

HARTZELL PROPELLER LLC

One Propeller Place
Piqua, Ohio 45356-2634 U.S.A.
Telephone: 937.778.4200
Fax: 937.778.4215

MANUAL REVISION TRANSMITTAL

MANUAL 127 (61-16-27)

Metal Spinner Maintenance Manual

REVISION 29 dated September 2025

Remove Pages:

COVER

Cover/Inside Cover

REVISION HIGHLIGHTS

pages 1 thru 4

LIST OF EFFECTIVE PAGES

pages 1 thru 4

ILLUSTRATED PARTS LIST

pages 10.3-35 thru 10.3-38

pages 10.3-45 thru 10.3-46

pages 10.4-29 thru 10.4-32

pages 10.5-7 thru 10.5-8

Insert Pages:

COVER

Cover/Inside Cover

REVISION HIGHLIGHTS

pages 1 thru 4

LIST OF EFFECTIVE PAGES

pages 1 thru 4

ILLUSTRATED PARTS LIST

pages 10.3-35 thru 10.3-38

pages 10.3-45 thru 10.3-46

pages 10.4-29 thru 10.4-32

pages 10.5-7 thru 10.5-8

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.

(Blank Page)

Manual No. 127
61-16-27
Revision 29
September 2025



Metal Spinner Maintenance Manual

Hartzell Propeller LLC
One Propeller Place
Piqua, Ohio 45356-2634 U.S.A.
Phone: 937.778.4200
Fax: 937.778.4215

(Blank Page)

REVISION 29 HIGHLIGHTS

Revision 29, dated September 2025, 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.

- ILLUSTRATED PARTS LIST

Three-Bladed Propeller Spinners

- Added the parts list for Spinner Assembly D-3273-4(P)
- Added the parts list for Spinner Assembly D-7267-2(P)

Four-Bladed Propeller Spinners

- Added the parts list for Spinner Assembly 107356-2(P)

Five-Bladed Propeller Spinners

- Added the parts list for Spinner Assembly D-5574-(P)

(Blank Page)

REVISION 29 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 of 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 of 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 of 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.

<u>Revision No.</u>	<u>Issue Date</u>	<u>Comments</u>
Original	Jun/74	New Issue
Revision 1	Jan/03	Reissue
Revision 2	Feb/04	Minor Revision
Revision 3	May/10	Major Revision
Revision 4	Apr/11	Minor Revision
Revision 5	Feb/13	Minor Revision
Revision 6	Feb/14	Minor Revision
Revision 7	Jul/15	Minor Revision
Revision 8	Feb/16	Minor Revision
Revision 9	May/17	Minor Revision
Revision 10	Jul/17	Minor Revision
Revision 11	Dec/17	Minor Revision
Revision 12	Feb/18	Minor Revision
Revision 13	Feb/19	Minor Revision
Revision 14	Feb/20	Minor Revision
Revision 15	Dec/20	Minor Revision
Revision 16	Jul/21	Minor Revision
Revision 17	Nov/21	Minor Revision
Revision 18	Dec/21	Minor Revision
Revision 19	Jun/22	Minor Revision
Revision 20	Oct/22	Minor Revision
Revision 21	Nov/22	Minor Revision
Revision 22	May/23	Major Revision
Revision 23	Feb/24	Minor Revision
Revision 24	May/24	Minor Revision
Revision 25	Jul/24	Minor Revision
Revision 26	Aug/24	Minor Revision
Revision 27	Dec/24	Minor Revision
Revision 28	Mar/25	Minor Revision
Revision 29	Sep/25	Minor Revision

This is a record of revisions inserted into this manual.
Revision 22 includes all prior revisions.

[illegible][illegible]

(Blank Page)

RECORD OF TEMPORARY REVISIONS

Update this page to show all Temporary Revisions inserted into this manual.
Revision 25 includes all prior temporary revisions, up to and including TR-038.

[illegible]

(Blank Page)

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.

[illegible]

Service Document Number	Incorporation Rev./Date
Service Letters:	
SL 102	Rev. 3, May/10
SL 109	Rev. 1, Jan/03
SL 117	Rev. 1, Jan/03
SL 119	Rev. 1, Jan/03
SL 123A	Rev. 1, Jan/03
HC-SL-61-164	Rev. 1, Jan/03
HC-SL-61-166	Rev. 1, Jan/03
HC-SL-61-171	Rev. 3, May/10
HC-SL-61-179	Rev. 1, Jan/03
HC-SL-61-183	Rev. 1, Jan/03
HC-SL-61-190	Rev. 1, Jan/03
HC-SL-61-199	Rev. 1, Jan/03
HC-SL-61-225, R1	Rev. 3, May/10
HC-SL-61-230	Rev. 3, May/10
HC-SL-61-257	Rev. 7, Jul/15
HC-SL-61-262	Rev. 3, May/10
HC-SL-30-276, R2	Rev. 4, Apr/11

SERVICE DOCUMENT LIST

[illegible][illegible]

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, refer to the applicable Hartzell Propeller Owner's manual.
 - (a) For a list of owner's manuals, refer to the Required Publications section in the Introduction chapter of this manual.

(Blank Page)

LIST OF EFFECTIVE PAGES

Chapter	Page	Revision Level	Date
Cover/Inside Cover	Cover/Inside Cover	Rev. 29	Sep/25
Revision Highlights	1 thru 4	Rev. 29	Sep/25
Record of Revisions	1 thru 2	Rev. 22	May/23
Record of Temporary Revisions	1 thru 2	Rev. 25	Jul/24
Service Document List	1 thru 2	Rev. 22	May/23
Airworthiness Limitations	1 thru 2	Rev. 24	May/24
List of Effective Pages	1 thru 4	Rev. 29	Sep/25
Table of Contents	1 thru 2	Rev. 22	May/23
Introduction	1 thru 2	Rev. 25	Jul/24
	3	Rev. 24	May/24
	4 thru 9	Rev. 25	Jul/24
	10	Rev. 24	May/24
	11	Rev. 25	Jul/24
	12 thru 13	Rev. 24	May/24
	14 thru 22	Rev. 22	May/23
Description and Operation	1 thru 10	Rev. 23	Feb/24
Testing and Fault Isolation	1-1 thru 1-3	Rev. 22	May/23
	1-4	Rev. 24	May/24
Automatic Test Requirements	2-1 thru 2-2	Rev. 25	Jul/24
Disassembly	3-1 thru 3-2	Rev. 22	May/23
	3-3 thru 3-4	Rev. 24	May/24
Cleaning	4-1 thru 4-2	Rev. 22	May/23
	4-3 thru 4-4	Rev. 24	May/24
Check	5-1 thru 5-2	Rev. 23	Feb/24
	5-3 thru 5-6	Rev. 24	May/24
	5-7	Rev. 22	May/23
	5-8	Rev. 24	May/24
	5-9	Rev. 22	May/23
	5-10	Rev. 23	Feb/24
	5-11 thru 5-12	Rev. 22	May/23
	5-13	Rev. 23	Feb/24
	5-14	Rev. 22	May/23
	5-15 thru 5-22	Rev. 23	Feb/24

LIST OF EFFECTIVE PAGES

Chapter	Page	Revision Level	Date
Check	5-23	Rev. 24	May/24
	5-24 thru 5-40	Rev. 23	Feb/24
	5-41	Rev. 24	May/24
	5-42	Rev. 23	Feb/24
	5-43 thru 5-44	Rev. 24	May/24
	5-45	Rev. 23	Feb/24
	5-46	Rev. 24	May/24
	5-47 thru 5-48	Rev. 23	Feb/24
Repair and Modification	6-1 thru 6-2	Rev. 23	Feb/24
	6-2.1 thru 6-2.2	Rev. 23	Feb/24
	6-3 thru 6-4	Rev. 24	May/24
	6-5	Rev. 23	Feb/24
	6-6	Rev. 24	May/24
	6-7 thru 6-12	Rev. 23	Feb/24
	6-13	Rev. 26	Aug/24
	6-14 thru 6-37	Rev. 23	Feb/24
	6-38	Rev. 24	May/24
Assembly	6-39 thru 6-54	Rev. 23	Feb/24
	7-1 thru 7-2	Rev. 22	May/23
	7-3 thru 7-4	Rev. 24	May/24
Fits and Clearances	8-1 thru 8-9	Rev. 22	May/23
	8-10	Rev. 27	Dec/24
Special Tools, Fixtures, and Equipment	9-1 thru 9-2	Rev. 22	May/23
	9-3 thru 9-4	Rev. 24	May/24
Illustrated Parts List	10.1-1 thru 10.1-4	Rev. 22	May/23
	10.1-5 thru 10.1-7	Rev. 24	May/24
	10.1-8	Rev. 22	May/23
	10.1-9 thru 10.1-10	Rev. 24	May/24
	10.2-1 thru 10.2-6	Rev. 22	May/23
	10.2-7 thru 10.2-14	Rev. 26	Aug/24
	10.2-15	Rev. 23	Feb/24
	10.2-16 thru 10.2-22	Rev. 26	Aug/24
	10.2-23 thru 10.2-25	Rev. 23	Feb/24

LIST OF EFFECTIVE PAGES

Chapter	Page	Revision Level	Date
Illustrated Parts List	10.2-26 thru 10.2-28	Rev. 26	Aug/24
	10.2-29	Rev. 23	Feb/24
	10.2-30	Rev. 26	Aug/24
	10.2-31	Rev. 23	Feb/24
	10.2-32	Rev. 24	May/24
	10.2-33 thru 10.2-34	Rev. 27	Dec/24
	10.3-1 thru 10.3-5	Rev. 22	May/23
	10.3-6 thru 10.3-7	Rev. 23	Feb/24
	10.3-8 thru 10.3-9	Rev. 22	May/23
	10.3-10 thru 10.3-11	Rev. 26	Aug/24
	10.3-12 thru 10.3-13	Rev. 23	Feb/24
	10.3-14	Rev. 26	Aug/24
	10.3-15 thru 10.3-21	Rev. 23	Feb/24
	10.3-22 thru 10.3-25	Rev. 26	Aug/24
	10.3-26	Rev. 23	Feb/24
	10.3-27 thru 10.3-30	Rev. 26	Aug/24
	10.3-31 thru 10.3-32	Rev. 28	Mar/25
	10.3-33 thru 10.3-34	Rev. 26	Aug/24
	10.3-35 thru 10.3-38	Rev. 29	Sep/25
	10.3-39	Rev. 26	Aug/24
	10.3-40	Rev. 23	Feb/24
	10.3-41	Rev. 26	Aug/24
	10.3-42	Rev. 25	Jul/24
	10.3-43 thru 10.3-45	Rev. 26	Aug/24
	10.3-46	Rev. 29	Sep/25
	10.3-47 thru 10.3-48	Rev. 23	Feb/24
	10.3-49	Rev. 26	Aug/24
	10.3-50	Rev. 23	Feb/24
	10.3-51	Rev. 25	Jul/24
	10.3-52 thru 10.3-68	Rev. 23	Feb/24
	10.4-1 thru 10.4-2	Rev. 22	May/23
	10.4-3 thru 10.4-4	Rev. 23	Feb/24
	10.4-5	Rev. 22	May/23

LIST OF EFFECTIVE PAGES

Chapter	Page	Revision Level	Date
Illustrated Parts List	10.4-6	Rev. 23	Feb/24
	10.4-7	Rev. 22	May/23
	10.4-8	Rev. 23	Feb/24
	10.4-9 thru 10.4-10	Rev. 22	May/23
	10.4-11 thru 10.4-25	Rev. 23	Feb/24
	10.4-26 thru 10.4-29	Rev. 24	May/24
	10.4-30 thru 10.4-32	Rev. 29	Sep/25
	10.5-1	Rev. 22	May/23
	10.5-2 thru 10.5-3	Rev. 23	Feb/24
	10.5-4	Rev. 22	May/23
	10.5-5 thru 10.5-6	Rev. 23	Feb/24
	10.5-7	Rev. 29	Sep/25
	10.5-8 thru 10.5-13	Rev. 23	Feb/24
	10.5-14 thru 10.5-16	Rev. 28	Mar/25
	10.6-1 thru 10.6-4	Rev. 23	Feb/24
	10.7-1 thru 10.7-2	Rev. 22	May/23

TABLE OF CONTENTS

Revision Highlights	1
Record of Revisions	1
Record of Temporary Revisions	1
Service Document List.....	1
Airworthiness Limitations.....	1
List of Effective Pages	1
Table of Contents.....	1
Introduction.....	1
Description and Operation.....	1
Testing and Fault Isolation.....	1-1
Automatic Test Requirements.....	2-1
Disassembly	3-1
Cleaning	4-1
Check	5-1
Repair and Modification.....	6-1
Assembly	7-1
Fits and Clearances.....	8-1
Special Tools, Fixtures and Equipment	9-1
Illustrated Parts List.....	10.1-1

(Blank Page)

INTRODUCTION - CONTENTS

1. General	3
A. Statement of Purpose	3
B. Item References	3
2. Reference Publications	4
A. Hartzell Propeller Publications	4
B. Vendor Publications	5
3. Personnel Requirements	6
4. Special Tooling and Consumable Materials	6
A. Special Tooling	6
B. Consumable Materials	6
5. Safe Handling of Paints and Chemicals	7
6. Calendar Limits and Long Term Storage	7
A. Calendar Limits	7
B. Long Term Storage	7
7. Component Life and Overhaul	8
A. Component Life	8
B. Overhaul	9
8. Damage/Repair Types	10
A. Airworthy/Unairworthy Damage	10
B. Minor/Major Repair	10
9. Propeller Critical Parts	11
10. Warranty Service	11
11. Hartzell Propeller Contact Information	12
A. Product Support Department	12
B. Technical Publications Department	12
C. Recommended Facilities	12
12. Definitions	13
13. Abbreviations	20

(Blank Page)

1. General (Rev. 2)

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 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 the 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 the Hartzell Propeller Product Support Department.
 - (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 manuals that provide important details for procedures such as anodizing and penetrant inspection.
- (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 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) Some manuals are available on the Hartzell Propeller website at www.hartzellprop.com. The complete Hartzell Propeller Technical Library is available by subscription.
- (3) In addition to this manual, one or more of the following publications are required for information regarding specific recommendations and procedures to maintain spinner assemblies that are included in this manual.

Manual No. (ATA No.)	Hartzell Propeller Manual Title
n/a	Active Hartzell Propeller Service Bulletins, Service Letters, Service Instructions, and Service Advisories
Manual 115N (61-00-15)	Propeller Owner's Manual and Logbook for Compact Models with Aluminum Blades
Manual 131 (61-00-31)	Propeller Owner's Manual and Logbook for Reversible Propeller Model HC-H3YF-3()
Manual 136 (61-00-36)	Propeller Owner's Manual and Logbook for Reversible Propeller HC-E3YR-7() and Pressure Control Unit B-4270-()
Manual 139 (61-00-39)	Propeller Owner's Manual and Logbook for Steel Hub Turbine Propellers with Aluminum Blades
Manual 140 (61-10-40)	Propeller Owner's Manual and Logbook for Hydroselective Propeller Models with Aluminum Blades
Manual 145 (61-00-45)	Propeller Owner's Manual and Logbook for Compact and Lightweight Compact Propeller Models with Composite Blades
Manual 146 (61-00-46)	Propeller Owner's Manual and Logbook for Steel Hub Turbine Propeller Models with Composite Blades

Manual No. (ATA No.)	Hartzell Propeller Manual Title
Manual 147 (61-00-47)	Propeller Owner's Manual and Logbook for Lightweight Turbine Propeller Models with Composite Blades
Manual 149 (61-00-49)	Propeller Owner's Manual and Logbook for Lightweight Turbine Propeller Models with Aluminum Blades
Manual 154 (61-00-54)	Propeller Owner's Manual and Logbook for Six-Blade Lightweight Turbine Propellers with Composite Blades
Manual 159 (61-02-59)	Application Guide
Manual 165A (61-00-65)	Illustrated Tool and Equipment Manual
Manual 167 (61-00-67)	Propeller Owner's Manual and Logbook for "B" Steel Hub Reciprocating Propellers
Manual 168 (61-00-68)	Propeller Owner's Manual and Logbook for Steel "A" Hub Reciprocating Propeller Models with Aluminum Blades
Manual 169 (61-00-69)	Propeller Owner's Manual and Logbook for "9" Steel Hub Reciprocating Propeller Models with Aluminum Blades
Manual 174 (61-00-74)	Propeller Owner's Manual and Logbook for Steel Hub Reciprocating Propeller Models HC-A2(MV,V,X)20-4A1 with Aluminum Blades
Manual 180 (30-61-80)	Ice Protection System Manual
Manual 202A (61-01-02)	Standard Practices Manual, Volumes 1 through 11
Manual 411 (61-00-11)	Propeller Owner's Manual and Logbook for Constant Speed, Non-counterweighted () (A,B)1 and () (A,B)2 Series "Bantam" Propellers with Composite Blades
Manual 480 (61-00-80)	Propeller Owner's Manual and Logbook for Raptor Reciprocating Propeller Series with Composite Blades Constant Speed, Non-counterweighted
Manual 486 (61-00-86)	Propeller Owner's Manual and Logbook for Raptor Turbine Propeller Series with Composite Blades

B. Vendor Publications

None.

3. Personnel Requirements (Rev. 3)

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 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 Title 14 Code of Federal Regulations (CFR) Part 43 for additional information about general aviation maintenance requirements.

4. Special Tooling and Consumable Materials (Rev. 2)

A. Special Tooling

- (1) Special tooling may be required for procedures in this manual. For further tooling information, refer to Hartzell Propeller 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 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 physical properties, health, and physical hazards of any paint or chemical.

6. Calendar Limits and Long Term Storage (Rev. 3)

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 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) Spinners that have been in storage should be inspected for corrosion in accordance with the Check chapter of this manual before installation.
- (2) For additional information about long term storage, refer to the Packaging and Storage chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).

7. Component Life and Overhaul (Rev. 3)

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) Spinner components do not require time tracking unless specifically noted in Hartzell Propeller service publications.
- (2) 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.

- (3) Time Since New (TSN) and Time Since Overhaul (TSO) records for the propeller hub and blades must be maintained in the propeller logbook.
- (4) 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 Owner's Manual for a list of life limited components.
- (5) 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.

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.
- (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 Service Letter HC-SL-61-61Y.
 - (b) At such specified periods, the spinner assembly 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 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 component maintenance manual.
- (4) The information in this manual supersedes data in all previously published revisions of this manual.

8. Damage/Repair Types (Rev. 2)

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 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 is a specific condition to a propeller component that exceeds the airworthy damage limits specified in the applicable Hartzell Propeller component maintenance manual.
 - (a) Unairworthy damage can affect the safety or flight characteristics of the propeller and does not conform to its type design.
 - (b) Unairworthy damage must be repaired before the propeller is returned to service.

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 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.
 - 2 The repair station must meet facility, tooling, and personnel requirements and is required to participate in Hartzell Propeller Sample Programs as defined in the Approved Facilities chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).

9. Propeller Critical Parts (Rev. 2)

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 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. 2)

A. Warranty Claims

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

11. Hartzell Propeller Contact Information (Rev. 3)

A. Product Support Department

- (1) Contact the Hartzell Propeller Product Support Department 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) The Product Support Department 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) The Product Support Department 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 website at www.hartzellprop.com.

B. Technical Publications Department

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

Hartzell Propeller LLC

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 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 worldwide network of aftermarket distributors and approved repair facilities is available on the Hartzell website at www.hartzellprop.com.

12. Definitions (Rev. 5)

A basic understanding of the following terms will assist in maintaining and operating Hartzell propeller systems.

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.
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.

Term	Definition
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 corrode, 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, sometimes 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
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 due to action of the elements
Exposure	Leaving material open to action of the elements

Term	Definition
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
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

Term	Definition
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
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

Term	Definition
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 Parts	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
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

Term	Definition
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 fiber 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 through it while the engine is not producing power
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

Abbreviation	Term
MSDS	Material Safety Data Sheet
N	Newtons
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-Meters
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

(Blank Page)

DESCRIPTION AND OPERATION - CONTENTS

1. Description.....	3
A. General.....	3
2. Components	5
A. Dome	5
B. Forward Bulkhead	5
C. Dome Cap	5
D. Filler Plate	5
E. Hoop.....	5
F. Doubler.....	5
G. Bulkhead	5
3. Finishes Available	6
4. Product Improvements.....	6
A. CNC Manufacturing of the Spinner Dome and Bulkhead Assembly	6
B. One Piece Spinner Dome and New Hardware.....	8
C. D-5769-1 Spinner Dome in the 835-54() Spinner Assembly	9

LIST OF FIGURES

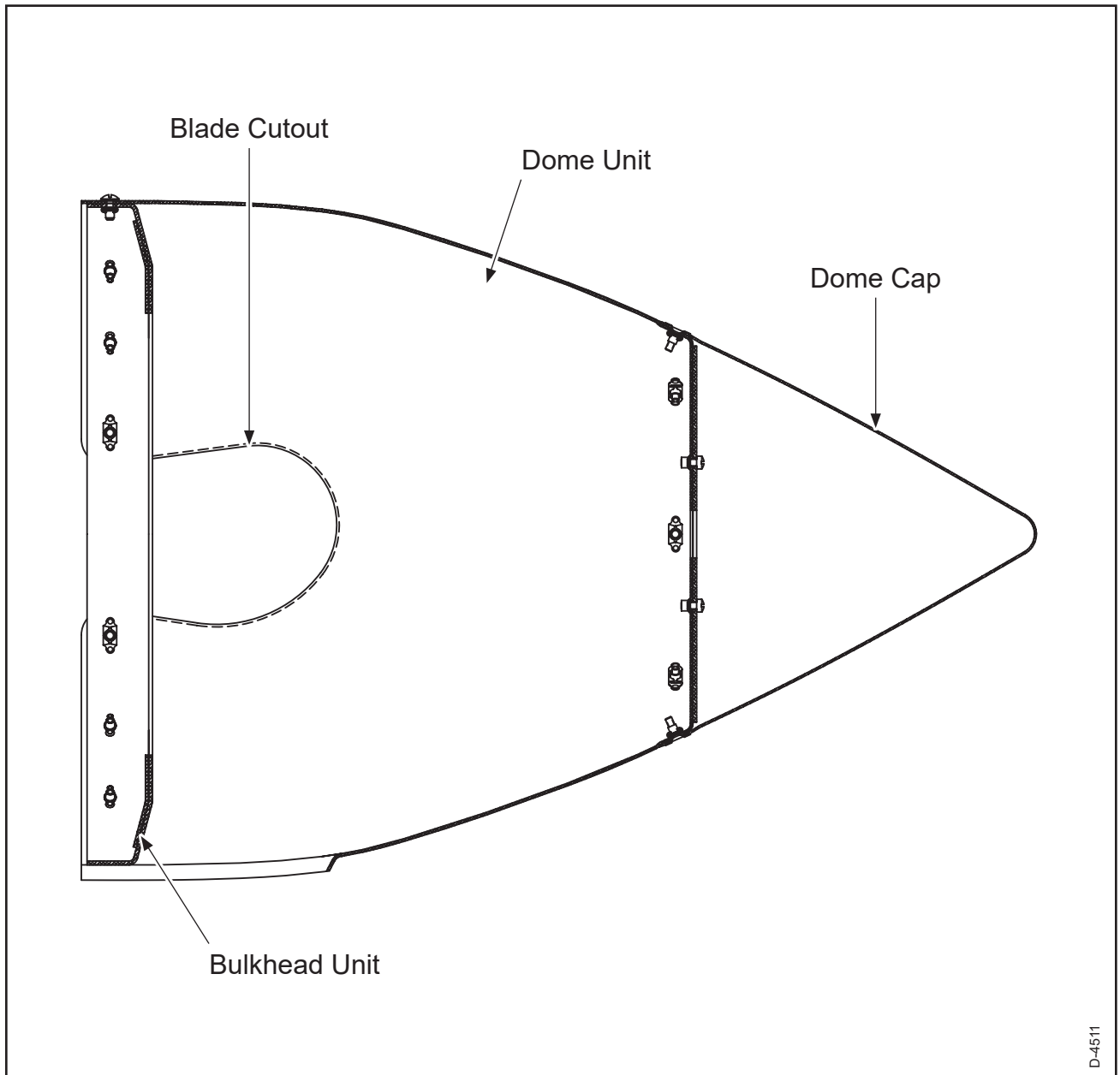
Cross Section of a Typical Hartzell Spinner Assembly with a Two-piece Dome	Figure 1	3
Cross Section of a Typical Hartzell Spinner Assembly with a One-piece Dome.....	Figure 2.....	4
Spinner Identification.....	Figure 3.....	6

(Blank Page)

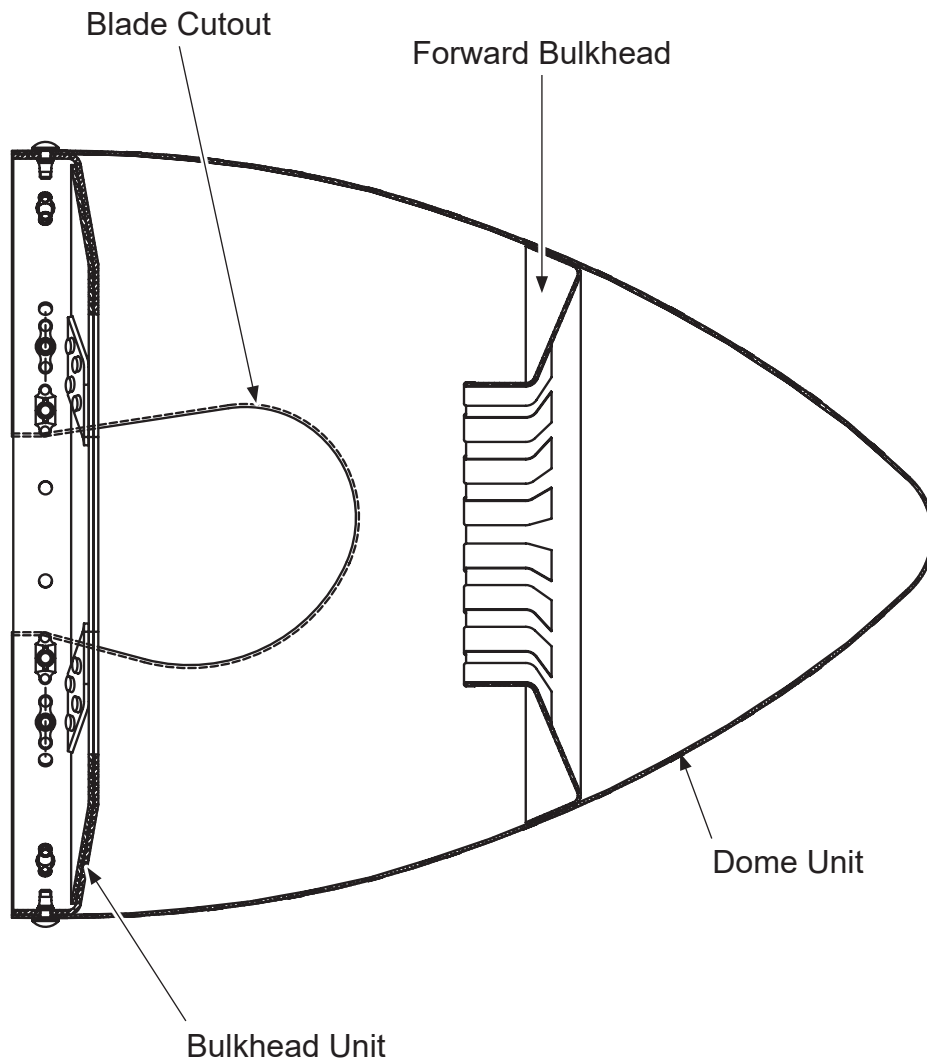
1. Description

A. General

- (1) Hartzell Propeller spinners streamline air flow over the propeller to improve performance, to improve the cooling effect of air on air cooled engines, and to improve airflow into turbine engine inlets for maximum power.
- (2) Spinners also improve the appearance of the propeller.



Cross Section of a Typical Hartzell Spinner Assembly with a Two-piece Dome
Figure 1



853-23

Cross Section of a Typical Hartzell Spinner Assembly with a One-piece Dome
Figure 2

2. Components - Refer to Figure 1 and Figure 2

A. Dome

- (1) The dome is the outer shell of the spinner assembly that is attached to the bulkhead by the dome mounting screws.
- (2) The dome may also be attached to the propeller by using an appropriate opening in the forward section, and then secured by a nut to the low pitch stop assembly in the cylinder of full feathering compact propellers.
 - (a) In this case, a dome cap is attached to the dome to complete the assembly.

B. Forward Bulkhead

- (1) A forward bulkhead that is bonded to the spinner dome is not repairable or replaceable.
- (2) A forward bulkhead that is not bonded to the spinner dome may be repairable or replaceable.

C. Dome Cap

- (1) The dome cap is removable to permit a check of the air pressure in the propeller air chamber.

D. Filler Plate

- (1) A filler plate covers each spinner dome blade cut-out and is installed on the bulkhead or to the spinner dome.

E. Hoop

- (1) The hoop provides added support for the spinner dome.

F. Doubler

- (1) The doubler provides added support for the bulkhead.

G. Bulkhead

- (1) The bulkhead supports the spinner dome and attaches to the engine or to the propeller.
- (2) The bulkhead may be a single plate, a ring, or individual pieces mechanically fastened to one another.
- (3) The bulkhead may be any one of the different type units manufactured by Hartzell Propeller.
- (4) There are bulkheads of a very simple type used on early installations to the more complex type presently being manufactured to be used with the modern complex aircraft with reversing propellers.

3. Finishes Available

A. Important Information

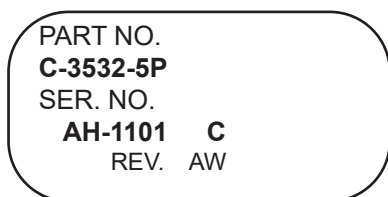
- (1) A buffed finish that is suitable for primer and paint is the standard factory finish for spinner parts.
- (2) For other factory finishes that are available, refer to the Part Number section in the Illustrated Parts List chapter of this manual.

4. Product Improvements

A. CNC Manufacturing of the Spinner Dome and Bulkhead Assembly

- (1) In October 2003, Hartzell Propeller introduced CNC manufactured spinner domes and bulkheads.
 - (a) Manufacturing process changes were implemented to improve the quality of spinner domes and bulkhead assemblies. The changes affect all Hartzell Propeller spinner and bulkhead assemblies.
 - (b) Spinner domes and bulkhead assemblies manufactured with the new process are being gradually introduced to the field.
- (2) The CNC Spinner Component Identification
 - (a) Existing part numbers for Hartzell spinner domes and bulkheads remain the same; however, each part serial number now includes a suffix "C", e.g., AZ-1234C to indicate that the part was manufactured using the CNC machining process. Refer to Figure 3.

NOTE: The part serial number is etched inside the spinner dome and on the forward surface of the bulkhead, located to the right of one of the cut-outs. It is also located on a label placed adjacent to the etched number.



Spinner Label

AH-1101C

Etched Spinner Serial Number

**Spinner Identification
Figure 3**

- (b) The spinner dome and bulkhead assembly parts that include the part serial number with the "C" suffix are not interchangeable with previously manufactured parts that have a non-suffix part serial number.
- (c) Spinner dome and bulkhead assembly parts that include the "C" suffix part serial number are interchangeable with other assembly parts with "C" suffix part serial numbers.

B. One Piece Spinner Dome and New Hardware

(1) General

- (a) In December 2003, Hartzell Propeller introduced a one piece spinner dome manufactured with the CNC process.
- (b) The new one piece spinner dome units replace the spinner dome units and dome caps that have previously been used.
- (c) One piece spinner domes manufactured with the new CNC process are being gradually introduced to the field.

(2) One Piece CNC Spinner Component Identification

- (a) The CNC spinner components are identified by a "C" suffix to the serial number. Refer to Figure 3.

NOTE: The serial number is etched inside the spinner dome and on the forward surface of the bulkhead, located to the right of one of the cut-outs. It is also located on a label placed adjacent to the etched number.

- 1 One piece spinner domes with the "C" suffix serial number will not align with non-"C" suffix bulkhead assemblies.
 - 2 Two piece spinner domes will not align with bulkhead assemblies that have the "C" suffix serial number.
 - 3 Spinner dome and bulkhead assembly parts that carry the "C" suffix serial number are interchangeable with other assembly parts of the same design that have "C" suffix serial numbers.
- (b) When a one piece spinner dome is implemented, the spinner dome part number changes.
 - 1 The spinner assembly part number does not change.
 - 2 This permits the installation of a one piece spinner dome assembly without the type certificate for the aircraft being changed.
- (c) When a one piece spinner dome is implemented, the two piece spinner dome is no longer available.

(3) Change to Existing Low Pitch Stop Hardware

- (a) Propeller assemblies that previously used a spinner dome unit and dome cap with the dome secured with two hex nuts on the low pitch stop will require a change to the existing hardware.

NOTE: Refer to the section, "Replacing a Two-piece Dome with a One-piece Dome" in the Repair and Modification chapter of this manual.

C. D-5769-1(P) Spinner Dome in the 835-54(P) Spinner Assembly**(1) General**

- (a) The D-5769-1(P) spinner dome in the 835-54(P) spinner assembly has had in-service cracking and separation events, causing a high replacement rate.
- (b) Hartzell Propeller designed a 102963 forward bulkhead and a 102987 spacer to be installed in the D-5769-1(P) spinner dome.
 - 1 Installation of the forward bulkhead and spacer in the spinner dome is to achieve the stability that the 102965(P) spinner dome provides.
 - a The forward bulkhead and the spacer cannot be installed in the 102965(P) spinner dome.
- (c) Hartzell Propeller designed a 102965(P) spinner dome that supersedes the D-5769-1(P) spinner dome in the 835-54(P) spinner assembly.
 - 1 The 102965(P) spinner dome has a bonded forward bulkhead.
 - a This internal support will improve the stability of the dome, reduce vibration at the aft end of the dome, and improve the spinner dome reliability in the 835-54(P) spinner assembly.
- (d) Refer to the section, "Replacement or Modification of the D-5769-1() Spinner Dome on the 835-54() Spinner Assembly" in the Repair and Modification chapter of this manual for the specific aircraft application and installation procedures.

(Blank Page)

TESTING AND FAULT ISOLATION - CONTENTS

1. Troubleshooting Guide	1-3
A. Cracks	1-3
2. Lightning Strike	1-4
A. Before Further Flight	1-4

LIST OF TABLES

Troubleshooting Guide	Table 1-1.....	1-3

(Blank Page)

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 some of the more common spinner 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. <u>Cracks</u>	Stress associated with the blade cut-outs and attachment points. Vibration problems due to a propeller system imbalance. A crack may be the first indication of a vibration problem. Misalignment of the spinner components.	Refer to the Stop Drilling of a Crack section of the Repair and Modification Chapter of this manual. Perform a dynamic balance of the propeller. Refer to the Static and Dynamic Balance chapter of Hartzell Standard Practices Manual 202A (61-01-02). Refer to the Spinner Installation section of the applicable Hartzell Propeller Owner's Manual.

**Troubleshooting Guide
Table 1-1**

2. Lightning Strike (Rev. 1)

A. Before Further Flight

- (1) In the event of a spinner lightning strike, an inspection is required before further flight.
 - (a) A lightning strike on the spinner usually leaves arcing damage on the spinner, as evidence of where it entered or left the spinner.
 - (b) Refer to the Special Inspections chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02) for lightning strike inspection criteria.
 - (c) Pitting or damage caused by lightning may not exceed the serviceable limits for the affected spinner components as specified in the Check chapter of this manual.

AUTOMATIC TEST REQUIREMENTS (NOT APPLICABLE) (Rev. 2)

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 models included in this manual.

(Blank Page)

DISASSEMBLY - CONTENTS

1. Disassembly and Removal of the Spinner Assembly 3-3

(Blank Page)

1. Disassembly and Removal of the Spinner Assembly

A. General

- (1) Refer to the Spinner Installation and Removal section of the applicable Hartzell Propeller Owner's Manual for spinner removal and disassembly.
- (a) For a list of Hartzell owner's manuals, refer to the Reference Publications section in the Introduction chapter of this manual.

(Blank Page)

CLEANING - CONTENTS

1. Cleaning Procedures	4-3
A. General Cleaning	4-3
2. Material Information	4-3
A. Consumables	4-3

(Blank Page)

1. Cleaning Procedures

CAUTION: IF A PART WILL BE IMMERSSED IN THE CLEANING SOLUTION, MAKE SURE TO LIMIT THE AMOUNT OF TIME THE PART REMAINS IN THE SOLUTION.

A. General Cleaning

- (1) Clean metal parts with MEK CM106 or Acetone CM11 prior to inspection.
- (2) Refer to the Cleaning chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02) for additional cleaning instructions.

2. Material Information

A. Consumables

NOTE: For additional information about CM numbers or materials refer to the Consumable Materials chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02) or contact the Hartzell Propeller Product Support Department.

<u>CM Number</u>	<u>Hartzell Part Number</u>	<u>Description</u>	<u>Quantity</u>
CM11	N/A	Acetone or Denatured Alcohol	AR
CM106	N/A	Methyl Ethyl Ketone (MEK)	AR
CM219	N/A	Methyl Propyl Ketone (MPK)	AR

(Blank Page)

CHECK - CONTENTS

1. Inspection Interval Requirements	5-3
A. General.....	5-3
2. Mandatory Inspections.....	5-3
A. Inspection of the C-3533() Spinner	5-3
3. Inspection Requirements	5-4
A. General.....	5-4
B. Visual Inspection	5-4
C. Dimensional Inspection	5-4
D. Penetrant Inspection	5-5
4. Replacement Requirements	5-5
5. Repair	5-5
6. Special Inspections.....	5-6
A. Inspection of the D-4810 Spinner Assembly Spinner Dome	5-6
7. Specific Checks	5-8
A. Dome.....	5-10
B. Forward Bulkhead	5-18
C. Spinner Shim (Aluminum)	5-20
D. Spinner Shim (Plastic).....	5-20
E. Spacer/Adapter	5-21
F. Bulkhead	5-23
G. Adapter Ring Unit.....	5-29
H. Filler Plate	5-32
I. Bulkhead Hub.....	5-35
J. Dome Cap	5-37
K. Threaded Magnetic Target	5-41
L. Spinner Mounting Plate.....	5-43
M. Bulkhead Spacer.....	5-46

LIST OF FIGURES

Inspecting the D-4810 Spinner Assembly Spinner Dome	Figure 5-1	5-7
Spinner Dome.....	Figure 5-2	5-9
Mounting Screw Hole	Figure 5-3	5-12
Spinner Safety Screw and Nutplate.....	Figure 5-4	5-14
Forward Bulkhead, Spinner Shim, and Spacer/Adapter	Figure 5-5	5-17
Bulkhead.....	Figure 5-6	5-22
C-3409-1 and C-3030-4 Spinner Bulkheads Only	Figure 5-7	5-26
Adapter Ring Unit	Figure 5-8	5-28
Spinner Filler Plate	Figure 5-9	5-31
Spinner Cap.....	Figure 5-10	5-36
Threaded Magnetic Target.....	Figure 5-11	5-40
Spinner Mounting Plate	Figure 5-12	5-42
Bulkhead Spacer	Figure 5-13	5-45

LIST OF TABLES

Component Inspection Criteria	Table 5-1	5-10

1. Inspection Interval Requirements (Rev. 3)

A. General

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

2. Mandatory Inspections

A. Inspection of the C-3533() Spinner

- (1) To comply with AD 73-14-06
 - (a) Remove the spinner dome in accordance with the applicable Hartzell Propeller Owner's Manual.
 - (b) Visually examine the front bulkhead inside the spinner dome for cracks or fractures in the flange or in the radius between the flange and the web.
 - (c) Visually examine the rear bulkhead and the doublers for cracks in the vicinity of the spinner dome attachments, and the attachment of the rear bulkhead to the propeller hub.
 - (d) Replace any defective, cracked, or broken part with a new or serviceable part.
 - (e) Reassemble the spinner dome to the rear bulkhead.
 - (f) Make sure that a fiber washer is fitted under the head of each attaching screw.
 - (g) Torque each attaching screw to 20 - 25 in. lb. (2.25-2.82 N•m).
 - (h) Make an entry in the aircraft log book of the details of the inspection and compliance with AD 73-14-06.

3. Inspection Requirements

A. General

- (1) Paint removal is not necessary for the inspection of cracks, corrosion, etc., if the paint is smooth and shows no signs of distortion such as bubbling.
 - (a) If there is paint distortion, remove the paint in the area of concern and inspect.
- (2) Inspect all parts to determine if they meet the specifications in this chapter.
 - (a) Any serial-numbered part found unairworthy must be removed from service in accordance with the Part Retirement Procedures chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).

B. Visual Inspection

- (1) Perform a visual inspection of all parts. Parts with obvious defects or damage that would adversely affect proper fit or function must be removed from service.
 - (a) If there is a contradiction between general and specific inspection requirements for a part, the specific inspection requirements take precedence over the general inspection and acceptance requirements.

C. Dimensional Inspection

(1) Diameter Measurements

- (a) When measuring the diameter of a part with a two point measuring instrument, take at least two measurements unless specified differently.
 - 1 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.
 - 2 Alternately, take eight evenly spaced measurements, unless specified differently.
 - a 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).
 - b This alternate method may not be used to accept a diameter that has obvious damage beyond repairable (serviceable) limits.
- (b) 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.

(2) Decimal Places

- (a) 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.

D. Penetrant Inspection

- (1) Perform a penetrant inspection of aluminum parts, as required.
 - (a) For inspection of aluminum parts, follow the procedures for penetrant inspection in the Penetrant Inspection chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).

4. Replacement Requirements

A. General

- (1) Replace all parts that have cracks, wear, obvious defects, or damage found during the visual inspection that do not meet serviceable limits.

5. Repair

A. General

- (1) For repairable part defects refer to Table 5-1, Return to Service Criteria, in this chapter.

NOTE: Some repairs permitted by this manual have additional inspection requirements. Refer to the Repair and Modification chapter of this manual.

- (2) For repair procedures refer to the Repair and Modification chapter in this manual, unless otherwise stated.

6. Special Inspections

A. Inspection of the D-4810 Spinner Assembly Spinner Dome

(1) General

- (a) This procedure provides a means to inspect the forward bulkhead bond on the C-3532-17P spinner dome of the D-4810 spinner assembly.
- (b) The inspection affects Piper PA-46-301P Malibu Aircraft with Hartzell D-4810 spinner assembly with dome serial numbers less than B-740, e.g., B-739, B-738, A-(), etc.

NOTE 1: This inspection was to have been performed at the next regularly scheduled maintenance, but not to exceed 100 hours of operation after receipt of a bulletin dated August 5, 1988. The length of time since issuance is reason to believe all have complied.

NOTE 2: Removal of the propeller from the aircraft is not required for this inspection

- (c) This inspection must be performed by a certified aircraft mechanic.

(2) Procedure

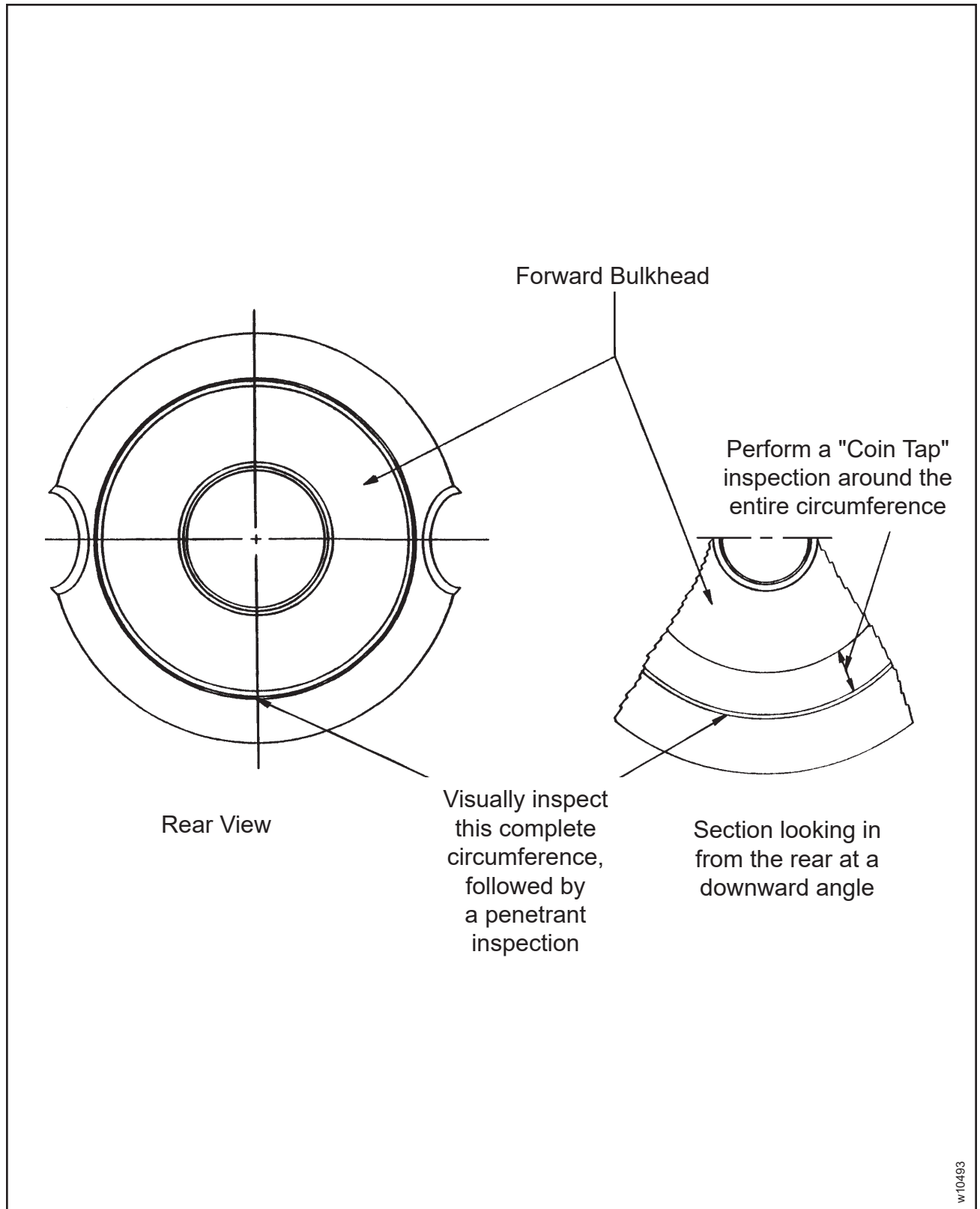
- (a) Remove the spinner dome from the propeller in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 115N (61-00-15).

NOTE: Removal of the propeller from the aircraft is not required for this inspection.

- (b) Locate the serial number on the inside surface of the dome.

NOTE: An electric pencil etching was used to apply the serial number.

- (c) If the serial number is greater than B-739, e.g., B-740, B-741, C-(), D-(), etc., no further action is required. Reinstall the dome on the aircraft in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 115N (61-00-15).



Inspecting the D-4810 Spinner Assembly Spinner Dome
Figure 5-1

(d) If the serial number is less than or equal to B-739, e.g., B-739, B-738, or if the serial number cannot be determined, perform the following inspections. Refer to Figure 5-1.

- 1 Visually examine the bond between the dome inner surface and the rear most edge of the internal dome forward bulkhead for cracks or separations.
- 2 Perform a penetrant inspection in accordance with the Penetrant Inspection chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02). Suspected indications must be confirmed by the "coin-tap" inspection in this chapter.

NOTE: It is normal to get a slight indication at the junction of the aluminum and the adhesive, but a true crack will provide a strong indication.

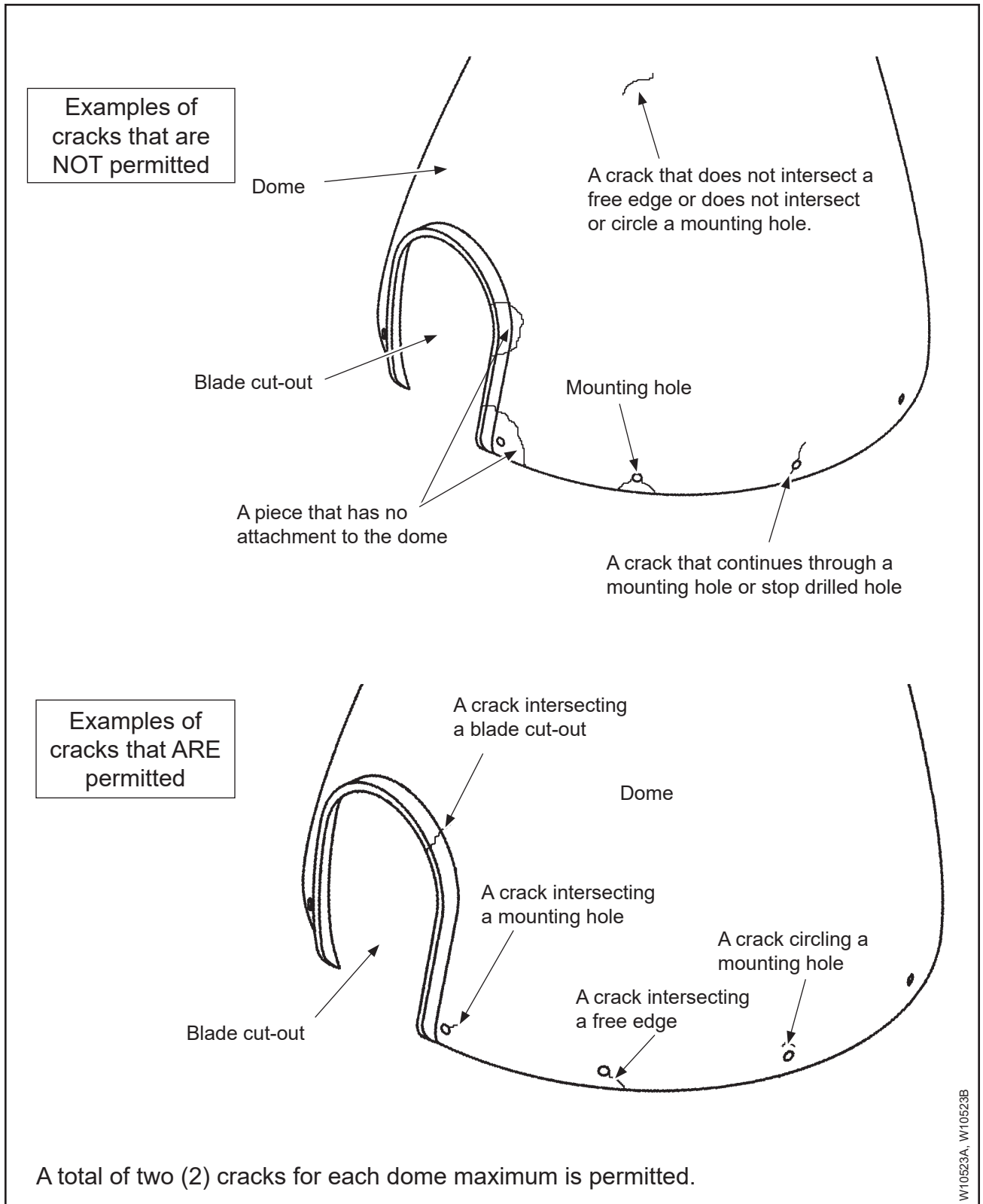
- 3 Perform a "coin-tap" inspection.
 - a Using a steel washer approximately 0.125 inch (3.17 mm) thick by 1.375 inches (32.92 mm) OD, and an ID of 0.75 inch (19 mm) or less, tap the entire circumference of the bonded surface of the forward bulkhead (210).

NOTE: Debonded areas will be evident by an audible change in the tone of the tap. A dull "clunking" sound indicates a debonded area; a sharp, solid "rapping" sound indicates a good, acceptable bond.

- 4 If no evidence of debonding is found, reinstall the dome on the aircraft in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 115N (61-00-15).
- 5 Make a record in the propeller logbook to indicate compliance with this inspection.
- 6 If evidence of debonding is found, remove the dome from service and return it to Hartzell Propeller for repair or replacement.

7. Specific Checks

Refer to Table 5-1, Component Inspection Criteria for checks of specific components of the spinner assembly.



**Spinner Dome
Figure 5-2**

Component Inspection Criteria

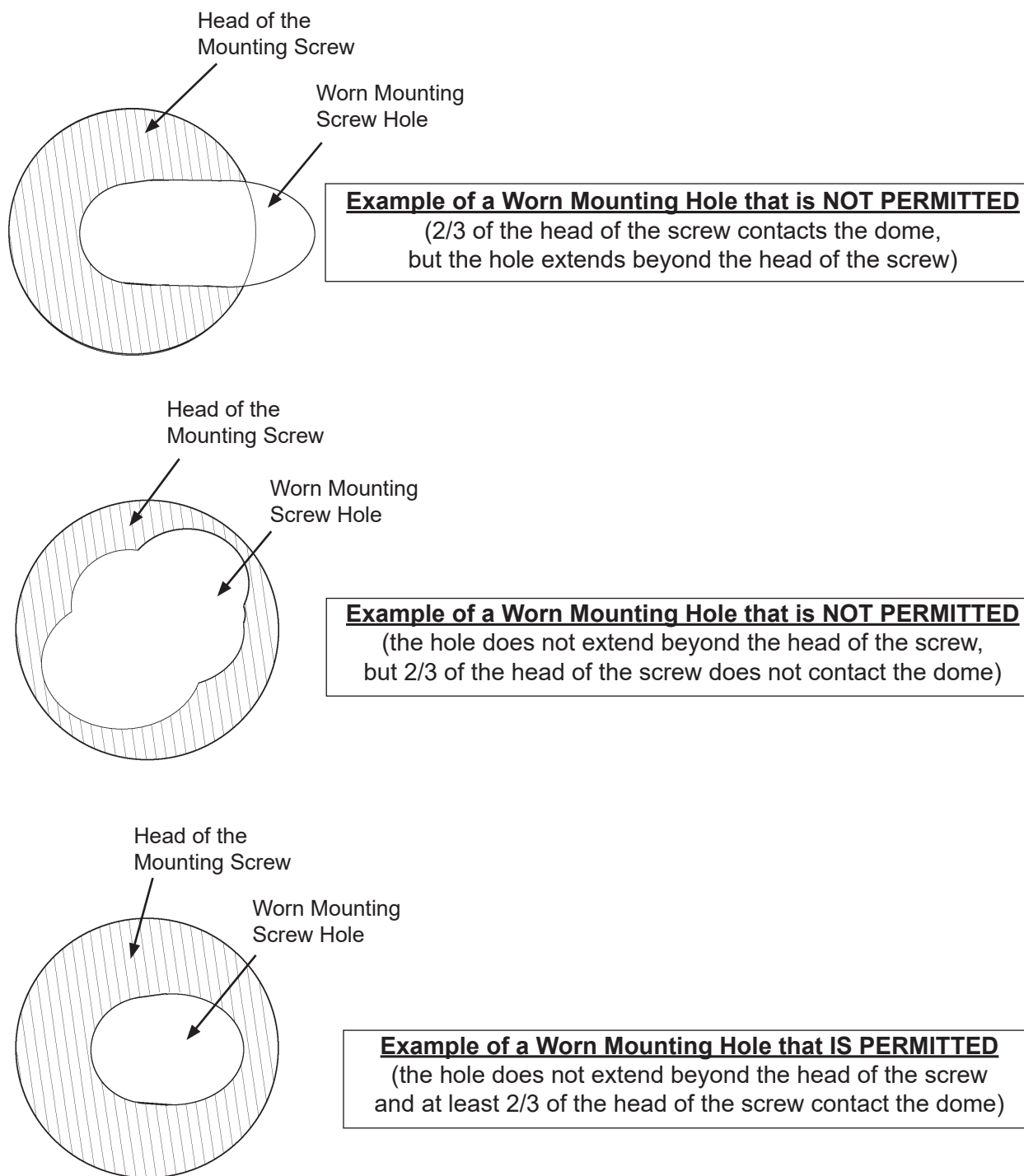
Table 5-1

Inspect	Serviceable Limits	Corrective Action
A. <u>DOME</u> (Item 20) Refer to Figure 5-2.		
(1) Visually examine the inside and the outside of the dome for cracks.	A maximum of two cracks total is permitted for each dome.	If the number of cracks is greater than the permitted serviceable limits, replace the dome.
	A crack that intersects a free edge is permitted within the serviceable limits.	A crack with a maximum length of 1.5 inches (38 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.
	A maximum of one crack intersecting a cut-out is permitted.	A crack with a maximum length of 0.75 inch (19 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.
	A maximum of one crack intersecting a mounting hole is permitted.	A crack with a maximum length of 1.00 inch (25.4 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.
	A crack circling a mounting hole is permitted to a maximum of 1/3 of the circumference of the hole.	Stop drilling is not required. Inspect the crack before each flight. If the crack is larger than the permitted serviceable limits, further flight is not permitted and the dome must be replaced.
	A crack that continues through a mounting hole or stop drilled hole is not permitted.	If the crack continues through a mounting hole or stop drilled hole, replace the dome.
	A crack that produces a piece that has no attachment to the dome is not permitted.	If a piece has no attachment to the dome, replace the dome.
	Domes with a bonded forward bulkhead: Cracks are not permitted on the bonded forward bulkhead.	If there are cracks on the bonded forward bulkhead, replace the spinner dome. If the spinner dome cannot be replaced (spinner dome is no longer manufactured), replace the spinner assembly. Contact your Supplemental Type Certificate holder for approved spinner assembly replacements.

Component Inspection Criteria

Table 5-1

Inspect	Serviceable Limits	Corrective Action
A. <u>DOME, continued</u> (Item 20)		
(2) Visually examine the dome for wear.	The maximum permitted depth of wear is 0.005 inch (0.12 mm).	Wear that is deeper than 0.005 inch (0.12 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.008 inch (0.20 mm). The maximum permitted total accumulation of any repairs on the dome is 5% of the dome surface area. If the wear is greater than the permitted serviceable limits or corrective action limits replace the dome.
(3) Visually examine the dome for dents. (Refer to the definition of a "dent" in the Introduction chapter of this manual.)	The maximum permitted deflection from normal contour is 0.005 inch (0.12 mm) over a maximum area of one square inch (645 square mm) for each dent. The maximum permitted dome surface area that may be dented is 5%. A dent is not permitted to affect the fit or function of the dome.	If a dent or dents are greater than the permitted serviceable limits, replace or repair the dome in accordance with the section, "Repair of Dents" in the Repair and Modification chapter of this manual.
(4) Visually examine the dome for scratches.	There may be an unlimited number of scratches that have a maximum permitted depth of material loss of 0.004 inch (0.10 mm).	A scratch that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.008 inch (0.20 mm). The maximum permitted total accumulation of any repairs on the dome is 5% of the dome surface area. If the scratch is greater than the permitted serviceable limits or corrective action limits replace the dome.



Wear beyond the head of the screw is not permitted.
At installation, two thirds of the head of the screw must contact the dome.

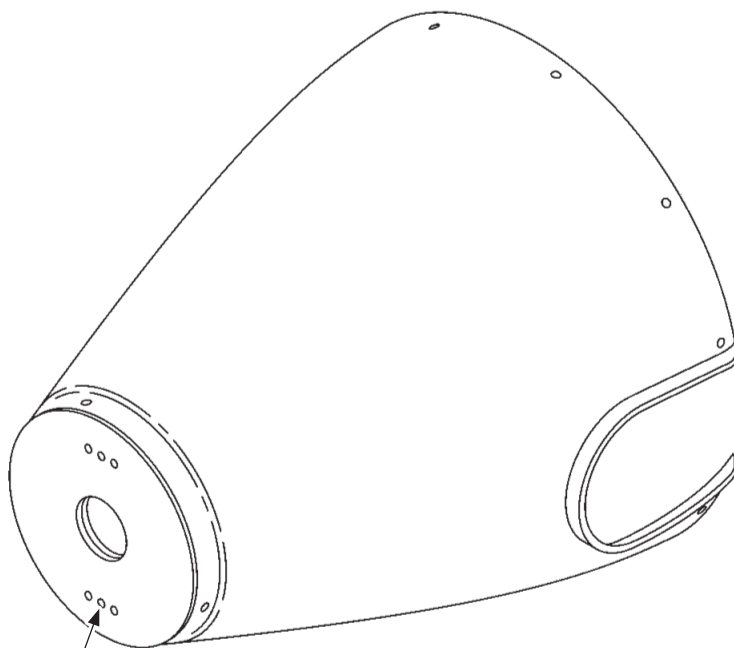
W10524

Mounting Screw Hole
Figure 5-3

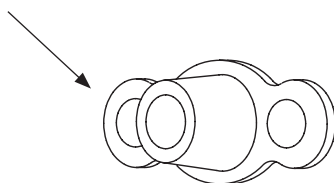
Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
A. <u>DOME, continued</u> (Item 20)		
(5) Visually examine the dome for gouges.	The maximum permitted depth of a gouge is 0.004 inch (0.10 mm).	A gouge that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.008 inch (0.20 mm). The maximum total accumulation of any repairs on the dome is 5% of the dome surface area. If the depth of the gouge is greater than the permitted serviceable limits or corrective action limits replace the dome.
(6) Visually examine each mounting hole for wear. Refer to Figure 5-3.	Wear beyond the head of the screw is not permitted. At installation, a minimum of two thirds (2/3) of the head of the screw must contact the dome. A minimum of 3 holes for the dome (one hole between each blade cut-out) cannot be greater than a maximum diameter of 0.205 inch (5.20 mm).	If the wear is greater than the permitted serviceable limits, replace the dome. If the spinner dome cannot be replaced (spinner dome is no longer manufactured), replace the spinner assembly. Contact your Supplemental Type Certificate holder for approved spinner assembly replacements.
(7) Visually examine the dome internal and external surfaces for pitting.	Internal Surfaces (including bonded forward bulkhead): Pitting is permitted to a depth of 0.002 inch (0.05 mm) with no limit on area. Pitting between 0.002 inch (0.05 mm) to a maximum depth of 0.004 inch (0.10 mm) is permitted to a total accumulated area of 2 square inches (1290 square mm). External Surfaces: Pitting to a maximum depth of 0.002 inch (0.05 mm) is permitted to a total accumulated area of 2 square inches (1290 square mm).	Pitting greater than the permitted serviceable limits must be removed by polishing with abrasive pad CM47 or equivalent. The maximum depth of repair is 0.008 inch (0.20 mm) when the opposing surface (internal or external) does not require repair in the same location. The maximum depth of repairs on an internal and external surface in the same location is 0.005 inch (0.12 mm) on each opposing surface. The maximum permitted total accumulation of all repairs on the dome is 5% of the total dome surface area. If pitting or repair is greater than the serviceable limits, replace the dome.

Dome With Cap Removed



Cap Safety Screw Fixed Nutplate



W10500

Spinner Safety Screw and Nutplate
Figure 5-4

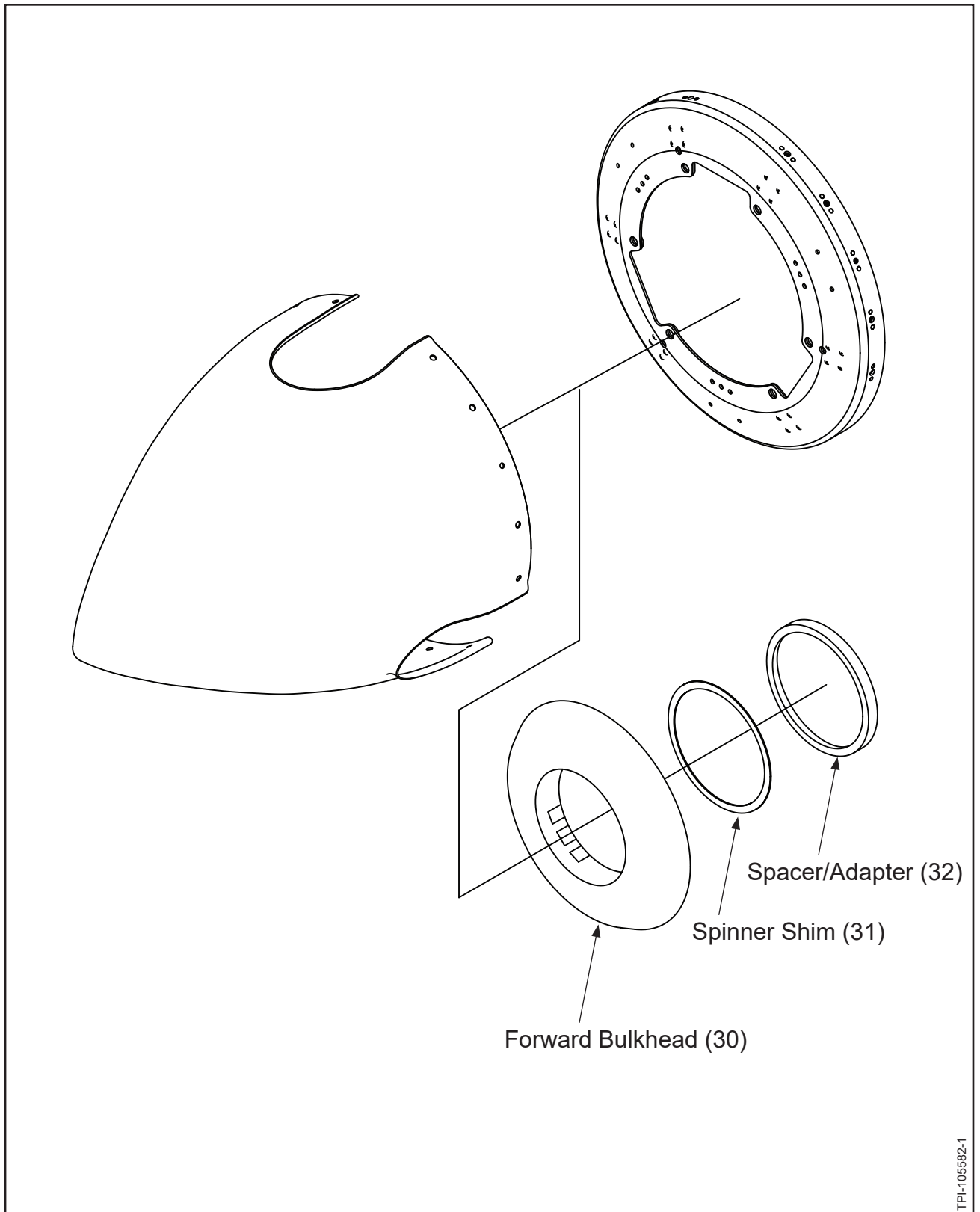
Component Inspection Criteria

Table 5-1

Inspect	Serviceable Limits	Corrective Action
A. <u>DOME, continued</u> (Item 20)		
(8) Visually examine each nutplate for missing or damaged threads.	Threads must withstand the screw installation satisfactorily.	If the threads will not withstand the screw installation satisfactorily, replace the nutplate in accordance with the section, "Replacement of Nutplates, Rivets, and Rivnuts" in the Repair and Modification chapter of this manual.
(9) Visually examine each nutplate for loose attachment hardware.	Loose attachment hardware is not permitted.	If the attachment hardware is loose, replace the nutplate and/or the attachment hardware in accordance with the section, "Replacement of Nutplates, Rivets, and Rivnuts" in the Repair and Modification chapter of this manual.
(10) For a two-piece dome, visually examine the cap safety screw fixed nutplate for damage. Refer to Figure 5-4.	The screw must be present. Loose nutplate attachment hardware is not permitted.	If the screw is not present, replace the screw. If the nutplate is loose, replace the nutplate. The nutplate/screw position may be relocated in accordance with the section, "Replacement of Nutplates, Rivets, and Rivnuts" in the Repair and Modification chapter of this manual.
(11) Visually examine the cut-out area of the spinner dome for damage caused by interference with an anti-ice travel tube.	Damage to the cut-out area must be repaired.	Repair the damaged area in accordance with the section, "Repair of Damage to the Spinner Dome Cut-out Area" in the Repair and Modification chapter of this manual. If damage cannot be repaired, replace the spinner dome.
(12) For domes with bonded forward bulkheads: Visually examine the ID of the forward bulkhead for fretting.	The maximum permitted depth of fretting is 0.010 inch (0.25 mm).	If fretting is greater than the permitted serviceable limits, replace the spinner dome. If the spinner dome cannot be replaced (spinner dome is no longer manufactured), replace the spinner assembly. Contact your Supplemental Type Certificate holder for approved spinner assembly replacements.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
A. <u>DOME, continued</u> (Item 20)		
(13) For domes with bonded forward bulkheads: Visually examine the bond.	The maximum permitted looseness of the bond is 1/4 of the circumference.	If the looseness of the forward bulkhead is greater than the permitted serviceable limits, replace the spinner dome. If the spinner dome cannot be replaced (spinner dome is no longer manufactured), replace the spinner assembly. Contact your Supplemental Type Certificate holder for approved spinner assembly replacements.
(14) For a C-4533-1 spinner dome used on the D-4532-1 spinner (a) There may be eight screws in the dome/forward bulkhead. Refer to the section, "Addition of Screws to C-4533-1 Spinner Dome used on the D-4532-1 Spinner Assembly" in the Repair and Modification chapter of this manual.		
(15) For a D-4512() or D-4512-1() Dome with C-4523-1() Caps (a) A modification may have been performed. Refer to the section, "Modification of C-4523-2() Caps and D-4512() or D-4512-2() Spinner Domes" in the Repair and Modification chapter of this manual.		
(16) For a D-4810 spinner with a C-3532-17P spinner dome (a) For additional inspection procedures, refer to the section, "Inspection of the D-4810 Spinner Assembly Spinner Dome" in this chapter.		
(17) For D-5769-1() spinner dome installed on 835-54() spinner assembly (a) If the spinner dome has filler plates installed, remove the filler plates in accordance with the section, "835-54() Spinner Assembly Filler Plate Removal" in the Repair and Modification chapter of this manual. (b) If cracks are found during inspection, replace the spinner dome before further flight. If the spinner dome cannot be replaced (spinner dome is no longer manufactured), replace the spinner assembly. Contact your Supplemental Type Certificate holder for approved spinner assembly replacements. (c) If no cracks are found during inspection, refer to the section, "835-54() Spinner Assembly, Modification of the Spinner Dome" in the Repair and Modification chapter of this manual for modification instructions for the D-5769-1() spinner dome.		
(18) For a D-4810 spinner with C-3532-17P spinner dome refer to the Special Inspections section of this chapter for additional inspection procedures.		



Forward Bulkhead, Spinner Shim, Spacer/Adapter
Figure 5-5

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
B. <u>FORWARD BULKHEAD</u> (Item 30) Refer to Figure 5-5.		
(1) Visually examine the forward bulkhead for cracks and/or broken material.	A crack or broken material is not permitted.	If there is a crack or broken material, replace the forward bulkhead.
(2) Visually examine the forward bulkhead for cuts or gouges.	Cuts or gouges that extend through the entire surface of the forward bulkhead are not permitted. Cuts or gouges that reduce the rigidity of the forward bulkhead are not permitted.	If a cut or gouge extends through the entire surface of the part, or reduces the rigidity of the part, replace the forward bulkhead.
(3) Visually examine the forward bulkhead for abnormal wear or deformation.	Wear or deformation must not interfere with, or affect the fit, function, or rigidity of the forward bulkhead.	If wear or deformation is greater than the permitted serviceable limits, replace the forward bulkhead.
(4) Visually examine the UHMW tape for wear and damage.	Wear or damage to the UHMW tape that exposes the metal forward bulkhead is not permitted. UHMW tape that is loose or that adversely affects the fit of the spinner dome is not permitted.	If the UHMW tape is not within the permitted serviceable limits, replace the UHMW tape in accordance with the section, "Replacement of the UHMW Tape" in the Repair and Modification chapter of this manual.
(5) Visually examine the forward bulkhead for fretting.	The maximum permitted depth of fretting is 0.010 inch (0.25 mm).	If the fretting is greater than the permitted serviceable limits, replace the forward bulkhead.

Component Inspection Criteria
Table 5-1

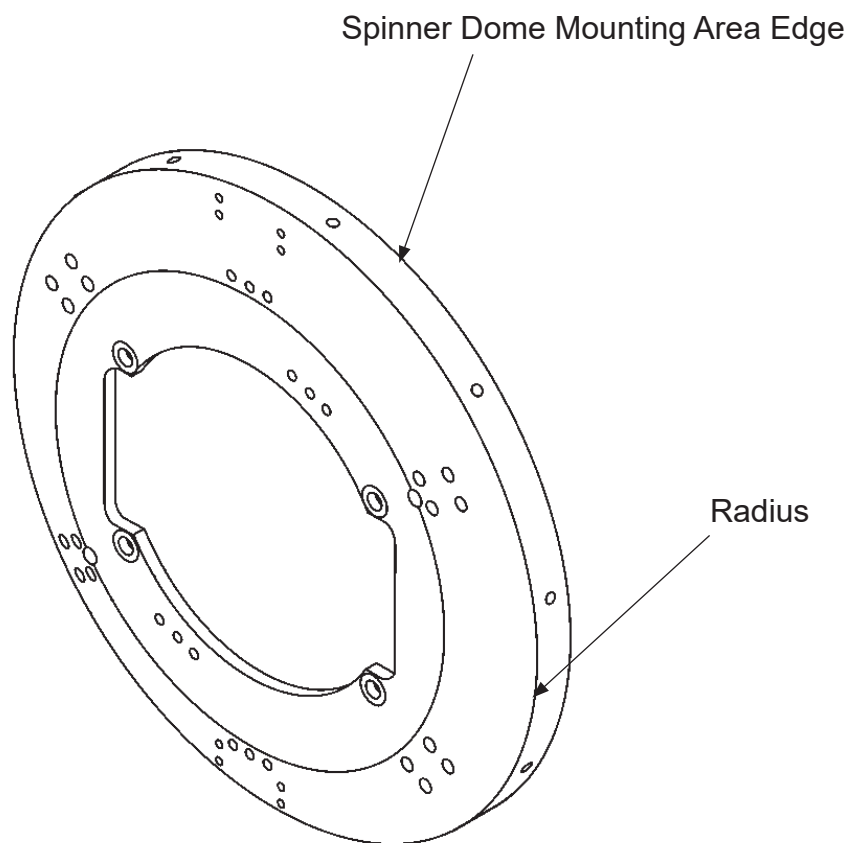
Inspect	Serviceable Limits	Corrective Action
B. <u>FORWARD BULKHEAD, continued</u> (Item 30) Refer to Figure 5-5.		
(6) Visually examine the forward bulkhead for pitting.	Pitting is permitted to a depth of 0.002 inch (0.05 mm) with no limit on area. Pitting between 0.002 inch (0.05 mm) to a maximum depth of 0.004 inch (0.10 mm) is permitted to a total accumulated area of 2 square inches (1290 square mm).	Pitting greater than the permitted serviceable limits must be removed by polishing with abrasive pad CM47 or equivalent. The maximum depth of repair is 0.008 inch (0.20 mm) when the opposing surface does not require repair in the same location. The maximum depth of repairs on opposing surfaces in the same location is 0.005 inch (0.12 mm) on each surface. The maximum permitted total accumulation of all repairs on the forward bulkhead is 5% of the total forward bulkhead surface area. A forward bulkhead that is bonded to the dome is not repairable. If pitting is greater than the permitted serviceable limits, replace the spinner dome and forward bulkhead. For a forward bulkhead that is not bonded to the dome, if pitting is greater than the permitted serviceable limits or corrective action limits, replace the forward bulkhead.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
C. <u>SPINNER SHIM (ALUMINUM)</u> (Item 31) Refer to Figure 5-5.		
(1) Visually examine the spinner shim for corrosion product, pitting, or damage.	Corrosion product is not permitted. Pitting or damage that affects fit or function is not permitted.	If corrosion product, pitting, or damage is greater than the permitted serviceable limits, replace the spinner shim.
(2) Examine the spinner shim for a crack or a complete separation that extends from the ID to the OD of the spinner shim.	The maximum permitted length of a crack is 1/4 of the distance between the ID and the OD of the spinner shim. A longer crack or a complete separation that extends from the ID to the OD of the spinner shim is not permitted.	If damage is greater than the permitted serviceable limits, replace the spinner shim.
D. <u>SPINNER SHIM (PLASTIC)</u> (Item 31) Refer to Figure 5-5.		
(1) Visually examine the spinner shim for damage.	Damage that affects fit or function is not permitted.	If damage is greater than the permitted serviceable limits, replace the spinner shim.
(2) Examine the spinner shim for a complete separation that extends from the ID to the OD of the spinner shim.	A complete separation that extends from the ID to the OD of the spinner shim is not permitted.	If damage is greater than the permitted serviceable limits, replace the spinner shim.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
E. <u>SPACER/ADAPTER</u> (Item 32) Refer to Figure 5-5.		
(1) Visually examine the spacer/adapter for cracks and/or broken material.	A crack or broken material is not permitted.	If there is a crack or broken material, replace the spacer/adapter.
(2) Visually examine the spacer/adapter for cuts or gouges.	Cuts or gouges that extend through the entire surface of the spacer/adapter are not permitted. Cuts or gouges that reduce the rigidity of the spacer/adapter are not permitted.	If a cut or gouge extends through the entire surface of the part, or reduces the rigidity of the part, replace the spacer/adapter.
(3) Visually examine the spacer/adapter for wear or deformation.	Wear or deformation must not interfere with or affect the fit, function, or rigidity of the spacer/adapter.	If wear or deformation is greater than the permitted serviceable limits, replace the spacer/adapter.



W10501

Bulkhead
Figure 5-6

Component Inspection Criteria

Table 5-1

Inspect	Serviceable Limits	Corrective Action
F. <u>BULKHEAD</u> (Item 50) Refer to Figure 5-6. <u>NOTE:</u> An A-4203-1() spinner assembly that is installed on propeller model HC-C3YF-1R()F is not interchangeable on other propeller assemblies. If it is necessary to change the bulkhead, refer to the section, "Balance Weight Requirements for Specific Propeller Applications" in the Static and Dynamic Balance chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02) for information about balance weights.		
(1) Visually examine the bulkhead for cracks.	Cracks are not permitted.	If there are cracks, replace the bulkhead.
(2) Visually examine the bulkhead for dents. (Refer to the definition of "Dent" in the Introduction chapter of this manual).	The maximum permitted deflection from the normal contour is 0.005 inch (0.12 mm) over a maximum area of 1 square inch (645 square mm) for each dent. The maximum permitted bulkhead surface area that may be dented is 5%. A dent is not permitted to affect the fit or function of the bulkhead.	If a dent or dents are greater than the permitted serviceable limits, replace the bulkhead or repair it in accordance with the section, "Repair of Dents" in the Repair and Modification chapter of this manual.
(3) Visually examine the bulkhead for scratches.	There may be an unlimited number of scratches that have a maximum permitted depth of material loss of 0.004 inch (0.10 mm).	A scratch that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.010 inch (0.25 mm). The maximum permitted total accumulation of any repairs on the bulkhead is 5% of the bulkhead surface area. If the scratch is greater than the permitted serviceable limits or corrective action limits, replace the bulkhead.
(4) Visually examine the bulkhead for gouges.	The maximum permitted depth of a gouge is 0.004 inch (0.10 mm).	A gouge that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.010 inch (0.25 mm). The maximum permitted total accumulation of any repairs on the bulkhead is 5% of the bulkhead surface area. If the gouge is greater than the permitted serviceable limits or corrective action limits, replace the bulkhead.

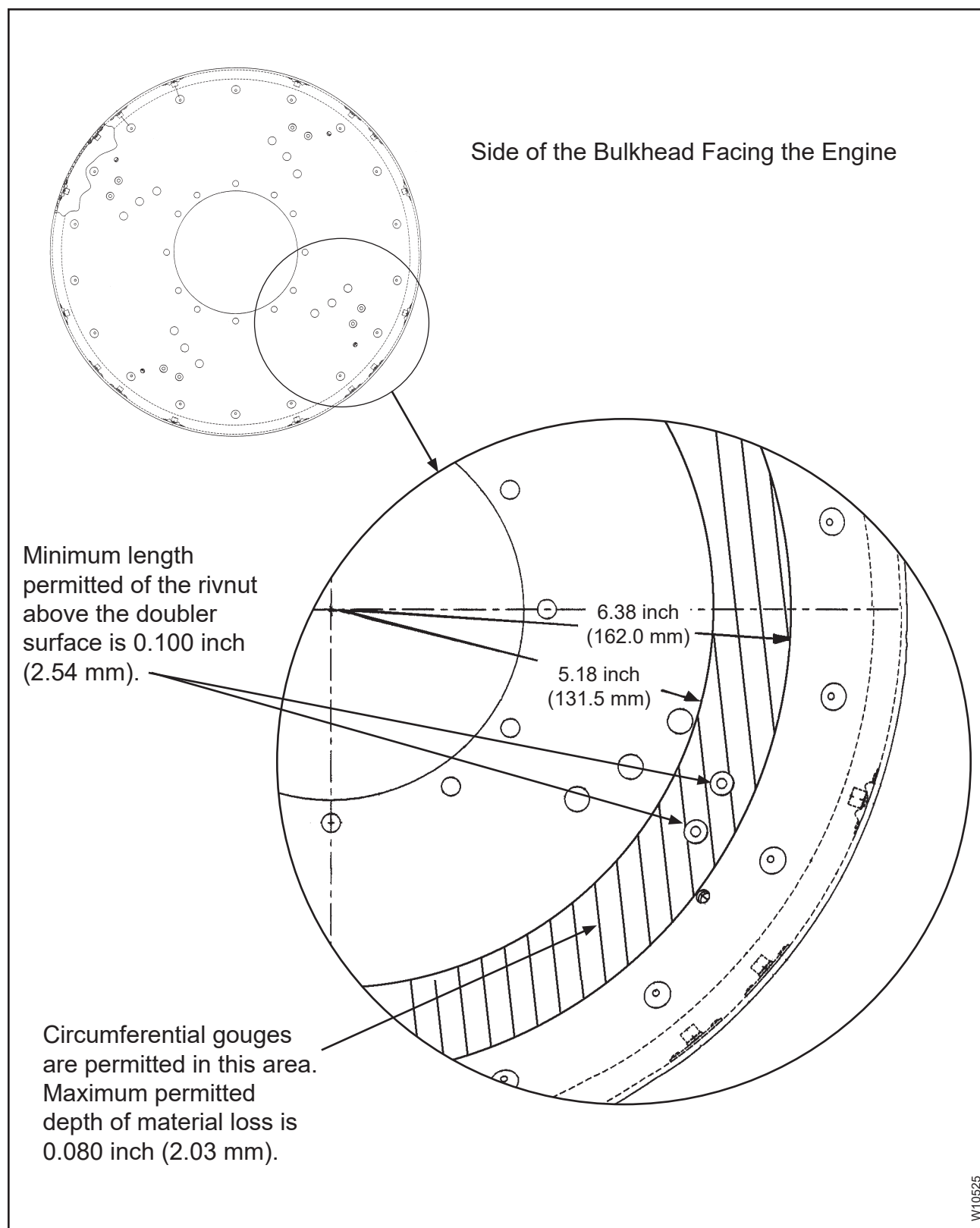
Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
F. <u>BULKHEAD, continued</u> (Item 50) Refer to Figure 5-6.		
(5) Visually examine the bulkhead for pitting.	The maximum permitted depth of pitting without an area limit is 0.002 inch (0.05 mm). The maximum permitted depth of pitting with a total accumulated area limit of 2 square inches (1290 square mm) is 0.004 inch (0.10 mm).	Pitting greater than the permitted serviceable limits must be removed by polishing with abrasive pad CM47 or equivalent. The maximum permitted depth of repair when opposing surfaces in the same location do not require repair is 0.010 inch (0.25 mm). The maximum depth of repairs on opposing surfaces in the same location is 0.006 inch (0.15 mm) on each surface. The maximum permitted total accumulation of all repairs on the bulkhead is 5% of the total bulkhead surface area. If pitting repair is greater than the serviceable limits, replace the bulkhead.
(6) For a turbine engine application: Visually examine the bulkhead for roundness in the radius and at the mounting area edge.	A bulkhead that is out-of-round in the radius or at the mounting area edge is not permitted.	Straighten the mounting area edge of the bulkhead. If the mounting area edge of the bulkhead cannot be straightened, replace the bulkhead. If the out-of-round area is in a radius area, replace the bulkhead.
(7) For a reciprocating engine application: Visually examine the bulkhead for roundness in the radius and at the mounting area edge.	A bulkhead that is out-of-round in the radius or at the mounting area edge is not permitted.	If the bulkhead is out-of-round in the radius or at the mounting area edge, replace the bulkhead.

Component Inspection Criteria

Table 5-1

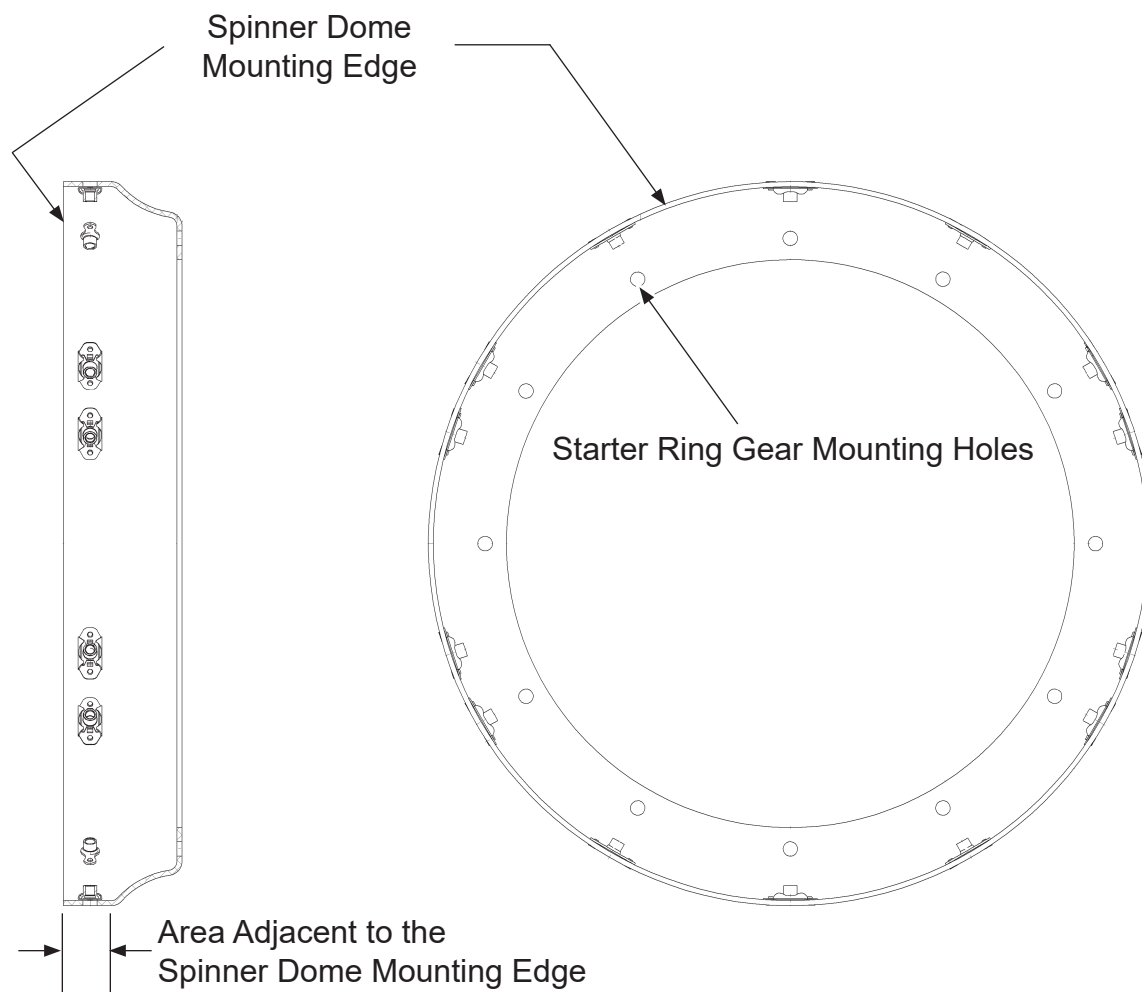
Inspect	Serviceable Limits	Corrective Action
F. <u>BULKHEAD, continued</u> (Item 50) Refer to Figure 5-6.		
(8) Visually examine each nutplate for missing or damaged threads.	Threads must withstand the screw installation satisfactorily.	If the threads will not withstand the screw installation satisfactorily, replace the nutplate in accordance with the section, "Replacement of Nutplates, Rivets, and Rivnuts" in the Repair and Modification chapter of this manual.
(9) Visually examine each nutplate for damage or loose attachment hardware.	Damaged or loose attachment hardware are not permitted.	If there is damage or a loose nutplate, replace the nutplate. If there is damage or loose attachment hardware, replace the nutplate in accordance with the section, "Replacement of Nutplates, Rivets, and Rivnuts" in the Repair and Modification chapter of this manual.



C-3409-1 and C-3030-4 Spinner Bulkheads Only
Figure 5-7

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
F. <u>BULKHEAD, continued</u> (Item 50) Refer to Figure 5-7.		
(10) For bulkheads C-3409-1 and C-3030-4 ONLY Refer to Figure 5-7		
(a) Visually examine the bulkhead for circumferential gouges.	Circumferential gouges are permitted in the area indicated in Figure 5-7. The maximum permitted depth of material loss is 0.080 inch (2.03 mm).	Remove any loose material. If the depth of a gouge is greater than the permitted serviceable limits, replace the bulkhead.
(b) Visually examine the rivnuts as indicated in Figure 5-7.	The minimum permitted length of the rivnut above the doubler surface is 0.100 inch (2.54 mm).	If the length of the rivnut above the doubler surface is less than the permitted serviceable limits, replace the rivnut.



C-885

Adapter Ring Unit
Figure 5-8

Component Inspection Criteria

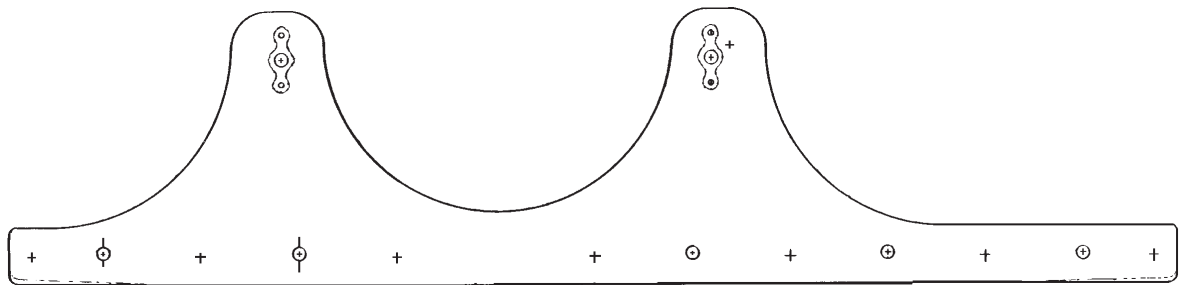
Table 5-1

Inspect	Serviceable Limits	Corrective Action
G. <u>ADAPTER RING UNIT</u> (Item 70) Refer to Figure 5-8.		
(1) Visually examine the adapter ring unit for cracks.	Cracks are not permitted.	If there are cracks, replace the adapter ring unit.
(2) Visually examine the adapter ring unit for gouges.	The maximum permitted depth of a gouge is 0.004 inch (0.10 mm).	A gouge that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.008 inch (0.20 mm). The maximum total accumulation of any repairs on the adapter ring unit is 5% of the adapter ring unit surface area. If the depth of the gouge is greater than the permitted serviceable limits or corrective action limits, replace the adapter ring unit.
(3) Visually examine the adapter ring unit for dents. (Refer to the definition of "dent" in the Introduction chapter of this manual).	The maximum permitted deflection from normal contour is 0.005 inch (0.12 mm) over a maximum area of one square inch (645 square mm) for each dent. The maximum permitted adapter ring unit surface area that may be dented is 5%. A dent is not permitted to affect the fit or function of the adapter ring unit.	If a dent or dents are greater than the permitted serviceable limits, replace or repair the adapter ring unit in accordance with the section, "Repair of a Dent" in the Repair and Modification chapter of this manual.
(4) Visually examine the adapter ring unit for scratches.	There may be an unlimited number of scratches that have a maximum permitted depth of material loss of 0.004 inch (0.10 mm).	A scratch that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.008 inch (0.20 mm). The maximum permitted total accumulation of any repairs on the adapter ring unit is 5% of the adapter ring unit surface area. If the scratch is greater than the permitted serviceable limits or corrective action limits, replace the adapter ring unit.

Component Inspection Criteria

Table 5-1

Inspect	Serviceable Limits	Corrective Action
G. <u>ADAPTER RING UNIT, continued</u> (Item 70) Refer to Figure 5-8.		
(5) Visually examine the adapter ring unit for pitting.	Pitting is permitted to a depth of 0.002 inch (0.05 mm) with no limit on area. Pitting between 0.002 inch (0.05 mm) to a maximum depth of 0.004 inch (0.10 mm) is permitted to a total accumulated area of 2 square inches (1290 square mm).	Pitting greater than the permitted serviceable limits must be removed by polishing with abrasive pad CM47 or equivalent. The maximum depth of repair is 0.008 inch (0.20 mm) when the opposing surface does not require repair in the same location. The maximum depth of repairs on opposing surfaces in the same location is 0.005 inch (0.12 mm) on each surface. The maximum permitted total accumulation of all repairs on the adapter ring unit is 5% of the total adapter ring unit surface area. If pitting repair is greater than the serviceable limits, replace the adapter ring unit.
(6) Visually examine the adapter ring unit for roundness at the spinner dome mounting edge and the adjacent area.	An out-of-round condition is not permitted.	Bend the adapter ring unit to the correct roundness. If the out-of-round condition cannot be corrected, replace the adapter ring unit.
(7) Visually examine each nutplate for missing or damaged threads.	Threads must withstand the screw installation satisfactorily.	If the threads will not withstand the screw installation satisfactorily, replace the nutplate in accordance with the section, "Replacement of Nutplates, Rivets, and Rivnuts" in the Repair and Modification chapter of this manual.



W10497A

Spinner Filler Plate
Figure 5-9

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
H. <u>FILLER PLATE</u> (Item 90) Refer to Figure 5-9.		
(1) Visually examine the inside and outside of the filler plate for cracks.	A total of one crack for each filler plate maximum is permitted.	If there are more cracks than the permitted serviceable limits, replace the filler plate.
	A crack that intersects a free edge or that intersects or circles a mounting hole is permitted within the serviceable limits; all other cracks are not permitted.	If greater than the permitted serviceable limits, replace the filler plate.
	One crack intersecting a mounting hole is permitted.	A crack with a maximum length of 0.50 inch (12.7 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.
	A crack circling a mounting hole is permitted up to one third (1/3) the circumference of the hole.	Stop drilling is not required. Inspect the crack before each flight. If the crack is larger than permitted, no further flight is permitted and the filler plate must be replaced.
	A crack that continues through a mounting hole or stop drilled hole is not permitted.	If greater than the permitted serviceable limits, replace the filler plate.
	A crack that produces a piece that has no attachment to the filler plate is not permitted.	If greater than the permitted serviceable limits, replace the filler plate.
(2) Visually examine the filler plate for gouges.	The maximum permitted depth of a gouge is 0.004 inch (0.10 mm).	A gouge that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.008 inch (0.20 mm). The maximum total accumulation of any repairs on the filler plate is 5% of the filler plate surface area. If the depth of the gouge is greater than the permitted serviceable limits or corrective action limits, replace the filler plate.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
H. <u>FILLER PLATE, continued</u> (Item 90) Refer to Figure 5-9.		
(3) Visually examine the filler plate for dents. (Refer to the definition of "dent" in the Introduction chapter of this manual).	The maximum permitted deflection from normal contour is 0.005 inch (0.12 mm) over a maximum area of one square inch (645 square mm) for each dent. The maximum permitted filler plate surface area that may be dented is 5%. A dent is not permitted to affect the fit or function of the filler plate.	If a dent or dents are greater than the permitted serviceable limits, replace or repair the filler plate in accordance with the section, "Repair of a Dent" in the Repair and Modification chapter of this manual.
(4) Visually examine the filler plate for scratches.	There may be an unlimited number of scratches that have a maximum permitted depth of material loss of 0.004 inch (0.10 mm).	A scratch that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.008 inch (0.20 mm). The maximum permitted total accumulation of any repairs on the filler plate is 5% of the filler plate surface area. If the scratch is greater than the permitted serviceable limits or corrective action limits, replace the filler plate.

Component Inspection Criteria

Table 5-1

Inspect	Serviceable Limits	Corrective Action
H. <u>FILLER PLATE, continued</u> (Item 90) Refer to Figure 5-9.		
(5) Visually examine the filler plate for pitting.	Pitting is permitted to a depth of 0.002 inch (0.05 mm) with no limit on area. Pitting between 0.002 inch (0.05 mm) to a maximum depth of 0.004 inch (0.10 mm) is permitted to a total accumulated area of 2 square inches (1290 square mm).	Pitting that is greater than the permitted serviceable limits must be removed by polishing with abrasive pad CM47 or equivalent. The maximum depth of repair is 0.008 inch (0.20 mm) when the opposing surface does not require repair in the same location. The maximum depth of repairs on opposing surfaces in the same location is 0.005 inch (0.12 mm) on each surface. The maximum permitted total accumulation of all repairs on the filler plate is 5% of the total filler plate surface area. If pitting repair is greater than the serviceable limits, replace the filler plate.
(6) Visually examine the filler plate for fretting at the filler plate-to-dome interface.	The minimum permitted thickness of the area of fretting is 50% of the undamaged thickness at the wear location. Other fretting is not permitted.	If the damage is greater than the permitted serviceable limits, replace the filler plate.
(7) Visually examine each rivet on the filler plate for looseness.	A loose rivet is not permitted. The filler plate must be firmly attached.	If there is a loose rivet, replace the rivet in accordance with the section, "Replacement of Nutplates, Rivets, and Rivnuts" in the Repair and Modification chapter of this manual.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
I. <u>BULKHEAD HUB</u> (Item 100)		
(1) Visually examine the bulkhead hub for corrosion product.	Corrosion product is not permitted.	Remove corrosion product using an abrasive pad CM47 or equivalent. If corrosion product cannot be removed, replace the bulkhead hub.
(2) Visually examine the bulkhead hub for cracks, pitting, damage, or wear.	A crack is not permitted. Pitting, damage, and wear up to 0.004 inch (0.10 mm) in depth is permitted.	If a crack, pitting, damage, or wear exceeds the serviceable limits, replace the bulkhead hub.
(3) Visually examine the bulkhead hub for anodize coverage.	Except for a few scratches and corners with anodize coating missing, complete anodize coverage is required.	If the serviceable limits are exceeded, re-anodize the bulkhead hub in accordance with the Chromic Acid Anodizing chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).

Examples of Cracks NOT Permitted

Dome Cap

A crack that does not intersect a mounting hole or free edge

Examples of Cracks Permitted

Dome Cap

A crack that continues through a mounting hole or stop drilled hole

A crack circling a mounting hole

W10502

Spinner Cap
Figure 5-10

Component Inspection Criteria

Table 5-1

	Inspect	Serviceable Limits	Corrective Action
J.	<u>DOME CAP</u> (Item 150) Refer to Figure 5-10.		
(1)	Visually examine the inside and the outside of the dome cap for cracks.	For a dome cap with four or fewer mounting holes, a maximum total of one crack for each dome cap is permitted. For a dome cap with five or more mounting holes, a maximum total of two cracks for each dome cap is permitted. A crack that intersects a free edge is permitted.	If there are more cracks than the permitted serviceable limits, replace the dome cap.
		A crack with a maximum length of 1.00 inch (25.4 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.	If there are more cracks than the permitted serviceable limits, replace the dome cap.
		A crack that intersects a free edge is permitted.	A crack with a maximum length of 1.00 inch (25.4 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.
		A maximum of one crack intersecting each mounting hole is permitted.	If there is a crack that does not meet the permitted serviceable limits, replace the dome cap.
		A crack with a maximum length of 0.75 inch (19 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.	A crack with a maximum length of 0.75 inch (19 mm) may be stop drilled one time at the end of the crack in accordance with the section, "Stop Drilling of a Crack" in the Repair and Modification chapter of this manual.
		If there is a crack that does not meet the permitted serviceable limits, replace the dome cap.	If there is a crack that does not meet the permitted serviceable limits, replace the dome cap.
		A crack circling a mounting hole is permitted up to a maximum of 1/3 of the circumference of the hole.	Stop drilling is not required. Inspect the crack before each flight. If the crack is larger than the serviceable limits, no further flight is permitted and the dome cap must be replaced.
		A crack that continues through a mounting hole or stop drilled hole is not permitted.	If there is a crack that does not meet the permitted serviceable limits, replace the dome cap.
		A crack that produces a piece that has no attachment to the dome cap is not permitted.	If there is a crack that does not meet the permitted serviceable limits, replace the dome cap.

Component Inspection Criteria

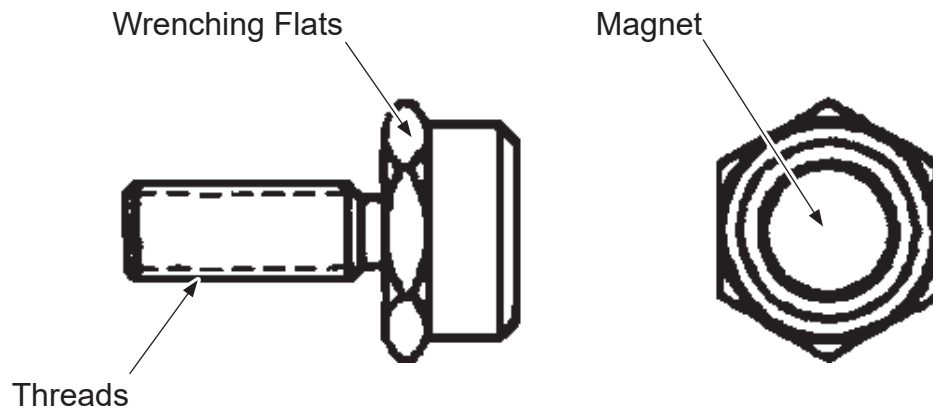
Table 5-1

Inspect	Serviceable Limits	Corrective Action
J. <u>DOME CAP, continued</u> (Item 150) Refer to Figure 5-10.		
(2) Visually examine the dome cap for wear.	The maximum permitted depth of wear is 0.005 inch (0.12 mm).	Wear that is deeper than 0.005 Inch (0.12 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.010 inch (0.25 mm). The maximum permitted total accumulation of any repairs on the dome cap is 5% of the dome cap surface area. If the wear is greater than the permitted serviceable limits or corrective action limits, replace the dome cap.
(3) Visually examine the dome cap for dents. (Refer to the definition of a "dent" in the Introduction chapter of this manual).	The maximum permitted deflection from normal contour is 0.005 inch (0.12 mm) over a maximum area of one square inch (645 square mm) for each dent. The maximum permitted dome cap surface area that may be dented is 5%. A dent that affects the fit or function of the dome cap is not permitted.	If a dent or dents are greater than the permitted serviceable limits, replace or repair the dome cap in accordance with the section, "Repair of Dents" in the Repair and Modification chapter of this manual.
(4) Visually examine the dome cap for scratches.	There may be an unlimited number of scratches that have a maximum permitted depth of material loss of 0.004 inch (0.10 mm).	A scratch that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.010 inch (0.25 mm). The maximum permitted total accumulation of any repairs on the dome cap is 5% of the dome cap surface area. If the scratch is greater than the permitted serviceable limits or corrective action limits, replace the dome cap.

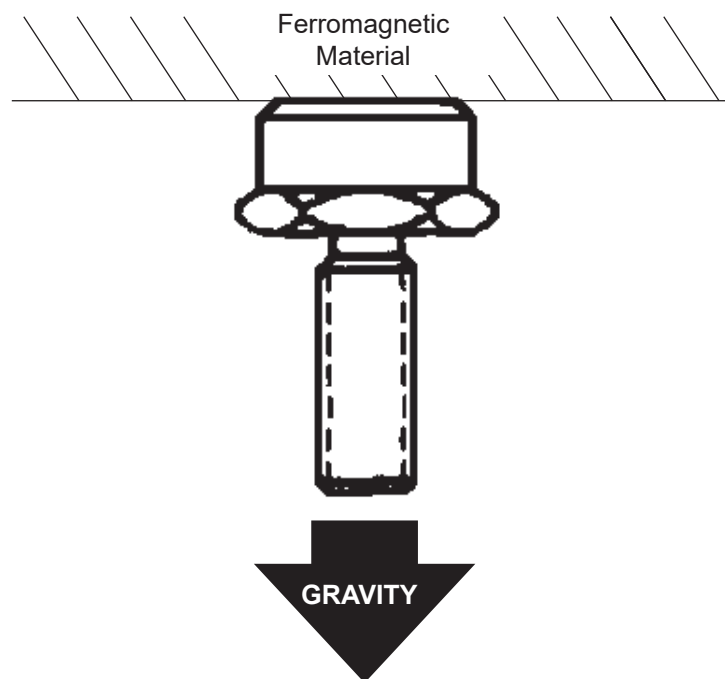
Component Inspection Criteria

Table 5-1

	Inspect	Serviceable Limits	Corrective Action
J.	<u>DOME CAP, continued</u> (Item 150) Refer to Figure 5-10.		
(5)	Visually examine the dome cap for gouges.	The maximum permitted depth of a gouge is 0.004 inch (0.10 mm).	A gouge that is deeper than 0.004 inch (0.10 mm) must be removed by polishing with emery cloth or equivalent to a maximum depth of 0.010 inch (0.25 mm). The maximum total accumulation of any repairs on the dome is 5% of the dome cap surface area. If the depth of the gouge is greater than the permitted serviceable limits or corrective action limits, replace the dome cap.
(6)	Visually examine each mounting hole for wear. Refer to Figure 5-3.	Wear beyond the head of the screw is not permitted. At installation, a minimum of 2/3 of the head of the screw must contact the dome cap.	If the wear is greater than the permitted serviceable limits, replace the dome cap.
(7)	Visually examine the dome cap internal and external surfaces for pitting.	Internal Surfaces: Pitting is permitted to a depth of 0.002 inch (0.05 mm) with no limit on area. Pitting between 0.002 inch (0.05 mm) to a maximum depth of 0.004 inch (0.10 mm) is permitted to a total accumulated area of 2 square inches (1290 square mm). External Surfaces: Pitting to a maximum depth of 0.002 inch (0.05 mm) is permitted to a total accumulated area of 2 square inches (1290 square mm).	Pitting greater than the permitted serviceable limits must be removed by polishing with abrasive pad CM47 or equivalent. The maximum depth of repair is 0.008 inch (0.20 mm) when the opposing surface (internal or external) does not require repair in the same location. The maximum depth of repairs on an internal and external surface in the same location is 0.005 inch (0.12 mm) on each opposing surface. The maximum permitted total accumulation of all repairs on the dome cap is 5% of the total dome cap surface area. If pitting repair is greater than the serviceable limits, replace the dome cap.
(8)	For C-4523-1() Caps on D-4512() or D-4512-1() Domes: A modification may have been performed. Refer to the Repair and Modification chapter in this Manual.		



Magnetic Force Test

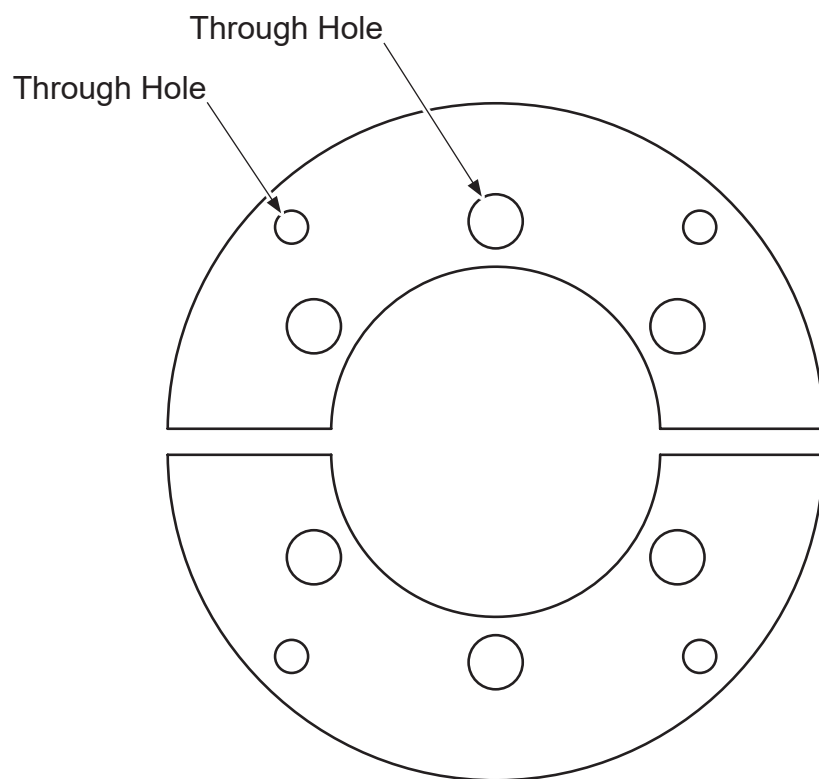


B-6371

Threaded Magnetic Target
Figure 5-11

Component Inspection Criteria
Table 5-1

	Inspect	Serviceable Limits	Corrective Action
K.	<u>THREADED MAGNETIC TARGET</u> (Item 270) Refer to Figure 5-11.		
(1)	Visually examine the threaded magnetic target for corrosion product and pitting.	Corrosion product is not permitted. Pitting that affects fit or function is not permitted.	Corrosion product may be removed using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02). If corrosion product or pitting is greater than the permitted serviceable limits, replace the threaded magnetic target.
(2)	Visually examine the threaded magnetic target for damage.	Damage that affects fit or function is not permitted.	If the damage is not within the permitted serviceable limits, replace the threaded magnetic target.
(3)	Perform a test to make sure that the magnet in the threaded magnetic target has a magnetic force.	The magnet must have a magnetic force that pulls it to ferromagnetic materials, for example, steel. The magnetic force must be sufficient to support the weight of the threaded magnetic target against gravity.	If the magnetic force is not within the serviceable limits, replace the threaded magnetic target.
(4)	Visually examine the wrenching flats (hex) of the threaded magnetic target for wrench damage.	Corners between the wrenching flats may be rounded. Two wrenching flats must be sufficiently undamaged to withstand the installation torque. Material displacement is not permitted to interfere with the mating parts.	File away any unwanted material displacement. If a minimum of two flats will not withstand installation torque, replace the threaded magnetic target.
(5)	Visually examine the threads of the threaded magnetic target.	A maximum of 3/4 of one thread total accumulated damage is permitted.	If the damage is greater than the permitted serviceable limits, replace the threaded magnetic target.
(6)	Visually examine the threaded magnetic target for tight retention of the magnet.	The magnet must be tight inside the housing. A loose magnet is not permitted.	If the magnet is not tight in the housing, replace the threaded magnetic target.



B-1344

Spinner Mounting Plate
Figure 5-12

Component Inspection Criteria

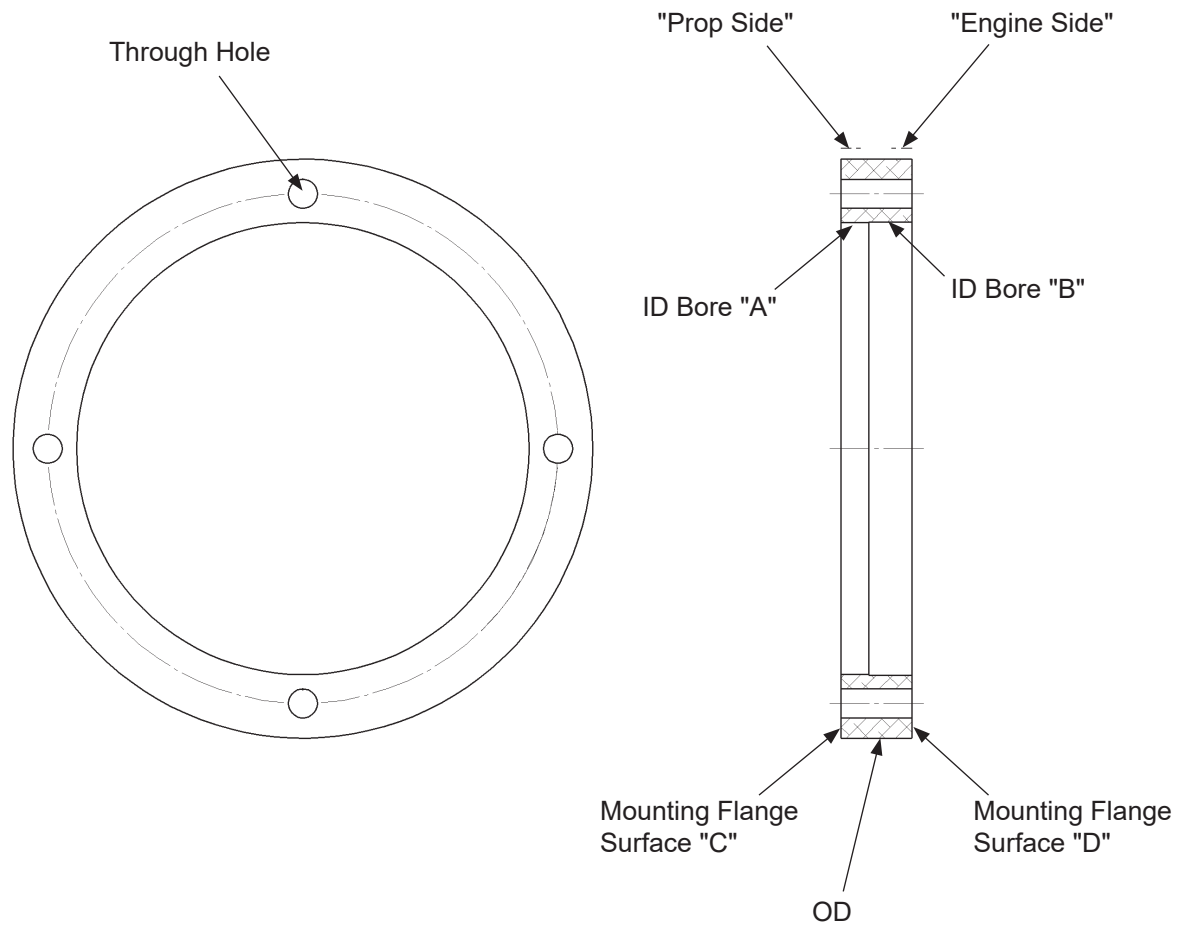
Table 5-1

	Inspect	Serviceable Limits	Corrective Action
L.	<u>SPINNER MOUNTING PLATE</u> (Item 300) Refer to Figure 5-12.		
(1)	Visually examine the spinner mounting plate for corrosion product and pitting.	Corrosion product is not permitted. The maximum permitted depth of pitting is 0.005 inch (0.12 mm).	Light corrosion product may be removed by using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02). Local polishing to a maximum of 0.010 inch deep (0.25 mm) is permitted to a maximum area of 0.5 square inch (322 square mm) of total accumulated repair for each side of the spinner mounting plate. Local polishing that intersects any part of a hole circumference is not permitted. If corrosion product or pitting is greater than the permitted serviceable limits or the corrective action limits, replace the spinner mounting plate.
(2)	Visually examine the spinner mounting plate for scratches or damage.	The maximum permitted depth of a scratch or damage is 0.005 inch (0.12 mm).	Local polishing to a maximum of 0.010 inch deep (0.25 mm) is permitted to a maximum area of 0.5 square inch (322 square mm) of total accumulated repair for each side of the spinner mounting plate. Local polishing that intersects any part of a hole circumference is not permitted. If scratches or damage is greater than the permitted serviceable limits or the corrective action limits, replace the spinner mounting plate.
(3)	Magnetic particle inspect the spinner mounting plate in accordance with the Magnetic Particle Inspection chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).	A relevant indication is not permitted.	If there is a relevant indication, replace the spinner mounting plate.

Component Inspection Criteria

Table 5-1

Inspect	Serviceable Limits	Corrective Action
L. <u>SPINNER MOUNTING PLATE</u> (Item 300) Refer to Figure 5-12.		
(4) Visually examine the spinner mounting plate for cadmium plate coverage.	Except for a few minor scratches and corners with cadmium plate missing, complete cadmium plate coverage is required.	If the cadmium plate coverage is not within the serviceable limits, replate the spinner mounting plate in accordance with the Cadmium Replating chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).
(5) Inspect each through hole for damage.	Damage that interferes with the piloting of the associated fastener is not permitted.	If the damage to the hole is greater than the permitted serviceable limits, replace the spinner mounting plate.



NOTE: To establish orientation of the markings if both are missing on both sides, the diameter of ID Bore "B" is larger than the diameter of ID Bore "A".

Bulkhead Spacer
Figure 5-13

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
M. <u>BULKHEAD SPACER</u> (Item 310) Refer to Figure 5-13.		
(1) Visually examine the bulkhead spacer for corrosion product.	Corrosion product is not permitted.	Remove corrosion product using glass bead cleaning in accordance with the Cleaning chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).
(2) Visually examine the ID bore "A" and ID bore "B" of the bulkhead spacer for nicks, scratches, damage, or pitting.	The maximum permitted depth of a nick, scratch, damage, or pitting is 0.005 inch (0.12 mm). Linear pitting is not permitted.	Repair nicks, scratches, damage, or pitting by polishing with an abrasive pad CM47 or equivalent. The maximum permitted depth of repair is 0.020 inch (0.50 mm). The maximum permitted total area of nicks, scratches, damage, or pitting and repair of ID bore "A" and ID bore "B" is 25% of each surface.
(3) Visually examine the ID of each through hole of the bulkhead spacer for nicks, scratches, damage, or pitting.	The maximum permitted depth of a nick, scratch, damage, or pitting is 0.005 inch (0.12 mm). The maximum permitted total accumulated area of nicks, scratches, damage, pitting, and repair is 25% of each through hole. Linear pitting is not permitted.	Repair nicks, scratches, damage, or pitting by polishing with an abrasive pad CM47 or equivalent. The maximum permitted depth of repair is 0.020 inch (0.50 mm). Nicks, scratches, damage, pitting, or repair must not affect the fit of the bulkhead spacer with the mating parts.
(4) Measure the ID of each through hole of the bulkhead spacer.	The maximum permitted ID is 0.3175 inch (8.064 mm).	If the ID is greater than the permitted serviceable limits, replace the bulkhead spacer.

Component Inspection Criteria

Table 5-1

Inspect	Serviceable Limits	Corrective Action
M. <u>BULKHEAD SPACER, continued</u> (Item 310) Refer to Figure 5-13.		
(5) Visually examine mounting flange surface "C" and mounting flange surface "D" of the bulkhead spacer for nicks, scratches, gouges, pitting, or other damage.	The maximum permitted depth of nicks, scratches, gouges, pitting, or other damage is 0.005 inch (0.12 mm). Material may not be pushed up above the undamaged adjacent surfaces. Linear pitting is not permitted.	Repair nicks, scratches, gouges, pitting, or other damage by polishing with an abrasive pad CM47 or equivalent. The maximum permitted depth of repair is 0.020 inch (0.50 mm). The maximum permitted total area of nicks, scratches, gouges, pitting, or other damage and repair for each side is 0.5 square inch (322 square mm). The maximum permitted area of an individual repair is 0.25 square inch (161 square mm) and must be at least 0.250 inch (6.35 mm) from any other repaired area. Nicks, scratches, gouges, pitting, other damage, or repair that affects the fit of the bulkhead spacer with the mating parts is not permitted. If the nicks, scratches, gouges, pitting, other damage, or repair is greater than the permitted serviceable limits or the corrective action limits, replace the bulkhead spacer.
(6) Visually examine the OD of the bulkhead spacer for nicks, scratches, gouges, pitting, or other damage.	The maximum permitted depth of nicks, scratches, gouges, pitting, or other damage is 0.005 inch (0.12 mm). The maximum permitted total accumulated area of nicks, scratches, gouges, pitting, or other damage is 0.5 square inch (322 square mm). Linear pitting is not permitted.	Repair nicks, scratches, gouges, pitting, or other damage by polishing with an abrasive pad CM47 or equivalent. The maximum permitted depth of repair is 0.020 inch (0.50 mm). The maximum permitted total area of nicks, scratches, gouges, pitting, other damage, and repair is 1.0 square inch (645 square mm). If the nicks, scratches, gouges, pitting, other damage, or repair is greater than the permitted serviceable limits or the corrective action limits, replace the bulkhead spacer.

Component Inspection Criteria
Table 5-1

Inspect	Serviceable Limits	Corrective Action
M. <u>BULKHEAD SPACER, continued</u> (Item 310) Refer to Figure 5-13.		
(7) Visually examine both sides of the bulkhead spacer for the markings "Prop Side" and "Engine Side".	There must be a marking "Prop Side" on one side and "Engine Side" on the other side of the bulkhead spacer.	Using a round bottom stamp or an electric pencil, apply the words "Prop Side" and "Engine Side" to the applicable mounting surface. Remove any pushed up material using a customer procured whetstone.
(8) Penetrant inspect the bulkhead spacer in accordance with the Penetrant Inspection chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).	A relevant indication is not permitted.	If there is a relevant indication, replace the bulkhead spacer.
(9) Visually examine the bulkhead spacer for anodize coverage.	A minimum of 95% anodize coverage is required.	Anodize the bulkhead spacer or repair by applying chemical conversion coating to the bare aluminum in accordance with the Chromic Acid Anodize chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02). A maximum of 5% of bare aluminum may be covered with chemical conversion coating. If using anodizing, complete the penetrant inspection before anodizing the bulkhead spacer.

REPAIR AND MODIFICATION - CONTENTS

1. General	6-3
A. Plating and Welding of Aluminum Spinners	6-3
B. Repair of a Dent	6-3
C. Painting	6-4
D. Factory Polish.....	6-5
E. Replacement of Nutplates, Rivets, and Rivnuts.....	6-5
F. Stop Drilling of a Crack.....	6-6
G. Modification of a Bulkhead for Dynamic Balance	6-6
2. Specific Repair and Modifications.....	6-7
A. Spinner Bulkhead Modification for HC-()2Y()-() Propellers	6-7
B. Spinner Bulkhead Modification for HC-()3Y()-() Propellers	6-15
C. Removal of a Ridge on the ID of the 836-57() Spinner Dome Installed on the 690 Rockwell Commander	6-16
D. Optional Use of Bolts to Replace Bulkhead Rivet on the 836-15R Spinner Assembly	6-17
E. Installing Filler Plates on C-3043-(2,3) Spinner Assemblies	6-19
F. Filler Plate Replacement	6-21
G. Modification to Drain Water from Spinner Assemblies: D-630-1(), 104552, 105180, and 105820	6-24
H. Modification of C-4523-2() Caps and D-4512() or D-4512-2() Spinner Domes	6-25
I. Repair of Damage to the Spinner Dome Cut-out Area	6-28
J. Spinner Bulkhead Requirements to Maintain Propeller Balance	6-29
K. Modification of a D-5555-1(L)() Bulkhead for Synchrophaser Hardware and Dynamic Balance	6-30
L. Replacing a Two-piece Dome with a One-piece Dome	6-37
M. 835-54() Spinner Assembly Filler Plate Removal.....	6-39
N. 835-54() Spinner Assembly, Modification of the Spinner Dome	6-42
O. 835-54() Spinner Assembly, Modification of the Spinner Dome	6-42
P. Modification of the D-6448-3(P) Spinner Bulkhead	6-44
Q. Application of the Timing Stripe.....	6-49
R. Modification of the C-2294-11(P) Bulkhead for Installation of CAV Aerospace (TKS) Anti-Ice Components	6-51
S. Replacement of the UHMW Tape	6-51

LIST OF FIGURES

Two-bladed Propeller Bulkhead Cutout Dimensions	Figure 6-1	6-8
Two-bladed Propeller Bulkhead Modification Template.....	Figure 6-2	6-9
Installing the Bulkhead Mounting Doublers	Figure 6-3	6-11
Three-bladed Propeller Bulkhead Modification Dimensions.....	Figure 6-4	6-14
Removing the ID Ridge From the 836-57() Spinner Dome	Figure 6-5	6-16
Optional Use of Bolts to Replace the Bulkhead Rivet on the 836-15R Spinner	Figure 6-6	6-17
C-4238 Filler Plate Specifications.....	Figure 6-7	6-18
Filler Plates without Predrilled Floating Nutplate Attachment Screw Holes	Figure 6-8	6-20
Drilling Drain Holes in the Spinner Bulkhead.....	Figure 6-9	6-23
Area of Repair for Spinner Dome Cut-out	Figure 6-10	6-27
Location of Holes for Dynamic Balance Weights.....	Figure 6-11.....	6-31
Location of Holes for Synchrophaser System	Figure 6-12	6-33
Dimensions for Synchrophaser System	Figure 6-13	6-34
Hex Nut Configuration	Figure 6-14	6-36
A Cutaway View of the Spinner Dome.....	Figure 6-15	6-40
D-5769-1 Spinner Dome, 102963 Front Bulkhead, and 102987 Spacer.....	Figure 6-16	6-41
Spinner Bulkhead D-6448-3 Modification	Figure 6-17	6-43
Timing Stripe Specifications	Figure 6-18	6-45
Modification of C-2294-11(P) Bulkhead for Anti-ice.....	Figure 6-19	6-50
UHMW Tape Location - For a Forward Bulkhead that is Bonded to the Spinner Dome	Figure 6-20	6-52
UHMW Tape Location - Forward Bulkhead that is <u>Not</u> Bonded to the Spinner Dome	Figure 6-21	6-53

LIST OF TABLES

Spinner Bulkheads that can be Modified (Two-bladed Propellers).....	Table 6-1	6-7
Spinner Bulkheads that can be Modified (Three-bladed Propellers) ..	Table 6-2	6-13
Spinner Bulkheads Required to be Replaced	Table 6-3	6-13
Drain Hole Location - Dimension "A"	Table 6-4	6-24

(Blank Page)

WARNING: DO NOT ATTEMPT IN THE FIELD ANY REPAIR, REPLACEMENT, REWORK OR PROCEDURE NOT SPECIFICALLY AUTHORIZED BY HARTZELL PROPELLER OR NOT SPECIFICALLY REFERRED TO IN HARTZELL MANUALS. CONTACT THE HARTZELL PROPELLER PRODUCT SUPPORT DEPARTMENT FOR GUIDANCE ABOUT THE AIRWORTHINESS OF ANY PART WITH UNUSUAL WEAR OR DAMAGE.

1. General

A. Plating and Welding of Aluminum Spinners

- (1) Plating, chrome plating, welding, or cold-weld metal epoxy of any type is not permitted as a repair of a spinner component.

B. Repair of a Dent

CAUTION: A HIGH AMOUNT OF METAL MOVEMENT CAN RESULT IN FORMATION OF A CRACK. IF A CRACK DEVELOPS, REFER TO CRACK LIMITS FOR SPINNER DOMES IN TABLE 5-1 IN THE CHECK CHAPTER OF THIS MANUAL.

(1) Spinner Dome and Dome Cap Dent Repair

- (a) Using a non-metallic hammer and a contoured block, restore the original contour by striking the internal side lightly with a hammer while holding a smooth contoured block on the external side.

CAUTION: IF THE ORIGINAL CONTOUR CANNOT BE ESTABLISHED OR IF MORE THAN 0.008 INCH (0.20 MM) OF THE ORIGINAL THICKNESS IS LOST, REPLACE THE SPINNER DOME OR DOME CAP.

- (b) Smooth the repaired area with emery cloth or equivalent.
- (c) Use a 320 to 400 grit abrasive cloth to prepare external surfaces for a high luster finish if desired.
- (d) For a high luster finish on external surfaces, polish the repaired area using an automotive type aluminum finish medium.

(2) Other Component Dent Repair

CAUTION: A HIGH AMOUNT OF METAL MOVEMENT CAN RESULT IN FORMATION OF A CRACK. INSPECT THE SUBJECT COMPONENT FOR CRACKS AFTER REMOVING DENTS.

- (a) Using a non-metallic hammer and a smooth contoured block, restore the original contour by striking the opposite side (side opposite that which was contacted by the denting force) lightly with a hammer while holding a smooth contoured block on the opposite side.
- (b) Smooth the repaired area with emery cloth or equivalent.

C. Painting

- (1) The spinner dome may be painted before installation on the aircraft, if desired.
 - (a) Paint only the areas of the bulkhead that will be exposed when the spinner dome is installed.
 - (b) Make sure that the serial number is visible after painting.
 - (c) If the spinner dome is polished, lightly sand the surfaces using 280 grit or finer sandpaper.

(3) Painting Recommendations

NOTE: Refer to the Paint and Finish chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02) for recommended general painting guidelines.

- (a) Using a cloth soaked with solvent such as MEK CM106, MPK CM219, or lacquer thinner, wipe the sanded surface.
- (b) Let the solvent dry.
- (c) Mask the areas that will not be painted.
- (d) Apply a wash primer, such as wash primer Mix #3.
- (e) Apply paint to a recommended full completed coverage of 2 to 4 mils dry thickness of paint.

NOTE: Hartzell recommends using Sherwin-Williams Polane paint.

(4) Timing Stripe

- (a) When manufactured, a timing stripe was applied to Hartzell bulkheads that have the following part numbers:
 - 1 C-3064-9()
 - 2 D-3474-1()
 - 3 D-4801()
 - 4 D-5241()
- (b) For instructions about applying the timing stripe, refer to the section "Applying the Timing Stripe" in this chapter.

D. Factory Polish

- (1) If a polished spinner dome is desired, add the letter "P" to the end of the part number when ordering.

CAUTION: POLISHING IN THE FIELD IS NOT RECOMMENDED.

- (a) Polishing in the field is extremely labor intensive and the results may be unpredictable.

- (2) Hartzell Propeller will not re-polish any component of a spinner assembly.

E. Replacement of Nutplates, Rivets, and Rivnuts

CAUTION: WHEN DRILLING OUT A RIVET, DO NOT MAKE THE RIVET HOLE OVERSIZED.

- (1) Using the appropriate drill bit, drill out the rivet.
- (2) Replace the nutplate, rivet, and/or rivnut in accordance with the procedures in the FAA Advisory Circular 43.13-1B.
- (3) The following is a list of nutplates that may be replaced.
 - (a) B-3849-08 Nutplate, floating, (stainless)
 - (b) B-3849-3 Nutplate, floating
 - (c) B-3846-3 Nutplate, fixed
 - (d) B-3858-3 Nutplate, fixed, cres (stainless)
 - (e) B-6983 Nutplate, floating, acorn
 - (f) B-7052-3 Nutplate, fixed
- (4) The following is a list of rivets that may be replaced.
 - (a) B-3847-() Rivet, 100° head, 0.094 aluminum
 - (b) B-3848-() Rivet, 100° head, 0.125 aluminum
 - (c) B-3861-() Rivet, universal head, 0.125 aluminum
 - (d) B-3862-() Rivet, universal head, 0.188 aluminum
 - (e) B-3863-() Rivet, universal head, 0.250 aluminum
 - (f) B-6673-0306 Rivet, 100° head, pop-type
- (5) The following is a list of rivnuts that may be replaced.
 - (a) B-7333-75 Rivnut, aluminum
 - (b) B-7333-120 Rivnut, aluminum
 - (c) B-7333-200 Rivnut, aluminum

F. Stop Drilling of a Crack

(1) Procedure

CAUTION: DO NOT DRILL MORE THAN ONE HOLE AT THE END OF A CRACK.

- (a) Using a 1/8 inch drill bit, drill a hole at the end of the crack to minimize further cracking.
- (b) Drilling more than one hole at the end of a crack is not permitted.
- (c) Deburr the newly drilled hole.

(2) Continued Operation

- (a) Inspect the stop drilled crack before each flight.
- (b) If the crack continues beyond the stop drilled hole, no further flight is permitted and the part must be replaced.

G. Modification of a Bulkhead for Dynamic Balance

- (1) Chadwick-Helmuth Manual AW-9511-2, "The Smooth Propeller", specifies several generic bulkhead rework procedures. These are satisfactory if they comply with the conditions specified in the Static and Dynamic Balance chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).

2. Specific Repair and Modifications

A. Spinner Bulkhead Modification for HC-()2Y()-() Propellers

(1) General

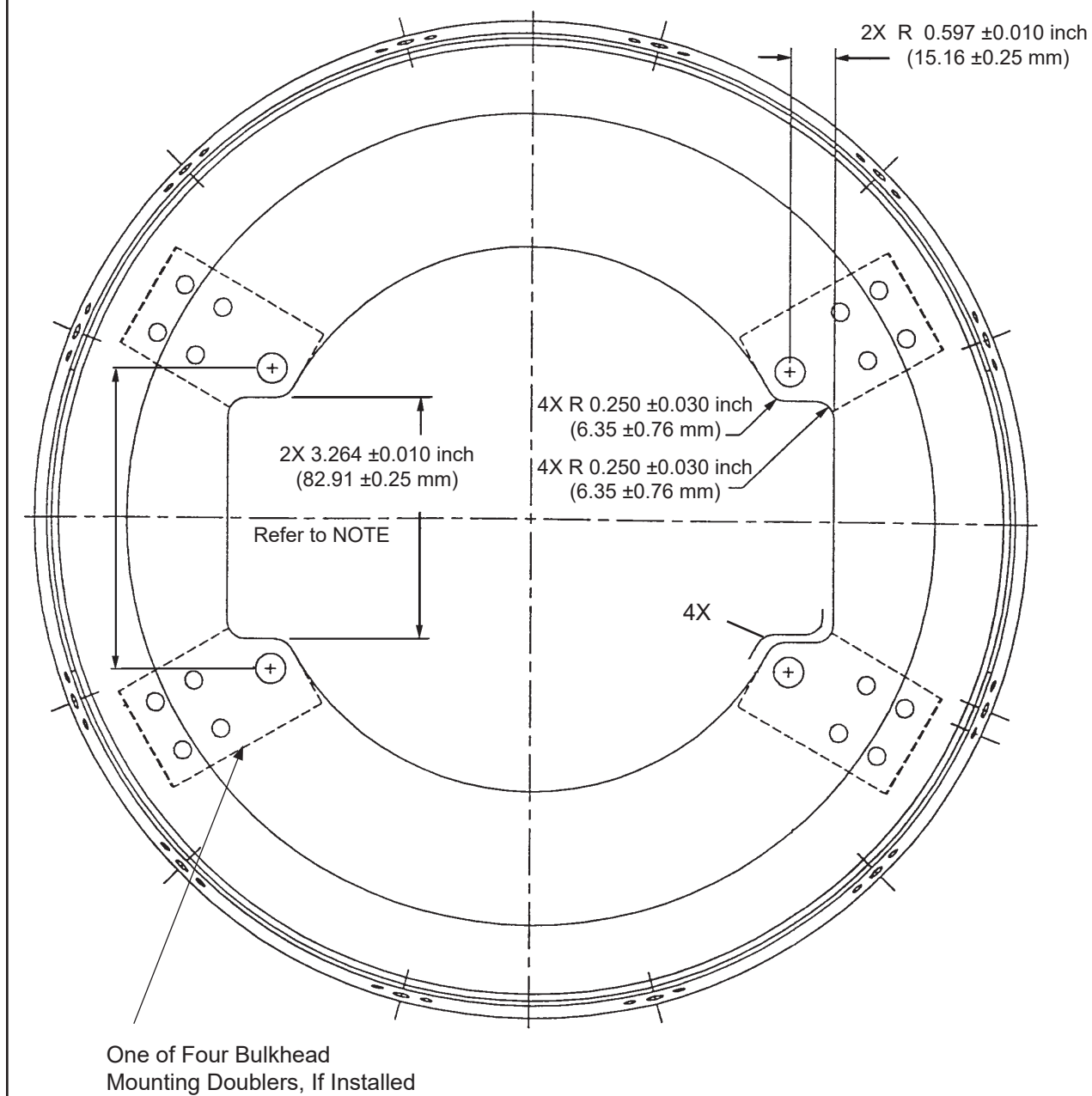
- (a) Since April, 1997, Hartzell Propeller has produced an improved two-bladed compact propeller hub.
- (b) The improved style hub is identified by the letter "B" at the end of the hub serial number and the propeller serial number.
- (c) Installation of an earlier style bulkhead on an improved style hub requires modification, except for spinner bulkheads mounted to starter ring gears.
- (d) The modification may be done in accordance with the procedures provided in this section.
- (e) For a propeller that uses a non-Hartzell spinner, contact the applicable type certificate holder for modification instructions.

Previous Bulkhead Part Number	Replaced By
C-2283	C-2283-7
C-2283-1	C-2283-8
C-2283-2	C-2283-9
C-2283-2P	C-2283-9P
C-2283-3	C-2283-10
C-2283-4	C-2283-11
C-2283-5	C-2283-12
C-2283-6	C-2283-13
C-2294	C-2294-5
C-2294-2	C-2294-7
C-2294-3	C-2294-8
C-2294-3P	C-2294-8P
C-2299	C-2299-3
C-2299-1	C-2299-4
C-2299-2	C-2299-5
C-2299-2P	C-2299-5P
C-2469	C-2469-2
C-2469-1	C-2469-3
C-2469-1L	C-2469-3L

Previous Bulkhead Part Number	Replaced By
C-2472	C-2472-3
C-2472-1	C-2472-4
C-2472-2	C-2472-5
C-3228	C-3228-1
C-3283-1	C-3283-4
C-3283-2	C-3283-5
C-3295	C-3295-1
C-3534	C-3534-2
C-3534-1	C-3534-3
C-3569	C-3569-1
C-4567	C-4567-1
D-4534	D-4534-1
D-4812	D-4812-1
D-4825	D-4825-1
D-4834L	D-4834-1L
D-5258	D-5258-1
D-5751	D-5751-2
D-5751-1	D-5751-3
D-5751-1L	D-5751-3L

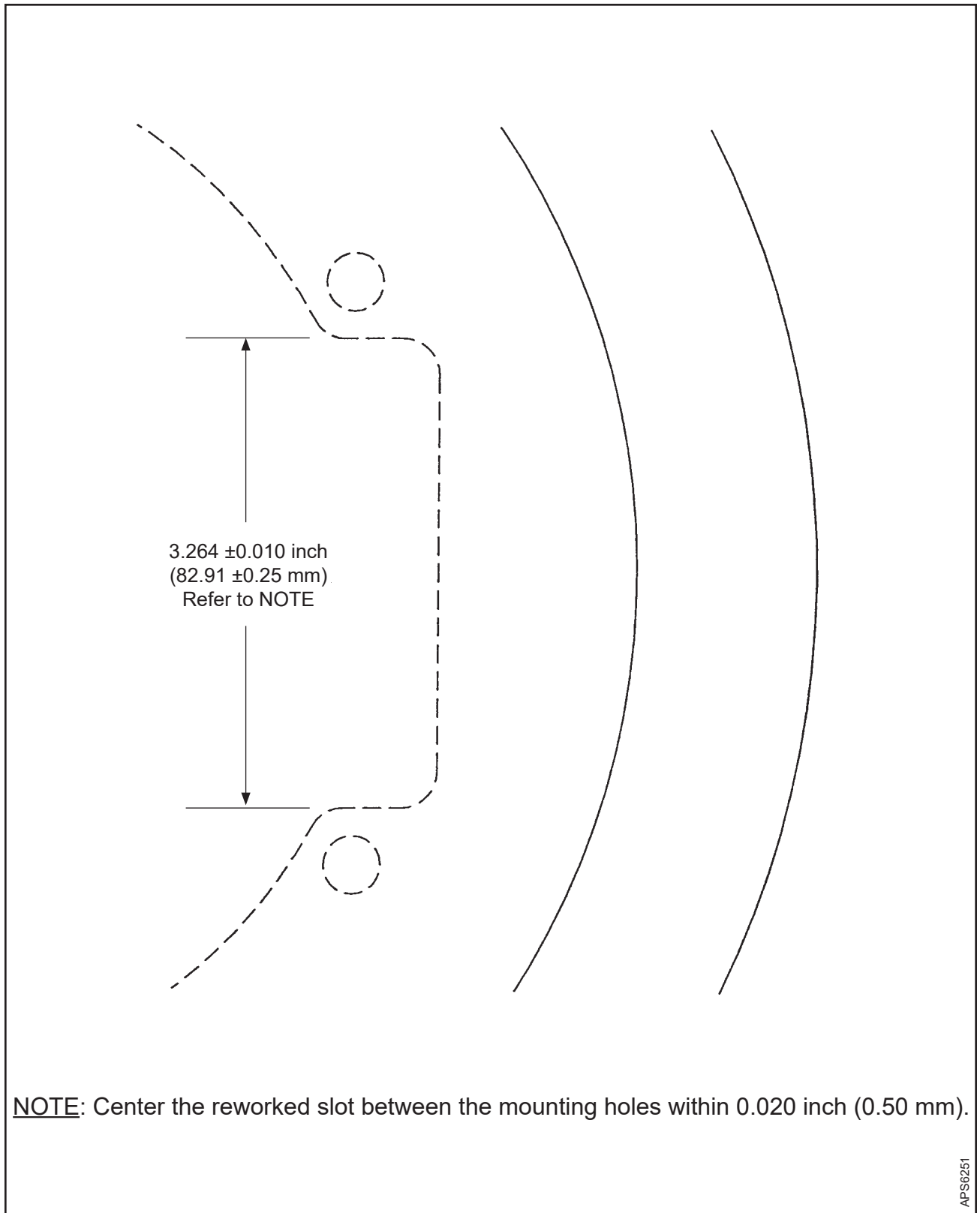
Spinner Bulkheads that can be Modified (Two-bladed Propellers)

Table 6-1



NOTE: Center the reworked slot between the mounting holes within 0.020 inch (0.50 mm)

Two-bladed Propeller Bulkhead Cutout Dimensions
Figure 6-1



Two-bladed Propeller Bulkhead Modification Template
Figure 6-2

(2) Two-bladed Propeller Spinner Bulkheads with Mounting Doublers

(a) The modification provides bulkhead clearance from the new style hub.

- 1 Refer to Table 6-1 for a list of two-bladed compact spinner bulkhead part numbers that can be modified.

(b) Make cutouts in accordance with the dimensions provided in Figure 6-1.

- 1 Fabricate a template to match the broken lines in Figure 6-2.
- 2 Align the holes in the template with the mounting holes on the bulkhead.
- 3 Using hub bolts a suitable alternate, hold the template in place on the bulkhead.

CAUTION: MAKE SURE THAT THE DIMENSIONS OF THE TEMPLATE ARE CORRECT BEFORE CUTTING THE BULKHEAD.

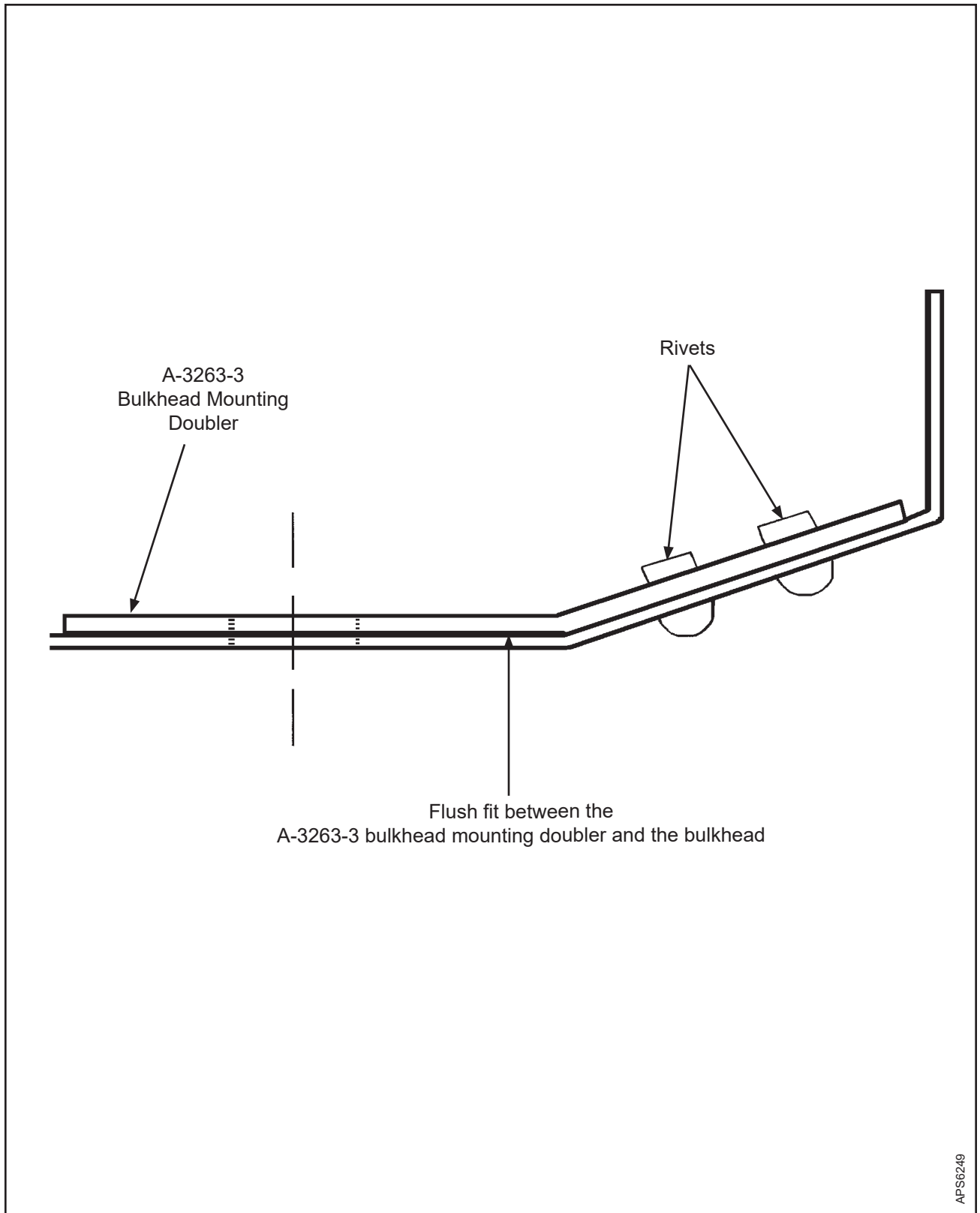
- 4 Mark the areas to be removed.
- 5 Using a mill, nibbler, grinder, or other appropriate tooling, remove the material.
 - a For best results, remove the material using a milling machine.
- 6 Remove all burrs and rough edges.
- 7 Inspect the cutout for the correct dimensions.
 - a If the dimensions of the cutout are not within the dimensions provided in Figure 6-1, replace the bulkhead.

(c) Apply zinc-chromate primer CM67 to the exposed edge of the bulkhead mounting doublers.

NOTE: The bulkhead mounting doublers are fabricated from steel and require corrosion protection.

(d) Vibra etch a "B" after the serial number on the bulkhead.

(e) Install the spinner bulkhead to the propeller hub.



Installing the Bulkhead Mounting Doublers
Figure 6-3

(3) Two-bladed Propeller Spinner Bulkheads without Mounting Doublers

- (a) The modification provides bulkhead clearance from the new style hub.
 - 1 Refer to Table 6-1 for a list of two-bladed compact spinner bulkhead part numbers that can be modified.
- (b) Install four A-3263-3 mounting doublers on the spinner bulkhead.

CAUTION: IT IS CRITICAL THAT THE BULKHEAD MOUNTING DOUBLER BE INSTALLED FLUSH WITH THE CONTOUR OF THE SPINNER BULKHEAD.

- 1 It may be necessary to bend the bulkhead mounting doubler slightly for a correct fit. Refer to Figure 6-3.
- 2 Ream the hub bolt mounting hole in the bulkhead mounting doubler to 0.404 - 0.413 inch (10.26 - 10.49 mm).
- 3 Using 120 grit sandpaper, remove any excess adhesive.

NOTE: Cured structural adhesive may prevent the bulkhead mounting doubler from lying flush on the spinner bulkhead.
- 4 Put a bulkhead mounting doubler on the engine side of the spinner bulkhead.
- 5 Align the mounting hole in the bulkhead mounting doubler with the mounting hole in the spinner bulkhead.
- 6 Making sure that the bulkhead mounting doubler is flush with the spinner bulkhead surface, clamp the bulkhead mounting doubler in place on the spinner bulkhead.
 - a Using the rivet holes in the bulkhead mounting doubler as a template and a #30 twist drill, drill the rivet holes (4 holes in each bulkhead mounting doubler) through the spinner bulkhead.
 - b Deburr all of the newly drilled holes.
 - c If a spinner bulkhead part number will be covered by a bulkhead mounting doubler, relocate the part number or make a record of the part number in the propeller logbook.
- 7 Using B-3861-7 rivets, fasten the mounting doubler in accordance with aircraft standard practices.
- 8 Repeat steps (3)(b)1 through (3)(b)6c of this procedure to install the remaining mounting doublers.

NOTE: Installation of the bulkhead mounting doublers will not require a longer hub mounting bolt.
- 9 Make cutouts in accordance with step (2) of this procedure.

Spinner Assembly	Previous Bulkhead P/N	Modified Bulkhead P/N
A-837-12	C-3286()	C-3286-1()
A-2295-1	C-2294-1()	C-2294-12()
A-2295-2	C-2294-4()	C-2294-13()
A-2295-4	C-2294-10()	C-2294-14()
C-3535	C-3539()	C-3539-1()
C-3535-1	C-3539()	C-3539-1()
C-3535-2	C-3539()	C-3539-1()
C-3565	C-3566()	C-3566-6()
C-3567	C-3566-1()	C-3566-7()
C-3567-1(L)	C-3566-1()	C-3566-7()
C-3567-2	C-3566-2()	C-3566-8()
C-3567-4	C-3566-4()	C-3566-10()
C-3567-5(L)	C-3566-5()	C-3566-11()
C-3567-6(L)	C-3566-4()	C-3566-10()
C-3570	C-3571()	C-3571-1()
C-3575	C-3576()	C-3576-2()
C-3575-1	C-3576-1()	C-3576-3()
C-4558	D-4561()	D-4561-4()
C-4558-1	D-4561-1()	D-4561-5()
C-4558-2	D-4561-2()	D-4561-6()

Spinner Assembly	Previous Bulkhead P/N	Modified Bulkhead P/N
C-4558-3	D-4561-3()	D-4561-7()
C-4582	C-4583()	C-4583-2()
C-4582-1	C-4583-1()	C-4583-3()
C-6446	C-6448()	C-6448-1()
D-1649	D-1648()	D-1648-1()
D-3273	C-3267()	C-3267-4()
D-3273-1(L)	C-3267-1()	C-3267-5()
D-3273-2	C-3267-2()	C-3267-6()
D-4247	C-3566-3()	C-3566-9()
D-4578	D-4581()	D-4581-1()
D-4841	D-4877()	D-4877-1()
D-4841-1	C-3566-4()	C-3566-10()
D-5205	D-4561-3()	D-4561-7()
D-5489	D-5491()	D-5491-1()
D-5495L	C-3539()	C-3539-1()
D-6750	D-6753()	D-6753-1()
D-6841	D-6839()	D-6839-1()
D-6936	C-3571()	C-3571-1()
D-7067	D-7065()	D-7065-1()

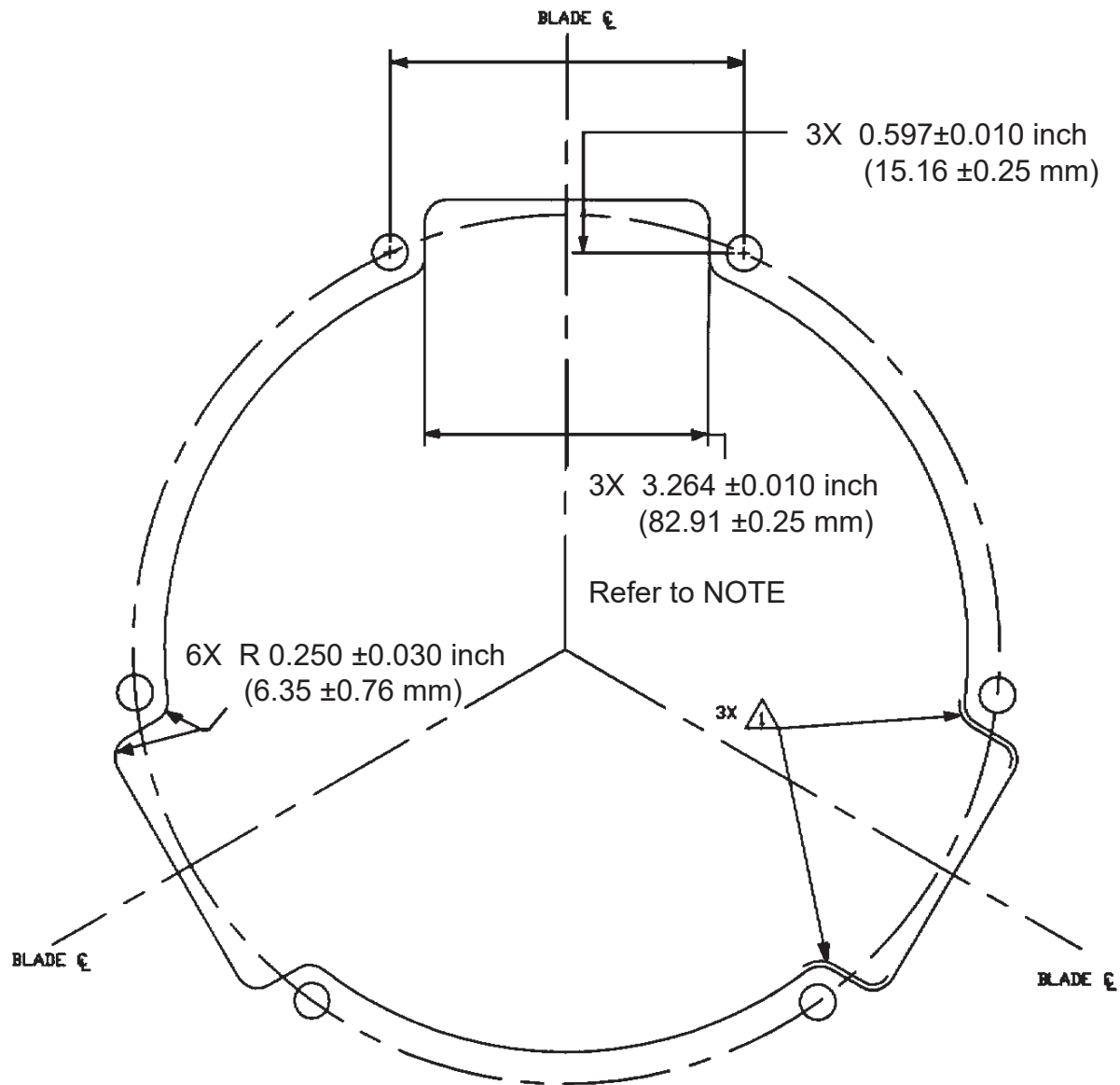
Spinner Bulkheads that can be Modified (Three-bladed Propellers)

Table 6-2

Previous Spinner Assembly	Previous Bulkhead	Previous Dome	New Spinner Assembly	New Bulkhead	New Dome
A-3284	C-3283()	C-3282()	A-3284-2()	C-3283-3()	C-3282-4()
A-4203-1	C-3283()	C-3282-3()	n/a	C-3283-3()	n/a
A-835-38	C-3279	n/a	n/a	C-3279-1	n/a
D-5732	D-5734()	n/a	n/a	D-5734-1()	n/a
D-7086	D-7084()	n/a	n/a	D-7084-1()	n/a

Spinner Bulkheads that Cannot be Modified

Table 6-3



W10406

NOTE: Center the reworked slot between the mounting holes within 0.020 inch (0.50 mm)

Three-bladed Propeller Bulkhead Modification Dimensions
Figure 6-4

B. Spinner Bulkhead Modification for HC-()3Y()-() Propellers

(1) General

- (a) Hartzell Propeller produces an improved three-bladed compact propeller hub.
- (b) The improved style hub is identified by the letter "B" at the end of the hub serial number and the propeller serial number.
- (c) Installation of an earlier manufactured bulkhead (listed in Table 6-2) on an improved style hub requires modification, except for spinner bulkheads mounted to starter ring gears.
 - 1 Refer to Table 6-3 for a list of spinner bulkheads that cannot be modified and must be replaced when a new hub is installed.
- (d) The modification may be done in accordance with the procedures provided in this section.
- (e) For a propeller that uses a non-Hartzell spinner, contact the applicable type certificate holder for modification instructions.

(3) Procedures

WARNING: REMOVAL OF THE SPINNER BULKHEAD AND THE ASSOCIATED BETA SYSTEM MUST BE PERFORMED BY QUALIFIED PERSONNEL AT AN APPROPRIATELY LICENSED PROPELLER SERVICE FACILITY.

- (a) Modify the bulkhead in accordance with the dimensions provided in Figure 6-4.
- (b) Fabricate a template to match the solid lines in Figure 6-4.

CAUTION: MAKE SURE THAT THE DIMENSIONS OF THE TEMPLATE ARE CORRECT BEFORE CUTTING THE BULKHEAD.

- (c) Align the holes in the template over the mounting holes on the bulkhead.
- (d) Using hub bolts or a suitable alternate, hold the template in place on the bulkhead.
- (e) Mark the areas to be removed.
- (f) Using a mill, nibbler, grinder, or other appropriate tooling, remove the material.

NOTE: For best results, remove the material using a milling machine.

- (g) Remove all tool marks, burrs, and rough edges.
- (h) Inspect the cutout for the correct dimensions. Refer to Figure 6-4.

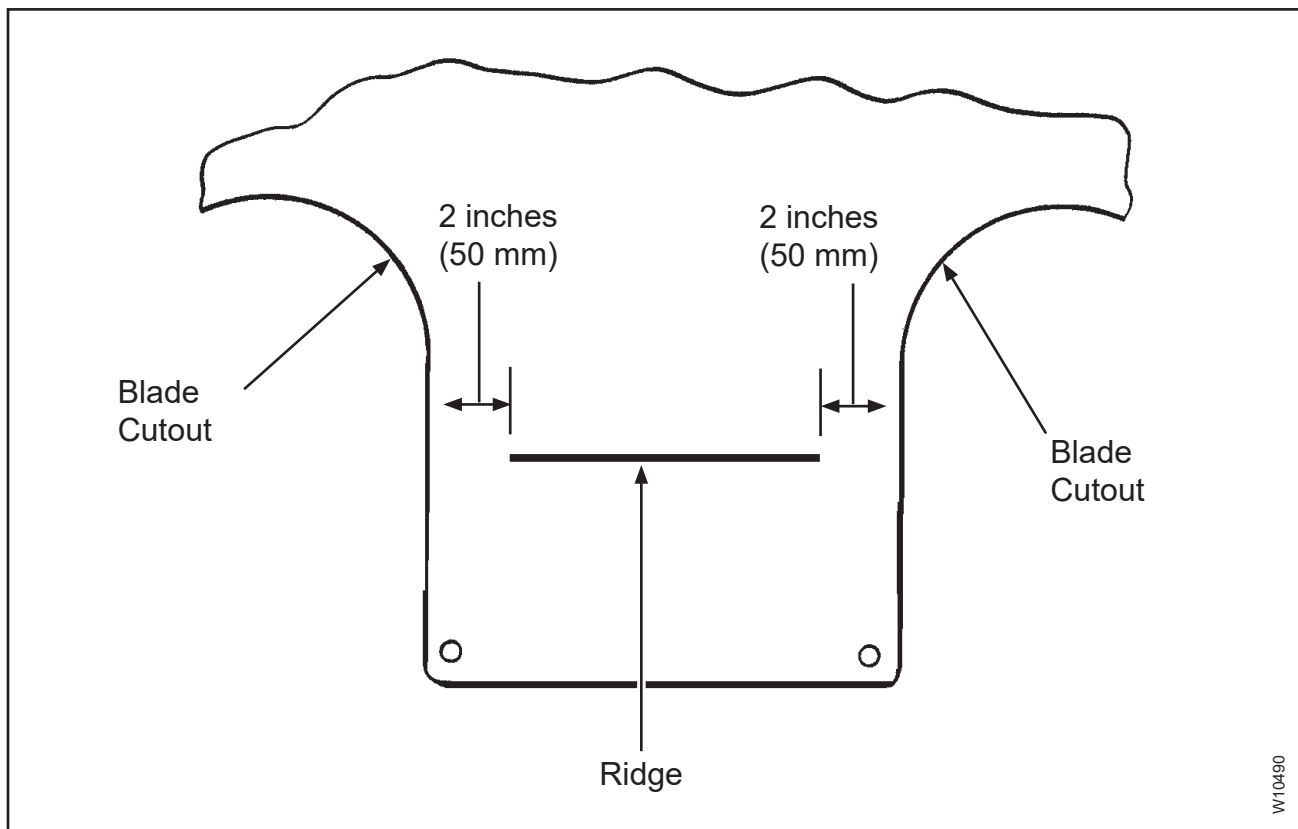
- 1 If the dimensions are greater than the dimensions provided, replace the bulkhead.

(i) Apply zinc-chromate primer CM67 to the exposed edge of the steel reinforcing brackets.

(j) Vibra etch a "B" after the serial number on the bulkhead.

C. Removal of a Ridge on the ID of the 836-57() Spinner Dome Installed on the 690 Rockwell Commander

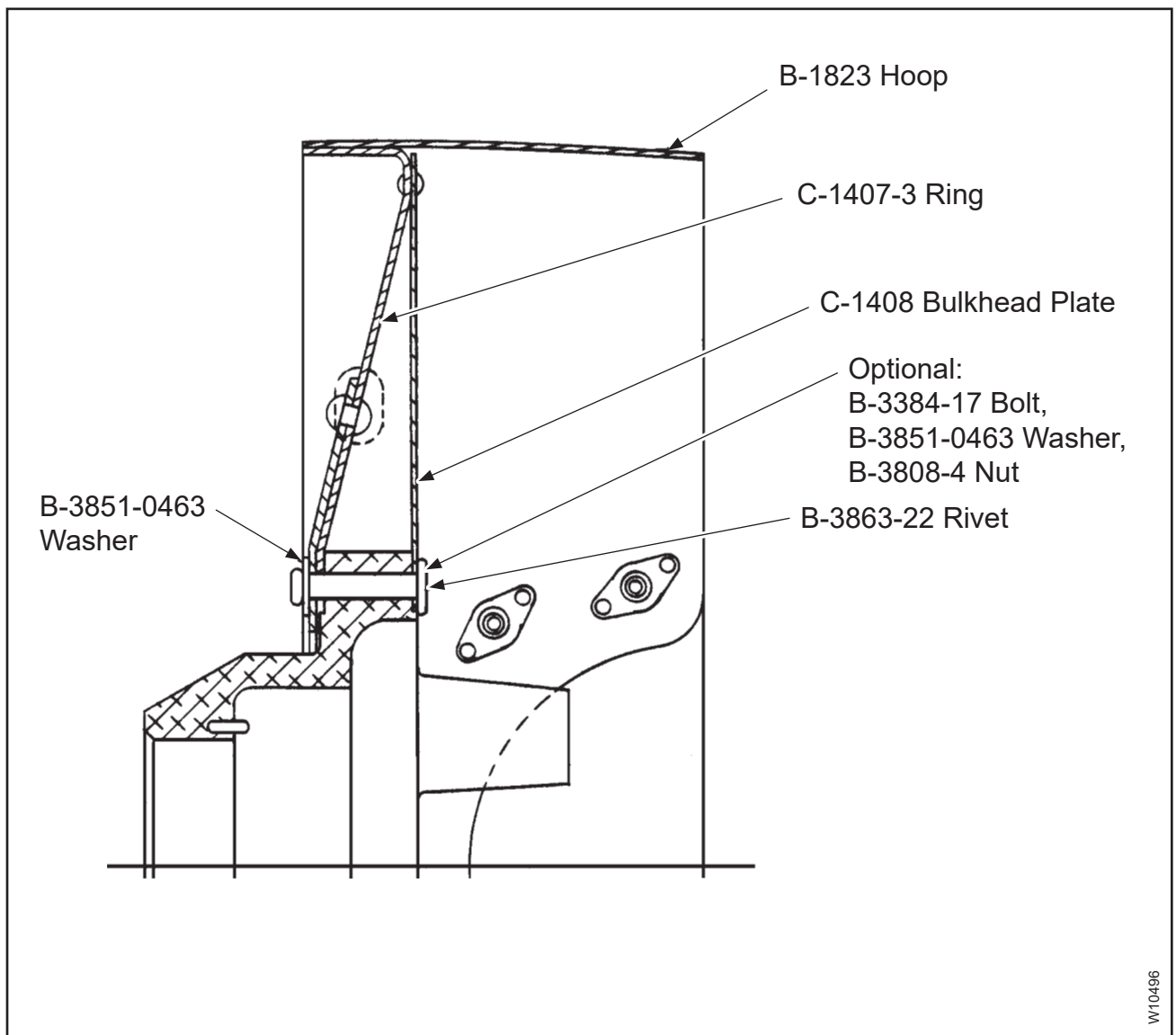
- (1) Grind or polish the ID of the spinner dome to remove the ridge. Refer to Figure 6-5.
- (2) The entire ridge may be removed or only approximately 2 inches (50.8 mm) on either side of the blade cutout may be removed. Refer to Figure 6-5.
- (3) The spinner dome must have a minimum thickness of 0.035 inch (0.88 mm) after the ridge has been removed.



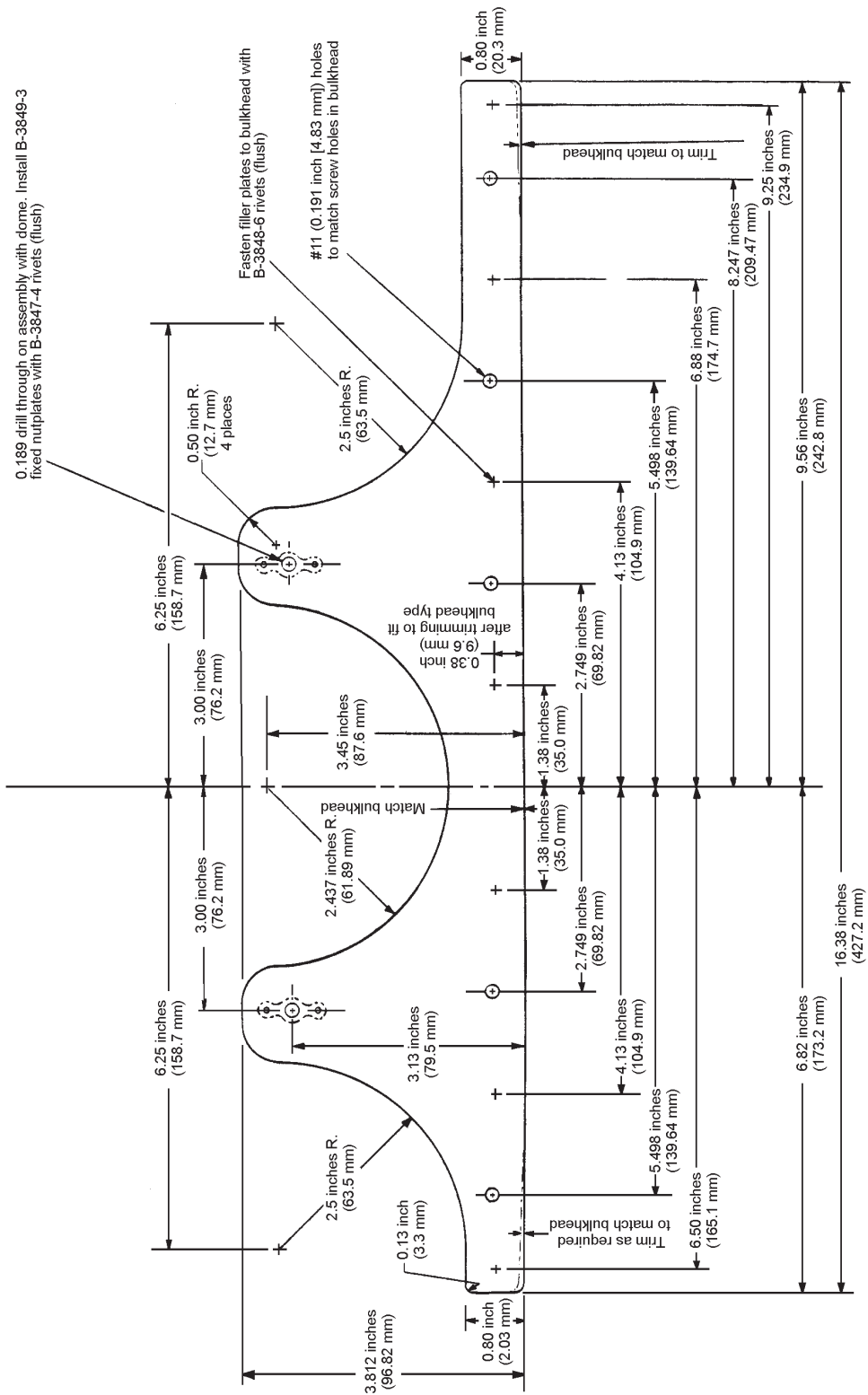
Removing the ID Ridge From the 836-57() Spinner Dome
Figure 6-5

D. Optional Use of Bolts to Replace Bulkhead Rivet on the 836-15R Spinner Assembly

- (1) The 836-15R spinner assembly requires the use of a B-3863-22 rivet to attach the bulkhead to the propeller hub.
- (2) Bolts B-3384-17, washers B-3851-0463, and nuts B-3808-4 may be used as an option to the rivets. Refer to Figure 6-6.



Optional Use of Bolts to Replace the Bulkhead Rivet on the 836-15R Spinner
Figure 6-6



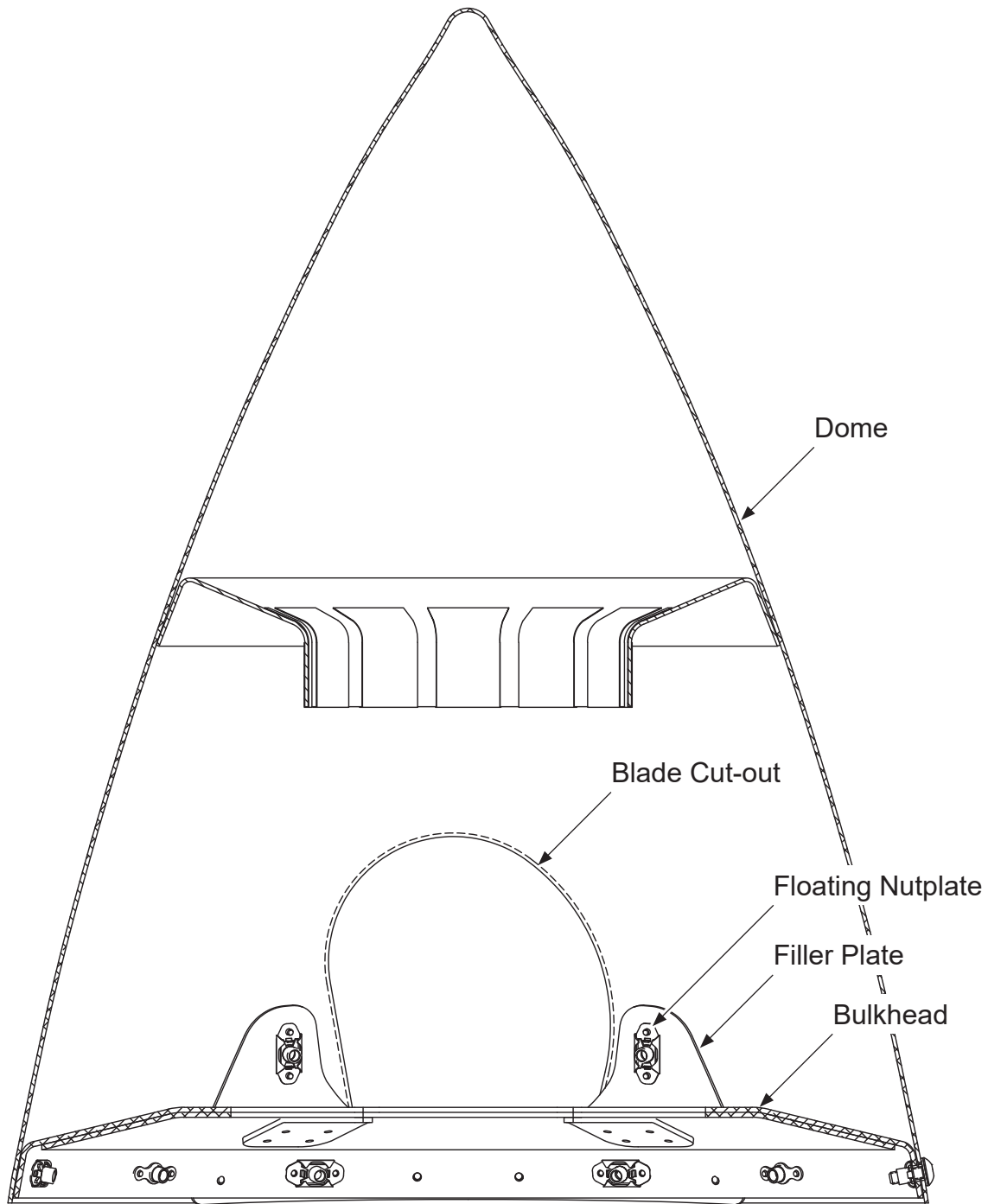
W10497

C-4238 Filler Plate Specifications
Figure 6-7

E. Installing Filler Plates on C-3043-(2,3) Spinner Assemblies

(1) Procedure

- (a) Remove the spinner dome and the bulkhead from the propeller assembly in accordance with the Removal and Installation chapter of the applicable Hartzell Propeller Owner's Manual.
- (b) Cut three filler plates from dural 2024-T3 material with a thickness of 0.050 inch (1.27 mm). Refer to Figure 6-7 for dimensions.
- (c) Using an appropriately sized drill bit, drill holes in the filler plate to match the screw holes in the bulkhead. Refer to Figure 6-7 for specifications.
- (d) Using an appropriately sized drill bit, drill holes in the filler plate to prepare for rivet installation. Refer to Figure 6-7 for specifications.
- (e) Using a 100 degree countersink tool, countersink the holes in the replacement filler plates to a diameter of 0.210 to 0.230 inch (5.33 to 5.84 mm).
- (f) Holding the filler plate in position on the bulkhead, fasten with B-3848-6 rivets flush with the surface.
- (g) Reinstall the spinner dome and the bulkhead on the propeller assembly in accordance with the Removal and Installation chapter of the applicable Hartzell Propeller Owner's Manual.



TPI-JM-000387

Filler Plates without Predrilled Floating Nutplate Attachment Screw Holes
Figure 6-8

F. Filler Plate Replacement

(1) Procedure

- (a) Remove the attaching screws and washers to remove the spinner dome from the propeller assembly.

NOTE: Removal and replacement of a filler plate can either be completed with the propeller and bulkhead unit mounted on the aircraft or at a time when the propeller assembly is removed from the aircraft such as at overhaul.

- (b) Remove the existing rivets that attach the filler plate to the bulkhead unit by drilling slightly through the rivet head with an appropriately sized drill bit.

- (c) Remove the rivet head.

- (d) Using a punch, remove the rivet shank from the bulkhead unit.

- (e) Using an appropriately sized drill bit, open each rivet hole to accept the appropriate size and type of rivet.

- 1 For B-4813 filler plates installed on D-4848 bulkhead units used on Beech 1900C applications only, and D-4848-1 bulkhead units that are used on Rockwell OV-10 applications only:

- a If one or more of the rivet holes is oversized, use a 5/32 inch drill bit to open each rivet hole to accept an AN426-AD() 5/32 inch universal rivet.

- 2 For C-5588 filler plates installed on D-5549 bulkhead units that are used on Beech 1900D applications only:

- a If one or more of the rivet holes is oversized, use a 5/32 inch drill bit to open each rivet hole to accept an AN426-AD() 5/32 inch universal rivet.

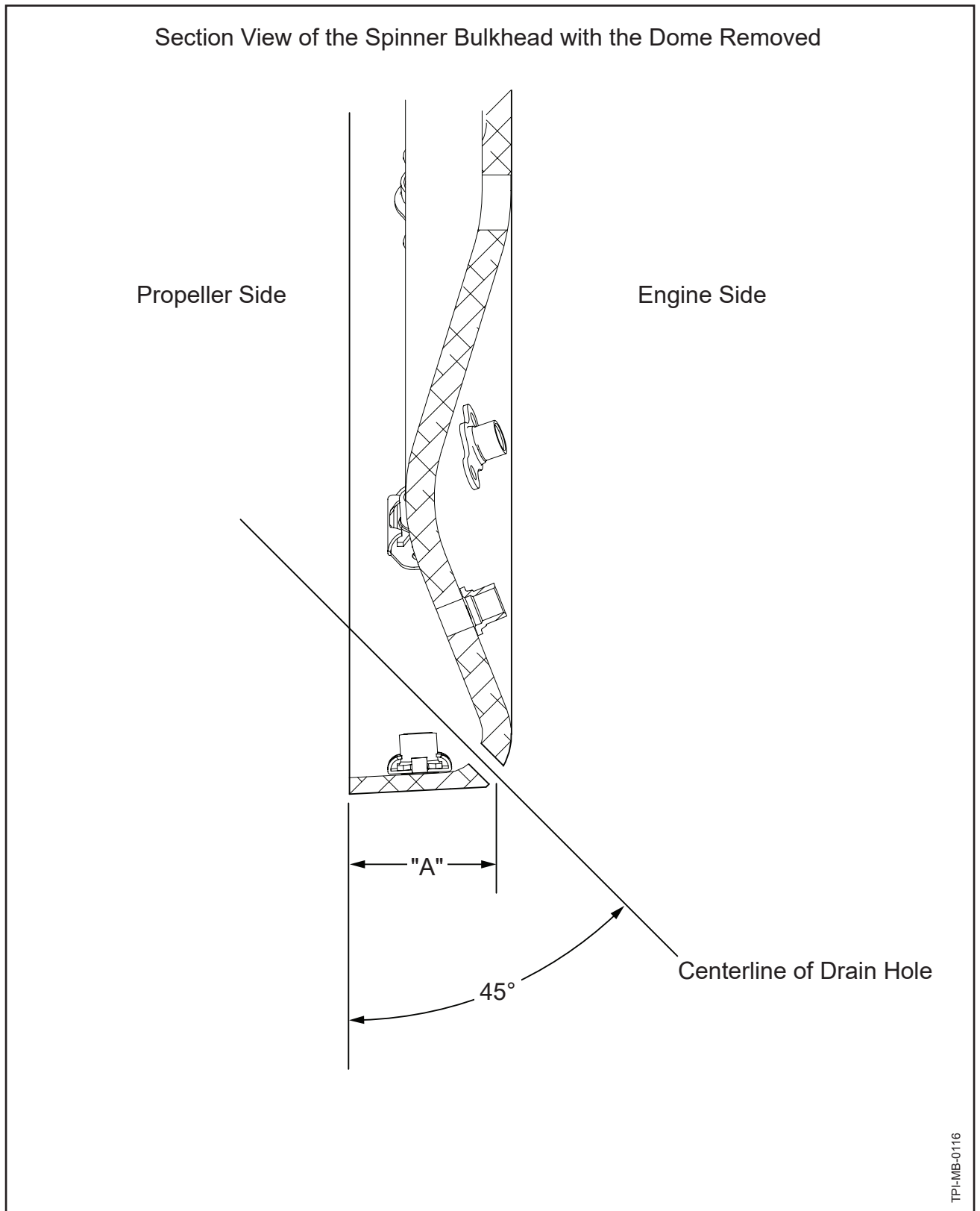
- 3 For B-4522() filler plates used on 835-47(), 835-52(), and 835-54() spinner assemblies:

CAUTION: MIXING OF ALUMINUM AND STAINLESS STEEL FILLER PLATES CAUSES A SIGNIFICANT WEIGHT IMBALANCE.

- a When replacing a B-4522() filler plate, all of the filler plates must be of the same filler plate material.

NOTE: Previous manufactured B-4522() filler plates were made of aluminum. Current manufactured B-4522() and 100547() filler plates are made of stainless steel.

- (f) Break each rivet hole edge in the filler plate 0.010 inch (2.54 mm) maximum.
- (g) Using a 100 degree countersink tool, countersink the holes in the replacement filler plate to a diameter of 0.210 to 0.230 inch (5.33 to 5.84 mm).
- (h) Using the appropriate size and type of rivets, install a new filler plate on the bulkhead.
- (i) For filler plates without predrilled floating nutplate attachment screw holes (Refer to Figure 6-8):
 - 1 Place dome over bulkhead.
 - 2 Using a felt tip marker or non-graphite pencil, mark the location of the floating nutplate attachment screw holes onto each of the filler plates.
 - 3 Remove the dome.
 - 4 Using an appropriate drill bit, drill a hole at each marked location.
 - a Deburr the drilled holes.
 - 5 Place the floating nutplate onto the filler plate aligning the screw attachment hole.
 - a Insert screw through the filler plate into the floating nutplate.
 - b Line up the floating nutplate and fasten with a screw to keep the floating nutplate in place.
 - c Mark the floating nutplate rivet holes using a felt tip marker or non-graphite pencil.
 - d Remove the screw and floating nutplate.
 - 6 Using an appropriate drill bit, drill a hole at each marked location.
 - a Deburr the drilled holes.
 - 7 Using the appropriate size and type of rivets, install the floating nutplates on the inner side of the filler plates in accordance with the Repair and Modification procedures chapter in this manual.
- (j) Install the spinner dome onto the bulkhead using screws (200) and washers (210).



Drilling Drain Holes in the Spinner Bulkhead
Figure 6-9

G. Modification to Drain Water from Spinner Assemblies:

D-630-1(), 104552, 105180, and 105820

(1) Procedure

NOTE: The following procedure must be performed by a certified aircraft mechanic with the appropriate rating or by a certified propeller repair station with the appropriate rating.

- (a) Remove the screws (200) and washers (210).
- (b) Remove the spinner dome from the bulkhead.
- (c) Using a center punch, mark the location of the drain holes to be drilled in the outside radius of the spinner bulkhead.
 - 1 There is one drain hole per blade.
 - 2 The holes must be evenly spaced from each other at the mid point between the blade cutouts. Refer to Figure 6-9 and Table 6-4 for dimension "A".

CAUTION: DO NOT DAMAGE THE NUTPLATES WHEN DRILLING THE DRAIN HOLES THROUGH THE SPINNER BULKHEAD.

- (d) Using a 0.250 inch diameter drill bit, drill the drain holes through the spinner bulkhead.
- (e) Deburr both the inside (engine-side) and outside (propeller-side) of the holes with a deburring tool.
 - 1 If the inside of the bulkhead is difficult to access, it may be deburred the next time the propeller is removed; however, the outside must be deburred to avoid damage to the spinner dome.
- (f) Remove all metal chips.
- (g) Install the spinner dome onto the bulkhead using screws (200) and washers (210).

Spinner Assembly	Spinner Bulkhead	Dimension "A"	Additional Instructions
D-630-1	D-5211-(1,2,4)	1.085 ±0.010 inch (27.55 ±0.25 mm)	Center the hole over the fixed nutplate
104552	104154	1.050 ±0.010 inch (26.67 ±0.25 mm)	Center the hole between the fixed nutplates
105180	105178	0.950 ±0.010 inch (24.13 ±0.25 mm)	Center the hole over the fixed nutplate
105820	105819	1.340 ±0.010 inch (34.03 ±0.25 mm)	Center the hole between the fixed nutplates

Drain Hole Location - Dimension "A"

Table 6-4

H. Modification of C-4523-2() Caps and D-4512() or D-4512-2() Spinner Domes

(1) Procedure

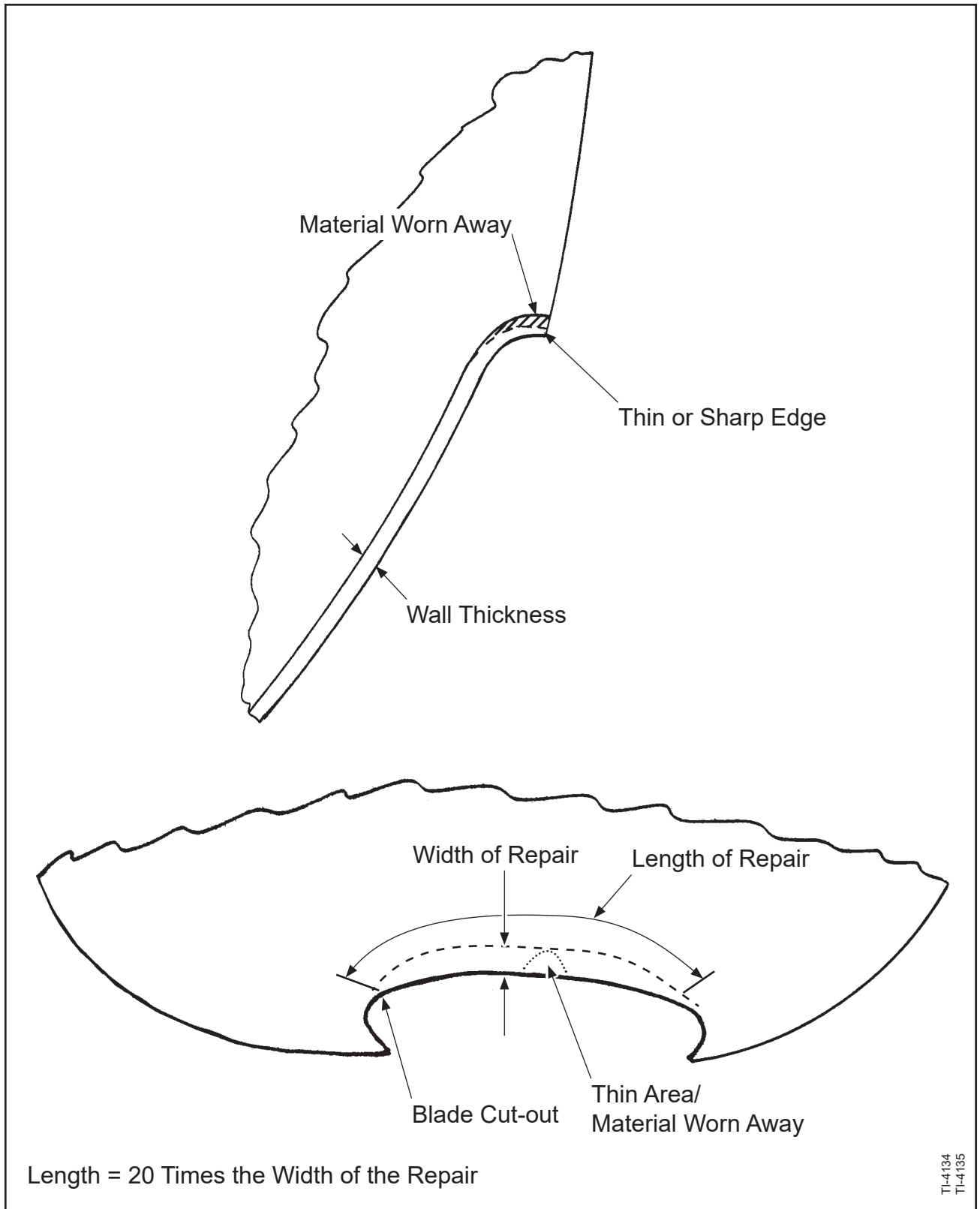
NOTE: The following procedure must be performed by a certified aircraft mechanic with the appropriate rating or by a certified propeller repair station with the appropriate rating.

- (a) Remove the screws (200) and washers (210)
- (b) Remove the spinner dome from the bulkhead.
- (c) Remove any lip, burr, and/or sharp edge as a first attempt to improve the fit of the cap before starting the procedures described below.
- (d) If removal of any lip, burr, and/or sharp edge does not improve the fit, continue with the following steps:

CAUTION: MAINTAIN A MINIMUM DISTANCE OF 0.160 INCH (4.06 mm) BETWEEN THE CAP EDGE AND THE MOUNTING HOLE EDGE.

- 1 Shorten the cap by uniformly removing material around the circumference of the cap.
 - a When pressing the cap evenly against the joggled surface of the spinner dome it is possible that the edge of the cap would be stopped by the joggle radius before the inside surface of the cap is in full contact with the joggled surface. In these instances the cap should be shortened by the minimum needed to make sure of firm contact between the mating surfaces.
- 2 Remove all sharp edges.
- 3 After checking and modifying as required, position the cap on the spinner dome without screws and sight through the four cap holes.
- 4 If it appears that the anchor nuts could float enough (maximum 0.030 inch [0.76 mm] radius to center) with the cap holes, replace the fixed anchor nuts with floating anchor nuts.
 - a Drill the existing four screw holes to 0.312 +0.006/-0.000 inch (7.92 +0.15/-0.00 mm) diameter.
 - b Using eight B-6673-0306, 100 degree head, pop-type rivets, install B-3849-08, floating nutplates on the spinner dome where the holes were newly drilled.

- 5 If it appears that the floating nutplates could not float enough (maximum 0.030 inch [0.76 mm] radius to center) with the cap holes, relocate the screw holes and install floating nutplates.
- a Using the cap, shortened in accordance with the instructions above, as a template and placing it axisymmetrically on the spinner dome, mark a set of four new holes.
 - b Using the appropriate size drill bit, drill four new 0.312 +0.006/-0.000 inch (7.92 +0.15/-0.00 mm) diameter holes in the new locations as marked.
 - c Using eight B-6673-0306, 100 degree head, pop - type rivets, install Kaynar F5000-08 or B-3849-08, floating nutplates or MS21059L08 two-lug floating anchor nuts on the spinner dome at the four locations where the new holes were drilled.
- (d) Install the spinner dome onto the bulkhead using screws (200) and washers (210).



Area of Repair for Spinner Dome Cut-out
Figure 6-10

I. Repair of Damage to the Spinner Dome Cut-out Area

(1) Procedure

NOTE: The following procedure must be performed by a certified aircraft mechanic with the appropriate rating or by a certified propeller repair station with the appropriate rating.

- (a) Remove the screws (200) and washers (210) from the spinner dome.
- (b) Remove the spinner dome from the bulkhead.
- (c) Starting at the location of damage, remove material equally on both sides, making a smooth, blended recess around the opening of the spinner dome cut-out. Refer to Figure 6-10.

- 1 The maximum permitted width of damage that may be removed is 0.100 inch (2.54 mm).

- (d) Blend the damage out around the edge of the cut-out. Refer to Figure 6-10.

- 1 The total length of repair must be 20 times the width of the damage.

NOTE: Example of a repair:
damage width = 0.100 inch (2.5 mm)
total blended length = 2 inches (50 mm)
(1 inch [25 mm] on each side of the damage)

- 2 The minimum permitted wall thickness from the inside to the outside of the spinner dome is 0.045 inch (1.15 mm). Refer to Figure 6-10.

- 3 Remove all sharp edges in the area of the repair.

- (e) After repair of the damaged area, polish the total area of repair.

- 1 For initial polishing, use 200-240 grit emery cloth or an equivalent abrasive pad such as CM47.
 - 2 For final polishing, use a fine grit crocus cloth to remove remaining tool or filing marks.

- (f) After polishing, make an inspection of the area of repair.

- 1 File or tool marks, coarse finish, or indications of damage are not permitted.
 - 2 Measure the wall thickness. The minimum permitted wall thickness is 0.045 inch (1.15 mm).

- (g) Make an inspection of the spinner dome in accordance with the serviceable limits in the Check chapter of this manual.

- (h) Install the spinner dome onto the bulkhead using screws (200) and washers (210).

J. Spinner Bulkhead Requirements to Maintain Propeller Balance

- (1) This procedure affects the Hartzell spinner assembly A-4203-1 installed on Hartzell Propeller Model HC-C3YF-IR()F/F9684-1 on the Piper PA-36-285 only.
 - (a) The bulkhead to propeller location will be identified with locating decals, 79980-AR-20 and 79980-AR-30.
 - (b) A decal, IMP-422, will be attached to the bulkhead indicating the presence of weight slugs installed on the bulkhead.
- (2) To eliminate the possibility of operating the aircraft with an unbalanced engine-propeller combination, when replacing the bulkhead:
 - (a) Make a record of the location and position of the weight slugs.
 - (b) Remove the weight slugs from the existing bulkhead.
 - (c) Install the weight slugs in the same position and location on the new bulkhead relative to the blade location.
 - (d) Using B-3840-() screws, attach the A-48-() weight slugs to the C-3283 bulkhead, making sure that there are 1 to 3 threads of the screw protruding through each nut plate.
 - 1 A maximum of two (2) stacks of weight slugs for each blade, with a maximum of eight (8) weight slugs in each stack is permitted.
 - (e) When the propeller is returned for service, the bulkhead must remain attached to provide a method to balance following service.
 - (f) If the PA-36-285 aircraft is operated with the Hartzell C-3282-3 spinner dome removed, the spinner bulkhead C-3283 must remain installed.

K. Modification of a D-5555-1(L)() Bulkhead for Synchrophaser Hardware and Dynamic Balance

(1) General

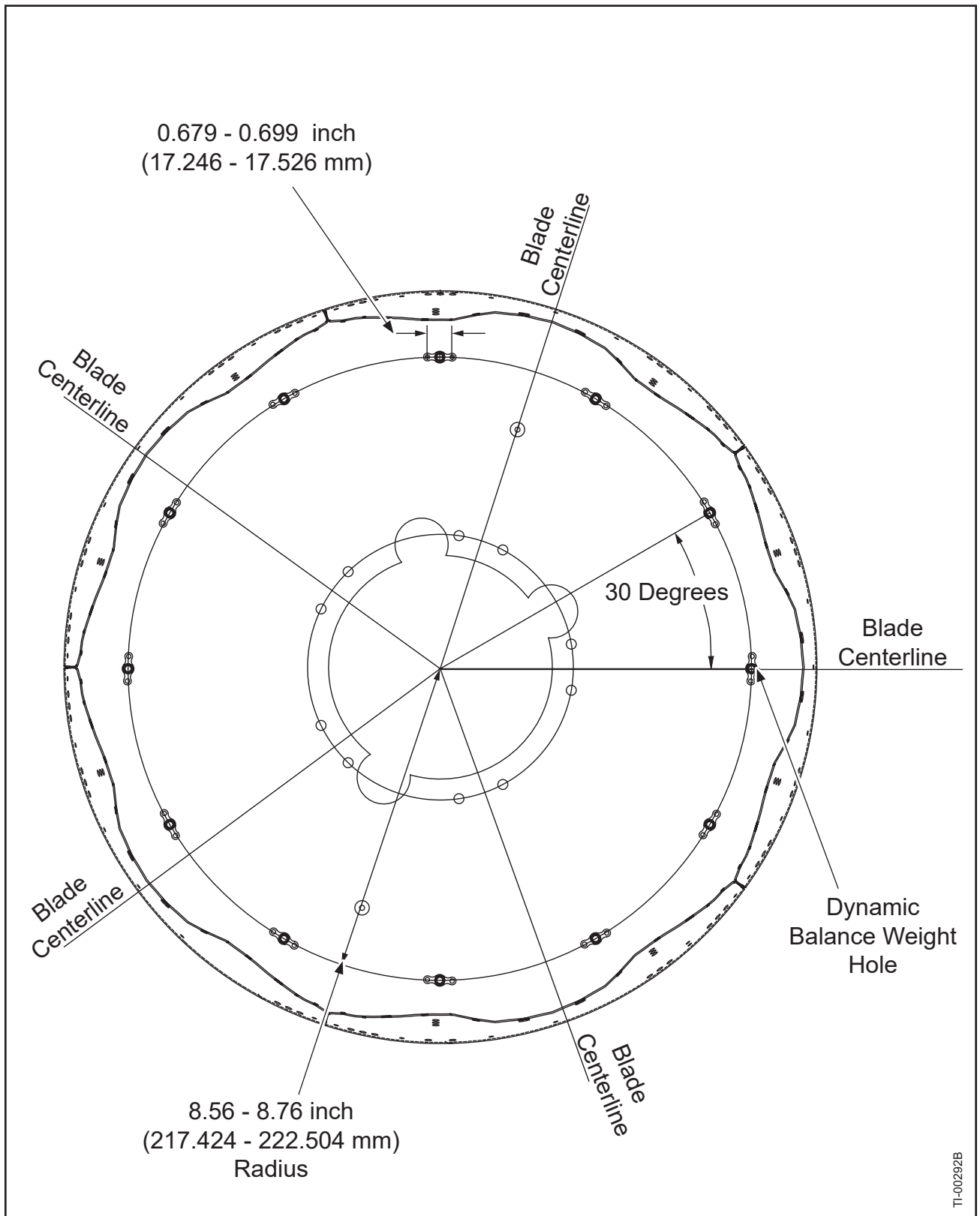
- (a) This procedure affects the Hartzell D-5555-1(L)() spinner bulkhead used in the D-5527-1(L)() spinner assembly that is used with the Hartzell HC-E5N-3A(L)/(H,L)8212 propeller installed on the Piaggio P-180 Avanti aircraft.
- (b) This procedure provides instructions for the modification of the D-5555-1(L)() spinner bulkheads (shipped prior to January 5, 2009) to incorporate:
 - 1 Rivets and nutplates for the installation of dynamic balance weights
 - 2 Holes for the installation of bulkhead mounted synchrophaser hardware
- (c) Bulkheads that incorporate the modification can be identified by revision level "B" marked on the bulkhead.

(2) Disassembly

- (a) Remove the screws (200) and washers (210) from the spinner dome.
- (b) Remove the spinner dome from the bulkhead.
- (c) Remove the propeller from the aircraft in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 149 (61-00-49) or the Aircraft Maintenance Manual.

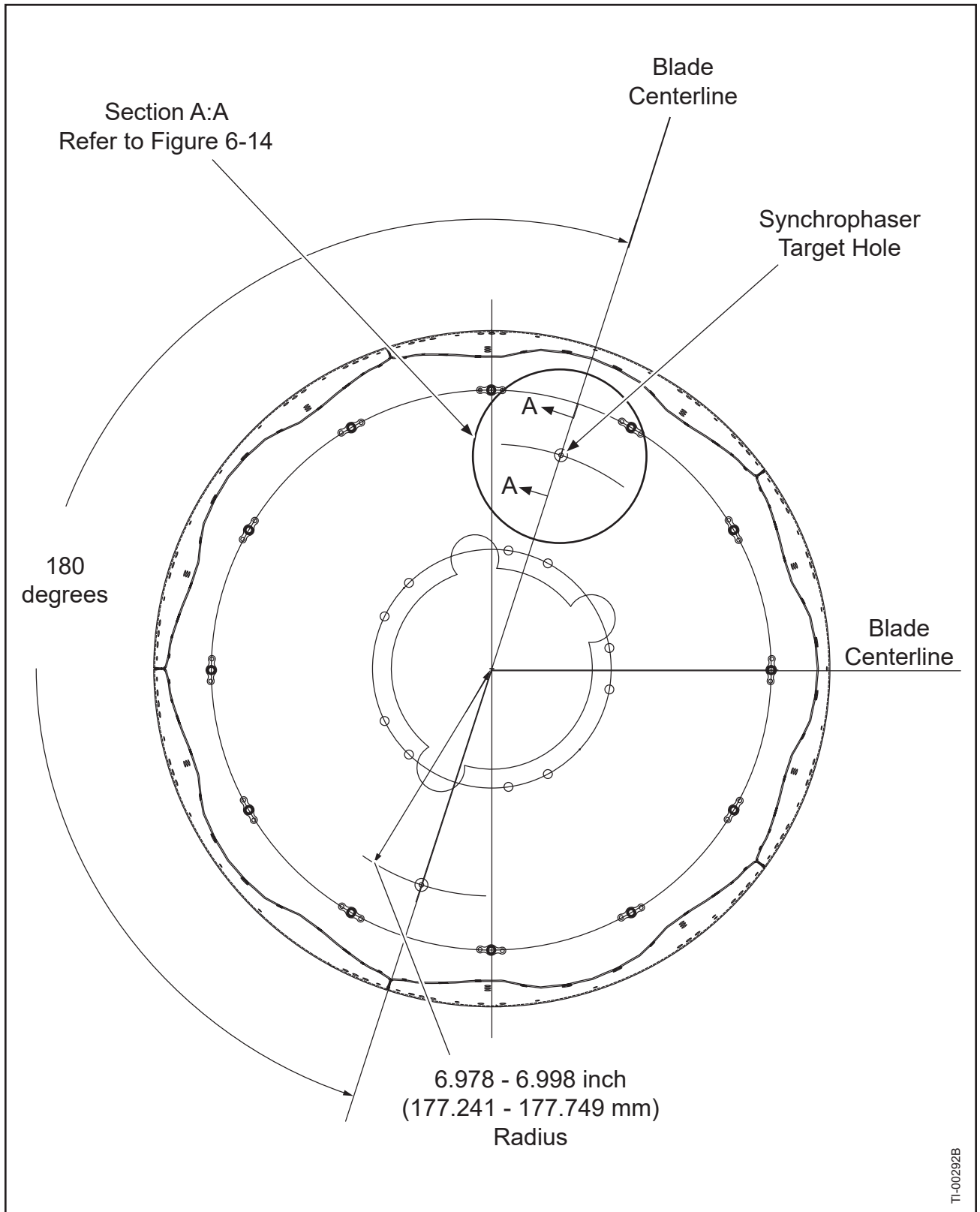
WARNING: REMOVAL OF THE SPINNER BULKHEAD AND THE ASSOCIATED BETA SYSTEM MUST BE PERFORMED BY A QUALIFIED PERSON AT AN APPROPRIATELY LICENSED PROPELLER SERVICE FACILITY.

- (d) Remove the D-5555-1(L)() spinner bulkhead from the propeller in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 149 (61-00-49).

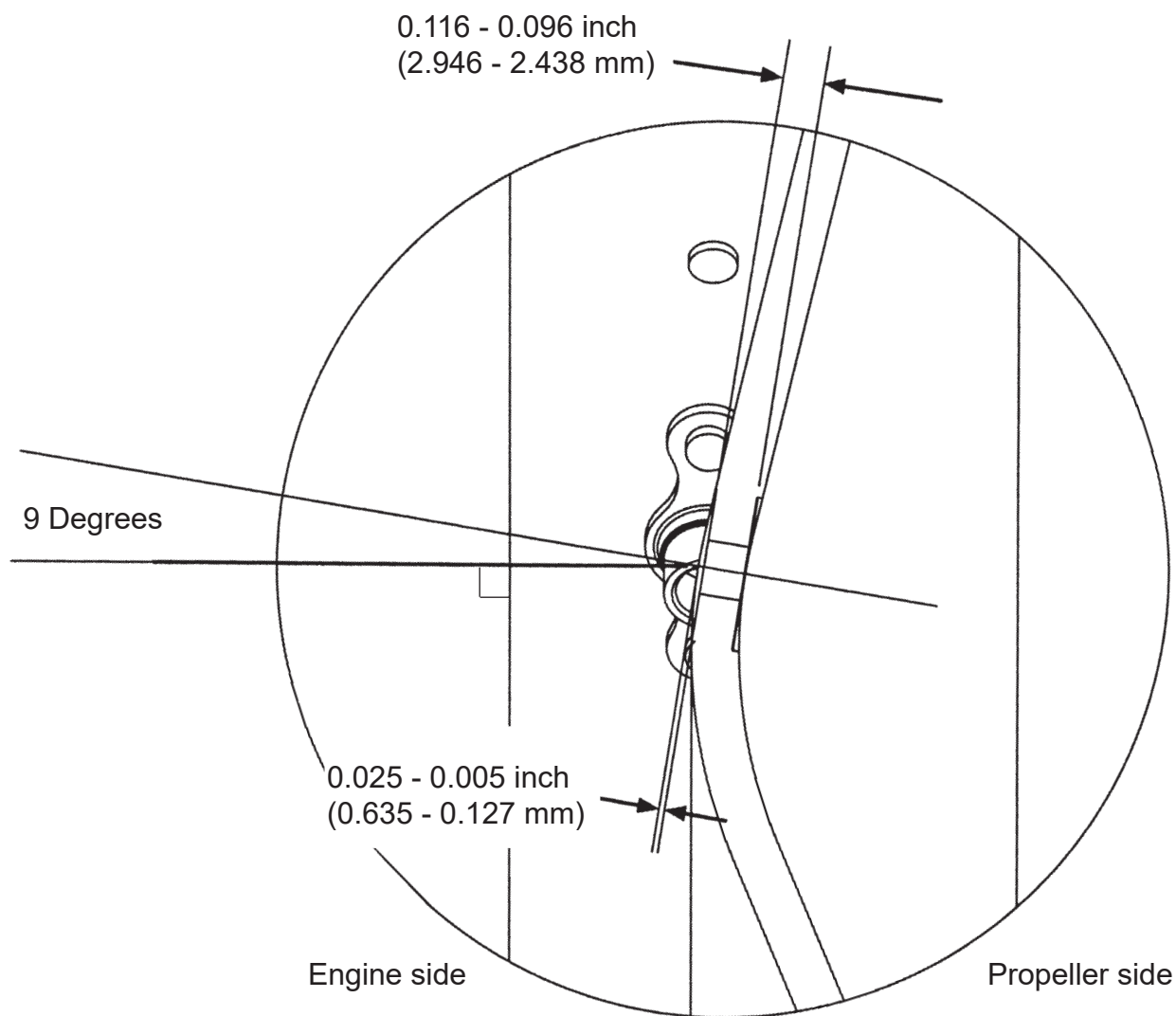


Location of Holes for Dynamic Balance Weights
Figure 6-11

- (3) Modification of the Spinner Bulkhead for Dynamic Balance Weight Holes
 - (a) Drill 12 holes to a diameter of 0.200 - 0.192 inch (5.08 - 4.87 mm) in the locations specified in Figure 6-11.
 - (b) Drill 24 holes to a diameter of 0.104 - 0.096 inch (2.64 - 2.43 mm) in the locations specified in Figure 6-11.
 - 1 Countersink 0.188 inch (4.77 mm) diameter X 100 degrees on the engine side of the bulkhead.
 - (c) Deburr the edges of each newly drilled hole.
 - (d) Using procedures in accordance with FAA Advisory Circular 43.13-1B or equivalent accepted industry standard practices, install the twelve B-3858-3 nutplates
 - 1 Fasten the nutplates with B-3847-6 rivets on the propeller side of the spinner bulkhead.



Location of Holes for Synchrophaser System
Figure 6-12



Section A:A
Refer to Figure 6-12

TI-00292C

Dimensions for Synchrophaser System
Figure 6-13

- (4) Modification of the Spinner Bulkhead for Synchrophaser Target Holes
 - (a) Drill 2 holes to a diameter of 0.146 - 0.138 inch (3.70 - 3.50 mm) in the locations specified in Figure 6-12.
 - (b) On both sides of the bulkhead, spot face the 2 holes to a diameter of 0.407 - 0.398 inch (10.337 - 10.109 mm) in accordance with the dimensions shown in Figure 6-13.
 - (c) Deburr the edges of each newly drilled hole.
- (5) Installation
 - (a) Install the bulkhead mounted synchrophaser hardware in accordance with the Aircraft Maintenance Manual or Piaggio Service Bulletin 80-0026.

WARNING: INSTALLATION OF THE SPINNER BULKHEAD AND THE ASSOCIATED BETA SYSTEM MUST BE PERFORMED BY A QUALIFIED PERSON AT AN APPROPRIATELY LICENSED PROPELLER SERVICE FACILITY.

- (b) Install the D-5555-1(L)() spinner bulkhead on the propeller in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 149 (61-00-49).
- (c) Install the beta ring in accordance with the Assembly chapter of Hartzell Propeller Five Blade Lightweight Turbine Propeller Overhaul Manual 158 (61-10-58).
- (d) Install the propeller on the aircraft in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 149 (61-00-49) or the Aircraft Maintenance Manual.
- (e) Install the spinner dome onto the bulkhead using screws (200) and washers (210).
- (f) Make an entry in the propeller logbook that this modification has been done.



A-2405 Hex Nut
No safety wire holes



A-2405-1 Hex Nut
Two safety wire holes



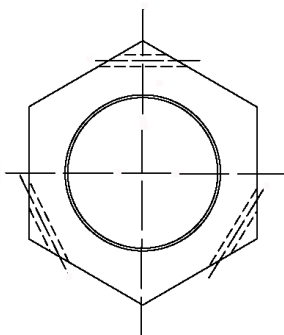
A-2405-2 Hex Nut
Two safety wire holes



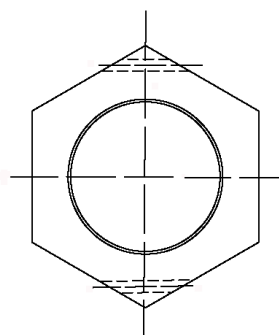
A-2405-3 Hex Nut
No safety wire holes



A-2405-4 Hex Nut
Three safety wire holes



A-2405-4
Safety Wire Holes



A-2405-1 and A-2405-2
Safety Wire Holes

APS6279A-H

Hex Nut Configuration
Figure 6-14

L. Replacing a Two-piece Dome with a One-piece Dome

(1) General

- (a) Propeller assemblies that previously used a spinner dome unit and dome cap with the dome attached by two hex nuts on the low pitch stop will require a change to the existing hardware. Refer to Figure 6-14 for hex nut identification.

NOTE: One A-2405-4 hex nut is used and is safety wired to a B-7589 set screw to secure the low pitch stop.

- (b) The new A-2405-4 hex nut and B-7589 set screw will be shipped with the new one piece spinner assembly.
- (c) The A-2405-4 hex nut and B-7589 set screw must be installed as required during the installation of the one piece spinner dome unit.

(2) Materials

- (a) Refer to Figure 6-14 for hex nut identification.

<u>Part Number</u>	<u>Description</u>	<u>Used with the One Piece Spinner Dome</u>	<u>Quantity for each Propeller Assembly</u>
A-2405-4	Hex Nut	Yes	1
B-7589	Set Screw	Yes	1

- (b) For each propeller assembly only one hex nut is used on the low pitch stop.
- (c) The A-2405-4 may be used instead of the A-2405-3 hex nut with the two piece spinner domes.

(3) Procedure

- (a) Remove the screws (200) and washers (210) from the spinner dome.
- (b) Remove the spinner dome from the bulkhead.

CAUTION: THE LOW PITCH STOP MUST BE SECURED BEFORE REMOVING THE HEX NUTS. IF THE LOW PITCH STOP IS ROTATED DURING THE REMOVAL OF THE HEX NUT, REFER TO THE TESTING AND TROUBLESHOOTING CHAPTER OF HARTZELL PROPELLER OWNER'S MANUAL 115N (61-00-15). FOR INSTRUCTIONS ON LOW PITCH STOP ADJUSTMENT.

- (c) If bulkhead replacement is necessary, remove the bulkhead and propeller in accordance with the Installation and Removal chapter of Hartzell Owner's Manual 115N (61-00-15).

CAUTION: A NEW PROPELLER MOUNTING O-RING MUST BE USED AT EVERY REMOVAL AND INSTALLATION OF THE PROPELLER ASSEMBLY. FOR THE CORRECT MOUNTING O-RING PART NUMBER, REFER TO THE INSTALLATION AND REMOVAL CHAPTER OF HARTZELL PROPELLER OWNER'S MANUAL 115N (61-00-15).

- (d) Install the new bulkhead and the propeller in accordance with the Installation and Removal chapter of Hartzell Propeller Owner's Manual 115N (61-00-15).
- (e) Remove and discard the hex nuts and any spacers from the low pitch stop.
- (f) Apply threadlocker CM21 to the threads of the new A-2405-4 hex nut.
- (g) Install the A-2405-4 hex nut on the low pitch stop.
- (h) Torque the A-2405-4 hex nut to 15-20 ft-lb. (20-27 N•m).
- (i) Install the B-7589 set screw in one of the four threaded holes in the top of the cylinder.
 - 1 The maximum permitted height from the top of the set screw to the cylinder surface is 0.175 inch (4.44 mm).
- (j) Using 0.032 inch (0.81 mm) stainless steel safety wire, unless otherwise directed, safety the B-7589 set screw to the A-2504-4 hex nut in accordance with military standard MS33540.
- (k) Install the spinner dome onto the bulkhead using screws (200) and washers (210).

M. 835-54() Spinner Assembly Filler Plate Removal

(1) Procedure

(a) Remove all 100547P filler plates.

- 1 Remove the screws that hold each filler plate to the spinner dome.
- 2 Remove the screws (200) and washers (210).
- 3 Remove the spinner dome from the bulkhead.
- 4 Remove and discard the filler plates.

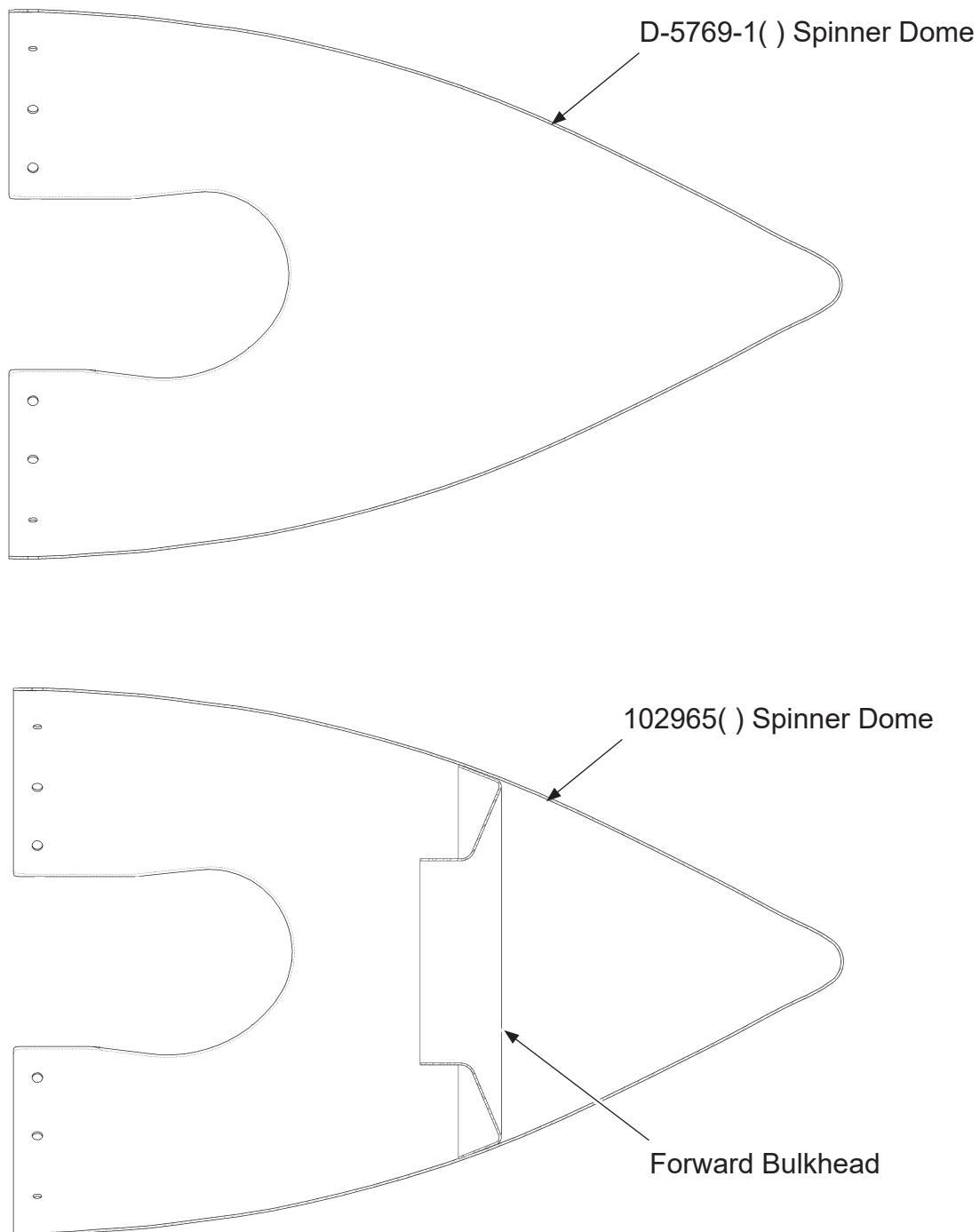
(b) Visually inspect for cracking at each filler plate attachment screw hole in the spinner dome.

- 1 If cracking is found, replace the spinner assembly with an 835-33(P), 835-58(P), or 103585() spinner assembly.

NOTE: Contact your Supplemental Type Certificate holder for the applicable approved spinner assembly.

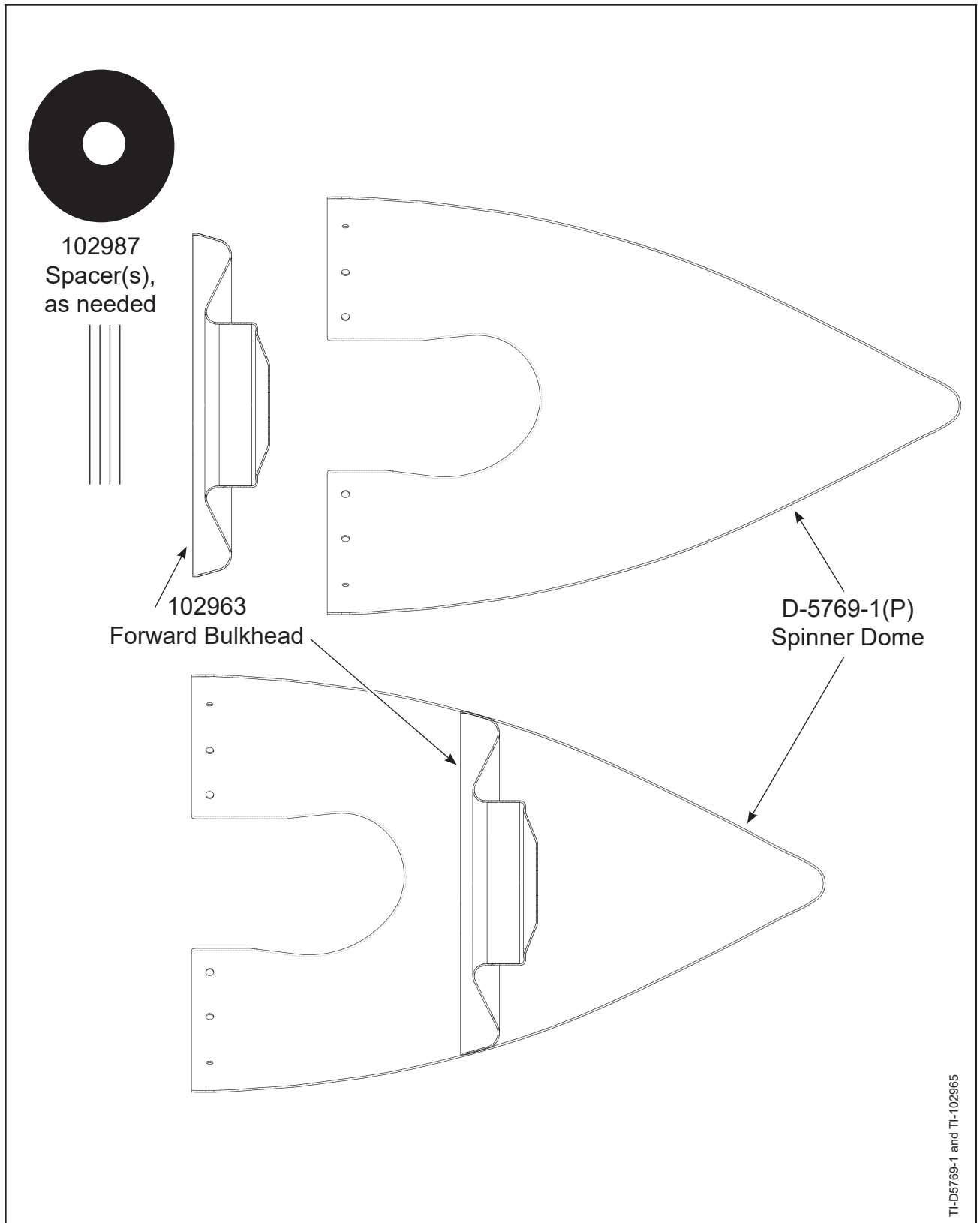
2 If cracking is not found:

- a If desired, install a B-3845-8 screw with one A-1020 fiber washer into each filler plate attachment hole in the spinner dome.
- b Install one A-1020 fiber washer and a B-3808-3 nut on the inside of the dome and tighten the screw.
- c Install the spinner dome onto the bulkhead using screws (200) and washers (210).



TI-D5769-1
TI-102965

A Cutaway View of the Spinner Dome
Figure 6-15



D-5769-1 Spinner Dome, 102963 Front Bulkhead, and 102987 Spacer
Figure 6-16

N. 835-54() Spinner Assembly, Modification of the Spinner Dome

Refer to Figure 6-16.

- (1) Remove the screws (200) and washers (210) from the spinner dome.
 - (a) Retain the screws and washers.
- (2) Remove the spinner dome from the bulkhead.
- (3) Install the 102987 spacer onto the cylinder of the propeller.
- (4) Install the 102963 forward bulkhead over the spacer on the cylinder of the propeller.

CAUTION: THE FORWARD BULKHEAD MUST FIT SNUGLY ON THE CYLINDER, OR THE CYLINDER WILL BECOME DAMAGED BY CHAFING.

- (5) Check for a snug fit where the forward bulkhead contacts the cylinder.
 - (a) If the forward bulkhead does not fit snugly on the cylinder, apply one or more additional layers of UHMW tape to the ID of the forward bulkhead and recheck.
 - (b) Repeat until the forward bulkhead fits snugly on the cylinder.
- (6) Install the D-5769-1() spinner dome over the forward bulkhead.

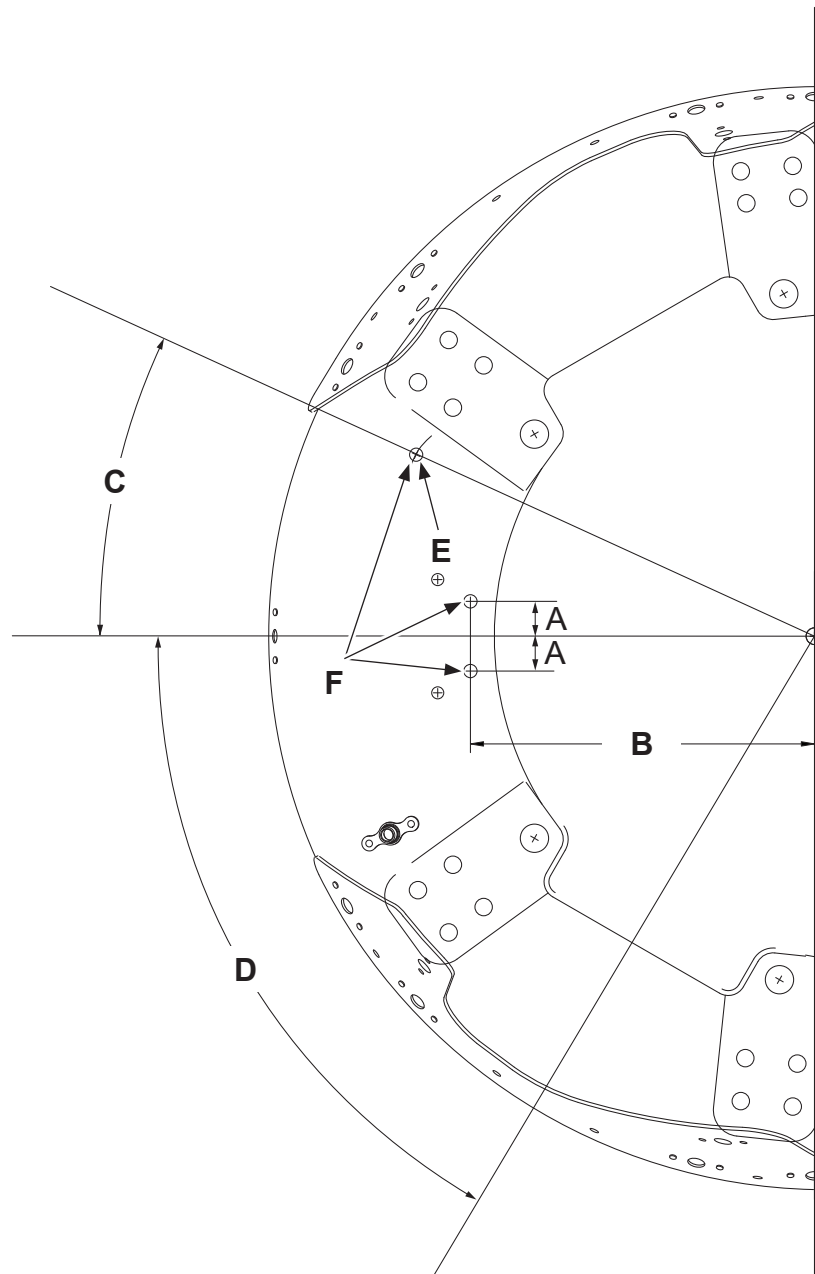
CAUTION: TO AVOID DAMAGING THE AIRCRAFT COWLING, SCREWS MUST NOT EXTEND MORE THAN THREE THREADS PAST THE BULKHEAD NUTPLATES.

- (7) Install the spinner dome onto the bulkhead using screws (200) and washers (210).
- (8) When a 102963 forward bulkhead and 102987 spacer are installed, make an entry in the propeller logbook that indicates installation in accordance with this procedure.

O. 835-54() Spinner Assembly, Replacement of the Spinner Dome

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

- (1) Remove the screws (200) and washers (210) from the spinner dome.
- (2) Remove the D-5769-1() spinner dome and replace it with the 102965 spinner dome.
- (3) Install the spinner dome onto the bulkhead using screws (200) and washers (210).



Blade Centerline

holes.ai

Spinner Bulkhead D-6448-3 Modification
Figure 6-17

P. Modification of the D-6448-3(P) Spinner Bulkhead

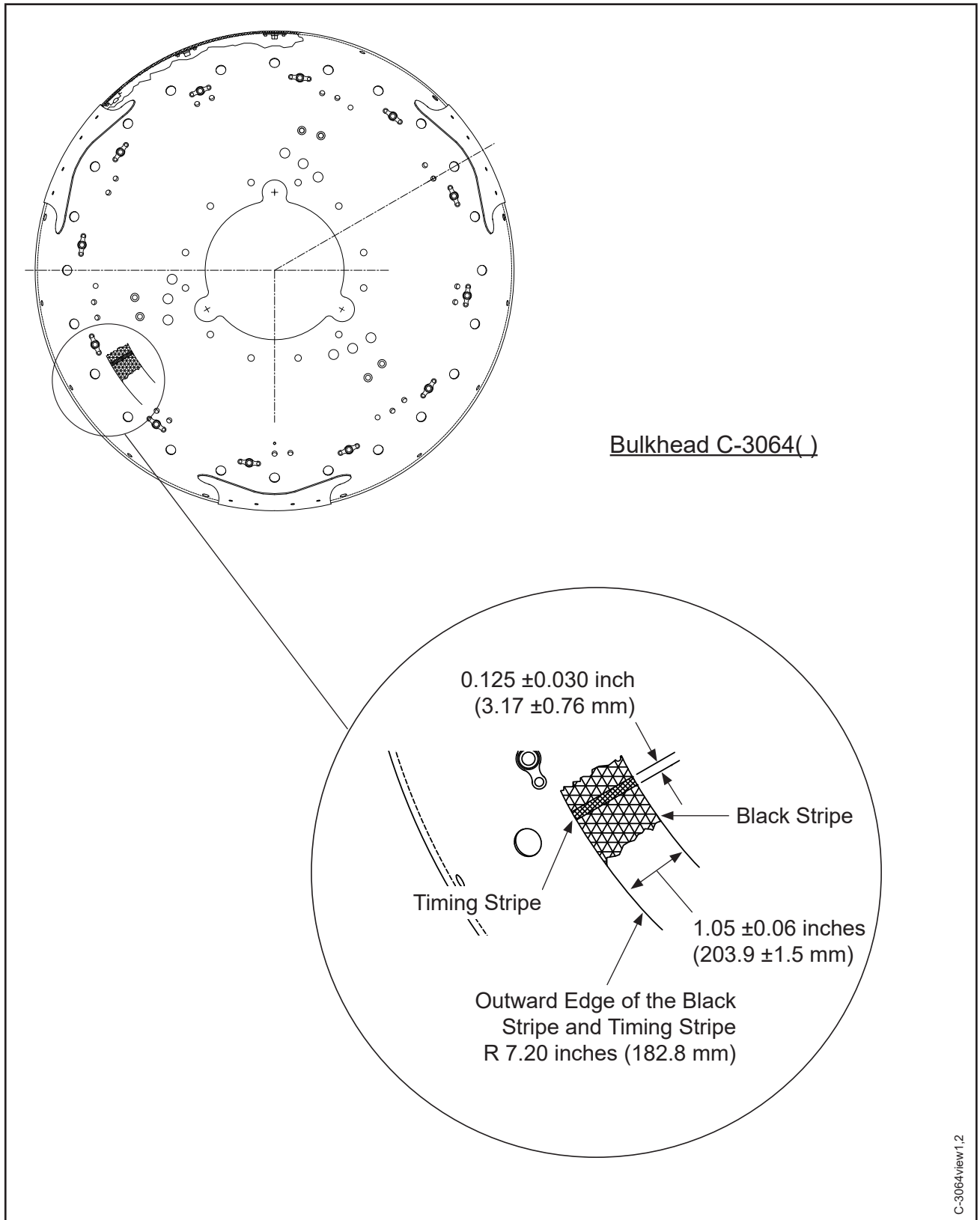
NOTE: A spinner bulkhead with the "F" holes as shown in Figure 6-17 do not require modification.

(1) Procedure

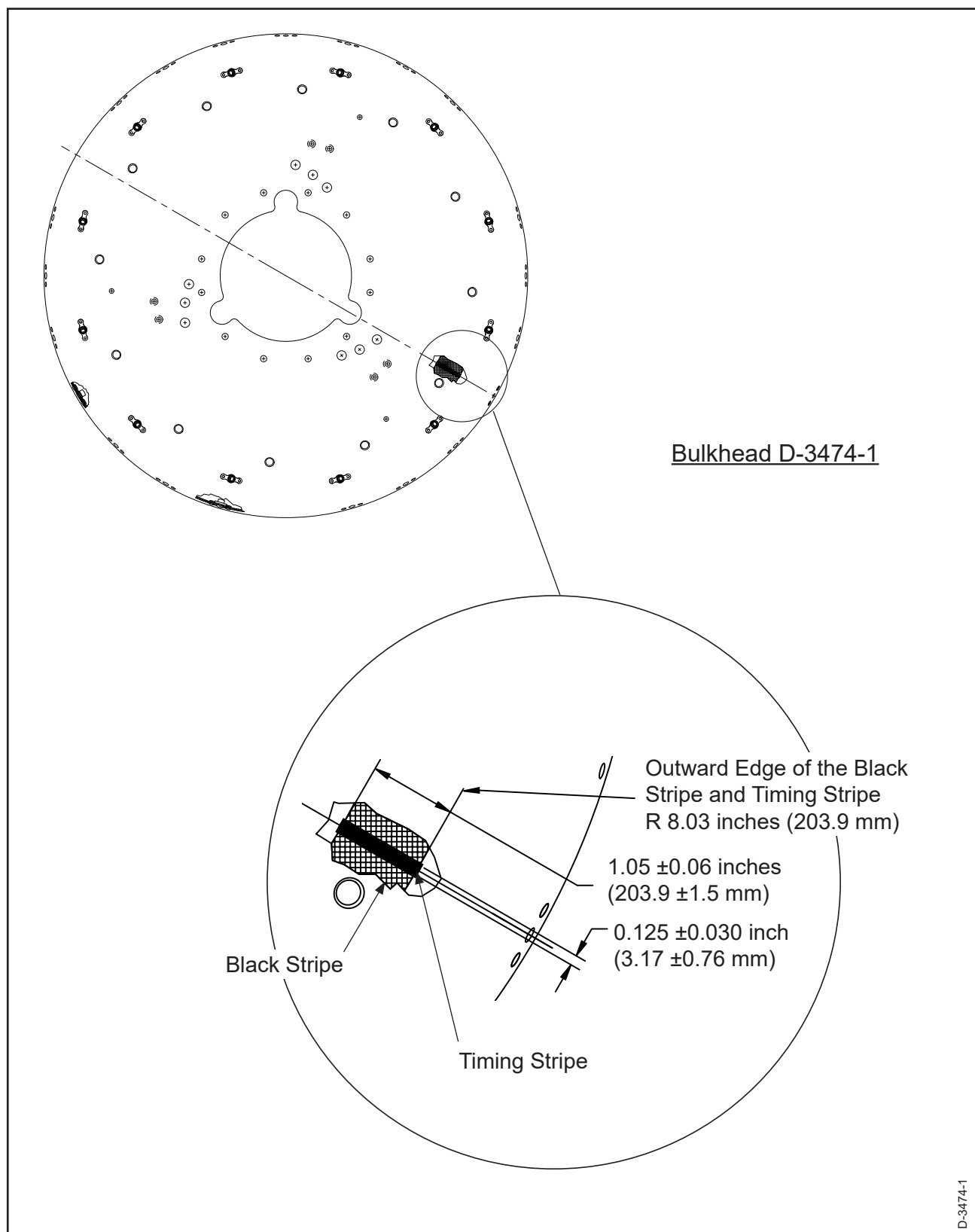
(a) Modify the bulkhead in accordance with Figure 6-17.

Callout in Figure 6-17	Specification for Bulkhead Modification
A	0.490 - 0.510 inches (12.446 - 12.954 mm)
B	4.927 - 4.947 inches (125.146 - 125.654 mm)
C	24 - 25 degrees
D	59.5 - 60.5 degrees
E	Radius 6.271 - 6.291 inches (159.283 - 159.791 mm)
F	Dia. 0.189 - 0.197 inches (4.801 - 5.004 mm)

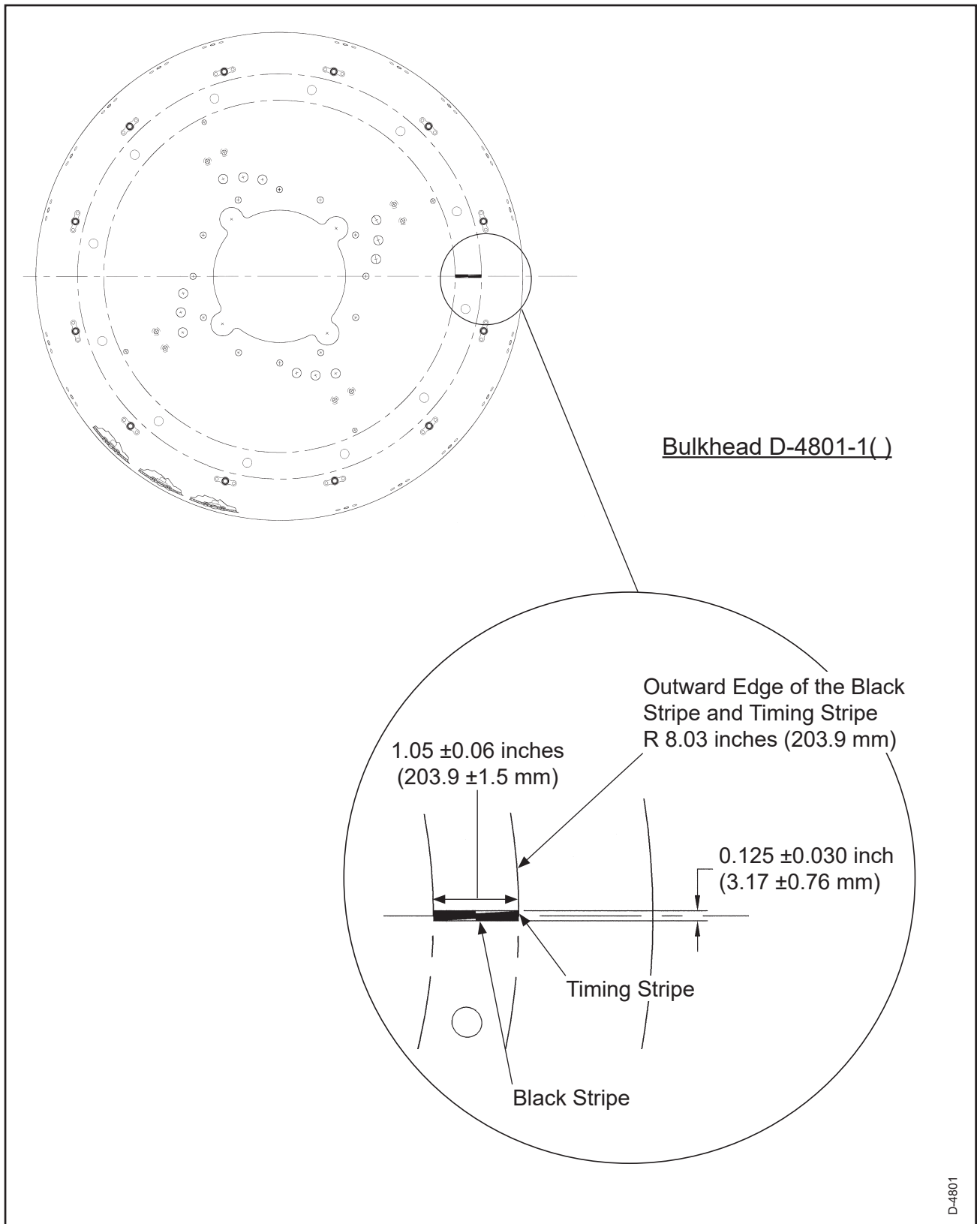
(b) Deburr each hole.



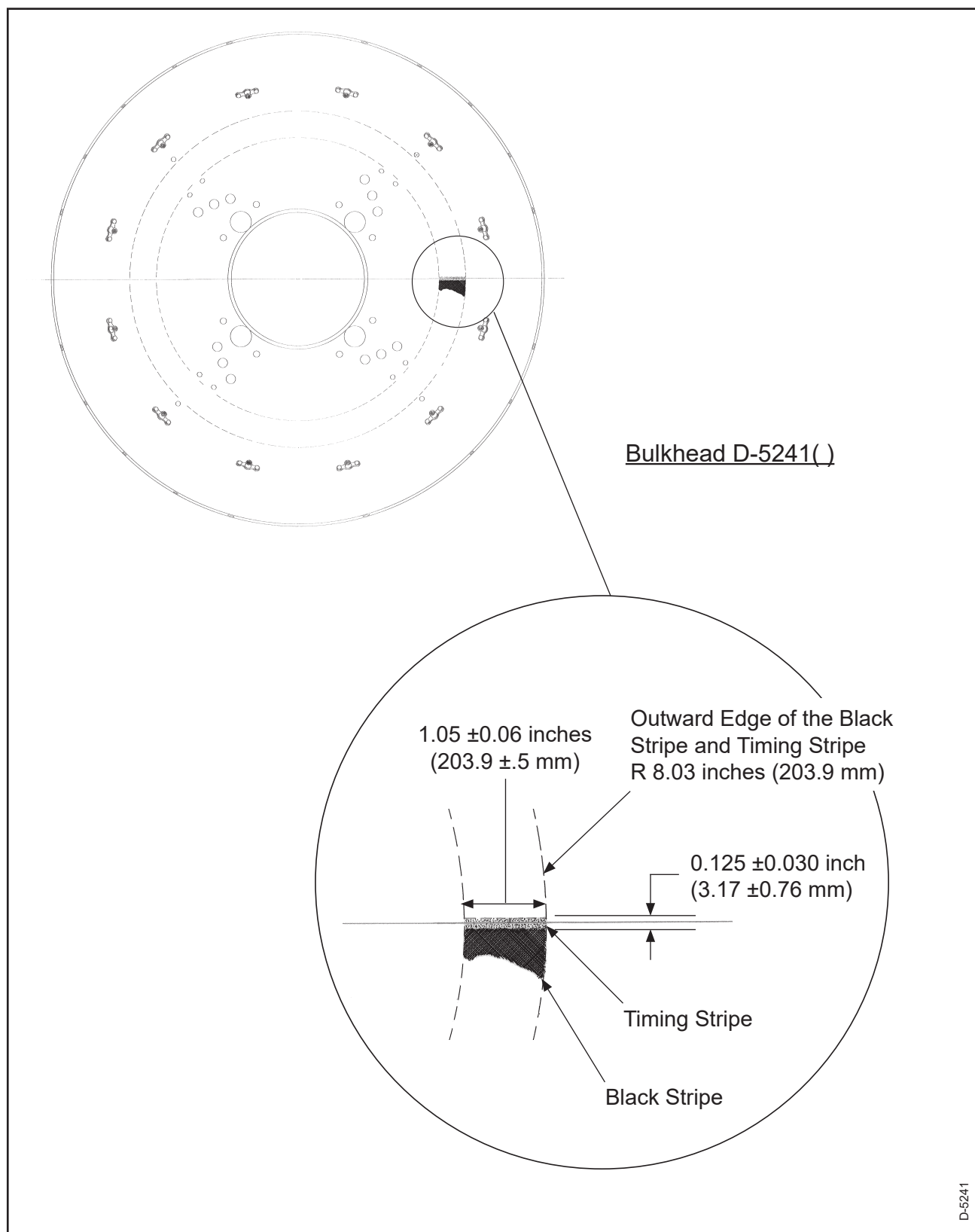
Timing Stripe Specifications
Figure 6-18, page 1 of 4



Timing Stripe Specifications
Figure 6-18, page 2 of 4



Timing Stripe Specifications
Figure 6-18, page 3 of 4



Timing Stripe Specifications
Figure 6-18, page 4 of 4

Q. Application of the Timing Stripe

(1) Procedure

NOTE 1: For information about mixes, refer to the Paint and Finish chapter of Hartzell Standard Practices Manual 202A (61-001-02).

NOTE 2: For the procedures below, refer to the applicable bulkhead in Figure 6-18.

- (a) Using a clean cloth dampened with lacquer thinner CM22 or MEK CM106, wipe the bulkhead.

1 Let the lacquer thinner CM22 or MEK CM106 dry.

- (b) Apply masking material to the bulkhead as necessary for the black stripe.

- (c) Apply Polane® black (Mix #5) paint to the bulkhead.

1 Let the Polane® black (Mix #5) paint dry.

- (d) Remove the masking material from the bulkhead.

- (e) Apply a yellow stripe on the black band in accordance with either Method 1, Paint Procedure or Method 2, Label Procedure.

1 Method 1 - Paint Procedure

a Apply masking material as necessary for the Polane® yellow (Mix #10) paint stripe.

b Apply Polane® yellow (Mix #10) paint to result in a yellow stripe on the bulkhead.

(1) Let the Polane® yellow (Mix #10) paint dry.

c Remove the masking material from the bulkhead.

2 Method 2 - Label Procedure

CAUTION: ADHESION OF THE YELLOW TAPE CM160 MUST BE CONTINUOUS ACROSS THE EDGE OF THE BULKHEAD DOUBLER, WHERE APPLICABLE.

a Apply yellow tape CM160 in accordance with the applicable bulkhead in Figure 6-18.

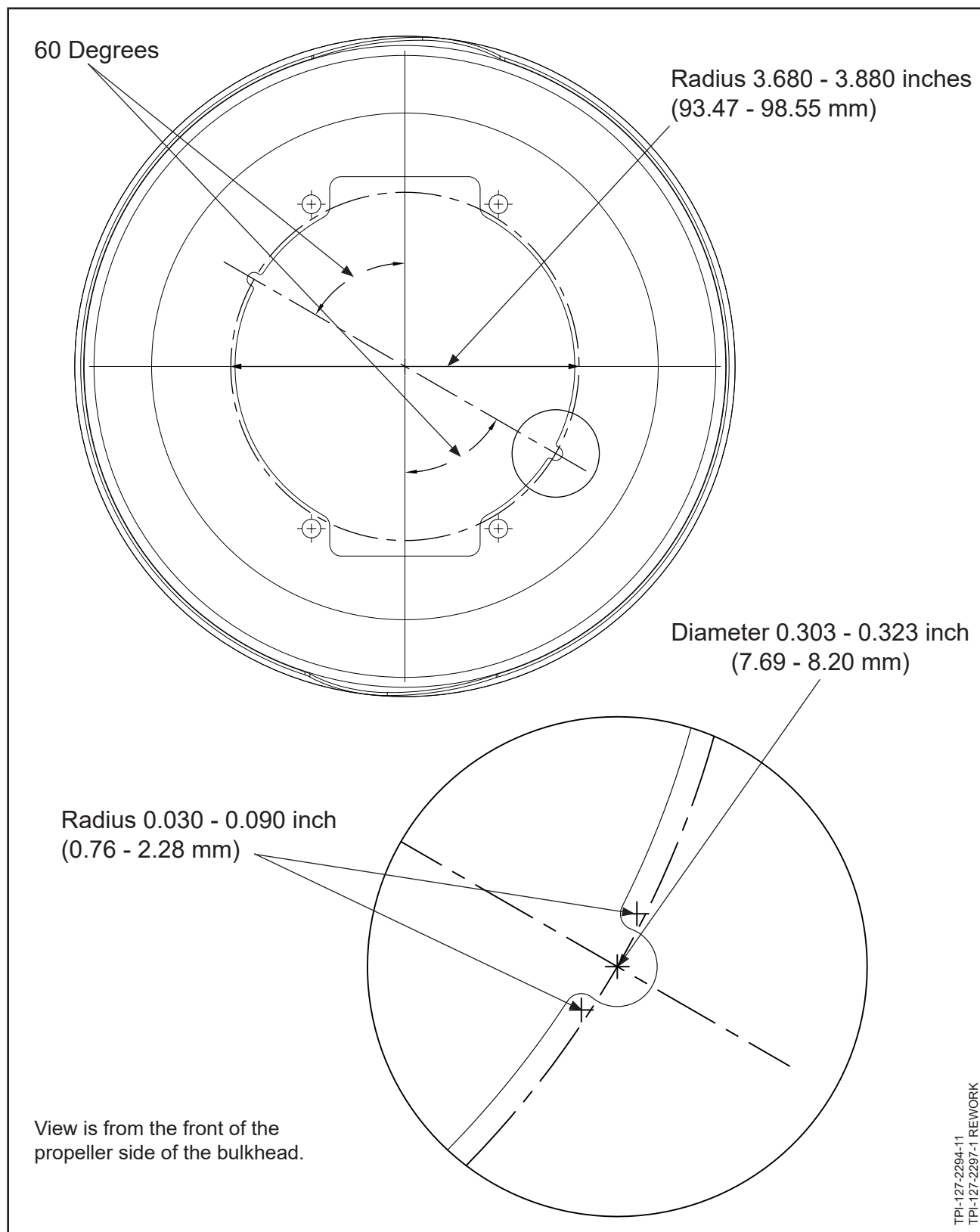
b Cut the yellow tape CM160 to the correct length, if necessary.

c Apply masking material 0.500 inch (12.70 mm) away from around the edges of the yellow tape CM160.

d Apply a layer of clear protective spray CM129 over the yellow tape CM160.

(1) Let the clear protective spray CM129 dry.

e Remove the masking material from the bulkhead.



Modification of C-2294-11(P) Bulkhead for Anti-ice
Figure 6-19

R. Modification of the C-2294-11(P) Bulkhead for Installation of CAV Aerospace (TKS) Anti-ice Components

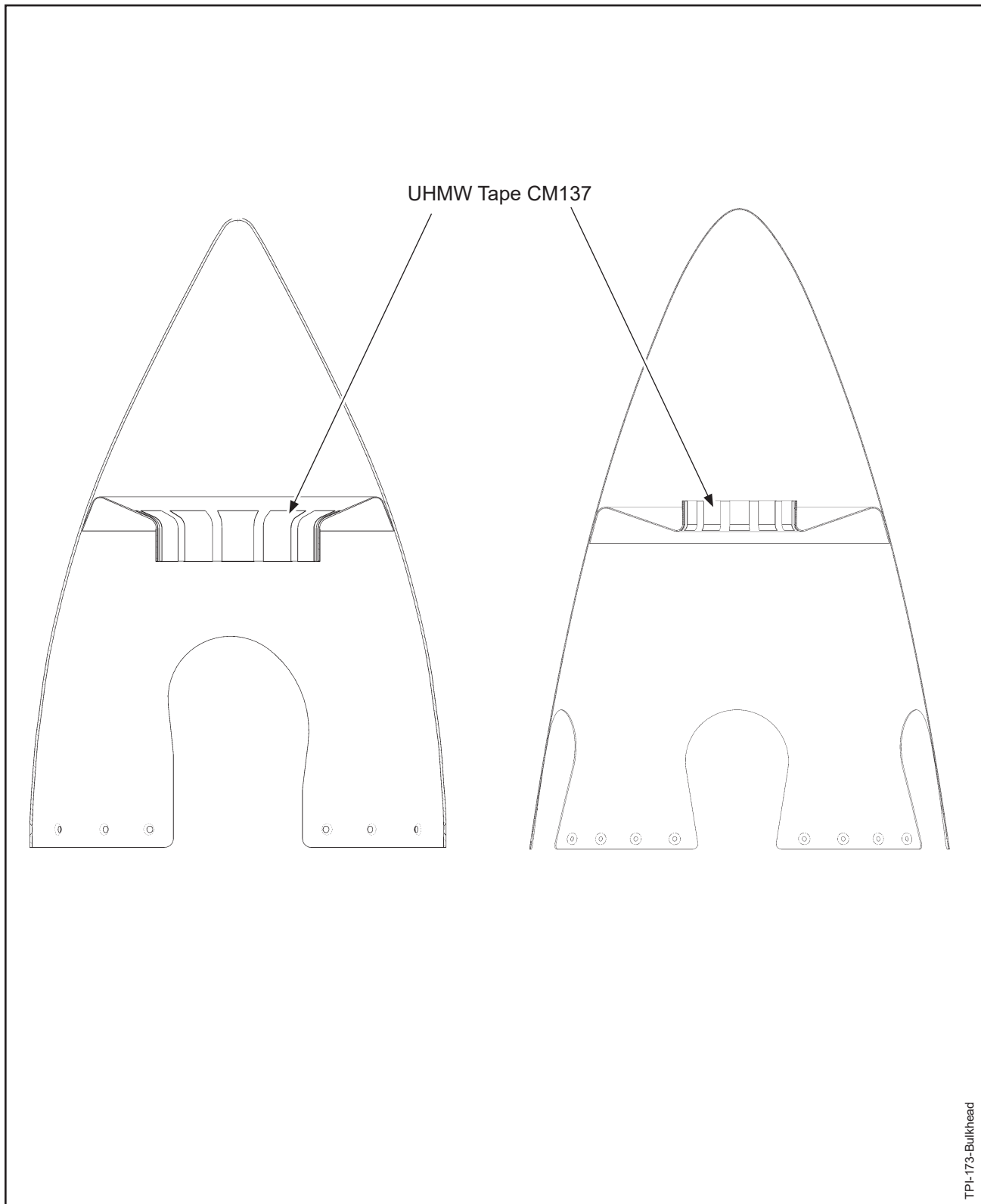
- (1) Remove material from the C-2294-11(P) spinner bulkhead to provide clearance for the travel tube.
- (2) Make cutouts in accordance with the dimensions in Figure 6-19.
 - (a) Using appropriate tooling, remove the material.
 - (b) Remove all burrs and rough edges.
 - (c) Inspect the cutout for the correct dimensions.
- (3) If the dimensions of the cutout are greater than the dimensions in Figure 6-19, replace the C-2294-11(P) spinner bulkhead.

S. Replacement of the UHMW Tape

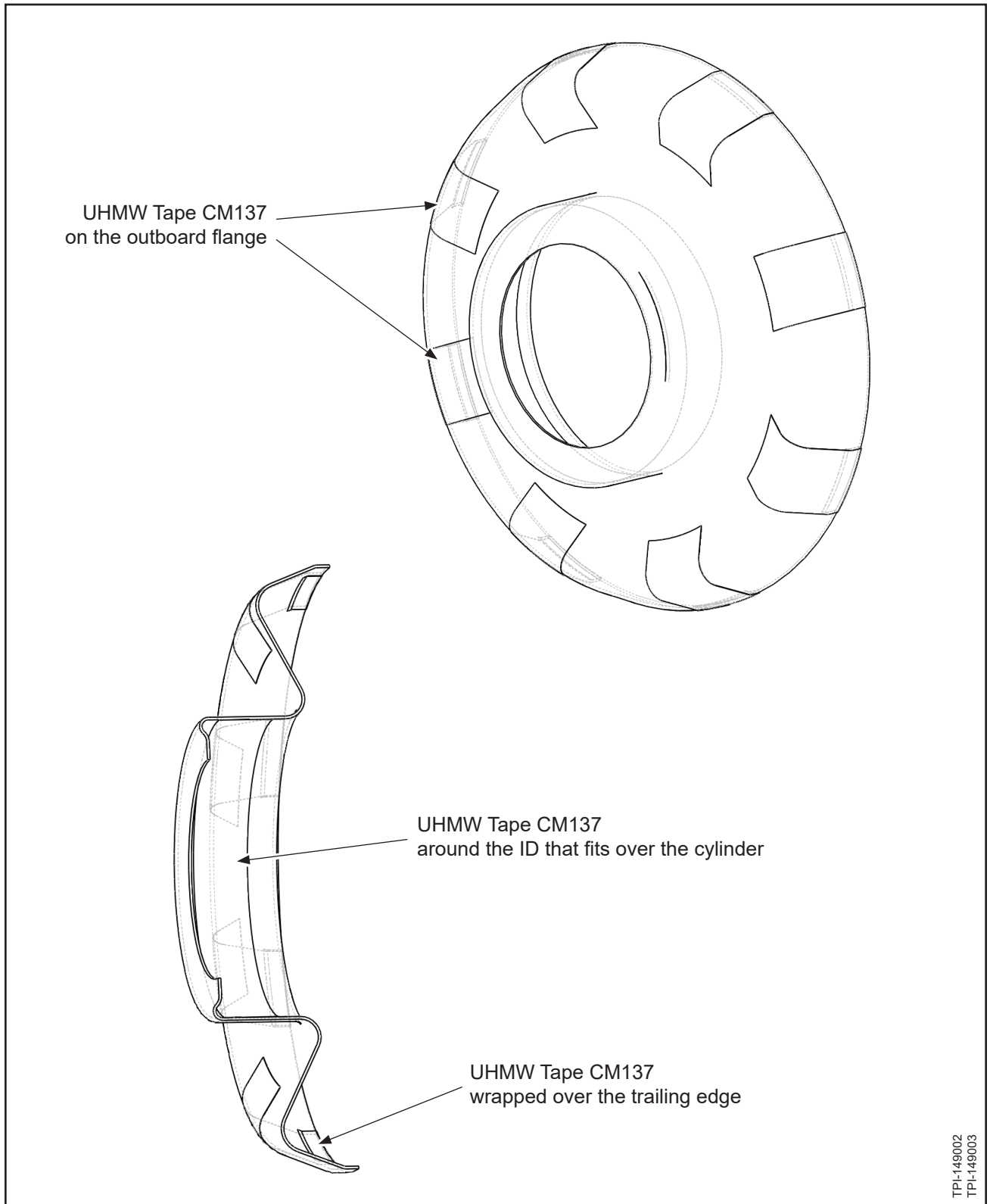
- (1) UHMW Tape Removal
 - (a) Grip the edge of the UHMW tape CM137 and pull to remove it from the forward bulkhead.
- (2) Cleaning

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) Using cheesecloth CM159 or equivalent dampened with acetone CM173, MEK CM106, or MPK CM219, wipe the surface where the UHMW tape CM137 will be installed to remove any adhesive residue.



**UHMW Tape Location -
For a Forward Bulkhead that is Bonded to the Spinner Dome
Figure 6-20**



**UHMW Tape Location -
Forward Bulkhead that is Not Bonded to the Spinner Dome
Figure 6-21**

(3) UHMW Tape Installation

(a) For a forward bulkhead that is bonded to the spinner dome:

- 1 Cut pieces of UHMW tape CM137 that are approximately 2.5 inches (63 mm) long.
 - a Cut the applicable number of pieces to complete the replacement.
- 2 Install the pieces of UHMW tape CM137 in equally spaced locations on the forward bulkhead as shown in Figure 6-20.
- 3 Install additional layers of UHMW tape CM137 if necessary until the forward bulkhead fits snugly on the cylinder.

(b) For a forward bulkhead that is not bonded to the spinner dome:

- 1 Option 1: Apply UHMW tape CM137 around the ID of the forward bulkhead that fits over the cylinder.
 - a Measure and cut one piece of UHMW tape CM137 to fit around the ID of the forward bulkhead.
 - b Install the UHMW tape CM137 around the ID of the forward bulkhead as shown in Figure 6-21.
 - c Install additional layers of UHMW tape CM137 if necessary until the forward bulkhead fits snugly on the cylinder.
- 2 Option 2: Apply UHMW tape CM137 on the outboard flange of the forward bulkhead to prevent contact between the forward bulkhead and the spinner dome.
 - a Cut eight pieces of UHMW tape CM137 that are approximately 3.0 inches (76 mm) long.
 - b Install the pieces of UHMW tape CM137 in equally spaced locations on the outboard flange of the forward bulkhead as shown in Figure 6-21.
 - (1) Wrap the tape over the trailing edge of the forward bulkhead as necessary.
 - c If necessary, install additional layers of UHMW tape CM137.

ASSEMBLY - CONTENTS

1. Spinner Assembly and Installation.....	7-3

(Blank Page)

1. Spinner Assembly and Installation

A. Important Information

- (1) Refer to the Spinner Installation and Removal section of the applicable Hartzell Propeller Owner's Manual for spinner assembly and installation.

(Blank Page)



FITS AND CLEARANCES - CONTENTS

LIST OF TABLES

Spinner Dome Dimensions Table 8-1 8-3

(Blank Page)

DOMES UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOMES DIAMETER inches (mm)	NOSE RADIUS inches (mm)
C-1872-4()	DOMES UNIT	3	17.900 (454.66 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-1888()	DOMES UNIT	3	18.220 (426.78 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-1888-()	DOMES UNIT	3	18.220 (468.78 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-1888-U	DOMES UNIT	3	18.278 (464.26 mm)	14.116 (358.54 mm)	1.250 (31.75 mm)
C-1904()	DOMES	3	15.460 (392.68 mm)	12.850 (326.39 mm)	1.331 (33.80 mm)
C-1904-()	DOMES	3	15.460 (392.68 mm)	12.850 (326.39 mm)	1.331 (33.80 mm)
C-1904-1()	DOMES	2	15.460 (392.68 mm)	12.850 (326.39 mm)	1.331 (33.80 mm)
C-1904-2()	DOMES UNIT	2	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
C-1904-3()	DOMES	2	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
C-1904-4()	DOMES UNIT	3	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
C-1904-5()	DOMES	3	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
C-1904-6()	DOMES UNIT	3	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
C-1904-7()	DOMES UNIT	2	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
C-1904-8()	DOMES	2	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
C-226()	DOMES	2	14.100 (358.14 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-226-()	DOMES	2	14.100 (358.14 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-226-1()	DOMES	3	14.100 (358.14 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-226-2()	DOMES	3	14.100 (358.14 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-226-4()	DOMES	3	14.100 (358.14 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-226-5()	DOMES	2	14.100 (358.14 mm)	14.100 (358.14 mm)	1.290 (32.76 mm)
C-2284()	DOMES UNIT	2	19.203 (487.75 mm)	14.597 (370.76 mm)	0.540 (13.71 mm)
C-2284-1()	DOMES UNIT	2	19.203 (487.75 mm)	14.370 (364.99 mm)	0.540 (13.71 mm)
C-2284-2()	DOMES UNIT	2	17.883 (454.22 mm)	14.279 (362.68 mm)	0.540 (13.71 mm)
C-2284-2L()	DOMES UNIT	2	17.883 (454.22 mm)	14.279 (362.68 mm)	0.540 (13.71 mm)
C-2284-3()	DOMES UNIT	2	17.883 (454.22 mm)	14.279 (362.68 mm)	0.540 (13.71 mm)
C-2284-3L()	DOMES UNIT	2	17.883 (454.22 mm)	14.279 (362.68 mm)	0.540 (13.71 mm)
C-2284-4()	DOMES UNIT	2	18.203 (462.35 mm)	14.355 (364.10 mm)	0.540 (13.71 mm)
C-2284-4L()	DOMES UNIT	2	18.203 (462.35 mm)	14.355 (364.10 mm)	0.540 (13.71 mm)
C-2284-5()	DOMES UNIT	2	18.203 (462.35 mm)	14.355 (364.10 mm)	0.540 (13.71 mm)
C-2284-6()	DOMES UNIT	2	19.203 (487.75 mm)	14.597 (370.76 mm)	0.540 (13.71 mm)
C-2445()	DOMES UNIT	2	15.708 (398.98 mm)	14.116 (358.54 mm)	--
C-2445-()	DOMES UNIT	2	14.208 (360.88 mm)	14.116 (358.54 mm)	--
C-2445-1()	DOMES UNIT	2	18.040 (458.21 mm)	14.100 (358.14 mm)	1.550 (39.37 mm)
C-2445-1L()	DOMES UNIT	2	18.040 (458.21 mm)	14.100 (358.14 mm)	1.550 (39.37 mm)
C-2445-2()	DOMES UNIT	2	14.208 (360.88 mm)	14.116 (358.54 mm)	--
C-2471()	DOMES UNIT	2	17.945 (455.80 mm)	12.850 (326.39 mm)	1.550 (39.37 mm)
C-2471-1()	DOMES UNIT	2	17.004 (431.90 mm)	12.850 (326.39 mm)	1.550 (39.37 mm)
C-2495-1()	DOMES UNIT	2	16.970 (431.03 mm)	14.100 (358.14 mm)	1.550 (39.37 mm)
C-2495-1L()	DOMES UNIT	2	16.970 (431.03 mm)	14.100 (358.14 mm)	1.550 (39.37 mm)
C-2531()	DOMES	2	15.850 (402.59 mm)	15.500 (393.70 mm)	1.290 (32.76 mm)
C-2531-()	DOMES	2	15.850 (402.59 mm)	15.500 (393.70 mm)	1.290 (32.76 mm)

**Spinner Domes Dimensions
Table 8-1**

DOME UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOME DIAMETER inches (mm)	NOSE RADIUS inches (mm)
C-2531-1()	DOME	3	15.850 (402.59 mm)	15.500 (393.70 mm)	1.290 (32.76 mm)
C-2531-2()	DOME UNIT	3	18.160 (461.26 mm)	15.500 (393.70 mm)	1.290 (32.76 mm)
C-2531-5()	DOME	3	15.850 (402.59 mm)	15.500 (393.70 mm)	1.290 (32.76 mm)
C-2531-7()	DOME	4	20.480 (520.19 mm)	15.820 (401.82 mm)	1.290 (32.76 mm)
C-2531-8()	DOME	2	15.850 (402.59 mm)	15.500 (393.70 mm)	1.290 (32.76 mm)
C-2531-9()	DOME	3	20.480 (520.19 mm)	15.820 (401.82 mm)	1.290 (32.76 mm)
C-2531-10()	DOME	2	15.850 (402.59 mm)	15.500 (393.70 mm)	1.290 (32.76 mm)
C-2934()	DOME	2	15.440 (392.17 mm)	13.900 (353.06 mm)	1.550 (39.37 mm)
C-3004()	DOME	3	19.030 (483.36 mm)	18.400 (467.36 mm)	1.360 (34.54 mm)
C-3004-()	DOME	3	19.030 (483.36 mm)	18.400 (467.36 mm)	1.360 (34.54 mm)
C-3004-1()	DOME	4	19.030 (483.36 mm)	18.420 (467.86 mm)	1.360 (34.54 mm)
C-3004-2()	DOME	3	18.840 (478.53 mm)	18.370 (466.59 mm)	1.360 (34.54 mm)
C-3004-4()	DOME	4	18.840 (478.53 mm)	18.890 (479.80 mm)	1.360 (34.54 mm)
C-3088()	DOME UNIT	3	19.908 (484.63 mm)	14.116 (358.54 mm)	--
C-3274()	DOME UNIT	3	22.001 (558.82 mm)	15.850 (402.59 mm)	0.610 (15.49 mm)
C-3274-()	DOME UNIT	3	22.001 (558.82 mm)	15.850 (402.59 mm)	0.610 (15.49 mm)
C-3274-1()	DOME UNIT	3	20.591 (523.01 mm)	15.809 (401.54 mm)	0.610 (15.49 mm)
C-3274-2()	DOME UNIT	3	20.591 (523.01 mm)	15.809 (401.54 mm)	0.610 (15.49 mm)
C-3274-3()	DOME UNIT	3	20.591 (523.01 mm)	15.809 (401.54 mm)	0.616 (15.46 mm)
C-3278()	DOME UNIT	3	18.094 (459.85 mm)	15.340 (389.63 mm)	0.540 (13.71 mm)
C-3278-()	DOME UNIT	3	18.090 (459.48 mm)	15.340 (389.63 mm)	0.540 (13.71 mm)
C-3278-2()	DOME UNIT	3	18.760 (476.50 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
C-3278-2L()	DOME UNIT	2	18.760 (476.50 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
C-3278-3()	DOME UNIT	3	19.163 (486.74 mm)	15.340 (389.63 mm)	0.540 (13.71 mm)
C-3278-5()	DOME UNIT	3	18.760 (476.50 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
C-3278-6()	DOME UNIT	3	19.619 (498.32 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
C-3278-6L()	DOME UNIT	3	17.619 (447.52 mm)	15.340 (389.63 mm)	0.540 (13.71 mm)
C-3278-L()	DOME UNIT	3	18.090 (459.48 mm)	15.340 (389.63 mm)	0.540 (13.71 mm)
C-3282()	DOME	3	15.360 (390.14 mm)	11.020 (279.90 mm)	0.800 (20.32 mm)
C-3282-1()	DOME	2	14.410 (366.01 mm)	11.020 (279.90 mm)	0.800 (20.32 mm)
C-3282-2()	DOME	2	14.000 (355.60 mm)	11.020 (279.90 mm)	0.800 (20.32 mm)
C-3282-3()	DOME	3	16.050 (406.67 mm)	11.020 (279.90 mm)	0.800 (20.32 mm)
C-3282-4()	DOME UNIT	3	15.370 (390.39 mm)	11.040 (280.41 mm)	0.750 (19.05 mm)
C-3282-5()	DOME UNIT	3	16.060 (407.92 mm)	11.040 (280.41 mm)	0.750 (19.05 mm)
C-3436()	DOME	3	20.920 (531.36 mm)	19.530 (496.06 mm)	1.375 (34.92 mm)
C-3436-()	DOME	3	20.920 (531.36 mm)	19.530 (496.06 mm)	1.375 (34.92 mm)
C-3436-1()	DOME	4	20.920 (531.36 mm)	19.530 (496.06 mm)	1.375 (34.92 mm)
C-3436-2()	DOME	5	20.920 (531.36 mm)	19.530 (496.06 mm)	1.375 (34.92 mm)
C-3532()	DOME UNIT	2	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)
C-3532-()	DOME UNIT	2	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)
C-3532-1()	DOME UNIT	3	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)

Spinner Dome Dimensions
Table 8-1, continued

DOMES UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOMES DIAMETER inches (mm)	NOSE RADIUS inches (mm)
C-3532-2()	DOMES UNIT	3	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)
C-3532-3()	DOMES UNIT	3	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)
C-3532-4()	DOMES UNIT	2	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)
C-3532-5()	DOMES	3	17.110 (434.59 mm)	13.710 (348.23 mm)	0.414 (10.51 mm)
C-3532-6()	DOMES	3	17.270 (436.65 mm)	14.600 (370.84 mm)	0.414 (10.51 mm)
C-3532-7()	DOMES UNIT	3	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)
C-3532-8()	DOMES UNIT	2	20.120 (511.04 mm)	14.200 (360.68 mm)	0.414 (10.51 mm)
C-3532-9()	DOMES UNIT	2	17.600 (447.04 mm)	13.900 (353.06 mm)	0.414 (10.51 mm)
C-3532-11()	DOMES UNIT	3	17.102 (434.39 mm)	13.714 (348.33 mm)	0.130 (3.30 mm)
C-3532-12()	DOMES UNIT	2	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)
C-3532-12PC	DOMES UNIT	2	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)
C-3532-13()	DOMES UNIT	2	18.560 (471.42 mm)	14.300 (362.22 mm)	0.414 (10.51 mm)
C-3532-14()	DOMES UNIT	3	17.100 (434.34 mm)	14.300 (362.22 mm)	0.414 (10.51 mm)
C-3532-15()	DOMES UNIT	3	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)
C-3532-16()	DOMES UNIT	3	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)
C-3532-16PC	DOMES UNIT	3	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)
C-3532-17()	DOMES UNIT	2	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)
C-3532-18()	DOMES UNIT	2	17.100 (434.34 mm)	17.700 (449.58 mm)	0.414 (10.51 mm)
C-3532-19()	DOMES	3	17.532 (445.31 mm)	13.934 (353.92 mm)	0.414 (10.51 mm)
C-3532-20()	DOMES UNIT	3	20.114 (510.89 mm)	14.826 (376.58 mm)	0.310 (7.87 mm)
C-3532-21()	DOMES	3	19.239 (488.67 mm)	14.564 (369.92 mm)	0.414 (10.51 mm)
C-3532-22()	DOMES UNIT	2	19.239 (488.67 mm)	14.564 (369.92 mm)	0.414 (10.51 mm)
C-3532-23()	DOMES UNIT	3	20.120 (511.04 mm)	14.820 (376.42 mm)	0.414 (10.51 mm)
C-3532-24()	DOMES	3	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)
C-3532-26()	DOMES	3	17.530 (445.26 mm)	13.934 (353.92 mm)	0.414 (10.51 mm)
C-3753()	DOMES	3	20.050 (509.27 mm)	14.300 (362.22 mm)	1.250 (31.75 mm)
C-3753-()	DOMES	3	20.050 (509.27 mm)	14.300 (362.22 mm)	1.250 (31.75 mm)
C-4205()	DOMES	2	15.240 (387.09 mm)	12.852 (326.44 mm)	1.651 (41.93 mm)
C-4205-()	DOMES	2	15.240 (387.09 mm)	12.852 (326.44 mm)	1.651 (41.93 mm)
C-4205-1()	DOMES	2	19.530 (496.06 mm)	12.852 (326.44 mm)	0.611 (15.51 mm)
C-4249()	DOMES	3	13.400 (340.36 mm)	15.230 (386.84 mm)	--
C-4249-()	DOMES	3	13.400 (340.36 mm)	15.230 (386.84 mm)	--
C-4250()	DOMES UNIT	3	18.120 (460.24 mm)	15.340 (389.63 mm)	1.330 (33.78 mm)
C-4250-()	DOMES UNIT	3	18.120 (460.24 mm)	15.340 (389.63 mm)	1.330 (33.78 mm)
C-4250-1()	DOMES UNIT	3	18.120 (460.24 mm)	15.340 (389.63 mm)	1.330 (33.78 mm)
C-4533()	DOMES UNIT	2	19.970 (507.23 mm)	13.757 (349.42 mm)	1.000 (25.4 mm)
C-4533-1()	DOMES UNIT	2	19.970 (507.23 mm)	13.757 (349.42 mm)	1.000 (25.4 mm)
C-4533-2()	DOMES UNIT	2	19.970 (507.23 mm)	13.757 (349.42 mm)	1.000 (25.4 mm)
C-4568()	DOMES UNIT	2	19.060 (484.12 mm)	15.400 (391.16 mm)	0.500 (12.7 mm)
C-4568-()	DOMES UNIT	2	19.060 (484.12 mm)	15.400 (391.16 mm)	0.500 (12.7 mm)
C-4575()	DOMES UNIT	3	17.100 (434.34 mm)	13.700 (347.98 mm)	0.414 (10.51 mm)

Spinner Domes Dimensions
Table 8-1, continued

DOME UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOME DIAMETER inches (mm)	NOSE RADIUS inches (mm)
C-4586()	DOME UNIT	3	17.418 (442.41 mm)	13.163 (334.34 mm)	0.313 (7.95 mm)
C-4586-()	DOME UNIT	3	17.418 (442.41 mm)	13.163 (334.34 mm)	0.313 (7.95 mm)
D-1647()	DOME UNIT	3	21.130 (536.70 mm)	15.850 (402.59 mm)	0.163 (4.14 mm)
D-1647-()	DOME UNIT	3	21.130 (536.70 mm)	15.850 (402.59 mm)	0.163 (4.14 mm)
D-1687()	DOME	5	23.565 (598.55 mm)	19.631 (498.60 mm)	0.675 (17.14 mm)
D-1687-()	DOME	5	23.565 (598.55 mm)	19.631 (498.60 mm)	0.675 (17.14 mm)
D-1687-2()	DOME	5	23.600 (599.44 mm)	19.631 (498.60 mm)	0.675 (17.14 mm)
D-1687-3()	DOME	5	23.790 (604.26 mm)	19.673 (499.69 mm)	0.675 (17.14 mm)
D-4035()	DOME	3	23.020 (584.70 mm)	21.700 (551.18 mm)	2.030 (51.56 mm)
D-4035-()	DOME	3	23.020 (584.70 mm)	21.700 (551.18 mm)	2.030 (51.56 mm)
D-4035-1()	DOME	5	22.762 (578.15 mm)	21.569 (547.85 mm)	2.030 (51.56 mm)
D-4035-1B()	DOME	5	22.762 (578.15 mm)	21.569 (547.85 mm)	2.030 (51.56 mm)
D-4035-2()	DOME	3	23.025 (584.83 mm)	21.722 (551.73 mm)	2.030 (51.56 mm)
D-4512()	DOME UNIT	4	23.255 (590.67 mm)	16.326 (414.68 mm)	0.468 (11.88 mm)
D-4512-()	DOME UNIT	4	23.255 (590.67 mm)	16.326 (414.68 mm)	--
D-4512-L()	DOME UNIT	4	23.255 (590.67 mm)	16.326 (414.68 mm)	--
D-4512-1()	DOME UNIT	4	23.255 (590.67 mm)	16.326 (414.68 mm)	0.468 (11.88 mm)
D-4512-2()	DOME UNIT	4	23.255 (590.67 mm)	16.326 (414.68 mm)	0.550 (13.97 mm)
D-4512-2L()	DOME UNIT	4	23.255 (590.67 mm)	16.326 (414.68 mm)	0.550 (13.97 mm)
D-4512-3()	DOME UNIT	4	23.382 (593.90 mm)	16.326 (414.68 mm)	--
D-4512-4()	DOME UNIT	4	23.255 (590.67 mm)	16.326 (414.68 mm)	0.550 (13.97 mm)
D-4512-5()	DOME UNIT	3	23.349 (593.06 mm)	16.326 (414.68 mm)	0.550 (13.97 mm)
D-4512-5L()	DOME UNIT	3	23.349 (593.06 mm)	16.326 (414.68 mm)	0.550 (13.97 mm)
D-4512-6()	DOME UNIT	4	23.349 (593.06 mm)	16.326 (414.68 mm)	0.547 (13.89 mm)
D-4512-7()	DOME UNIT	4	23.349 (593.06 mm)	16.326 (414.68 mm)	--
D-4512-8()	DOME UNIT	3	23.349 (593.06 mm)	16.326 (414.68 mm)	--
D-4512-8L()	DOME UNIT	3	23.349 (593.06 mm)	16.326 (414.68 mm)	--
D-4516()	DOME UNIT	4	23.989 (609.32 mm)	18.531 (470.68 mm)	0.550 (13.97 mm)
D-4516L()	DOME UNIT	4	23.989 (609.32 mm)	18.531 (470.68 mm)	0.500 (12.7 mm)
D-4516-()	DOME UNIT	4	23.989 (609.32 mm)	18.531 (470.68 mm)	0.550 (13.97 mm)
D-4516-2()	DOME UNIT	4	23.489 (596.62 mm)	18.400 (467.36 mm)	0.548 (13.91 mm)
D-4516-2L()	DOME UNIT	4	23.489 (596.62 mm)	18.400 (467.36 mm)	0.548 (13.91 mm)
D-4525()	DOME UNIT	3	23.683 (601.54 mm)	18.150 (461.01 mm)	0.550 (13.97 mm)
D-4525-()	DOME UNIT	3	23.683 (601.54 mm)	18.150 (461.01 mm)	0.550 (13.97 mm)
D-4525-L()	DOME UNIT	3	23.683 (601.54 mm)	18.150 (461.01 mm)	0.550 (13.97 mm)
D-4525-1()	DOME UNIT	3	23.683 (601.54 mm)	18.150 (461.01 mm)	--
D-4525-1L()	DOME UNIT	3	23.683 (601.54 mm)	18.150 (461.01 mm)	--
D-4525-2()	DOME UNIT	3	23.685 (601.59 mm)	18.181 (461 mm)	--
D-4525-2L()	DOME UNIT	3	23.685 (601.59 mm)	18.181 (461 mm)	--
D-4525-3()	DOME UNIT	3	23.683 (601.54 mm)	18.181 (461 mm)	0.553 (14.04 mm)
D-4528()	DOME	4	23.560 (598.42 mm)	19.700 (500.38 mm)	0.675 (17.14 mm)

Spinner Dome Dimensions
Table 8-1, continued

DOME UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOME DIAMETER inches (mm)	NOSE RADIUS inches (mm)
D-4545-()	DOME	4	23.560 (598.42 mm)	19.700 (500.38 mm)	0.675 (17.14 mm)
D-4560-1()	DOME UNIT	3	21.033 (533.47 mm)	14.380 (365.25 mm)	0.540 (13.71 mm)
D-4560-2()	DOME UNIT	3	21.542 (547.16 mm)	14.330 (363.98 mm)	0.540 (13.71 mm)
D-4580()	DOME UNIT	3	21.300 (541.02 mm)	16.380 (416.05 mm)	0.490 (12.44 mm)
D-4580-()	DOME UNIT	3	21.300 (541.02 mm)	16.576 (421.03 mm)	0.490 (12.44 mm)
D-4580-1()	DOME UNIT	3	20.520 (521.20 mm)	16.380 (416.05 mm)	0.490 (12.44 mm)
D-4797()	DOME UNIT	2	17.400 (441.96 mm)	12.706 (322.73 mm)	--
D-4797-1()	DOME UNIT	3	17.400 (441.96 mm)	12.706 (322.73 mm)	--
D-4797-2()	DOME UNIT	2	19.520 (495.80 mm)	12.850 (326.39 mm)	--
D-4797-3()	DOME UNIT	3	19.520 (495.80 mm)	12.850 (326.39 mm)	--
D-4817()	DOME UNIT	3	19.040 (483.61 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
D-4817-()	DOME UNIT	3	19.040 (483.61 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
D-4824-L()	DOME UNIT	2	15.460 (392.68 mm)	12.852 (326.44 mm)	1.331 (33.80 mm)
D-4827()	DOME UNIT	2	17.680 (449.07 mm)	14.279 (362.68 mm)	0.540 (13.71 mm)
D-4827-()	DOME UNIT	2	17.680 (449.07 mm)	14.279 (362.68 mm)	0.540 (13.71 mm)
D-4827-L()	DOME UNIT	2	17.680 (449.07 mm)	14.279 (362.68 mm)	0.540 (13.71 mm)
D-4830()	DOME UNIT	3	17.740 (450.59 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
D-4830-()	DOME UNIT	3	17.740 (450.59 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
D-4830-1()	DOME UNIT	3	17.740 (450.59 mm)	15.330 (389.38 mm)	0.540 (13.71 mm)
D-4837-()	DOME	3	20.480 (520.19 mm)	15.820 (401.82 mm)	1.290 (32.76 mm)
D-4847()	DOME	4	20.560 (522.22 mm)	18.550 (471.17 mm)	1.310 (33.27 mm)
D-4847-()	DOME	4	20.560 (522.22 mm)	18.550 (471.17 mm)	1.310 (33.27 mm)
D-4898()	DOME	3	20.920 (531.36 mm)	19.530 (496.06 mm)	1.375 (34.92 mm)
D-4898-()	DOME	3	20.920 (531.36 mm)	19.530 (496.06 mm)	1.375 (34.92 mm)
D-5206()	DOME UNIT	3	20.330 (516.38 mm)	14.320 (363.72mm)	0.540 (13.71 mm)
D-5206-()	DOME UNIT	3	20.330 (516.38 mm)	14.320 (363.72mm)	0.540 (13.71 mm)
D-5210()	DOME	4	23.560 (598.42 mm)	18.500 (469.90 mm)	1.065 (27.05 mm)
D-5210-1()	DOME	4	23.500 (596.90 mm)	18.500 (469.90 mm)	1.065 (27.05 mm)
D-5210-2()	DOME	4	23.220 (589.78 mm)	18.400 (467.36 mm)	1.065 (27.05 mm)
D-5210-3()	DOME	4	23.815 (604.90 mm)	18.633 (473.27 mm)	1.065 (27.05 mm)
D-5210-5()	DOME	4	23.560 (598.42 mm)	18.548 (471.12 mm)	1.065 (27.05 mm)
D-5210-()	DOME	4	23.560 (598.42 mm)	18.500 (469.90 mm)	1.065 (27.05 mm)
D-5227()	DOME	3	23.565 (598.55 mm)	19.630 (498.60 mm)	6.250 (158.75 mm)
D-5227-()	DOME	3	23.565 (598.55 mm)	19.630 (498.60 mm)	6.250 (158.75 mm)
D-5236()	DOME UNIT	2	18.750 (476.25 mm)	14.000 (355.60 mm)	--
D-5259-()	DOME UNIT	3	15.060 (382.52 mm)	15.340 (389.63 mm)	--
D-5320()	DOME	4	22.995 (584.07 mm)	19.700 (500.38 mm)	--
D-5320-()	DOME	4	22.995 (584.07 mm)	19.700 (500.38 mm)	--
D-5422-()	DOME	4	18.278 (464.26 mm)	14.116 (358.54 mm)	1.290 (32.76 mm)
D-5427-1()	DOME UNIT	3	18.278 (464.26 mm)	14.116 (358.54 mm)	1.290 (32.76 mm)
D-5490()	DOME UNIT	3	20.536 (521.61 mm)	14.330 (363.98 mm)	0.550 (13.97 mm)

Spinner Dome Dimensions
Table 8-1, continued

DOME UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOME DIAMETER inches (mm)	NOSE RADIUS inches (mm)
D-5490-()	DOME UNIT	3	20.536 (521.61 mm)	14.330 (363.98 mm)	0.550 (13.97 mm)
D-5496-L()	DOME UNIT	3	24.688 (627.07 mm)	--	--
D-5548()	DOME	4	24.688 (627.07 mm)	18.480 (469.39 mm)	1.060 (26.92 mm)
D-5548-()	DOME	4	24.688 (627.07 mm)	18.480 (469.39 mm)	1.060 (26.92 mm)
D-5554()	DOME ASSEMBLY	5	33.880 (860.55 mm)	21.440 (544.57 mm)	1.181 (29.99 mm)
D-5554-()	DOME ASSEMBLY	5	33.880 (860.55 mm)	21.440 (544.57 mm)	1.181 (29.99 mm)
D-5560-1()	DOME	4	23.390 (594.10 mm)	19.742 (501.44 mm)	1.800 (45.72 mm)
D-5576()	DOME	5	24.045 (610.74 mm)	19.720 (500.88 mm)	0.675 (17.14 mm)
D-5576-()	DOME	5	24.045 (610.74 mm)	19.720 (500.88 mm)	0.675 (17.14 mm)
D-5598()	DOME	5	26.342 (669.08 mm)	22.995 (584.07 mm)	--
D-5705()	DOME UNIT	3	21.060 (534.92 mm)	15.120 (384.04 mm)	0.500 (12.70 mm)
D-5714()	DOME	4	23.798 (610.74 mm)	18.994 (482.44 mm)	1.000 (25.40 mm)
D-5714-()	DOME	4	23.798 (610.74 mm)	18.994 (482.44 mm)	1.000 (25.40 mm)
D-5714-1()	DOME	3	23.798 (610.74 mm)	18.994 (482.44 mm)	0.130 (3.30 mm)
D-5733()	DOME UNIT	3	18.228 (462.99 mm)	12.636 (320.95 mm)	0.610 (15.49 mm)
D-5733-()	DOME UNIT	3	18.228 (462.99 mm)	12.636 (320.95 mm)	0.610 (15.49 mm)
D-5769-()	DOME	3	19.530 (496.06 mm)	12.870 (326.89 mm)	0.610 (15.49 mm)
D-5769-1()	DOME	2	19.530 (496.06 mm)	12.870 (326.89 mm)	0.610 (15.49 mm)
D-5771()	DOME	3	19.528 (496.01 mm)	12.866 (326.79 mm)	0.611 (15.51 mm)
D-5771-1()	DOME	3	19.528 (496.01 mm)	12.866 (326.79 mm)	0.611 (15.51 mm)
D-5771-()	DOME	3	19.528 (496.01 mm)	12.866 (326.79 mm)	0.611 (15.51 mm)
D-5795()	DOME	2	19.528 (496.01 mm)	12.866 (326.79 mm)	1.290 (32.76 mm)
D-5795-()	DOME	2	19.528 (496.01 mm)	12.866 (326.79 mm)	1.290 (32.76 mm)
D-5799()	DOME UNIT	4	20.498 (520.64 mm)	15.816 (401.72 mm)	1.290 (32.76 mm)
D-5799-()	DOME UNIT	4	20.498 (520.64 mm)	15.816 (401.72 mm)	1.290 (32.76 mm)
D-6447()	DOME UNIT	3	18.997 (482.52 mm)	16.010 (406.65 mm)	0.750 (19.05 mm)
D-6447-()	DOME UNIT	3	18.997 (482.52 mm)	16.010 (406.65 mm)	0.750 (19.05 mm)
D-6447-1()	DOME UNIT	3	18.837 (478.45 mm)	15.934 (404.72 mm)	0.753 (19.12 mm)
D-6751()	DOME UNIT	3	18.278 (464.26 mm)	13.912 (353.36 mm)	0.548 (13.91 mm)
D-6751-()	DOME UNIT	3	18.278 (464.26 mm)	13.912 (353.36 mm)	0.548 (13.91 mm)
D-6751-PC	DOME UNIT	3	18.278 (464.26 mm)	13.912 (353.36 mm)	0.548 (13.91 mm)
D-6840()	DOME UNIT	3	19.005 (482.72 mm)	16.016 (416.80 mm)	0.695 (17.65 mm)
D-6840-()	DOME UNIT	3	19.005 (482.72 mm)	16.016 (416.80 mm)	0.695 (17.65 mm)
D-6906-()	DOME UNIT	3	18.562 (471.47 mm)	14.304 (363.32 mm)	--
D-6927()	DOME	3	24.710 (627.63 mm)	18.024 (457.80 mm)	1.290 (32.76 mm)
D-6927-()	DOME	3	24.710 (627.63 mm)	18.024 (457.80 mm)	1.290 (32.76 mm)
D-6935()	DOME UNIT	3	18.562 (471.47 mm)	14.304 (363.32 mm)	0.312 (7.92 mm)
D-6935-()	DOME UNIT	3	18.562 (471.47 mm)	14.304 (363.32 mm)	0.312 (7.92 mm)
D-6957()	DOME UNIT	2	18.562 (471.47 mm)	14.304 (363.32 mm)	0.312 (7.92 mm)
D-6957-()	DOME UNIT	2	18.562 (471.47 mm)	14.304 (363.32 mm)	0.312 (7.92 mm)
D-7085()	DOME UNIT	3	19.145 (486.28 mm)	14.620 (371.34 mm)	0.365 (9.27 mm)

Spinner Dome Dimensions
Table 8-1, continued

DOME UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOME DIAMETER inches (mm)	NOSE RADIUS inches (mm)
D-7085-()	DOME UNIT	3	19.145 (486.28 mm)	14.620 (371.34 mm)	0.365 (9.27 mm)
D-7216()	DOME	3	20.498 (520.64 mm)	15.816 (401.72 mm)	--
D-7216-()	DOME	3	20.498 (520.64 mm)	15.816 (401.72 mm)	--
D-7266()	DOME UNIT	3	22.910 (581.91 mm)	14.620 (371.34 mm)	0.884 (22.44 mm)
D-7266-()	DOME UNIT	3	22.910 (581.91 mm)	14.620 (371.34 mm)	0.884 (22.44 mm)
D-7266-1()	DOME	3	22.910 (581.91 mm)	14.620 (371.34 mm)	0.884 (22.44 mm)
D-7266-2()	DOME UNIT	3	22.910 (581.91 mm)	14.620 (371.34 mm)	0.884 (22.44 mm)
D-7266-3()	DOME UNIT	3	22.917 (582.09 mm)	14.635 (371.72 mm)	0.884 (22.44 mm)
D-7266-5()	DOME UNIT	3	22.918 (582.11 mm)	14.635 (371.72 mm)	0.884 (22.44 mm)
D-7274()	DOME	4	24.279 (616.68 mm)	18.398 (467.30 mm)	1.000 (25.40 mm)
D-7325()	DOME UNIT	2	24.279 (616.68 mm)	18.398 (467.30 mm)	1.000 (25.40 mm)
D-7325-1()	DOME UNIT	2	24.279 (616.68 mm)	18.398 (467.30 mm)	1.000 (25.40 mm)
D-7325-2()	DOME UNIT	3	24.279 (616.68 mm)	18.398 (467.30 mm)	1.000 (25.40 mm)
D-7329()	DOME	3	24.180 (614.17 mm)	14.220 (361.18 mm)	0.725 (18.41 mm)
D-7811-2()	DOME	3	18.954 (481.43 mm)	15.330 (389.38 mm)	0.560 (14.22 mm)
D-7811-7()	DOME	3	17.954 (456.03 mm)	15.330 (389.38 mm)	0.560 (14.22 mm)
D-7811-10(P)	DOME	3	17.966 (456.33 mm)	15.355 (390.02 mm)	0.500 (12.70 mm)
D-7812-2()	DOME UNIT, 4-BLADE	4	23.411 (594.63 mm)	16.360 (415.54 mm)	0.500 (12.70 mm)
D-7812-8()	DOME UNIT	2	23.398 (594.30 mm)	16.330 (389.38 mm)	0.500 (12.70 mm)
E-5750()	DOME UNIT	2	20.480 (520.19 mm)	13.150 (334.01 mm)	0.500 (12.70 mm)
E-5750-()	DOME UNIT	2	20.480 (520.19 mm)	13.200 (335.28 mm)	0.500 (12.70 mm)
E-5750-L()	DOME UNIT	2	20.480 (520.19 mm)	13.260 (336.80 mm)	0.500 (12.70 mm)
E-5750-1()	DOME UNIT	2	20.480 (520.19 mm)	13.260 (336.80 mm)	0.500 (12.70 mm)
E-5750-1L()	DOME UNIT	2	20.480 (520.19 mm)	13.260 (336.80 mm)	0.500 (12.70 mm)
E-5761()	DOME	5	25.423 (645.74 mm)	22.963 (583.26 mm)	1.420 (36.06 mm)
E-5761-()	DOME	5	25.423 (645.74 mm)	22.963 (583.26 mm)	1.420 (36.06 mm)
E-6477()	DOME UNIT	3	18.848 (478.73 mm)	18.293 (464.64 mm)	--
E-6477-()	DOME UNIT	3	18.848 (478.73 mm)	18.293 (464.64 mm)	--
E-7341()	DOME	4	24.688 (627.07 mm)	18.480 (469.39 mm)	1.000 (25.40 mm)
100633()	DOME	4	24.219 (615.16 mm)	18.489 (469.62 mm)	1.000 (25.40 mm)
100951()	DOME	3	21.258 (539.95 mm)	15.866 (402.99 mm)	0.563 (14.30 mm)
101467()	DOME UNIT	3	21.042 (534.46 mm)	18.231 (463.06 mm)	0.930 (22.62 mm)
101467-1()	DOME UNIT	3	21.532 (546.91 mm)	18.372 (466.64 mm)	0.930 (22.62 mm)
101467-2()	DOME UNIT	3	22.342 (542.08 mm)	18.372 (466.64 mm)	0.930 (22.62 mm)
102949L()	DOME UNIT	2	16.970 (431.03 mm)	14.100 (358.14 mm)	1.550 (39.37 mm)
103783	DOME, 4 - BLADE	4	24.415 (620.14 mm)	18.429 (468.09 mm)	1.000 (25.40 mm)
103937(P)	DOME	2	15.470 (392.94 mm)	12.870 (326.90 mm)	1.280 (32.51 mm)
104550	DOME, 4-BLADE	4	26.595 (675.51 mm)	20.469 (519.91 mm)	1.065 (27.05 mm)
104750(P)	DOME, 4-BLADE	4	25.423 (645.74 mm)	22.961 (583.20 mm)	1.490 (37.84 mm)
105044()	DOME, 5-BLADE	5	26.595 (675.51 mm)	20.469 (519.91 mm)	1.000 (25.40 mm)
105176()	DOME, 5-BLADE	5	26.597 (675.56 mm)	18.500 (469.90 mm)	1.000 (25.40 mm)

Spinner Dome Dimensions
Table 8-1, continued

HARTZELL METAL SPINNER OVERHAUL MANUAL

127

DOVE UNIT PART NUMBER	DESCRIPTION	NUMBER OF BLADES	SPINNER ASSEMBLY LENGTH inches (mm)	DOVE DIAMETER inches (mm)	NOSE RADIUS inches (mm)
105818()	DOVE, 5-BLADE	5	25.455 (646.56 mm)	19.711 (500.66 mm)	1.375 (34.92 mm)
105903()	DOVE, 3-BLADE	3	19.246 (488.84 mm)	14.564 (369.92 mm)	0.414 (10.51 mm)
105949()	DOVE	5	23.815 (604.90 mm)	18.633 (473.28 mm)	1.000 (25.40 mm)
105949-1()	DOVE	5	23.573 (598.75 mm)	18.548 (471.11 mm)	1.000 (25.40 mm)
106815()	DOVE, 5-BLADE	5	26.78 (680.21 mm)	18.519 (470.40 mm)	1.065 (27.05 mm)
107014()	DOVE, 4-BLADE	4	22.995 (584.07 mm)	19.590 (497.58 mm)	1.880 (47.75 mm)
107105(P)	DOVE, 5-BLADE	5	25.423 (645.74 mm)	22.961 (583.20 mm)	1.490 (37.84 mm)
107178()	DOVE UNIT, 3-BLADE	3	17.345 (440.56 mm)	13.153 (334.08 mm)	0.371 (9.42 mm)
107250()	DOVE, 6-BLADE	6	26.595 (675.51 mm)	20.469 (519.91 mm)	1.065 (27.06 mm)
107398()	DOVE, 5-BLADE	5	26.595 (675.51 mm)	20.469 (519.91 mm)	1.065 (27.06 mm)
107526()	DOVE, 4-BLADE	4	21.073 (535.25 mm)	17.575 (446.40 mm)	1.000 (25.40 mm)
107559()	DOVE, 4-BLADE	4	28.302 (718.87 mm)	18.548 (471.11 mm)	1.073 (27.25 mm)
107591()	DOVE, 4-BLADE	4	18.278 (464.26 mm)	13.912 (353.36 mm)	0.606 (15.39 mm)
107834()	DOVE, 5-BLADE	5	25.300 (642.62 mm)	22.910 (581.91 mm)	1.490 (37.84 mm)
108181(P)	DOVE	4	20.498 (520.64 mm)	15.816 (401.72 mm)	1.310 (33.27 mm)
109060(P)	DOVE	4	23.390 (594.10 mm)	19.742 (501.44 mm)	1.800 (45.72 mm)
109079(P)	DOVE	5	23.823 (605.10 mm)	18.648 (473.65 mm)	1.073 (27.25 mm)
109083(P)	DOVE	6	25.455 (646.55 mm)	19.711 (500.65 mm)	1.440 (36.57 mm)
109488(P)	DOVE UNIT, 2-BLADE	2	16.775 (426.08 mm)	12.96 (329.18 mm)	0.313 (7.95 mm)

Spinner Dove Dimensions
Table 8-1, continued

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

(Blank Page)

1. Tooling and Facility Requirements (Rev. 2)

A. Standard Tooling

- (1) Propeller repair stations certified by the FAA or international equivalent to overhaul Hartzell Propeller spinner assemblies are expected to possess precision fixtures, tools, and build tables for 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 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.

(Blank Page)

ILLUSTRATED PARTS LIST - CONTENTS

1. Introduction	10.1-5
A. General.....	10.1-5
B. Spinner Assemblies/Mounting Hardware	10.1-5
C. Ice Protection System Components	10.1-6
2. Description of Columns.....	10.1-6
A. Fig./Item Number.....	10.1-6
B. Part Number	10.1-6
C. Description	10.1-7
D. Effectivity Code (EFF CODE).....	10.1-7
E. Units Per Assembly (UPA).....	10.1-7
F. Overhaul (O/H).....	10.1-7
3. Description of Terms	10.1-8
A. Alternate	10.1-8
B. Supersedure.....	10.1-8
C. Replacement	10.1-8
D. Obsolete	10.1-8
4. Vendor Supplied Hardware.....	10.1-9

SPINNER PARTS LISTS:

Two-Bladed Propeller Spinners.....	10.2-1
Three-Bladed Propeller Spinners.....	10.3-1
Four-Bladed Propeller Spinners.....	10.4-1
Five-Bladed Propeller Spinners	10.5-1
Six-Bladed Propeller Spinners	10.6-1

SPINNER DOME AND HARDWARE KIT PARTS LISTS:

Spinner Dome and Hardware Kits.....	10.7-1

LIST OF FIGURES

Example of a Two-Bladed Propeller Spinner - Two-piece Dome with Filler Plates	Figure 10.2-1	10.2-2
Example of a Two-Bladed Propeller Spinner - Two-piece Dome without Filler Plates	Figure 10.2-2	10.2-3
Example of a Two-Bladed Propeller Spinner - One-piece Dome with Filler Plates.....	Figure 10.2-3	10.2-4
Example of a Two-Bladed Propeller Spinner - One-piece Dome without Filler Plates.....	Figure 10.2-4	10.2-5
Example of a Two-Bladed Propeller Spinner - One-piece Dome without Filler Plates, with Hub Bulkhead	Figure 10.2-5	10.2-6
Example of a Three-Bladed Propeller Spinner - Two-piece Dome with Filler Plates	Figure 10.3-1	10.3-2
Example of a Three-Bladed Propeller Spinner - Two-piece Dome without Filler Plates.....	Figure 10.3-2	10.3-3
Example of a Three-Bladed Propeller Spinner - One-piece Dome with Filler Plates	Figure 10.3-3	10.3-4
Example of a Three-Bladed Propeller Spinner - One-piece Dome without Filler Plates	Figure 10.3-4	10.3-5
Example of a Three-Bladed Propeller Spinner - One-piece Dome with a 104744 or a 106109 Bulkhead Unit.....	Figure 10.3-5	10.3-6
Example of a Three-Bladed Propeller Spinner - One-piece Dome with a Forward Bulkhead	Figure 10.3-6	10.3-7
Example of a Three-Bladed Propeller Spinner - One-piece Dome without Filler Plates, with Bulkhead Hub	Figure 10.3-7	10.3-8
Example of a Three-Bladed Propeller Spinner - One-piece Dome with Filler Plates, with Bulkhead Hub.....	Figure 10.3-8	10.3-9
Example of a Four-Bladed Propeller Spinner - Two-piece Dome without Filler Plates	Figure 10.4-1	10.4-2
Example of a Four-Bladed Propeller Spinner - One-piece Dome with Filler Plates.....	Figure 10.4-2	10.4-3
Example of a Four-Bladed Propeller Spinner - One-piece Dome without Filler Plates	Figure 10.4-3	10.4-4
Example of a Four-Bladed Propeller Spinner - Two-piece Dome with Filler Plates	Figure 10.4-4	10.4-5

LIST OF FIGURES, CONTINUED

107528() Four-Bladed Propeller Spinner.....	Figure 10.4-5.....	10.4-6
D-4511-(L)(P) Spinner Assembly.....	Figure 10.4-6.....	10.4-7
D-4511-1(L)(P) Spinner Assembly.....	Figure 10.4-7.....	10.4-9
Example of a Five-Bladed Propeller Spinner - One-piece Dome with Filler Plates.....	Figure 10.5-1.....	10.5-2
Example of a Five-Bladed Propeller Spinner - One-piece Dome without Filler Plates.....	Figure 10.5-2.....	10.5-3
Five-Bladed Piaggio P-180 Propeller Spinner - Two-piece Dome with Filler Plates.....	Figure 10.5-3.....	10.5-4
Example of a Six-Bladed Propeller Spinner - One-piece Dome without Filler Plates.....	Figure 10.6-1.....	10.6-2

(Blank Page)

1. Introduction

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.

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

CAUTION: THE ILLUSTRATIONS IN THIS CHAPTER ARE PROVIDED FOR PART IDENTIFICATION AND LOCATION REFERENCE ONLY. THEY SHOULD NOT BE USED FOR ASSEMBLY.

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

B. Spinner Assemblies/Mounting Hardware

- (1) Every effort has been made to include all of the spinner assemblies and configurations manufactured by Hartzell Propeller. If a repair station has questions about a spinner assembly as stated in the Illustrated Parts List, contact the Hartzell Propeller Product Support Department.
- (2) It is the responsibility of the propeller maintenance facility to make sure that the appropriate spinner and mounting parts have been installed. Refer to the Hartzell Propeller Application Guide Manual 159 (61-02-59) for spinner assembly application information.
- (3) Spinner assemblies and the applicable mounting hardware are application specific. Refer to Hartzell Propeller Application Guide Manual 159 (61-02-59).

C. Ice Protection System Components

- (1) Ice protection systems are application specific. Refer to Hartzell Propeller Application Guide Manual 159 (61-02-59).
 - (a) For components of ice protection systems supplied by Hartzell, refer to Hartzell Propeller 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 in the illustration 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 propeller configuration may use a 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 identification number for the part.
- (2) Use the Hartzell Propeller part number when ordering the part from Hartzell or a Hartzell-approved distributor.

C. Description

- (1) This column provides the Hartzell Propeller 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 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.
- (4) 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.

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 number 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 be 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.

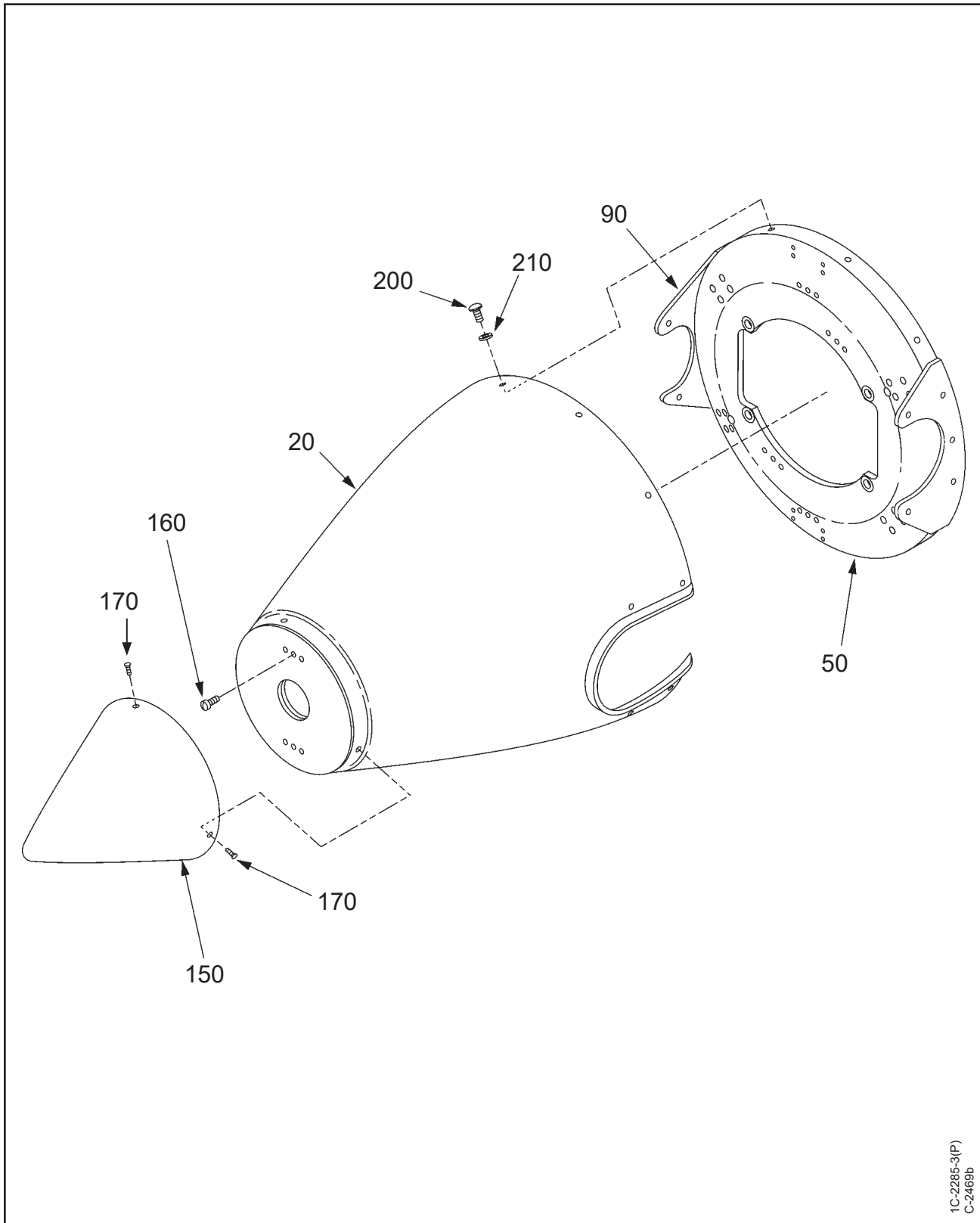
4. Vendor Supplied Hardware (Rev. 1)

A. Important Information

- (1) Many O-rings, fasteners, and other vendor supplied hardware listed in Hartzell Propeller 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. Part shipments from Hartzell Propeller 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 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 Standard Practices Manual 202A (61-01-02).
 - (b) Where permitted, both the Hartzell part number item and AN, MS, NAS, and other specified vendor number items can be used interchangeably.
 - (c) The Hartzell part number must be used when ordering these parts from Hartzell Propeller.

(Blank Page)

Two-Bladed Propeller Spinners

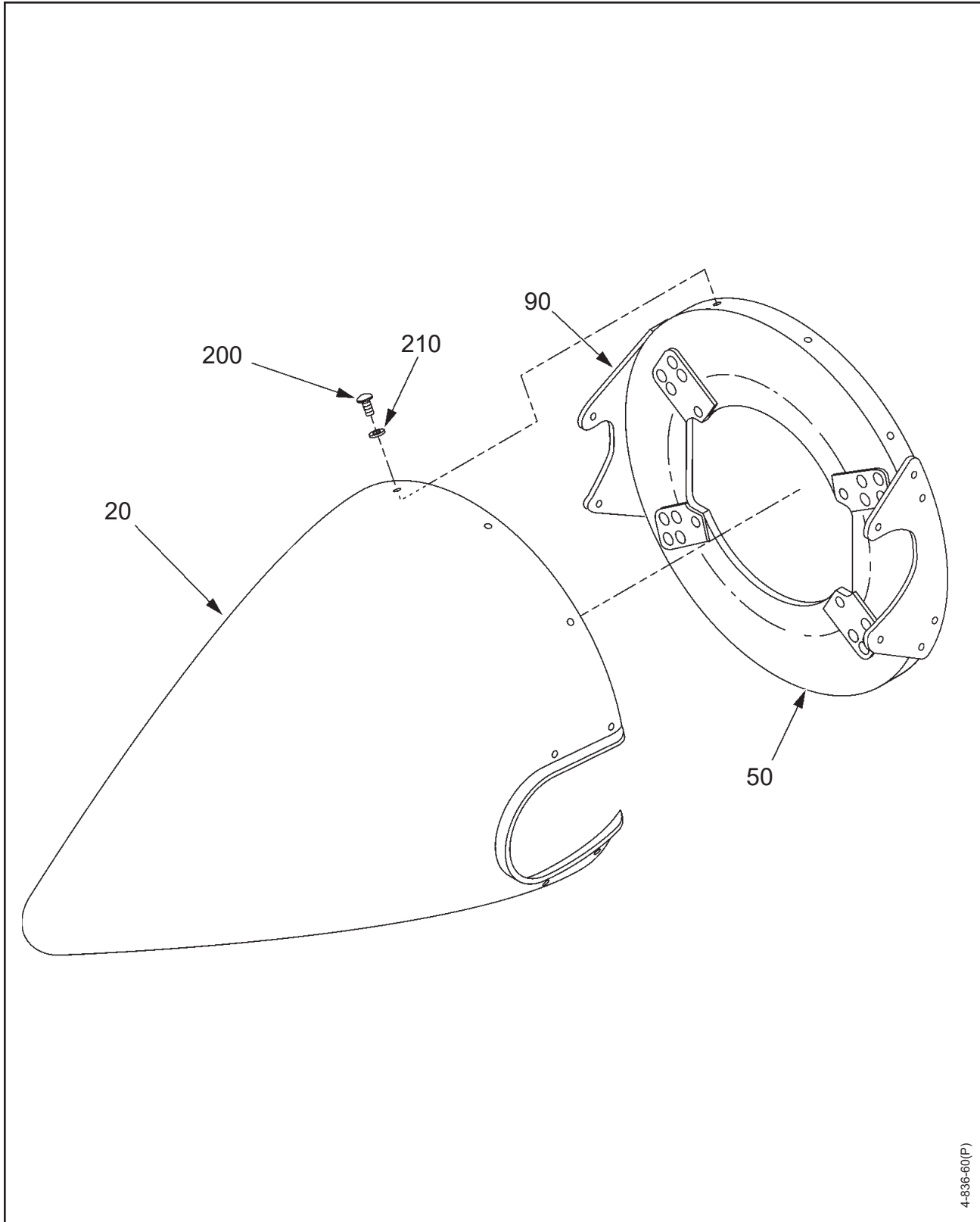


1C-2285-3(P)
C-2469b

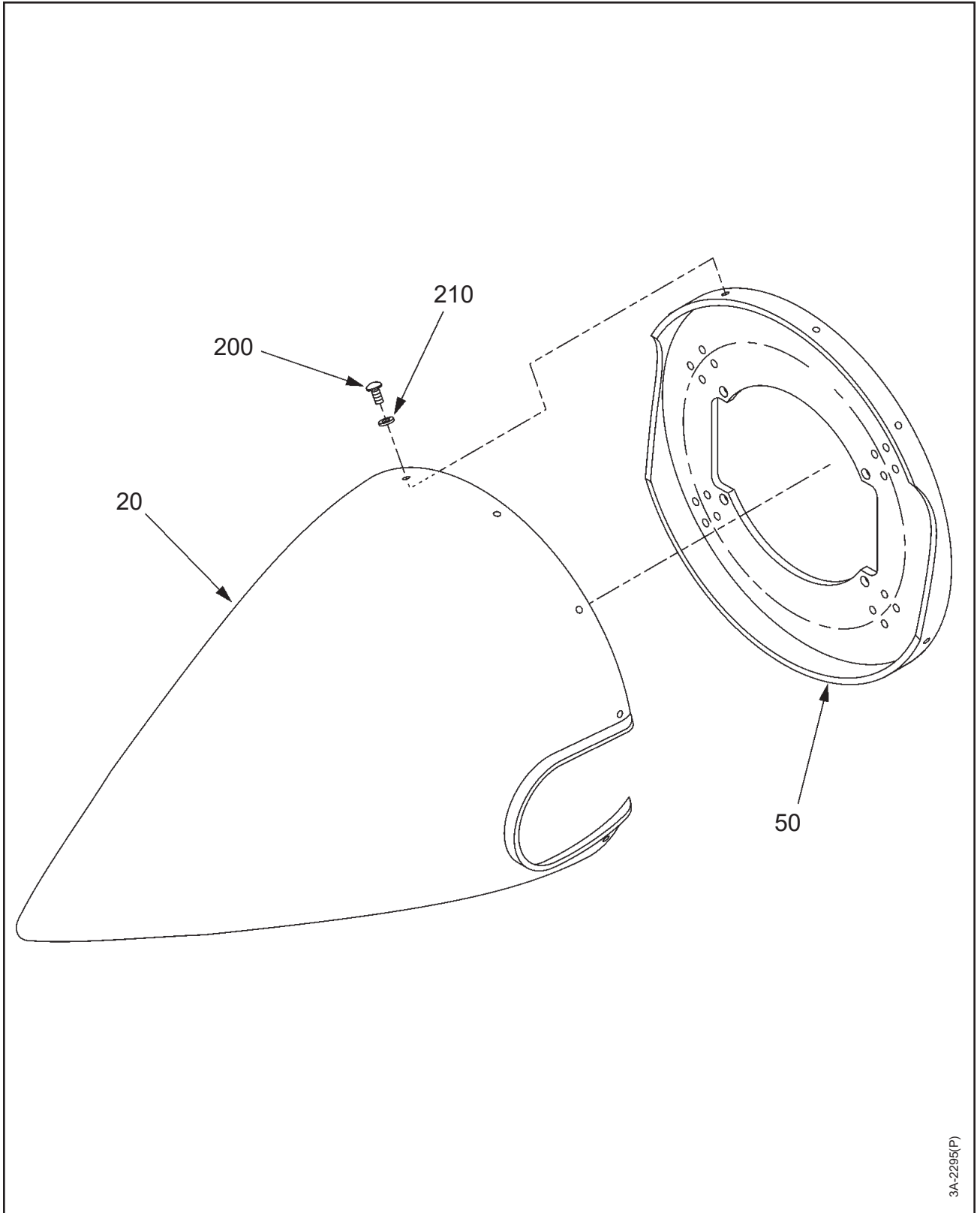
Example of a Two-Bladed Propeller Spinner - Two-piece Dome with Filler Plates
Figure 10.2-1



1

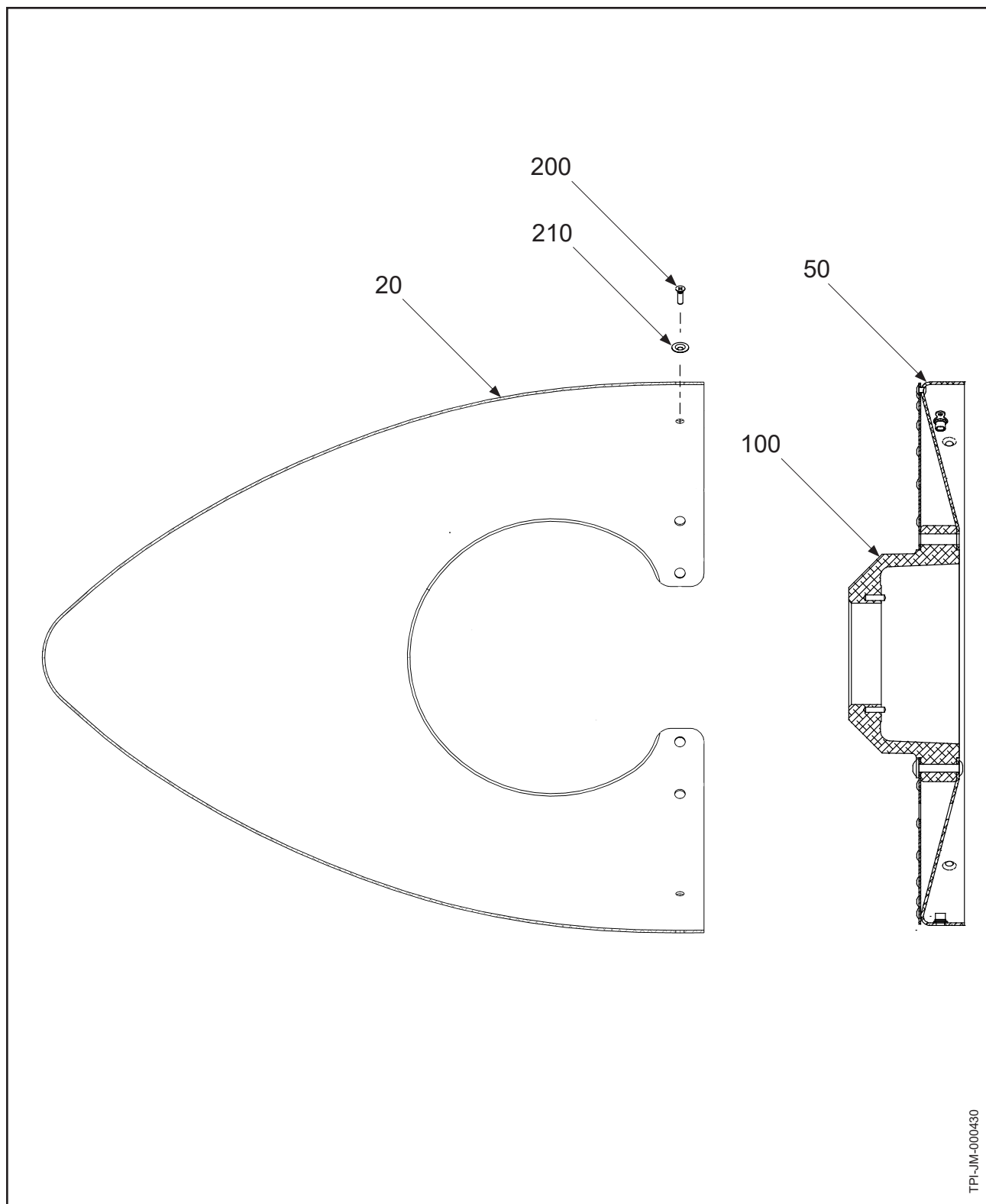


Example of a Two-Bladed Propeller Spinner - One-piece Dome with Filler Plates
Figure 10.2-3



3A-2295(P)

Example of a Two-Bladed Propeller Spinner - One-piece Dome without Filler Plates
Figure 10.2-4



**Example of a Two-Bladed Propeller Spinner -
One-piece Dome without Filler Plates, with Hub Bulkhead
Figure 10.2-5**

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	A-2295()	SPINNER ASSEMBLY			
20	C-3532-4()	• DOME UNIT, 2-BLADE		1	
50	C-2294-5()	• BULKHEAD UNIT	C	1	
-53	A-3263-4	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.2-4					
-10	A-2295-5()	SPINNER ASSEMBLY			
20	C-3532-22()	• DOME UNIT, 2-BLADE		1	
50	C-2294-11()	• BULKHEAD UNIT		1	
-53	A-3263-19	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.2-4					
-10	A-2297-()	SPINNER ASSEMBLY			
20	C-3532-9()	• DOME UNIT, 2-BLADE		1	
50	C-2294-7()	• BULKHEAD UNIT, SUPERSEDES ITEM 50	C	1	
-51	A-3263-4	• • DOUBLER, MOUNTING, BULKHEAD		4	
-53	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-3					
-10	A-2298()	SPINNER ASSEMBLY		OBS	
20	C-3532-10()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2299()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-3					
-10	A-2298-1()	SPINNER ASSEMBLY - SUPERSEDED BY A-2298-2(P)		OBS	
20	C-3532-11()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2299-4()	• BULKHEAD UNIT	C	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-3					
-10	A-2298-2()	SPINNER ASSEMBLY			
20	C-3532-12()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2299-4()	• BULKHEAD UNIT	C	1	
-53A	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55A	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59A	B-3846-3	• • NUTPLATE, FIXED		4	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4212-1	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-3					
-10	A-2298-3()	SPINNER ASSEMBLY			
20	C-3532-12()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2299-5()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4212-1	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-3					
-10	A-2298-3()	SPINNER ASSEMBLY			
20	C-3532-12()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2299-5()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4212-1	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-4					
-10	A-3293()	SPINNER ASSEMBLY		OBS	
20	C-3294()	• DOME UNIT, 2-BLADE		1	
50	C-3295-1()	• BULKHEAD UNIT	C	1	
200	AN526C1032R8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
C	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".				

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	A-3519()	SPINNER ASSEMBLY			
20	C-3532-8()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
70	C-3553-1()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.2-4					
-10	A-4203()	SPINNER ASSEMBLY			
20	C-3282-2()	• DOME		1	
50	C-3283-5()	• BULKHEAD UNIT	C	1	
-53	C-7737-4	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		8	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		4	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		20	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		10	Y
210	A-1020	• WASHER, FIBER		10	Y
10.2-2					
-10	C-2285()	SPINNER ASSEMBLY			
20	C-2284()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY		2	Y
50	C-2283-7()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
C	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".				

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-2					
-10	C-2285-1()	SPINNER ASSEMBLY	CSA		
20	C-2284-1()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY		2	Y
50	C-2283-7()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD,.125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-2					
-10	C-2285-2(L)()	SPINNER ASSEMBLY			
20	C-2284-2()	• DOME UNIT, 2-BLADE	A	1	
	C-2284-2L()	• DOME UNIT, 2-BLADE	B	1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY		2	Y
50	C-2283-8()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD,.125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY			MODEL		
A	C-2285-2()	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".	CSA	Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered	
B	C-2285-2L()				
C					

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-1					
-10	C-2285-3(L) ()	SPINNER ASSEMBLY			
20	C-2284-3()	• DOME UNIT, 2-BLADE	A	1	
	C-2284-3L()	• DOME UNIT, 2-BLADE	B	1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY		2	Y
50	C-2283-9()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		8	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4244-1	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-2					
-10	C-2285-4(L) ()	SPINNER ASSEMBLY	CSA		
20	C-2284-4()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY		2	Y
50	C-2283-10()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		C-2285-3()	CSA		
B		C-2285-3L()	Dome and bulkhead may not be purchased individually,		
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".	complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL
127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-1					
-10	C-2285-5()	SPINNER ASSEMBLY	CSA		
20	C-2284-5()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY		2	Y
50	C-2283-11()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		8	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4244-9	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY			MODEL	EFFECTIVITY	
C			Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".	CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered	

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-1					
-10	C-2285-6()	SPINNER ASSEMBLY	CSA		
20	C-2284-6()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	C-2283-12()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4244	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		14	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.2-2					
-10	C-2285-8(L)()	SPINNER ASSEMBLY			
20	103186	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD & HOOP)	A	1	
	103186L	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD & HOOP)	B	1	
50	C-2283-14()	• BULKHEAD UNIT	A	1	
	C-2283-14L()	• BULKHEAD UNIT	B	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY			MODEL		
A	C-2285-8()	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".	CSA	Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered	
B	C-2285-8L()				
C					

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	C-2513-3()	SPINNER ASSEMBLY			
20	C-2531-8()	• DOME, 2-BLADE		1	
70	C-2512-3()	• ADAPTER ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
-71	A-2538	• • PLATE, REINFORCEMENT, BULKHEAD		2	
-72	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-3					
-10	C-2513-5()	SPINNER ASSEMBLY			
20	C-2531-10()	• DOME, 2-BLADE		1	
70	C-2512-5()	• ADAPTER ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
80	B-2296	• • FILLER STRIP, ADAPTER RING		2	
90	B-2494-1	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		14	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
-10	C-2513-6()	SPINNER ASSEMBLY - SUPERSEDED BY C-2513-5		OBS	
20	C-2531-10()	• DOME, 2-BLADE		1	
70	C-2512-6()	• ADAPTER ASSEMBLY		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
-10	C-2520()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	C-2530	SPINNER ASSEMBLY			
20	C-2531()	• DOME, 2-BLADE		1	
50	C-2509()	• BULKHEAD ASSEMBLY		1	
-55	B-3863-20	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		12	
-56	B-3851-0463	• • WASHER		12	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		32	
-63	B-3847-3	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-80	C-2507	• • BULKHEAD		1	
100	B-887-1	• • HUB, BULKHEAD		1	
-140	C-2508-1	• • HOOP		1	
-141	B-3881-3	• • NUTPLATE, FIXED, ONE-LUG		4	
-142	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		8	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
230	B-3875-18H	• BOLT, 5/16 - 24, HEX HEAD		4	
250	B-3851-0532	• WASHER, SUPERSEDED BY ITEM 250A		4	Y
250A	A-2435-1	• WASHER, 5/16 INCH, SUPERSEDES ITEM 250		4	Y
260	B-3808-5	• NUT, HEX, SELF-LOCKING		4	Y
-10	C-3233()	SPINNER ASSEMBLY		OBS	
-10	C-3245-(P)	SPINNER ASSEMBLY - SUPERSEDED BY C-4565-(P)		OBS	
10.2-3					
-10	C-3533()	SPINNER ASSEMBLY			
20	C-3532()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3534-2()	• BULKHEAD UNIT - REPLACES ITEM 50	C	1	
-53	A-3263-2	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4212-2	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY			MODEL		
C	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".				

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-3					
-10	C-3533-1P	SPINNER ASSEMBLY			
20	C-3532-P	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3534-3P	• BULKHEAD UNIT	C	1	
-53	A-3263-2	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4212-2	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-3					
-10	C-3568-()	SPINNER ASSEMBLY			
20	C-3532-13	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3569-1()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4244-3	• • FILLER PLATE - REPLACED BY ITEM 90A		OBS	
90A	B-4244-1	• • FILLER PLATE - REPLACES ITEM 90		2	
-91A	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
-10	C-3702()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
C	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".				

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	C-4565()	SPINNER ASSEMBLY			
20	C-4568()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-4567-1()	• BULKHEAD UNIT,	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		28	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
-10	D-4808()	SPINNER ASSEMBLY		OBS	
10.2-1					
-10	D-4532()	SPINNER ASSEMBLY		OBS	
20	C-4533()	• DOME UNIT, 2-BLADE		1	
50	D-4534-1()	• BULKHEAD UNIT	C	1	
90	B-4259	• • FILLER PLATE		2	
150	C-4535()	• CAP, DOME		1	
160	B-3840-6	• SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
C	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".				

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-1					
-10	D-4532-2	SPINNER ASSEMBLY			
20	C-4533-2()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		10	
-25	A-3244	• • PLATE, DOME		1	
-26	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		8	
30	C-4547	• • FORWARD BULKHEAD		1	
-34	B-3845-8	• • SCREW		8	
-35	B-3808-3	• • NUT, HEX, SELF-LOCKING		8	
50	D-4534-1()	• BULKHEAD UNIT	C	1	
-53	A-3263-14	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		8	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4259	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
150	C-4535()	• CAP, DOME		1	
160	B-3840-6	• SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.2-3					
-10	D-4798()	SPINNER ASSEMBLY			
20	D-4797()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4862()	• BULKHEAD UNIT		1	
-53	D-4863	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		20	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	C-5736	• • FILLER PLATE		2	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-3					
-10	D-4798-2()	SPINNER ASSEMBLY			
20	D-4797-2()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4862-1()	• BULKHEAD UNIT		1	
-53	B-4863	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		14	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		28	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	C-3892	• • FILLER PLATE		2	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.2-4					
-10	D-4810-()	SPINNER ASSEMBLY			
20	C-3532-17()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD & DOME REINFORCEMENT RING)		1	
50	D-4812-1()	• BULKHEAD UNIT	C	1	
-53	A-3263-2	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-1					
-10	D-4826(L)()	SPINNER ASSEMBLY			
20	D-4827()	• DOME UNIT, 2-BLADE (INCLUDES BONDED HOOP)	A	1	
	D-4827-L()	• DOME UNIT, 2-BLADE (INCLUDES BONDED HOOP)	B	1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	C-2283-9()	• BULKHEAD UNIT	C	1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD,.125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		8	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4244-1	• FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
150	B-3242()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
-10	D-4832-L()	SPINNER ASSEMBLY		OBS	
10.2-4					
-10	D-5413-(P)	SPINNER ASSEMBLY			
20	C-3532-18()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-8()	• BULKHEAD UNIT	C	1	
-53	A-3263-4	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD,.125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY			MODEL		
A			D-4826		
B			D-4826L()		
C			Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-2					
-10	D-5749-(L) ()	SPINNER ASSEMBLY			
20	E-5750()	• DOME UNIT, 2-BLADE	A	1	
	E-5750-L()	• DOME UNIT, 2-BLADE	B	1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	B-5757	• • PLATE, DOME		1	
-110	B-5767	• • TAB, FILLER PLATE		2	
-111	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		4	
-112	B-3849-3	• • NUTPLATE, FLOATING		2	
-113	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-114	B-3860-10L	• • WASHER, DIMPLED, 100° CRES		2	
-115	B-3867-272	• • SCREW, 10-32, 100° HEAD, CRES		2	
-140	C-5758	• • HOOP - SPINNING		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	D-5751-2()	• BULKHEAD UNIT	C	1	
-53	A-3263-14	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		18	
-60	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		36	
150	C-5754()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES (DOME-TO-BULKHEAD)		18	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		18	Y
10.2-3					
-10	D-6974-1()	SPINNER ASSEMBLY			
20	D-6957-1()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-6958()	• BULKHEAD UNIT		1	
-53	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		10	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-4244-8	• • FILLER PLATE		2	
-91	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		D-5749			
B		D-5749-L()			
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	D-7327-1()	SPINNER ASSEMBLY			
	D-7325-1()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-7233()	• BULKHEAD UNIT		1	
-53	B-7217-1	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		12	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.2-5					
-10	835-1S()	SPINNER ASSEMBLY		OBS	
20	C-1904-1()	• DOME, 2-BLADE		1	
50	C-807-6()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
-80	C-925	• • BULKHEAD - SPINNING		1	
-81	C-928	• • PLATE, BULKHEAD		1	
-82	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
100	B-1398-1	• • HUB, BULKHEAD		1	
-101	A-894-1	• • DOWEL PIN		2	
-102	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-103	B-3851-0363	• • WASHER		12	
-195	830-2	• START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		RF	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
-230	B-3384-18	• BOLT, 1/4-28, HEX HEAD		4	
-250	B-3851-0463	• WASHER, FLAT		4	
-255	B-3851-0432	• WASHER, FLAT		4	
-260	B-3808-4	• NUT, HEX, SELF-LOCKING		4	
-10	835-3()	SPINNER ASSEMBLY - SUPERSEDED BY 835-13()		OBS	
-10	835-6()	SPINNER ASSEMBLY - SUPERSEDED BY 835-30()		OBS	
-10	835-12()	SPINNER ASSEMBLY - SUPERSEDED BY 835-13()		OBS	
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-5					
-10	835-13()	SPINNER ASSEMBLY	CSA		
20	C-1904-1()	• DOME, 2-BLADE		1	
50	C-807-1()	• BULKHEAD UNIT/ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
-80	C-925	• • BULKHEAD - SPINNING		1	
-81	C-928	• • PLATE, BULKHEAD		1	
-82	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
100	B-887	• • HUB, BULKHEAD		1	
-102	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-103	B-3851-0363	• • WASHER		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
10.2-5					
-10	835-15()	SPINNER ASSEMBLY			
20	C-1904-1()	• DOME, 2-BLADE		1	
50	C-807-6()	• BULKHEAD UNIT / ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
-80	C-925	• • BULKHEAD - SPINNING		1	
-81	C-928	• • PLATE, BULKHEAD		1	
-82	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
100	B-1398-1	• • HUB, BULKHEAD		1	
-101	A-894-1	• • DOWEL PIN		2	
-102	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-103	B-3851-0363	• • WASHER		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
-10	835-16	SPINNER ASSEMBLY - SUPERSEDED BY 835-30()	OBS		
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		
			CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL
127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-5					
-10	835-17()	SPINNER ASSEMBLY			
20	C-1904-1()	• DOME, 2-BLADE		1	
50	C-807-11()	• BULKHEAD UNIT/ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
-80	C-925	• • BULKHEAD - SPINNING		1	
-81	C-928	• • PLATE, BULKHEAD		1	
-82	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
100	B-1398-1	• • HUB, BULKHEAD		1	
-101	A-894-1	• • DOWEL PIN		2	
-102	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-103	B-3851-0363	• • WASHER		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
-10	835-19()	SPINNER ASSEMBLY		OBS	
-10	835-20()	SPINNER ASSEMBLY - SUPERSEDED BY 835-33()		OBS	
20	C-2426	• DOME, 2-BLADE		1	
70	C-885-4()	• ADAPTER RING UNIT		1	
90	B-2480	• FILLER PLATE UNIT		2	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		22	Y
210	A-1020	• WASHER, FIBER		22	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-1					
-10	835-21()	SPINNER ASSEMBLY			
20	C-2471()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		6	
-25	A-2493	• • PLATE, DOME		1	
-26	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		8	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
70	C-885-4()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
90	B-2480-1()	• FILLER PLATE UNIT		2	
150	B-2447()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		25	Y
210	A-1020	• WASHER, FIBER		25	Y
-10	835-22()	SPINNER ASSEMBLY - SUPERSEDED BY 835-23()		OBS	
10.2-4					
-10	835-23()	SPINNER ASSEMBLY			
20	C-1904-2()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2472-3()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		28	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
-10	835-27()	SPINNER ASSEMBLY		OBS	
10.2-4					
-10	835-30()	SPINNER ASSEMBLY	CSA		
20	C-1904-1()	• DOME, 2-BLADE		1	
50	C-885()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
EFFECTIVITY			MODEL	EFFECTIVITY	
C			Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".	CSA	
				Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered	

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-3					
-10	835-33()	SPINNER ASSEMBLY ALTERNATE FOR 835-58() - POST HC-SB-61-311 SUPERSEDES 835-58() - POST HC-ASB-61-332	A B		
20	C-1904-3()	• DOME, 2-BLADE		1	
70	C-885-4()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
90	B-2480	• FILLER PLATE UNIT		2	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		22	Y
210	A-1020	• WASHER, FIBER		22	Y
10.2-3					
-10	835-41()	SPINNER ASSEMBLY			
20	C-4205()	• DOME, 2-BLADE		1	
50	C-885-4()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
90	B-2480()	• FILLER PLATE UNIT		2	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		22	Y
210	A-1020	• WASHER, FIBER		22	Y
10.2-4					
-10	835-42()	SPINNER ASSEMBLY			
20	C-4205-1()	• DOME, 2-BLADE		1	
50	C-2472-4()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		28	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A	All approved applications, except Mooney M20() aircraft with a Hartzell HC-C2YR-1BFP/F7497 propeller in accordance with Hartzell STC SA02414CH-D.		B	Mooney M20() aircraft with a Hartzell HC-C2YR-1BFP/F7497 propeller in accordance with Hartzell STC SA02414CH-D.	
			C	Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".	

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-3					
-10	835-44()	SPINNER ASSEMBLY			
20	C-1904-7()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2472-5()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		14	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
90	B-4298	• FILLER PLATE UNIT		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.2-4					
-10	835-50L()	SPINNER ASSEMBLY			
20	D-4824L()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4825-1()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
-10	835-54()	SPINNER ASSEMBLY SUPERSEDED BY 835-58() METAL SPINNER ASSEMBLY AND 103585 COMPOSITE SPINNER ASSEMBLY. FOR THE COMPOSITE SPINNER ASSEMBLY REPLACEMENT, REFER TO HARTZELL PROPELLER MANUAL 148 (61-16-48).		OBS	
10.2-4 -10	835-58()	SPINNER ASSEMBLY SUPERSEDES THE 835-54() METAL SPINNER ASSEMBLY. POST HC-SB-61-311 SUPERSEDES THE 835-54() METAL SPINNER ASSEMBLY. POST HC-ASB-61-332 SUPERSEDED BY THE 103585 COMPOSITE SPINNER ASSEMBLY. FOR THE COMPOSITE SPINNER ASSEMBLY REPLACEMENT, REFER TO HARTZELL PROPELLER MANUAL 148 (61-16-48).	A B B		
20	103937()	• DOME		1	
70	C-4549-1()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		28	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
10.2-1 -10	836-29()	SPINNER ASSEMBLY			
20	C-2445-1()	• DOME UNIT, 2-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-3	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • PLATE, DOME		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
70	C-2434-1()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		14	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
-63	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
90	B-4211	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		8	
150	B-2447-()	• CAP, DOME		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
-10	836-30()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		
A		All approved applications, except Mooney M20() aircraft with a Hartzell HC-C2YR-1BFP/F7497 propeller in accordance with Hartzell STC SA02414CH-D.	B		
			Mooney M20() aircraft with a Hartzell HC-C2YR-1BFP/F7497 propeller in accordance with Hartzell STC SA02414CH-D.		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-3					
-10	836-52()	SPINNER ASSEMBLY			
20	C-2495-1()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2469-2()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD (PROPELLER SIDE)		4	
-54	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD (ENGINE SIDE)		4	
-55	B-3863-10	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		14	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-2494-2	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		10	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.2-3					
-10	836-60()	SPINNER ASSEMBLY			
20	C-2495-1()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2469-3()	• BULKHEAD UNIT	C	1	
-53	A-3263-3	• • DOUBLER, MOUNTING, BULKHEAD (PROPELLER SIDE)		4	
-54	A-3263-6	• • DOUBLER, MOUNTING, BULKHEAD (ENGINE SIDE)		4	
-55	B-3863-10	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		14	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		8	
90	B-2494-2	• • FILLER PLATE		2	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		10	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
C		Refer to Table 6-1, "Spinner Bulkheads that can be Modified (Two-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	837-3()	SPINNER ASSEMBLY			
20	C-226-5()	• DOME, 2-BLADE		1	
50	C-1336()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		20	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		10	Y
210	A-1020	• WASHER, FIBER		10	Y
-300	B-1344	• PLATE, MOUNTING, SPINNER		1	
-310	B-1345	• SPACER, BULKHEAD		1	
-320	B-3808-5	• NUT, HEX, SELF-LOCKING		4	Y
-330	360105130	• AN5-13A, HEX HEAD BOLT		4	
-340	B-3851-0532	• WASHER		4	Y
-10	837-4()	SPINNER ASSEMBLY - SUPERSEDED BY 837-3()		OBS	
20	C-226-5(P)	• SPINNER DOME		1	
50	C-1336	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		10	Y
-300	B-1344	• PLATE, MOUNTING, SPINNER		1	
-400	360105130	• AN5-13A, HEX HEAD BOLT		4	
-410	AN960-516L	• WASHER		4	Y
-440	H10-5	• KAYLOCK NUTS		4	Y
10.2-4					
-10	837-6()	SPINNER ASSEMBLY	CSA		
20	C-226()	• DOME, 2-BLADE		1	
50	C-227()	• BULKHEAD UNIT		1	
-53	B-7284R	• • DOUBLER, MOUNTING, BULKHEAD		2	
-54	B-7284L	• • DOUBLER, MOUNTING, BULKHEAD		2	
-55	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		36	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		10	Y
210	A-1020	• WASHER, FIBER		10	Y
-400	B-3387-11	• BOLT, 7/16 - 20, HEX HEAD		4	
-410	B-3851-0763	• WASHER		8	Y
-430	B-3851-0732	• WASHER		4	Y
-440	A-1373	• NUT, 7/16, HEX, SELF-LOCKING		4	Y
-10	837-7()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY			MODEL	EFFECTIVITY	
				MODEL	
				CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered	

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	837-11()	SPINNER ASSEMBLY			
20	C-226-5()	• DOME, 2-BLADE		1	
50	C-1336-1()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		36	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		10	Y
210	A-1020	• WASHER, FIBER		10	Y
230	B-3875-4H	• BOLT, 5/16-24, HEX HEAD		10	
260	B-3808-5	• NUT, HEX, SELF-LOCKING		10	Y
-410	B-3851-0563	• WASHER		10	
10.2-4					
-10	837-18()	SPINNER ASSEMBLY			
20	C-2934()	• DOME, 2-BLADE		1	
50	C-1336-1()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		36	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		10	Y
210	A-1020	• WASHER, FIBER		10	Y
230	B-3875-4H	• BOLT, 5/16-24, HEX HEAD		10	
260	B-3808-5	• NUT, HEX, SELF-LOCKING		10	Y
-410	B-3851-0563	• WASHER		10	
10.2-4					
-10	109340()	SPINNER ASSEMBLY			
20	C-3532-22()	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	109339()	• BULKHEAD UNIT		1	
-53	A-3263-19	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL
127

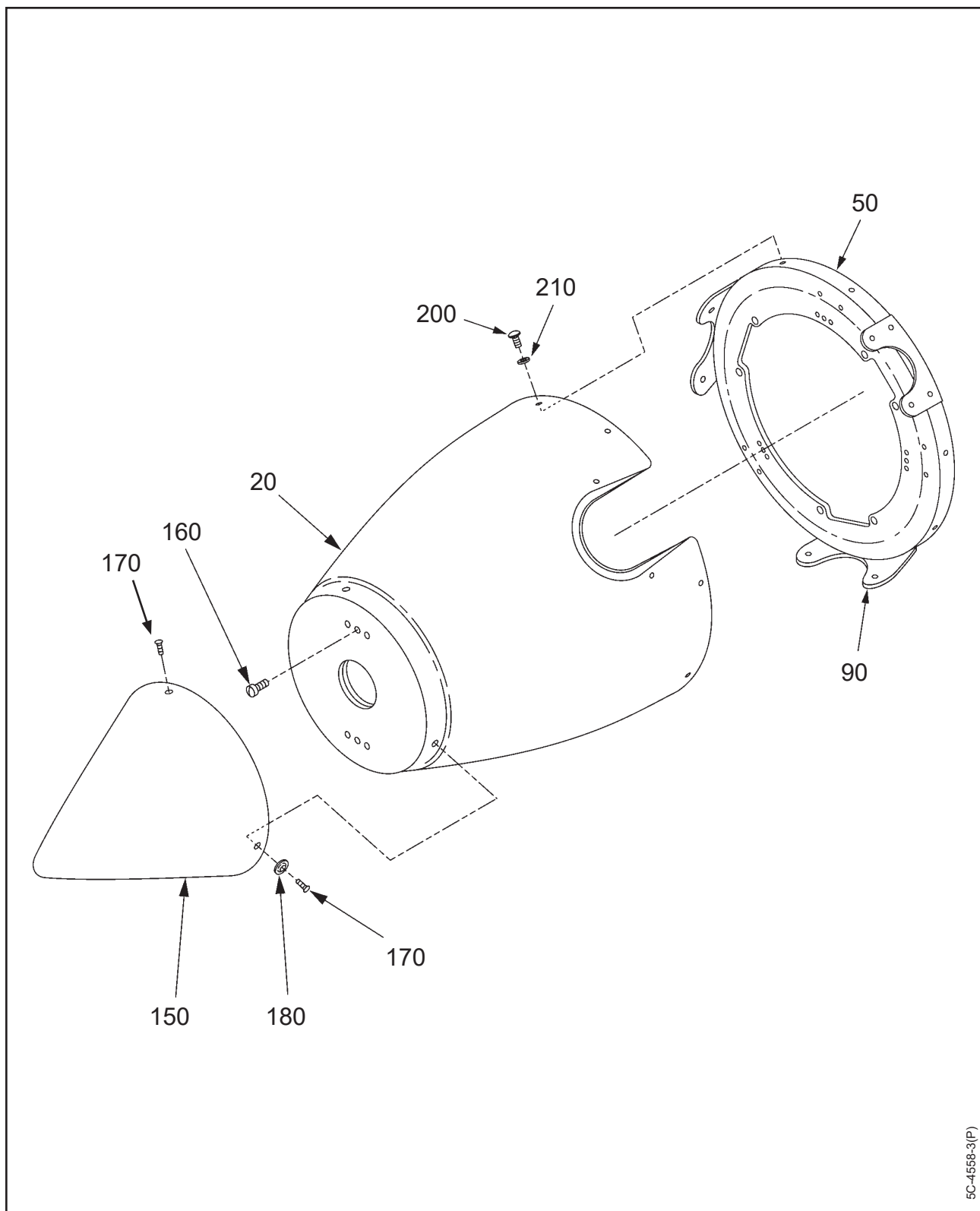
FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.2-4					
-10	109490(P)	SPINNER ASSEMBLY			
20	109488(P)	• DOME UNIT, 2-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	109489(P)	• BULKHEAD UNIT		1	
-53	A-3263-15	• • DOUBLER, MOUNTING, BULKHEAD		4	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 AL		8	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		28	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		14	Y
210	A-1020	• WASHER, FIBER		14	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Two-Bladed Propeller

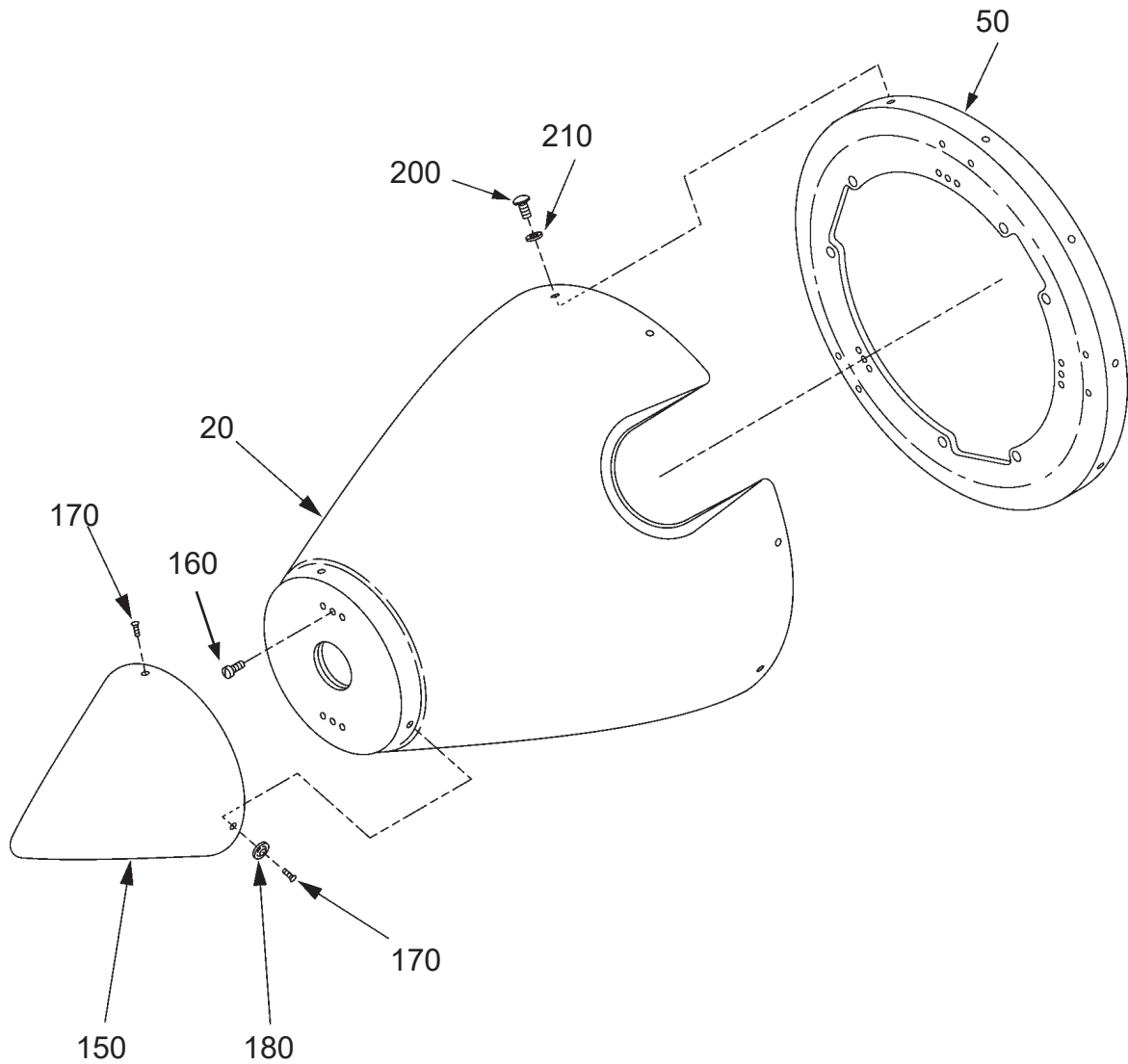
(Blank Page)

Three-Bladed Propeller Spinners



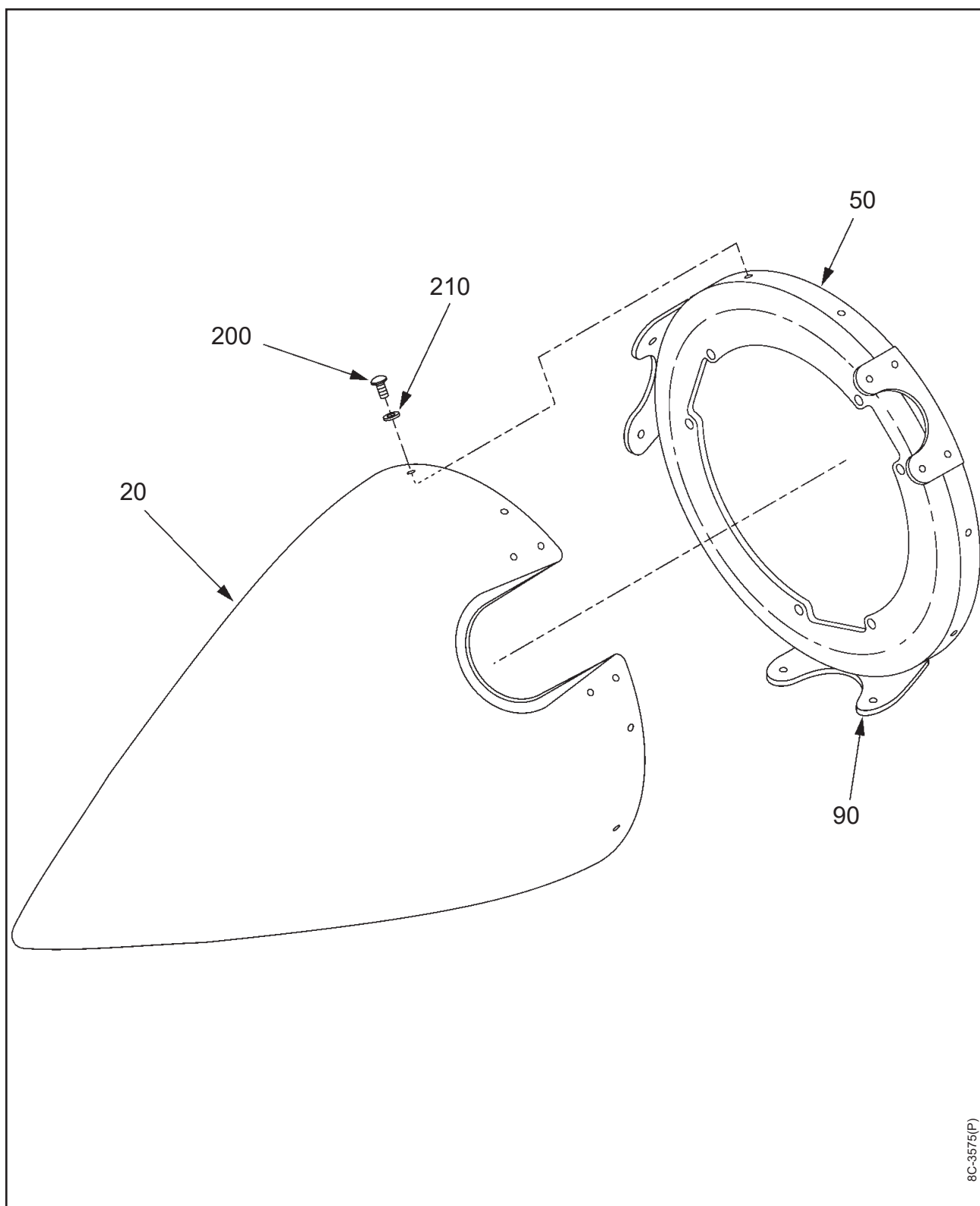
5C-4558-3(P)

Example of a Three-Bladed Propeller Spinner -
Two-piece Dome with Filler Plates
Figure 10.3-1



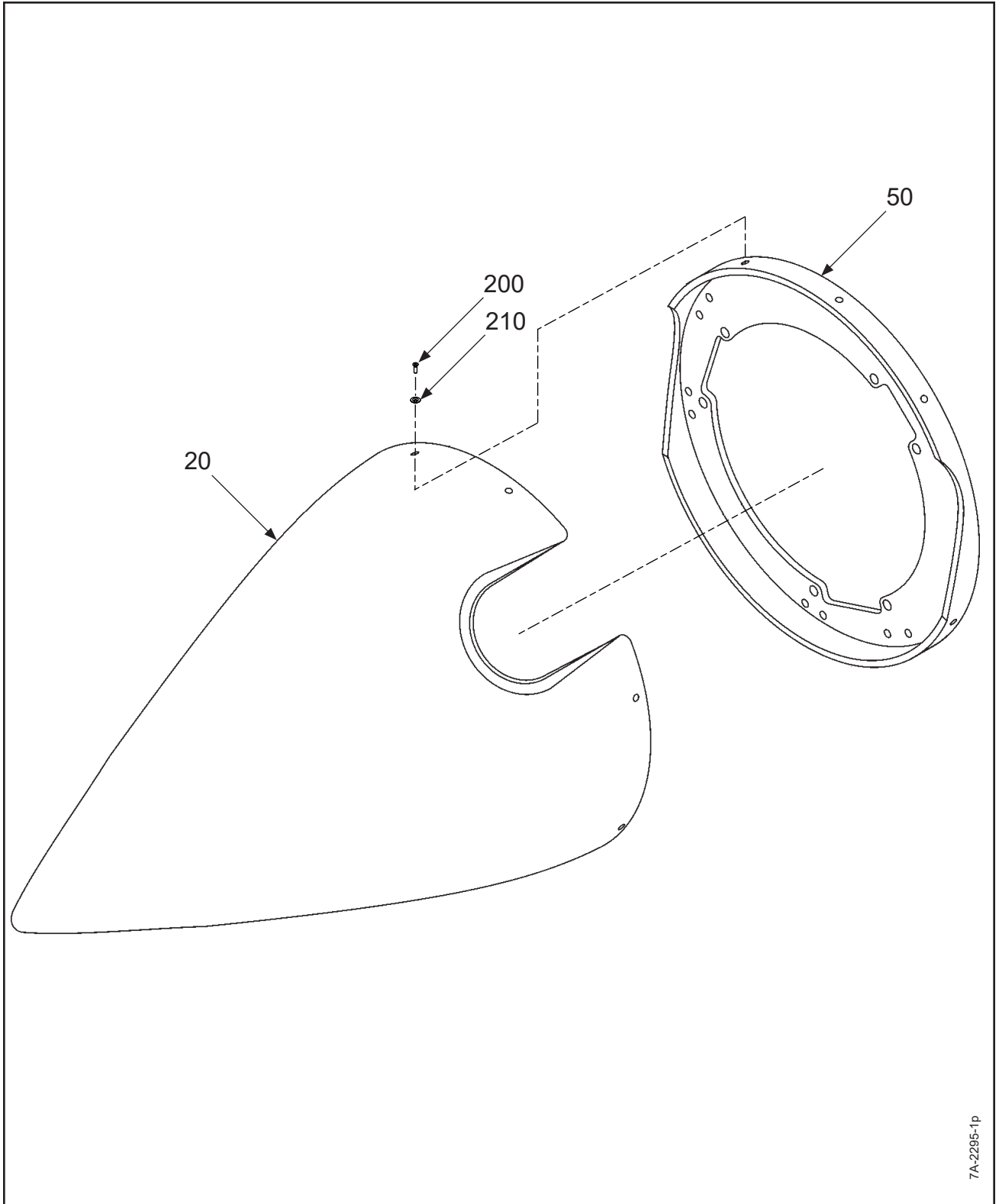
6c-3567-6p

Example of a Three-Bladed Propeller Spinner -
Two-piece Dome without Filler Plates
Figure 10.3-2



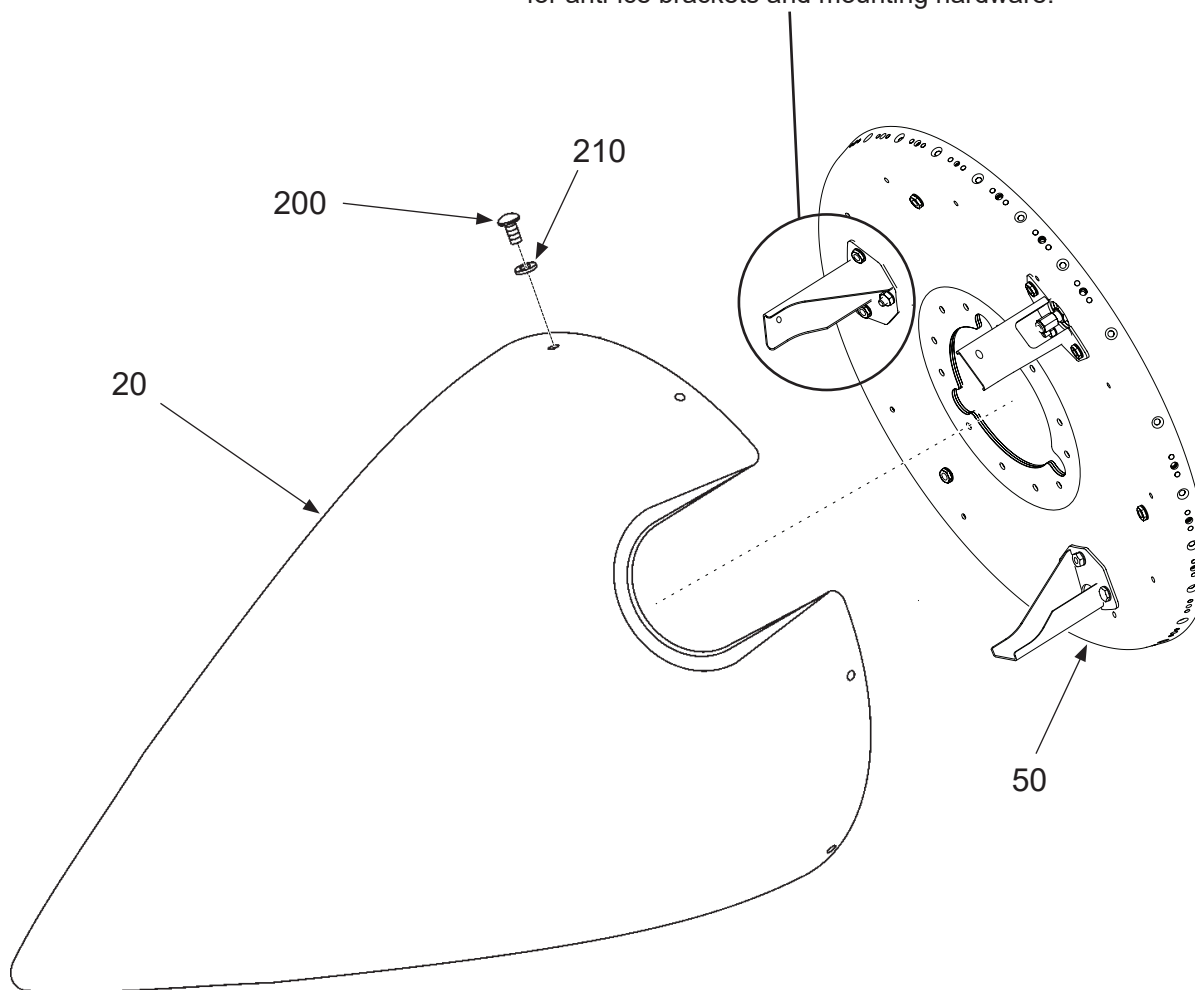
8C-3575(P)

Example of a Three-Bladed Propeller Spinner -
One-piece Dome with Filler Plates
Figure 10.3-3



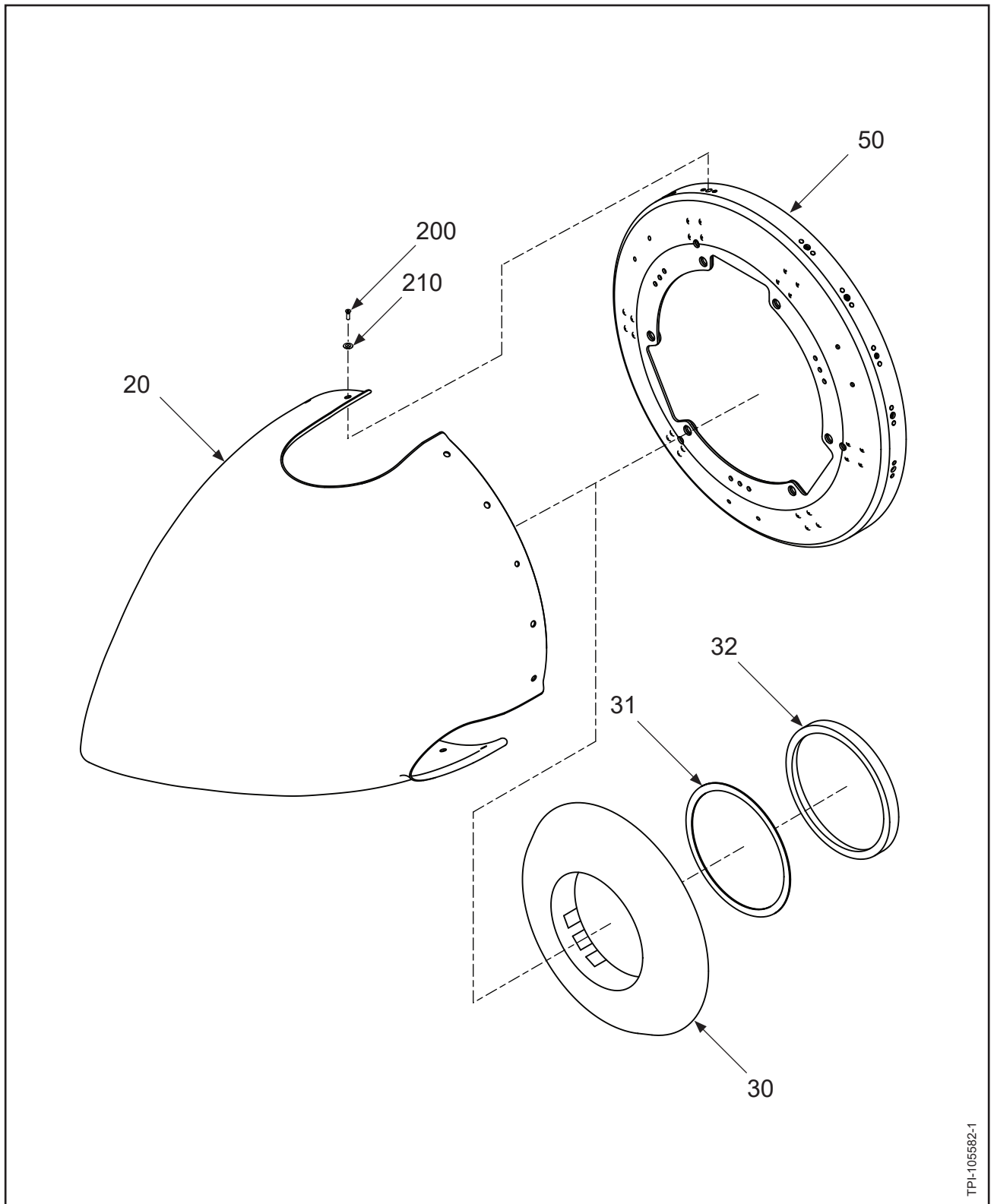
Example of a Three-Bladed Propeller Spinner -
One-piece Dome without Filler Plates
Figure 10.3-4

Anti-ice kit components shown for reference only.
Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80)
for anti-ice brackets and mounting hardware.

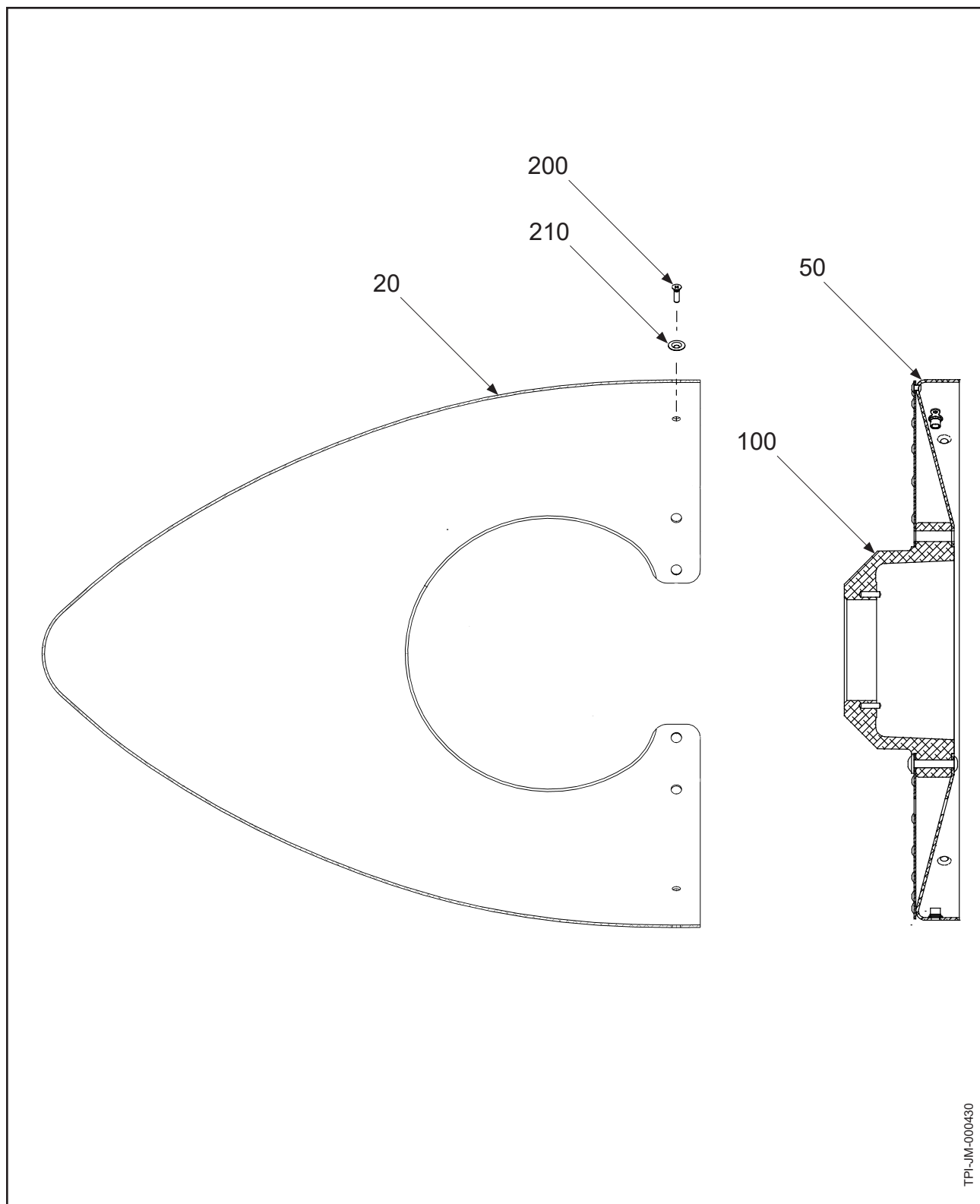


TPI-MB-0036

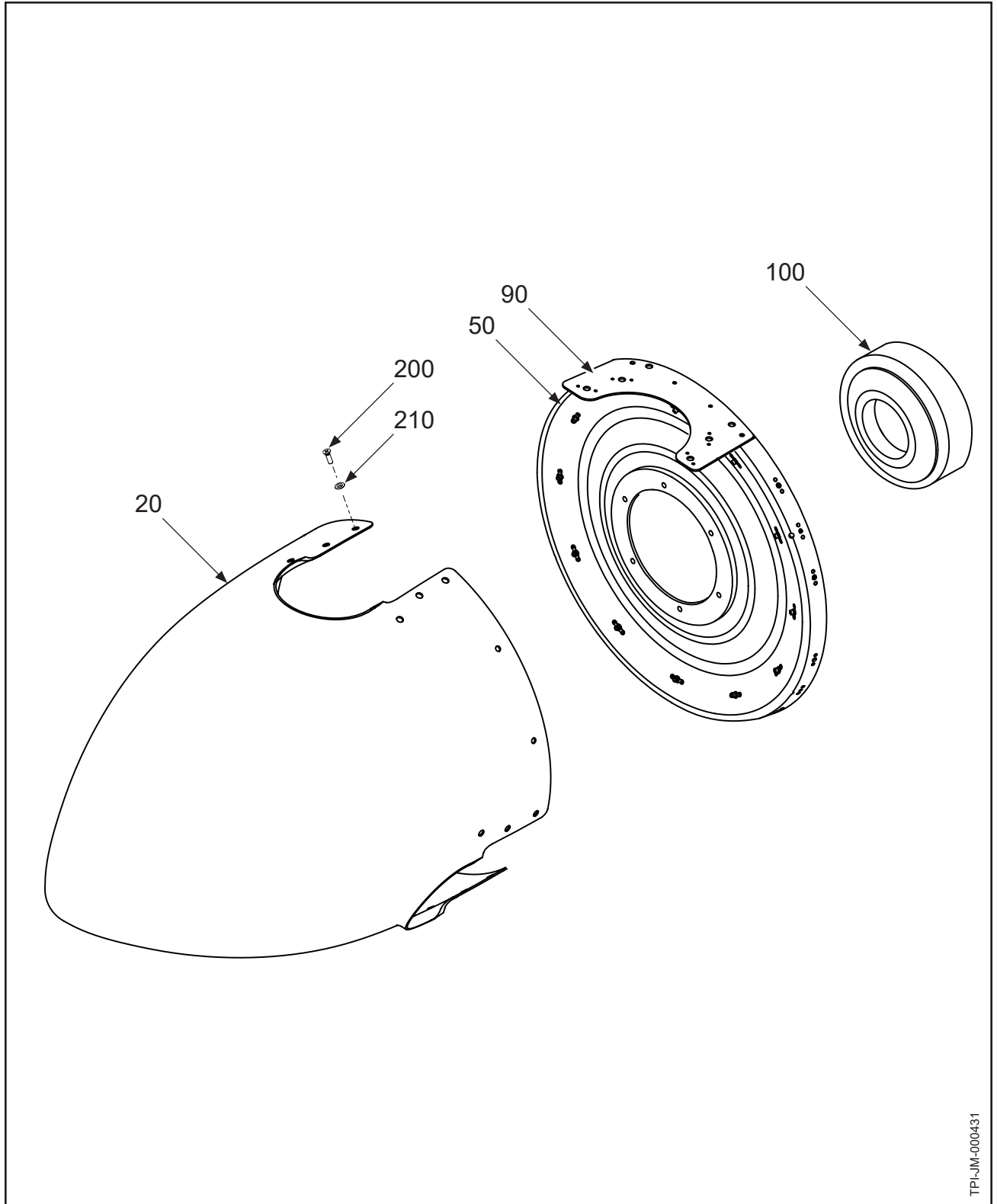
**Example of a Three-Bladed Propeller Spinner -
One-piece Dome with a 104744 or a 106109 Bulkhead Unit**
Figure 10.3-5



Example of a Three-Bladed Propeller Spinner -
One-piece Dome with a Forward Bulkhead
Figure 10.3-6



Example of a Three-Bladed Propeller Spinner -
One-piece Dome without Filler Plates, with Bulkhead Hub
Figure 10.3-7



TPI-JM-000431

**Example of a Three-Bladed Propeller Spinner -
One-piece Dome with Filler Plates, with Bulkhead Hub**
Figure 10.3-8

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	A-2295-1()	SPINNER ASSEMBLY			
20	C-3532-5()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)	F	1	
50	C-2294-12()	• BULKHEAD UNIT		1	
-53A	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		3	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	A-2295-2()	SPINNER ASSEMBLY			
20	C-3532-5()	• DOME - REPLACED BY ITEM 20A (INCLUDES BONDED FORWARD BULKHEAD)		1	
20A	C-3532-24()	• DOME UNIT - REPLACES ITEM 20 (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-13()	• BULKHEAD UNIT - REPLACED BY ITEM 50A		1	
50A	C-2294-19()	• BULKHEAD UNIT - REPLACES ITEM 50		1	
-53A	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-61A	B-3849-3	• • NUTPLATE, FLOATING		6	
-62A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-4					
-10	A-2295-3()	SPINNER ASSEMBLY			
20	C-3532-19()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-16()	• BULKHEAD UNIT		1	
-53	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
F Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".					

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	A-2295-4()	SPINNER ASSEMBLY			
20	C-3532-21()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-14()	• BULKHEAD UNIT	F	1	
-53A	C-7737-18	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		3	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-4					
-10	A-2295-6()	SPINNER ASSEMBLY			
20	C-3532-25()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-15()	• BULKHEAD UNIT		1	
-53	C-7737-18	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-4					
-10	A-2295-8()	SPINNER ASSEMBLY			
20	C-3532-5()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-16()	• BULKHEAD UNIT		1	
-53	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	A-2295-10()	SPINNER ASSEMBLY			
20	C-3532-19()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-18()	• BULKHEAD UNIT		1	
-53	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-63	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		18	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	A-2295-11()	SPINNER ASSEMBLY			
20	C-3532-5()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-20()	• BULKHEAD UNIT		1	
-53	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	A-2295-13()	SPINNER ASSEMBLY			
20	C-3532-5()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-22()	• BULKHEAD UNIT		1	
-53	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	A-2295-14()	SPINNER ASSEMBLY			
20	C-3532-26()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-23()	• BULKHEAD UNIT		1	
-53	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	A-2295-15()	SPINNER ASSEMBLY			
20	C-3532-5()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-2294-25()	• BULKHEAD UNIT		1	
-53	C-7737-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	A-3640()	SPINNER ASSEMBLY			
20	C-3532-6()	• DOME UNIT, 3-BLADE		1	
50	C-3642()	• BULKHEAD UNIT		1	
-51	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		6	
-52	B-7333-120	• • RIVNUT		6	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	A-4203-1()	SPINNER ASSEMBLY			
20	C-3282-3()	• DOME UNIT, 3-BLADE		1	
50	C-3283-()	• BULKHEAD UNIT - SUPERSEDED BY ITEM 50A		1	
50A	C-3283-3()	• BULKHEAD UNIT - SUPERSEDES ITEM 50		1	
-53	B-4691	• • DOUBLER, MOUNTING, BULKHEAD		3	
-55	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		36	
-59	B-3881-3	• • NUTPLATE, FIXED		6	
-61	B-3846-3	• • NUTPLATE, FIXED		15	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		18	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		10	Y
210	A-1020	• WASHER, FIBER		10	Y
10.3-2					
-10	A-4209()	SPINNER ASSEMBLY			
20	C-4250-1()	• DOME UNIT, 3-BLADE		1	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		6	
70	C-3259-1()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	B-3264()	• CAP, DOME	A	1	
	B-3264-1()	• CAP, DOME	B	1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER		12	Y
-10	C-2500()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL
A	For Spinners with a serial number CE-3 or before				
B	For Spinners with a serial number after CE-3				

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-8					
-10	C-2504()	SPINNER ASSEMBLY			
20	C-2531-2()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		3	
50	C-2534()	• BULKHEAD ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		24	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-63	B-3847-3	• • RIVET, 100° HEAD, .094 DIA, AL		36	
100	B-1842-1	• • HUB, BULKHEAD		1	
-101	A-894-1	• • DOWEL PIN, 1/8"		3	
-102	B-3863-22	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		9	
-103	B-3384-23	• • BOLT, 1/4-28, HEX HEAD		6	
-104	B-3851-0463	• • WASHER		18	
-105	A-1865	• • WASHER, FIBER		6	
-106	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
-140	C-2508-3	• • HOOP		1	
-195	830-8	• • START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		33	Y
210	A-1020	• WASHER, FIBER		33	Y
10.3-4					
-10	C-2513()	SPINNER ASSEMBLY			
20	C-2531-1()	• DOME, 3-BLADE		1	
70	C-2512()	• ADAPTER ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-71	A-2538	• • BULKHEAD REINFORCEMENT PLATE		3	
-72	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		24	
-140	C-2508-2	• • HOOP		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	C-2513-2()	SPINNER ASSEMBLY			
20	C-2531-5()	• DOME, 3-BLADE		1	
70	C-2512-2()	• ADAPTER ASSEMBLY		1	
-71	A-2538	• • BULKHEAD REINFORCEMENT PLATE		3	
-72	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		20	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-7					
-10	C-2535()	SPINNER ASSEMBLY			
20	C-2531-2()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		3	
50	C-2534-3()	• BULKHEAD ASSEMBLY		1	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		24	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
100	B-1842-1	• • HUB, BULKHEAD		1	
-101	A-894-1	• • DOWEL PIN, 1/8"		3	
-102	B-3863-22	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		9	
-103	B-3384-23	• • BOLT, 1/4-28, HEX HEAD		6	Y
-104	B-3851-0463	• • WASHER		18	Y
-105	A-1865	• • WASHER, FIBER		6	Y
-106	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	Y
-140	C-2508-3	• • HOOP		1	
-142	B-3847-3	• • RIVET, 100° HEAD, .094 DIA, AL		36	
-195	830-8	• • START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		3	
-700	A-2537	• • ANTI-ICE KIT	A	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		33	Y
210	A-1020	• WASHER, FIBER		33	Y
-10	C-3006()	SPINNER ASSEMBLY - SUPERSEDED BY C-3065()		OBS	
-10	C-3006-2()	SPINNER ASSEMBLY - SUPERSEDED BY C-3065-2()		OBS	
-10	C-3043()	SPINNER ASSEMBLY		OBS	
20	C-2531-9()	• DOME UNIT, 3-BLADE		1	
50	C-3030()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80) for Components, Inspection Criteria, and Installation Procedures			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	C-3043-2()	SPINNER ASSEMBLY			
20	C-2531-9()	• DOME UNIT, 3-BLADE		1	
50	C-3030-1()	• BULKHEAD UNIT		1	
-51	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		18	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	C-3043-3()	SPINNER ASSEMBLY			
20	C-2531-9()	• DOME UNIT, 3-BLADE		1	
50	C-3030-4()	• BULKHEAD UNIT		1	
-51	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		18	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	C-3043-7()	SPINNER ASSEMBLY		OBS	
20	C-2531-9()	• DOME UNIT, 3-BLADE		1	
50	C-3671()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-3					
-10	C-3065()	SPINNER ASSEMBLY			
20	C-3004()	• DOME, 3-BLADE		1	
50	C-3064()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	A-3038	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	C-3065-1()	SPINNER ASSEMBLY			
10	C-3004-2()	• DOME, 3-BLADE		1	
50	C-3064-1()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	C-3065-3()	SPINNER ASSEMBLY			
20	C-3004-2()	• DOME, 3-BLADE		1	
50	C-3064-3()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	C-3065-4()	SPINNER ASSEMBLY		OBS	
20	C-3004()	• DOME, 3-BLADE		1	
50	C-3078()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	C-3065-5()	SPINNER ASSEMBLY		OBS	
20	C-3004-3()	• DOME, 3-BLADE		1	
50	C-3064-1()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	C-3065-6()	SPINNER ASSEMBLY			
20	C-3004-2()	• DOME, 3-BLADE		1	
50	C-3064-4()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	A-3038-1	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	C-3065-7()	SPINNER ASSEMBLY		OBS	
20	C-3004()	• DOME, 3-BLADE		1	
50	C-3064-5()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	C-3065-9()	SPINNER ASSEMBLY		OBS	
20	C-3004-2()	• DOME, 3-BLADE		1	
50	C-3064-7()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-3					
-10	C-3065-11()	SPINNER ASSEMBLY			
20	C-3004()	• DOME, 3-BLADE		1	
50	C-3064-9()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		21	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-63	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	A-3038	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	C-3065-12()	SPINNER ASSEMBLY			
20	C-3004-2()	• DOME, 3-BLADE		1	
50	C-3064-10()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	A-3038-1	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	B-3851-0332	• WASHER		15	Y
10.3-3					
-10	C-3065-13()	SPINNER ASSEMBLY			
20	C-3004-2()	• DOME, 3-BLADE		1	
50	C-3064-11()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		21	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-63	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	A-3038-1	• • FILLER PLATE		3	
-91	B-3848-4	• • RIVET, 100° HEAD, .125 DIA, AL, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	B-3851-0332	• WASHER, FLAT		15	Y
-10	C-3065-15()	SPINNER ASSEMBLY		OBS	
20	C-3004-5()	• DOME, 3-BLADE		1	
50	C-3064-12()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	C-3065-16()	SPINNER ASSEMBLY			
20	C-3004()	• DOME, 3-BLADE		1	
50	C-3064-13()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	A-3038	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-2					
-10	C-3258-(L)()	SPINNER ASSEMBLY			
20	C-3278()	• DOME UNIT, 3-BLADE	A B	1	
	C-3278L()	• DOME UNIT, 3-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • DOME PLATE		1	
-26	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		8	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
70	C-3259-1()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	B-3264-1	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
-10	C-3269()	SPINNER ASSEMBLY - SUPERSEDED BY D-3273		OBS	
-10	C-3311()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		
A		C-3258-(P)			
B		C-3258-L(P)			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	C-3535()	SPINNER ASSEMBLY			
20	C-3532-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3539-1()	• BULKHEAD UNIT	F	1	
-53A	A-3263-7	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-61A	B-3849-3	• • NUTPLATE, FLOATING		6	
-62A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-4					
-10	C-3535-1()	SPINNER ASSEMBLY			
20	C-3532-7()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3539-1()	• BULKHEAD UNIT	F	1	
-53A	A-3263-7	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-61A	B-3849-3	• • NUTPLATE, FLOATING		6	
-62A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-3					
-10	C-3535-3()	SPINNER ASSEMBLY			
20	C-3532-23()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3539-2()	• BULKHEAD UNIT		1	
-53	A-3263-7	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	B-4212-3	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	C-3552()	SPINNER ASSEMBLY			
20	C-3532-2()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
70	C-3553()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
10.3-4					
-10	C-3552-1()	SPINNER ASSEMBLY			
20	C-3532-3()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
70	C-3553()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-2					
-10	C-3567()	SPINNER ASSEMBLY	CSA		
20	C-3278-3()	• DOME UNIT, 3-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • DOME PLATE		1	
-26	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		8	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	C-3566-7()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		36	
150	B-3264()	• CAP, DOME - SPINNER ASSEMBLY S/N AX2191 AND LOWER		1	
150A	B-3264-1()	• CAP, DOME - SPINNER ASSEMBLY S/N AX2192 AND HIGHER		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".	CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-2					
-10	C-3567-1()	SPINNER ASSEMBLY WITH 2 PIECE DOME UNIT SUPERSEDED BY C-3567-1() SPINNER ASSEMBLY WITH 1-PIECE SPINNER DOME UNIT	CSA		
20	C-3278-2()	• DOME UNIT, 3-BLADE		OBS	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • DOME PLATE		1	
-26	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		8	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	C-3566-7()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		36	
150	B-3264-1()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-4					
-10	C-3567-1()	SPINNER ASSEMBLY WITH 1 PIECE DOME UNIT SUPERSEDES C-3567-1() SPINNER ASSEMBLY WITH 2-PIECE SPINNER DOME UNIT, POST HC-SL-61-230			
20	D-7811-2()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3566-12()	• BULKHEAD UNIT		1	
-53	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
F	Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".		CSA	Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered	

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	C-3567-4()	SPINNER ASSEMBLY WITH 2 PIECE DOME UNIT SUPERSEDED BY C-3567-4() SPINNER ASSEMBLY WITH 1-PIECE SPINNER DOME UNIT	CSA		
20	C-3278-5()	• DOME UNIT, 3-BLADE		OBS	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	A-2493	• • DOME PLATE		1	
-26	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		8	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	C-3566-10()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	B-3264-1()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-6					
-10	C-3567-4()	SPINNER ASSEMBLY WITH 1 PIECE DOME UNIT SUPERSEDES C-3567-4() SPINNER ASSEMBLY WITH 2-PIECE SPINNER DOME UNIT, POST HC-SL-61-230			
20	D-7811-5()	• DOME, SUPERSEDED BY ITEM 20A (INCLUDES BONDED FORWARD BULKHEAD)		1	
20A	D-7811-7()	• DOME, SUPERSEDES ITEM 20 (INCLUDES BONDED FORWARD BULKHEAD) SUPERSEDED BY ITEM 20B		1	
20B	D-7811-10(P)	• DOME, SUPERSEDES ITEM 20A		1	
30	104195	• • FORWARD BULKHEAD		1	
31	B-5486	• • SHIM, SPINNER		AR	
32	104196	• • ADAPTER		1	
50	C-3566-13()	• BULKHEAD UNIT		1	
-53	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
-210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".	CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	C-3567-7()	SPINNER ASSEMBLY			
20	D-7811-2()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3566-14()	• BULKHEAD UNIT		1	
-53	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-6					
-10	C-3567-8()	SPINNER ASSEMBLY			
20	D-7811-7()	• DOME, SUPERSEDED BY ITEM 20A		1	
20A	D-7811-10(P)	• DOME, SUPERSEDES ITEM 20		1	
30	104195	• • FORWARD BULKHEAD, PLASTIC		1	
31	B-5486	• • SHIM, SPINNER		1	
32	104196	• • ADAPTER		1	
50	C-3566-15()	• BULKHEAD UNIT		1	
-53	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
-210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	C-3567-9()	SPINNER ASSEMBLY			
20	D-7811-2()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3566-16()	• BULKHEAD UNIT		1	
-53	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	C-3570-()	SPINNER ASSEMBLY			
20	C-3532-14()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3571-1()	• BULKHEAD UNIT	F	1	
-53A	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90A	B-4244-15	• • FILLER PLATE		3	
-91A	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-3					
-10	C-3575()	SPINNER ASSEMBLY			
20	C-3532-15()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3576-2()	• BULKHEAD UNIT	F	1	
-53A	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-60A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90A	B-4244-5	• • FILLER PLATE		3	
-91A	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	C-3575-1()	SPINNER ASSEMBLY			
20	C-3532-16()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3576-3()	• BULKHEAD UNIT	F	1	
-53A	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-60A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90A	B-4244-5	• • FILLER PLATE		3	
-91A	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-3					
-10	C-3575-2()	SPINNER ASSEMBLY			
20	C-3532-16()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3576-4()	• BULKHEAD UNIT		1	
-53	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	B-4244-5	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
-10	C-4558-(P)	SPINNER ASSEMBLY - SUPERSEDED BY C-4558-3()		OBS	
-10	C-4558-1()	SPINNER ASSEMBLY - SUPERSEDED BY C-4558-3()		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-1					
-10	C-4558-2()	SPINNER ASSEMBLY			
20	D-4560-1()	• DOME UNIT, 3-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	B-3244	• • DOME PLATE		1	
50	D-4561-6()	• BULKHEAD UNIT	F	1	
-53	A-3263-12	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	B-4596	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		15	
150	C-4563()	• CAP, DOME		1	
160	B-3840-6	• SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
F	Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".				

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-1					
-10	C-4558-3()	SPINNER ASSEMBLY			
20	D-4560-2()	• DOME UNIT, 3-BLADE		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-25	B-3244	• • DOME PLATE		1	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	D-4561-7()	• BULKHEAD UNIT	F	1	
-53	A-3263-12	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	B-4548	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
-96	104862	• • CAP, NUTPLATE		6	
150	C-4563()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-3					
-10	C-4582()	SPINNER ASSEMBLY			
20	C-4586()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-4583-2()	• BULKHEAD UNIT	F	1	
-53A	A-3263-13	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-60A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90A	B-4244-6	• • FILLER PLATE		3	
-91A	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	C-4582-1()	SPINNER ASSEMBLY			
20	C-4586()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-4583-3()	• BULKHEAD UNIT	F	1	
-53A	A-3263-13	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	B-4244-6	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-3					
-10	C-6446()	SPINNER ASSEMBLY			
20	D-6447()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-6448-1()	• BULKHEAD UNIT	F	1	
-53A	A-3263-16	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59A	B-3846-3	• • NUTPLATE, FIXED		3	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	C-6455	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		33	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-3					
-10	C-6446-1()	SPINNER ASSEMBLY			
20	D-6447-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-6448-2()	• BULKHEAD UNIT		1	
-53	A-3263-16	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		42	
90	C-5736-1	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	C-6446-2()	SPINNER ASSEMBLY			
20	D-6447-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-6448-3()	• BULKHEAD UNIT		1	
-53	A-3263-16	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		48	
90	C-5736-1	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-2					
-10	D-1649()	SPINNER ASSEMBLY			
20	D-1647()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
-26	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL (OPTIONAL)		8	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	D-1648-1()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	C-3275()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-2					
-10	D-3273()	SPINNER ASSEMBLY			
20	C-3274()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	C-3267-4()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		36	
150	C-3275()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-2					
-10	D-3273-1()	SPINNER ASSEMBLY - SUPERSEDED BY D-3273-2()			
20	C-3274-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	C-3267-5()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	C-3275()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
-10	D-3273-1L()	SPINNER ASSEMBLY		OBS	
20	C-3274-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
50	C-3267-5L()	• BULKHEAD UNIT	F	1	
150	C-3275()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-1					
-10	D-3273-2()	SPINNER ASSEMBLY			
20	C-3274-2()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	C-3267-6()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	B-4244-2	• FILLER PLATE		3	
-92	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
150	C-3275()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-1					
-10	D-3273-3()	SPINNER ASSEMBLY			
20	C-3274-3()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	C-3267-6()	• BULKHEAD UNIT		1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	B-4244-2	• FILLER PLATE		3	
-92	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
150	C-3275()	• CAP, DOME		1	
160	B-3840-6	• SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	D-3273-4(P)	SPINNER ASSEMBLY			
20	100951(P)	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3267-7(P)	• BULKHEAD UNIT		1	
-53	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
-61	B-3849-3	• • NUTPLATE, FLOATING		24	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	100952	• • FILLER PLATE		3	
-92	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		21	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		27	Y
210	A-1020	• WASHER, FIBER		27	Y
10.3-4					
-10	D-3434()	SPINNER ASSEMBLY			
20	C-3436()	• DOME UNIT, 3-BLADE		1	
50	D-3437()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-4					
-10	D-3434-1()	SPINNER ASSEMBLY			
20	C-3436()	• DOME, 3-BLADE		1	
50	D-3437-1()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT		6	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	D-3434-5()	SPINNER ASSEMBLY			
20	C-3436()	• DOME, 3-BLADE		1	
50	D-3437-5()	• BULKHEAD UNIT (INCLUDES BONDED SPINNING BULKHEAD)		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-4					
-10	D-3434-6()	SPINNER ASSEMBLY			
20	C-3436()	• DOME, 3-BLADE		1	
50	D-3472()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-4					
-10	D-3434-11()	SPINNER ASSEMBLY			
20	C-3436()	• DOME, 3-BLADE		1	
50	D-3437-8()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT		6	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	D-3434-12()	SPINNER ASSEMBLY			
20	C-3436()	• DOME, 3-BLADE		1	
50	D-3474()	• BULKHEAD UNIT (INCLUDES BONDED SPACER BULKHEAD)		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-4					
-10	D-3434-13()	SPINNER ASSEMBLY			
20	C-3436()	• DOME, 3-BLADE		1	
50	D-3472-1()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-4					
-10	D-3434-17()	SPINNER ASSEMBLY			
20	C-3436()	• DOME, 3-BLADE		1	
50	D-3474-1()	• BULKHEAD UNIT (INCLUDES BONDED SPACER BULKHEAD)		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT		6	
-59	B-3846-3	• • NUTPLATE, FIXED		15	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		66	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-4					
-10	D-4033-L()	SPINNER ASSEMBLY			
20	D-4035()	• DOME, 3-BLADE		1	
50	D-4036()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-2					
-10	D-4247-()	SPINNER ASSEMBLY (PUSHER)			
20	C-4250()	• DOME UNIT (INCLUDES BONDED FORWARD BULKHEAD)		1	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		6	
50	C-3566-9()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		48	
150	B-3264()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
10.3-3					
-10	D-4511-3()	SPINNER ASSEMBLY			
20	D-7812-8()	• DOME, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4513-4()	• BULKHEAD UNIT		1	
-53	C-7737-20	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-63	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	100143	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		21	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-3					
-10	D-4511-3L()	SPINNER ASSEMBLY			
20	D-7812-8L()	• DOME, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4513-4()	• BULKHEAD UNIT		1	
-53	C-7737-20	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-63	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	100143	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		21	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-1					
-10	D-4578-()	SPINNER ASSEMBLY			
20	D-4580()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	D-4581-1()	• BULKHEAD UNIT	F	1	
-53	A-3263-10	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	B-4244-7	• FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
150	C-3275()	• CAP, DOME		1	
160	B-3840-6	• SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
10.3-1					
-10	D-4578-1()	SPINNER ASSEMBLY			
20	D-4580-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	D-4581-2()	• BULKHEAD UNIT		1	
-53	A-3263-10	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	B-4244-10	• FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
150	C-3275()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	D-4798-1()	SPINNER ASSEMBLY			
20	D-4797-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4796()	• BULKHEAD UNIT		1	
-53	B-6300	• • REINFORCEMENT BRACKET		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		18	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	C-5736	• • FILLER PLATE		3	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-3					
-10	D-4798-3()	SPINNER ASSEMBLY			
20	D-4797-3()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4796-1()	• BULKHEAD UNIT		1	
-53	B-6300	• • REINFORCEMENT BRACKET		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		18	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		36	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	C-3892	• • FILLER PLATE		3	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	D-4816-()	SPINNER ASSEMBLY			
20	D-4817()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
70	D-4818()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
150	B-3264-1()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
-10	D-4829-(P)	SPINNER ASSEMBLY		OBS	
-10	D-4839()	SPINNER ASSEMBLY		OBS	
10.3-1					
-10	D-4841()	SPINNER ASSEMBLY			
20	D-4830()	• DOME UNIT, 3-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	D-4877-1()	• BULKHEAD UNIT	F	1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		36	
90	B-4878	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		18	
150	B-3264-1()	• CAP, DOME		1	
160	B-3840-6	• SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	D-4897-(P)	SPINNER ASSEMBLY			
20	D-4898-(P)	• DOME, 3-BLADE		1	
50	D-4899-(P)	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-5			A		
-10	D-4897-1P	SPINNER ASSEMBLY			
20	D-4898-P	• DOME, 3-BLADE		1	
50	104744P	• BULKHEAD UNIT (INCLUDES BONDED SPINNING BULKHEAD, SLINGER RING, AND FITTING)		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
-65	B-3384-4	• • BOLT, 1/4-28, HEX HEAD		3	
-66	B-3837-0432	• • WASHER, CORROSION RESISTANT		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
10.3-5			A		
-10	D-4897-2(P)	SPINNER ASSEMBLY			
20	D-4898-(P)	• DOME, 3-BLADE		1	
50	106109(P)	• BULKHEAD UNIT (INCLUDES BONDED SPINNING BULKHEAD, SLINGER RING, AND FITTING)		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		42	
-65	B-3384-4	• • BOLT, 1/4-28, HEX HEAD		3	
-66	B-3837-0432	• • WASHER, CORROSION RESISTANT		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		21	Y
210	A-1020	• WASHER, FIBER		21	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Application Guide Manual 159 (61-02-59) for the applicable Ice Protection Kit. Refer to the Ice Protection System Manual 180 (30-60-80) for Components, Check Criteria, and Installation Procedures.			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	D-5203-()	SPINNER ASSEMBLY			
20	C-3004()	• DOME UNIT, 3-BLADE		1	
50	D-5204()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT		6	
-55	B-3848-4	• • RIVET, 100° HEAD, .125 DIA, AL, 100° HEAD, .125 DIA, AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		9	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	A-3038	• • FILLER PLATE		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-1					
-10	D-5205-()	SPINNER ASSEMBLY			
20	D-5206()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
-23	B-3849-08	• • NUTPLATE, FLOATING		3	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		6	
50	D-4561-7()	• BULKHEAD UNIT	F	1	
-53A	A-3263-12	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	B-4548	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
-96	104862	• • CAP, NUTPLATE		6	
150	C-4563()	• CAP, DOME		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		3	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	D-5495-L ()	SPINNER ASSEMBLY			
20	D-5496-L ()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3539-1 ()	• BULKHEAD UNIT	F	1	
-53A	A-3263-7	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-61A	B-3849-3	• • NUTPLATE, FLOATING		6	
-62A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-3					
-10	D-5732-()	SPINNER ASSEMBLY			
20	D-5733()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-5734()	• BULKHEAD UNIT - SUPERSEDED BY ITEM 50A		1	
50A	D-5734-1 ()	• BULKHEAD UNIT - SUPERSEDES ITEM 50		1	
-53A	B-7346	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		18	
-59A	B-3846-3	• • NUTPLATE, FIXED		6	
-60A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63A	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90A	C-5736	• • FILLER PLATE		3	
-91A	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-3					
-10	D-6750-()	SPINNER ASSEMBLY			
20	D-6751()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-6753-1 ()	• BULKHEAD UNIT	F	1	
-53	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	C-6756	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	D-6750-1()	SPINNER ASSEMBLY			
20	D-6751-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-6753-2()	• BULKHEAD UNIT		1	
-53	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	C-6756	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-3					
-10	D-6841()	SPINNER ASSEMBLY			
20	D-6840()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-6839-1()	• BULKHEAD UNIT	F	1	
-53A	A-3263-16	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55A	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59A	B-3846-3	• • NUTPLATE, FIXED		3	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	C-6870	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		33	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	D-6929	SPINNER ASSEMBLY			
20	D-6927	• DOME, 3-BLADE		1	
50	D-6928	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	D-6936-()	SPINNER ASSEMBLY			
20	D-6935()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3571-1()	• BULKHEAD UNIT	F	1	
-53	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	B-4244-15	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-4					
-10	D-7267()	SPINNER ASSEMBLY			
20	D-7266()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-7084-1()	• BULKHEAD UNIT		1	
-53	B-7217-2	• • DOUBLER, MOUNTING, BULKHEAD		3	
-54	B-7217-2L	• • DOUBLER, MOUNTING, BULKHEAD		3	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-3					
-10	D-7267-2(P)	SPINNER ASSEMBLY			
20	D-7266-1(P)	• DOME UNIT (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-7084-3(P)	• BULKHEAD UNIT		1	
-53	B-7217	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		18	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
90	C-5736-2	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
F		Refer to Table 6-2, "Spinner Bulkheads that can be Modified (Three-bladed Propellers)".			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	D-7330()	SPINNER ASSEMBLY			
20	D-7329()	• DOME UNIT, 3-BLADE		1	
50	C-3752()	• BULKHEAD UNIT		1	
-51	B-3862-9	• • RIVET, UNIVERSAL HEAD, .188 AL		9	
-52	B-7333-120	• • RIVNUT		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-96	104862	• • CAP, NUTPLATE		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-3					
-10	D-7709()	SPINNER ASSEMBLY			
20	D-7325-2()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-7084-4()	• BULKHEAD UNIT		1	
-53	B-7217	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		18	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
-10	835-8()	SPINNER ASSEMBLY		OBS	
20	C-1904()	• DOME UNIT, 3-BLADE		1	
50	C-1429()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	835-9()	SPINNER ASSEMBLY - SUPERSEDED BY 835-29()		OBS	
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	835-10S()	SPINNER ASSEMBLY			
20	C-1904()	• DOME, 3-BLADE		1	
-45	C-807-7S()	• BULKHEAD UNIT ASSEMBLY		1	
50	C-807-10()	• • BULKHEAD UNIT		1	
-51	B-3861-4	• • • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
-55	B-3862-20	• • • RIVET, UNIVERSAL HEAD, .188 AL		9	
-56	B-3851-0363	• • • WASHER		9	
-59	B-3846-3	• • • NUTPLATE, FIXED		3	
-61	B-3849-3	• • • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		30	
100	B-1398-1	• • • HUB, BULKHEAD		1	
-101	A-894-1	• • • DOWEL PIN		2	
-195	830-5	• START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		RF	
-230	B-3384-18	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3851-0463	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	835-11S()	SPINNER ASSEMBLY		OBS	
20	C-1904()	• DOME, 3-BLADE		1	
50	C-807-7SL()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	835-14()	SPINNER ASSEMBLY			
20	C-1904()	• DOME, 3-BLADE		1	
70	C-885-1()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	835-18()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-7					
-10	835-29()	SPINNER ASSEMBLY			
20	C-1904()	• DOME, 3-BLADE		1	
50	C-807-8()	• BULKHEAD UNIT		1	
-51	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
-55	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		9	
-56	B-3851-0363	• • WASHER		9	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
100	B-887	• • HUB, BULKHEAD		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-230	B-3384-18	• BOLT, 1/4-28, HEX HEAD		6	Y
-250	B-3851-0463	• WASHER		6	Y
-255	B-3851-0432	• WASHER		6	Y
-260	B-3808-4	• NUT, HEX, SELF-LOCKING		6	Y
10.3-7					
-10	835-31()	SPINNER ASSEMBLY			
20	C-1904()	• DOME, 3-BLADE		1	
50	C-807-8()	• BULKHEAD UNIT		1	
-51	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
-55	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		9	
-56	B-3851-0363	• • WASHER		9	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
100	B-887	• • HUB, BULKHEAD		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
500	C-2128-1	• SLINGER RING UNIT	S	1	
10.3-3					
-10	835-36()	SPINNER ASSEMBLY			
20	C-1904-5()	• DOME		1	
70	C-885-3()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	B-2480	• FILLER PLATE UNIT - REPLACED BY ITEM 90A		3	
90A	100438()	• FILLER PLATE UNIT - REPLACES ITEM 90		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		27	Y
210	A-1020	• WASHER, FIBER		27	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
S		Refer to Hartzell Propeller Application Guide Manual 159 (61-02-59) for the applicable Ice Protection Kit. Refer to the Ice Protection System Manual 180 (30-60-80) for Components, Check Criteria, and Installation Procedures.			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	835-38()	SPINNER ASSEMBLY			
20	C-1904-4()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	C-3279()	• BULKHEAD UNIT - SUPERSEDED BY ITEM 50A		1	
50A	C-3279-1()	• BULKHEAD UNIT - SUPERSEDES ITEM 50		1	
-51A	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		12	
-59A	B-3846-3	• • NUTPLATE, FIXED		3	
-61A	B-3849-3	• • NUTPLATE, FLOATING		12	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-7					
-10	835-39()	SPINNER ASSEMBLY			
20	C-3624()	• DOME, 3-BLADE, REPLACED BY ITEM 20A		1	
20A	D-5771()	• DOME, REPLACES ITEM 20		1	
50	C-807-8()	• BULKHEAD UNIT		1	
-51	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
-55	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		9	
-56	B-3851-0363	• • WASHER		9	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
100	B-887	• • HUB, BULKHEAD		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-7					
-10	835-39E()	SPINNER ASSEMBLY			
20	C-3624()	• DOME, 3-BLADE, REPLACED BY ITEM 20A		1	
20A	D-5771()	• DOME, REPLACES ITEM 20		1	
50	C-807-8E()	• BULKHEAD UNIT		1	
-51	B-3861-4	• • RIVET, UNIVERSAL HEAD, .125 ALUM		36	
-52	B-7333-75	• • RIVNUT		6	
-55	B-3862-20	• • RIVET, UNIVERSAL HEAD, .188 AL		9	
-56	B-3851-0363	• • WASHER		9	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
100	B-887	• • HUB, BULKHEAD		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	835-47()	SPINNER ASSEMBLY			
20	C-1904-5()	• DOME		1	
70	C-4549()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	B-4522()	• FILLER PLATE UNIT		3	
90A	100547()	• FILLER PLATE UNIT - POST CNC		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		27	Y
210	A-1020	• WASHER, FIBER		27	Y
10.3-3					
-10	835-52()	SPINNER ASSEMBLY			
20	D-5769()	• DOME		1	
70	C-4549()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
90	B-4522()	• FILLER PLATE UNIT		3	
90A	100547()	• FILLER PLATE UNIT - POST CNC		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		27	Y
210	A-1020	• WASHER, FIBER		27	Y
-10	835-53E()	SPINNER ASSEMBLY - SUPERSEDED BY 835-39E		OBS	
10.3-4					
-10	835-56()	SPINNER ASSEMBLY			
20	D-5971-1()	• DOME, 3-BLADE		1	
70	C-4549-2()	• ADAPTER RING UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	836-2()	SPINNER ASSEMBLY - SUPERSEDED BY 836-25()		OBS	
-10	836-3()	SPINNER ASSEMBLY - SUPERSEDED BY 835-15R()		OBS	
-10	836-6S()	SPINNER ASSEMBLY - SUPERSEDED BY 836-20SPR()		OBS	
-10	836-7()	SPINNER ASSEMBLY - SUPERSEDED BY 836-21S()		OBS	
-10	836-7S()	SPINNER ASSEMBLY - SUPERSEDED BY 836-21SPR()		OBS	
-10	836-12()	SPINNER ASSEMBLY - SUPERSEDED BY 836-25P()		OBS	
-10	836-13()	SPINNER ASSEMBLY - SUPERSEDED BY 836-26P()		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-7					
-10	836-15R()	SPINNER ASSEMBLY	CSA		
20	C-1888()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
50	D-1387-RH()	• BULKHEAD UNIT		1	
-53	C-1879	• • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • PLATE, BULKHEAD		1	
100	B-1376	• • HUB, BULKHEAD		1	
-101	A-894-1	• • PIN		2	
-140	B-1823	• • HOOP		1	
-230	B-3384-15H	• • BOLT, 1/4-28, HEX HEAD		12	
-250	B-3834-0463	• • WASHER		12	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
-10	836-16SPR	SPINNER ASSEMBLY - SUPERSEDED BY 836-32SPR()		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		
			CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	836-17SPR	SPINNER ASSEMBLY	CSA		
20	C-1888()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
50	D-1871-RP	• BULKHEAD ASSEMBLY		1	
50	D-1871-1RP	• • BULKHEAD UNIT		1	
-51	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-52	B-3863-22	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-1842-2	• • • HUB, BULKHEAD		1	
-101	A-894-1	• • • PIN		7	
-140	B-1823	• • • HOOP		1	
-195	830-14	• • START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		RF	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0463	• • WASHER		6	
-251	A-1865	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
-700	A-2167	• • ANTI-ICE KIT	A	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
-10	836-18()	SPINNER ASSEMBLY - SUPERSEDED BY 836-25P()		OBS	
-10	836-19()	SPINNER ASSEMBLY - SUPERSEDED BY 836-26P()		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80) for Components, Inspection Criteria, and Installation Procedures	CSA		Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-7					
-10	836-20()	SPINNER ASSEMBLY			
20	C-1888-()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
50	D-1871-5R()	• BULKHEAD UNIT ASSEMBLY		1	
-51	B-3863-20	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-52	B-3863-22	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-53	C-1879	• • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • PLATE, BULKHEAD		1	
100	B-1398	• • HUB, BULKHEAD		1	
-101	A-894-1	• • PIN		2	
-140	B-1823	• • HOOP		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
10.3-4					
-10	836-20SPR	SPINNER ASSEMBLY	CSA		
20	C-1888-P	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
-45	D-1871-6RP	• BULKHEAD UNIT ASSEMBLY		1	
50	D-1871-5R()	• • BULKHEAD UNIT		1	
-51	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-52	B-3863-22	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-1398	• • • HUB, BULKHEAD		1	
-101	A-894-1	• • • PIN		2	
-140	B-1823	• • • HOOP		1	
-195	830-18	• START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		RF	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0463	• • WASHER		6	
-251	A-1865	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		
			CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	836-21S(P)(R)	SPINNER ASSEMBLY	CSA		
20	C-1888	• DOME UNIT, 3-BLADE	C	1	
	C-1888-P	• DOME UNIT, 3-BLADE	D	1	
-31	A-1867	• • SHIM		AR	
-45	D-1871-4R	• BULKHEAD UNIT ASSEMBLY	C	1	
	D-1871-4RP	• BULKHEAD UNIT ASSEMBLY	D	1	
50	D-1871-3R	• • BULKHEAD UNIT	C	1	
50	D-1871-3RP	• • BULKHEAD UNIT	D	1	
-51	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-52	B-3863-22	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-1398	• • • HUB, BULKHEAD		1	
-101	A-894-1	• • • PIN		2	
-140	B-1823	• • • HOOP		1	
-195	830-18	• • START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		RF	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0463	• • WASHER		6	
-251	A-1865	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
-700	A-2587	• • ANTI-ICE KIT	A	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80) for Components, Inspection Criteria, and Installation Procedures	C 836-21S(P) D 836-21S(P)R CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	836-22S(P)(R)	SPINNER ASSEMBLY	CSA		
20	C-1888	• DOME UNIT, 3-BLADE	C	1	
	C-1888-P	• DOME UNIT, 3-BLADE	D	1	
-31	A-1867	• • SHIM		AR	
-45	D-1871-7R	• BULKHEAD UNIT ASSEMBLY	C	1	
	D-1871-7RP	• BULKHEAD UNIT ASSEMBLY	D	1	
50	D-1871-3R	• • BULKHEAD UNIT	C	1	
	D-1871-3RP	• • BULKHEAD UNIT	D	1	
-51	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-52	B-3863-22	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-1398	• • • HUB, BULKHEAD		1	
-101	A-894-1	• • • PIN		2	
-140	B-1823	• • • HOOP		1	
-195	830-18	• • START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		RF	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0463	• • WASHER		6	
-251	A-1865	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
-700	A-2167	• • ANTI-ICE KIT	A	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80) for Components, Inspection Criteria, and Installation Procedures	C	836-22S(P)	
			D	836-22S(P)R	
			CSA	Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered	

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
-10	836-23()	SPINNER ASSEMBLY		OBS	
10.3-4					
-10	836-25()	SPINNER ASSEMBLY	CSA		
20	C-1888-()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
-45	D-1976-4R()	• BULKHEAD ASSEMBLY		1	
50	D-1976-3R()	• • BULKHEAD UNIT		1	
-52	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		9	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-887	• • • HUB, BULKHEAD		1	
-140	B-1823	• • • HOOP		1	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0432	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		
			CSA Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	836-26()	SPINNER ASSEMBLY	CSA		
20	C-1888-()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
-45	D-1976-2R()	• BULKHEAD UNIT ASSEMBLY		1	
50	D-1976-1R()	• • BULKHEAD UNIT		1	
-52	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		9	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-887	• • • HUB, BULKHEAD		1	
-140	B-1823	• • • HOOP		1	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0432	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
-700	A-2588	• • ANTI-ICING KIT	A	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80) for Components, Inspection Criteria, and Installation Procedures	CSA		
			Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	836-31SPR	SPINNER ASSEMBLY	CSA		
20	C-1888-P	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
-45	D-1871-2R(P)	• BULKHEAD ASSEMBLY		1	
50	D-1871-1RP	• • BULKHEAD UNIT		1	
-51	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-52	B-3863-22	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-1842-2	• • • HUB, BULKHEAD		1	
-101	A-894-1	• • • PIN		7	
-140	B-1823	• • • HOOP		1	
-195	830-14	• • START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING		RF	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0463	• • WASHER		6	
-251	A-1865	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
-700	A-2587	• • ANTI-ICE KIT	A	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80) for Components, Inspection Criteria, and Installation Procedures	CSA		Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-7					
-10	836-32(S)(P)R(B,L)	SPINNER ASSEMBLY	CSA		
20	C-1888	• DOME UNIT, 3-BLADE	C	1	
20	C-1888-P	• DOME UNIT, 3-BLADE	A,B,D	1	
-31	A-1867	• • SHIM		AR	
50	D-1870-4RP	• BULKHEAD ASSEMBLY	A	1	
	D-1870-RP	• BULKHEAD ASSEMBLY	B	1	
	D-1870-R	• BULKHEAD ASSEMBLY	C	1	
	D-1870-RLP	• BULKHEAD ASSEMBLY	D	1	
	D-1870-1RP	• BULKHEAD ASSEMBLY	E	1	
-51	B-3863-20	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-52	B-3863-22	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-53	C-1879	• • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-68	C-1408-1	• • PLATE, BULKHEAD		1	
100	B-1842-2	• • HUB, BULKHEAD		1	
-101	A-894-1	• • PIN		3	
-140	B-1823	• • HOOP		1	
-195	830-14	• • START LOCK ASSEMBLY	A, B, C	RF	
	830-14L	• • START LOCK ASSEMBLY REFER TO THE APPLICABLE PROPELLER OVERHAUL MANUAL FOR PARTS LISTING	D	RF	
-230	B-3384-20H	• • BOLT, 1/4-28, HEX HEAD SUPERSEDED BY ITEM 51A		6	
-230A	B-6626-20	• • BOLT, 1/4-28, HEX HEAD SUPERSEDES ITEM 51, POST HC-SL-61-257		6	
-250	B-3834-0463	• • WASHER		6	
-251	A-1865	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
-10	836-33S()	SPINNER ASSEMBLY		OBS	
-10	836-35LS()	SPINNER ASSEMBLY		OBS	
EFFECTIVITY		MODEL	EFFECTIVITY		
A		836-32SPRB	E		
B		836-32SPR	CSA		
C		836-32SR	Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered		
D		836-32SPRL			

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-7					
-10	836-36()	SPINNER ASSEMBLY	CSA		
20	C-1872-4()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
-45	D-1976-6R()	• BULKHEAD ASSEMBLY		1	
50	D-1976-5R()	• • BULKHEAD UNIT		1	
-52	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		9	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		12	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-887	• • • HUB, BULKHEAD		1	
-140	B-1823	• • • HOOP		1	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0432	• • WASHER		6	
-251	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
-700	A-2588	• ANTI-ICE KIT	A	1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-4					
-10	836-37()	SPINNER ASSEMBLY	CSA		
20	C-1872-4()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
-45	D-1976-8R()	• BULKHEAD ASSEMBLY		1	
50	D-1976-7R()	• • BULKHEAD UNIT		1	
-52	B-3863-20	• • • RIVET, UNIVERSAL HEAD, .250 DIA, AL		9	
-53	C-1879	• • • DOUBLER, BULKHEAD		1	
-55	B-3862-6	• • • RIVET, UNIVERSAL HEAD, .188 AL		54	
-59	B-3846-3	• • • NUTPLATE, FIXED		6	
-61	B-3849-3	• • • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
-63	B-3847-3	• • • RIVET, 100° HEAD, .094 DIA, AL		12	
-68	C-1408-1	• • • PLATE, BULKHEAD		1	
100	B-887	• • • HUB, BULKHEAD		1	
-140	B-1823	• • • HOOP		1	
-230	B-3384-21H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0432	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		Refer to Hartzell Propeller Ice Protection System Manual 180 (30-61-80) for Components, Inspection Criteria, and Installation Procedures	CSA		Dome and bulkhead may not be purchased individually, complete spinner assembly must be ordered

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
-10	836-38S()	SPINNER ASSEMBLY - SUPERSEDED BY 836-21SP		OBS	
-10	836-42()	SPINNER ASSEMBLY		OBS	
20	C-3088()	• DOME UNIT, 3-BLADE		1	
50	C-3077	• BULKHEAD ASSEMBLY		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
-10	836-43()	SPINNER ASSEMBLY		OBS	
20	C-1888-2()	• DOME UNIT, 3-BLADE		1	
50	C-3077-1()	• BULKHEAD ASSEMBLY		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
-10	836-45()	SPINNER ASSEMBLY		OBS	
20	C-1888()	• DOME UNIT		1	
50	D-1976-4R	• BULKHEAD ASSEMBLY		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
-10	836-49()	SPINNER ASSEMBLY		OBS	
20	C-1888-4()	• DOME UNIT, 3-BLADE		1	
50	C-3077-3()	• BULKHEAD ASSEMBLY		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-4					
-10	836-57()	SPINNER ASSEMBLY			
20	C-3753()	• DOME, 3-BLADE		1	
50	C-3752()	• BULKHEAD UNIT		1	
-51	B-3862-9	• • RIVET, UNIVERSAL HEAD, .188 AL		9	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-96	104862	• • CAP, NUTPLATE		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
-10	836-58()	SPINNER ASSEMBLY		OBS	
20	C-1888-()	• DOME UNIT, 3-BLADE		1	
50	C-3756-()	• BULKHEAD ASSEMBLY		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	836-61()	SPINNER ASSEMBLY			
20	C-3753()	• DOME, 3-BLADE		1	
50	C-3762()	• BULKHEAD UNIT		1	
-51	B-3862-9	• • RIVET, UNIVERSAL HEAD, .188 AL		9	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-96	104862	• • CAP, NUTPLATE		3	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	837-8()	SPINNER ASSEMBLY			
20	C-226-1()	• DOME, 3-BLADE		1	
50	C-1399	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
-300	B-1344	• PLATE, MOUNTING, SPINNER		1	
-310	B-1345-1	• SPACER, BULKHEAD		1	
-320	B-3808-5	• NUT, HEX, SELF-LOCKING		4	
-330	360105100	• AN5-10A HEXAGON HEAD BOLT		4	
-340	B-3851-0532	• WASHER		4	
10.3-4					
-10	837-9()	SPINNER ASSEMBLY			
20	C-226-2()	• DOME, 3-BLADE		1	
50	C-1399	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
-300	B-1344	• PLATE, MOUNTING, SPINNER		1	
-310	B-1345	• SPACER, BULKHEAD		1	
-320	B-3808-5	• NUT, HEX, SELF-LOCKING		4	
-330	360105140	• AN5-10A HEXAGON HEAD BOLT		4	
-340	B-3851-0563	• WASHER		4	
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-7					
-10	837-17	SPINNER ASSEMBLY			
20	C-226-1	• DOME, 3-BLADE		1	
-45	D-3758	• BULKHEAD UNIT		1	
-47	B-3863-16	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		12	
50	C-1399-4	• • BULKHEAD, UNIT		1	
-59	B-3846-3	• • • NUTPLATE, FIXED		12	
-60	B-3847-5	• • • RIVET, 100° HEAD, .094 DIA, AL		24	
100	B-1585	• HUB, BULKHEAD		1	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-7					
-10	104368()	SPINNER ASSEMBLY			
20	C-1888-()	• DOME UNIT, 3-BLADE		1	
-31	A-1867	• • SHIM		AR	
50	104367()	• BULKHEAD ASSEMBLY (INCLUDES BONDED BULKHEAD DOUBLER)		1	
-51	B-3863-22	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		6	
-52	B-3863-20	• • RIVET, UNIVERSAL HEAD, .250 DIA, AL		3	
-55	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		36	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		18	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-3	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-64	B-6655-08	• • NUT, HEX, SELF-LOCKING		6	
-66	B-3837-N616	• • WASHER, CORROSION RESISTANT		6	
-68	C-1408-1	• • PLATE, BULKHEAD		1	
90	104366	• • FILLER PLATE		3	
-91	B-3861-5	• • RIVET, UNIVERSAL HEAD, .125 ALUM		6	
-97	B-3866-50	• • SCREW, 8-32, 100° HEAD, CRES		6	
100	B-1842-2	• HUB, BULKHEAD		1	
-101	A-894-1	• • PIN		3	
-230	B-3384-17H	• • BOLT, 1/4-28, HEX HEAD		6	
-250	B-3834-0463	• • WASHER		6	
-252	A-1864	• • WASHER		6	
-260	B-3808-4	• • NUT, HEX, SELF-LOCKING		6	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	104685()	SPINNER ASSEMBLY			
20	D-7813-1()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	D-4561-8()	• BULKHEAD UNIT		1	
-53	A-3263-12	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		24	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-92	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	B-4548	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
-96	104862	• • CAP, NUTPLATE		6	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
10.3-4					
-10	104781()	SPINNER ASSEMBLY			
20	D-7266-4()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
-33	104262	• MOUNT, FORWARD BULKHEAD		1	
50	D-7084-5()	• BULKHEAD UNIT		1	
-53	B-7217	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		18	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
10.3-3					
-10	105012()	SPINNER ASSEMBLY			
20	D-6751()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	105011()	• BULKHEAD UNIT		1	
-53	A-3263-5	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		12	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		12	
90	105010	• • FILLER PLATE		3	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		12	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		18	Y
210	A-1020	• WASHER, FIBER		18	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-3					
-10	105298()	SPINNER ASSEMBLY			
20	C-3004-2()	• DOME, 3-BLADE		1	
50	105297()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT, ALUMINUM		6	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	105890()	SPINNER ASSEMBLY			
20	105874()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	105873()	• BULKHEAD UNIT		1	
-53	A-3263-15	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.3-4					
-10	105905()	SPINNER ASSEMBLY			
20	105903()	• DOME (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	105904()	• BULKHEAD UNIT		1	
-53	A-3263-15	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-7	• • RIVET, UNIVERSAL HEAD, .125 ALUM		12	
-59	B-3846-3	• • NUTPLATE, FIXED		3	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		30	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL
127

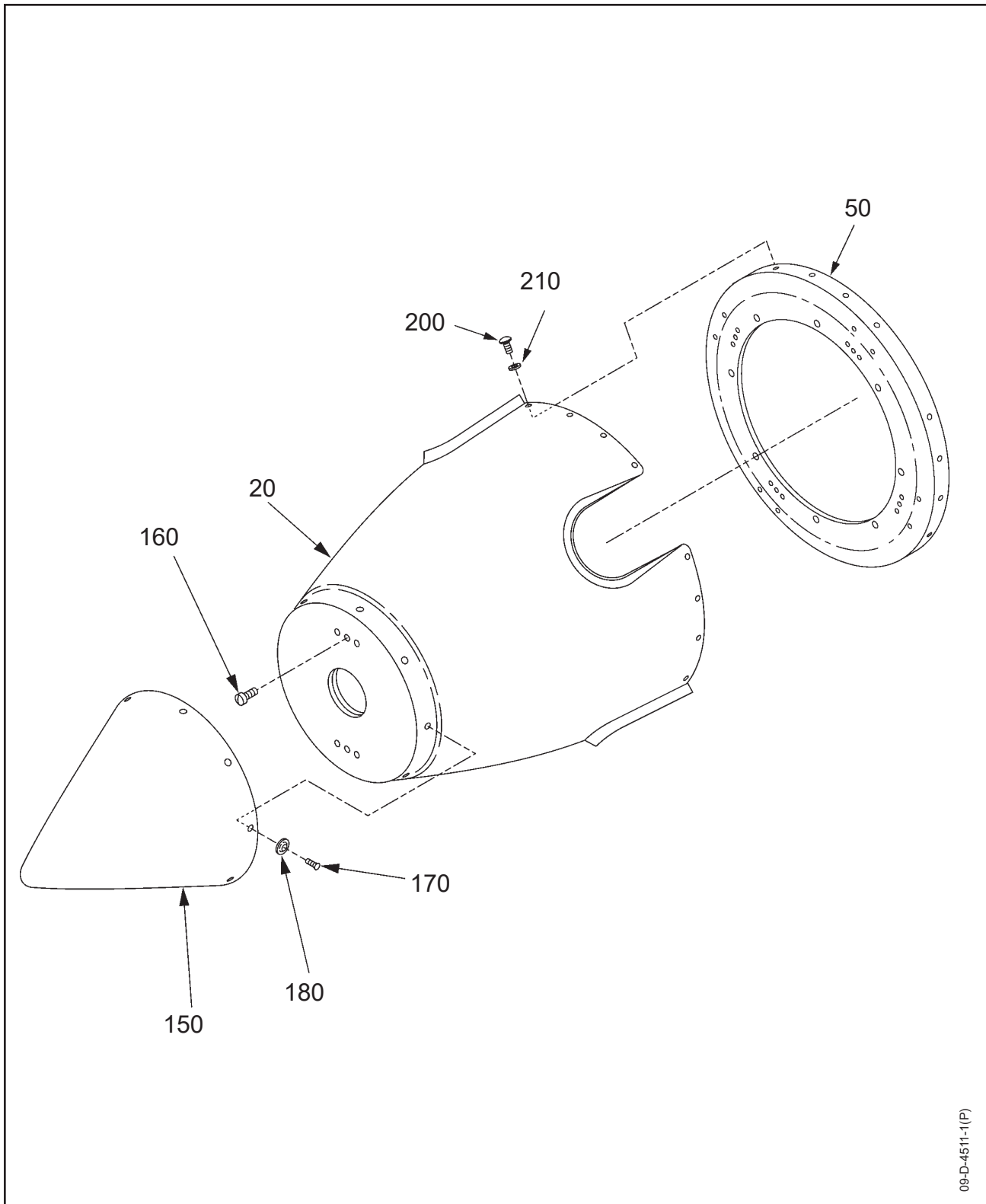
FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.3-4					
-10	107186()	SPINNER ASSEMBLY			
20	107178()	• DOME UNIT, 3-BLADE (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	107179()	• BULKHEAD UNIT		1	
-53	A-3263-15	• • DOUBLER, MOUNTING, BULKHEAD		6	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		12	
-59	B-3846-3	• • NUTPLATE, FIXED		6	
-61	B-3849-3	• • NUTPLATE, FLOATING		6	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Three-Bladed Propeller

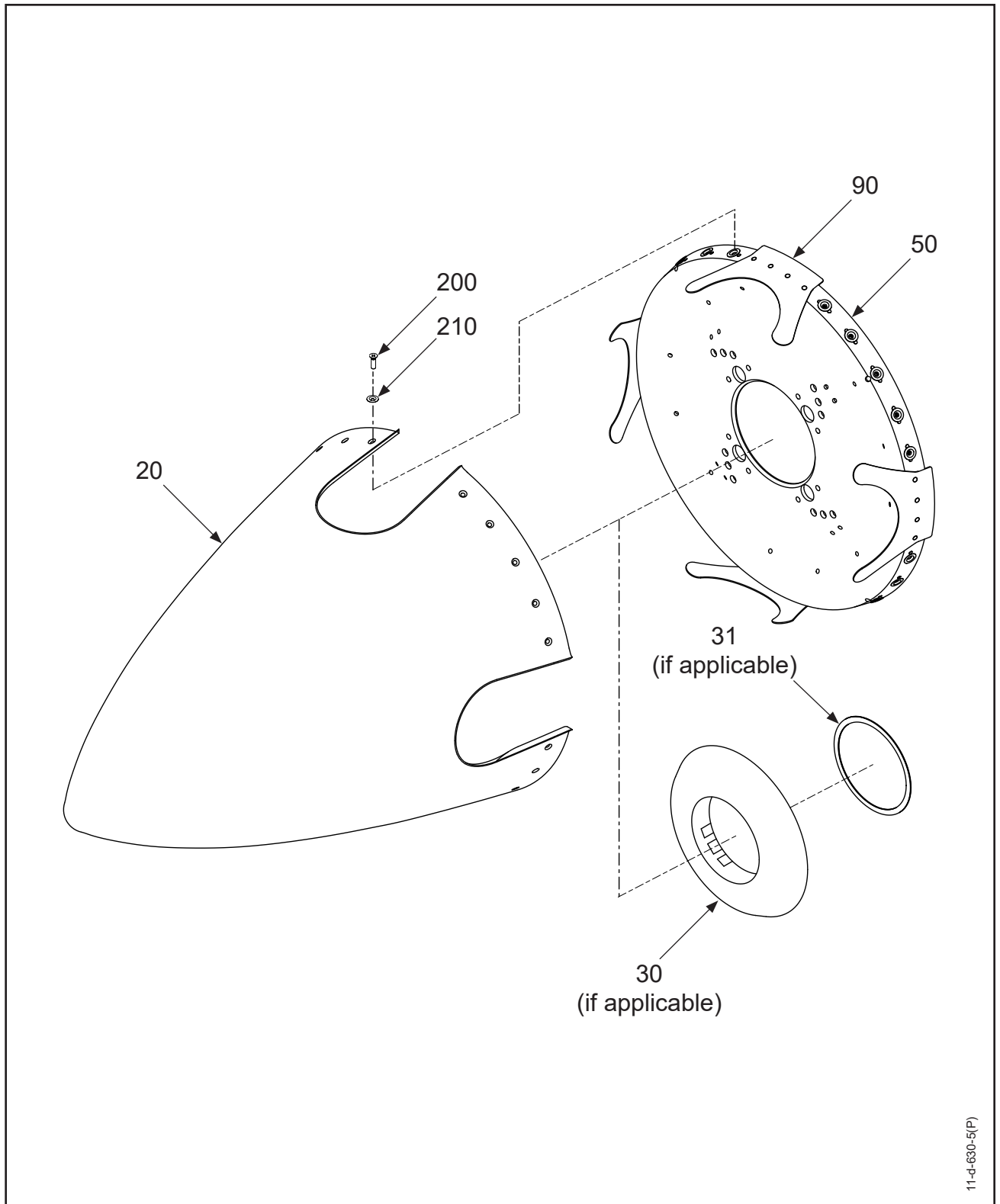
(Blank Page)

Four-Bladed Propeller Spinners

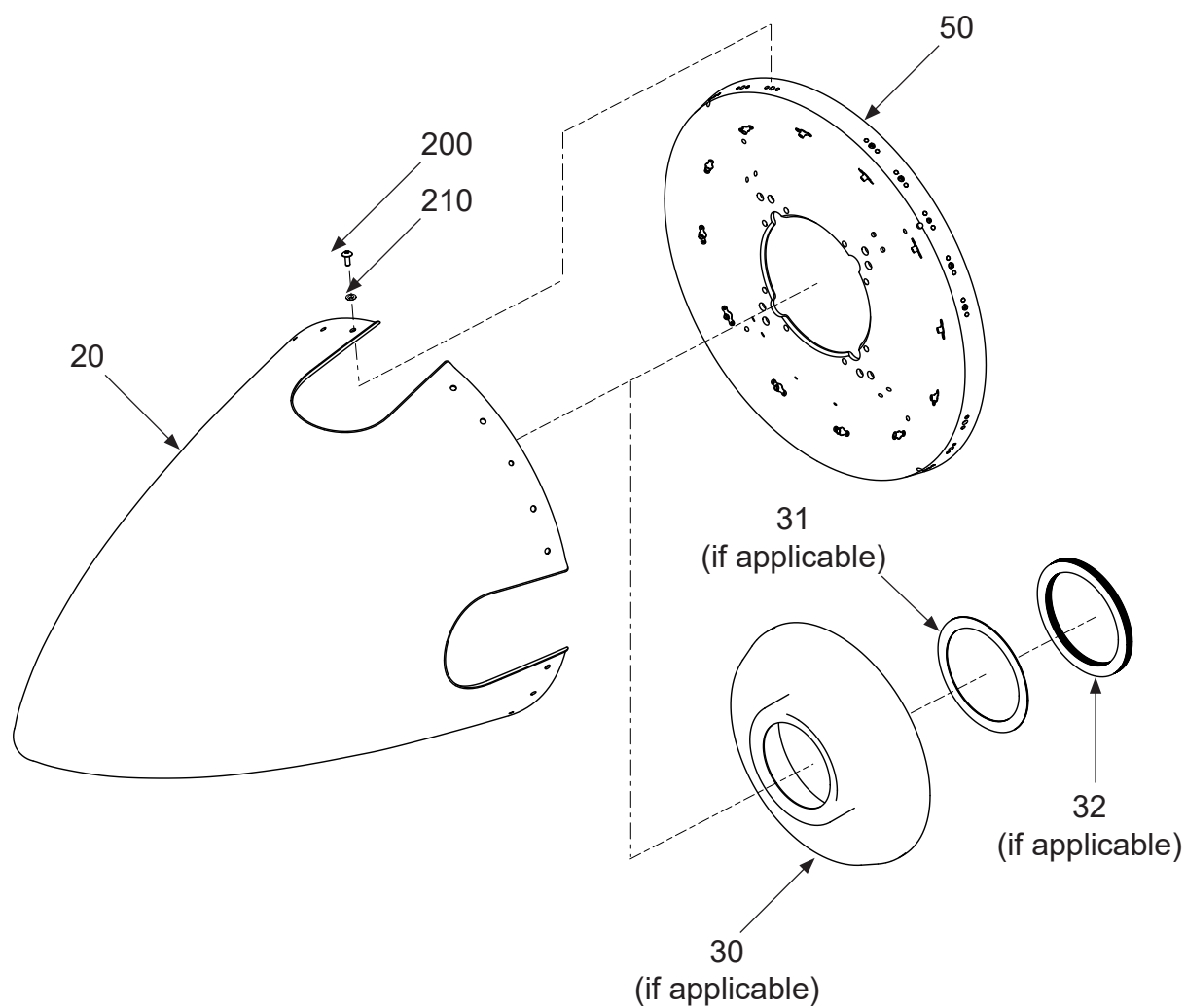


09-D-4511-1(P)

Example of a Four-Bladed Propeller Spinner -
Two-piece Dome without Filler Plates
Figure 10.4-1

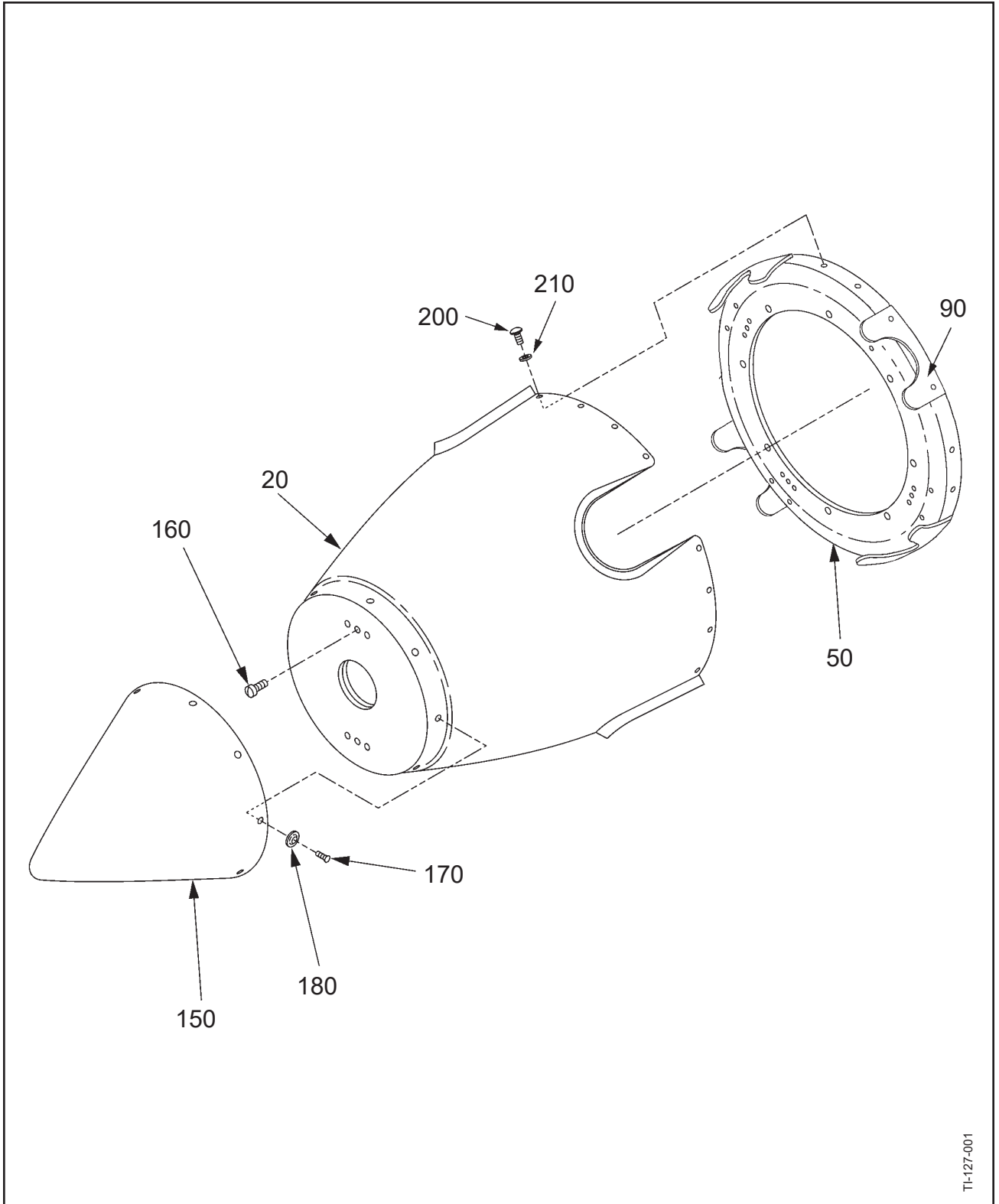


Example of a Four-Bladed Propeller Spinner -
One-piece Dome with Filler Plates
Figure 10.4-2



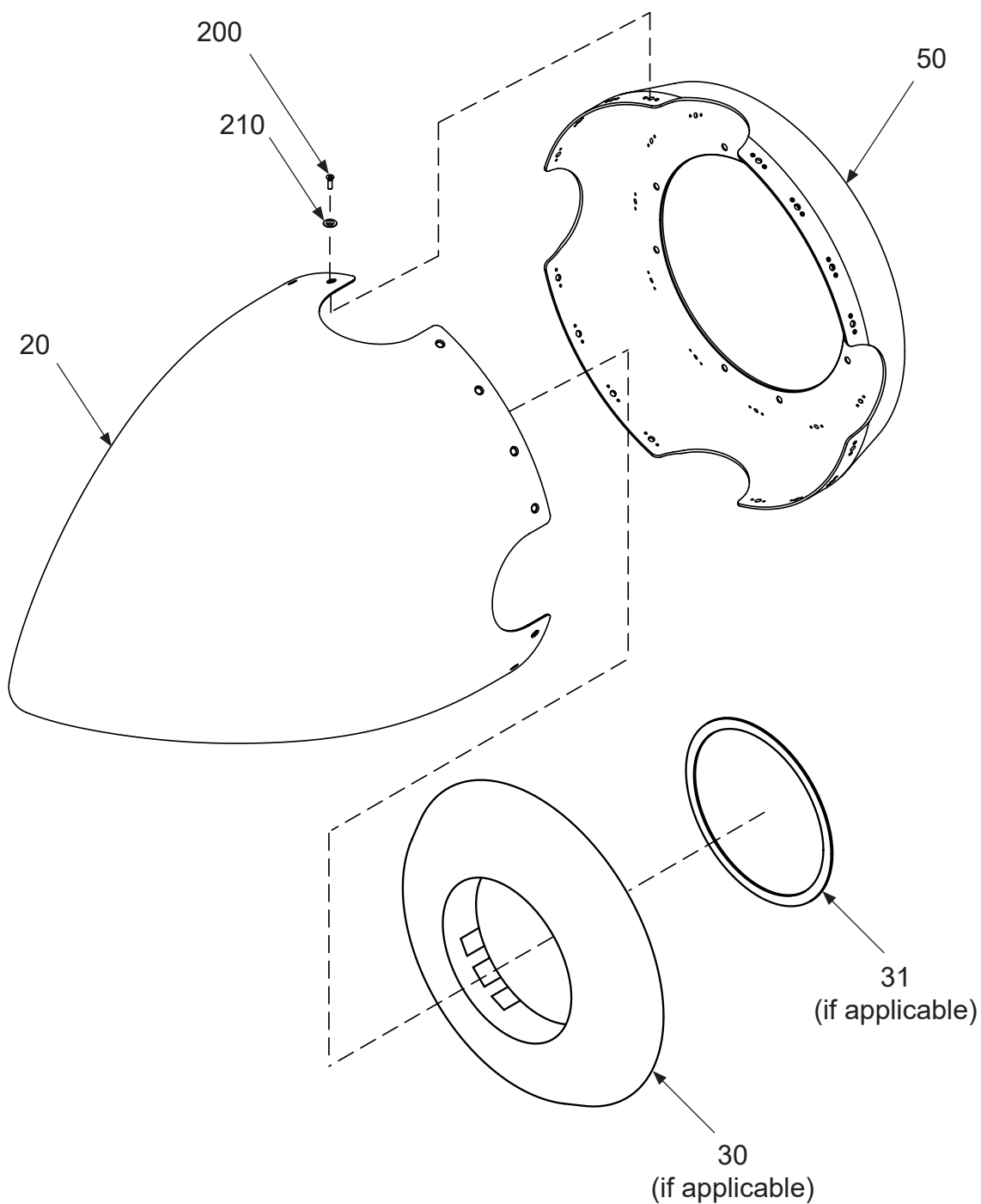
TPI-JM-000437

**Example of a Four-Bladed Propeller Spinner -
One-piece Dome without Filler Plates
Figure 10.4-3**



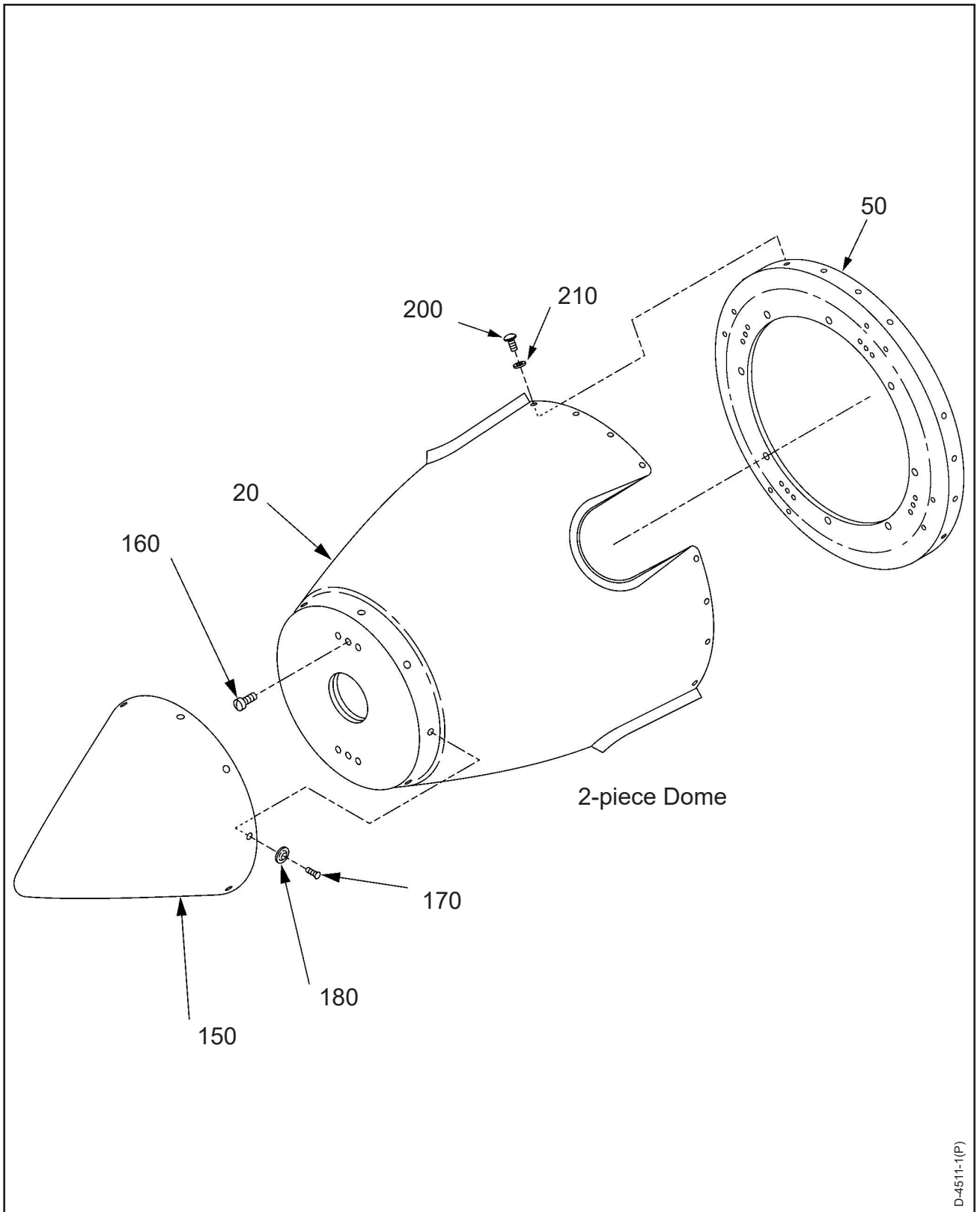
TI-127-001

Example of a Four-Bladed Propeller Spinner -
Two-piece Dome with Filler Plates
Figure 10.4-4



TPI-JM-000159

107528() Four-Bladed Propeller Spinner
Figure 10.4-5



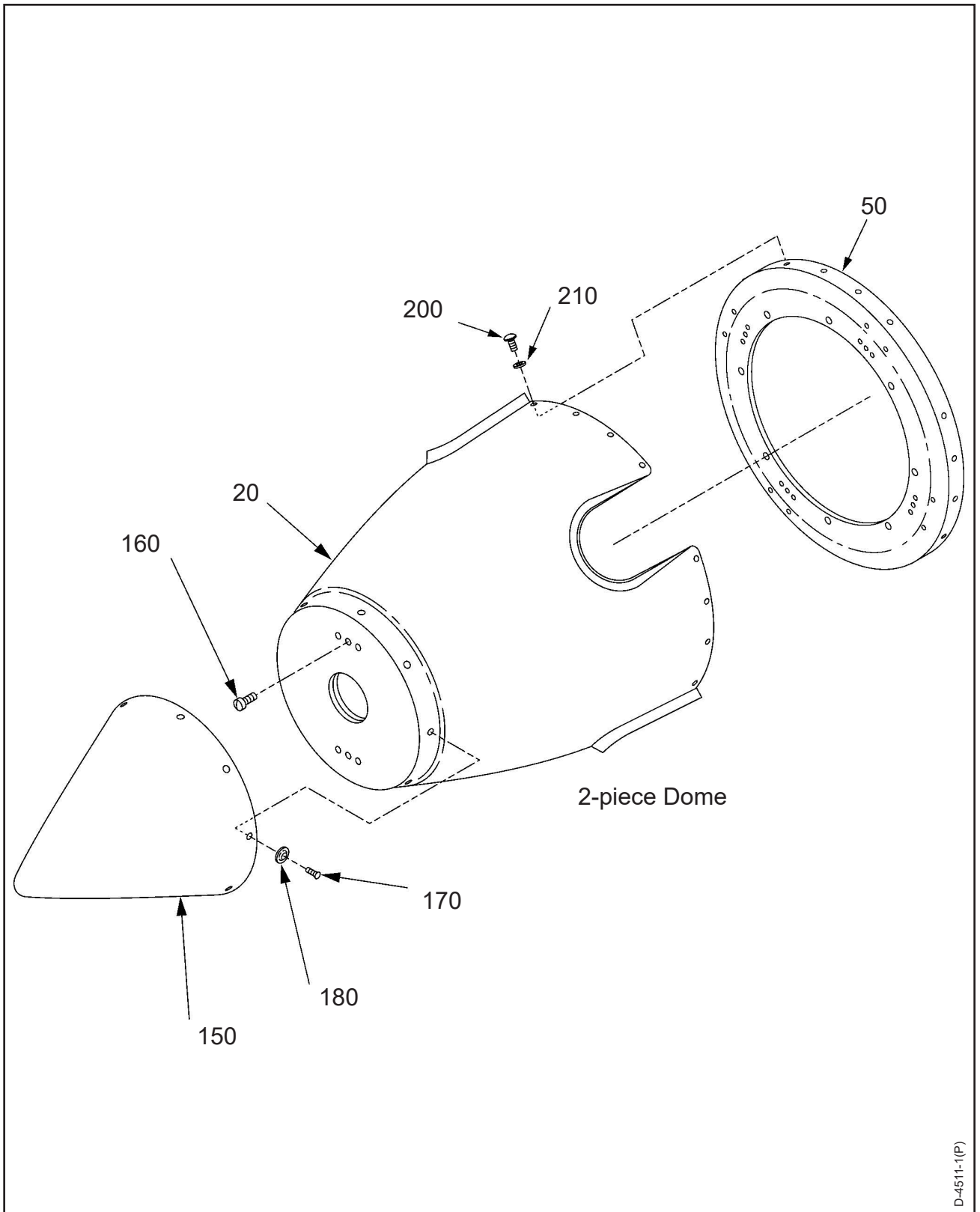
D-4511-1(P)

D-4511-(L)(P) Spinner Assembly
Figure 10.4-6, page 1 of 2



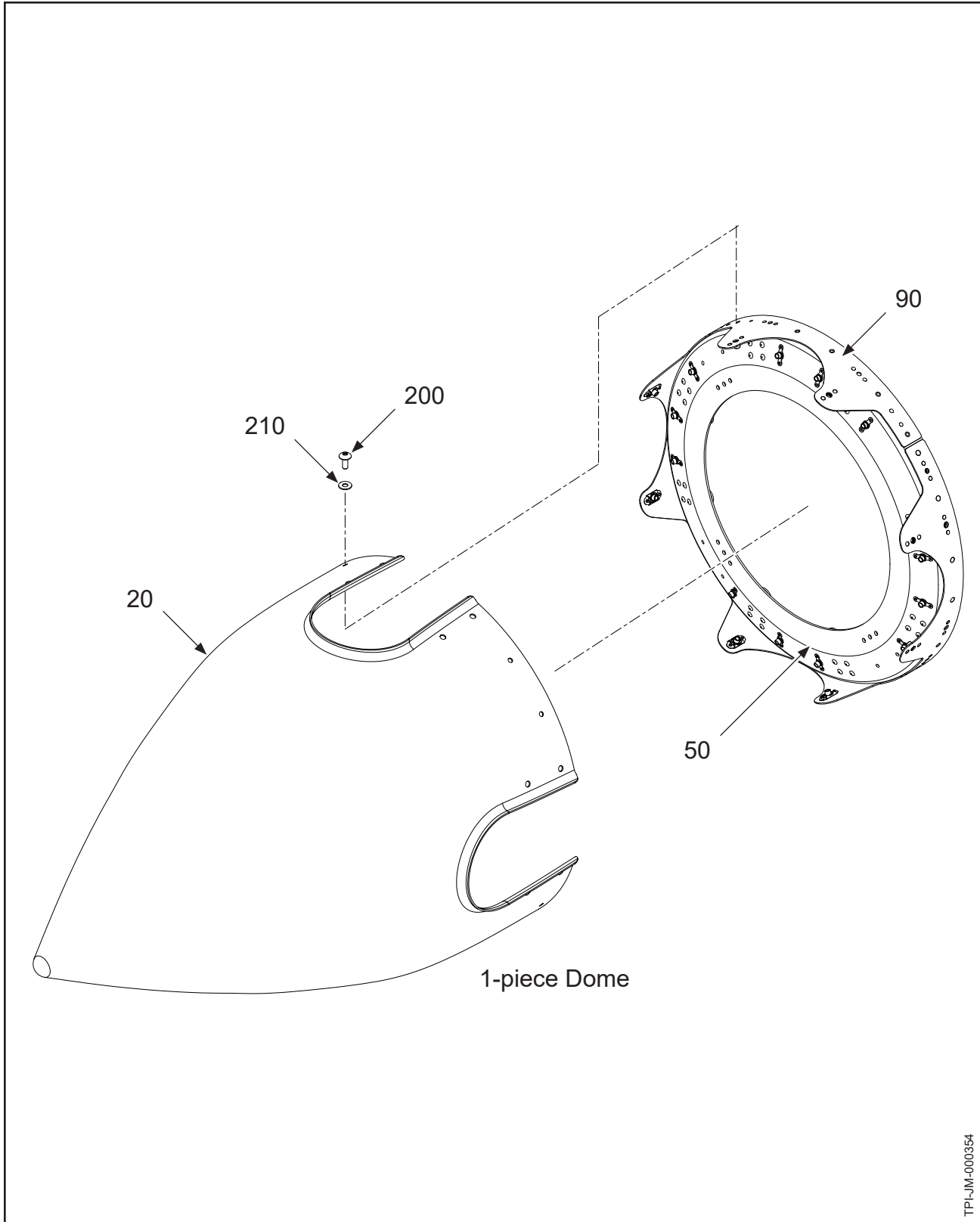
ILLUSTRATED PARTS LIST

Page 10.4-8
Rev. 23 Feb/24



D-4511-1(P)

D-4511-1(L)(P) Spinner Assembly
Figure 10.4-7, page 1 of 2



D-4511-1(L)(P) Spinner Assembly
Figure 10.4-7, page 2 of 2

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	C-3410()	SPINNER ASSEMBLY			
20	C-2531-7()	• DOME, 4-BLADE		1	
50	C-3409()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		18	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.4-3					
-10	C-3410-1()	SPINNER ASSEMBLY			
20	C-2531-7()	• DOME, 4-BLADE		1	
50	C-3409-1()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		18	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.4-3					
-10	C-3410-3()	SPINNER ASSEMBLY		OBS	
20	C-2531-7()	• DOME, 4-BLADE		1	
50	C-3409-1()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.4-2					
-10	C-3425()	SPINNER ASSEMBLY			
20	C-3004-1()	• DOME, 4-BLADE		1	
50	C-3414()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	A-3038	• • FILLER PLATE		4	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-2					
-10	C-3425-1()	SPINNER ASSEMBLY			
20	C-3004-1()	• DOME, 4-BLADE		1	
50	C-3414-1()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	A-3038	• • FILLER PLATE		4	
-600	2H1377*	• • TARGET, SYNCOPHASER		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.4-2					
-10	C-3425-2()	SPINNER ASSEMBLY			
20	C-3004-1()	• DOME, 4-BLADE		1	
50	C-3414-2()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	A-3038	• • FILLER PLATE		4	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.4-2					
-10	C-3425-3()	SPINNER ASSEMBLY			
20	C-3004-1()	• DOME, 4-BLADE		1	
50	C-3414-3()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	A-3038	• • FILLER PLATE		4	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-2					
-10	C-3425-5P	SPINNER ASSEMBLY			
20	C-3004-1P	• DOME, 4-BLADE		1	
50	C-3414-5P	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	A-3038	• FILLER PLATE		4	
-91	B-3848-4	• • RIVET, 100° HEAD, .125 DIA, AL, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.4-3					
-10	D-630-()	SPINNER ASSEMBLY			
20	D-5210()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-630-1()	SPINNER ASSEMBLY			
20	D-5210()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-1()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-630-2()	SPINNER ASSEMBLY			
20	D-5210()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-2()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER		20	Y
-270	B-6371	• TARGET, MAGNETIC, THREADED		1	
-280	B-3837-N616	• WASHER, CORROSION RESISTANT		1	Y
-290	B-3869-06	• NUT, SELF-LOCKING CRES		1	Y
10.4-3					
-10	D-630-3()	SPINNER ASSEMBLY			
20	D-5210-2()	• DOME, 4-BLADE		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-3()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-630-4()	SPINNER ASSEMBLY			
20	D-5210-()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-4()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER		20	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-2					
-10	D-630-5()	SPINNER ASSEMBLY			
20	D-5210-3()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-5()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-4699	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3867-272	• SCREW, 10-32, 100° CRES (DOME-TO-BULKHEAD)		20	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
10.4-3					
-10	D-630-6()	SPINNER ASSEMBLY			
20	D-5210-(P)	• DOME		1	
20A	D-5210-5()	• DOME - ALTERNATE FOR ITEM 20, POST HC-SL-61-318	A	1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-6()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-630-7()	SPINNER ASSEMBLY			
20	D-5210-()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-7()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		
A	The D-5310-5() dome is an alternate for the D-5310-(P) dome when installed with the HC-E4N-3P/ D9511FSB propeller with a Hartzell anti-ice system and installed on a Quest Aircraft, LLC Kodiak 100.				

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-630-8()	SPINNER ASSEMBLY - ALTERNATE FOR D-630-6(), POST HC-SL-61-318	A		
20	D-5210-5()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-8()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-630-9()	SPINNER ASSEMBLY			
20	D-5210-()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-9()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-630-10()	SPINNER ASSEMBLY			
20	D-5210-5()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-6()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY			MODEL		
A	The D-630-8() spinner is an alternate for the D-630-6() spinner when installed with the HC-E4N-3P/ D9511FSB propeller with a Hartzell anti-ice system and installed on a Quest Aircraft, LLC Kodiak 100.				

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-630-11()	SPINNER ASSEMBLY			
20	D-5210-5()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-7()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-3434-4()	SPINNER ASSEMBLY			
20	C-3436-1()	• DOME, 4-BLADE		1	
50	D-3437-3()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-3434-7()	SPINNER ASSEMBLY			
20	C-3436-1()	• DOME, 4-BLADE		1	
50	D-3437-6()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-3434-7P*1	SPINNER ASSEMBLY (PAINT BULK)			
20	C-3436-1P	• DOME, 4-BLADE		1	
50	D-3437-6	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-3434-10()	SPINNER ASSEMBLY			
20	C-3436-1()	• DOME, 4-BLADE		1	
50	D-3437-7()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-55	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		40	
600	2H1377*	• • TARGET, SYNCOPHASER		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-3434-18()	SPINNER ASSEMBLY			
20	C-3436-1()	• DOME, 4-BLADE		1	
50	D-4801-1()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-59	B-3846-3	• • NUTPLATE, FIXED		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-6 -10	D-4511-(L)(P)	SPINNER ASSEMBLY			
		<u>2-PIECE DOME UNIT WITH 4 DOME CAP MOUNTING HOLES</u>			
20	D-4512-(P)	• DOME UNIT, 4-BLADE (INCLUDES BONDED DOME PLATE) SUPERSEDED BY ITEM 20B	A	1	
	D-4512-L(P)	• DOME UNIT, 4-BLADE (INCLUDES BONDED DOME PLATE) SUPERSEDED BY ITEM 20B	B	1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		4	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		8	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	D-4513-(P)	• BULKHEAD UNIT		1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
150	C-4523(-1)(P)	• DOME CAP (WITH 4 MOUNTING HOLES) SUPERSEDED BY ITEM 150A		1	
150A	C-4523-2(P)	• DOME CAP (WITH 4 MOUNTING HOLES) SUPERSEDES ITEM 150		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		4	Y
180	B-3860-8L	• WASHER, DIMPLED, 100° CRES		4	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A	D-4511-(P)				
B	D-4511-L(P)				

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-6	D-4511-(L)(P)	SPINNER ASSEMBLY, CONTINUED			
		2-PIECE DOME UNIT WITH 8 DOME CAP MOUNTING HOLES			
20A	D-4512-2(P)	• DOME UNIT, 4-BLADE (INCLUDES BONDED DOME PLATE) SUPERSEDED BY ITEM 20B	A	1	
	D-4512-2L(P)	• DOME UNIT, 4-BLADE (INCLUDES BONDED DOME PLATE) SUPERSEDED BY ITEM 20B	B	1	
-21A	B-3846-3	• • NUTPLATE, FIXED		2	
-22A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23A	B-3849-08	• • NUTPLATE, FLOATING		8	
-24A	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		16	
160	B-3840-6	• • SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
50	D-4513-(P)	• BULKHEAD UNIT		1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
150B	C-4523-5(P)	• DOME CAP (WITH 8 MOUNTING HOLES)		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		8	Y
180	B-3860-8L	• WASHER, DIMPLED, 100° CRES		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
		1-PIECE DOME UNIT			
20B	D-7812-2(P)	• DOME UNIT, 4-BLADE, SUPERSEDES ITEM 20 AND 20A		1	
30	104916	• • FORWARD BULKHEAD, PLASTIC		1	
31	104923	• • SHIM, SPINNER		15	
32	104917	• • SPACER		1	
50	D-4513-(P)	• BULKHEAD UNIT		1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY			MODEL		
A	D-4511-1(P)				
B	D-4511-1L(P)				

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL
127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-7 -10	D-4511-1(L)(P)	SPINNER ASSEMBLY			
		<u>2-PIECE DOME UNIT WITH 4 DOME CAP MOUNTING HOLES</u>			
20	D-4512-1(P) D-4512-1L(P)	• DOME UNIT, 4-BLADE - SUPERSEDED BY ITEM 20B • DOME UNIT, 4-BLADE - SUPERSEDED BY ITEM 20B	A B	1 1	
-23	B-3849-08	• • NUTPLATE, FLOATING		4	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		8	
50	D-4513-(P)	• BULKHEAD UNIT		1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
150	C-4523-1(P)	• DOME CAP (WITH 4 MOUNTING HOLES) SUPERSEDED BY ITEM 150A		1	
150A	C-4523-2(P)	• DOME CAP (WITH 4 MOUNTING HOLES) SUPERSEDES ITEM 150		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		4	Y
180	B-3860-8L	• WASHER, DIMPLED, 100° CRES		4	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL
A	D-4511-1(P)				
B	D-4511-1L(P)				

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-7	D-4511-1(L)(P)	SPINNER ASSEMBLY, CONTINUED			
		2-PIECE DOME UNIT WITH 8 DOME CAP MOUNTING HOLES			
20A	D-4512-(4,6,7)(L)(P)	• DOME UNIT, 4-BLADE (WITH BONDED FORWARD BULKHEAD) SUPERSEDED BY ITEM 20B		1	
-23A	B-3849-08	• • NUTPLATE, FLOATING		8	
-24A	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		16	
50	D-4513-(P)	• BULKHEAD UNIT, SUPERSEDED BY ITEM 50A		1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
50A	D-4513-3(P)	• BULKHEAD UNIT, SUPERSEDES ITEM 50		1	
-53A	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55A	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-57A	B-3846-3	• • NUTPLATE, FIXED		12	
-58A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-59A	B-3846-3	• • NUTPLATE, FIXED		8	
-61A	B-3849-3	• • NUTPLATE, FLOATING		16	
-62A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	100142	• • FILLER PLATE		4	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		24	
150B	C-4523-5(P)	• DOME CAP (WITH 8 MOUNTING HOLES)		1	
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		8	Y
180	B-3860-8L	• WASHER, DIMPLED, 100° CRES		8	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16/24	Y
210	A-1020	• WASHER, FIBER		16/24	Y
10.4-8	D-4511-1(L)(P)	SPINNER ASSEMBLY, CONTINUED			
		1-PIECE DOME UNIT			
20B	D-7812-7(P)	• DOME UNIT, 4-BLADE (WITH BONDED FORWARD BULKHEAD) SUPERSEDES ITEM 20 AND 20A		1	
50A	D-4513-3(P)	• BULKHEAD UNIT, SUPERSEDES ITEM 50		1	
-53A	C-7737-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55A	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-57A	B-3846-3	• • NUTPLATE, FIXED		12	
-58A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-59A	B-3846-3	• • NUTPLATE, FIXED		8	
-61A	B-3849-3	• • NUTPLATE, FLOATING		16	
-62A	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	100142	• • FILLER PLATE		4	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-4					
-10	D-4515()	SPINNER ASSEMBLY			
20	D-4516()	• DOME UNIT, 4-BLADE (INCLUDES BONDED DOME PLATE)		1	
-21	B-3846-3	• • NUTPLATE, FIXED		2	
-22	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		4	
-23	B-3849-08	• • NUTPLATE, FLOATING		4	
-24	B-6673-0306	• • RIVET, 100° HEAD, POP - TYPE		8	
50	D-4518()	• BULKHEAD UNIT		1	
-53	A-3263-1	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		32	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		24	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		48	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		16	
90	B-4299	• • FILLER PLATE		4	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		28	
150	C-4523-2()	• CAP, DOME		1	
160	B-3840-6	• SCREW, 10-32, FILLISTER HEAD (LOW PITCH STOP NUT SAFETY)		2	Y
170	B-3866-50	• SCREW, 8-32, 100° HEAD, CRES (CAP MOUNTING)		4	Y
180	B-3860-8L	• WASHER, DIMPLED, 100° CRES		4	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		32	Y
210	A-1020	• WASHER, FIBER		32	Y
10.4-3					
-10	D-4544-L()	SPINNER ASSEMBLY			
20	D-4545()	• DOME, 4-BLADE		1	
50	D-4546-L()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-52	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		12	
-59	B-3846-3	• • NUTPLATE, FIXED		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10-4-2					
-10	D-4846-()	SPINNER ASSEMBLY			
20	D-4847-()	• DOME, 4-BLADE		1	
50	D-4848-()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	B-4813	• • FILLER PLATE		4	
-91	B-3848-4	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	A-1020	• WASHER, FIBER		16	Y
10.4-2					
-10	D-4846-1()	SPINNER ASSEMBLY			
20	D-4847()	• DOME, 4-BLADE		1	
50	D-4848-1()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
90	B-4813	• • FILLER PLATE		4	
-91	B-3848-4	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		16	Y
210	B-3851-0332	• WASHER		16	Y
-10	D-5304-()	SPINNER ASSEMBLY		OBS	
10.4-3					
-10	D-5319-()	SPINNER ASSEMBLY			
20	D-5320()	• DOME, 4-BLADE		1	
30	C-5324	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5321()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY MODEL			EFFECTIVITY MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-5421-()	SPINNER ASSEMBLY			
20	D-5422-()	• DOME, 4-BLADE		1	
50	D-5423-()	• BULKHEAD UNIT		1	
-53	A-3263-15	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3861-6	• • RIVET, UNIVERSAL HEAD, .125 ALUM		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-140	B-1823	• • HOOP		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-2					
-10	D-5500-1()	SPINNER ASSEMBLY			
20	D-5560-1()	• DOME, 4-BLADE		1	
30	C-5562	• FORWARD BULKHEAD		1	
-31	B-632	• SHIM, SPINNER		15	
50	D-5501-2()	• BULKHEAD UNIT (WITH BONDED BULKHEAD SPACER)		1	
-57	B-3846-3	• • NUTPLATE, FIXED		8	
-58	B-3847-7	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-5262-2	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		20	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
-10	D-5519-()	SPINNER ASSEMBLY		OBS	
20	D-5210-1()	• DOME, 4-BLADE		1	
50	D-5521()	• BULKHEAD UNIT		1	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER, FIBER		20	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-5519-1()	SPINNER ASSEMBLY			
20	D-5210-1()	• DOME, 4-BLADE		1	
50	D-5521-1()	• BULKHEAD UNIT		1	
-51	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-5522	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		20	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER, FIBER		20	Y
10.4-3					
-10	D-5519-2()	SPINNER ASSEMBLY			
20	D-5210-1()	• DOME, 4-BLADE		1	
50	D-5521-2()	• BULKHEAD UNIT		1	
-51	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		20	
-52	B-7333-120	• • RIVNUT, ALUMINUM		8	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-5522	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		20	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER, FIBER		20	Y
10.4-2					
-10	D-5547-(P)	SPINNER ASSEMBLY			
20	D-5548-(P)	• DOME, 4-BLADE		1	
30	C-5596	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5549-(P)	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-5588	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-5710-()	SPINNER ASSEMBLY		OBS	
20	D-5714()	• DOME, 4-BLADE		1	
30	C-5718	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	E-5715()	• BULKHEAD UNIT		1	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-5710-2()	SPINNER ASSEMBLY			
20	D-5714()	• DOME, 4-BLADE		1	
30	C-5718	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	E-5715-2()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-270	B-6371	• • TARGET, MAGNETIC, THREADED		1	
-280	B-3837-N616	• • WASHER		1	
-290	B-3869-06	• • NUT, SELF-LOCKING, CRES		1	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	D-5710-3P	SPINNER ASSEMBLY			
20	D-5714P	• DOME, 4-BLADE		1	
30	C-5718	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	E-5715-3P	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-270	B-6371	• • TARGET, MAGNETIC, THREADED		1	
-280	B-3837-N616	• • WASHER		1	
-290	B-3869-06	• • NUT, SELF-LOCKING, CRES		1	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	D-5710-4()	SPINNER ASSEMBLY			
20	D-5714-1()	• DOME, 4-BLADE		1	
30	C-5718	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	E-5715-4()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-2					
-10	E-6963-(P)	SPINNER ASSEMBLY			
20	D-7274()	• DOME, 4-BLADE		1	
30	C-7275	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-7273()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	D-7278	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	100635()	SPINNER ASSEMBLY			
20	100633()	• DOME		1	
50	100631()	• BULKHEAD UNIT		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		24	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		8	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		48	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		24	Y
210	A-1020	• WASHER, FIBER		24	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-2					
-10	103784()	SPINNER ASSEMBLY			
20	103783()	• DOME, 4-BLADE		1	
30	C-5596	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	103780()	• BULKHEAD UNIT (INCLUDED BONDED BULKHEAD RINGS)		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	103781	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER		20	Y
10.4-2					
-10	103788()	SPINNER ASSEMBLY			
20	103783()	• DOME, 4-BLADE		1	
30	C-5596	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	103789()	• BULKHEAD UNIT (INCLUDED BONDED BULKHEAD RING)		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	103781	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		32	Y
210	A-1020	• WASHER, FIBER		32	Y
10.4-3					
-10	106500()	SPINNER ASSEMBLY			
20	D-5320()	• DOME, 4-BLADE		1	
30	C-5562	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	106499()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		16	
-57	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	106500-1()	SPINNER ASSEMBLY			
20	107014()	• DOME, 4-BLADE		1	
30	C-5562	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	106499()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	107124(P)	SPINNER ASSEMBLY			
20	107196(P)	• DOME		1	
30	C-5324	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	107123(P)	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING, SLINGER RING, AND FITTING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
-230	B-3384-4H	• • BOLT, 1/4-28, HEX HEAD		8	Y
-255	B-3837-0432	• • WASHER, CORROSION RESISTANT		8	Y
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-2					
-10	107356-2(P)	SPINNER ASSEMBLY			
20	D-5210-(P)	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	107335-2(P)	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-63	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-5					
-10	107528()	SPINNER ASSEMBLY			
20	107526()	• DOME		1	
30	C-5718	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	107527()	• BULKHEAD UNIT		1	
-57	B-3846-3	• • NUTPLATE, FIXED		12	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		32	
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES (DOME-TO-BULKHEAD)		16	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		16	Y
10.4-3					
-10	107562()	SPINNER ASSEMBLY			
20	107559()	• DOME		1	
30	107561	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	D-5211-1()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	107593()	SPINNER ASSEMBLY			
20	107591()	• DOME UNIT (INCLUDES BONDED FORWARD BULKHEAD)		1	
50	107592()	• BULKHEAD UNIT		1	
-53	C-7737-4	• • DOUBLER, MOUNTING, BULKHEAD		8	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-61	B-3849-3	• • NUTPLATE, FLOATING		8	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		24	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		12	Y
210	A-1020	• WASHER, FIBER		12	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Four-Bladed Propeller

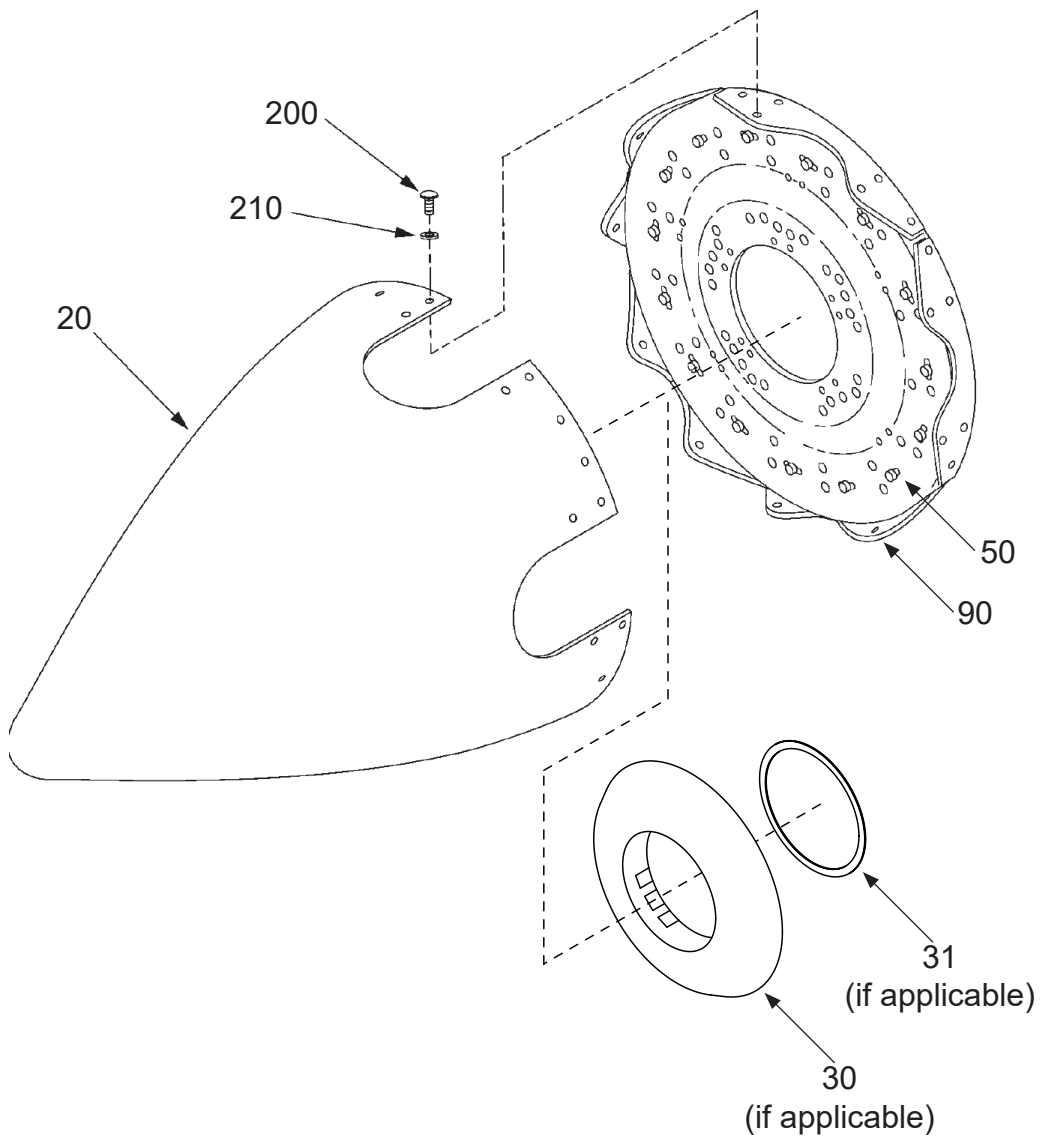
HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.4-3					
-10	108048(P)	SPINNER ASSEMBLY			
20	107196(P)	• DOME		1	
30	C-5324	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	108049(P)	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		16	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.4-3					
-10	109498()	SPINNER ASSEMBLY			
20	D-5210-()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	109497()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		16	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	B-3851-0332	• WASHER		20	Y
-270	B-6371	• TARGET, MAGNETIC, THREADED		1	
-280	B-3837-N616	• WASHER, CORROSION RESISTANT		1	Y
-290	B-3869-06	• NUT, SELF-LOCKING CRES		1	Y
10.4-2					
-10	109547()	SPINNER ASSEMBLY			
20	D-5210-()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	107355	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		4	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-61	B-3849-3	• • NUTPLATE, FLOATING		16	
90	C-4699	• • FILLER PLATE		4	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		16	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER		20	Y
EFFECTIVITY			MODEL		

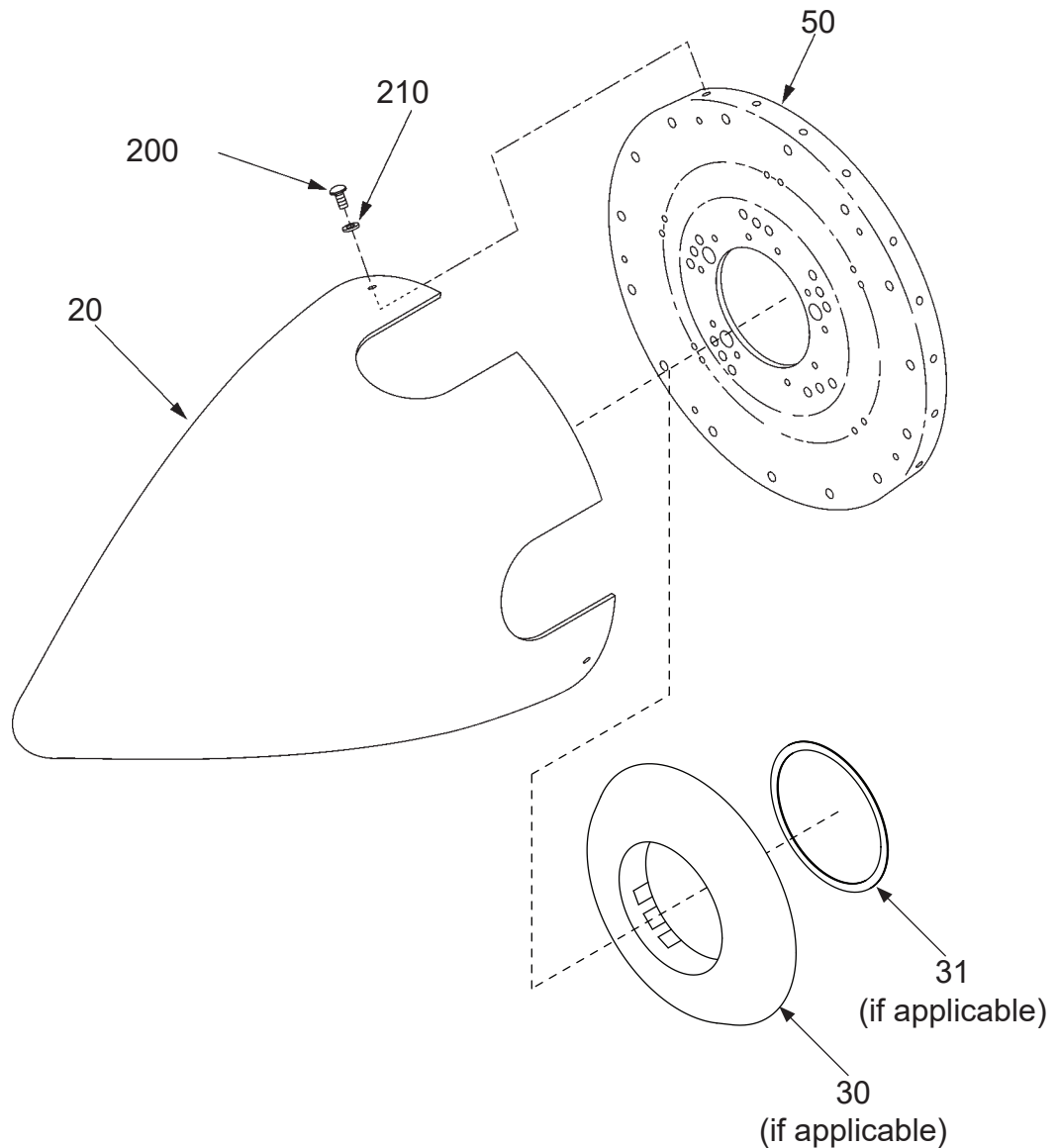
- ITEM NOT ILLUSTRATED

Five-Bladed Propeller Spinners



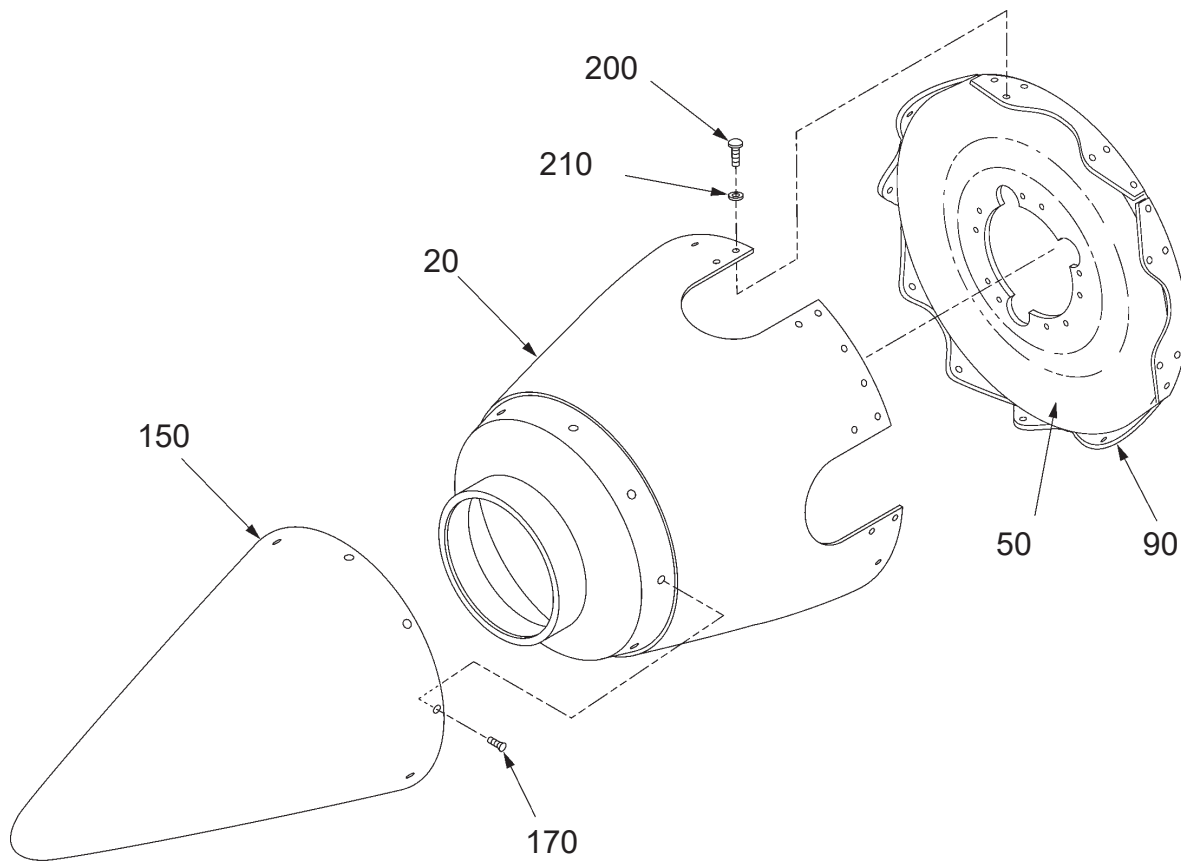
13E-5760P
E-5762
E-5762A

**Example of a Five-Bladed Propeller Spinner -
One-piece Dome with Filler Plates
Figure 10.5-1**



12D-3434-8p
D-4017A, B, C

**Example of a Five-Bladed Propeller Spinner -
One-piece Dome without Filler Plates
Figure 10.5-2**



14D-5527-1p

Five-Bladed Piaggio P-180 Propeller Spinner -
Two-piece Dome with Filler Plates
Figure 10.5-3

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-2					
-10	D-3434-8()	SPINNER ASSEMBLY			
20	C-3436-2()	• DOME, 5-BLADE		1	
50	D-4017-()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD SPINNING)		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-52	B-7333-120	• • RIVNUT, ALUMINUM		10	
-59	B-3846-3	• • NUTPLATE, FIXED		10	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	D-3434-21()	SPINNER ASSEMBLY			
20	C-3436-2()	• DOME, 5-BLADE		1	
50	D-4017-2()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD SPINNING)		1	
-51	B-3862-6	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-57	B-3846-3	• • NUTPLATE, FIXED		15	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-59	B-3846-3	• • NUTPLATE, FIXED		10	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	D-5497-()	SPINNER ASSEMBLY			
20	D-1687()	• DOME, 5-BLADE		1	
50	D-5498()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD SPINNING)		1	
-52	B-7333-120	• • RIVNUT, ALUMINUM		10	
-57	B-3846-3	• • NUTPLATE, FIXED		8	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		16	
-59	B-3846-3	• • NUTPLATE, FIXED		12	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		44	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-2					
-10	D-5497-3()	SPINNER ASSEMBLY			
20	D-1687()	• DOME, 5-BLADE		1	
50	D-5498-3G()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD SPINNING)		1	
-51	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-52	B-7333-120	• • RIVNUT, ALUMINUM		10	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	D-5497-4()	SPINNER ASSEMBLY			
20	D-1687()	• DOME, 5-BLADE		1	
50	D-5498-4G()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD SPINNING)		1	
-51	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		14	
-52	B-7333-120	• • RIVNUT, ALUMINUM		10	
-59	B-3846-3	• • NUTPLATE, FIXED		27	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
-63	B-3847-8	• • RIVET, 100° HEAD, .094 DIA, AL		10	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-3					
-10	D-5527()	SPINNER ASSEMBLY			
20	D-5554()	• DOME, 5-BLADE		1	
-21	B-7052-3	• • NUTPLATE, FIXED		8	
-22	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		16	
30	D-5559	• • FORWARD BULKHEAD		1	
-36	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		15	
150	D-5556	• • CAP, DOME		1	
170	B-3867-272	• • SCREW, 10-32, 100° HEAD, CRES (CAP MOUNTING)		8	Y
50	D-5555-()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD PLATE)		1	
-59	B-3858-3	• • NUTPLATE, FIXED		30	
-62	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
90	C-5565	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		45	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		30	Y
210	B-3851-0332	• WASHER		30	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-1					
-10	D-5527-L()	SPINNER ASSEMBLY		OBS	
20	D-5554()	• DOME UNIT		1	
50	D-5555L	• BULKHEAD UNIT		1	
-49	C-5590	• • BULKHEAD PLATE		1	
-51	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		10	
-59	B-3858-3	• • NUTPLATE, FIXED		30	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
90	C-5565	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		35	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		30	Y
210	B-3851-0332	• WASHER		30	Y
10.5-3					
-10	D-5527-1(L)()	SPINNER ASSEMBLY			
20	D-5554()	• DOME ASSEMBLY, 5-BLADE		1	
-21	B-7052-3	• • NUTPLATE, FIXED		8	
-22	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		16	
30	D-5559	• • FORWARD BULKHEAD		1	
-36	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		15	
150	D-5556	• • CAP, DOME		1	
170	B-3867-272	• • SCREW, 10-32, 100° HEAD, CRES (CAP MOUNTING)		8	Y
50	D-5555-1()	• BULKHEAD UNIT	A	1	
	D-5555-1L()	• BULKHEAD UNIT	B	1	
-59	B-3858-3	• • NUTPLATE, FIXED		42	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		64	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
90	C-5565	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		35	
200	B-3845-9	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		30	Y
210	B-3851-0332	• WASHER		30	Y
10.5-1					
-10	D-5574-(P)	SPINNER ASSEMBLY			
20	D-5576-(P)	• DOME, 5-BLADE		1	
50	D-5577-(P)	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		10	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-5578	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		25	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
A		D-5527-1()			
B		D-5527-1L()			

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

HARTZELL METAL SPINNER MAINTENANCE MANUAL

127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-1					
-10	D-5597-1()	SPINNER ASSEMBLY			
20	D-5598()	• DOME, 5-BLADE		1	
30	D-2825	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		4	
50	D-5599-3()	• BULKHEAD UNIT		1	
-58	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		20	
-59	B-3846-3	• • NUTPLATE, FIXED		30	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
90	C-2878-1	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		35	
-96	104862	• • CAP, NUTPLATE		10	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		30	Y
210	B-3851-0332	• WASHER		30	Y
10.5-1					
-10	E-5760-()	SPINNER ASSEMBLY			
20	E-5761()	• DOME, 5-BLADE		1	
50	E-5762()	• BULKHEAD UNIT (INCLUDED BONDED BULKHEAD SPINNING)		1	
-51	B-3862-9	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-52	B-3862-10	• • RIVET, UNIVERSAL HEAD, .188 AL		10	
-55	B-3862-7	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-59	B-3846-3	• • NUTPLATE, FIXED		25	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		30	
-61	B-3849-3	• • NUTPLATE, FLOATING		20	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-63	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
90	C-5764	• • FILLER PLATE		5	
-91	B-3848-5	• • RIVET, 100° HEAD, .125 DIA, AL		35	
-96	104862	• • CAP, NUTPLATE		10	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		30	Y
210	A-1020	• WASHER, FIBER		30	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-1					
-10	E-6955-()	SPINNER ASSEMBLY			
20	D-5576()	• DOME, 5-BLADE		1	
50	E-6956()	• BULKHEAD UNIT (INCLUDED BONDED BULKHEAD SPINNING)		1	
-51	B-3848-4	• • RIVET, 100° HEAD, .125 DIA, AL, 100° HEAD, .125 DIA, AL		25	
-52	B-3862-9	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-60	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		40	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		20	
90	C-5578	• • FILLER PLATE		5	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	E-7256-()	SPINNER ASSEMBLY			
20	D-1687()	• DOME, 5-BLADE		1	
50	E-7257()	• BULKHEAD UNIT (INCLUDED BONDED BULKHEAD SPINNING)		1	
-51	B-3862-9	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		60	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-1					
-10	104236()	SPINNER ASSEMBLY			
20	D-1687()	• DOME, 5-BLADE - SUPERSEDED BY ITEM 20A		1	
20A	D-5576()	• DOME, 5-BLADE - SUPERSEDES ITEM 20		1	
50	104237()	• BULKHEAD UNIT (INCLUDED BONDED BULKHEAD SPINNING)		1	
-51	B-3862-9	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-52	B-7333-120	• • RIVNUT, ALUMINUM		10	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-4	• • RIVET, 100° HEAD, .094 DIA, AL		60	
90	C-5778-2	• • FILLER PLATE		5	
-91	B-3848-4	• • RIVET, 100° HEAD, .125 DIA, AL, 100° HEAD, .125 DIA, AL		25	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-2					
-10	104478()	SPINNER ASSEMBLY			
20	D-1687-2()	• DOME, 5-BLADE		1	
50	104477()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-60	B-3847-7	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	104552()	SPINNER ASSEMBLY			
20	105044()	• DOME, 5-BLADE		1	
30	104152	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	104154()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		24	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	105180()	SPINNER ASSEMBLY			
20	105176()	• DOME, 5-BLADE		1	
30	105181	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	105178()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		17	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		54	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY		MODEL	EFFECTIVITY		
			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-2					
-10	105820()	SPINNER ASSEMBLY			
20	105818()	• DOME, 5-BLADE		1	
30	105907	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	105819()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-60	B-3847-7	• • RIVET, 100° HEAD, .094 DIA, AL		20	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	105929()	SPINNER ASSEMBLY			
20	105176()	• DOME, 5-BLADE		1	
30	105181	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	105928()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		15	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		50	
200	B-3845-8	• SCREW, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
10.5-1					
-10	105951()	SPINNER ASSEMBLY			
20	105949()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	105950()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		10	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-4699	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		20	
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES (DOME-TO-BULKHEAD)		20	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-2					
-10	105951-1()	SPINNER ASSEMBLY			
20	105949-1()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	105950-1()	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		10	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES (DOME-TO-BULKHEAD)		20	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
10.5-2					
-10	106528()	SPINNER ASSEMBLY			
20	D-1687-3()	• DOME, 5-BLADE		1	
30	106900	• FORWARD BULKHEAD		1	
31	106898	• SHIM, SPINNER		15	
50	106526()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD SPINNING)		1	
-51	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	106817()	SPINNER ASSEMBLY			
20	106815()	• DOME, 5-BLADE		1	
30	104152	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	106816()	• BULKHEAD UNIT - REPLACED BY ITEM 50A		1	
50A	107200()	• BULKHEAD UNIT - REPLACES ITEM 50 (INCLUDES BONDED BULKHEAD RING)		1	
-59A	B-3846-3	• • NUTPLATE, FIXED		15	
-61A	B-3849-3	• • NUTPLATE, FLOATING		10	
-62A	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		50	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		15	Y
210	A-1020	• WASHER, FIBER		15	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-1					
-10	106917()	SPINNER ASSEMBLY			
20	105949()	• DOME		1	
30	106915	• FORWARD BULKHEAD		1	
31	106962	• SHIM, SPINNER (BLACK)		15	Y
50	106916	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		10	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-4699	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		20	
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES (DOME-TO-BULKHEAD)		20	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
10.5-2			A		
-10	106940()	SPINNER ASSEMBLY			
20	105044-1()	• DOME, 5-BLADE		1	
30	104152	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	107003()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING, SLINGER RING, AND FITTING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
-230	B-3384-4	• • BOLT, 1/4-28, HEX HEAD		10	
-255	B-3837-0432	• • WASHER, CORROSION RESISTANT		10	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2					
-10	106940-1()	SPINNER ASSEMBLY			
20	105044-1()	• DOME, 5-BLADE		1	
30	104152	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	107003-1()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY			MODEL		
A Refer to Hartzell Propeller Application Guide Manual 159 (61-02-59) for the applicable Ice Protection Kit. Refer to the Ice Protection System Manual 180 (30-60-80) for Components, Check Criteria, and Installation Procedures.					

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-1					
-10	107503()	SPINNER ASSEMBLY			
20	105949()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	107497	• BULKHEAD UNIT		1	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		20	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-4699	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		20	
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES (DOME-TO-BULKHEAD)		20	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
-270	B-6371	• TARGET, MAGNETIC, THREADED		1	
-280	B-3837-N616	• WASHER, CORROSION, RESISTANT		1	
-290	B-3869-06	• NUT, SELF-LOCKING, CRES		1	
10.5-2					
-10	108167()	SPINNER ASSEMBLY			
20	107398()	• DOME, 5-BLADE		1	
30	108166	• FORWARD BULKHEAD		1	
31	106898	• SHIM, SPINNER		15	
50	107397()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRESS (DOME-TO-BULKHEAD)		20	Y
210	109013	• WASHER, DIMPLED, ELECTROPOLISHED, 100° CRESS		20	Y
10.5-2					
-10	108250(P)	SPINNER ASSEMBLY			
20	D-1687-(P)	• DOME, 5-BLADE		1	
30	106527	• FORWARD BULKHEAD		1	
31	B-5486	• SHIM, SPINNER		15	
50	108249(P)	• BULKHEAD UNIT		1	
-51	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

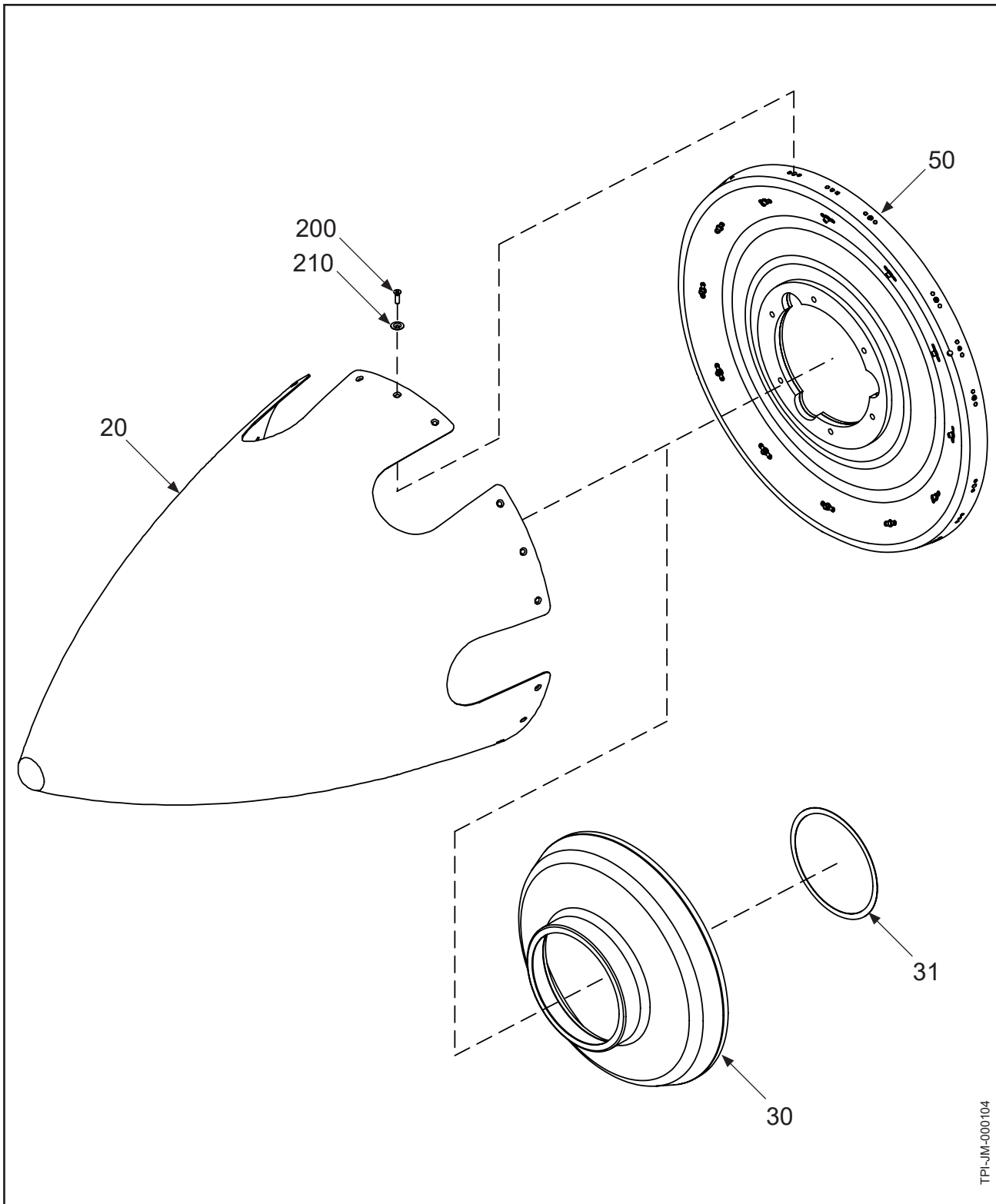
FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.5-2					
-10	108344()	SPINNER ASSEMBLY			
20	D-1687-3()	• DOME		1	
30	106900	• FORWARD BULKHEAD		1	
31	106898	• SHIM, SPINNER		15	
50	108343()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD SPINNING)		1	
-51	B-3862-8	• • RIVET, UNIVERSAL HEAD, .188 AL		15	
-59	B-3846-3	• • NUTPLATE, FIXED		22	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		64	
200	B-3845-8	• SCREW, 10-32, TRUSS HEAD (DOME-TO-BULKHEAD)		20	Y
210	A-1020	• WASHER, FIBER		20	Y
10.5-2			A		
-10	109044()	SPINNER ASSEMBLY			
20	109079()	• DOME		1	
30	C-5292	• FORWARD BULKHEAD		1	
31	B-632	• SHIM, SPINNER		15	
50	109042()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING, SLINGER RING, AND FITTING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		20	
-60	B-3847-6	• • RIVET, 100° HEAD, .094 DIA, AL		20	
-61	B-3849-3	• • NUTPLATE, FLOATING		10	
-62	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		40	
90	C-4699	• • FILLER PLATE		5	
-91	B-3848-6	• • RIVET, 100° HEAD, .125 DIA, AL		20	
-230	B-3384-4H	• • BOLT, 1/4-28, HEX HEAD		10	
-255	B-3837-0432	• • WASHER, CORROSION RESISTANT		10	
200	B-3867-272	• SCREW, 10-32, 100° CRES (DOME-TO-BULKHEAD)		20	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
EFFECTIVITY			MODEL		
A Refer to Hartzell Propeller Application Guide Manual 159 (61-02-59) for the applicable Ice Protection Kit. Refer to the Ice Protection System Manual 180 (30-60-80) for Components, Check Criteria, and Installation Procedures.					

- ITEM NOT ILLUSTRATED

Spinners - Five-Bladed Propeller

(Blank Page)

Six-Bladed Propeller Spinners



TPI-JM-000104

**Example of a Six-Bladed Propeller Spinner -
One-piece Dome without Filler Plates
Figure 10.6-1**

HARTZELL METAL SPINNER MAINTENANCE MANUAL
127

FIG./ITEM NUMBER.	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
10.6-1					
-10	108169()	SPINNER ASSEMBLY			
20	107250()	• DOME		1	
30	108166	• FORWARD BULKHEAD		1	
31	106898	• SHIM, SPINNER		15	
50	107251()	• BULKHEAD UNIT (INCLUDES BONDED BULKHEAD RING)		1	
-59	B-3846-3	• • NUTPLATE, FIXED		18	
-60	B-3847-5	• • RIVET, 100° HEAD, .094 DIA, AL		60	
-61	B-3849-3	• • NUTPLATE, FLOATING		12	
200	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES (DOME-TO-BULKHEAD)		18	Y
210	B-3860-10L	• WASHER, DIMPLED, 100° CRES		18	Y
EFFECTIVITY			MODEL		

- ITEM NOT ILLUSTRATED

Spinners - Six-Bladed Propeller

(Blank Page)

Spinner Dome and Hardware Kits

FIG./ITEM NUMBER	PART NUMBER	DESCRIPTION	EFF CODE	UPA	O/H
-	C-3004-2PKIT	POLISHED DOME AND HARDWARE KIT			
-	C-3004-2P	• DOME UNIT, 3 BLADE		1	
-	B-3545-8	• SCREW, 10-32, TRUSS HEAD		15	Y
-	A-1020	• WASHER, FIBER		15	Y
-	C-3532-16PKIT	POLISHED DOME AND HARDWARE KIT			
-	C-3532-16P	• DOME UNIT, 3 BLADE		1	
-	B-3545-8	• SCREW, 10-32, TRUSS HEAD		18	Y
-	A-1020	• WASHER, FIBER		18	Y
-	D-630-5PKIT	SPINNER DOME AND MOUNTING HARDWARE KIT			
-	D-5210-3P	• DOME		1	
-	C-5292	• FORWARD BULKHEAD		1	
-	B-632	• SHIM, SPINNER		15	
-	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES		20	Y
-	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
-	D-6751-PKIT	POLISHED DOME AND HARDWARE KIT			
-	D-6751-P	• DOME UNIT, 3 BLADE		1	
-	B-3545-8	• SCREW, 10-32, TRUSS HEAD		18	Y
-	A-1020	• WASHER, FIBER		18	Y
-	D-6751-1KIT	UNPOLISHED DOME AND HARDWARE KIT			
-	D-6751-1	• DOME UNIT, 3 BLADE		1	
-	B-3845-8	• SCREW, 10-32, TRUSS HEAD		18	Y
-	A-1020	• WASHER, FIBER		18	Y
-	D-6751-1PKIT	POLISHED DOME AND HARDWARE KIT			
-	D-6751-1P	• DOME UNIT, 3 BLADE		1	
-	B-3845-8	• SCREW, 10-32, TRUSS HEAD		18	Y
-	A-1020	• WASHER, FIBER		18	Y
-	105949PKIT	POLISHED DOME AND MOUNTING HARDWARE KIT			
-	105949P	• DOME		1	
-	C-5292	• FORWARD BULKHEAD		1	
-	B-632	• SHIM, SPINNER		15	
-	B-3867-272	• SCREW, 10-32, 100° HEAD, CRES		20	Y
-	B-3860-10L	• WASHER, DIMPLED, 100° CRES		20	Y
EFFECTIVITY		MODEL	EFFECTIVITY		MODEL

- ITEM NOT ILLUSTRATED

Spinner Dome and Hardware Kits