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MANUAL REVISION TRANSMITTAL
Manual 117D (61-10-17)
Compact Constant Speed and Feathering Propeller
Overhaul Manual

REVISION 24 dated November 2023

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NOTE 1: Record the removal of a Temporary Revision on the Record of Temporary Revisions pages in this manual.

NOTE 2: When the manual revision has been inserted in the manual, record the information required on the Record of Revisions pages in this manual.

NOTE 3: Pages distributed in this revision may include pages from previous revisions if they are on the opposite side of revised pages. This is done as a convenience to those users who wish to print a two-sided copy of the new revision.

Manual No. 117D
61-10-17
Revision 24
November 2023



Compact Constant Speed and Feathering Propeller Overhaul Manual

Two Blade: ()HC-()2Y()-2()	Three Blade: ()HC-()3Y()-2()
Four Blade: ()HC-()4Y()-2()	Allison engine applications: HC-C3YF-5F HC-C3YN-5A

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COVER **61-10-17**

Inside Cover
Rev. 24 Nov/23

REVISION 24 HIGHLIGHTS

Revision 24, dated November 2023, incorporates the following:

Front matter (Cover, Revision Highlights, etc.), has been revised to match this revision.

Minor language/format changes and renumbering, if applicable are marked with a revision bar, but are not listed below.

- TESTING AND FAULT ISOLATION
 - Revised the section, "Lightning Strike on Hub or Blade"
- CLEANING
 - Revised the section, "Cleaning Procedures"
- CHECK
 - Removed Figure 5-30, "Counterweight Slug Identification"
 - Removed the section, "C-7429 or 101570 Counterweight Slug"
 - Removed Figure 5-31, "Counterweight Slug Through Hole Wear"
 - Removed the section, "A-890-() Counterweight Slug"
- REPAIR
 - Removed the section, "Brass Counterweight Slug Mounting Hole Repair"
 - Removed Figure 6-4, "Brass Counterweight Slug Mounting Hole Repair"
- ASSEMBLY
 - Revised the section, "General"
 - Revised the section, "Application of Blade Angle Reference Tape (Optional)"
- FITS AND CLEARANCES
 - Revised the section, "Torque Values"
- ILLUSTRATED PARTS LIST
 - Removed counterweight slugs, where applicable

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REVISION 24 HIGHLIGHTS

1. Introduction

A. General

- (1) This is a list of current revisions that have been issued against this manual. Please compare to the RECORD OF REVISIONS page to make sure that all revisions have been added to the manual.

B. Components

- (1) Revision No. indicates the revisions incorporated in this manual.
- (2) Issue Date is the date of the revision.
- (3) Comments indicates the level of the revision.
 - (a) New Issue is a new manual distribution. The manual is distributed in its entirety. All the revision dates are the same and no change bars are used.
 - (b) Reissue is a revision to an existing manual that includes major content and/or major format changes. The manual is distributed in its entirety. All the revision dates are the same and no change bars are used.
 - (c) Major Revision is a revision to an existing manual that includes major content or minor format changes over a large portion of the manual. The manual is distributed in its entirety. All the revision dates are the same, but change bars are used to indicate the changes incorporated in the latest revision of the manual.
 - (d) Minor Revision is a revision to an existing manual that includes minor content changes to the manual. Only the revised pages of the manual are distributed. Each page retains the date and the change bars associated with the last revision to that page.

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<u>Revision No.</u>	<u>Issue Date</u>	<u>Comments</u>
Revision 4	May/99	Reissue
Revision 5	Aug/99	Minor Revision
Revision 6	Apr/00	Minor Revision
Revision 7	Apr/01	Minor Revision
Revision 8	Apr/03	Minor Revision
Revision 9	Sep/03	Minor Revision
Revision 10	Apr/04	Minor Revision
Revision 11	Jun/05	Minor Revision
Revision 12	Sep/06	Minor Revision
Revision 13	Oct/08	Minor Revision
Revision 14	Aug/09	Minor Revision
Revision 15	Sep/12	Minor Revision
Revision 16	Apr/15	Minor Revision
Revision 17	Mar/18	Minor Revision
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Revision 21	Oct/22	Minor Revision
Revision 22	Feb/23	Major Revision
Revision 23	Aug/23	Minor Revision
Revision 24	Nov/23	Minor Revision

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RECORD OF REVISIONS

This is a record of revisions inserted into this manual.
Revision 24 includes all previous revisions.

Revision Number	Issue Date	Date Inserted	Inserted By
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RECORD OF TEMPORARY REVISIONS

Update this page to show all Temporary Revisions inserted into this manual.
Revision 22 includes all prior temporary revisions, up to and including TR-026.

Temporary Revision No.	Section/ Page	Issue Date	Date Inserted	Inserted By	Date Removed	Removed By

RECORD OF TEMPORARY REVISIONS

Update this page to show all Temporary Revisions inserted into this manual.
Revision 22 includes all prior temporary revisions, up to and including TR-026.

Temporary Revision No.	Section/ Page	Issue Date	Date Inserted	Inserted By	Date Removed	Removed By

SERVICE DOCUMENT LIST

CAUTION 1: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THE SERVICE DOCUMENT. INFORMATION CONTAINED IN A SERVICE DOCUMENT MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH INFORMATION CONTAINED IN A SERVICE DOCUMENT OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE.

CAUTION 2: THE INFORMATION FOR THE DOCUMENTS LISTED INDICATES THE REVISION LEVEL AND DATE AT THE TIME THAT THE DOCUMENT WAS INITIALLY INCORPORATED INTO THIS MANUAL. INFORMATION CONTAINED IN A SERVICE DOCUMENT MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. REFER TO THE APPLICABLE SERVICE DOCUMENT INDEX FOR THE MOST RECENT REVISION LEVEL OF THE SERVICE DOCUMENT.

Service Document Number	Incorporation Rev./Date	Service Document Number	Incorporation Rev./Date
Service Bulletins:		Service Letters, Continued:	
SB 103	Rev. 11 Jun/05	HC-SL-61-179	Rev. 4 May/99
SB 142B	Rev. 4 May/99	HC-SL-61-187, R2	Rev. 9 Sep/03
HC-SB-61-224, R2	Rev. 4 May/99	HC-SL-61-197, R2	Rev. 6 Apr/00
HC-SB-61-226, R1	Rev. 4 May/99	HC-SL-61-230	Rev. 11 Jun/05
HC-SB-61-377, R00	Rev. 17 Mar/18	HC-SL-61-241, R1	Rev. 14 Aug/09
		HC-SL-61-243	Rev. 11 Jun/05
		HC-SL-61-265, R1	Rev. 14 Aug/09
		HC-SL-61-282	Rev. 14 Aug/09
Service Letters:		HC-SL-61-290	Rev. 14 Aug/09
SL 100	Rev. 4 May/99	HC-SL-61-293	Rev. 14 Aug/09
SL 82A	Rev. 4 May/99	HC-SL-61-293, R1	Rev. 14 Aug/09
SL 101A	Rev. 16 Apr/15	HC-SL-61-301	Rev. 15 Sep/12
SL 155A	Rev. 4 May/99	HC-SL-61-340	Rev. 16 Apr/15
HC-SL-61-170	Rev. 4 May/99	HC-SL-61-347	Rev. 17 Mar/18
HC-SL-61-177	Rev. 4 May/99	HC-SL-61-354	Rev. 17 Mar/18

SERVICE DOCUMENT LIST

Service Document Number	Incorporation Rev./Date
Service Instructions:	
SI 102J	Rev. 4 May/99
SI 108	Rev. 4 May/99
SI 149	Rev. 4 May/99
SI 152A	Rev. 4 May/99
SI 202A	Rev. 4 May/99

Service Document Number	Incorporation Rev./Date
Service Advisories:	
SA 40	Rev. 4 May/99

AIRWORTHINESS LIMITATIONS

1. Airworthiness Limitations

A. Life Limits

- (1) Certain component parts, as well as the entire propeller, may have specific life limits established by the FAA. Such limits require replacement of items after a specific number of hours of use.
- (2) For airworthiness limitations information for a propeller that has composite blades, refer to Hartzell Propeller Inc. Owner's Manual 145 (61-00-45).
- (3) For airworthiness limitations information for a propeller that has metal blades, refer to Hartzell Propeller Inc. Owner's Manual 115N (61-00-15).

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1. General (Rev. 1)

A. Statement of Purpose

- (1) This manual has been reviewed and accepted by the FAA. Additionally, this manual contains data that has been approved in a manner acceptable to the FAA Administrator.
- (2) This manual provides maintenance and overhaul procedures for use in propeller repair stations by personnel that are trained and experienced with Hartzell Propeller Inc. products.
 - (a) This manual does not provide complete information for an inexperienced technician to attempt propeller overhaul without supervision.
- (3) This manual is intended to be the primary source of maintenance and overhaul information for applicable Hartzell Propeller/component models.
 - (a) Propeller models addressed in this manual may be Type Certificated by the FAA, or may be experimental. Experimental parts must not be installed on a Type Certificated propeller. Always use the current illustrated parts list for the assembly of any propeller. Always refer to the aircraft Type Certificate (TC) or Supplemental Type Certificate (STC) to determine installation eligibility of any propeller. If installation eligibility is not identifiable, an additional installation approval, such as FAA form 337 field approval or Supplemental Type Certificate may be required. If in doubt, contact Hartzell Propeller Inc. Product Support.
 - (b) Information published in Service Bulletins, Service Letters, Service Advisories, and Service Instructions may supersede information published in this manual. The reader must consult active Service Bulletins, Service Letters, Service Advisories, and Service Instructions for information that may have not yet been incorporated into the latest revision of this manual.
- (4) This manual makes reference to other Hartzell Propeller Inc. manuals that provide important details for procedures such as anodizing, penetrant inspection, and overhaul procedures for hub units.
- (5) Where possible, this manual is written in the format specified by ATA iSpec 2200.

B. Item References

- (1) Item references throughout the text in this manual refer to item numbers in the Illustrated Parts List chapter of this manual. The item numbers appear in parentheses directly following the part name. Only the item base number will appear in the text of the manual. Item base numbers and the alpha variants of the base numbers will appear in the illustrated parts list. There are two reasons for the use of alpha variants:
 - (a) A part may be superseded, replaced, or obsoleted by another part. For example, the pitch change block unit (105733) that is item 320 was superseded by the pitch change block unit (105733-1) that is item 320A.
 - (b) An Illustrated Parts List may contain multiple configurations. Effectivity codes are used to distinguish different part numbers within the same list. For example, one configuration may use a piston (B-2419) that is item 80, yet another configuration uses a piston (104256) that is item 80A. Effectivity codes are very important in the determination of parts in a given configuration.

2. Reference Publications

A. Hartzell Propeller Inc. Publications

- (1) Information published in Service Bulletins, Service Letters, Service Advisories, and Service Instructions may supersede information published in this manual. The reader must consult active Service Bulletins, Service Letters, Service Advisories, and Service Instructions for information that may have not yet been incorporated into the latest revision of this manual.
- (2) In addition to this manual, one or more of the following publications are required for information regarding specific recommendations and procedures to maintain propeller assemblies that are in this manual.

Manual No. (ATA No.)	Available at www.hartzellprop.com	Hartzell Propeller Inc. Manual Title
n/a	Yes	Active Hartzell Propeller Inc. Service Bulletins, Service Letters, Service Instructions, and Service Advisories
Manual 115N (61-00-15)	Yes	Propeller Owner's Manual and Logbook for Compact Models with Aluminum Blades
Manual 145 (61-00-45)	Yes	Propeller Owner's Manual and Logbook for Compact and Lightweight Compact Propeller Models with Composite Blades

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Manual No. (ATA No.)	Available at www.hartzellprop.com	Hartzell Propeller Inc. Manual Title
Manual 127 (61-16-27)	Yes	Metal Spinner Maintenance Manual
Manual 133C (61-13-33)	-	Aluminum Blade Overhaul Manual
Manual 135F (61-13-35)	-	Composite Blade Overhaul Manual
Manual 148 (61-16-48)	Yes	Composite Spinner Maintenance Manual
Manual 159 (61-02-59)	Yes	Application Guide
Manual 165A (61-00-65)	Yes	Illustrated Tool and Equipment Manual
Manual 180 (30-61-80)	Yes	Ice Protection System Manual
Manual 202A (61-01-02)	Vol. 7, Yes, Vol. 11, Yes	Standard Practices Manual, Volumes 1 through 11

B. Vendor Publications

None.

3. Personnel Requirements (Rev. 1)

A. Service and Maintenance Procedures in this Manual

- (1) Personnel performing the service and maintenance procedures in this manual are expected to have the required equipment/tooling, training, and certifications (when required by the applicable Aviation Authority) to accomplish the work in a safe and airworthy manner.
- (2) Compliance to the applicable regulatory requirements established by the Federal Aviation Administration (FAA) or international equivalent is mandatory for anyone performing or accepting responsibility for any inspection and/or repair of any Hartzell Propeller Inc. product.
 - (a) Maintenance records must be kept in accordance with the requirements established by the Federal Aviation Administration (FAA) or international equivalent.
 - (b) Refer to Federal Aviation Regulation (FAR) Part 43 for additional information about general aviation maintenance requirements.

4. Special Tooling and Consumable Materials (Rev. 1)

A. Special Tooling

- (1) Special tooling may be required for procedures in this manual. For further tooling information, refer to Hartzell Propeller Inc. Illustrated Tool and Equipment Manual 165A (61-00-65).
 - (a) Tooling reference numbers appear with the prefix "TE" directly following the tool name to which they apply. For example, a template that is reference number 133 will appear as: template TE133.

B. Consumable Materials

- (1) Consumable materials are referenced in certain sections throughout this manual. Specific approved materials are listed in the Consumable Materials chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
 - (a) Consumable material reference numbers appear with the prefix "CM" directly following the material to which they apply. For example, an adhesive that is reference number 16 will appear as: adhesive CM16. Only the material(s) specified can be used.

5. Safe Handling of Paints and Chemicals (Rev.1)

A. Instructions for Use

- (1) Always use caution when handling or being exposed to paints and/or chemicals during propeller overhaul and/or maintenance procedures.
- (2) Before using paint or chemicals, always read the manufacturer's label on the container(s) and follow specified instructions and procedures for storage, preparation, mixing, and/or application.
- (3) Refer to the product's Material Safety Data Sheet (MSDS) for detailed information about the physical properties, health, and physical hazards of any paint or chemical.

6. Calendar Limits and Long Term Storage (Rev. 2)

A. Calendar Limits

- (1) The effects of exposure to the environment over a period of time create a need for propeller overhaul regardless of flight time.
- (2) A calendar limit between overhauls is specified in Hartzell Propeller Inc. Service Letter HC-SL-61-61Y.
- (3) Experience has shown that special care, such as keeping an aircraft in a hangar, is not sufficient to permit extension of the calendar limit.
- (4) The start date for the calendar limit is when the propeller is first installed on an engine.
- (5) The calendar limit is not interrupted by subsequent removal and/or storage.
- (6) The start date for the calendar limit must not be confused with the warranty start date that is with certain exceptions, the date of installation by the first retail customer.

B. Long Term Storage

- (1) Propellers that have been in storage have additional inspection requirements before installation. Refer to the Packaging and Storage chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

7. Component Life and Overhaul (Rev. 2)

WARNING: CERTAIN PROPELLER COMPONENTS USED IN NON-AVIATION APPLICATIONS ARE MARKED WITH DIFFERENT PART NUMBERS TO DISTINGUISH THEM FROM COMPONENTS USED IN AVIATION APPLICATIONS. DO NOT ALTER THE PART NUMBERS SHOWN ON PARTS DESIGNATED FOR NON-AVIATION APPLICATIONS OR OTHERWISE APPLY THOSE PARTS FOR USE ON AVIATION APPLICATIONS.

A. Component Life

- (1) Component life is expressed in terms of hours of service (Time Since New, TSN) and in terms of hours of service since overhaul (Time Since Overhaul, TSO).

NOTE: TSN/TSO is considered as the time accumulated between rotation and landing, i.e., flight time.

- (2) Time Since New (TSN) and Time Since Overhaul (TSO) records must be maintained in the propeller logbook.
- (3) Both TSN and TSO are necessary for defining the life of the component. Certain components, or in some cases an entire propeller, may be "life limited," which means that they must be replaced after a specified period of use (TSN).
- (a) It is a regulatory requirement that a record of the Time Since New (TSN) be maintained for all life limited parts.
- (b) Refer to the Airworthiness Limitations chapter in the applicable Hartzell Propeller Inc. Owner's Manual for a list of life limited components.
- (4) When a component or assembly undergoes an overhaul, the TSO is returned to zero hours.
- (a) Time Since New (TSN) can never be returned to zero.
- (b) Repair without overhaul does not affect TSO or TSN.
- (5) Blades and hubs are sometimes replaced while in service or at overhaul.
- (a) Maintaining separate TSN and TSO histories for a replacement hub or blade is required.
- (b) Hub replacement
- 1 If the hub is replaced, the replacement hub serial number must be recorded (the entry signed and dated) in the propeller logbook.
 - 2 The propeller will be identified with the serial number of the replacement hub.

NOTE: Propeller assembly serial numbers are impression stamped on the hub. For stamping information, refer to the Parts Identification and Marking chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

- 3 The TSN and TSO of the replacement hub must be recorded and maintained in the propeller logbook.
- 4 If tracking any component(s) other than the hub/blades, maintain these TSN/TSO records separately in the propeller logbook.

NOTE: Hub replacement does not affect the TSN/TSO of any other propeller components.

B. Overhaul

- (1) Overhaul is the periodic disassembly, cleaning, inspecting, repairing as necessary, reassembling, and testing in accordance with approved standards and technical data approved by Hartzell Propeller Inc.
- (2) The overhaul interval is based on hours of service, i.e., flight time, or on calendar time.
 - (a) Overhaul intervals are specified in Hartzell Propeller Inc. Service Letter HC-SL-61-61Y.
 - (b) At such specified periods, the propeller hub assembly and the blade assemblies must be completely disassembled and inspected for cracks, wear, corrosion, and other unusual or abnormal conditions.
- (3) Overhaul must be completed in accordance with the latest revision of the applicable component maintenance manual and other publications applicable to, or referenced in, the component maintenance manual.
 - (a) Parts that are not replaced at overhaul must be inspected in accordance with the check criteria in the applicable Hartzell Propeller Inc. component maintenance manual.
 - (b) Parts that must be replaced at overhaul are identified by a "Y" in the O/H column of the Illustrated Parts List in the applicable Hartzell Propeller Inc. component maintenance manual.
- (4) The information in this manual supersedes data in all previously published revisions of this manual.

8. Damage/Repair Types (Rev. 1)

A. Airworthy/Unairworthy Damage

- (1) Airworthy damage is a specific condition to a propeller component that is within the airworthy damage limits specified in the applicable Hartzell Propeller Inc. component maintenance manual.
 - (a) Airworthy damage does not affect the safety or flight characteristics of the propeller and conforms to its type design.
 - (b) Airworthy damage does not require repair before further flight, but should be repaired as soon as possible to prevent degradation of the damage.
- (2) Unairworthy Damage
 - (a) Unairworthy damage is damage that exceeds the airworthy damage limits as specified in the Check chapter 5 of this manual
 - 1 Unairworthy damage can affect the safety or flight characteristics of the propeller and does not conform to its type design.
 - 2 This condition deems the component unairworthy, requiring appropriate corrective action to repair or remove it from service, as applicable.

B. Minor/Major Repair

- (1) Minor Repair
 - (a) Minor repair is that which may be done safely in the field by a certified aircraft mechanic.
 - 1 For serviceable limits and repair criteria for Hartzell propeller components, refer to the applicable Hartzell Propeller Inc. component maintenance manual.
- (2) Major Repair
 - (a) Major repair cannot be done by elementary operations.
 - (b) Major repair work must be accepted by an individual that is certified by the Federal Aviation Administration (FAA) or international equivalent.
 - 1 Hartzell recommends that individuals performing major repairs also have a Factory Training Certificate from Hartzell Propeller Inc.
 - 2 The repair station must meet facility, tooling, and personnel requirements and is required to participate in Hartzell Propeller Inc. Sample Programs as defined in the Approved Facilities chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

9. Propeller Critical Parts (Rev. 1)

A. Propeller Critical Parts

- (1) Procedures in this manual may involve Propeller Critical Parts (PCP).
 - (a) These procedures have been substantiated based on Engineering analysis that expects this product will be operated and maintained using the procedures and inspections provided in the Instructions for Continued Airworthiness (ICA) for this product.
 - (b) Refer to the Illustrated Parts List chapter in the applicable Hartzell Propeller Inc. maintenance manual to identify the Propeller Critical Parts.
- (2) Numerous propeller system parts can produce a propeller Major or Hazardous effect, even though those parts may not be considered as Propeller Critical Parts.
 - (a) The operating and maintenance procedures and inspections provided in the ICA for this product are, therefore, expected to be accomplished for all propeller system parts.

10. Warranty Service (Rev. 1)

A. Warranty Claims

- (1) If you believe you have a warranty claim, contact the Hartzell Propeller Inc. Product Support Department to request a *Warranty Application* form. Complete this form and return it to Hartzell Product Support for evaluation **before proceeding with repair or inspection work**. Upon receipt of this form, the Hartzell Product Support Department will provide instructions on how to proceed.
 - (a) For Hartzell Propeller Inc. Product Support Department contact information, refer to the “Contact Information” section in this chapter.

11. Hartzell Propeller Inc. Contact Information (Rev. 2)

A. Product Support Department

- (1) Contact the Product Support Department of Hartzell Propeller Inc. about any maintenance problems or to request information not included in this publication.

NOTE: When calling from outside the United States, dial (001) before dialing the telephone numbers below.

(a) Hartzell Propeller Inc. Product Support may be reached during business hours (8:00 a.m. through 5:00 p.m., United States Eastern Time) at (937) 778-4379 or at (800) 942-7767, toll free from the United States and Canada.

(b) Hartzell Propeller Inc. Product Support can also be reached by fax at (937) 778-4215, and by e-mail at techsupport@hartzellprop.com.

(c) After business hours, you may leave a message on our 24 hour product support line at (937) 778-4376 or at (800) 942-7767, toll free from the United States and Canada.

1 A technical representative will contact you during normal business hours.

2 Urgent AOG support is also available 24 hours per day, seven days per week via this message service.

(d) Additional information is available on the Hartzell Propeller Inc. website at www.hartzellprop.com.

B. Technical Publications Department

- (1) For Hartzell Propeller Inc. service literature and revisions, contact:

Hartzell Propeller Inc.	Telephone: 937.778.4200
Attn: Technical Publications Department	Fax: 937.778.4215
One Propeller Place	E-mail: manuals@hartzellprop.com
Piqua, Ohio 45356-2634 U.S.A.	

C. Recommended Facilities

- (1) Hartzell Propeller Inc. recommends using Hartzell-approved distributors and repair facilities for the purchase, repair, and overhaul of Hartzell propeller assemblies or components.

- (2) Information about the Hartzell Propeller Inc. worldwide network of aftermarket distributors and approved repair facilities is available on the Hartzell website at www.hartzellprop.com.

12. Definitions (Rev. 4)

Term	Definition
Annealed	Softening of material due to overexposure to heat
Aviation Certified	Intended for FAA or international equivalent type certificated aircraft applications. A TC and PC number must be stamped on the hub, and a PC number must be stamped on blades.
Aviation Experimental	Intended for aircraft/propeller applications not certified by the FAA or international equivalent. Products marked with an “X” at or near the end of the model number or part number are not certified by the FAA or international equivalent and are not intended to use on certificated aircraft.
Beta Operation	A mode of pitch control that is directed by the pilot rather than by the propeller governor
Beta Range	Blade angles between low pitch and maximum reverse blade angle
Beta System	Parts and/or equipment related to operation (manual control) of propeller blade angle between low pitch blade angle and full reverse blade angle
Blade Angle	Measurement of blade airfoil location described as the angle between the blade airfoil and the surface described by propeller rotation
Blade Centerline	An imaginary reference line through the length of a blade around which the blade rotates
Blade Station	Refers to a location on an individual blade for blade inspection purposes. It is a measurement from the blade “zero” station to a location on a blade, used to apply blade specification data in blade overhaul manuals. <u>Note:</u> Do not confuse <i>blade station</i> with <i>reference blade radius</i> ; they may not originate at the same location.
Blemish	An imperfection with visible attributes, but having no impact on safety or utility
Brinelling	A depression caused by failure of the material in compression

Term	Definition
Bulge	An outward curve or bend
Camber	The surface of the blade that is directed toward the front of the aircraft. It is the low pressure, or suction, side of the blade. The camber side is convex in shape over the entire length of the blade.
Chord	A straight line distance between the leading and trailing edges of an airfoil
Chordwise	A direction that is generally from the leading edge to the trailing edge of an airfoil
Co-bonded	The act of bonding a composite laminate and simultaneously curing it to some other prepared surface
Composite Material	Kevlar®, carbon, or fiberglass fibers bound together with, or encapsulated within an epoxy resin
Compression Rolling	A process that provides improved strength and resistance to fatigue
Constant Force	A force that is always present in some degree when the propeller is operating
Constant Speed	A propeller system that employs a governing device to maintain a selected engine RPM
Corrosion (Aluminum)	The chemical or electrochemical attack by an acid or alkaline that reacts with the protective oxide layer and results in damage of the base aluminum. Part failure can occur from corrosion due to loss of structural aluminum converted to corrosion product, pitting, a rough etched surface finish, and other strength reduction damage caused by corrosion.

Term	Definition
Corrosion (Steel)	Typically, an electrochemical process that requires the simultaneous presence of iron (component of steel), moisture and oxygen. The iron is the reducing agent (gives up electrons) while the oxygen is the oxidizing agent (gains electrons). Iron or an iron alloy such as steel is oxidized in the presence of moisture and oxygen to produce rust. Corrosion is accelerated in the presence of salty water or acid rain. Part failure can occur from corrosion due to loss of structural steel converted to corrosion product, pitting, a rough etched surface finish and other strength reduction damage caused by corrosion.
Corrosion Product (Aluminum)	A white or dull gray powdery material that has an increased volume appearance (compared to non-corroded aluminum). Corrosion product is not to be confused with damage left in the base aluminum such as pits, worm holes, and etched surface finish.
Corrosion Product (Steel)	When iron or an iron alloy such as steel corrodes, a corrosion product known as rust is formed. Rust is an iron oxide which is reddish in appearance and occupies approximately six times the volume of the original material. Rust is flakey and crumbly and has no structural integrity. Rust is permeable to air and water, therefore the interior metallic iron (steel) beneath a rust layer continues to corrode. Corrosion product is not to be confused with damage left in the base steel such as pits and etched surface finish.
Crack	Irregularly shaped separation within a material, usually visible as a narrow opening at the surface
Debond	Separation of two materials that were originally bonded together in a separate operation
Defect	An imperfection that affects safety or utility
Delamination	Internal separation of the layers of composite material
Dent	The permanent deflection of the cross section that is visible on both sides with no visible change in cross sectional thickness
Depression	Surface area where the material has been compressed but not removed

Term	Definition
Distortion	Alteration of the original shape or size of a component
Edge Alignment	Distance from the blade centerline to the leading edge of the blade
Erosion	Gradual wearing away or deterioration caused by action of the elements
Exposure	Leaving material open to action of the elements
Face	The surface of the blade that is directed toward the rear of the aircraft. The face side is the high pressure, or thrusting, side of the blade. The blade airfoil sections are normally cambered or curved such that the face side of the blade may be flat or even concave in the midblade and tip region.
Face Alignment	Distance from the blade centerline to the highest point on the face side perpendicular to the chord line
Feathering	The capability of blades to be rotated parallel to the relative wind, thus reducing aerodynamic drag
Fraying	A raveling or shredding of material
Fretting	Damage that develops when relative motion of small displacement takes place between contacting parts, wearing away the surface
Galling	To fret or wear away by friction
Gouge	Surface area where material has been removed
Hazardous Propeller Effect	The hazardous propeller effects are defined in Title 14 CFR section 35.15(g)(1)
Horizontal Balance	Balance between the blade tip and the center of the hub
Impact Damage	Damage that occurs when the propeller blade or hub assembly strikes, or is struck by, an object while in flight or on the ground
Inboard	Toward the butt of the blade
Intergranular Corrosion	Corrosion that attacks along the grain boundaries of metal alloys

Term	Definition
Jog	A term used to describe movement up/down, left/right, or on/off in short incremental motions
Laminate	To unite composite material by using a bonding material, usually with pressure and heat
Lengthwise	A direction that is generally parallel to the pitch axis
Loose Material	Material that is no longer fixed or fully attached
Low Pitch	The lowest blade angle attainable by the governor for constant speed operation
Major Propeller Effect	The major propeller effects are defined in Title 14 CFR section 35.15(g)(2)
Minor Deformation	Deformed material not associated with a crack or missing material
Monocoque	A type of construction in which the outer skin carries all or a major part of the load
Nick	Removal of paint and possibly a small amount of material
Non-Aviation Certified	Intended for non-aircraft application, such as Hovercraft or Wing-in-Ground effect (WIG) applications. These products are certificated by an authority other than FAA. The hub and blades will be stamped with an identification that is different from, but comparable to TC and PC.
Non-Aviation Experimental	Intended for non-aircraft application, such as Hovercraft or Wing-In-Ground effect (WIG) applications. Products marked with an "X" at or near the end of the model number or part number are not certified by any authority and are not intended for use on certificated craft.
Onspeed	Condition in which the RPM selected by the pilot through the propeller control/condition lever and the actual engine (propeller) RPM are equal
Open Circuit	Connection of high or infinite resistance between points in a circuit which are normally lower
Outboard	Toward the tip of the blade

Term	Definition
Overhaul	The periodic disassembly, inspection, repair, refinish, and reassembly of a propeller assembly to maintain airworthiness
Overspeed	Condition in which the RPM of the propeller or engine exceeds predetermined maximum limits; the condition in which the engine (propeller) RPM is higher than the RPM selected by the pilot through the propeller control/condition lever
Pitch	Same as “Blade Angle”
Pitting	Formation of a number of small, irregularly shaped cavities in surface material caused by corrosion or wear
Pitting (Linear)	The configuration of the majority of pits forming a pattern in the shape of a line
Porosity	An aggregation of microvoids. See “voids”.
Propeller Critical Part	A part on the propeller whose primary failure can result in a hazardous propeller effect, as determined by the safety analysis required by Title 14 CFR section 35.15
Reference Blade Radius	Refers to the propeller reference blade radius in an assembled propeller, e.g., 30-inch radius. A measurement from the propeller hub centerline to a point on a blade, used for blade angle measurement in an assembled propeller. An adhesive stripe (blade angle reference tape CM160) is usually located at the reference blade radius location. <u>Note:</u> Do not confuse <i>reference blade radius</i> with <i>blade station</i> ; they may not originate at the same point.
Reversing	The capability of rotating blades to a position to generate reverse thrust to slow the aircraft or back up
Scratch	Same as “Nick”
Short Circuit	Connection of low resistance between points on a circuit between which the resistance is normally much greater
Shot Peening	Process where steel shot is impinged on a surface to create compressive surface stress, that provides improved strength and resistance to fatigue

Term	Definition
Single Acting	Hydraulically actuated propeller that utilizes a single oil supply for pitch control
Split	Delamination of blade extending to the blade surface, normally found near the trailing edge or tip
Station Line	See "Blade Station"
Synchronizing	Adjusting the RPM of all the propellers of a multi-engine aircraft to the same RPM
Synchrophasing	A form of propeller synchronization in which not only the RPM of the engines (propellers) are held constant, but also the position of the propellers in relation to each other
Ticking	A series of parallel marks or scratches running circumferentially around the diameter of the blade
Track	In an assembled propeller, a measurement of the location of the blade tip with respect to the plane of rotation, used to verify face alignment and to compare blade tip location with respect to the locations of the other blades in the assembly
Trailing Edge	The aft edge of an airfoil over which the air passes last
Trimline	Factory terminology referring to where the part was trimmed to length
Underspeed	The condition in which the actual engine (propeller) RPM is lower than the RPM selected by the pilot through the propeller control/condition lever
Unidirectional Material	A composite material in which the fibers are substantially oriented in the same direction
Variable Force	A force that may be applied or removed during propeller operation
Vertical Balance	Balance between the leading and trailing edges of a two-blade propeller with the blades positioned vertically
Voids	Air or gas that has been trapped and cured into a laminate
Windmilling	The rotation of an aircraft propeller caused by air flowing over it while the engine is not producing power

Term	Definition
Woven Fabric	A material constructed by interlacing fiber to form a fabric pattern
Wrinkle (aluminum blade)	A wavy appearance caused by high and low material displacement
Wrinkle (composite blade)	Overlap or fold within the material

13. Abbreviations (Rev. 2)

Abbreviation	Term
AD	Airworthiness Directives
AMM	Aircraft Maintenance Manual
AOG	Aircraft on Ground
AR	As Required
ATA	Air Transport Association
CSU	Constant Speed Unit
FAA	Federal Aviation Administration
FH	Flight Hour
FM	Flight Manual
FMS	Flight Manual Supplement
Ft-Lb	Foot-Pound
HMI	Human Machine Interface
ICA	Instructions for Continued Airworthiness
ID	Inside Diameter
In-Lb	Inch-Pound
IPL	Illustrated Parts List
IPS	Inches Per Second
kPa	Kilopascals
Lb(s)	Pound(s)
Max.	Maximum
Min.	Minimum
MIL-X-XXX	Military Specification
MPI	Major Periodic Inspection (Overhaul)
MS	Military Standard
MSDS	Material Safety Data Sheet

Abbreviation	Term
N	Newton
N/A	Not Applicable
NAS	National Aerospace Standards
NASM	National Aerospace Standards, Military
NDT	Nondestructive Testing
NIST	National Institute of Standards and Technology
N•m	Newton-Meter
OD	Outside Diameter
OPT	Optional
PC	Production Certificate
PCP	Propeller Critical Part
PLC	Programmable Logic Controller
PMB	Plastic Media Blasting (Cleaning)
POH	Pilot's Operating Handbook
PSI	Pounds per Square Inch
RF	Reference
RPM	Revolutions per Minute
SAE	Society of Automotive Engineers
STC	Supplemental Type Certificate
TBO	Time Between Overhaul
TC	Type Certificate
TSI	Time Since Inspection
TSN	Time Since New
TSO	Time Since Overhaul
UID	Unique Identification
WIG	Wing-In-Ground-Effect

DESCRIPTION AND OPERATION - CONTENTS

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1. General (Rev. 2)

A. Propeller/Blade Model Designation

- (1) Hartzell Propeller Inc. uses a model number designation system to identify specific propeller and blade assemblies. The propeller model number and blade model number are separated by a slash (/).
 - (a) Example: *propeller model number / blade model number*
- (2) The propeller model number is impression stamped on the propeller hub.
 - (a) For additional information about the propeller model number designation system, refer to the applicable Hartzell Propeller Inc. owner's manual.
- (3) The blade model number is impression stamped on the butt end of the blade, and also identified by a label on the cylinder.
 - (a) For additional information about the model number designation system for composite blades, refer to Hartzell Propeller Inc. Composite Blade Overhaul Manual 135F (61-13-35).
 - (b) For additional information about the model number designation system for aluminum blades, refer to Hartzell Propeller Inc. Aluminum Blade Overhaul Manual 133C (61-13-33).

2. Operation

A. Compact Constant Speed and Feathering Propellers (-2)

- (1) The -2 Series propellers are constant speed propellers that use an air charge, spring, and counterweights (when applicable) to move the blades to high pitch/feather position. Blade centrifugal twisting moment acts to move the blades to low pitch, but the air charge, spring, and counterweights overcome this force. Oil pressure against a propeller mounted hydraulic piston opposes the counterweight, spring, and air charge forces to move the blades to low blade angle (low pitch).
- (2) The action of the air charge, spring, and counterweights tends to move the blades to a higher blade angle (high pitch), reducing engine RPM. Oil pressure toward low pitch increases engine RPM.
- (3) If oil pressure is lost during operation, the propeller will feather. Feathering occurs because the air charge, spring, and blade counterweights are no longer opposed by hydraulic oil pressure. The air charge, spring and blade counterweights are then free to increase blade pitch to the feathering (high pitch) stop.
- (4) Normal in-flight feathering of these propellers is accomplished when the pilot pulls the propeller pitch control past the feather detent. This allows control oil to drain from the cylinder and return to the engine sump. The engine can then be shut down.

- (5) Normal in-flight unfeathering is accomplished when the pilot positions the propeller pitch control into the normal flight (governing) range and an engine restart is attempted.
- (6) Some aircraft are equipped with a hydraulic accumulator, which stores a supply of oil under pressure. This oil supply is released to unfeather the propeller during an in-flight engine restart. Pressurized oil is directed to the propeller, resulting in blade angle decrease. The propeller begins to windmill, and engine restart is possible.
- (7) When the engine is stopped on the ground, it is undesirable to feather the propeller, as the high blade angle inhibits engine starting. To prevent feathering during normal engine shutdown on the ground, the propeller incorporates spring energized latches. As long as propeller rotation is approximately 800 RPM or above, the latches are disengaged by centrifugal force acting on the latches to compress the springs. When RPM drops below 800 RPM (and blade angle is typically within 7 degrees of the low pitch stop), the springs overcome the latch weight centrifugal force and move the latches to engage the high pitch stops, preventing blade angle movement to feather.

B. Feathering, Turbine Propellers (-5)

- (1) The -5 Series propellers are constant speed propellers that use an air charge, spring, and counterweights to move the blades to high pitch/feather position. Blade centrifugal twisting moment acts to move the blades to low pitch, but the air charge, spring, and counterweights overcome this force. Oil pressure against a propeller mounted hydraulic piston opposes the counterweight, spring, and air charge forces to move the blades to low blade angle (low pitch).
- (2) The action of the air charge, spring, and counterweights tends to move the blades to a higher blade angle (high pitch), reducing engine RPM. Oil pressure toward low pitch increases engine RPM.
- (3) If oil pressure is lost during operation, the propeller will feather. Feathering occurs because the air charge, spring, and counterweights are no longer opposed by hydraulic oil pressure. The air charge, spring, and blade counterweights are then free to increase blade pitch to the feathering (high pitch) stop.
- (4) Normal in-flight feathering of these propellers is accomplished when the pilot pulls the propeller pitch control past the feather detent. This allows control oil to drain from the cylinder and return to the engine sump. The engine may then be shut down.
- (5) Normal in-flight unfeathering occurs when the pilot positions the propeller pitch control into the normal flight (governing) range and restarts the engine. As engine speed increases, oil is directed to the propeller, and blade angle decreases.
- (6) Start lock latches are not employed on all -5 propellers. These propellers will feather during normal engine shutdown.

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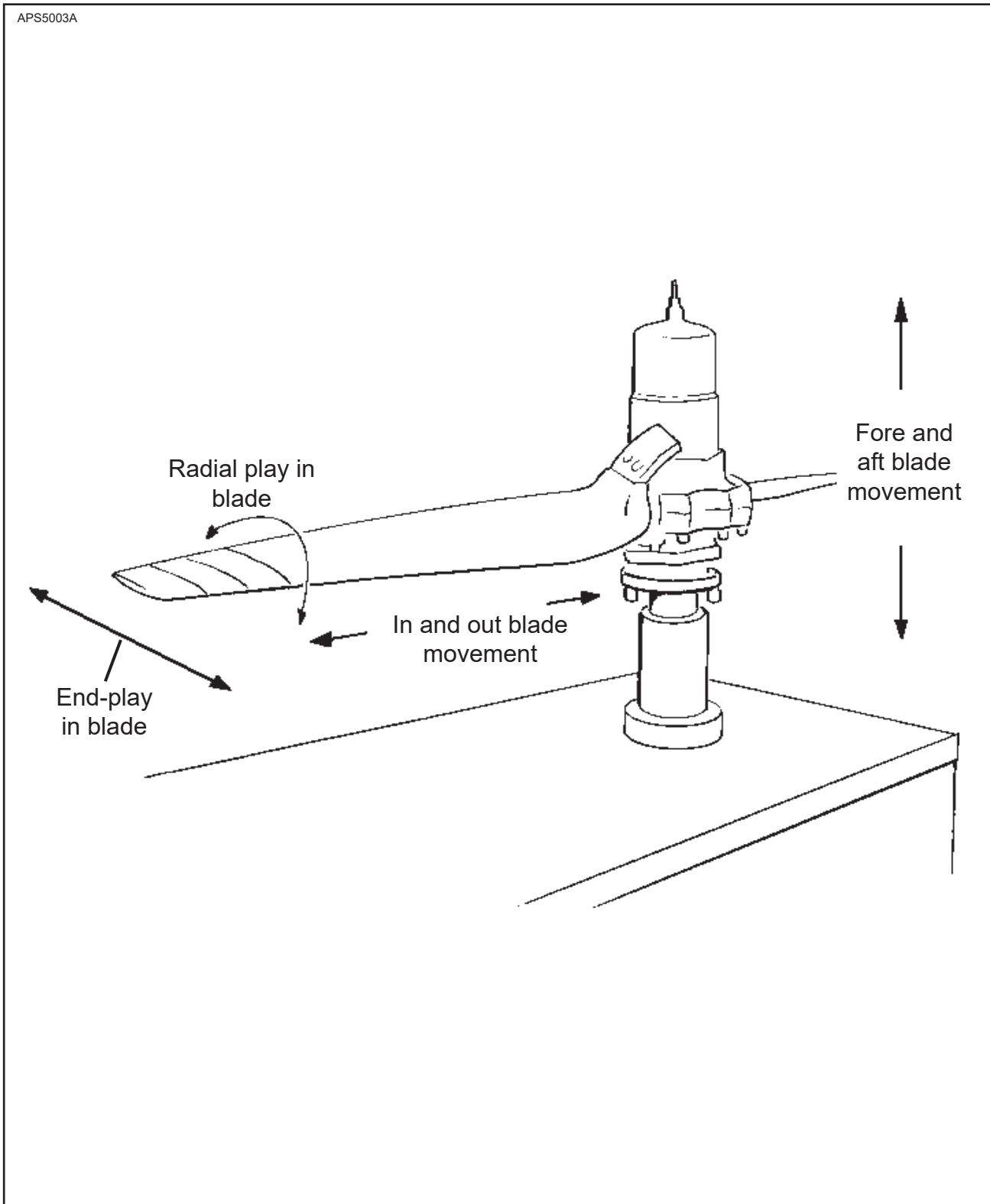
1. Troubleshooting Guide

CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

The purpose of this guide is to help isolate probable causes and suggest remedies for common propeller service problems. In all cases, the remedy for a problem should follow the procedures detailed in the applicable section of this manual.

Problem	Probable Cause	Remedy
A. Pitch Control Difficulty	Excessive friction in moving parts.	Refer to problem 1.B. Friction.
	Oil leaking past piston causing underspeed.	Disassemble the propeller and inspect the O-ring and piston-to-cylinder sealing surfaces. Replace defective O-ring.
B. Friction	Lack of lubrication.	Add approved lubrication.
	Blade preload is excessive.	Disassemble the propeller and readjust the blade preload.
	Balls in the blade retention split bearing are unusually rough, corroded, or chipped.	Replace the blade retention split bearing assembly.
	Insufficient clearance between the various moving parts in the pitch change mechanism.	Check/increase the clearances between the individual parts as necessary to decrease friction in the mechanism.
C. Abnormal Propeller Vibration	Bent, cracked, or damaged blade.	Refer to Hartzell Propeller Inc. Aluminum Blade Overhaul Manual 133C (61-13-33) or Hartzell Propeller Inc. Composite Blade Manual 135F (61-13-35).
	Cracked or damaged hub.	Refer to the Aluminum Hub Overhaul chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

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Checking Blade Movement
Figure 1-1

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Problem	Probable Cause	Remedy
D. Blades Not Tracking	Foreign object strike damage.	Refer to the Special Inspections chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02) for inspection procedure.
E. End-Play Movement of the Blade Refer to Figure 1-1.	Buildup of wear or repair tolerances.	Disassemble the propeller and reset the preload.
	Blade retention bearing is worn.	Inspect/Replace blade retention bearing.
	Blade alignment bearing is worn.	Replace the blade alignment bearing.
F. In-and-Out Movement of the Blade Refer to Figure 1-1.	Buildup of wear or repair tolerances.	Disassemble the propeller and reset the preload.
	Blade retention bearing is worn.	Inspect/Replace blade retention bearing.
G. Fore-and-Aft Movement of the Blade Refer to Figure 1-1.	Buildup of wear or repair tolerances.	Disassemble the propeller and reset the preload.
	Blade retention bearing is worn.	Replace blade retention bearing.
	Blade alignment bearing is worn.	Replace the blade alignment bearing.
H. Radial Play in the Blade	Pitch change fork is worn.	Disassemble the propeller. Inspect and replace parts, as required.
	Pitch change knob bushing is worn.	Disassemble the propeller. Inspect and replace parts, as required.
	Pitch change block is worn.	Disassemble the propeller. Inspect and replace parts, as required.

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Problem	Probable Cause	Remedy
I. Oil Leakage	Faulty O-ring seal between the engine flange and the propeller mounting flange.	Remove the propeller from the engine and inspect the O-ring and the sealing surface. Replace defective O-ring
	Engine crankshaft seal leaking.	Replace the engine crankshaft seal.
	Faulty O-ring seal on the hub extension plug.	Disassemble the propeller and inspect the O-rings and the sealing surfaces. Replace defective O-ring(s).
	Faulty O-ring seal between the hub-half and the cylinder.	Remove the cylinder and inspect the O-ring and the sealing surface. Replace defective O-ring.
	Faulty internal propeller O-ring.	Disassemble the propeller and inspect the O-ring and pitch change rod-to-hub sealing surface (cylinder side). Replace defective O-ring.
J. External Grease Leakage	Improperly torqued or loose/missing lubrication fitting.	Replace missing lubrication fitting. Torque lubrication fitting in accordance with Table 801.
	Grease leaking between blade and hub.	Disassemble the propeller and inspect the hub-to-blade seal and sealing surfaces. Replace defective seal.

2. Lightning Strike on Hub or Blade (Rev. 2)

A. Before Further Flight

- (1) In the event of a propeller lightning strike, an inspection is required before further flight.
 - (a) A lightning strike on the propeller usually leaves arcing damage on the hub or blade, as evidence of where it entered or left the propeller.
 - (b) Refer to the Special Inspections chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02) for lightning strike inspection criteria.

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AUTOMATIC TEST REQUIREMENTS (NOT APPLICABLE) (Rev. 1)

NOTE: In accordance with ATA iSpec 2200 specification, this space is reserved for automatic test requirements. Such requirements are not applicable to the Hartzell Propeller Inc. propellers included in this manual.

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1. Important Information (Rev. 3)

WARNING: ADHESIVES AND SOLVENTS ARE FLAMMABLE AND TOXIC TO THE SKIN, EYES, AND RESPIRATORY TRACT. SKIN AND EYE PROTECTION ARE REQUIRED. AVOID PROLONGED CONTACT AND BREATHING OF VAPORS. USE SOLVENT RESISTANT GLOVES TO MINIMIZE SKIN CONTACT AND WEAR SAFETY GLASSES FOR EYE PROTECTION. USE IN A WELL VENTILATED AREA AWAY FROM SPARKS AND FLAME. READ AND OBSERVE ALL WARNING LABELS.

CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

A. Removing the Propeller

- (1) Remove the propeller from the aircraft in accordance with the applicable Hartzell Propeller Inc. owner's manual.

B. Record Serial Numbers/Blade Location Before Disassembly

- (1) Make a record of the serial number and model number of the hub, blades, and any other serial-numbered parts and compare with the data in the propeller logbook.
 - (a) For the location of the serial number on the hub, refer to the Parts Identification and Marking chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

CAUTION 1: DO NOT ETCH, SCRIBE, PUNCH MARK, OR SIMILARLY IDENTIFY PARTS IN ANY MANNER THAT MAY BE HARMFUL TO THE STRENGTH OR FUNCTION OF THE PROPELLER.

CAUTION 2: GRAPHITE ("LEAD") PENCIL MARKS WILL CAUSE CORROSION. ALL MARKS MADE ON PARTS MUST BE MADE WITH A CRAYON OR SOFT, NON-GRAPHITE PENCIL SUCH AS CM162.

- (2) Before disassembly, use a crayon or soft, non-graphite pencil such as CM162 to number the blades counterclockwise from the propeller serial number impression stamped on the propeller hub unit.
 - (a) Make a record of each blade serial number and the hub socket/arm from which it was removed.

C. Ice Protection System (if applicable)

- (1) If the propeller is equipped with an ice protection system supplied by Hartzell, refer to the Hartzell Propeller Inc. Ice Protection System Manual 180 (61-30-80) for technical information about the applicable ice protection system.
- (2) If the propeller is equipped with an ice protection system not supplied by Hartzell Propeller Inc., refer to the applicable TC or STC holder's Instructions for Continued Airworthiness (ICA) for technical information about the applicable ice protection system.

2. Propeller Disassembly

WARNING: THE USE OF BLADE PADDLES TO MOVE BLADES CAN RESULT IN THE OVERLOAD AND DAMAGE OF THE BLADE PITCH CHANGE MECHANISM. THIS DAMAGE IS NOT REPAIRABLE AND CAN RESULT IN SEPARATION BETWEEN THE BLADE AND THE PITCH CHANGE MECHANISM, CAUSING LOSS OF PITCH CONTROL DURING FLIGHT.

CAUTION 1: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

CAUTION 2: USE COMPRESSED AIR THAT HAS BEEN FILTERED FOR MOISTURE, OR NITROGEN TO ACTUATE THE PROPELLERS.

CAUTION 3: DO USE MORE THAN 175 PSI (12.06 BARS) OF PRESSURE WHEN ACTUATING PROPELLERS INCLUDED IN THIS MANUAL.

CAUTION 4: USE ENOUGH PRESSURE TO MAKE SURE THAT THE PROPELLER ACTUATES AGAINST EACH POSITIVE STOP.

A. Disassembly of the Propeller External Pitch Change Parts

WARNING: SOME MODELS OF THE -2 PROPELLER AND ALL OF THE -5 PROPELLERS INCORPORATE SPRINGS UNDER PRESSURE. THE SPRINGS COULD BECOME LETHAL PROJECTILES AND MUST BE CAREFULLY DISASSEMBLED ACCORDING TO DIRECTIONS. TO ASSURE PERSONAL SAFETY, ALL -2 AND -5 PROPELLERS ARE DISASSEMBLED IN THE SAME MANNER.

NOTE 1: The propeller model number is recorded in the log book, and is also stamped on the propeller hub. The propeller model number indicates the presence of a cylinder spring kit by a "U" after the dash number. For example: HC-C3YR-2LUF indicates a "U" spring kit. The following propeller models have a "U" spring installed that is not indicated in the model number: HC-C3YF-5F, HC-C3YN-5A, PHC-I3YF-2AL.

NOTE 2: Other models may have cylinder springs without the "U" being present in the propeller model number. The "U" cylinder spring kit may have been installed after the propeller was in the field and the propeller may not have been properly reidentified after installation.

- (1) Remove the air valve cap, if present.
- (2) Using an air gauge or other appropriate instrument, depress the needle in the air valve (40) to release the air charge in the cylinder (70).

WARNING: INTERNAL CYLINDER AIR PRESSURE MUST BE REDUCED TO ZERO BEFORE ATTEMPTING TO REMOVE THE AIR VALVE.

- (3) Remove and discard the air valve (40).
- (4) Remove the counterweights, if applicable. Refer to Hartzell Propeller Inc. Aluminum Blade Manual 133C (61-13-33) or Hartzell Propeller Inc. Composite Propeller Blade Maintenance Manual 135F (61-13-35).
- (5) For propellers using one-piece spinners, remove and discard the set screw (35) from the cylinder wrench attachment hole.
- (6) Remove the low pitch stop nut (30).
- (7) Remove the low pitch stop (50).
- (8) Remove and discard the low pitch stop O-ring (60).
- (9) Using air pressure in the rotatable fixture TE125, move the propeller to low pitch position.

WARNING: HOLD THE PROPELLER BLADES AT LOW PITCH WITH AIR PRESSURE IN THE ROTATABLE FIXTURE. REMOVAL OF THE STOP SCREW (280) WITHOUT AIR PRESSURE COULD RESULT IN SUDDEN AND EXPLOSIVE ROTATION OF THE BLADES TO FEATHER PITCH, RESULTING IN PERSONAL INJURY AND DAMAGE TO THE INTERNAL COMPONENTS OF THE PROPELLER.

- (10) Using the T-handle wrench TE381 or equivalent, remove the stop screw (280), washer (290) (if used), feather stop washer (300), feather adjust washer(s) (310), high pitch stop sleeve (320), and high pitch adjust washer(s) (330).
 - (a) To facilitate propeller reassembly, make a record of the number of washers both under the feathering stop and on top of the feathering stop.
- (11) Discard the stop screw (280), washer (290) (if used), feather stop washer (300), feather adjust washer(s) (310), and high pitch adjust washer(s) (330). Retain the high pitch stop sleeve (320).
- (12) Release the air pressure in the rotatable fixture to permit the propeller to move to feather position.

B. Cylinder Removal

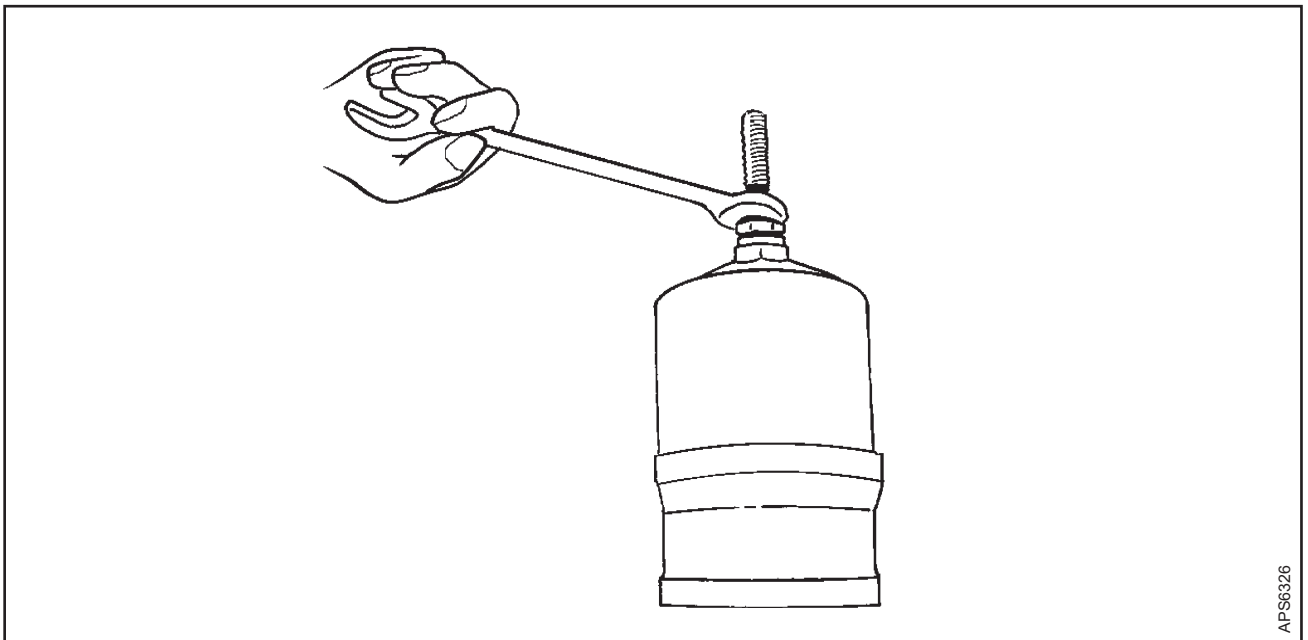
WARNING: USE EXTREME CAUTION WHEN REMOVING THE CYLINDER AND FEATHERING SPRING ASSEMBLY. WHEN COMPRESSED, THE FEATHERING SPRING ASSEMBLY IS LOADED TO APPROXIMATELY 750 POUNDS (341KG) FORCE. ENSURE THE SAFETY OF PERSONNEL IN THE VICINITY DURING THE DISASSEMBLY PROCEDURES.

CAUTION: CYCLE THE PROPELLER BEFORE BEGINNING THE CYLINDER REMOVAL PROCESS. FAILURE TO CYCLE THE PROPELLER MAY CAUSE THE PITCH CHANGE ROD TO PREMATURELY DISENGAGE FROM THE FORK.

- (1) Attach a cylinder wrench TE153 to the top of the cylinder (70).
- (2) Insert the small threaded end of the feather assist spring assembling tool TE9 into the cylinder and turn the tool into the end of the pitch change rod (370) until tight.

NOTE: Using the spring assembling tool TE9 prevents the spring from forcefully releasing if the spring retainer is broken or the screws are damaged.

- (3) Tighten the hex nut on the spring assembling tool TE9 until the guide washer and the thrust bearing of the spring assembly tool are snug against the cylinder (70).



Loosening the Spring Assembly Tool
Figure 3-1

- (4) Loosen the spring assembling tool TE9 hex nut approximately two full turns. Refer to Figure 3-1.

CAUTION: DO NOT DAMAGE THE CYLINDER THREADS WHEN REMOVING THE CYLINDER FROM THE HUB.

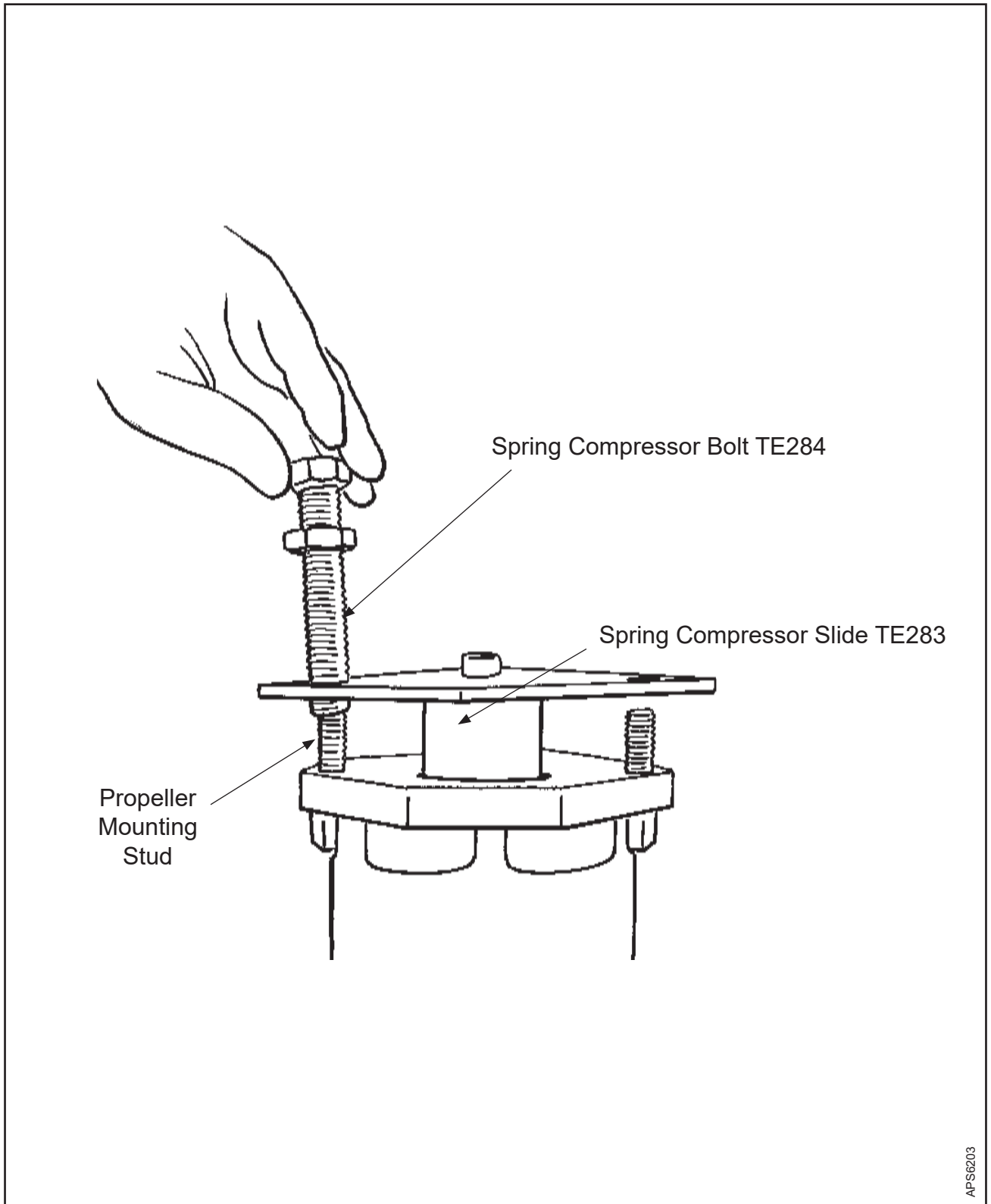
- (5) Turn the cylinder wrench TE153 counterclockwise until the cylinder (70) threads are free from the hub.

NOTE: The feathering spring assembly attached to the cylinder is removed with the cylinder.

- (6) Unthread the hex nut on the spring assembly tool TE9, allowing the feather assist spring to gradually extend.

NOTE: The feather assist spring is completely extended when the hex nut, washer, and thrust bearing of the spring assembly tool TE9 become loose.

- (7) Remove the feather assist spring assembly tool TE9 and the cylinder wrench TE153 from the cylinder (70).
- (8) Remove the cylinder (70), with the feather assist spring assembly, from the propeller.
- (9) Set aside the cylinder (70) with the feather assist spring assembly for further disassembly.



Installing the Spring Compressor Assembly TE31
Figure 3-2

C. Removing the Hub Plug (660)

- (1) Using a sling, remove the propeller from rotatable fixture TE125 on the assembly table TE129.
- (2) Turn the propeller over and put on a support so the propeller mounting flange is accessible.

NOTE: A sturdy barrel or drum with the rim well padded, may be used as a support.

- (3) Remove the hub plug (660).
 - (a) Insert TE98 in the pitch change rod (370) until the washer is firmly touching the end of the pitch change rod.
 - (b) Put the pulling fingers of TE98 in the recess of the hub plug groove.
 - (c) Turn the handle to tighten TE98 and remove the hub plug (660).
- (4) Remove and discard the hub plug OD O-ring (670).
- (5) Remove and discard the hub plug ID O-ring (680).

D. Hub Disassembly ("E" Hubs)

NOTE: An example of an "E" hub part number is ()HC-E()Y()-2.

CAUTION: SPRING COMPRESSOR ASSEMBLY TE31 IS DESIGNED FOR USE WITH "R" OR "K" FLANGE PROPELLERS AND WILL NOT ENGAGE THE SMALLER DIAMETER "L" FLANGE MOUNTING STUDS.

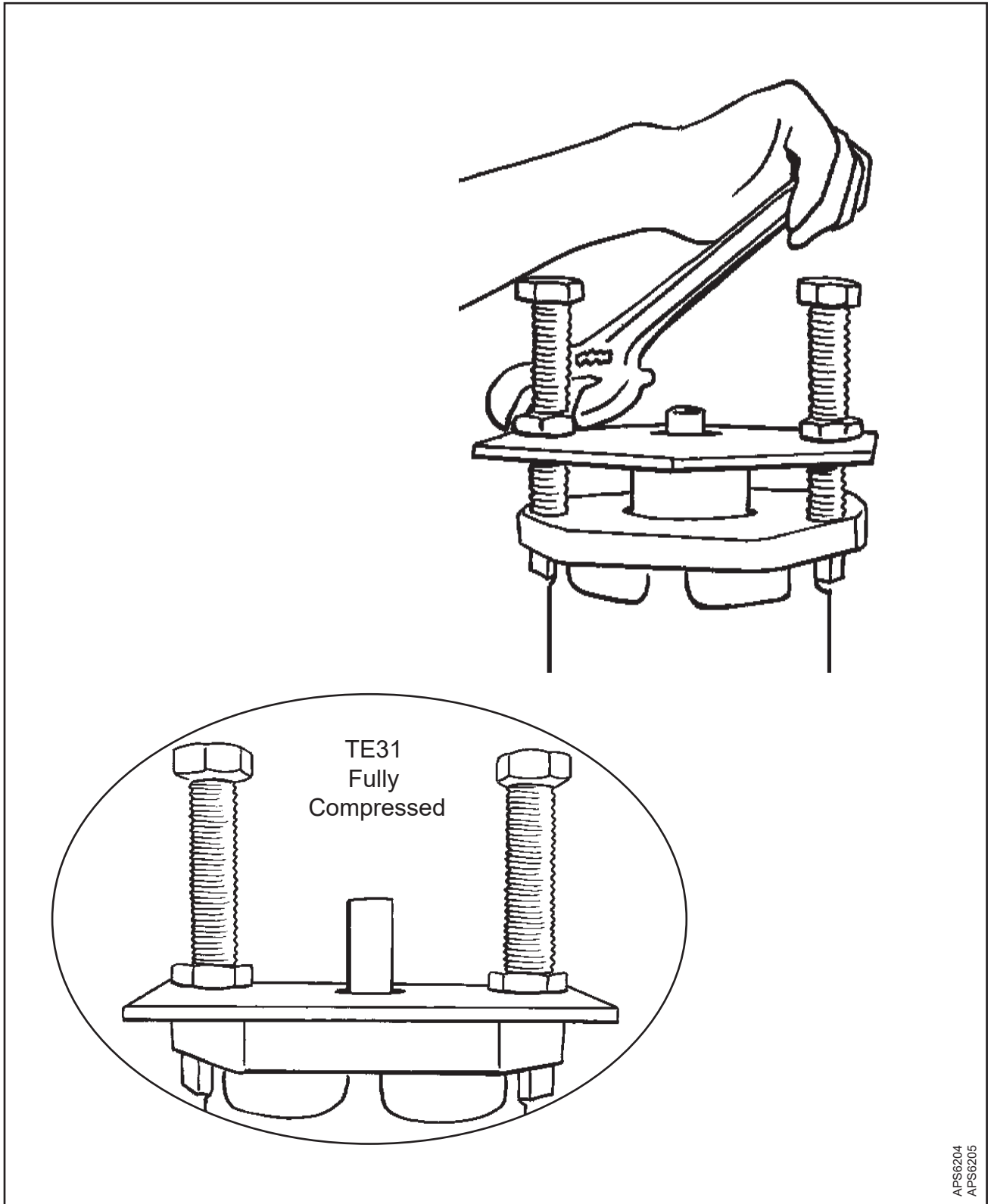
NOTE: A new bolt with a smaller ID thread may be fabricated to take the place of the spring compressor bolt TE284, or an "R" or "K" flange style stud may be used for disassembly purposes only.

- (1) If not previously removed, remove the hub plug (660) in accordance with the section "Removing the Hub Plug (660)" in this chapter.
- (2) Install the spring compressor assembly TE31 on the propeller mounting flange. Refer to Figure 3-2.

NOTE: The spring compressor assembly TE31 has six holes to clear the studs already installed.

- (a) Center the spring compressor slide TE283 on the spring retainer (560) in the propeller hub bore and align the spring compressor bolts TE284 with the studs in the hub mounting flange.

- 1 The spring may be compressed using only two of the three spring compressor bolts TE284 supplied, positioned approximately 180 degrees apart.



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Compressing the Feathering Springs with the Spring Compressor Assembly TE31
Figure 3-3

- (b) Install the nuts on the spring compressor bolts TE284.
 - 1 Position the nuts close to the heads of the spring compressor bolts TE284.
- (c) Turn the propeller mounting bolts into the ends of the spring compressor bolts TE284 until tight. Refer to Figure 3-2.

NOTE: The spring compressor bolts TE284 have both ID and OD threads.

WARNING: WHEN COMPRESSED, THE FEATHERING SPRING ASSEMBLY IS LOADED TO APPROXIMATELY 1000 POUNDS (454 KG) FORCE. ENSURE THE SAFETY OF PERSONNEL IN THE VICINITY DURING ASSEMBLY PROCEDURES.

CAUTION: TIGHTEN THE SPRING COMPRESSOR NUTS EVENLY TO PREVENT BINDING.

- (3) Compress the springs (540, 550) by evenly tightening the spring compressor nuts. Refer to Figure 3-3.

NOTE: Tightening the spring compressor nuts will move the spring retainer (560) beyond the groove in the pitch change rod (370) and permit the removal of the keeper (570).

- (4) Remove and discard the keeper (570) halves from the groove in the pitch change rod (370).
- (5) Decompress the springs (540)(550) by evenly loosening the spring compressor nuts.
- (6) Remove the spring compressor assembly TE31 from the propeller mounting bolts.
- (7) Remove the spring retainer (560).
- (8) Remove the large diameter feathering spring (540).
- (9) Remove the small diameter feathering spring (550).
- (10) Remove the spring guide (530) (B-1586 Spring Assembly ONLY).
- (11) Remove the spacer (520) (A-2273 Spring Assembly ONLY).
- (12) Reinstall the propeller on the rotatable fixture TE125 on the assembly table TE129.

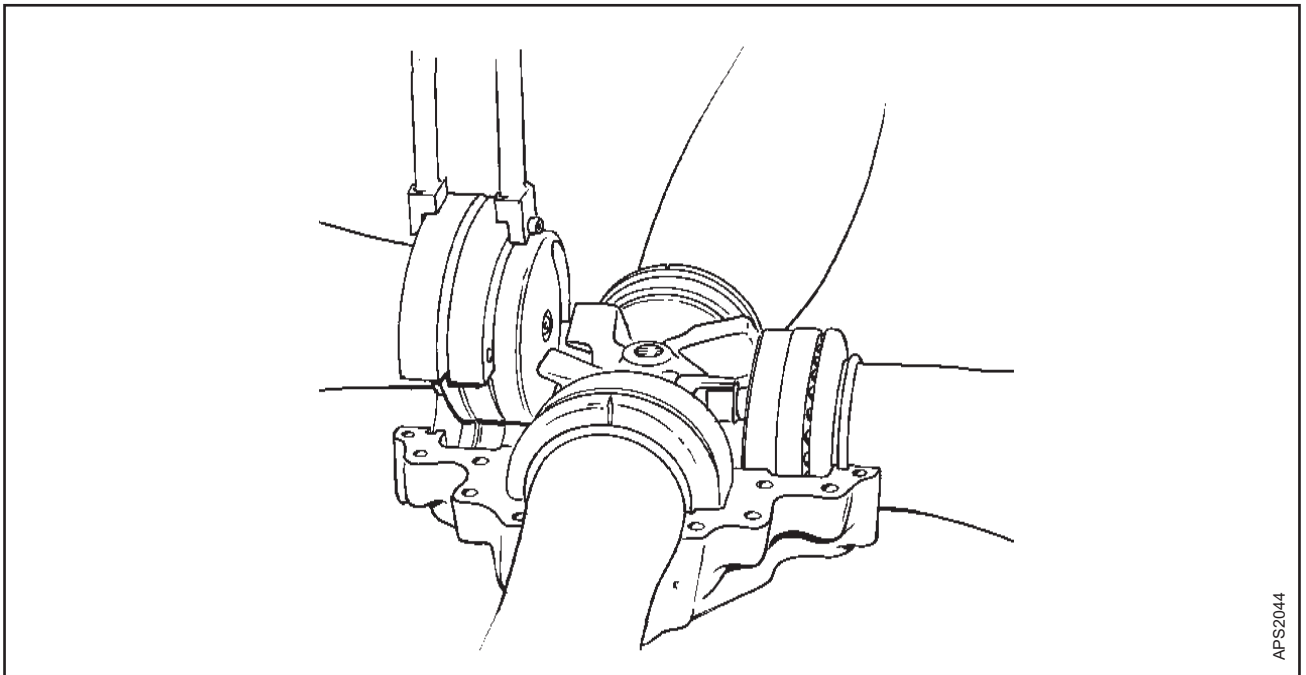
E. Disassembly of the Propeller Internal Pitch Change Parts

- (1) Remove and discard the piston nut (340).
- (2) Remove the piston (350).
- (3) Remove and discard the piston O-ring (360).
- (4) Using the wrench adapter TE6, remove the pitch change rod (370).
- (5) Remove and discard the hub nuts (610) and washers (600).
- (6) Remove the short and long hub bolts (580, 590).
 - (a) If the spinner bulkhead is mounted to the propeller with the hub bolts, remove the spinner bulkhead.
- (7) Remove and discard the cylinder mounting O-ring (380) from the cylinder-side hub half.

CAUTION: TO AVOID BLADE DAMAGE, IT IS RECOMMENDED TO USE BLADE STANDS TO SUPPORT THE BLADES.

- (8) Remove the cylinder half of the hub unit (480).
 - (a) A plastic wedge and rubber mallet may be used to separate the hub halves.

NOTE: The hub half may be difficult to remove because sealant was applied between the hub halves.



Removing the Blades Using Blade Retention Components Clamp TE24
Figure 3-4

- (9) Remove and discard the pitch change rod O-ring (390) from the cylinder-side hub half.
- (10) Using blade retention components clamp TE24, if desired, remove blade number one, preload plate, and thrust bearing. Refer to Figure 3-4.
- (11) Remove the pitch change fork (400).
- (12) Remove the pitch change blocks (440).
- (13) Using blade retention components clamp TE24, if desired, remove the remaining blade(s).
- (14) Remove the engine-side hub from the rotatable fixture.
- (15) Remove and discard the pitch change rod O-ring (470) from the engine-side hub half.
- (16) Remove the spinner bulkhead from the rotatable fixture, if applicable.

F. Hub Disassembly

- (1) For hub disassembly instructions, refer to the Aluminum Hub Overhaul chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

G. Pitch Change Fork Disassembly

NOTE: Pitch change forks with steel rubbing plates and brass rivets should be upgraded to the current plastic rubbing plate configuration. For information about upgrading pitch change forks to the current configuration, refer to the Special Adhesive and Bonding Procedures chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

- (1) Two-Bladed Propeller Pitch Change Fork Disassembly
 - (a) Remove and discard the plastic rubbing plates (420).
 - (b) Visually inspect each spring pin (430) for damage that may affect the ability of the pin to retain the rubbing plate (420).

- 1 Remove any damaged spring pin(s) (430).

NOTE: Replacement spring pin(s) will be installed when the rubbing plate (420) is installed at assembly.

- (2) Three-Bladed and Four-Bladed Propeller Pitch Change Fork Disassembly
 - (a) Remove and discard the pitch change fork buttons (410).

H. Pitch Change Block Disassembly

- (1) Remove and discard the pitch change block button (450) from the pitch change block, if applicable.

I. Blade Retention Parts Disassembly - Refer to Figure 10-10.

- (1) Remove and discard the blade seal (3010).
- (2) Remove the hub-side blade retention bearing (3020).
- (3) Remove and discard the ball bearings (3030).
- (4) Remove and discard the ball spacer (3040).
- (5) Remove and discard the pitch change knob bushing (3000) from the blade.
- (6) Remove the pitch change knob bracket (composite blades only).
 - (a) Remove and discard the pitch change knob bracket bolts (2990).
 - (b) Remove the blade pitch change knob bracket (2970).
 - 1 If the dowel pin (2960) remains in the blade, remove the dowel pin from the blade.
 - 2 If the dowel pin (2960) remains in the pitch change knob bracket, dowel pin removal from the bracket is not required.
- (7) Remove and discard the nut (3110) and set screw (3100) from each preload plate (3080).
- (8) Remove the preload plate (3080).
- (9) If installed, remove and discard the O-ring (3065).
- (10) If installed, remove the blade seal (3063).
- (11) Using a suitable gear puller or brass drift, remove the bearing retaining ring (3060).
- (12) Remove the blade-side blade retention bearing (3050) of the blade retention split-bearing.
- (13) For blade overhaul procedures, refer to Hartzell Propeller Inc. Aluminum Blade Manual 133C (61-13-33), or Hartzell Propeller Inc. Composite Propeller Blade Maintenance Manual 135F (61-13-35).

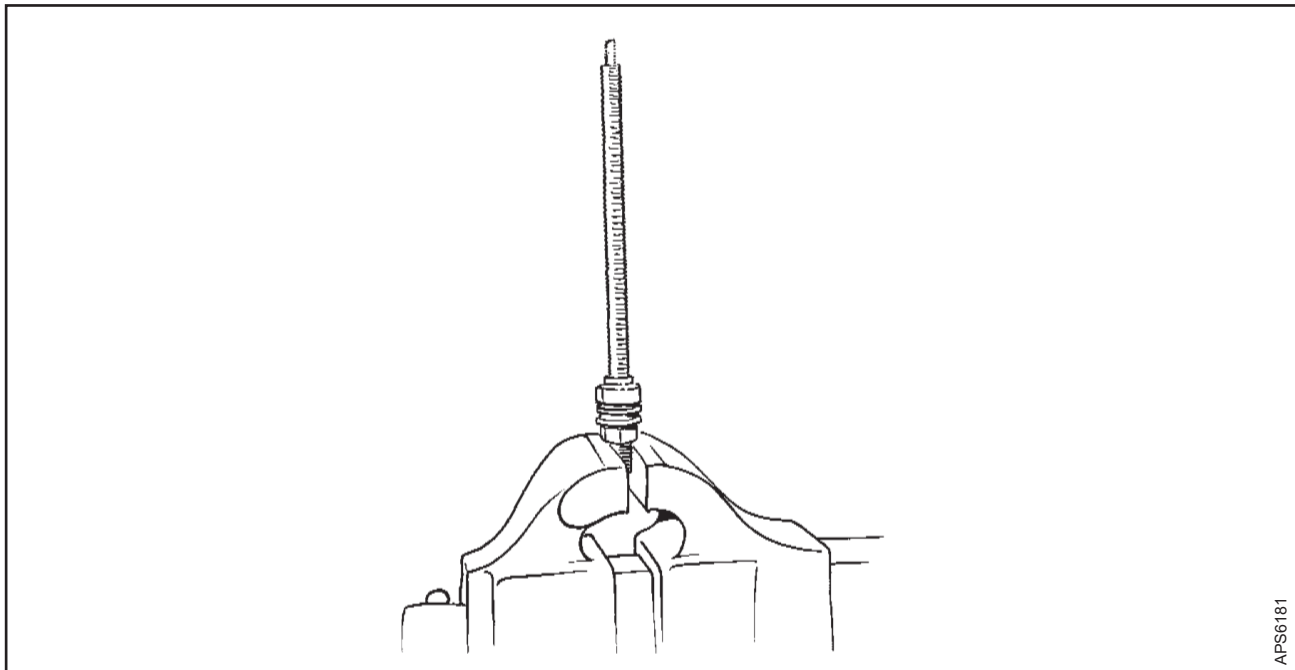
J. Cylinder Spring Disassembly

- (1) If there is a feather assist spring retainer and spring in the cylinder, use the instructions in this section for further disassembly of the cylinder.
 - (a) If the cylinder contains only a high pitch start lock, use the instructions in the section, "Cylinder Start Lock Unit Disassembly" for further disassembly of the cylinder.

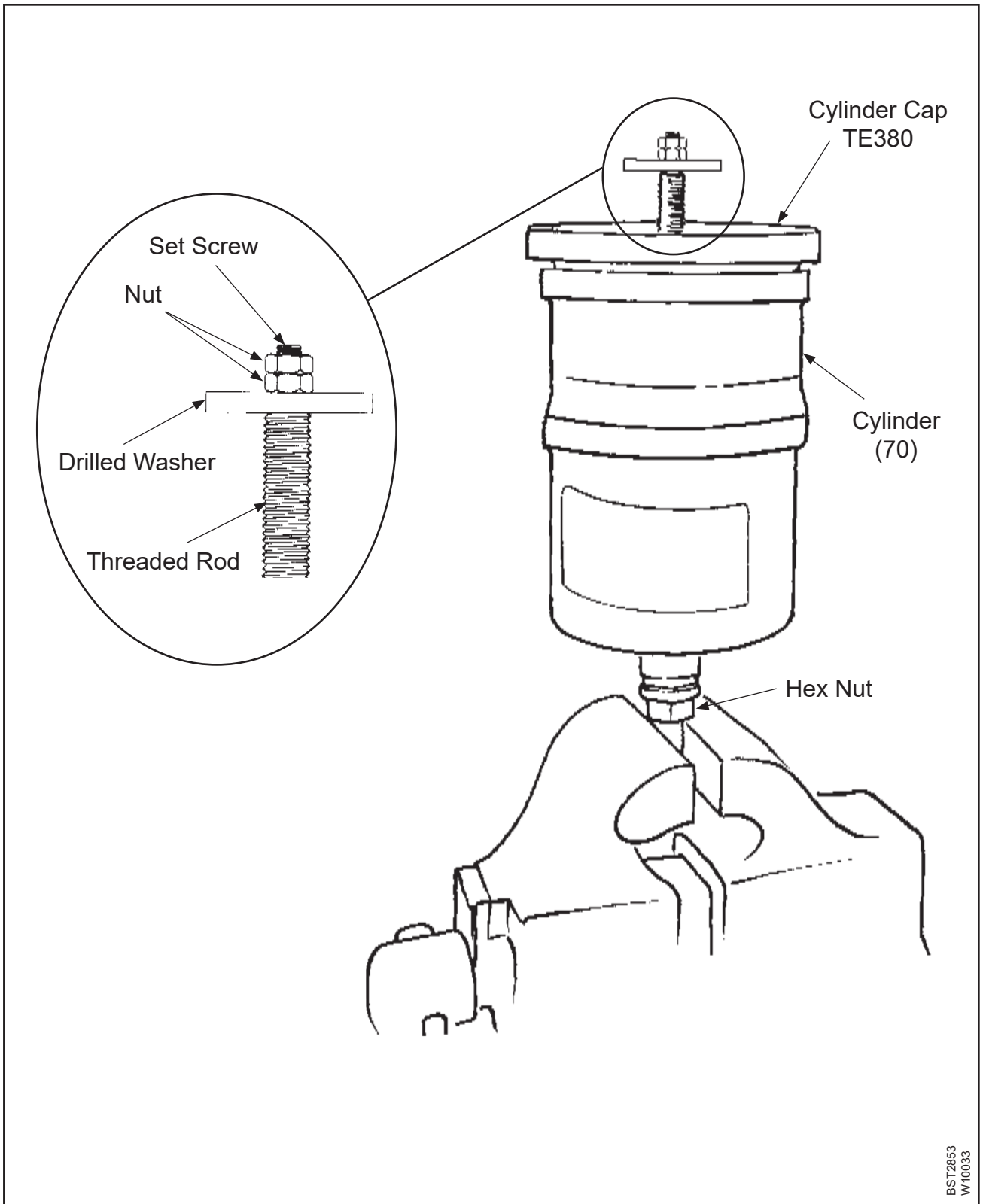
WARNING: WHEN COMPRESSED, THE FEATHERING SPRING ASSEMBLY IS LOADED TO APPROXIMATELY 750 POUNDS (341 KG) FORCE. ENSURE THE SAFETY OF PERSONNEL IN THE VICINITY DURING DISASSEMBLY PROCEDURES.

CAUTION: DO NOT ATTEMPT TO DISASSEMBLE THE SPRING ASSEMBLY WITH THE CYLINDER TORQUE WRENCH ADAPTER TE153 ATTACHED TO THE CYLINDER.

- (2) Put the assembling tool TE9 in a vise with the flattened portion of the threaded rod between the jaws of the vise, and tighten the vise. Refer to Figure 3-5.



Placing the Assembling Tool TE9 in a Vise
Figure 3-5

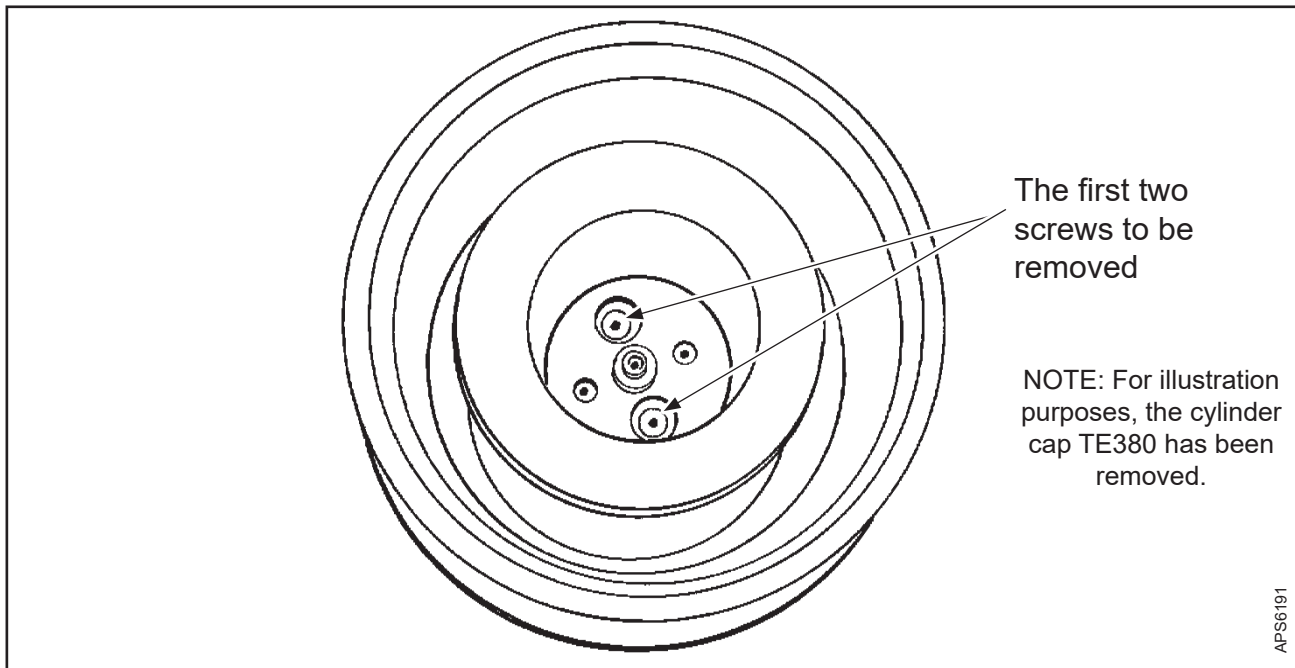


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Positioning the Cylinder on the Assembly Tool
Figure 3-6

CAUTION: DO NOT DAMAGE THE CYLINDER THREADS WHEN INSTALLING THE CYLINDER CAP TE380.

- (3) Install the cylinder cap TE380 on the cylinder (70). Refer to Figure 3-6.
- (4) Slide the cylinder (70) onto the assembling tool TE9 with the small opening of the cylinder toward the vise. Refer to Figure 3-6.
- (5) Put the drilled washer over the end of the set screw in the end of the assembling tool TE9. Refer to Figure 3-6.
- (6) Install two nuts on the set screw of the assembling tool TE9. Refer to Figure 3-6.
- (7) Turn the hex nut until the drilled washer of the assembling tool TE9 is snug against the weight (190) or retainer plate (200) with two screws (180) visible through the large holes in the washer. Refer to Figure 3-7.
- (8) Remove and discard the two screws (180).
- (9) Loosen the hex nut until the drilled washer can be rotated over the weight (190) or retainer plate (200) and two screws (180) inside the spring retainer (220).
- (10) Turn the drilled washer until the heads of the remaining two screws (180) can be seen through the large holes in the drilled washer. Refer to Figure 3-7.



Removing the First Two Screws
Figure 3-7

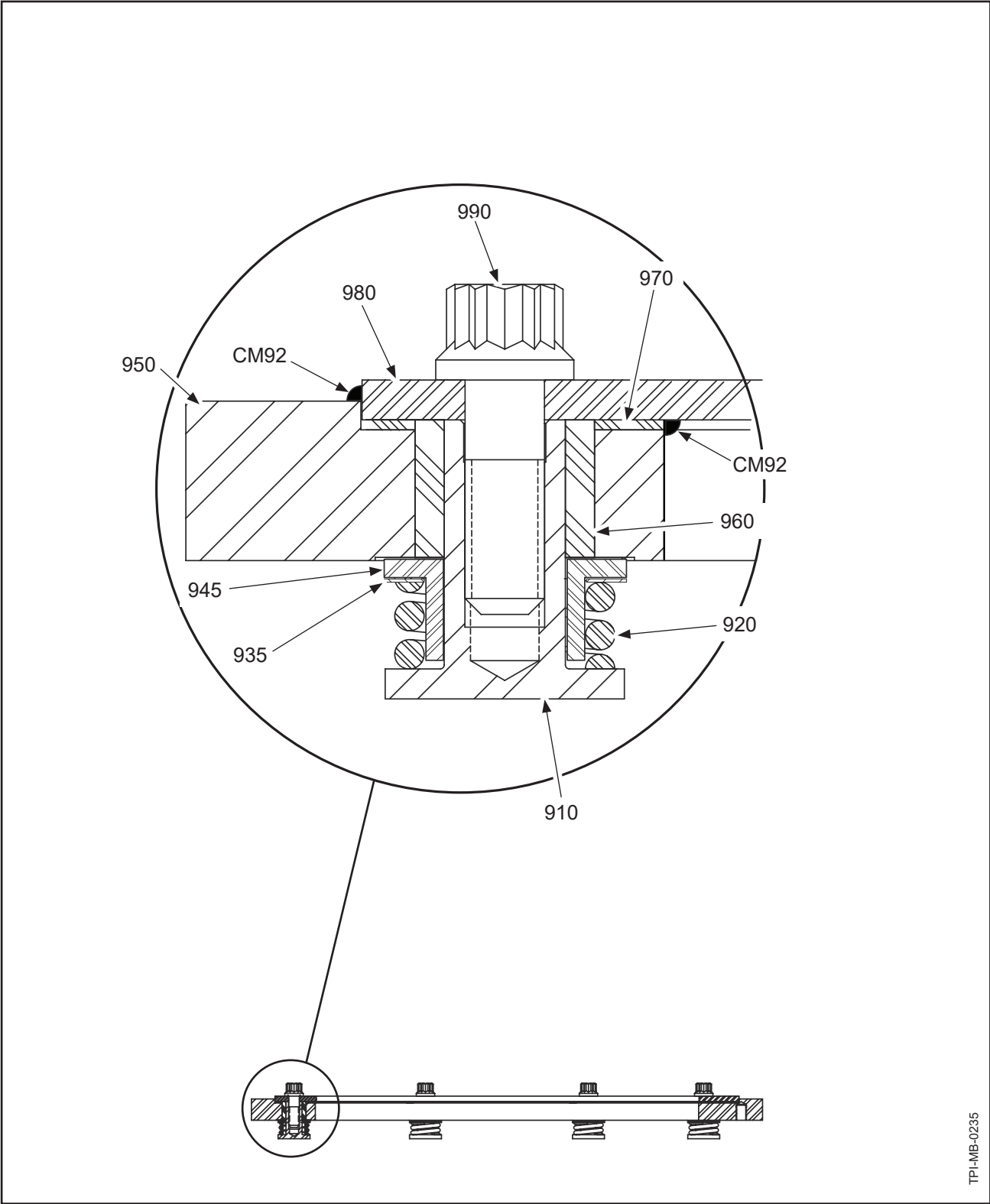
- (11) Tighten the hex nut of the assembling tool TE9 until the drilled washer is tight against the weight (190) or retainer plate (200).
- (12) Remove the remaining two screws (180).
- (13) Remove the cylinder cap TE380.
- (14) Loosen the hex nut of the assembling tool TE9 until the feather assist spring (230) is fully released.
- (15) Remove the two nuts and the drilled washer of the assembling tool TE9.
- (16) Remove the weight (190) or retainer plate (200) and the flyweight plate (250).
- (17) Remove and discard the spring retainer (220).
- (18) Remove the feathering spring (230).
- (19) Remove and discard the screws (100) holding the start lock housing (240) in place.
- (20) Remove the start lock housing (240).
- (21) Remove and discard the cylinder ID O-ring (90).

K. Cylinder Start Lock Unit Disassembly (Cylinders Without a Spring Assembly)

- (1) Attach a cylinder wrench TE153 to the top of the cylinder (70).

CAUTION: DO NOT DAMAGE THE CYLINDER THREADS WHEN REMOVING THE CYLINDER FROM THE HUB.

- (2) Remove the cylinder (70).
- (3) Remove the cylinder wrench TE153 from the cylinder (70).
- (4) Remove and discard the four screws (100) attaching the start lock unit (110) to the inside of the cylinder (70).
- (5) Remove the start lock unit (110).
- (6) Remove and discard the cotter pin (150).
- (7) Remove the start lock pin (140).
- (8) Remove and discard the start lock spring (130).



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C-1576 Damper Assembly
Figure 3-8

L. C-1576 Damper Disassembly

NOTE: Refer to Figure 3-8.

- (1) Remove and discard the eight screws (990).
- (2) Remove the hex head spacer tubes (910) from the damper weight (950) and the silicone grommet (960).
- (3) Remove the flanged bushing (945) and the spring adjust washer (935).
- (4) Remove and discard the springs (920).
- (5) Remove the sealant CM92 from between the damper weight (950) and the damper plate (980).
- (6) Separate the damper weight (950) and the damper plate (980).
- (7) Remove and discard the silicone grommets (960) and the friction disc (970).

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1. Cleaning Procedures (Rev. 4)

WARNING: ADHESIVES AND SOLVENTS ARE FLAMMABLE AND TOXIC TO THE SKIN, EYES, AND RESPIRATORY TRACT. SKIN AND EYE PROTECTION ARE REQUIRED. AVOID PROLONGED CONTACT AND BREATHING OF VAPORS. USE SOLVENT RESISTANT GLOVES TO MINIMIZE SKIN CONTACT AND WEAR SAFETY GLASSES FOR EYE PROTECTION. USE IN A WELL VENTILATED AREA AWAY FROM SPARKS AND FLAME. READ AND OBSERVE ALL WARNING LABELS.

A. General Cleaning

- (1) Refer to the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

B. Cleaning Steel Parts for Magnetic Particle Inspection

- (1) Refer to the Magnetic Particle Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

C. Cleaning Steel Parts for Cadmium Replating Procedures

- (1) Refer to the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

D. Cleaning Aluminum Parts for Penetrant Inspection

- (1) Refer to the Penetrant Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

E. Cleaning Titanium Parts for Penetrant Inspection

- (1) Refer to the Penetrant Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

F. Cleaning Aluminum Parts for Chromic Acid Anodizing Procedures

- (1) Refer to the Chromic Acid Anodizing chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

G. Cleaning Cylinder Threads

- (1) It is preferable that the cylinder threads be cleaned only with solvent CM23; however, removal of sealant in the threaded area can be difficult.

CAUTION: DO NOT USE GLASS BEAD OR OTHER ABRASIVE CLEANING METHODS, AS THEY MAY CAUSE EXCESSIVE DAMAGE TO THE CYLINDER THREADS.

- (2) Use plastic media in accordance with the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02) to remove the sealant from the cylinder threads.

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1. Inspection Interval Requirements (Rev. 1)

A. General

- (1) For information about life limited components and mandatory inspections, refer to the Airworthiness Limitations chapter of the applicable Hartzell Propeller Inc. owner's manual.
- (2) For overhaul periods of Hartzell Propeller Inc. propellers, refer to Hartzell Propeller Inc. Service Letter HC-SL-61-61Y.

2. Dimensional Inspection (Rev. 1)

A. Diameter Measurements

- (1) When measuring the diameter of a part with a two point measuring instrument, take at least two measurements unless specified differently.
 - (a) Obtaining a measurement outside the specified tolerance at any point of measurement is cause for retirement of the part when a minimum of two measurements are taken.
 - (b) Alternately, take eight evenly spaced measurements, unless specified differently.
 - 1 Obtaining a measurement outside the specified tolerance on three or more measurements is cause for retirement of the part when eight measurements are taken (two of eight measurements may be out of specified tolerance).
 - 2 This alternate method may not be used to accept a diameter that has obvious damage beyond repairable (serviceable) limits.
- (2) When measuring the diameter of a part with a three point measuring instrument, take one measurement. A measurement outside the specified tolerance is cause for retirement of the part.

B. Decimal Places

- (1) Inspect the part features to the number of decimal places specified. If three decimal places are specified, inspect the part to three decimal places only.

3. Inspection Criteria/Procedures (Rev. 3)

A. Propeller Components (Except for those listed separately in this section)

- (1) Refer to Table 5-1, "Component Inspection Criteria" in this chapter.

B. Hubs

- (1) Aluminum Hubs: Refer to the Aluminum Hub Overhaul chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

C. Blades

- (1) Aluminum Blades: Refer to Hartzell Propeller Inc. Aluminum Blade Overhaul Manual 133C (61-13-33).
- (2) Composite Blades: Refer to Hartzell Propeller Inc. Composite Blade Overhaul Manual 135F (61-13-35).

D. Ice Protection Systems

- (1) For ice protection systems supplied by Hartzell, refer to Hartzell Propeller Inc. Ice Protection System Manual 180 (30-61-80).
- (2) For ice protection systems not supplied by Hartzell, refer to the applicable TC or STC holder's Instructions for Continued Airworthiness (ICA).

E. Spinner Assemblies

- (1) Metal Spinners: Refer to Hartzell Propeller Inc. Metal Spinner Maintenance Manual 127 (61-16-27).
- (2) Composite Spinners: Refer Hartzell Propeller Inc. Composite Spinner Maintenance Manual 148 (61-16-48).

F. Special Inspections (Lightning Strike, Foreign Object Strike, etc.)

- (1) Refer to the Special Inspections chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

4. Propeller Component Checks

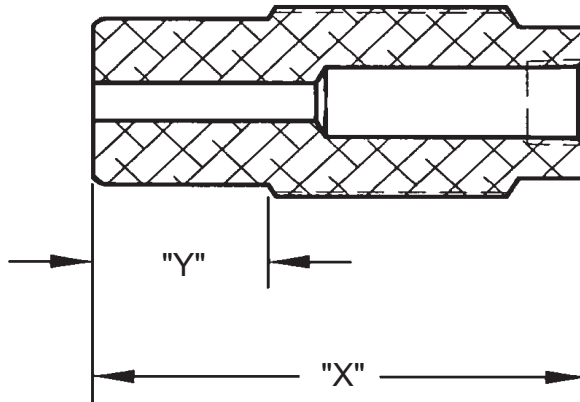
CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

Refer to Table 5-1, "Component Inspection Criteria" in this chapter.

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Component Inspection Criteria
Table 5-1

	Inspect	Serviceable Limits	Corrective Action
A.	<u>SPINNER NUT</u> (Items 10, 30)		
(1)	Visually examine each spinner nut for wrenching damage.	The corners between the wrenching flats may be rounded. Two (2) wrenching flats must be sufficiently undamaged to withstand installation torque. Material may not be displaced above or below the nut that could result in interference with the mating parts.	File away unwanted material displacement. Replace the nut if a minimum of two (2) flats will not withstand installation torque.
(2)	Visually examine each spinner nut for corrosion on all surfaces and wear on surfaces other than wrenching flats.	The maximum permitted depth of material loss is 0.005 inch (0.12 mm).	If there is material loss deeper than the permitted serviceable limits, replace the nut.
(3)	Visually examine the spinner nut for cadmium plating coverage.	Cadmium plating must be present on all surfaces.	Replate the nut in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
B.	<u>SPINNER SPACER</u> (Item 20)		
(1)	Visually examine the spinner spacer for corrosion, wear, or damage.	The maximum permitted depth of material loss is 0.003 inch (0.07 mm).	If there is material loss deeper than the permitted serviceable limits, replace the spinner spacer.
(2)	If a magnet attracts the spinner spacer, visually examine the spinner spacer for cadmium plating coverage.	There must be plating on all surfaces.	Replate the spacer in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
	<u>NOTE:</u> If a magnet does not attract the spinner spacer, material is stainless steel or brass and cadmium plating is not required.		



Part No.	"X" Dimension	"Y" Dimension
A-2404-4	2.00 ± 0.03 inch (50.8 ± 0.8 mm)	0.500 ± 0.010 inch (12.70 ± 0.05 mm)
A-2404-3	2.35 ± 0.03 inch (59.7 ± 0.8 mm)	0.700 ± 0.010 inch (17.78 ± 0.05 mm)
A-2404-2	2.00 ± 0.03 inch (50.8 ± 0.8 mm)	0.600 ± 0.010 inch (15.24 ± 0.05 mm)
A-2404-1	2.10 ± 0.03 inch (53.3 ± 0.8 mm)	0.700 ± 0.010 inch (17.78 ± 0.05 mm)
A-2404	2.25 ± 0.03 inch (57.2 ± 0.8 mm)	0.800 ± 0.010 inch (20.32 ± 0.05 mm)

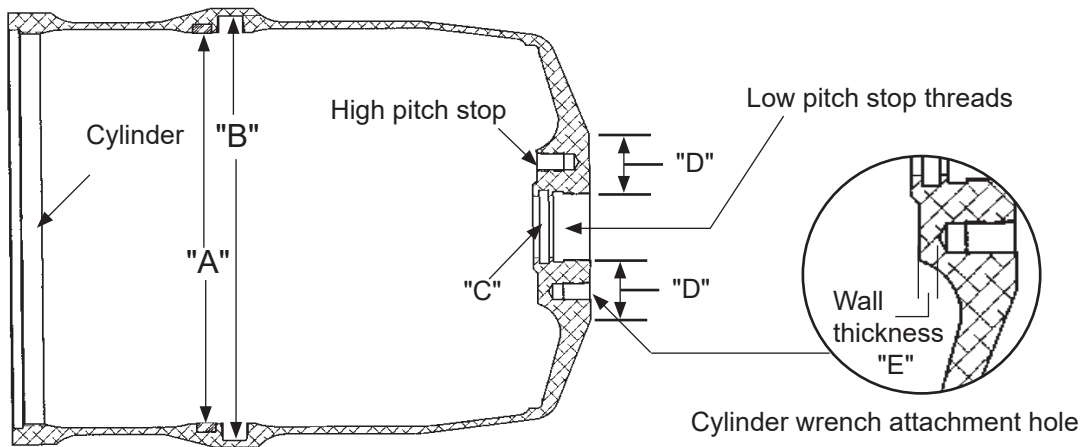
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LOWSTOP.XLS

Low Stop Dimensions
Figure 5-1

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
C.	<u>LOW STOP</u> (Item 50) (Refer to Figure 5-1)		
(1)	Visually examine the pitch change rod/low stop contact surface for damage.	Slight damage is permitted. Damage must not affect the performance of the low stop.	If the damage is more than the permitted serviceable limits, replace the low stop.
(2)	Visually examine the external threads of the low stop for damage.	One damaged thread is permitted.	If more than one thread is damaged, replace the low stop.
(3)	Visually examine the internal threads of the low pitch stop for damage.	One damaged thread is permitted.	If more than one thread is damaged, replace the low stop.
(4)	Visually examine the air hole in the center of the low stop.	The air passage must be clean and unobstructed.	If the air passage cannot be cleared, replace the low stop.
(5)	Visually examine the Hard Anodize on the "Y" dimension surface of the low stop.	Loss of Hard Anodize on the "Y" dimension is not permitted. The OD threads may be bare aluminum or be coated with anodize.	If there is loss of Hard Anodize on the "Y" dimension, replace the low stop.

NOTE: To identify the low stop, refer to Figure 5-1.



Part Number	"A" Bushing Maximum Diameter	"B" O-ring Groove Maximum Diameter	"C" Low Pitch Stop O-ring Groove Maximum Diameter
B-2423-1	4.759 inch (120.88 mm)	5.235 inch (132.97 mm)	0.989 inch (25.12 mm)
B-2452-1	5.259 inch (133.58 mm)	5.735 mm (145.77 mm)	0.989 inch (25.12 mm)

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Cylinder Dimensional Inspection Criteria
Figure 5-2

Component Inspection Criteria
Table 5-1

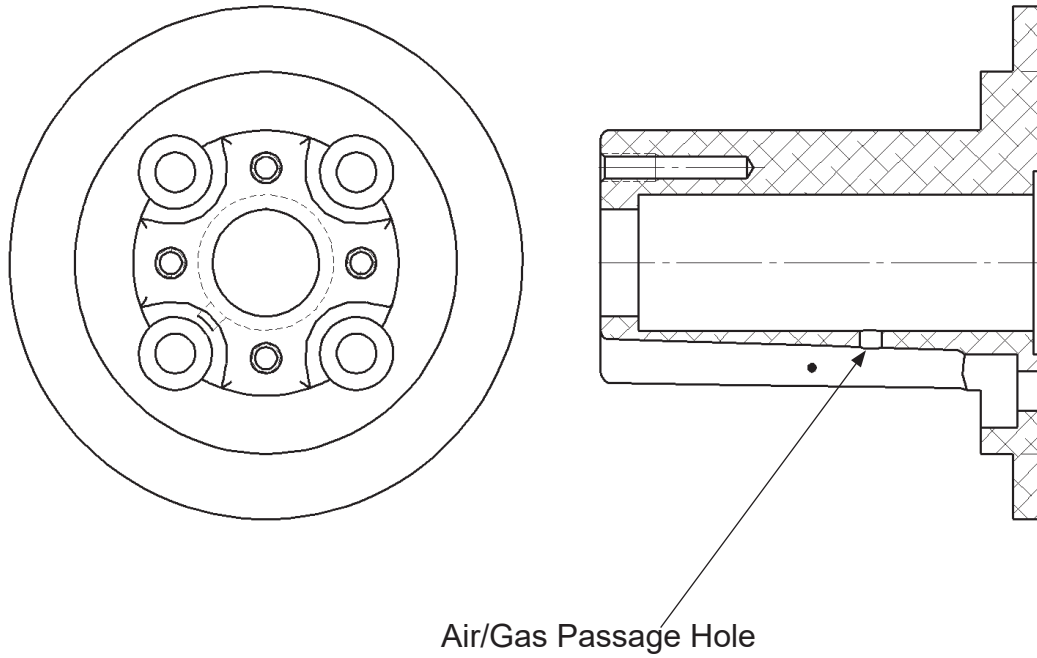
Inspect	Serviceable Limits	Corrective Action
<p>D. <u>CYLINDER</u> (Item 70) (Refer to Figure 5-2)</p>		
<p>(1) Visually examine the external surfaces of the cylinder for wear, nicks, scratches or other damage.</p>	<p>All external surfaces: maintain a wall thickness of 0.079 inch (2.00 mm), repaired area must be less than 0.5 inch (12.7 mm) in diameter, repairs must be separated by a minimum of 0.5 inch (12.7 mm).</p> <p>Damage in circular area "D" limited to 0.020 inch (0.50 mm) depth. Sufficient flat surface must remain to support the nut.</p>	<p>Using an abrasive pad CM47, or equivalent, polish to blend out damage. High spots are not permitted.</p> <p>If base aluminum is exposed, chromate conversion coat.</p> <p>If damage is greater than the permitted serviceable limits, replace cylinder.</p> <p>If damage is greater than the permitted serviceable limits, replace the cylinder.</p>
<p>(2) Visually examine the cylinder wrench attachment threads for damage.</p>	<p>A maximum of 1/4 of one thread accumulated damage per wrench attachment hole is permitted.</p>	<p>Refer to the Repair chapter in this manual for repair of cylinder wrench attachment threads.</p>
<p>(3) If cylinder wrench attachment holes are repaired with a slimsert, measure the wall thickness, "E".</p>	<p>The minimum permitted wall thickness under the center point of the hole is 0.080 inch (2.03 mm).</p>	<p>If the wall thickness under the center point of the hole is less than the serviceable limits, replace the cylinder.</p>
<p>(4) Visually examine the low pitch stop threads for damage.</p>	<p>Damage is not permitted</p>	<p>If there is damage, replace the cylinder.</p>
<p>(5) Visually examine the ID of the cylinder bushing and the immediate surrounding cylinder wall area for signs of bushing wear.</p>	<p>If the cylinder bushing or surrounding area shows signs of wear, dimensionally inspect the cylinder ID in accordance with Figure 5-2.</p>	<p>If the ID is greater than the permitted serviceable limits, replace the cylinder bushing. For cylinder bushing replacement procedures, refer to the Special Adhesive and Bonding Procedures chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
D. <u>CYLINDER CONTINUED</u> (Item 70) (Refer to Figure 5-2)		
(6) Visually examine the adhesive bond of the cylinder bushing.	An unbonded area is not permitted.	If there is an unbonded area, replace the bushing. For cylinder bushing replacement procedures, refer to the Special Adhesive and Bonding Procedures chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
(7) Visually examine the O-ring groove for wear.	If the O-ring groove shows wear, dimensionally inspect the ID of the O-ring groove in accordance with Figure 5-2.	If the wear is more than the permitted serviceable limits, replace the cylinder.
(8) Visually examine the cylinder mounting threads for damage.	One damaged thread is permitted.	If more than one thread is damaged, replace the cylinder.
(9) Visually examine the high pitch stop bracket attachment hole threads for damage.	One damaged thread is permitted for each attachment hole.	If more than one thread is damaged, replace the cylinder.
<u>NOTE:</u> Some older cylinders may have smaller, additional holes in the high pitch stop bracket attachment area. If no large, threaded holes (0.25 inch, 6.4 mm) are present, replace the cylinder.		
(10) Visually examine the low pitch stop O-ring groove.	If the O-ring groove shows wear, dimensionally inspect the ID in accordance with Figure 5-2.	If the wear is more than the permitted serviceable limits, replace the cylinder.

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
E.	<u>B-2406-() START LOCK HOUSING</u> (Item 120)		
(1)	Visually examine the bracket (except the high stop pin bores) for corrosion, wear, or damage.	base, the maximum permitted depth of material loss is 0.010 inch (0.25 mm).	If the depth of material loss is greater than the serviceable limits, replace the bracket.
		For the bracket flange base that attaches to the cylinder, the maximum permitted depth of material loss is 0.030 (0.76 mm) in individual gouges.	If the depth of material loss is greater than the serviceable limits, replace the bracket.
(2)	Visually examine the high stop pin bores for corrosion and damage.	Corrosion or damage is not permitted.	If there is corrosion or damage replace the bracket.
(3)	Visually examine the ID of the high stop pin bores for wear.	If there is wear, measure the ID. Maximum permitted ID is 0.503 inch (12.77 mm).	If the pin bore ID is greater than the serviceable limits, replace the bracket.

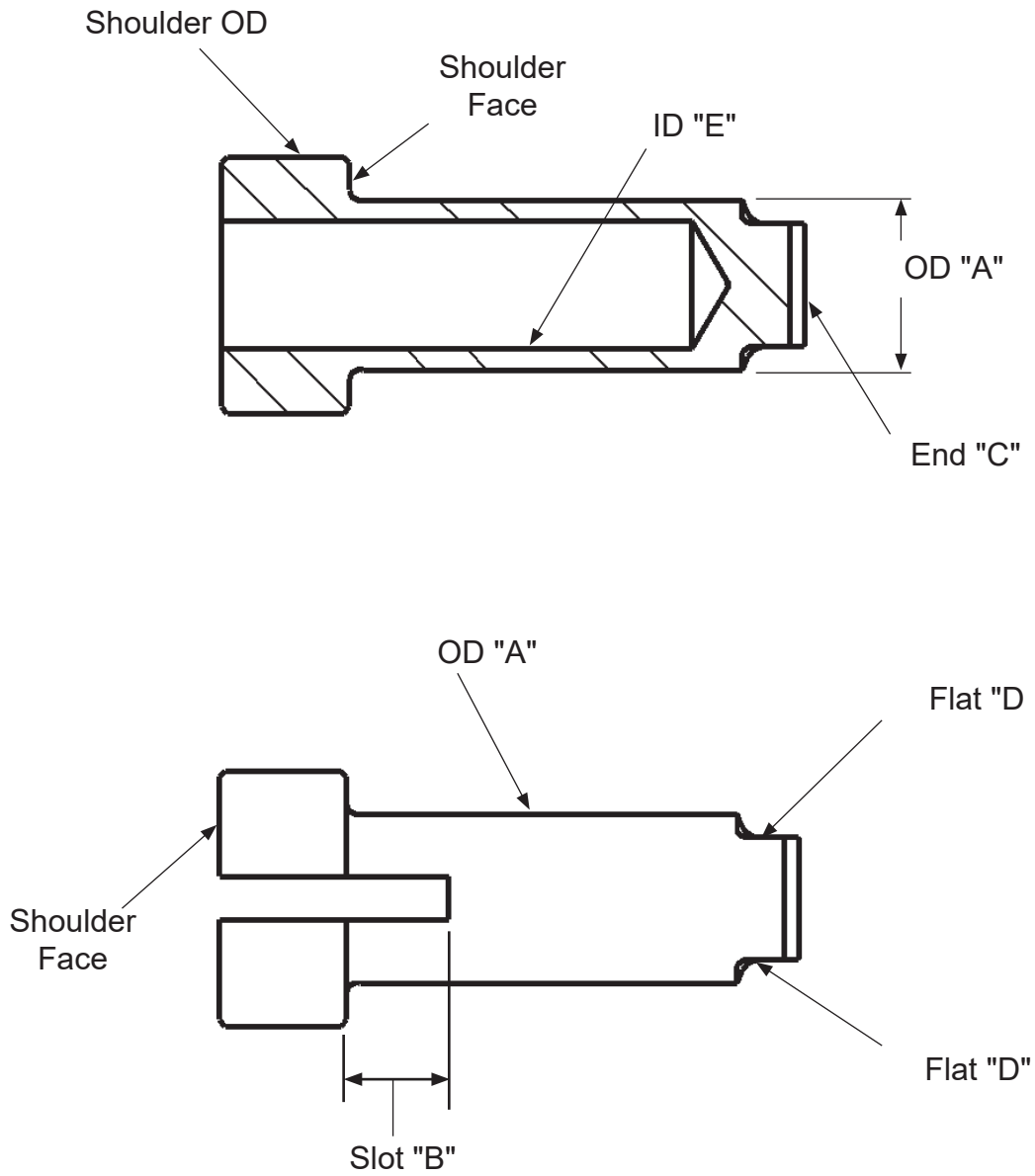


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Start Lock Housing
Figure 5-3

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>F. <u>B-1593 START LOCK HOUSING</u> (Item 240) (Refer to Figure 5-3)</p>		
<p>(1) Visually examine the start lock housing for corrosion, wear, or damage.</p>	<p>The maximum permitted depth of damage is 0.010 inch (0.25 mm).</p>	<p>If corrosion, wear, or damage is greater than the permitted serviceable limits, replace the start lock housing.</p>
	<p>Damage must not push up material above the normal bracket surface that mates with the cylinder (70) and washer (250).</p>	<p>Pushed up material on the referenced mating surfaces may be spot polished using an abrasive pad CM47 or equivalent. Apply a layer of chemical conversion coating to the aluminum surface where anodize has been removed through polishing in accordance with the Chromic Acid Anodizing chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>
<p>(2) Visually examine the internal threads for damage.</p>	<p>Damage is not permitted on the washer (250) mating surface.</p>	<p>If there is damage, replace the start lock housing.</p>
	<p>A maximum of one-half damaged thread is permitted.</p>	<p>If the damage is greater than the permitted serviceable limits, replace the start lock housing.</p>
<p>(3) For the B-1593 start lock housing, visually examine the start lock housing for an air/gas passage hole.</p>	<p>There must be an air/gas passage hole.</p>	<p>If there is no air/gas passage hole or the ID of the hole is smaller than the minimum permitted serviceable limits, repair in accordance with the section "Repair of the B-1593 Start Lock Housing" in the Repair chapter of this manual.</p>
	<p>The minimum permitted ID of the air/gas passage hole is 0.147 inch (3.73 mm).</p>	<p>repair in accordance with the section "Repair of the B-1593 Start Lock Housing" in the Repair chapter of this manual.</p>
	<p>The maximum permitted ID of the air/gas passage hole is 0.157 inch (3.98 mm).</p>	<p>If the ID of the hole is greater than the maximum permitted serviceable limits, replace the start lock housing.</p>

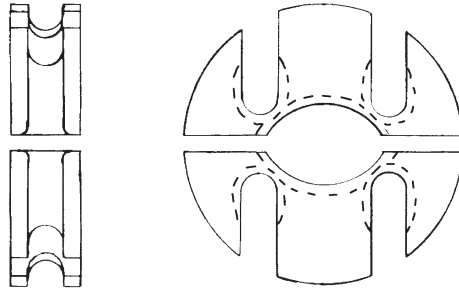


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Start Lock Pin
Figure 5-4

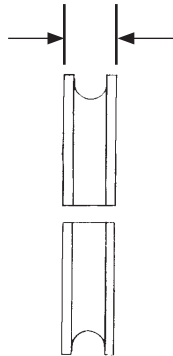
Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>G. <u>START LOCK PIN</u> (Item 140) (Refer to Figure 5-4)</p>		
<p>(1) Visually examine the start lock pin for corrosion.</p>	<p>Corrosion is not permitted. If there is corrosion, remove it in accordance with the corrective action repair limits.</p>	<p>Remove corrosion using glass bead cleaning. Refer to the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If glass bead cleaning does not remove the corrosion, replace the start lock pin.</p>
<p>(2) Measure OD "A" of the start lock pin.</p>	<p>The minimum permitted diameter of OD "A" is 0.494 inch (12.55 mm).</p>	<p>If the diameter is less than the permitted serviceable limits, replace the start lock pin.</p>
<p>(3) Measure the length of Slot "B" of the start lock pin.</p>	<p>The maximum permitted length of Slot "B" is 0.320 inch (8.12 mm).</p>	<p>If the length is greater than the permitted serviceable limits, replace the start lock pin.</p>
<p>(4) Visually examine Flats "D" and End "C" of the start lock pin for damage and pitting.</p>	<p>The maximum permitted depth of damage and pitting is 0.005 inch (0.12 mm). The maximum permitted amount of damage and pitting is 20% of each surface.</p>	<p>If the damage or pitting is greater than the permitted serviceable limits, replace the start lock pin.</p>
<p>(5) Visually examine Flats "D" and End "C" of the start lock pin for wear.</p>	<p>The maximum permitted depth of wear is 0.005 inch (0.12 mm). The amount of wear is not limited.</p>	<p>If the wear is greater than the permitted serviceable limits, replace the start lock pin.</p>
<p>(6) Visually examine all remaining surfaces of the start lock pin for damage and pitting.</p>	<p>The maximum permitted depth of damage or pitting on the OD "A" surface or the ID "E" surface is 0.001 inch (0.025 mm) with a maximum area of coverage of 10% of each surface. The maximum permitted depth of damage or pitting on the shoulder faces or the shoulder OD is 0.005 inch (0.12 mm) with a maximum area of coverage of 10% for each surface.</p>	<p>If the damage or pitting is greater than the permitted serviceable limits, replace the start lock pin.</p>



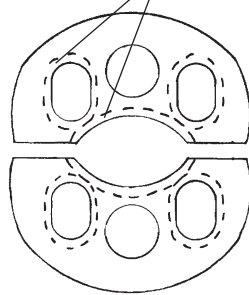
A-1590 Weight (not coated) - Replace with B-318 Weight

0.363 ± 0.005 inch
(9.22 ± 0.13 mm)



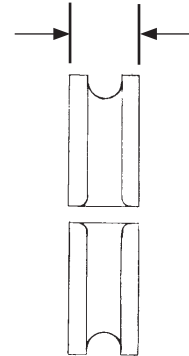
B-317

Areas of
permitted
wear.



B-317 and B-318 Weights (coated)

0.486 ± 0.003 inch
(12.34 ± 0.08 mm)



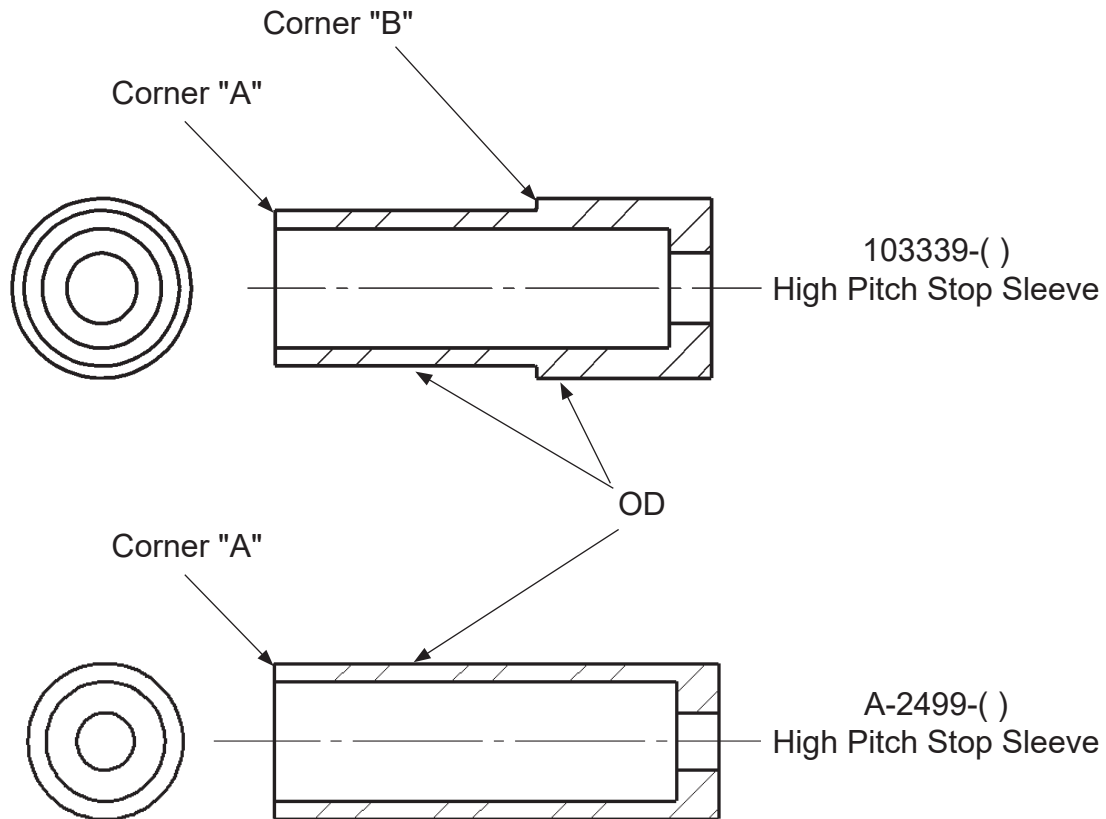
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APS6244A
APS6245

Weight Identification
Figure 5-5

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
H.	<u>SPRING GUIDE</u> (Item 170)		
	(1) Visually examine the spring guide for wear or damage.	The maximum permitted depth of damage or wear is 0.010 inch (0.25 mm).	If the depth of damage or wear is greater than the serviceable limits, replace the spring guide.
I.	<u>RETAINER PLATE</u> (Item 200)		
	(1) Visually examine the retainer plate for corrosion, wear, or damage.	Corrosion, damage, or wear is not permitted.	If there is corrosion, damage, or wear, replace the retainer plate.
J.	<u>WEIGHT</u> (Item 190) (Refer to Figure 5-5)		
	(1) Examine to identify the weight.	Weight must be the correct part for the propeller model.	Replace the weight with the correct part for the propeller model.
	(2) Examine the weight for corrosion, wear, or damage.	Coating must have 90 percent (90%) coverage. Coating may be completely worn away at edges and corners. The maximum permitted depth of damage for wear areas (dashed lines) indicated in Figure 5-5 is 0.003 inch (0.07 mm).	If the inspection does not meet the serviceable limits, replace the weight.
K.	<u>FEATHERING SPRING (CYLINDER)</u> (Item 230)		
	(1) Visually examine the feathering spring for wear, polish marks, or other damage.	The maximum permitted depth of damage is 0.005 inch (0.12 mm).	If the depth of damage is greater than the serviceable limits, replace the spring.

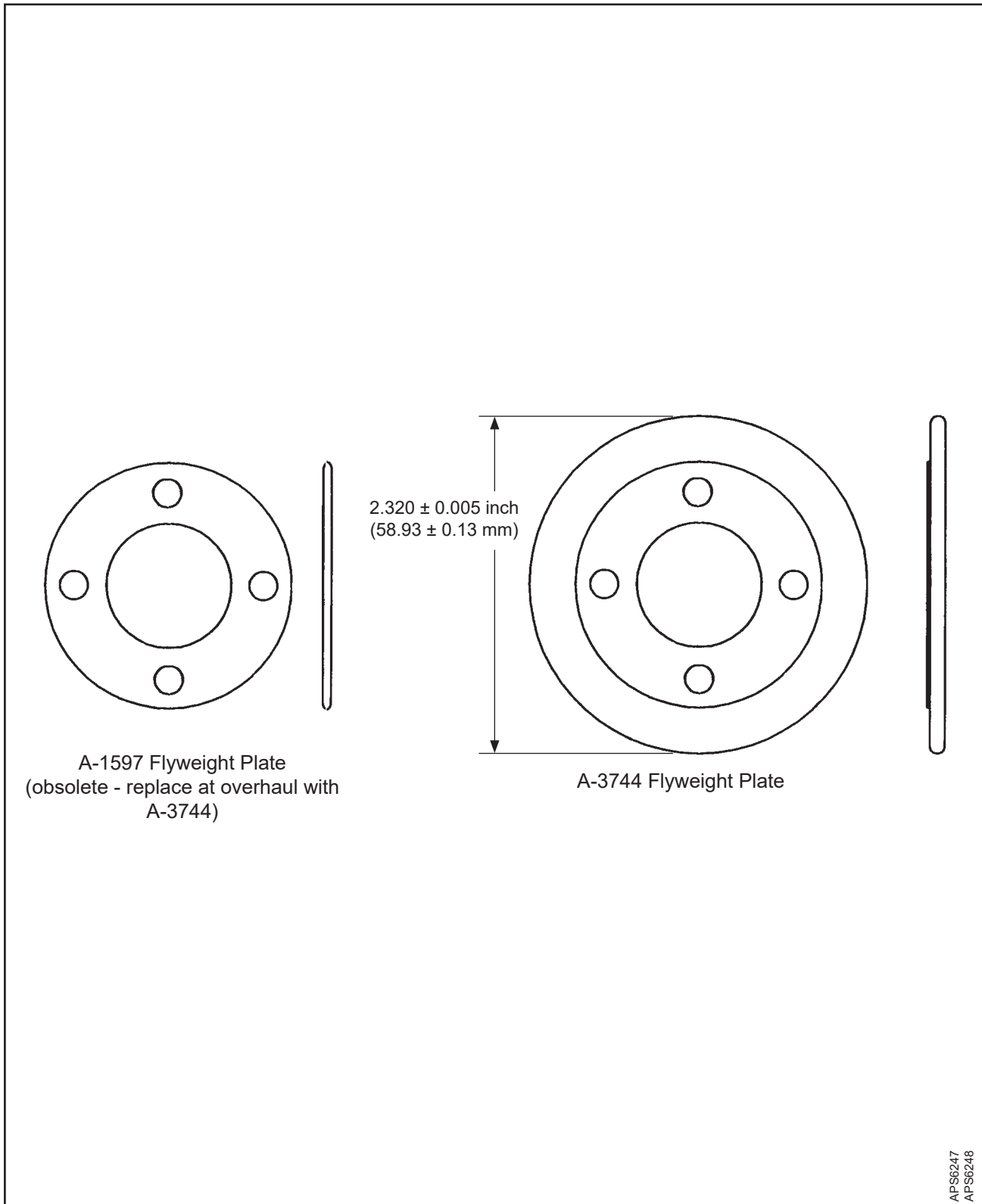


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High Pitch Stop Sleeve
Figure 5-6

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
<p>L. <u>HIGH PITCH STOP SLEEVE</u> (Item 320) (Refer to Figure 5.6)</p>		
<p>(1) Visually examine the OD of the high pitch stop sleeve for wear, nicks, scratches, or other damage that would affect fit or performance.</p>	<p>The maximum permitted depth of damage is 0.005 inch (0.12 mm).</p>	<p>Smooth out the damaged area. If the depth of damage is greater than the permitted serviceable limits, replace the high pitch stop sleeve.</p>
<p>(2) Visually examine the cadmium plating on the surface of the high pitch stop sleeve.</p>	<p>Except for a few scratches and corners with cadmium plating missing, complete coverage is required.</p>	<p>If the damage is greater than the serviceable limits, replate and bake the high pitch stop sleeve in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>
<p>(3) Visually examine corner "A" for rounding and damage.</p>	<p>Minor rounding of the corner that does not affect the engagement by the high pitch stop pins is permitted.</p>	<p>If the rounding or damage of the corner affects the engagement of the high pitch stop pins, replace the high pitch stop sleeve.</p>
<p>(4) Additionally, for the 103339-() high pitch stop sleeve only, visually examine corner "B" for rounding and damage.</p>	<p>Minor rounding of the corner that does not affect the engagement of the start lock housing for attainment of feather angle is permitted.</p>	<p>If rounding or damage of the corner affects the engagement of the start lock housing for attainment of feather angle, replace the high pitch stop sleeve.</p>

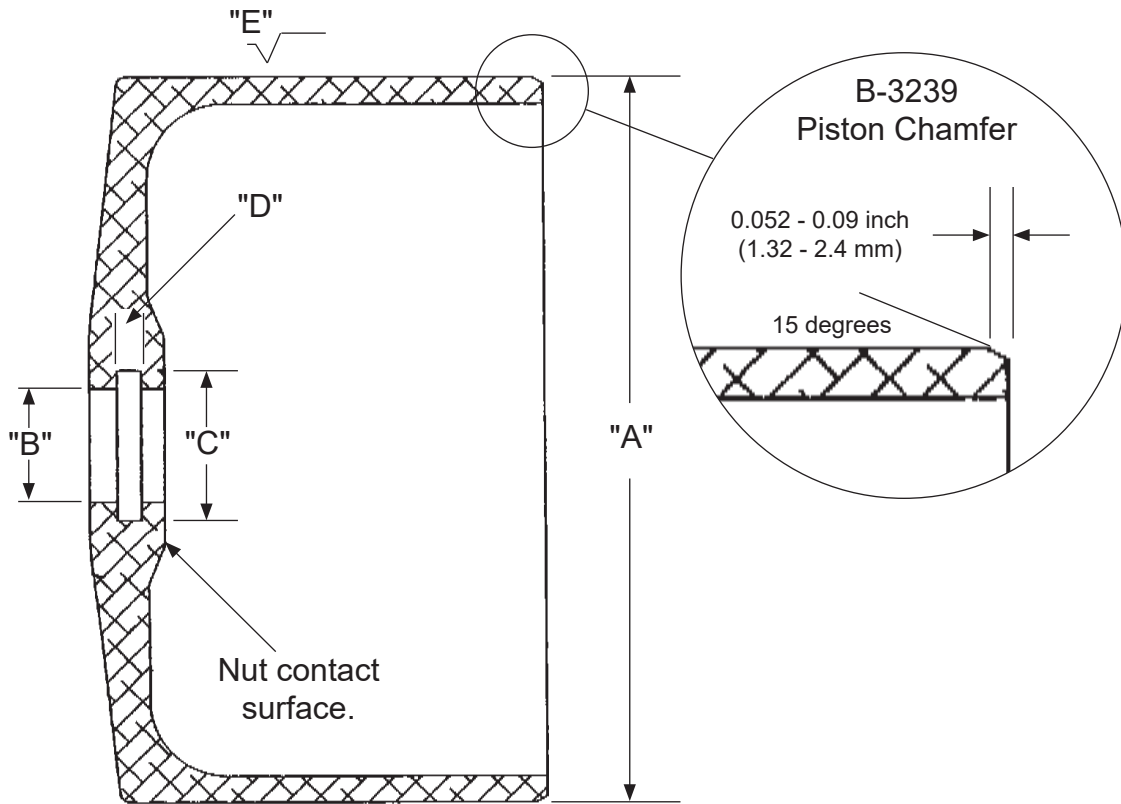


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Flyweight Plate Identification
Figure 5-7

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
M.	<u>FLYWEIGHT PLATE</u> (Item 250) (Refer to Figure 5-7)		
	(1) Identify the flyweight plate part number, refer to Figure 5-7.	The part must be the A-3744 flyweight plate.	If A-1597 flyweight plate is present, replace with A-3744 flyweight plate.
	(2) Visually examine the flyweight plate for corrosion, wear, or damage.	Corrosion, wear, or damage is not permitted.	If there is corrosion, wear, or damage, replace the flyweight plate.
	(3) Visually examine the cadmium plating on the surface of the flyweight plate.	Cadmium plating must completely cover the flyweight plate.	Replate and bake the flyweight plate in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).



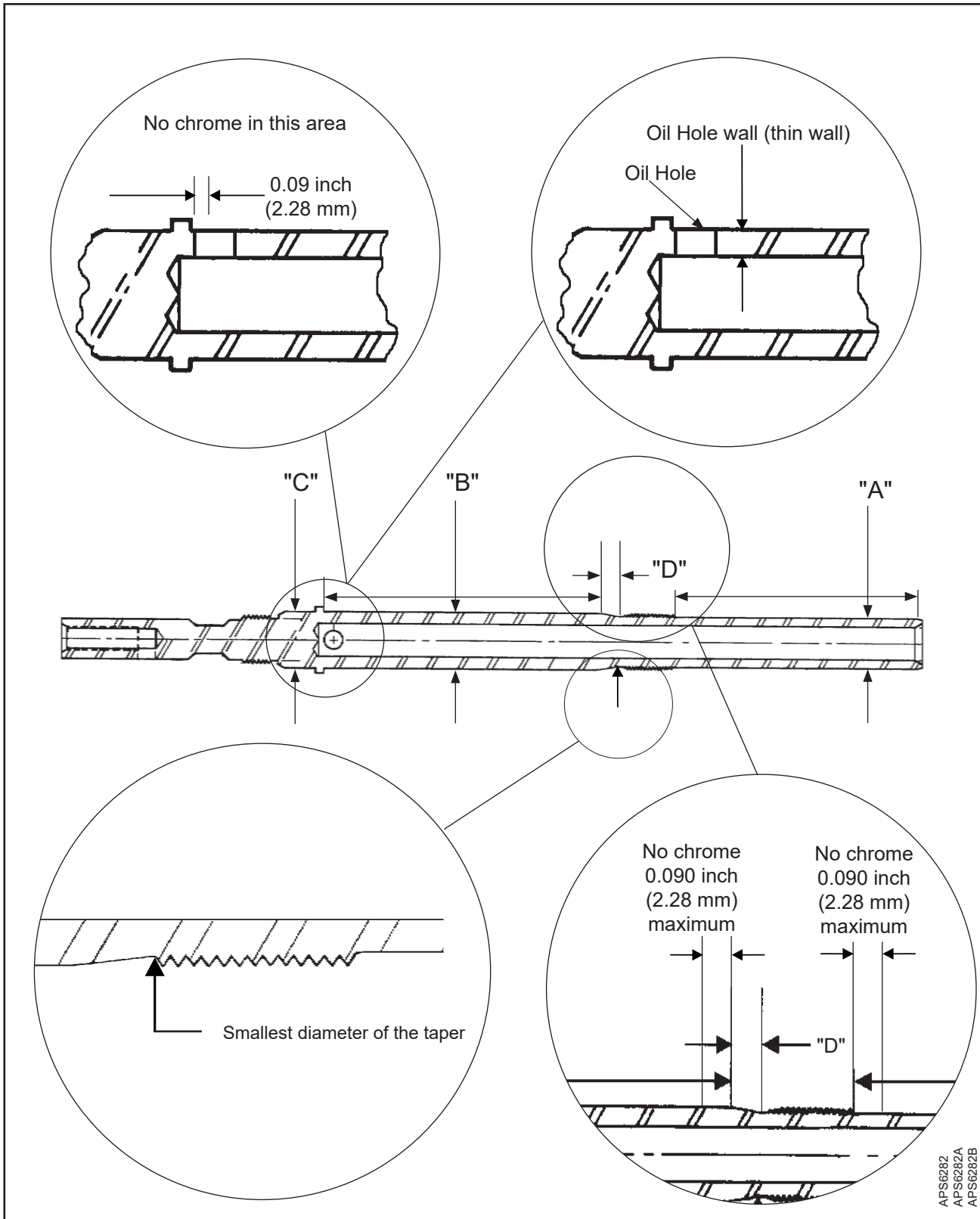
Part Number	"A" Minimum Piston OD	"B" Maximum Bore ID	"C" Maximum O-ring ID	"D" Minimum O-ring Width	"E" Max. Surface Micro Finish
B-3237	4.746 inch (120.55 mm)	0.739 inch (18.77 mm)	0.982 inch (24.94 mm)	0.146 inch (3.71 mm)	16
B-3239	5.246 inch (133.25 mm)	0.739 inch (18.77 mm)	0.982 inch (24.94 mm)	0.146 inch (3.71 mm)	16
B-3683	4.746 inch (120.55 mm)	0.739 inch (18.77 mm)	0.982 inch (24.94 mm)	0.146 inch (3.71 mm)	16

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PISTON.XLS

Piston Dimensional Inspection Criteria
Figure 5-8

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
N.	PISTON (Item 350) (Refer to Figure 5-8)		
(1)	Visually examine the anodized surfaces of the piston (that are not referenced below or in Figure 5-8), for wear, nicks, scratches, or other damage.	The maximum permitted depth of damage is 0.005 inch (0.12 mm).	If the depth of damage is greater than the serviceable limits, replace the piston.
(2)	Visually examine the piston OD for corrosion, wear, damage, and anodize coverage.	Anodize must be present on all OD surfaces. The maximum permitted diameter of damage is 0.030 inch (0.76 mm). The maximum permitted depth of damage is 0.002 (0.50 mm). Damage must not penetrate the anodize. Pushed-up material is not permitted.	If corrosion, wear, damage, or loss of anodize coverage is greater than the serviceable limits, replace the piston.
(3)	Visually examine the piston areas "A", "B", "C", and "E".	If the piston shows wear, dimensionally inspect in accordance with Figure 5-8.	If the wear is greater than the serviceable limits, replace the piston.
(4)	Visually examine the nut contact surface for corrosion, wear, or damage.	If there is damage, dimensionally inspect area "D" in accordance with Figure 5-8. The maximum permitted depth of damage is 0.007 inch (0.17 mm).	If the damage is greater than the serviceable limits, replace the piston.
(5)	Visually examine the C-3239 piston for chamfer.	The C-3239 piston must have a chamfer.	If the chamfer is not present, machine chamfer in accordance with chamfer dimensions in Figure 5-8. Chemical conversion coat the aluminum surface where the anodize has been removed by machining.



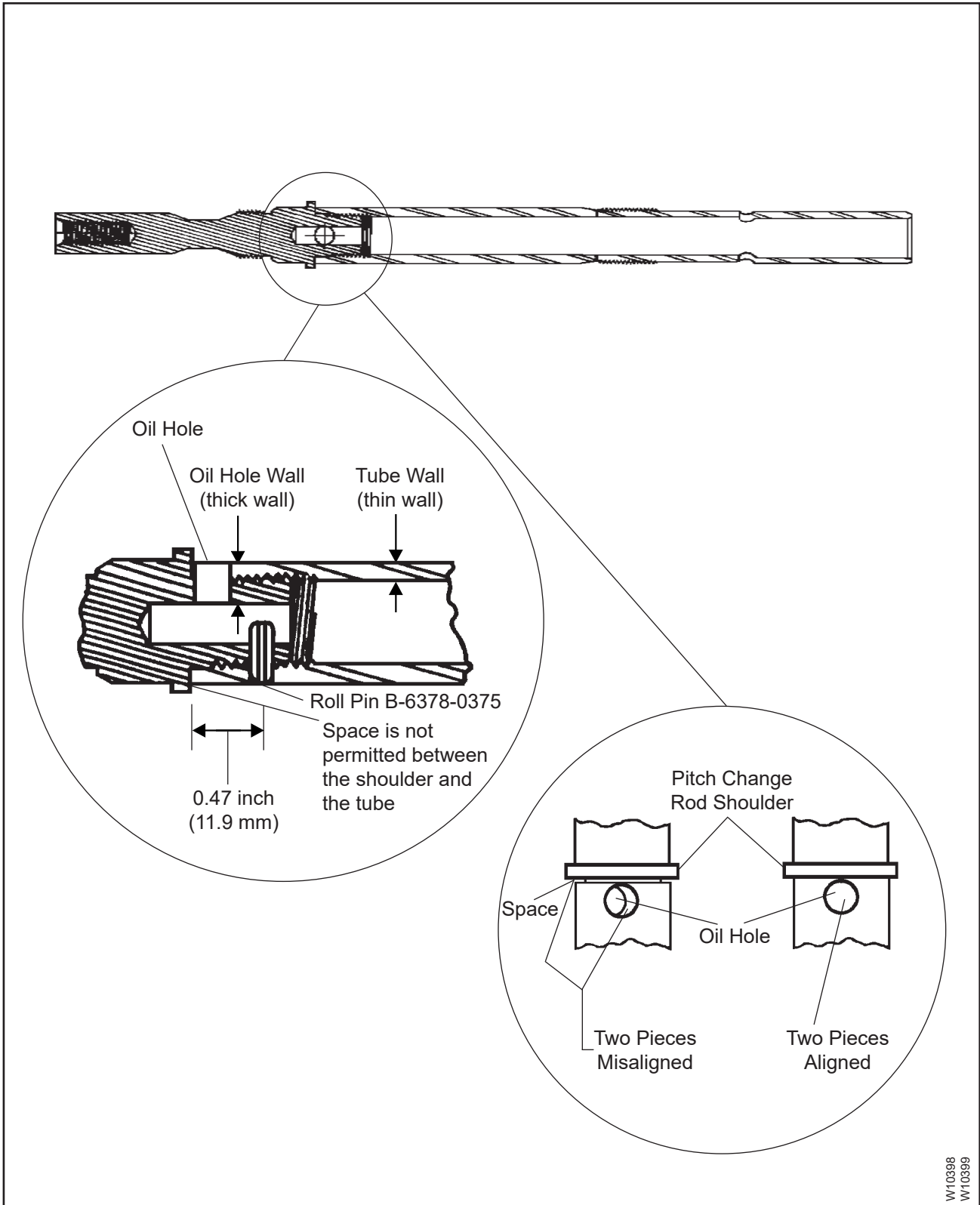
One-Piece Pitch Change Rod
Figure 5-9

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
O.	<u>PITCH CHANGE ROD, B-4505 & B-4505-1 ONLY</u> (Item 370) (Refer to Figure 5-9)		
(1)	Visually examine the chrome plating of the pitch change rod for damage, in the areas of diameters "A" and "B".	Any area worn below the chrome plating is cause for replacement.	If the wear is greater than the serviceable limits, replace the pitch change rod
(2)	Visually examine the external threads for damage.	One damaged thread is permitted.	If the damage is greater than the serviceable limits, replace the pitch change rod.
(3)	Measure area "B" of the pitch change rod.	The minimum permitted diameter is 0.732 inch (18.60 mm).	If the diameter is less than the serviceable limits, replace the pitch change rod.
(4)	Measure area "A" of the pitch change rod.	The minimum permitted diameter is 0.662 inch (16.82 mm).	If the diameter is less than the serviceable limits, replace the pitch change rod.
(5)	Visually examine the taper area "D" for corrosion, wear, and damage.	Corrosion, wear, or damage is not permitted at the smallest diameter of the taper. Remaining taper surface may have a maximum damage depth of 0.004 inch (0.10 mm) over 25% of the surface area.	If damage causes high spots above the existing surface, remove only the high spots. If corrosion, wear, or damage is more than the serviceable limits, replace the pitch change rod
(6)	Visually examine the pitch change rod for straightness.	The pitch change rod must be straight. Bending is not permitted.	If the pitch change rod is not straight, replace the pitch change rod.
(7)	Measure area "C" of the pitch change rod.	The minimum permitted diameter is 0.732 inch (18.60 mm).	If the diameter is less than the permitted serviceable limits, replace the pitch change rod.

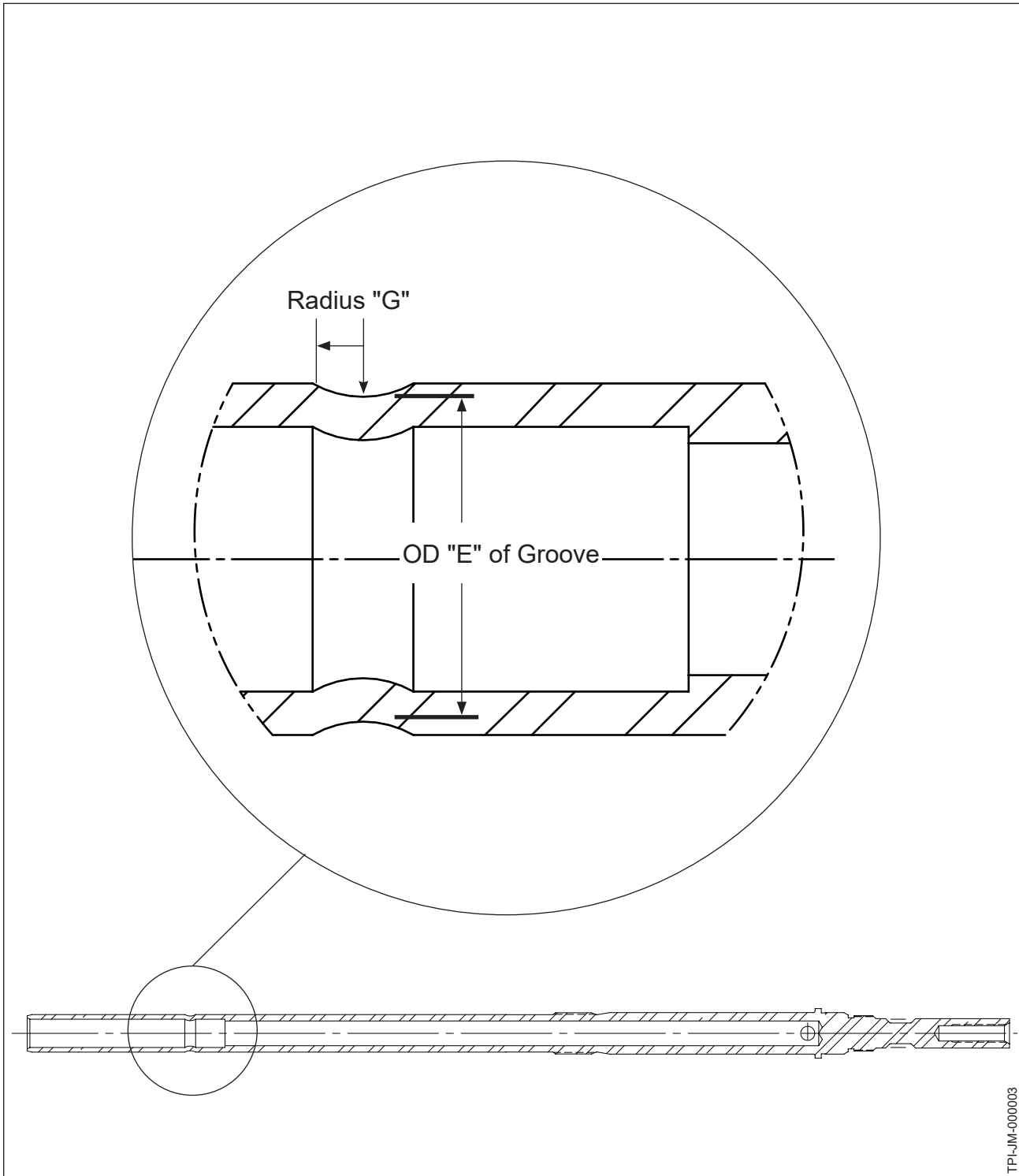
**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
O.	<u>PITCH CHANGE ROD, B-4505 & B-4505-1 ONLY, CONTINUED</u> (Item 370) (Refer to Figure 5-9)		
(8)	Magnetic particle inspect the pitch change rod in accordance with the Magnetic Particle Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).	A relevant indication is not permitted.	If there is a relevant indication, replace the pitch change rod.
(9)	Examine the oil supply bore using a borescope or fiberoptic flashlight.	Unwanted material is not permitted.	Remove all unwanted material.



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Two-Piece B-2491 Pitch Change Rod
Figure 5-10



TPL-JM-000003

B-2491-4S Pitch Change Rod
Figure 5-11

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
P.	PITCH CHANGE ROD, B-2491-() ONLY		
	Additional inspection requirements for the two-piece (Item 370) (Refer to Figures 5-9 thru 5-11)		
(1)	Visually examine the chrome plating of the pitch change rod for damage, in the areas of diameters "A" and "B".	Any area worn below the chrome plating is cause for replacement.	If the wear is greater than the serviceable limits, replace the pitch change rod.
(2)	Visually examine the external threads for damage.	One damaged thread is permitted.	If the damage is greater than the serviceable limits, replace the pitch change rod.
(3)	Measure area "B" of the pitch change rod.	The minimum permitted diameter is 0.732 inch (18.60 mm).	If the diameter is less than the serviceable limits, replace the pitch change rod.
(4)	Measure area "A" of the pitch change rod.	The minimum permitted diameter is 0.662 inch (16.82 mm).	If the diameter is less than the serviceable limits, replace the pitch change rod.
(5)	Visually examine the taper area "D" for corrosion, wear, and damage.	Corrosion, wear, or damage is not permitted at the smallest diameter of the taper. Remaining taper surface may have a maximum damage depth of 0.004 inch (0.10 mm) over 25% of the surface area.	If damage causes high spots above the existing surface, remove only the high spots. If corrosion, wear, or damage is more than the serviceable limits, replace the pitch change rod.
(6)	Visually examine the pitch change rod for straightness.	The pitch change rod must be straight. Bending is not permitted.	If the pitch change rod is not straight, replace the pitch change rod.
(7)	Measure area "C" of the pitch change rod.	The minimum permitted diameter is 0.732 inch (18.60 mm).	If the diameter is less than the permitted serviceable limits, replace the pitch change rod.

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
<p>P. <u>PITCH CHANGE ROD, B-2491-() ONLY, CONTINUED</u> Additional inspection requirements for the two-piece (Item 370) (Refer to Figures 5-9 thru 5-11)</p>		
<p>(8) Magnetic particle inspect the pitch change rod in accordance with the Magnetic Particle Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>	<p>A relevant indication is not permitted.</p>	<p>If there is a relevant indication, replace the pitch change rod.</p>
<p>(9) Examine the oil supply bore using a borescope or fiberoptic flashlight.</p>	<p>Unwanted material is not permitted.</p>	<p>Remove all unwanted material.</p>
<p><u>NOTE:</u> Identify the pitch change rod to determine if the additional inspection requirements for the two-piece pitch change rod are applicable. Look into the oil hole to determine if the pitch change rod is of one-piece or two-piece construction. A one-piece pitch change rod will have a thin tube wall the entire length of the tube. The two-piece pitch change rod will have both a thick oil hole wall and a thin tube wall along the length of the tube. Refer to Figures 5-8 and 5-9.</p>		
<p>(10) Visually examine for indexing (movement) between the two pieces where they are joined.</p>	<p>Space between the shoulder and the tube is not permitted. Misalignment of the oil hole between the two pieces is not permitted.</p>	<p>If there is space or misalignment, replace the pitch change rod.</p>
<p>(11) Visually examine for the presence of a roll pin approximately 180 degrees away from the oil hole.</p>	<p>There must be a roll pin approximately 180 degrees away from the oil hole.</p>	<p>If there is no roll pin, install a roll pin. Refer to the Repair chapter of this manual for instructions to install the roll pin.</p>
<p>(12) For B-2491-4S ONLY. Measure the OD "E" of the groove in the pitch change rod.</p>	<p>The minimum permitted diameter of OD "E" is 0.610 inch (15.50 mm).</p>	<p>If OD "E" is less than the permitted serviceable limits, replace the pitch change rod.</p>
<p>(13) For B-2491-4S ONLY. Measure radius "G".</p>	<p>The minimum permitted radius "G" is 0.184 inch (4.67 mm). The maximum permitted radius "G" is 0.200 inch (5.08 mm).</p>	<p>If radius "G" is greater than the permitted serviceable limits, replace the pitch change rod.</p>

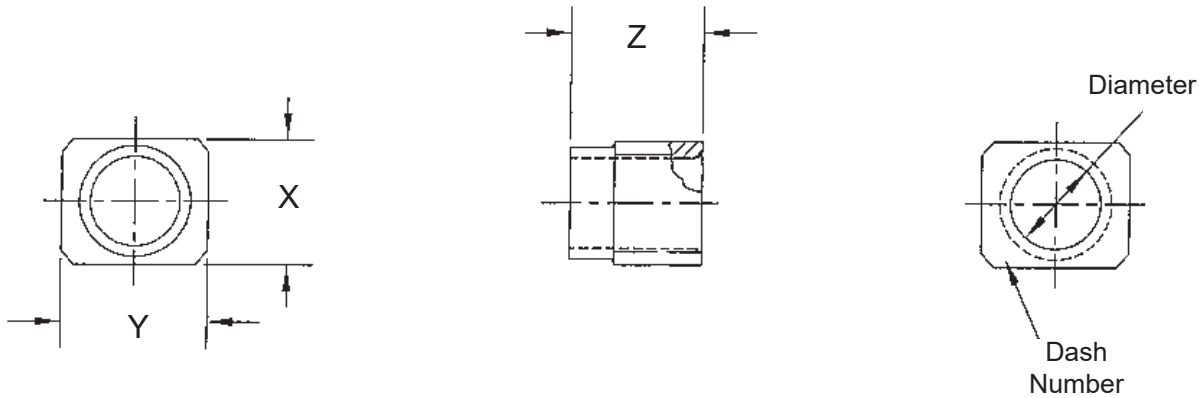
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Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
Q. <u>FORK</u> (Item 400)		
(1) Visually examine the fork (excluding the slots, threaded bore and tapered section of the bore) for wear, scratches, or other damage.	The maximum permitted depth of wear, scratches, or other damage is 0.003 inch (0.07 mm).	Wear, scratches, or other damage may be repaired to a maximum depth of 0.004 inch (0.10 mm). Refer to the Repair chapter in this manual for general repair procedures of steel parts. Some surfaces may appear rough (in the "as forged" condition), repair of such surfaces is not required. If repaired, replate the fork and bake in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If wear, scratches, or other damage is greater than the permitted corrective action, replace the fork.
(2) Visually examine the threaded portion of the fork bore for damage.	One damaged thread is permitted.	If damage is greater than the permitted serviceable limits, replace the fork.
(3) Visually examine the tapered portion of the fork bore for wear, nicks, fretting or other damage.	The maximum permitted depth of wear, nicks, fretting or other damage is 0.003 inch (0.07 mm). Pushed-up material from the damage that may interfere with the pitch change rod taper is not permitted.	Remove pushed-up material until flush with machined surrounding surfaces. If repaired, replate the fork and bake in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If the depth of wear, nicks, fretting or other damage is greater than the permitted serviceable limits, replace the fork.
(4) Visually examine the fork slots for damage.	The maximum permitted depth of damage is 0.006 inch (0.15 mm).	If damage is greater than the permitted serviceable limits, replace the fork.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
Q. <u>FORK, CONTINUED</u> (Item 400)		
(5) Magnetic particle inspect the fork in accordance with Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).	A relevant indication is not permitted.	If there is a relevant indication, replace the fork.
(6) Visually examine the fork for cadmium plate coverage.	A few random scratches, corners with plating missing, normal wear of the plating from the threads, internal taper, and fork slots are permitted; otherwise, cadmium plating must cover the fork.	If the cadmium plating coverage is less than the permitted serviceable limits, cadmium replating the fork in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).



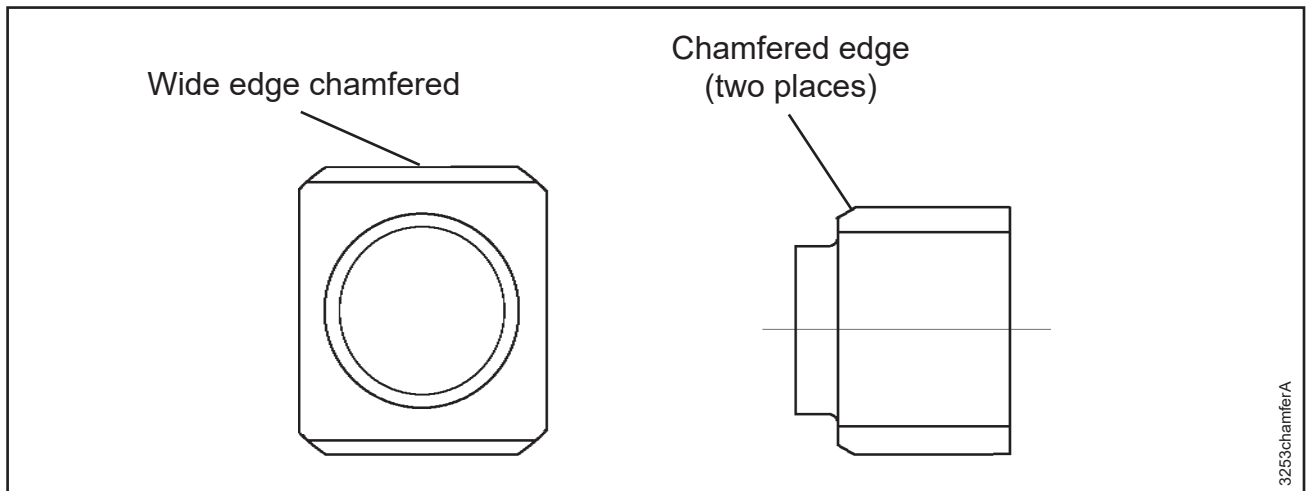
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BLOCK.XLS

Part Number	"X" Minimum	"Y" Minimum	"Z" Minimum	Hole Diameter Maximum
A-2217-1	Not a wear surface, no measurement required	1.011 inch (25.67 mm)	0.905 inch (22.98 mm)	0.6250 inch (15.875 mm)
A-2217-2	Not a wear surface, no measurement required	1.009 inch (25.62 mm)	0.905 inch (22.98 mm)	0.6250 inch (15.875 mm)
A-2217-3	0.870 inch (22.09 mm)	0.870 inch (22.09 mm)	0.905 inch (22.98 mm)	0.6890 inch (17.500 mm)
A-2217-4	0.870 inch (22.09 mm)	0.870 inch (22.09 mm)	0.905 inch (22.98 mm)	0.6250 inch (15.875 mm)
A-3253	0.871 inch (22.12 mm)	Not a wear surface, no measurement required	0.745 inch (18.92 mm)	0.6250 inch (15.875 mm)
A-3253-1	0.869 inch (22.07 mm)	Not a wear surface, no measurement required	0.745 inch (18.92 mm)	0.6250 inch (15.875 mm)
A-3253-2	0.869 inch (22.07 mm)	Not a wear surface, no measurement required	0.745 inch (18.92 mm)	0.6890 inch (17.500 mm)
A-3253-3	0.874 inch (22.19 mm)	Not a wear surface, no measurement required	0.745 inch (18.92 mm)	0.6890 inch (17.500 mm)

Pitch Change Block Identification/Dimensional Criteria
Figure 5-12

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>R. <u>PITCH CHANGE BLOCK</u> (Item 440) (Refer to Figure 5-12)</p> <p><u>NOTE 1:</u> To identify the pitch change blocks, refer to Figure 5-12.</p> <p><u>NOTE 2:</u> The pitch change knob hole in the pitch change knob block is offset from the block center. Pitch change blocks should be installed in the fork with the thin wall toward the engine-side hub half during initial assembly.</p>		
(1) Visually examine the pitch change block for damage.	The maximum permitted depth of damage is 0.005 inch (0.12 mm).	If the depth of damage is greater than the permitted serviceable limits, replace the pitch change block.
(2) Visually examine the pitch change block for wear.	If there is wear, dimensionally inspect in accordance with Figure 5-12.	If wear is greater than the permitted serviceable limits, replace the pitch change block.
(3) For A-3253-() block only: Visually examine the block for a chamfer.	Refer to Figure 5-13 for chamfer location.	Modify the block in accordance with the section "Modification of the A-3253-() Pitch Change Block" in the Repair chapter of this manual.
(4) Magnetic particle inspect the pitch change block in accordance with Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).	A relevant indication is not permitted.	If there is a relevant indication, replace the pitch change block.



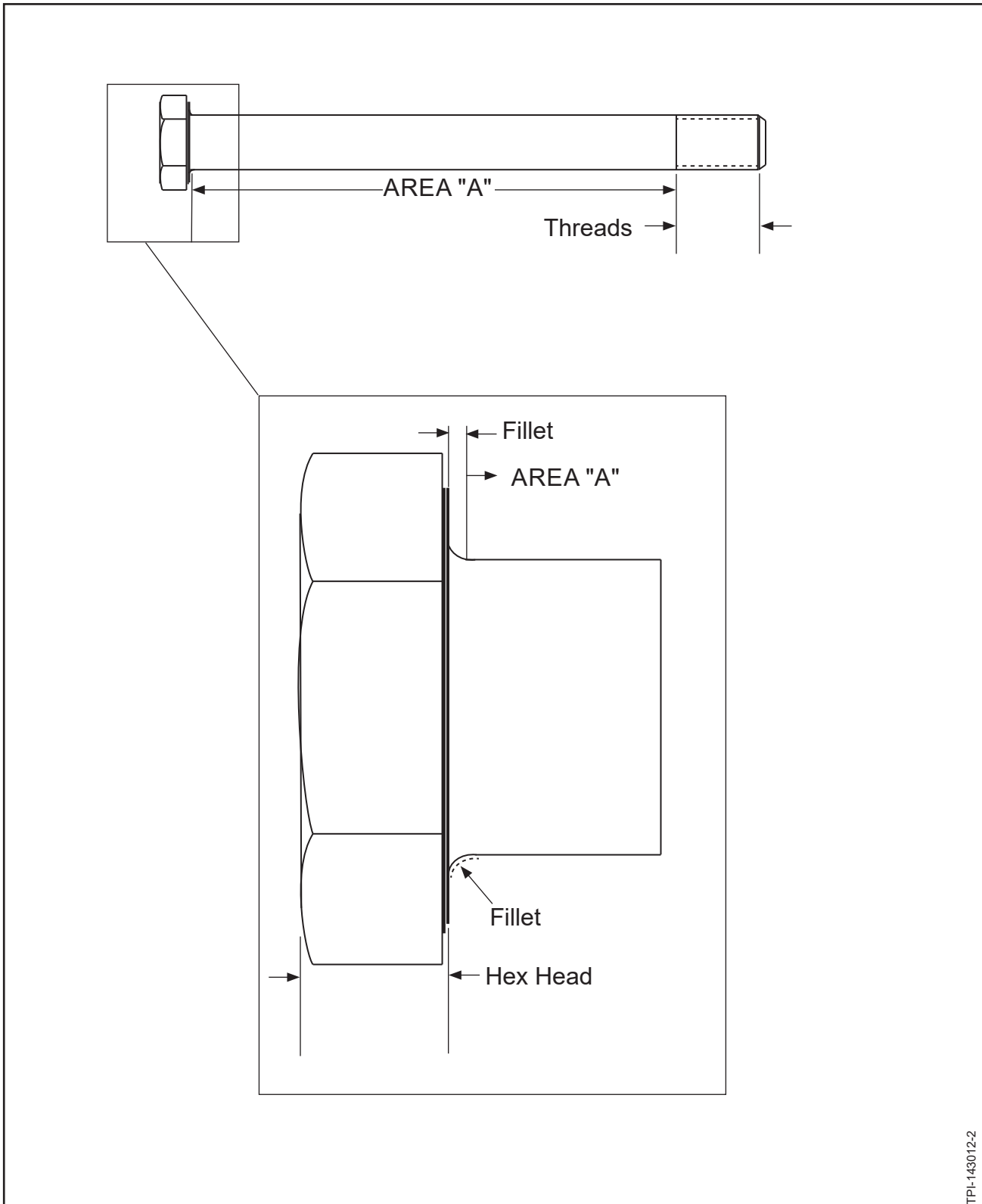
A-3253-() Pitch Change Block Chamfer Location
Figure 5-13

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
S.	<u>HUB UNIT</u> (Item 480)		
	<u>NOTE:</u>	Perform the inspection of the hub in accordance with Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).	
T.	<u>SPACER</u> (Item 520)		
(1)	Visually examine the spacer for corrosion, wear, or damage.	The maximum permitted depth of damage is 0.005 inch (0.12 mm).	If the depth of damage is greater than the permitted serviceable limits, replace the spacer.
(2)	Visually examine the spacer for Hard Anodize coverage.	A maximum of 0.5 square inch (322.5 square mm) missing is permitted on external surfaces.	If the amount of missing Hard Anodize is greater than the permitted serviceable limits, replace the spacer.
U.	<u>SPRING GUIDE</u> (Item 530)		
(1)	Visually examine the spring guide for wear or damage.	The maximum permitted depth of damage is 0.020 inch (0.50 mm).	If the depth of damage is greater than the permitted serviceable limits, replace the spring guide.
(2)	Visually examine the spring guide bore for wear.	If the bore is worn, dimensionally inspect. Maximum permitted bore ID is 0.677 inch (17.19 mm).	If the ID is greater than the permitted serviceable limits, replace the spring guide.
V.	<u>FEATHERING SPRING (HUB)</u> (Item 540 - except B-3281-1)		
(1)	Visually examine the feathering spring for wear, polish marks, or other damage.	The maximum permitted depth of wear, polish marks, or damage is 0.003 inch (0.07 mm).	If the depth of wear, polish marks, or damage is greater than the permitted serviceable limits, replace the spring.
W.	<u>FEATHERING SPRING (HUB)</u> (Item 550 - except B-3281-3)		
(1)	Visually examine the feathering spring for wear, polish marks, or other damage.	The maximum permitted depth of wear, polish marks, or damage is 0.003 inch (0.07 mm).	If the depth of wear, polish marks, or damage is greater than the permitted serviceable limits, replace the spring.

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
X.	<u>SPRING RETAINER</u> (Item 560)		
(1)	Visually examine the spring retainer for corrosion, wear, or damage.	The maximum permitted depth of damage is 0.003 inch (0.07 mm).	If the depth of damage is greater than the permitted serviceable limits, replace the spring retainer.
(2)	Visually examine the bore that encircles the keeper (570).	If the bore is worn or damaged, dimensionally inspect. The maximum permitted bore ID is 0.775 inch (19.68 mm).	If the ID is greater than the permitted serviceable limits, replace the spring retainer.
(3)	Visually examine the smallest bore that pilots the pitch change rod (370).	If the bore is worn or damaged, dimensionally inspect. The maximum permitted small bore ID is 0.672 inch (17.06 mm).	If the ID is greater than the permitted serviceable limits, replace the spring retainer.
(4)	Visually examine the cadmium plating coverage on the spring retainer.	Cadmium plating must completely cover the spring retainer.	If the cadmium plating coverage is less than the permitted serviceable limits, replate and bake the spring retainer in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).



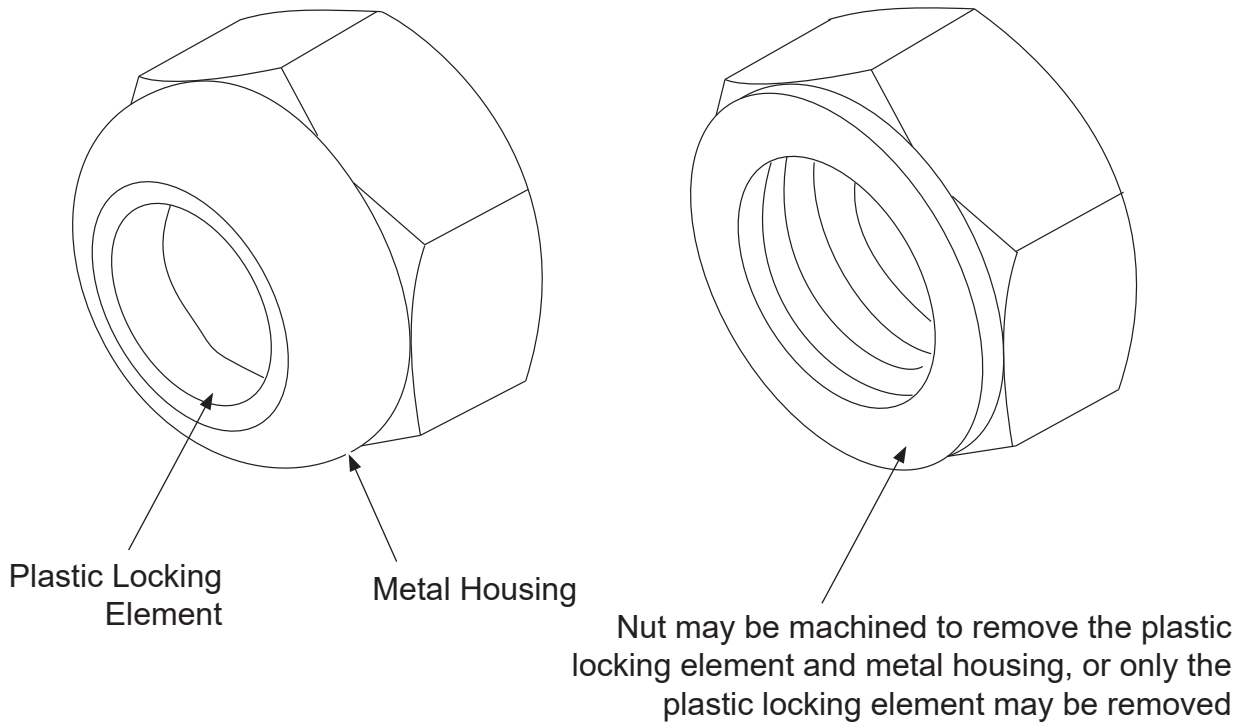
TPI-143012-2

Hex Head Bolt
Figure 5-14

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>Y. <u>HEX HEAD BOLT</u> (Items 580, 590) (Refer to Figure 5-14)</p>		
<p><u>NOTE:</u> Hub bolts used to bolt the hub halves together may be reused when they are inspected in accordance with the following procedure. Bolts used to attach hub extensions must be replaced at overhaul. The following bolts may be inspected, re-plated as necessary, and re-used during overhaul: A-1584, A-3203, A-3219-1, A-2431, A-2432, A-2433, and 102691.</p>		
<p>(1) Visually examine the hex head bolt for corrosion product and pitting.</p>	<p>Corrosion product is not permitted.</p> <p>The maximum permitted depth of pitting is 0.002 inch (0.05 mm).</p> <p>No more than 5% of the total unthreaded surface may be pitted. The maximum permitted diameter of an individual pit is 0.032 inch (0.81 mm). Pitting is not permitted in the fillet between the hex head and the grip, Area "A". Pitting must not affect the fit or function of the hex head bolt.</p>	<p>Remove corrosion product using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p> <p>If corrosion product cannot be removed, replace the hex head bolt.</p> <p>If the pitting is greater than the permitted serviceable limits, replace the hex head bolt.</p>
<p>(2) Except for the threads, visually examine the hex head bolt for damage or scratches.</p>	<p>The maximum permitted depth of damage or a scratch is 0.002 inch (0.05 mm). Scratches or damage must not affect the fit or function of the hex head bolt. Pushed up material is not permitted.</p>	<p>Remove pushed up material with a thread file. The repair must not affect the fit or function of the hex head bolt.</p> <p>If the depth of a scratch or damage is greater than the permitted serviceable limits or if the scratch, damage, or repair affects the fit or function of the hex head bolt, replace the hex head bolt.</p>
<p>(3) Visually examine the hex head bolt for circumferential scoring caused by installation and removal.</p>	<p>Circumferential scoring that reduces the diameter of the hex head bolt is not permitted. The minimum permitted OD in Area "A" is 0.370 inch (9.40 mm).</p>	<p>If scoring is greater than the permitted serviceable limits or if the OD in Area "A" is less than the permitted serviceable limits, replace the hex head bolt.</p>

CAUTION: DO NOT USE MODIFIED A-2043-1 NUTS ON THE PROPELLER ASSEMBLY. A-2043-1 NUTS THAT HAVE BEEN MODIFIED ARE TO BE USED ONLY FOR THE HEX HEAD BOLT THREAD CHECK.

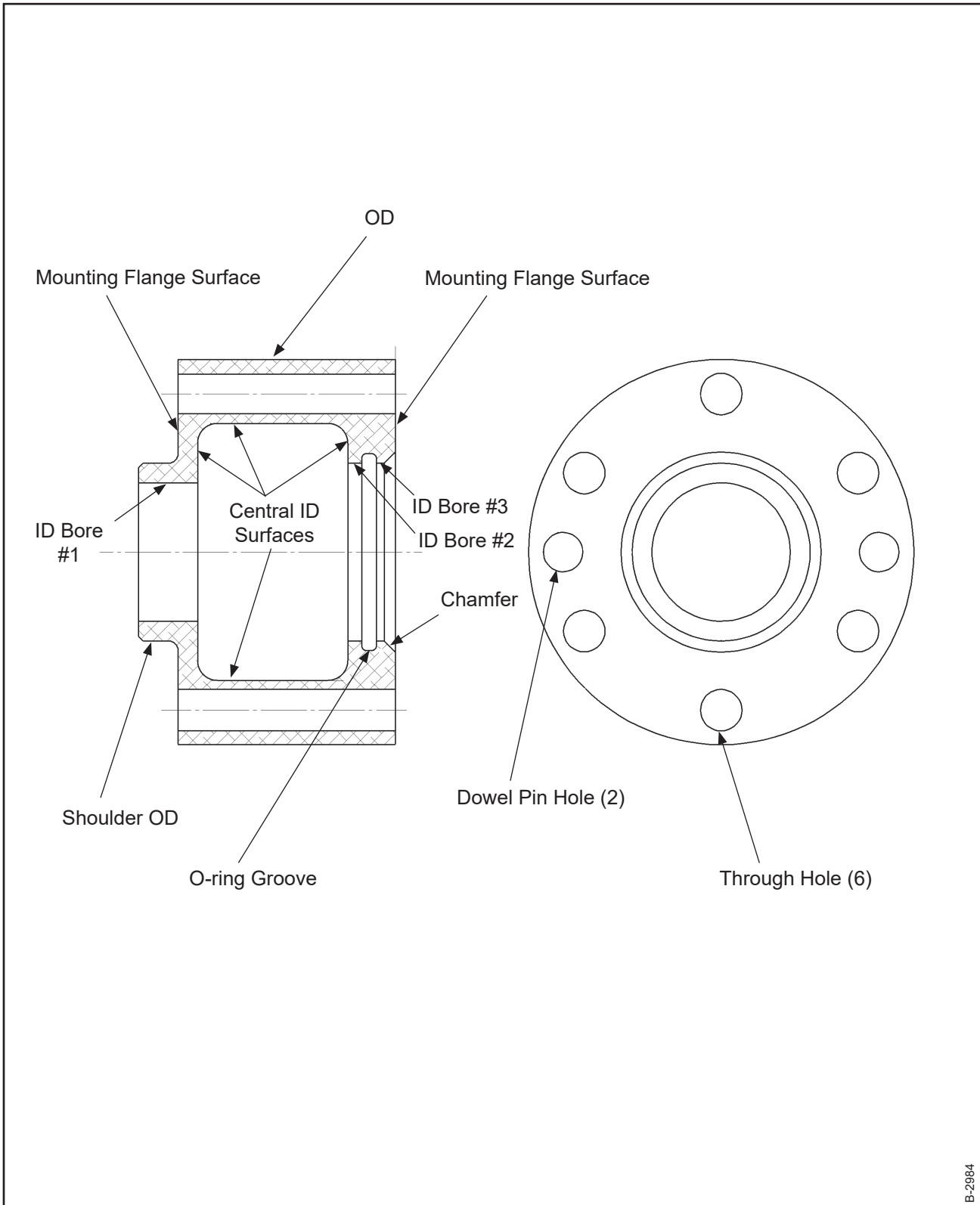


TPI-143011-1

A-2043-1 Nut Modification
Figure 5-15

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>Y. <u>HEX HEAD BOLT, CONTINUED</u> (Items 580, 590) (Refer to Figure 5-15)</p>		
<p>(4) Visually examine the wrenching surfaces of the head of the hex head bolt for metal movement caused by wrenching.</p>	<p>Limited damage from wrenching is permitted, but it must be possible to torque the hex head bolt and metal movement must not interfere with the installation of the hex head bolt or cause damage to the hub.</p>	<p>Remove metal movement with a file or equivalent. Only corners may be repaired. If metal movement is greater than the permitted serviceable limits, replace the hex head bolt.</p>
<p>(5) Visually examine the threads of the hex head bolt for damage and pitting.</p>	<p>A maximum total accumulation of 3/4 thread of damage and pitting is permitted. Thread damage must not cause damage to the mating part. An A-2043-1 nut with the plastic locking element removed should be able to be freely rotated by hand on the bolt threads. For the modification of the nut, refer to Figure 5-15.</p>	<p>Limited thread file repair is permitted, but must be considered as thread damage. If the damage and pitting is greater than the permitted serviceable limits, replace the hex head bolt.</p>
<p>(6) Magnetic particle inspect each bolt in accordance with the Magnetic Particle Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>	<p>A relevant indication is not permitted.</p>	<p>If there is a relevant indication, replace the hex head bolt.</p>
<p>(7) Visually examine the hex head bolt for cadmium plating coverage.</p>	<p>Cadmium plating must completely cover the bolt with the following exceptions: A few scratches and corners with cadmium plating missing, minor abrading of cadmium plating on the threads, or minor abrading of the cadmium plating on the hex head because of wrenching are permitted.</p>	<p>If the cadmium plating coverage is less than the permitted serviceable limits, cadmium replate and bake for a minimum of 23 hours within four hours after plating the hex head bolt in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>



B-2984

Spacer, "F" Flange
Figure 5-16

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
<p>Z. <u>"F" FLANGE SPACER</u> (Item 620) (Refer to Figure 5-16)</p>		
<p>(1) Visually examine the "F" flange spacer for corrosion.</p>	<p>Corrosion is not permitted.</p>	<p>Remove corrosion using glass bead cleaning. Refer to the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>
<p>(2) Visually examine the OD of the "F" flange spacer for nicks, scratches, gouges, pitting, or other damage.</p>	<p>The maximum permitted depth of a nick, scratch, gouge, pitting, or damage is 0.004 inch (0.10 mm). The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted. The maximum permitted total area of all described damage is 1.0 sq. inch (645 sq. mm).</p>	<p>Repair is permitted to a depth of 0.010 inch (0.25 mm). The maximum permitted total area of damage and repair is 1.0 square inch (645 sq. mm). If the damage or repair is greater than the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.</p>
<p>(3) Visually examine both mounting flange surfaces of the "F" flange spacer for nicks, scratches, gouges, pitting, or other damage.</p>	<p>The maximum permitted depth of a nick, scratch, gouge, pitting, or damage is 0.002 inch (0.05 mm). Material may not be pushed up above the undamaged adjacent surfaces. The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted.</p>	<p>Repair is permitted to a depth of 0.005 inch (0.12 mm). The maximum permitted total area of damage and repair is 1.0 square inch (645 sq. mm). The maximum permitted area of an individual repair is 0.25 square inch and must be at least 0.250 inch (6.35 mm) from any other repaired area. If the damage or repair is greater than the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.</p>
<p>(4) Visually examine for wear on the shoulder OD of the "F" flange spacer that interfaces with the propeller hub.</p>	<p>If there is wear, measure the OD of the shoulder. The minimum permitted diameter is 2.2475 inch (57.087 mm).</p>	<p>If the OD is less than the permitted serviceable limits, replace the "F" flange spacer.</p>

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
Z. "F" FLANGE SPACER, CONTINUED (Item 620) (Refer to Figure 5-16)		
(5) Visually examine for wear on the ID of the O-ring groove of the "F" flange spacer that interfaces with the engine.	If there is wear, measure the ID of the O-ring groove. The maximum permitted ID is 2.500 inches (63.50 mm).	If "F" flange spacer is not within the permitted serviceable limits, replace the "F" flange spacer.
(6) Visually examine the ID bore #1 of the "F" flange spacer for nicks, scratches, gouges, pitting, or other damage.	The maximum permitted depth of a nick, scratch, gouge, pitting, or damage is 0.002 inch (0.05 mm). The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted. The maximum permitted total area of all described damage is 1.0 sq. inch (645 sq. mm).	Repair is permitted to a depth of 0.005 inch (0.12 mm). The maximum permitted total area of damage and repair is 0.5 square inch (322 sq. mm). If the damage or repair is greater than the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.
(7) Visually examine the central ID surfaces of the "F" flange spacer for nicks, scratches, gouges, pitting, or other damage.	The maximum permitted depth of a nick, scratch, gouge, pitting, or damage is 0.004 inch (0.10 mm). The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted. The maximum permitted total area of all described damage is 1.0 sq. inch (645 sq. mm).	Repair is permitted to a depth of 0.010 inch (0.25 mm). The maximum permitted total area of damage and repair is 1.0 square inch (645 sq. mm). If the damage or repair is greater than the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.
(8) Remove the dowel pins and visually examine each dowel pin hole of the "F" flange spacer for nicks, scratches, damage, or pitting.	The maximum permitted depth of a nick, scratch, damage, or pitting is 0.002 inch (0.05 mm). The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted.	Repair is permitted to a depth of 0.005 inch (0.12 mm). Damage or repair must not affect the tight fit of the dowel pin. If the "F" flange spacer is not within the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.
(9) Examine the dowel pin holes of the "F" flange spacer for the fit of a dowel pin.	A dowel pin must not be able to be inserted or removed from the dowel pin hole without using tools.	If a dowel pin can be inserted or removed from the dowel pin hole without using tools, replace the "F" flange spacer.

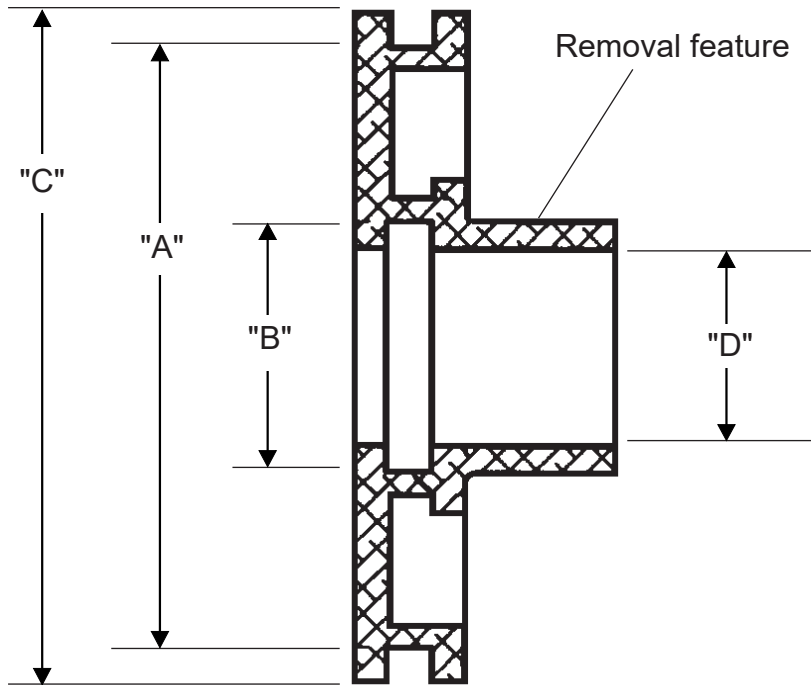
**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
Z	"F" FLANGE SPACER, CONTINUED (Item 620) (Refer to Figure 5-16)		
(10)	Visually examine the ID of each through hole of the "F" flange spacer for nicks, scratches, damage, or pitting.	The maximum permitted depth of a nick, scratch, damage, or pitting is 0.002 inch (0.05 mm). The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted.	Repair is permitted to a depth of 0.004 inch (0.10 mm). Damage or repair must not affect the fit of the "F" flange spacer with the mating part. If the "F" flange spacer is not within the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.
(11)	Measure the ID of each through hole of the "F" flange spacer.	The maximum permitted ID is 0.540 inch (13.71 mm).	If the ID is greater than the permitted serviceable limits, replace the "F" flange spacer.
(12)	Visually examine ID bore #2 and ID bore #3 of the "F" flange spacer for nicks, scratches, damage, or pitting.	The maximum permitted depth of a nick, scratch, damage, or pitting is 0.002 inch (0.05 mm). The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted.	Repair is permitted to a depth of 0.003 inch (0.07 mm). The maximum total damage or repair is 25 percent of each circumference for ID bore #2 and ID bore #3. If the "F" flange spacer is not within the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>Z. <u>"F" FLANGE SPACER, CONTINUED</u> (Item 620) (Refer to Figure 5-16)</p>		
<p>(13) Visually examine the chamfer of the "F" flange spacer for nicks, scratches, damage, or pitting.</p>	<p>The maximum permitted depth of a nick, scratch, damage, or pitting is 0.002 inch (0.05 mm). The maximum permitted diameter of an individual pit is 0.062 inch (1.58 mm). Linear pitting is not permitted.</p>	<p>Repair is permitted to a depth of 0.005 inch (0.12 mm). Damage or repair must not affect the fit of the "F" flange spacer with the mating part. If the "F" flange spacer is not within the permitted serviceable limits or the corrective action limits, replace the "F" flange spacer.</p>
<p>(14) Perform penetrant inspection of the "F" flange spacer in accordance with the Penetrant Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>	<p>A relevant indication is not permitted.</p>	<p>If there is a relevant indication that cannot be removed within all the serviceable limits and corrective action limits given for the "F" flange spacer in this section, replace the "F" flange spacer.</p>
<p>(15) Visually examine the "F" flange spacer for anodize coverage.</p>	<p>A minimum of 95 percent anodize coverage is required.</p>	<p>Anodize the "F" flange spacer or repair by applying chemical conversion coating to bare aluminum in accordance with the Chromic Acid Anodizing chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). A maximum of 5 percent of bare aluminum may be covered with chemical conversion coating. If using anodizing, complete the penetrant inspection before anodizing the "F" flange spacer.</p>

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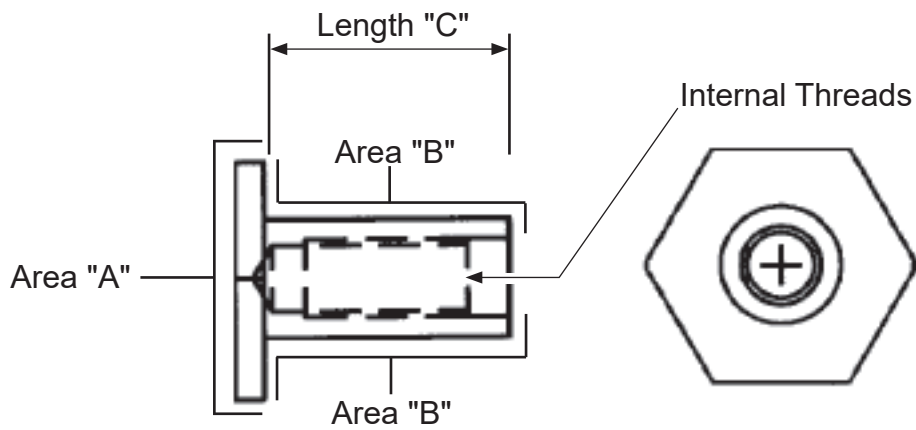
Part Number	"A" Minimum O-ring Groove OD	"B" Maximum O-ring Groove ID	"C" Minimum Plug OD	"D" Maximum Bore OD
A-2481	2.015 inch (51.18 mm)	0.846 inch (21.49 mm)	2.246 inch (57.05 mm)	0.670 inch (17.02 mm)
A-2481-1	2.326 inch (59.08 mm)	0.846 inch (21.49 mm)	2.557 inch (64.95 mm)	0.670 inch (17.02 mm)
A-2481-3	2.015 inch (51.18 mm)	0.846 inch (21.49 mm)	2.246 inch (57.05 mm)	0.670 inch (17.02 mm)

AP56285
PLUG.XLS

Shaft Plug
Figure 5-17

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
AA. <u>SHAFT PLUG</u> (Item 660), (Refer to Figure 5-17)		
(1) Visually examine the shaft plug for corrosion.	Corrosion is not permitted.	If there is corrosion replace the shaft plug.
(2) Visually examine the O-ring groove OD ("A").	If the shaft plug is worn or damaged, dimensionally inspect in accordance with Figure 5-17.	If wear or damage is greater than the permitted serviceable limits, replace the shaft plug.
(3) Visually examine the O-ring groove ID ("B").	If the shaft plug is worn or damaged, dimensionally inspect in accordance with the limits in Figure 5-17.	If wear or damage is greater than the permitted serviceable limits, replace the shaft plug.
(4) Visually examine the shaft plug OD diameter ("C").	If the shaft plug is worn or damaged, dimensionally inspect in accordance with the limits in Figure 5-17.	If wear or damage is greater than the permitted serviceable limits, replace the shaft plug.
(5) Visually examine the ID of the shaft plug bore ("D").	If the shaft plug is worn or damaged, dimensionally inspect in accordance with the limits in Figure 5-17.	If wear or damage is greater than the permitted serviceable limits, replace the shaft plug.



TPI-MB-0069

Hex Head Spacer Tube
Figure 5-18

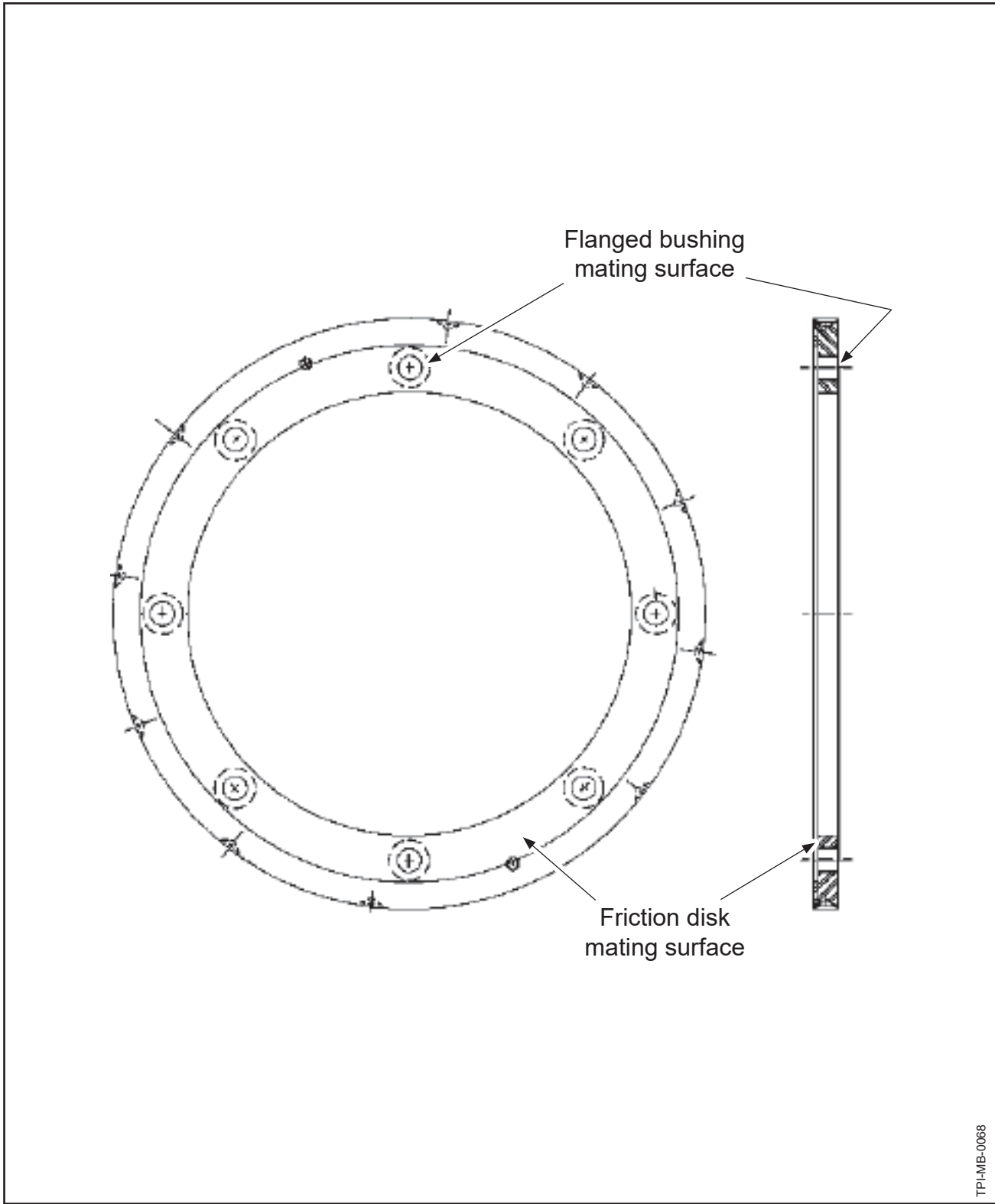
**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
<p>AB. <u>HEX HEAD SPACER TUBE</u> (Item 910) (Refer to Figure 5-18)</p>		
<p>(1) Visually examine the hex head spacer tube for corrosion.</p>	<p>Corrosion is not permitted. If there is corrosion, remove it in accordance with the corrective action repair limits.</p>	<p>Remove corrosion using an abrasive pad CM47 or equivalent. Glass bead cleaning is not permitted. If corrosion cannot be removed, replace the hex head spacer tube.</p>
<p>(2) Visually examine Area "A" for pitting, wear, or damage.</p>	<p>The maximum permitted depth of pitting, wear, or damage is 0.004 inch (0.10 mm).</p>	<p>If the depth of pitting, wear, or damage is greater than the permitted serviceable limits, replace the hex head spacer tube.</p>
<p>(3) Visually examine Area "B" for wear caused by the compression spring or washers that encircled the hex head spacer tube.</p>	<p>The maximum permitted depth of wear is 0.012 inch (0.30 mm). Pushed-up material above the surrounding undamaged material is not permitted.</p>	<p>Remove pushed-up material using a file or equivalent until it is flush with the surrounding undamaged material. If the wear is greater than the permitted serviceable limits, replace the hex head spacer tube.</p>
<p>(4) Visually examine Area "B" for pitting or damage.</p>	<p>The maximum permitted depth of pitting or damage is 0.003 inch (0.07 mm).</p>	<p>Using an abrasive pad CM47 or equivalent, remove pitting or damage that is deeper than 0.003 inch (0.07 mm) to a maximum depth of 0.012 inch (0.30 mm). Maximum area of repair (including spring and washer wear if present) is 25% of Area "B". If the depth or area of repair is greater than the permitted serviceable limits, replace the hex head spacer tube.</p>
<p>(5) Examine the internal threads using a screw (990).</p>	<p>Internal threads of the hex head spacer tube are not permitted to bind on the threads of the screw (990).</p>	<p>If the internal threads of the hex head spacer tube bind on the threads of the screw (990), replace the hex head spacer tube.</p>

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
AB. <u>HEX HEAD SPACER TUBE, CONTINUED</u> (Item 910) (Refer to Figure 5-18)		
(6) Measure Length "C".	The minimum permitted Length "C" is 0.777 inch (19.74 mm).	If Length "C" is less than the permitted serviceable limits, replace the hex head spacer tube.
(7) Visually examine the hex head spacer tube for cadmium plating coverage.	Except for a few scratches and corners with cadmium plating missing, complete coverage is required.	If cadmium plating coverage is less than the permitted serviceable limits, cadmium replate and bake the hex head spacer tube in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
(8) Magnetic particle inspect the hex head spacer tube in accordance with Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02)..	A relevant indication is not permitted.	If there is a relevant indication, replace the hex head spacer tube.

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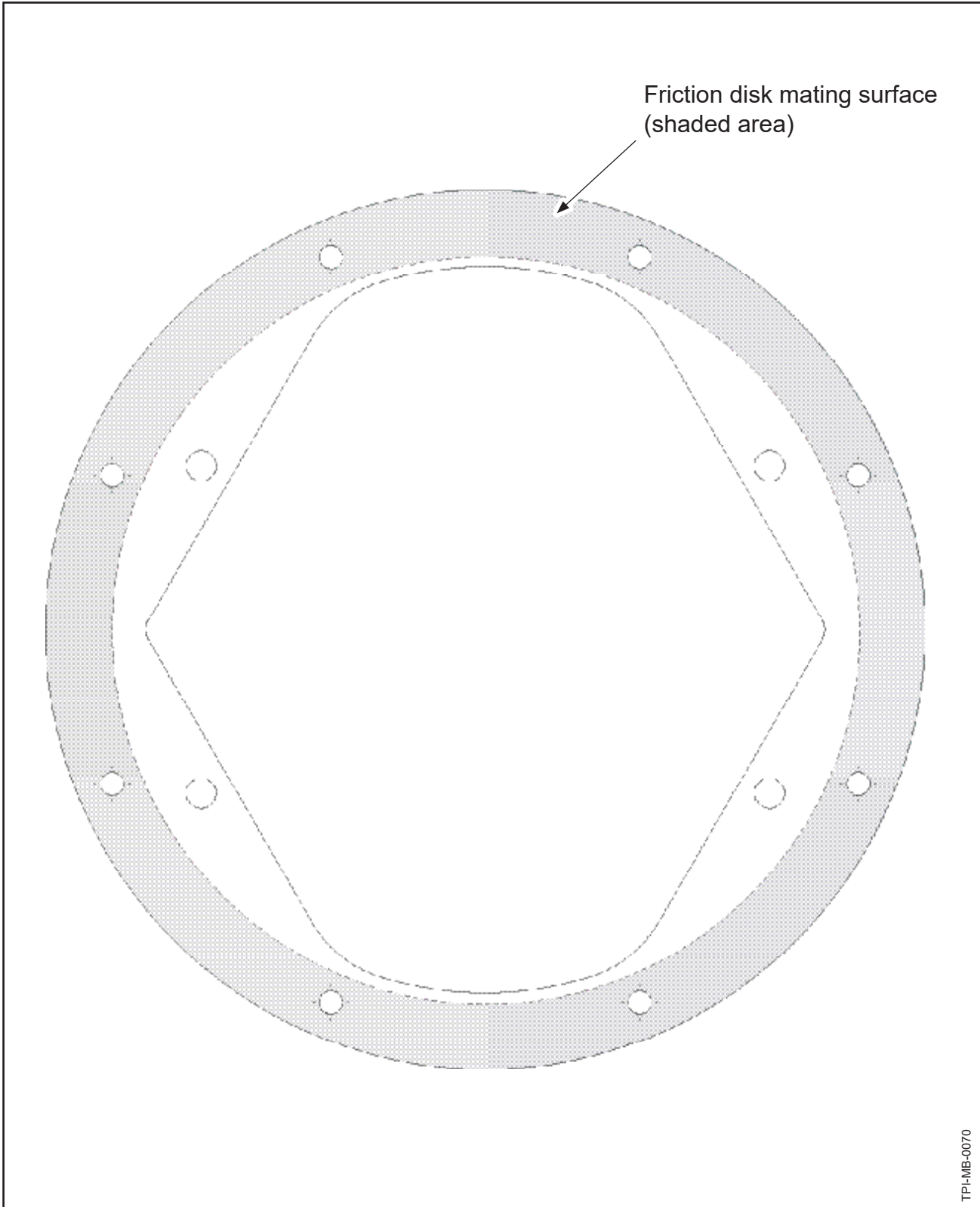
TP-LMB-0068

Damper Weight
Figure 5-19

CHECK **61-10-17**

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
<p>AC. <u>DAMPER WEIGHT</u> (Item 950) (Refer to Figure 5-19)</p>		
<p>(1) Visually examine the damper weight for corrosion.</p>	<p>Corrosion is not permitted.</p>	<p>If there is corrosion on the friction disk mating surface or on any of the eight flanged bushing mating surfaces, replace the damper weight.</p> <p>On all other surfaces, remove corrosion using an abrasive pad CM47 or equivalent. The maximum depth of material removal is 0.005 inch (0.012 mm). The maximum permitted weight of material removal is 1% of the total weight of the damper weight. If the corrective action repair is greater than the allowable limits, replace the damper weight.</p>
<p>(2) Visually examine the damper weight for pitting or damage in the form of nicks and/or gouges.</p>	<p>Damage is not permitted on the friction disk mating surface or on any of the eight flanged bushing mating surfaces. On all other surfaces, the maximum permitted depth of damage of 0.005 inch (0.12 mm).</p>	<p>If the depth of pitting or damage is more than the permitted serviceable limits, replace the damper weight.</p>
<p>(3) Visually examine the damper weight for wear caused by the eight (8) flanged bushings.</p>	<p>Wear is not permitted.</p>	<p>If there is wear, replace the damper weight.</p>
<p>(4) Measure the thickness of the damper weight for wear caused by the friction disk.</p>	<p>The minimum thickness from the friction disc mating surface to the opposite surface is 0.396 inch (10.06 mm).</p>	<p>If the thickness is less than the permitted serviceable limits, replace the damper weight.</p>
<p>(5) Visually examine the damper weight for cadmium plating coverage.</p>	<p>Except for a few scratches and corners with cadmium plating missing, complete coverage is required.</p>	<p>If the cadmium plating coverage is less than the permitted serviceable limits, replating the damper weight in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p> <p>Baking is not required.</p>

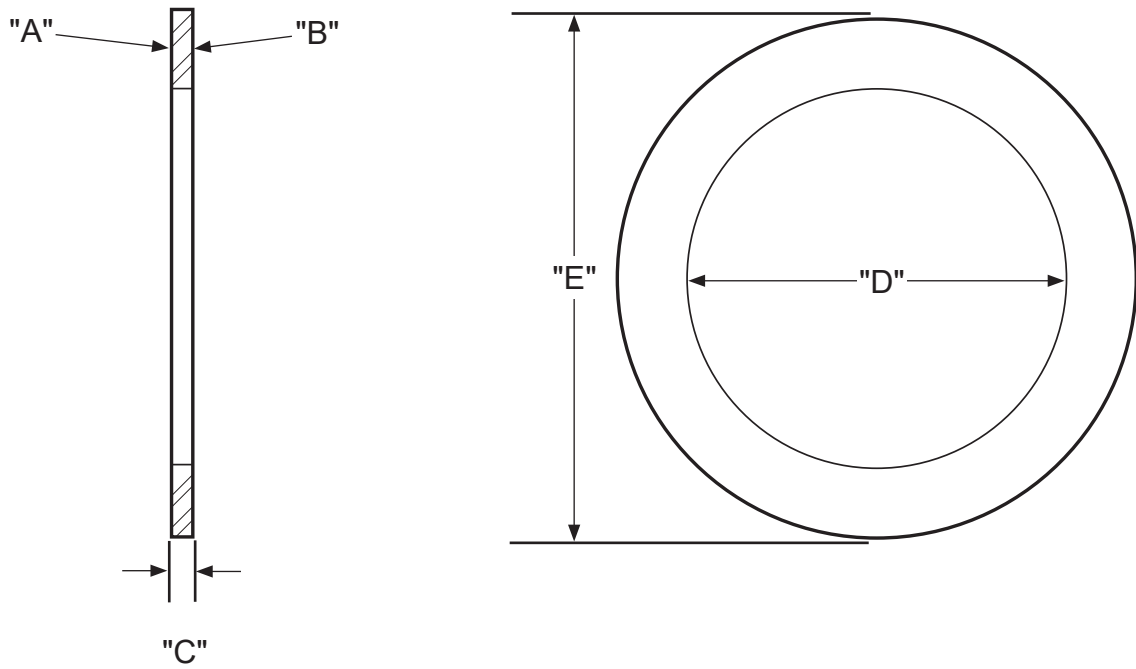


TPI-MB-0070

Damper Plate
Figure 5-20

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>AD. <u>DAMPER PLATE</u> (Item 980) (Refer to Figure 5-20)</p>		
<p>(1) Visually examine the damper plate for corrosion, pitting, wear, or damage.</p>	<p>Corrosion, pitting, wear, or damage on the friction disk mating surface is not permitted.</p>	<p>If there is corrosion, pitting, wear, or damage on the friction disk mating surface, replace the support plate.</p>
	<p>On all other surfaces, the maximum permitted depth of pitting, wear, or damage is 0.005 inch (0.12 mm). Corrosion is not permitted. If there is corrosion, remove it in accordance with the corrective action repair limits.</p>	<p>On all other surfaces, remove corrosion using an abrasive pad CM47 or equivalent. If the depth of pitting, wear, or damage is more than the permitted serviceable limits, replace the damper plate.</p>
<p>(2) Visually examine the damper plate for cadmium plating coverage.</p>	<p>Except for a few scratches and corners with cadmium plating missing, complete coverage is required.</p>	<p>If cadmium plating coverage is less than the permitted serviceable limits, replate the support plate in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). Baking is not required.</p>
<p>(3) Magnetic particle inspect the damper plate in accordance with Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>	<p>A relevant indication is not permitted.</p>	<p>If there is a relevant indication, replace the damper plate.</p>

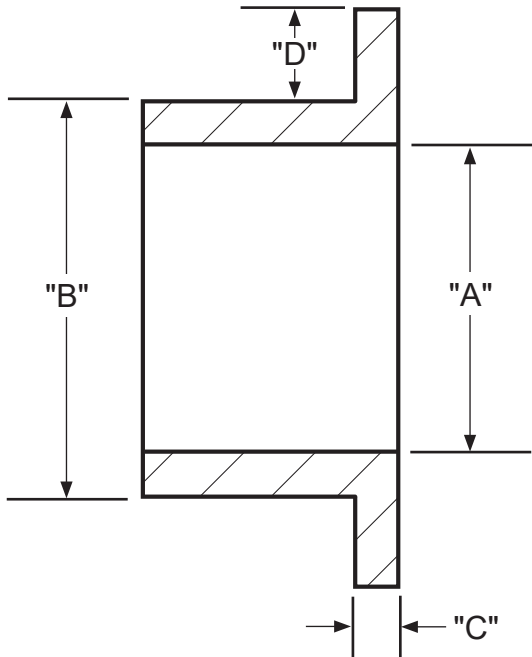


TPI-MB-0237

Spring Adjust Washer
Figure 5-21

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
AE. <u>SPRING ADJUST WASHER</u> (Item 935) (Refer to Figure 5-21)		
(1) Visually examine the spring adjust washer surfaces "A" and "B" for scratches and damage.	The maximum permitted area of scratches or damage is 10% of either surface "A" or "B". Damage is not permitted to penetrate the spring adjust washer thickness or to upset the even support of the spring on the flanged bushing. Pushed up material above the surrounding undamaged material is not permitted.	If scratches or damage are greater than the permitted serviceable limits, replace the spring adjust washer.
(2) Visually examine the spring adjust washer surfaces "A" and "B" for wear.	If there is wear, measure the thickness "C" of the spring adjust washer. The minimum permitted spring adjust washer thickness is 0.008 inch (0.21 mm). The minimum permitted thickness applies to wear and not to scratches and damage.	If the thickness "C" is less than the permitted serviceable limits, replace the spring adjust washer.
(3) Visually examine the spring adjust washer surfaces "A" and "B" for flatness.	If the spring adjust washer does not appear flat on a known flat surface then measure the deviation. Maximum deviation from flat is 0.003 inch (0.07 mm).	If the deviation from flat is greater than the permitted serviceable limits, replace the spring adjust washer.
(4) Visually examine the spring adjust washer ID "D" for wear.	If there is wear, measure the ID "D". The maximum permitted ID with two point measurement is 0.524 inch (13.30 mm).	If the ID "D" is greater than the permitted serviceable limits, replace the spring adjust washer.
(5) Visually examine the spring adjust washer OD "E" for wear.	If there is wear, measure the OD "E". The minimum permitted OD is 0.705 inch (17.91 mm) with two point measurement.	If the OD "E" is less than the permitted serviceable limits, replace the spring adjust washer.

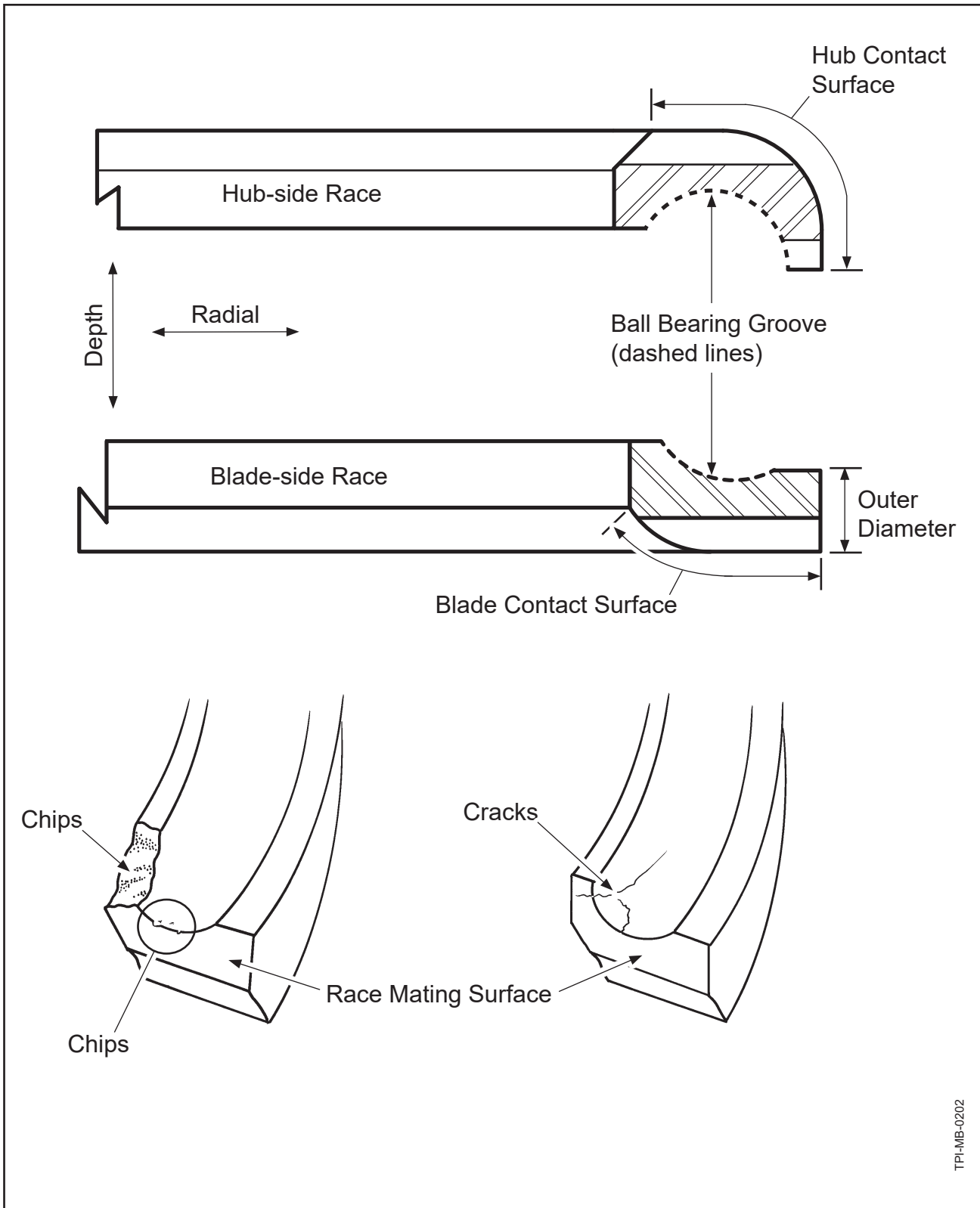


TPI-MB-0236

Flanged Bushing
Figure 5-22

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
AF. FLANGED BUSHING (Item 945) (Refer to Figure 5-22)		
(1) Visually examine the flanged bushing ID "A" for damage.	The maximum permitted area of damage is 25% of the ID bore surface. The maximum permitted depth of damage is 0.005 inch (0.12 mm).	If the damage is greater than the permitted serviceable limits, replace the flanged bushing.
(2) Visually examine the flanged bushing ID "A" for wear.	If there is wear, measure the flanged bushing ID "A". The maximum permitted ID "A" is 0.400 inch (10.16 mm) when measured with two point measurement.	If the ID "A" is greater than the permitted serviceable limits, replace the flanged bushing.
(3) Visually examine the flanged bushing shaft OD "B" for damage or wear.	The maximum permitted depth of damage or wear is 0.020 inch (0.50 mm).	If the damage or wear is greater than the permitted serviceable limits, replace the flanged bushing.
(4) Visually examine the flange "C" on the flanged bushing for wear.	If there is wear, measure the thickness of the flange "C". The minimum permitted flange thickness is 0.040 inch (1.02 mm).	If the flange thickness is less than the permitted serviceable limits, replace the flanged bushing. NOTE: A reduction of flange thickness may require a fourth spring adjust washer to achieve the required spring gap during assembly.
(5) Visually examine the flanged bushing flange width "D" beyond the shaft OD for wear or damage.	If there is wear or damage, measure the flange width "D". The minimum permitted flange width is 0.091 inch (2.32 mm).	If the flange width is less than the permitted serviceable limits, replace the flanged bushing.



Bearing Race
Figure 5-23

**Component Inspection Criteria
Table 5-1**

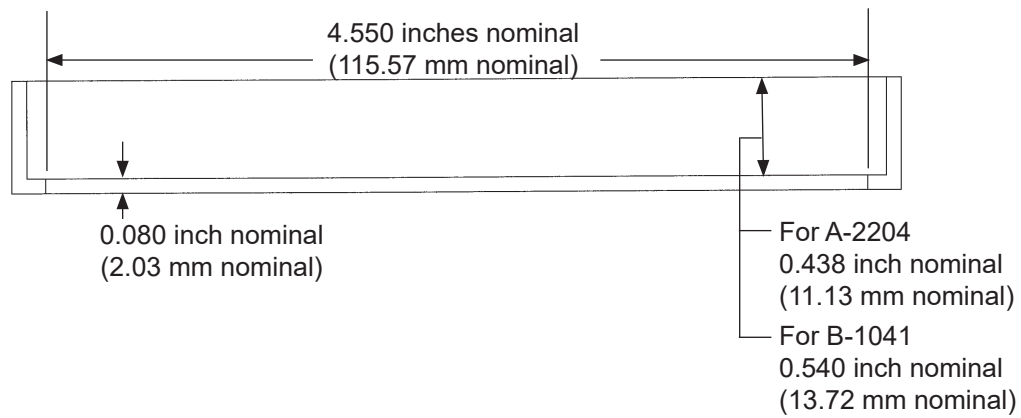
Inspect	Serviceable Limits	Corrective Action
<p>AG. <u>BEARING RACE</u> (Items 3020, 3050) (Refer to Figure 5-23)</p>		
<p>(1) Visually examine the ball bearing groove in each bearing race for corrosion product.</p>	<p>Corrosion product is not permitted. If there is corrosion product, remove it in accordance with the corrective action repair limits.</p>	<p>Remove corrosion product using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If the corrosion product cannot be removed, replace the bearing race.</p>
<p>(2) Visually examine the ball bearing groove in each bearing race for pitting, wear, fretting, and damage.</p>	<p>The maximum permitted depth of pitting is 0.003 inch (0.076 mm) in the ball bearing groove.</p> <p>The maximum permitted diameter of a pit is 0.032 inch (0.81 mm).</p> <p>The maximum permitted total area of pitting in the ball bearing groove on a complete bearing race is 0.12 square inch (77.4 square mm) (two bearing races for each bearing set). Pitting must not interfere with bearing ball movement or support.</p>	<p>If the pitting is greater than the serviceable limits, replace the bearing race.</p>
	<p>If the ball bearing groove has wear, measure the wear. The maximum permitted depth of wear is 0.005 inch (0.12 mm).</p>	<p>If the wear is greater than the permitted serviceable limits, replace the bearing race.</p>
	<p>Fretting damage is not permitted.</p>	<p>If there is fretting damage, replace the bearing race.</p>
	<p>For damage other than pitting or fretting, the maximum permitted depth of damage is 0.003 inch (0.076 mm) and must not interfere with bearing ball movement or support.</p>	<p>If damage is greater than the permitted serviceable limits, replace the bearing race.</p>

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
<p>AG. <u>BEARING RACE, CONTINUED</u> (Items 3020, 3050) (Refer to Figure 5-23)</p>		
<p>(3) Except for the ball bearing groove, visually examine all other surfaces of each bearing race for corrosion product.</p>	<p>Corrosion product is not permitted. If there is corrosion product, remove it in accordance with the corrective action repair limits.</p>	<p>Remove corrosion product using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If the corrosion product cannot be removed, replace the bearing race.</p>
<p>(4) Except for the ball bearing groove, visually examine all other surfaces of each bearing race for pitting, wear, fretting, and damage.</p>	<p>The maximum permitted depth of pitting is 0.005 inch (0.12 mm). The maximum permitted diameter of a pit is 0.062 inch (1.57 mm).</p>	<p>If the pitting is greater than the permitted serviceable limits, replace the bearing race.</p>
	<p>The maximum permitted total area of pitting on all surfaces except the ball bearing groove of a complete bearing race is 0.25 square inch (161.2 square mm) (two bearing races for each bearing set).</p>	
	<p>Fretting damage is permitted on the outer diameter of the bearing races that interface with the bearing retaining ring (1030). Fretting must not loosen the tight fit with the bearing retaining ring (1030).</p>	<p>Clean the fretted area thoroughly using an abrasive pad CM47 or equivalent to decrease fretting damage to a minimum. If the fit of the bearing retaining ring (1030) to the bearing race is not tight, replace the bearing race.</p>
	<p>Wear is not permitted.</p>	<p>If there is wear, replace the bearing race.</p>
	<p>For damage other than pitting, the maximum permitted depth of damage is 0.005 inch (0.12 mm) and must not interfere with the mating surfaces.</p>	<p>If the damage is greater than the permitted serviceable limits, replace the bearing race.</p>

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
AG. <u>BEARING RACE, CONTINUED</u> (Items 3020, 3050) (Refer to Figure 5-23)		
(5) Visually examine the bearing race for chips or cracks that are adjacent to the mating surfaces of the bearing race.	Chips or cracks that are adjacent to the mating surfaces of the bearing race are not permitted.	If there are chips or cracks adjacent to the mating surfaces of the bearing race, replace the bearing race.
(6) Magnetic particle inspect each bearing race in accordance with the Magnetic Particle Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).	A relevant indication is not permitted.	If there is a relevant indication, replace the bearing race.



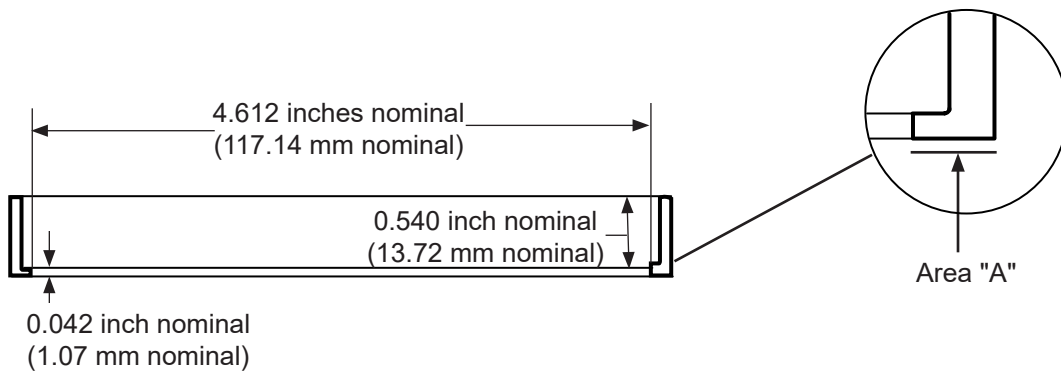
NOTE: Dimensions are for identification purposes only

B-1041

A-2204 and B-1041 Bearing Retaining Ring
Figure 5-24

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
AH. <u>A-2204 AND B-1041 BEARING RETAINING RING</u> (Item 3060) (Refer to Figure 5-24)		
(1) Visually examine the bearing retaining ring for corrosion and pitting.	Corrosion is not permitted. The maximum permitted depth of pitting is 0.005 inch (0.12 mm). Pitting must not interfere with the ability of the bearing retaining ring to fit tightly to the blade and the bearing race.	Remove corrosion using glass bead cleaning. Refer to the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If the damage is greater than the permitted serviceable limits, replace the bearing retaining ring.
(2) Visually examine the bearing retaining ring for wear, damage, or fretting.	The bearing retaining ring must fit tightly to the blade and the bearing race when installed over the blade and bearing race.	If wear, damage, or fretting is greater than the permitted limits, replace the bearing retaining ring.
(3) Visually examine the bearing retaining ring for cadmium plating coverage.	A few random scratches and corners with anodize coating missing are permitted; otherwise, complete coverage is required.	If cadmium plating coverage is less than the permitted serviceable limits, replate the bearing retaining ring in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).



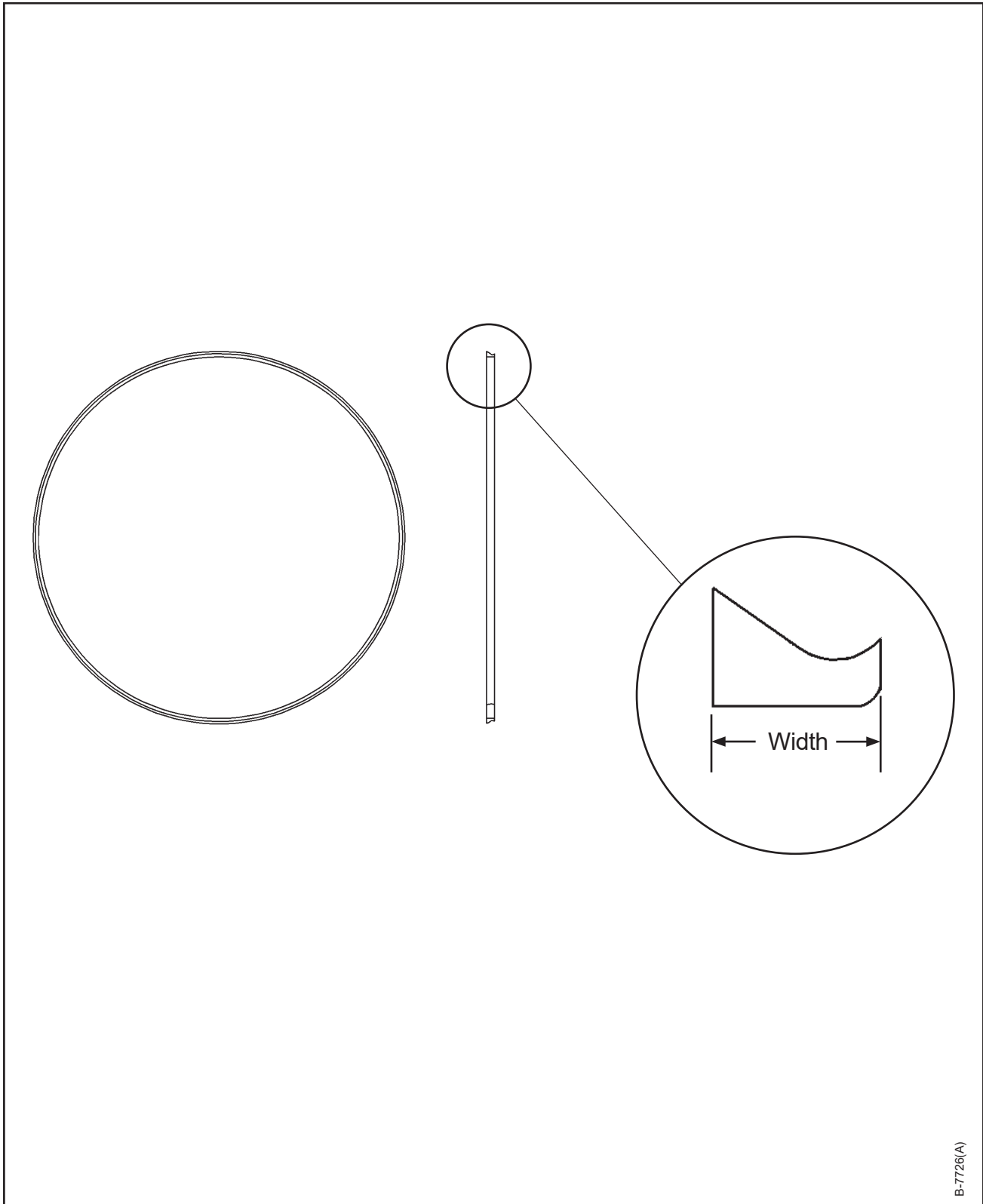
NOTE: Dimensions are for identification purposes only

B-7071

B-7071 Bearing Retaining Ring
Figure 5-25

**Component Inspection Criteria
Table 5-1**

	Inspect	Serviceable Limits	Corrective Action
AI.	<u>B-7071 BEARING RACE RETENTION RING</u> (Item 3060) (Refer to Figure 5-25)		
(1)	Except for Area "A", visually examine the bearing retaining ring for corrosion and pitting.	Corrosion is not permitted. The maximum permitted depth of pitting is 0.005 inch (0.12 mm). Pitting must not interfere with the ability of the bearing retaining ring to fit tightly to the blade and the bearing race.	Remove corrosion using glass bead cleaning. Refer to the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If the damage is more than the permitted serviceable limits, replace the bearing retaining ring.
(2)	Visually examine the bearing retaining ring for corrosion, pitting, damage, or wear in Area "A".	Corrosion, pitting, damage, or wear is not permitted.	If the corrosion, pitting, damage, or wear is more than the permitted serviceable limits, replace the bearing retaining ring.
(3)	Except for Area "A", visually examine the bearing retaining ring for wear, damage, or fretting.	The bearing retaining ring must fit tightly to the blade and the bearing race when installed over the blade and bearing race.	If wear, damage, or fretting is more than the permitted serviceable limits, replace the bearing retaining ring.
(4)	Visually examine the entire bearing retaining ring for cadmium plating coverage.	A few random scratches and corners with anodize coating missing are permitted; otherwise, complete coverage is required.	If cadmium plating is not on all surfaces, replate the bearing retaining ring in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

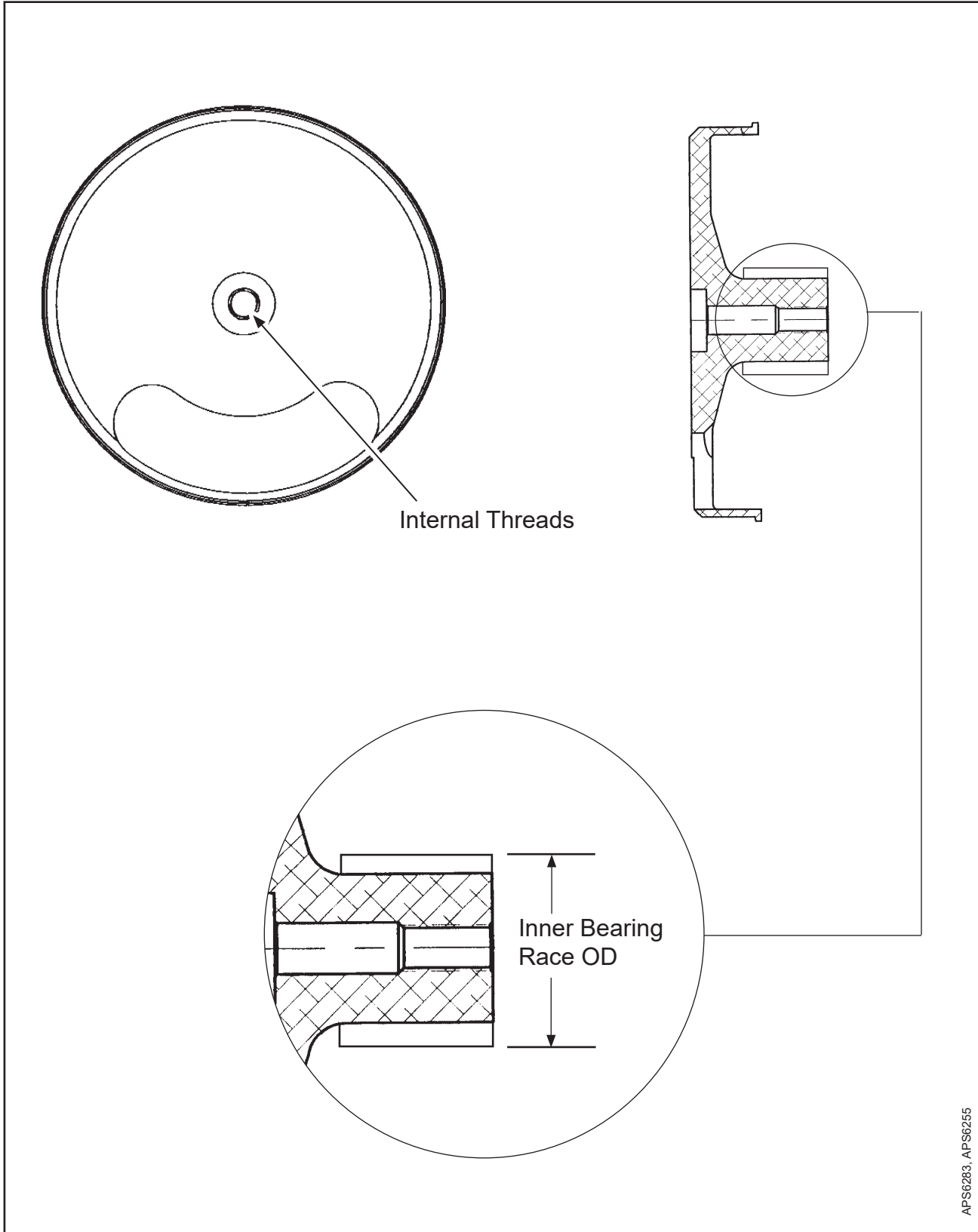


B-7726(A)

Blade Seal
Figure 5-26

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
AJ. <u>BLADE SEAL</u> (Item 3063) (Refer to Figure 5-26)		
(1) Using 10X magnification and an appropriate light source, visually examine the blade seal for damage, missing material, separation, or form irregularities of the continuous ring.	Damage, missing material, separation, or irregularities are not permitted.	If the damage or other conditions are more than the permitted serviceable limits, replace the blade seal.
(2) Visually examine the width of the blade seal for wear.	If there is wear, measure the width of the blade seal. The minimum permitted width is 0.090 inch (2.29 mm).	If the width measurement of the blade seal is less than the permitted serviceable limits, replace the blade seal.



Preload Plate Assembly with Inner Bearing Race
Figure 5-27

**Component Inspection Criteria
Table 5-1**

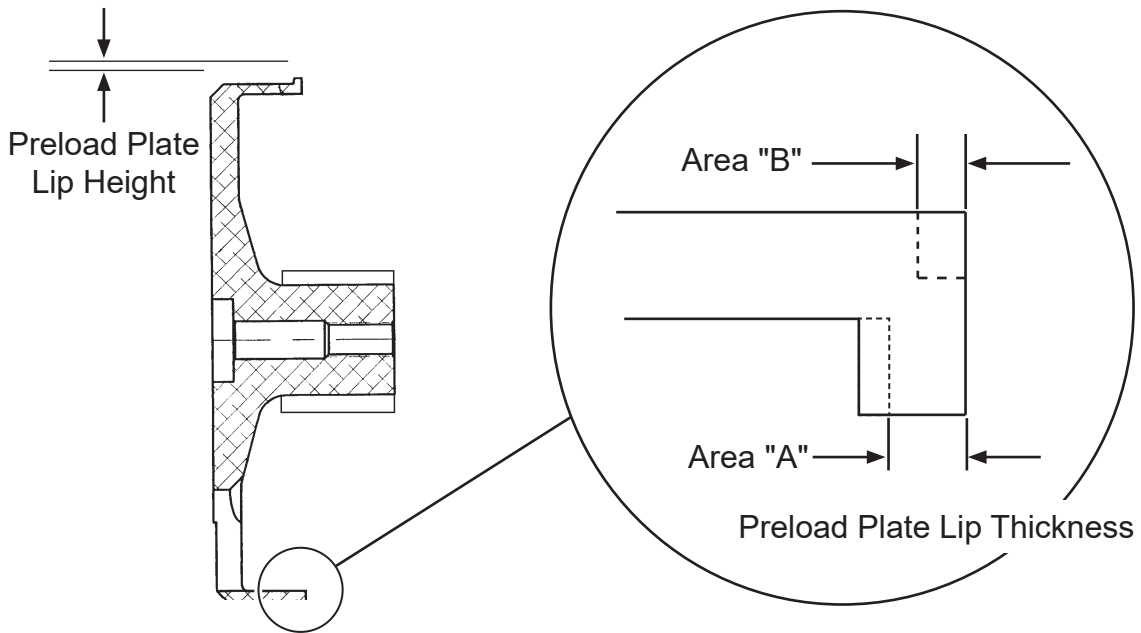
Inspect	Serviceable Limits	Corrective Action
AK. <u>PRELOAD PLATE ASSEMBLY w/INNER BEARING RACE</u> (Item 3070) (Refer to Figure 5-27 and Figure 5-28)		
(1) Visually examine the aluminum part of the preload plate assembly for corrosion product.	Corrosion product is not permitted. If there is corrosion product, remove it in accordance with the corrective action repair limits.	Mask the internal threads then remove corrosion product using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If the corrosion product cannot be removed, replace the preload plate assembly.
(2) Visually examine the aluminum part of the preload plate assembly for pitting.	The maximum permitted depth of pitting is 0.004 inch (0.10 mm).	Pitting may be removed by polishing using an abrasive pad CM47 or equivalent, up to 0.007 inch (0.17 mm) deep. If the depth of pitting or repair is greater than the permitted serviceable limits, replace the preload plate assembly.
(3) Visually examine the internal threads for damage.	A maximum of two threads of total accumulated damage are permitted.	If the damage is greater than permitted serviceable limits, replace the preload plate assembly.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>AK. <u>PRELOAD PLATE ASSEMBLY w/INNER BEARING RACE, CONTINUED</u> (Item 3070) (Refer to Figure 5-27 and Figure 5-28)</p>	<p>(4) Visually examine the OD of the inner bearing race (3090) for corrosion product, brinelling, pitting and damage.</p> <p>Corrosion product is not permitted. If there is corrosion product, remove it in accordance with the corrective action repair limits.</p> <p>Raised material is not permitted.</p> <p>The maximum permitted depth of brinelling is 0.003 inch (0.07 mm).</p> <p>The maximum permitted depth of pitting and damage is 0.005 inch (0.12 mm).</p> <p>The maximum permitted total area of brinelling, pitting and damage is 5%.</p>	<p>Mask the internal threads then remove corrosion product using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p> <p>Polish raised material using abrasive pad CM47 or equivalent.</p> <p>B-6679 inner bearing race: If corrosion product cannot be removed, or if raised material, brinelling, pitting, or damage of the inner bearing race is greater than the permitted serviceable limits, remove the inner bearing race in accordance with the Repair chapter of this manual, then examine the preload plate spindle in accordance with the applicable step in this Preload Plate Assembly inspection criteria.</p> <p>A-1272 inner bearing race: If corrosion product cannot be removed, or if raised material, brinelling, pitting, or damage of the inner bearing race is greater than the permitted serviceable limits, replace the preload plate assembly.</p>

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
<p>AK. <u>PRELOAD PLATE ASSEMBLY w/INNER BEARING RACE, CONTINUED</u> (Item 3070) (Refer to Figure 5-27 and Figure 5-28)</p>		
<p>(5) Measure the OD of the inner bearing race (3090).</p>	<p>B-6679 inner bearing race: The minimum permitted OD is 1.249 inch (31.73 mm).</p> <p>A-1272 inner bearing race: The minimum permitted OD is 1.124 inch (28.55 mm).</p>	<p>B-6679 inner bearing race: If the OD is less than permitted, remove the inner bearing race in accordance with the Repair chapter of this manual, then examine the preload plate spindle in accordance with the applicable step in this Preload Plate Assembly inspection criteria.</p> <p>A-1272 inner bearing race: If the OD is less than the permitted serviceable limits, replace the preload plate assembly.</p>
<p>(6) If the inner bearing race (3090) is removed, visually examine the preload plate spindle for corrosion product, raised material, and damage.</p>	<p>Corrosion product is not permitted. If there is corrosion product, remove it in accordance with the corrective action repair limits.</p> <p>Raised material is not permitted.</p> <p>The maximum permitted depth of damage is 0.004 inch (1.02 mm) .</p>	<p>Mask the internal threads then remove corrosion product using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p> <p>Polish raised material using an abrasive pad CM47 or equivalent.</p> <p>If corrosion product, raised material, or damage to the preload plate spindle is greater than the serviceable limits, replace the preload plate assembly.</p>



Lip Thickness (Area "A")	Maximum Permitted Depth of Damage in Area "B"
0.060 inch (1.53 mm)	0.013 inch (0.33 mm) or less
0.061 inch (1.55 mm)	0.014 inch (0.35 mm)
0.062 inch (1.58 mm)	0.015 inch (0.38 mm)
0.063 inch (1.61 mm)	0.016 inch (0.40 mm)
0.064 inch (1.63 mm)	0.017 inch (0.43 mm)
0.065 inch (1.66 mm)	0.018 inch (0.45 mm)
0.066 inch (1.68 mm)	0.019 inch (0.48 mm)
0.067 inch (1.71 mm) or greater	0.020 inch (0.50 mm)

Example 1: Lip thickness in Area "A" is greater than 0.063 inch (1.61 mm)
Depth of damage in Area "B" is 0.016 inch (0.40 mm).
Preload plate is within permitted serviceable limits.

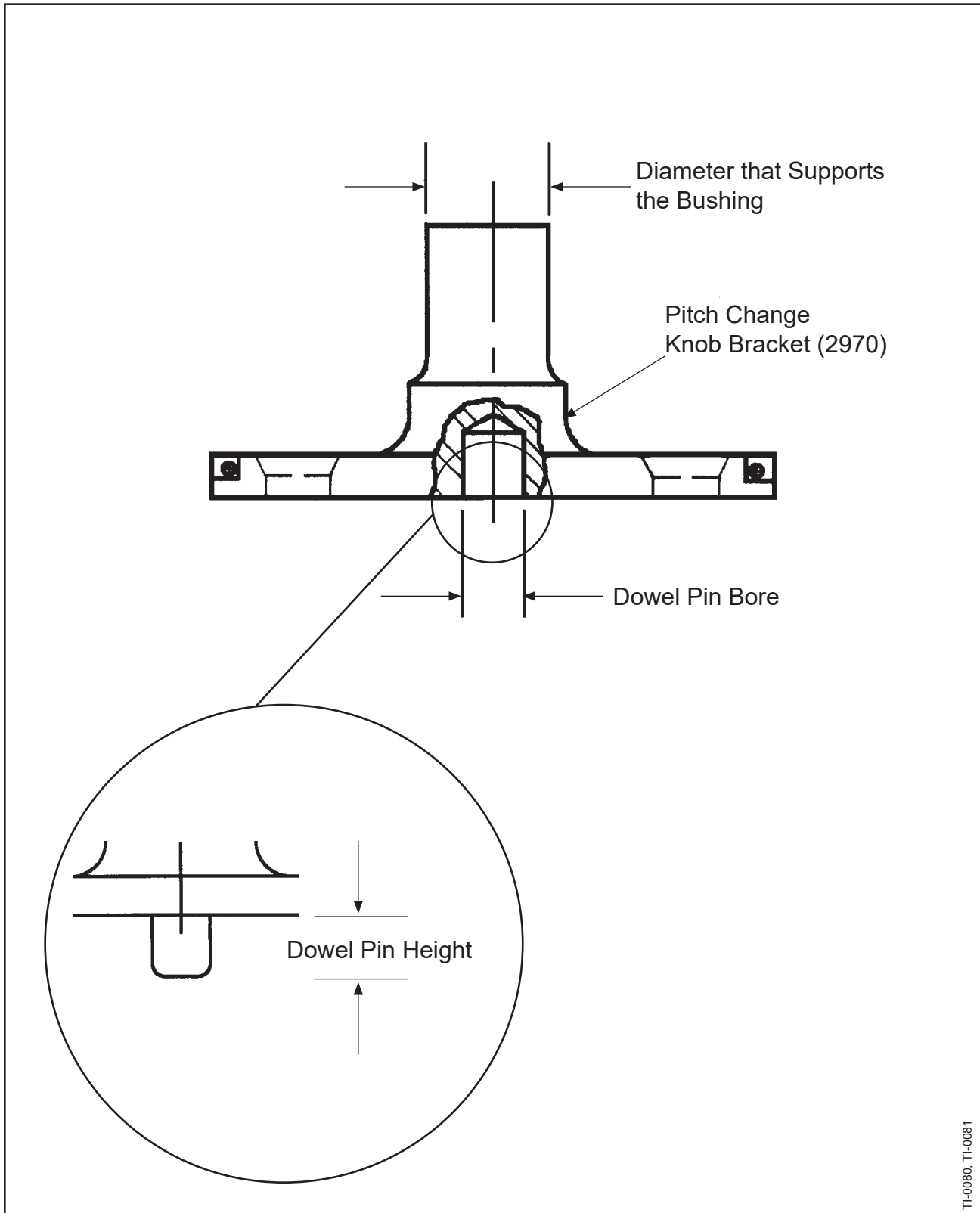
Example 2: Lip thickness in Area "A" is less than 0.063 inch (1.61 mm)
Depth of damage in Area "B" is 0.018 inch (0.45 mm)
Damage is greater than the permitted serviceable limits,
replace the preload plate

TPL-MB-0018a

**Preload Plate Lip Measurement
Figure 5-28**

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
<p>AK. <u>PRELOAD PLATE ASSEMBLY w/INNER BEARING RACE, CONTINUED</u> (Item 3070) (Refer to Figure 5-27 and Figure 5-28)</p>		
<p>(7) Visually examine the preload plate lip for damage. If the lip is damaged, measure the height.</p>	<p>The minimum permitted lip height is 0.040 inch (1.02 mm).</p>	<p>Remove any rough edges or evidence of fretting. If damage or repair is greater than the permitted serviceable limits, or the lip height is less than the permitted serviceable limits, replace the preload plate assembly.</p>
<p>(8) Visually examine the preload plate lip for damage.</p>	<p>The minimum lip thickness is 0.060 inch (1.52 mm). The maximum permitted depth of damage in Area "B" of the lip of the preload plate is dependent on the thickness in Area "A" of the lip of the preload plate. Use the information and examples in Figure 5-27 to find the maximum permitted depth of damage in Area "B" when lip thickness in Area "A" is equal to or greater than the dimension specified in Figure 5-28.</p>	<p>If the lip thickness in Area "A" is less than the permitted serviceable limits, replace the preload plate. If the depth of damage in Area "B" is greater than the permitted serviceable limits, replace the preload plate assembly.</p>
<p>(9) Penetrant inspect the preload plate in accordance with the Penetrant Inspection chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).</p>	<p>A relevant indication is not permitted.</p>	<p>If there is a relevant indication, replace the preload plate assembly.</p>



Pitch Change Knob Bracket and Dowel Pin
Figure 5-29

Component Inspection Criteria
Table 5-1

	Inspect	Serviceable Limits	Corrective Action
AL.	<u>PITCH CHANGE KNOB BRACKET AND DOWEL PIN</u> (Items 2960, 2970) (Refer to Figure 5-29)		
(1)	Visually examine the pitch change knob bracket for damage or corrosion.	Damage or corrosion is not permitted except for a few light scratches.	Remove corrosion using glass bead cleaning. Refer to the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A, (61-01-02). If glass bead cleaning is used, refer to the section "C-1862-() Pitch Change Knob Plating Repair" in the Repair chapter of this manual for instructions about replating the pitch change knob bracket. If there is damage that cannot be removed within the serviceable limits, replace the pitch change knob.
(2)	Visually examine the exposed portion of the dowel pin OD for wear.	If there is wear, measure the OD. Minimum permitted diameter is 0.3126 inch (7.940 mm).	If the OD is less than the permitted serviceable limits, replace the dowel pin.
(3)	Visually examine the OD of the exposed portion of the dowel pin for damage or corrosion.	Damage or corrosion is not permitted.	If there is damage or corrosion, replace the dowel pin.
(4)	Examine the fit of the dowel pin in the pitch change knob bracket by checking for pin movement in the pitch change knob bracket.	Movement is not permitted. If there is movement, measure the dowel pin OD and the dowel pin bore in the pitch change knob bracket. For the dowel pin, the minimum permitted dowel pin OD is 0.3126 inch (7.940 mm). For the dowel pin bore in the pitch change knob bracket, the maximum permitted bore is 0.3125 inch (7.937 mm).	If the dowel pin OD is less than the permitted serviceable limits, replace the dowel pin. If the dowel pin bore in the pitch change knob bracket is greater than the permitted serviceable limits, replace the pitch change knob bracket.

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
AL. <u>PITCH CHANGE KNOB BRACKET AND DOWEL PIN, CONTINUED</u> (Items 2960, 2970) (Refer to Figure 5-29)		
(5) Measure the dowel pin height when installed in the pitch change knob bracket.	The permitted dowel pin height is 0.330 (\pm 0.010) inch (8.38 \pm 0.25 mm).	If the dowel pin height is not within the permitted serviceable limits, replace the dowel pin.
(6) Measure the diameter that supports the bushing.	Minimum permitted diameter is 0.6210 inch (15.774 mm).	If the diameter is less than the permitted serviceable limits, replace the pitch change knob bracket.
(7) Perform a magnetic particle inspection of the pitch change knob bracket in accordance with the Magnetic Particle Inspection chapter of Manual 202A (61-01-02).	A crack is not permitted.	If there is a crack, replace the pitch change knob bracket.
(8) Visually examine the pitch change knob bracket for nickel or cadmium plating coverage.	Either nickel or cadmium plating must cover all surfaces of the pitch change knob bracket.	If there is nickel plating that does not cover the entire pitch change knob bracket, refer to the Repair chapter of this manual for instructions for replating of the pitch change knob bracket. If cadmium plating coverage is less than the serviceable limits, cadmium replate and bake in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02)

**Component Inspection Criteria
Table 5-1**

Inspect	Serviceable Limits	Corrective Action
AM. <u>BALANCE WEIGHT</u> (Item 9020)		
(1) Visually examine the balance weight for corrosion product.	Corrosion product is not permitted. Remove corrosion product in accordance with the corrective action instructions.	Remove corrosion product by using glass bead cleaning. Refer to the Cleaning chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02). If the corrosion product cannot be removed, replace the balance weight.
(2) Visually examine the balance weight for pitting, wear, or damage.	The maximum permitted depth of pitting, wear, or damage is 0.003 inch (0.07 mm).	Using an abrasive pad CM47 or equivalent, polish to a maximum depth of 0.005 inch (0.12 mm). If the depth of damage is greater than the permitted serviceable limits or the corrective action, replace the balance weight.
(3) For an aluminum (gray color) balance weight: Visually examine the balance weight for anodize coverage.	Except for a few scratches and corners with anodize coating missing, complete coverage is required.	If the coverage is less than the permitted serviceable limits, re-anodize the balance weight in accordance with the Chromic Acid Anodizing chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
(4) For a steel (silver color) balance weight: Visually examine the balance weight for cadmium plating coverage.	Except for a few scratches and corners with cadmium plating missing, complete coverage is required.	If the coverage is less than the permitted serviceable limits, replating the balance weight in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02)

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WARNING 1: DO NOT ATTEMPT IN THE FIELD ANY REPAIR, REPLACEMENT, REPLATING, RE-ANODIZING OR RE-SHOT PEENING PROCEDURE NOT SPECIFICALLY AUTHORIZED BY HARTZELL PROPELLER INC. OR NOT SPECIFICALLY REFERRED TO IN HARTZELL PROPELLER INC. MANUALS. CONTACT THE FACTORY FOR GUIDANCE ABOUT THE AIRWORTHINESS OF ANY PART WITH UNUSUAL WEAR OR DAMAGE.

WARNING 2: ADHESIVES AND SOLVENTS ARE FLAMMABLE AND TOXIC TO THE SKIN, EYES, AND RESPIRATORY TRACT. SKIN AND EYE PROTECTION ARE REQUIRED. AVOID PROLONGED CONTACT AND BREATHING OF VAPORS. USE SOLVENT RESISTANT GLOVES TO MINIMIZE SKIN CONTACT AND WEAR SAFETY GLASSES FOR EYE PROTECTION. USE IN A WELL VENTILATED AREA AWAY FROM SPARKS AND FLAME. READ AND OBSERVE ALL WARNING LABELS.

CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

1. General Repair Requirements (Rev. 2)

A. Shot Peening

CAUTION: THE PEENING MARKS ON CERTAIN PROPELLER PARTS ARE NOT TOOL MARKS AND SHOULD NOT BE REMOVED.

- (1) Some propeller assembly parts have been shot peened at Hartzell Propeller Inc. to improve fatigue strength.
- (2) Shot peened surfaces may require re-shot peening because of rust, corrosion, fretting, or nicks. For shot peening procedures, refer to the Shot Peening chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

WARNING: FAILURE TO CORRECTLY SHOT PEEN APPLICABLE PROPELLER PARTS MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. A QUALITY SHOT PEENING PROCESS IS CRITICAL FOR FLIGHT SAFETY. SHOT PEENING OF PROPELLER PARTS REQUIRES SPECIAL TECHNIQUES, TRAINING, MATERIALS, AND EQUIPMENT.

- (a) Only repair stations that are properly certified by Hartzell Propeller Inc. should shot peen Hartzell propeller parts.

- 1 For certification requirements, refer to the Approved Facilities chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
- 2 For a list of repair stations that are certified by Hartzell Propeller Inc. to perform shot peening on Hartzell propeller parts:
 - a Go to the Sample Program Approvals page on the Hartzell Propeller Inc. website at www.hartzellprop.com
 - b Contact Hartzell Propeller Inc. Product Support
 - (1) Refer to the section, "Contact Information" in the Introduction chapter of this manual.

B. Aluminum and Steel Parts

- (1) Remove scratches, nicks, burrs, and other minor damage by using a fine emery cloth or abrasive pad, such as CM47.
 - (a) Blend the polished area in with the surrounding area.
 - (b) Use extreme care to completely remove the damage while removing as little material as possible.
- (2) After any repair, inspect the part in accordance with the applicable inspection criteria to be sure it is within the permitted limits.

2. Repair/Modification Procedures (Rev. 3)

A. Propeller Components (Except for those listed separately in this section)

- (1) For repair and modification procedures of propeller components (except for those listed separately in this section), refer to the applicable section in this chapter.

B. Hubs

- (1) Aluminum Hubs: Refer to the applicable Aluminum Hub Overhaul chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

C. Blades

- (1) Aluminum Blades: Refer to Hartzell Propeller Inc. Aluminum Blade Overhaul Manual 133C (61-13-33).
- (2) Composite Blades: Refer to Hartzell Propeller Inc. Composite Blade Overhaul Manual 135F (61-13-35).

D. Spinner Assemblies

- (1) Metal Spinners: Refer to Hartzell Propeller Inc. Metal Spinner Maintenance Manual 127 (61-16-27).
- (2) Composite Spinners: Refer to Hartzell Propeller Inc. Composite Spinner Maintenance Manual 148 (61-16-48).

E. Ice Protection Systems

- (1) For ice protection systems supplied by Hartzell, refer to Hartzell Propeller Inc. Ice Protection System Manual 180 (30-61-80).
- (2) For ice protection systems not supplied by Hartzell, refer to the applicable TC or STC holder's Instructions for Continued Airworthiness (ICA).

3. Specific Repair Procedures

NOTE: Balance weight attachment hole and grease fitting hole repair procedures are described in the Aluminum Hub Overhaul chapter of Hartzell Propeller Inc. Manual 202A (61-02-02).

A. Repair of Damaged Cylinder Wrench Attachment Holes.

(1) General.

- (a) Several models of aluminum hub propellers have threaded holes in the forward end of the propeller cylinder for attachment of wrenches during assembly and disassembly. Damage to these holes is repairable in accordance with the following procedure.
- (b) Perform the procedure only on cylinders with the following part numbers:

B-2423-1 B-2452-1

(2) Procedure

- (a) Use Slimsert TE410 (Hartzell Propeller Inc. P/N B-6986-258). Cut off the counterbored end of the Slimsert to remove the counterbore and locking teeth.
- (b) Drill the damaged hole to diameter 0.281 +0.004 -0.001 inch (7.13 +0.101, -0.025 mm) with a maximum depth of 0.440 inch (11.17 mm) at the corner of the hole. Make sure that the drill is centered and square with the hole.
- (c) Inspect the wall thickness under the point of the hole in accordance with the Check chapter in this manual.
- (d) Thread the hole to 5/16-24UNF-3B using a bottom tap.

NOTE: The resultant thread will be non-standard due to the larger than normal minor diameter of 0.280 - 0.285 inch (7.11 - 7.23 mm) produced by the previous drill operation.

- (e) Chemical conversion coat the tapped hole. Refer to the Chromic Acid Anodizing chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
- (f) Spray the Slimsert OD and the tapped hole with primer CM127.
- (g) Coat the Slimsert OD with thread locking compound CM74.
- (h) Install the modified Slimsert flush to 0.020 inch (0.51 mm) below the part surface, using installation tool TE314.

NOTE: Step drill, reamer, and swage tool are not required, because the counterbored end is cut off.

- (i) Check the installed Slimsert using a 1/4-28 UNF-3A bolt.
- (j) Allow the repaired parts to cure for 12 hours before assembly.

B. Installation of a Roll Pin in the Two-Piece B-2491-() Pitch Change Rod

(1) General

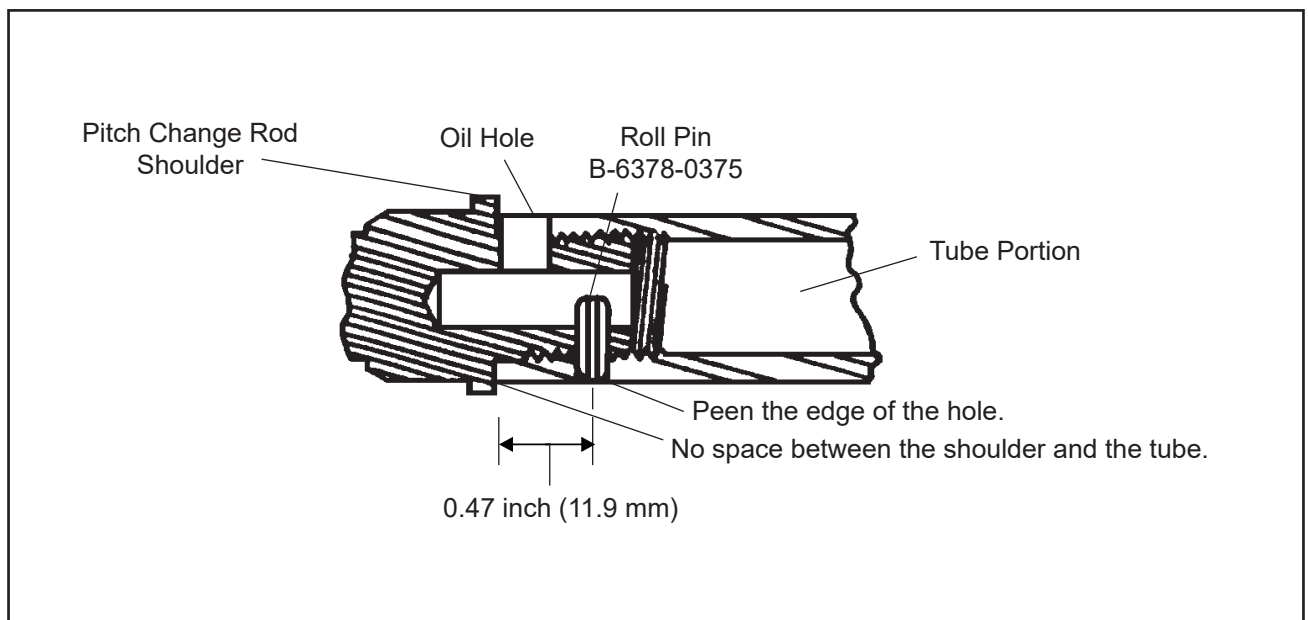
- (a) This procedure is used only for the two piece B-2491-() pitch change rod. Refer to the Check chapter of this manual for pitch change rod identification.

(2) Procedure

- (a) Locate the oil hole in the pitch change rod.
- (b) Center punch a location approximately 180 degrees away from the oil hole in the pitch change rod and 0.47 inch (11.9 mm) from the pitch change rod shoulder. Refer to Figure 6-1.

CAUTION: DRILL THROUGH ONLY ONE SIDE OF THE PITCH CHANGE ROD.

- (c) Drill a 0.125 inch +0.004/-0.000 inch (3.17 mm +0.10/-0.00 mm) hole through one side of the pitch change rod. Refer to Figure 6-1.
- (d) Press a B-6378-0375 roll pin into the drilled hole, until the roll pin is flush to slightly below the surface of the pitch change rod.
- (e) Peen the edge of the hole to secure the B-6378-0375 roll pin in the pitch change rod.

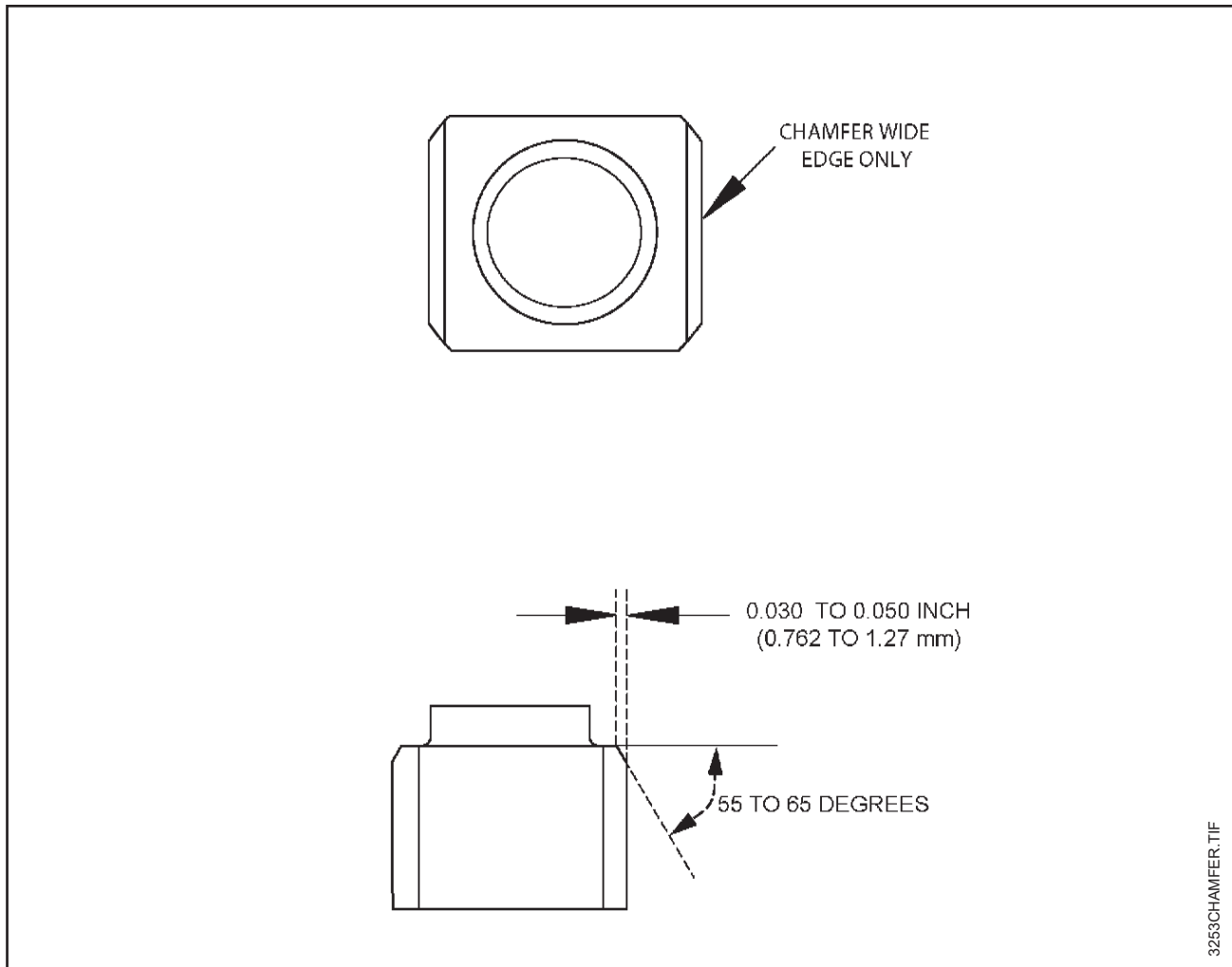


Installing a Roll Pin in the Two-Piece Pitch Change Rod
Figure 6-1

C. Modification of the A-3253-() Pitch Change Block

- (1) Installation of the new pitch change knob bushings, C-7645 or C-7645-1, requires the modification of the A-3253-() pitch change blocks on three and four blade propellers.
- (2) Modify the A-3253-() pitch change block in accordance with the dimensions specified in Figure 6-2.

NOTE: Pitch change block A-2217-() used with () HC-()2Y()-() propellers, does not require modification.



Pitch Change Block Modification
Figure 6-2

D. C-1862-() Pitch Change Knob Plating Repair

- (1) Apply copper sulfate test solution (refer to the note) to the surfaces that may not have nickel plating.

NOTE: Copper sulfate test solution: 64.0 grams copper sulfate in 250 ml. distilled water, add 22.5 grams sulfuric acid.

- (a) A bare steel surface with no nickel plating will turn a light iridescent orange when it comes in contact with the copper sulfate test solution.

- 1 If there is an incomplete coverage of nickel plating, go to step 5.D.(2).

- 2 If no nickel plating is present, go to step 5.D.(3).

- (b) Nickel plated surfaces will not change color and the copper sulfate test solution will remain clear.

- 1 If there is complete coverage of nickel plating, no replating is required.

- 2 Using soap and water or solvent CM 23, clean the pitch change knob.

- 3 Using compressed air or a clean cloth, dry the pitch change knob.

- 4 Further steps in this section are not required.

CAUTION: DO NOT REMOVE THE STEEL BASE MATERIAL WHEN REMOVING THE NICKEL PLATING.

- (2) If some surfaces of the pitch change knob bracket do not have nickel plating present, remove the remainder of the nickel plating.

NOTE: Glass bead cleaning in the weld is capable of removing nickel plating that is applied at the factory when new.

- (a) It is recommended to remove the nickel plating mechanically using glass bead cleaning. Use care to not remove the steel base material.

NOTE: Worn glass beads will not remove the plating as effectively as new beads.

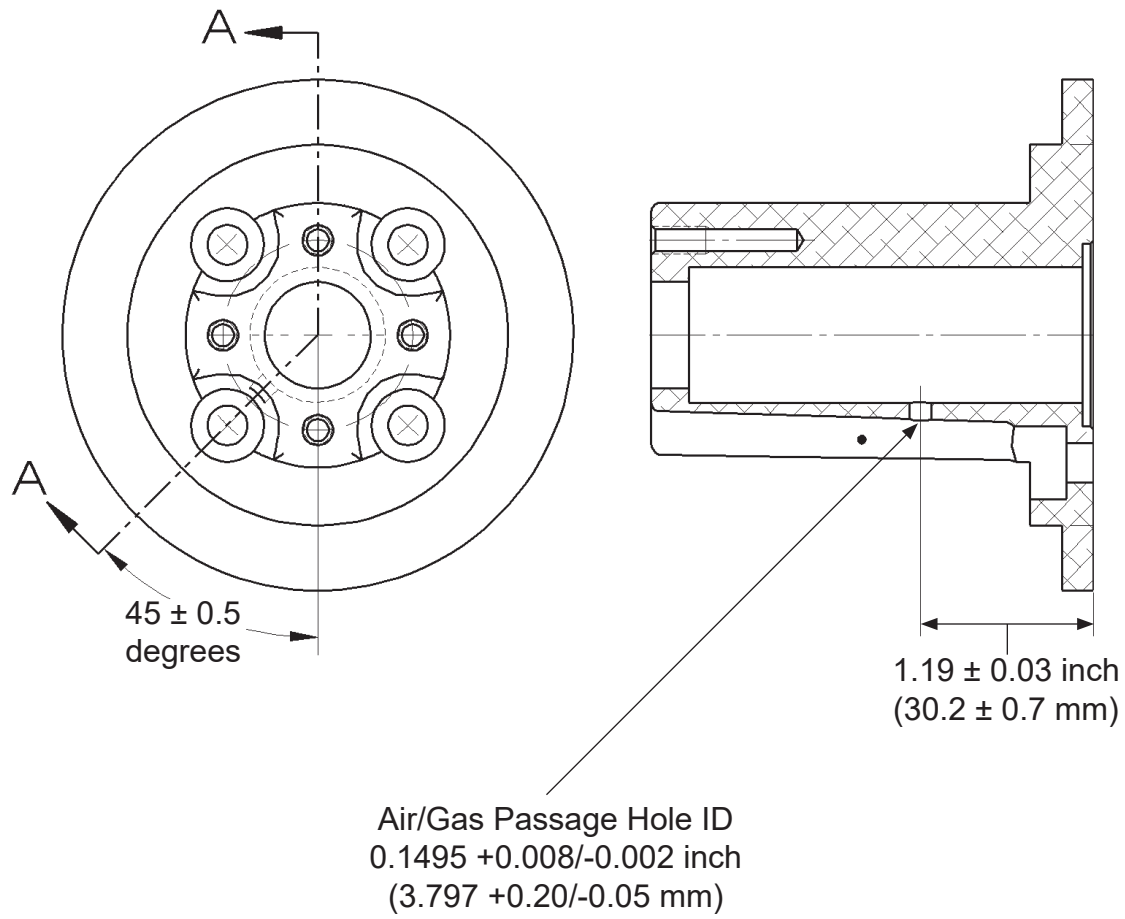
- (b) Apply copper sulfate test solution to make sure that the nickel plating is completely removed.

- (c) Using soap and water or solvent CM 23, clean the pitch change knob.

- (d) Using compressed air or a clean cloth, dry the pitch change knob.

- (3) Apply masking material to the dowel pin, if installed.

- (4) Cadmium replate and bake the pitch change knob bracket in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).



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Repair of the B-1593 Start Lock Housing
Figure 6-3

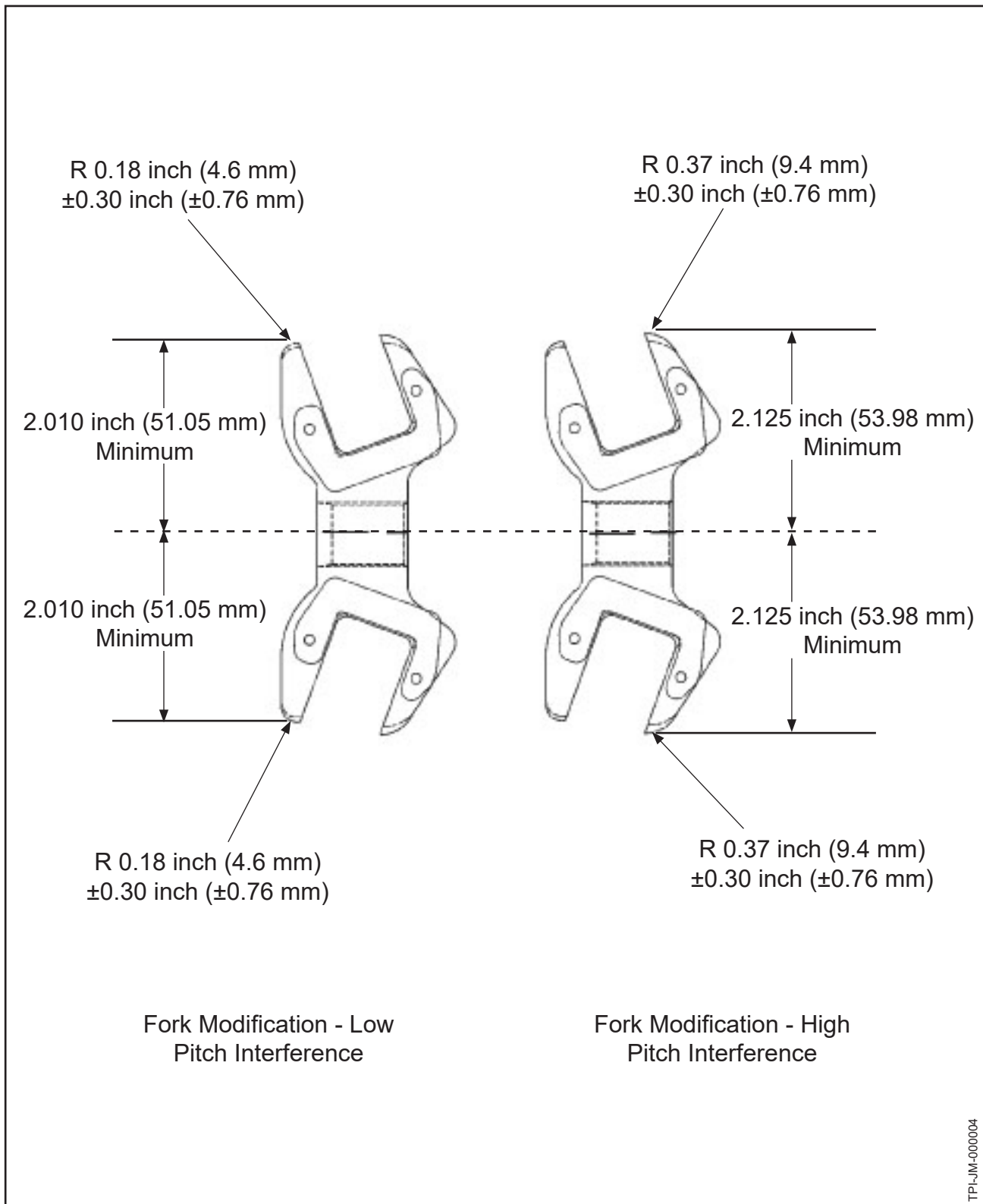
E. Repair of the B-1593 Start Lock Housing

(1) General

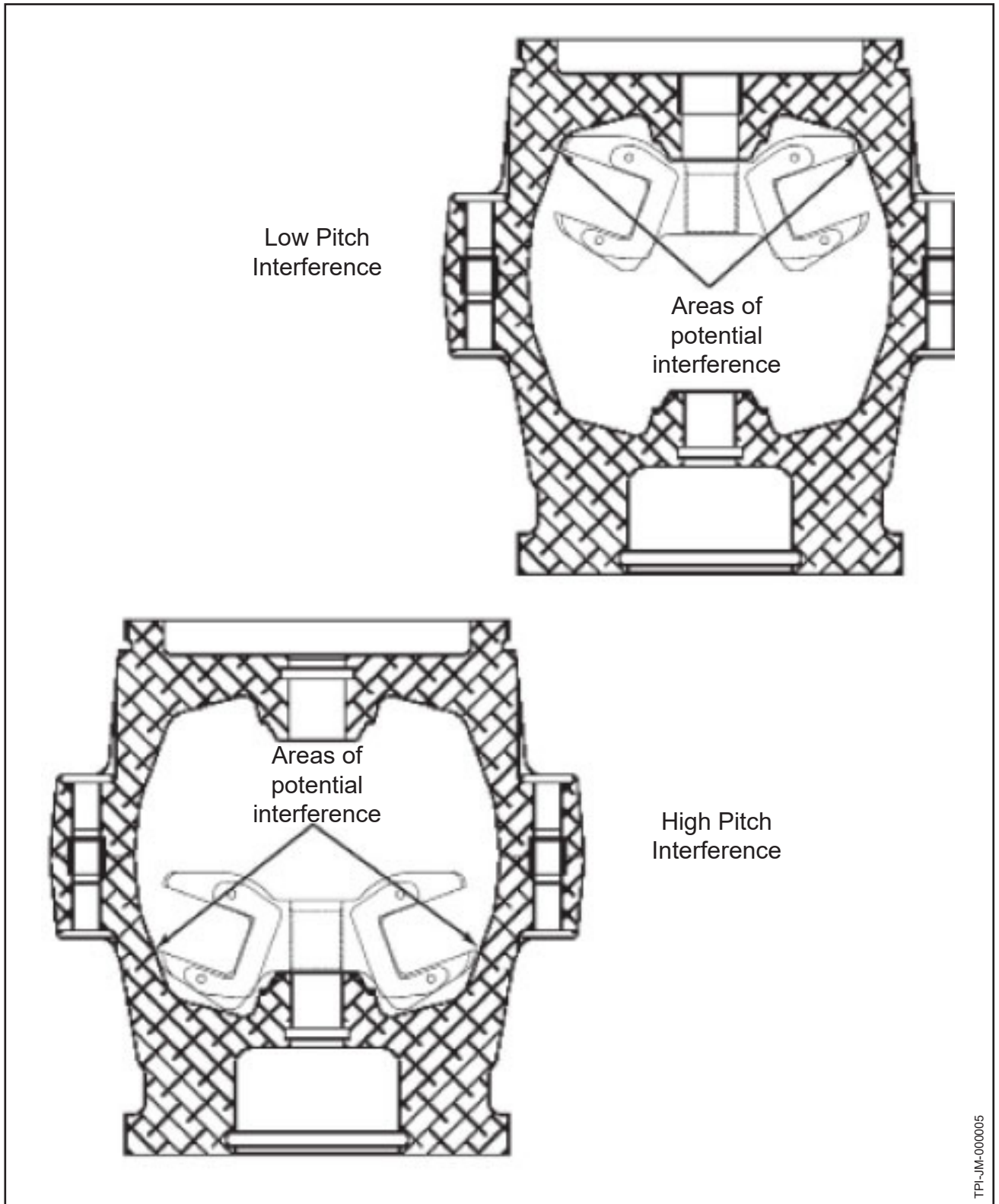
- (a) This repair procedure provides the instructions for adding an air/gas passage hole to the B-1593 start lock housing.

(2) Procedure

- (a) Drill a hole in the B-1593 start lock housing in accordance with the dimensions specified in Figure 6-3.
- (b) The surface finish of the newly drilled hole must not exceed 89RA.
- (c) Apply a layer of chemical conversion coating to the ID of the newly drilled hole in accordance with Chromic Acid and Anodizing chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).



**B-2457-3 Fork Modification Dimensions
Figure 6-4**



TPI-JM-000005

Hub/Fork Interference Locations
Figure 6-5

F. B-2457-3 Fork Modification for Hub/Fork Interference

- (1) B-2457-3 forks that are revision "AZ" or subsequent are not eligible for this modification.
 - (a) The revision number is pin stamped on the body of the fork. Some forks manufactured before revision "AZ" may not have a revision number pin stamped on the fork.
- (2) Interference between the hub and the fork may prevent setting the correct low, high, or feather blade angle. This condition occurs only when a fork manufactured before revision "AZ" is installed in a propeller hub with a "B" serial number suffix.

WARNING: CADMIUM IS TOXIC. PERSONS INVOLVED WITH GRINDING OF CADMIUM PLATED PARTS MUST WEAR ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. DUST COLLECTION EQUIPMENT MUST BE AVAILABLE TO COLLECT CADMIUM REMOVED DURING THE GRINDING OPERATION.

- (3) If the part will be cadmium plated, disassemble the fork in accordance with the Disassembly chapter in this manual.
- (4) Using a bench mounted belt sander or equivalent tool, grind the appropriate fork tips to the dimension shown in Figure 6-4.
- (5) Put the fork into the hub as shown in Figure 6-5. Confirm that the fork does not contact the sides of the hub.
- (6) If there is still fork-to-hub contact, perform the hub modification procedures in accordance with the Aluminum Hub Overhaul chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
- (7) After modification, the fork must either be cadmium plated or the ground areas must be coated with zinc chromate primer (CM67).
 - (a) If the fork will be cadmium plated:
 - 1 Replate and bake the fork in accordance with the Cadmium Replating chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
 - 2 Assemble the fork in accordance with the Assembly chapter in this manual.
 - (b) If the fork will be coated with zinc chromate primer (CM7), apply the zinc chromate primer to the ground areas in accordance with the manufacturer's guidelines.

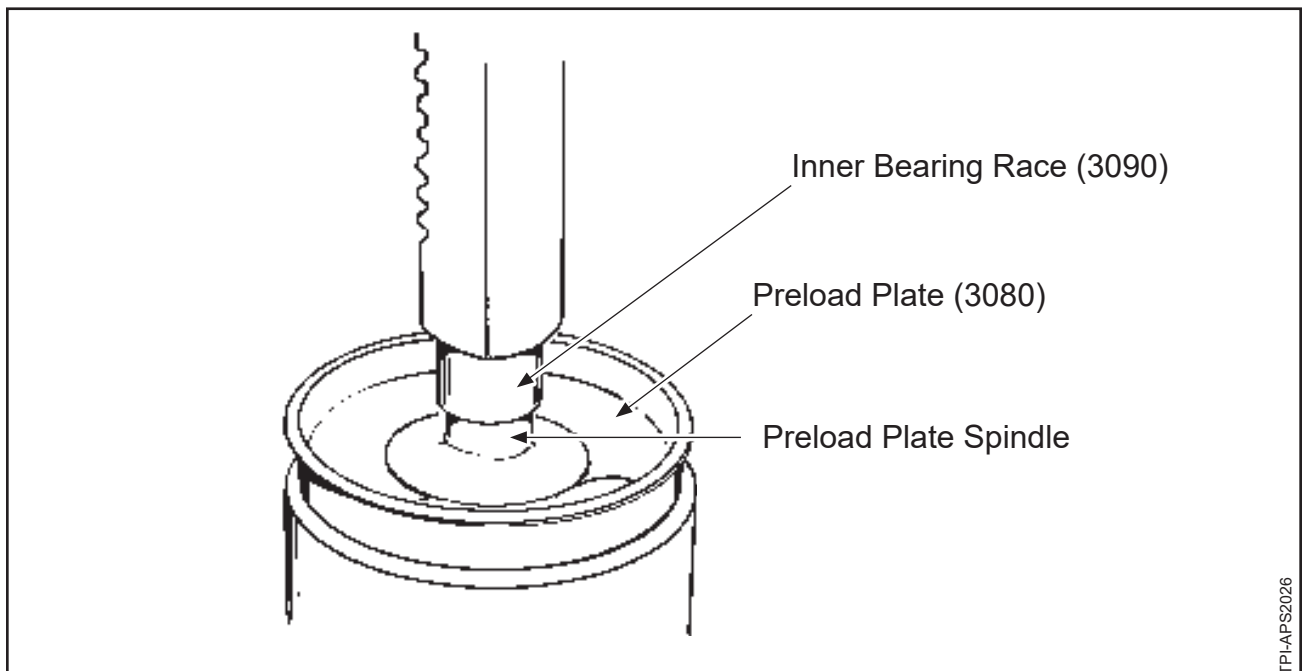
G. Removal and Installation of the Inner Bearing Race (3090)

CAUTION: ONLY DO THIS PROCEDURE IF THERE IS ENOUGH SPACE BETWEEN THE BOTTOM OF THE INNER BEARING RACE (3090) AND THE SURFACE OF THE PRELOAD PLATE (3080). DO NOT DO THIS PROCEDURE IF THE BOTTOM OF THE INNER BEARING RACE IS TOUCHING THE PRELOAD PLATE.

- (1) Remove the inner bearing race (3090) using the TE98 puller or a locally procured tool.

CAUTION: WHEN REMOVING THE INNER BEARING RACE (3090), USE CARE TO NOT DAMAGE THE PRELOAD PLATE THREADS.

- (a) If using the TE98 puller, place a spacer below the collar of the puller to keep the puller from touching the preload plate threads.
- (2) Discard the inner bearing race (3090).
- (3) Do the required inspections of the preload plate spindle in accordance with the Check chapter of this manual.
- (4) Using number 4 oil CM80, lubricate the inside diameter of the new inner bearing race (3090).



Installation of the Inner Bearing Race
Figure 6-6

- (5) Put the preload plate (3080) in a locally procured fixture.

CAUTION 1: WHEN PUSHING THE INNER BEARING RACE (3090) ONTO THE PRELOAD PLATE (3080), THE FORCE MUST NOT BE GREATER THAN 5000 POUNDS.

CAUTION 2: WHEN PUSHING THE INNER BEARING RACE (3090) ONTO THE PRELOAD PLATE SPINDLE, USE CARE TO NOT DAMAGE THE PRELOAD PLATE THREADS.

- (6) Push the inner bearing race (3090) over the preload plate spindle. Refer to Figure 6-6.

NOTE: The top of the inner bearing race (3090) must be flush to 0.005 inch (0.13 mm) below the top surface of the preload plate spindle.

- (7) Test the preload plate threads.

(a) Thread the set screw (3100) into the preload plate (3080).

(1) If the set screw (3100) does not thread in smoothly, replace the preload plate assembly (3070).

- (8) Twist, turn, and pull by hand the inner bearing race (3090) to make sure it holds a press fit on the preload plate assembly (3070).

(a) If the inner bearing race (3090) does not hold a press fit on the preload plate (3080), replace the preload plate assembly (3070).

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1. General (Rev. 6)

WARNING 1: ANY PART IDENTIFIED IN THIS MANUAL AS AN EXPERIMENTAL OR NON-AVIATION PART MUST NOT BE USED IN AN FAA OR INTERNATIONAL EQUIVALENT TYPE CERTIFICATED PROPELLER. A PART IDENTIFIED AS EXPERIMENTAL OR NON-AVIATION DOES NOT HAVE FAA OR INTERNATIONAL EQUIVALENT APPROVAL EVEN THOUGH IT MAY STILL SHOW AN AVIATION TC OR PC NUMBER STAMP. USE ONLY THE APPROVED ILLUSTRATED PARTS LIST PROVIDED IN THE APPLICABLE OVERHAUL MANUAL OR ADDITIONAL PARTS APPROVED BY AN FAA ACCEPTED DOCUMENT FOR ASSEMBLY OF A PROPELLER. THE OPERATOR ASSUMES ALL RISK ASSOCIATED WITH THE USE OF EXPERIMENTAL PARTS. USE OF EXPERIMENTAL PARTS ON AN AIRCRAFT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE.

WARNING 2: ADHESIVES AND SOLVENTS ARE FLAMMABLE AND TOXIC TO THE SKIN, EYES, AND RESPIRATORY TRACT. SKIN AND EYE PROTECTION ARE REQUIRED. AVOID PROLONGED CONTACT AND BREATHING OF VAPORS. USE SOLVENT RESISTANT GLOVES TO MINIMIZE SKIN CONTACT AND WEAR SAFETY GLASSES FOR EYE PROTECTION. USE IN A WELL VENTILATED AREA AWAY FROM SPARKS AND FLAME. READ AND OBSERVE ALL WARNING LABELS.

CAUTION 1: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

CAUTION 2: THE USE OF BLADE PADDLES TO MOVE BLADES CAN RESULT IN THE OVERLOAD AND DAMAGE OF THE BLADE PITCH CHANGE MECHANISM. THIS DAMAGE IS NOT REPAIRABLE AND CAN RESULT IN SEPARATION BETWEEN THE BLADE AND THE PITCH CHANGE MECHANISM, CAUSING LOSS OF PITCH CONTROL DURING FLIGHT.

A. Important Information

- (1) Read all assembly instructions before beginning the assembly procedures.
- (2) Protect all unassembled components from damage.
- (3) Use applicable torque values. Refer to Table 8-1, "Torque Values", in the Fits and Clearances chapter of this manual.

- (4) Unless specified differently, safety wire in accordance with NASM33540 using 0.032 inch (0.81 mm) safety wire.

CAUTION: BEFORE ASSEMBLING THE PROPELLER, DETERMINE IF AN ICE PROTECTION SYSTEM IS REQUIRED.

B. Ice Protection Systems

- (1) If installing an ice protection system supplied by Hartzell, refer to Hartzell Propeller Inc. Ice Protection System Manual 180 (30-61-80).
- (2) If installing an ice protection system not supplied by Hartzell, refer to the applicable TC or STC holder's Instructions for Continued Airworthiness (ICA).

C. O-rings

- (1) Unless instructed otherwise, lubricate all O-rings with lubricant CM12 before installing in the propeller assembly.
- (2) Hartzell Propeller Inc. recommends that the lot number and cure date for each O-ring be recorded with all work orders when an O-ring is installed in any propeller assembly.

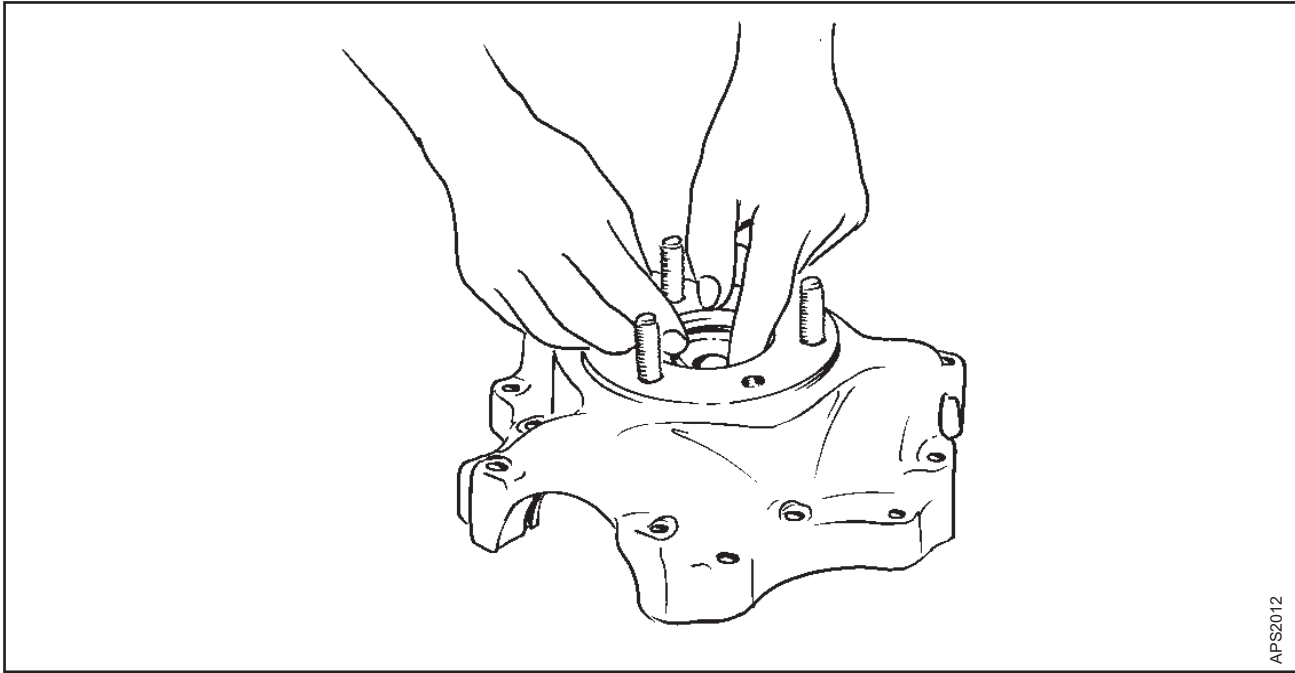
D. Blade Bore Plug/Bearing Installation

- (1) For aluminum blades, refer to Hartzell Propeller Inc. Aluminum Blade Overhaul Manual 133C (61-13-33).
- (2) For composite blades, refer to Hartzell Propeller Inc. Composite Blade Overhaul Manual 135F (61-13-35).

E. Blade Angle Information

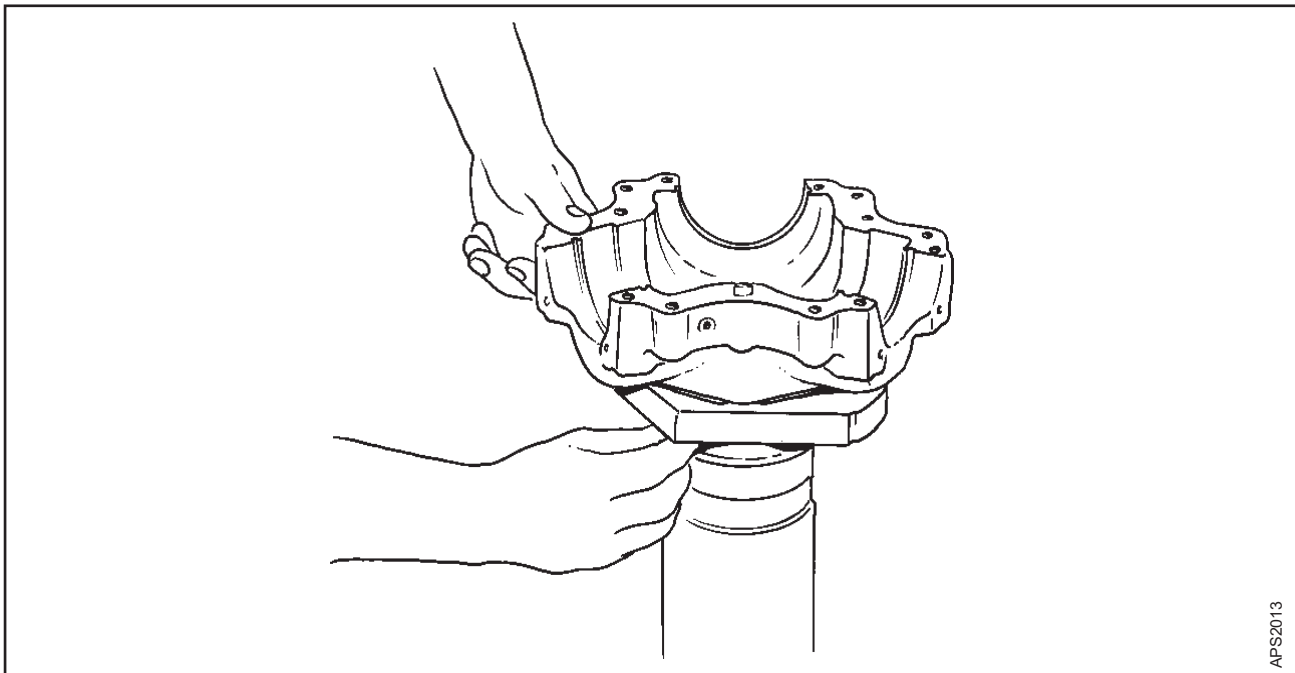
- (1) For specific blade angle information, refer to the Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).

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APS2012

Installing the Flange O-ring in the Engine-Side Hub Half Flange
Figure 7-1



APS2013

Installing the Engine-Side Hub Half on the Rotatable Fixture
Figure 7-2

2. Compact Hub Assembly Procedures

CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

A. Hub Preparation

NOTE: Verify the spinner and bulkhead assembly and installation procedures, if applicable, before beginning the assembly of the hub. Use the alternate hub clamping nuts and bolts that are supplied with a spinner mounting kit.

- (1) Refer to the Aluminum Hub Overhaul chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02) for procedures to install the pitch change rod guide bushings and the propeller mounting hardware.
- (2) Install a new pitch change rod O-ring (390) in the cylinder-side hub half (480).
- (3) Install the shaft plug (660), if required, into the engine-side hub half of hubs with extensions that do not require a hub spring assembly. For non-extended hubs proceed to step (4) in this section.

NOTE 1: For propellers that require a hub spring assembly, the shaft plug will be installed after completing the hub spring assembly installation.

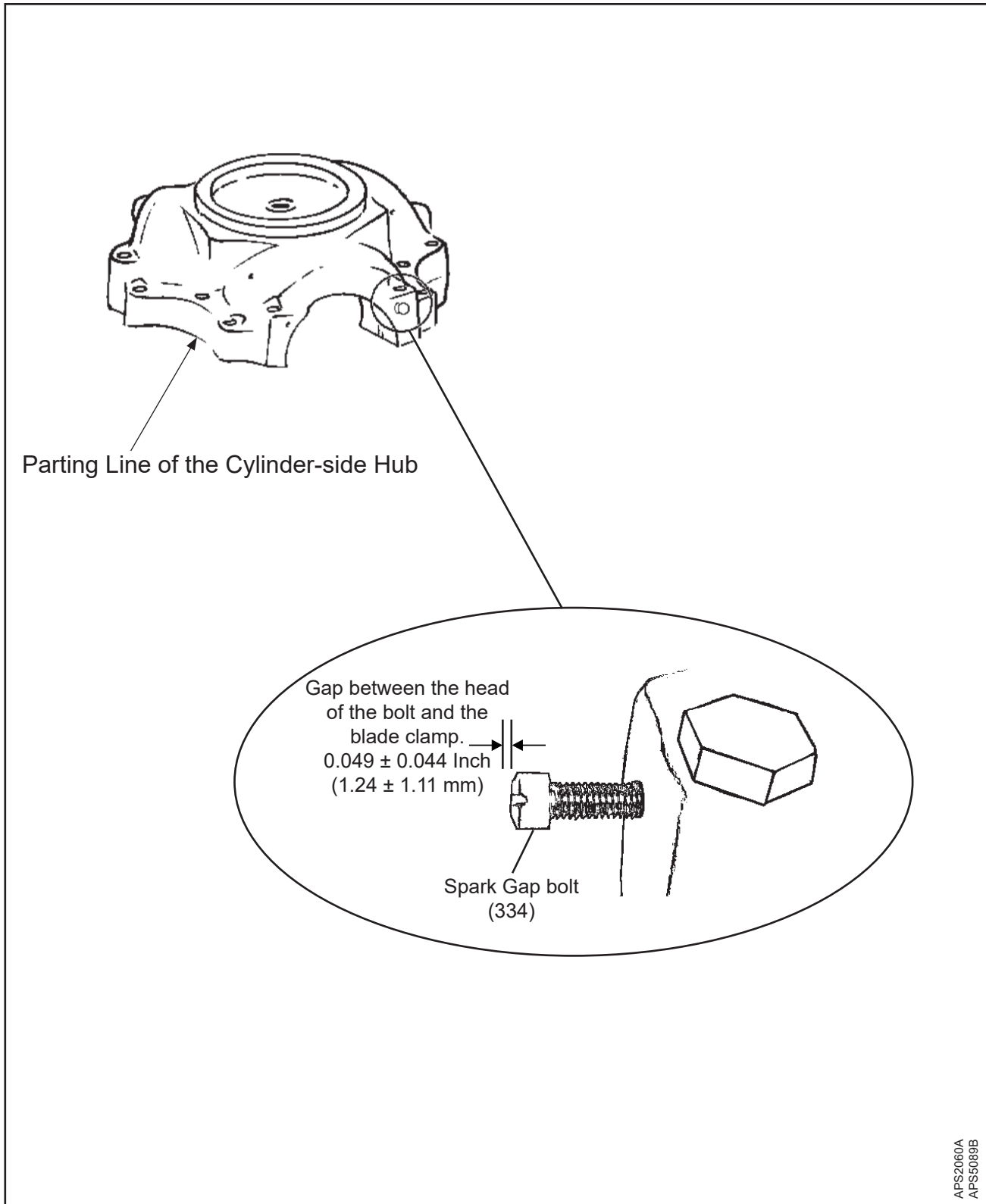
NOTE 2: An example of an extended hub model number is: HC-E2YR-2BF.

- (a) Install a new shaft plug OD O-ring (670) on the shaft plug.
- (b) Install a new shaft plug ID O-ring (680) in the shaft plug.
- (c) Install the shaft plug (660) in the engine-side hub half center bore.

NOTE: When installing, hold the shaft plug by the removal feature (refer to Figure 5-17).

- (4) Install the flange mounting O-ring (4000) on the engine-side hub half (480) (Figure 7-1).
- (5) Install a new pitch change rod O-ring (470) in the engine-side hub half.

NOTE: If the hub is an extended hub design, the pitch change rod O-ring is installed in the hub shaft plug ID.



APS2060A
APS5089B

Spark Gap Bolt
Figure 7-3

- (6) For **HC-C3YR-2C propellers only** - Install the spark gap bolt (1994) into the cylinder-side hub half.

CAUTION: THE CYLINDER SIDE OF THE HUB MUST BE RESTING ON THE PARTING LINE WHEN LOCATING THE BALANCE HOLE FOR THE BOLT.

- (a) Install the spark gap bolt (1994) in the right balance hole of cylinder side hub half. Refer to Figure 7-3.

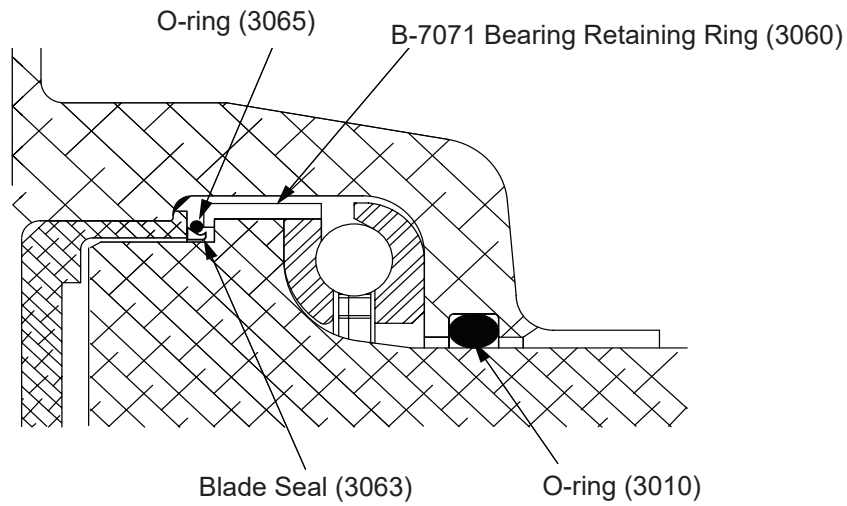
CAUTION: TO PREVENT DAMAGE TO THE BOLT LOCKING MECHANISM, DO NOT TORQUE THE BOLT IN THE BALANCE HOLE.

- (b) Turn the spark gap bolt (1994) into the balance hole until the bolt bottoms out in the hole.

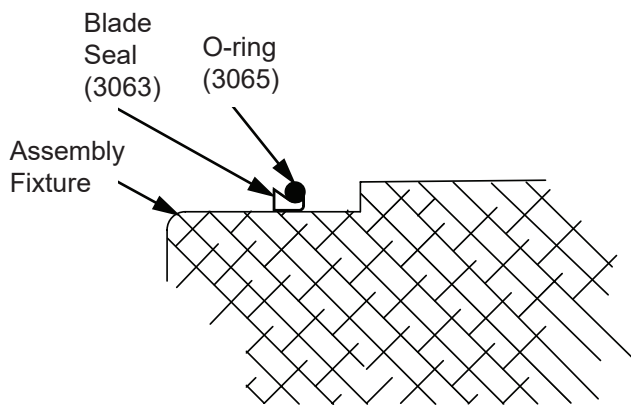
1 The locking mechanism causes resistance when turning the bolt in the hole. Stop turning the bolt when the resistance increases, indicating that the bolt has bottomed in the hole.

- (c) The gap between the head of the bolt (1994) and the blade clamp will be set later in the assembly procedure.

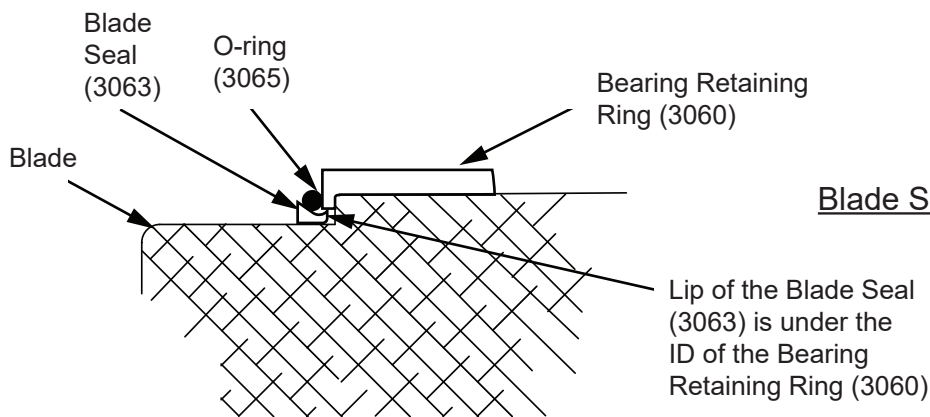
- (7) Install and secure the engine-side hub half on the rotatable fixture on the propeller assembly table. Refer to Figure 7-2.



Blade Seal Installed in a Propeller Assembly



O-ring Installation on the Blade Seal
(on the Assembly Fixture)



Blade Seal Installed Correctly
(on the blade)

Blade Seal Installation for Composite Blades Only
Figure 7-4

3. Blade Assembly Procedures

CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

A. Installation of the Pitch Change Knob (Composite Blades Only).

- (1) Install the dowel pin (2960) into the pitch change knob bracket (2970).
- (2) Install the pitch change knob bracket (2970).
- (3) Install the pitch change knob bracket bolts (2990) and torque in accordance with the Torque Values table in the Fits and Clearances chapter of this manual.

CAUTION: THE SAFETY WIRE THAT GOES THROUGH THE LOOP ON THE PITCH CHANGE KNOB BRACKET MUST NOT INTERFERE WITH THE TRAVEL OF THE BLADE OR CONTACT THE PRELOAD PLATE. INSTALL THE SAFETY WIRE WITH THE PIG-TAIL ON THE BOLT. IF THE SAFETY WIRE IS INSTALLED WITH THE PIG-TAIL ON THE PITCH CHANGE BRACKET LOOP, THE PIG-TAIL MAY INTERFERE WITH THE FIT BETWEEN THE PITCH CHANGE KNOB BRACKET AND THE PRELOAD PLATE SLOT.

- (4) Safety wire with 0.020 inch stainless steel wire.

B. For Propellers with Composite Blades Only - Optional Blade Sealing Method

CAUTION: THE B-7071 BEARING RETAINING RING MUST BE INSTALLED WHEN USING THE BLADE SEAL.

- (1) Assemble the blade seal (3063) and O-ring (3065):
 - (a) Install the blade seal (3063) on an assembly fixture.
 - 1 The blade seal (3063) without the outer O-ring (3065) in place must install onto the assembly fixture OD without stretching.
 - 2 If the blade seal (3063) stretches, replace the blade seal.

CAUTION: DO NOT OVERSTRETCH OR TWIST THE O-RING DURING INSTALLATION

- (b) Install the O-ring (3065) into the recessed area of the blade seal (3063) as shown in Figure 7-4. If the O-ring does not remain in place, replace the blade seal.

CAUTION: THE CORRECT INSTALLATION OF THE BLADE SEAL ASSEMBLY IS CRITICAL TO THE SEAL FUNCTION AND BLADE ROTATION.

(2) Remove the blade seal assembly from the assembly fixture. Refer to Figure 7-4.

CAUTION: DO NOT USE EXCESSIVE FORCE THAT MIGHT DEFORM THE BLADE SEAL ASSEMBLY WHEN INSTALLING THE BLADE SEAL AND O-RING ASSEMBLY ON THE BLADE.

(3) Without using excessive force, install the blade seal and O-ring assembly on the blade. Refer to Figure 7-4.

(4) If the blade seal and O-ring assembly does not easily maintain position with a portion of the blade seal (3063) under the bearing retaining ring (3060), replace the blade seal.

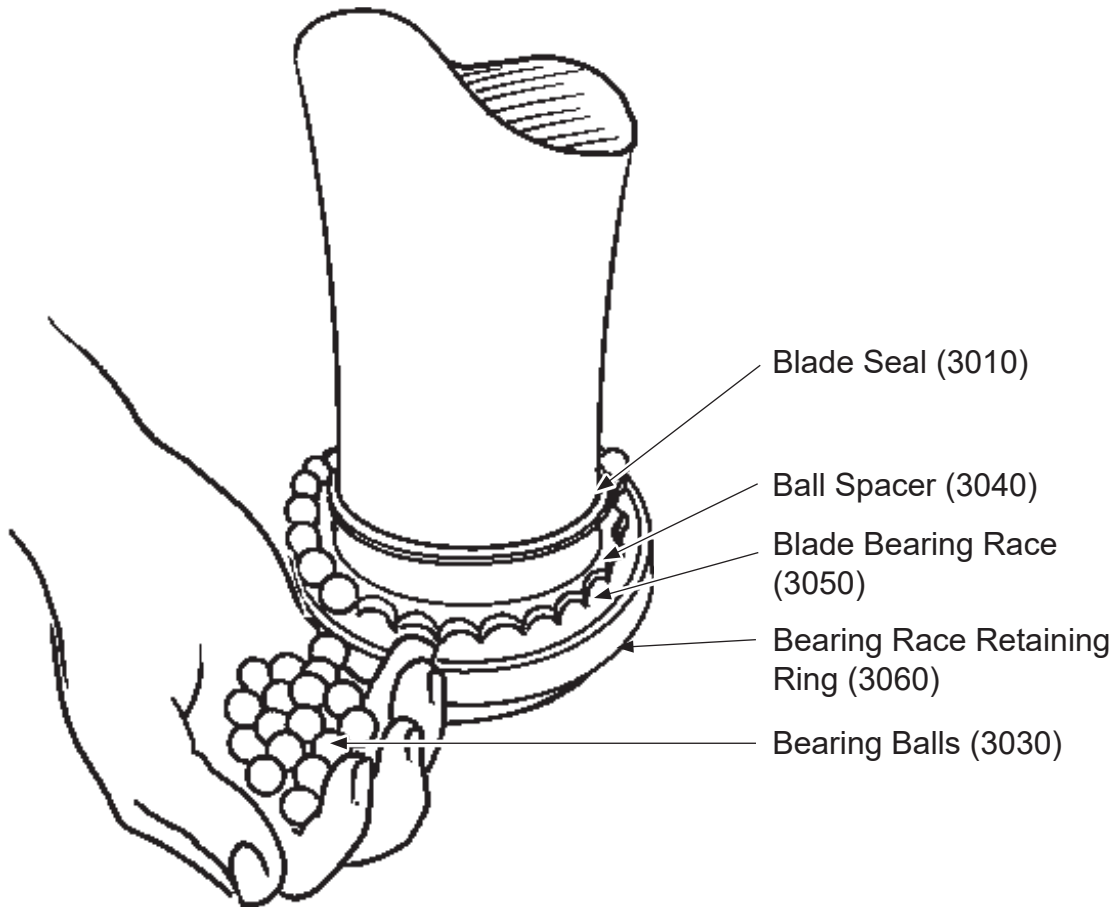
C. Pitch Change Knob Bushing Installation

- (1) Refer to the Special Adhesive and Bonding Procedures chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02), for pitch change knob bushing installation.

CAUTION: A BLADE WITH SHOT PEENED PITCH CHANGE KNOB MUST HAVE A C-7645-() BUSHING INSTALLED.

- (2) When installing pitch change knob bushings, assemblies are permitted to have a mix of blades with A-2413-() bushings and C-7645-() bushings.

NOTE: The following procedure assumes that the blade has been inspected, reworked, and repaired and that the blade bore plug, inner bearing race, and blade thrust bearings are installed in accordance with Hartzell Propeller Inc. Aluminum Blade Overhaul Manual 133C (61-13-33) or Hartzell Propeller Inc. Composite Blade Maintenance Manual 135F (61-13-35).



APS2002

Installing the Blade Retention Bearing
Figure 7-5

D. Installation of the Blade Bearing Race and Balls. Refer to Figure 7-5.

- (1) Lubricate the blade seal (3010) with lubricant CM12 and install on the blade.
- (2) Lubricate the blade bearing race (3050) with lubricant CM12.
- (3) Place the ball spacer (3040) on the blade bearing race (3050).

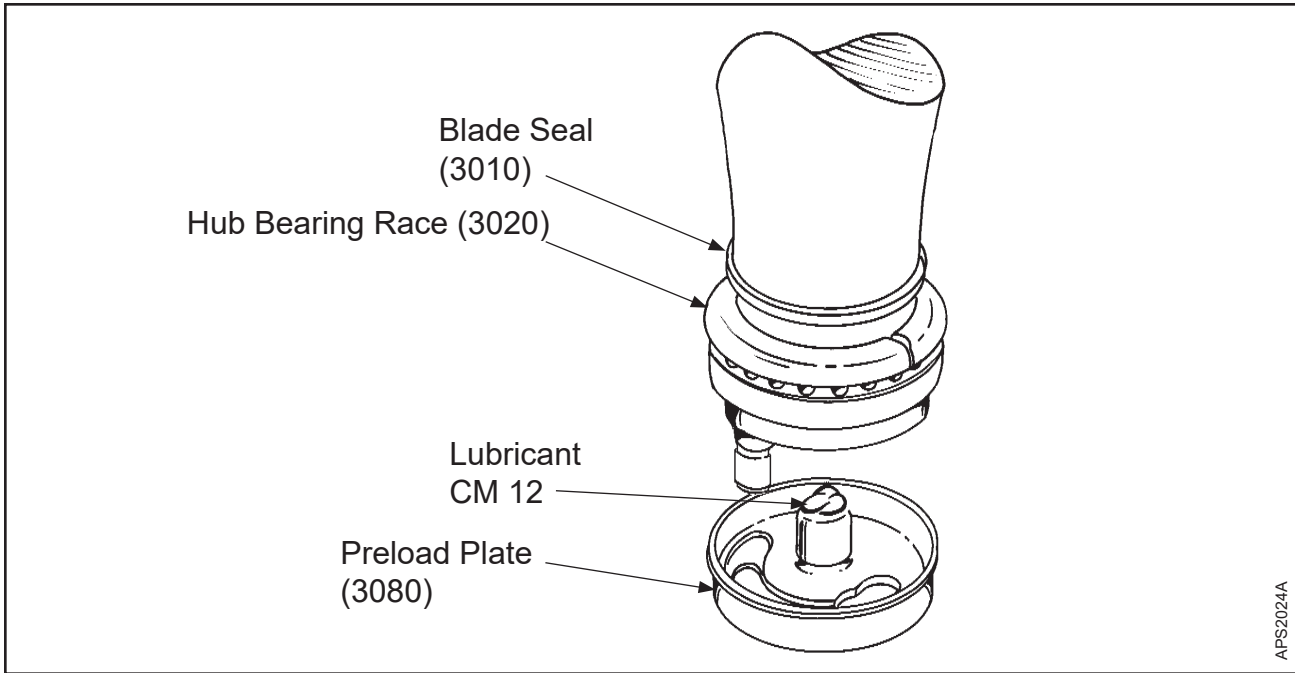
CAUTION: ALL THE BEARING BALLS IN A SINGLE BEARING MUST BE OF THE SAME SIZE AND GAUGE. BEARING BALLS SUPPLIED BY HARTZELL PROPELLER INC. ARE THE SAME GAUGE.

- (4) Using a small amount of lubricant CM12 around the bearing balls, place the bearing balls (3030) in the openings of the ball spacer (3040) on the blade race (3050).

CAUTION: THE BEARING RACE HALVES MUST HAVE MATCHING SERIAL NUMBERS.

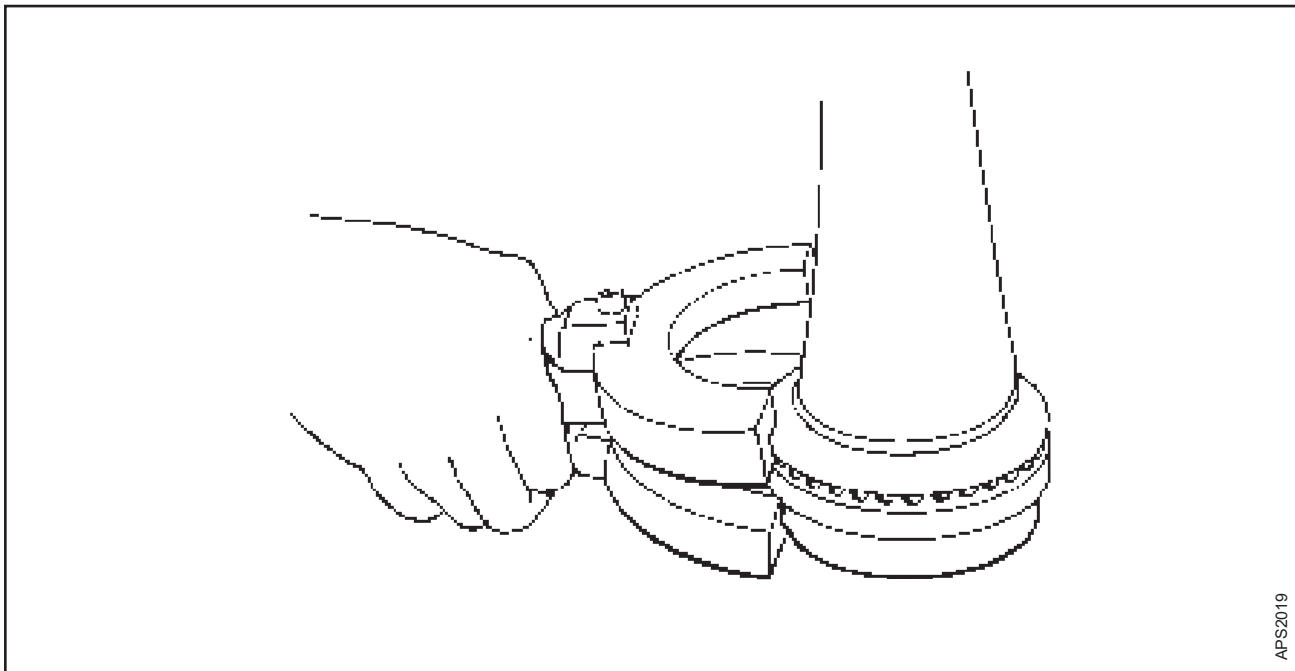
- (5) Place the hub bearing race (3020) on the balls (3030). Refer to Figure 7-6.

NOTE: The split bearing race parting line must be perpendicular to the hub parting line when installed in the hub.



AFS2024A

**Installing the Preload Plate on the Blade Shank
Figure 7-6**



AFS2019

**Applying the Clamping Tool TE24 to the Blade Assembly
Figure 7-7**

E. Preload Plate Assembly

- (1) Install the socket head screw (3100) in the preload plate (3080) so the end of the screw protruding toward the blade butt is flush with the preload plate.

NOTE: The socket head screw will be repositioned later to set the blade preload.

- (2) Install the nut (3110) on the screw (3100).
- (3) Place approximately one tablespoon of lubricant CM12 on top of the preload plate inner bearing race spindle.

NOTE: Using this amount of lubricant will force lubrication into the inner bearing race (3090) when the preload plate is installed on the blade.

- (4) Install the preload plate (3080) on the butt of the blade. Refer to Figure 7-6.

NOTE: For installation into the hub, hold the split bearing and preload plate assembly to the blade butt with the clamping tool TE24. Refer to Figure 7-7.

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4. Propeller Assembly Procedures

CAUTION 1: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

CAUTION 2: ACTUATION OF PROPELLERS IS TO BE ACCOMPLISHED USING COMPRESSED AIR THAT HAS BEEN FILTERED FOR MOISTURE, OR NITROGEN.

CAUTION 3: DO NOT EXCEED A PRESSURE OF 175 PSI (12.06 BARS) WHEN ACTUATING PROPELLERS COVERED IN THIS MANUAL.

CAUTION 4: USE SUFFICIENT PRESSURE TO MAKE SURE THAT THE PROPELLER ACTUATES AGAINST EACH POSITIVE STOP.

NOTE: Use protractor TE96, TE97, or equivalent when measuring a blade angle. Refer to the Hartzell Propeller Inc. Tool and Equipment Manual 165A (61-00-65) - available on the Hartzell Propeller Inc. website at www.hartzellprop.com.

A. Blade Installation - Two Blade Propeller

- (1) Lubricate the hub blade retention radius with a thin film of lubricant CM12.
- (2) Lubricate the hub seal grooves with a thin film of lubricant CM12.

CAUTION 1: BLADES MUST BE PRELOADED WHILE RESTING IN THE HUB SOCKET THEY WILL OCCUPY WHEN ASSEMBLED. DO NOT PRELOAD ALL THE BLADES IN THE SAME SOCKET.

CAUTION 2: TO AVOID BLADE DAMAGE, SUPPORT THE BLADE IN THE ENGINE-SIDE HUB HALF UNTIL THE BLADE IS PRELOADED OR UNTIL THE CYLINDER-SIDE HUB HALF IS INSTALLED.

- (3) Install the number one blade assembly into the socket of the engine-side hub half.
- (4) Center the slot in the preload plate (3080) at the hub parting line. Refer to Figure 7-8.

NOTE: Position the blade knob slot in the preload plate to allow the blade to travel the full blade angle range without restriction.

CAUTION: IMPROPER PRELOAD CAN CAUSE THE BLADES TO BE LOOSE IN THE HUB OR MAY EXERT EXCESSIVE PRESSURE THAT CAN INTERFERE WITH PITCH CHANGE MOVEMENT.

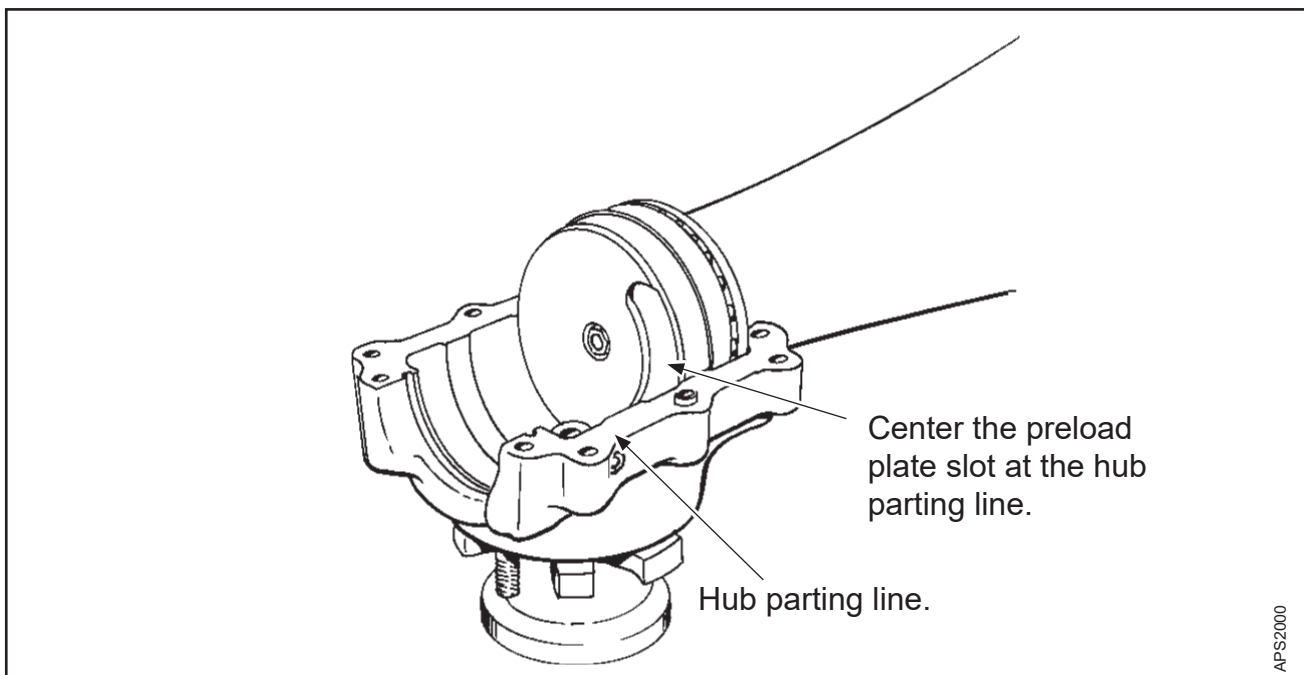
- (5) Setting the blade preload.
- (a) Install the cylinder-side hub half. Refer to Figure 7-9.
 - (b) Bolt the hub halves together using two bolts (580), two washers (600), and two nuts (610).

NOTE: The bolts are located midway between the blades as shown in Figure 7-9.

- (c) Torque the nuts (610) in accordance with Table 8-1.
- (d) Tighten the preload socket set screw (3100) through the open end of the hub. Refer to Figure 7-10.

NOTE: The loose blade will become rigid in the hub as the socket screw is tightened.

- (e) Tighten the preload socket set screw (3100) until the tip of the blade stops moving vertically.
- (f) Loosen the preload socket screw (3100) and retighten. When the blade tip stops moving, turn the socket screw an additional 1/4 turn into the preload plate.



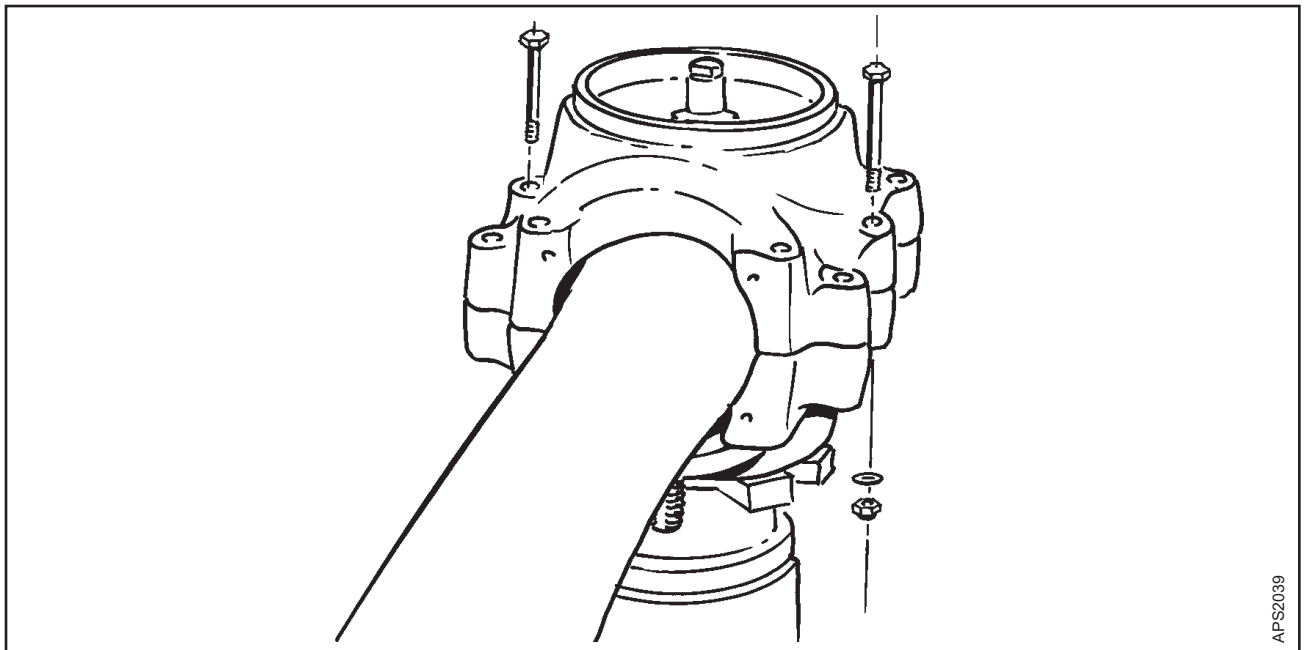
**Installing Blade Number One in the Two-Way Hub
Figure 7-8**

- (g) Check the blade for free rotation. If the blade is not free, remove the blade and check the following:
- 1 Blade seal (3010) for proper fit in the hub groove.
 - 2 The needle rollers in the inner bearing race (3090) may be skewed. The needle rollers should be parallel to the axis of blade pitch change.
 - 3 Blade preload may be too tight.
- (h) Remove the two bolts (580), two washers (600), and two nuts (610).
- (i) Remove the cylinder-side hub half (480).
- (j) Apply one drop of thread locking compound CM21 to the threads of the preload socket set screw (3100).
- (k) Torque the jam nut (3110) in accordance with Table 8-1.

NOTE: Be sure to prevent the socket screw from moving when torquing the jam nut.

- (6) Remove blade number one.
- (7) Install number two blade assembly into the socket of the engine-side hub half.
- (8) Center the slot of the preload plate (3080) at the hub parting line. Refer to Figure 7-8.

NOTE: The blade knob slot in the preload plate should be positioned to allow the blade to travel the full blade angle range without restriction.

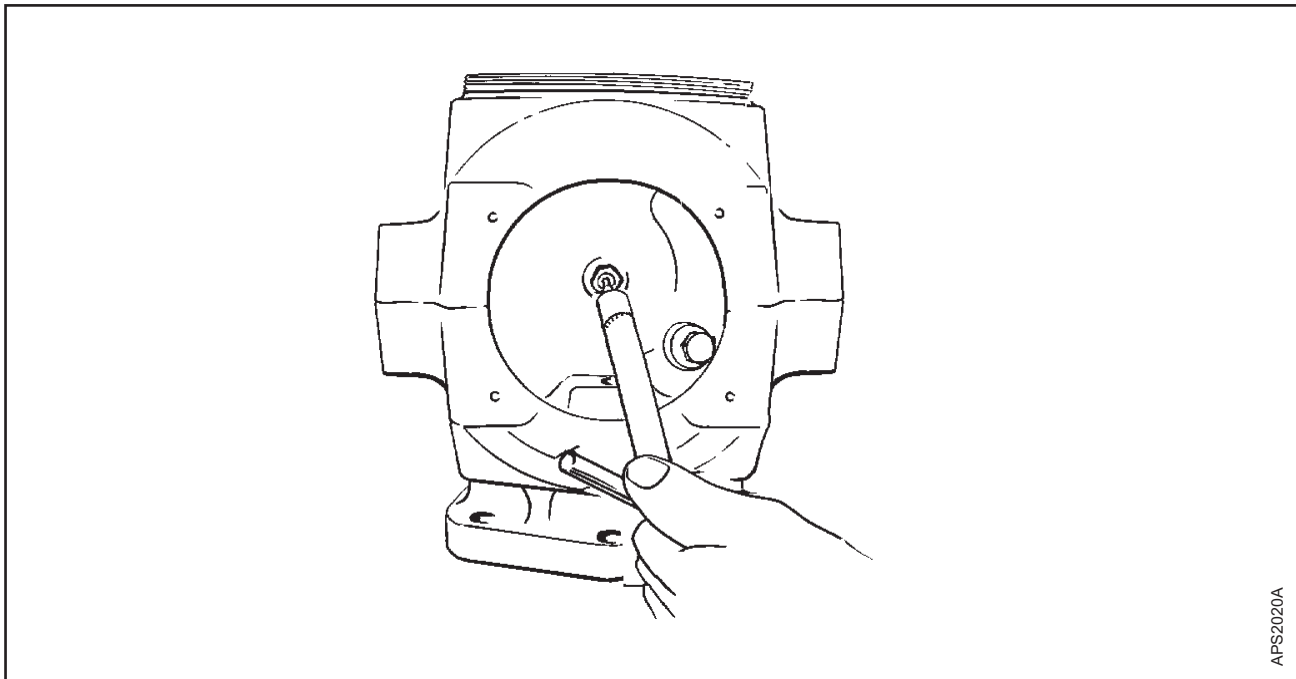


Installing the Two-Way Cylinder-Side Hub Half
Figure 7-9

CAUTION: IMPROPER PRELOAD CAN CAUSE THE BLADES TO BE LOOSE IN THE HUB OR CAN EXERT EXCESSIVE PRESSURE, INTERFERING WITH PITCH CHANGE MOVEMENT.

- (9) Repeat steps 5(a) through 5(k) in this section, to set the preload for blade number two.
- (10) Reinstallation of blade number one, including the pitch change parts.
 - (a) Install the pitch change block buttons (450) into the pitch change block (440).
 - (b) Apply anti-seize compound CM118 to the outside of each pitch change knob bushing (3000).
 - (c) Apply anti-seize compound CM118 to each pitch change block groove of the pitch change fork (400).
 - (d) Apply anti-seize compound CM118 to the threads of the fork (400).
 - (e) Install a pitch change block (440) on each blade pitch change knob, with the round extension away from the blades.

NOTE: Check the orientation of the pitch change block. Pitch change blocks should be installed in the fork with the thin wall toward the engine-side hub half during initial assembly.



**Setting the Two-Way Preload
Figure 7-10**

- (f) Install the rubbing plate, if applicable, on the fork. Refer to the Special Adhesive and Bonding chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02) for rubbing plate installation procedures.

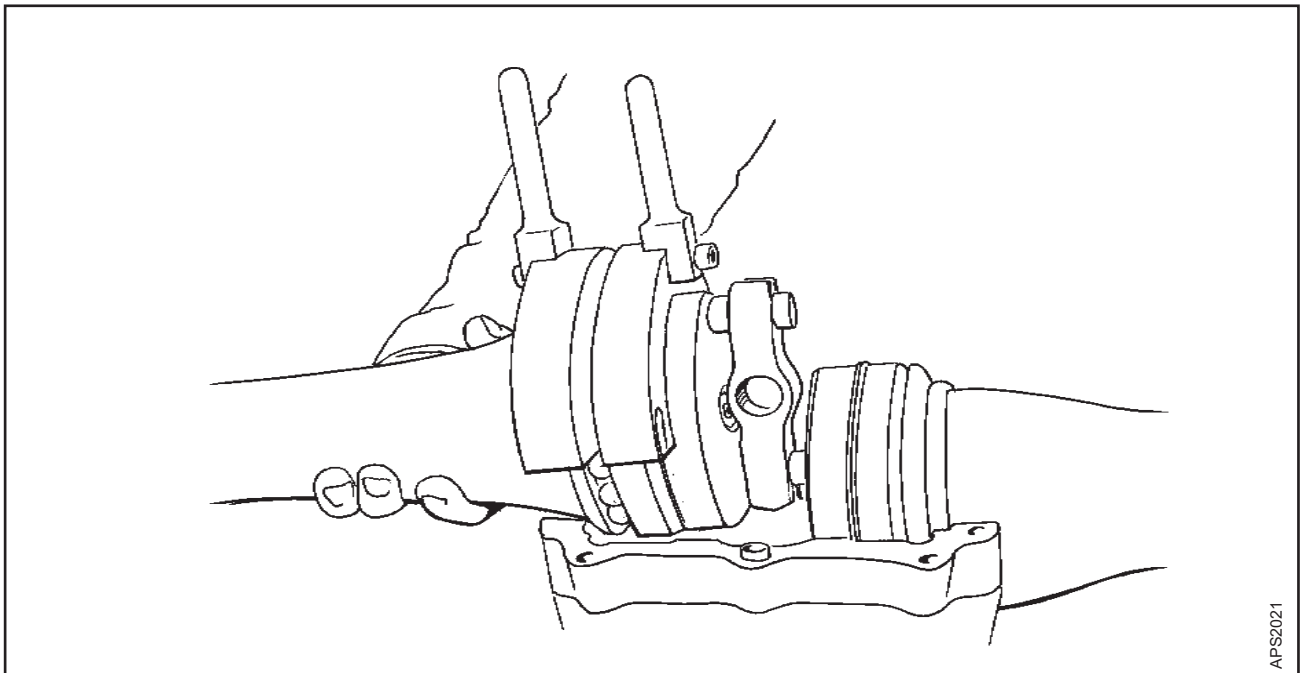
CAUTION: MAKE SURE THE TAPER IN THE FORK MATCHES THE TAPER IN THE PITCH CHANGE ROD. IF THE PITCH CHANGE ROD IS IMPROPERLY ATTACHED TO THE FORK, THE SEATING AREA OF THE PITCH CHANGE ROD WILL BE DAMAGED.

- (g) Install the fork (400) on the pitch change block (440) of blade number two.

- (h) Slide the pitch change block (440) on blade number one into the fork (400).

NOTE: Be sure to maintain correct pitch change block orientation. Refer to Figure 7-11.

- (i) Reinstall blade number one in the hub socket. Refer to Figure 7-11.
(j) Remove the blade retention components clamp TE24 from blade number one.

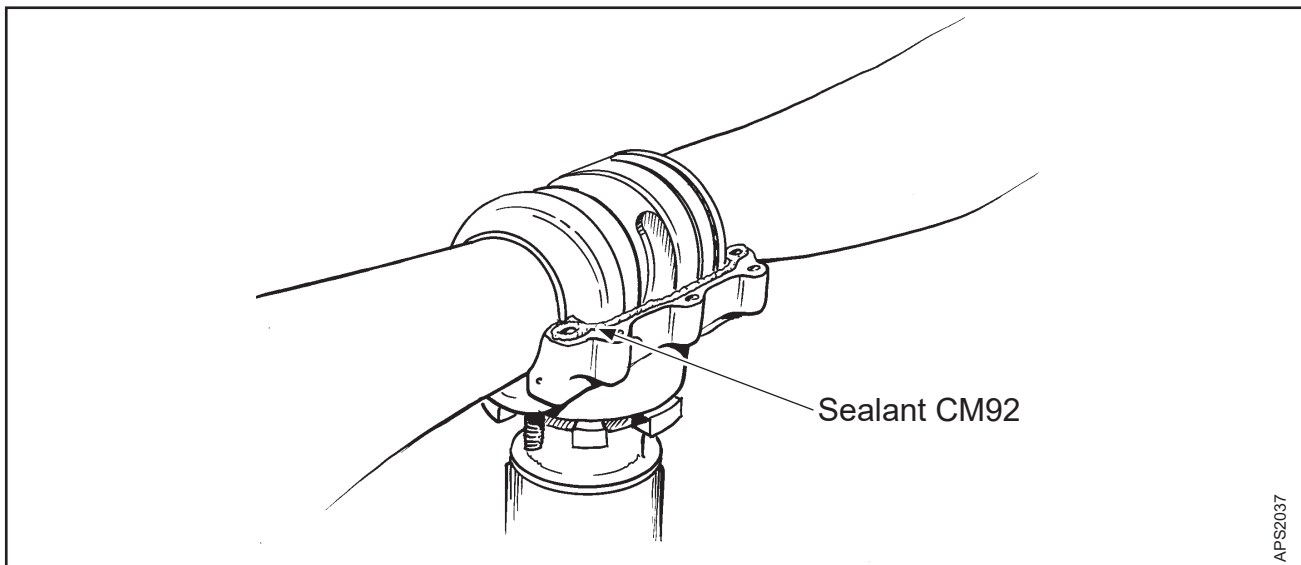


Installing Blade Number One and the Pitch Change Parts
Figure 7-11

- (11) Installing the cylinder-side hub half.
- (a) Hubs manufactured with a hub parting surface seal groove no longer use the A-2436 hub parting seal. Fill the groove with sealant CM92 and continue the assembly procedure.
 - (b) Apply a bead of sealant CM92 on the hub mating surfaces. Refer to Figure 7-12.
 - 1 Use enough sealant on the mating surfaces so that a small amount will be squeezed out along the entire parting surface when the hub bolts are properly torqued.

CAUTION: MAKE SURE THAT THE BLADE SEAL IS CORRECTLY ALIGNED IN THE HUB GROOVE WHEN INSTALLING THE CYLINDER-SIDE HUB HALF.

- (c) Install the cylinder-side hub half.
 - 1 Use a rubber mallet to position the hub half, if necessary.
 - (d) Positioned midway between each of the blade sockets on both sides, install a bolt (580), washer (600), and nut (610). Refer to Figure 7-9.
 - 1 When the propeller is assembled without the bulkhead, as many as four additional washers (600) may be used to aid in clamping the hub halves during the cure of the sealant CM92.
 - (e) Torque the each nut (610) in accordance with Table 8-1.
- (12) Proceed to paragraph 4.D. Pitch Change Unit Assembly and Blade Tolerance Checks, in this chapter.



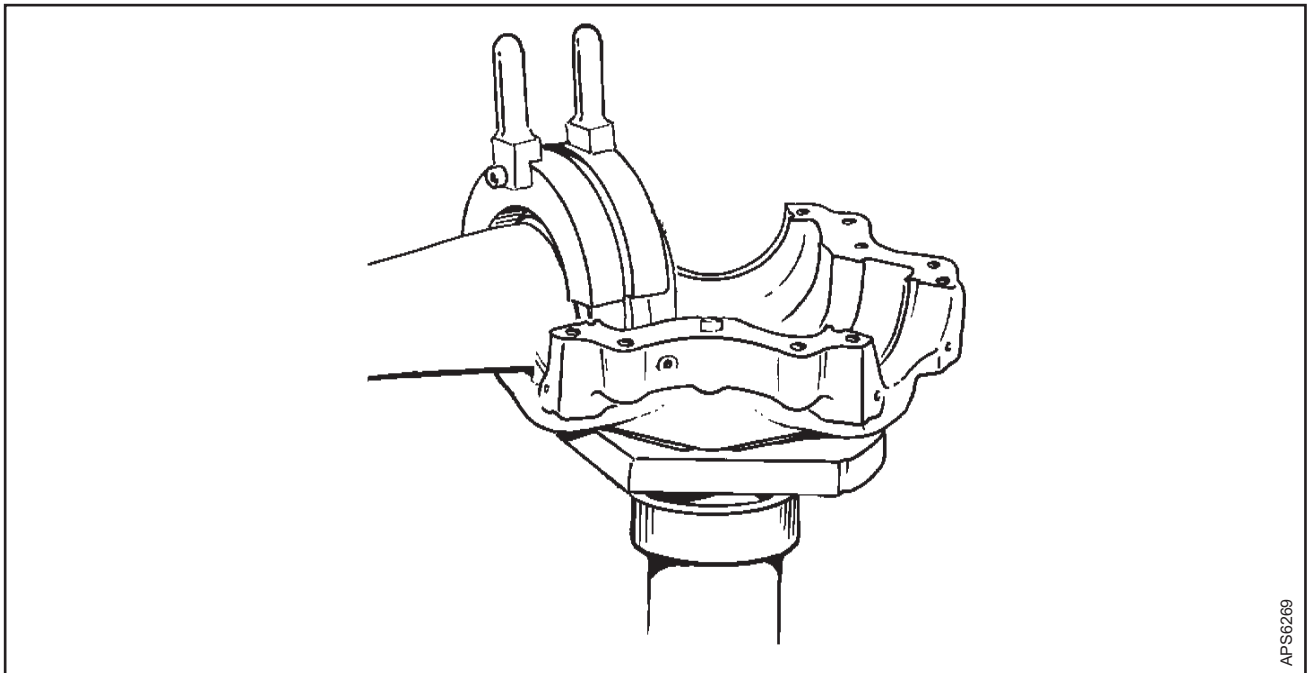
Applying Sealant on the Two-Way Hub Parting Surface
Figure 7-12

B. Blade Installation - Three Blade Propeller

- (1) Lubricate the hub blade retention radius with a thin film of lubricant CM12.
- (2) Lubricate the hub seal grooves with a thin film of lubricant CM12.

CAUTION: BLADES MUST BE PRELOADED WHILE RESTING IN THE SOCKET THEY WILL OCCUPY WHEN ASSEMBLED. DO NOT PRELOAD ALL THE BLADES IN THE SAME SOCKET.

- (3) Using clamping tool TE24, install the number one blade assembly into the socket of the engine-side hub half. Refer to Figure 7-13.



**Installing Blade One in the Three-Way Hub
Figure 7-13**

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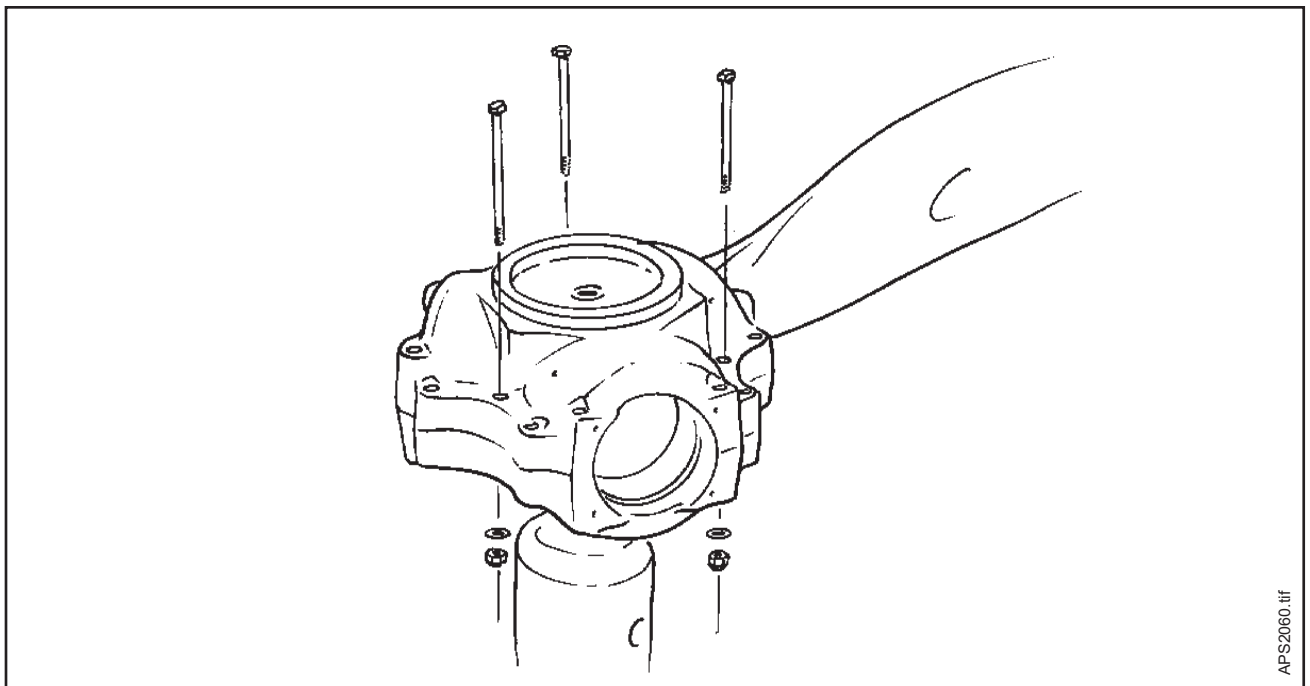
- (4) Center the slot of the preload plate (3080) at the hub parting line (same as for the two blade propeller, refer to Figure 7-8).

NOTE: The blade knob slot in the preload plate should be positioned to allow the blade to travel the full blade angle range without restriction.

CAUTION: IMPROPER PRELOAD CAN CAUSE THE BLADES TO BE LOOSE IN THE HUB OR MAY EXERT EXCESSIVE PRESSURE THAT CAN INTERFERE WITH PITCH CHANGE MOVEMENT.

- (5) Setting the blade preload.
 - (a) Install the cylinder-side hub half (480). Refer to Figure 7-14.
 - (b) Bolt the hub halves together using three bolts (580), three washers (600), and three nuts (610). Refer to Figure 7-14.

NOTE: The bolts are located midway between the blades.

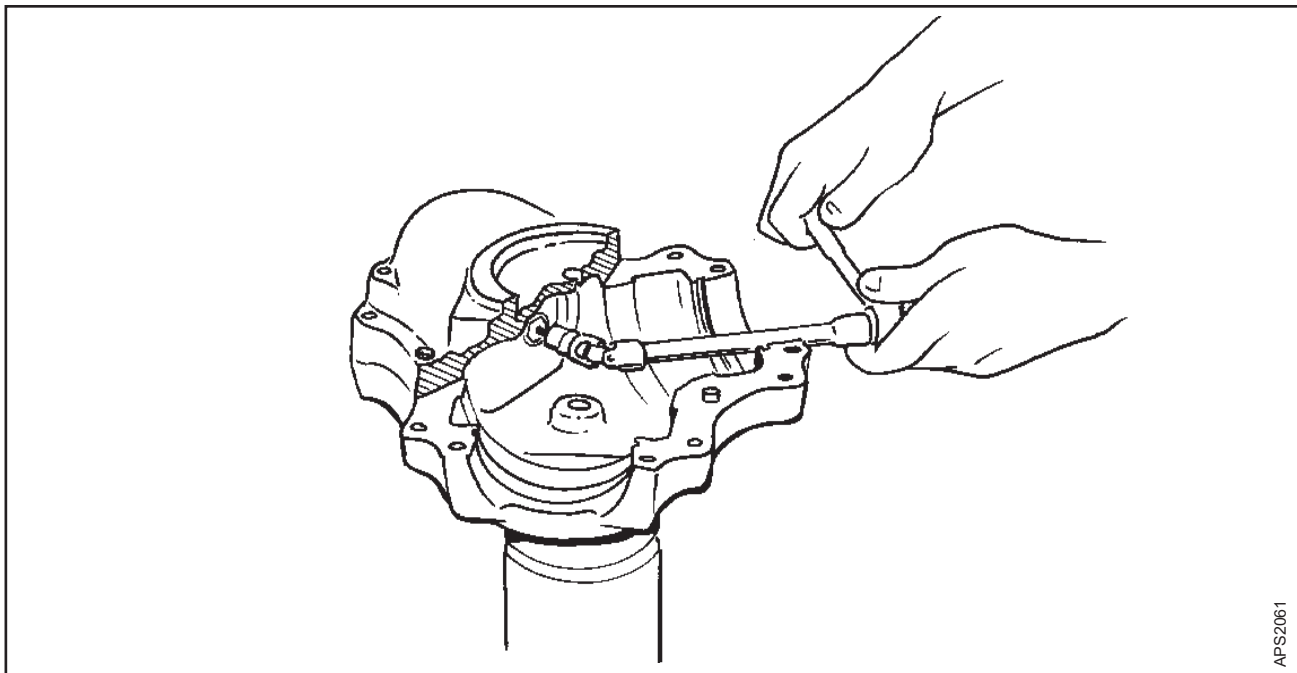


Installing the Three-Way Hub Half Before Tightening Preload Plate
Figure 7-14

- (c) Torque the nuts (610) in accordance with Table 8-1.
- (d) Tighten the preload socket set screw (3100) through the open end of the hub. Refer to Figure 7-15.

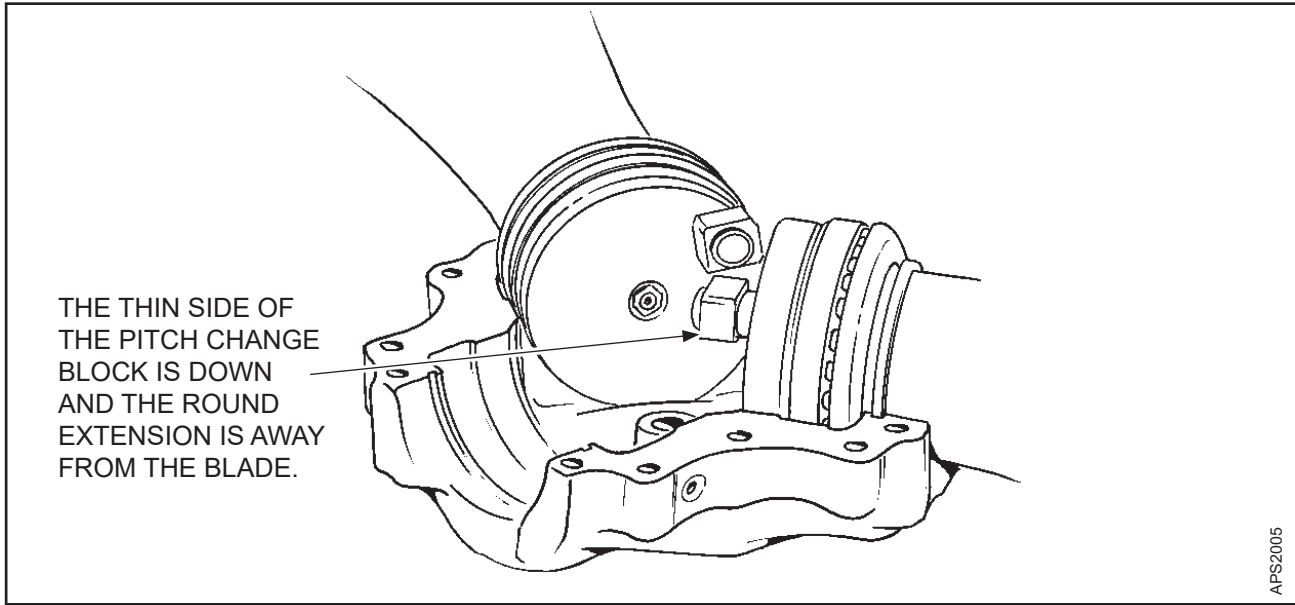
NOTE: The loose blade will become rigid in the hub as the socket screw is tightened.

- (e) Tighten the preload socket screw until the tip of the blade stops moving vertically.
- (f) Gently move the tip of the blade to make sure the blade is properly seated in the retention socket.
- (g) Loosen the preload socket screw (3100) and retighten. When the blade tip stops moving, turn the socket screw an additional 1/4 turn into the preload plate.
- (h) Check the blade for free rotation. If the blade is not free, remove the blade and check the following:
 - 1 Blade seal (3010) for proper fit in hub groove.
 - 2 The needle rollers in the inner bearing race (3090) may be skewed. The needle rollers should be parallel to the axis of blade pitch change.
 - 3 Blade preload may be too tight.

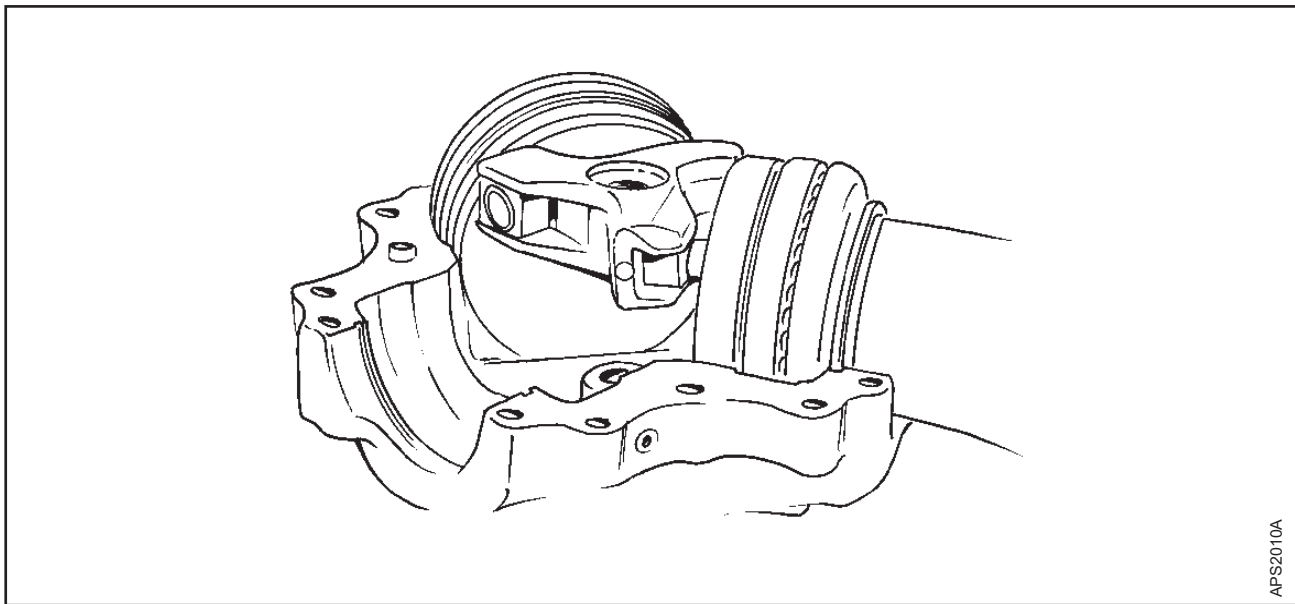


Tightening Preload Plate Hex Head Screw and Jam Nut
Figure 7-15

- (i) Remove the three bolts (580), three washers (600), and three nuts (610).
 - (j) Remove the cylinder-side hub half (380).
 - (k) Apply one drop of thread locking compound CM21 on the threads of the preload socket set screw (3100).
 - (l) Torque the jam nut (3110) in accordance with Table 8-1.
NOTE: Be sure to prevent the socket screw from moving when torquing the jam nut.
- (6) Remove blade number one.
- (7) Install blade assemblies two and three into the sockets of the engine-side hub half.
- (8) Center the slot of the preload plate (3080) at the hub parting line (same as for the two blade propeller, refer to Figure 7-8).
NOTE: The blade knob slot in the preload plate should be positioned to allow the blade to travel the full blade angle range without restriction.
- (9) Repeat steps 5(a) through 5(l) in this section, to set the preload for blade numbers two and three.
- (10) Reinstallation of blade number one including the pitch change parts.
- (a) Install the three pitch change fork buttons (410) on the pitch change fork (400).
NOTE: The buttons press fit into the fork holes provided.
 - (b) Apply anti-seize compound CM118 to the outside of each pitch change knob bushing (3000).
 - (c) Apply anti-seize compound CM118 to each pitch change block groove of the pitch change fork (400).
 - (d) Apply anti-seize compound CM118 to the threads of the fork (400).



**Installing the Pitch Change Blocks on Blades Two and Three
Figure 7-16**



**Installing the Pitch Change Fork on Blades Two and Three
Figure 7-17**

- (e) Install a pitch change block (440) on each blade pitch change knob with the round extension away from the blades. Refer to Figure 7-16.

NOTE 1: Inspect the pitch change block for a chamfer. Refer to the Check chapter of this manual for pitch change block inspection criteria. If the block is not chamfered, rework the block in accordance with the Rework of the A-3253-() Pitch Change Block section of the Repair chapter of this manual.

NOTE 2: Check the orientation of the pitch change block. Pitch change blocks should be installed in the fork with the thin wall toward the engine-side hub half during initial assembly.

CAUTION: MAKE SURE THE TAPER IN THE FORK MATCHES THE TAPER IN THE PITCH CHANGE ROD. IF THE PITCH CHANGE ROD IS IMPROPERLY ATTACHED TO THE FORK, THE SEATING AREA OF THE PITCH CHANGE ROD WILL BE DAMAGED.

- (f) Install the fork (400) on the pitch change blocks of blades two and three.

NOTE: Forks manufactured in the 1980s were intended to be universal (both left and right handed) and were tapered on both sides. Universal forks are no longer manufactured.

- (g) Slide the pitch change block (440) for blade number one into the fork (400).

- (h) Insert the pitch change knob of blade number one into the pitch change block (440) mounted on the fork (400) and rotate the blade into the hub blade socket.

- (i) Remove the blade retention components clamp TE24 from blade number one.

(11) Installing the cylinder-side hub half.

(a) Apply a bead of sealant CM92 on the hub mating surfaces. Refer to Figure 7-18.

- 1 Use enough sealant on the mating surfaces so that a small amount will be squeezed out along the entire parting surface when the hub bolts are properly torqued.

CAUTION: MAKE SURE THAT THE BLADE SEAL IS CORRECTLY ALIGNED IN THE HUB GROOVE WHEN INSTALLING THE CYLINDER-SIDE HUB HALF.

(b) Install the cylinder-side hub half.

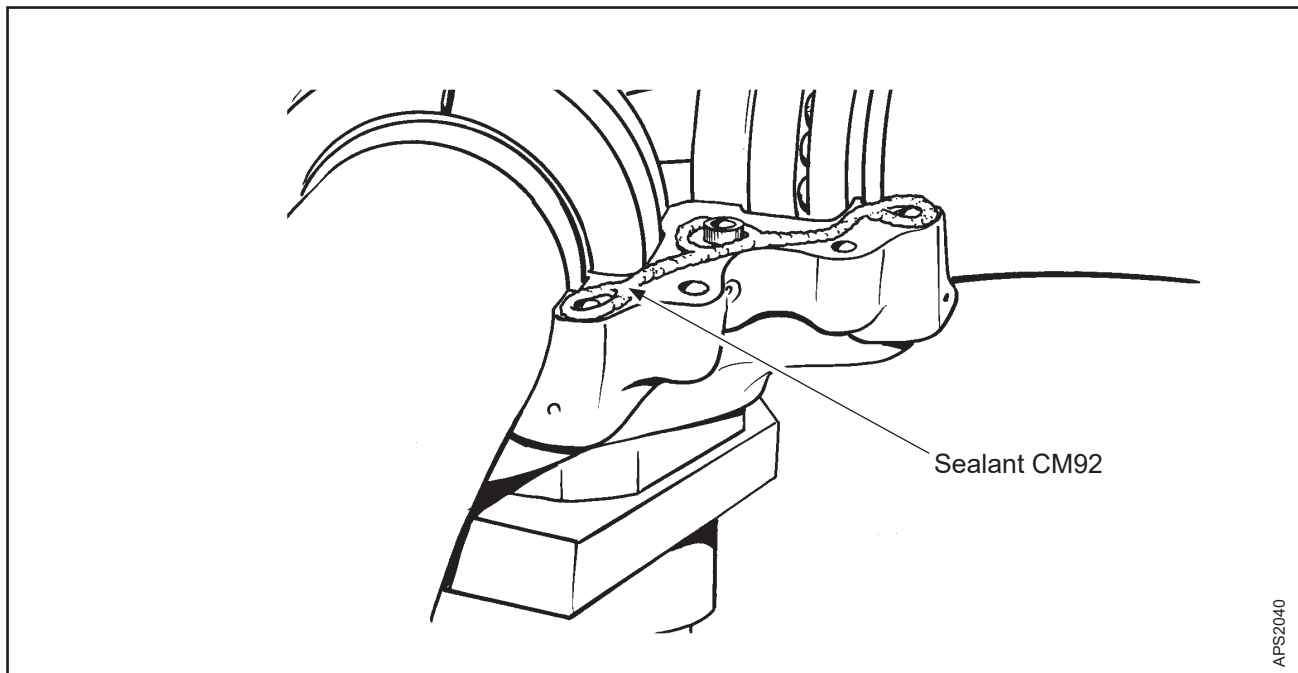
- 1 Use a rubber mallet to position the hub half, if necessary.

(c) Positioned midway between each of the three blade sockets, install a bolt (580), washer (600), and nut (610). Refer to Figure 7-14.

- 1 When the propeller is assembled without the bulkhead, as many as four additional washers (600) may be used to aid in clamping the hub halves during the cure of the sealant CM92.

(d) Torque the each nut (610) in accordance with Table 8-1.

(e) Go to the section, "Pitch Change Unit Assembly and Blade Tolerance Checks", in this chapter.



Applying Sealant Between the Three-Way Hub Halves
Figure 7-18

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C. Blade Installation - Four Blade Propeller

- (1) Lubricate the hub blade retention radius with a thin film of lubricant CM12.
- (2) Lubricate the blade hub seal grooves with a thin film of lubricant CM12.

CAUTION 1: BLADES MUST BE PRELOADED WHILE RESTING IN THE SOCKET THEY WILL OCCUPY WHEN ASSEMBLED. DO NOT PRELOAD ALL THE BLADES IN THE SAME SOCKET.

CAUTION 2: TO AVOID BLADE DAMAGE, SUPPORT THE BLADE IN THE ENGINE-SIDE HUB HALF UNTIL THE BLADE IS PRELOADED OR UNTIL THE CYLINDER-SIDE HUB HALF IS INSTALLED.

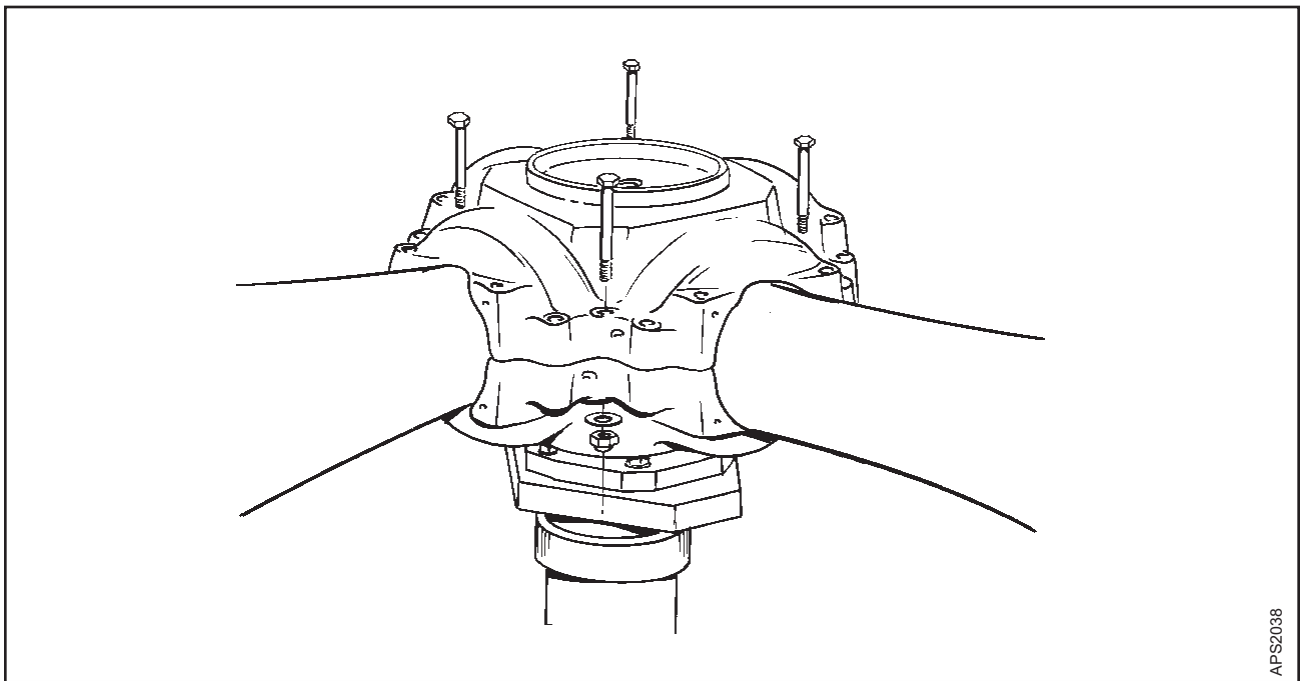
- (3) Install blade assemblies one and two into the sockets of the engine-side hub half.
- (4) Center the slot of the preload plate (3080) at the hub parting line (same as for the two blade propeller, refer to Figure 7-8).

NOTE: The blade knob slot in the preload plate should be positioned to allow the blade to travel the full blade angle range without restriction.

CAUTION: IMPROPER PRELOAD CAN CAUSE THE BLADES TO BE LOOSE IN THE HUB OR MAY EXERT EXCESSIVE PRESSURE THAT CAN INTERFERE WITH PITCH CHANGE MOVEMENT.

- (5) Setting the blade preload.
 - (a) Install the cylinder-side hub half.
 - (b) Bolt the hub halves together using four bolts (580), four washers (600), and four nuts (610) positioned midway between each blade socket. Refer to Figure 7-19.
 - (c) Torque the nuts (610) in accordance with Table 8-1.
 - (d) Tighten the preload socket set screw (3100) through the open end of the hub.

NOTE: The loose blade will become rigid in the hub as the socket screw is tightened.
 - (e) Tighten the preload socket set screw (3100) until the tip of the blade stops moving vertically.
 - (f) Gently push on the tip of the blade to make sure the blade is properly seated in the retention socket.



Installing the Four-Way Cylinder-Side Hub Half
Figure 7-19

- (g) Loosen the preload socket screw (3100) and retighten. When the blade tip stops moving, turn the socket screw an additional 1/4 turn into the preload plate.
 - (h) Check the blade for free rotation. If the blade is not free, remove the blade and check the following:
 - 1 Blade seal (3010) for proper fit in the hub groove.
 - 2 The needle rollers in the inner bearing race (3090) may be skewed. The needle rollers should be parallel to the axis of blade pitch change.
 - 3 Blade preload may be too tight.
 - (i) Remove the four bolts (580), four washers (600), and four nuts (610).
 - (j) Remove the cylinder-side hub half (480).
 - (k) Apply one drop of thread locking compound CM21 on the threads of the preload socket set screws (3100).
 - (l) Torque the jam nuts (3110) in accordance with Table 8-1.
 - NOTE:** Be sure to prevent the socket screw from moving when torquing the jam nut.
- (6) Remove blades one and two.
- (7) Install blade assemblies three and four into the socket of the engine-side hub half.
- (8) Center the slot of the preload plate (3080) at the hub parting line (same as for the two blade propeller, refer to Figure 7-8).
 - NOTE:** The blade knob slot in the preload plate should be positioned to allow the blade to travel the full blade angle range without restriction.
- (9) Repeat steps 5(a) through 5(l) in this section, to set the preload for blade numbers three and four.
- (10) Reinstalling blades one and two including pitch change parts.
- (a) Install the pitch change fork buttons (410) on the pitch change fork (400).
 - NOTE:** The buttons press fit into the holes in the fork.
 - (b) Install blade two into the engine-side hub half.
 - (c) Center the slot of the preload plate (3080) at the hub parting line.
 - NOTE:** The blade knob in the preload plate should be positioned to allow the blade to travel the full blade angle range without restriction.
 - (d) Apply anti-seize compound CM118 to the outside of each pitch change knob bushing (3000).

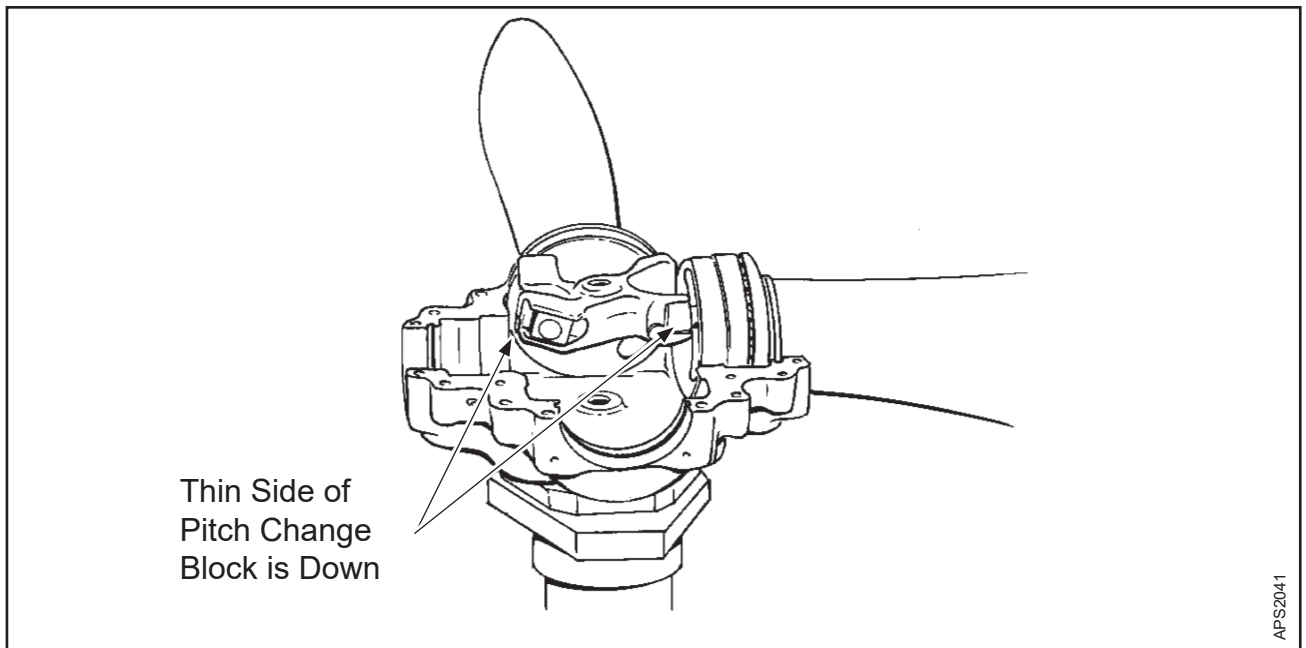
- (e) Apply anti-seize compound CM118 to each pitch change block groove of the pitch change fork (400).
- (f) Apply anti-seize compound CM118 to the fork threads.
- (g) Install a pitch change block (440) on each blade pitch change knob of blades two, three and four, with the round extension away from the blades.

NOTE 1: Inspect the pitch change block for a chamfer. Refer to the Check chapter of this manual for pitch change block inspection criteria. If the block is not chamfered, rework the block in accordance with the Rework of the A-3253-() Pitch Change Block section of the Repair chapter of this manual.

NOTE 2: Check the orientation of the pitch change block. Pitch change blocks should be installed in the fork with the thin wall toward the engine-side hub half during initial assembly.

CAUTION: MAKE SURE THE TAPER IN THE FORK MATCHES THE TAPER IN THE PITCH CHANGE ROD. IF THE PITCH CHANGE ROD IS IMPROPERLY ATTACHED TO THE FORK, THE SEATING AREA OF THE PITCH CHANGE ROD WILL BE DAMAGED.

- (h) Install the fork (400) on the pitch change blocks (440) of blades two, three and four. Refer to Figure 7-20.

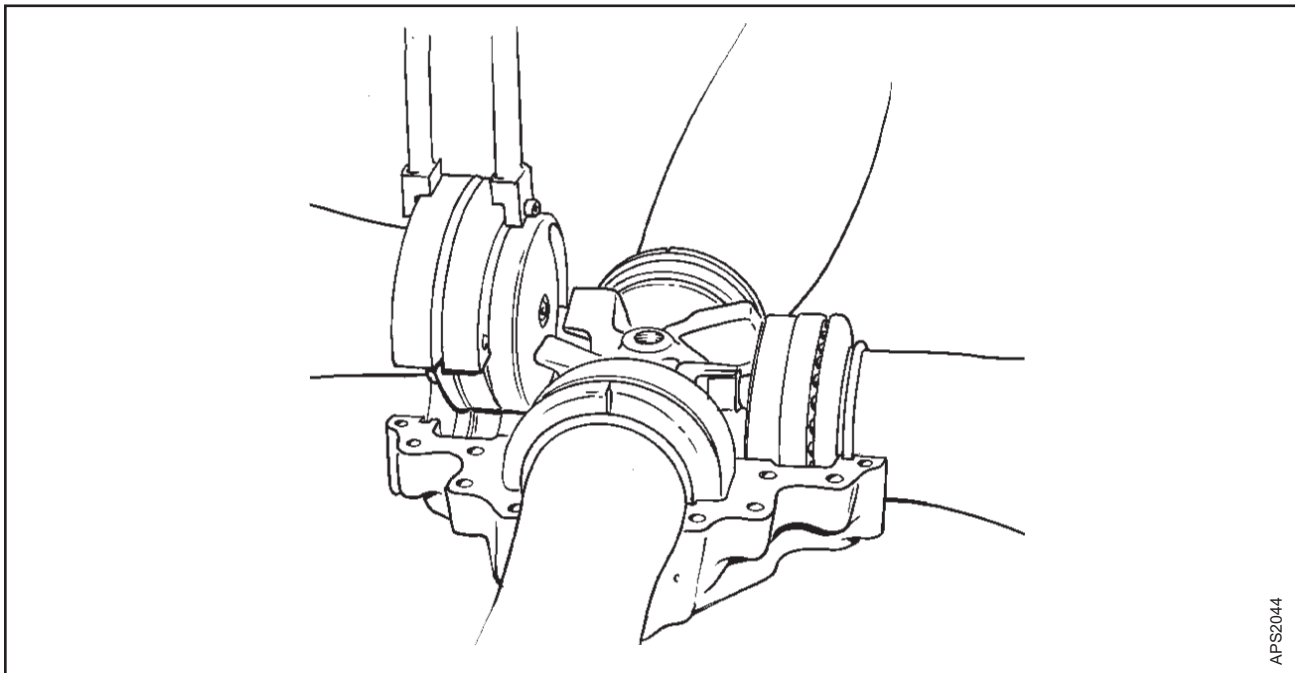


**Installing the Pitch Change Fork
Figure 7-20**

- (i) Slide the pitch change block (440) in the fork (400) for blade number one.
- (j) Position the center of the slots in the preload plate on the plane of the parting line of the hub.

NOTE: The blade knob slot in the preload plate should be positioned to allow the blade to travel within the blade angle range without restriction.

- (k) Insert the pitch change knob of blade number one in the pitch change block (440) mounted in the fork (400) and install the blade in the engine-side hub half. Refer to Figure 7-21.

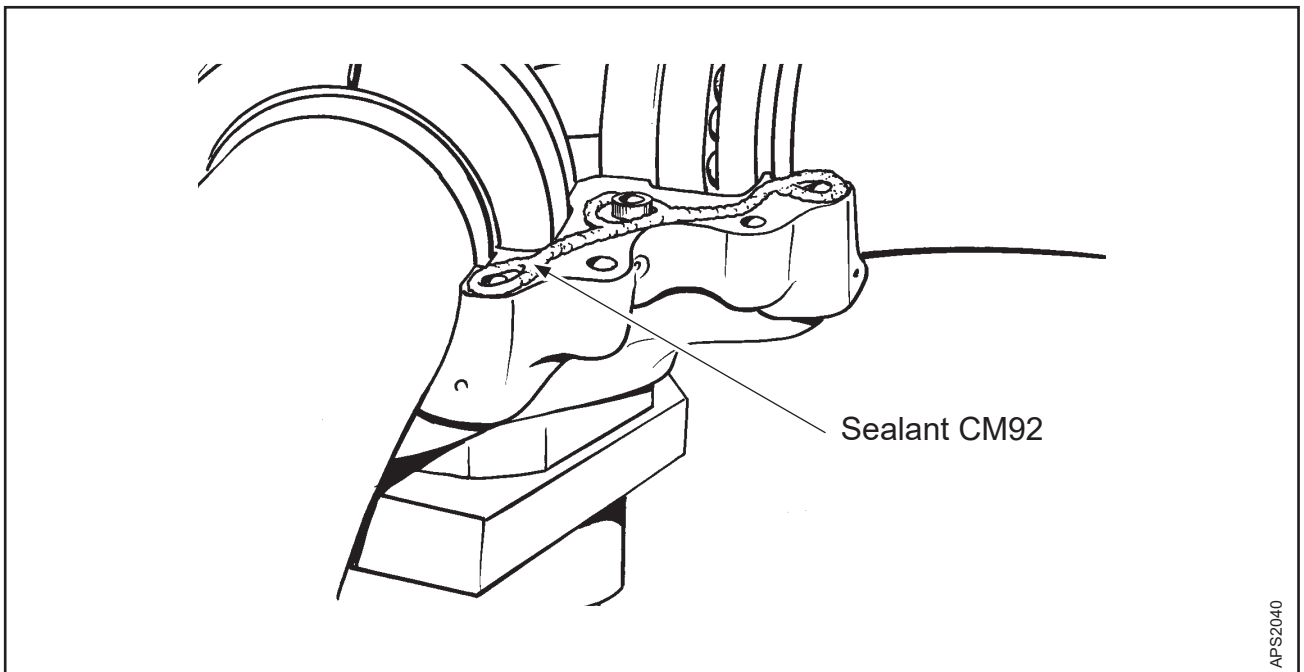


**Installing Blade Number One in the Four-Way Hub
Figure 7-21**

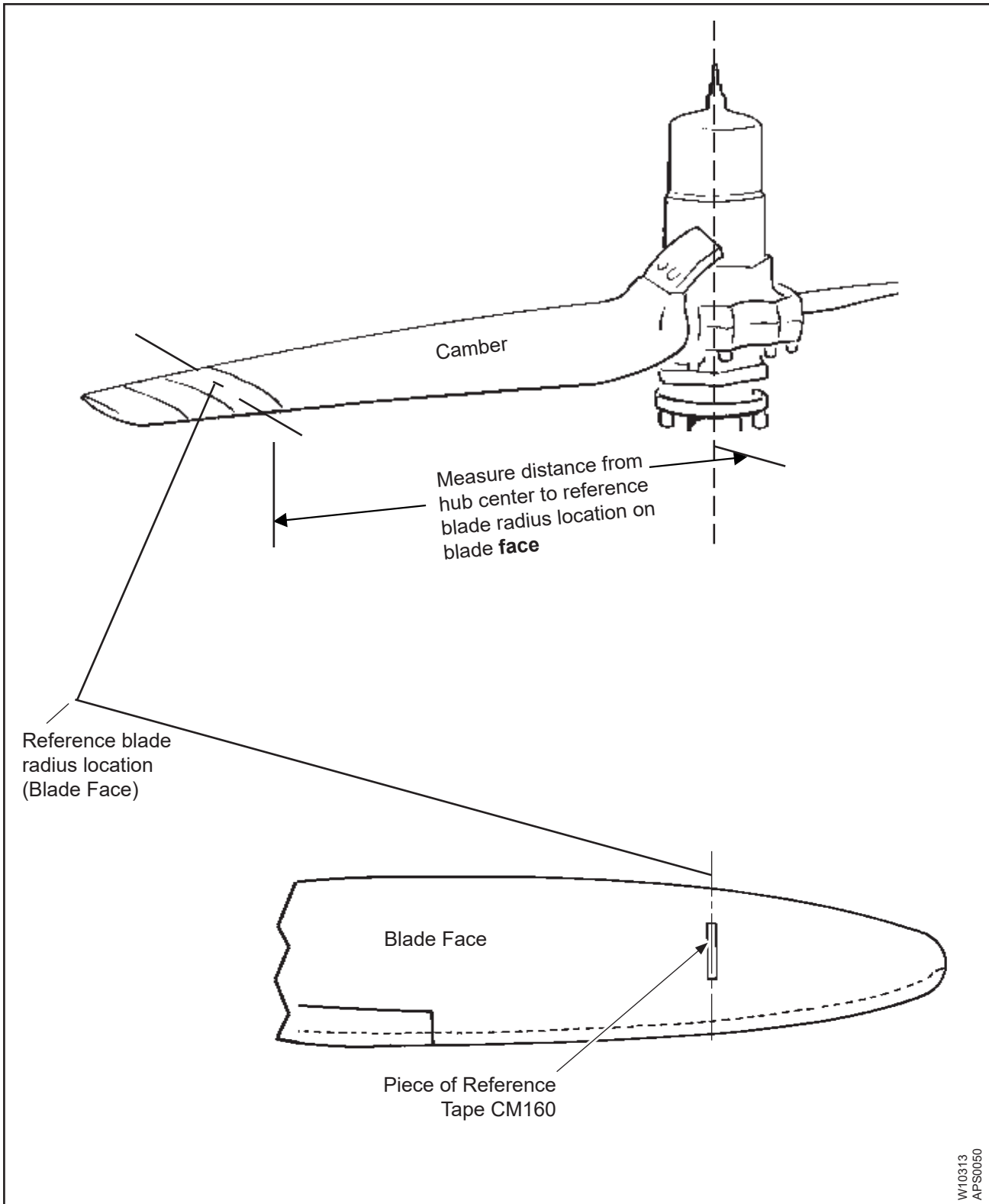
- (11) Install the cylinder-side hub half.
- (a) Apply a bead of sealant CM92 on the hub mating surfaces. Refer to Figure 7-22.
- 1 Use enough sealant on the mating surfaces so that a small amount will be squeezed out along the entire parting surface when the hub bolts are properly torqued.

CAUTION: MAKE SURE THAT THE BLADE SEAL IS CORRECTLY ALIGNED IN THE HUB GROOVE WHEN INSTALLING THE CYLINDER-SIDE HUB HALF.

- (b) Install the cylinder-side hub half.
- 1 Use a rubber mallet to position the hub half.
- (c) Positioned midway between each of the four blade sockets, install a bolt (580), washer (600), and nut (610). Refer to Figure 7-19.
- 1 When the propeller is assembled without the bulkhead, as many as four additional washers (600) may be used to aid in clamping the hub halves during the cure of the sealant CM92.
- (d) Torque the each nut (610) in accordance with Table 8-1.
- (e) Go to the section, "Pitch Change Unit Assembly and Blade Tolerance Checks", in this chapter.



Applying Sealant Between the Four-Way Hub Halves
Figure 7-22



Application of Blade Angle Reference Tape
Figure 7-23

D. Application of Blade Angle Reference Tape (Optional)

CAUTION: DO NOT CONFUSE REFERENCE BLADE RADIUS WITH BLADE STATION. REFERENCE BLADE RADIUS AND BLADE STATION OF THE SAME NUMBER MAY NOT ALWAYS INDICATE THE SAME LOCATION ON THE BLADE.

- (1) Reference blade radius is measured from the center of the propeller hub to a predetermined reference location on the blade for blade angle measurement.
- (2) Blade stations are used during the repair or overhaul process of a blade to define a blade span location for dimensional measurement.
- (3) Establish a reference blade radius location
 - (a) Refer to the Aircraft Type Certificate Data Sheet or the Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59) for the reference blade radius location specified for the applicable aircraft installation.
 - (b) Beginning with blade one, measure from the center of the propeller hub to the reference blade radius location specified. Refer to Figure 7-23.
 - (c) Apply a piece of reference tape CM160 to the face side of the blade at the reference blade radius location, perpendicular to the blade centerline as shown in Figure 7-23.
 - 1 Put the reference tape CM160 on the blade so that the reference blade radius location runs through the centerline of the tape.
 - (d) Repeat steps 3(b) and 3(c) for the remaining blades in the hub assembly.
 - (e) Put a pattern cut-out over each piece of reference tape CM160.
 - (f) Spray each piece of reference tape CM160 with clear lacquer CM129 to prevent peeling.

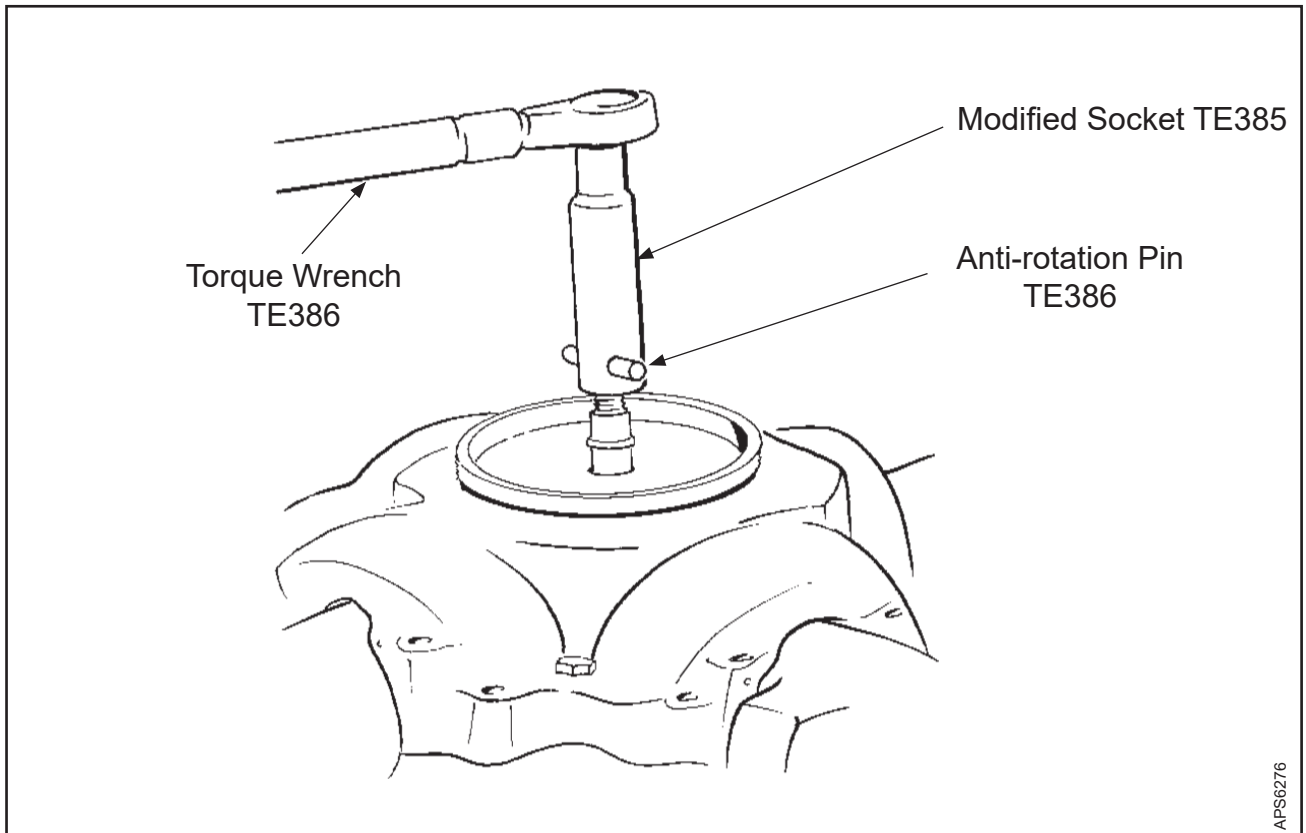
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E. Pitch Change Unit Assembly and Blade Tolerance Checks

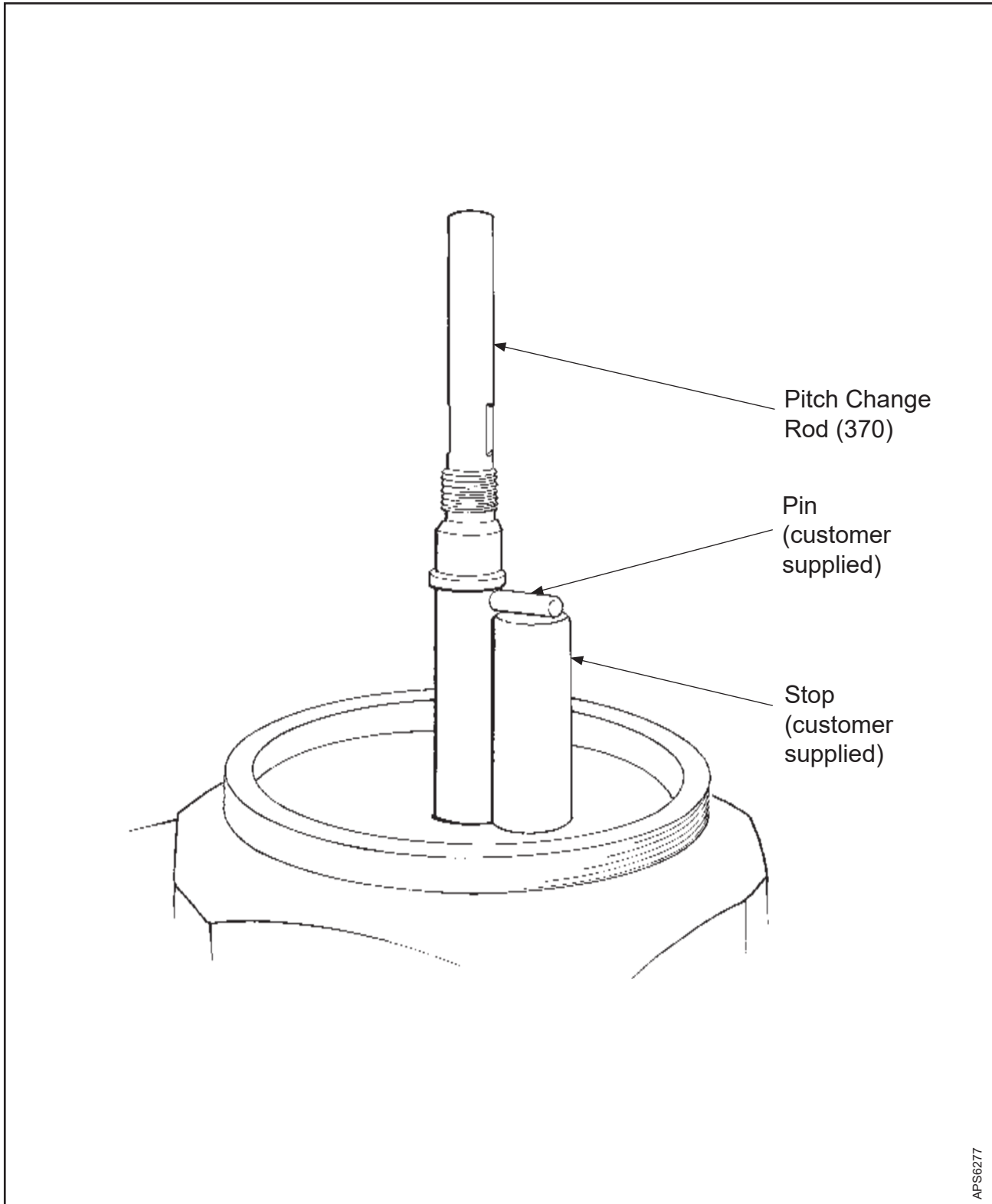
- (1) Insert the pitch change rod (370) through the cylinder-side hub half and start the pitch change rod in the threads of the fork (400).
- (2) Put the modified socket TE385 of the torque wrench adaptor TE6 in place on the pitch change rod (370). Refer to Figure 7-24.
- (3) Insert the anti-rotation pin TE386 of the torque wrench adaptor TE6 into the hole in the modified socket TE385. Make sure the flat side of the anti-rotation pin is toward the pitch change rod (370).

NOTE: The anti-rotation pin TE386 keeps the socket from turning on the pitch change rod.

- (4) Torque the pitch change rod (370) in accordance with Table 8-1.
- (5) Move the blades by hand to make sure the blades have a full range of movement from low pitch to feather pitch.



Using the Torque Wrench Adaptor TE6 on the Pitch Change Rod
Figure 7-24

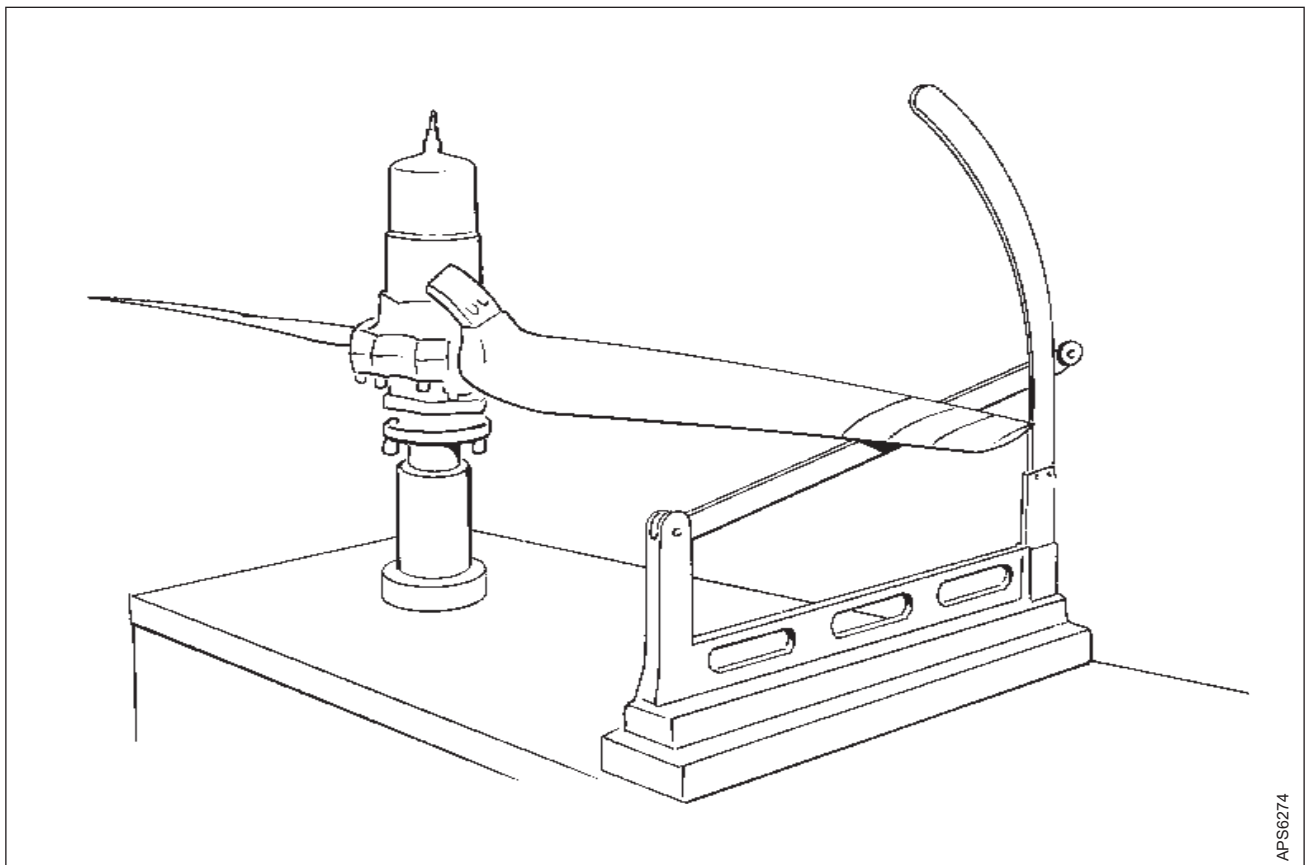


Using a Spacer to Check Blade Angles
Figure 7-25

(6) Blade Angle Check

(a) **Counterweighted -2 and counterweighted -5 propellers only**

- 1 Insert a pin with appropriate diameter into the hole in the pitch change rod (370). Refer to Figure 7-25.
- 2 Place a stop between the pin and the hub.
NOTE: The stop should be long enough, approximately 2.25 inches (5.7 cm), to allow measurement of the blade angles near low pitch.
- 3 Rotate the blades by hand until the pin contacts the stop, checking that the pitch change parts are firmly engaging the pitch change knob of the blades.
NOTE: Rotate the blades by hand toward high pitch to remove any slight blade angular looseness.



**Checking Blade Angles With the Bench Top Protractor TE96
Figure 7-26**

CAUTION 1: DO NOT ETCH, SCRIBE, PUNCH MARK OR SIMILARLY IDENTIFY PARTS IN ANY MANNER THAT MAY BE HARMFUL TO THE STRENGTH OR FUNCTION OF THE PROPELLER.

CAUTION 2: GRAPHITE ("LEAD") PENCIL MARKS WILL CAUSE CORROSION.

4 Mark a line on each blade at the 30-inch reference blade radius.

NOTE: The line at the 30-inch reference blade radius is for measurement reference purposes and will also be used when checking the feather angle of the blade.

5 Check all the blade angles at the 30-inch reference blade radius for 0.2 degree maximum tolerance between blades. Refer to Figure 7-26.

6 If the blade angle differs more than 0.2 degree between blades, turn one or more of the pitch change blocks (440).

a To turn the blocks, remove the pitch change rod (370), and the cylinder-side hub half.

b Make the appropriate adjustments to the pitch change blocks (440).

NOTE: Pitch change blocks should be installed in the fork with the thin wall toward the engine-side hub half during initial assembly. Rotating the pitch change block 180 degrees will decrease the pitch of the corresponding blade approximately 0.3 to 0.4 degree on a tractor propeller. Rotating the pitch change block 180 degrees will increase the pitch of the corresponding blade approximately 0.3 to 0.4 degree on a pusher propeller. It is possible to bring pitch angles differing as much as 0.5 degree into 0.2 tolerance by rotating the blocks. It is also possible to bring the blades within tolerance by rotating the fork 180 degrees on two-blade and four-blade propellers.

7 Reassemble the propeller, and recheck the blade angle tolerance between blades following steps E.6.(a)1 through E.6.(a)5 above.

(b) **Non-counterweighted -2 propellers only**

- 1 Install a stop screw (280) approximately five turns into the end of the pitch change rod (370).

NOTE: A stop screw that has had the locking mechanism drilled out may be used as a tool for setting the angle. A new stop screw must be used for the final assembly of the propeller.

- 2 Install the cylinder (70) hand tight on the cylinder-side hub half.

- 3 Install the low pitch stop (50) in the top of the cylinder (70).

NOTE: The low pitch stop does not have to be set to the appropriate low pitch angle. The cylinder and low pitch stop only provide a contact point for the pitch change rod while checking for 0.2 degrees tolerance between blades.

- 4 Rotate the blades by hand until the pitch change rod (370) with the stop screw (280) installed contacts the low pitch stop (50), checking that the pitch change parts are firmly engaging the pitch change knob of the blades.

NOTE: Rotate the blades by hand toward low pitch to remove any slight blade angular looseness.

CAUTION 1: DO NOT ETCH, SCRIBE, PUNCH MARK OR SIMILARLY IDENTIFY PARTS IN ANY MANNER THAT MAY BE HARMFUL TO THE STRENGTH OR FUNCTION OF THE PROPELLER.

CAUTION 2: GRAPHITE ("LEAD") PENCIL MARKS WILL CAUSE CORROSION.

- 5 Mark a line on each blade at the 30-inch reference blade radius.

NOTE: The line at the 30-inch reference blade radius is for measurement reference purposes and will also be used when checking the feather angle of the blade.

- 6 Check all the blade angles at the 30-inch reference blade radius for 0.2 degree maximum tolerance between blades. Refer to Figure 7-26.

- 7 If the blade angle differs more than 0.2 degree between blades, turn one or more of the pitch change blocks (440).
- a To turn the blocks, remove the pitch change rod (370), and the cylinder-side hub half.
- b Make the appropriate adjustments to the pitch change blocks (440).

NOTE: Pitch change blocks should be installed in the fork with the thin wall toward the engine-side hub half during initial assembly. Rotating the pitch change block 180 degrees will decrease the pitch of the corresponding blade approximately 0.3 to 0.4 degree on a tractor propeller. Rotating the pitch change block 180 degrees will increase the pitch of the corresponding blade approximately 0.3 to 0.4 degree on a pusher propeller. It is possible to bring pitch angles differing as much as 0.5 degree into 0.2 tolerance by rotating the blocks. It is also possible to bring the blades within tolerance by rotating the fork 180 degrees on two-blade and four-blade propellers.

- 8 Reassemble the propeller, and recheck the blade angle tolerance between blades by doing the procedures, "Counterweighted -2 and counterweighted -5 propellers only" in this section.
- (7) When all the blades are within 0.2 degree of each other, install the remaining hub bolts (580)(590), washers (600), and nuts (610).
- (8) Torque the hub nuts (610) in accordance with Table 8-1.

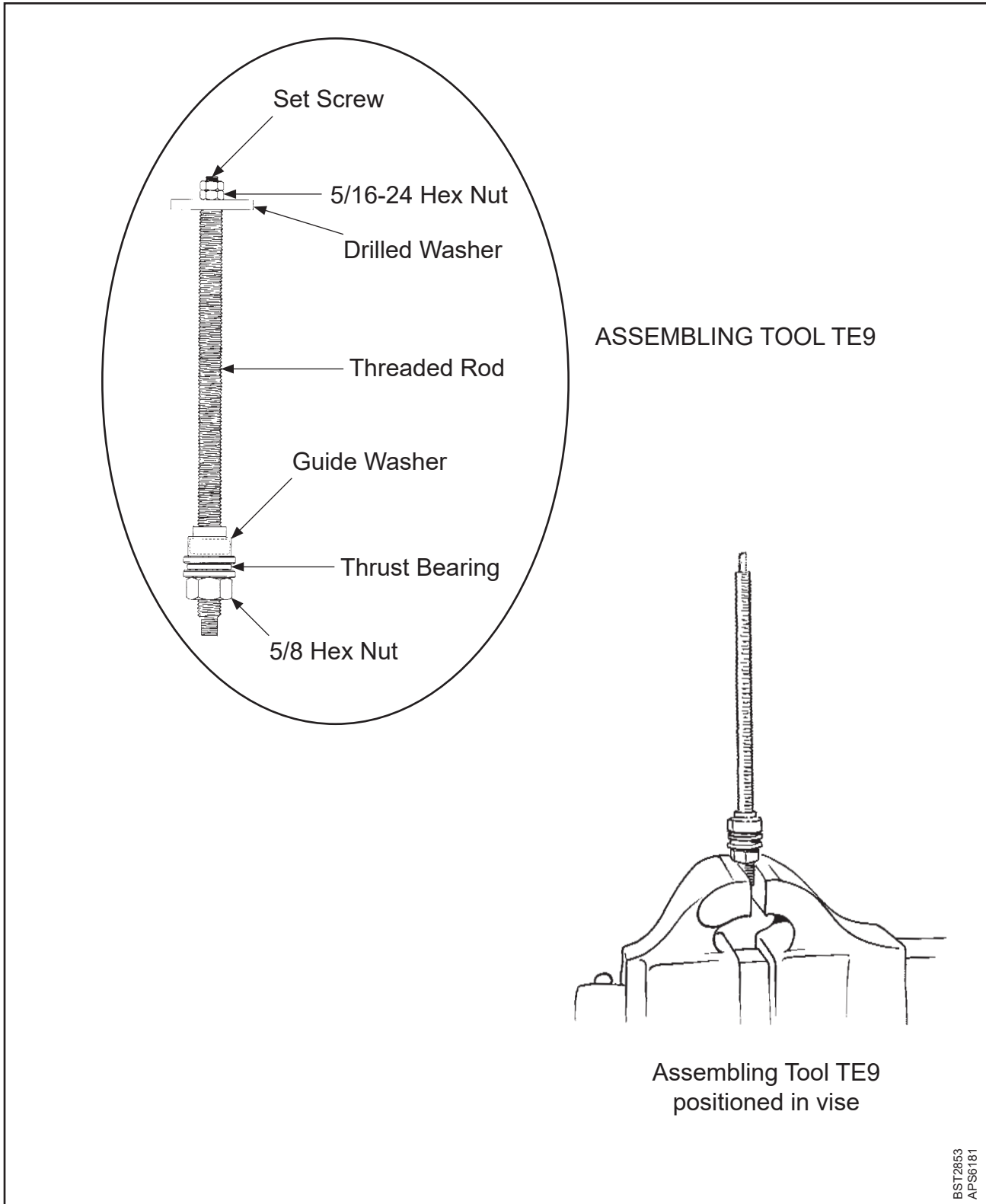
F. 830-21 or 830-30 Start Lock Assembly and Installation

CAUTION: CHECK THE START LOCK FOR FULL PIN RETRACTION.

- (1) Insert the high stop pin (140) in the start lock housing (120).
- (2) Insert the high stop spring (130) in the high stop pin (140).
- (3) Compress the spring (130) and insert the cotter pin (150).
- (4) Spread the ends of the cotter pin (150).

NOTE: The cotter pin holds the high stop spring and the high stop pin in the stop bracket.

- (5) Do the above steps (1) through (4) for the remaining arms of the start lock.
- (6) Operate the start lock pins (140) by hand to check for full freedom of movement of the pins.
- (7) Position the start lock (110) in the cylinder (70), aligning the holes in the start lock with the holes in the cylinder.
- (8) Apply thread locking compound CM21 to the start lock housing screws (100).
- (9) Use the screws (100) to attach the start lock (110) to the cylinder (70).
- (10) Torque the screws (100) in accordance with Table 8-1.
- (11) Install the cylinder ID O-ring (90) in the groove inside the cylinder (70).



Using the Assembling Tool TE9
Figure 7-27

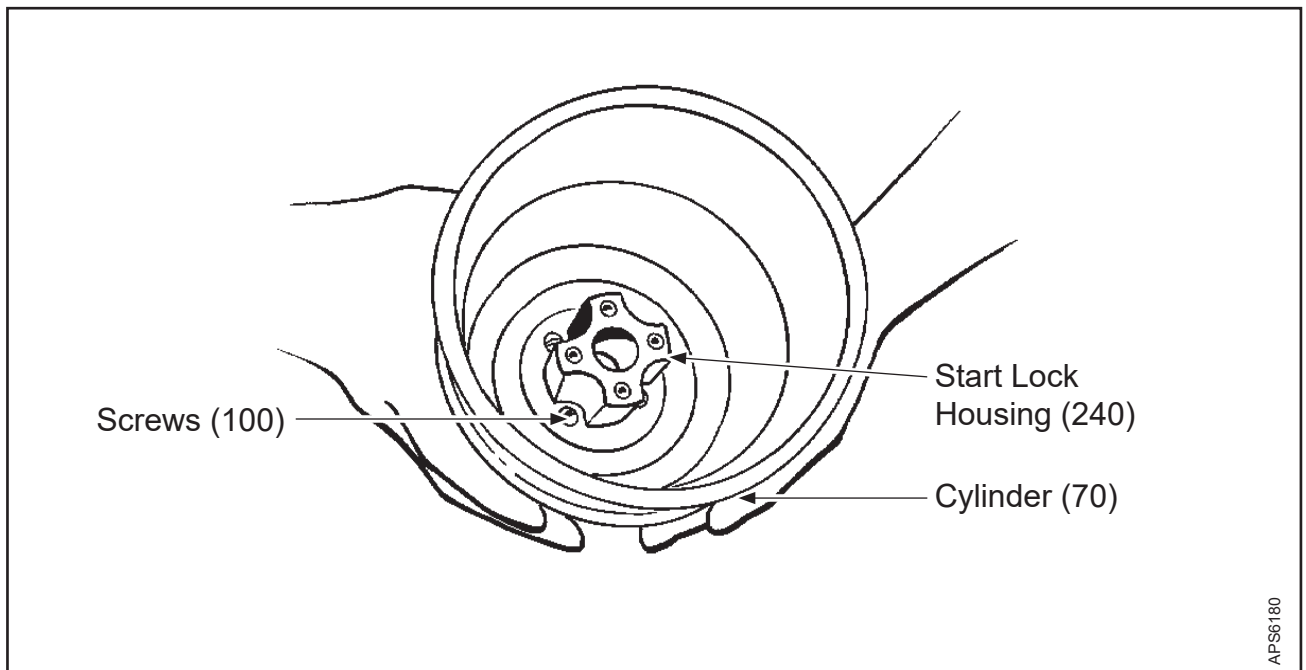
G. Cylinder Spring Assembly Installation

CAUTION: ASSEMBLING TOOL TE9 MUST BE USED TO COMPRESS THE CYLINDER MOUNTED SPRING.

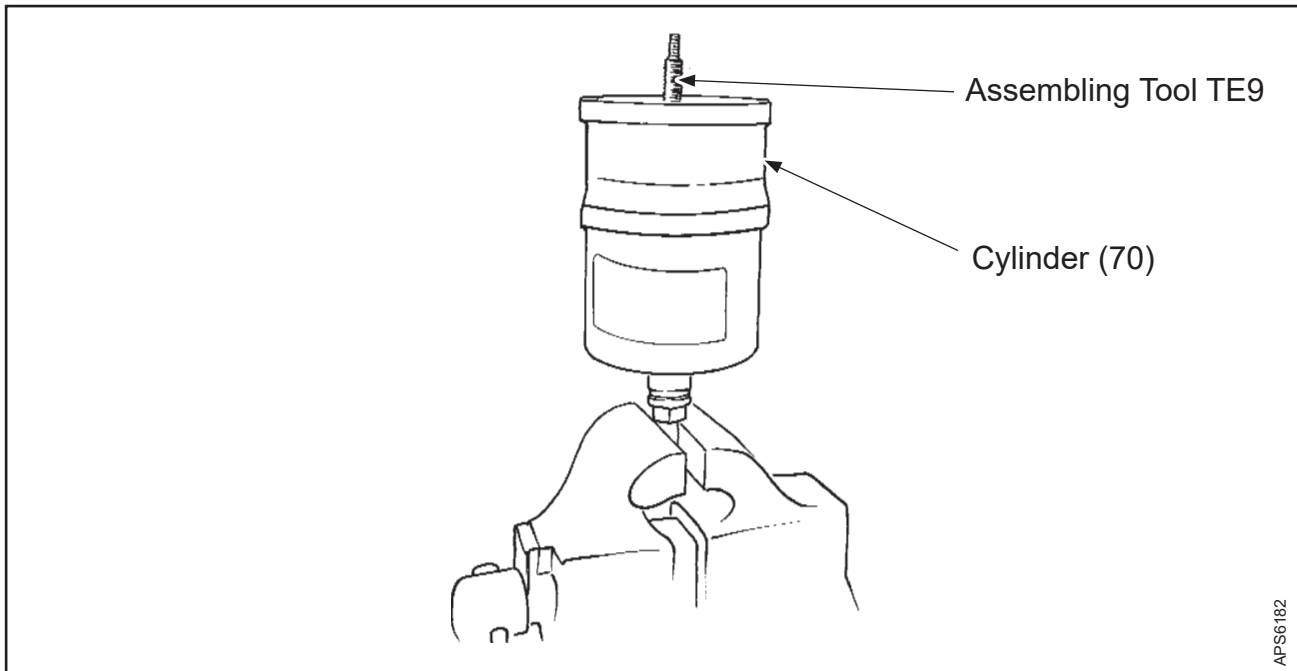
- (1) Place the assembling tool TE9 in a vise with the flattened portion of the threaded rod between the jaws of the vise, and tighten the vise. Refer to Figure 7-27.

CAUTION: DO NOT ATTEMPT TO INSTALL THE SPRING ASSEMBLY WITH THE CYLINDER TORQUE WRENCH ADAPTER TE153 ATTACHED TO THE CYLINDER.

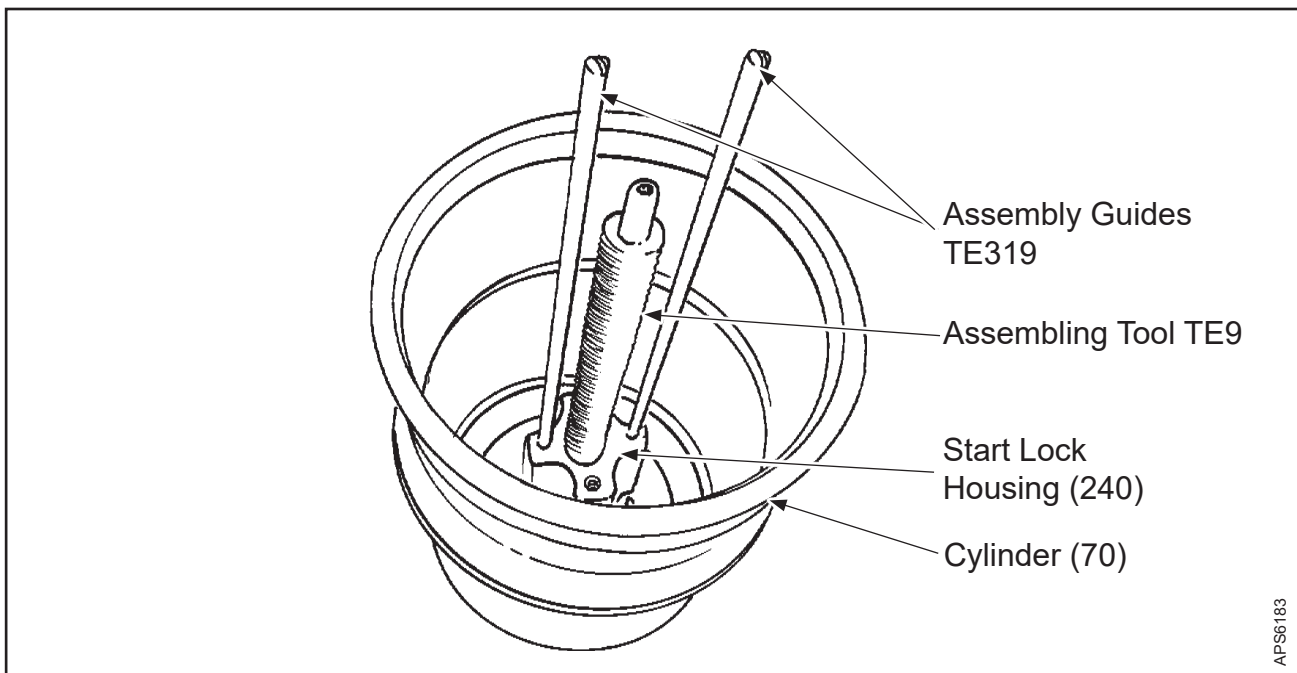
- (2) Position the start lock housing (240) in the cylinder (70) and align the holes in the bracket with the holes in the cylinder.
- (3) Apply thread locking compound CM21 to the start lock housing screws (100).
- (4) Use the screws (100) to attach the start lock housing (240) to the cylinder (70) (Figure 7-28).
- (5) Torque the start lock housing screws (100) in accordance with Table 8-1.
- (6) Install the cylinder ID O-ring (90) in the groove inside the cylinder (70).



Attaching the Start Lock Housing to the Cylinder
Figure 7-28



Positioning the Cylinder on the Assembling Tool TE9
Figure 7-29



Installing the Assembly Guides TE319
Figure 7-30

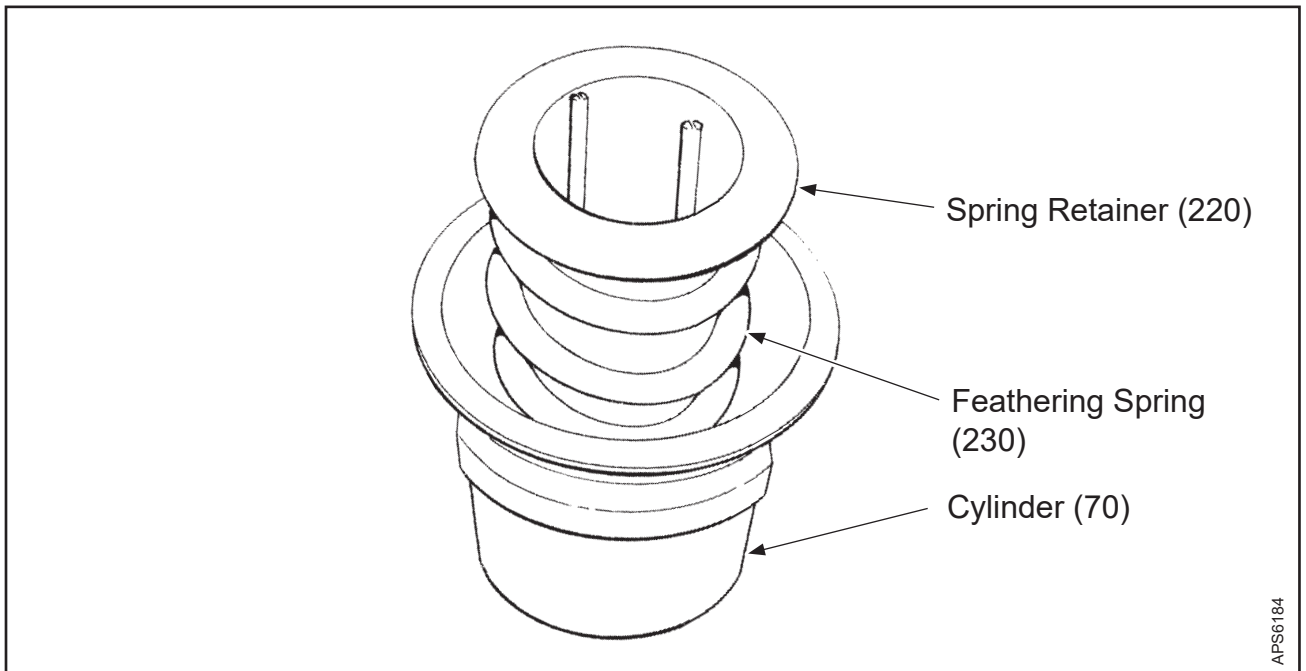
- (7) Put the cylinder (70) on the assembling tool TE9 with the small opening of the cylinder toward the vise. Refer to Figure 7-29.

NOTE: The small diameter shoulder of the guide washer of the assembling tool TE9 will fit in the small opening of the cylinder.

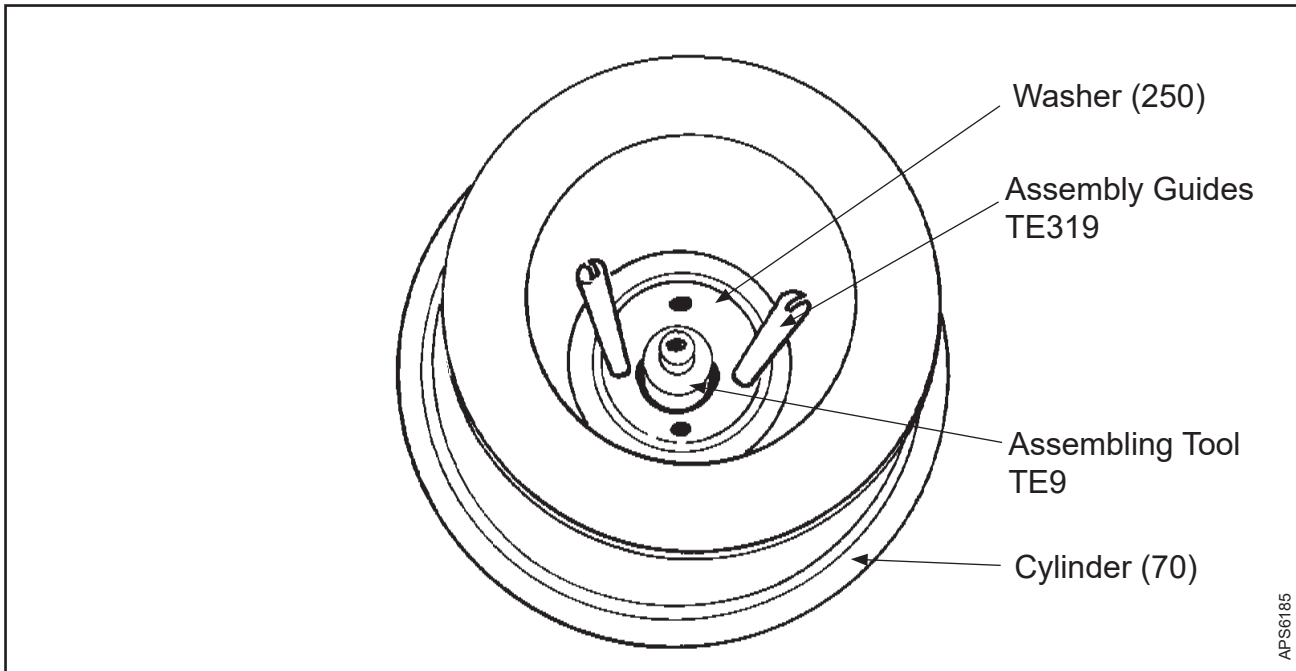
- (8) Install the assembly guides TE319 into the screw holes in the start lock housing (240). Refer to Figure 7-30.

NOTE: Make sure the assembly guides are installed 180 degrees apart.

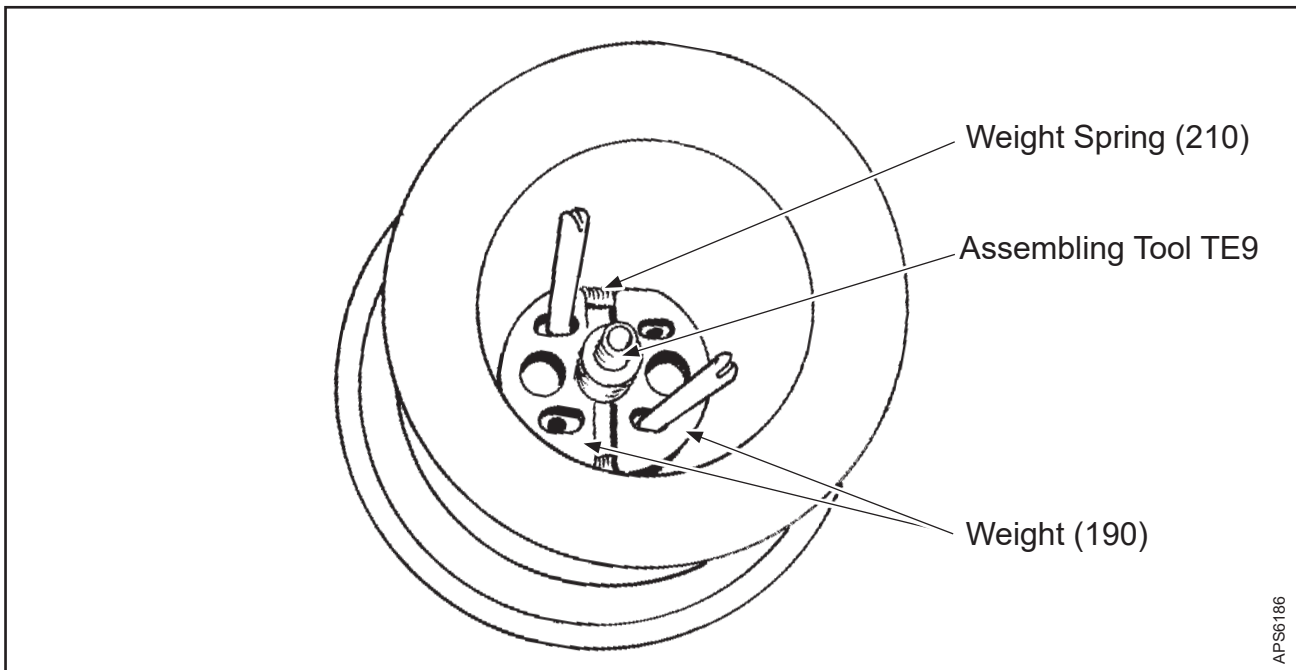
- (9) Place the feathering spring (230) and spring retainer (220) over the assembly guides in the cylinder (70). Refer to Figure 7-31.



Placing the Feathering Spring and Spring Retainer in the Cylinder
Figure 7-31



Installing the Washer on the Assembly Guides TE319
Figure 7-32



Positioning the Weight in the Cylinder
Figure 7-33

- (10) Position the washer (250) with the raised portion up and line up the holes in the washer with the assembly guides TE319. Refer to Figure 7-32.
- (11) Slide the washer (250) on the assembly guides TE319 until the washer is snug against the bottom of the spring retainer (220). Refer to Figure 7-32.

NOTE: The raised part of the washer should be visible.

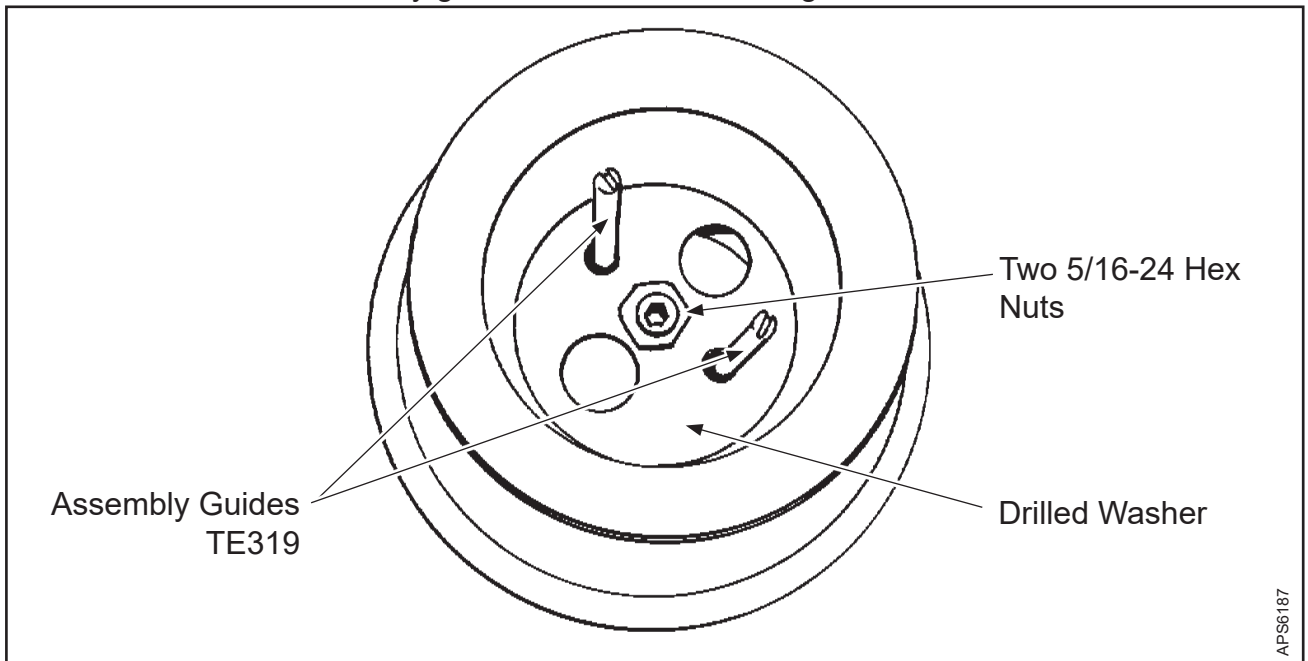
- (12) For propellers using a stop weight (190) - Place the weight spring (210) in the groove around the halves of the weight (190).

NOTE: Position the spring connection point 90 degrees from the meeting point of the weight halves.

- (13) Line up two of the small holes in the weight (190) or retainer plate (200) with the assembly guides TE319.

CAUTION: THE WEIGHT OR RETAINER PLATE MUST REST AROUND THE LARGE DIAMETER OF THE THREADED ROD OF THE ASSEMBLING TOOL TE9.

- (14) Slide the weight (190) or retainer plate (200) on the assembly guides TE319 until the weight or retainer plate rests around the large diameter of the threaded rod TE287 and against the washer (250) at the bottom of the spring retainer (220). Refer to Figure 7-33.
- (15) Line up the two small holes in the drilled washer of the assembling tool TE9 with the assembly guides TE319. Refer to Figure 7-34.



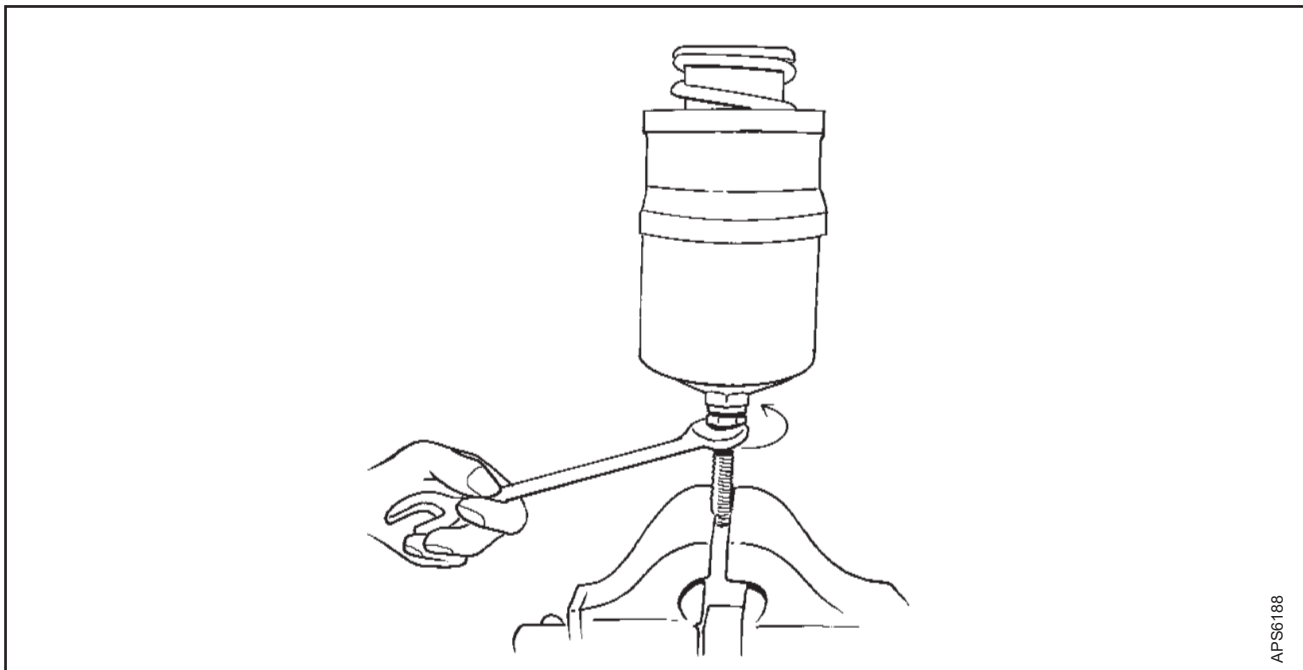
Placing the Drilled Washer in the Cylinder
Figure 7-34

- (16) Slide the drilled washer of the assembling tool TE9 on the assembly guides TE319 and over the end of the set screw in the end of the assembling tool.
- (17) Install the two hex nuts on the set screw of the assembling tool TE9 and tighten. Refer to Figure 7-34.

WARNING: WHEN COMPRESSED, THE FEATHERING SPRING ASSEMBLY IS LOADED TO APPROXIMATELY 750 POUNDS (340 KG) FORCE. ENSURE THE SAFETY OF PERSONNEL IN THE VICINITY DURING ASSEMBLY PROCEDURES.

CAUTION: DO NOT EXCEED 10 FT-LB (13 N•M) OF TORQUE WHEN COMPRESSING THE SPRING.

- (18) Turn the hex nut with the appropriate wrench to fully compress the spring (230). Refer to Figure 7-35.



**Compressing the Feathering Spring Using Assembling Tool TE9
Figure 7-35**

CAUTION: DO NOT DAMAGE THE CYLINDER THREADS WHEN INSTALLING THE CYLINDER CAP TE380.

(19) Apply lubricant CM12 to the threads of the cylinder cap TE380.

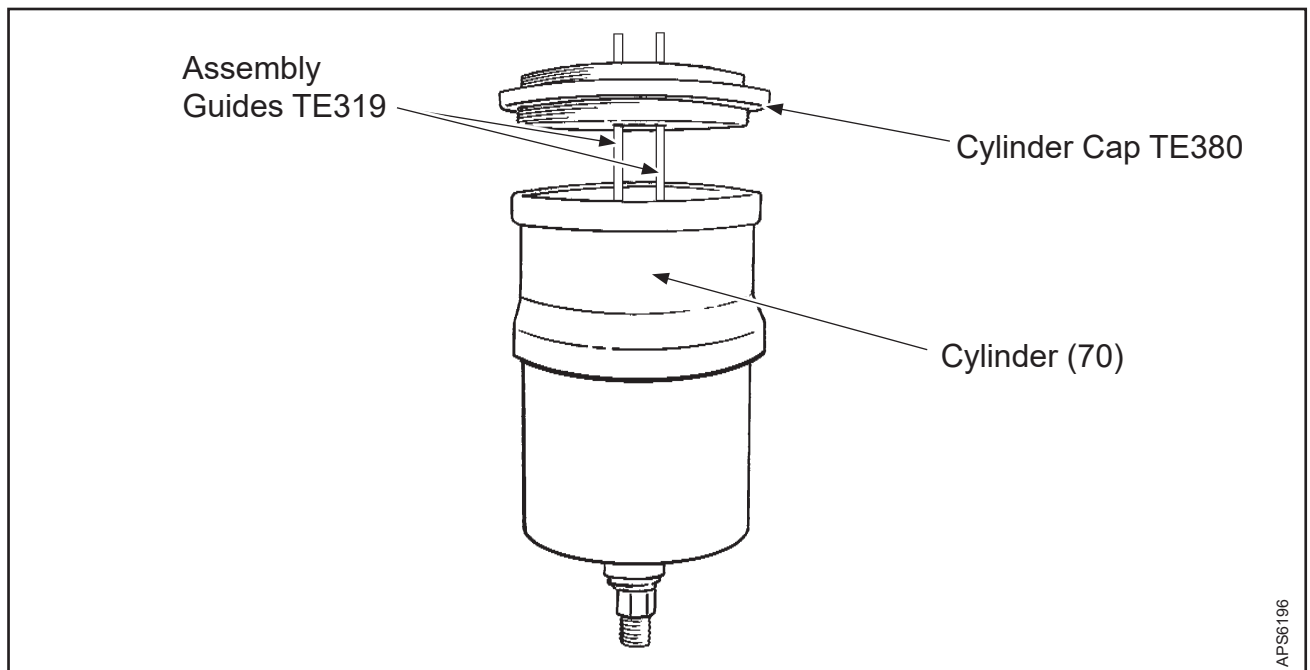
(20) Install the cylinder cap TE380 until snug. Refer to Figure 7-36.

NOTE: The cylinder cap is designed to accommodate two different size cylinders. Make sure the cylinder cap threads are aligned with the cylinder threads.

CAUTION: DO NOT APPLY SEALANT TO THE SCREW SHOULDER.

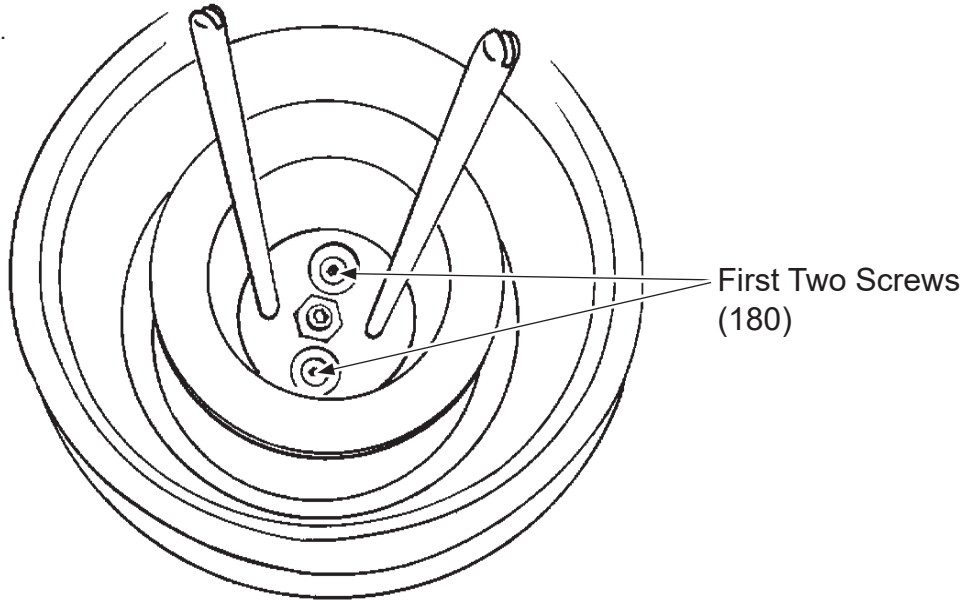
(21) Apply one drop of sealant CM21 to the threads of each of the first two screws (180).

NOTE: Excessive sealant may inhibit weight movement.



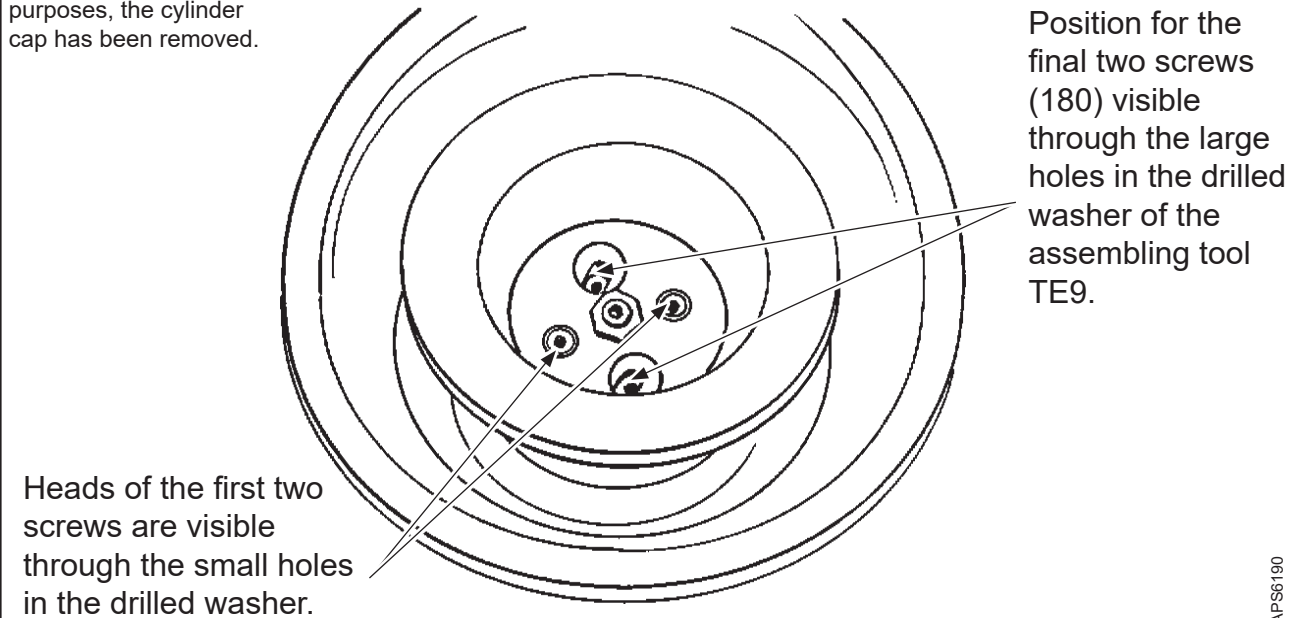
Installing the Cylinder Cap
Figure 7-36

NOTE: For illustration purposes, the cylinder cap has been removed.



Positioning the Drilled Washer for Installation of the First Two Screws
Figure 7-37

NOTE: For illustration purposes, the cylinder cap has been removed.



Positioning the Drilled Washer for Installation of the Final Two Screws
Figure 7-38

- (22) Install a screw (180) in each of the threaded holes that can be seen through the large holes in the drilled washer of the assembling tool TE9. Refer to Figure 7-37.
- (23) Torque the screws (180) in accordance with Table 8-1.
- (24) Remove the assembly guides TE319.
- (25) Loosen the hex nut until the drilled washer can be rotated past the heads of the installed screws (180).
- (26) Turn the drilled washer until the threaded holes for the remaining two screws (180) can be seen through the large holes in the drilled washer. Refer to Figure 7-38.
- (27) Tighten the hex nut to draw the drilled washer tight against the heads of the two screws (180) already installed.

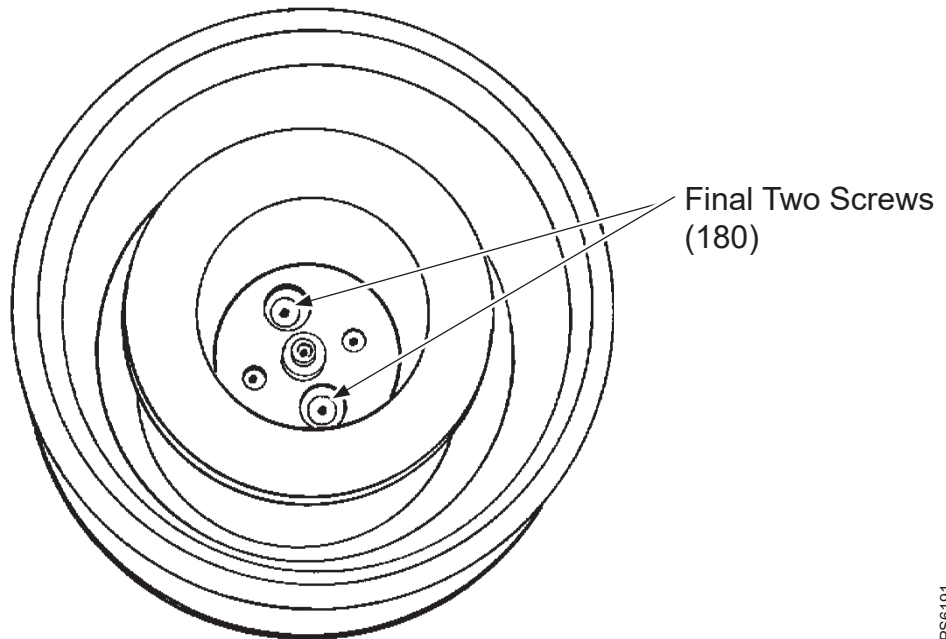
CAUTION: DO NOT APPLY SEALANT TO THE SCREW SHOULDER.

- (28) Apply one drop of sealant CM21 to the threads of the final two screws (180).

NOTE: Excessive sealant may inhibit weight movement.

- (29) Install a screw (180) in each of the threaded holes that can be seen through the large holes in the drilled washer. Refer to Figure 7-39.

NOTE: For illustration purposes, the cylinder cap has been removed.



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**Installing the Final Two Screws
Figure 7-39**

- (30) Torque the screws (180) in accordance with Table 8-1.
- (31) Loosen the hex nut until the drilled washer is clear of the cylinder (70) and the cylinder cap TE380.
- (32) Remove the two hex nuts and the drilled washer of the assembling tool TE9.

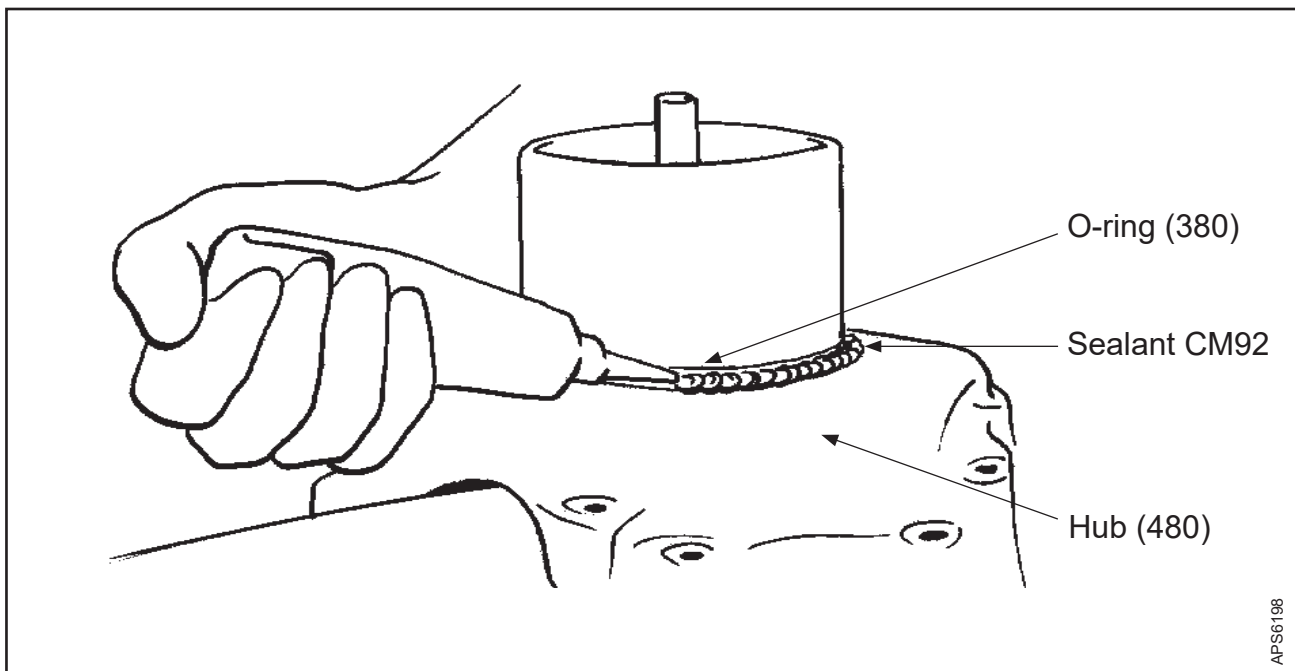
WARNING: USE CARE WHEN HANDLING CYLINDERS WITH THE SPRING ASSEMBLIES INSTALLED.

- (33) Remove the cylinder (70) from the assembling tool TE9.
- (34) For propellers using a stop weight - Operate the weight (190) with a screwdriver to check for full freedom of movement.

CAUTION: DO NOT DAMAGE THE CYLINDER THREADS WHEN REMOVING THE CYLINDER CAP TE380.

- (35) Remove the cylinder cap TE380.

NOTE: If possible, leave the cylinder cap in place on the cylinder until just before installation as an additional safety precaution.



Applying a Bead of Sealant Where the Cylinder and Hub Meet
Figure 7-40

H. Piston and Cylinder Installation for all except ()HC-()()Y()-2()H

- (1) Install a new cylinder O-ring (380) at the base of the cylinder attachment threads of the cylinder-side hub half.
- (2) Install a new O-ring (360) in the groove in the small opening of the piston (350).
- (3) Install the piston (350) on the pitch change rod (370) with the small opening toward the hub.
- (4) Install the piston nut (340) on the pitch change rod (370).
- (5) Torque the piston nut (340) in accordance with Table 8-1.
- (6) Stack washers (330) (same number as were removed during disassembly) on top of the pitch change rod (370).

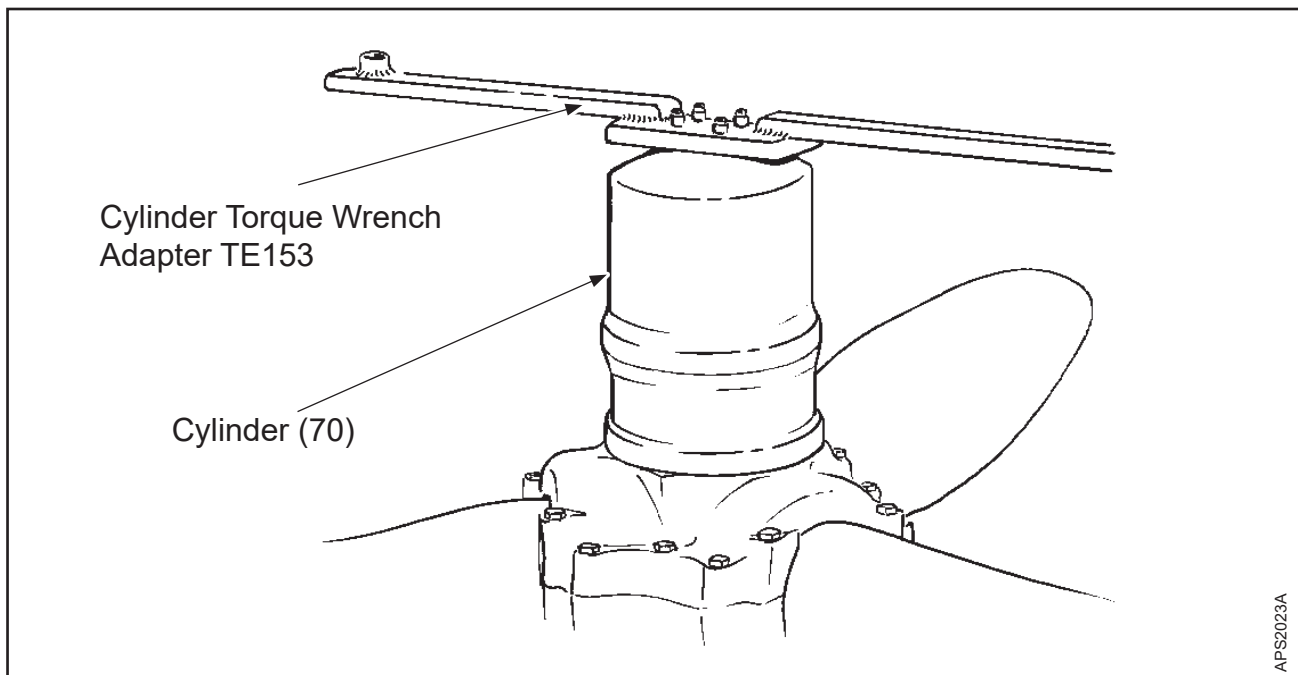
NOTE: The number of washers determines the high pitch (start lock) blade angle.

- (7) Install the high pitch stop sleeve (320) over the pitch change rod (370) and washers (330).
- (8) Lubricate the outside of the piston (350) using lubricant CM12.
- (9) Pour 2.25 fluid ounces (63.93 ml) of hydraulic oil CM157 into the piston (350).

NOTE: When assembling a propeller that will be disassembled for shipping, it is not necessary to apply CM92 around the shoulder of the cylinder half of the hub next to the O-ring.

- (10) Apply a bead of sealant CM92 on the cylinder O-ring (380) where the cylinder (70) and the hub (480) will meet at installation. Refer to Figure 7-40.

- (11) Apply lubricant CM12 to the cylinder (70) threads.
- (12) Attach the cylinder torque wrench adapter TE153 to the cylinder (70). Refer to Figure 7-41.
- (13) For propellers with cylinder spring assemblies only, put the spring guide (170) in the piston with the raised portion of the spring guide away from the hub.
- (14) Put the cylinder (70) over the piston (350).
- (15) Insert the cylinder installation rod TE384 into the cylinder and press down to push the high pitch stops apart, allowing the cylinder to drop into the position to be started on the hub threads.
 - (a) The cylinder installation rod TE384 is not required for propellers using the retainer plate (200), i.e., dash five (-5) propellers.



Installing the Cylinder with Cylinder Torque Wrench Adapter TE153
Figure 7-41

CAUTION: DO NOT DAMAGE THE THREADS WHEN INSTALLING THE CYLINDER.

(16) Start the cylinder (70) on the hub threads by hand.

NOTE: Make sure the cylinder threads are aligned with the hub threads.

(17) Torque the cylinder (70) according to Table 8-1.

(18) Remove the cylinder installation rod TE384, as applicable.

(19) Remove the cylinder torque wrench adapter TE153 from the cylinder (70).

I. Piston and Cylinder Installation for ()HC-()()Y()-2()H Propellers Only

- (1) Install a new cylinder O-ring (380) at the base of the cylinder attachment threads of the cylinder-side hub half.
- (2) Install a new O-ring (360) in the groove in the small opening of the piston (350).
- (3) Install the piston (350) on the pitch change rod (370) with the small opening toward the hub.
- (4) Install the piston nut (340) on the pitch change rod (370).
- (5) Torque the piston nut (340) in accordance with Table 8-1.
- (7) Using lubricant CM12, lubricate the outside of the piston (350).
- (8) Pour 2.25 fluid ounces (63.93 ml) of hydraulic oil CM157 into the piston (350).

NOTE: When assembling a propeller that will be disassembled for shipping, it is not necessary to apply CM92 around the shoulder of the cylinder half of the hub next to the O-ring.

- (9) Apply a bead of sealant CM92 on the cylinder O-ring (380) where the cylinder (70) and the hub (480) will meet at installation. Refer to Figure 7-40.
- (10) Stack washers (330) on top of the pitch change rod (370).

NOTE: The number of washers determines the high pitch (start lock) blade angle.

- (11) Put the high pitch stop sleeve (320) into the top of the cylinder (70) and situated so the lip of the stop sleeve bottoms out on the start lock housing (240).

NOTE: Spread apart the high pitch stops to permit the stop sleeve to bottom out on the start lock housing.

- (12) Apply lubricant CM12 to the cylinder (70) threads.
- (13) Attach the cylinder torque wrench adapter TE153 to the cylinder (70). Refer to Figure 7-41.

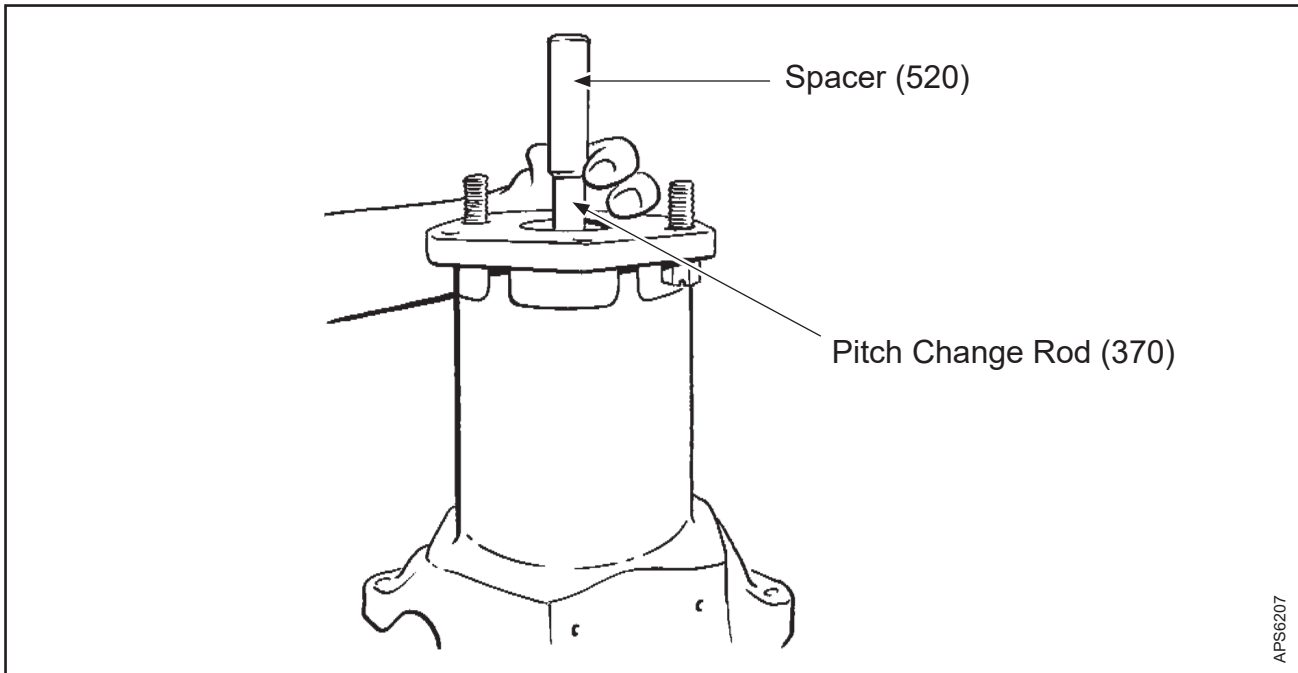
CAUTION: USE CARE NOT TO KNOCK THE WASHERS OFF THE PITCH CHANGE ROD WHEN PUTTING THE CYLINDER OVER THE PISTON.

- (14) Put the cylinder (70) over the piston (350).

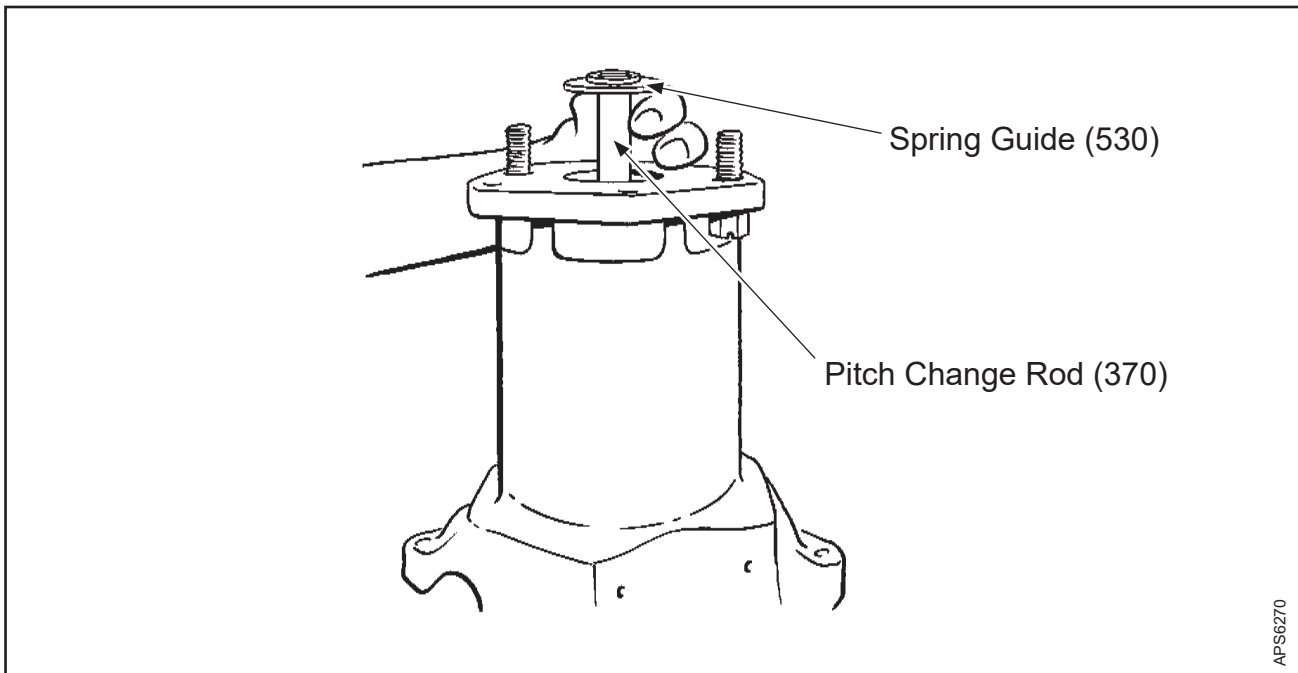
CAUTION: DO NOT DAMAGE THE THREADS WHEN INSTALLING THE CYLINDER.

- (15) While making sure that the cylinder threads are aligned with the hub threads, turn the cylinder (70) on the hub threads by hand.
- (16) Torque the cylinder (70) in accordance with Table 8-1.

- (17) Remove the cylinder torque wrench adapter TE153 from the cylinder (70).
- (18) Install the T-handle wrench TE381 and a washer (290) through the top of the cylinder (70) into the pitch change rod (370).
 - (a) If the T-handle wrench is not threading into the pitch change rod, slowly apply air pressure to the propeller until the T-handle wrench comes into contact with the pitch change rod and begins to move.
 - (b) When the T-handle wrench has moved, stop applying air pressure and begin threading the wrench into the pitch change rod.



Installing the Spacer
Figure 7-42



Installing the Spring Guide
Figure 7-43

J. Hub Spring Installation

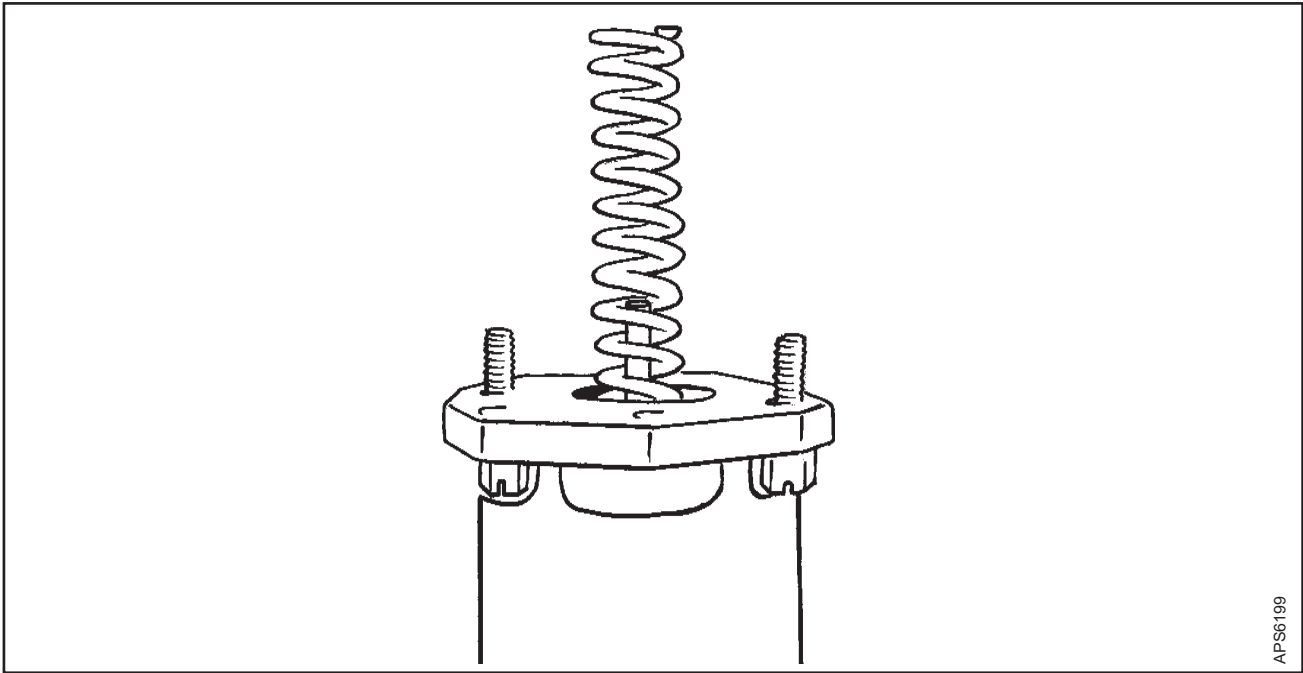
- (1) Move the propeller to feather position.

WARNING: MAKE SURE SLINGS AND SUPPORTS ARE RATED UP TO 800 POUNDS (363KG) TO PREVENT PERSONAL INJURY.

- (2) Using a sling, remove the propeller from the rotatable fixture on the assembly table.
- (3) Turn the propeller over and place on a support so the propeller mounting flange is accessible.

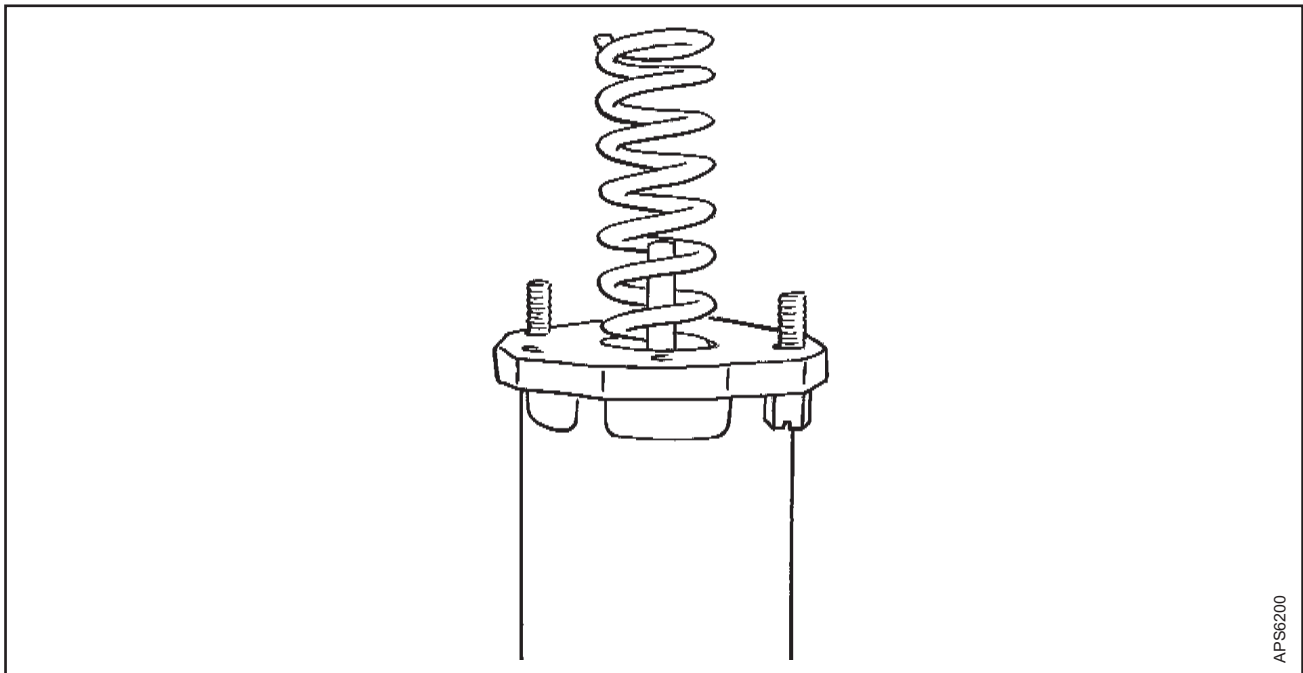
NOTE: A sturdy barrel or drum with the rim well padded, may be used as a support.

- (4) For A-2273 hub spring assembly only - slide the spacer (520) on the pitch change rod (370). Refer to Figure 7-42.
- (5) For A-1586 hub spring assembly only - slide the spring guide (530), with the raised side up, on the pitch change rod (370) until the spring guide contacts the hub. Refer to Figure 7-43.



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Installing the Small Diameter Feathering Spring on the Pitch Change Rod
Figure 7-44



APS6200

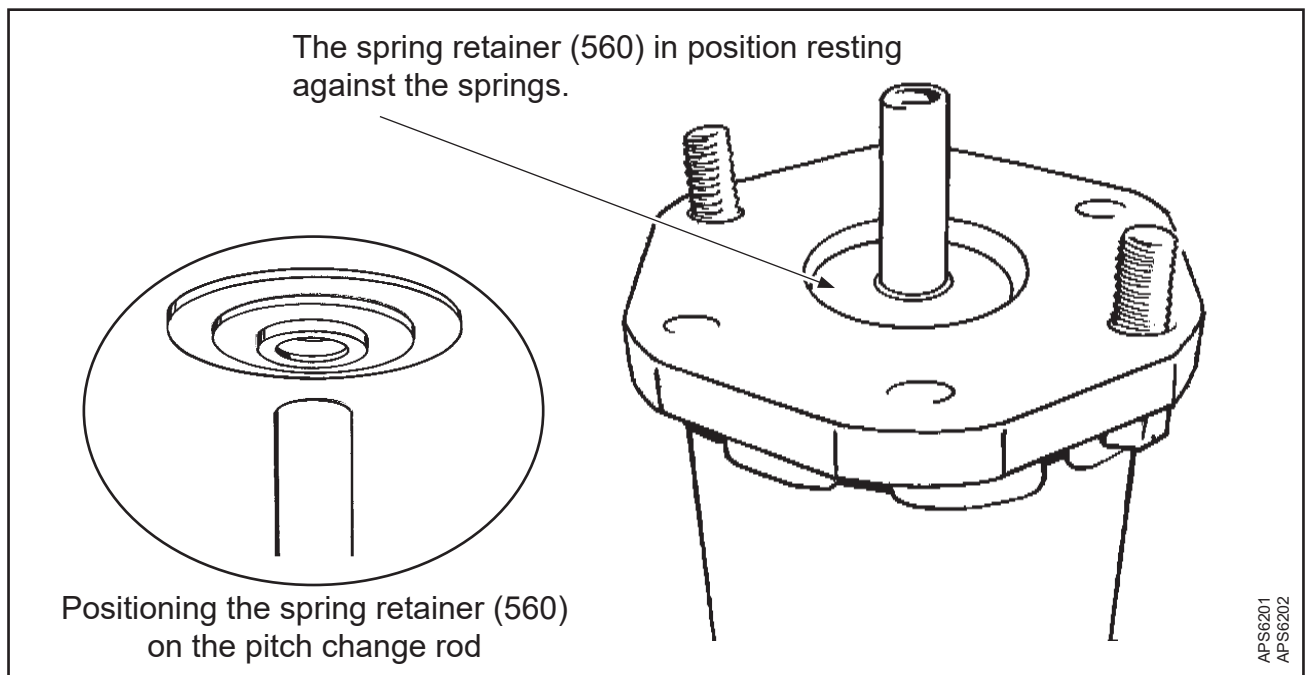
Installing the Large Diameter Feathering Spring on the Pitch Change Rod
Figure 7-45

- (6) Install the small diameter feathering spring (550) on the pitch change rod (370). Refer to Figure 7-44.
- (7) Put the large diameter feathering spring (540) on the pitch change rod (370) over the small diameter feathering spring (530). Refer to Figure 7-44 and Figure 7-45.

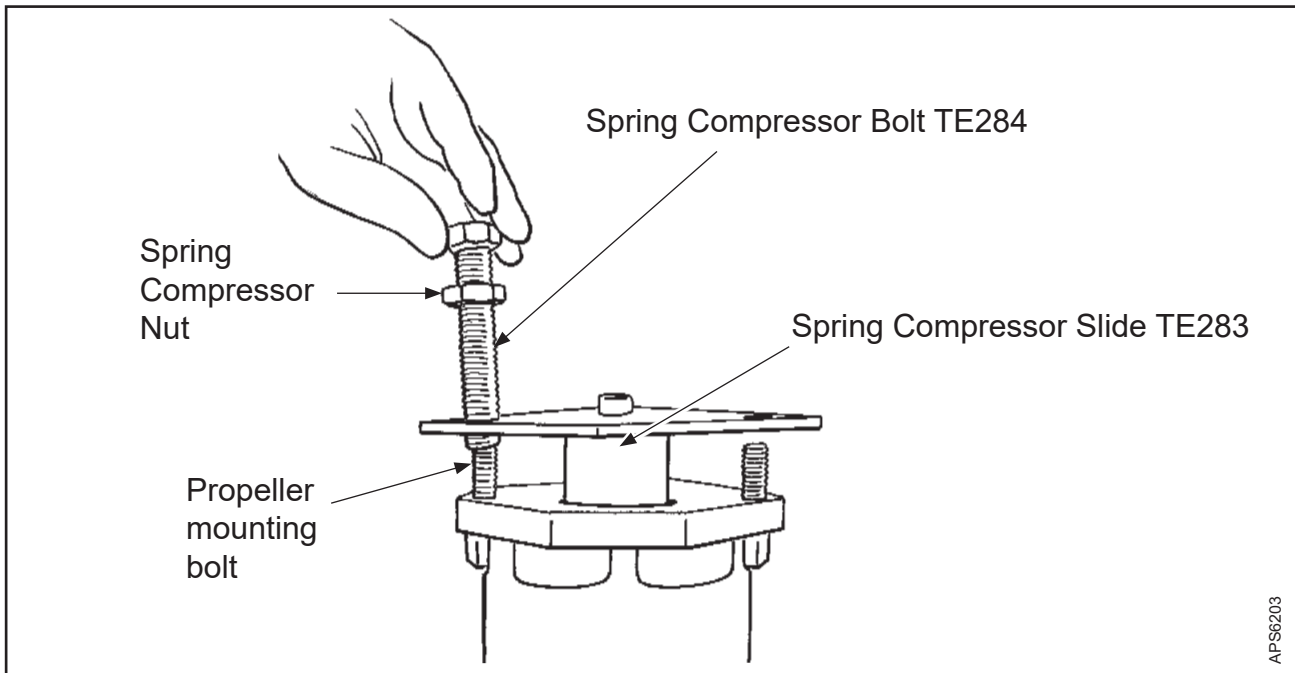
NOTE: For the A-1586 hub spring assembly only, make sure the large diameter feathering spring (550) is positioned around the raised surface of the spring guide (530).

CAUTION: THE RAISED SIDE OF THE SPRING RETAINER IS TOWARD THE SPRINGS.

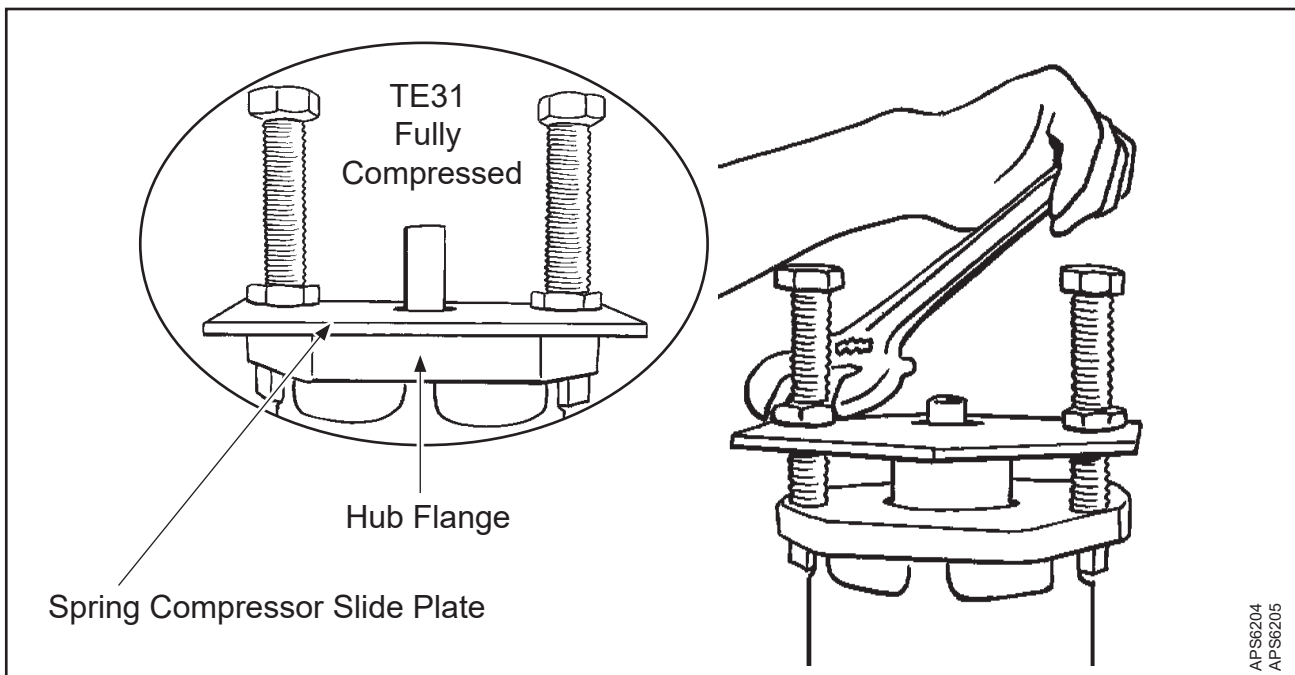
- (8) With the raised side toward the springs, install the spring retainer (560) on the pitch change rod (370) (Figure 7-46).
- (9) Slide the spring retainer (560) on the pitch change rod (370) until the retainer is resting against the springs (Figure 7-46).



Installing the Spring Retainer on the Pitch Change Rod
Figure 7-46



Installing the Spring Compressor Assembly TE31
Figure 7-47



Compressing the Feathering Springs with the Spring Compressor Assembly TE31
Figure 7-48

CAUTION: SPRING COMPRESSOR ASSEMBLY TE31 IS DESIGNED FOR USE WITH "R" OR "K" FLANGE PROPELLERS AND WILL NOT ENGAGE THE SMALLER DIAMETER "L" FLANGE MOUNTING STUDS.

NOTE: A new bolt with a smaller I.D. thread may be fabricated to take the place of the spring compressor bolt TE284, or an "R" or "K" flange style stud may be used for assembly purposes only.

(10) Install the spring compressor assembly TE31 on the propeller mounting flange. Refer to Figure 7-47.

NOTE: The spring compressor assembly TE31 has six holes to clear the studs already installed.

(a) Center the spring compressor slide TE283 on the spring retainer (560) in the propeller hub bore and align the spring compressor bolts TE284 with the holes in the hub mounting flange.

NOTE: The spring may be compressed using only two of the three spring compressor bolts TE284 supplied, positioned approximately 180 degrees apart.

(b) Install the nuts on the spring compressor bolts TE284

NOTE: The nuts should be positioned close to the heads of the spring compressor bolts TE284.

(c) Turn the propeller mounting bolts into the ends of the spring compressor bolts TE284 until tight. Refer to Figure 7-48.

NOTE: The spring compressor bolts TE284 have both ID and OD threads.

WARNING: WHEN COMPRESSED, THE FEATHERING SPRING ASSEMBLY IS LOADED TO APPROXIMATELY 1000 POUNDS (454 KG) FORCE. ENSURE THE SAFETY OF PERSONNEL IN THE VICINITY DURING ASSEMBLY PROCEDURES.

CAUTION: TIGHTEN THE SPRING COMPRESSOR NUTS EVENLY TO PREVENT BINDING.

(11) Compress the springs (540, 550) by evenly tightening the spring compressor nuts. Refer to Figure 7-48.

NOTE: Tightening the spring compressor nuts will move the spring retainer (560) beyond the groove in the pitch change rod (370) and allow the installation of the keeper (570).

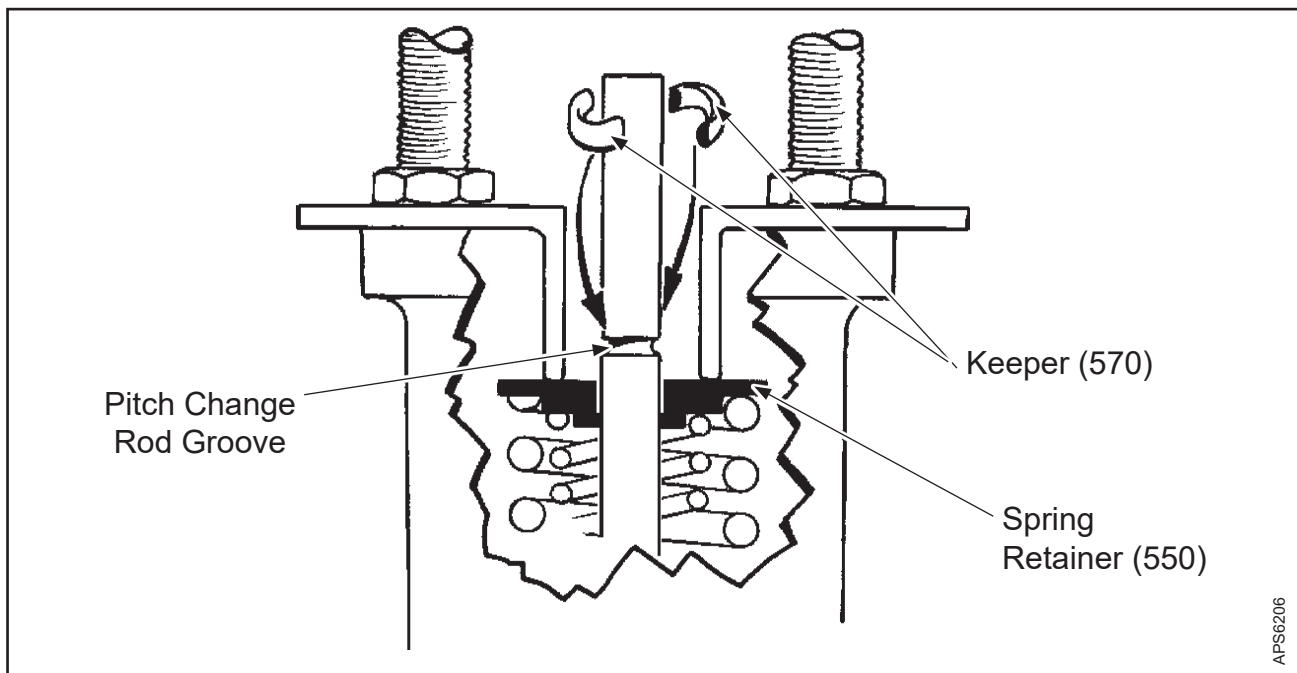
- (12) Cut the keeper (570) at the notches and grind off the resulting burrs.
- (13) Place the keeper (570) halves in the groove in the pitch change rod (370).
Refer to Figure 7-49.

NOTE: Using a small amount of grease will keep the keeper halves in place until the spring is decompressed.

CAUTION: MAKE SURE THE KEEPER DOES NOT DISLODGE FROM THE PITCH CHANGE ROD GROOVE DURING SPRING DECOMPRESSION.

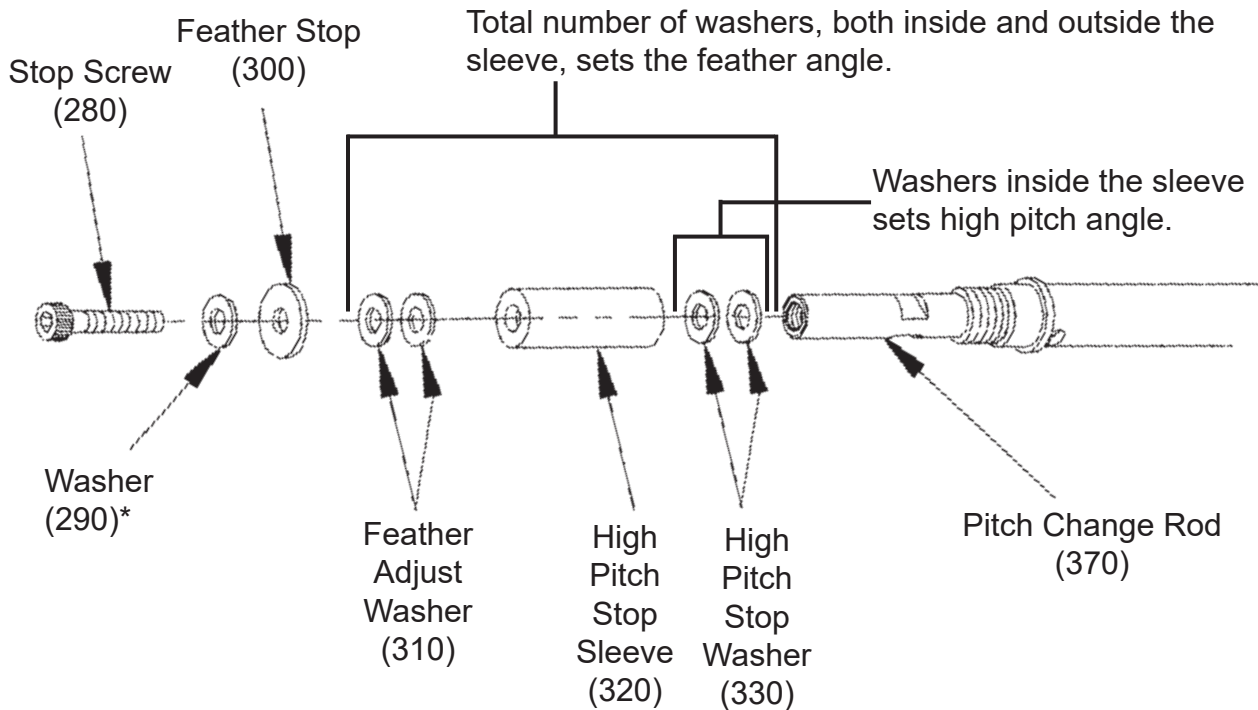
- (14) Decompress the springs by evenly loosening the spring compressor nuts.
- (15) Remove the spring compressor assembly TE31 from the propeller mounting bolts.
- (16) Install the shaft plug (650) into the engine-side hub half.
 - (a) Install a new shaft plug OD O-ring (670) on the shaft plug.
 - (b) Install a new shaft plug ID O-ring (680) in the shaft plug.
 - (c) Install a new shaft plug (660) in the engine-side hub half center bore.

NOTE: When installing, hold the shaft plug by the removal feature.
Refer to Figure 5-17.



Installing the Keeper on the Pitch Change Rod
Figure 7-49

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*NOTE: In some propellers, the proper low pitch blade angle cannot be set even though the high pitch stop sleeve and low pitch stop are correctly positioned. This is due to the threaded low pitch stop bottoming in the cylinder. In this situation, add washer(s) (290) as required to reposition the low pitch stop between bottoming in the cylinder and a thread minimum engagement when correct low pitch blade angle is obtained.

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Parts for Adjusting the Pitch Angle for All Except ()HC-()()Y()-2()H
Figure 7-50

K. Setting the Blade Angles for All Except ()HC-()Y()-2()H - Refer to Figure 7-50

NOTE 1: Grease may be used between the washers (310) and the feathering stop (300) for ease of removal if blade angle adjustment is required. Washers that fall into the propeller may be retrieved with a magnet.

NOTE 2: When setting feather or high pitch angles, the approximate degree of movement achieved per washer is:

B-3851-0532 or A-2435-1 washer equals 1.5 degree

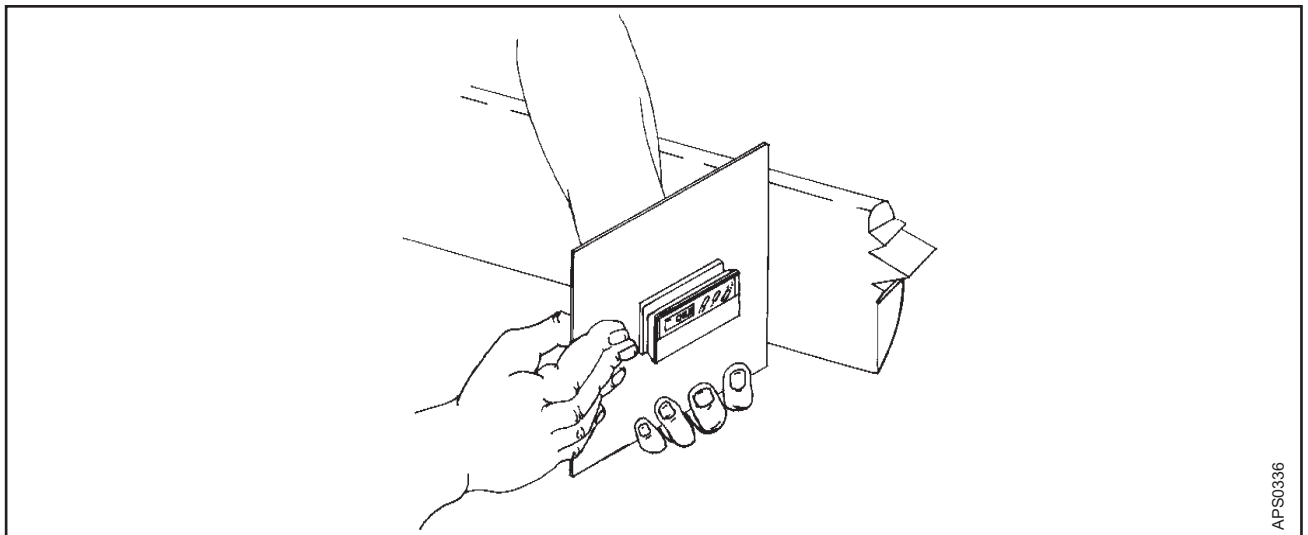
B-3851-0563 or A-2435 washer equals 3 degrees

- (1) Install washers (310) and the feathering stop (300) on top of the high pitch stop sleeve (320) using feathering tool TE383.

NOTE: The total number of washers, both inside and outside the sleeve, sets the feather angle.

- (2) Tighten the feathering tool TE383 into the pitch change rod (370) until snug.
- (3) Check the feather blade angle at the reference blade radius previously marked.
Refer to Figure 7-51.
 - (a) If feather angle adjustment is required, loosen the feathering tool TE383 and remove the feather stop (300) and washer(s) (310) by skewing the tool sideways.
 - (b) Remove or add washer(s) (310) as needed.

NOTE: Add washers under the feather stop (300) to increase the feather angle. Remove washers from under the feather stop to decrease the feather angle.



**Checking the Feather Angle With a Hand Held Protractor
Figure 7-51**

- (c) Install the washer(s) (310) and feather stop (300) with the feathering tool TE383.
 - (d) Check the feather blade angle at the reference blade radius previously marked.
 - (e) Do steps (3) through (4)(d) of this section until feather angle is correct.
- (4) When the feather angle is correct, apply air pressure to move the propeller into high pitch position, with the feathering tool TE 383 still installed.

NOTE: The start lock pins (140) or the weight (190) will click into place when the propeller is moved to high pitch.

- (5) Release the air pressure to allow the high pitch stop pins (140) or the weight (190) to hold the propeller at high pitch.
- (6) Check the high pitch blade angles.

NOTE: Refer to the Type Certificate Data Sheet or the Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59) for the propeller high pitch angle.

CAUTION: IF HIGH PITCH REQUIRES ADJUSTMENT, CONTROL THE BLADE ANGLE BY ADDING AIR PRESSURE TO THE PROPELLER TO MOVE AND HOLD THE PROPELLER OFF THE HIGH PITCH STOP LATCHES.

- (a) If high pitch angle adjustment is required, loosen the feathering tool TE383 and remove the feather stop (300), washer(s) (310), high pitch stop sleeve (320), and washers (330) from the pitch change rod (370) by skewing the tool sideways.

CAUTION: AFTER THE FEATHER ANGLE HAS BEEN SET, THE TOTAL NUMBER OF WASHERS (310, 330) MUST BE MAINTAINED. CHANGING THE POSITIONS OF THE WASHERS TO ACHIEVE HIGH PITCH WILL NOT EFFECT THE FEATHER ANGLE. ADDING OR REMOVING ANY WASHERS (310, 330) THAT HAVE ALREADY BEEN INSTALLED WILL CHANGE THE FEATHER AND HIGH PITCH ANGLES.

- (b) To decrease high pitch angle, move high pitch adjust washer(s) (330) from between the high pitch stop sleeve (320) and the pitch change rod (370) to between the high pitch stop sleeve (320) and the feather stop (300).
- (c) To increase high pitch angle, move feather adjust washer(s) (310) from between the high pitch stop sleeve (320) and the feather stop (300) to between the high pitch stop sleeve (320) and the pitch change rod (370).

(d) Using the feathering tool TE383, reinstall the parts stack.

NOTE: The parts stack includes: washers (330), high pitch stop sleeve (320), washers (310), feather stop (300), and stop screw (280).

(e) Release the air pressure to allow the high pitch stop pins (140) or the weight (190) to hold the propeller at high pitch.

(f) Check the high pitch blade angles.

(g) Repeat step 4.I.(6) until angles are correct.

1 If the high pitch blade angles cannot be achieved, there may be interference between the hub and the fork. The fork can be modified in accordance with the Repair chapter in this manual.

CAUTION: TO AVOID DAMAGE TO THE PROPELLER COMPONENTS, BE SURE THE AIR PRESSURE IS APPLIED BEFORE REMOVING THE FEATHERING TOOL TE383.

(7) When angles are correct, remove the feathering tool TE383.

NOTE: When removing the feathering tool TE383, make sure the washers (310) and the feathering stop (300) stay in place on top of the high pitch sleeve (320).

(8) Using a magnet, remove only the feathering stop (300) from the washer stack on top of the high pitch sleeve (320).

(9) Install the feathering stop (300) on the stop screw (280).

NOTE: The self-locking patch on the threads of the stop screw makes it difficult to put the feathering stop on the stop screw.

(10) Apply one drop of thread locking compound CM74 to the threaded end of the stop screw (280).

(11) Using the T-handle wrench TE381, install the feathering stop (300) and the stop screw (280) through the top of the cylinder (70) into the pitch change rod (370), making sure that the washers (310) are still in position on top of the pitch change rod (370).

NOTE: A small amount of lubricant CM12 on the head of the screw will hold the screw to the T-handle wrench long enough to guide the screw and the feathering stop into the threaded hole in the pitch change rod.

(12) Tighten the stop screw (280) with the T-handle wrench TE381. Maintain a minimum screw engagement of seven threads.

(13) Release the air pressure to allow the high pitch stop pins (140) or the weight (190) to hold the propeller at high pitch.

(14) Re-check the high pitch blade angles.

CAUTION: IF HIGH PITCH REQUIRES ADJUSTMENT, CONTROL THE BLADE ANGLE BY ADDING AIR PRESSURE TO THE PROPELLER TO MOVE AND HOLD THE PROPELLER OFF THE HIGH PITCH STOP LATCHES.

(a) If high pitch angle adjustment is required, remove the stop screw (280), feather stop (300), feather adjust washer(s) (310), high pitch stop sleeve (320), and high pitch adjust washers (330) from the pitch change rod (370).

CAUTION: AFTER THE FEATHER ANGLE HAS BEEN SET, THE TOTAL NUMBER OF WASHERS (310, 330) MUST BE MAINTAINED. CHANGING THE POSITIONS OF THE WASHERS TO ACHIEVE HIGH PITCH WILL NOT EFFECT THE FEATHER ANGLE. ADDING OR REMOVING ANY WASHERS (310, 330) THAT HAVE ALREADY BEEN INSTALLED WILL CHANGE THE FEATHER AND HIGH PITCH ANGLES.

(b) To decrease high pitch angle, move high pitch adjust washer(s) (330) from between the high pitch stop sleeve (320) and the pitch change rod (370) to between the high pitch stop sleeve (320) and the feather stop (300).

(c) To increase high pitch angle, move feather adjust washer(s) (310) from between the high pitch stop sleeve (320) and the feather stop (300) to between the high pitch stop sleeve (320) and the pitch change rod (370).

(d) Using the T-handle wrench TE381, reinstall the parts stack.

NOTE: The parts stack includes: high pitch adjust washer(s) (330), high pitch stop sleeve (320), feather adjust washers (310), feather stop (300), and stop screw (280).

(15) Tighten the stop screw (280) with the T-handle wrench TE381. Maintain a minimum screw engagement of seven threads.

(16) When the high pitch angle is correct, install a new low stop O-ring (60) in the top of the cylinder (70).

CAUTION: THE LOW PITCH STOP MUST BE TURNED A MINIMUM OF FIVE THREADS INTO THE CYLINDER.

(17) Install the low pitch stop (50) in the top of the cylinder (70).

NOTE: If necessary, refer to Figure 5-1, Low Stop Dimensions in the Check chapter of this manual to determine the appropriate low stop for the blade angle required.

(18) Check the low pitch stop angle.

(a) Rotate the blades to the low pitch position and set the propeller pitch in accordance with the aircraft Type Certificate Data Sheet and/or the Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).

(b) Adjust the low pitch angle with the low pitch stop (50).

NOTE: If adjusting the low pitch stop does not change the blade angle, make sure that the slots in the preload plate are not interfering with the pitch angle.

1 To increase pitch, turn the low pitch stop (50) clockwise.

2 To decrease pitch, turn the low pitch stop (50) counterclockwise.

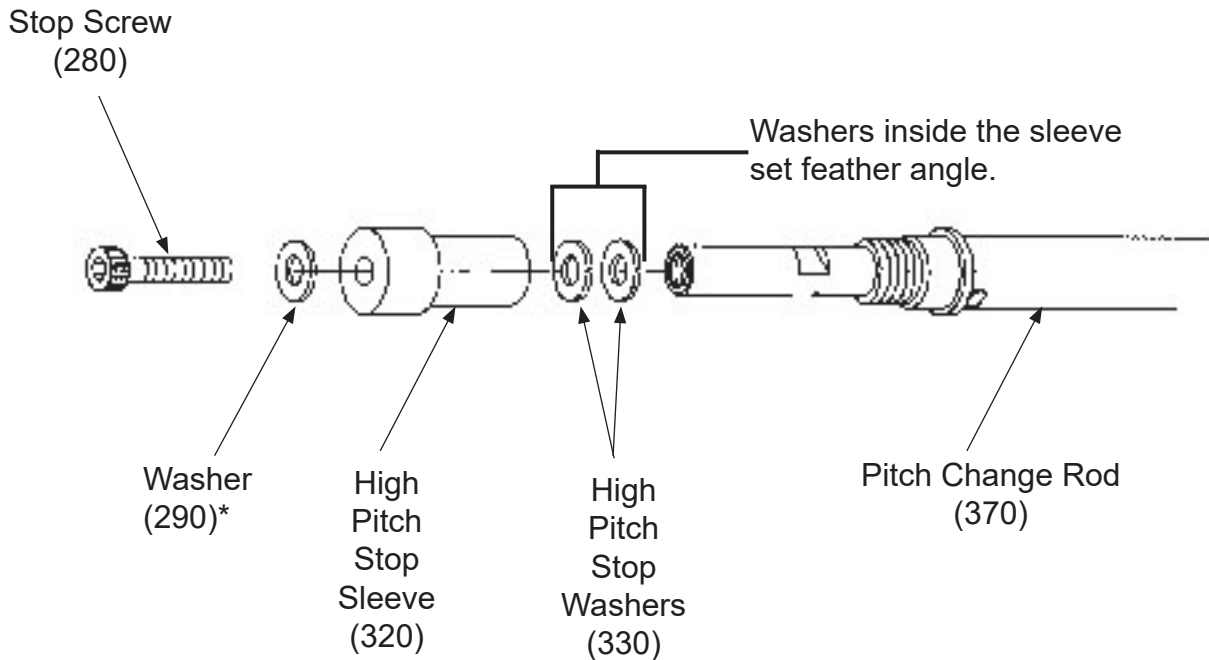
CAUTION 1: BE SURE AIR PRESSURE IS APPLIED BEFORE REMOVING THE STOP SCREW (280).

CAUTION 2: ADD WASHERS BETWEEN THE STOP SCREW (280) AND THE FEATHER STOP (300) ONLY.

3 If low pitch cannot be obtained because the low pitch stop (50) bottoms out or exceeds the five thread engagement minimum, washers (290) may be added or removed between the stop screw (280) and the feather stop (300) only.

NOTE: This will not change the feather (high pitch) blade angle.

a If the low pitch blade angles cannot be achieved, there may be interference between the hub and the fork. The fork can be modified in accordance with the Repair chapter in this manual.



*NOTE: In some propellers, even though the high pitch stop sleeve and low pitch stop are correctly positioned, the proper low pitch blade angle cannot be set. This is because of the threaded low pitch stop bottoming in the cylinder. In this situation, add washer(s) (290) as required to reposition the low pitch stop between bottoming in the cylinder and a thread minimum engagement when correct low pitch blade angle is obtained.

TPI-JM-000006

Parts for Adjusting the Pitch Angle for ()HC-()Y()-2()H Only
Figure 7-52

- L. Setting the Blade Angles for ()HC-()()Y()-2()H only - Refer to Figure 7-52

NOTE 1: Washers that fall into the propeller may be retrieved with a magnet.

NOTE 2: When setting the feather angle, the approximate degree of movement achieved for each washer is:

B-3851-0532 or A-2435-1 washer equals 1.5 degree|

B-3851-0563 or A-2435 washer equals 3 degrees

- (1) Check the feather blade angle at the reference blade radius previously marked. Refer to Figure 7-51.

- (2) Apply air pressure to move the propeller into high pitch position.

NOTE: The start lock pins (140) or the weight (190) will click into place when the propeller is moved to high pitch.

- (3) Release the air pressure to permit the start lock pins (140) or the weight (190) to hold the propeller at high pitch.

- (4) Measure the high pitch blade angles.

- (5) If feather angle adjustment is required, apply air pressure to move the propeller into high pitch position.

(a) For the feather angle, refer to the Type Certificate Data Sheet or the Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).

CAUTION: IF THE FEATHER ANGLE REQUIRES ADJUSTMENT, CONTROL THE BLADE ANGLE BY ADDING AIR PRESSURE TO THE PROPELLER TO MOVE AND HOLD THE PROPELLER OFF THE HIGH PITCH STOP LATCHES.

- (b) Remove the stop sleeve (320).

- (c) Remove or add washer(s) (330) as needed.

NOTE: Add washers under the stop sleeve (320) to increase the feather angle. Remove washers from under the stop sleeve to decrease the feather angle.

- (d) Release the air pressure to permit the start lock pins (140) or the weight (190) to hold the propeller at high pitch.

- (e) Measure the high pitch angle.

NOTE: The amount the high pitch angle increases or decreases is equivalent to the amount the feather angle increases or decreases.

- (f) Repeat steps 4.K.(4) through 4.K.(5)(e) until feather angle is correct.
- 1 If the high/feather pitch blade angles cannot be achieved, there may be interference between the hub and the fork. The fork can be modified in accordance with the Repair chapter in this manual.
- (6) Using the T-handle wrench TE381, washer (290) through the top of the cylinder (70).
- (7) Apply one drop of thread locking compound CM74 to the threaded end of the stop screw (280).
- (8) Using the T-handle wrench TE381, install the stop screw (280) and washer (290) through the top of the cylinder (70) into the pitch change rod (370).
- NOTE:** A small amount of lubricant CM12 on the head of the screw will hold the screw to the T-handle wrench long enough to guide the screw into the threaded hole in the pitch change rod.
- (9) Tighten the stop screw (280) with the T-handle wrench TE381. Maintain a minimum screw engagement of seven threads.
- (10) Install a new low stop O-ring (60) in the top of the cylinder (70).

CAUTION: THE LOW PITCH STOP MUST BE TURNED A MINIMUM OF FIVE THREADS INTO THE CYLINDER.

- (11) Install the low pitch stop (50) in the top of the cylinder (70).
- (a) If necessary, refer to Figure 5-1, Low Stop Dimensions in the Check chapter of this manual to determine the correct low stop for the blade angle required.
- (12) Measure the low pitch stop angle.
- (a) Rotate the blades to the low pitch position and set the propeller pitch in accordance with the aircraft Type Certificate Data Sheet and/or the Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).
 - (b) Adjust the low pitch angle with the low pitch stop (50).
 - 1 If adjusting the low pitch stop does not change the blade angle, make sure that the slots in the preload plate are not interfering with the pitch angle.
 - 2 To increase pitch, turn the low pitch stop (50) clockwise.
 - 3 To decrease pitch, turn the low pitch stop (50) counterclockwise.

CAUTION 1: MAKE SURE AIR PRESSURE IS APPLIED BEFORE REMOVING THE STOP SCREW (280).

CAUTION 2: ADD WASHERS BETWEEN THE STOP SCREW (280) AND THE STOP SLEEVE (320) ONLY.

- 4 If low pitch cannot be obtained because the low pitch stop (50) bottoms out or exceeds the five thread engagement minimum, washers (290) may be added or removed between the stop screw (280) and the stop sleeve (320) only.

NOTE: This will not change the feather (high pitch) blade angle.

- a If the low pitch blade angles cannot be achieved, there may be interference between the hub and the fork. The fork can be modified in accordance with the Repair chapter in this manual.

M. Air Valve Installation

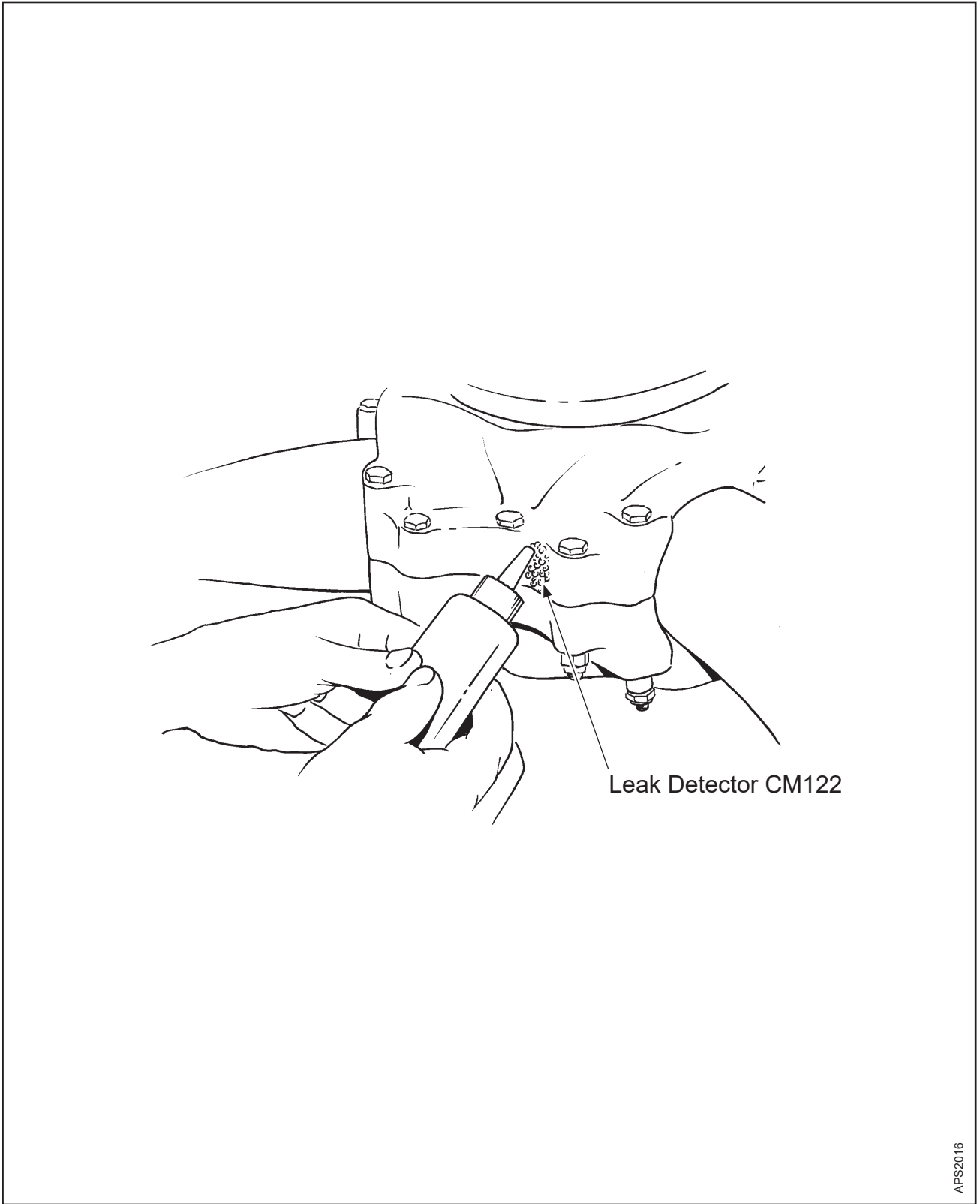
- (1) Hold the low pitch stop (50) from turning and install the check nut (30).
- (2) Torque the check nut (30) in accordance with Table 8-1.
NOTE: Be sure to prevent the low pitch stop from moving when torquing the check nut.
- (3) For propellers with one-piece domes, install the set screw (35) in one of the four cylinder wrench attachment holes in the top of the cylinder.
 - (a) The maximum height of the set screw is flush with the top of the A-2405-4 nut (30).
- (4) Safety wire the set screw (35) and the nut (30).
NOTE: When assembling a propeller that will be disassembled for shipping, it is not necessary to install safety wire to the nut (30) and safety screw (35).
- (5) Apply hydraulic thread locking compound CM134 to the threads of the air valve (40).
 - (a) To reduce the required time between pressure checks, use primer CM127 on the threads of the air valve (40) before applying hydraulic thread locking compound CM134.
- (6) Install the air valve (40) in the end of the low pitch stop (50) until tight.
NOTE: The air valve has tapered pipe threads.

N. Counterweight Installation

- (1) For the correct counterweight for the propeller, refer to the Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).
- (2) For counterweight installation on an aluminum blade, refer to Hartzell Propeller Inc. Aluminum Blade Manual 133C (61-13-33).
- (3) For counterweight installation on a composite blade, refer to Hartzell Propeller Inc. Composite Blade Maintenance Manual 135F (61-13-35).

CAUTION: ACTUATE A TWO-WAY PROPELLER SLOWLY TO MAKE SURE THAT THE COUNTERWEIGHTS CLEAR THE CYLINDER.

- (4) Actuate the propeller blades to check the clearance between the counterweights and the hub bolts.
 - (a) If necessary, loosen the nuts and turn the bolts in the hub to permit the maximum clearance between the bolts and the counterweights.
- (5) For propeller HC-C3YR-2C only - Set a gap of 0.049 ± 0.044 inch (1.24 ± 1.11 mm) between the head of the spark gap screw and the blade clamp. Refer to Figure 7-3.

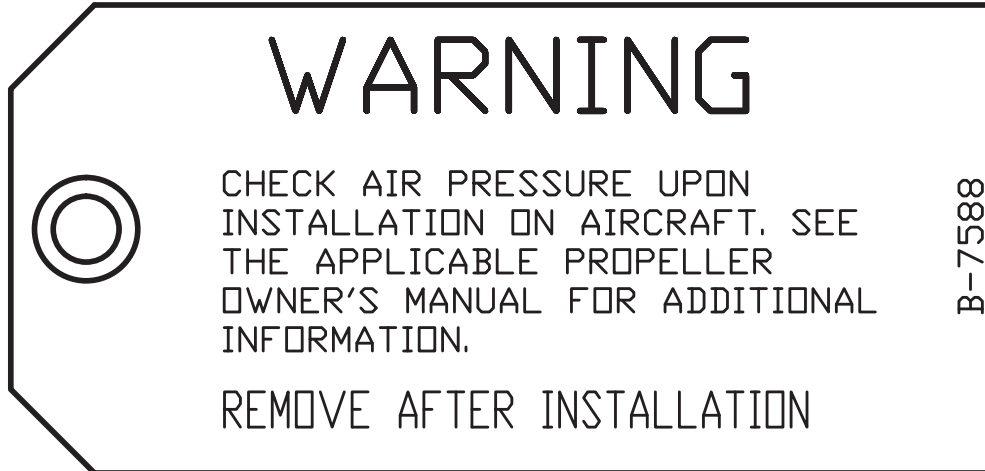


Hub Leak Check
Figure 7-53

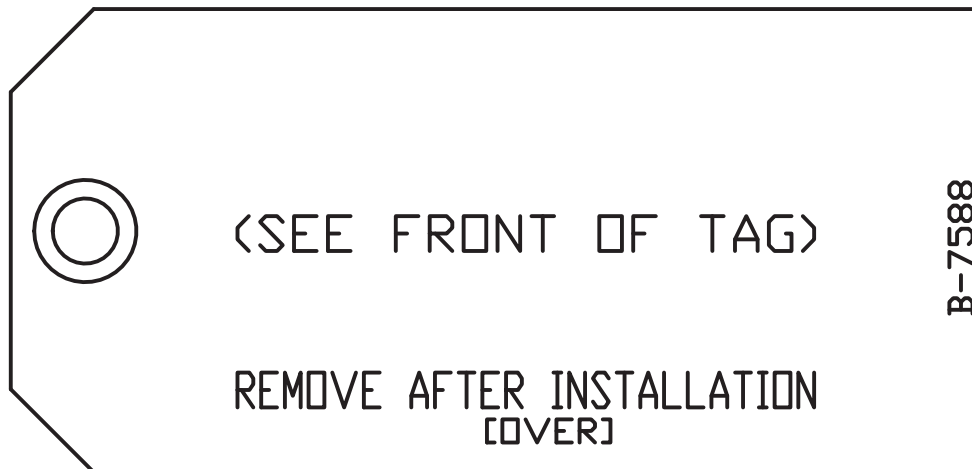
O. Leak Test (Rev. 3)

NOTE: Refer to the Illustration Parts List chapter of this manual for the location of the lubrication fittings and lubrication plugs (engine-side/cylinder-side) for the applicable propeller model.

- (1) Install the lubrication fittings (1980) in the applicable side of the hub.
 - (a) Tighten each lubrication fitting (1980) until finger-tight, then tighten one additional 360 degree turn.
- (2) Install the lubrication plugs (1985) in the applicable side of the hub.
 - (a) Leave one lubrication plug hole open for leak testing.
 - (b) Tighten the lubrication plugs (1985) until finger-tight, then tighten one additional 360 degree turn.
- (3) With the hub installed on the propeller test stand, perform the leak test in accordance with the following steps.
 - (a) Move the propeller to low pitch position.
 - (b) Apply leak detector CM122 to the open lubrication plug hole. Refer to Figure 7-53.
 - 1 If there is any indication of air exiting the hub, refer to the Testing and Fault Isolation chapter of this manual.
- (4) After the leak test is complete, install the remaining lubrication plug (1985) in the applicable side of the hub.
 - (a) Tighten the lubrication plug (1985) until finger-tight, then tighten one additional 360 degree turn.



Front of Air Pressure Warning Tag



Back of Air Pressure Warning Tag

TPI-B-7588

Air Pressure Check Warning Tag
Figure 7-54

P. Charging the Propeller with Air

- (1) To determine the proper pressure:
 - (a) For a propeller with aluminum blades, refer to the Maintenance Practices chapter of Hartzell Propeller Inc. Owner's Manual 115N (61-00-15).
 - (b) For a propeller with composite blades, refer to the Maintenance Practices chapter of Hartzell Propeller Inc. Owner's Manual 145 (61-00-45).
- (2) Using proper control, charge the cylinder with dry air or nitrogen.
NOTE: Nitrogen is the preferred charging medium.
- (3) Apply solution CM122 to the air valve (40) pin to check for air leaks.
- (4) Apply solution CM122 where the air valve (40) and the low pitch stop (50) meet to check for air leaks.
- (5) Apply solution CM122 where the low pitch stop (50) and the check nut (30) meet to check for air leaks.
- (6) Recheck the air charge pressure in the cylinder to make sure that there are no air leaks.
 - (a) If primer CM127 was not used on the air valve (40), permit twelve hours between pressure checks.
 - (b) If primer CM127 was used on the air valve (40), permit two hours between pressure checks.
- (7) Install tag B-7588 or equivalent on the air valve assembly. Refer to Figure 7-54.

5. Blade Track

- A. Check the blade track. The blade track of all aluminum blades must be within 1/8 inch of each other. Refer to Figure 7-55.

6. Propeller Lubrication

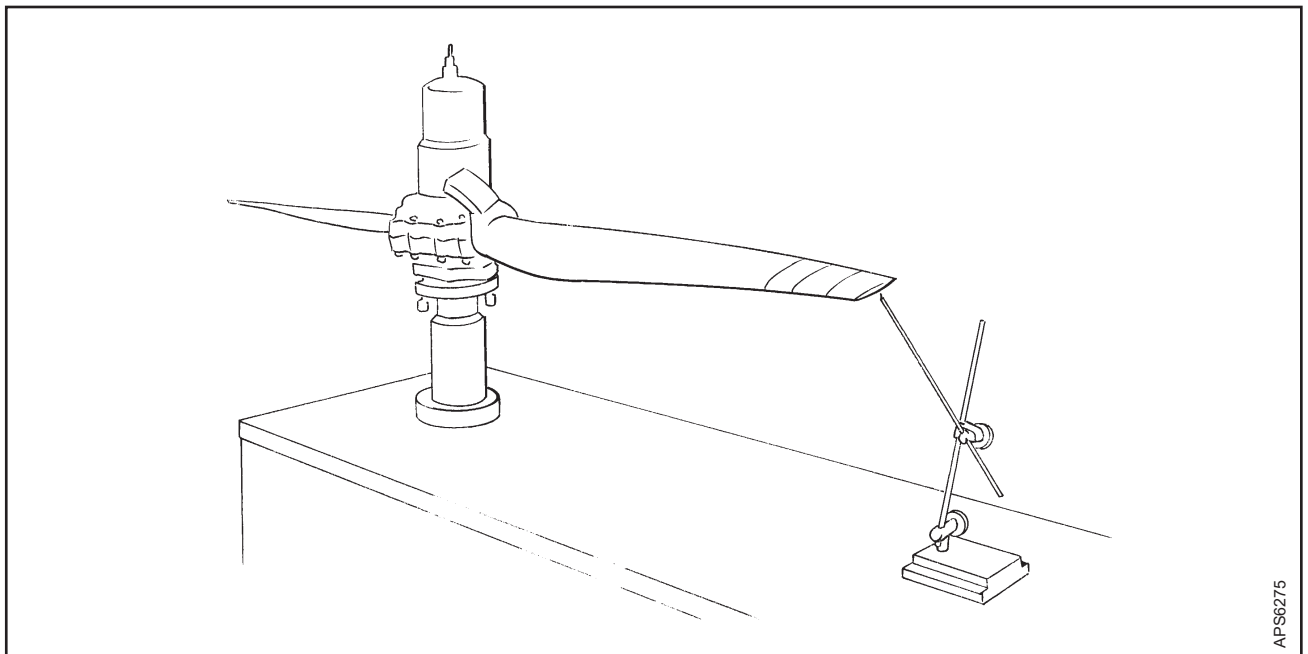
- A. Lubricate the propeller in accordance with the Propeller Lubrication chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

7. Static Balance

- A. Perform static balance of the propeller in accordance with the Static and Dynamic Balance chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

8. Labels

- A. For installation of labels, refer to the Parts Identification and Marking chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).



Checking Blade Track
Figure 7-55

9. Propeller Disassembled for Shipping

A. General

- (1) A propeller disassembled for shipping has had one or more blades removed from the propeller after assembly. The propeller was fully assembled, tested, inspected, lubricated, and statically balanced before blade removal and shipping.
- (2) A propeller disassembled for shipping must be assembled by trained personnel in accordance with Hartzell Propeller Inc. manuals.
- (3) For additional general assembly information, refer to the General section at the beginning of this chapter.

B. Preparing the Propeller for Shipping

NOTE 1: New hardware was installed during propeller assembly for shipping. When disassembling a propeller for shipping, it is not necessary to discard hardware that would require replacement at overhaul.

NOTE 2: New O-rings have been installed during propeller assembly for shipping. During propeller disassembly for shipping, it is not necessary to replace O-rings unless damaged during component installation or removal.

- (1) Before removal, make a mark to indicate alignment of each blade assembly, fork unit, spinner bulkhead, and balance weight location with the hub unit. Refer to the Marking before Disassembly section in the Disassembly chapter of this manual.
 - (a) Before removal, make a mark to indicate position and orientation of each pitch change block in the pitch change fork unit.
- (2) Remove all balance weight screws (9000) and balance weights (9020).
- (3) Disconnect the electric de-ice lead wires from the hub and bulkhead, if applicable.
- (4) Disassemble the propeller to the point of blade removal. Refer to the Propeller Disassembly section in the Disassembly chapter of this manual.
- (5) Propeller Reassembly with Blades Removed for Shipping
 - (a) When reassembling the propeller with the blades removed, do not accomplish procedures related to blade installation or setting of blade angles.

NOTE: The pitch change blocks may be taped in place in the pitch change fork.
 - (b) Reassemble the propeller without the blade assemblies. Refer to the Assembly section in this chapter.

- (6) Packing the Propeller and Blades for Shipping
 - (a) For packing the propeller and blades for shipping, refer to the Packaging and Storage chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
 - (b) Pack the propeller without blades for shipping.
 - (c) Pack the blades for shipping with the preload plate, blade seal, and grease on each blade shank.

10. Reassembly of a Propeller Disassembled for Shipping

A. Unpacking the Propeller and Blades

- (1) Carefully unpack the propeller and blades from shipping.
- (2) Visually inspect each propeller component for shipping damage.
 - (a) If damage is found, refer to the Check chapter of this manual for the inspection, serviceable limits, and corrective action criteria for the specific component.

B. Preparing Propeller for Reassembly

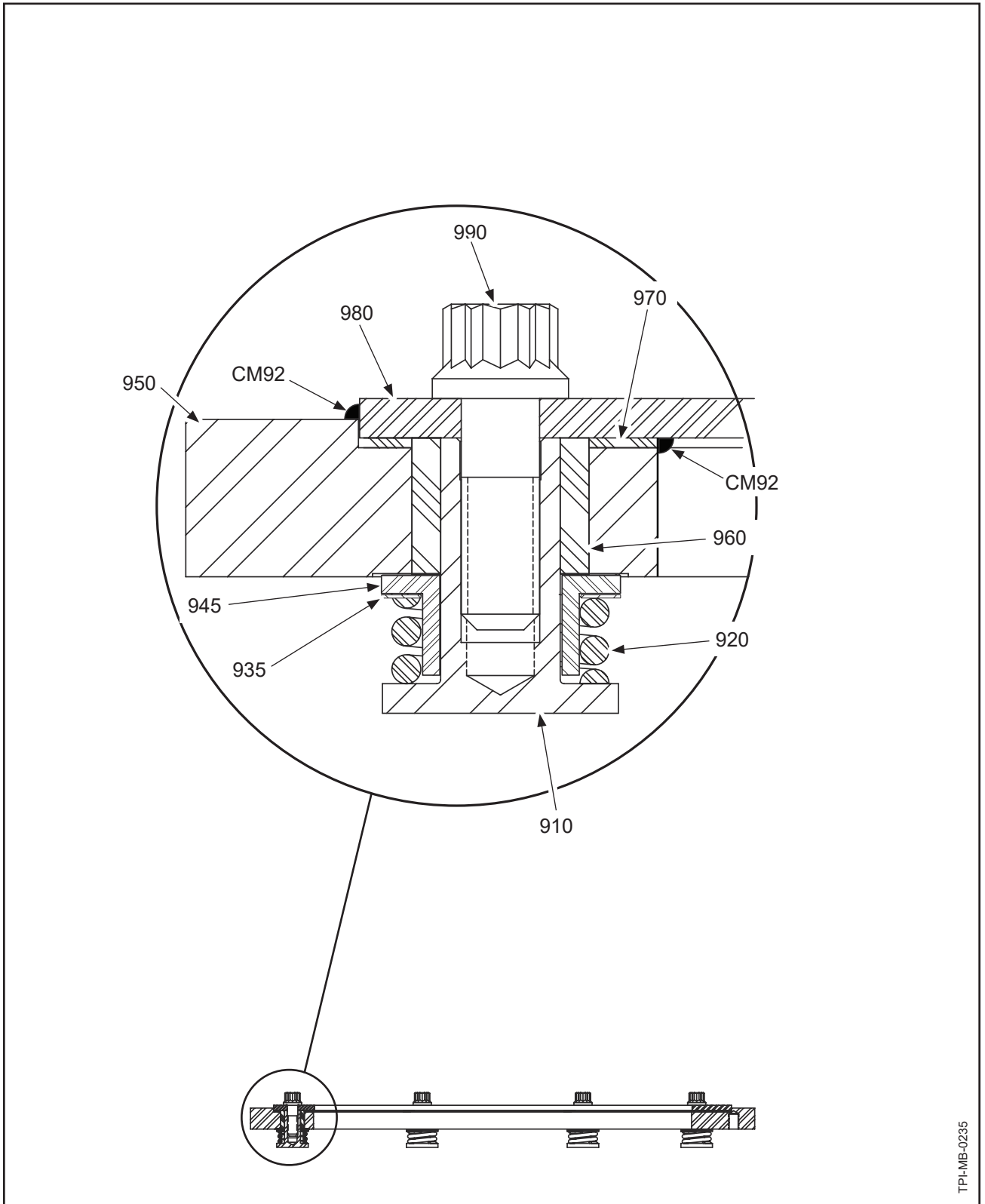
NOTE 1: New hardware was installed during propeller assembly for shipping. When disassembling a propeller from shipping, it is not necessary to discard hardware that would require replacement at overhaul.

NOTE 2: New O-rings have been installed during propeller assembly for shipping. During propeller disassembly from shipping, it is not necessary to replace O-rings, unless they were damaged during component installation or removal.

- (1) Make sure that each blade assembly, the fork unit, and each balance weight has been marked for alignment with the hub unit.
- (2) Remove all balance weight screws (9000) and balance weights (9020).

C. Propeller Reassembly

- (1) Reassemble the propeller in accordance with the Assembly instructions in this chapter.
- (2) Reconnect the electric de-ice lead wires to the bulkhead, if applicable.



TPLMB-0235

C-1576 Damper Assembly
Figure 7-56

11. C-1576 Damper Assembly

CAUTION: USE WITH A-2476-16 SPINNER MOUNTING KIT ONLY.

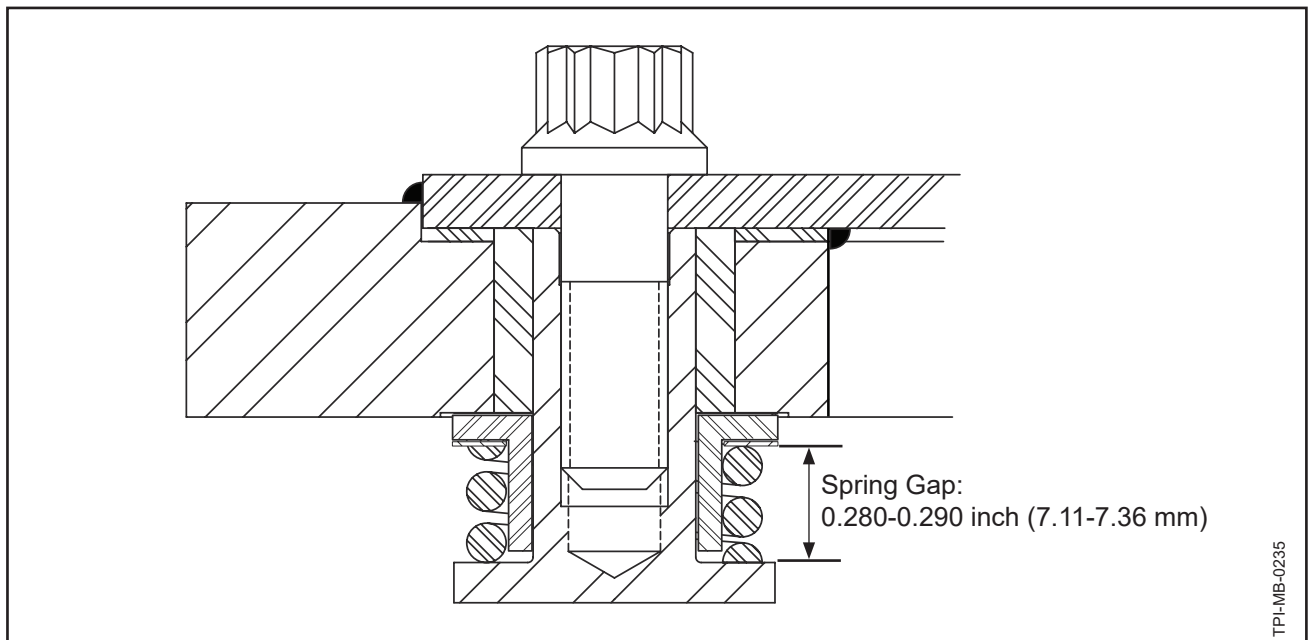
A. General

- (1) The damper assembly must be overhauled at the same time as the propeller.
 - (a) If the damper is not overhauled at the same time as the propeller, the propeller must not be returned to service.
- (2) For installation of the damper on the aircraft, refer to Hartzell Propeller Inc. Owner's Manual 115N (61-00-15).

B. Damper Assembly Procedure

- (1) Put the eight hex head spacer tubes (910) on a flat surface.
- (2) Put one compression spring (920), one spring adjust washer (935), and one flanged bushing (945) on each hex head spacer tube (910) in accordance with Figure 7-56.
- (3) Put the damper weight (950) in position over the hex head spacer tubes (910), flanged bushings (945), spring adjust washers (935), and compression springs (920).
 - (a) Put the damper weight/friction disk mating surface away from the hex head spacer tubes (910).
- (4) Install eight silicone grommets (960) into the holes in the damper weight (950) around the hex head spacer tubes (910).
- (5) Put the friction disk (970) onto the mating surface of the damper weight (950).
 - (a) Align the holes in the friction disk (970) with the silicone grommets (960).
- (6) Put the damper plate (980) onto the friction disk (970) with each screw hole centered on each of the hex head spacer tubes (910).
- (7) Install the eight screws (990) into the holes in the damper plate (980).
 - (a) Tighten the screws (990) evenly around the assembly.
- (8) Measure the spring gap of each compression spring (920) in accordance with Figure 7-57.
 - (a) The spring gap must be 0.280-0.290 inch (7.12-7.36 mm).
 - 1 If the spring gap on all eight compression springs (920) is within the permitted limit:
 - a Go to step (9) of this section.

- 2 If the spring gap is not within the permitted limit:
- a Perform the following steps at each location that is not within the permitted limit.
- (1) Remove the screw (990) from the damper plate (980). Refer to Figure 7-56.
 - (2) Remove the hex head spacer tube (910), compression spring (920), flanged bushing (945), and spring adjust washer (935).
 - (3) Remove the flanged bushing (945) from the hex head spacer tube (910).
 - (a) The compression spring (920) and the spring adjust washer(s) (935) can stay on the hex head spacer tube (910).
 - (4) Add/remove spring adjust washer(s) (935) as required to get the required height of the compressed compression spring (920). Refer to Figure 7-57.
 - (a) The maximum permitted number of spring adjust washer(s) (935) is four.
 - (b) It is permitted to assemble the damper assembly with no spring adjust washer(s) (935) installed if necessary to get the required spring gap.



Measuring the Spring Gap
Figure 7-57

- (5) Put the flanged bushing (945) back onto the hex head spacer tube (910), spring adjust washer(s) (935) (if used), and compression spring (920).
- (6) Holding the hex head spacer tube (910), flanged bushing (945), spring adjust washer(s) (935) (if used), and compression spring (920) together, install the tube-end of the hex head spacer tube into the silicone grommet (960) in the damper weight (950) until it touches the damper plate (980).
- (7) Install the screw (990) into the hole in the damper plate (980) and tighten.
- (8) Go to the "Damper Assembly Procedure" step (8).
- (9) Remove one screw (990) from the damper plate (980) and apply sealant CM21 to the threads of the screw.
 - (a) Install the screw (990) back into the hole in the damper plate (980) and torque to 96-120 In-Lbs. (10.9-13.5 N•m).
 - (b) Repeat step 11.B.(9) and 11.B.(9)(a) for each of the remaining screws (990).
- (10) Apply a bead of sealant CM92 between the damper weight (950) and the damper plate (980) on both the inboard and outboard sides of the damper plate in accordance with Figure 7-56.

FITS AND CLEARANCES - CONTENTS

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2. Blade Tolerances 8-6

 A. Blade Play 8-6

 B. Blade Track 8-7

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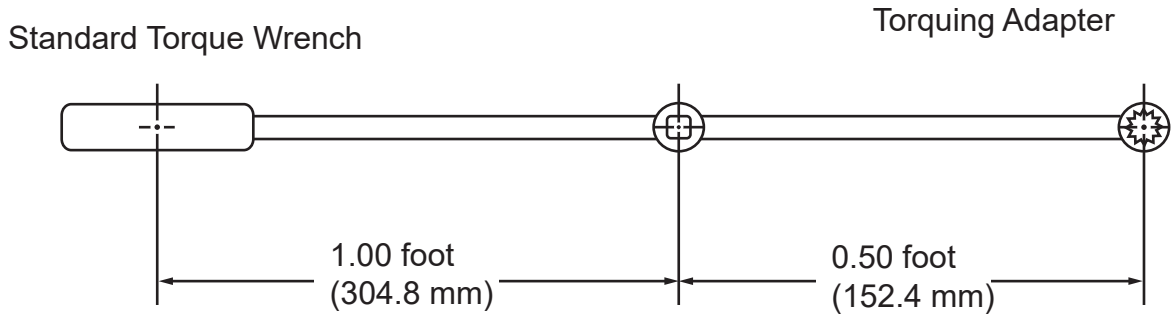
Calculating Torque When Using a Torque Wrench Adaptor Figure 8-1..... 8-3

Blade Play Figure 8-2..... 8-6

LIST OF TABLES

Torque Values Table 8-1..... 8-5

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$$\frac{(\text{actual torque required}) \times (\text{torque wrench length})}{(\text{torque wrench length}) + (\text{length of adaptor})} = \text{torque wrench reading to achieve required actual torque}$$

EXAMPLE:

$$\frac{100 \text{ Ft-Lb (136 N}\cdot\text{m)} \times 1 \text{ ft (304.8 mm)}}{1 \text{ ft (304.8 mm)} + 0.50 \text{ ft (152.4 mm)}} = 66.7 \text{ Ft-Lb (90.1 N}\cdot\text{m)} < \text{reading on torque wrench with 6-inch (152.4 mm) adaptor for actual torque of 100 Ft-Lb (136 N}\cdot\text{m)}$$

The correction shown is for an adapter that is aligned with the centerline of the torque wrench. If the adapter is angled 90 degrees relative to the torque wrench centerline, the torque wrench reading and actual torque applied will be equal.

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Calculating Torque When Using a Torque Wrench Adaptor
Figure 8-1

1. Torque Values (Rev. 2)

A. Important Information

- (1) The structural integrity of joints in the propeller held together with threaded fasteners is dependent upon proper torque application.
 - (a) Vibration can cause an incorrectly tightened fastener to fail in a matter of minutes.
 - (b) Correct tension in a fastener depends on a variety of known load factors and can influence fastener service life.
 - (c) Correct tension is achieved by application of measured torque.
- (2) Use accurate wrenches and professional procedures to make sure of correct tensioning.
- (3) For the torque values to use when assembling a Hartzell Propeller Inc. propeller, refer to Table 8-1, "Torque Values" in this chapter.
- (4) When an adapter is used with a torque wrench, use the equation in Figure 8-1 to determine the correct torque value.

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CAUTION 1: TORQUE VALUES ARE BASED ON NON-LUBRICATED THREADS, UNLESS SPECIFIED IN TABLE 8-1.

CAUTION 2: FOR TORQUE READING WHEN USING A TORQUE WRENCH ADAPTER, REFER TO FIGURE 8-1.

NOTE: Torque tolerance is $\pm 10\%$ unless otherwise noted.

Item No.	Part Number	Description	Torque Ft-Lb	Torque In-Lb	Torque N•m
10	A-2405-2	Nut, spinner, cap side	25 - 30	300 - 360	34 - 40
30	A-2405-()	Nut, spinner, cylinder side	25 - 30	300 - 360	34 - 40
35	B-7589	Screw, Set, 1/4-28, drilled	Maximum height flush with the top of the A-2405-4 nut.		
40	B-1938	Valve, air	Torque until tight and no air leaks from around valve.		
70	B-2423-1	Cylinder	120 - 150 wet	1440 - 1800 wet	163 -203 wet
	B-2452-1	Cylinder	120 - 150 wet	1440 - 1800 wet	163 -203 wet
100	B-3841-()	Screw, start lock housing	---	50	5.7
180	A-1595-()	Screw, cylinder spring assembly	---	48	5.4
280	A-3205	Screw, stop	10 - 15	120 - 180	14 - 20
340	B-3807	Nut, piston	15 - 25	180 - 300	20 - 34
370	B-2491-()	Pitch change rod fitted to fork	40 wet	480 wet	54 wet
	B-4505-()	Pitch change rod fitted to fork	40 wet	480 wet	54 wet
580	A-2431	Hub clamping bolt	20 - 22	240 - 264	28 - 29
590	A-2432	Hub clamping bolt	20 - 22	240 - 264	28 - 29
610	A-2043-1	Hub clamping nut	20 - 22	240 - 264	28 - 29
990	A-2038-6	Screw, damper	---	96-120	10.9-13.6
3110	B-3368	Preload lock nut	---	120	13.6

**Torque Values
Table 8-1**

2. Blade Tolerances (Rev. 6)

A. Blade Play

(1) Limits for blade play are specified below. Refer to Figure 8-2.

(a) End Play for Composite Blades:

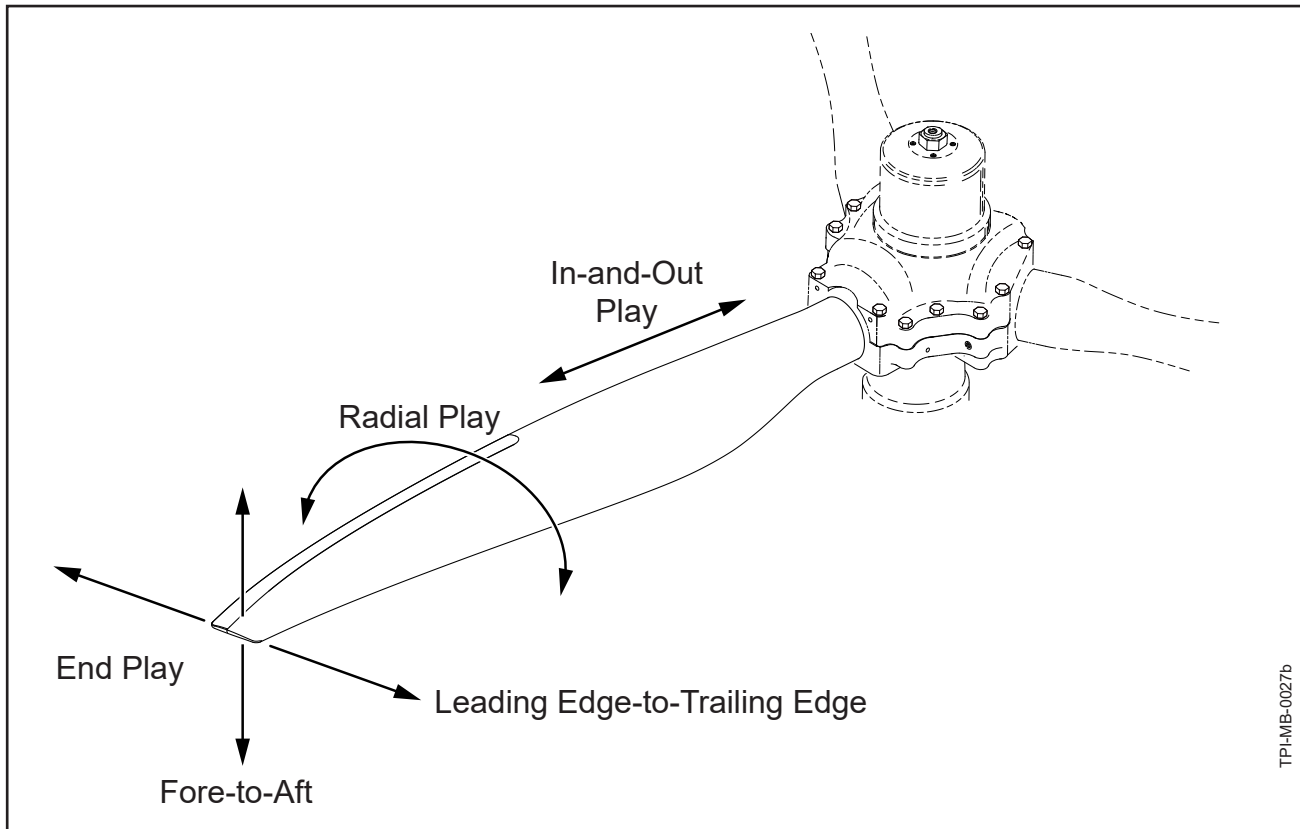
- | | | |
|---|-------------------------------|---|
| 1 | Leading Edge-to-Trailing Edge | ± 0.125 inch (3.17 mm)
Total: 0.250 inch (6.35 mm) |
| 2 | Fore-to-Aft (face to camber) | ± 0.125 inch (3.17 mm)
Total: 0.250 inch (6.35 mm) |

(b) End Play for Aluminum Blades:

- | | | |
|---|-------------------------------|--|
| 1 | Leading Edge-to-Trailing Edge | ± 0.0625 inch (1.58 mm)
Total: 0.125 inch (3.17 mm) |
| 2 | Fore-to-Aft (face to camber) | ± 0.0625 inch (1.58 mm)
Total: 0.125 inch (3.17 mm) |

(c) In-and-Out Play none permitted

(d) Radial Play (pitch change) ± 0.5 degree (1 degree total)
measured at reference station



Blade Play
Figure 8-2

HARTZELL PROPELLER OVERHAUL MANUAL
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- (2) Blades should be tight in the propeller; however, play that is within the allowable limits is acceptable if the blade returns to its original position when released.
 - (a) If blade play is greater than the allowable limits, or if the blade(s) do not return to their original position when released, there may be internal wear or damage that should be referred to a certified propeller repair station with the appropriate rating.

B. Blade Track

- (1) Composite Blades ±0.125 inch (3.17 mm)
Total: 0.250 inch (6.35 mm)
- (2) Aluminum Blades ±0.0625 inch (1.58 mm)
Total: 0.125 inch (3.17 mm)

C. Blade Pitch Tolerance

- (1) Blade pitch setting tolerance between blades at low pitch 0.2 degree

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SPECIAL TOOLS, FIXTURES, AND EQUIPMENT - CONTENTS

1. Tooling and Facility Requirements	9-3
A. Standard Tooling	9-3
B. Special Tooling	9-3
C. Facilities	9-3

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1. Tooling and Facility Requirements (Rev. 1)

A. Standard Tooling

- (1) Propeller repair stations certified by the FAA or international equivalent to overhaul Hartzell Propeller Inc. propellers are expected to possess precision fixtures, tools, and blade tables for blade inspection and repair.
 - (a) Except as specifically required in this manual, locally fabricated tooling is acceptable for most repair and inspection operations.

B. Special Tooling

- (1) Special tooling may be required for procedures in this manual. For further tooling information, refer to Hartzell Propeller Inc. Illustrated Tool and Equipment Manual 165A (61-00-65).
 - (a) Tooling reference numbers appear with the prefix "TE" directly following the tool name to which they apply. For example, a template that is reference number 133 will appear as: template TE133.
 - (b) It is the responsibility of the repair station or the technician performing the repair or servicing to use these special tools as required.

C. Facilities

- (1) Grinding, plating, and painting of propeller components can create health and safety hazards beyond that of other areas of a typical workshop.
 - (a) Areas where grinding, plating, and painting are performed should comply with governmental regulations for occupational safety and health, industry standards, and environmental regulations.
- (2) Workshop areas need to be segregated to prevent contamination.
 - (a) Separate areas should be designated for cleaning, inspection, painting, plating, and assembly.
 - (b) Propeller balancing must be performed in a draft free area.

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ILLUSTRATED PARTS LIST - CONTENTS

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Exploded Views and Parts Lists:

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1. Introduction (Rev. 1)

WARNING: ANY PART IDENTIFIED AS AN EXPERIMENTAL OR NON-AVIATION PART MUST NOT BE USED IN AN FAA OR INTERNATIONAL EQUIVALENT TYPE CERTIFICATED PROPELLER. A PART IDENTIFIED AS EXPERIMENTAL OR NON-AVIATION DOES NOT HAVE FAA OR INTERNATIONAL EQUIVALENT APPROVAL EVEN THOUGH IT MAY STILL SHOW AN AVIATION TC OR PC NUMBER STAMP. USE ONLY THE APPROVED ILLUSTRATED PARTS LIST PROVIDED IN THE APPLICABLE OVERHAUL MANUAL OR ADDITIONAL PARTS APPROVED BY AN FAA ACCEPTED DOCUMENT FOR ASSEMBLY OF A PROPELLER. THE OPERATOR ASSUMES ALL RISK ASSOCIATED WITH THE USE OF EXPERIMENTAL PARTS. USE OF EXPERIMENTAL PARTS ON AN AIRCRAFT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE.

A. General

CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS CHAPTER MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE INTRODUCTION CHAPTER OF THIS MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS. REFER TO THE ILLUSTRATED PARTS LIST IN THIS MANUAL FOR IDENTIFICATION OF PROPELLER CRITICAL PARTS.

- (1) This chapter includes the parts lists and applicable illustrations for the propeller models included in this manual.

CAUTION: ILLUSTRATIONS IN THE ILLUSTRATED PARTS LIST ARE TO BE USED FOR IDENTIFYING PARTS AND SHOULD NOT BE USED AS A MAINTENANCE REFERENCE FOR ASSEMBLY.

- (a) The illustrations in this chapter use some general views of parts that may not exactly depict every propeller part configuration.

B. Counterweights/Slugs/Mounting Hardware

- (1) Counterweights, counterweight slugs, and the applicable mounting hardware are application specific. Refer to Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).

C. Spinner Assemblies/Mounting Hardware

- (1) Spinner assemblies and the applicable mounting hardware are application specific. Refer to Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).

D. Ice Protection System Components

- (1) Ice protection systems are application specific. Refer to Hartzell Propeller Inc. Application Guide Manual 159 (61-02-59).
 - (a) For components of ice protection systems supplied by Hartzell, refer to Hartzell Propeller Inc. Ice Protection System Manual 180 (30-61-80).
 - (b) For components of ice protection systems not supplied by Hartzell, refer to the applicable TC or STC holder's Instructions for Continued Airworthiness (ICA).

2. Description of Columns (Rev. 1)

A. Fig/Item Number

- (1) Figure Number refers to the illustration where items appear. Item Numbers refer to the specific part callout in the applicable illustration.
 - (a) Item Numbers that are listed but not shown are identified by a dash to the left of the item number. (example: "-800")
 - (b) Alpha variants will be used to add additional items. There are two reasons for the use of alpha variants:
 - 1 A part may have an alternate, or may be superseded, replaced, or obsoleted by another part.
 - a For example, the self locking nut (A-2043) that is item 20 was superseded by the self locking nut (A-2043-1) that is item 20A.
 - 2 An Illustrated Parts List may contain multiple configurations. Effectivity codes are used to distinguish different part numbers within the same list.
 - a For example, one configuration may use a propeller mounting bolt (B-3339-1) that is item 30, yet another propeller configuration uses a mounting bolt (B-3347) that is item 30A. Effectivity codes are very important in the determination of parts in a given configuration.

B. Part Number

- (1) The Part Number is the Hartzell Propeller Inc. identification number for the part.
- (2) Use the Hartzell Propeller Inc. part number when ordering the part from Hartzell or a Hartzell-approved distributor.

C. Description

- (1) This column provides the Hartzell Propeller Inc. description of the part.
- (2) Bullets and indentations are used to indicate parts that are components of a sub-assembly.
 - (a) For example, a Fork Assembly that is part of a HC-C2YR-1 propeller assembly will have one bullet (•) before the description. This indicates that the Fork Assembly is part of the propeller assembly.
 - 1 A Fork Bumper that is part of the Fork Assembly will appear directly below the Fork Assembly with two bullets (••) before the description. This indicates that the Fork Bumper is part of the Fork Assembly - that is part of the Propeller Assembly.
 - a Example: HC-C2YR-1
 - Fork Assembly
 - Fork Bumper
- (3) If the description in this column includes a "PCP" prefix, the part is classified as a Propeller Critical Part.
- (4) If applicable, information regarding part alternatives, supersedures, replacements, or obsolescence will appear in the Description column.
 - (a) Refer to the section, "Description of Terms" in this chapter for definitions and requirements for part "alternates", "supersedures", etc.
 - (b) When part alternatives, supersedures, replacements, etc. are listed, the service document number related to the change may be included for reference.
- (5) If applicable, vendor CAGE codes will be listed in the Description column.

D. Effectivity Code (EFF CODE)

- (1) This column is used when additional information about a part is required.
 - (a) Effectivity codes can be used to identify parts that are only used on a particular model, or to direct the user to additional information in the "Effectivity" box at the bottom of the page.
 - (b) Whenever an effectivity code is present, refer to the "Effectivity" box at the bottom of the page for the applicable information.
- (2) Parts common to all assembly models on the page show no effectivity code.

E. Units Per Assembly (UPA)

- (1) Designates the total quantity of an item required for the next higher assembly or subassembly.

F. Overhaul (O/H)

- (1) Designates the parts to be replaced at overhaul. A "Y" identifies the parts that must be replaced at overhaul.

NOTE: An overhaul kit may not contain all the parts identified with a "Y" for a particular model propeller. An example of parts that may not be included in the overhaul kit is spinner mounting parts.

G. Propeller Critical Part (PCP)

- (1) This column identifies the Propeller Critical Parts (PCP) that are contained in each propeller model.
 - (a) Refer to the Introduction chapter of this manual for the definition of Propeller Critical Parts (PCP).

3. Description of Terms (Rev. 1)

A. Alternate

- (1) Alternate parts are identified by the term "ALTERNATE" in the Description column. Alternate items are considered airworthy for continued flight and existing stock of parts may be used for maintenance and/or repair. The new or alternate part numbers may be used interchangeably when ordering/stocking new parts.

B. Supersedure

- (1) Part changes are identified by the terms "SUPERSEDES ITEM _____" or "SUPERSEDED BY ITEM _____" in the Description column. Superseded items are considered airworthy for continued flight and existing stock of superseded parts may be used for maintenance and/or repair. Once the superseding part has been incorporated/installed into an assembly, the original superseded part may no longer be used. Superseded parts may no longer be available, and the new part number must be used when ordering/stocking new parts.

C. Replacement

- (1) Part changes identified by the terms "REPLACES ITEM _____" or "REPLACED BY ITEM _____" in the Description column are considered airworthy for continued flight, but must be replaced with a part with the new part number at overhaul. Existing stock of replaced parts may not used for maintenance and/or repair of effected assemblies. Replaced parts may no longer be available, and the new part number must be used when ordering/stocking new parts.

D. Obsolete

- (1) Obsolete parts are identified by "OBS" in the Units Per Assembly (UPA) column. Obsolete items are considered unairworthy for continued flight.

4. Vendor Supplied Hardware (Rev. 1)

A. Important Information

- (1) Many O-rings, fasteners, and other vendor supplied hardware listed in Hartzell Propeller Inc. manuals have previously been specified with AN, MS, NAS or vendor part number. To provide internal controls and procurement flexibility, Hartzell part numbers have been assigned to all O-rings, fasteners, and hardware. Parts shipments from Hartzell Propeller Inc. will specify only the Hartzell part numbers.
- (2) Some O-rings, fasteners, and hardware manufactured in accordance with established industry specifications (certain AN, MS, NAS items) are acceptable for use in Hartzell Propeller Inc. products without additional standards imposed by Hartzell.
 - (a) For a listing of part number interchangeability, refer to the Vendor Cross Reference chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
 - (b) Where permitted, both the Hartzell part number item and AN, MS, NAS, and other specified vendor numbers items can be used interchangeably.
 - (c) The Hartzell part number must be used when ordering these parts from Hartzell Propeller Inc.

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EXPLODED VIEWS AND PARTS LISTS
2-blade Propellers/Hub Units

Propeller Exploded Views

(-2) w/Start Lock Assembly, w/o Hub Plug..... Figure 10A-1 10A-3
 (-2) w/Start Lock Assembly and Hub Plug..... Figure 10A-2..... 10A-4
 (-2) w/Start Lock Assembly, Hub Spring Assembly, and
 Hub Plug..... Figure 10A-3..... 10A-5
 (-2) w/Cylinder Spring Assembly, w/o Hub Plug Figure 10A-4..... 10A-6
 (-2) w/Cylinder Spring Assembly and Hub Plug..... Figure 10A-5..... 10A-7

(-2) Propeller Parts List

(B)HC-C2YF-2B(D,E)(P) 10A-8
 (B)HC-C2YF-2B(D,E)F(P) 10A-11
 (B)HC-C2YF-2C(D)(P)..... 10A-14
 (B)HC-C2YF-2C(D)F(P) 10A-17
 (B)HC-C2YF-2C(D)UF(P)..... 10A-20
 (B,D)HC-C2YF-2CH(P) 10A-23
 (B,D)HC-C2YF-2CHF(P) 10A-26
 (B,D)HC-C2YF-2CHU(P)..... 10A-29
 (B,D)HC-C2YF-2CHUF(P)..... 10A-32
 BHC-C2YF-2C(L)KF(P) 10A-35
 BHC-C2YF-2C(L)KUF(P) 10A-38
 (B)HC-C2YF-2RB(D,E)(P)..... 10A-41
 (B)HC-C2YF-2RB(D,E)F(P)..... 10A-44
 (C,D)HC-C2YF-2RB(P) 10A-47
 (C,D)HC-C2YF-2RBF(P) 10A-50
 HC-C2YK-2B(D,E)(P)..... 10A-53
 HC-C2YK-2B(D,E)F(P)..... 10A-56
 HC-C2YK-2CD(P)..... 10A-59
 HC-C2YK-2CDF(P) 10A-62
 HC-C2YK-2C(D)UF(P) 10A-65
 HC-C2YK-2C(L)E(P) 10A-68
 HC-C2YK-2C(L)EF(P) 10A-71
 HC-C2YK-2C(L)EUF(P)..... 10A-74
 HC-C2YK-2C(L)GF(P)..... 10A-77

EXPLODED VIEWS AND PARTS LISTS
2-blade Propellers/Hub Units, Continued

(-2) Propeller Parts List

HC-C2YK-2C(L)GUF(P)	10A-80
HC-C2YK-2RB(D,E)(P)	10A-83
HC-C2YK-2RB(D,E)F(P)	10A-86
HC-C2YL-2CUF(P).....	10A-89
HC-C2YL-2RB(P)	10A-92
HC-C2YL-2RBF(P).....	10A-95
HC-C2YR-2B(D,E)(P).....	10A-98
HC-C2YR-2B(D,E)F(P).....	10A-101
HC-C2YR-2C(D)(P).....	10A-104
HC-C2YR-2C(D)F(P).....	10A-107
HC-C2YR-2CDUF(P).....	10A-110
HC-C2YR-2C(L)(E)UF(P).....	10A-113
HC-C2YR-2RB(D,E)(P)	10A-116
HC-C2YR-2RB(D,E)F(P)	10A-119
HC-E2YK-2B(P).....	10A-122
HC-E2YK-2BF(P)	10A-125
HC-E2YK-2RB(P).....	10A-128
HC-E2YK-2RBF(P).....	10A-131
HC-E2YK-2RBS(P).....	10A-134
HC-E2YK-2RBSF(P)	10A-137
HC-E2YL-2B(L)(P).....	10A-140
HC-E2YL-2B(L)F(P)	10A-143
HC-E2YL-2B(L)S(P)	10A-146
HC-E2YL-2B(L)SF(P).....	10A-149
HC-E2YR-2(P).....	10A-152
HC-E2YR-2F(P).....	10A-155
HC-E2YR-2B(P)	10A-158
HC-E2YR-2BF(P)	10A-161
HC-E2YR-2(B)T(P).....	10A-164
HC-E2YR-2(B)TF(P).....	10A-167
HC-E2YR-2RB(P).....	10A-170

EXPLODED VIEWS AND PARTS LISTS
2-blade Propellers/Hub Units, Continued

(-2) Propeller Parts List

HC-E2YR-2RBF(P).....	10A-173
HC-E2YR-2RBS(P)	10A-176
HC-E2YR-2RBSF(P)	10A-179
HC-F2YL-2(P).....	10A-182
HC-F2YL-2F(P)	10A-185
HC-F2YL-2UF(P).....	10A-188
HC-F2YR-2(P).....	10A-191
HC-F2YR-2F(P).....	10A-194
HC-F2YR-2(L)AUF(P)	10A-197
HC-F2YR-2(L)UF(P).....	10A-200
(B)HC-I2YF-2CUF(P)	10A-203
BHC-J2YF-2C(P).....	10A-206
BHC-J2YF-2CF(P).....	10A-209
BHC-J2YF-2C(L)UF(P).....	10A-212
(B)HC-L2YF-2CF(P)	10A-215
(B)HC-L2YF-2CUF(P)	10A-218
HC-M2YL-2CEUF(P).....	10A-221
HC-M2YR-2C(L)EF(P).....	10A-224
HC-M2YR-2C(L)EUF(P).....	10A-227

EXPLODED VIEWS AND PARTS LISTS
2-blade Propellers/Hub Units, continued

APPENDIX

Hub Unit Exploded Views

2-blade Hub Units: Configuration A Figure App-A-1 App-A-3
2-blade Hub Units: Configuration B Figure App-A-2 App-A-5
2-blade Hub Units: Configuration C Figure App-A-3 App-A-8

Hub Unit Parts Lists

C-3230-() App-A-4
D-2201-()(R) App-A-6
D-2477-()(R) App-A-9
D-2483 App-A-9
D-2484-() App-A-9
D-4214-() App-A-6
D-6522-()(R) App-A-6
D-6530-()(R) App-A-7
D-6553-() App-A-9
D-6555-() App-A-7
D-6558-() App-A-7
D-6560-() App-A-4
D-6563-() App-A-9
D-6565-()(R) App-A-9

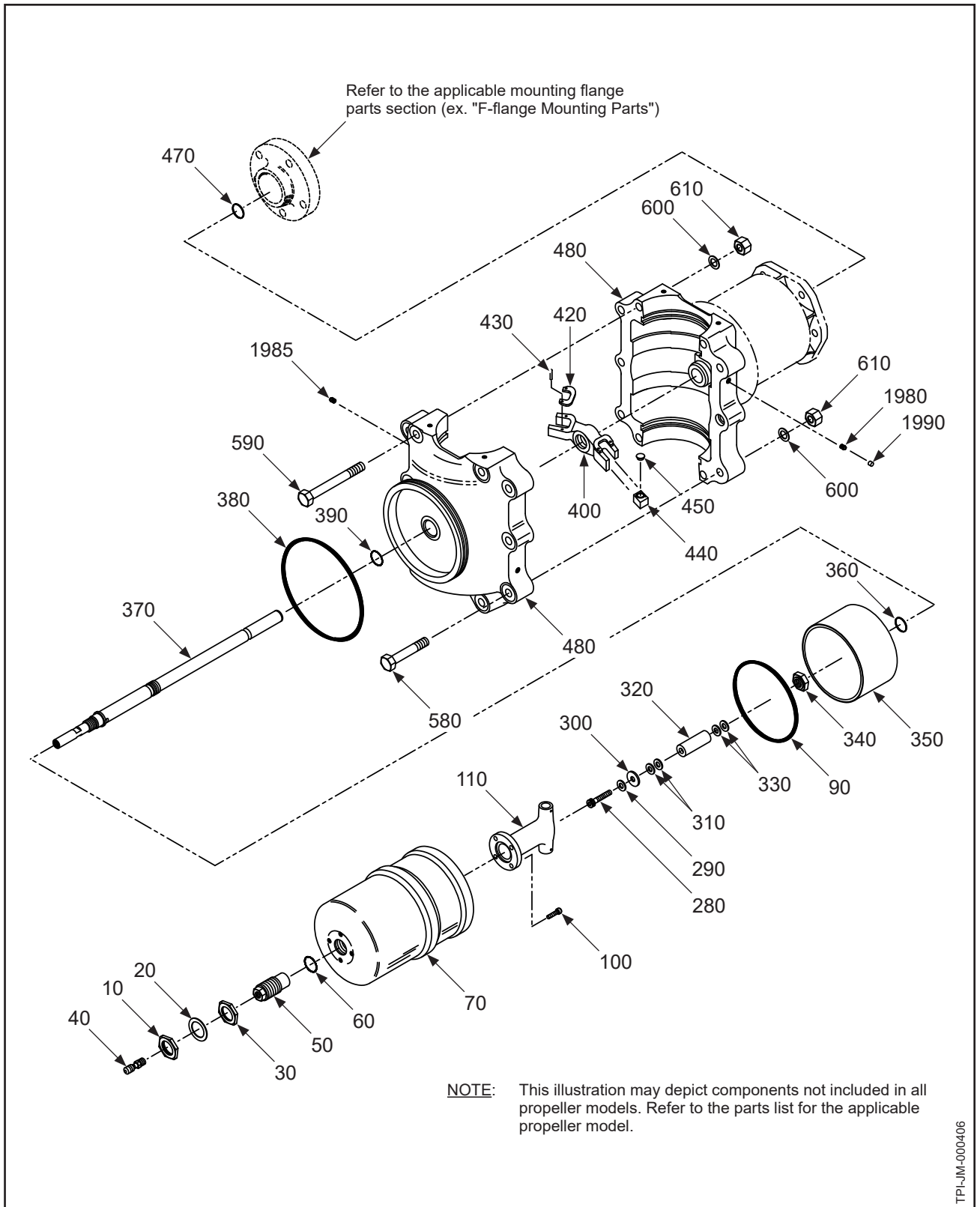
Damper Assembly Exploded View

C-1576 Damper Assembly Figure App-A-4 App-A-10

Damper Assembly Parts List

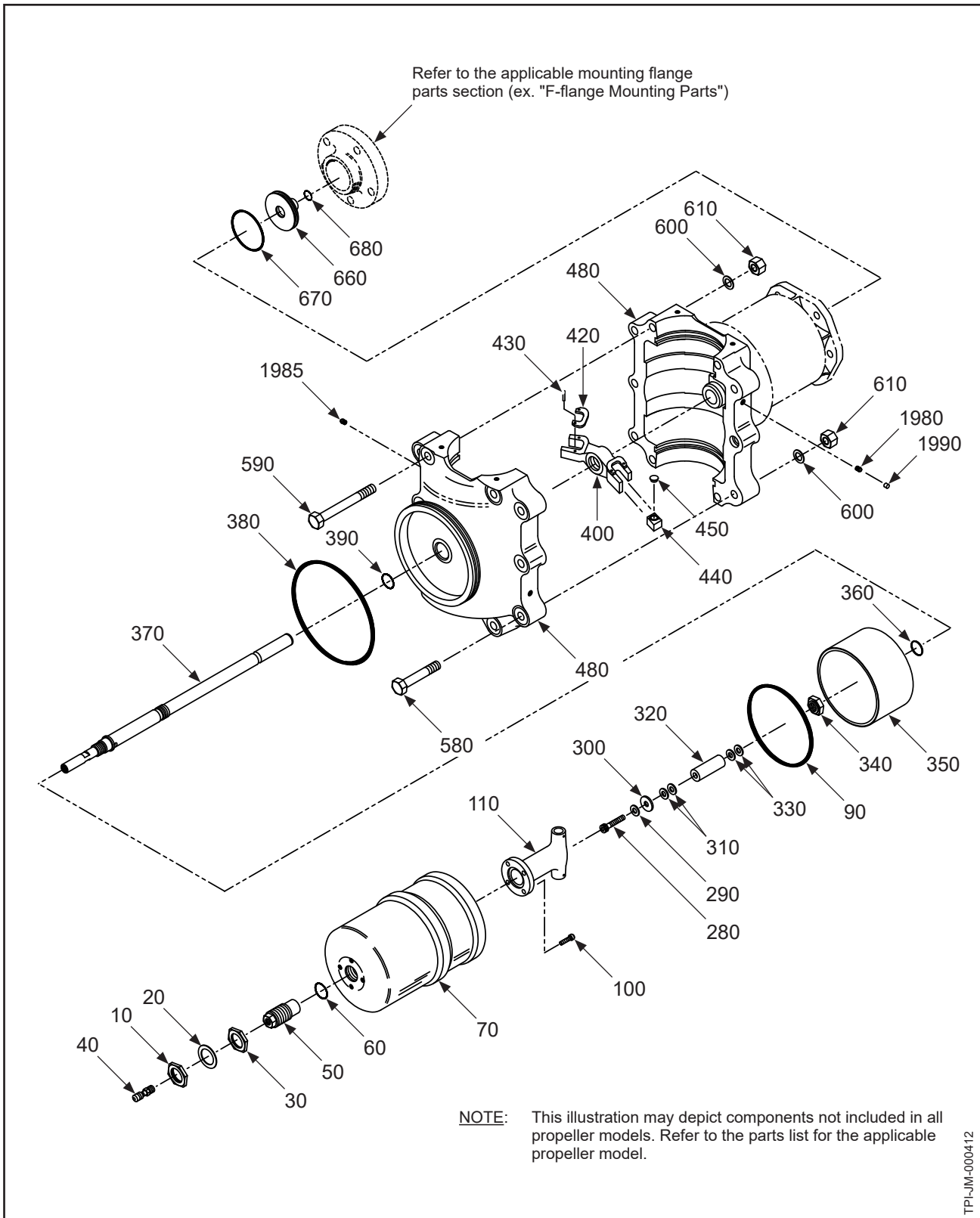
C-1576 Damper Assembly App-A-11

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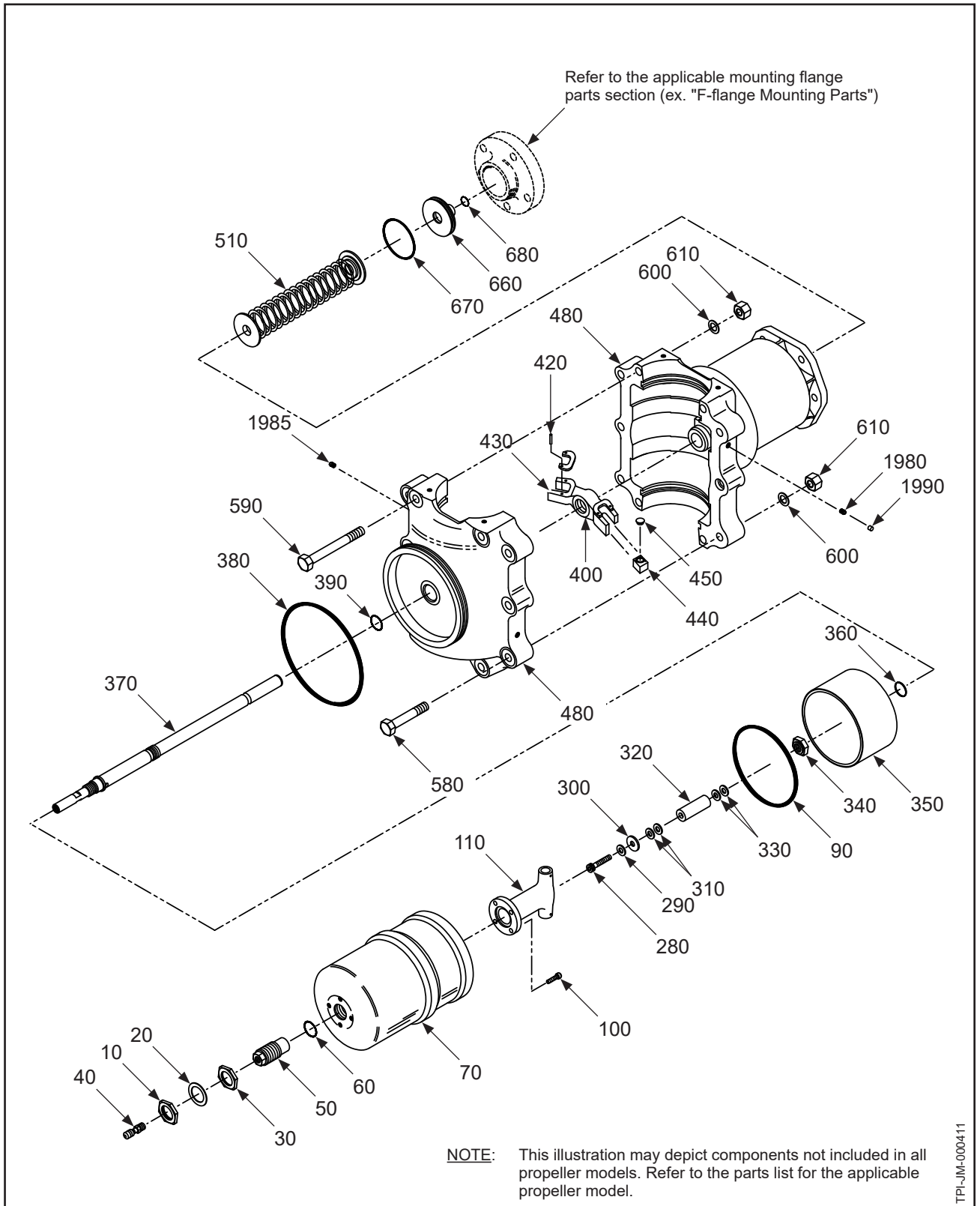
(-2) w/Start Lock Assembly, w/o Hub Plug
Figure 10A-1

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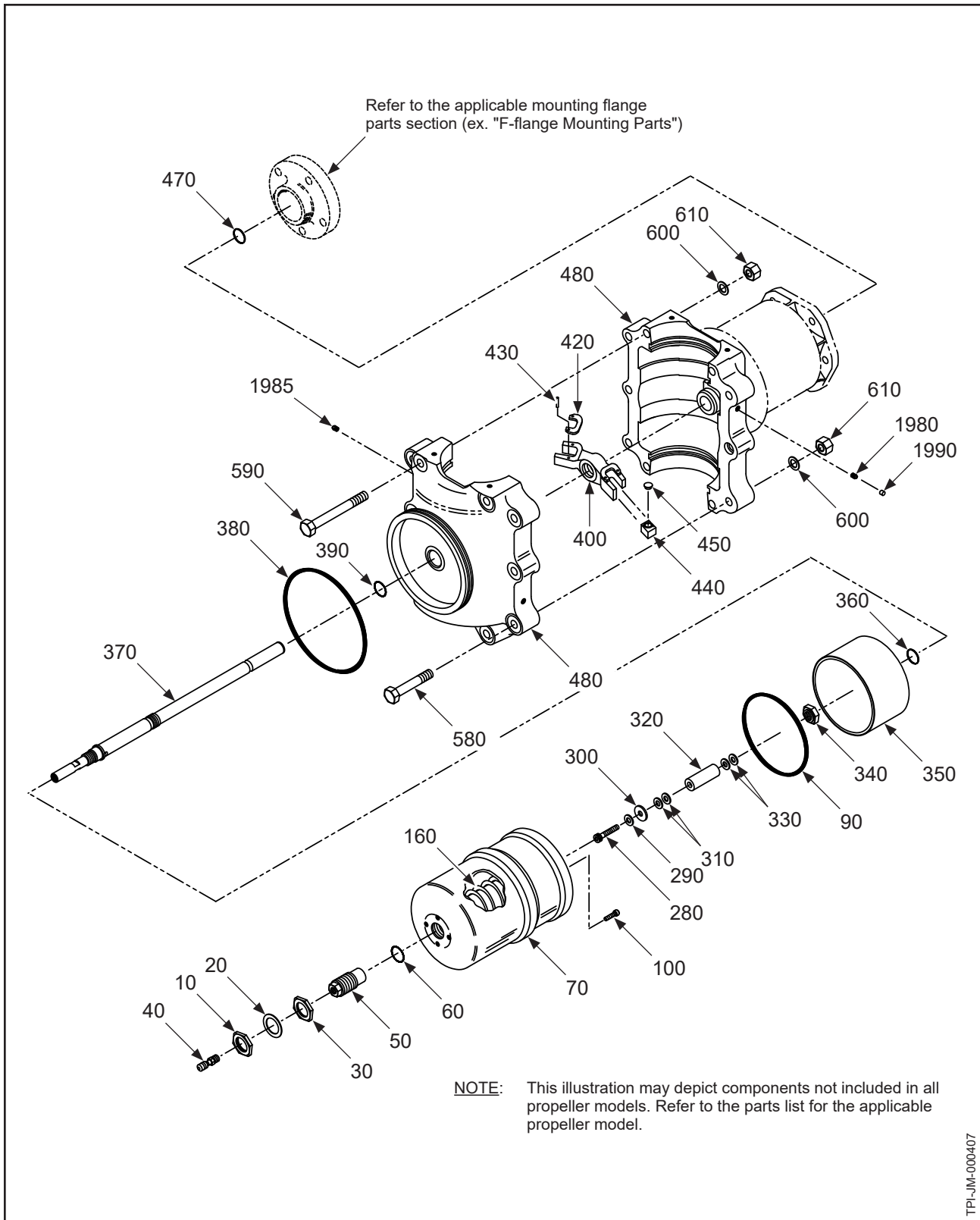
(-2) w/Start Lock Assembly and Hub Plug
Figure 10A-2

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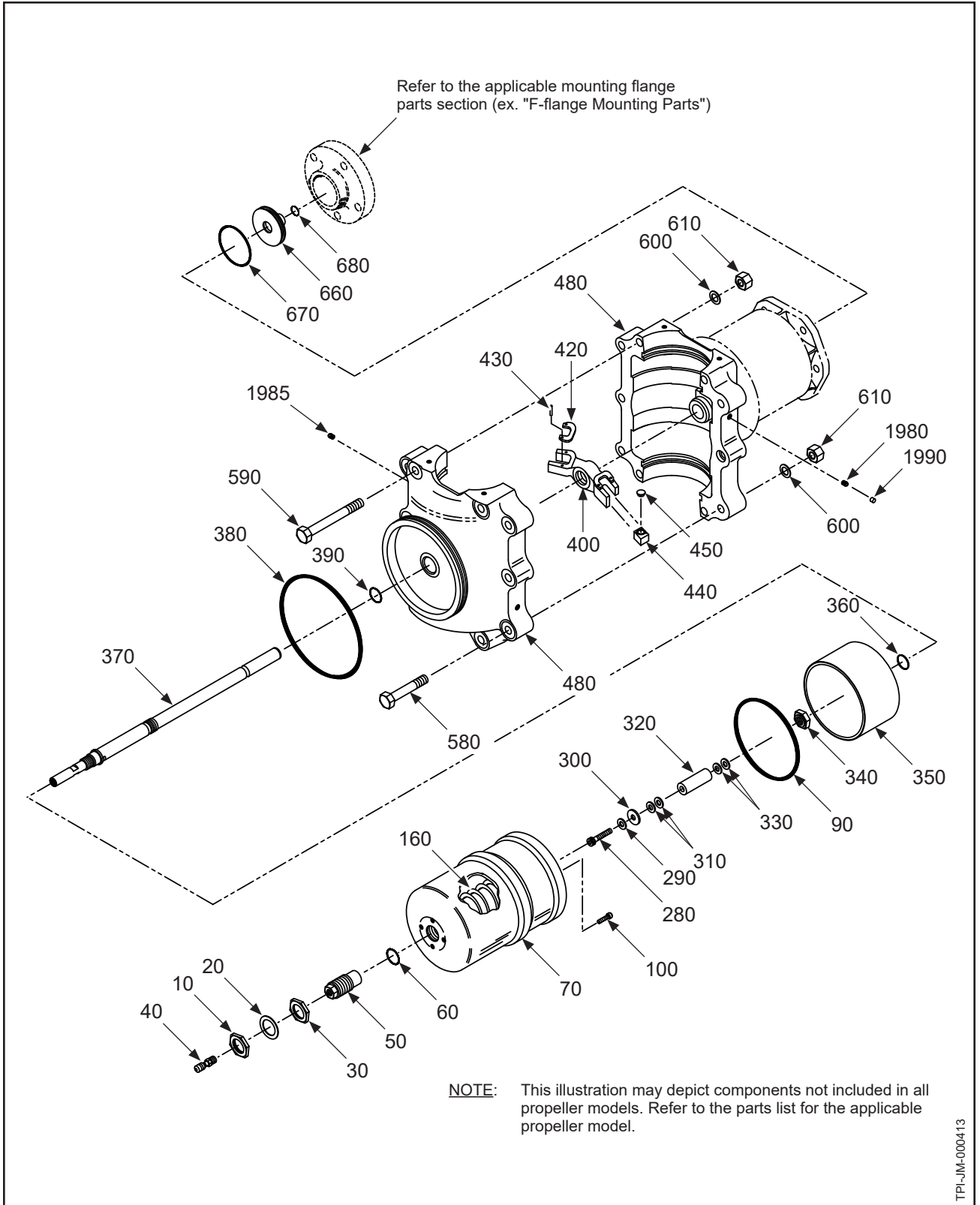
(-2) w/Start Lock Assembly, Hub Spring Assembly, and Hub Plug
Figure 10A-3

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(-2) w/Cylinder Spring Assembly, w/o Hub Plug
Figure 10A-4

HARTZELL PROPELLER OVERHAUL MANUAL
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(-2) w/Cylinder Spring Assembly and Hub Plug
Figure 10A-5

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2B(D,E)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2B(D,E)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2B(D,E)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-4	• PCP: HUB SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201	• PCP: HUB SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-2	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-1	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	G	1		PCP
	D-6530-12	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	H	1		PCP
480C	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	G	1		PCP
	D-6530-32	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
G		BHC-C2YF-2B(D,E)(P)				
H		HC-C2YF-2B(D,E)(P)				

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2B(D,E)(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2B(D,E)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2B(D,E)(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2B(D,E)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2B(D,E)F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2B(D,E)F(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-4	• PCP: HUB SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201	• PCP: HUB SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-2	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-1	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	G	1		PCP
	D-6530-12	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	H	1		PCP
480C	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	G	1		PCP
	D-6530-32	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-C2YF-2B(D,E)F(P)				
H		HC-C2YF-2B(D,E)F(P)				

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2B(D,E)F(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2B(D,E)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2B(D,E)F(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2C(D)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2C(D)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-4	• PCP: HUB SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-2	• PCP HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-1	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	G	1		PCP
	D-6530-12	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	H	1		PCP
480C	D-6530-25	• PCP HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	G	1		PCP
	D-6530-32	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
G		BHC-C2YF-2C(D)(P)				
H		HC-C2YF-2C(D)(P)				

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2C(D)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2C(D)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2C(D)F(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-4	• PCP: HUB SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-2	• PCP HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-1	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	G	1		PCP
	D-6530-12	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	H	1		PCP
480C	D-6530-25	• PCP HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	G	1		PCP
	D-6530-32	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-C2YF-2C(D)F(P)				
H		HC-C2YF-2C(D)F(P)				

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)F(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2C(D)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)F(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-C2YF-2C(D)UF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)UF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-C2YF-2C(D)UF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-4	• PCP: HUB SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201	• PCP: HUB SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-2	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-1	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	G	1		PCP
	D-6530-12	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480A, SUPERSEDED BY ITEM 480C	H	1		PCP
480C	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	G	1		PCP
	D-6530-32	• PCP: HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-C2YF-2C(D)UF(P)				
H		HC-C2YF-2C(D)UF(P)				

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)UF(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-C2YF-2C(D)UF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2C(D)UF(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B,D)HC-C2YF-2CH(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CH(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B,D)HC-C2YF-2CH(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-18	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-20	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-6	• PCP: HUB UNIT, DHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-C2YF-2CH(P)				
H		DHC-C2YF-2CH(P)				

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CH(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B,D)HC-C2YF-2CH(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CH(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B,D)HC-C2YF-2CHF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHF(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B,D)HC-C2YF-2CHF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-18	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-20	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-6	• PCP: HUB UNIT, DHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-C2YF-2CHF(P)				
H		DHC-C2YF-2CHF(P)				

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHF(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B,D)HC-C2YF-2CHF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHF(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B,D)HC-C2YF-2CHU(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP	2-PIECE SPINNER WITH DOME CAP		
			NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHU(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B,D)HC-C2YF-2CHU(P), CONTINUED				
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-18	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-20	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-6	• PCP: HUB UNIT, DHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-C2YF-2CHU(P)				
H		DHC-C2YF-2CHU(P)				

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHU(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B,D)HC-C2YF-2CHU(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHU(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B,D)HC-C2YF-2CHUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			
		CAP	2-PIECE SPINNER WITH DOME CAP			
		NO CAP	1-PIECE SPINNER, NO DOME CAP			

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHUF(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B,D)HC-C2YF-2CHUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-18	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-20	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-6	• PCP: HUB UNIT, DHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-C2YF-2CHU(P)				
H		DHC-C2YF-2CHU(P)				

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHUF(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B,D)HC-C2YF-2CHUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B,D)HC-C2YF-2CHUF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - BHC-C2YF-2C(L)KF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

BHC-C2YF-2C(L)KF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - BHC-C2YF-2C(L)KF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-25	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6530-11	• PCP: HUB, UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480B	D-2201-18	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A SUPERSEDES ITEM 480B, POST HC-SL-61-179 SUPERSEDED BY ITEM 480D		1		PCP
480D	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480C, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		BHC-C2YF-2CK(F)(P)				
L		BHC-C2YF-2CLK(F)(P)				

- ITEM NOT ILLUSTRATED

BHC-C2YF-2C(L)KF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - BHC-C2YF-2C(L)KF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

BHC-C2YF-2C(L)KF(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - BHC-C2YF-2C(L)KUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

BHC-C2YF-2C(L)KUF(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - BHC-C2YF-2C(L)KUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-25	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-18	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480C		1		PCP
480B	D-6530-11	• PCP: HUB, UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-179 SUPERSEDES ITEM 480B, SUPERSEDED BY ITEM 480D		1		PCP
480D	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480C, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		BHC-C2YF-2CKUF(P)				
L		BHC-C2YF-2CLKUF(P)				

- ITEM NOT ILLUSTRATED

BHC-C2YF-2C(L)KUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - BHC-C2YF-2C(L)KUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

BHC-C2YF-2C(L)KUF(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2RB(D,E)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2RB(D,E)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2RB(D,E)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-1R	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-4R	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-1R	• PCP HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	G	1		PCP
	D-6530-2R	• PCP HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
G		HC-C2YF-2RB(D,E)(P)				
H		BHC-C2YF-2RB(D,E)(P)				

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2RB(D,E)(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2RB(D,E)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2RB(D,E)(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2RB(D,E)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2RB(D,E)F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2RB(D,E)F(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-1R	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-4R	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-1R	• PCP HUB UNIT, HC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	G	1		PCP
	D-6530-2R	• PCP HUB UNIT, BHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
G		HC-C2YF-2RB(D,E)F(P)				
H		BHC-C2YF-2RB(D,E)F(P)				

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2RB(D,E)F(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-C2YF-2RB(D,E)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-C2YF-2RB(D,E)F(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (C,D)HC-C2YF-2RB(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(C,D)HC-C2YF-2RB(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - CHC-C2YF-2RB(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-8R	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-10R	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-3R	• PCP: HUB UNIT, CHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	G	1		PCP
	D-6530-4R	• PCP: HUB UNIT, DHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		CHC-C2YF-2RB(P)				
H		DHC-C2YF-2RB(P)				

- ITEM NOT ILLUSTRATED

(C,D)HC-C2YF-2RB(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - CHC-C2YF-2RB(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(C,D)HC-C2YF-2RB(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (C,D)HC-C2YF-2RBF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(C,D)HC-C2YF-2RBF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (C,D)HC-C2YF-2RBF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-8R	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-10R	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-3R	• PCP: HUB UNIT, CHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	G	1		PCP
	D-6530-4R	• PCP: HUB UNIT, DHC-C2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		CHC-C2YF-2RB(P)				
H		DHC-C2YF-2RB(P)				

- ITEM NOT ILLUSTRATED

(C,D)HC-C2YF-2RBF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (C,D)HC-C2YF-2RBF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(C,D)HC-C2YF-2RBF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2B(D,E)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2B(D,E)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2B(D,E)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2B(D,E)(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2B(D,E)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2B(D,E)(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2B(D,E)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			
		CAP	2-PIECE SPINNER WITH DOME CAP			
		NO CAP	1-PIECE SPINNER, NO DOME CAP			

- ITEM NOT ILLUSTRATED

HC-C2YK-2B(D,E)F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2B(D,E)F(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2B(D,E)F(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2B(D,E)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2B(D,E)F(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2CD(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2CD(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2CD(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		
480A	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		
480B	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2CD(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2CD(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2CDF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2CDF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2CDF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		
480A	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		
480B	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2CDF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2CDF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2CDF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(D)UF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX)	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(D)UF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(D)UF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480, SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(D)UF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(D)UF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(D)UF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)E(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)E(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)E(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E L		HC-C2YK-2CE(P) HC-C2YK-2CLE(P)				

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)E(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)E(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)EF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)EF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)EF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		HC-C2YK-2CEF(P)				
L		HC-C2YK-2CLEF(P)				

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)EF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)EF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)EF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(L)EUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
160A	B-1106	• • SPRING ASSEMBLY, REPLACES ITEM 160	A	1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		PIPER PA44-180 ONLY	CAP	2-PIECE SPINNER WITH DOME CAP		
			NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)EUF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(L)EUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480, SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
		REFER TO THE "C-1576 DAMPER ASSEMBLY" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
-900	C-1576	• DAMPER ASSEMBLY		1		
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB,	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		HC-C2YK-2CEUF(P)				
L		HC-C2YK-2CLEUF(P)				

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)EUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(L)EUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)EUF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)GF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)GF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)GF(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-21	• PCP HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
		REFER TO THE "C-1576 DAMPER ASSEMBLY" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
900	C-1576	• DAMPER ASSEMBLY		1		
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB,	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		HC-C2YK-2CGF(P)				
L		HC-C2YK-2CLGF(P)				

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)GF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2C(L)GF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)GF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(L)GUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			
		CAP	2-PIECE SPINNER WITH DOME CAP			
		NO CAP	1-PIECE SPINNER, NO DOME CAP			

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)GUF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(L)GUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480, SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
		REFER TO THE "C-1576 DAMPER ASSEMBLY" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
900	C-1576	• DAMPER ASSEMBLY		1		
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		HC-C2YK-2CGUF(P)				
L		HC-C2YK-2CLGUF(P)				

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)GUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YK-2C(L)GUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2C(L)GUF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2RB(D,E)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2RB(D,E)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2RB(D,E)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-2201-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-1R	• PCP HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-21R	• PCP HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2RB(D,E)(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2RB(D,E)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YK-2RB(D,E)(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2RB(D,E)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YK-2RB(D,E)F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2RB(D,E)F(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-1R	• PCP HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-21R	• PCP HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YK-2RB(D,E)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YL-2CUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1106	• • SPRING ASSEMBLY	A	1		
	B-1589-2	• • SPRING ASSEMBLY	B	1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
A	PIPER PA23, EXCEPT APACHE		CAP	2-PIECE SPINNER WITH DOME CAP		
B	PIPER PA23, APACHE		NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YL-2CUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-6	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-2	• PCP: HUB UNIT, HC-C2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-22	• PCP: HUB UNIT, HC-C2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YL-2CUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YL-2CUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YL-2RB(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YL-2RB(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YL-2RB(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-6R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-2R	• PCP: HUB UNIT, HC-C2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-22R	• PCP: HUB UNIT, HC-C2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YL-2RB(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YL-2RB(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YL-2RBF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YL-2RBF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YL-2RBF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-6R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6522-2R	• PCP: HUB UNIT, HC-C2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-22R	• PCP: HUB UNIT, HC-C2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YL-2RBF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2B(D,E)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YR-2B(D,E)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2B(D,E)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2B(D,E)(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2B(D,E)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2B(D,E)(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2B(D,E)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YR-2B(D,E)F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2B(D,E)F(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2B(D,E)F(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2B(D,E)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2B(D,E)F(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2C(D)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2C(D)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2C(D)(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2C(D)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2C(D)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2C(D)F(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2C(D)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YR-2CDUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C2YR-2CDUF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YR-2CDUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEKS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2CDUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YR-2CDUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2CDUF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YR-2C(L)(E)UF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
160A	B-1106	• • SPRING ASSEMBLY, REPLACES ITEM 160	A	1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A	HC-C2YR-2C(L)EUF(P), PIPER PA44-180 ONLY		CAP NO CAP	2-PIECE SPINNER WITH DOME CAP 1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-C2YR-2C(L)(E)UF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YR-2C(L)(E)UF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16	• PCP: HUB, ALTERNATE FOR ITEM 480, SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-C2YR-2C(E)UF(P)				
L		HC-C2YR-2CL(E)UF(P)				

- ITEM NOT ILLUSTRATED

HC-C2YR-2C(L)(E)UF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-C2YR-2C(L)(E)UF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2C(L)(E)UF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2RB(D,E)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP	2-PIECE SPINNER WITH DOME CAP		
			NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-C2YR-2RB(D,E)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2RB(D,E)(P), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-2201-2R	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16R	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1R	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21R	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2RB(D,E)(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2RB(D,E)(P), CONTINUED BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST BALANCE PARTS <ul style="list-style-type: none"> • SCREW • BALANCE WEIGHT 				
-9000	B-3840-()			AR	Y	
-9020	A-2424(A)-()			AR		
-9030		COUNTERWEIGHTS/MOUNTING BOLTS <ul style="list-style-type: none"> • PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER 				PCP
-9040		<ul style="list-style-type: none"> • COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES 			Y	
		SPINNER PARTS <ul style="list-style-type: none"> • APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES 				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2RB(D,E)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP	2-PIECE SPINNER WITH DOME CAP		
			NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-C2YR-2RB(D,E)F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2RB(D,E)F(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-2R	• PCP: HUB, SUPERSEDED BY ITEM 480B		1		PCP
480A	D-2201-16R	• PCP: HUB, ALTERNATE FOR ITEM 480 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6522-1R	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEMS 480 AND 480A, POST HC-SL-61-179 SUPERSEDED BY ITEM 480C		1		PCP
480C	D-6522-21R	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4) SUPERSEDES ITEM 480B, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-C2YR-2RB(D,E)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C2YR-2RB(D,E)F(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-8		PROPELLER PARTS - HC-E2YK-2B(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2B(P), CONTINUED				
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2B(P), CONTINUED BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST BALANCE PARTS <ul style="list-style-type: none"> • SCREW • BALANCE WEIGHT 				
-9000	B-3840-()			AR	Y	
-9020	A-2424(A)-()			AR		
-9030		COUNTERWEIGHTS/MOUNTING BOLTS <ul style="list-style-type: none"> • PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER 				PCP
-9040		<ul style="list-style-type: none"> • COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES 			Y	
		SPINNER PARTS <ul style="list-style-type: none"> • APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES 				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2BF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
A	NO COUNTERWEIGHTS		CAP	2-PIECE SPINNER WITH DOME CAP		
B	WITH COUNTERWEIGHTS		NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2BF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2BF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2RB(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON		1		
350A	B-3239	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2RB(P), CONTINUED				
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2RB(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2RBF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON		1		
350A	B-3239	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
A	NO COUNTERWEIGHTS		CAP	2-PIECE SPINNER WITH DOME CAP		
B	WITH COUNTERWEIGHTS		NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2RBF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YK-2RBF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YK-2RBS(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON		1		
350A	B-3239	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YK-2RBS(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
510	A-2273	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YK-2RBS(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YK-2RBSF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON		1		
350A	B-3239	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YK-2RBSF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
510	A-2273	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YK-2RBSF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YK-2RBSF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		K-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YK-2RBSF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YL-2B(L)(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YL-2B(L)(P), CONTINUED				
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2483	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6563-1	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6563-21	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		HC-E2YL-2B(P)				
L		HC-E2YL-2BL(P)				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YL-2B(L)(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YL-2B(L)F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YL-2B(L)F(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2483	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6563-1	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6563-21	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-E2YL-2BF(P)				
L		HC-E2YL-2BLF(P)				

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)F(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YL-2B(L)F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)F(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YL-2B(L)S(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YL-2B(L)S(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2483	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6563-1	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6563-21	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
510	A-2273	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		2	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-E2YL-2BS(P)				
L		HC-E2YL-2BLS(P)				

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)S(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YL-2B(L)S(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)S(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YL-2B(L)SF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)SF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP			
10A-3		PROPELLER PARTS - HC-E2YL-2B(L)SF(P), CONTINUED							
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS							
480	D-2483	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP			
480A	D-6563-1	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP			
480B	D-6563-21	• PCP: HUB UNIT, HC-E2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP			
490	A-2245-1	• • BUSHING, PITCH CHANGE ROD, USED WITH ITEM 480 SUPERSEDED BY ITEM 490A		1	Y				
490A	A-2245-3	• • BUSHING, PITCH CHANGE ROD USED WITH ITEMS 480A AND 480B SUPERSEDES ITEM 490, POST HC-SL-61-179		1	Y				
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST							
510	A-2273	• SPRING ASSEMBLY		1					
580	A-2431	• BOLT		6					
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4					
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y				
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y				
660	A-2481-3	• PLUG, HUB		1					
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y				
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y				
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		2	Y				
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y				
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y				
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y				
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y				
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL					
E		HC-E2YL-2BSF(P)							
L		HC-E2YL-2BLSF(P)							

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)SF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YL-2B(L)SF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YL-2B(L)SF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-E2YR-2(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2(P), CONTINUED				
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230-1	• PCP: HUB		1		PCP
480A	D-6560-2	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YR-2(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-E2YR-2F(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2F(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230-1	• PCP: HUB		1		PCP
480A	D-6560-2	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2B(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2B(P), CONTINUED				
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2B(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2BF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2BF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2BF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2(B)T(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2(B)T(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2 C-3230-1	• PCP; HUB, SUPERSEDED BY ITEM 480A • PCP: HUB, SUPERSEDED BY ITEM 480A	G H	1 1		PCP PCP
480A	D-6565-1	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6560-2	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6565-21	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
510	B-1586	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		HC-E2YR-2BT(P)				
H		HC-E2YR-2T(P)				

- ITEM NOT ILLUSTRATED

HC-E2YR-2(B)T(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2(B)T(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-E2YR-2(B)T(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2(B)TF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-E2YR-2(B)TF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2(B)TF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2	• PCP; HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	C-3230-1	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6565-1	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6560-2	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6565-21	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
510	B-1586	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		HC-E2YR-2BTF(P)				
H		HC-E2YR-2TF(P)				

- ITEM NOT ILLUSTRATED

HC-E2YR-2(B)TF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2(B)TF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2RB(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2RB(P), CONTINUED				
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2RB(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2RBF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY	A	1		
	830-30	• START LOCK - ASSEMBLY	B	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
A		NO COUNTERWEIGHTS	CAP	2-PIECE SPINNER WITH DOME CAP		
B		WITH COUNTERWEIGHTS	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2RBF(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-E2YR-2RBF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2RBS(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2RBS(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
510	A-2273	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2RBS(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2RBSF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER		1		
-80	A-862-6	• • BUSHING, CYLINDER		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-21	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-2455	• PISTON, REPLACED BY ITEM 350A		1		
350A	B-3239	• PISTON, REPLACES ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2RBSF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2477-2R	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
510	A-2273	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-3		PROPELLER PARTS - HC-E2YR-2RBSF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YL-2(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YL-2(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230-6	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6560-3	• PCP: HUB UNIT, HC-F2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6560-23	• PCP: HUB UNIT, HC-F2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YL-2(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YL-2F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YL-2F(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230-6	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6560-3	• PCP: HUB UNIT, HC-F2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6560-23	• PCP: HUB UNIT, HC-F2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YL-2F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YL-2UF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YL-2UF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230-6	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6560-3	• PCP: HUB UNIT, HC-F2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6560-23	• PCP: HUB UNIT, HC-F2YL-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YL-2UF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YR-2(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 120		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YR-2(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6560-1	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6560-21	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YR-2(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YR-2F(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 120		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YR-2F(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6560-1	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6560-21	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - HC-F2YR-2F(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YR-2(L)AUF(P)				
30	A-2405-4	• NUT, 15/16-20, HEX		1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED		1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1		
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-F2YR-2(L)AUF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YR-2(L)AUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-6565-2	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6565-22	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E L		HC-F2YR-2AUF(P) HC-F2YR-2LAUF(P)				

- ITEM NOT ILLUSTRATED

HC-F2YR-2(L)AUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YR-2(L)AUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-F2YR-2(L)AUF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YR-2(L)UF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1		
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YR-2(L)UF(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3230	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6560-1	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6560-21	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-F2YR-2UF(P)				
L		HC-F2YR-2LUF(P)				

- ITEM NOT ILLUSTRATED

HC-F2YR-2(L)UF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - HC-F2YR-2(L)UF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-F2YR-2(L)UF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-I2YF-2CUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-I2YF-2CUF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-I2YF-2CUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-4214-4	• PCP: HUB, SUPERSEDED BY ITEM 480B	G	1		PCP
	D-4214-3	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6555-2	• PCP: HUB UNIT, BHC-I2YF-(2,4) REPLACES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6555-1	• PCP: HUB UNIT, HC-I2YF-(2,4) REPLACES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	D-6555-22	• PCP: HUB UNIT, BHC-I2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
	D-6555-21	• PCP: HUB UNIT, HC-I2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	H	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-I2YF-2CUF(P)				
H		HC-I2YF-2CUF(P)				

- ITEM NOT ILLUSTRATED

(B)HC-I2YF-2CUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-I2YF-2CUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-I2YF-2CUF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - BHC-J2YF-2C(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT (NO ALTERNATE BECAUSE OF TRAVEL REQUIREMENTS)		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-2	• FORK, PITCH CHANGE, SUPERSEDED BY ITEM 400A		1		
400A	B-2457-3	• FORK, PITCH CHANGE, SUPERSEDES ITEM 400		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		2		
	A-2217-4	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		2		
440A	A-2217-2	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-2217-1		2		
450	A-3212	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - BHC-J2YF-2C(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2484-1	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6553-2	• PCP: HUB UNIT, BHC-J2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6553-22	• PCP: HUB UNIT, BHC-J2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - BHC-J2YF-2C(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - BHC-J2YF-2CF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT (NO ALTERNATE BECAUSE OF TRAVEL REQUIREMENTS)		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - BHC-J2YF-2CF(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2484-1	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6553-2	• PCP: HUB UNIT, BHC-J2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6553-22	• PCP: HUB UNIT, BHC-J2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-2		PROPELLER PARTS - BHC-J2YF-2CF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - BHC-J2YF-2C(L)UF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

BHC-J2YF-2C(L)UF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - BHC-J2YF-2C(L)UF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2484-1	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6553-2	• PCP: HUB UNIT, BHC-J2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6553-22	• PCP: HUB UNIT, BHC-J2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		BHC-J2YF-2CUF(P)				
L		BHC-J2YF-2CLUF(P)				

- ITEM NOT ILLUSTRATED

BHC-J2YF-2C(L)UF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-5		PROPELLER PARTS - BHC-J2YF-2C(L)UF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

BHC-J2YF-2C(L)UF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-L2YF-2CF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-L2YF-2CF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-L2YF-2CF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-24	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-23	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-10	• PCP: HUB UNIT, BHC-L2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-9	• PCP: HUB UNIT, HC-L2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6530-30	• PCP: HUB UNIT, BHC-L2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	B-6588-1	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980A AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-L2YF-2CF(P)				
H		HC-L2YF-2CF(P)				

- ITEM NOT ILLUSTRATED

(B)HC-L2YF-2CF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - (B)HC-L2YF-2CF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-L2YF-2CF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-L2YF-2CUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD, ENGINE-SIDE HUB HALF		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(B)HC-L2YF-2CUF(P), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-L2YF-2CUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-2201-24	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-2201-23	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	D-6530-10	• PCP: HUB UNIT, BHC-L2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B	G	1		PCP
	D-6530-9	• PCP: HUB UNIT, HC-L2YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179	H	1		PCP
480B	D-6530-30	• PCP: HUB UNIT, BHC-L2YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290	G	1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		BHC-L2YF-2CUF(P)				
H		HC-L2YF-2CUF(P)				

- ITEM NOT ILLUSTRATED

(B)HC-L2YF-2CUF(P), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - (B)HC-L2YF-2CUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(B)HC-L2YF-2CUF(P), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-M2YL-2CEUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-M2YL-2CEUF(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-M2YL-2CEUF(P), CONTINUED REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-4214-6	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6558-1	• PCP: HUB UNIT, HC-M2YL-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		2	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-M2YL-2CEUF(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-M2YL-2CEUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		L-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-M2YL-2CEUF(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-M2YR-2C(L)EF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, CYLINDER		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-M2YR-2C(L)EF(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-M2YR-2C(L)EF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-4214-5	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6558-2	• PCP: HUB UNIT, HC-M2YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6558-22	• PCP: HUB UNIT, HC-M2YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-M2YR-2CEF(P)				
L		HC-M2YR-2CLEF(P)				

- ITEM NOT ILLUSTRATED

HC-M2YR-2C(L)EF(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-1		PROPELLER PARTS - HC-M2YR-2C(L)EF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-M2YR-2C(L)EF(P), page 3 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-M2YR-2C(L)EUF(P)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-2457-3	• FORK, PITCH CHANGE		1		
420	B-3323	• • PLATE, ANTI-ROTATION		2	Y	
430	B-3842-0500	• • SPRING PIN		4		
440	A-2217-3	• BLOCK, PITCH CHANGE		2		
450	A-3212-1	• BUTTON, PITCH CHANGE BLOCK		2	Y	
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-M2YR-2C(L)EUF(P), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-M2YR-2C(L)EUF(P), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 2-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-4214-5	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	D-6558-2	• PCP: HUB UNIT, HC-M2YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-179 SUPERSEDED BY ITEM 480B		1		PCP
480B	D-6558-22	• PCP: HUB UNIT, HC-M2YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-290		1		PCP
580	A-2431	• BOLT		6		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		4		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		10	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		10	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		4	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	2	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		2	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	2	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-M2YR-2CEUF(P)				
L		HC-M2YR-2CLEUF(P)				

- ITEM NOT ILLUSTRATED

HC-M2YR-2C(L)EUF(P), page 2 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10A-4		PROPELLER PARTS - HC-M2YR-2C(L)EUF(P), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-M2YR-2C(L)EUF(P), page 3 of 3

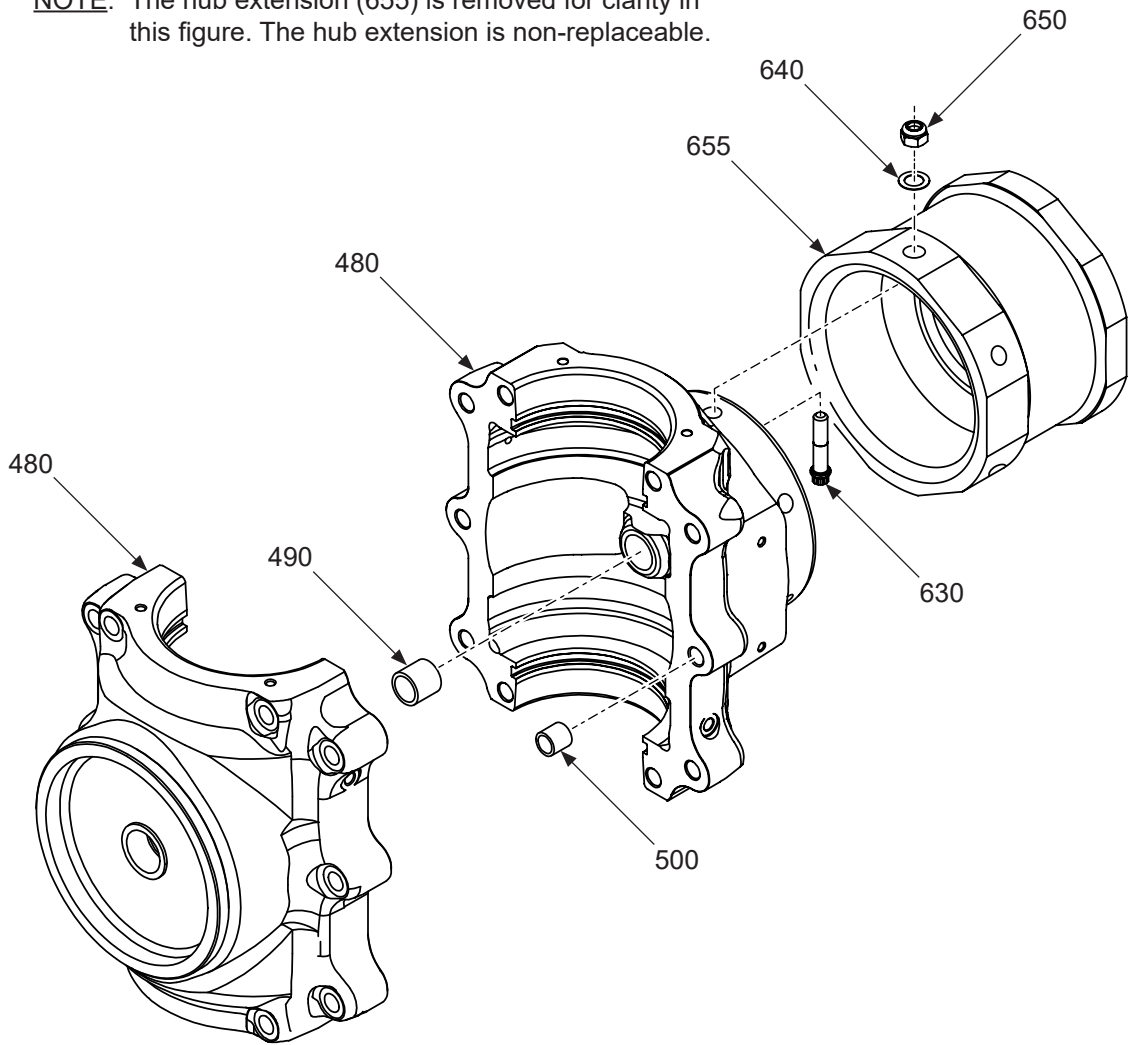
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2-Blade Propeller/Hub Unit Parts Lists - Appendix

Hub Unit Parts Lists
Damper Assembly Parts List

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NOTE: The hub extension (655) is removed for clarity in this figure. The hub extension is non-replaceable.



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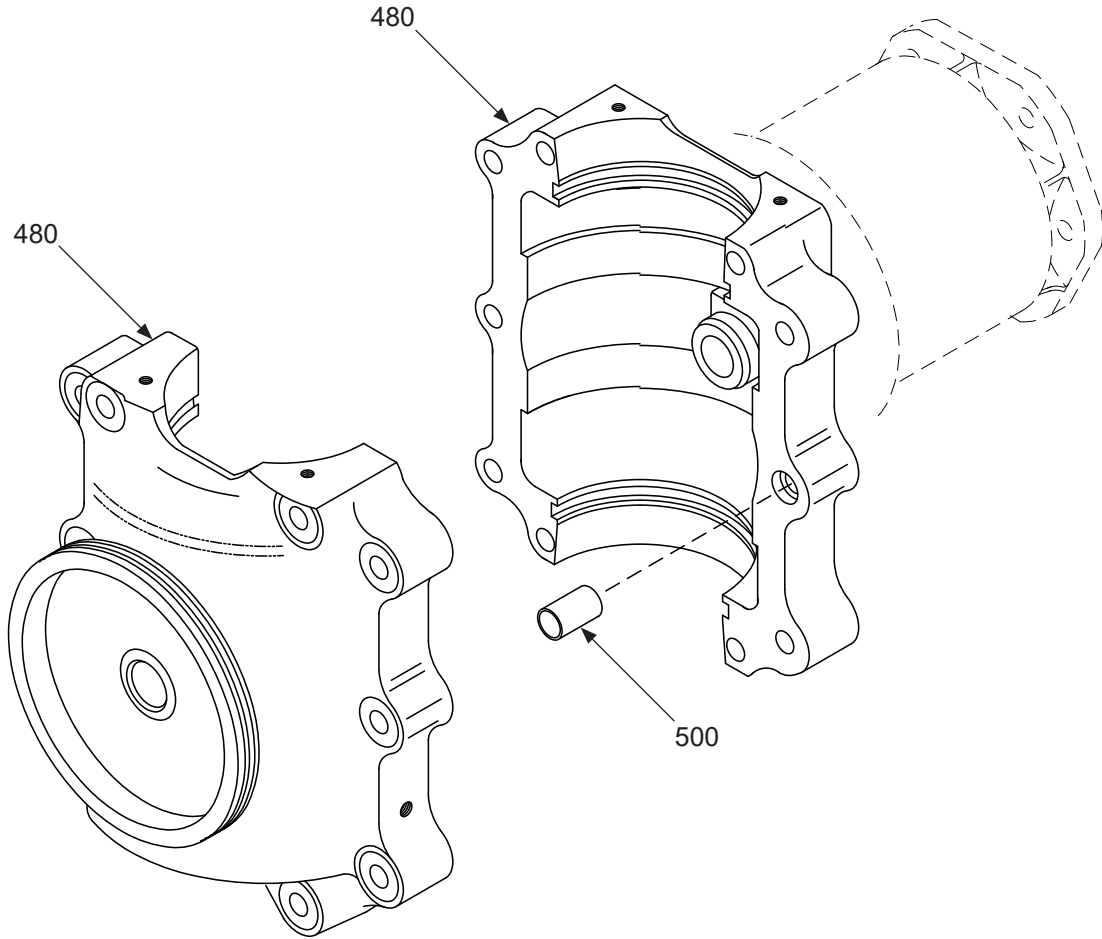
2-Blade Hub Units: Configuration A
Figure App-A-1

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-A-1		C-3230-() HUB UNIT PARTS				
480	C-3230	• PCP: HUB UNIT		1		PCP
	C-3230-1	• PCP: HUB UNIT		1		PCP
	C-3230-6	• PCP: HUB UNIT		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
630	A-3229	• • BOLT, 3/8-24, 12-POINT		6	Y	
640	B-3834-0663	• • WASHER		6	Y	
650	A-2043	• • NUT, 3/8-24, HEX, SELF-LOCKING		6	Y	
655	N/A	• • EXTENSION, HUB (NON-REPLACEABLE)		1		
App-A-1		D-6560-() HUB UNIT PARTS				
480	D-6560-1	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4)		1		PCP
	D-6560-2	• PCP: HUB UNIT, HC-E2Y(R,K)-1		1		PCP
	D-6560-3	• PCP: HUB UNIT, HC-F2YL-1		1		PCP
	D-6560-21	• PCP: HUB UNIT, HC-F2Y(R,K)-1		1		PCP
	D-6560-23	• PCP: HUB UNIT, HC-F2YL-1		1		PCP
490	A-2245-3	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
630	A-3229	• • BOLT, 3/8-24, 12-POINT		6	Y	
640	B-3834-0663	• • WASHER		6	Y	
650	A-2043-1	• • NUT, 3/8-24, HEX, SELF-LOCKING		6	Y	
655	N/A	• • EXTENSION, HUB (NON-REPLACEABLE)		1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

2-Blade Hub Unit Parts Lists: Configuration A



TPHMB-0539

2-Blade Hub Units: Configuration B
Figure App-A-2

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-A-2		D-2201-()(R) HUB UNIT PARTS				
480	D-2201	• PCP: HUB UNIT		1		PCP
	D-2201-2	• PCP: HUB UNIT		1		PCP
	D-2201-4	• PCP: HUB UNIT		1		PCP
	D-2201-6	• PCP: HUB UNIT		1		PCP
	D-2201-16	• PCP: HUB UNIT		1		PCP
	D-2201-18	• PCP: HUB UNIT		1		PCP
	D-2201-20	• PCP: HUB UNIT		1		PCP
	D-2201-23	• PCP: HUB UNIT		1		PCP
	D-2201-24	• PCP: HUB UNIT		1		PCP
	D-2201-25	• PCP: HUB UNIT		1		PCP
	D-2201-1R	• PCP: HUB UNIT		1		PCP
	D-2201-2R	• PCP: HUB UNIT		1		PCP
	D-2201-4R	• PCP: HUB UNIT		1		PCP
	D-2201-6R	• PCP: HUB UNIT		1		PCP
	D-2201-8R	• PCP: HUB UNIT		1		PCP
	D-2201-10R	• PCP: HUB UNIT		1		PCP
	D-2201-16R	• PCP: HUB UNIT		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-2		D-4214-() HUB UNIT PARTS				
480	D-4214-3	• PCP: HUB UNIT		1	Y	PCP
	D-4214-4	• PCP: HUB UNIT		1	Y	PCP
	D-4214-5	• PCP: HUB UNIT		1	Y	PCP
	D-4214-6	• PCP: HUB UNIT		1	Y	PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-2		D-6522-()(R) HUB UNIT PARTS				
480	D-6522-1	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4)		1		PCP
	D-6522-2	• PCP: HUB UNIT, HC-C2YL-(2,4)		1		PCP
	D-6522-21	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4)		1		PCP
	D-6522-22	• PCP: HUB UNIT, HC-C2YL-(2,4)		1		PCP
	D-6522-1R	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4)		1		PCP
	D-6522-2R	• PCP: HUB UNIT, HC-C2YL-(2,4)		1		PCP
	D-6522-21R	• PCP: HUB UNIT, HC-C2Y(K,R)-(2,4)		1		PCP
	D-6522-22R	• PCP: HUB UNIT, HC-C2YL-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

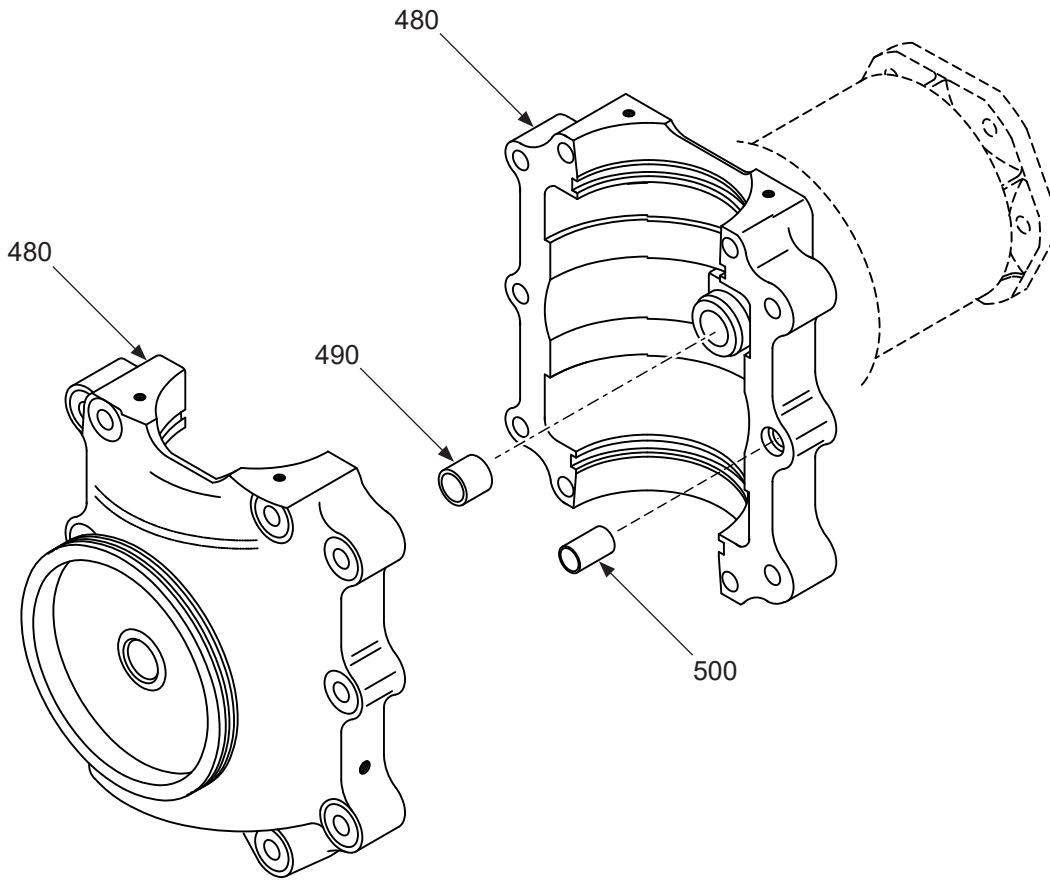
2-Blade Hub Unit Parts Lists: Configuration B, page 1 of 2

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-A-2		D-6530-() (R) HUB UNIT PARTS				
480	D-6530-1	• PCP: HUB UNIT, HC-C2YF-(2,4)		1		PCP
	D-6530-2	• PCP: HUB UNIT, BHC-C2YF-(2,4)		1		PCP
	D-6530-5	• PCP: HUB UNIT, BHC-C2YF-(2,4)		1		PCP
	D-6530-6	• PCP: HUB UNIT, DHC-C2YF-(2,4)		1		PCP
	D-6530-9	• PCP: HUB UNIT, HC-L2YF-(2,4)		1		PCP
	D-6530-10	• PCP: HUB UNIT, BHC-L2YF-(2,4)		1		PCP
	D-6530-11	• PCP: HUB UNIT, BHC-C2YF-(2,4)		1		PCP
	D-6530-12	• PCP: HUB UNIT, HC-C2YF-(2,4)		1		PCP
	D-6530-25	• PCP: HUB UNIT, BHC-C2YF-(2,4)		1		PCP
	D-6530-30	• PCP: HUB UNIT, BHC-L2YF-(2,4)		1		PCP
	D-6530-32	• PCP: HUB UNIT, HC-C2YF-(2,4)		1		PCP
	D-6530-1R	• PCP: HUB UNIT, BHC-C2YF-(2,4)		1		PCP
	D-6530-2R	• PCP: HUB UNIT, BHC-C2YF-(2,4)		1		PCP
	D-6530-3R	• PCP: HUB UNIT, CHC-C2YF-(2,4)		1		PCP
	D-6530-4R	• PCP: HUB UNIT, HC-D2YF-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-2		D-6555-() HUB UNIT PARTS				
480	D-6555-1	• PCP: HUB UNIT, HC-I2YF-(2,4)		1		PCP
	D-6555-2	• PCP: HUB UNIT, BHC-I2YF-(2,4)		1		PCP
	D-6555-21	• PCP: HUB UNIT, HC-I2YF-(2,4)		1		PCP
	D-6555-22	• PCP: HUB UNIT, BHC-I2YF-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-2		D-6558-() HUB UNIT PARTS				
480	D-6558-1	• PCP: HUB UNIT, HC-M2YL-(2,4)		1		PCP
	D-6558-2	• PCP: HUB UNIT, HC-M2YR-(2,4)		1		PCP
	D-6558-22	• PCP: HUB UNIT, HC-M2YR-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

2-Blade Hub Unit Parts Lists: Configuration B, page 2 of 2



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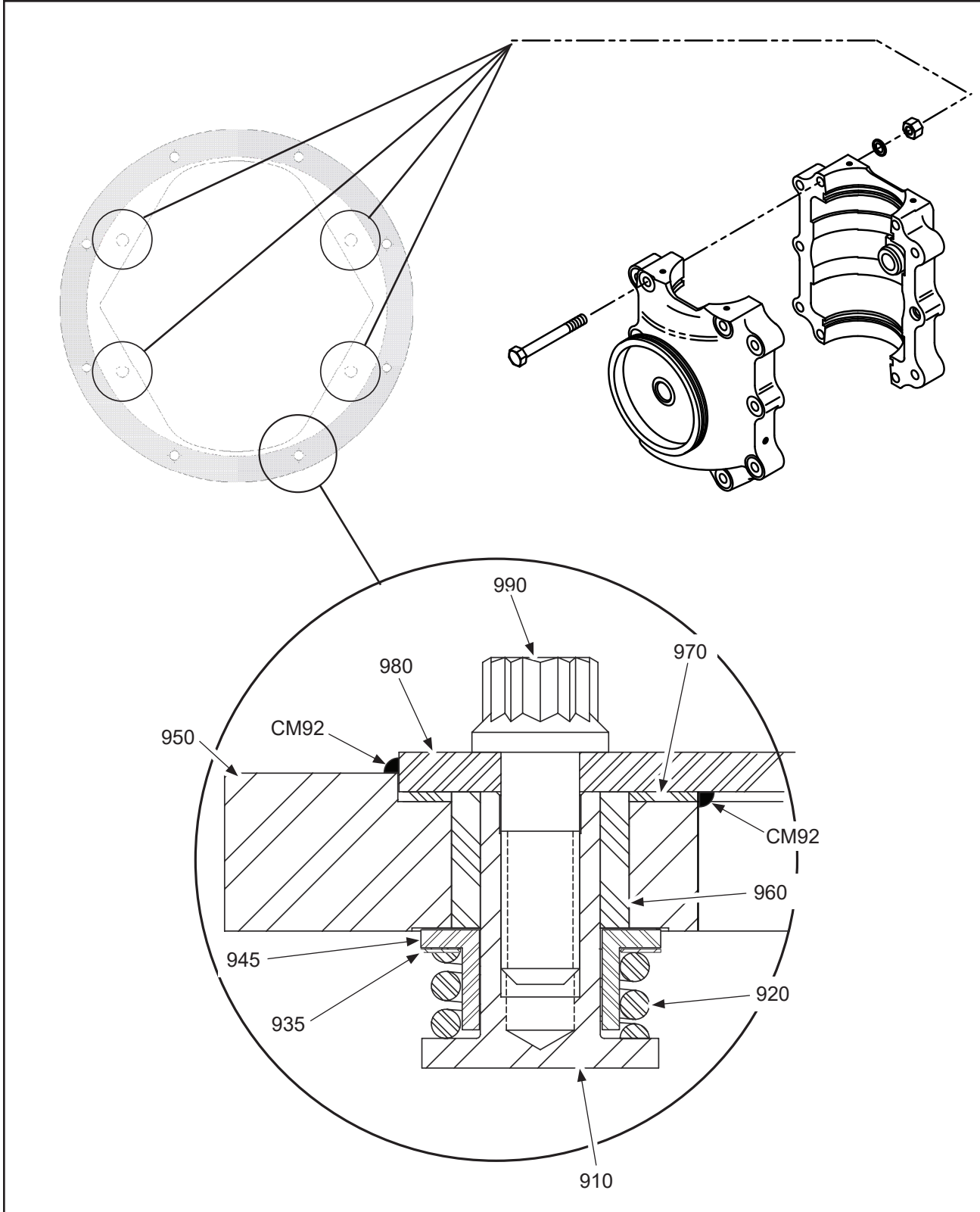
2-Blade Hub Units: Configuration C
Figure App-A-3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-A-3		D-2477-()(R) HUB UNIT PARTS				
480	D-2477-2	• PCP: HUB		1	Y	PCP
	D-2477-2R	• PCP: HUB		1	Y	PCP
490	A-2245-1	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-3		D-2483 HUB UNIT PARTS				
480	D-2483	• PCP: HUB		1	Y	PCP
490	A-2245-1	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-3		D-2484-() HUB UNIT PARTS				
480	D-2484-1	• PCP: HUB		1	Y	PCP
490	A-2245-1	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-3		D-6553-() HUB UNIT PARTS				
480	D-6553-2	• PCP: HUB UNIT, BHC-J2YF-(2,4)		1	Y	PCP
	D-6553-22	• PCP: HUB UNIT, BHC-J2YF-(2,4)		1	Y	PCP
490	A-2245-3	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-3		D-6563-() HUB UNIT PARTS				
480	D-6563-1	• PCP: HUB UNIT, HC-E2YL-(2,4)		1		PCP
	D-6563-21	• PCP: HUB UNIT, HC-E2YL-(2,4)		1		PCP
490	A-2245-3	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-A-3		D-6565-()(R) HUB UNIT PARTS				
480	D-6565-1	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4)		1		PCP
	D-6565-2	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4)		1		PCP
	D-6565-21	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4)		1		PCP
	D-6565-22	• PCP: HUB UNIT, HC-F2Y(R,K)-(2,4)		1		PCP
	D-6565-1R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4)		1		PCP
	D-6565-21R	• PCP: HUB UNIT, HC-E2Y(R,K)-(2,4)		1		PCP
490	A-2245-3	• • HUB BUSHING, ROD (CYLINDER-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

2-Blade Hub Unit Parts Lists: Configuration C



C-1576 Damper Assembly
Figure App-A-4

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-A-4		C-1576 DAMPER ASSEMBLY PARTS				
910	A-1579	• SPACER TUBE, HEX HEAD		8		
920	A-1580	• SPRING, COMPRESSION		8	Y	
-930	B-3851-0732	• WASHER, REPLACED BY ITEM 935		8	Y	
935	106975	• WASHER, SPRING ADJUST, REPLACES ITEM 930		8		
-940	A-1865-2	• WASHER, FIBER, REPLACED BY ITEM 945		8	Y	
945	106972	• BUSHING, FLANGED, REPLACES ITEM 940		8		
950	C-1567-1	• WEIGHT, DAMPER		1		
960	A-1581	• SILICONE GROMMET		8	Y	
970	C-1568-1	• DISK, FRICTION		1	Y	
980	C-1566-1	• PLATE, DAMPER		1		
990	A-1578	• BOLT, 1/4-28, 12 POINT, REPLACED BY ITEM 990A		OBS	Y	
990A	A-2038-6	• SCREW, 1/4-28, CAP, REPLACES ITEM 990		8	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

C-1576 Damper Assembly

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EXPLODED VIEWS AND PARTS LISTS
3-blade Propellers/Hub Units

Propeller Exploded Views

(-2) Propeller w/ Start Lock Assembly, w/o Hub Plug	Figure 10B-1	10B-3
(-2) Propeller w/ Start Lock Assembly and Hub Plug.....	Figure 10B-2.....	10B-4
(-2) Propeller w/ Start Lock Assembly, Hub Spring Assembly, and Hub Plug.....	Figure 10B-3.....	10B-5
(-2) or (-5) Propeller w/ Cylinder Spring Assembly, w/o Hub Plug	Figure 10B-4.....	10B-6
(-2) Propeller w/ Cylinder Spring Assembly and Hub Plug	Figure 10B-5.....	10B-7
(-2) or (-5) Propeller w/ Cylinder Spring Assembly, w/o Hub Plug and Washer (290)	Figure 10B-6.....	10B-8

(-2) Propeller Parts List

PHC-C3YD-2UF	10B-9
(E,P)HC-C3YF-2.....	10B-12
(E,P)HC-C3YF-2F	10B-15
(E,P)HC-C3YF-2U	10B-18
(E,P)HC-C3YF-2UF.....	10B-21
PHC-C3YF-2(L)KU	10B-24
PHC-C3YF-2(L)KUF	10B-27
HC-C3YN-2	10B-30
HC-C3YN-2F	10B-33
HC-C3YN-2L(A).....	10B-36
HC-C3YN-2L(A)F	10B-39
HC-C3YN-2L(A)(D)U	10B-42
HC-C3YN-2L(A)(D)UF	10B-45
HC-C3YN-2U	10B-48
HC-C3YN-2UF	10B-51
HC-C3YR-2C (Composite Blades).....	10B-54
HC-C3YR-2	10B-57
HC-C3YR-2F	10B-60
HC-C3YR-2(L)(E)U.....	10B-63
HC-C3YR-2(L)(E)UF	10B-66
HC-E3YR-2.....	10B-69

EXPLODED VIEWS AND PARTS LISTS
3-blade Propellers/Hub Units, continued

(-2) Propeller Parts List, continued

HC-E3YR-2F	10B-72
HC-E3YR-2(A)(L)	10B-75
HC-E3YR-2(A)(L)F	10B-78
HC-E3YR-2(A)(L)T	10B-81
HC-E3YR-2(A)(L)TF	10B-84
HC-F3YR-2.....	10B-87
HC-F3YR-2F.....	10B-90
HC-F3YR-2U	10B-93
HC-F3YR-2UF	10B-96
HC-F3YR-2UFH	10B-99
(E)HC-G3YF-2.....	10B-102
(E)HC-G3YF-2F.....	10B-105
(E,P)HC-G3YF-2U.....	10B-108
(E,P)HC-G3YF-2UF.....	10B-111
HC-H3YF-2.....	10B-114
HC-H3YF-2F.....	10B-117
HC-H3YF-2UF	10B-120
PHC-H3YF-2KUF	10B-123
HC-H3YN-2	10B-126
HC-H3YN-2F	10B-129
HC-H3YN-2UF.....	10B-132
HC-I3YF-2	10B-135
HC-I3YF-2F	10B-138
HC-I3YF-2U.....	10B-141
HC-I3YF-2UF.....	10B-144
PHC-I3YF-2AL.....	10B-147
PHC-I3YF-2(L)UF.....	10B-150
HC-I3YR-2(L)UF	10B-153
PHC-J3YF-2	10B-156
PHC-J3YF-2F	10B-159
PHC-J3YF-2U.....	10B-162
PHC-J3YF-2UF	10B-165

EXPLODED VIEWS AND PARTS LISTS
3-blade Propellers/Hub Units, continued

(-5) Propeller Parts List

HC-C3YF-5F.....	10B-168
HC-C3YN-5A.....	10B-171

APPENDIX

Hub Unit Exploded Views

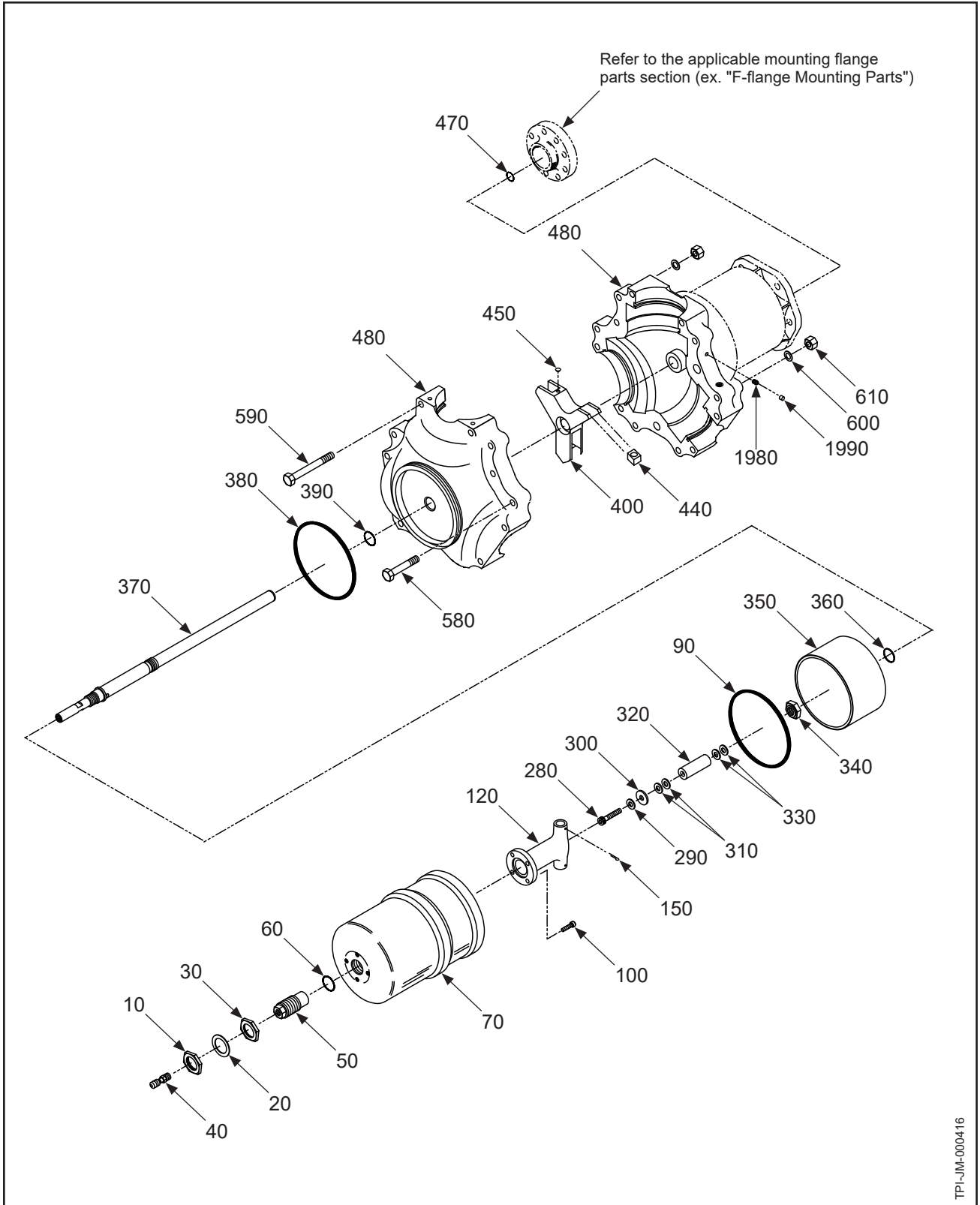
3-blade Hub Units: Configuration A.....	Figure App-B-1	App-B-3
3-blade Hub Units: Configuration B.....	Figure App-B-2	App-B-5
3-blade Hub Units: Configuration C.....	Figure App-B-3	App-B-8

Hub Unit Parts Lists

C-3266-().....	App-B-4
D-3251-().....	App-B-6
D-3261-().....	App-B-9
D-3266-().....	App-B-9
D-3276.....	App-B-6
D-3285-().....	App-B-9
D-3685.....	App-B-6
D-3695.....	App-B-6
D-3716.....	App-B-6
E-7162-().....	App-B-6
E-7163-().....	App-B-6
E-7164-().....	App-B-9
E-7166-().....	App-B-6
E-7167-().....	App-B-7
E-7168-().....	App-B-7
E-7169-().....	App-B-9
E-7172-().....	App-B-7
E-7173-().....	App-B-7
E-7174-().....	App-B-4
E-7175-().....	App-B-9
E-7751.....	App-B-7
105998-().....	App-B-7

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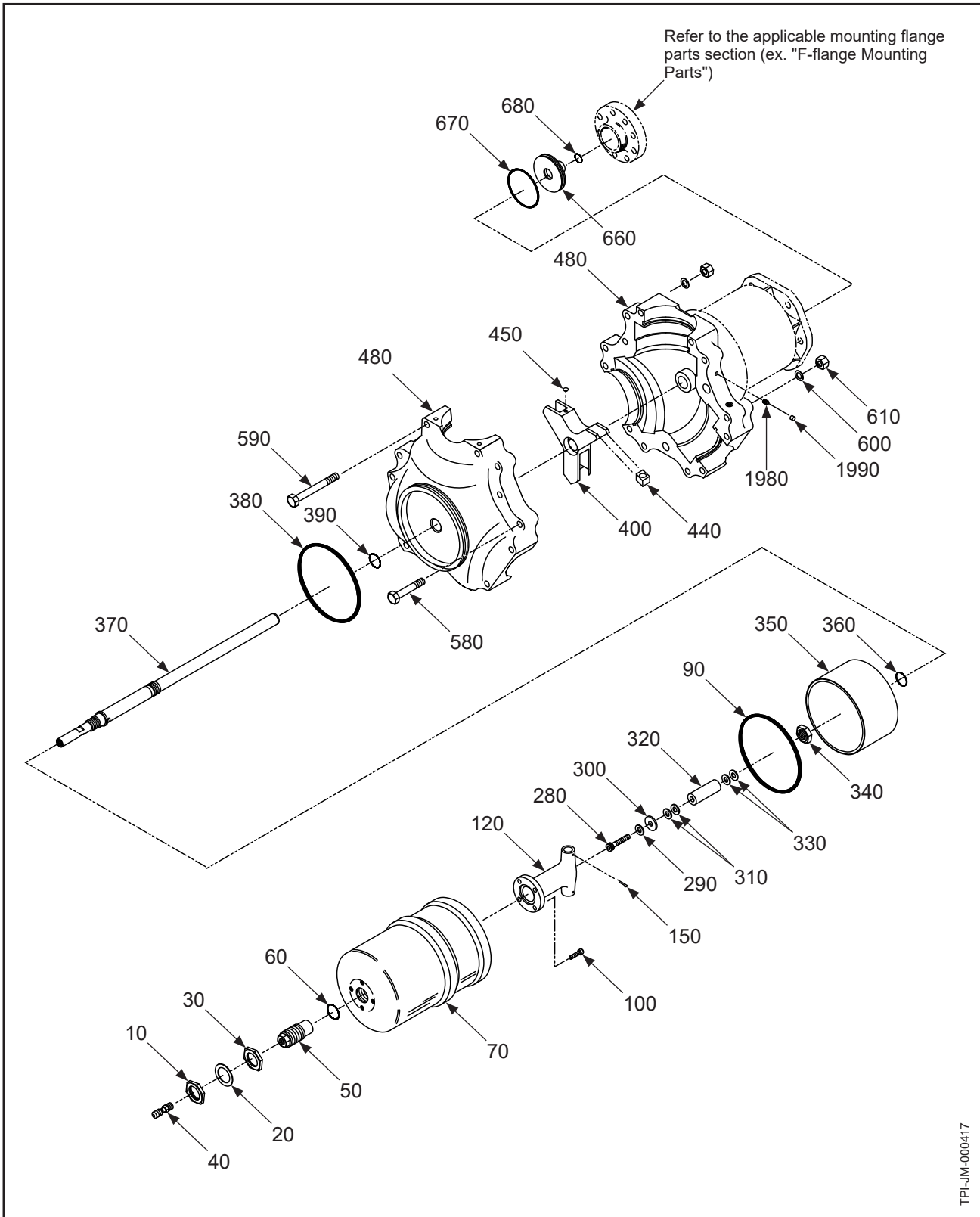
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TPI-JM-000416

**(-2) Propeller w/ Start Lock Assembly, w/o Hub Plug
Figure 10B-1**

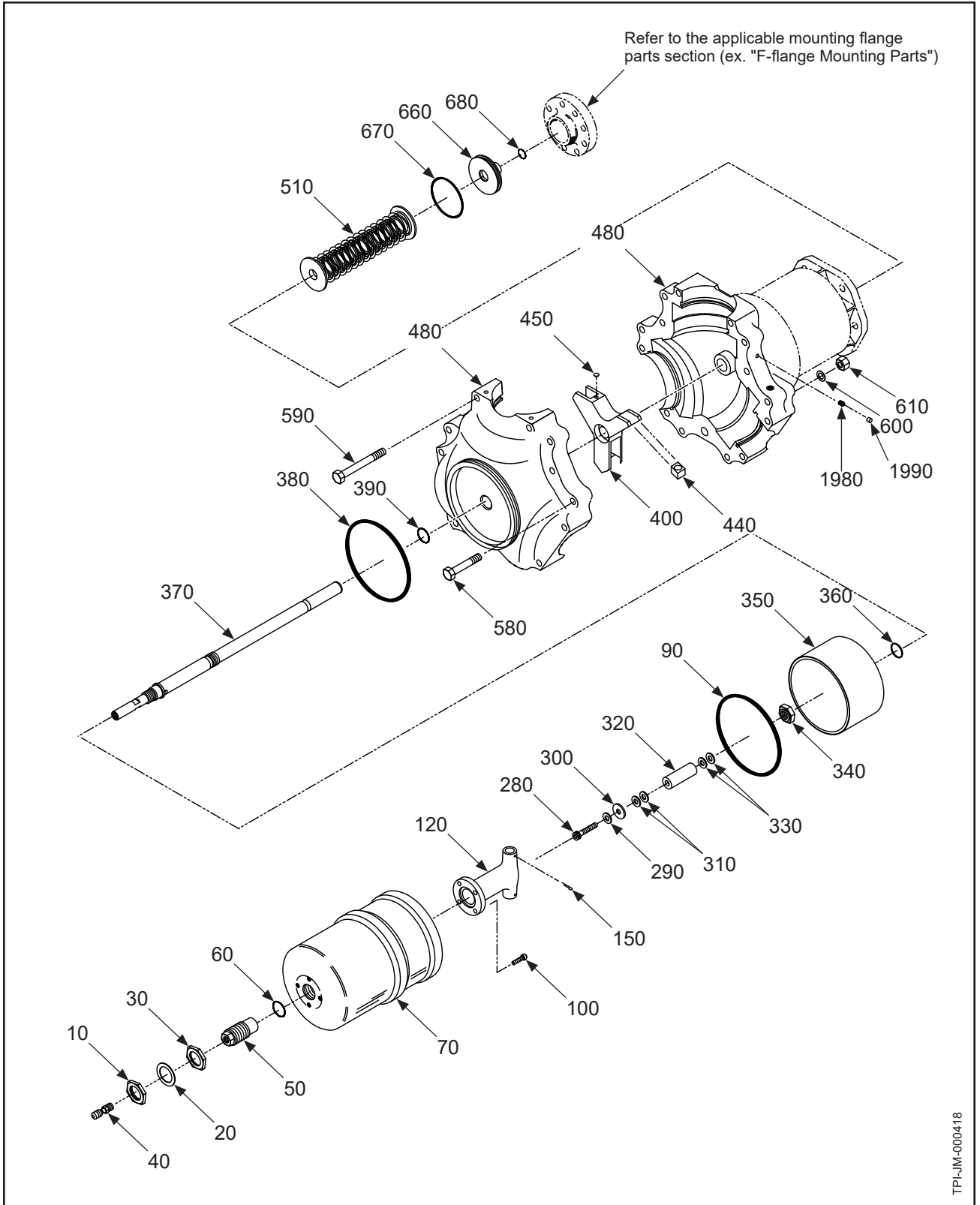
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TPI-JM-000417

**(-2) Propeller w/ Start Lock Assembly and Hub Plug
Figure 10B-2**

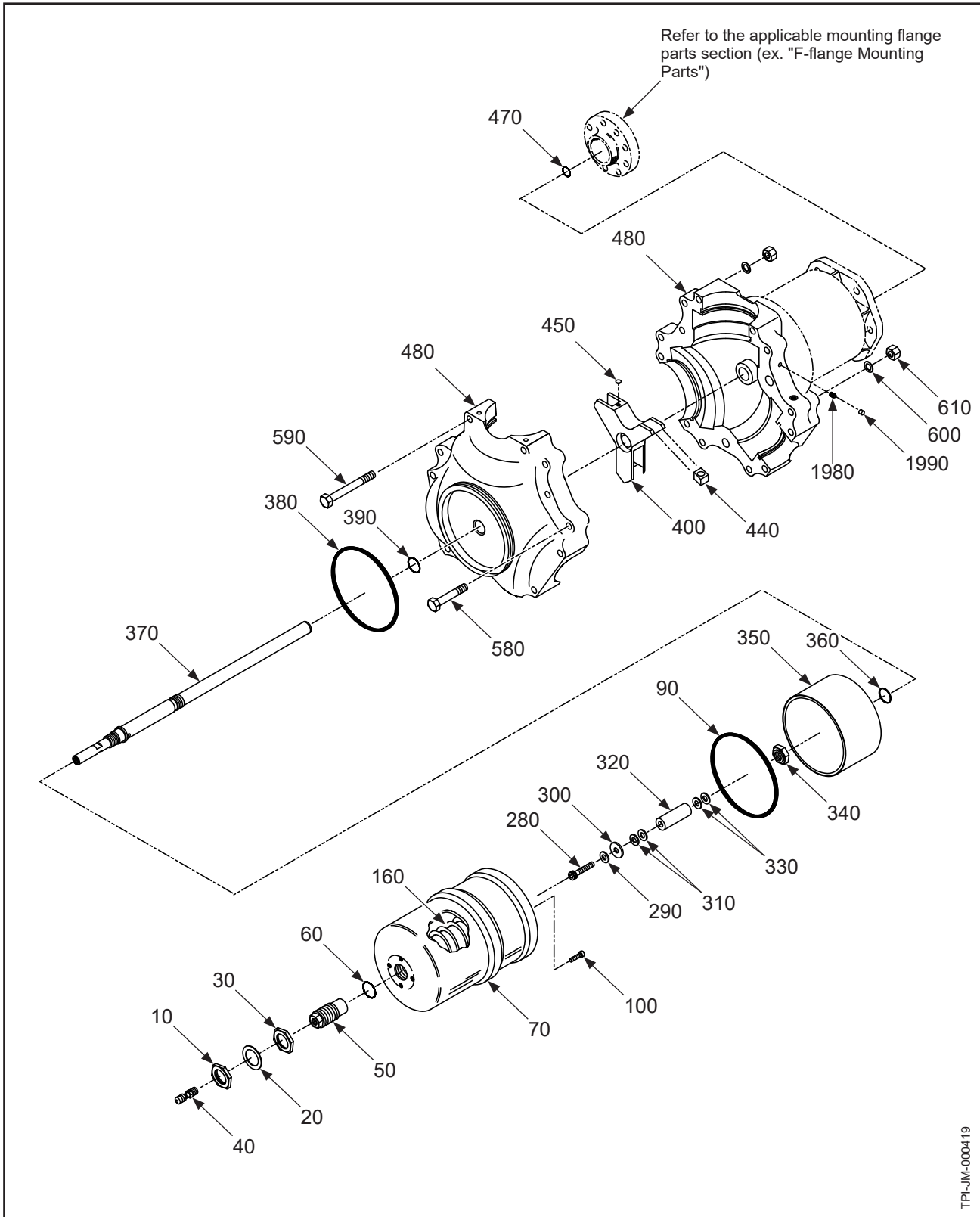
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TPI-IM-000418

(-2) Propeller w/ Start Lock Assembly, Hub Spring Assembly, and Hub Plug
Figure 10B-3

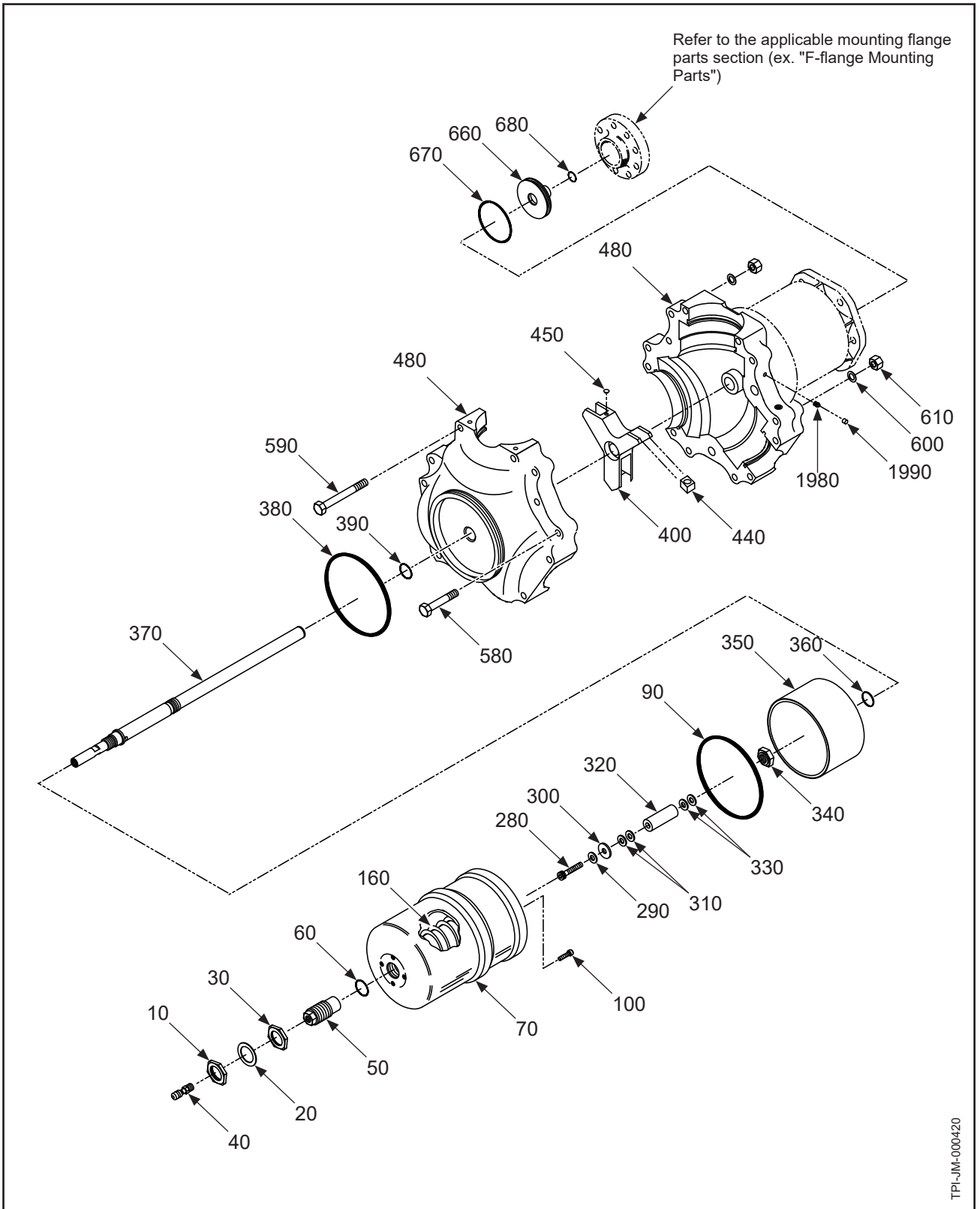
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TPI-JM-000419

(-2) or (-5) Propeller w/ Cylinder Spring Assembly, w/o Hub Plug
Figure 10B-4

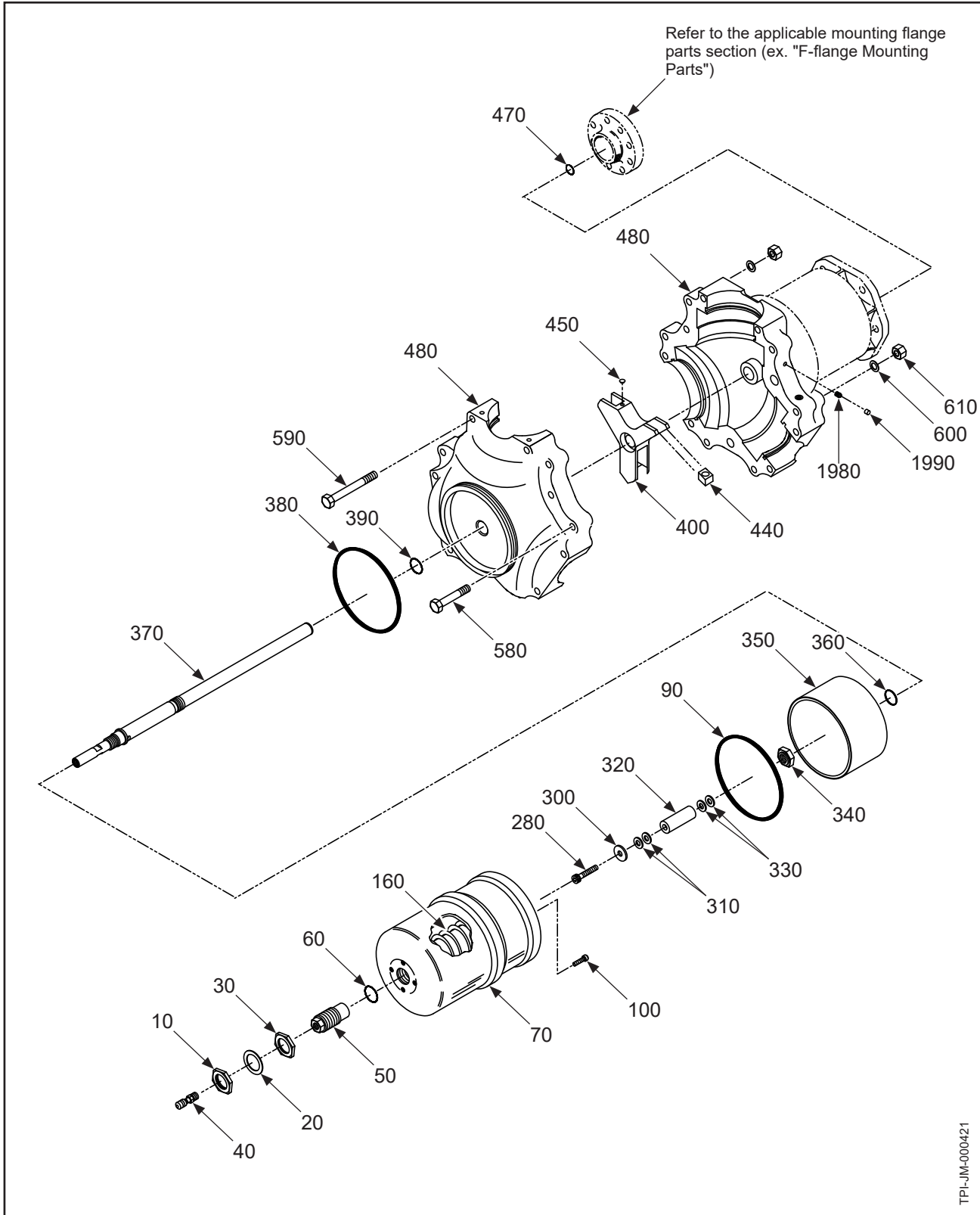
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TPL-IM-000420

(-2) Propeller w/ Cylinder Spring Assembly and Hub Plug
Figure 10B-5

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(-2) or (-5) Propeller w/ Cylinder Spring Assembly, w/o Hub Plug and Washer (290)
Figure 10B-6

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YD-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YD-2UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-7751	• PCP: HUB UNIT, HC-C3YD-(2,4)		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YD-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		D-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E,P)HC-C3YF-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E,P)HC-C3YF-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-4	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-3251-7	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-1	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7167-2	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7167-11	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7167-12	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT			9	
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)			6	
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)			15	Y
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)			15	Y
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985			6	Y
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB			3	Y
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187			3	Y
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354			3	Y
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B			3	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		HC-C3YF-2				
H		(EHC,PHC)-C3YF-2				

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E,P)HC-C3YF-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E,P)HC-C3YF-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2F, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E,P)HC-C3YF-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-7167-1	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDED BY ITEM 480A	G	1		PCP
	E-7167-2	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-11	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-265	G	1		PCP
	E-7167-12	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		HC-C3YF-2F				
H		(EHC,PHC)-C3YF-2F				

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2F, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E,P)HC-C3YF-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2F, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-C3YF-2U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2U, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-C3YF-2U, CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-4	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-3251-7	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-1	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7167-2	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7167-11	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7167-12	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		HC-C3YF-2U				
H		(EHC,PHC)-C3YF-2U				

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2U, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-C3YF-2U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2U, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-C3YF-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2UF, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-C3YF-2UF, CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-4	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-3251-7	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-1	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7167-2	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7167-11	• PCP: HUB UNIT, HC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7167-12	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		HC-C3YF-2UF				
H		(EHC,PHC)-C3YF-2UF				

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2UF, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-C3YF-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(E,P)HC-C3YF-2UF, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YF-2(L)KU				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YF-2(L)KU, CONTINUED				
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USE WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USE WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-7	• PCP HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7167-2	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7167-12	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		PHC-C3YF-2KU				
L		PHC-C3YF-2LKU				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YF-2(L)KU, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YF-2(L)KUF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YF-2(L)KUF, CONTINUED				
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-7	• PCP HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7167-2	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7167-12	• PCP: HUB UNIT, PHC-C3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		PHC-C3YF-2KUF				
L		PHC-C3YF-2LKUF				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - PHC-C3YF-2(L)KUF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440B	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2L(A)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2L(A), CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2L(A), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2L(A)F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2L(A)F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YN-2L(A)F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C3YN-2L(A)F, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2L(A)(D)U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2L(A)(D)U, CONTINUED				
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2L(A)(D)U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2L(A)(D)UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C3YN-2L(A)(D)UF, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2L(A)(D)UF, CONTINUED				
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2L(A)(D)UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
			CAP	2-PIECE SPINNER WITH DOME CAP		
			NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2U, CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A				
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3276	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YN-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-3		PROPELLER PARTS - HC-C3YR-2C				
30	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404-()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252-2	• FORK, THREE BLADE - ASSEMBLY		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

HC-C3YR-2C (Composite Blades), page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2C, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-7172-1	• PCP: HUB UNIT, HC-C3YR-(2,4), SUPERSEDED BY ITEM 480A	G	1		PCP
480A	E-7172-11	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-265 REPLACED BY ITEM 480B	G	1		PCP
480B	105998-11	• PCP: HUB UNIT, HC-C3YR-(2,4) REPLACES ITEM 480A, POST HC-ASB-61-341, R2	G	1		PCP
580	A-2431	• BOLT			9	
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)			6	
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)			9	Y
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)			15	Y
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985			6	Y
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB			3	Y
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187			3	Y
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354			3	Y
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B			3	Y
-1994	B-7073-L1	• BOLT, 10-32, HEX HEAD			3	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		FOR CONTINENTAL CD-200 OR SMA DIESEL ENGINE APPLICATIONS ONLY: ITEMS 480/480A MUST BE REPLACED BY ITEM 480B.				

- ITEM NOT ILLUSTRATED

HC-C3YR-2C (Composite Blades), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2C, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-1929	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

HC-C3YR-2C (Composite Blades), page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YR-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YR-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7172-1	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7172-11	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YR-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YR-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	

EFFECTIVITY	MODEL	EFFECTIVITY	MODEL
		CAP	2-PIECE SPINNER WITH DOME CAP
		NO CAP	1-PIECE SPINNER, NO DOME CAP

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YR-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7172-1	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7172-11	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-C3YR-2F, CONTINUED BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST BALANCE PARTS <ul style="list-style-type: none"> • SCREW • BALANCE WEIGHT COUNTERWEIGHTS/MOUNTING BOLTS <ul style="list-style-type: none"> • PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER • COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES SPINNER PARTS <ul style="list-style-type: none"> • APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES 				
-9000	B-3840-()			AR	Y	
-9020	A-2424(A)-()			AR		
-9030						PCP
-9040					Y	
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2(L)(E)U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160 SUPERSEDED BY ITEM 160B		1		
160B	B-1106	• SPRING ASSEMBLY, SUPERSEDES ITEM 160 AND 160A	A	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	

EFFECTIVITY	MODEL	EFFECTIVITY	MODEL
A	HC-C3YR-2(L)EU	CAP NO CAP	2-PIECE SPINNER WITH DOME CAP 1-PIECE SPINNER, NO DOME CAP

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2(L)(E)U, CONTINUED				
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7172-1	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7172-11	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		HC-C3YR-2(E)U				
L		HC-C3YR-2L(E)U				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2(L)(E)U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2(L)(E)UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160 SUPERSEDED BY ITEM 160B		1		
160B	B-1106	• SPRING ASSEMBLY, SUPERSEDES ITEM 160 AND 160A	A	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		HC-C3YR-2(L)EUF	CAP NO CAP		2-PIECE SPINNER WITH DOME CAP 1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2(L)(E)UF, CONTINUED				
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB-HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7172-1	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7172-11	• PCP: HUB UNIT, HC-C3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-C3YR-2(E)UF				
L		HC-C3YR-2L(E)UF				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-C3YR-2(L)(E)UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2(F), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3266-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7174-2	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7174-12	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2(F), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3266-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7174-2	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7174-12	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2A(L)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
			CAP	2-PIECE SPINNER WITH DOME CAP		
			NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2A(L), CONTINUED				
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3261-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7175-1	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7175-11	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-E3YR-2A				
L		HC-E3YR-2AL				

- ITEM NOT ILLUSTRATED

HC-E3YR-2A(L), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2A(L), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2A(L)F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4	• ROD, PITCH CHANGE, SUPERSEDED BY ITEM 370A		1		
370A	B-2491-4S	• ROD, PITCH CHANGE, SUPERSEDES ITEM 370		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			
		CAP	2-PIECE SPINNER WITH DOME CAP			
		NO CAP	1-PIECE SPINNER, NO DOME CAP			

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP		
10B-2		PROPELLER PARTS - HC-E3YR-2A(L)F, CONTINUED						
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1				
	B-3252-L	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1				
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1				
	B-3252-2L	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	L	1				
410	A-3256	• • BUMPER, FORK		3	Y			
440	A-3253-2	• BLOCK, PITCH CHANGE		3				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS						
480	D-3261-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP		
480A	E-7175-1	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP		
480B	E-7175-11	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP		
580	A-2431	• BOLT		9				
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6				
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y			
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y			
660	A-2481	• PLUG, HUB		1				
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y			
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y			
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y			
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y			
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y			
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y			
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y			
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL				
E		HC-E3YR-2AF						
L		HC-E3YR-2ALF						

- ITEM NOT ILLUSTRATED

HC-E3YR-2A(L)F, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-E3YR-2A(L)F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-3		PROPELLER PARTS - HC-E3YR-2(A)(L)T				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400, POST HC-SL-61-340	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400, POST HC-SL-61-340	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-E3YR-2(A)T	CAP	2-PIECE SPINNER WITH DOME CAP		
L		HC-E3YR-2(A)LT	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-E3YR-2(A)(L)T, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-3		PROPELLER PARTS - HC-E3YR-2(A)(L)T, CONTINUED				
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3261-2	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	C-3266-2	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7175-1	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7174-2	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7175-11	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7174-12	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
510	B-1586	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
640	B-3834-0663	• WASHER		12	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-E3YR-2(A)T	G		HC-E3YR-2A(L)T	
L		HC-E3YR-2(A)LT	H		HC-E3YR-2(L)T	

- ITEM NOT ILLUSTRATED

HC-E3YR-2(A)(L)T, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-3		PROPELLER PARTS - HC-E3YR-2(A)(L)T, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-3		PROPELLER PARTS - HC-E3YR-2(A)(L)TF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-4S	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-E3YR-2(A)TF	CAP	2-PIECE SPINNER WITH DOME CAP		
L		HC-E3YR-2(A)LTF	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-3		PROPELLER PARTS - HC-E3YR-2(A)(L)TF, CONTINUED				
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3261-2	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	C-3266-2	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7175-1	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7174-2	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7175-11	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7174-12	• PCP: HUB UNIT, HC-E3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST)				
510	B-1586	• SPRING ASSEMBLY		1		
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
640	B-3834-0663	• WASHER		12	Y	
660	A-2481-3	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E		HC-E3YR-2(A)TF				
L		HC-E3YR-2(A)LTF				
G		HC-E3YR-2A(L)TF				
H		HC-E3YR-2(L)TF				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-3		PROPELLER PARTS - HC-E3YR-2(A)(L)TF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-F3YR-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• LOW STOP		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-F3YR-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3266-1	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7174-1	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7174-11	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
660A	A-2481-3	• PLUG, HUB (OPTIONAL)		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-F3YR-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-F3YR-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• LOW STOP		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP NO CAP		2-PIECE SPINNER WITH DOME CAP 1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-F3YR-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3266-1	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7174-1	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7174-11	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
660A	A-2481-3	• PLUG, HUB (OPTIONAL)		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-F3YR-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• LOW STOP		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2U, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3266-1	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7174-1	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7174-11	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
660A	A-2481-3	• PLUG, HUB (OPTIONAL)		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2U(F)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• LOW STOP		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160,		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440B	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	C-3266-1	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7174-1	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7174-11	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
660A	A-2481-3	• PLUG, HUB (OPTIONAL)		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2UFH				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER (REFER TO FIGURE 10-13)	CAP	AR		
30	A-2405-4	• NUT, 15/16-20, HEX	CAP	1		
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404-1	• LOW STOP		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	103339-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2UFH, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-7174-1	• PCP: HUB UNIT, HC-F3YR-(2,4), SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7174-11	• PCP: HUB UNIT, HC-F3YR-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-F3YR-2UFH, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E)HC-G3YF-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(E)HC-G3YF-2, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E)HC-G3YF-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-9	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-3251-5	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-4	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7167-3	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7167-14	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7167-13	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		EHC-G3YR-2				
H		HC-G3YR-2				

- ITEM NOT ILLUSTRATED

(E)HC-G3YF-2, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E)HC-G3YF-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(E)HC-G3YF-2, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E)HC-G3YF-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

(E)HC-G3YF-2F, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E)HC-G3YF-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-9	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-3251-5	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-4	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7167-3	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7167-14	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7167-13	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		EHC-G3YR-2F				
H		HC-G3YR-2F				

- ITEM NOT ILLUSTRATED

(E)HC-G3YF-2F, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - (E)HC-G3YF-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(E)HC-G3YF-2F, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-G3YF-2U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160	A	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3	470	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		(E)HC-G3YF-2U	CAP NO CAP		2-PIECE SPINNER WITH DOME CAP 1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-G3YF-2U, CONTINUED				
C-3317-115-1	•	O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-9	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-3251-5	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-4	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7167-3	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7167-14	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7167-13	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		(EHC,PHC)-G3YF-2U				
H		HC-G3YF-2U				

- ITEM NOT ILLUSTRATED

(E,P)HC-G3YF-2U, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-G3YF-2U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

(E,P)HC-G3YF-2U, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-G3YF-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160	A	1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		(E)HC-G3YF-2UF	CAP	2-PIECE SPINNER WITH DOME CAP		
			NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-G3YF-2UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-9	• PCP: HUB, SUPERSEDED BY ITEM 480A	G	1		PCP
	D-3251-5	• PCP: HUB, SUPERSEDED BY ITEM 480A	H	1		PCP
480A	E-7167-4	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	G	1		PCP
	E-7167-3	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B	H	1		PCP
480B	E-7167-14	• PCP: HUB UNIT, (P,E)HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	G	1		PCP
	E-7167-13	• PCP: HUB UNIT, HC-G3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265	H	1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
G		(EHC,PHC)-G3YF-2UF				
H		HC-G3YF-2UF				

- ITEM NOT ILLUSTRATED

(E,P)HC-G3YF-2UF, page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - (E,P)HC-G3YF-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YF-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-6	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YF-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-4	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-1	• PCP: HUB UNIT, HC-H3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-11	• PCP: HUB UNIT, HC-H3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YF-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YF-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-6	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440B	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YF-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-4	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-1	• PCP: HUB UNIT, HC-H3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-11	• PCP: HUB UNIT, HC-H3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YF-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-H3YF-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-2	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-6	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-H3YF-2UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-4	• PCP; HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-1	• PCP: HUB UNIT,HC-H3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-11	• PCP: HUB UNIT,HC-H3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-H3YF-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-H3YF-2KUF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT (NO ALTERNATE BECAUSE OF TRAVEL REQUIREMENTS)		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• SPRING ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-6	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-H3YF-2KUF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-14	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-5	• PCP: HUB UNIT, PHC-H3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-15	• PCP: HUB UNIT, PHC-H3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-H3YF-2KUF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YN-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-6	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YN-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-2	• PCP: HUB UNIT, HC-H3YN-2, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7164-1	• PCP: HUB UNIT, HC-H3YN-2 SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7164-11	• PCP: HUB UNIT, HC-H3YN-2, SUPERSEDES ITEM 480A		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481-1	• PLUG, HUB		1		
670	C-3317-228	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YN-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YN-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-6	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YN-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-2	• PCP: HUB UNIT, HC-H3YN-2, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7164-1	• PCP: HUB UNIT, HC-H3YN-2 SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7164-11	• PCP: HUB UNIT, HC-H3YN-2, SUPERSEDES ITEM 480A		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481-1	• PLUG, HUB		1		
670	C-3317-228	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - HC-H3YN-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-H3YN-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-6	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-H3YN-2UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-2	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7164-1	• PCP: HUB UNIT, HC-H3YN-2, SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7164-11	• PCP: HUB UNIT, HC-H3YN-2, SUPERSEDES ITEM 480A		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481-1	• PLUG, HUB			1	
670	C-3317-228	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - HC-H3YN-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-I3YF-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-I3YF-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-6	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7168-1	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7168-11	• PCP: HUB SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-I3YF-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-I3YF-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-I3YF-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-6	• PCP: HUB UNIT, HC-I3YF-(2,4), SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7168-1	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7168-11	• PCP: HUB, SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-1		PROPELLER PARTS - HC-I3YF-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-I3YF-2U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-I3YF-2U, CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-3251-6	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7168-1	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7168-11	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-I3YF-2U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-I3YF-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-I3YF-2UF, CONTINUED				
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF) REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS		1	Y	
480	D-3251-6	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7168-1	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7168-11	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-4		PROPELLER PARTS - HC-I3YF-2UF, CONTINUED BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST BALANCE PARTS <ul style="list-style-type: none"> • SCREW • BALANCE WEIGHT COUNTERWEIGHTS/MOUNTING BOLTS <ul style="list-style-type: none"> • PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER • COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES SPINNER PARTS <ul style="list-style-type: none"> • APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES 				
-9000	B-3840-()			AR	Y	
-9020	A-2424(A)-()			AR		
-9030						PCP
-9040					Y	
EFFECTIVITY	MODEL	EFFECTIVITY	MODEL			

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - PHC-I3YF-2AL				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - PHC-I3YF-2AL, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3251-14	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7168-2	• PCP: HUB UNIT, (P,E) HC-I3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7168-12	• PCP: HUB UNIT, (P,E) HC-I3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - PHC-I3YF-2AL, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - PHC-I3YF-2(L)UF				
30	A-2405-4	• NUT, 15/16-20, HEX		1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED		1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• LOW STOP		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY	E	1		
	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		PHC-I3YF-2UF				
L		PHC-I3YF-2LUF				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - PHC-I3YF-2(L)UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-7168-2	• PCP: HUB UNIT, (P,E) HC-I3YF-(2,4) SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7168-12	• PCP: HUB UNIT, (P,E) HC-I3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY	MODEL		
E L		PHC-I3YF-2UF PHC-I3YF-2LUF				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - PHC-I3YF-2(L)UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

PHC-I3YF-2(L)UF, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-I3YR-2(L)UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• LOW STOP		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY SUPERSEDED BY ITEM 400A	E	1		
	B-3252-L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDED BY ITEM 400A	L	1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY SUPERSEDES ITEM 400	E	1		
	B-3252-2L	• FORK, THREE BLADE, LH - ASSEMBLY SUPERSEDES ITEM 400	L	1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-I3YR-2UF	CAP	2-PIECE SPINNER WITH DOME CAP		
L		HC-I3YY-2LUF	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-I3YR-2(L)UF, page 1 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-I3YR-2(L)UF, CONTINUED				
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3716	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7173-1	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7173-11	• PCP: HUB UNIT, HC-I3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		3	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E L		HC-I3YR-2UF HC-I3YY-2LUF				

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-13YR-2(L)UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - PHC-J3YF-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - PHC-J3YF-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-7	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-3	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199, SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-13	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 48A0, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - PHC-J3YF-2, CONTINUED BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST BALANCE PARTS • SCREW • BALANCE WEIGHT COUNTERWEIGHTS/MOUNTING BOLTS • PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER • COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES SPINNER PARTS • APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - PHC-J3YF-2F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2423-1	• CYLINDER UNIT		1		
-80	A-862-3	• • BUSHING, PLASTIC		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-10	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "START LOCK ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
110	830-30	• START LOCK - ASSEMBLY		1		
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK, USED WITH ITEMS 400 AND 400A		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - PHC-J3YF-2F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-7	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-3	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199, SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-13	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 48A0, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-2		PROPELLER PARTS - PHC-J3YF-2F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-J3YF-2U				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253	• BLOCK, PITCH CHANGE, USED WITH ITEM 400		3		
	A-3253-1	• BLOCK, PITCH CHANGE, USED WITH ITEM 400A		3		
440A	A-3253-1	• BLOCK, PITCH CHANGE, ALTERNATE FOR A-3253		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-J3YF-2U, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-7	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-3	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199, SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-13	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-J3YF-2U, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

PHC-J3YF-2U, page 3 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-J3YF-2UF				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-1	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
290	B-3837-0563	• WASHER		AR	Y	
290A	B-3837-0532	• WASHER		AR	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
350A	B-3237	• PISTON, ALTERNATE FOR ITEM 350		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-2491-5	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-J3YF-2UF, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3285-7	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7169-3	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 480, POST HC-SL-61-199, SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7169-13	• PCP: HUB UNIT,PHC-J3YF-(2,4) SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-5		PROPELLER PARTS - PHC-J3YF-2UF, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-C3YF-5F				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7252	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-3684	• • SPRING ASSEMBLY		1		
90	C-3317-427-2	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-2	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-2	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-2	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-C3YF-5F, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3685	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7166-1	• PCP: HUB UNIT, HC-C3YF-5 SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7166-11	• PCP: HUB UNIT, HC-C3YF-5 SUPERSEDES ITEM 480A, POST HC-SL-61-265		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-C3YF-5F, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-C3YN-5A				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
-65	C-7250	• CYLINDER ASSEMBLY (NOT AVAILABLE AS A COMPLETE ASSEMBLY, MUST ORDER INDIVIDUAL PARTS)		1		
70	B-2423-1	• • CYLINDER UNIT		1		
-80	A-862-3	• • • BUSHING, PLASTIC		1		
100	B-3841-8	• • SCREW (START LOCK HOUSING)		4	Y	
100A	B-3841-10	• • SCREW, ALTERNATE FOR ITEM 100		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-2	• • SPRING ASSEMBLY		1		
90	C-3317-427-2	• O-RING, CYLINDER ID		1	Y	
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
340	B-3807	• NUT, PISTON		1	Y	
350	B-3683	• PISTON		1		
360	C-3317-210-2	• O-RING, PISTON ID		1	Y	
370	B-2491-3	• ROD, PITCH CHANGE		1		
380	C-3317-247	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-2	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	B-3252	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDED BY ITEM 400A		1		
400A	B-3252-2	• FORK, THREE BLADE - ASSEMBLY, SUPERSEDES ITEM 400		1		
410	A-3256	• • BUMPER, FORK		3	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		3		
470	C-3317-115-2	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-C3YN-5A, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 3-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-3695	• PCP: HUB, SUPERSEDED BY ITEM 480A		1		PCP
480A	E-7163-1	• PCP: HUB UNIT, HC-C3YN-5A SUPERSEDES ITEM 480, POST HC-SL-61-199 SUPERSEDED BY ITEM 480B		1		PCP
480B	E-7163-11	• PCP: HUB UNIT, HC-C3YN-5A, SUPERSEDES ITEM 480A		1		PCP
580	A-2431	• BOLT		9		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		6		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		15	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		15	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		6	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		3	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		3	Y	
-1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		3	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		3	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10B-6		PROPELLER PARTS - HC-C3YN-5A, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

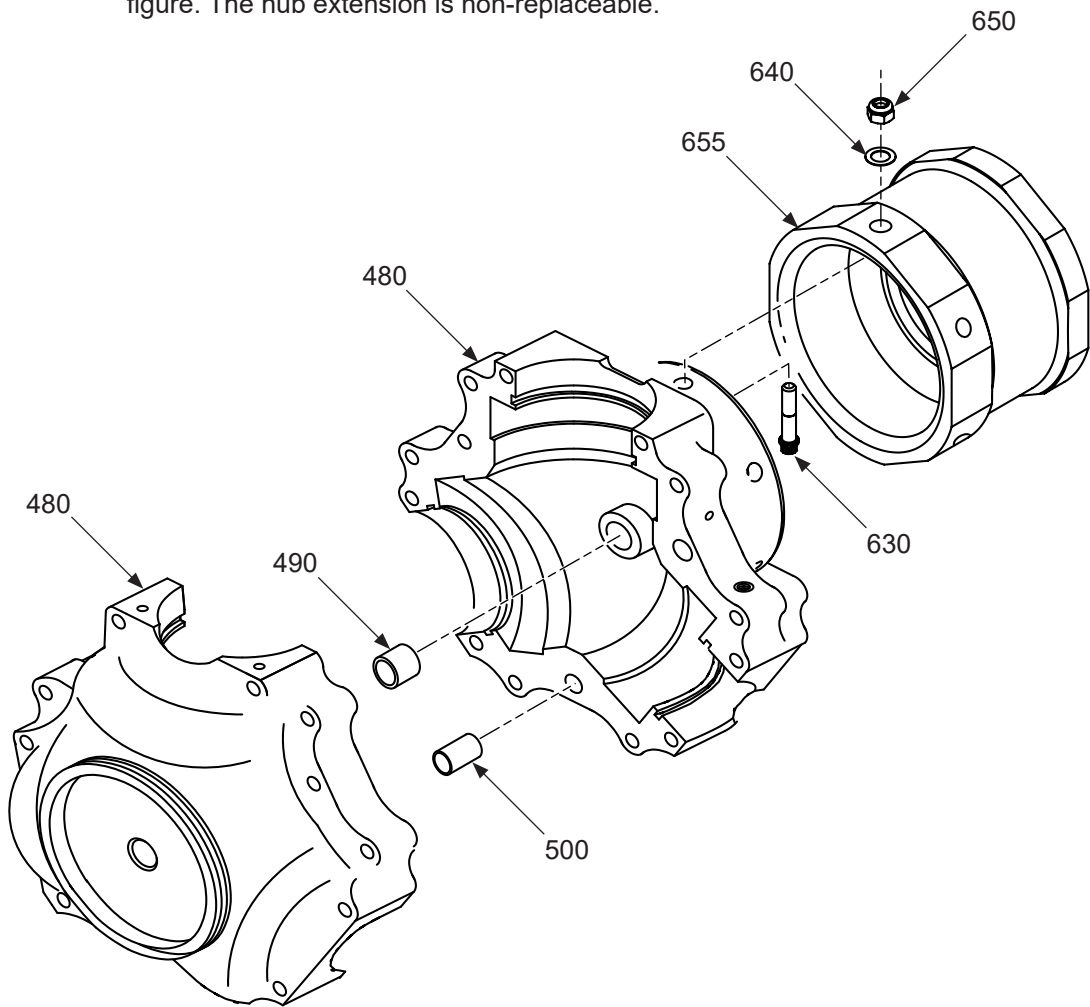
- ITEM NOT ILLUSTRATED

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3-Blade Propeller/Hub Unit Parts Lists - Appendix
Hub Unit Parts Lists

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NOTE: The hub extension (655) is removed for clarity in this figure. The hub extension is non-replaceable.



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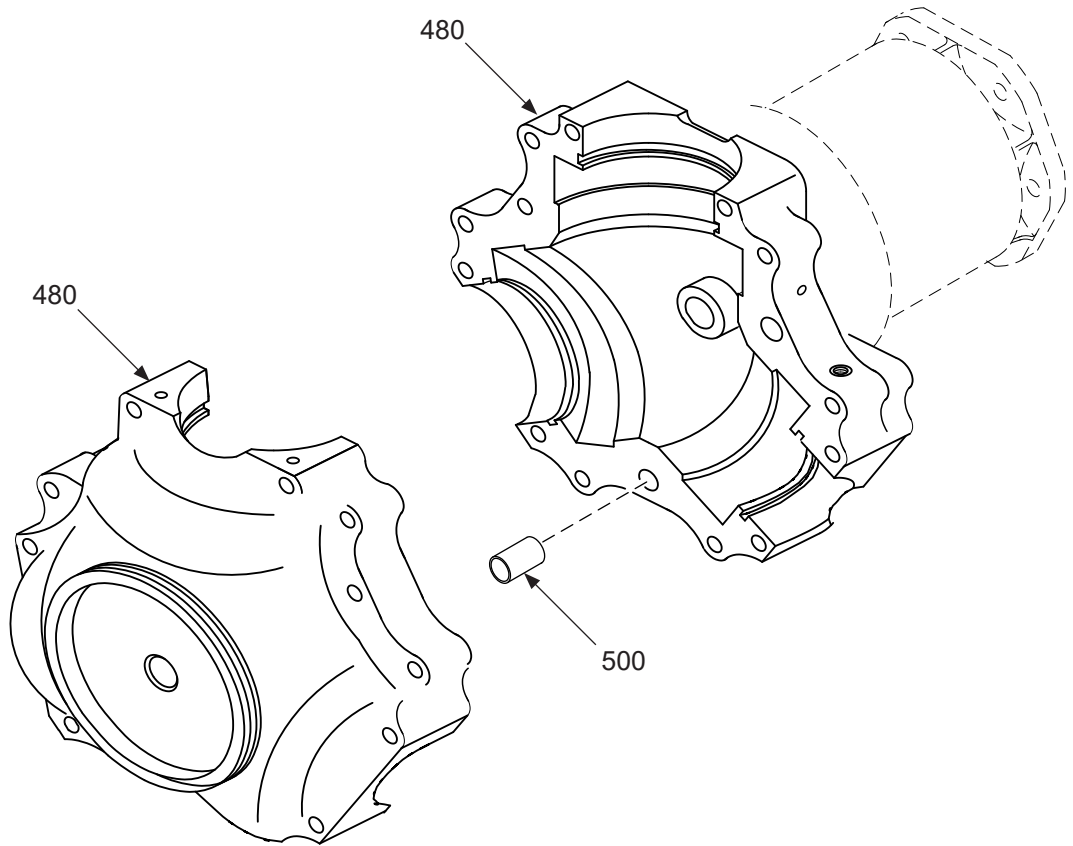
3-Blade Hub Units: Configuration A
Figure App-B-1

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-B-1		C-3266-() HUB UNIT PARTS				
480	C-3266-1	• PCP: HUB UNIT		1		PCP
	C-3266-2	• PCP: HUB UNIT		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
630	A-3229	• • BOLT, 3/8-24, 12-POINT		6	Y	
640	B-3834-0663	• • WASHER		6	Y	
650	A-2043-1	• • NUT, 3/8-24, HEX, SELF-LOCKING		6	Y	
655	N/A	• • EXTENSION, HUB (NON-REPLACEABLE)		1		
App-B-1		E-7174-() HUB UNIT PARTS				
480	E-7174-1	• PCP: HUB UNIT,HC-F3YR-(2,4)		1		PCP
	E-7174-2	• PCP: HUB UNIT,HC-E3YR-(2,4)		1		PCP
	E-7174-11	• PCP: HUB UNIT,HC-F3YR-(2,4)		1		PCP
	E-7174-12	• PCP: HUB UNIT,HC-E3YR-(2,4)		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
630	A-3229	• • BOLT, 3/8-24, 12-POINT		6	Y	
640	B-3834-0663	• • WASHER		6	Y	
650	A-2043-1	• • NUT, 3/8-24, HEX, SELF-LOCKING		6	Y	
655	N/A	• • EXTENSION, HUB (NON-REPLACEABLE)		1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

3-Blade Hub Unit Parts Lists: Configuration A



TP-MB-0545

3-Blade Hub Units: Configuration B
Figure App-B-2

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-B-2		D-3251-() HUB UNIT PARTS				
480	D-3251-2	• PCP: HUB UNIT		1		PCP
	D-3251-4	• PCP: HUB UNIT		1		PCP
	D-3251-5	• PCP: HUB UNIT		1		PCP
	D-3251-6	• PCP: HUB UNIT		1		PCP
	D-3251-7	• PCP: HUB UNIT		1		PCP
	D-3251-9	• PCP: HUB UNIT		1		PCP
	D-3251-14	• PCP: HUB UNIT		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
-505	B-6986-500M	• • INSERT, THREAD, THIN WALL	B	6	Y	
App-B-2		D-3276 HUB UNIT PARTS				
480	D-3276	• PCP: HUB UNIT		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		D-3685 HUB UNIT PARTS				
480	D-3685	• PCP: HUB UNIT		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		D-3695 HUB UNIT PARTS				
480	D-3695	• PCP: HUB UNIT		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		D-3716 HUB UNIT PARTS				
480	D-3716	• PCP: HUB UNIT		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		E-7162-() HUB UNIT PARTS				
480	E-7162-1	• PCP: HUB UNIT, HC-C3YN-(2,4)		1		PCP
	E-7162-11	• PCP: HUB UNIT, HC-C3YN-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		E-7163-() HUB UNIT PARTS				
480	E-7163-1	• PCP: HUB UNIT, HC-C3YN-5A		1		PCP
	E-7163-11	• PCP: HUB UNIT, HC-C3YN-5A		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		E-7166-() HUB UNIT PARTS				
480	E-7166-1	• PCP: HUB UNIT, HC-C3YF-5		1		PCP
	E-7166-11	• PCP: HUB UNIT, HC-C3YF-5		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
B		D-3251-(4,7) Hub units only				

- ITEM NOT ILLUSTRATED

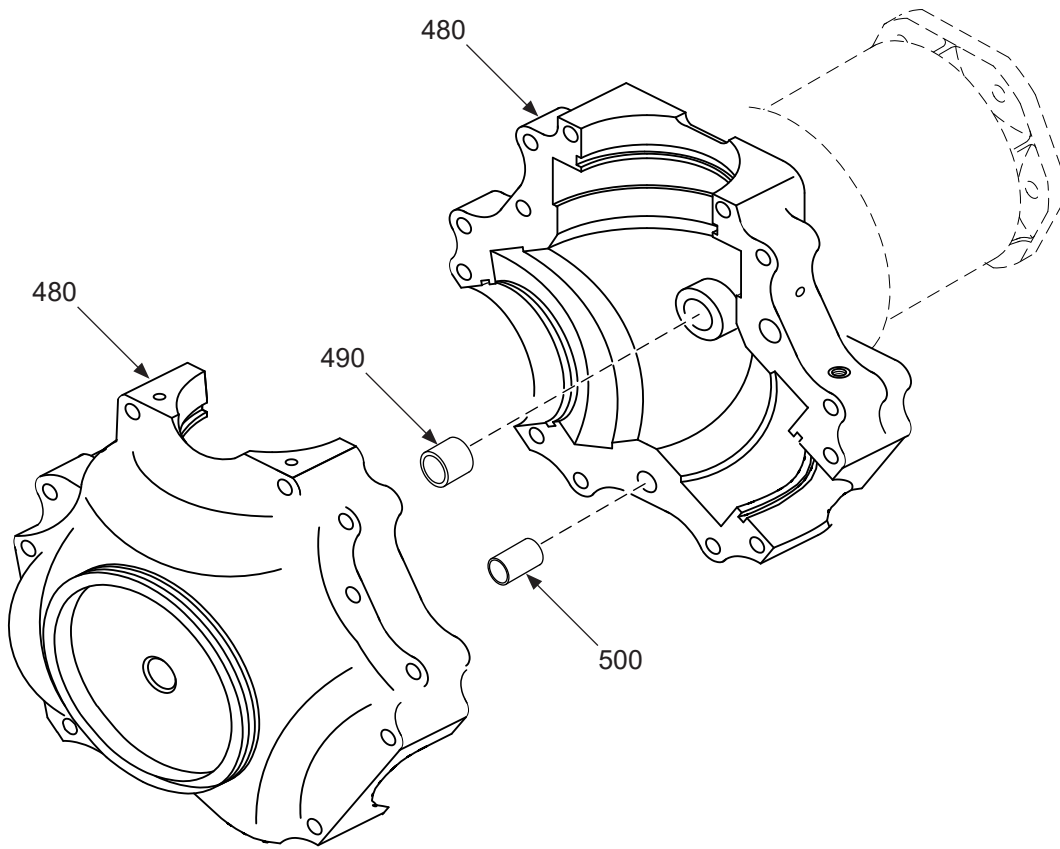
3-Blade Hub Unit Parts Lists: Configuration B, page 1 of 2

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-B-2		E-7167-() HUB UNIT PARTS				
480	E-7167-1	• PCP: HUB UNIT, HC-C3YF-(2,4)		1		PCP
	E-7167-2	• PCP: HUB UNIT, PHC-C3YF-(2,4)		1		PCP
	E-7167-3	• PCP: HUB UNIT, HC-G3YF-(2,4)		1		PCP
	E-7167-4	• PCP: HUB UNIT, (E,P)HC-G3YF-(2,4)		1		PCP
	E-7167-11	• PCP: HUB UNIT, HC-C3YF-(2,4)		1		PCP
	E-7167-12	• PCP: HUB UNIT, PHC-C3YF-(2,4)		1		PCP
	E-7167-13	• PCP: HUB UNIT, HC-G3YF-(2,4)		1		PCP
	E-7167-14	• PCP: HUB UNIT, (E,P)HC-G3YF-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE	A	1	Y	
-505	B-6986-500M	• • INSERT, THREAD, THIN WALL		6	Y	
App-B-2		E-7168-() HUB UNIT PARTS				
480	E-7168-1	• PCP: HUB UNIT, HC-I3YF-(2,4)		1		PCP
	E-7168-2	• PCP: HUB UNIT, (E,P)HC-I3YF-(2,4)		1		PCP
	E-7168-11	• PCP: HUB UNIT, HC-I3YF-(2,4)		1		PCP
	E-7168-12	• PCP: HUB UNIT, (E,P)HC-I3YF-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		E-7172-() HUB UNIT PARTS				
480	E-7172-1	• PCP: HUB UNIT, HC-C3YR-(2,4)		1		PCP
	E-7172-11	• PCP: HUB UNIT, HC-C3YR-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		E-7173-() HUB UNIT PARTS				
480	E-7173-1	• PCP: HUB UNIT, HC-I3YF-(2,4)		1		PCP
	E-7173-11	• PCP: HUB UNIT, HC-I3YF-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		E-7751 HUB UNIT PARTS				
480	E-7751	• PCP: HUB UNIT, HC-C3YD-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-2		105998-() HUB UNIT PARTS				
480	105998-11	• PCP: HUB UNIT, HC-C3YD-(2,4)		1		PCP
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A	E-7167-(1,2) Hub units only					

- ITEM NOT ILLUSTRATED

3-Blade Hub Unit Parts Lists: Configuration B, page 2 of 2



TPH-MB-0548

3-Blade Hub Units: Configuration C
Figure App-B-3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-B-3		D-3261-() HUB UNIT PARTS				
480	D-3261-2	• PCP: HUB UNIT		1		PCP
	D-3261-11	• PCP: HUB UNIT		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-3		D-3266-() HUB UNIT PARTS				
480	D-3266-2	• PCP: HUB UNIT		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-3		D-3285-() HUB UNIT PARTS				
480	D-3285-2	• PCP: HUB UNIT		1		PCP
	D-3285-4	• PCP: HUB UNIT		1		PCP
	D-3285-7	• PCP: HUB UNIT		1		PCP
	D-3285-14	• PCP: HUB UNIT		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-3		E-7164-() HUB UNIT PARTS				
480	E-7164-1	• PCP: HUB UNIT, HC-H3YN-2		1		PCP
	E-7164-11	• PCP: HUB UNIT, HC-H3YN-2		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-3		E-7169-() HUB UNIT PARTS				
480	E-7169-1	• PCP: HUB UNIT, HC-H3YF-(2,4)		1		PCP
	E-7169-3	• PCP: HUB UNIT, PHC-J3YF-(2,4)		1		PCP
	E-7169-5	• PCP: HUB UNIT, PHC-H3YF-(2,4)		1		PCP
	E-7169-11	• PCP: HUB UNIT, HC-H3YF-(2,4)		1		PCP
	E-7169-13	• PCP: HUB UNIT, PHC-J3YF-(2,4)		1		PCP
	E-7169-15	• PCP: HUB UNIT, PHC-H3YF-(2,4)		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
App-B-3		E-7175-() HUB UNIT PARTS				
480	E-7175-1	• PCP: HUB UNIT, HC-E3YR-(2,4)		1		PCP
	E-7175-11	• PCP: HUB UNIT, HC-E3YR-(2,4)		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD (ENGINE-SIDE)		1	Y	
500	A-2249	• • HUB BUSHING, GUIDE		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

3-Blade Hub Unit Parts Lists: Configuration C, page 1 of 2

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EXPLODED VIEWS AND PARTS LISTS 4-blade Propellers/Hub Units

Propeller Exploded Views

4-blade Propeller w/Cylinder Spring Assembly, w/o Hub Plug	Figure 10C-1.....	10C-3
4-blade Propeller w/Cylinder Spring Assembly and Hub Plug.....	Figure 10C-2.....	10C-4

(-2) Propeller Parts List

HC-C4YF-2(E)	10C-5
HC-C4YN-2	10C-8
HC-C4YR-2(L)	10C-11
HC-F4YR-2(L)	10C-14

APPENDIX

Hub Unit Exploded Views

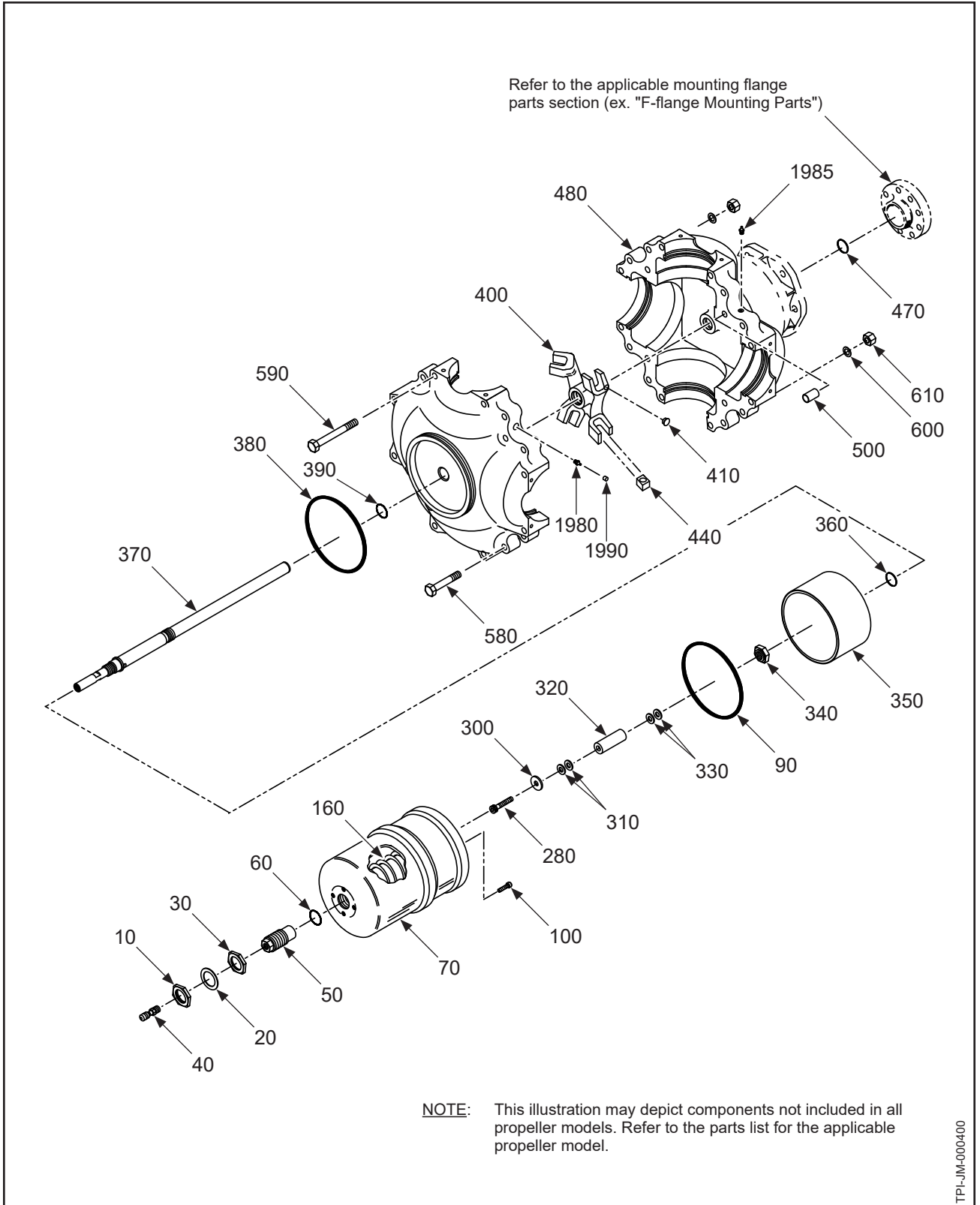
4-blade Hub Units: Configuration A	Figure App-C-1	App-C-3
4-blade Hub Units: Configuration B	Figure App-C-2	App-C-5

Hub Unit Parts Lists

D-4502.....	App-C-4
E-4501-()	App-C-6

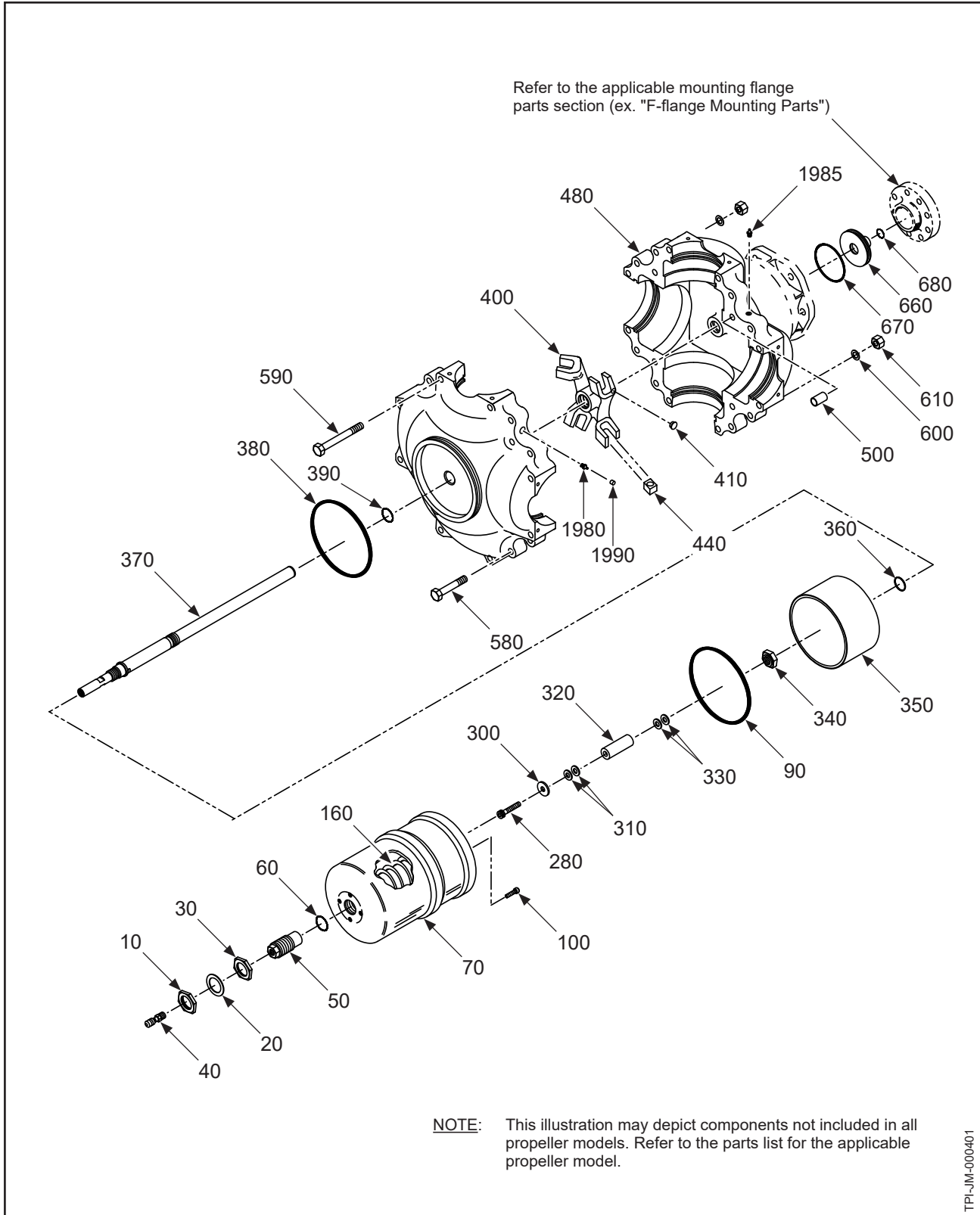
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4-blade Propeller w/Cylinder Spring Assembly, w/o Hub Plug
Figure 10C-1

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4-blade Propeller w/Cylinder Spring Assembly and Hub Plug
Figure 10C-2

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YF-2(E)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER UNIT		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-1	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-3	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3239	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-4505	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	C-4503	• FORK, PITCH CHANGE		1		
410	A-3256	• • BUMPER, FORK		4	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		4		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP		2-PIECE SPINNER WITH DOME CAP	
			NO CAP		1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YF-2(E), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 4-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-4501-3	• PCP: HUB		1		PCP
580	A-2431	• BOLT		12		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		8		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		20	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		20	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		8	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		4	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		4	Y	
1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		4	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		4	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
-2E		HC-C4YF-2E				

- ITEM NOT ILLUSTRATED

HC-C4YF-2(E), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YF-2(E), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		F-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YN-2				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER UNIT		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-1	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-3	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3239	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-4505	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	C-4503	• FORK, PITCH CHANGE		1		
410	A-3256	• • BUMPER, FORK		4	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		4		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
			CAP NO CAP		2-PIECE SPINNER WITH DOME CAP 1-PIECE SPINNER, NO DOME CAP	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YN-2, CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 4-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-4501-4	• PCP: HUB UNIT, HC-C4YN-(2, 4)		1		PCP
580	A-2431	• BOLT		12		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		8		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		20	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		20	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		8	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB		4	Y	
1980B	C-6349	• LUBRICATION FITTING, 45° ALTERNATE FOR ITEM 1980A, POST HC-SL-61-187		4	Y	
1985	106545	• PLUG, LUBRICATION REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB, POST HC-SL-61-354		4	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		4	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YN-2, CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		N-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YR-2(L)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER UNIT		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-1	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-3	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3239	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-4505	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	C-4503	• FORK, PITCH CHANGE	E	1		
	C-4503L	• FORK, PITCH CHANGE	L	1		
410	A-3256	• • BUMPER, FORK		4	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		4		
470	C-3317-115-1	• O-RING, PITCH CHANGE ROD (ENGINE-SIDE HUB HALF)		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-C4YR-2	CAP	2-PIECE SPINNER WITH DOME CAP		
L		HC-C4YR-2L	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YR-2(L), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 4-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	E-4501-1	• PCP: HUB UNIT, HC-C4YR-(2,4)		1		PCP
580	A-2431	• BOLT		12		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		8		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		20	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		20	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		8	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	4	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		4	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	4	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		4	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-C4YR-2				
L		HC-C4YR-2L				

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-1		PROPELLER PARTS - HC-C4YR-2(L), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-2		PROPELLER PARTS - HC-F4YR-2(L)				
10	A-2405-2	• NUT, 15/16-20, HEX	CAP	1		
20	A-169-7	• SPACER	CAP	AR		
30	A-2405-3	• NUT, 15/16-20, HEX, SUPERSEDED BY ITEM 30A	CAP	1		
	A-2405-4	• NUT, 15/16-20, HEX	NO CAP	1		
30A	A-2405-4	• NUT, 15/16-20, HEX, SUPERSEDES ITEM 30	CAP	1		
35	B-7589	• SCREW, SET, 1/4-28, DRILLED	NO CAP	1	Y	
40	B-1938	• VALVE ASSEMBLY		1	Y	
50	A-2404()	• STOP, PITCH (DETERMINED BY BLADE ANGLE)		1		
60	C-3317-117	• O-RING (STOP, PITCH)		1	Y	
70	B-2452-1	• CYLINDER UNIT		1		
-80	A-862-6	• • BUSHING, PLASTIC		1		
90	C-3317-431-1	• O-RING, CYLINDER ID		1	Y	
100	B-3841-8	• SCREW (START LOCK HOUSING)		4	Y	
		REFER TO THE "SPRING ASSEMBLY PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
160	B-1589-1	• SPRING ASSEMBLY, REPLACED BY ITEM 160A		1		
160A	B-1589-3	• SPRING ASSEMBLY, REPLACES ITEM 160		1		
280	A-3205	• SCREW		1	Y	
300	A-2411-1	• WASHER, FEATHER STOP		1	Y	
310	B-3837-0563	• WASHER, FEATHER ADJUST		AR	Y	
310A	B-3837-0532	• WASHER, FEATHER ADJUST		AR	Y	
320	A-2499-()	• SLEEVE, STOP (LENGTH TO GET PITCH REQUIREMENTS)		1		
330	A-2435	• WASHER, HIGH PITCH ADJUST		AR	Y	
330A	A-2435-1	• WASHER, HIGH PITCH ADJUST		AR	Y	
340	B-3807	• NUT, PISTON		1	Y	
350	B-3239	• PISTON		1		
360	C-3317-210-1	• O-RING, PISTON ID		1	Y	
370	B-4505-1	• ROD, PITCH CHANGE		1		
380	C-3317-251	• O-RING, CYLINDER MOUNTING		1	Y	
390	C-3317-210-1	• O-RING, PITCH CHANGE ROD (CYLINDER-SIDE HUB HALF)		1	Y	
400	C-4503	• FORK, PITCH CHANGE	E	1		
	C-4503L	• FORK, PITCH CHANGE	L	1		
410	A-3256	• • BUMPER, FORK		4	Y	
440	A-3253-2	• BLOCK, PITCH CHANGE		4		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-F4YR-2	CAP	2-PIECE SPINNER WITH DOME CAP		
L		HC-F4YR-2L	NO CAP	1-PIECE SPINNER, NO DOME CAP		

- ITEM NOT ILLUSTRATED

HC-F4YR-2(L), page 1 of 3

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-2		PROPELLER PARTS - HC-F4YR-2(L), CONTINUED				
		REFER TO THE APPLICABLE HUB UNIT IN THE 4-BLADE PROPELLER APPENDIX SECTION FOR EXPLODED VIEWS AND PARTS LISTS				
480	D-4502	• PCP: HUB UNIT, HC-F4YR-(2,4)		1		PCP
580	A-2431	• BOLT		12		
590	A-2432	• BOLT (WHEN USING SPINNER MOUNTING KIT, REPLACE BOLTS (590) WITH BOLTS IN KIT, IF APPLICABLE)		8		
600	B-3834-0632	• WASHER (WHEN USING SPINNER MOUNTING KIT, REPLACE WASHERS (600) WITH WASHERS IN KIT, IF APPLICABLE)		20	Y	
610	A-2043-1	• NUT (WHEN USING SPINNER MOUNTING KIT, REPLACE NUTS (610) WITH NUTS IN KIT, IF APPLICABLE)		20	Y	
660	A-2481	• PLUG, HUB		1		
670	C-3317-226	• O-RING, HUB PLUG OD		1	Y	
680	C-3317-115-1	• O-RING, HUB PLUG ID		1	Y	
1980	A-279	• LUBRICATION FITTING REPLACED BY ITEMS 1980A AND 1985		8	Y	
1980A	A-279	• LUBRICATION FITTING REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB	E L	4	Y	
1980B	C-6349	• LUBRICATION FITTING, 45°, POST HC-SL-61-187 ALTERNATE FOR ITEM 1980A		4	Y	
-1985	106545	• PLUG, LUBRICATION, POST HC-SL-61-354 REPLACES ITEM 1980 IN CYLINDER-SIDE OF HUB REPLACES ITEM 1980 IN ENGINE-SIDE OF HUB	E L	4	Y	
1990	B-6544	• CAP, LUBRICATION FITTING USED WITH ITEMS 1980, 1980A, AND 1980B		4	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		HC-F4YR-2				
L		HC-F4YR-2L				

- ITEM NOT ILLUSTRATED

HC-F4YR-2(L), page 2 of 3

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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10C-2		PROPELLER PARTS - HC-F4YR-2(L), CONTINUED				
		BLADE RETENTION PARTS REFER TO THE "BLADE RETENTION PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		R-FLANGE MOUNTING PARTS REFER TO THE "MOUNTING FLANGE PARTS" SECTION IN THIS CHAPTER FOR EXPLODED VIEW/PARTS LIST				
		BALANCE PARTS				
-9000	B-3840-()	• SCREW		AR	Y	
-9020	A-2424(A)-()	• BALANCE WEIGHT		AR		
		COUNTERWEIGHTS/MOUNTING BOLTS				
-9030		• PCP: COUNTERWEIGHT APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR PART NUMBER				PCP
-9040		• COUNTERWEIGHT MOUNTING BOLTS REFER TO THE APPLICABLE HARTZELL PROPELLER INC. BLADE OVERHAUL MANUAL: MANUAL 135F (61-13-35) - COMPOSITE BLADES MANUAL 133C (61-13-33) - ALUMINUM BLADES			Y	
		SPINNER PARTS				
		• APPLICATION SPECIFIC REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) AND THE APPLICABLE HARTZELL PROPELLER INC. SPINNER MAINTENANCE MANUAL: MANUAL 127 (61-16-27) - METAL SPINNER ASSEMBLIES MANUAL 148 (61-16-48) - COMPOSITE SPINNER ASSEMBLIES				
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

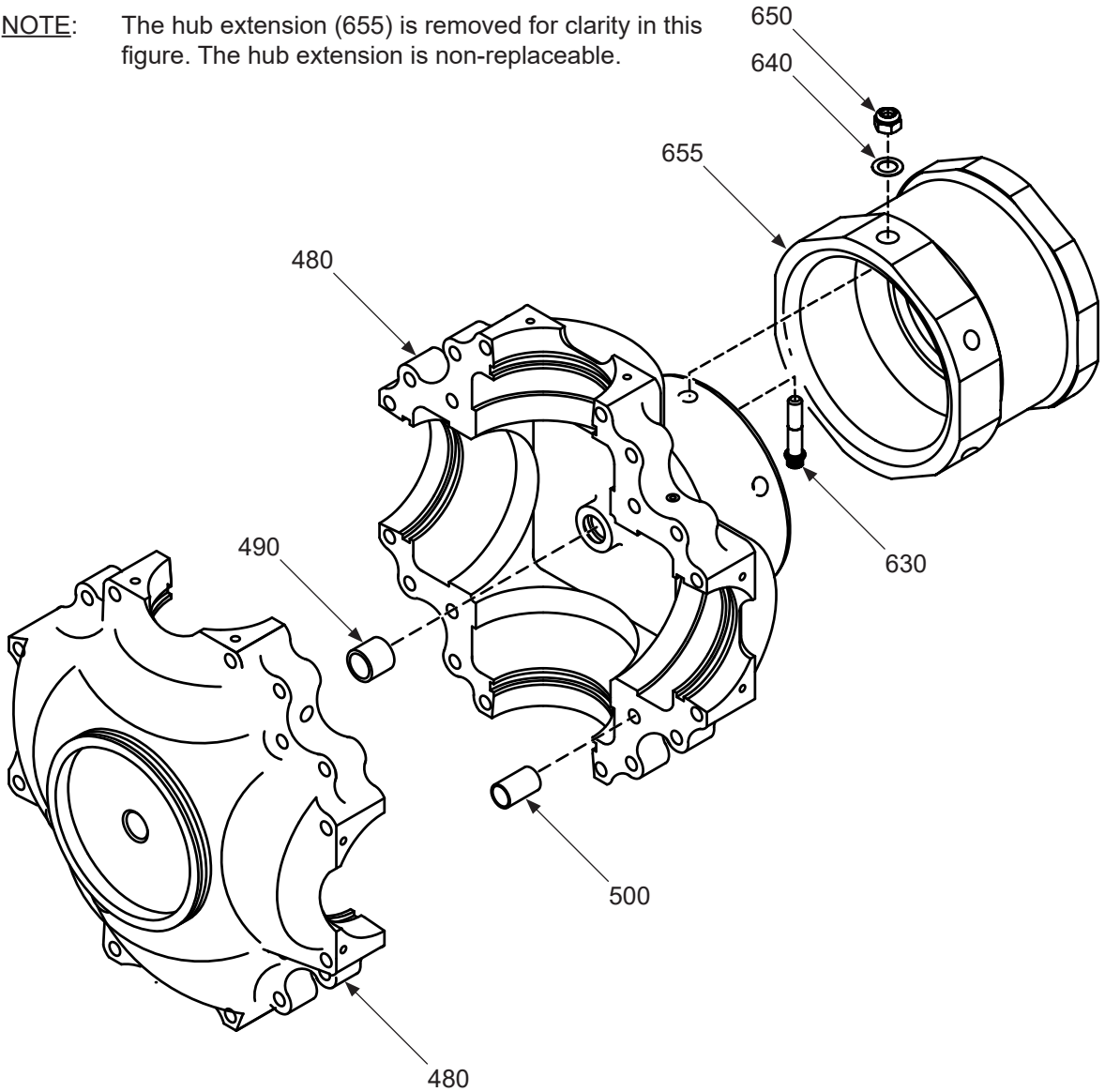
- ITEM NOT ILLUSTRATED

HC-F4YR-2(L), page 3 of 3

4-Blade Propeller/Hub Unit Parts Lists - Appendix
Hub Unit Parts Lists

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NOTE: The hub extension (655) is removed for clarity in this figure. The hub extension is non-replaceable.



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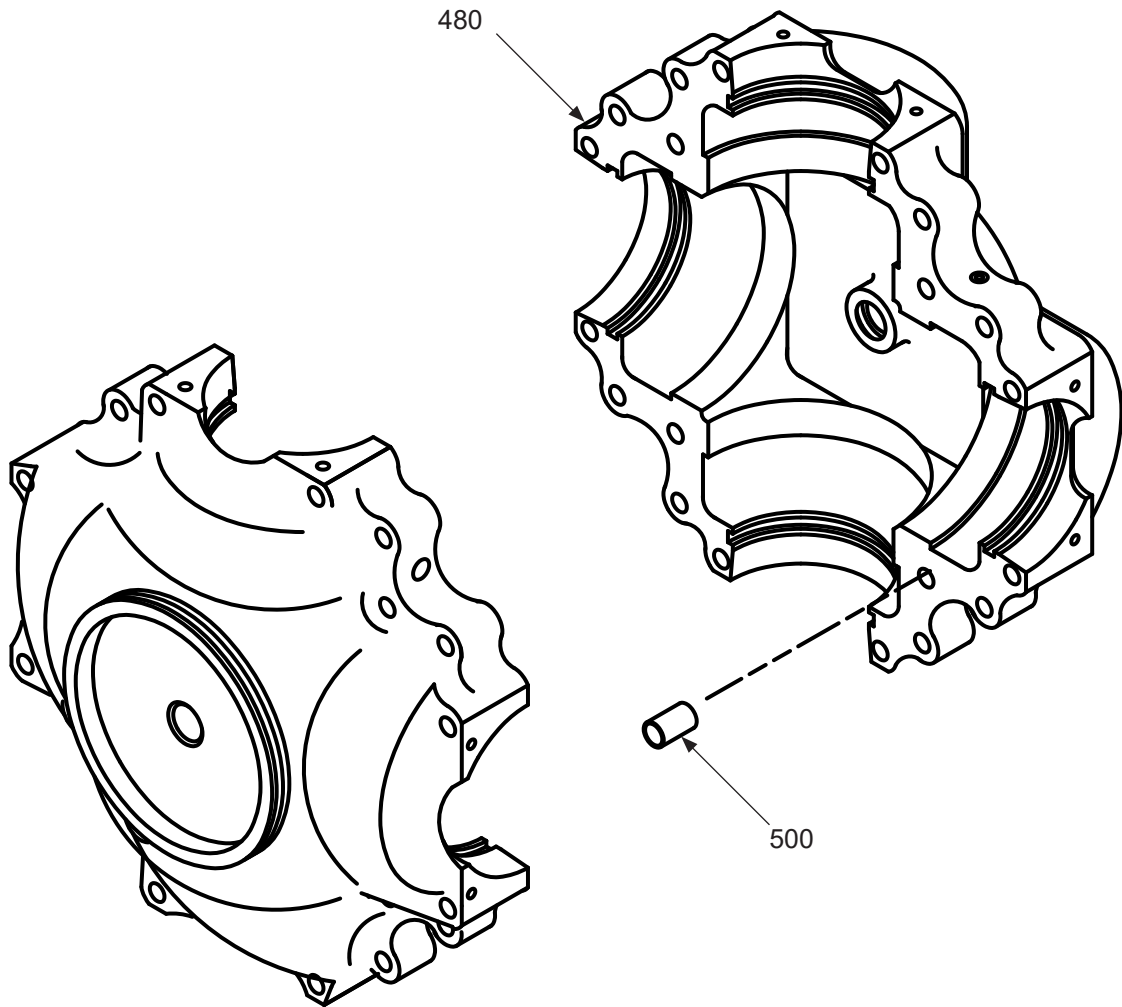
4-Blade Hub Unit: Configuration A
Figure App-C-1

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-C-1		D-4502 HUB UNIT PARTS				
480	D-4502	• PCP: HUB UNIT, HC-F4YR-(2,4)		1		PCP
490	A-2245-1	• • HUB BUSHING, ROD		1	Y	
500	A-2249	• • GUIDE BUSHING		1	Y	
630	A-3229	• • BOLT, 3/8-24, 12 POINT		6	Y	
640	B-3834-0663	• • WASHER		6	Y	
650	A-2043-1	• • NUT, 3/8-24, HEX, SELF-LOCKING		6	Y	
665	N/A	• • EXTENSION, HUB (NON-REPLACEABLE)		1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

4-Blade Hub Unit Parts Lists: Configuration A



TPL-JM-000402

4-Blade Hub Unit: Configuration B
Figure App-C-2

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
App-C-2						
480	E-4501-1	<ul style="list-style-type: none"> • PCP: HUB • PCP: HUB • PCP: HUB • • HUB BUSHING, GUIDE 		1		PCP
	E-4501-3			1		PCP
	E-4501-4			1		PCP
500	A-2249				1	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

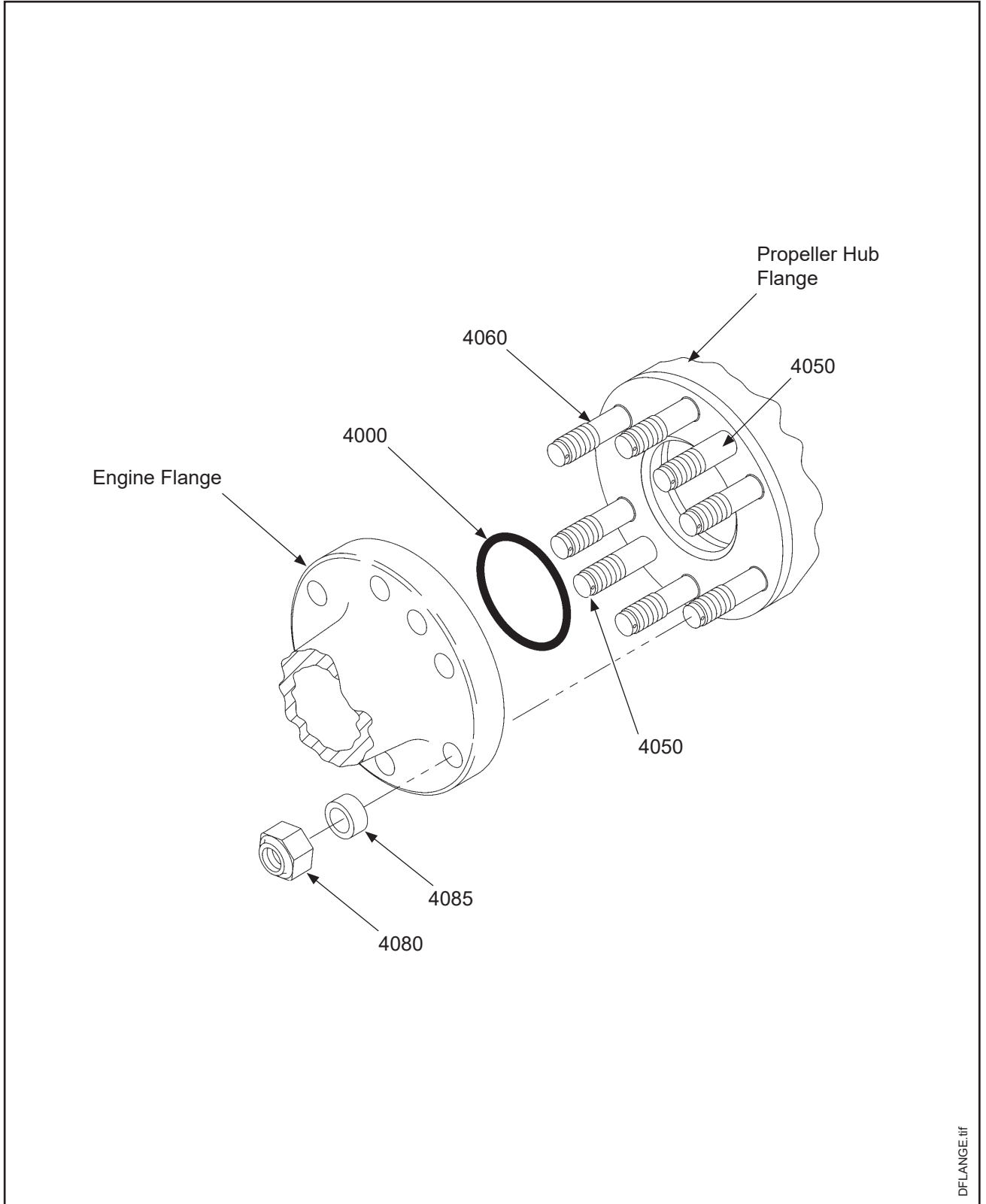
4-Blade Hub Unit Parts Lists: Configuration B

EXPLODED VIEWS AND PARTS LISTS Mounting Flange Parts

Flange Type

D-flange Exploded View	Figure 10D-1	10D-3
Parts List		10D-4
F-flange Exploded View	Figure 10D-2	10D-5
Parts List		10D-6
K-flange Exploded View	Figure 10D-3	10D-7
Parts List		10D-8
L-flange Exploded View	Figure 10D-4	10D-9
Parts List		10D-10
N-flange Exploded View	Figure 10D-5	10D-11
Parts List		10D-12
R-flange Exploded View	Figure 10D-6	10D-13
Parts List		10D-14

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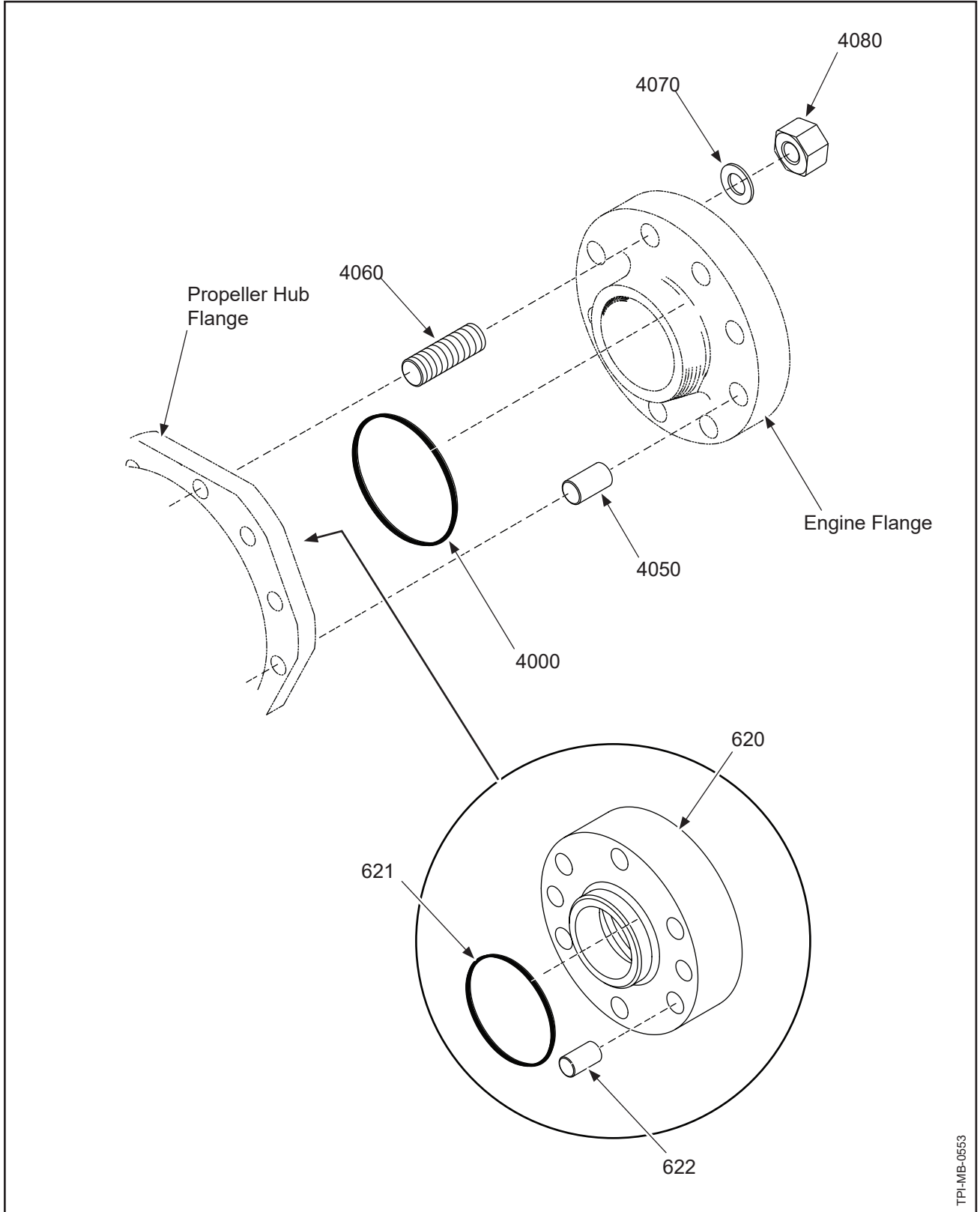
D-flange Exploded View
Figure 10D-1

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10D-1		D-FLANGE MOUNTING PARTS				
4000	C-3317-228	• O-RING, FLANGE		1	Y	
4050	A-7750	• STUD, MOUNTING, 1/2-20, DOWEL		2	Y	
4060	A-7749	• STUD, MOUNTING, 1/2-20		6	Y	
4080	A-2044	• NUT, 1/2-20, HEX, SELF-LOCKING		8	Y	
4085	A-7752	• SPACER, MOUNTING		8	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

D-flange Mounting Parts



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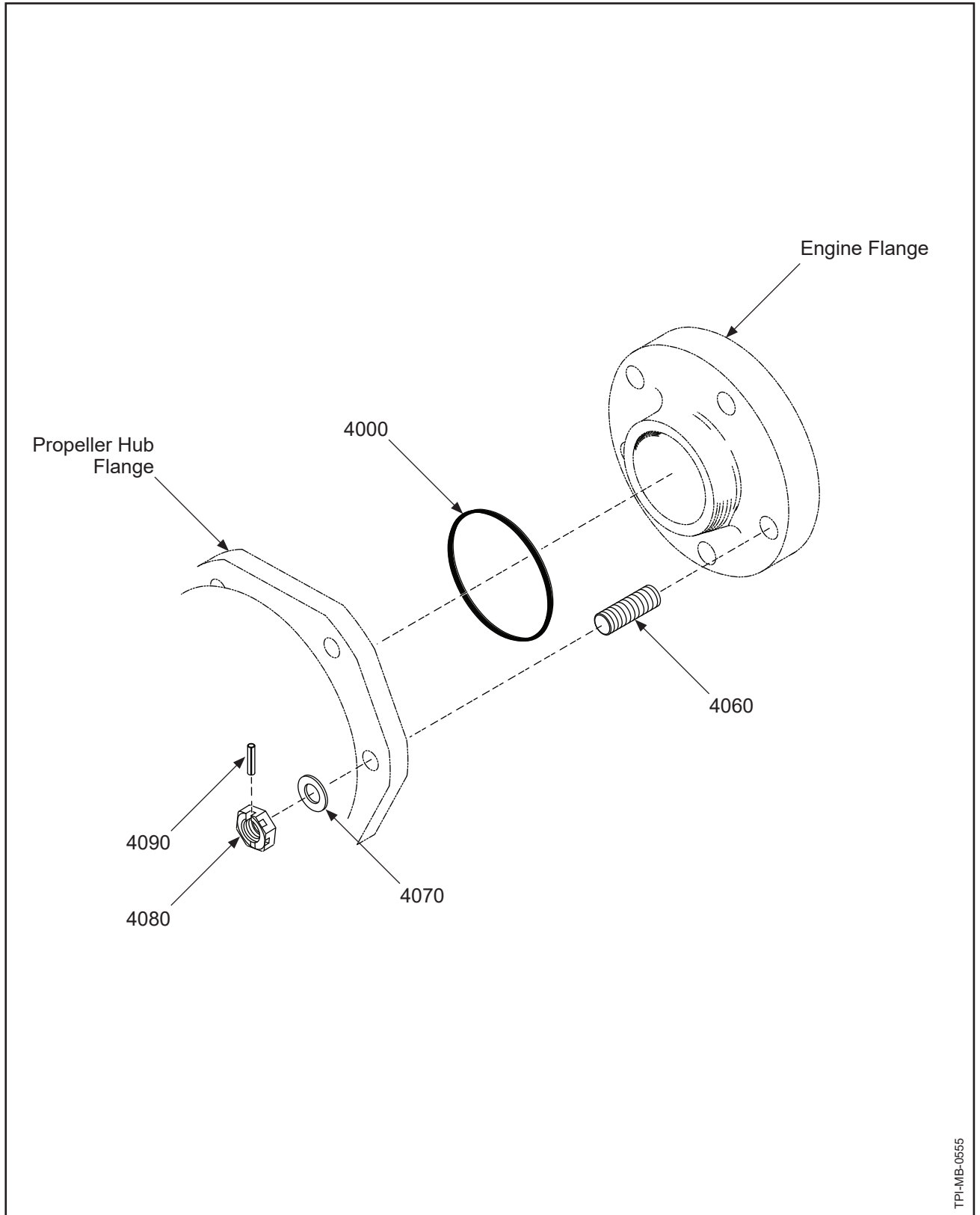
F-flange Exploded View
Figure 10D-2

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10D-2		F-FLANGE MOUNTING PARTS				
620	B-2984-3	• SPACER, "F" FLANGE	B	1		
621	C-3317-228	• O-RING (FLANGE)	B	1	Y	
622	B-6138-8-9	• DOWEL PIN	B	2	Y	
4000	C-3317-228	• O-RING (FLANGE)		1	Y	
4050	B-6138-8-9	• DOWEL PIN		2	Y	
4060	A-2429-() B-1739	• STUD, MOUNTING, 1/2-20 • STUD, MOUNTING, 1/2-20	A A	6 6	Y Y	
4070	A-1381	• WASHER, 1/2" CRES		6	Y	
4080	A-2044	• NUT, 1/2-20, HEX, SELF-LOCKING		6	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		MOUNTING STUDS ARE APPLICATION SPECIFIC. REFER TO HARTZELL PROPELLER INC. APPLICATION GUIDE MANUAL 159 (61-02-59) FOR SPECIFIC MOUNTING STUD PART NUMBERS.	B		HC-C4YF-2E PROPELLERS ONLY	

- ITEM NOT ILLUSTRATED

F-flange Mounting Parts



TPL-MB-0555

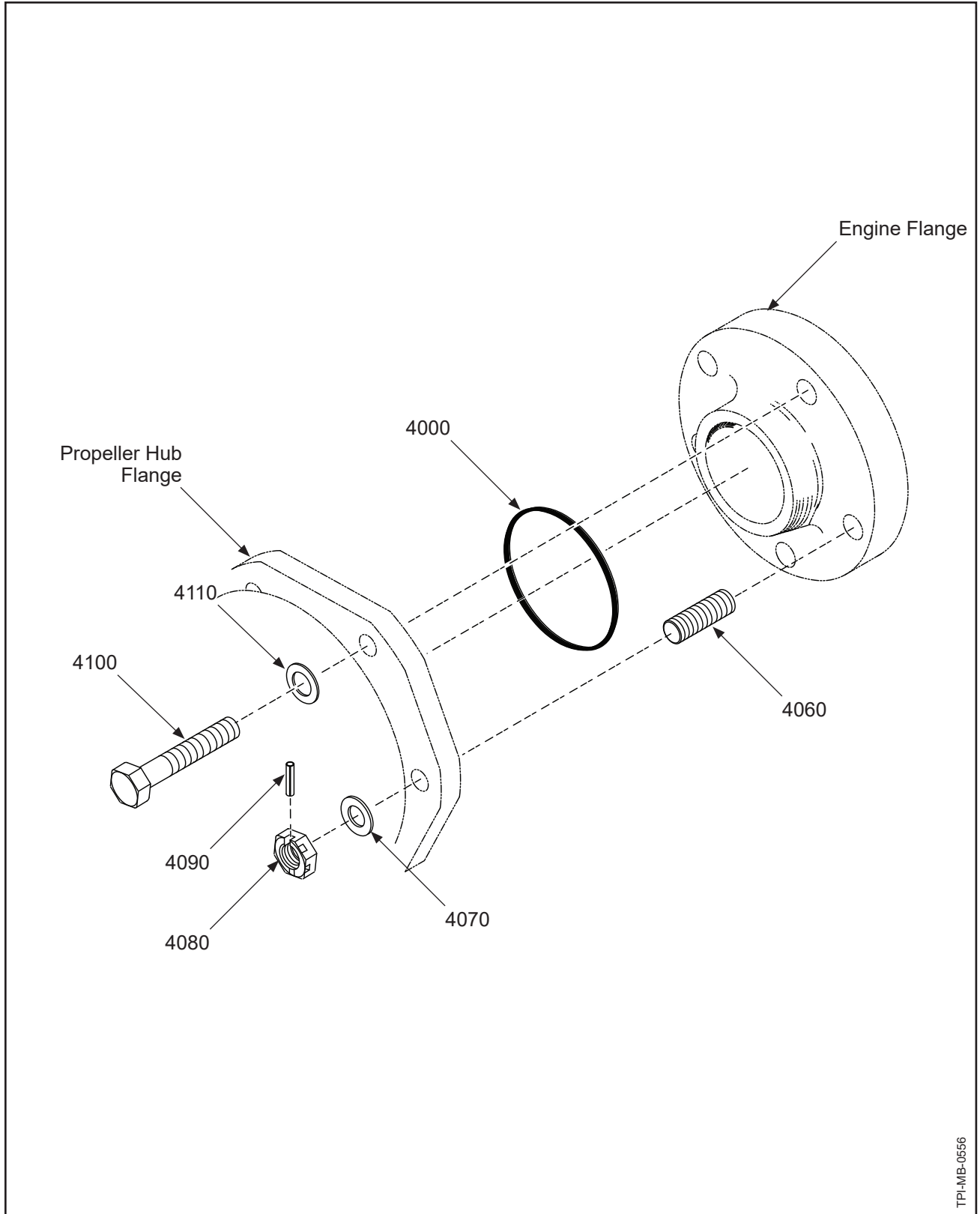
K-flange Exploded View
Figure 10D-3

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10D-3		K-FLANGE MOUNTING PARTS				
4000	C-3317-228	• O-RING (FLANGE)		1	Y	
4060	A-2067	• STUD, MOUNTING, 1/2-20		6	Y	
4070	A-1381	• WASHER, 1/2" CRES		6	Y	
4080	A-2069	• NUT, MOUNTING, CASTELLATED		6	Y	
4090	B-3842-0750	• SPRING PIN, 3/32", CRES		6	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

K-flange Mounting Parts



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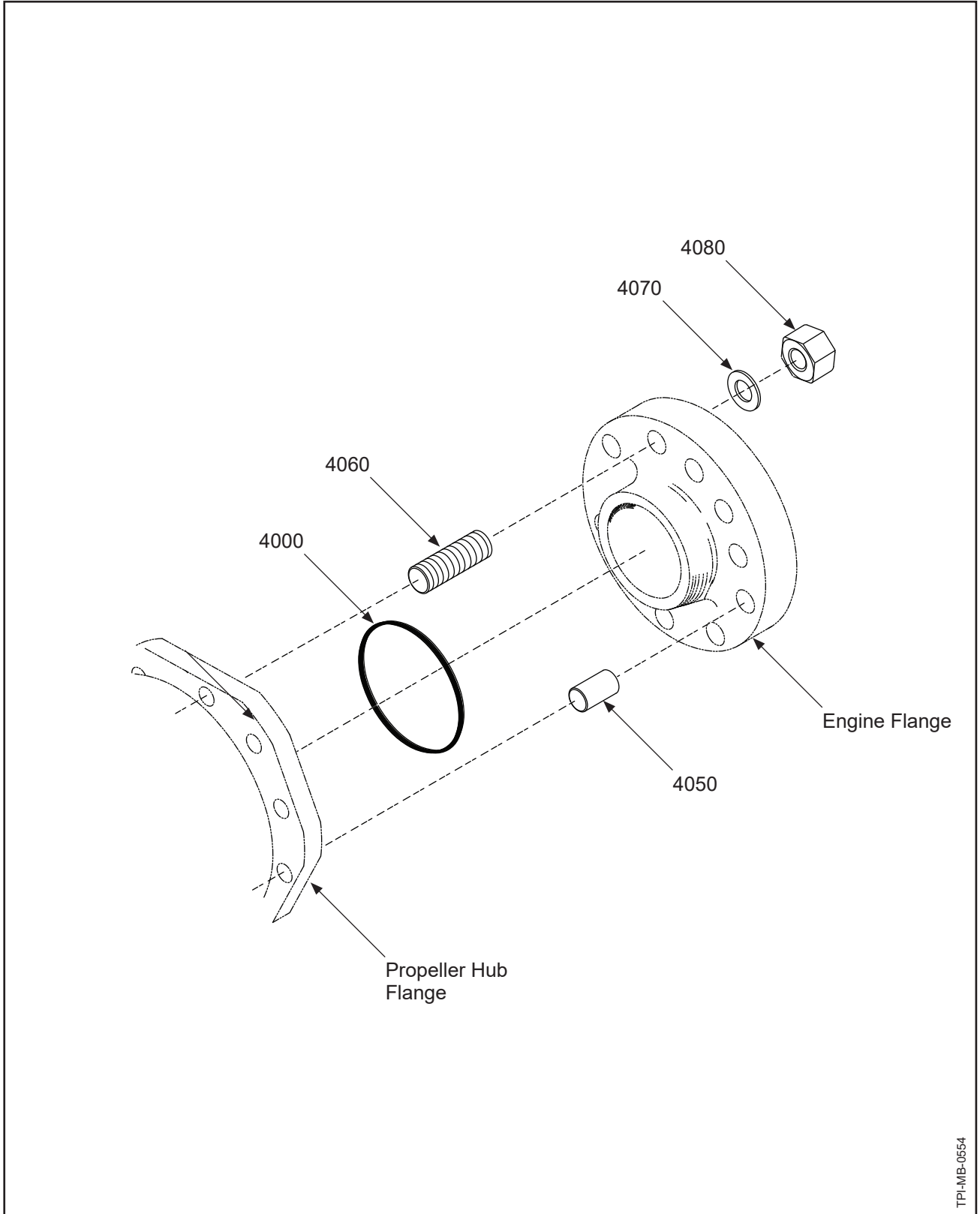
L-flange Exploded View
Figure 10D-4

**HARTZELL PROPELLER OVERHAUL MANUAL
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FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10D-4		L-FLANGE MOUNTING PARTS				
4000	C-3317-228	• O-RING (FLANGE)		1	Y	
4060	A-2247-1	• STUD, MOUNTING, 7/16-20, DRILLED		2	Y	
4070	A-2482	• WASHER, MOUNTING		2	Y	
4080	A-2498	• NUT, 7/16-20, CASTELLATED		2	Y	
4090	B-3842-0625	• SPRING PIN, 3/32", CRES		2	Y	
4100	B-6489-25	• BOLT, 7/16-20, HEX HEAD	E	4	Y	
4110	B-6526-7	• WASHER, MOUNTING, DOUBLE COUNTERSUNK	E	4	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E		USED ON ()HC-E2YL-2() HUBS ONLY				

- ITEM NOT ILLUSTRATED

L-flange Mounting Parts



TPI-MB-0554

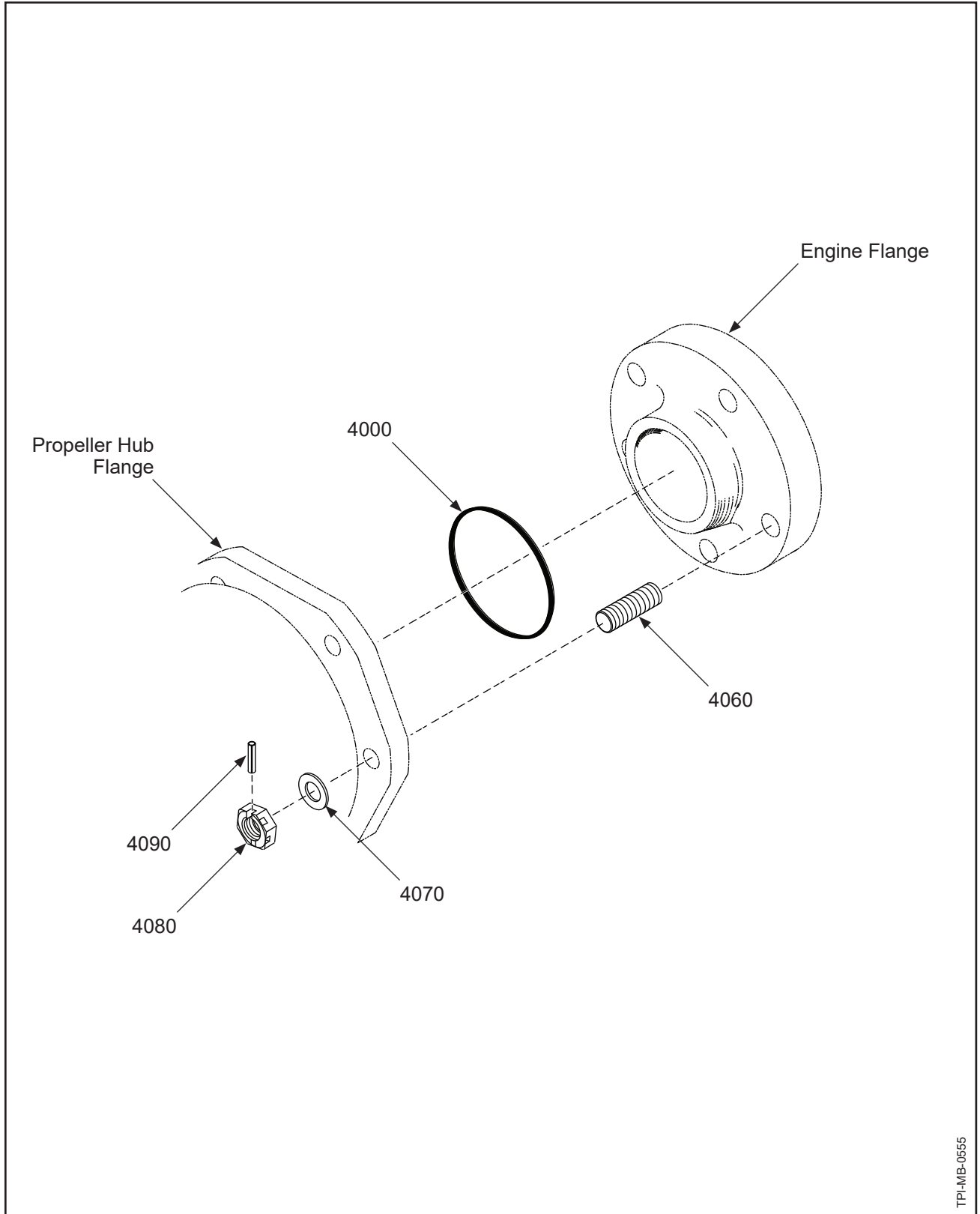
N-flange Exploded View
Figure 10D-5

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10D-5						
N-FLANGE MOUNTING PARTS FOR -2 PROPELLERS						
4000	C-3317-145	• O-RING (FLANGE)		1	Y	
4050	B-6138-8-8	• DOWEL PIN		2	Y	
4060	A-3254	• STUD, MOUNTING, 9/16-18		8	Y	
4070	A-2048-2	• WASHER, MOUNTING, 9/16" CSK		8	Y	
4080	A-3257	• NUT, 9/16-18, HEX, SELF-LOCKING		8	Y	
10D-5						
N-FLANGE MOUNTING PARTS FOR -5 PROPELLERS						
4000	C-3317-230	• O-RING (FLANGE)		1	Y	
4050	B-6138-8-8	• DOWEL PIN		2	Y	
4060	A-3254	• STUD, MOUNTING, 9/16-18		8	Y	
4070	A-2048-2	• WASHER, MOUNTING, 9/16" CSK		8	Y	
4080	A-3257	• NUT, 9/16-18, HEX, SELF-LOCKING		8	Y	
EFFECTIVITY			MODEL			
EFFECTIVITY			MODEL			

- ITEM NOT ILLUSTRATED

N-flange Mounting Parts



TPL-MB-0555

R-flange Exploded View
Figure 10D-6

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10D-6		R-FLANGE MOUNTING PARTS				
4000	C-3317-228	• O-RING (FLANGE)		1	Y	
4060	A-2067	• STUD, MOUNTING, 1/2-20		6	Y	
4070	A-1381	• WASHER, 1/2" CRES		6	Y	
4080	A-2069	• NUT, MOUNTING, CASTELLATED		6	Y	
4090	B-3842-0750	• SPRING PIN, 3/32", CRES		6	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

R-flange Mounting Parts

EXPLODED VIEWS AND PARTS LISTS
Blade Retention

Description

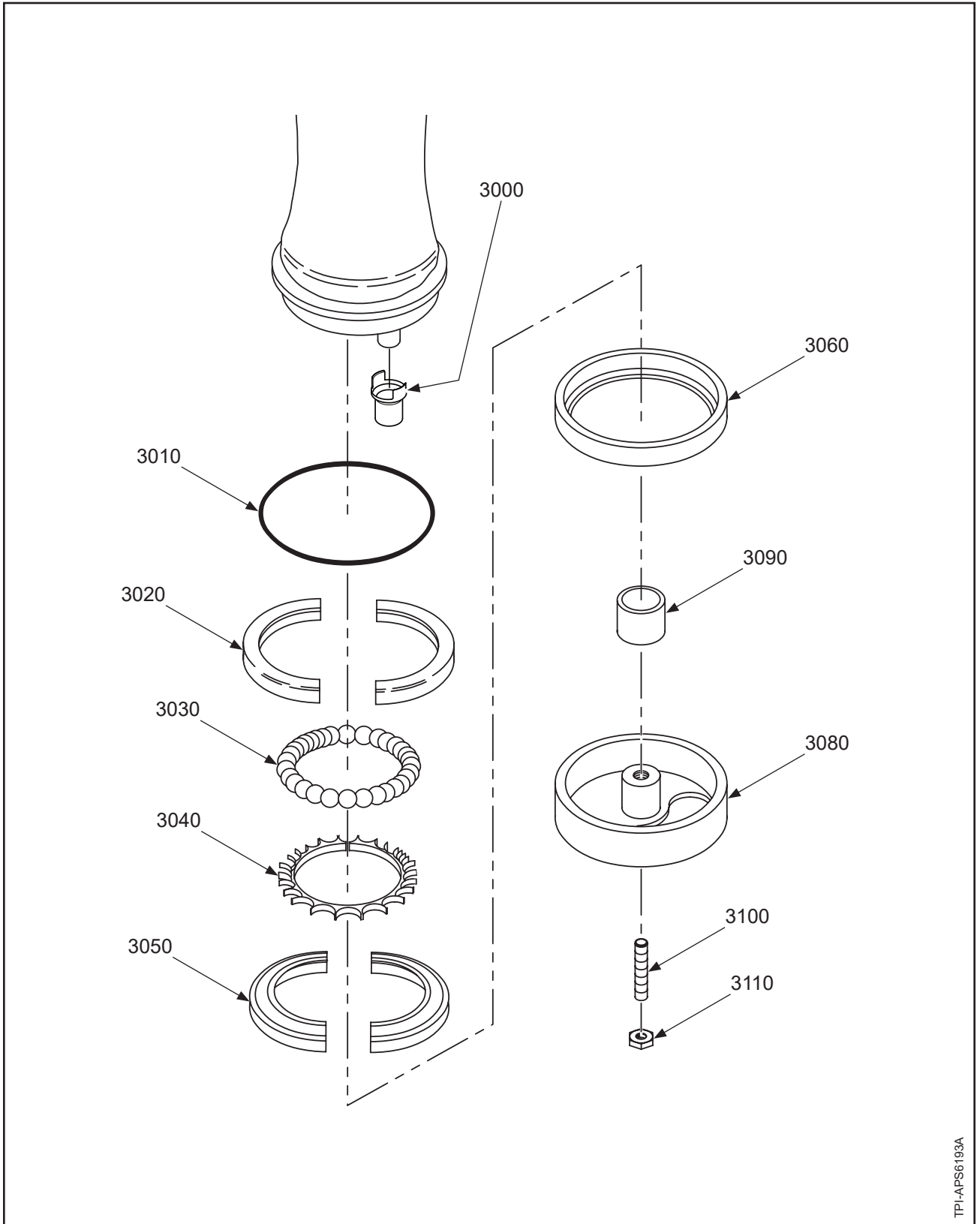
Aluminum Blades w/Integral Pitch Change Knob:

Exploded View	Figure 10E-1	10E-3
Parts List		10E-4

Composite Blades w/Bolt-on Pitch Change Knob Bracket:

Exploded View	Figure 10E-2	10E-5
Parts List		10E-6

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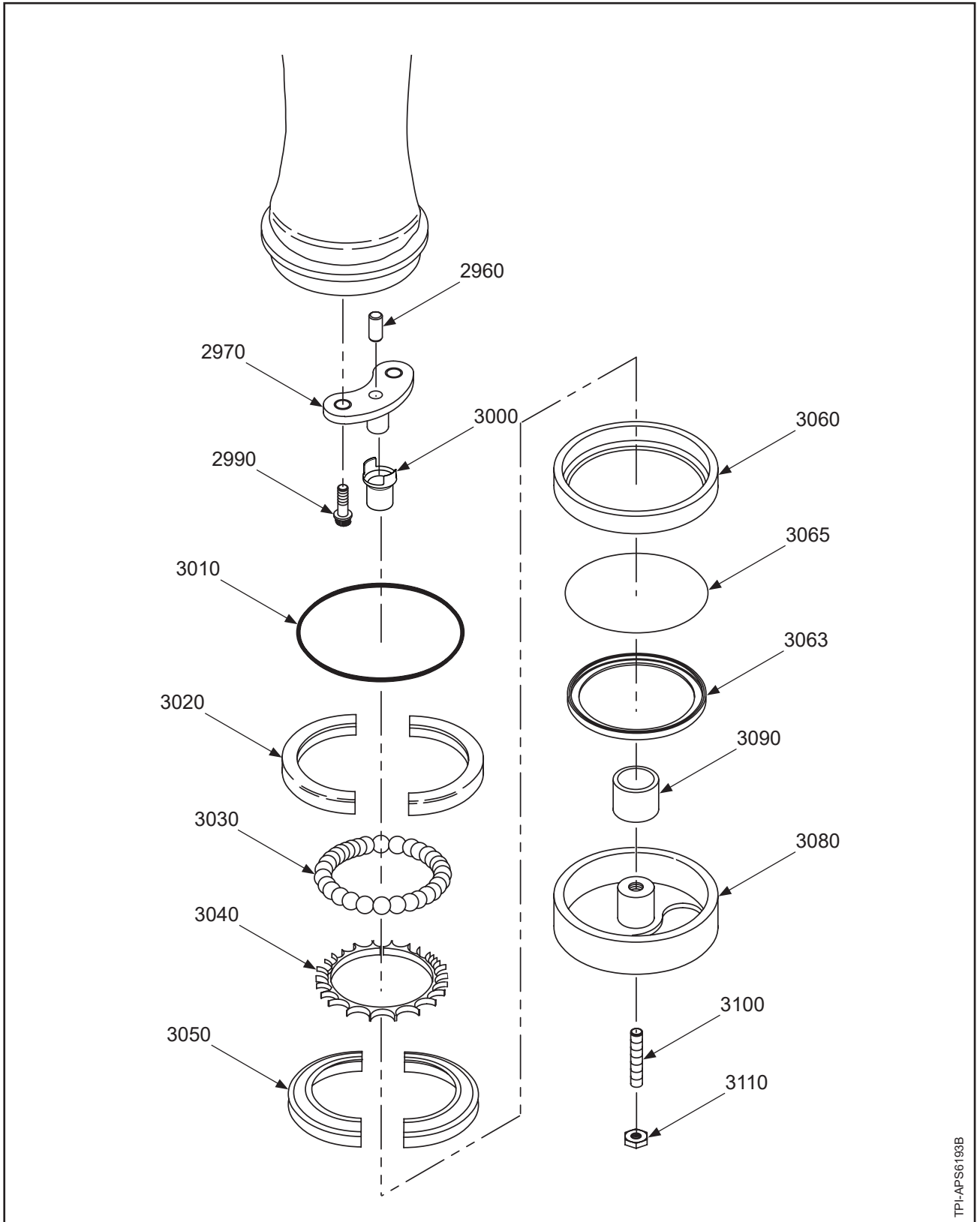
Exploded View: Aluminum Blades w/Integral Pitch Change Knob
Figure 10E-1

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10E-1		BLADE RETENTION PARTS: All quantities (UPA) in this parts list are per blade assembly.				
3000	A-2413	• BUSHING, PITCH CHANGE KNOB (WHITE) (NON-SHOT PEENED, NON-"F" KNOB)		1	Y	
	A-2413-2	• BUSHING, PITCH CHANGE KNOB (WHITE) (NON-SHOT PEENED, "F" KNOB)		1	Y	
3000A	C-7645	• BUSHING, PITCH CHANGE KNOB (WHITE) (NON-SHOT PEENED "F" KNOB OR SHOT PEENED "F" KNOB AT MINIMUM DIAMETER)		1	Y	
3000B	C-7645-1	• BUSHING, PITCH CHANGE KNOB (BLACK) (SHOT PEENED "F" KNOB)		1		
3010	B-3883-4339	• QUAD-RING (BLADE SEAL)		1	Y	
3010A	C-3317-340-8	• O-RING, ALTERNATE FOR ITEM 3010, POST HC-SL-61-293	E	1	Y	
3020	A-2202-A	• RACE, HUB SIDE		1		
3030	B-6144	• BALL, BEARING, 0.5 INCH DIAMETER		25	Y	
	B-6144-650	• BALL, BEARING, 0.5 INCH DIAMETER (650 PIECE BOX)		RF		
3040	B-3211	• SPACER, BALL		1	Y	
3050	A-2202-B	• RACE, BLADE SIDE		1		
3060	A-2204	• RING, RETAINING, BEARING		1		
3080	B-2256	• PRELOAD PLATE ASSEMBLY, SUPERSEDES ITEM 3085		1		
-3085	B-2222	• • PRELOAD PLATE, SUPERSEDED BY ITEM 3080		1		
3090	B-6677	• • RACE, INNER BLADE BORE BEARING, SUPERSEDED BY ITEM 3090A		1		
3090A	B-6679	• • RACE, INNER BLADE BORE BEARING SUPERSEDES ITEM 3090		1		
3100	A-3204	• • SCREW, SET, 5/16-24		1	Y	
3110	B-3368	• • NUT, HEX, 5/16-24, THIN		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
E	REQUIRES 0.010 INCH (0.25 MM) THICK CM155 TEFLON® TAPE INSTALLED ON THE BLADE IN ACCORDANCE WITH HARTZELL PROPELLER INC. ALUMINUM BLADE MANUAL 133C (61-13-33)					

- ITEM NOT ILLUSTRATED

Parts List: Aluminum Blades w/Integral Pitch Change Knob



Exploded View: Composite Blades w/Bolt-on Pitch Change Knob Bracket
Figure 10E-2

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10E-1		BLADE RETENTION PARTS: All quantities (UPA) in this parts list are per blade assembly.				
2950	B-6569- ()	• PITCH CHANGE KNOB ASSEMBLY		1		
2960	B-6138-5-5	• • DOWEL PIN		1		
2970	C-1862- ()	• • PITCH CHANGE KNOB BRACKET		1		
3000	C-7645	• • BUSHING, PITCH CHANGE KNOB		1	Y	
2990	B-3830	• BOLT, PITCH CHANGE KNOB		2	Y	
3010	C-3317-340	• O-RING (BLADE SEAL)		1	Y	
3010A	C-3317-340-8	• O-RING, ALTERNATE FOR ITEM 3010, POST HC-SL-61-301		1	Y	
3013	C-792	• BLADE RETENTION BEARING		1		
3020	C-792-A	• • RACE, HUB SIDE		1		
3030	B-6144-1 B-6144-650	• • BALL, BEARING, 3/8 INCH DIAMETER • • BALL, BEARING, 3/8 INCH DIAMETER (650 PIECE BOX)		33 RF	Y	
3050	C-792-B	• • RACE, BLADE SIDE		1		
3040	B-793	• SPACER, BALL		1	Y	
3060	B-1041	• RING, RETAINING, BEARING, SUPERSEDED BY ITEM 3060A		1		
3060A	B-7071	• RING, RETAINING, BEARING, SUPERSEDES ITEM 3060		1		
3063	B-7726	• BLADE SEAL	A	1		
3065	C-3317-045	• O-RING	A	1	Y	
3080	C-6816	• PRELOAD PLATE UNIT		1		
3090	A-1272	• • RACE, INNER BLADE BORE BEARING		1		
3100	A-3204-1	• • SCREW, SET, 5/16-24		1	Y	
3110	B-3368	• • NUT, HEX, 5/16-24, THIN		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		OPTIONAL ITEM. USED WITH ITEM 3060A <u>ONLY</u> .				

- ITEM NOT ILLUSTRATED

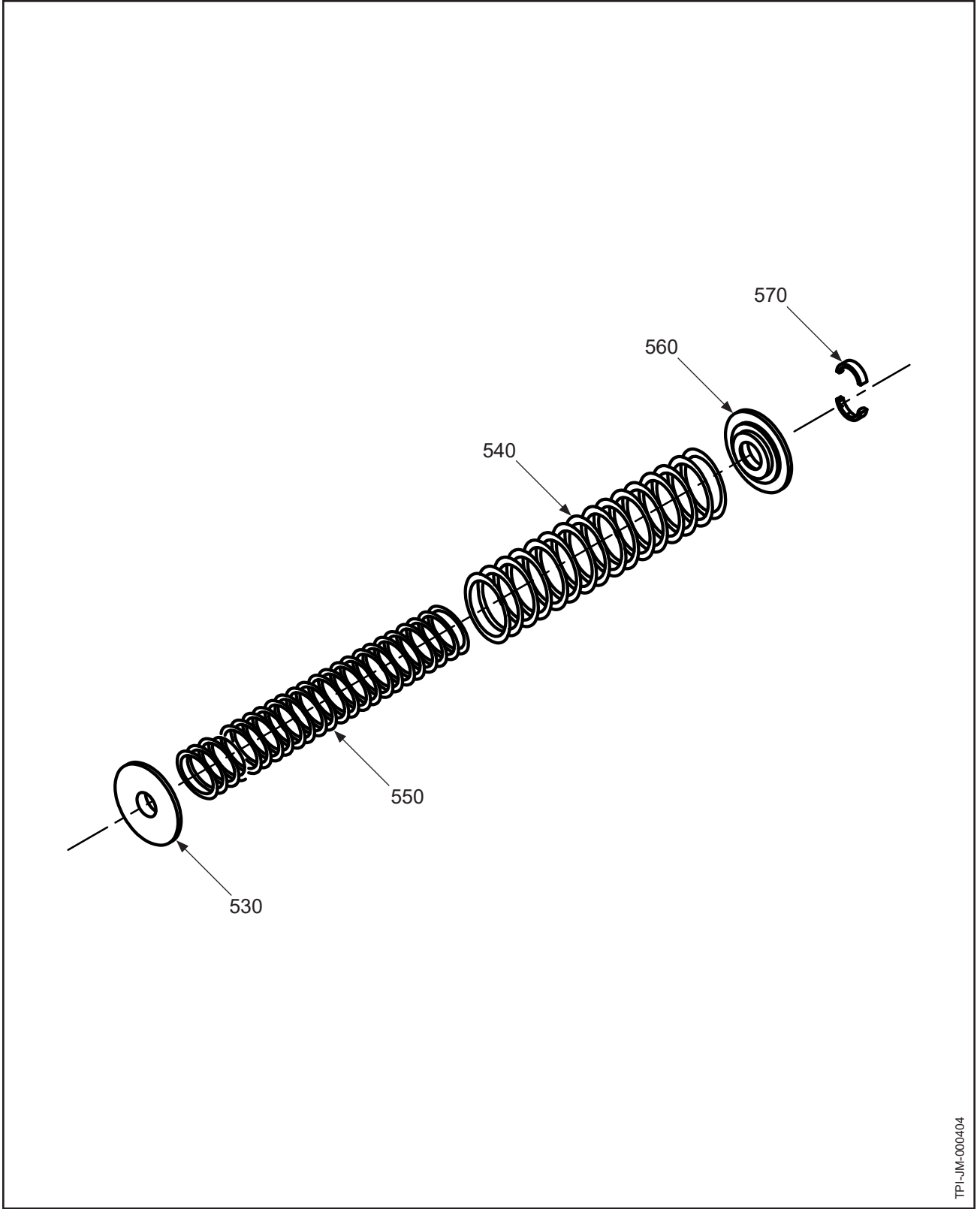
Parts List: Composite Blades w/Bolt-on Pitch Change Knob Bracket

EXPLODED VIEWS AND PARTS LISTS Spring Assembly

Spring Assembly

A-2273 Spring Assembly Exploded View	Figure 10F-1.....	10F-3
Parts List		10F-4
B-1106 Spring Assembly Exploded View.....	Figure 10F-2.....	10F-5
Parts List		10F-6
B-1586 Spring Assembly Exploded View	Figure 10F-3.....	10F-7
Parts List		10F-8
■ B-1589-() Spring Assemblies.....	Figure 10F-4.....	10F-9
B-1589 Parts List.....		10F-10
B-1589-1 Parts List		10F-10
B-1589-2 Parts List		10F-11
B-1589-3 Parts List		10F-11
B-3684 Spring Assembly	Figure 10F-5.....	10F-12
Parts List		10F-13

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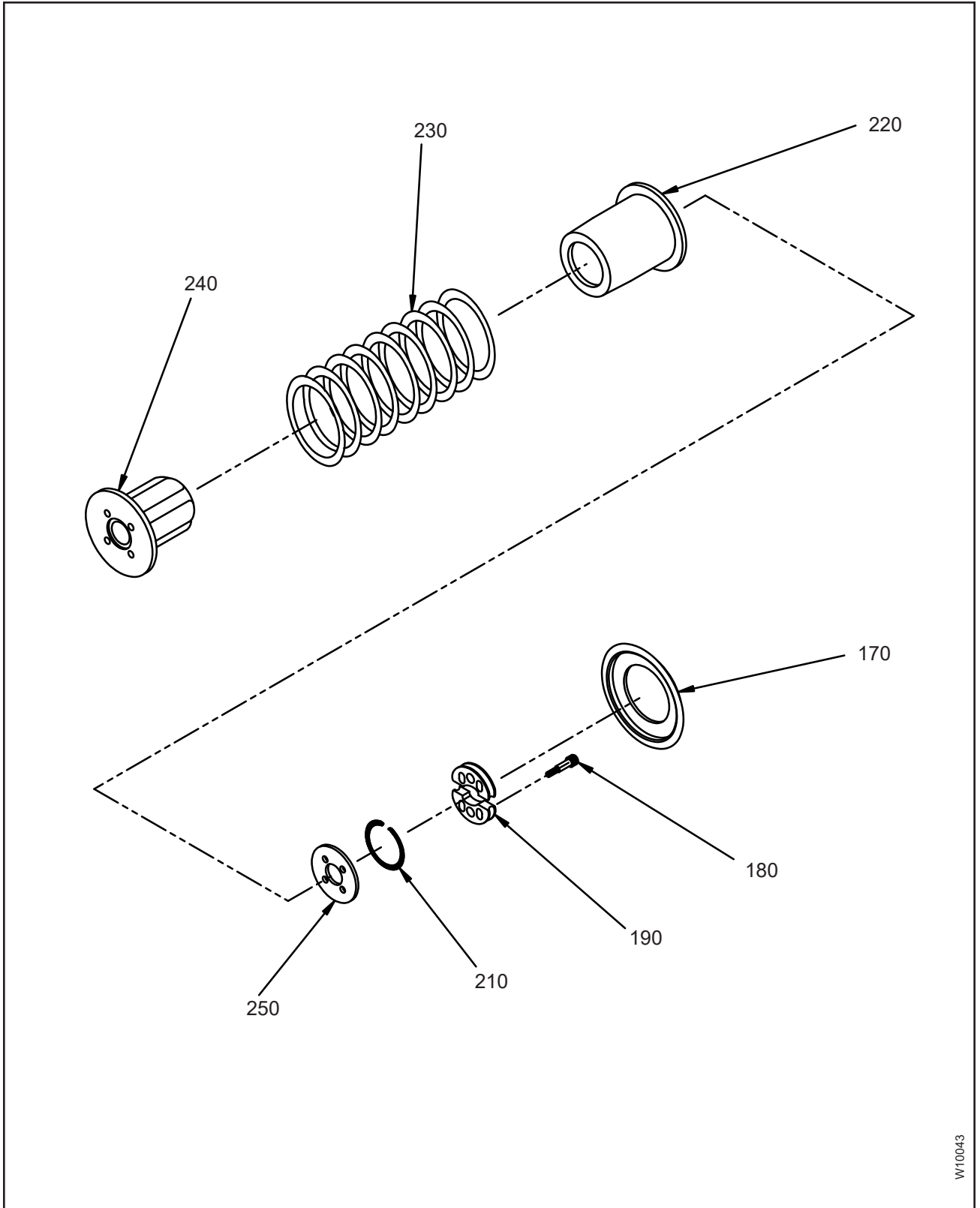
A-2273 Spring Assembly
Figure 10F-1

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10F-1		A-2273 SPRING ASSEMBLY				
520	A-2268	• SPACER		1		
540	B-3281-1	• SPRING, COMPRESSION (FEATHERING, LARGE)		1	Y	
550	B-3281-3	• SPRING, COMPRESSION (FEATHERING, SMALL)		1	Y	
560	A-2269	• RETAINER, SPRING		1		
570	A-2272	• KEEPER, SPLIT		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

A-2273 Spring Assembly



W10043

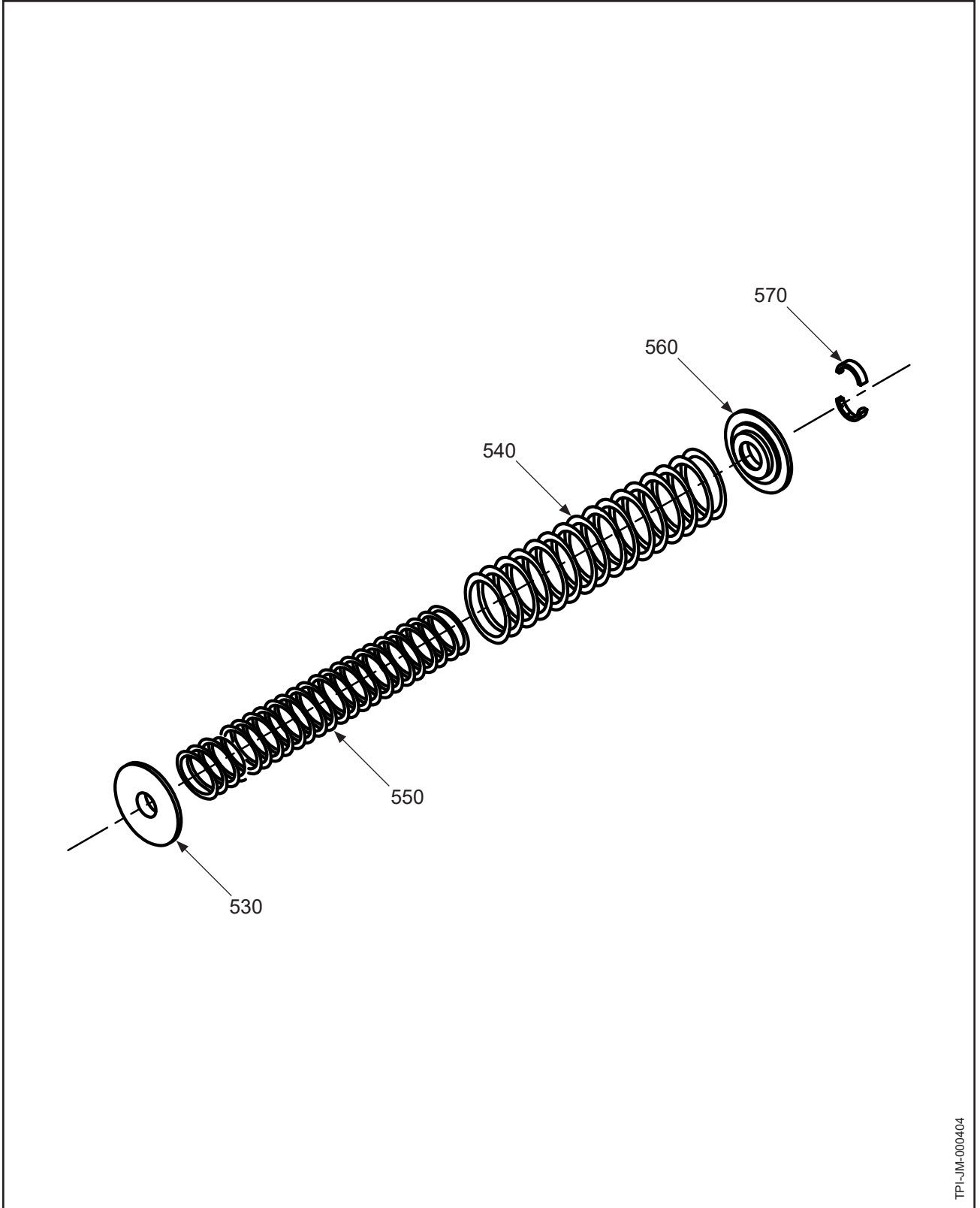
B-1106 Spring Assembly
Figure 10F-2

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10F-2		B-1106 SPRING ASSEMBLY				
170	A-1591	• GUIDE, SPRING		1		
180	A-1595-1	• SCREW		4	Y	
190	B-317	• WEIGHT, START LOCK		1		
210	A-1596-1	• • SPRING, WEIGHT		1	Y	
220	B-1592-1	• RETAINER, SPRING		1	Y	
230	B-1594-1	• SPRING, FEATHERING		1		
240	B-1593	• HOUSING, START LOCK		1		
250	A-3744	• PLATE, FLYWEIGHT		1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

B-1106 Spring Assembly



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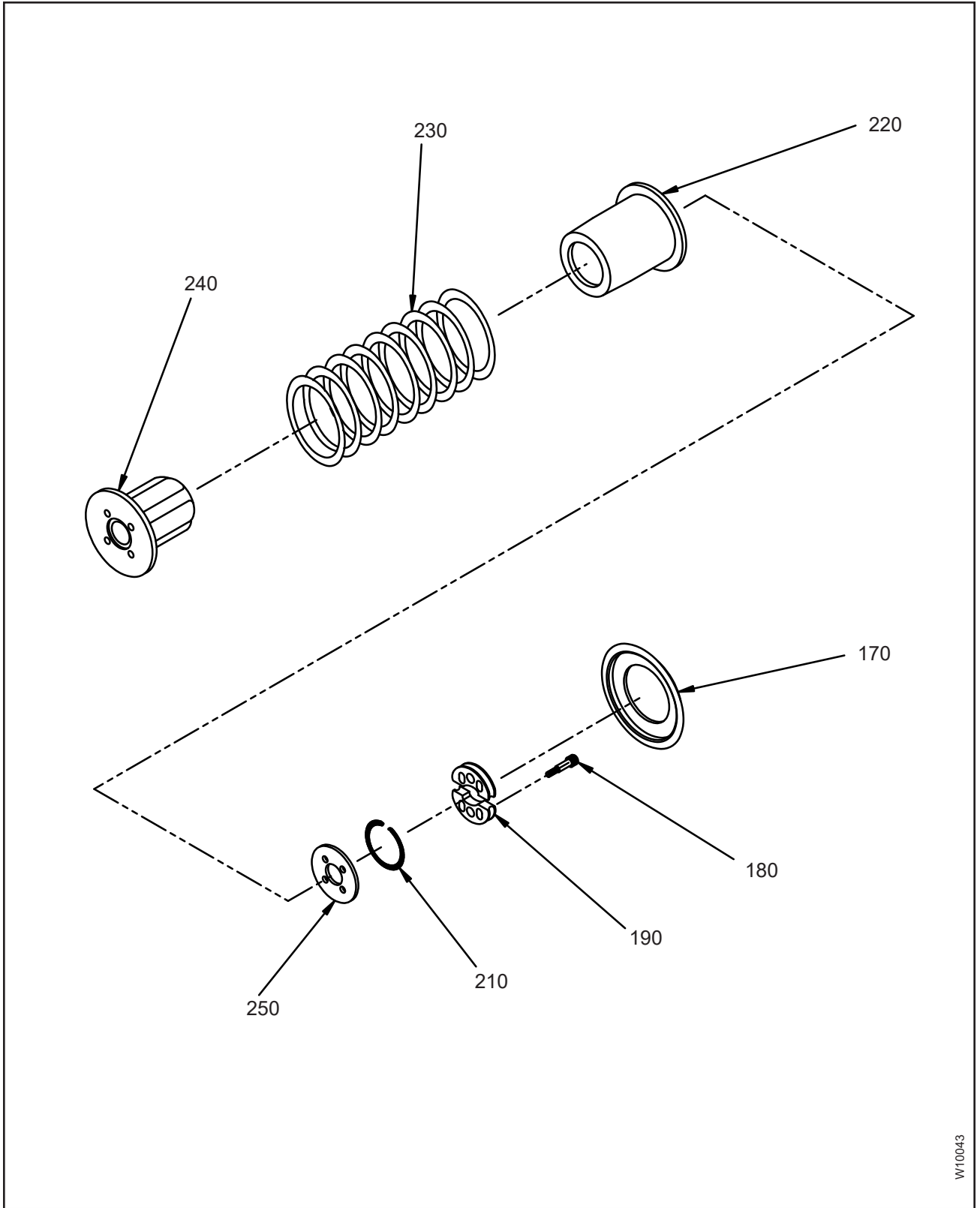
B-1586 Spring Assembly
Figure 10F-3

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10F-3		B-1586 SPRING ASSEMBLY				
530	A-2293	• GUIDE, SPRING		1		
540	B-2380	• SPRING, FEATHERING, LARGE		1		
550	B-2381	• SPRING, FEATHERING, SMALL		1		
560	A-2269-1	• RETAINER, SPRING		1		
570	A-2272	• KEEPER, SPLIT		1	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

B-1586 Spring Assembly



W10043

B-1589-() Spring Assemblies
Figure 10F-4

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10F-4		B-1589 SPRING ASSEMBLY - OBSOLETE	A			
170	A-1591	• GUIDE, SPRING		1		
180	A-1595	• SCREW		4	Y	
190	A-1590	• WEIGHT, START LOCK, REPLACED BY ITEM 190A		1		
190A	B-318	• WEIGHT, START LOCK, REPLACES ITEM 190		1		
210	A-1596	• • SPRING, WEIGHT		1	Y	
220	B-1592	• RETAINER, SPRING		1	Y	
230	B-1594	• SPRING, FEATHERING, ALTERNATE IS ITEM 230A		1		
230A	B-1594-1	• SPRING, FEATHERING, ALTERNATE FOR ITEM 230		1		
240	B-1593	• HOUSING, START LOCK		1		
250	A-1597	• PLATE, FLYWEIGHT, REPLACED BY ITEM 250A		1		
250A	A-3744	• PLATE, FLYWEIGHT, REPLACES ITEM 250		1		
10F-4		B-1589-1 SPRING ASSEMBLY - OBSOLETE	A			
170	B-4504	• GUIDE, SPRING		1		
180	A-1595	• SCREW		4	Y	
190	A-1590	• WEIGHT, START LOCK, REPLACED BY ITEM 190A		1		
190A	B-318	• WEIGHT, START LOCK, REPLACES ITEM 190		1		
210	A-1596	• • SPRING, WEIGHT		1	Y	
220	B-1592	• RETAINER, SPRING		1	Y	
230	B-1594	• SPRING, FEATHERING, ALTERNATE IS ITEM 230A		1		
230A	B-1594-1	• SPRING, FEATHERING, ALTERNATE FOR ITEM 230		1		
240	B-1593	• HOUSING, START LOCK		1		
250	A-1597	• PLATE, FLYWEIGHT, REPLACED BY ITEM 250A		1		
250A	A-3744	• PLATE, FLYWEIGHT, REPLACES ITEM 250		1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	
A		SERVICEABLE PARTS FROM THE OBSOLETED ASSEMBLY MAY BE USED IN THE CURRENT ASSEMBLY. COMPARE THE ASSEMBLY PARTS LISTS FOR THE APPLICABLE PARTS.				

- ITEM NOT ILLUSTRATED

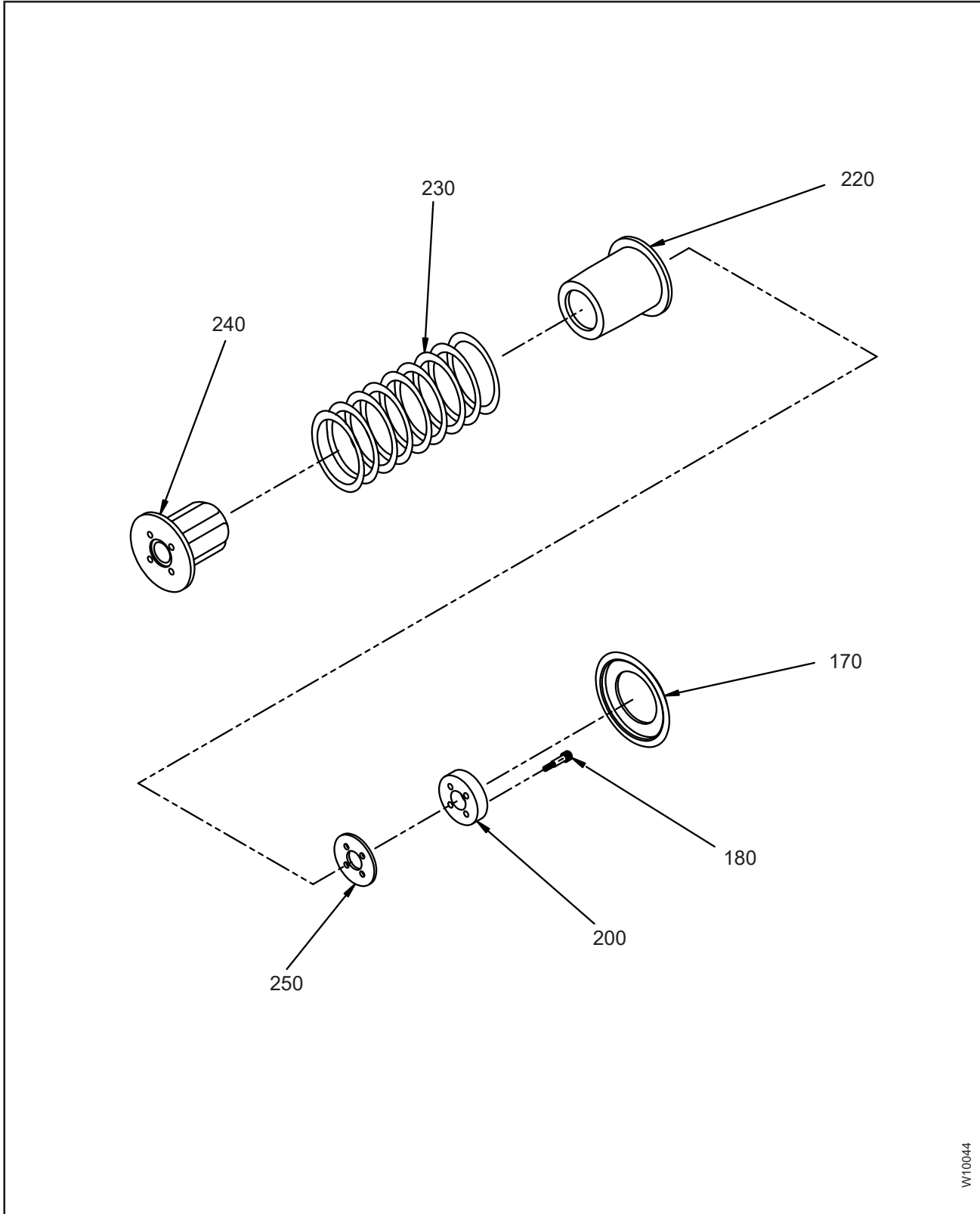
B-1589-()Spring Assembly

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10F-4		B-1589-2 SPRING ASSEMBLY				
170	A-1591	• GUIDE, SPRING		1		
180	A-1595	• SCREW		4	Y	
190	A-1590	• WEIGHT, START LOCK, REPLACED BY ITEM 190A		1		
190A	B-318	• WEIGHT, START LOCK, REPLACES ITEM 190		1		
210	A-1596	• • SPRING, WEIGHT		1	Y	
220	B-1592-1	• RETAINER, SPRING		1	Y	
230	B-1594-1	• SPRING, FEATHERING		1		
240	B-1593	• HOUSING, START LOCK		1		
250	A-1597	• PLATE, FLYWEIGHT, REPLACED BY ITEM 250A		1		
250A	A-3744	• PLATE, FLYWEIGHT, REPLACES ITEM 250		1		
10F-4		B-1589-3 SPRING ASSEMBLY				
170	B-4504	• GUIDE, SPRING		1		
180	A-1595	• SCREW		4	Y	
190	A-1590	• WEIGHT, START LOCK, REPLACED BY ITEM 190A		1		
190A	B-318	• WEIGHT, START LOCK, REPLACES ITEM 190		1		
210	A-1596	• • SPRING, WEIGHT		1	Y	
220	B-1592-1	• RETAINER, SPRING		1	Y	
230	B-1594-1	• SPRING, FEATHERING		1		
240	B-1593	• HOUSING, START LOCK		1		
250	A-1597	• PLATE, FLYWEIGHT, REPLACED BY ITEM 250A		1		
250A	A-3744	• PLATE, FLYWEIGHT, REPLACES ITEM 250		1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

B-1589-() Spring Assembly, continued



W10044

B-3684 Spring Assembly
Figure 10F-5

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10F-5		B-3684 SPRING ASSEMBLY				
170	A-1591	• GUIDE, SPRING		1		
180	A-1595	• SCREW		4	Y	
200	A-3681	• PLATE, RETAINER		1		
220	B-1592-1	• RETAINER, SPRING		1	Y	
230	B-1594-1	• SPRING, FEATHERING		1		
240	B-1593	• HOUSING, START LOCK		1		
250	A-3744	• PLATE, FLYWEIGHT		1		
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

B-3684 Spring Assembly

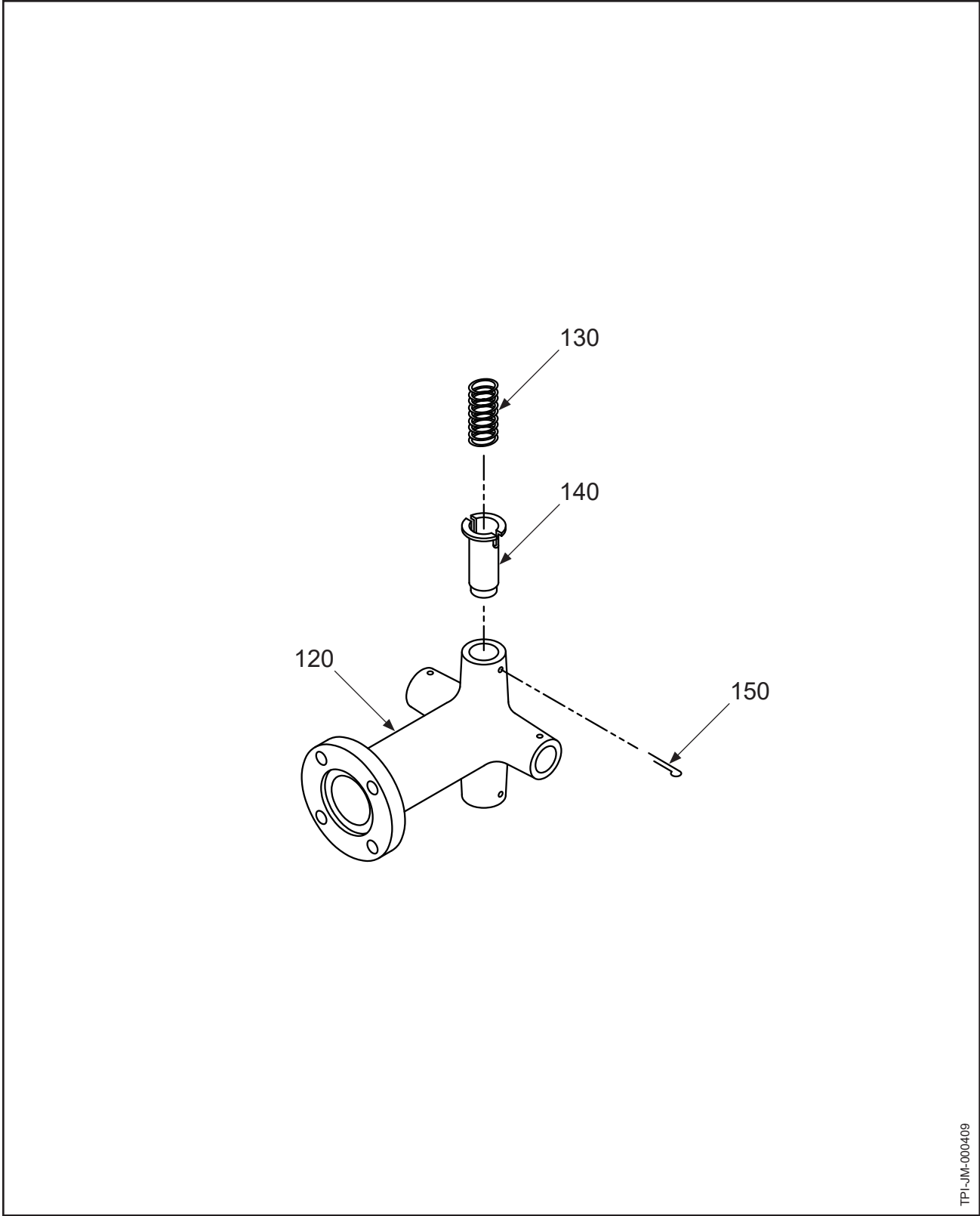
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EXPLODED VIEWS AND PARTS LISTS
Start Lock Assembly

Start Lock Assembly

830-21 Start Lock Assembly Exploded View	Figure 10G-1	10G-3
Parts List		10G-4
830-30 Start Lock Assembly Exploded View	Figure 10G-2	10G-5
Parts List		10G-6

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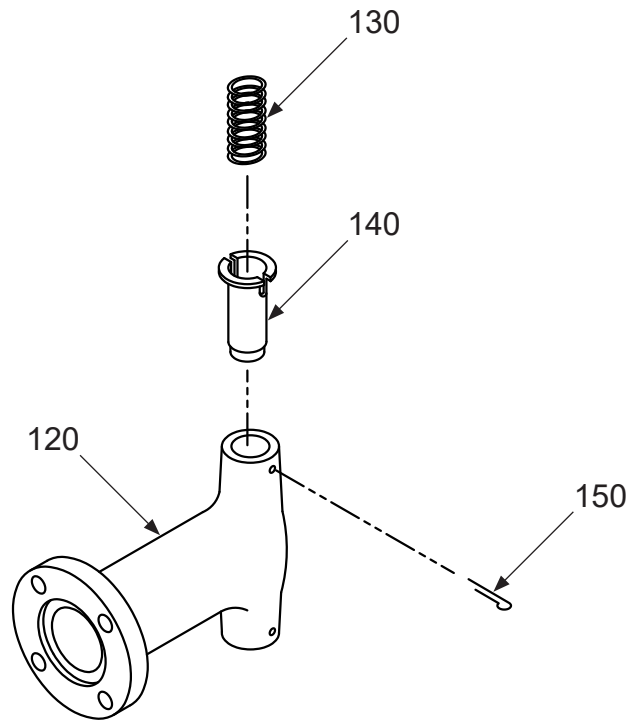
830-21 Start Lock Assembly
Figure 10G-1

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10G-1		830-21 START LOCK ASSEMBLY				
120	B-2406-1	• HOUSING, START LOCK		1		
130	A-884	• SPRING, COMPRESSION		4	Y	
140	A-2407-2	• PIN, START LOCK		4		
150	B-3838-3-5	• COTTER PIN		4	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

830-21 Start Lock Assembly



TPL-IM-000408

830-30 Start Lock Assembly
Figure 10G-2

**HARTZELL PROPELLER OVERHAUL MANUAL
117D**

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H	PCP
10G-2		830-30 START LOCK ASSEMBLY				
120	B-2406-3	• HOUSING, START LOCK		1		
120A	B-2406-1	• HOUSING, START LOCK, ALTERNATE FOR ITEM 120		1		
130	A-884	• SPRING, COMPRESSION (START LOCK)		2	Y	
140	A-2407	• PIN, START LOCK		2		
150	B-3838-3-5	• COTTER PIN		2	Y	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL	

- ITEM NOT ILLUSTRATED

830-30 Start Lock Assembly