

HARTZELL PROPELLER INC.
SERVICE BULLETIN
TRANSMITTAL SHEET
HC-SB-61-311

Propeller - Replacement of 835-54(P) Spinner Assembly

December 13, 2011

This page transmits a revision to Service Bulletin HC-SB-61-311.

- Original Issue, dated Sep 10/08
- Revision 1, dated Aug 06/09
- Revision 2, dated Jan 14/11
- Revision 3, dated Apr 06/11
- Revision 4, dated Aug 17/11
- Revision 5, dated Dec 13/11

Propeller assemblies that have complied with the actions required in Revision 1 or earlier of this Service Bulletin are affected.

Propeller assemblies that have not complied with the terminating actions required in Revision 2 or later of this Service Bulletin are affected.

Propeller assemblies that have complied with the terminating actions required in Revision 2 or later of this Service Bulletin are not affected.

FAA approval has been obtained on technical data in this publication that affects type design.

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

This revision is issued to change the following in the Service Bulletin:

- Introduce the (F2) Sterling Silver Metallic paint option for the 103877() kit, 103585() spinner assembly, and composite components.
- Remove the B-6654-100-1 2302-5 UHMW tape from the materials list for the 835-58(P) spinner assembly and 104070(P) kit.
- Correct the Paint & Finish Procedures for Acry Glo series 571 paints on composite components.
- Provide additional instructions for use of Acry Glo series 571 metallic (H code) paint options.
- Update the Appendix to include the 103877F2 kit as an option on the Order Form and clarify return shipping requirements.

This Service Bulletin is reissued in its entirety.

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1. Planning Information

A. Effectivity

- (1) The Hartzell 835-54(P) spinner assembly is affected by this Service Bulletin.
- (2) This spinner assembly may be installed on, but is not limited to:
 - (a) Piper PA-24 Comanche with Hartzell HC-C2YR-1BF/F7666A-4 propeller installed in accordance with Hartzell STC SA00631CH.
 - (b) Piper PA-28R-180 and PA-28R-200 aircraft with Hartzell HC-C2YR-1BFP/F7497 propeller installed in accordance with Professional Pilot STC SA02555CH.
- (3) Installations that have complied with the terminating action of revision 2 or later to this Service Bulletin are not affected by this revision.
- (4) Installations that use another approved spinner assembly in accordance with their applicable Supplemental Type Certificate are not affected by this Service Bulletin.
- (5) Mooney M20() aircraft with a Hartzell HC-C2YR-1BFP/F7497 propeller in accordance with Hartzell STC SA02414CH-D may have the affected spinner, but are NOT affected by this Service Bulletin. Refer to Hartzell Alert Service Bulletin HC-ASB-61-332 for the M20() applications.

CAUTION: 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 website at www.hartzellprop.com for a cross-reference of service documents.

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C. Reason

- (1) The D-5769-1(P) metal spinner dome (with no forward bulkhead) in the 835-54(P) spinner assembly has had in-service cracking and separation events, causing a high replacement rate.
- (2) A metal spinner dome, P/N 102965(P), with a bonded front support, was designed to supersede the D-5769-1(P) in the 835-54(P) spinner assembly.
- (3) The D-5769-1(P) metal spinner dome cannot be converted to the 102965(P) metal spinner dome. The 102963 installable forward bulkhead and the 102987 spacers were designed to achieve better stability for the D-5769-1(P) metal spinner dome.
- (4) The 102965(P) metal spinner dome with bonded front support has had in-service cracking events as part of the 835-54(P) spinner assembly.
- (5) A new 103585 spinner assembly is released as a design improvement and is a supersedure in approved applications to all variations of the 835-54(P) spinner assembly. Refer to Figure 3.
 - (a) The 103585 spinner assembly is available in primed (103585) and finish painted (103585F1 and 103585F2) versions.

NOTE: The 103585 part number identified on the Supplemental Type Certificate documentation represents all 103585 spinner assembly configurations regardless of finish suffix, such as (F1). The 103585 spinner assembly may not be approved in all applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

- (6) A new 835-58(P) spinner assembly is released as a design improvement and as a supersedure in approved applications to all variations of the 835-54(P) spinner assembly. Refer to Figure 4.

NOTE: The 835-58(P) spinner assembly is approved in accordance with Hartzell Propeller Supplemental Type Certificate SA00631CH, but may not be approved in all other applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

- (7) Regulatory action is not expected.

D. Description

- (1) This Service Bulletin requires a preflight inspection of the affected spinner assemblies.

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Component Part Number	Component Description	D-5769-1(P) Metal Spinner Dome (S/N < 0901981C)	102965(P) Metal Spinner Dome	D-5769-1(P) Metal Spinner Dome (S/N ≥ 0901981C)
D-5769-1(P)	Metal Spinner Dome has filler plate holes	1	0	0
102965(P)	Metal Spinner Dome has bonded front support no filler plate holes	0	1	0
D-5769-1(P)	Metal Spinner Dome no filler plate holes	0	0	1
102963	Forward Bulkhead	1	0	1
102987	Spacer	A/R	0	A/R
100547(P)	Filler Plates	Removal Required	0	0
B-3845-8	10-32 Screw	8 (optional)	0	0
A-1020	Fiber Washer	16 (required with B-3845-8)	0	0
B-3808-3	H10-3 Nut	8 (required with B-3845-8)	0	0
C-4549-1(P)	Adapter Ring Unit	1	1	1
A-1020	Fiber Washer	14	14	14
B-3845-8	10-32 Screw	14	14	14

Regardless of the components and/or configuration, all variations of the 835-54(P) spinner assembly must be removed and replaced on the affected applications in accordance with this Service Bulletin.

Components for the 835-54(P) Spinner Assembly (For Identification Only)
Table 1

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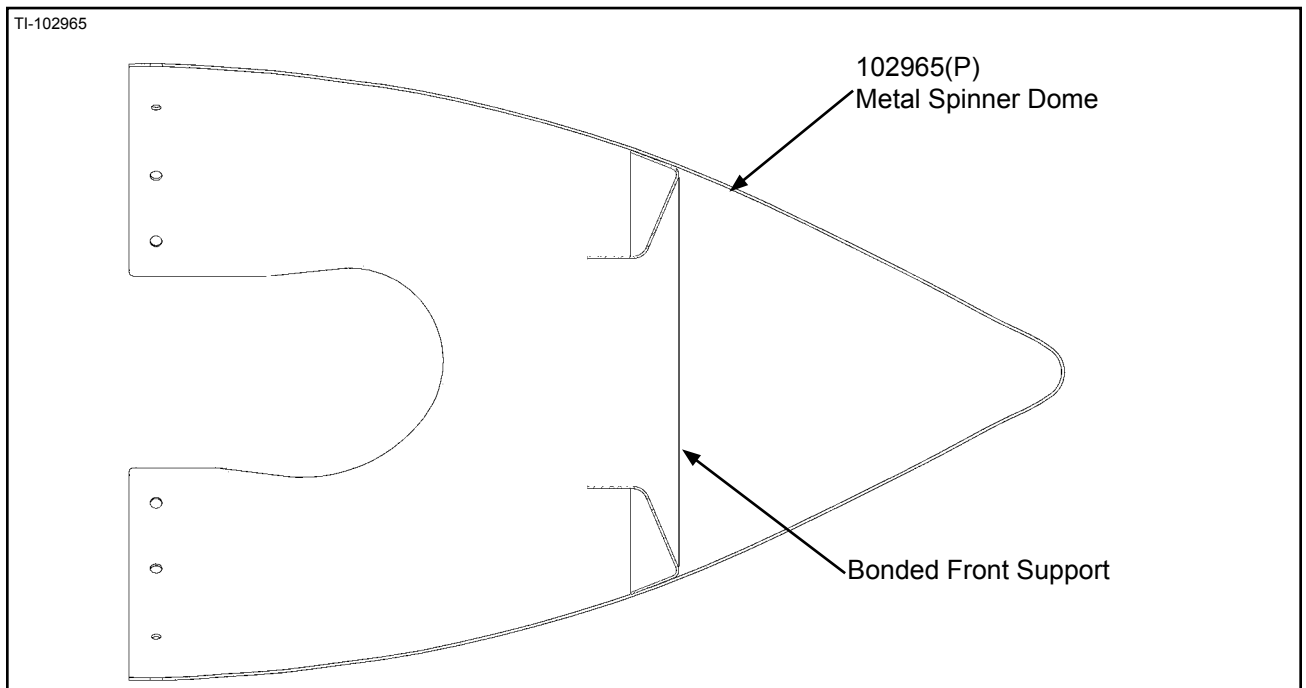
- (2) The original issue of this Service Bulletin introduced the 102965(P) metal spinner dome.
 - (a) The 102965(P) metal spinner dome incorporated a bonded front support to improve the stability of the dome, reduce vibration at the aft end of the dome, and improve the spinner dome reliability for reduced spinner dome cracking in the 835-54(P) spinner assembly. Refer to Figure 1.
- (3) Revision 1 of this Service Bulletin introduced the 102963 installable forward bulkhead and the 102987 spacer for use with the D-5769-1(P) metal spinner dome to help prevent failure of the D-5769-1(P) metal spinner domes in use. Refer to Figure 2.
 - (a) The 102963 installable forward bulkhead and the 102987 spacer were designed to provide stability to the D-5769-1(P) metal spinner dome, similar to the 102965(P) metal spinner dome, with bonded front support.
 - (b) The addition of the 102963 forward bulkhead and the 102987 spacer(s) does not require a change of the spinner assembly part number.
- (4) Revision 1 of this Service Bulletin required removal of the 100547(P) filler plates where applicable. Refer to Table 1.
 - (a) When installed with the D-5769-1(P) metal spinner dome, the 100547(P) filler plates may have caused additional stress, making the cracking condition worse on the D-5769-1(P) metal spinner dome.
 - (b) Where applicable, installation of the optional replacement hardware is permitted. Refer to Table 1.
- (5) Revision 2 requires that all 835-54(P) spinner assemblies be removed and replaced in accordance with this Service Bulletin.
 - (a) The 835-54(P) spinner assembly will no longer be manufactured and will not be procurable through Hartzell Propeller.
- (6) Revision 2 of this Service Bulletin introduced the new 103585() spinner assembly as a supersedure to the 835-54(P) spinner assembly in approved applications. Refer to Figure 3.

NOTE: The 103585 part number identified on the Supplemental Type Certificate documentation represents all 103585 spinner assembly configurations regardless of finish suffix, such as (F1). The 103585 spinner assembly may not be approved in all applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

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- (a) The 103585() spinner assembly includes a 103582() composite spinner dome with bonded front support, the 103583() or 104001() composite filler plates, and a 103584P metal adapter ring with assembly hardware.
- (b) The C-4549-1(P) metal adapter ring, originally supplied with the 835-54(P) spinner assembly can be used in accordance with this Service Bulletin as an alternate to the 103584P metal adapter ring as a component of the 103585() spinner assembly.
 - 1 When the C-4549-1(P) metal adapter ring is used in the 103585() spinner assembly, installation of the 103583() or 104001() composite filler plates is optional, but requires modification in accordance with the Accomplishment Instructions in this Service Bulletin.



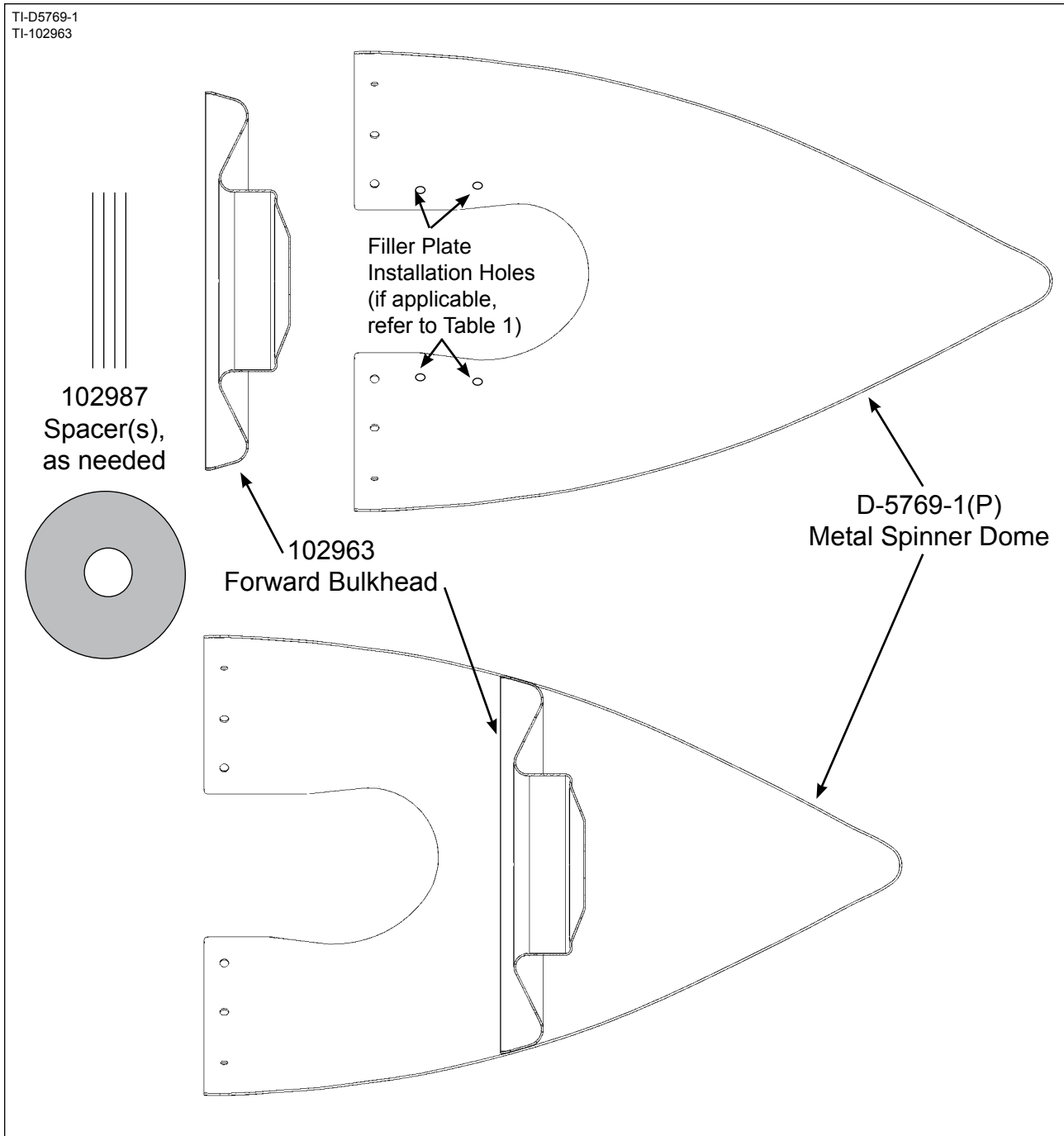
Cutaway View of the 102965(P) Metal Spinner Dome (For Identification Only)

Figure 1

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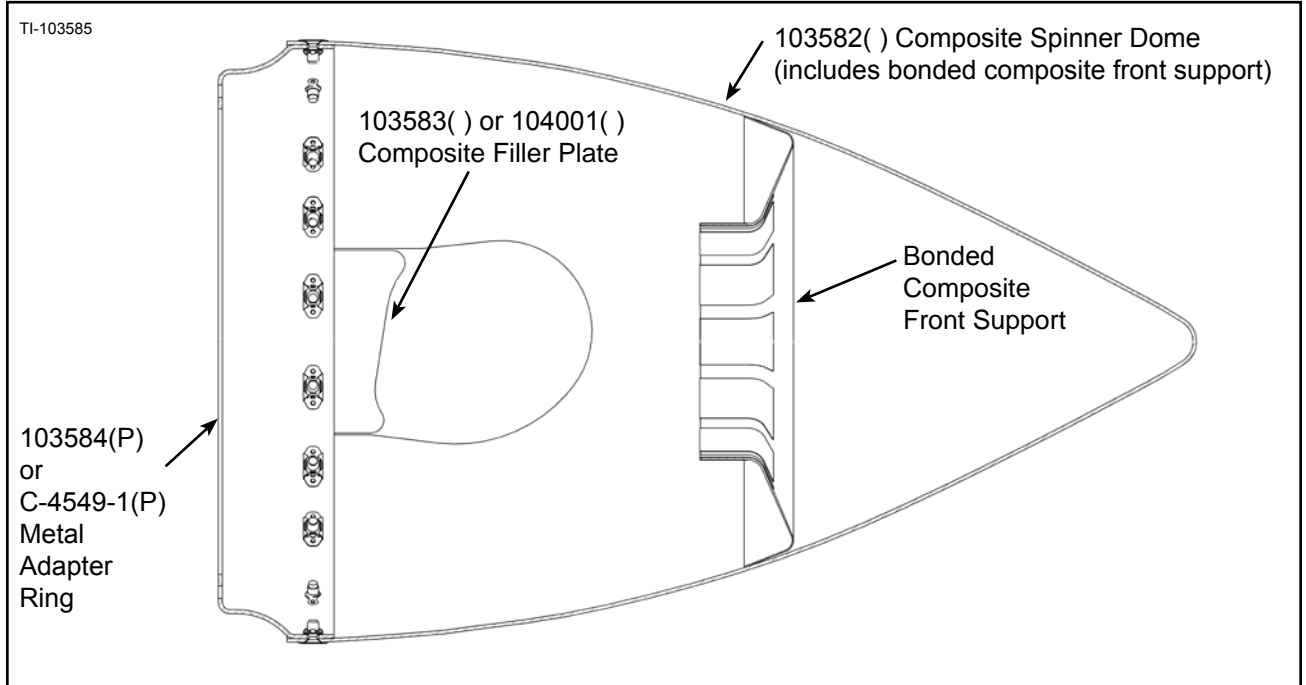


**Cutaway View of the D-5769-1(P) Metal Spinner Dome,
with 102963 Front Bulkhead, and 102987 Spacer (For Identification Only)
Figure 2**

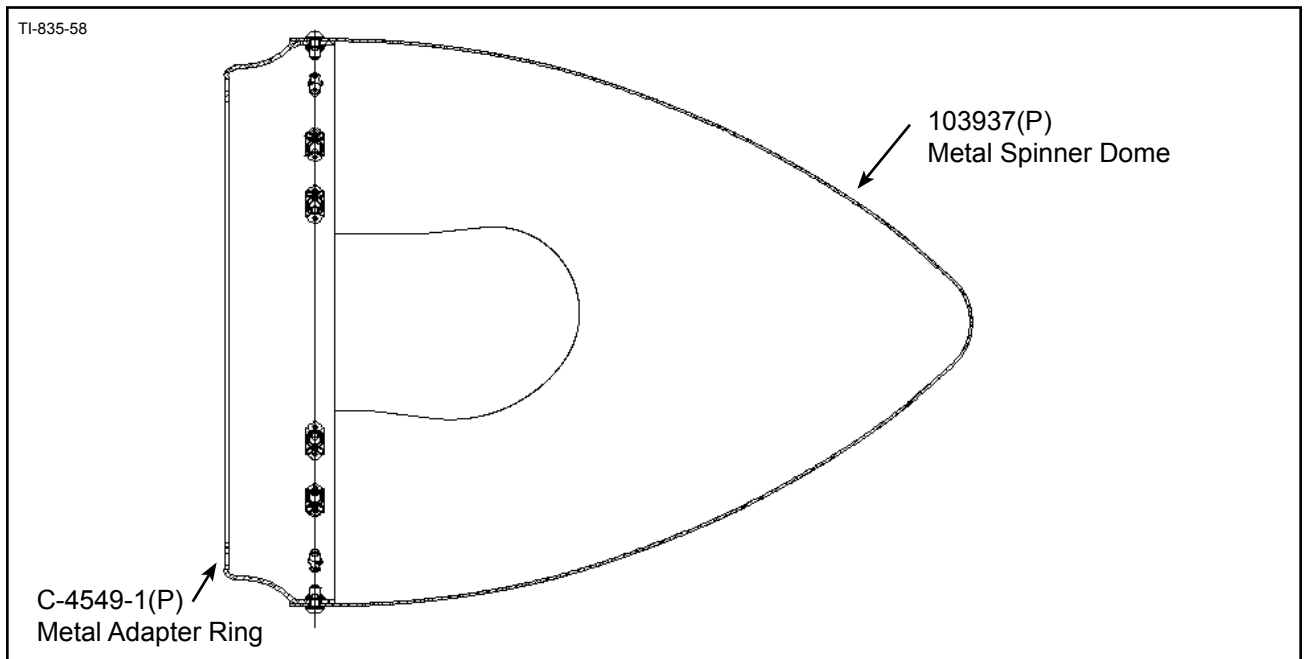
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**Cut-away View of the 103585() Spinner Assembly
Figure 3**



**Cut-away View of the 835-58(P) Spinner Assembly
Figure 4**

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- 2 If the 103583() or 104001() composite filler plates will be installed with the C-4549-1(P) metal adapter ring, modification of the adapter ring is required in accordance with the Accomplishment Instructions of this Service Bulletin. Refer to Figure 6 and Figure 7.

NOTE: A C-4549-1(P) metal adapter ring can be modified into the 103584(P) metal adapter ring in accordance with this Service Bulletin. This configuration is approved for the 103585() spinner assembly in accordance with this Service Bulletin. The 103585() spinner assembly is only available for purchase from Hartzell with the 103584P (polished) metal adapter ring.

- (7) Revision 2 of this Service Bulletin introduced the new 835-58(P) spinner assembly as a supersedure to the 835-54(P) spinner assembly in approved applications. Refer to Figure 4.

NOTE: The 835-58(P) spinner assembly is approved in accordance with Hartzell Propeller Supplemental Type Certificate SA00631CH, but may not be approved in all other applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

- (a) The 835-58(P) spinner assembly includes the new 103937(P) metal spinner dome and the C-4549-1(P) metal adapter ring with assembly hardware.

- (8) Revision 2 of this Service Bulletin clarified that the existing 835-33(P) spinner assembly is an approved spinner option for the approved applications. The shape of the 835-58(P) spinner assembly is the same as the shape of the 835-33(P) spinner assembly. Refer to Figure 4.

NOTE: The 835-33(P) spinner assembly may not be approved in all applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

- (9) Revision 3 of this Service Bulletin identifies the 103583() composite filler plates as an interim part number that has already been superseded by the 104001() composite filler plates introduced in Revision 2 of this Service Bulletin.
- (10) Revision 4 of this Service Bulletin removes the Mooney M20() application from the effectivity and all related sections. Refer to Hartzell Alert Service Bulletin HC-ASB-61-332 for the M20() applications.

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- (11) Revision 5 of this Service Bulletin introduces the (F2) Sterling Silver Metallic paint option for the 103877() kit, 103585() spinner assembly, and composite components. It also provides instructions for use of any Acry Glo series 571 metallic (H code) paint.

E. Compliance

- (1) For all installations, perform propeller pre-flight inspections in accordance with Hartzell Owner's Manual 115N (61-00-15).

WARNING: DO NOT OPERATE THE AIRCRAFT WITH A CRACKED SPINNER DOME OR SPINNER ASSEMBLY. FAILURE TO COMPLY MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE.

- (a) If a crack is found during inspection, replacement of the damaged spinner component(s), in accordance with this Service Bulletin, is required before further flight.

1 Contact Hartzell Product Support for replacement information.

- (b) If a crack is not found during inspection:

1 Within 13 calendar months or 50 flight hours, whichever occurs first, from January 14, 2011, complete one of the options given in the Terminating Action for this Service Bulletin.

2 At the owner/operator's discretion, any spinner assembly approved in accordance with the applicable Supplemental Type Certificate and the Terminating Action for this Service Bulletin may be installed in place of the 835-54(P) spinner assembly at any time.

- (2) Terminating Action:

- (a) Installation of a 103585() spinner assembly, for approved applications, is terminating action for this Service Bulletin.

NOTE: The 103585 part number identified on the Supplemental Type Certificate documentation represents all 103585 spinner assembly configurations regardless of finish suffix, such as (F1). The 103585 spinner assembly may not be approved in all applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

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- (b) Installation of an 835-58(P) spinner assembly, for approved applications, is terminating action for this Service Bulletin.

NOTE: The 835-58(P) spinner assembly is approved in accordance with Hartzell Propeller Supplemental Type Certificate SA00631CH, but may not be approved in all applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

- (c) Installation of an 835-33(P) spinner assembly, for approved applications, is terminating action for this Service Bulletin.

NOTE: The 835-33(P) spinner assembly may not be approved in all applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

- (d) Installation of any spinner assembly, other than a version of the 835-54(P) spinner assembly, that is approved in accordance with the applicable Supplemental Type Certificate is terminating action for this Service Bulletin.

- (3) Report any occurrences of spinner dome cracking to Hartzell Product Support for further instructions.

F. Approval

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

G. Manpower

- (1) Approximately one minute is required for spinner inspection.
- (2) Replacement using the 103585() spinner assembly:
 - (a) Approximately 0.5 man hours are required for spinner dome removal and replacement.
 - (b) Approximately 2.0 man hours are required for propeller removal and installation.
 - (c) Approximately 1.5 man hours are required for installation of the optional filler plates including modification of the adapter ring.
- (3) Replacement using the 835-58(P) spinner assembly:
 - (a) Approximately 0.5 man hours are required for spinner dome removal and replacement.

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- (4) Replacement using the 835-33(P) spinner assembly:
 - (a) Approximately 2.0 man hours are required for propeller removal and installation.
 - (b) Approximately 0.5 man hours are required for spinner dome removal and replacement.
- (5) Finishing of the 103582() composite spinner dome and 103583() or 104001() composite filler plates:
 - (a) Approximately 1.0 man hour is required to paint a primed composite spinner dome and primed composite filler plates (excluding cure time).
 - (b) Approximately 4.0 man hours are required to strip and finish a painted composite spinner dome and filler plates (excluding cure time).

H. Weight and Balance

- (1) Weight and balance may be affected by the change of spinner assembly. The weight change can be calculated based on the weight of each variation below:
 - (a) The 835-54(P) spinner assembly
 - 1 With D-5769-1(P) metal spinner dome and no forward bulkhead, the assembly weighs 2.9 pounds (1.32 kg).
 - 2 With D-5769-1(P) metal spinner dome and 102963 installable forward bulkhead, the assembly weighs 3.5 pounds (1.59 kg).
 - 3 With 102965(P) metal spinner dome, the assembly weighs 3.5 pounds (1.59 kg).
 - (b) The 835-58(P) spinner assembly weighs 2.5 pounds (1.13 kg).
 - (c) The 103585() spinner assembly weighs 2.3 pounds (1.04 kg).
 - (d) The 835-33(P) spinner assembly weighs 3.3 pounds (1.50 kg).

I. Electrical Load Data

- (1) Not Changed

CAUTION: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF ALL DOCUMENTS.

J. References

- (1) Hartzell Propeller Owner's Manual 115N (61-00-15)
- (2) Hartzell Metal Spinner Maintenance Manual 127 (61-16-27)

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- (3) Hartzell Composite Spinner Maintenance Manual 148 (61-16-48)
- (4) Hartzell Standard Practices Manual 202A (61-01-02)
- (5) Federal Aviation Administration Advisory Circular 43.13-1B
- (6) Hartzell Alert Service Bulletin HC-ASB-61-332

K. Other Publications Affected

- (1) Hartzell Metal Spinner Maintenance Manual 127 (61-16-27)
- (2) Hartzell Composite Spinner Maintenance Manual 148 (61-16-48)
- (3) Hartzell Standard Practices Manual 202A (61-01-02)

2. Material Information

A. Materials: 103585() Spinner Assembly

<u>Component Part Number</u>	<u>Component Description</u>	<u>Quantity Required</u>
*103582()	Composite Spinner Dome has no filler plate holes	1
103583(), superseded	Composite Filler Plates, superseded by 104001()	
*104001()	Composite Filler Plates	2
*B-3860-10L	Washer, Dimpled	18
*B-3867-272	10-32 Screw	18
*B-6654-100-1	2302-5 UHMW tape	A/R
C-3317-228	O-ring, Mounting Flange	1
103584P	Adapter Ring	1

Or use the following in place of the 103584P Adapter Ring, in accordance with the Modification Instructions in this Service Bulletin.

C-4549-1(P)	Adapter Ring Unit	1
*B-3849-3	Nutplate, Floating	4
*B-3847-5	Rivet	8

- (1) To simplify the ordering process for the purposes of compliance with this Service Bulletin, the items above that are indicated with an asterisk '*' are included in kit part number 103877(). The kit contains ten (10) of the B-3847-5 rivet, allowing for spares. The kit does NOT include the adapter ring.
 - (a) Some 103877F1 kits shipped with the 103583F1 composite filler plates. These are serviceable and approved in the assembly.

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- (2) Consumables are required to paint the primed composite components or refinish the painted composite components of the 103585() spinner assembly and the 103877() kit.
- (a) Sherwin Williams® Acry Glo® series 571 (including metallic, H code, colors) Paint or Sherwin Williams Polane® T series Paint must be used. The approved paint may be procured in any Sherwin Williams® color to the owner/operator's preference.
- 1 Hartzell Propeller offers the Acry Glo® series 571 paint in Matterhorn White (F1) and Sterling Silver Metallic (F2) at this time. The mix of paint, catalyst, reducer, accelerator, and stabilizer (for metallic H code colors only) listed here will apply to all colors (including metallic, H code, colors) of Acry Glo® series 571 Paint. Refer to Table 2 and Table 3 for the list of applicable consumables.
 - a Contact any Sherwin Williams® location to identify a local distributor for aircraft paint (from the Sherwin Williams® website, select Aerospace Finishes) for assistance procuring the correct paint.
 - 2 Hartzell Propeller offers the Polane® T series paint in a variety of colors. Refer to Table 3 and Hartzell Standard Practices Manual 202A (61-01-02) for a list of available Hartzell colors/mixes or contact any Sherwin Williams® Chemical Coatings location for assistance with additional colors/mixes.
 - a Contact any Sherwin Williams® Chemical Coatings location (from the Sherwin Williams® website, select Product Finishes) for assistance procuring the correct paint.

Temperature	Reducer Component Part Number	CM Number	Component Blend (humidity 65% or less)	Component Blend (humidity greater than 65%)
60-70°F (16-21°C)	A-6741-285	CM285	100%	75%
	A-6741-288	CM288	0%	25%
70-80°F (21-27°C)	A-6741-284	CM284	100%	75%
	A-6741-288	CM288	0%	25%
80-90°F (27-32°C)	A-6741-284	CM284	90-95%	67.5-71.25%
	A-6741-286	CM286	5-10%	3.75-7.5%
	A-6741-288	CM288	0%	25%
90°F+ (32°C+)	A-6741-284	CM284	75-90%	56.25-67.5%
	A-6741-286	CM286	10-25%	7.5-18.75%
	A-6741-288	CM288	0%	25%

Acry Glo® Series 571 Reducer Components and Blend Requirements
Table 2

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Part Number	CM Number	Description	Quantity	Applicability	
				Paint Primed Components	Refinish Painted Components
N/A	N/A	Sandpaper, 60 grit or finer (removal)	A/R		x
N/A	N/A	Sandpaper, 400 grit (between layers)	A/R	x	x
N/A	CM159	Cheesecloth, or equivalent	A/R	x	x
Alternates Listed		Solvent - use one of these alternates	A/R	x	x
N/A	CM173	Solvent - Acetone	A/R		
N/A	CM106	Solvent - Methyl Ethyl Ketone (MEK)	A/R		
N/A	CM219	Solvent - Methyl Propyl Ketone (MPK)	A/R		
Mix #1		Primer Filler, Polane 2.8 Plus	A/R		x
A-6741-84(-1)	CM84	Spray Fill	6 parts		
A-6741-85(-1)	CM85	Catalyst	1 part		
A-6741-32(-1)	CM32	Polane Reducer (25% maximum)	A/R		
Mix # 2		Primer Sealer, Grey	A/R		x
A-6741-29(-1)	CM29	Primer Sealer	13 parts		
A-6741-30(-1)	CM30	Catalyst	1 part		
A-6741-32(-1)	CM32	Polane Reducer (3.25 parts maximum)	A/R		
A-6741-31(-1)	CM31	Accelerator	A/R		
Mix #13		P-Static, Conductive Coating	A/R		x
A-2328-13	CM164	Kit, quart (contains base & activator)	-		
A-6741-164-5	CM164	Conductive Coating Base, Black	1 part		
A-6741-164-6	CM164	Conductive Coating Activator	1 part		
Finish Paint		Polane® T series paint - Refer to Hartzell Standard Practices Manual 202A (61-01-02) OR Acry Glo® series 571 Paint - see below		x	x
A-6741-282 OR A-6741-291 OR -----	CM282 CM291 -----	Acry Glo® series 571 Matterhorn White (Mix 15) Acry Glo® series 571 Sterling Silver Metallic (H code) (Mix 25) -or use any Acry Glo® series 571 color	3 parts		
A-6741-283	CM283	Catalyst - with NON-metallic paint	1 part		
A-6741-283	CM283	Catalyst- with metallic paint	1/2 part		

Consumables and Applicability to the 103585() Spinner and 103877() Kit
Table 3, page 1 of 2

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<u>Part Number</u>	<u>CM Number</u>	<u>Description</u>	<u>Quantity</u>	<u>Applicability</u>	
				<u>Paint Primed Components</u>	<u>Refinish Painted Components</u>
Finish Paint, continued		Polane® T series paint - Refer to Hartzell Standard Practices Manual 202A (61-01-02) OR Acry Glo® series 571 Paint - see below		x	x
A-6741-292	CM292	Acry Glo® Stabilizer - with metallic (H code) paints only	1/2 part		
A-6741-()	Table 3	Reducer (Blended, refer to Table 3)	A/R		
A-6741-288	Table 3	Reducer (Urethane Grade MEK)	A/R		
A-6741-287	CM287	Accelerator	A/R		
A-6741-290	CM290	Acry Glo® Conventional Clear - with metallic (H code) paints only (Mix 26)	A/R		

Consumables and Applicability to the 103585() Spinner and 103877() Kit
Table 3, page 2 of 2

- (3) A label is required for identification if the C-4549-1(P) metal adapter ring is modified for use in the 103585() spinner assembly if the optional filler plates will be installed.
 - (a) The label must be pressure sensitive with an adhesive backing.
 - (b) The label must be able to accept printing, typing, or writing.
- (4) Consumables are required for modification of the C-4549-1(P) metal adapter ring if the optional filler plates will be installed.
 - (a) Solvent is required. The following solvents may be used:
 - 1 Methyl Ethyl Ketone (MEK), CM106
 - 2 Methyl Propyl Ketone (MPK), CM219
 - (b) Use of a clear, protective spray CM129 is optional. The following may be used:
 - 1 Krylon 1301 Crystal Clear (preferred)
 - 2 Ace Polyurethane 1037795
 - 3 Semi-gloss Krylon 8118

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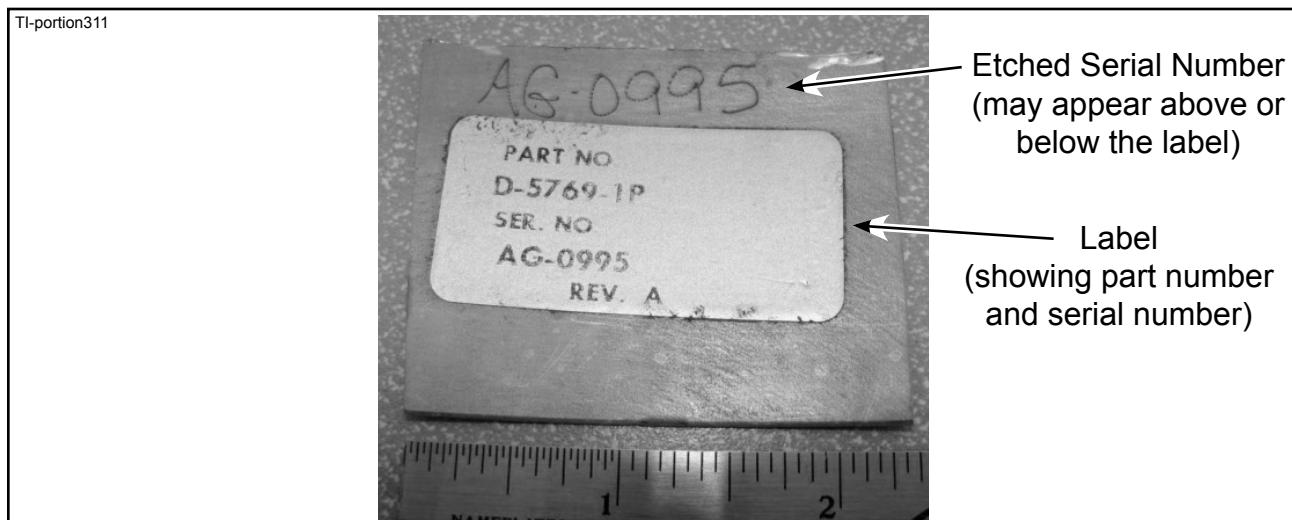
Propeller - Replacement of 835-54(P) Spinner Assembly

- (5) Tooling is required for modification of the C-4549-1(P) metal adapter ring if the optional filler plates will be installed:
- (a) Drill
 - (b) Appropriate drill bit to make a hole with 0.250 +0.006/-0.002 inch (6.35 +0.152/-0.050 mm) in diameter.
 - (c) Appropriate drill bit for the B-3847-5 rivet, refer to Federal Aviation Administration Advisory Circular 43.13-1B.

B. Materials: 835-58(P) Spinner Assembly

<u>Component Part Number</u>	<u>Component Description</u>	<u>Quantity Required</u>
*103937(P)	Metal Spinner Dome	1
C-4549-1(P)	Metal Adapter Ring Unit	1
*A-1020	Fiber Washer	14
*B-3845-8	10-32 Screw	14
C-3317-228	O-ring, Mounting Flange	A/R

- (1) To simplify the ordering process for the purposes of compliance with this Service Bulletin, the items above that are indicated with an asterisk "*" are included in kit part number 104070(P). The kit does NOT include the adapter ring.
- (2) The C-3317-228 O-ring is only required if the propeller is removed in order to replace the adapter ring.



Example Portion of the Retired Spinner Dome
Figure 5

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Propeller - Replacement of 835-54(P) Spinner Assembly

C. Materials: 835-33(P) Spinner Assembly

<u>Component Part Number</u>	<u>Component Description</u>	<u>Quantity Required</u>
835-33(P)	Spinner Assembly	1
C-3317-228	O-ring, Mounting Flange	1

NOTE 1: Any part listed in the Material Information and designated with the character 'P' following the part number is a polished, aluminum component. Absence of the letter 'P' for the same part number indicates it is a buff, aluminum component.

NOTE 2: Any composite part listed in the Material Information of this Service Bulletin and designated with () or the characters 'F1' following the part number indicates the optional finish. 'F1' indicates the Matterhorn White finish. Absence of these characters, such as 103585, for the same part number indicates it is a composite component, primed only. These options may be painted or re-finished at the owner's discretion.

NOTE 3: All CM numbers or materials in this Service Bulletin refer to the Consumable Materials chapter of Hartzell Standard Practices Manual 202A (61-01-02).

3. Accomplishment Instructions

A. Spinner Pre-flight Inspection

- (1) Perform propeller pre-flight inspections in accordance with Hartzell Owner's Manual 115N (61-00-15).

WARNING: DO NOT OPERATE THE AIRCRAFT WITH A CRACKED SPINNER DOME OR ASSEMBLY. FAILURE TO COMPLY MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE.

- (a) If a crack is found, the cracked spinner component(s) must be replaced before further flight.

- 1 Remove the spinner component(s), and propeller as needed, in accordance with Hartzell Owner's Manual 115N (61-00-15).

- a Retain the assembly screws and washers, for use with an 835-58(P) spinner assembly only.

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- b Retire the cracked metal spinner component(s) from service in accordance with the Part Retirement Procedures chapter of Hartzell Standard Practices Manual 202A (61-01-02), except:

NOTE: The Parts Retirement Form is available at www.hartzellprop.com.

- 1) Do not mark the part through the serial number to identify it as unairworthy.
- 2) These retired components must not be modified or returned to service for use in any application including experimental applications.
- 3) These retired components must have a portion of the component cut out to include the part number and serial number. Refer to Figure 5. This portion must be returned to Hartzell Product Support.
 - a) Hartzell Propeller will cover standard shipping for affected spinner pieces. Contact Hartzell Product Support for shipping account information.
 - b) Return Material Authorization is not required.
 - c) DO NOT SEND THE WHOLE COMPONENT(S).

- 2 Install one of the following:

- a A serviceable C-4549-1(P) metal adapter ring, in accordance with Hartzell Owner's Manual 115N (61-00-15), for use with one of the options listed in section 3.B. Proceed to section 3.B.
- b A complete spinner assembly approved in accordance with the applicable Supplemental Type Certificate and the Terminating Action for this Service Bulletin. Follow applicable installation instructions.

- (b) If no spinner cracking is found:

- 1 Within the flight time and calendar limits stated in the Compliance to this Service Bulletin:
 - a Remove the spinner dome in accordance with Hartzell Owner's Manual 115N (61-00-15).
 - 1) Retain the assembly screws and washers, for use with the 835-58(P) spinner assemblies only.

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Propeller - Replacement of 835-54(P) Spinner Assembly

- 2) Retire the spinner dome from service in accordance with the Part Retirement Procedures chapter of Hartzell Standard Practices Manual 202A (61-01-02), except:

NOTE: The Parts Retirement Form is available at www.hartzellprop.com.

- a) Do not mark the part through the serial number to identify it as unairworthy.
 - b) These retired components must not be modified or returned to service for use in any application including experimental applications.
 - c) These retired components must have a portion of the component cut out to include the part number and serial number. This portion must be returned to Hartzell Product Support.
 - i) Hartzell Propeller will cover standard shipping for affected spinner pieces. Contact Hartzell Product Support for shipping account information.
 - ii) Return Material Authorization is not required.
 - iii) **DO NOT SEND THE WHOLE COMPONENT(S).**
- b Remove the propeller in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15).
- c Visually inspect the C-4549-1(P) adapter ring for cracks.
- 1) If a crack is found, return to section 3.A.(1)(a)1b.
 - 2) If no cracking is found, the serviceable C-4549-1(P) adapter ring may be retained for use with one of the options listed in section 3.B. Proceed to section 3.B.

B. Metal Spinner Dome/Assembly Replacement - Terminating Action

- (1) If the C-4549-1(P) metal adapter ring is not cracked, but the owner/operator chooses to purchase a complete spinner assembly, the serviceable C-4549-1(P) metal adapter ring may be removed in accordance with Hartzell Owner's Manual 115N (61-00-15) and retained for later use.

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Propeller - Replacement of 835-54(P) Spinner Assembly

Finish Sequence	Finish Procedure	Spinner Assembly 103585		
		Dome 103582	Adapter Ring 103584	Filler Plate 103583 or 104001
1	Masking	---	---	---
2	Primer Filler (white layer)	X	---	X
3	Minor Blemish Correction See NOTE 1	X	---	X
4	Primer Sealer (gray layer)	X	---	X
5	Conductive Coating (black layer)	X	---	X
6	Masking Instruction 2	X	X	X
7	Wash Primer	---	X	---
8	Primer Sealer (gray layer)	X		X
9	Finish Paint See NOTE 2	X	X	X
10	Paint Inspection	X	X	X
11	Dome Resistance Check	X	---	X
12	Bulkhead Resistance Check	---	X	---
13	Erosion Mask Installation	---	---	---
14	Identification	X	X	X

NOTE 1: The steps in the section "Minor Blemish Correction" in the Finish Procedures chapter of Hartzell Composite Spinner Maintenance Manual 148 (61-16-48) may be performed at any time during the Primer Filler or Primer Sealer procedures.

NOTE 2: Any Hartzell approved Polane® T or Acry Glo® series 571 (including metallic, H code) paint colors may be used as finish paint for these components.

Finish Procedures
Table 4

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Propeller - Replacement of 835-54(P) Spinner Assembly

- (2) Any one of the following is approved for use with a serviceable C-4549-1(P) metal adapter ring:
 - (a) A 103585() spinner assembly, on approved applications.
 - 1 The 103877() kit is required for use with an existing, serviceable C-4549-1(P) metal adapter ring.
 - 2 The complete spinner assembly (including the 103584P metal adapter ring) can be purchased if needed.
 - 3 Proceed to section 3.C. for finish and installation instructions.
 - (b) An 835-58(P) spinner assembly, on approved applications.
 - 1 The 104070(P) kit is required for use with an existing, serviceable C-4549-1(P) metal adapter ring.
 - 2 The complete spinner assembly can be purchased if needed.
 - 3 Proceed to section 3.E. for installation instructions.
- (3) At the owner/operator's discretion, another spinner assembly approved in accordance with the applicable Supplemental Type Certificate and the Terminating Action for this Service Bulletin may be installed in place of the 835-54(P) spinner assembly at any time.
 - (a) The 835-33(P) spinner assembly, on approved applications, may be installed in accordance with Hartzell Owner's Manual 115N (61-00-15)
 - (b) For replacement using any other approved spinner assembly in accordance with the applicable Supplemental Type Certificate, contact your Supplemental Type Certificate holder.
 - (c) Follow removal and installation procedures, as required, in accordance with Hartzell Owner's Manual 115N (61-00-15), this Service Bulletin, and/or other applicable procedures.
 - (d) Make an entry in the propeller logbook indicating compliance with the Terminating Action for this Service Bulletin.

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Propeller - Replacement of 835-54(P) Spinner Assembly

C. Finish Procedures for the 103585() Spinner Assembly and Related Components

(1) The 103582(F1,F2) composite spinner dome and 103583F1 or 104001(F1,F2) composite filler plates are painted. F1 indicates Matterhorn White. F2 indicates Sterling Silver Metallic. Refer to Table 3.

(a) These components may be refinished to the owner/operator's specifications using an approved paint. Refer to the Materials section of this Service Bulletin for approved paint information.

1 If the manufacturer's painted finish is preferred, proceed to section 3.D.

CAUTION: REFINISHING OF THE COMPOSITE SPINNER DOME AND FILLER PLATES CAN ALTER THE P-STATIC DISSIPATION CAPABILITIES OF THESE COMPONENTS. IMPROPER P-STATIC DISSIPATION COULD LEAD TO DISTORTION OR DAMAGE OF THE ELECTRONIC COMPONENTS IN THE AIRCRAFT, INCLUDING NAVIGATIONAL EQUIPMENT.

(b) Additional paint must not be applied over the existing manufacturer's finish. Additional layers of paint will inhibit the function of the P-Static coating to dissipate static electricity.

(c) Refer to the Overhaul and Finish Procedures chapters of Hartzell Composite Spinner Maintenance Manual 148 (61-16-48) for detailed refinishing procedures, except:

CAUTION: KEEP THE SANDER MOVING AT ALL TIMES TO PREVENT OVERHEATING AND RESULTING PART DAMAGE. DOME AND BULKHEAD MATERIALS ARE VERY THIN IN CERTAIN AREAS. REMOVAL OF MATERIAL MAY AFFECT THE STRENGTH OF THE PART.

1 Paint Removal (Overhaul chapter): using 60 grit or finer sandpaper, sand smooth the entire surface of the part to the last layer before the composite material - the white layer below the black conductive coating.

a Refer to Table 4 in this Service Bulletin for the applicable Finish layers. Step 4 and Step 8 Primer Sealer may not be present in factory finished components.

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Propeller - Replacement of 835-54(P) Spinner Assembly

- 2 Paint Application (Finish Procedures chapter):
- a Refer to Table 4 in this Service Bulletin for the applicable Finish Procedures.
 - b For Acry Glo® series 571 paints (including metallic colors, H code) refer to the procedures for Polane® Paint in the Finish Procedures chapter except:
 - 1) Refer to the mixture proportions in the Materials section of this Service Bulletin.
 - 2) The maximum allowable film thickness of the paint (color) is 2 mils when dry.
 - a) The equivalent of 5 mils wet coat = 2 mils dry coat.
 - b) Wet coat thickness can be measured using a Sherwin Williams® wet film/mil gauge standard.

CAUTION: DO NOT EXCEED FOUR (4) HOURS BETWEEN LAYERS WHEN USING ACRY GLO® SERIES 571 METALLIC (H CODE) PAINT. THE METALLIC PAINT CANNOT BE SANDED.

- 3) Permit the painted surface to dry to the touch for a maximum of four (4) hours at a room temperature equal to or greater than 60 degrees F (15 degrees C).
 - a) For adequate layer-to-layer paint adhesion, the maximum time between layers of paint is four (4) hours.

CAUTION: DO NOT SAND METALLIC PAINT.

- b) If it has been longer than the maximum permitted time between layers, follow the procedures given in the Overhaul and Finish Procedures chapters of Hartzell Composite Spinner Maintenance Manual 148 (61-16-48).

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Propeller - Replacement of 835-54(P) Spinner Assembly

CAUTION: ACRY GLO® SERIES 571 METALLIC (H CODE) PAINTS REQUIRE THE USE OF A CLEAR COAT.

- 4) For Acry Glo® series 571 metallic (H code) paint only, a clear coat must be applied.

CAUTION: DO NOT EXCEED FOUR (4) HOURS BETWEEN THE LAST LAYER OF PAINT AND THE LAYER OF CM292 CONVENTIONAL CLEAR.

- a) Using the same application procedure as used for the color, apply CM292 Conventional Clear over the metallic paint.
- b) The maximum allowable film thickness of the clear coat is 2 mils when dry.
- i) The equivalent of 5 mils wet coat = 2 mils dry coat.
- ii) Wet coat thickness can be measured using a Sherwin Williams® wet film/mil gauge standard.
- c For Polane® T paints, follow the procedures given in the Overhaul and Finish Procedures chapters of Hartzell Composite Spinner Maintenance Manual 148 (61-16-48).
- 3 Dome Resistance Check:
- a Follow the procedures given.
- b Maximum permitted resistance is 0.1 Megohm.

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Propeller - Replacement of 835-54(P) Spinner Assembly

- (2) The 103582 composite spinner dome and the 104001 composite filler plates are primed for paint.

CAUTION: PRIMED COMPOSITE SPINNER COMPONENTS MUST BE FINISHED IN ACCORDANCE WITH HARTZELL PROPELLER PROCEDURES IN ORDER TO MEET THE P-STATIC DISSIPATION REQUIREMENTS FOR THESE COMPONENTS. IMPROPER P-STATIC DISSIPATION COULD LEAD TO DISTORTION OR DAMAGE OF THE ELECTRONIC COMPONENTS IN THE AIRCRAFT, INCLUDING NAVIGATIONAL EQUIPMENT.

- (a) These components must be finished to the owner/operator's specifications using an approved paint before flight. Refer to the Materials section of this Service Bulletin for approved paint information.

- (b) Refer to the Finish Procedures chapter of Hartzell Composite Spinner Maintenance Manual 148 (61-16-48) for detailed finishing procedures, except:

1 Paint Application (Finish Procedures chapter):

a Refer to Table 4 in this Service Bulletin for the applicable Finish Procedures.

b For primed components:

- 1) Using cheesecloth CM159 and solvent (refer to Table 3 for approved solvents), wipe the entire surface of the part. Allow the solvent to dry.

- 2) Start with Finish Sequence step 9, Finish Paint procedures.

c For Acry Glo® series 571 paints (including metallic colors, H code) refer to the procedures for Polane® Paint in the Finish Procedures chapter except:

- 1) Refer to the mixture proportions in the Materials section of this Service Bulletin.

- 2) The maximum allowable film thickness of the paint (color) is 2 mils when dry.

a) The equivalent of 5 mils wet coat = 2 mils dry coat.

b) Wet coat thickness can be measured using a Sherwin Williams® wet film/mil gauge standard.

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Propeller - Replacement of 835-54(P) Spinner Assembly

CAUTION: DO NOT EXCEED FOUR (4) HOURS BETWEEN LAYERS WHEN USING ACRY GLO® SERIES 571 METALLIC (H CODE) PAINT. THE METALLIC PAINT CANNOT BE SANDED.

- 3) Permit the painted surface to dry to the touch for a maximum of four (4) hours at a room temperature equal to or greater than 60 degrees F (15 degrees C).
 - a) For adequate layer-to-layer paint adhesion, the maximum permitted time between layers of paint is four (4) hours.

CAUTION: DO NOT SAND METALLIC PAINT.

- b) If it has been longer than the maximum permitted time between layers, follow the procedures given in the Overhaul and Finish Procedures chapters of Hartzell Composite Spinner Maintenance Manual 148 (61-16-48).

CAUTION: ACRY GLO® SERIES 571 METALLIC (H CODE) PAINTS REQUIRE THE USE OF A CLEAR COAT.

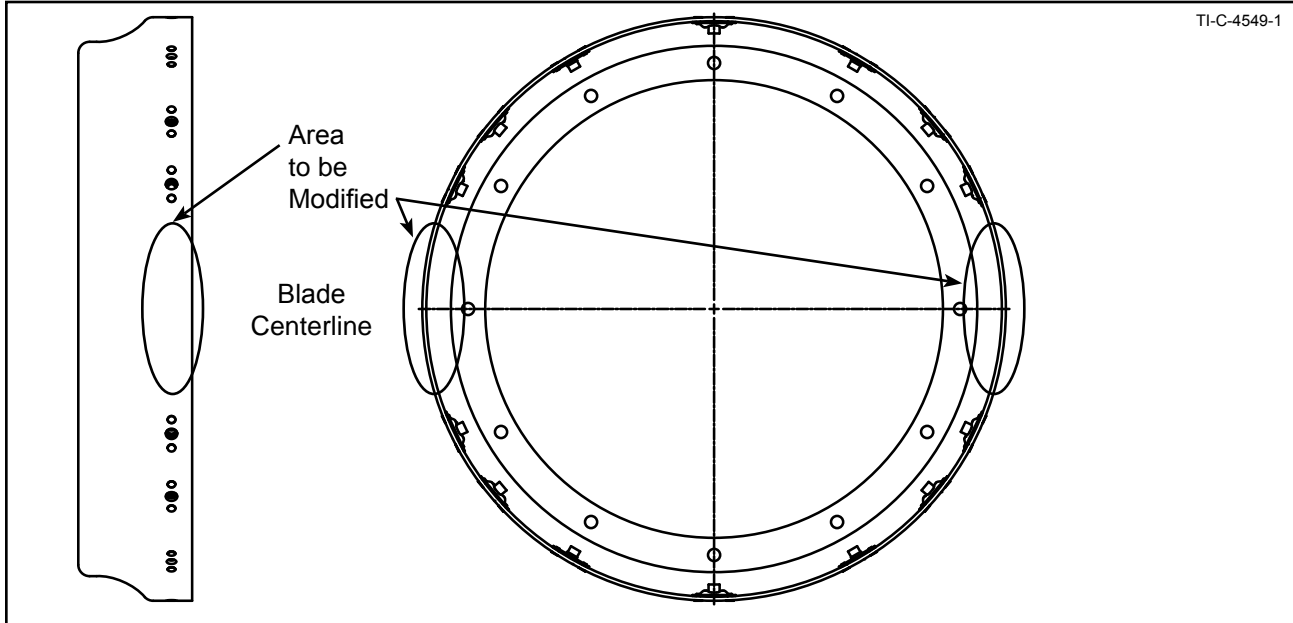
- 4) For Acry Glo® series 571 metallic (H code) paint only, a clear coat must be applied.

CAUTION: DO NOT EXCEED FOUR (4) HOURS BETWEEN THE LAST LAYER OF PAINT AND THE LAYER OF CM292 CONVENTIONAL CLEAR.

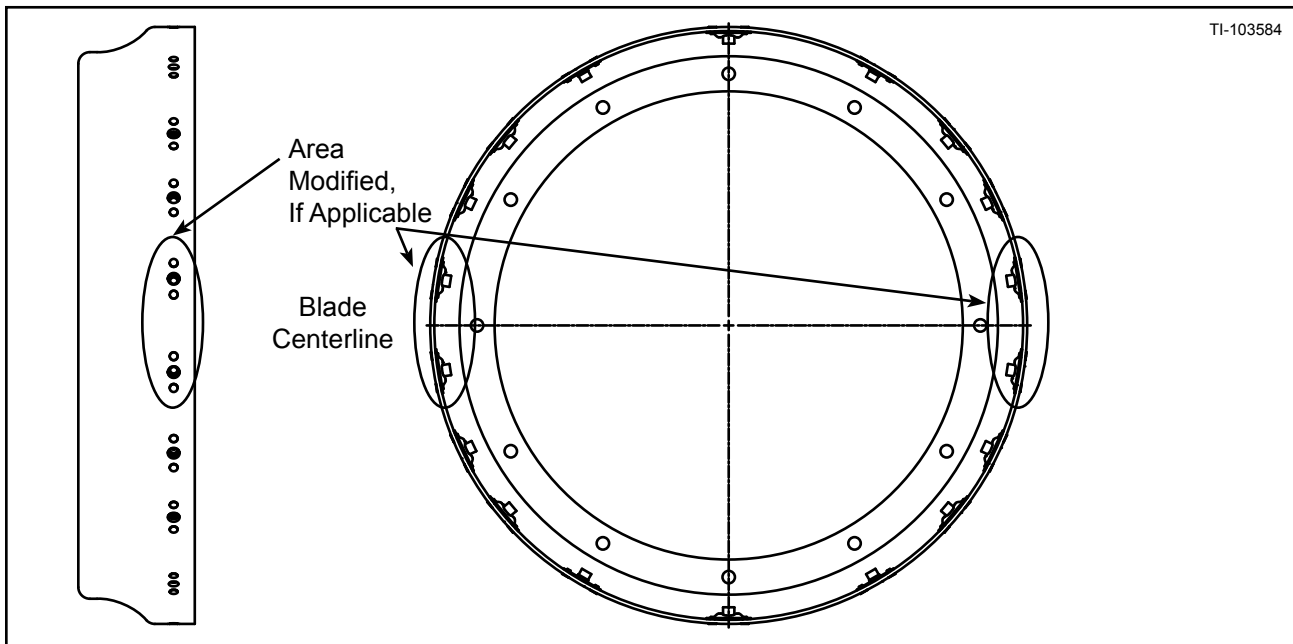
- a) Using the same application procedure as used for the color, apply CM292 Conventional Clear over the metallic paint.
- b) The maximum allowable film thickness of the clear coat is 2 mils when dry.
 - i) The equivalent of 5 mils wet coat = 2 mils dry coat.
 - ii) Wet coat thickness can be measured using a Sherwin Williams® wet film/mil gauge standard.

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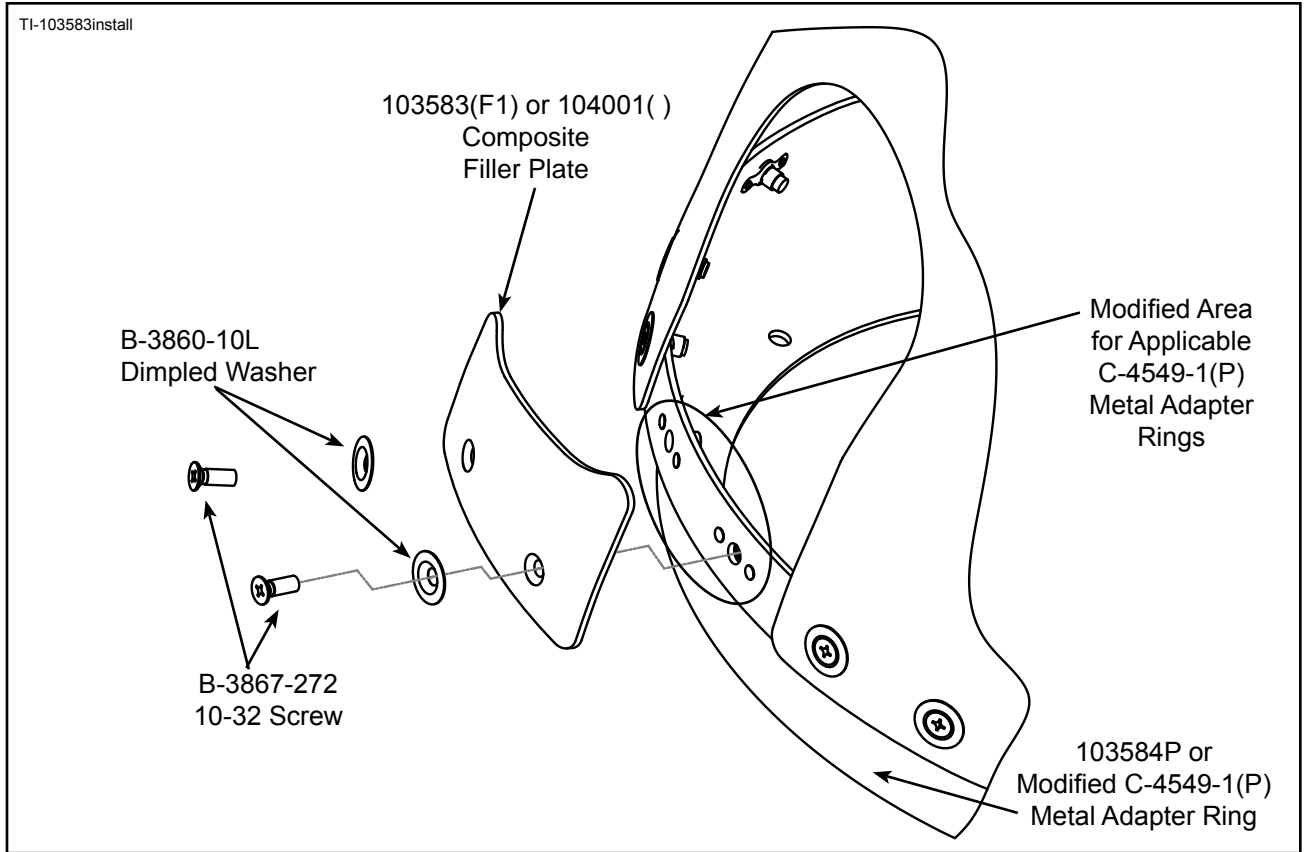
C-4549-1(P) Metal Adapter Ring
Figure 6



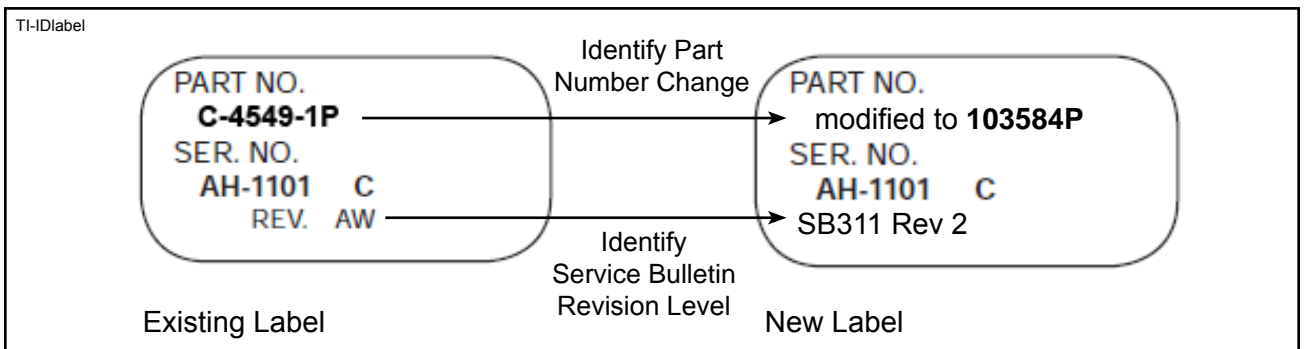
103584(P) or Modified C-4549-1(P) Metal Adapter Ring
Figure 7

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Propeller - Replacement of 835-54(P) Spinner Assembly



Installation of the 103583() or 104001() Composite Filler Plates on the 103585() Spinner Assembly
Figure 8



Metal Adapter Ring Identification Labels
Figure 9

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Propeller - Replacement of 835-54(P) Spinner Assembly

- (3) If the 103583() or 104001() composite filler plates will be installed, modify the serviceable C-4549-1(P) metal adapter ring for use as a 103584(P) metal adapter ring with the 103585() spinner assembly.
- (a) Modification may be performed by a certified airframe & powerplant mechanic or international equivalent.
 - (b) Modification may be performed on-wing or the adapter ring and gear may be removed in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15) before modification, if preferred.
 - (c) Using an equal number of the B-3867-272 10-32 screws and the B-3860-10L dimpled washers as needed, temporarily install the 103582() composite spinner dome on to the C-4549-1(P) metal adapter ring for placement purposes.
 - (d) Hold one of the 103583() or 104001() composite filler plates in place, centered in one of the blade cut-out holes, flush with the bottom edge of the adapter ring, aligning the filler plate attachment holes with the row of assembly screws around the dome. Refer to Figure 6 and Figure 8.
 - (e) Using a felt tip marker or non-graphite pencil, mark the location of the filler plate attachment holes.
 - (f) Repeat sections 3.D.(3)(d) and 3.D.(3)(e) for the second filler plate and blade cut-out.
 - (g) Remove the 103582() composite spinner dome.
 - (h) Using an appropriate drill bit, drill a hole 0.250 +0.006/-0.002 inches (6.35 +0.152/-0.050 mm) in diameter at each marked location.
 - (i) On the inside diameter of the C-4549-1(P) metal adapter ring, hold one (1) B-3849-3 floating nutplate so that the nutplate is oriented in the same direction as the other nutplates on the inner diameter of the adapter ring and the filler plate attachment hole is aligned with the other assembly holes and with the newly drilled hole. Refer to Figure 6, Figure 7, and Figure 8.
 - (j) Using a felt tip marker or non-graphite pencil, mark the location of the rivet attachment holes.
 - (k) Using an appropriate drill bit for the B-3847-5 rivet, drill a hole at each marked location.
 - (l) Repeat sections 3.D.(3)(i) through 3.D.(3)(k) for the remaining three (3) floating nutplates.

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Propeller - Replacement of 835-54(P) Spinner Assembly

- (m) Using the B-3847-5 rivets, install the B-3849-3 floating nutplates in accordance with Federal Aviation Administration Advisory Circular 43.13-1B.
- (n) Identify the C-4549-1(P) metal adapter ring as the 103584(P) metal adapter ring.
 - 1 Locally procure a pressure sensitive label with adhesive backing that will accept writing, printing, or typing.
 - 2 Type, print, or write on the label to provide the new, modified part number and the original serial number. Include the information as shown in Figure 9.
 - 3 Carefully remove the existing label from the propeller side of the modified metal adapter ring.
 - 4 Use solvent MEK CM106 or MPK CM219 to completely remove any remaining material, adhesive, and dirt.
 - 5 Permit the solvent to dry.
 - 6 Remove the backing paper from the new label.
 - 7 Apply the new label (with the new identification information) on to the adapter ring in the cleaned location the where the previous label was removed. Make sure that the edges are sealed to the metal adapter ring.
 - 8 Optionally, spray a layer of clear protective spray CM129 over the label to protect the label and information.
- (o) If applicable, install the adapter ring and gear in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15).
- (4) If applicable, install the removed propeller in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15).

CAUTION: TO AVOID DAMAGING THE AIRCRAFT COWLING, SPINNER DOME ATTACHING SCREWS MUST NOT EXTEND MORE THAN THREE THREADS PAST THE ADAPTER RING NUTPLATES.

- (5) Install the 103582() composite spinner dome over the propeller cylinder and gently push the spinner dome aft to align the mounting holes on the metal adapter ring. Do not install the attaching hardware at this point.

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Propeller - Replacement of 835-54(P) Spinner Assembly

CAUTION: THE BONDED FRONT SUPPORT MUST HAVE A SNUG FIT ON THE CYLINDER, OR THE CYLINDER MAY BE DAMAGED BY CHAFING.

(a) Check for a snug fit of the bonded front support where it contacts the cylinder.

1 With a hand placed on each opposite side of the spinner dome, carefully try to shift the dome from side to side.

a If the spinner dome shifts easily, the spinner dome does not have a snug fit on the cylinder.

1) Remove the spinner dome.

2) The 103582() composite spinner dome is manufactured with pieces of UHMW tape attached to the inside diameter of the bonded front support. Apply one or more additional layers of B-6654-100-1 UHMW tape to the inside diameter of the bonded front support and return to section 3.D.(5) to check the fit.

b If the spinner dome does not shift, the spinner dome has a snug fit on the cylinder.

(6) Using 14 each of the B-3860-10L dimpled washers and of the B-3867-272 10-32 screws, install the 103582() composite spinner dome in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15). Make sure that the screws do not extend more than three threads past the adapter ring nutplates. Refer to Figure 6.

(7) Using 4 each of the B-3860-10L dimpled washers and the B-3867-272 10-32 screws, install the 103583() or 104001() composite filler plates from the outer diameter of the adapter ring into the newly drilled holes at each blade cutout of the dome. Make sure that the screws do not extend more than three threads past the adapter ring nutplates. Refer to Figure 6.

(8) When the 103585() spinner assembly is installed, make an entry in the propeller logbook indicating modification of the adapter ring (where applicable) and installation of the spinner assembly in accordance with and as terminating action for this Service Bulletin.

E. Installation of the 835-58(P) spinner assembly.

NOTE: The 835-58(P) spinner assembly is approved in accordance with Hartzell Propeller Supplemental Type Certificate SA00631CH, but may not be approved in all other applications using the 835-54(P) spinner assembly. Contact your Supplemental Type Certificate holder for details.

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Propeller - Replacement of 835-54(P) Spinner Assembly

- (1) If a complete 835-58(P) spinner assembly was procured for installation:
 - (a) Install the C-4549-1(P) metal adapter ring in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15).
 - (b) Proceed to section 3.E.(3).
 - (2) If the C-4549-1(P) metal adapter ring is not cracked and will be used as part of the 835-58(P) spinner assembly:
 - (a) Use the 104070(P) kit identified in this Service Bulletin with a serviceable C-4549-1(P) adapter ring as part of the 835-58(P) spinner assembly.
 - (3) If applicable, install the removed propeller in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15).
 - (4) Install the 103937(P) metal spinner dome in accordance with Hartzell Propeller Owner's Manual 115N (61-00-15).
 - (a) If using a retained C-4549-1(P) metal adapter ring, use the retained attaching screws and washers to install the metal spinner dome.
 - (5) When the 835-58(P) spinner assembly is installed, make an entry in the propeller logbook indicating installation of the spinner assembly in accordance with and as terminating action for this Service Bulletin.
- F. Contact Information and Shipping Address for retired component portions.

Hartzell Propeller, Inc.
Attn: Hartzell Product Support - SB311
One Propeller Place
Piqua, Ohio 45356-2634 USA
Phone: (001) 937.778.4379 / Fax: (001) 937.778.4391
Email: techsupport@hartzellprop.com

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SERVICE BULLETIN APPENDIX

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Propeller - Replacement of 835-54(P) Spinner Assembly

1. Eligibility

- A. The Hartzell 835-54(P) spinner assembly with the D-5769-1(P) or 102965(P) spinner dome is eligible for this warranty program.
 - (1) This spinner assembly may currently be installed on, but is not limited to:
 - (a) Piper PA-24 Comanche with Hartzell HC-C2YR-1BF/F7666A-4 propeller installed in accordance with Hartzell STC SA00631CH.
 - (b) Piper PA-28R-180 and 28R-200 aircraft with Hartzell HC-C2YR-1BFP/F7497 propeller installed in accordance with Professional Pilot STC SA02555CH.
- B. This warranty program will expire on February 29, 2012.

2. Warranty Program

- A. Hartzell will provide one of the following options for applicable installations at no charge when requested in accordance with this Appendix:
 - (1) 103877() kit for use with a serviceable C-4549-1(P) metal adapter ring to make the 103585() spinner assembly.
 - (a) The 103585() spinner assembly, including the 103584(P) metal adapter ring, may be provided if the C-4549-1(P) metal adapter ring is not serviceable. Additional documentation may be required.
 - (2) 104070(P) kit for use with a serviceable C-4549-1(P) metal adapter ring to make the 835-58(P) spinner assembly.
 - (a) The 835-58(P) spinner assembly, including the C-4549-1(P) metal adapter ring, may be provided if the C-4549-1(P) metal adapter ring is not serviceable. Additional documentation may be required.
- B. Order Administration
 - (1) The Order Form in this Appendix must be completed and sent to Hartzell Product Support as a request for the components.
 - (a) The completed Order Form may be sent by fax or e-mail to Hartzell Product Support.

SERVICE BULLETIN APPENDIX

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Propeller - Replacement of 835-54(P) Spinner Assembly

- (2) Hartzell Product Support will review the Order Form to verify applicability for the requested components and warranty program eligibility.
 - (a) Upon verification, an order will be processed for the requested components. Items will be shipped as soon as possible.
 - (b) If the request cannot be verified, Hartzell Product Support will contact the facility and/or owner to discuss further options.
- (3) The required portion of the retired 102965(P) or D-5769-1(P) spinner dome must be returned to Hartzell Product Support in accordance with this Service Bulletin.
 - (a) When returning the required spinner portion, include the warranty reference number provided by Hartzell Propeller Product Support and/or the aircraft registration number.
 - (b) If the required portion is not received within 6 months from receipt of the replacement item(s), the receiver will be charged for the full list price of the ordered items. Credit card information or purchase order number must be provided, as applicable.
 - (c) If the complete spinner is received instead of the required portion, without specific request from Hartzell Propeller Product Support, Hartzell Propeller will charge the cost of shipping to the credit card or purchase order as provided.

C. Contact Information and Shipping Address for retired component portions.

Hartzell Propeller, Inc.

Attn: Hartzell Product Support - SB311

One Propeller Place

Piqua, Ohio 45356-2634 USA

Phone: (001) 937.778.4379

Fax: (001) 937.778.4391

Email: techsupport@hartzellprop.com OR warranty@hartzellprop.com

HARTZELL PROPELLER INC.

SERVICE BULLETIN APPENDIX

HC-SBA-61-311

Propeller - Replacement of 835-54(P) Spinner Assembly
Order Form

Owner Information: If shipping to the owner, credit card information must be provided, refer to 2.B.(3)(a).

Name: Phone:
Address: Fax:
City: Zip/Postal Code:
State: Country:
Credit Card Number: Expiration: Code:

Shipping Location: (Complete below or check box if same as Owner Information)

Company: Phone:
Contact Name: Fax:
Address: E-Mail:
City: Zip/Postal Code:
State: Country:

Propeller Model: Aircraft Model:
Blade Model: Aircraft Registration #:
STC #: Propeller TSN:
Propeller Serial #: Spinner Dome Part #:
Spinner Dome Serial #: Spinner Dome TSN:
Are any current spinner components cracked? (Y/N) dome: adapter ring:

Select Requested Components/Kits:

Select one component package. Refer to section 2. of HC-SB-61-311 for a detailed parts list of each item.
The corresponding spinner assembly may be provided if the adapter ring is not serviceable. Additional documentation may be required.

NOTE: Only the 104070() kit is approved for the Comanche.

- 103877 kit, primed
103877F1 kit, painted Matterhorn White
103877F2 kit, painted Sterling Silver Metallic
104070 kit, buff
104070P kit, polished

Send this Order Form to: Hartzell Propeller, Inc.
Product Support
Fax: (001) 937.778.4391
E-Mail: techsupport@hartzellprop.com OR warranty@hartzellprop.com

Hartzell use only - do not write below this line

Warranty #: Authorized by:

HARTZELL PROPELLER INC.

SERVICE BULLETIN APPENDIX

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Propeller - Replacement of 835-54(P) Spinner Assembly

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Sep 10/08
Revision 5, dated Dec 13/11

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