

HARTZELL PROPELLER INC.
SERVICE BULLETIN
TRANSMITTAL SHEET
HC-SB-61-363

**Propeller - Introduction of A-2051-1 Bolt with
Three-Direction Safety Wire Holes**

July 1, 2015

This page transmits a revision to Service Bulletin HC-SB-61-363.

- Original Issue, dated Mar 17/15
- Revision 1, dated Jul 01/15

Propeller assemblies that have previously complied with the inspections required in a previous revision of this Service Bulletin are affected.

Changes are shown by a change bar in the left margin of the revised pages.

Revision 1 is issued to change the following in the Service Bulletin:

- The A-2051-1 bolts are now available for field replacement of the A-2051 bolts
- Revised the section 3.B., "Rerouting the Safety Wire for the Spinner Mounting Plate Bolts"

This Service Bulletin is reissued in its entirety.

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1. Planning Information

A. Effectivity

- (1) Hartzell Propeller Inc. steel hub turbine propellers HC-B3TN-3(A,B,D)(E,F)Y are affected by this Service Bulletin.

WARNING: DO NOT USE OBSOLETE OR OUTDATED INFORMATION.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

B. Concurrent Requirements

- (1) Additional service documents may apply to the components/propellers affected by this Service Bulletin. Compliance with additional service documents may be necessary in conjunction with the completion of the Accomplishment Instructions in this Service Bulletin. Refer to the Hartzell Propeller Inc. website at www.hartzellprop.com for a cross-reference of service documents.

C. Reason

- (1) Hartzell Propeller Inc. has received reports of interference between the start lock plates and the safety wire securing the A-2051 bolts in the spinner mounting plate on the affected propellers.
 - (a) The A-2051 bolt has only one safety wire hole through the bolt head. When the bolt is torqued, the position of the safety wire hole may cause interference between the start lock plates and the safety wire when the propeller is in feather position.
- (2) Hartzell Propeller Inc. is introducing the A-2051-1 bolt as an alternate to the A-2051 bolt to prevent safety wire interference with the start lock plates on the affected propellers.
 - (a) The A-2051-1 bolt has three safety wire holes through the bolt head. This gives the assembler additional options to avoid interference with the start lock plates when routing the safety wire.
- (3) Regulatory action is not expected.

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D. Description

- (1) This Service Bulletin provides Instructions for Continued Airworthiness (ICA).
- (2) This Service Bulletin introduces the A-2051-1 bolt for use on the affected propellers.
 - (a) Hartzell Propeller Inc. now manufactures the affected propellers using nine A-2051-1 bolts to attach the spinner mounting plate.
 - (b) The A-2051-1 bolts may now be ordered from Hartzell Propeller Inc. as an alternate for the A-2051 bolts.
 - (c) The A-2051-1 bolts and A-2051 bolts may be used on the same propeller.
- (3) This Service Bulletin provides instructions for a visual inspection to check for interference between the start lock plates and the safety wire securing the A-2051 bolts in the spinner mounting plate.
 - (a) This Service Bulletin provides instructions for rerouting the safety wire if there is interference with the start lock plates.

E. Compliance

- (1) At next propeller overhaul or major disassembly, perform a visual inspection in accordance with the Accomplishment Instructions in this Service Bulletin to check for interference between the start lock plates and the safety wire securing the bolts in the spinner mounting plate.
 - (a) If there is interference between the start lock plate(s) and the safety wire, reroute the safety wire in accordance with the Accomplishment Instructions in this Service Bulletin.

NOTE: Next overhaul is specified in accordance with Hartzell Propeller Inc. Service Letter HC-SL-61-61Y.

F. Approval

- (1) FAA acceptance has been obtained on technical data in this publication that affects type design.

G. Manpower

- (1) No additional man-hours required when performed at propeller overhaul.

H. Weight and Balance

- (1) Not changed

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I. Electrical Load Data

- (1) Not changed

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J. References

- (1) Hartzell Propeller Inc. Propeller Owner's and Logbook Manual 139 (61-00-39)
- Available on the Hartzell Propeller Inc. website at www.hartzellprop.com
- (2) Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02),
Volume 7, Consumable Materials
- Available on the Hartzell Propeller Inc. website at www.hartzellprop.com
- (3) Hartzell Propeller Inc. Steel Hub Turbine Propeller Maintenance Manual
118F (61-10-18)

K. Other Publications Affected

- (1) Hartzell Propeller Inc. Steel Hub Turbine Propeller Maintenance Manual
118F (61-10-18)

2. Material Information

A. Material Necessary for Each Propeller

CAUTION: INSTRUCTIONS AND PROCEDURES IN THIS SERVICE BULLETIN MAY INVOLVE PROPELLER CRITICAL PARTS. REFER TO THE APPLICABLE PROPELLER OVERHAUL OR OWNER'S MANUAL FOR INFORMATION ABOUT PROPELLER CRITICAL PARTS.

<u>Part Number</u>	<u>Description</u>	<u>Qty.</u>
A-2051	Bolt, 5/16-24, Hex Head	AR
A-2051-1	Bolt, 5/16-24, Hex Head	AR

B. Consumables

<u>CM Number</u>	<u>Description</u>	<u>Qty</u>
CM131	Wire, Safety, Stainless - .032" lb.	AR

NOTE: All CM numbers or materials in this Service Bulletin refer to the Consumable Materials chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).

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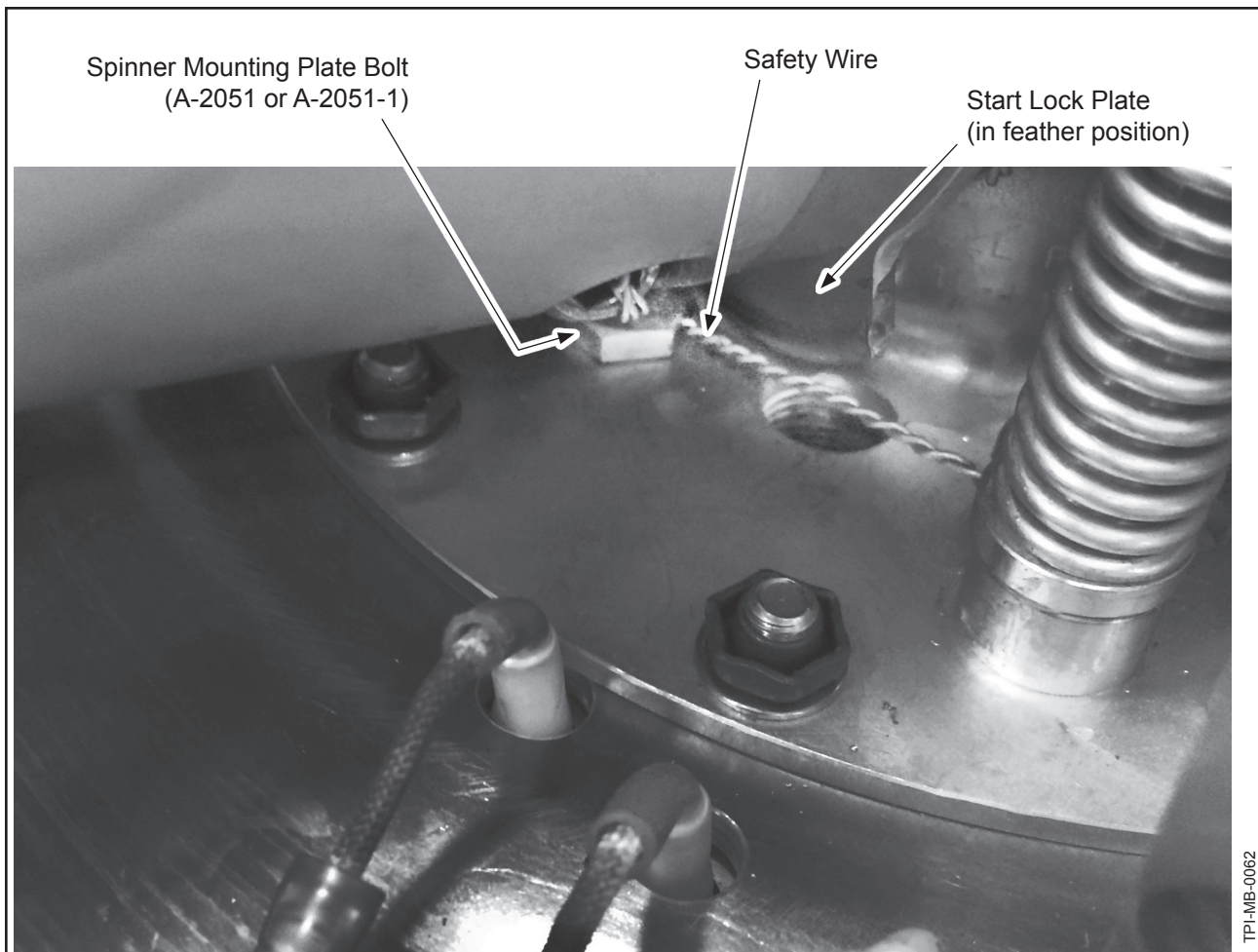
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3. Accomplishment Instructions

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A. Visual Inspection

- (1) Disassembly, inspection, and assembly of the propeller and propeller hub must be performed by a certified propeller repair station with the appropriate rating.



Visual Inspection
Figure 1

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- (2) Perform the following steps at propeller overhaul or major disassembly before applying sealant to the clamps:
 - (a) Visually examine the start lock plates for interference with the safety wire securing the bolts in the spinner mounting plate. Refer to Figure 1.
 - 1 If the start lock plates touch the safety wire:
 - a Reroute the safety wire for the spinner mounting plate bolts in accordance with section 3.B. in this Service Bulletin.
 - 2 If the start lock plates do not touch the safety wire, no further action is required.

B. Rerouting the Safety Wire for the Spinner Mounting Plate Bolts

NOTE: Figure 2 shows the safety wire routing used by Hartzell Propeller Inc. when nine A-2051-1 spinner mounting plate bolts are used.

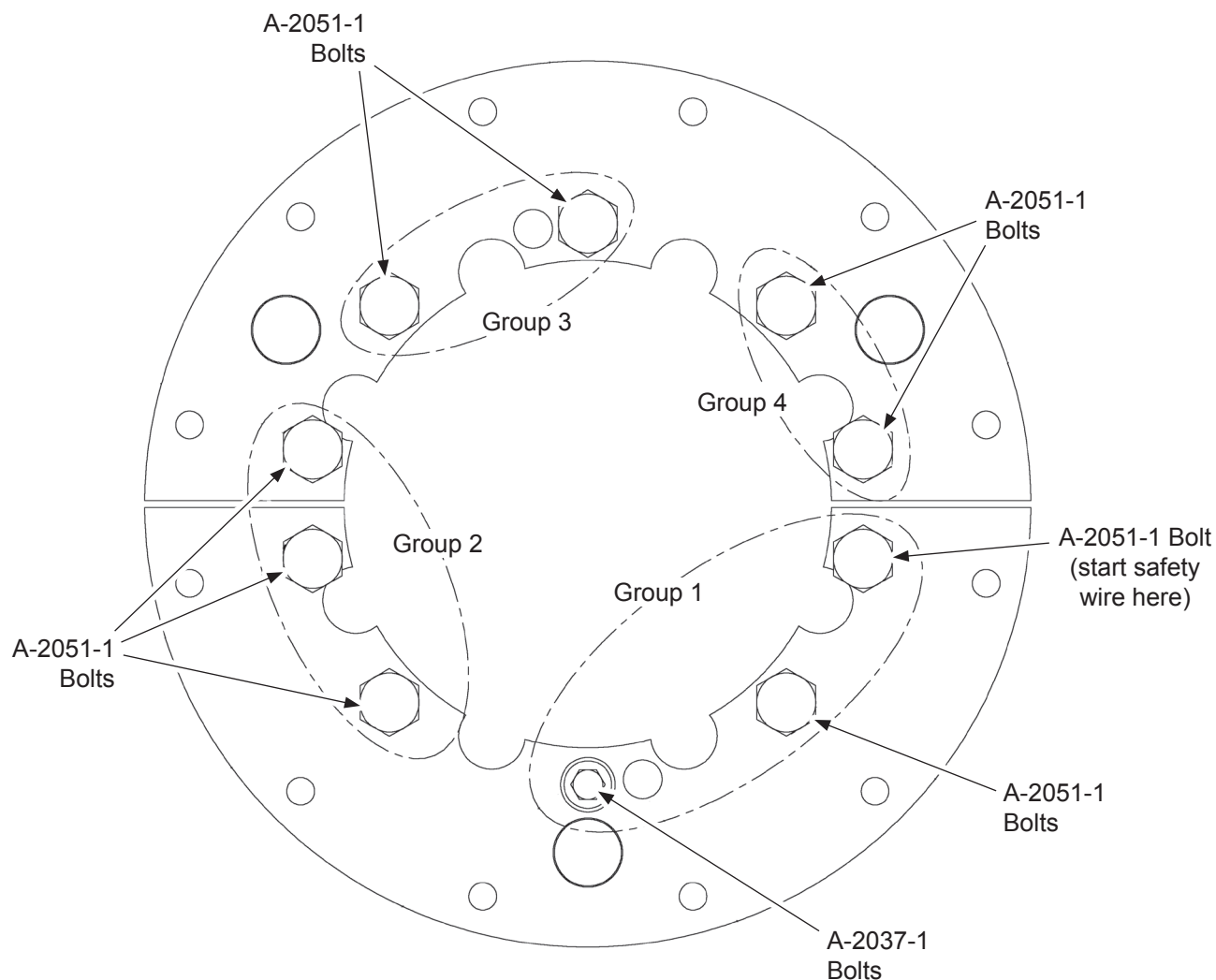
- (1) If any of the start lock plates touch the safety wire securing the bolts in the spinner mounting plate, cut the safety wire and remove the bolt at the location of the interference.
- (2) Install a new A-2051 bolt or a new A-2051-1 bolt at the location of the interference.
- (3) Torque the new A-2051 bolt or new A-2051-1 bolt 13.5 - 16.5 Ft-Lb (18 - 22 N•m).
- (4) Examine the position of the safety wire hole(s) in the new A-2051 bolt or new A-2051-1 bolt.
 - (a) If safety wire can be installed without interfering with the start lock plate:
 - 1 Safety wire the bolts together with 0.032 inch (0.82 mm) diameter stainless steel wire CM131 in accordance with NASM33540.
 - 2 Complete the propeller overhaul in accordance with Hartzell Propeller Inc. Steel Hub Turbine Propeller Maintenance Manual 118F (61-10-18).
 - (b) If the safety wire interferes with the start lock plate, repeat steps 3.B.(1) thru 3.B.(4) as necessary.

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The spinner mounting plate bolts are safety wired together in four separate groups as shown.

Safety Wire Routing Used by Hartzell Propeller Inc.
Figure 2

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C. Recommended Service Facilities

- (1) Hartzell Propeller Inc. has a worldwide network of Recommended Service Facilities for overhaul and repair of our products.
- (2) Each service facility must meet standard FAA requirements and additional Hartzell Propeller requirements before being recommended by Hartzell Propeller Inc. Each service facility is audited by Hartzell Propeller Inc. to verify the continuation of the standards.
- (3) Hartzell Propeller Inc. recommends that you use one of these service facilities when having your propeller overhauled or repaired.
- (4) For a current list of Hartzell Propeller Inc. Recommended Service Facilities, contact Hartzell Propeller Inc. Product Support or refer to the Hartzell Propeller Inc. website at www.hartzellprop.com.

D. Contact Information

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