TO: ALL HOLDERS OF WING TRAILING EDGE OUTBOARD FLAP LINKAGE ASSEMBLY COMPONENT MAINTENANCE MANUAL 27-52-97

REVISION NO. 1 DATED MAR 01/04

HIGHLIGHTS

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
TITLE PAGE 1 DESCRIPTION & OPERATION 1 REPAIR 8-1 601,605-608 REPAIR 12-1 601 REPAIR 14-1 601 1006-1015,1019,1021, 1023-1024,1027-1038, 1045,1047-1048, 1051-1062	Added 113T1330-23, -24 linkage assemblies, same as 113T1330-21, -22 linkage assemblies, except for new 6-9 link assembly and optional 2-8 link assembly
301 502 703-704 803,810-814	Updated the item numbers
REPAIR 1-1 602 REPAIR 3-2 602 REPAIR 4-2 602	Edited without technical change

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
REPAIR 5-2 602	HIGHLIGHT CONTINUED FROM PREVIOUS PAGE
REPAIR 6-2 602	
REPAIR 8-1 610	
REPAIR 9-2 606	
REPAIR 10-2 606	
REPAIR 11-1 601	Added optional 2-8 and 5-8 link assemblies to the 113T1330-1, -2 linkage assemblies
REPAIR 13-1 601	
1006-1015,1019,1021, 1023-1024,1027-1038, 1045,1047-1048, 1051-1062	
815	Added the Torque Table
1002-1004	Updated the Vendors List
1033,1057	Changed item numbers to identify bolts with different torque

BOEING

COMPONENT
MAINTENANCE MANUAL

WING TRAILING EDGE OUTBOARD FLAP LINKAGE ASSEMBLY

PART NUMBERS 113T1330-1,-2,-21 THRU -24

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

KD6781

REVISION RECORD

- Retain this record in front of manual. On receipt of revision, insert revised pages in the manual, and enter revision number, date inserted and initial.

REVISION NUMBER	REVISION DATE	DATE FILED	BY	REVISION NUMBER	REVISION DATE	DATE FILED	BY

KD6815

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL

PAGE	DATE	CODE
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TITLE PAGE		
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2	BLANK	
REVISION RECORD		
1	MAR 01/00	01
2	BLANK	
TR & SB RECORD		
1	MAR 01/00	01
2	BLANK	
LIST OF EFFECTIVE PAGES		
*1	MAR 01/04	01
THRU LAST PAGE		
CONTENTS		
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2	BLANK	
INTRODUCTION		
1	MAR 01/00	01
2	BLANK	
DESCRIPTION & OPERATION		
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2	MAR 01/00	01
3	MAR 01/00	01
4	BLANK	
DISASSEMBLY		
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302	BLANK	
CLEANING		
401	MAR 01/00	01
402	BLANK	

PAGE	DATE	CODE
CHECK		
501	MAR 01/00	01
*502	MAR 01/04	01.1
REPAIR-GENERAL		
601	MAR 01/00	01
602	MAR 01/00	01
REPAIR 1-1		
601	MAR 01/00	01
*602	MAR 01/04	01.1
REPAIR 2-1		
601	MAR 01/00	01
602	MAR 01/00	01
603	MAR 01/00	01
604	MAR 01/00	01
REPAIR 3-1		
601	MAR 01/00	01
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REPAIR 4-1		
601	MAR 01/00	01
602	MAR 01/00	01
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PAGE	DATE	CODE
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REPAIR 5-1		
601	MAR 01/00	01
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603	MAR 01/00	01
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PAGE	DATE	CODE
REPAIR 7-1		
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607	MAR 01/00	01
608	MAR 01/00	01

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PAGE	DATE	CODE
REPAIR 10-1		
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REPAIR 10-2		
601	MAR 01/00	01
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607	MAR 01/00	01
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602	BLANK	
REPAIR 14-1		
*601	MAR 01/04	01.1
602	BLANK	
ASSEMBLY		
701	MAR 01/00	01
702	MAR 01/00	01
*703	MAR 01/04	01.1
*704	MAR 01/04	01.1
FITS AND CLEARANCES		
801	MAR 01/00	01
802	MAR 01/00	01
*803	MAR 01/04	01.1
804	MAR 01/00	01

PAGE	DATE	CODE
FITS AND CLEARANCES		CONT.
805	MAR 01/00	01
806	MAR 01/00	01
807	MAR 01/00	01
808	MAR 01/00	01
809	MAR 01/00	01
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*1022	MAR 01/04	01.1
*1023	MAR 01/04	01.1
*1024	MAR 01/04	01.1
*1025	MAR 01/04	01.1
*1026	MAR 01/04	01.1
*1027	MAR 01/04	01.1
*1028	MAR 01/04	01.1

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
ILLUSTRATED PARTS LIST		CONT.
*1029	MAR 01/04	01.1
*1030	MAR 01/04	01.1
*1031	MAR 01/04	01.1
*1032	MAR 01/04	01.1
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*1058	MAR 01/04	01.1
*1059	MAR 01/04	01.1
*1060	MAR 01/04	01.1
*1061	MAR 01/04	01.1
*1062	MAR 01/04	01.1

PAGE	DATE	CODE

* = REVISED, ADDED OR DELETED

TABLE OF CONTENTS

*[1] Not Applicable.

*[2] Special instructions not required. Use standard industry practices.

INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions ranging from simple checks and replacement to complete shop-type repair.

This manual is divided into separate sections:

1. Title Page
2. Record of Revisions
3. Temporary Revision & Service Bulletin Record
4. List of Effective Pages
5. Table of Contents
6. Introduction
7. Procedures & IPL Sections

Refer to the Table of Contents for the page location of applicable sections.

The beginning of the REPAIR section includes a list of the separate repairs, a list of applicable standard Boeing practices, and an explanation of the True Position Dimensioning symbols used.

An explanation of the use of the Illustrated Parts List is provided in the Introduction to that section.

All weights and measurements used in the manual are in English units, unless otherwise stated. When metric equivalents are given they will be in parentheses following the English units.

Design changes, optional parts, configuration differences and Service Bulletin modifications create alternate part numbers. These are identified in the Illustrated Parts List (IPL) by adding an alphabetical character to the basic item number. The resulting item number is called an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless otherwise indicated.

Verification:

WING TRAILING EDGE OUTBOARD FLAP LINKAGE ASSEMBLY

DESCRIPTION AND OPERATION

1. Description

   A. The wing trailing edge outboard flap linkage assembly is made of fail-safe aluminum link and beam assemblies which are connected by pins. The linkage assembly is mounted to wing structure and holds the outboard trailing edge flap.

   B. In the procedures in this manual, the wing trailing edge outboard flap linkage assembly will be referred to as the linkage assembly.

2. Operation

   A. The trailing edge flap drive rotary actuators operate to extend the linkage assemblies and the flaps mounted to them.

3. Leading Particulars (Approximate)

   A. For 113T1330-1, -2

      (1) Length -- 29 inches

      (2) Width -- 10 inches

      (3) Height -- 17 inches

      (4) Weight -- 108 pounds

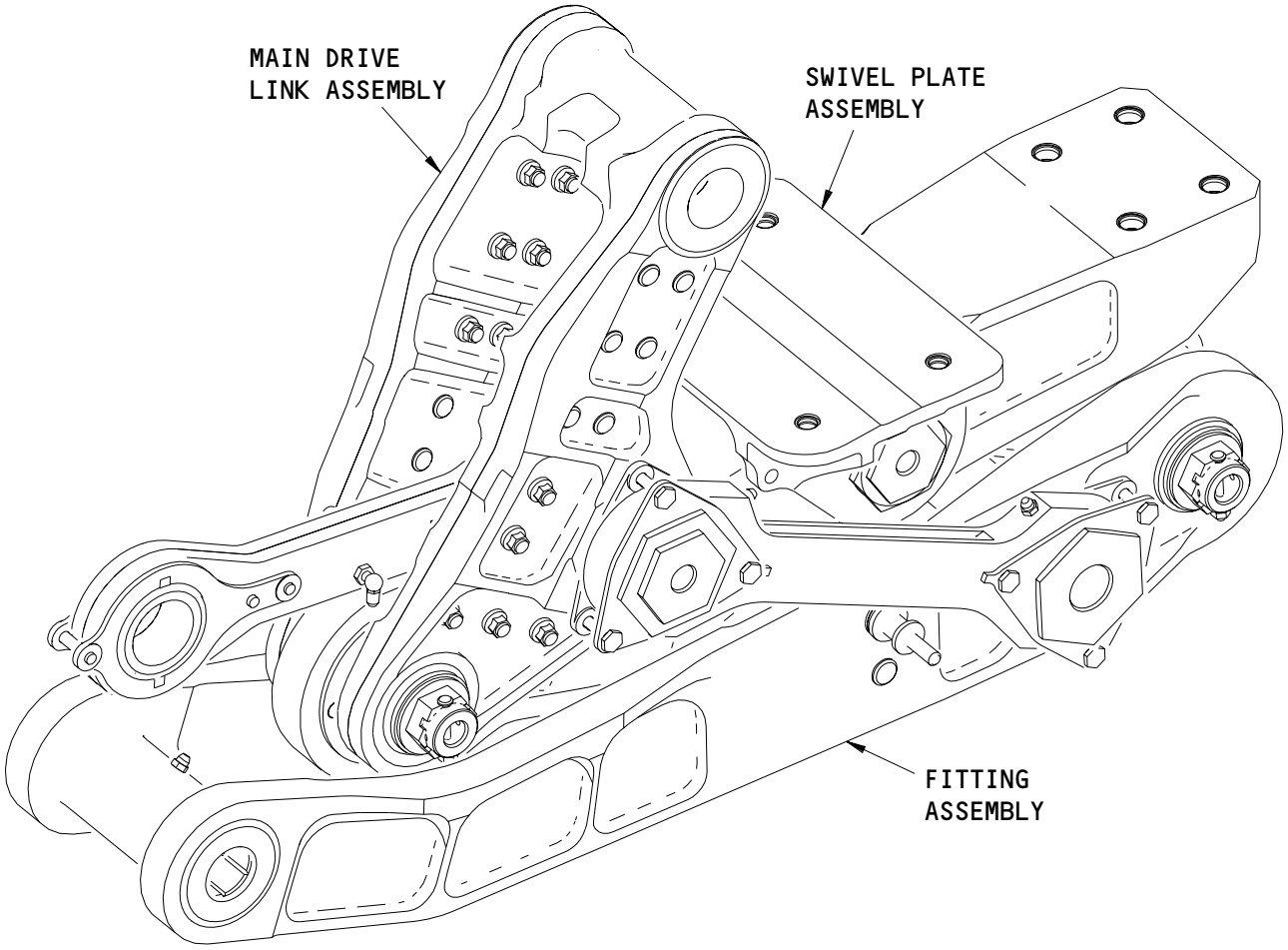
   B. For 113T1330-21 thru -24

      (1) Length -- 35 inches

      (2) Width -- 12 inches

      (3) Height -- 19 inches

      (4) Weight -- 140 pounds



SUPPORT NO. 1 LINKAGE ASSEMBLY SHOWN
SUPPORT NO. 8 LINKAGE ASSEMBLY OPPOSITE

Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 1)

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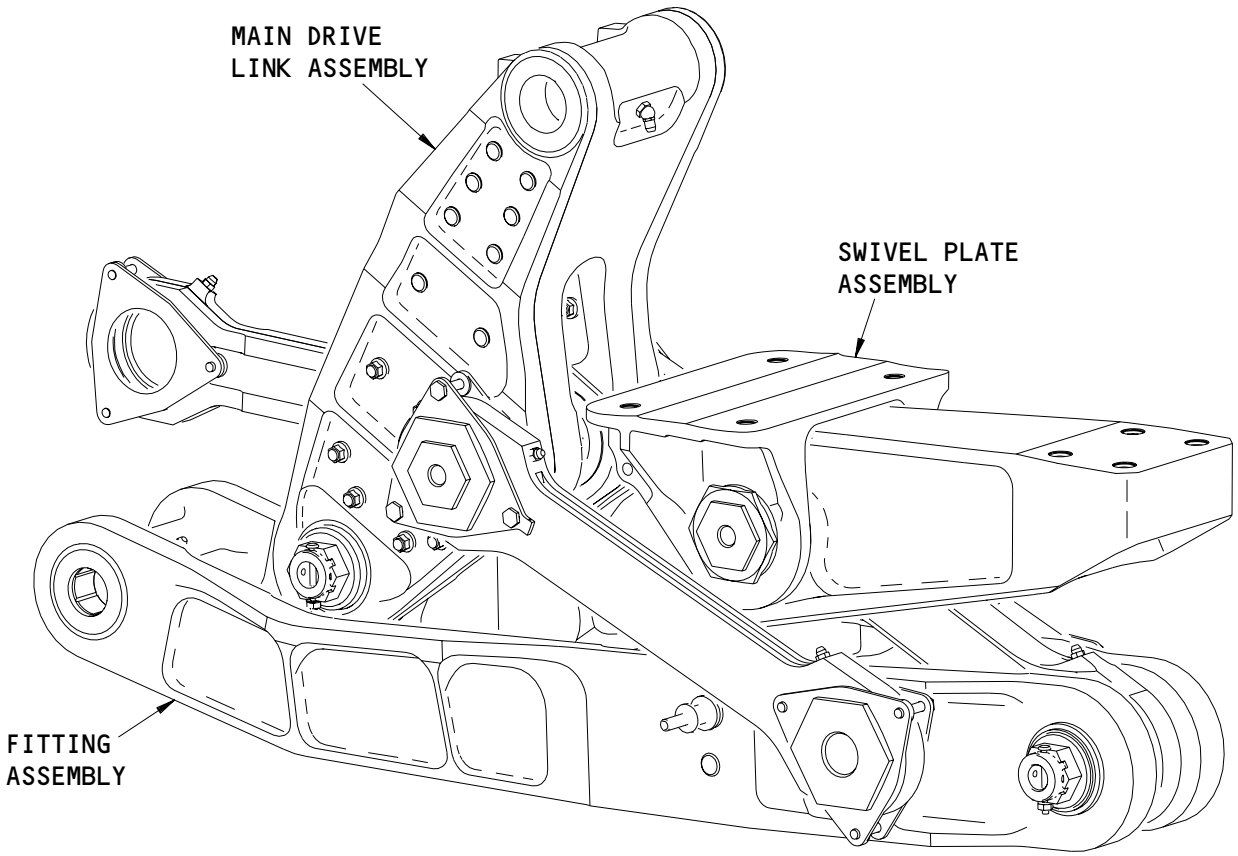


SUPPORT NO. 2 LINKAGE ASSEMBLY SHOWN
SUPPORT NO. 7 LINKAGE ASSEMBLY OPPOSITE

Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 2)

K06492

DISASSEMBLY

1. General

   A. This procedure has the data necessary to disassemble the linkage assembly (1A).

   B. Disassemble this component sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.

   C. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   D. Refer to IPL Fig. 1 and IPL Fig. 2 for item numbers.

2. Disassembly

   A. Part Replacement

      NOTE: The parts which follow are recommended for replacement. Unless a procedure tells you to replace a part, replacement is optional.

      (1) Seal (IPL Fig. 1; 70, 270, 370), (IPL Fig. 2; 65, 70, 290, 390).

      (2) Cotter pin (IPL Fig. 1; 10, 290), (IPL Fig. 2; 10, 310).

   B. Procedure

      (1) Use standard industry procedures to disassemble this component.

         NOTE: Do not disassemble the link assemblies (IPL Fig. 1; 45, 140) (IPL Fig. 2; 45, 165) unless it is necessary for repair or replacement. Refer to the manufacturer's instructions for the overhaul procedures for the 3-10 link assembly (IPL Fig. 1; 440A), (IPL Fig. 2; 460A).

CLEANING

1. General

   A. This procedure has the data necessary to clean the linkage assembly (1A).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to IPL Fig. 1 and IPL Fig. 2 for item numbers.

2. Cleaning

   A. References

      (1) SOPM 20-30-03, General Cleaning Procedures

   B. Procedure

      (1) Refer to the manufacturer's instructions to clean the bearings (75, 275, 375), (IPL Fig. 2; 95, 100, 295).

      (2) Use standard industry procedures and refer to SOPM 20-30-03 to clean all parts.

CHECK

1. General

   A. This procedure has the data necessary to find defects in the material of the specified parts.

   B. Refer to FITS AND CLEARANCES for the design dimension and wear limits.

   C. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   D. Refer to IPL Fig. 1 and IPL Fig. 2 for item numbers.

2. Check

   A. References

      (1) SOPM 20-20-01, Magnetic Particle Inspection

      (2) SOPM 20-20-02, Penetrant Methods of Inspection

   B. Procedure

      (1) Use standard industry procedures to do a visual check of all the parts for defects. Do the penetrant or magnetic particle check if the visual check shows possible damage or if you suspect possible damage on the parts listed below:

      (2) Do a magnetic particle check (SOPM 20-20-01) of these parts:

         (a) For IPL Fig. 1:

            1) Nut (30, 310)

            2) Pin (40, 135, 245, 320, 435)

            3) Retainer (60, 65, 260, 265, 360, 365)

            4) Link (95, 100, 285)

            5) Washer (240, 315)

            6) Bushing (390)

            7) Fitting (505)

(b) For IPL Fig. 2:

1) Pin (25, 40, 160, 265, 340A, 455)

2) Retainer (75, 80, 85, 90, 280, 285, 380, 385)

3) Link (120, 125, 305)

4) Bushing (195, 350, 410, 490)

5) Washer (260, 335, 515)

6) Nut (330)

7) Fitting (525)

(3) Do a penetrant check (SOPM 20-20-02) of these parts:

(a) For IPL Fig. 1:

1) Pin (25, 305)

2) Link (200, 205, 210)

3) Washer (300)

4) Plate (345)

5) Beam (400)

6) Fitting (515)

(b) For IPL Fig. 2:

1) Washer (20, 35, 320)

2) Link (220A, 225, 230)

3) Pin (325)

4) Plate (365)

5) Beam (420)

6) Fitting (535)

REPAIR - GENERAL

1. General

A. Instructions for repair, refinish, and replacement of the specified subassembly parts are included in each REPAIR when applicable:

PART NUMBER	NAME	REPAIR
---	REFINISH OF OTHER PARTS	1-1
113T1263	PIN	2-1
113T1301	9-10 SWIVEL PLATE ASSEMBLY	3-1, 3-2
113T1301	9-10 BEAM ASSEMBLY	4-1, 4-2
113T1302	9-10 SWIVEL PLATE ASSEMBLY	5-1, 5-2
113T1302	9-10 BEAM ASSEMBLY	6-1, 6-2
113T1307	6-9 LINK ASSEMBLY	7-1
113T1308	6-9 LINK ASSEMBLY	8-1
113T1313	1-3 FITTING ASSEMBLY	9-1, 9-2
113T1314	1-3 FITTING ASSEMBLY	10-1, 10-2
113T1319	2-8 LINK ASSEMBLY	11-1
113T1320	2-8 LINK ASSEMBLY	12-1
113T1335	5-8 LINK ASSEMBLY	13-1
113T1336	5-8 LINK ASSEMBLY	14-1

2. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in Fig. 601.

—	STRAIGHTNESS
▱	FLATNESS
⊥	PERPENDICULARITY (OR SQUARENESS)
//	PARALLELISM
○	ROUNDNESS
⌭	CYLINDRICITY
⌒	PROFILE OF A LINE
⌓	PROFILE OF A SURFACE
◎	CONCENTRICITY
⌯	SYMMETRY
∠	ANGULARITY
↗	RUNOUT
↗↗	TOTAL RUNOUT
⌴	COUNTERBORE OR SPOTFACE
⌵	COUNTERSINK
⌖	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
∅	DIAMETER
S ∅	SPHERICAL DIAMETER
R	RADIUS
SR	SPHERICAL RADIUS
()	REFERENCE
BASIC (BSC) OR DIM	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE. FROM THIS FEATURE PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
-A-	DATUM
Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
Ⓛ	LEAST MATERIAL CONDITION (LMC)
Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
Ⓟ	PROJECTED TOLERANCE ZONE
FIM	FULL INDICATOR MOVEMENT

EXAMPLES

— 0.002	STRAIGHT WITHIN 0.002
⊥ 0.002 B	PERPENDICULAR TO DATUM B WITHIN 0.002
// 0.002 A	PARALLEL TO DATUM A WITHIN 0.002
○ 0.002	ROUND WITHIN 0.002
⌭ 0.010	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER
⌒ 0.006 A	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM A
⌓ 0.020 A	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.020 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
◎ ∅ 0.0005 C	CONCENTRIC TO DATUM C WITHIN 0.0005 DIAMETER
⌯ 0.010 A	SYMMETRICAL WITH DATUM A WITHIN 0.010
∠ 0.005 A	ANGULAR TOLERANCE 0.005 WITH DATUM A
⌖ ∅ 0.002 Ⓢ B	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
⊥ ∅ 0.010 Ⓜ A 0.510 Ⓟ	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010 INCH DIAMETER, PERPENDICULAR TO DATUM A, AND EXTENDING 0.510 INCH ABOVE DATUM A, MAXIMUM MATERIAL CONDITION
2.000 OR 2.000 BSC	THEORETICALLY EXACT DIMENSION IS 2.000

True Position Dimensioning Symbols
Figure 601

KD6817

REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

   A. This procedure has the data necessary to refinish the parts which are not given in the specified repairs.

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to IPL Fig. 1 and IPL Fig. 2 for item numbers.

2. Refinish of Other Parts

   A. General

      (1) Instructions for the repair of the parts listed in Table 601 are for repair of the initial finish.

   B. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) D00566 Lubricant -- BMS3-8 (SOPM 20-60-03)

   C. References

      (1) SOPM 20-30-02, Stripping of Protective Finishes

      (2) SOPM 20-30-03, General Cleaning Procedures

      (3) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

      (4) SOPM 20-60-03, Lubricants

   D. Procedure

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Washer (20,300)	15-5PH CRES, 180-200 ksi	Passivate (F-17.09).
Nut (30,310)	15-5PH CRES, 180-200 ksi	Apply BMS 3-8 dry film per SOPM 20-30-03, type VIII on threads and exterior surfaces.
Washer (35,240,315)	15-5PH CRES, 180-200 ksi	Chrome plate (F-15.03), 0.0005-0.0010 inch thickness. Chrome plate is not required in inside and outside diameters.
IPL Fig. 2		
Washer (20,320)	15-5PH CRES, 180-200 ksi	Passivate (F-17.09).
Nut (30,330)	15-5PH CRES, 180-200 ksi	Apply BMS 3-8 dry film per SOPM 20-30-03, type VIII on threads and exterior surfaces.
Washer (35,260,335)	15-5PH CRES, 180-200 ksi	Chrome plate (F-15.03), 0.0005-0.0010 inch thickness. Chrome plate is not required in inside and outside diameters.

Refinish Details
Table 601

OUTER PIN - REPAIR 2-1

113T1263-16, -18, -61, -66 THRU -72

1. General

A. This procedure has the data necessary to refinish the outer pins (IPL Fig. 1; 40, 135, 245, 320, 435), (IPL Fig. 2; 40, 160, 265, 340A, 455).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 1 and IPL Fig. 2 for item numbers.

E. General repair details:

(1)	Materials:	15-5PH CRES Heat treat 180-200 ksi.
(2)	Shot Peen:	Shot number 170-460 Intensity 0.016 Coverage 2.0.

2. Outer Pin Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00432 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

(1) SOPM 20-10-04, Grinding of Chrome Plated Parts

(2) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

(3) SOPM 20-42-03, Hard Chrome Plating

(4) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) For outer pins 113T1263-16 and -18:

(a) On areas indicated by flagnote 3: chrome plate (F-15.03).

(b) Passivate (F-17.09) in other areas.

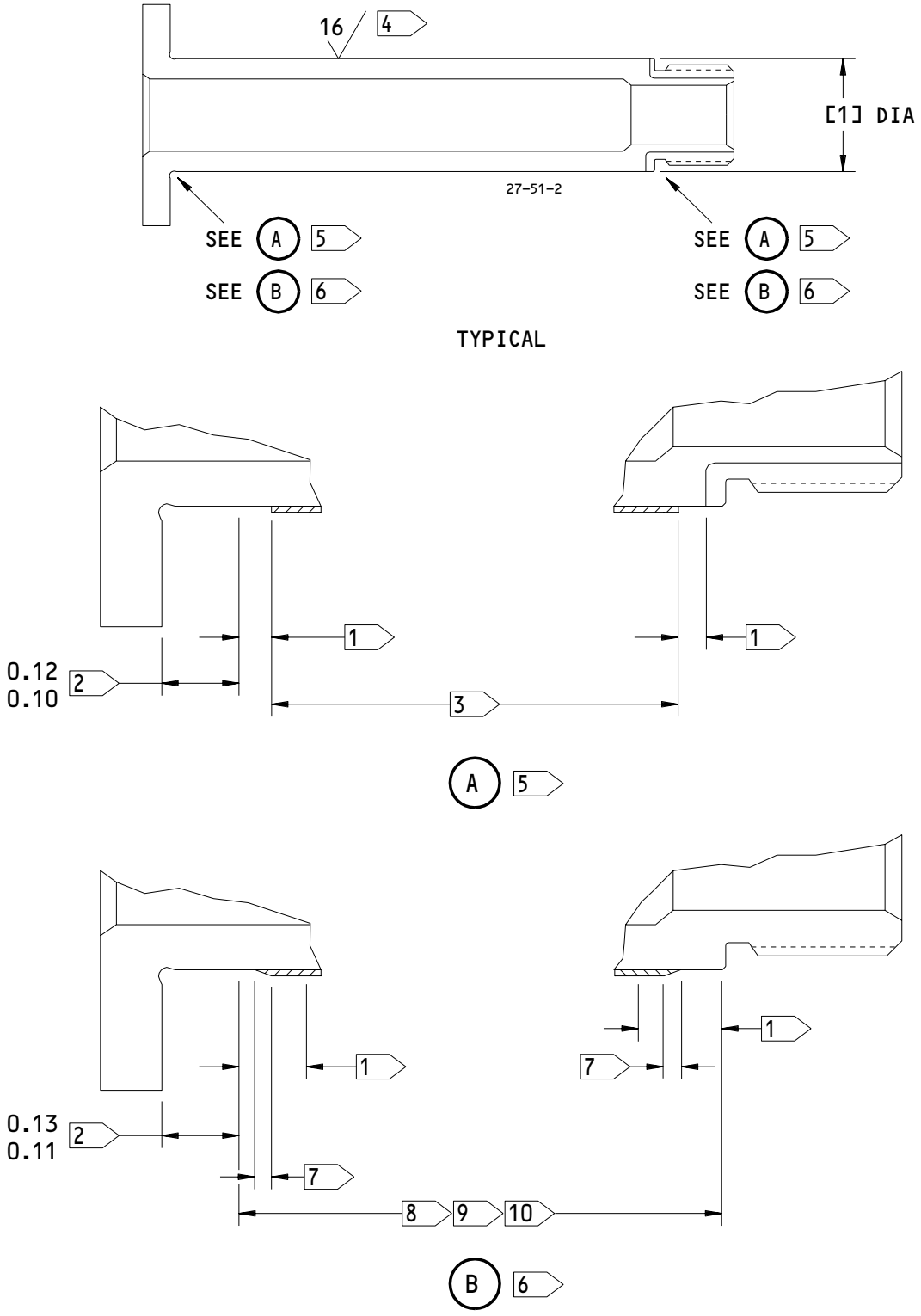
(c) Obey flagnotes shown in Fig. 601.

(2) For outer pins 113T1263-61, -66 thru -72:

(a) Chrome plate (F-15.34) on areas indicated by flagnote 8. Wipe the chrome plate with BMS 10-11 type 1 primer (F-19.45).

(b) Passivate (F-17.25) in other areas.

(c) Obey flagnotes shown in Fig. 601.



113T1263-16,-18,-61,-66 thru -72
Pin Repair
Figure 601 (Sheet 1)

K98758

PIN PART NUMBER	OUTSIDE DIAMETER [1]	
	BEFORE PLATING (MINIMUM)	AFTER PLATING
113T1263-16	1.4910	1.4990 1.4985
113T1263-18	1.6164	1.6240 1.6234
113T1263-61	1.6140	1.6240 1.6234
113T1263-66	1.3640	1.3740 1.3734
113T1263-67	1.6140	1.6240 1.6234
113T1263-68	1.3640	1.3740 1.3734
113T1263-69	1.3015	1.3115 1.3109
113T1263-70	1.6140	1.6240 1.6234
113T1263-71	1.4890	1.4990 1.4984
113T1263-72	1.4891	1.4991 1.4985

1 > 0.08 INCH MAXIMUM PLATE RUNOUT AREA

2 > NO PLATE ALLOWED IN THIS AREA

3 > CHROME PLATE (F-15.03)

4 > SURFACE FINISH AFTER PLATING

5 > FOR PINS P/N 113T1263-16,-18

6 > FOR PINS P/N 113T1263-61,-66 THRU -72

7 > 0.0050 INCH MINIMUM EDGE TAPER

8 > CHROME PLATE (F-15.34) 0.003 MINIMUM THICKNESS

9 > SHOT PEEN IN THIS AREA

10 > MAXIMUM PERMISSIBLE PLATE BOUNDRY

113T1263-16,-18,-61,-66 thru -72
Pin Repair
Figure 601 (Sheet 2)

K98810

9-10 SWIVEL PLATE ASSEMBLY - REPAIR 3-1

113T1301-31

1. General

   A. This procedure has the data necessary to replace the bushings (335, 340) in the swivel 9-10 plate assembly (325).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 1 for item numbers.

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00490 Sealant -- BMS5-95 (SOPM 20-60-04)

   B. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   C. Procedure (Fig. 601)

      (1) Remove the damaged bushings (330, 335, 340) from the swivel plate (345).

         NOTE: You must remove the bushings (335) before you can remove the bushings (340).

      (2) If there is corrosion or damage in the bushing holes in the swivel plate (345), see REPAIR 3-2 for repair instruction.

      (3) Install the new bushings (330) in the swivel plate (345) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

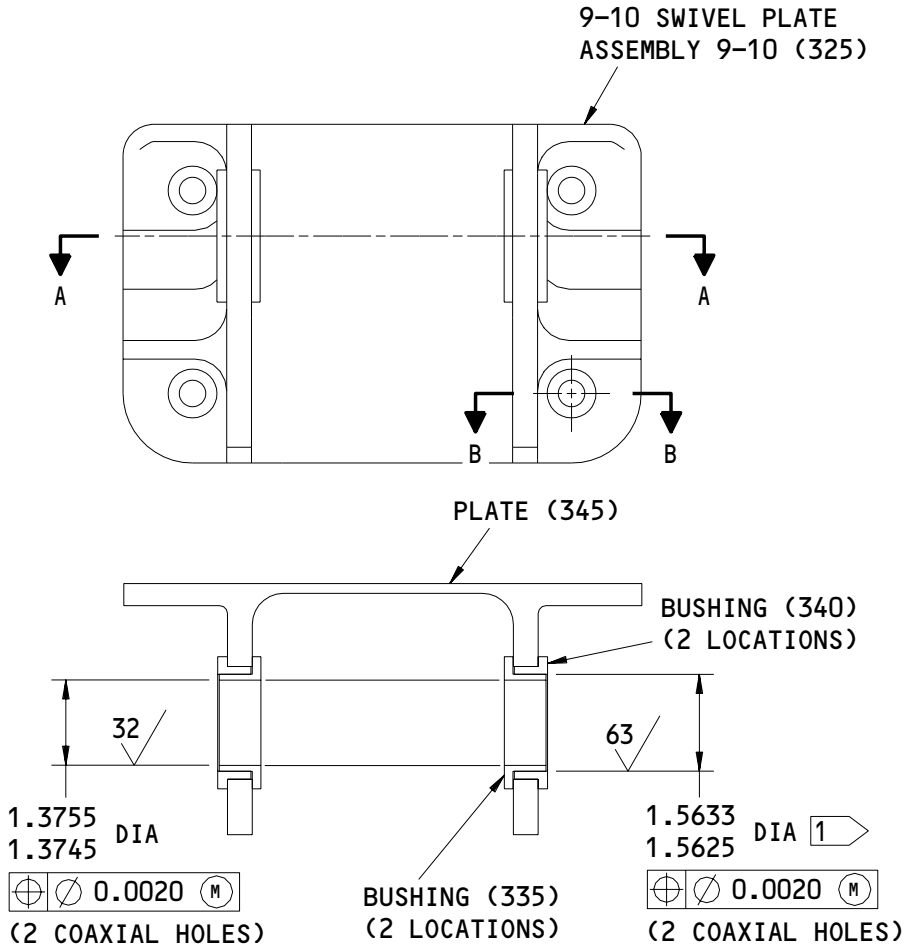
      (4) Machine the inside diameter of bushings (330) to the dimensions shown in Fig. 601.

(5) Install the new bushings (340) in the swivel plate (345) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

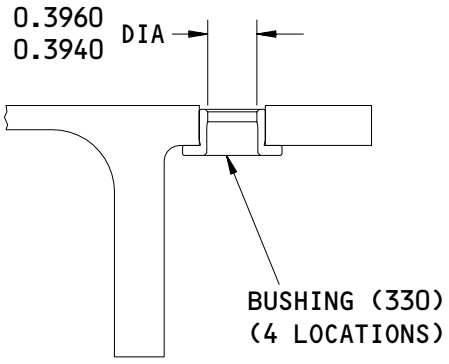
(6) Machine the inside diameter of bushings (340) to the dimensions shown in Fig. 601.

(7) Install the new bushings (335) on the inside of bushings (340) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(8) Machine the inside diameter of bushings (335) to the dimensions shown in Fig. 601.



A-A



B-B

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.03-0.05

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

1 INSIDE DIAMETER OF BUSHING (340)

113T1301-31
9-10 Swivel Plate Assembly Repair
Figure 601

K98875

SWIVEL PLATE - REPAIR 3-2

113T1301-33

1. General

A. This procedure has the data necessary to repair and refinish the swivel plate (345).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 1 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

(2) Shot peen: Intensity 0.008A

2. Swivel Plate Repair

A. References

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-20-01, Magnetic Particle Inspection

(4) SOPM 20-20-02, Penetrant Methods of Inspection

B. Procedure

(1) Machine the damaged holes for the bushings (330, 335, 340) to remove defects. Do not machine more than the limit shown in Fig. 601.

(2) Break all the sharp edges as shown in Fig. 601.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Shot peen the hole per SOPM 20-10-03. Make sure the surface finish of machined areas is 125 microinches prior to shot peening.

(5) Make the oversize bushings to replace the damaged bushings (330) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Prepare the surface and cadmium plate (F-16.11) the external surfaces of bushings (330). Cadmium plate is optional in the bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0005-0.0016 inch.

(f) Install the oversize bushings as shown in REPAIR 3-1.

(6) Make the oversize bushings to replace the damaged bushings (340) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES (Optional: 17-4PH CRES)
180-200 ksi

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Prepare the surface and cadmium plate.
Optional: Zinc-nickel plate.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0018-0.0037 inch.

(f) Install the oversize bushings as shown in REPAIR 3-1.

3. Swivel Plate Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00432 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

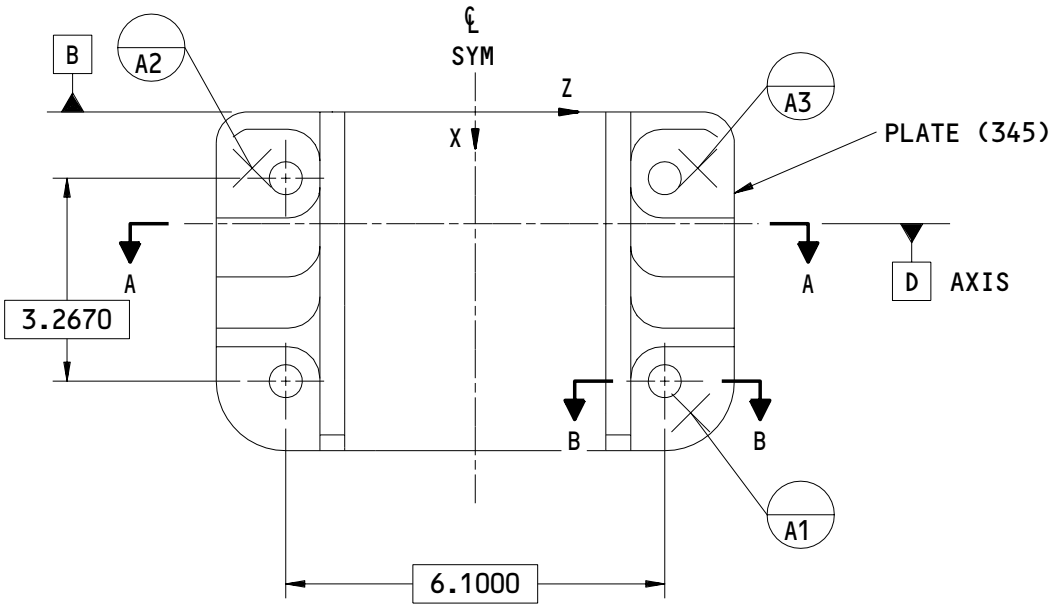
B. References

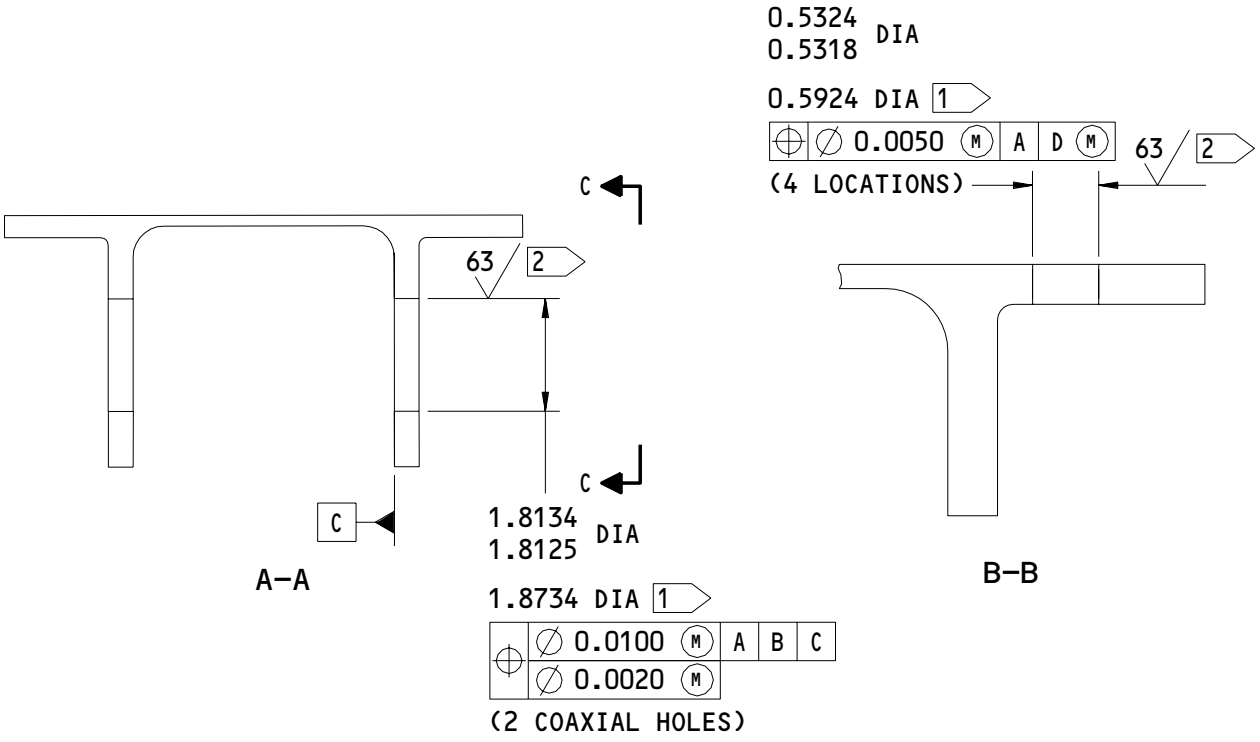
(1) SOPM 20-43-01, Chromic Acid Anodizing

C. Procedure (Fig. 601)

(1) Boric acid-sulfuric acid anodize (F-17.31) all over including in the holes for bushings (330, 340).

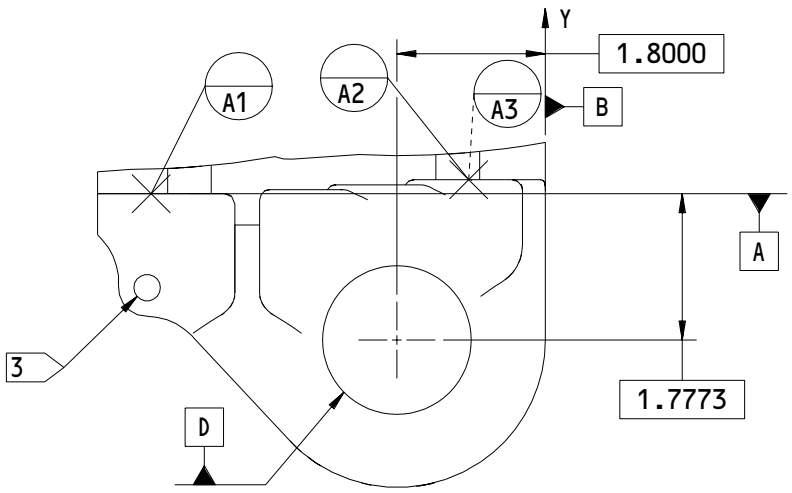
(2) Apply BMS 10-11, type 1 primer (F-20.02) all over except in holes.





113T1301-33
Plate Repair
Figure 601 (Sheet 1)

K98959



C–C

DATUM TARGET POINTS GENERAL DRAWING TOLERANCES DO NOT APPLY			
POINT	X	Y	Z
A1	4.8000	0.0000	3.5000
A2	0.9000	0.1700	-3.6000
A3	0.9000	0.1700	3.6000

1 REPAIR LIMIT

2 63 MICRO INCH SURFACE FINISH. HOLE DIAMETER AND SURFACE FINISH APPLY AFTER PEENING

3 DO NOT MASK HOLE DURING SHOT PEENING. VERIFICATION OF INTENSITY AND COVERAGE IN THE HOLE IS NOT REQUIRED. OVERSPRAY IS ALLOWED

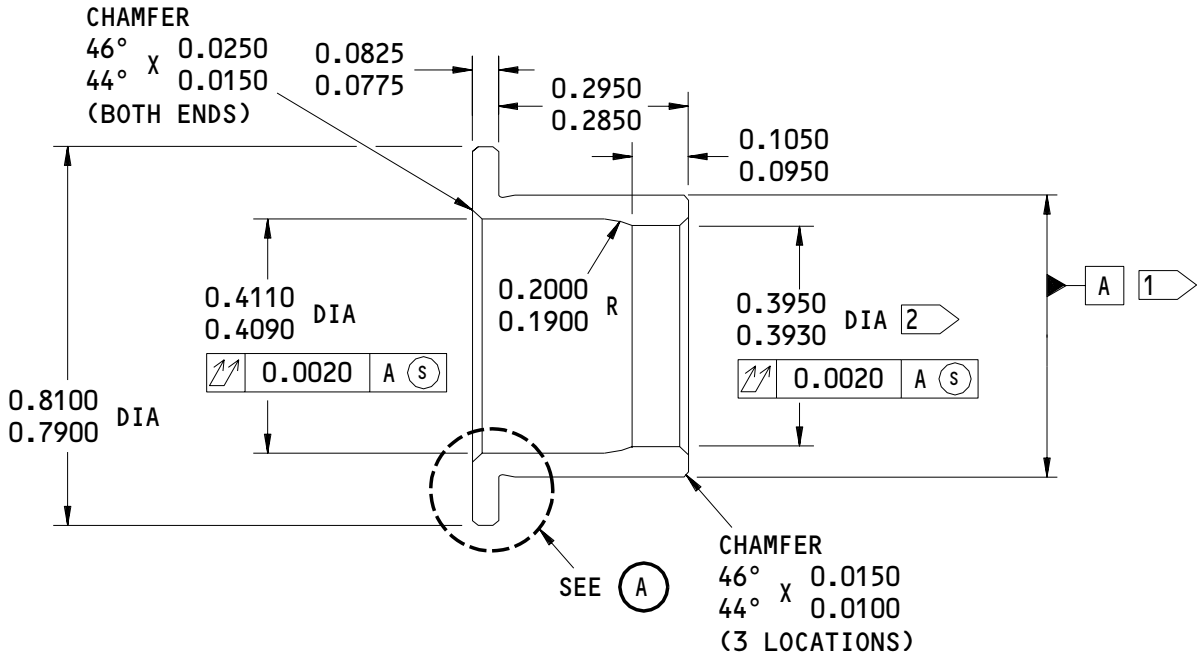
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.03–0.05

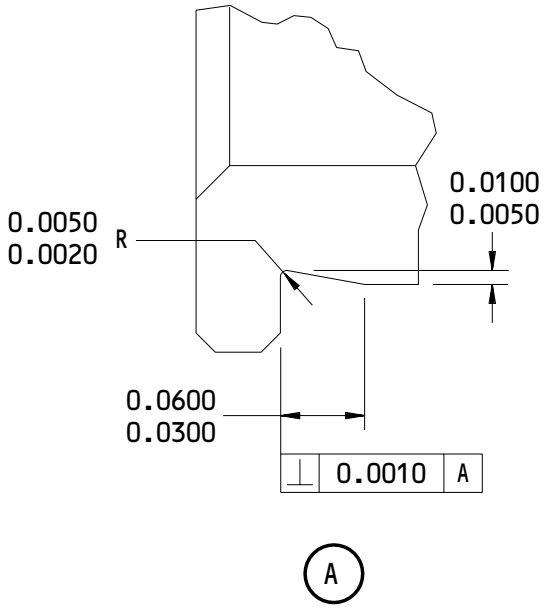
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

113T1301–33
Plate Repair
Figure 601 (Sheet 2)

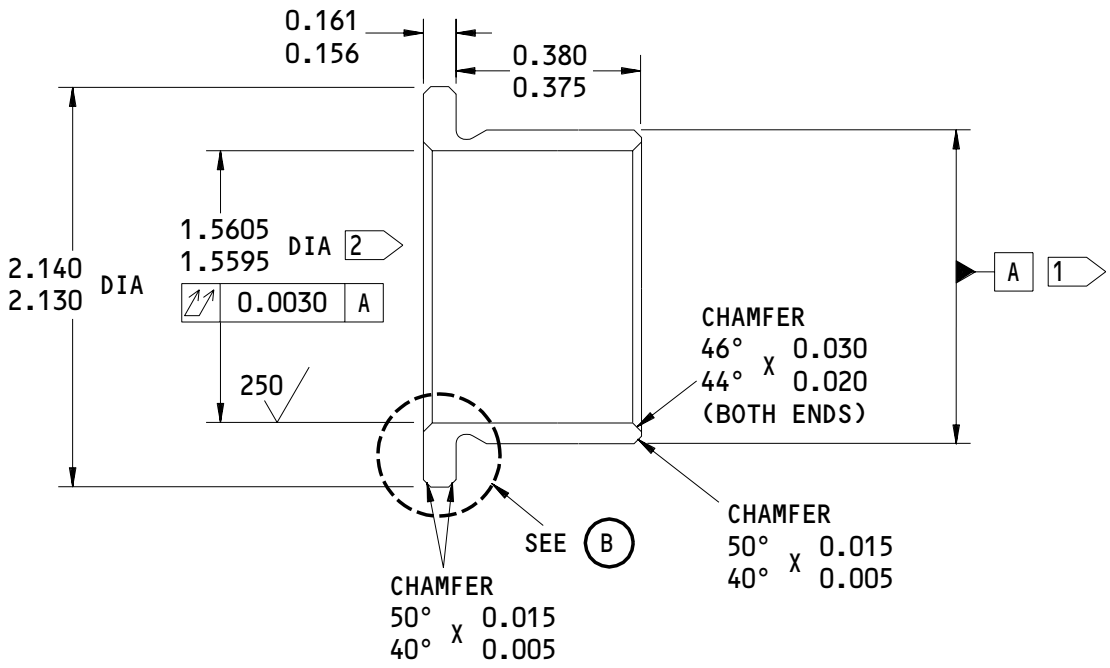


OVERSIZE REPLACEMENT FOR BUSHING (330)

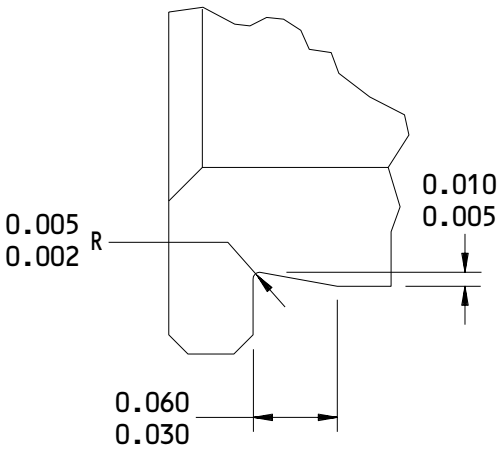


Oversize Bushing Details
Figure 602 (Sheet 1)

K99067

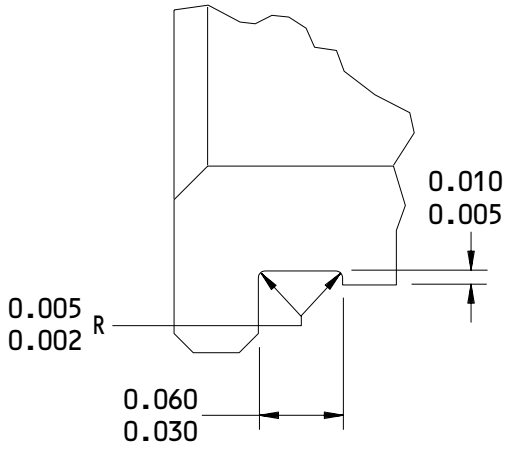


OVERSIZE REPLACEMENT FOR BUSHING (340)



TYPE 1

B



TYPE 2

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS INTERFERENCE

2 THE BUSHING INSIDE DIAMETER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBER REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K99082

9-10 BEAM ASSEMBLY - REPAIR 4-1

113T1301-41

1. General

   A. This procedure has the data necessary to replace bearing (375) and bushings (380, 385, 390) in the 9-10 beam assembly (350).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 1 for item numbers.

2. Bearing Replacement

   A. Procedure (Fig. 601)

      (1) Remove the bolts (355) and remove the retainers (360, 365), seals (370), and the damaged bearing (375) from the support beam (400).

      (2) If there is corrosion or damage in the bearing hole in the support beam (400), see REPAIR 4-2 for repair instruction.

      (3) Install the new bearing (375), spacers (375), and retainers (360, 365) in the support beam (400) with bolts (355).

3. Bushing Replacement

   A. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   B. Procedure (Fig. 601)

      (1) Remove the damaged bushings (380, 385, 390) from the beam assembly 9-10 (350).

         NOTE: You must remove the bushings (380) before you can remove the bushings (385).

      (2) If there is corrosion or damage in the bushing holes in the support beam (400), see REPAIR 4-2 for repair instruction.

(3) Install the new bushings (390) in the support beam (400). Use the shrink fit method (SOPM 20-50-03).

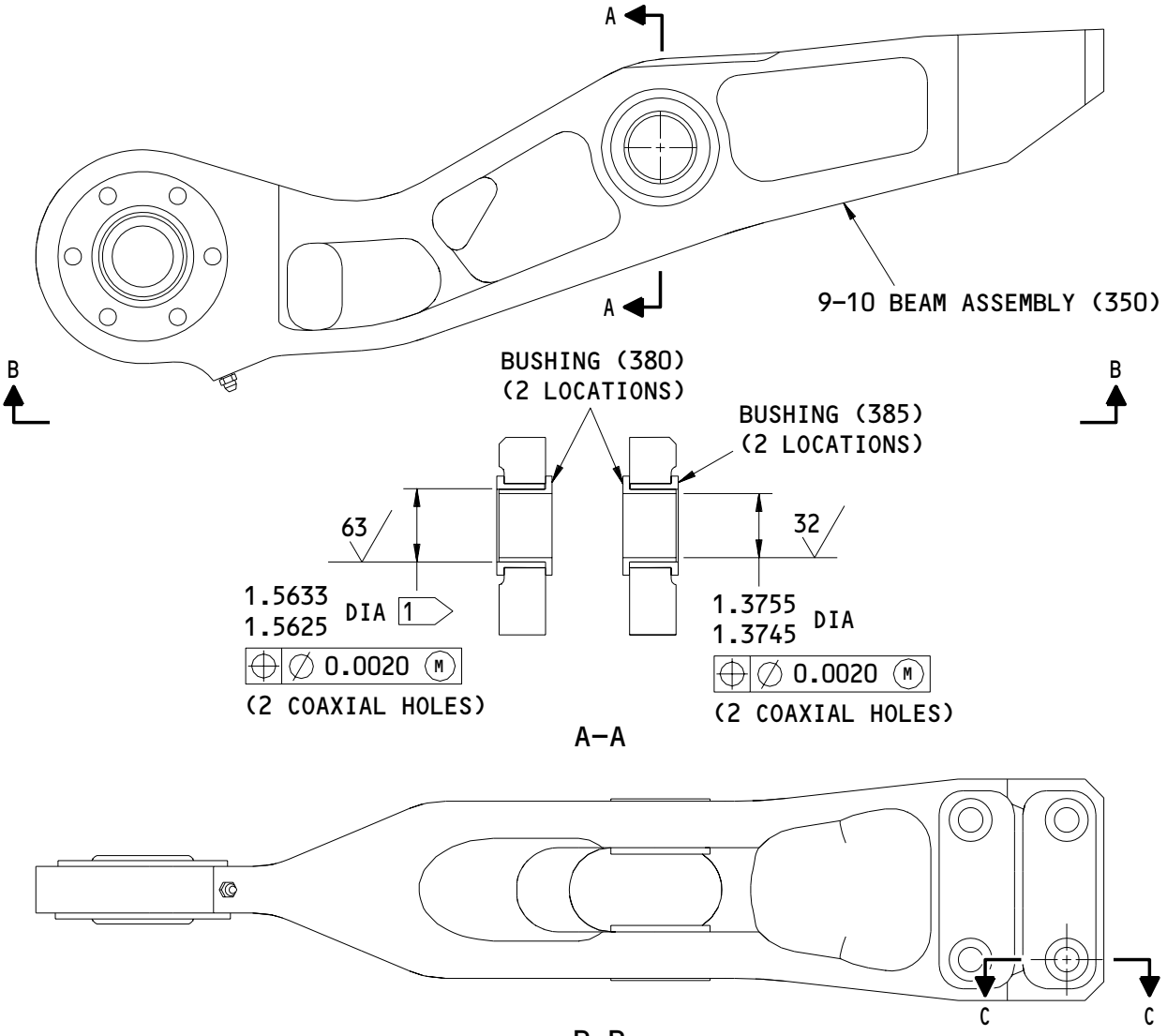
(4) Machine the inside diameter of bushings (390) to the dimensions shown in Fig. 601.

(5) Install the new bushings (385) in the support beam (400). Use the shrink fit method (SOPM 20-50-03).

(6) Machine the inside diameter of bushings (385) to the dimensions shown in Fig. 601.

(7) Install the new bushings (380) on the inside of bushings (385). Use the shrink fit method (SOPM 20-50-03).

(8) Machine the inside diameter of bushings (380) to the dimensions shown in Fig. 601.



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.03–0.05

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

1 INSIDE DIAMETER OF BUSHING (385)

113T1301-41
9-10 Beam Assembly Repair
Figure 601

K99154

SUPPORT BEAM - REPAIR 4-2

113T1301-43

1. General

A. This procedure has the data necessary to repair and refinish the support beam (400).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 1 for item numbers.

E. General repair details:

(1) Material: Titanium alloy

(2) Shot peen: Intensity 0.008A

2. Support Beam Repair

A. References

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

B. Procedure

(1) Machine the damaged holes for the bushings (380, 385, 390) to remove defects. Do not machine more than the limit shown in Fig. 601.

(2) Break all the sharp edges as shown in Fig. 601.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Shot peen the holes per SOPM 20-10-03.

(5) Make the oversize bushings to replace the damaged bushings (385) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES (Optional: 17-4PH CRES)
180-200 ksi

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Passivate (F-17.25) the bushing bore. Mask all other areas.

(e) Make sure the interference between the bushing outside diameter and the oversize hole insdie diameter is 0.0018-0.0037 inch.

(f) Install the oversize bushings as shown in REPAIR 4-1.

(6) Make the oversize bushings to replace the damaged bushings (390) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges 0.005-0.015 inch.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Passivate (F-17.25).

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0005-0.0016 inch.

(f) Install the oversize bushings as shown in REPAIR 4-1.

3. Support Beam Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00432 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

(1) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

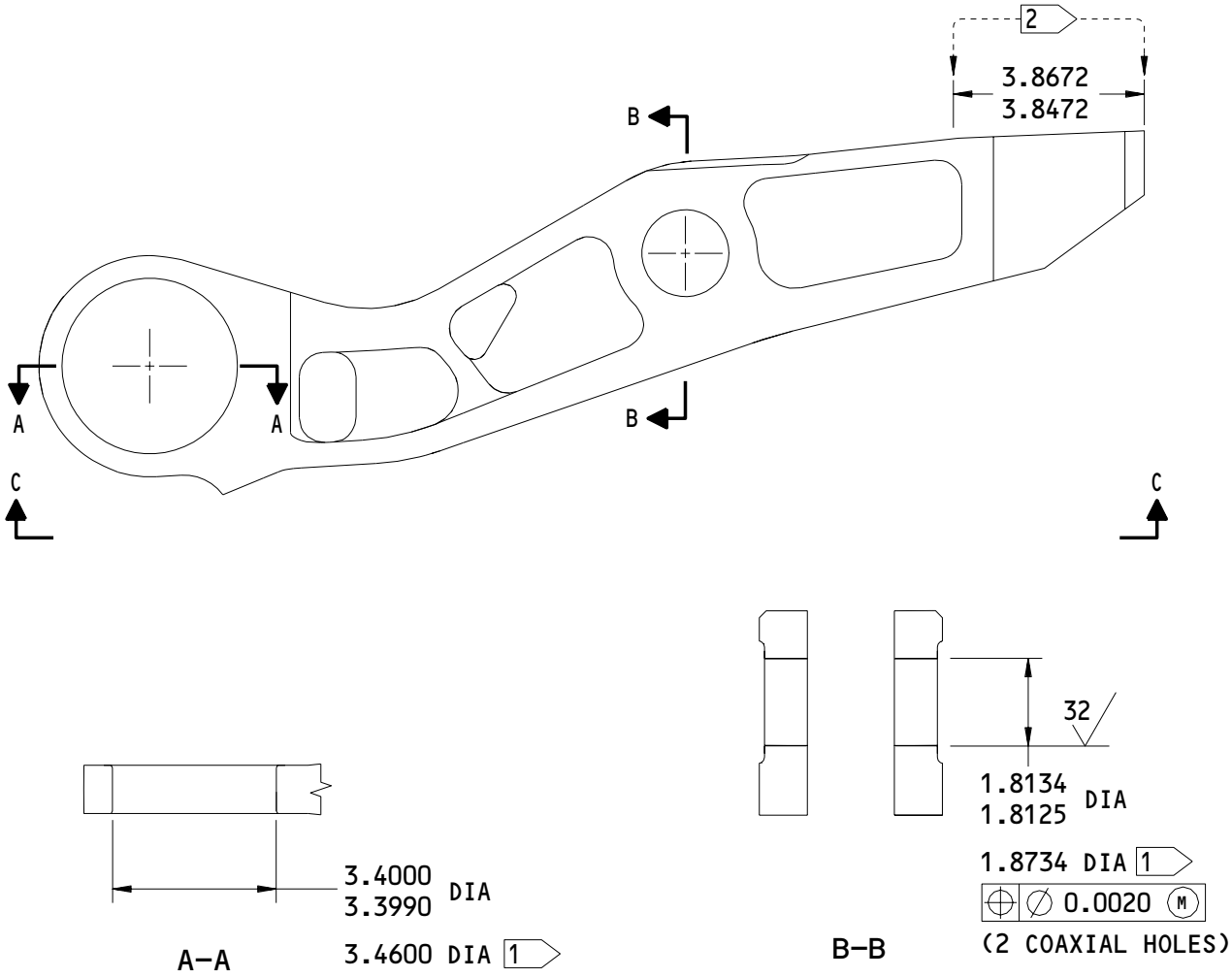
(2) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) On area indicated by flagnote 2:

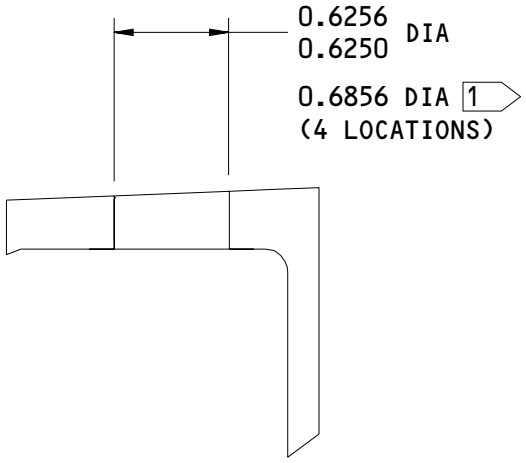
(a) Clean the area (F-14.882).

(b) Apply BMS 10-11, type 1 primer (F-20.02).



113T1301-43
Support Beam Repair
Figure 601 (Sheet 1)

K99192



D–D

1 REPAIR LIMIT

2 F–14.882 + F–20.02

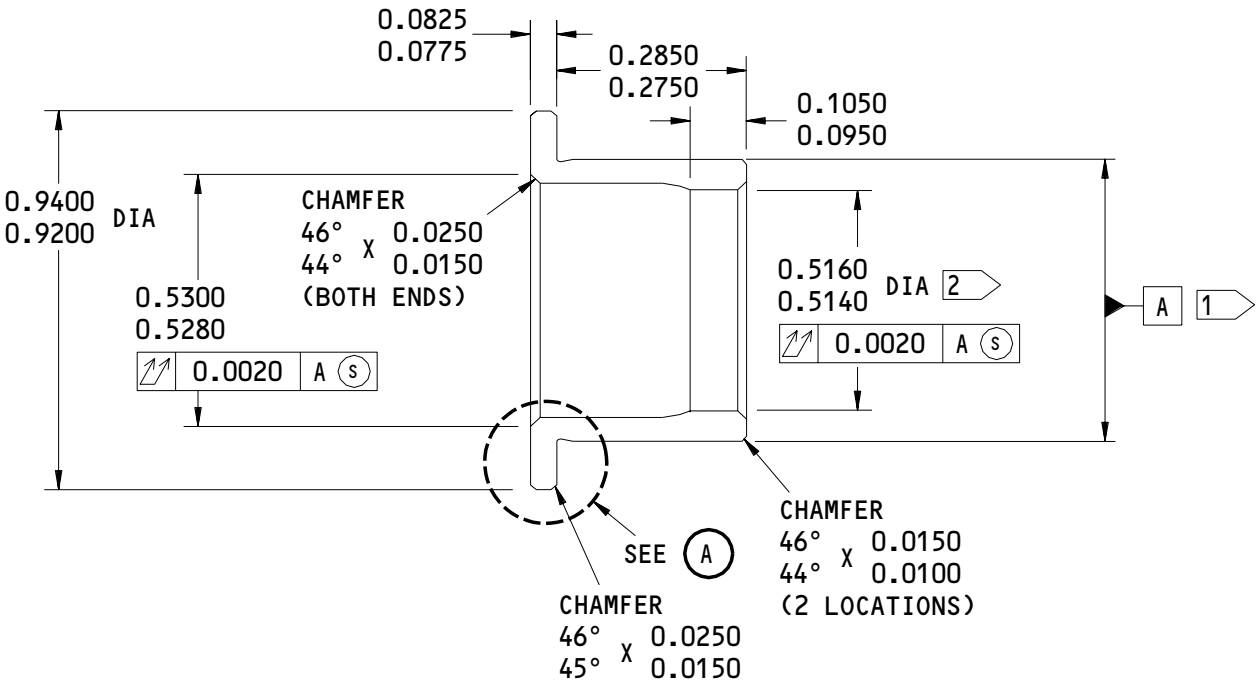
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.010–0.040

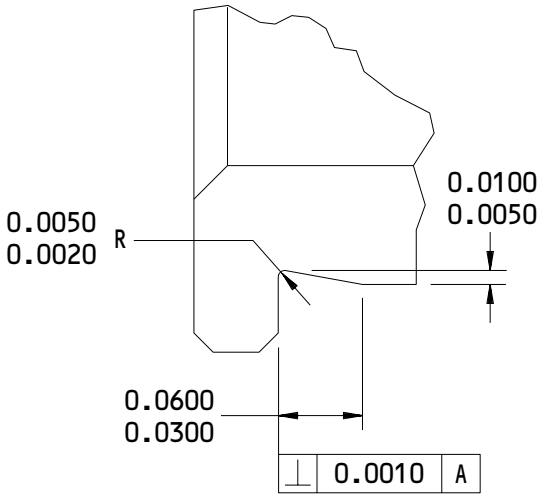
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

113T1301–43
Support Beam Repair
Figure 601 (Sheet 2)



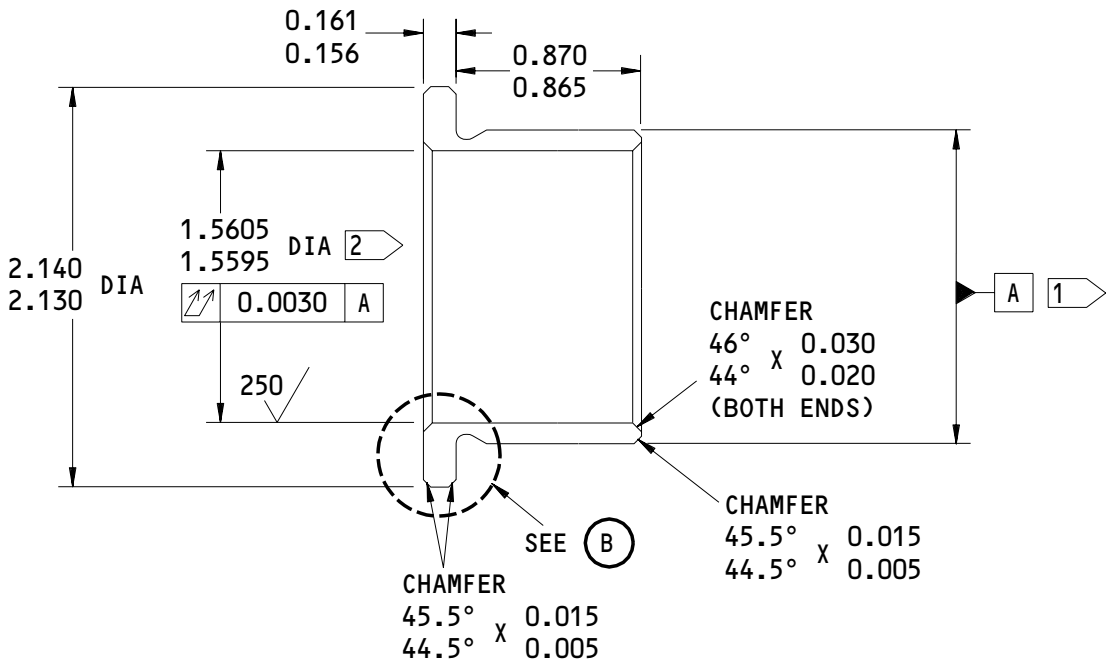
OVERSIZE REPLACEMENT FOR BUSHING (390)



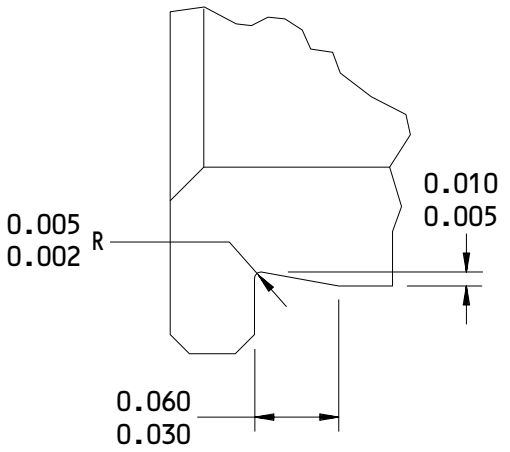
A

Oversize Bushing Details
Figure 602 (Sheet 1)

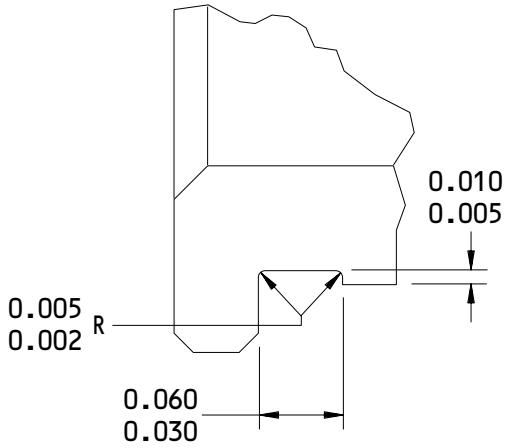
K99646



OVERSIZE REPLACEMENT FOR BUSHING (385)



TYPE 1



TYPE 2

B

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS INTERFERENCE

2 THE BUSHING INSIDE DIAMETER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBER REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K99334

9-10 SWIVEL PLATE ASSEMBLY - REPAIR 5-1

113T1302-31

1. General

   A. This procedure has the data necessary to replace the bushings (355, 360) in the 9-10 swivel plate assembly (345).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 2 for item numbers.

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00490 Sealant -- BMS5-95 (SOPM 20-60-04)

   B. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   C. Procedure (Fig. 601)

      (1) Remove the damaged bushings (350, 355, 360) from the swivel plate (365).

         NOTE: You must remove the bushings (355) before you can remove the bushings (360).

      (2) If there is corrosion or damage in the bushing holes in the swivel plate (365), see REPAIR 5-2 for repair instruction.

      (3) Install the new bushings (350) in the swivel plate (365) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

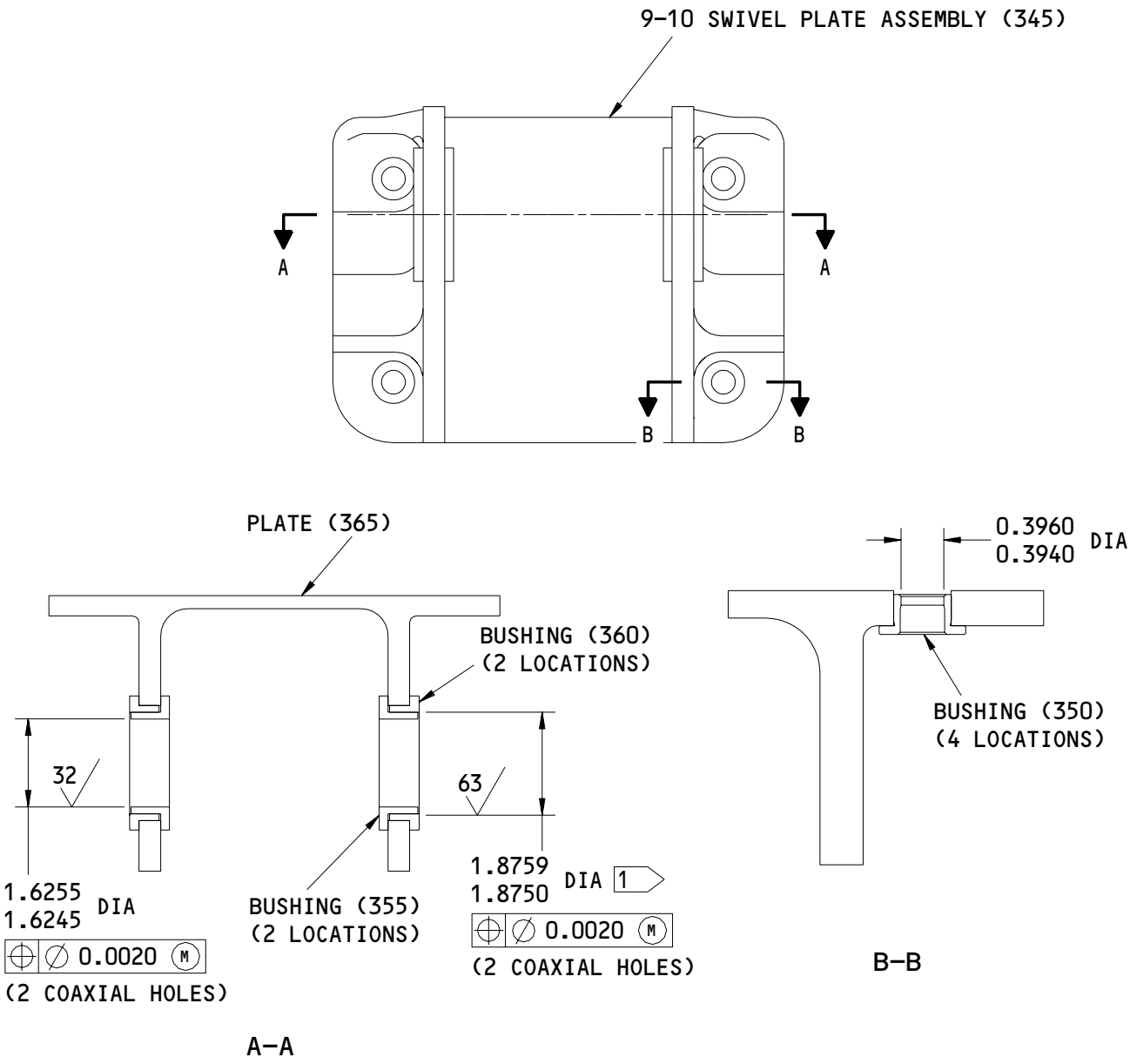
      (4) Machine the inside diameter of bushings (350) to the dimensions shown in Fig. 601.

(5) Install the new bushings (360) in the swivel plate (365) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(6) Machine the inside diameter of bushings (360) to the dimensions shown in Fig. 601.

(7) Install the new bushings (355) on the inside of bushings (360) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(8) Machine the inside diameter of bushings (355) to the dimensions shown in Fig. 601.



1 INSIDE DIAMETER OF BUSHING (360)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBER REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

113T1302-31
9-10 Swivel Plate Assembly Repair
Figure 601

K99361

SWIVEL PLATE - REPAIR 5-2

113T1302-33

1. General

A. This procedure has the data necessary to repair and refinish the swivel plate (365).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 1 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

(2) Shot peen: Intensity 0.008A

2. Swivel Plate Repair

A. References

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-20-01, Magnetic Particle Inspection

(4) SOPM 20-20-02, Penetrant Methods of Inspection

B. Procedure

(1) Machine the damaged holes for the bushings (350, 335, 360) to remove defects. Do not machine more than the limit shown in Fig. 601.

(2) Break all the sharp edges as shown in Fig. 601.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Shot peen the hole per SOPM 20-10-03. Make sure the surface finish of machined areas is 125 microinches prior to shot peening.

(5) Make the oversize bushings to replace the damaged bushings (350) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Prepare the surface and cadmium plate (F-16.11) the external surfaces of bushings (350). Cadmium plate is optional in the bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0005-0.0016 inch.

(f) Install the oversize bushings as shown in REPAIR 5-1.

(6) Make the oversize bushings to replace the damaged bushings (360) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES (Optional: 17-4PH CRES)
180-200 ksi

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Prepare the surface and cadmium plate.
Optional: Zinc-nickel plate.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0022-0.0042 inch.

(f) Install the oversize bushings as shown in REPAIR 5-1.

3. Swivel Plate Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00432 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

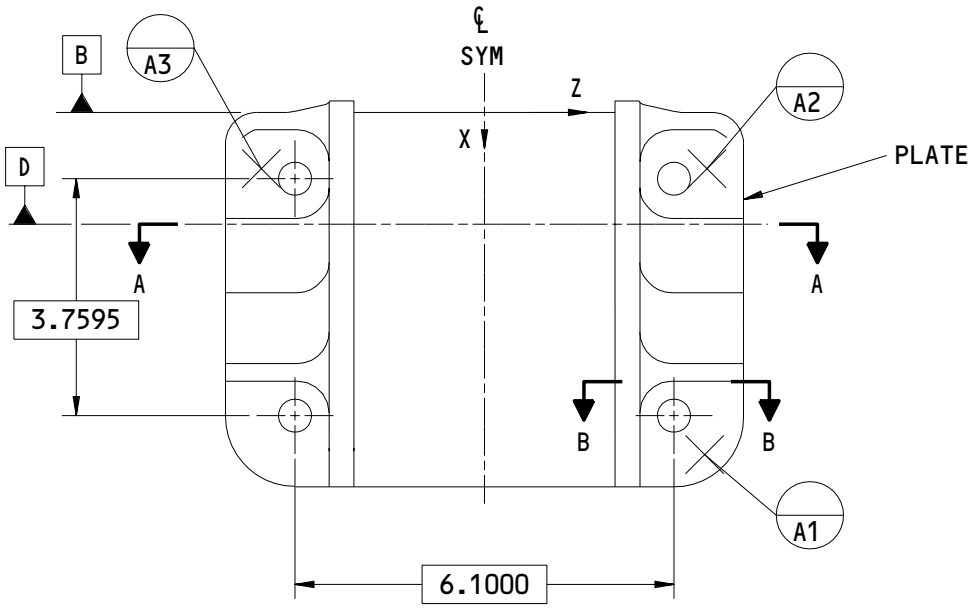
B. References

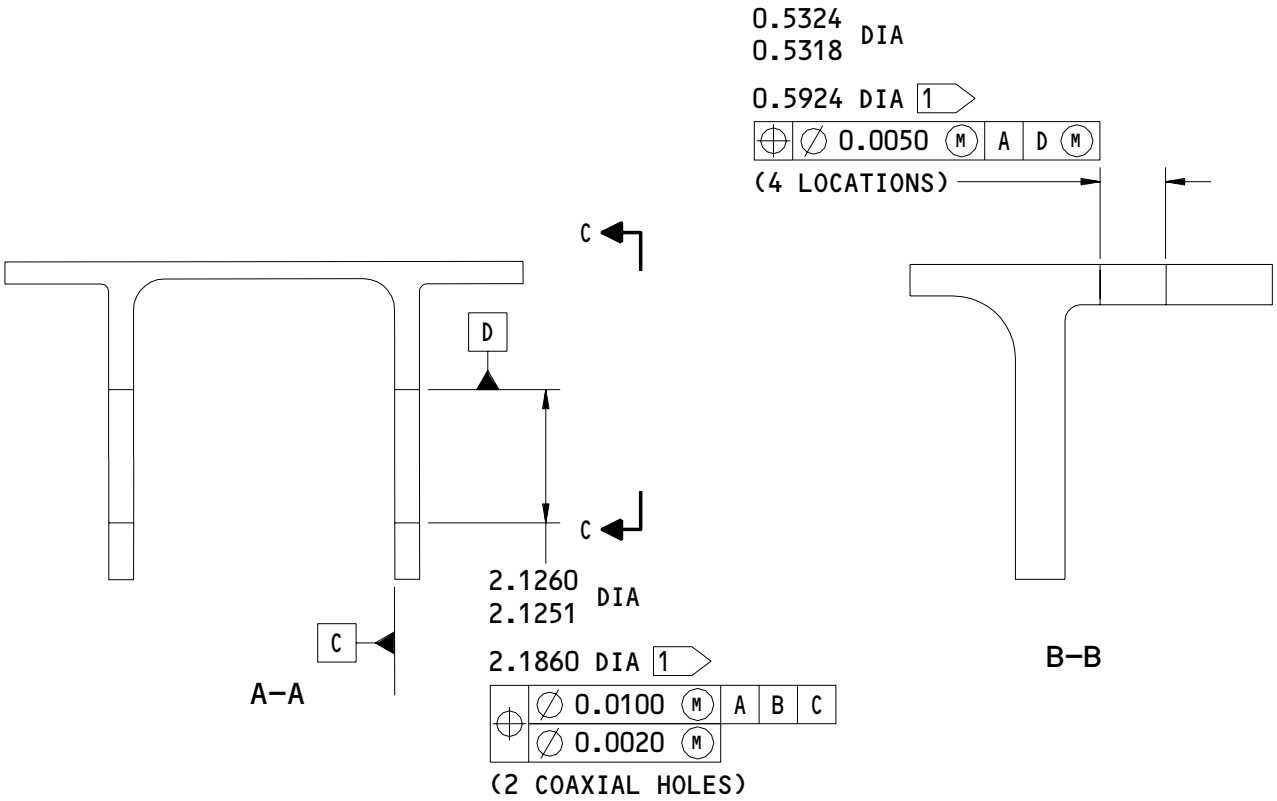
(1) SOPM 20-43-01, Chromic Acid Anodizing

C. Procedure (Fig. 601)

(1) Boric acid-sulfuric acid anodize (F-17.31) all over including in the holes for bushings (330, 340).

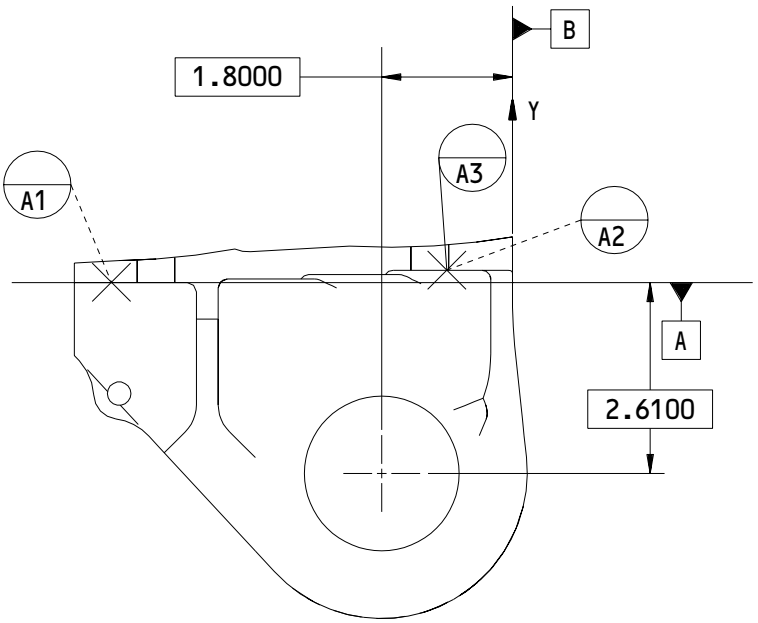
(2) Apply BMS 10-11, type 1 primer (F-20.02) all over except in holes.





113T1302-33
Plate Repair
Figure 601 (Sheet 1)

K99429



C–C

DATUM TARGET POINTS GENERAL DRAWING TOLERANCES DO NOT APPLY			
POINT	X	Y	Z
A1	5.5000	0.0000	3.5000
A2	0.9000	0.1700	3.6000
A3	0.9000	0.1700	-3.6000

1 REPAIR LIMIT

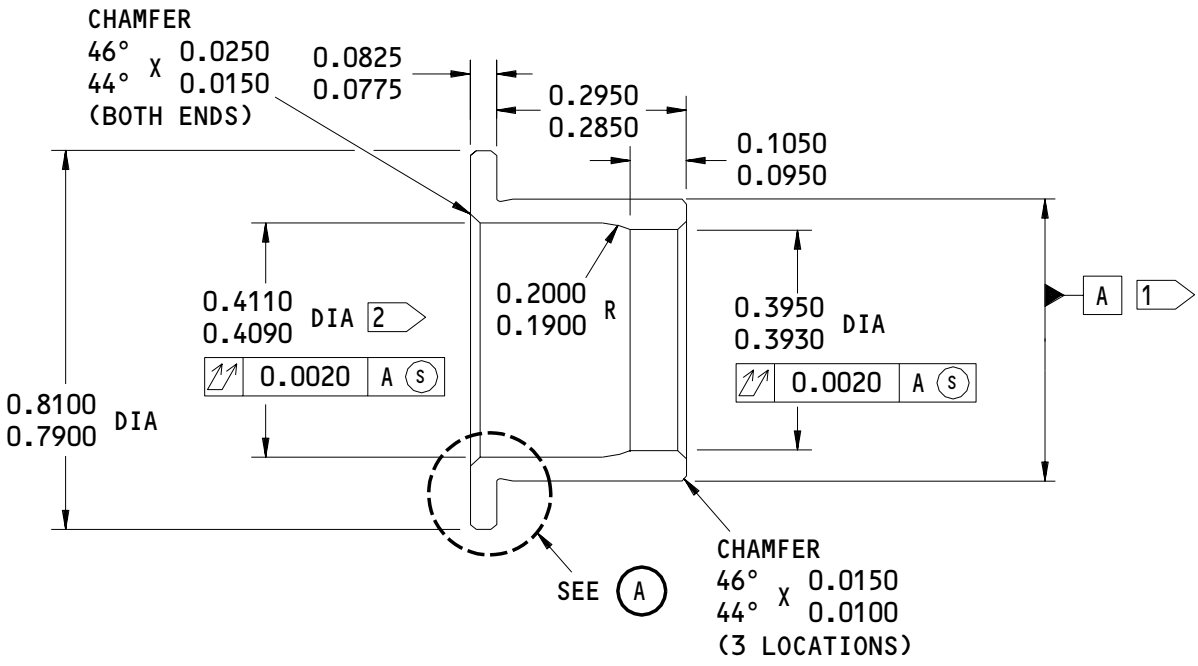
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

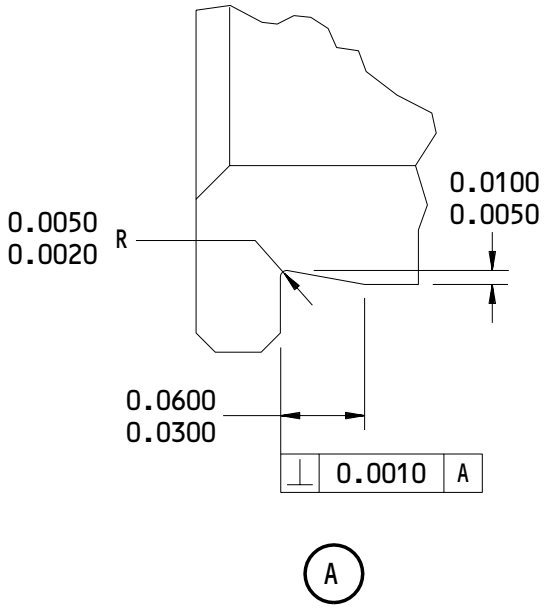
ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

113T1302-33
Plate Repair
Figure 601 (Sheet 2)

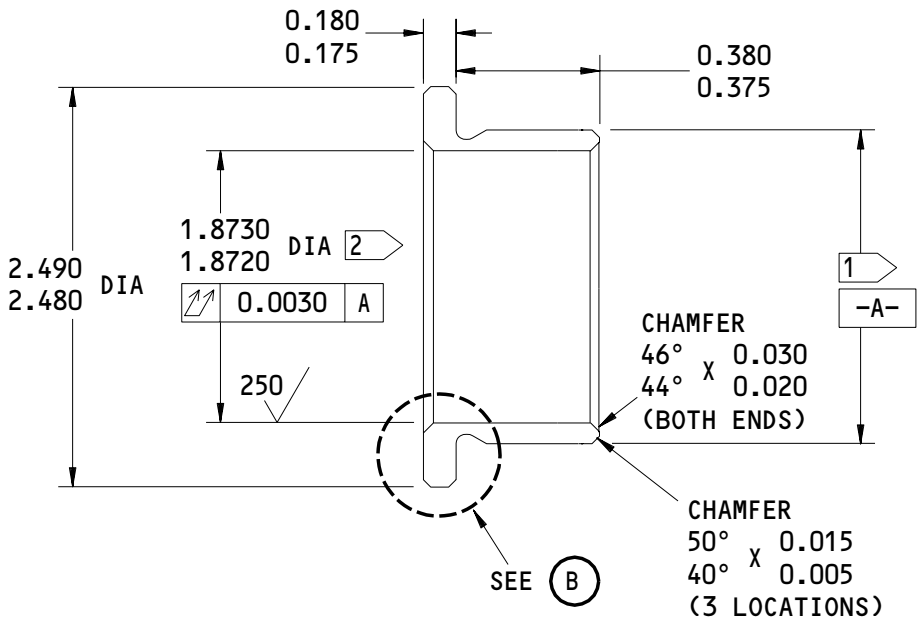


OVERSIZE REPLACEMENT FOR BUSHING (350)

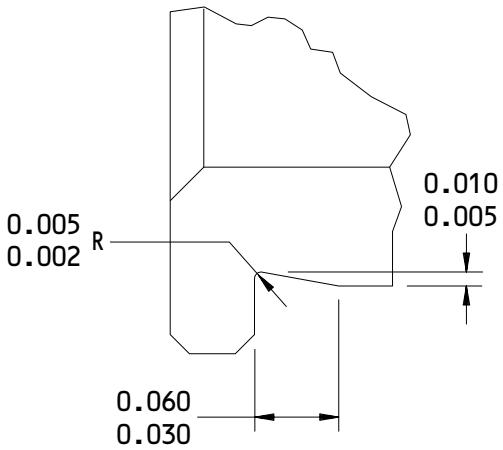


Oversize Bushing Details
Figure 602 (Sheet 1)

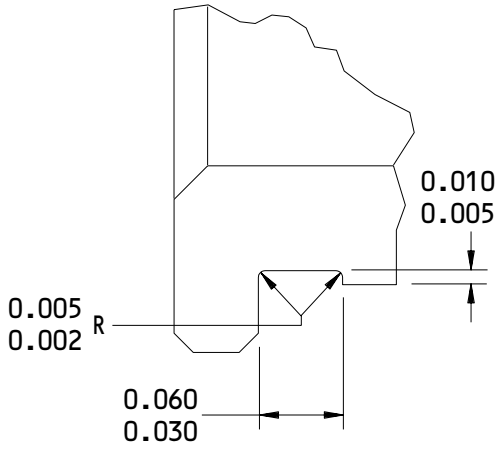
K99468



OVERSIZE REPLACEMENT FOR BUSHING (360)



TYPE 1



TYPE 2

B

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS INTERFERENCE

2 THE BUSHING INSIDE DIAMETER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBER REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K99471

9-10 BEAM ASSEMBLY - REPAIR 6-1

113T1302-41

1. General

   A. This procedure has the data necessary to replace bearing (395) and bushings (400, 405, 410) in the 9-10 beam assembly (370).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 2 for item numbers.

2. Bearing Replacement

   A. Procedure (Fig. 601)

      (1) Remove the bolts (375) and remove the retainers (380, 385), seals (390), and the damaged bearing (395) from the support beam (420).

      (2) If there is corrosion or damage in the bearing hole in the support beam (420), see REPAIR 6-2 for repair instruction.

      (3) Install the new bearing (395), spacers (390), and retainers (380, 385) in the support beam (420) with bolts (375).

3. Bushing Replacement

   A. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   B. Procedure (Fig. 601)

      (1) Remove the damaged bushings (400, 405, 410) from the beam assembly 9-10 (420).

         NOTE: You must remove the bushings (400) before you can remove the bushings (405).

      (2) If there is corrosion or damage in the bushing holes in the support beam (420), see REPAIR 6-2 for repair instruction.

(3) Install the new bushings (410) in the support beam (420) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

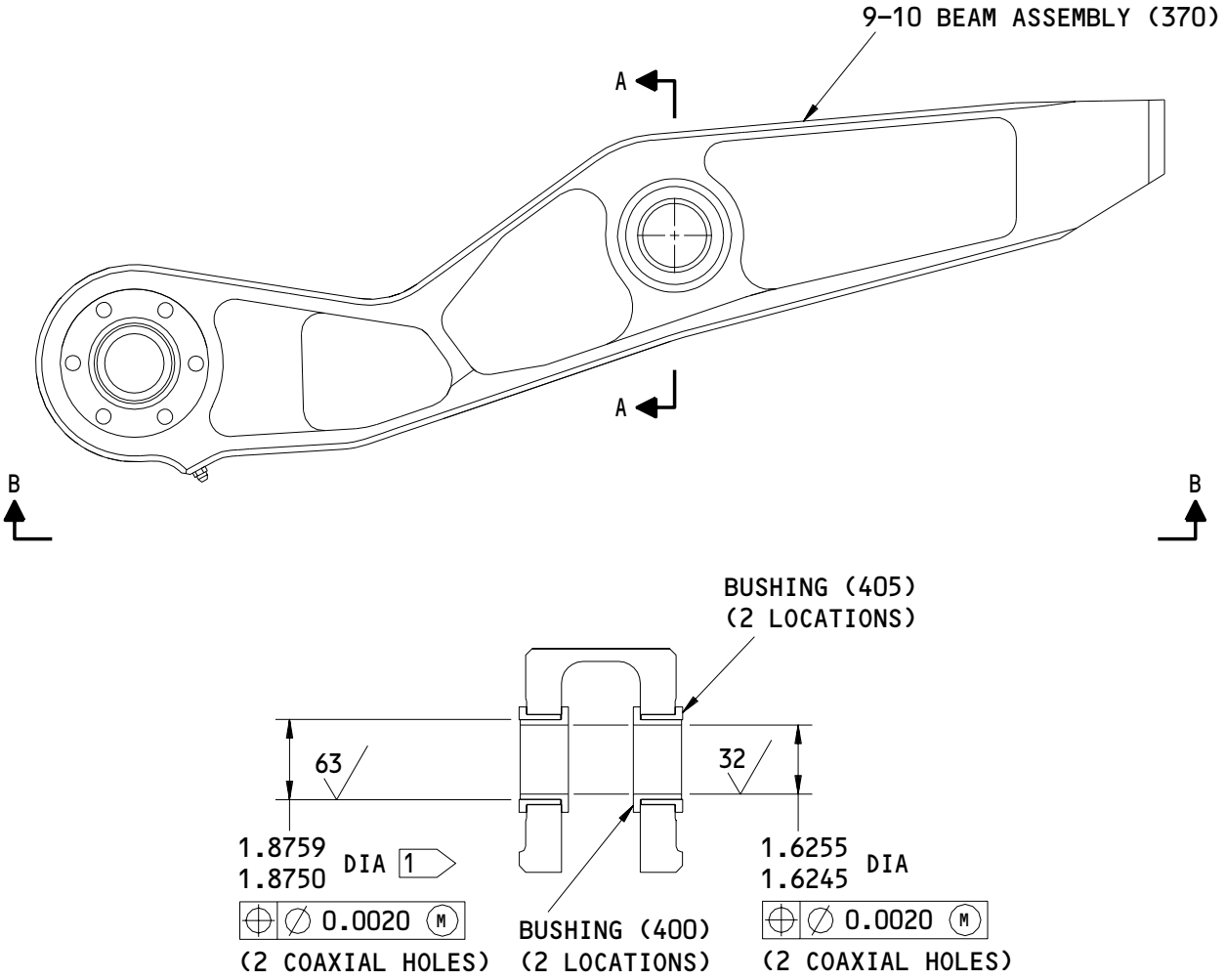
(4) Machine the inside diameter of bushings (410) to the dimensions shown in Fig. 601.

(5) Install the new bushings (405) in the support beam (420) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(6) Machine the inside diameter of bushings (405) to the dimensions shown in Fig. 601.

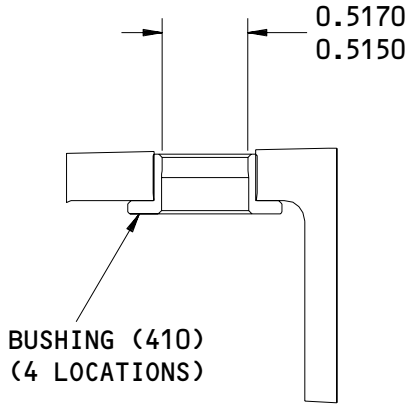
(7) Install the new bushings (400) on the inside of bushings (405) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(8) Machine the inside diameter of bushings (400) to the dimensions shown in Fig. 601.



113T1302-41
9-10 Beam Assembly Repair
Figure 601 (Sheet 1)

K99535



C–C

1 INSIDE DIAMETER OF BUSHING (405)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

113T1302-41
9-10 Beam Assembly Repair
Figure 601 (Sheet 2)

K99565

SUPPORT BEAM - REPAIR 6-2

113T1302-43

1. General

A. This procedure has the data necessary to repair and refinish the support beam (420).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 2 for item numbers.

E. General repair details:

(1) Material: Titanium alloy

(2) Shot peen: Intensity 0.010A
Coverage 2.0

2. Support Beam Repair

A. Reference

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

B. Procedure

(1) Machine the damaged holes for the bushings (400, 405, 410) to remove defects. Do not machine more than the limit shown in Fig. 601.

(2) Break all the sharp edges 0.010-0.040R inch.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Shot peen the holes per SOPM 20-10-03.

(5) Make the oversize bushings to replace the damaged bushings (410) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges 0.005-0.015 inch.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Passivate (F-17.25) the oversize bushings.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0005-0.0016 inch.

(f) Install the oversize bushings as shown in REPAIR 6-1.

(6) Make the oversize bushings to replace the damaged bushings (405) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES (Optional: 17-4PH CRES)
180-200 ksi

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Passivate (F-17.25) the oversize bushings.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0021-0.0043 inch.

(f) Install the oversize bushings as shown in REPAIR 6-1.

3. Support Beam Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00432 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

(1) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

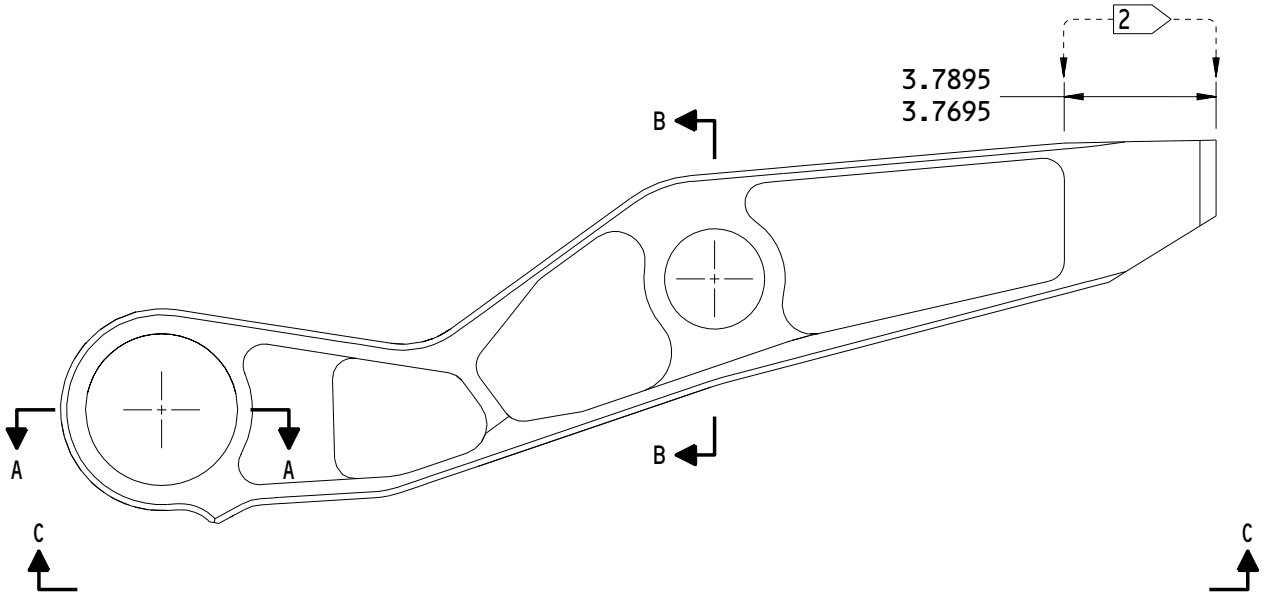
(2) SOPM 20-60-02, Finishing Materials

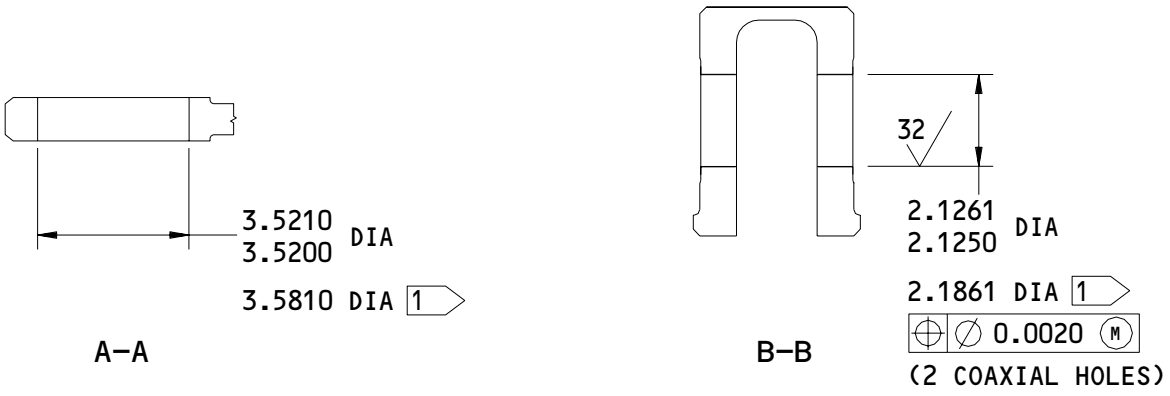
C. Procedure

(1) On area indicated by flagnote 2:

(a) Clean the area (F-14.882).

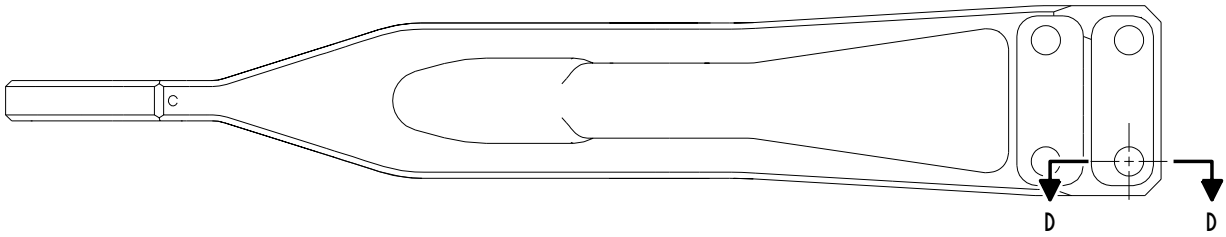
(b) Apply BMS 10-11, type 1 primer (F-20.02).



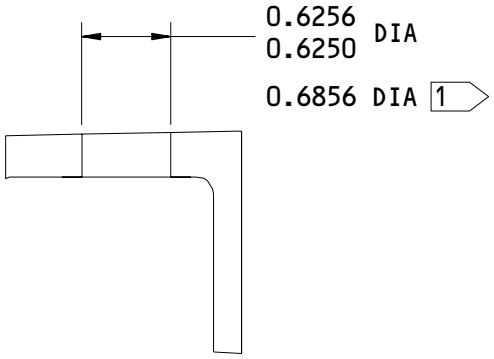


113T1302-43
Support Beam Repair
Figure 601 (Sheet 1)

K99605



C–C



D–D

1 REPAIR LIMIT

2 F-14.882 + F-20.02

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

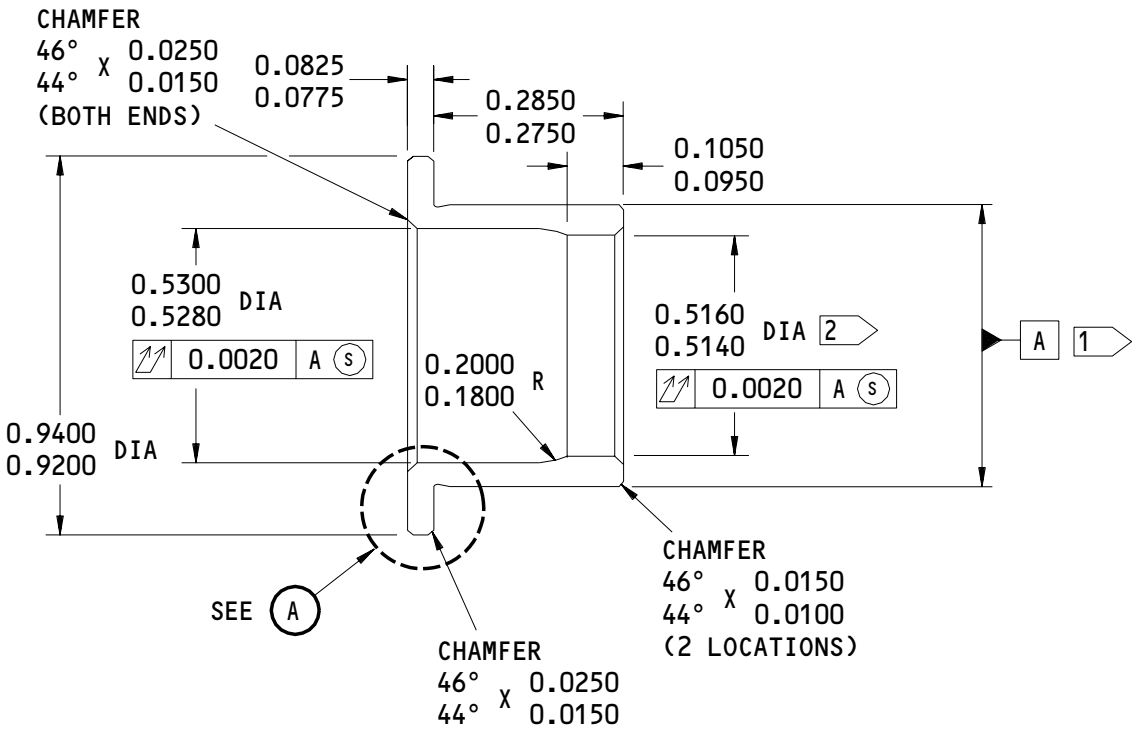
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

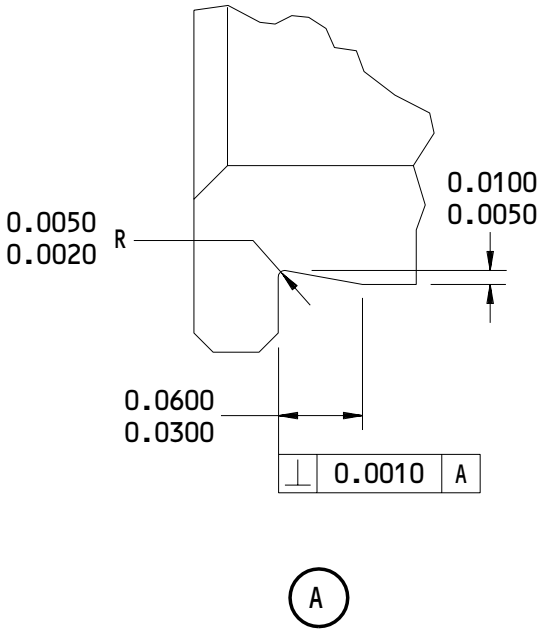
ALL DIMENSIONS ARE IN INCHES

113T1302-43
Support Beam Repair
Figure 601 (Sheet 2)

K99621

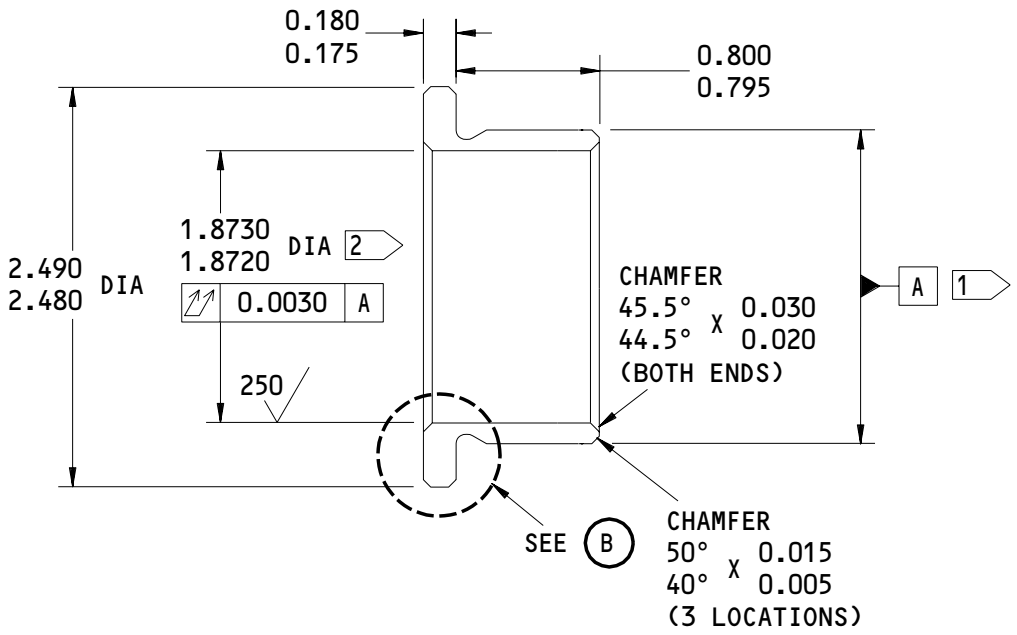


OVERSIZE REPLACEMENT FOR BUSHING (410)

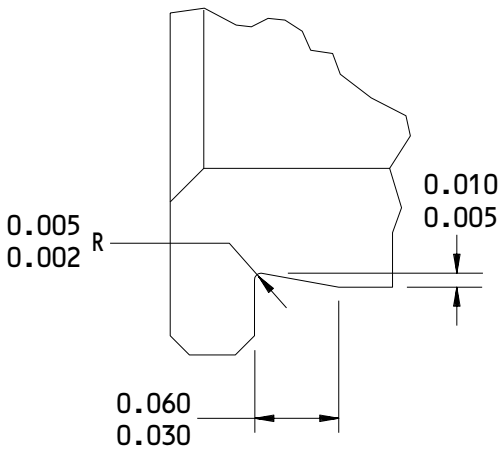


Oversize Bushing Details
Figure 602 (Sheet 1)

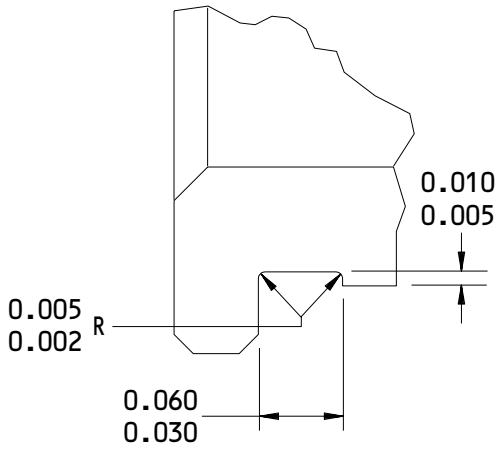
K99660



OVERSIZE REPLACEMENT FOR BUSHING (405)



TYPE 1



TYPE 2

B

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS INTERFERENCE

2 THE BUSHING INSIDE DIAMETER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBER REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K99667

6-9 LINK ASSEMBLY - REPAIR 7-1

113T1307-41

1. General

   A. This procedure has the data necessary to replace the bushings (150, 155, 160, 165, 170, 175) and to repair and refinish the 6-9 link assembly (140).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 1 for item numbers.

   E. General repair details:

      (1) Material: Aluminum alloy

      (2) Shot peen: Intensity 0.012A

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00490 Sealant -- BMS5-95 (SOPM 20-60-04)

   B. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   C. Procedure (Fig. 601)

      (1) Remove the damaged bushings (150, 155, 160, 165, 170, 175) from the 6-9 link assembly (140).

         NOTE: You must remove the bushings (150) before you can remove the bushings (155), and bushings (160, 165) before bushings (170).

(2) If there is corrosion or damage in the bushing holes in the 6-9 link assembly (140), see the 6-9 Link Assembly Repair section for repair instruction.

(3) Install the new bushings (175) in the 6-9 link assembly (140) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(4) Machine the inside diameter of bushings (175) to the dimensions shown in Fig. 601.

(5) Install the new bushings (170) in the 6-9 link assembly (140) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(6) Machine the inside diameter of bushings (170) to the dimensions shown in Fig. 601.

(7) Install the new bushings (160, 165) on the inside of bushings (170) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(8) Machine the inside diameter of bushings (160, 165) to the dimensions shown in Fig. 601.

(9) Install the new bushings (155) on the 6-9 link assembly (140) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(10) Machine the inside diameter of bushings (155) to the dimensions shown in Fig. 601.

(11) Install the new bushings (150) on the inside of bushings (155) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(12) Machine the inside diameter of bushings (150) to the dimensions shown in Fig. 601.

3. 6-9 Link Assembly Repair

A. References

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-20-01, Magnetic Particle Inspection

(4) SOPM 20-20-02, Penetrant Methods of Inspection

B. Procedure

(1) Machine the damaged holes for the bushings (155, 170, 175) to remove defects. Do not machine more than the limit shown in Fig. 601.

NOTE: Do not remove the fasteners or disassemble the 6-9 link assembly (140). Machine the 6-9 link assembly (140) as a unit.

(2) Break all the sharp edges as shown in Fig. 601.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Shot peen the hole per SOPM 20-10-03. Make sure the surface finish of machined areas is 125 microinches prior to shot peening.

(5) Make the oversize bushings to replace the damaged bushings (155) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-16.11) on area indicated by flagnote 2. On other areas, cadmium plate (F-16.11) is optional.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0010-0.0027 inch.

(6) Install the oversize bushings as shown in REPAIR 7-1.

(7) Make the oversize bushings to replace the damaged bushings (170) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-16.11) on area indicated by flagnote 2. On other areas, cadmium plate (F-16.11) is optional.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0011-0.0028 inch.

(8) Install the oversize bushings as shown in REPAIR 7-1.

(9) Make the oversize bushings to replace bushings (175) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- Aluminum-nickel-bronze

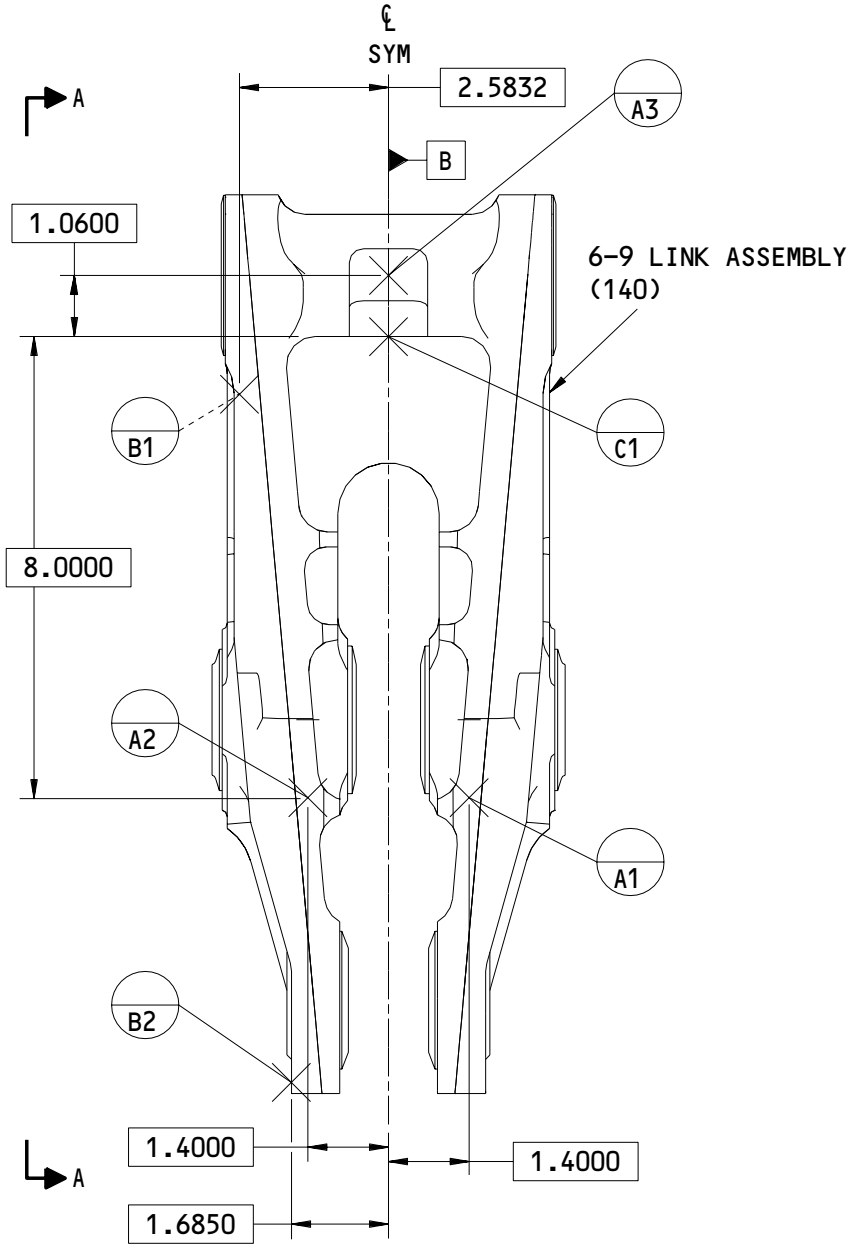
(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-16.11) on area indicated by flagnote 2. On other areas, cadmium plate (F-16.11) is optional.

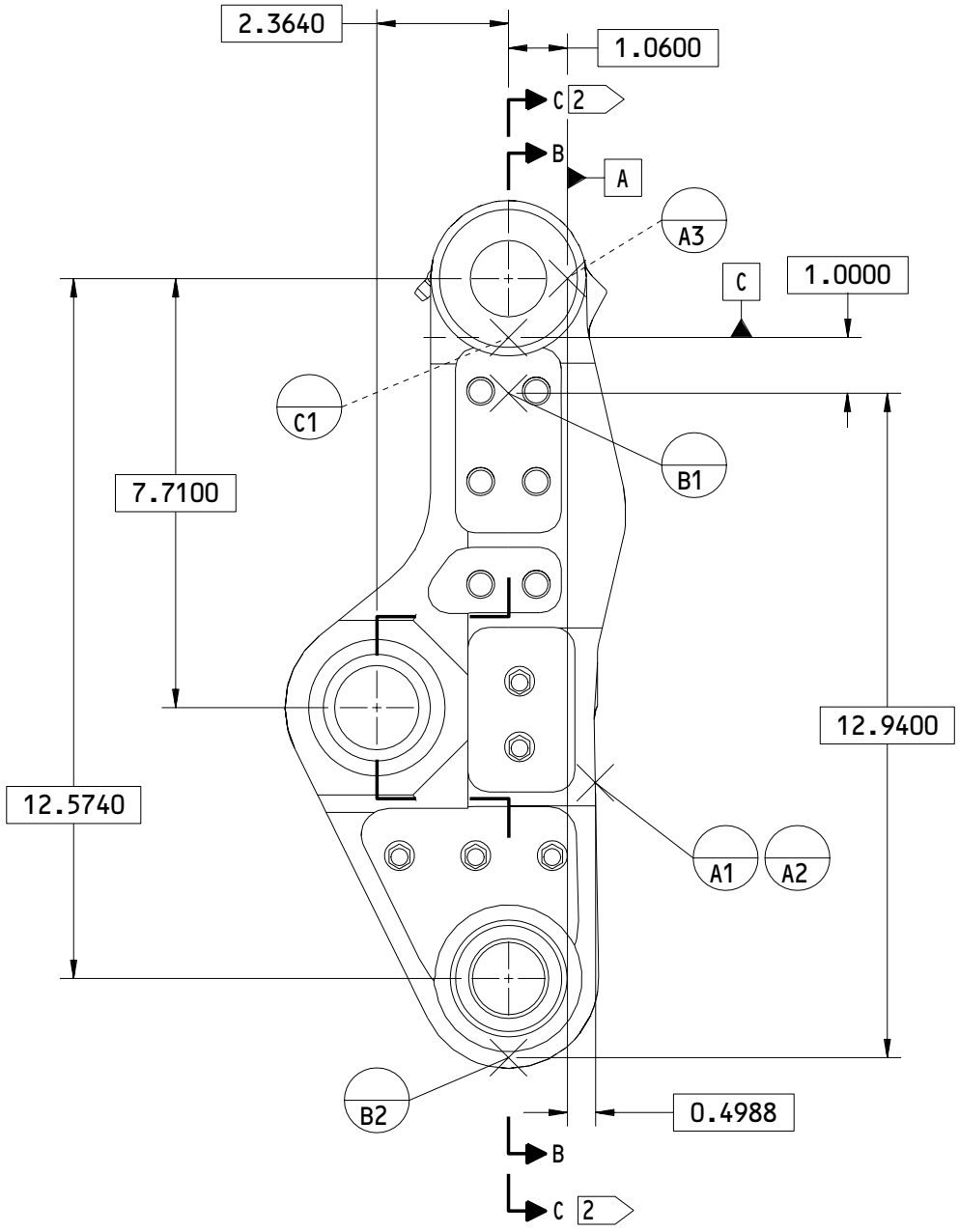
(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0010-0.0026 inch.

(10) Install the oversize bushings as shown in REPAIR 7-1.



113T1307-41
6-9 Link Assembly Repair
Figure 601 (Sheet 1)

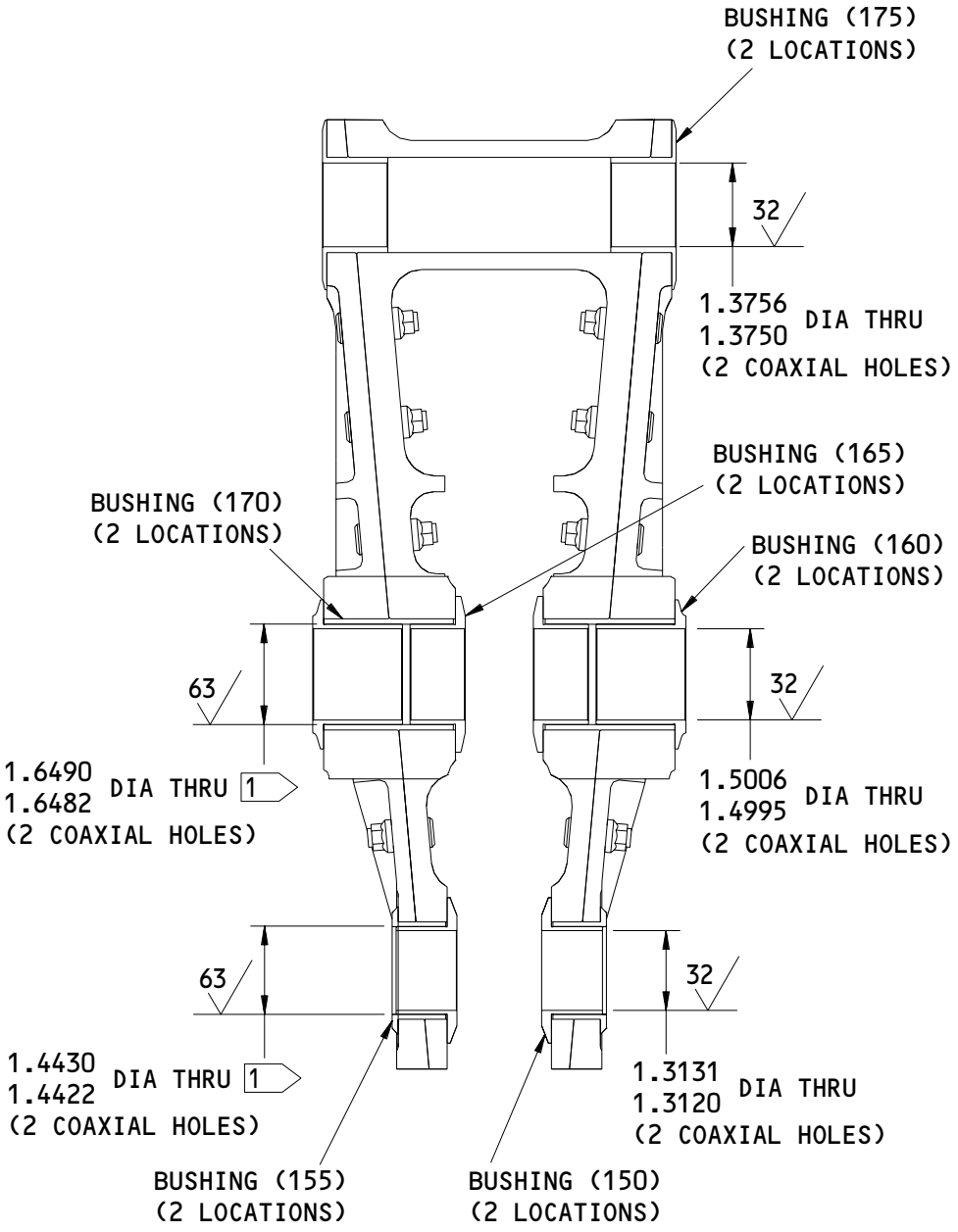
L00442



A–A

113T1307-41
6-9 Link Assembly Repair
Figure 601 (Sheet 2)

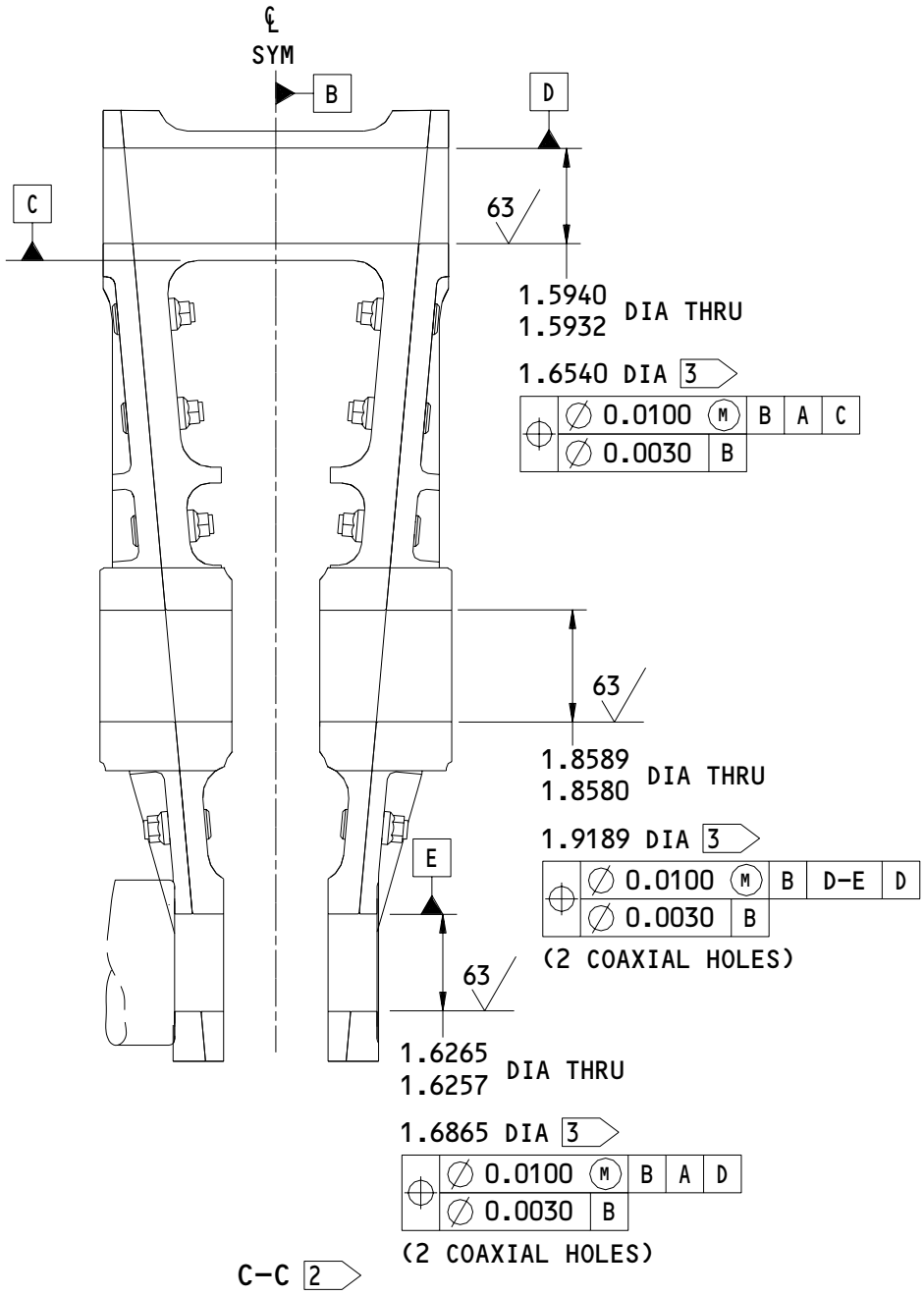
L00473



B–B

113T1307–41
6–9 Link Assembly Repair
Figure 601 (Sheet 3)

L00540



1 INSIDE DIAMETER OF BUSHINGS (155,170)

2 SHOWN WITHOUT BUSHINGS

3 REPAIR LIMIT

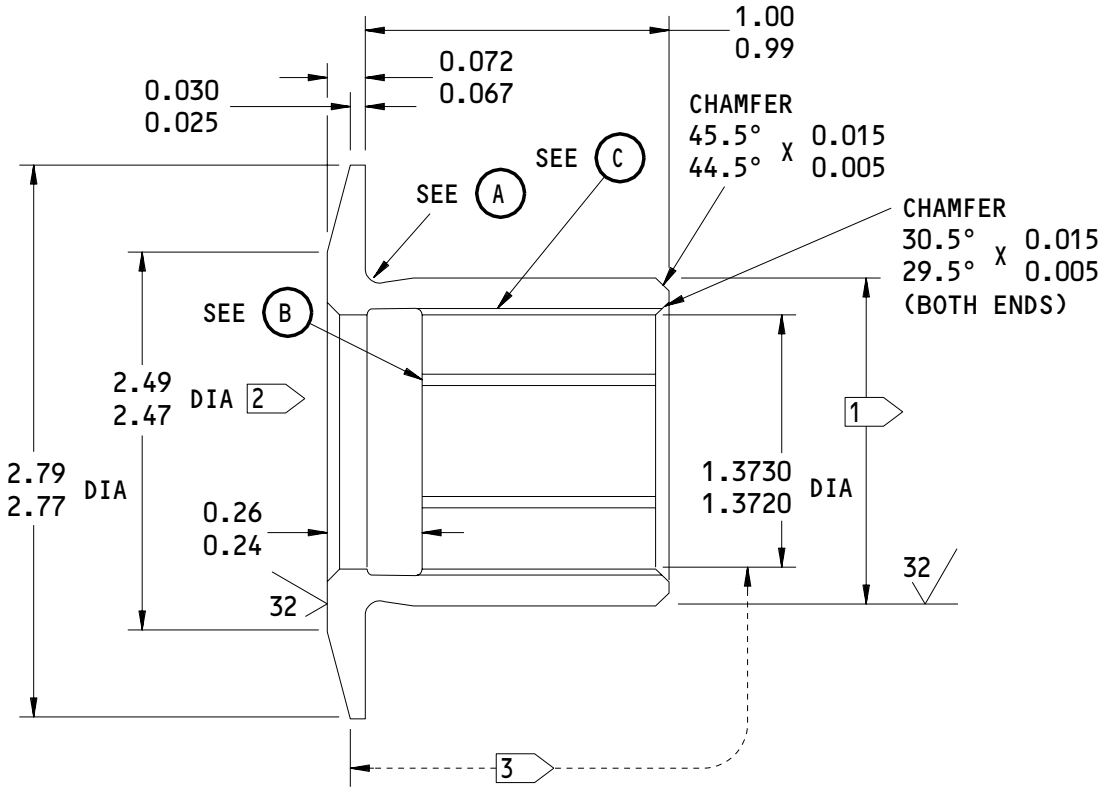
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

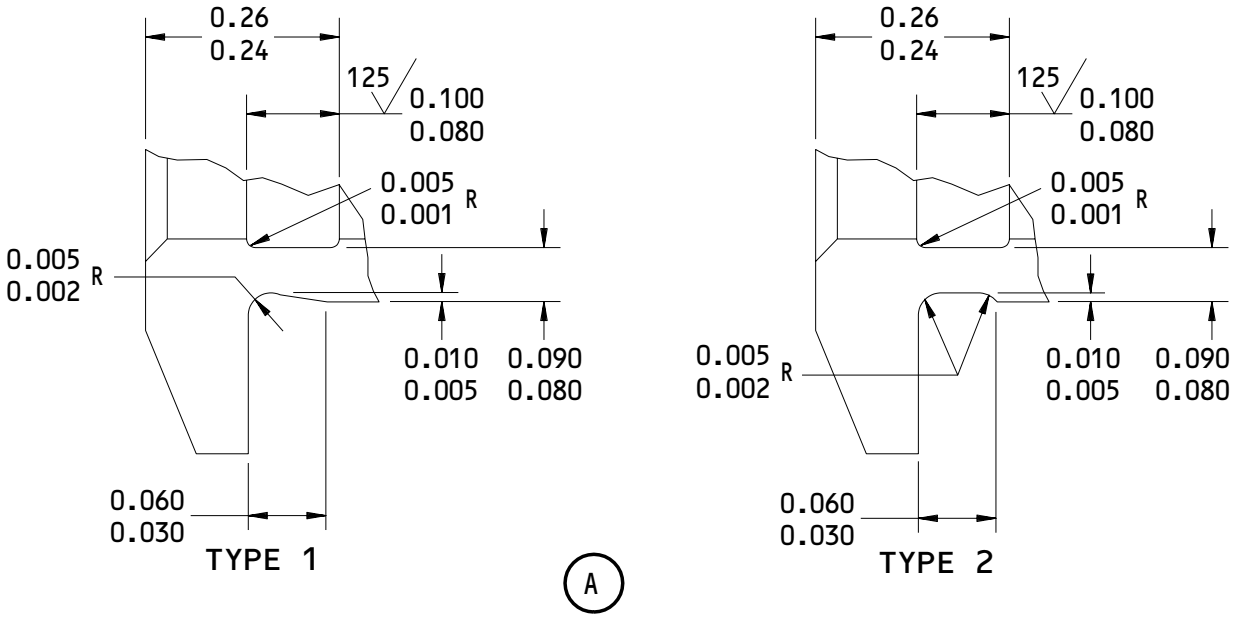
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

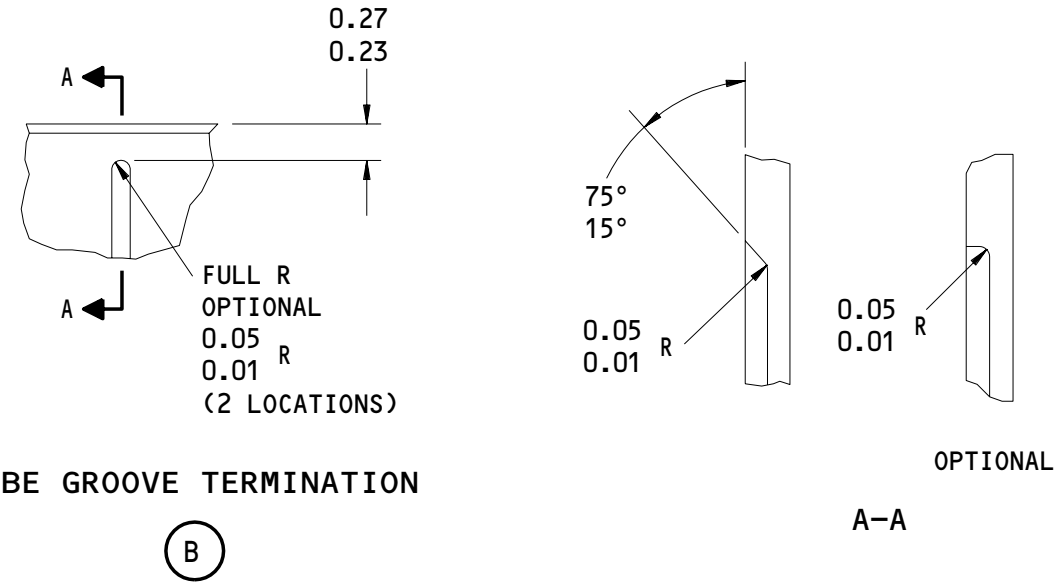
113T1307-41
6-9 Link Assembly Repair
Figure 601 (Sheet 4)



OVERSIZE REPLACEMENT FOR BUSHING (175)

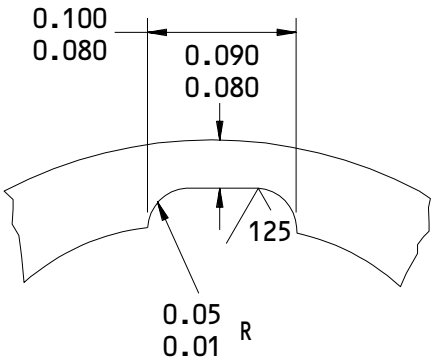


Oversize Bushing Details
Figure 602 (Sheet 1)



LUBE GROOVE TERMINATION

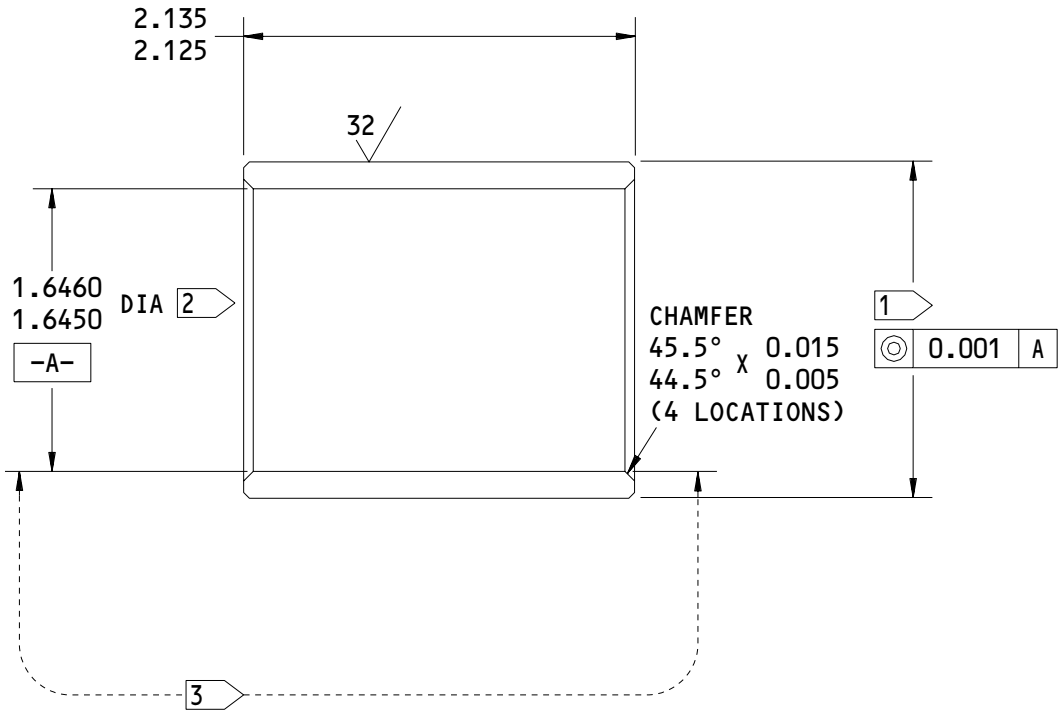
B



TYPICAL LUBE GROOVE DETAIL
6 GROOVES EQUALLY SPACED ON INNER FACE

C

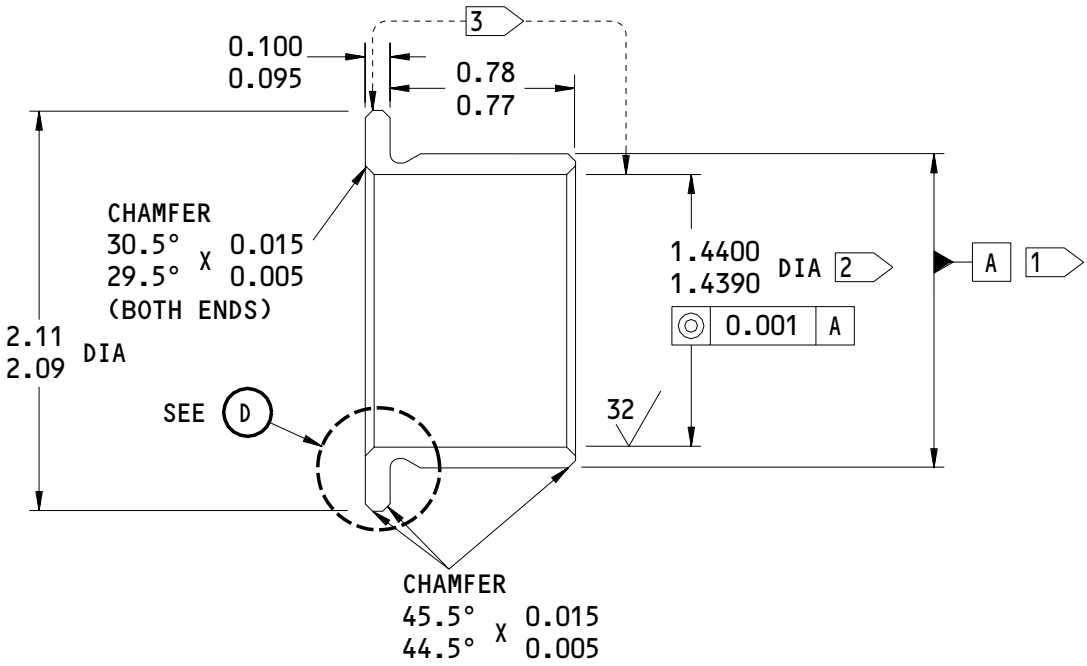
Oversize Bushing Details
Figure 602 (Sheet 2)



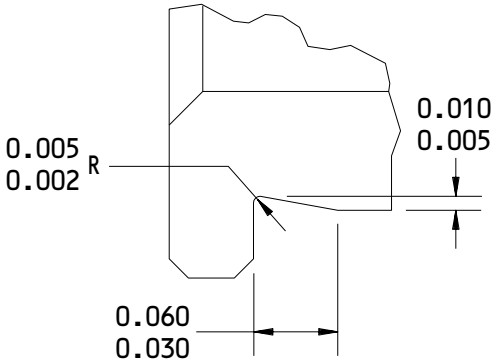
OVERSIZE REPLACEMENT FOR BUSHING (170)

Oversize Bushing Details
Figure 602 (Sheet 3)

L00715

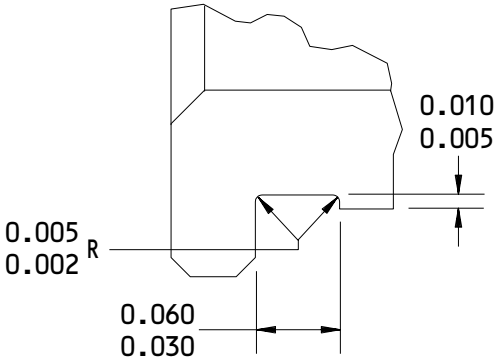


OVERSIZE REPLACEMENT FOR BUSHING (155)



TYPE 1

D



TYPE 2

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS INTERFERENCE

2 THE BUSHING INSIDE DIAMETER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

3 CADMIUM PLATE (F-15.06)

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 4)

6-9 LINK ASSEMBLY - REPAIR 8-1

113T1308-41, -47

1. General

   A. This procedure has the data necessary to replace the bushings (175, 180, 185, 190, 195, 200) and to repair and refinish the 6-9 link assembly (165).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 2 for item numbers.

   E. General repair details:

      (1) Material: Aluminum alloy

      (2) Shot peen: Intensity 0.012A

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00490 Sealant -- BMS5-95 (SOPM 20-60-04)

   B. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   C. Procedure (Fig. 601)

      (1) Remove the damaged bushings (175, 180, 185, 190, 195, 200) from the 6-9 link assembly (165).

         NOTE: You must remove the bushings (175) before you can remove the bushings (180), and bushings (185, 190) before bushings (195).

(2) If there is corrosion or damage in the bushing holes in the 6-9 link assembly (165), see 6-9 Link Assembly Repair section for repair instruction.

(3) Install the new bushings (200) in the 6-9 link assembly (165) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(4) Machine the inside diameter of bushings (200) to the dimensions shown in Fig. 601.

(5) Install the new bushings (195) in the 6-9 link assembly (165) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(6) Machine the inside diameter of bushings (195) to the dimensions shown in Fig. 601.

(7) Install the new bushings (185, 190) on the inside of bushings (195) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

NOTE: See Fig. 601 for the correct locations of bushings (185, 190).

(8) Machine the inside diameter of bushings (185, 190) to the dimensions shown in Fig. 601.

(9) Install the new bushings (180) on the 6-9 link assembly (165) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(10) Machine the inside diameter of bushings (180) to the dimensions shown in Fig. 601.

(11) Install the new bushings (175) on the inside of bushings (180) with BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(12) Machine the inside diameter of bushings (175) to the dimensions shown in Fig. 601.

(13) Fillet seal the bushing flanges with BMS 5-95 sealant.

3. 6-9 Link Assembly Repair

A. References

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-20-01, Magnetic Particle Inspection

(4) SOPM 20-20-02, Penetrant Methods of Inspection

B. Procedure

(1) Machine the damaged holes for the bushings (180, 195, 200) to remove defects. Do not machine more than the limit shown in Fig. 601.

NOTE: Do not remove the fasteners or disassemble the 6-9 link assembly (165). Machine the 6-9 link assembly (165) as a unit.

(2) Break all the sharp edges as shown in Fig. 601.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Shot peen the hole per SOPM 20-10-03. Make sure the surface finish of machined areas is 125 microinches prior to shot peening.

(5) Make the oversize bushings to replace the damaged bushings (180) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-16.11) on area indicated by flagnote 2. On other areas, cadmium plate (F-16.11) is optional.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0010-0.0027 inch.

(6) Install the oversize bushings as shown in REPAIR 8-1.

(7) Make the oversize bushings to replace the damaged bushings (195) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-16.11) on area indicated by flagnote 2. On other areas, cadmium plate (F-16.11) is optional.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0021-0.0042 inch.

(8) Install the oversize bushings as shown in REPAIR 8-1.

(9) Make the oversize bushings to replace bushings (200) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- Aluminum-nickel-bronze

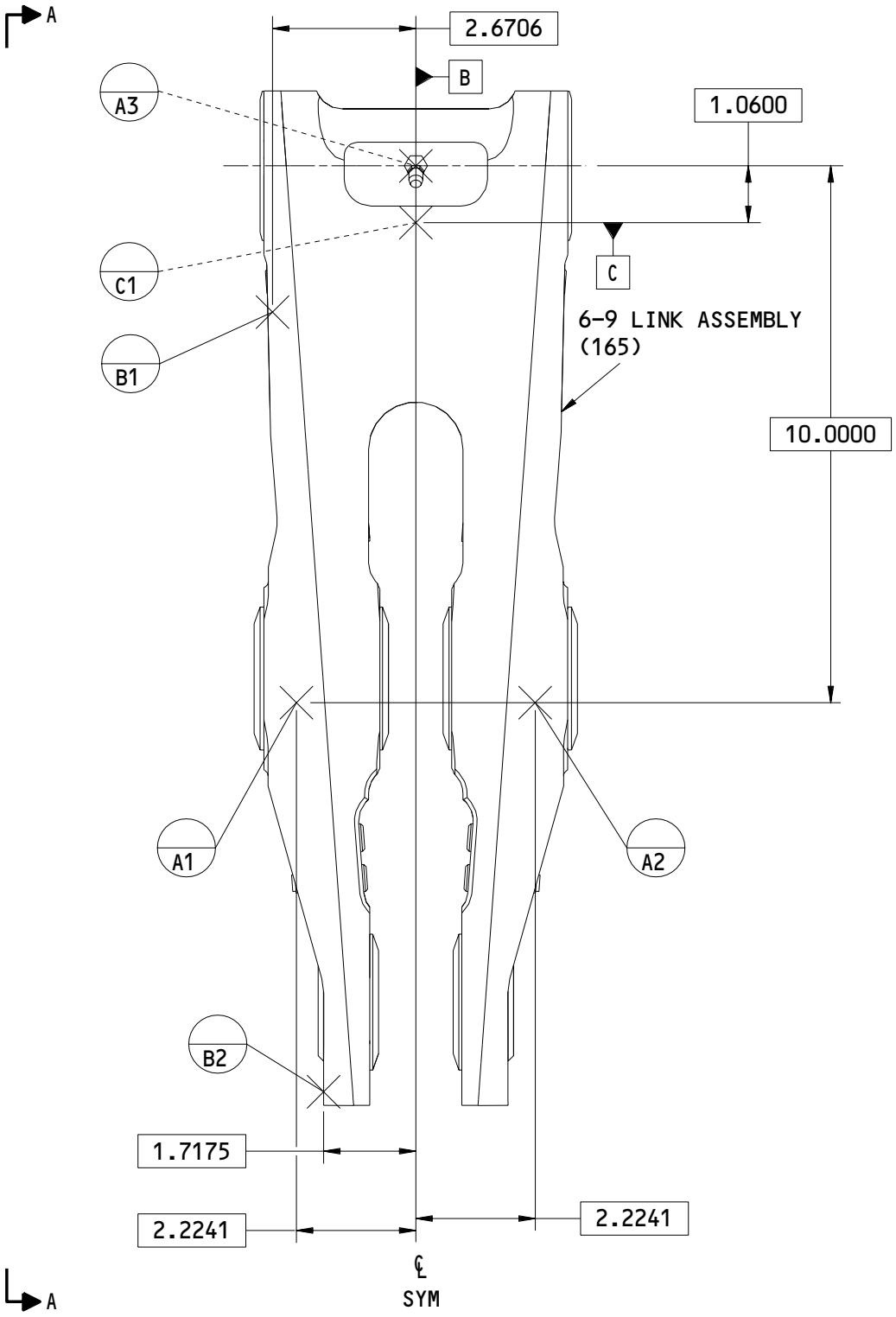
(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-16.11) on area indicated by flagnote 2. On other areas, cadmium plate (F-16.11) is optional.

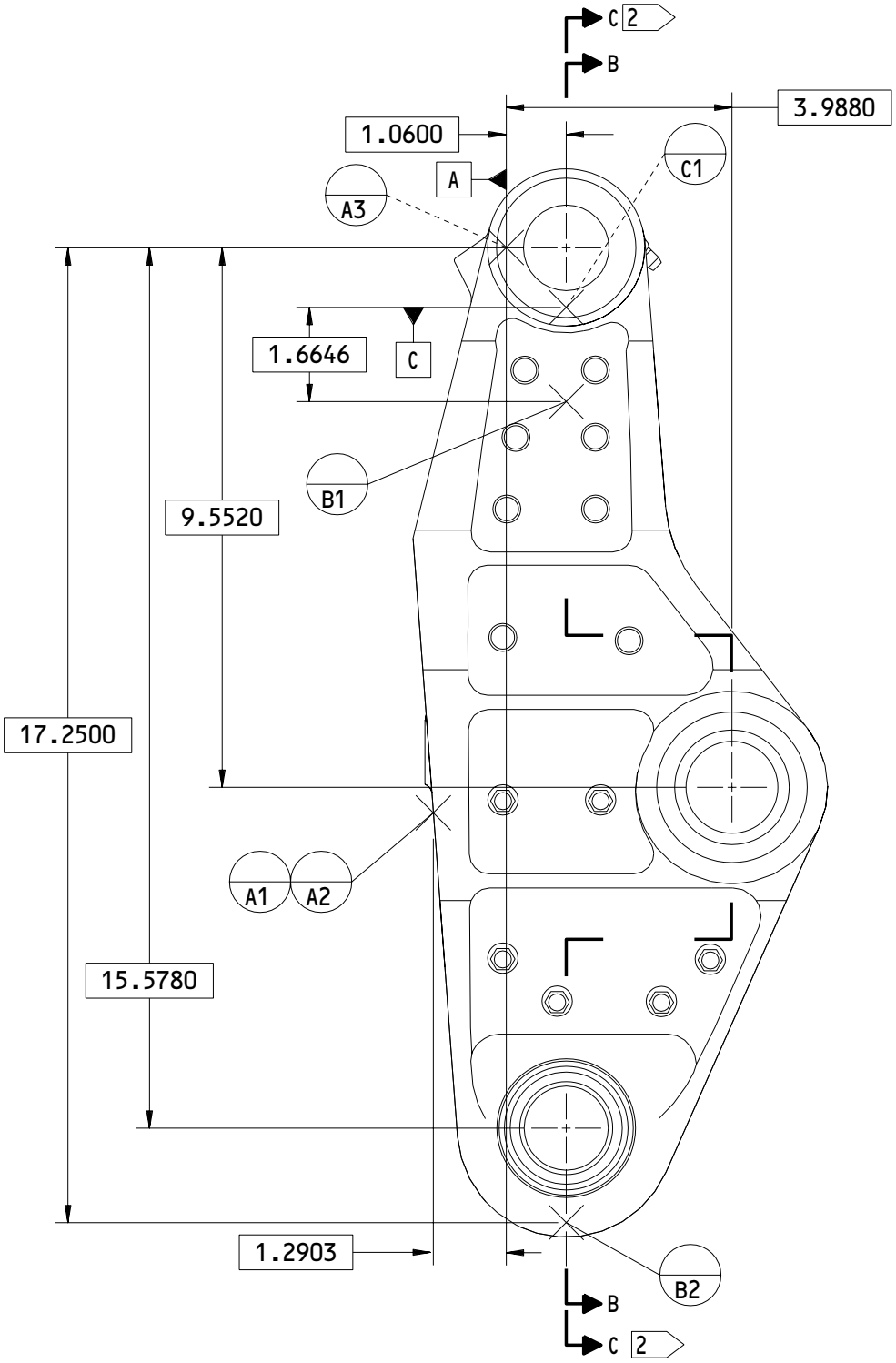
(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0017-0.0034 inch.

(10)all the oversize bushings as shown in REPAIR 8-1.



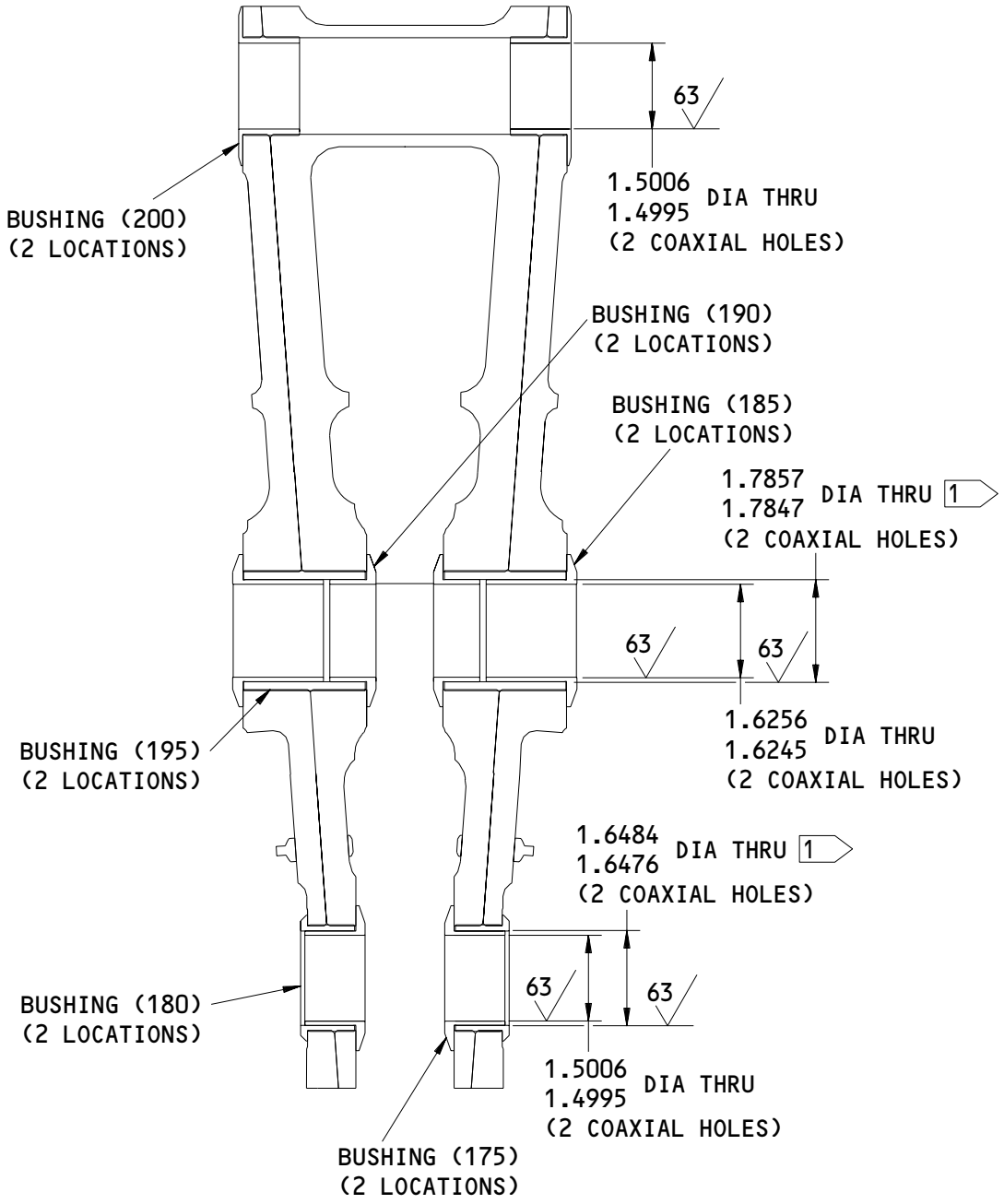
113T1308-41,-47
6-9 Link Assembly Repair
Figure 601 (Sheet 1)

L00782



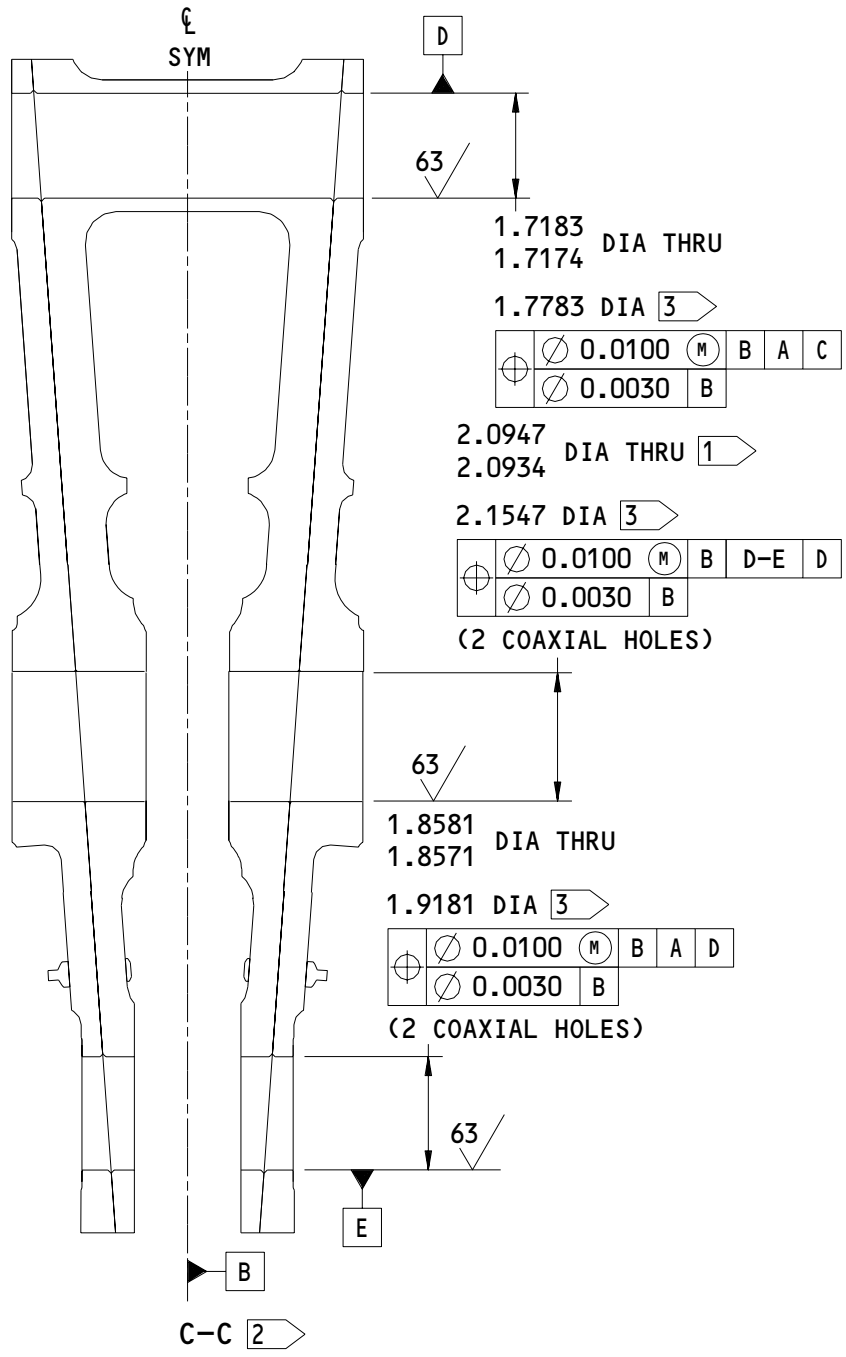
A–A

113T1308-41,-47
6-9 Link Assembly Repair
Figure 601 (Sheet 2)



B–B

113T1308-41,-47
6-9 Link Assembly Repair
Figure 601 (Sheet 3)



1 INSIDE DIAMETER OF BUSHINGS (175,195)

2 SHOWN WITHOUT BUSHINGS

3 REPAIR LIMIT

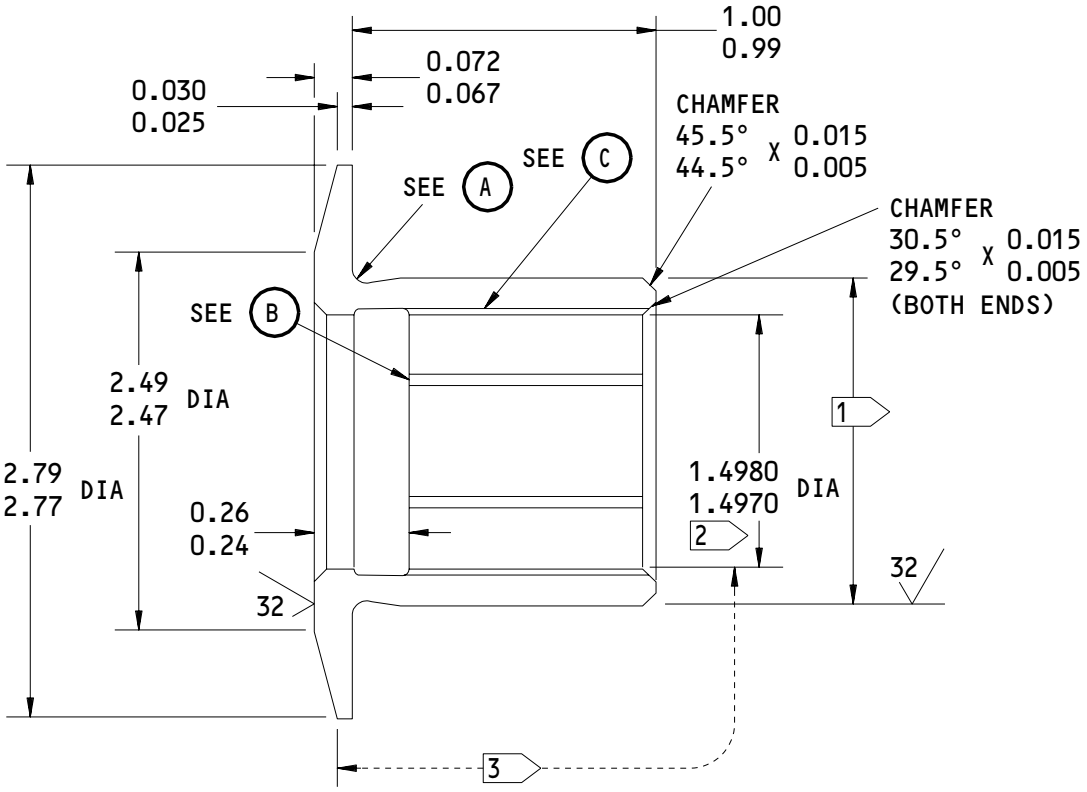
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

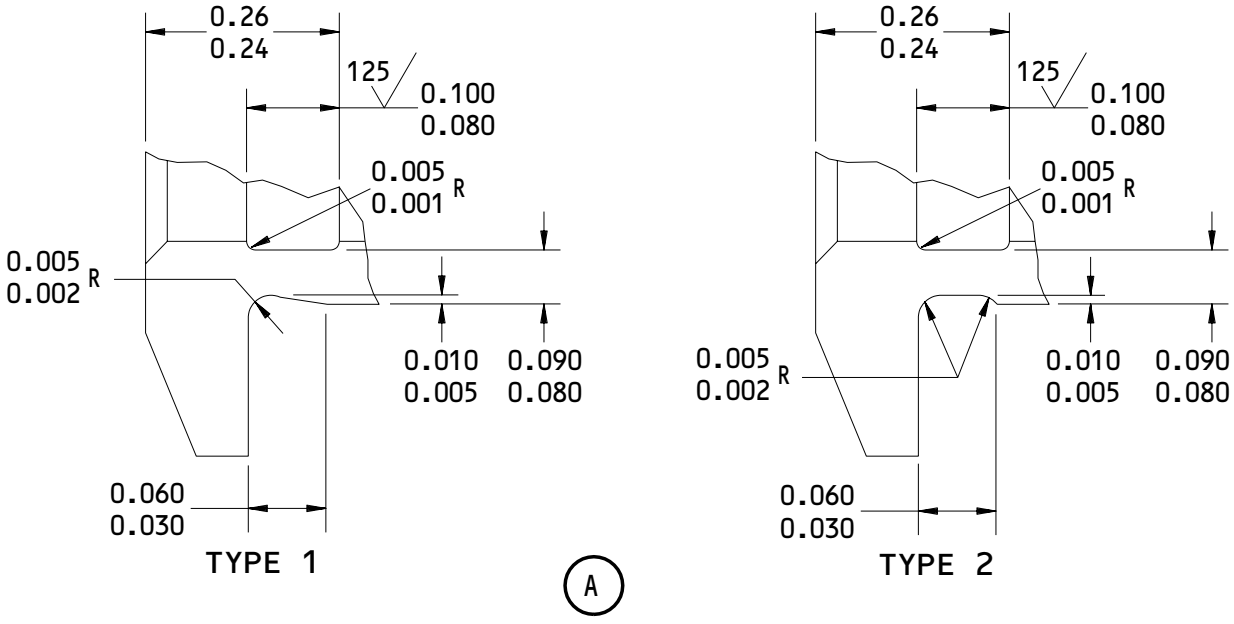
ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

113T1308-41,-47
6-9 Link Assembly Repair
Figure 601 (Sheet 4)

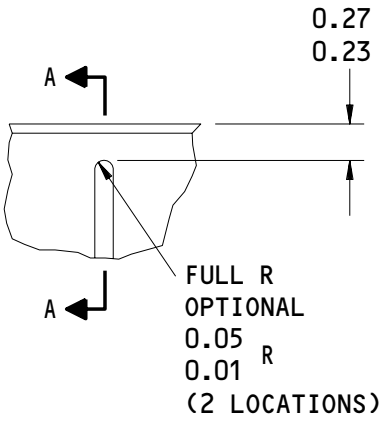


OVERSIZE REPLACEMENT FOR BUSHING (200)



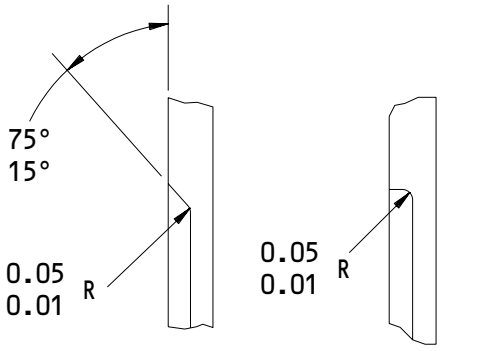
Oversize Bushing Details
Figure 602 (Sheet 1)

L01387

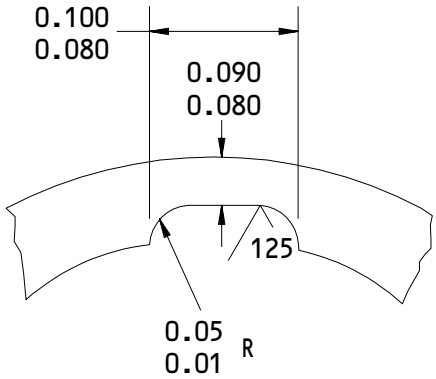


LUBE GROOVE TERMINATION

B



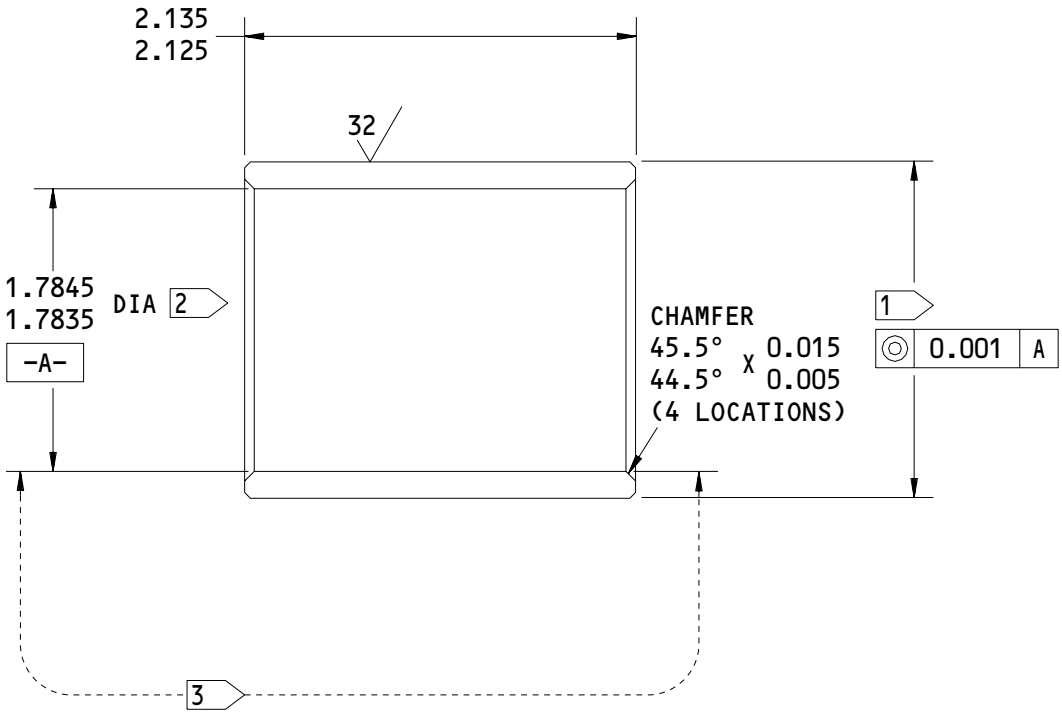
C–C



TYPICAL LUBE GROOVE DETAIL
6 GROOVES EQUALLY SPACED ON INNER FACE

C

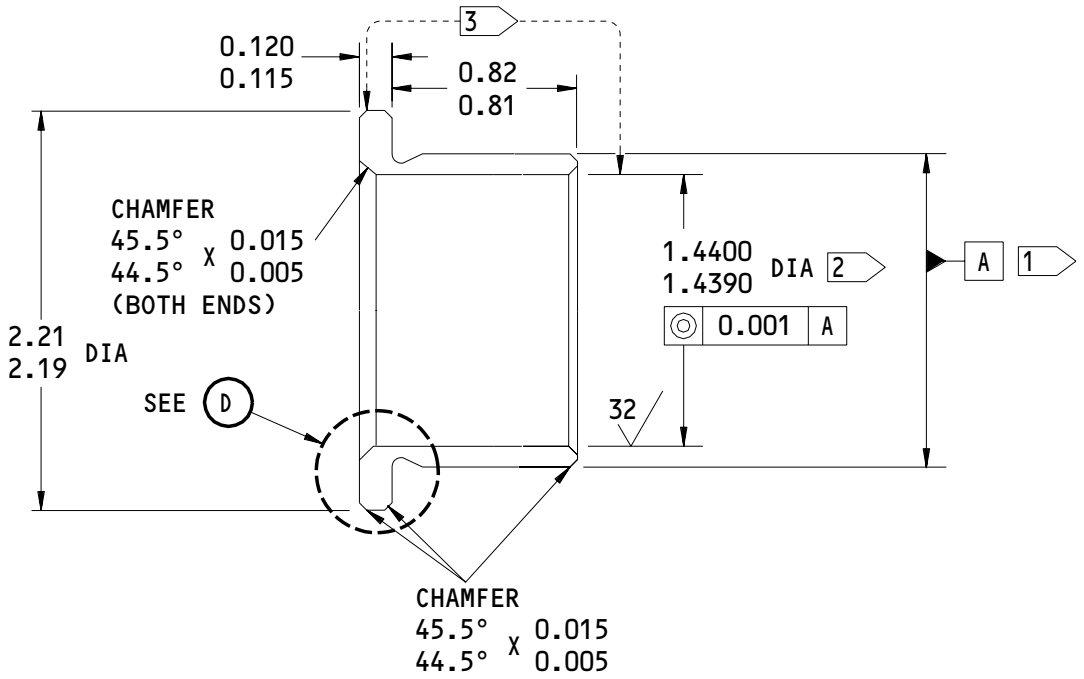
Oversize Bushing Details
Figure 602 (Sheet 2)



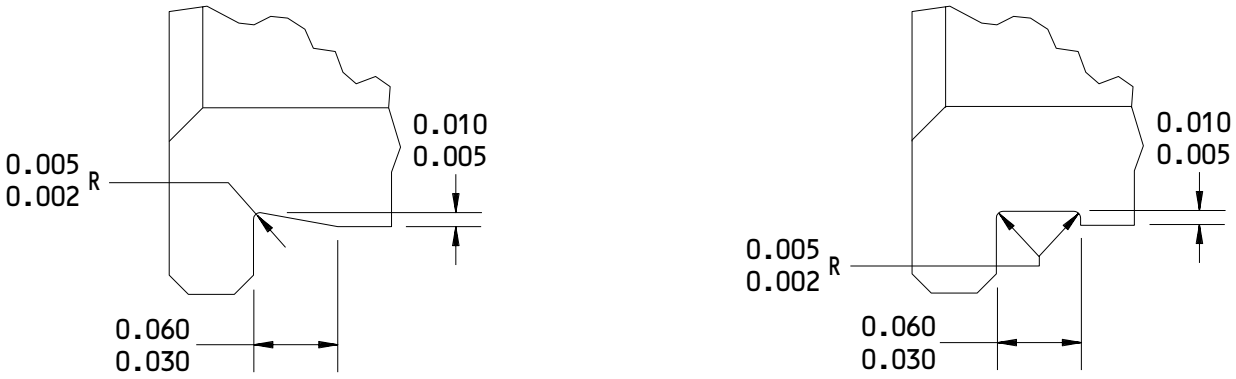
OVERSIZE REPLACEMENT FOR BUSHING (195)

Oversize Bushing Details
Figure 602 (Sheet 3)

L01391



OVERSIZE REPLACEMENT FOR BUSHING (180)



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS INTERFERENCE

2 THE BUSHING INSIDE DIAMETER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

3 CADMIUM PLATE (F-15.06)

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 4)

L01394

FITTING ASSEMBLY 1-3 - REPAIR 9-1

113T1313-41, -42

1. General

   A. This procedure has the data necessary to replace the bushings (455, 460, 465, 470) in the 1-3 fitting assembly (445, 450).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 1 for item numbers.

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00490 Sealant -- BMS5-95 (SOPM 20-60-04)

   B. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   C. Procedure (Fig. 601)

      (1) Remove the damaged bushings (455, 460, 465, 470) from the 1-3 fitting assembly (445, 450).

         NOTE: You must remove the bushings (465) before you can remove the bushings (470).

      (2) If there is corrosion or damage in the bushing holes in the fitting (515), see REPAIR 9-2 for repair instruction.

      (3) Install the new bushings (455, 460) in the fitting (515) with wet BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

      (4) Machine the inside diameter of bushings (455, 460) to the dimensions shown in Fig. 601.

(5) Install the new bushings (470) in the fitting (515) with wet BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(6) Machine the inside diameter of bushings (470) to the dimensions shown in Fig. 601.

(7) Install the new bushings (465) on the inside of bushings (470) with wet BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(8) Machine the inside diameter of bushings (465) to the dimensions shown in Fig. 601.

3. Fitting Assembly Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00033 Enamel -- BMS 10-60 (SOPM 20-60-02)

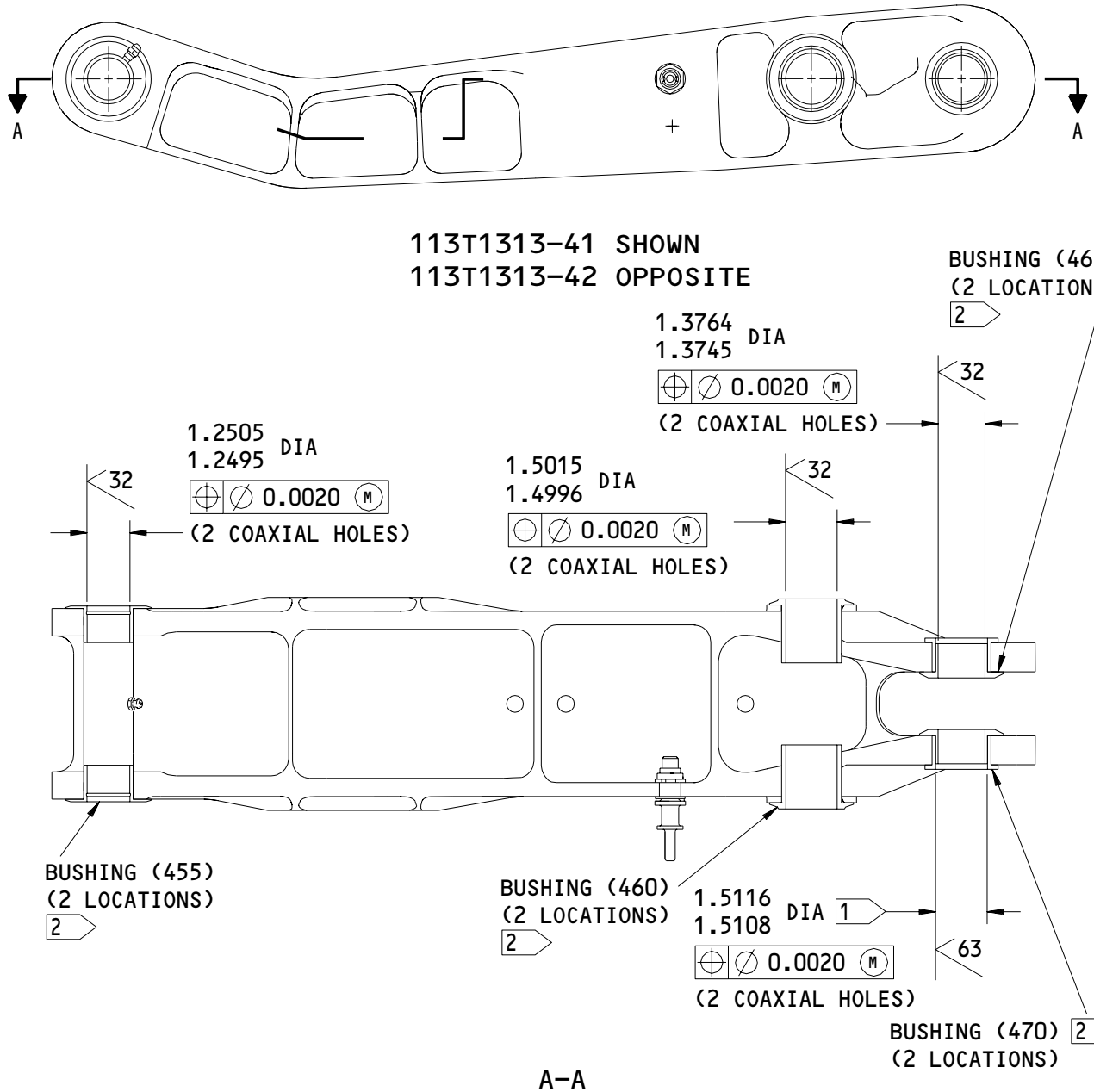
B. References

(1) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(2) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) Apply BMS 10-60 enamel (SRF-14.9813) all over except on the lube fitting (510), bushing holes, bushing flanges, and the fitting (505).



1 INSIDE DIAMETER OF BUSHING (470)

2 CHAMFER BOTH ENDS 48° / 42° X 0.015 / 0.005

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

113T1313-41,-42
1-3 Fitting Assembly Repair
Figure 601

L01333

FITTING - REPAIR 9-2

113T1313-43

1. General

A. This procedure has the data necessary to repair and refinish the fitting (515).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 1 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

(2) Shot peen: Intensity 0.012A

2. Fitting Repair

A. Reference

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

B. Procedure

(1) Machine the damaged holes for the bushings (455, 460, 465, 470) to remove defects. Do not machine more than the limit shown in Fig. 601.

(2) Break all the sharp edges.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Make the oversize bushings to replace the damaged bushings (470) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-15.06) on the external surfaces of bushings. Cadmium plate is optional in the bushing bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0011-0.0028 inch.

(5) Install the oversize bushings as shown in REPAIR 9-1.

(6) Shot peen the holes per SOPM 20-10-03.

(7) Make the oversize bushings to replace the bushings (460) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- Aluminum-nickel-bronze per AMS4640 or AMS4880.

(b) Break all the sharp edges.

(c) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(d) Cadmium plate (F-15.06) on the external surfaces of bushings. Cadmium plate is optional in the bushing bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0011-0.0029 inch.

(8) Install the oversize bushings as shown in REPAIR 9-1.

(9) Make the oversize bushings to replace the damaged bushings (455) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- Copper-berylium (UNS C17200) per AMS4533 Solution treated and aged (TF00)
Optional: Copper-berylium (UNS C17200) per AMS4535.

(b) Break all the sharp edges 0.005-0.015 inch.

(c) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(d) Cadmium plate (F-15.36) on the external surfaces of bushings. Cadmium plate is optional in the bushing bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0009-0.0026 inch.

(10) Install the oversize bushings as shown in REPAIR 9-1.

3. Fitting Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00432 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

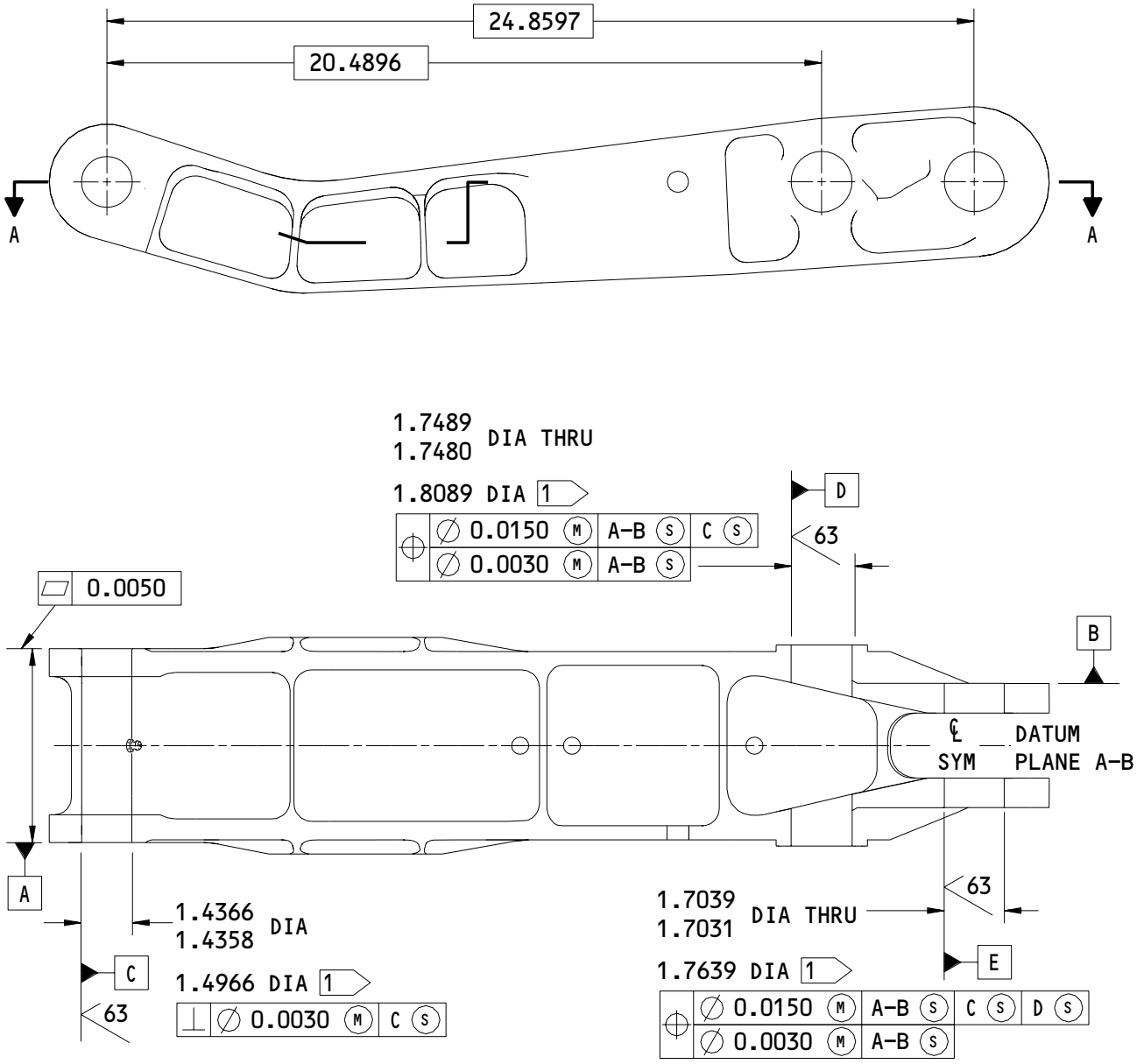
(1) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(2) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) Boric acid-sulfuric acid anodize (F-17.31).

(2) Apply BMS 10-11, type 1 primer (F-20.02).



A-A

1 REPAIR LIMIT

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

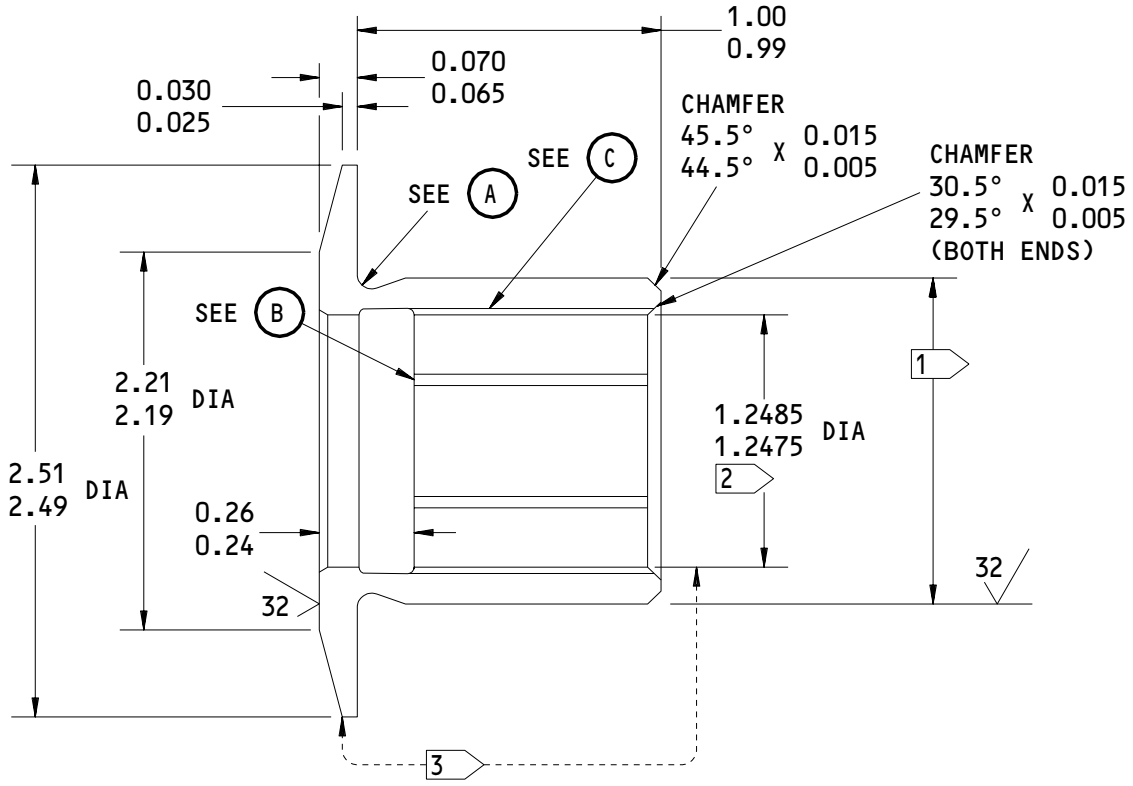
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

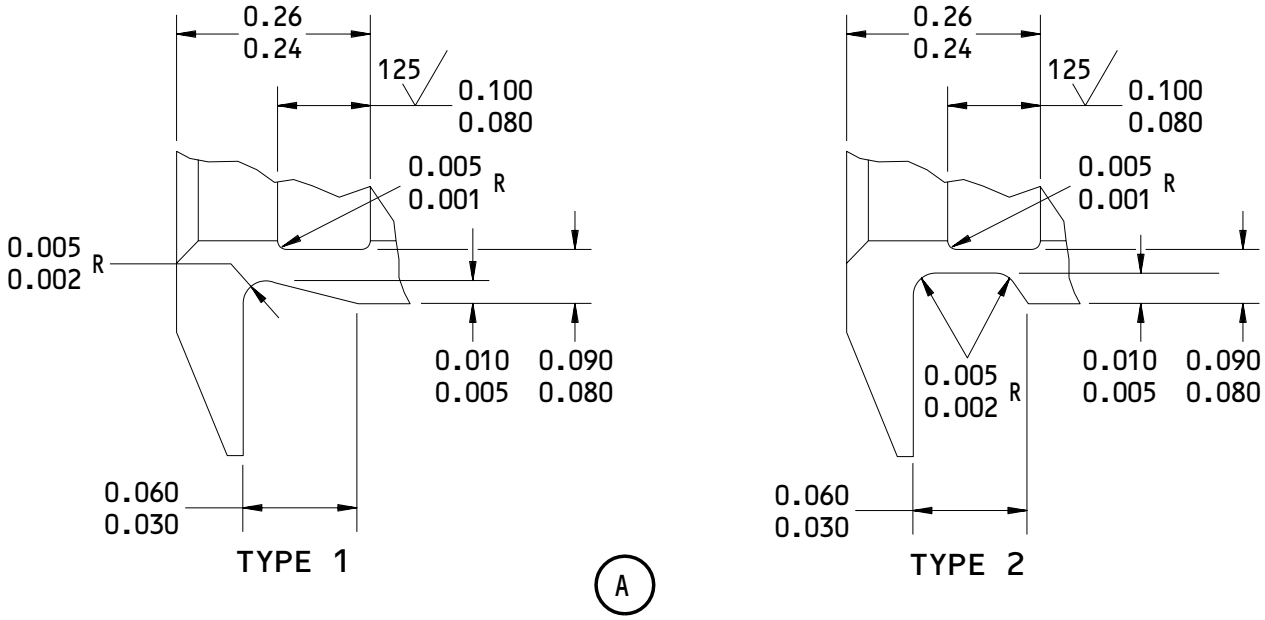
ALL DIMENSIONS ARE IN INCHES

113T1313-43
Fitting Repair
Figure 601

L05607

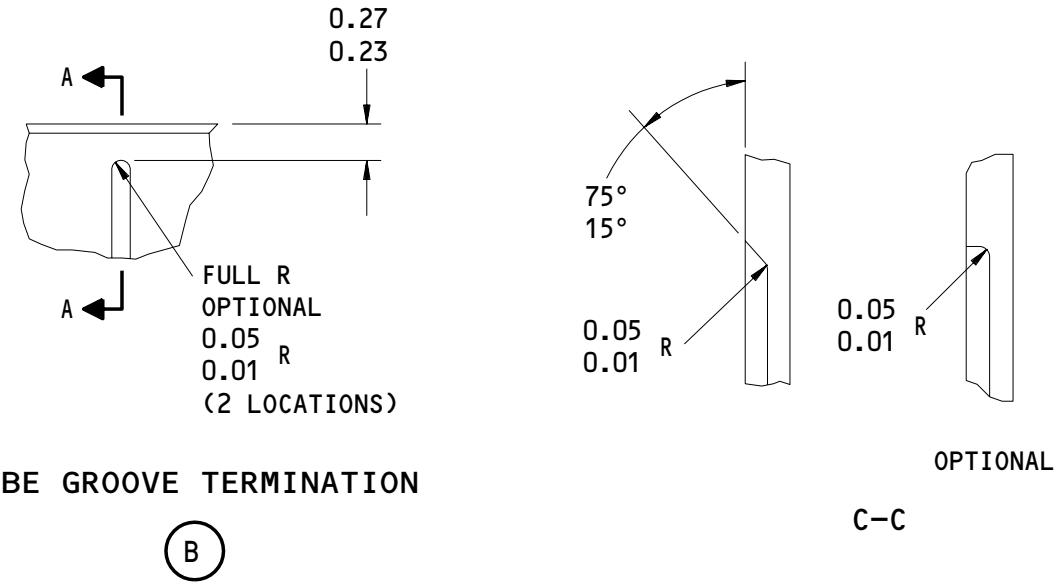


OVERSIZE REPLACEMENT FOR BUSHING (455)



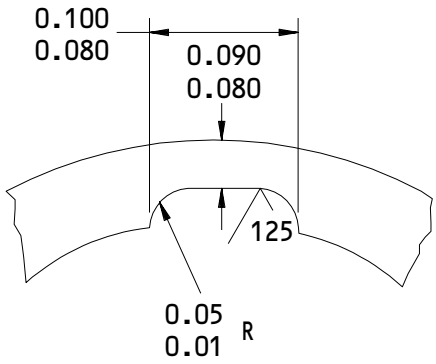
Oversize Bushing Details
Figure 602 (Sheet 1)

L01399



LUBE GROOVE TERMINATION

B

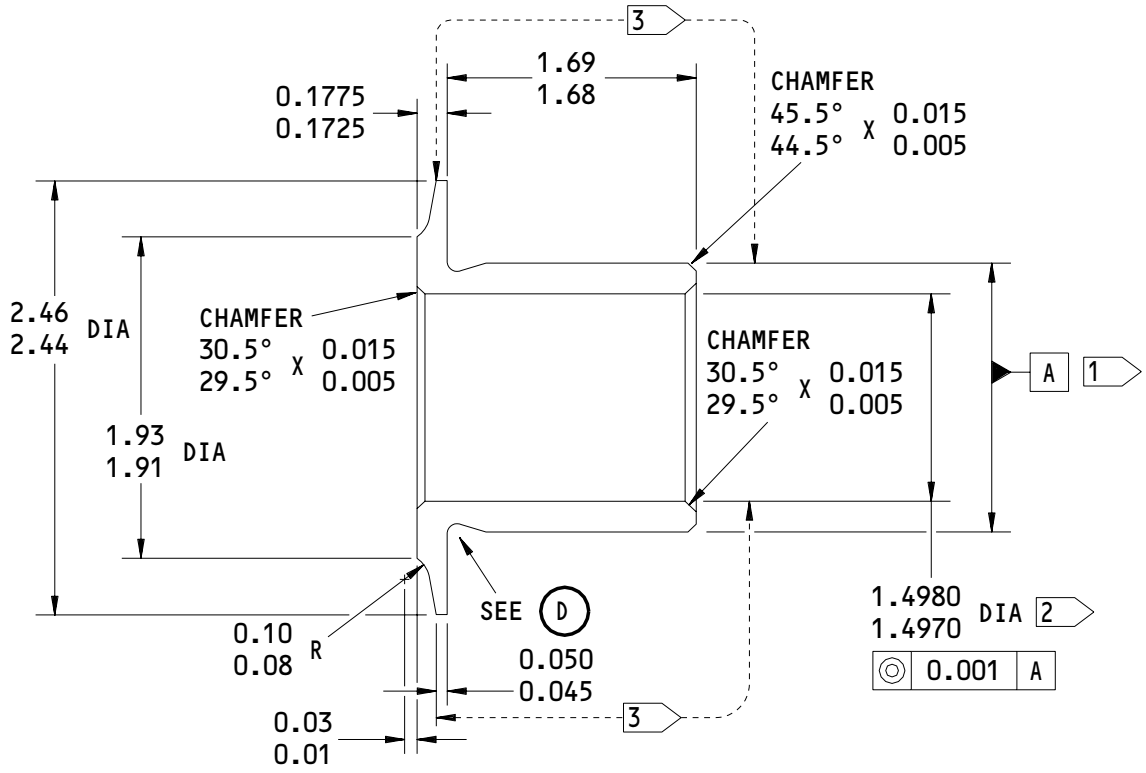


TYPICAL LUBE GROOVE DETAIL
6 GROOVES EQUALLY SPACED ON INNER FACE

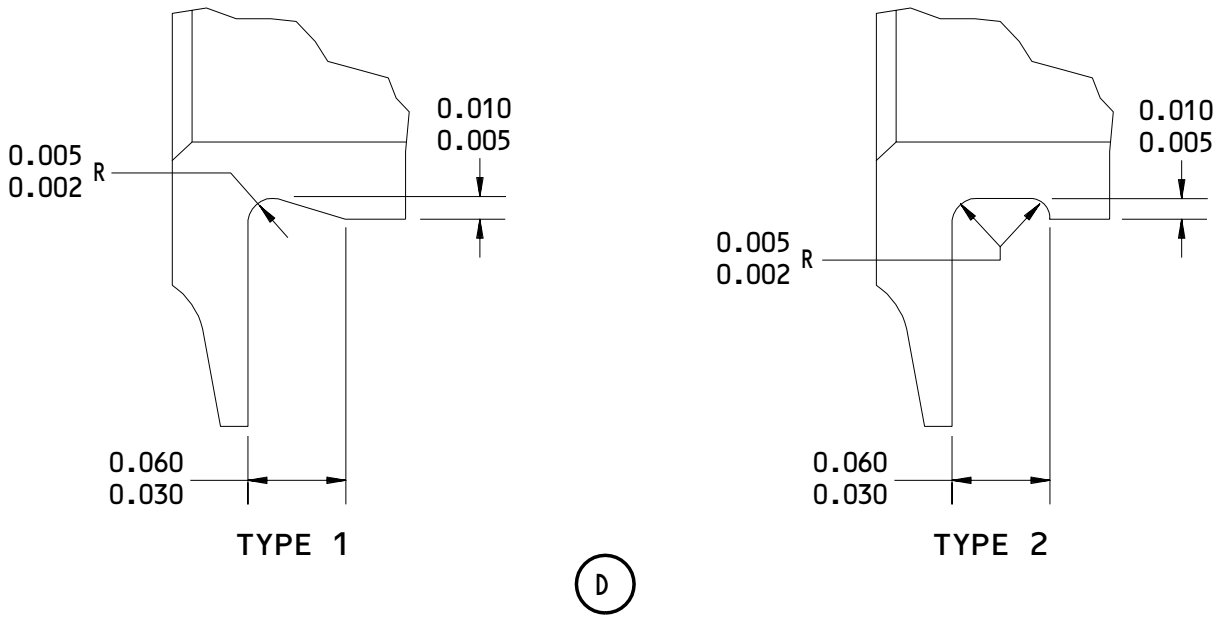
C

Oversize Bushing Details
Figure 602 (Sheet 2)

L07590

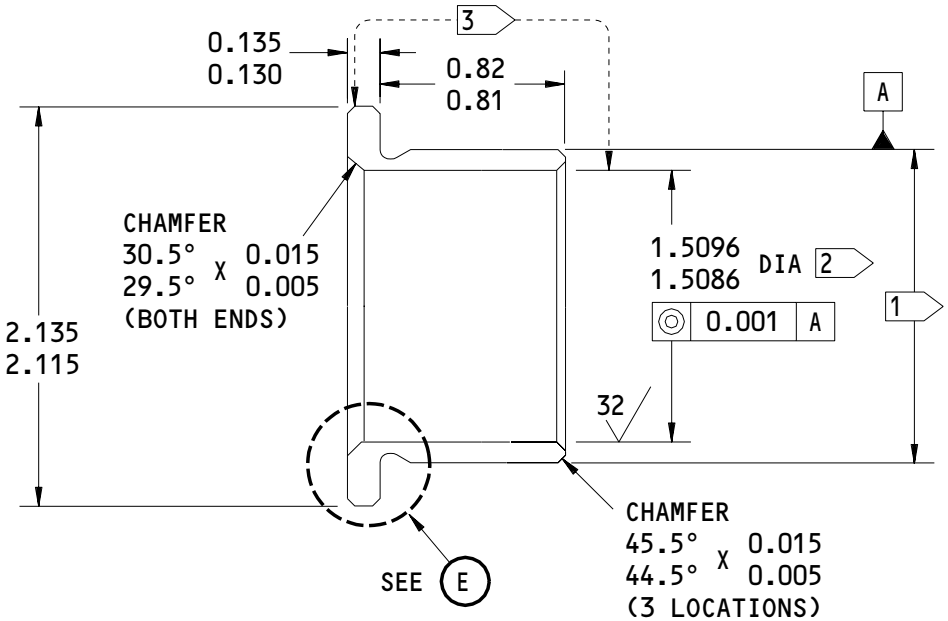


OVERSIZE REPLACEMENT FOR BUSHING (460)

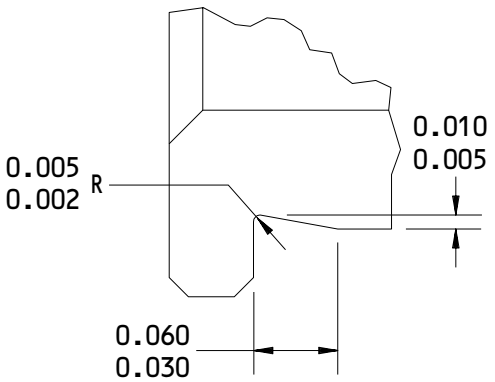


Oversize Bushing Details
Figure 602 (Sheet 3)

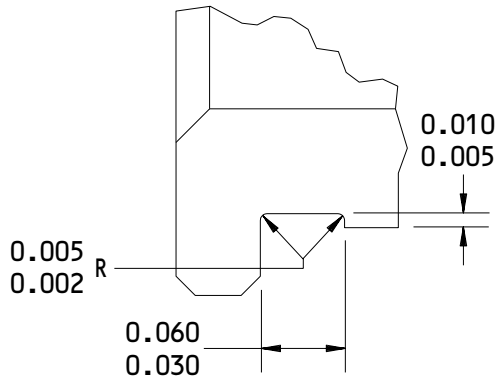
L02178



OVERSIZE REPLACEMENT FOR BUSHING (470)



TYPE 1



TYPE 2

E

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS INTERFERENCE

2 THE BUSHING INDIDE DIAMTER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

3 CADMIUM PLATE (F-15.06)

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 4)

1-3 FITTING ASSEMBLY - REPAIR 10-1

113T1314-41, -42

1. General

   A. This procedure has the data necessary to replace the bushings (475, 480, 485, 490) and to refinish the 1-3 fitting assembly (465, 470).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 2 for item numbers.

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00490 Sealant -- BMS5-95 (SOPM 20-60-04)

   B. References

      (1) SOPM 20-50-03, Bearing and Bushing Replacement

   C. Procedure (Fig. 601)

      (1) Remove the damaged bushings (475, 480, 485, 490) from the 1-3 fitting assembly (465, 470).

         NOTE: You must remove the bushings (485) before you can remove the bushings (490).

      (2) If there is corrosion or damage in the bushing holes in the fitting (535), see REPAIR 10-2 for repair instruction.

      (3) Install the new bushings (475, 480) in the fitting (535) with wet BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

      (4) Machine the inside diameter of bushings (475, 480) to the dimensions shown in Fig. 601.

(5) Install the new bushings (490) in the fitting (535) with wet BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(6) Machine the inside diameter of bushings (490) to the dimensions shown in Fig. 601.

(7) Install the new bushings (485) on the inside of bushings (490) with wet BMS 5-95 sealant. Use the shrink fit method (SOPM 20-50-03).

(8) Machine the inside diameter of bushings (485) to the dimensions shown in Fig. 601.

3. Fitting Assembly Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) COOO33 Enamel -- BMS 10-60 (SOPM 20-60-02)

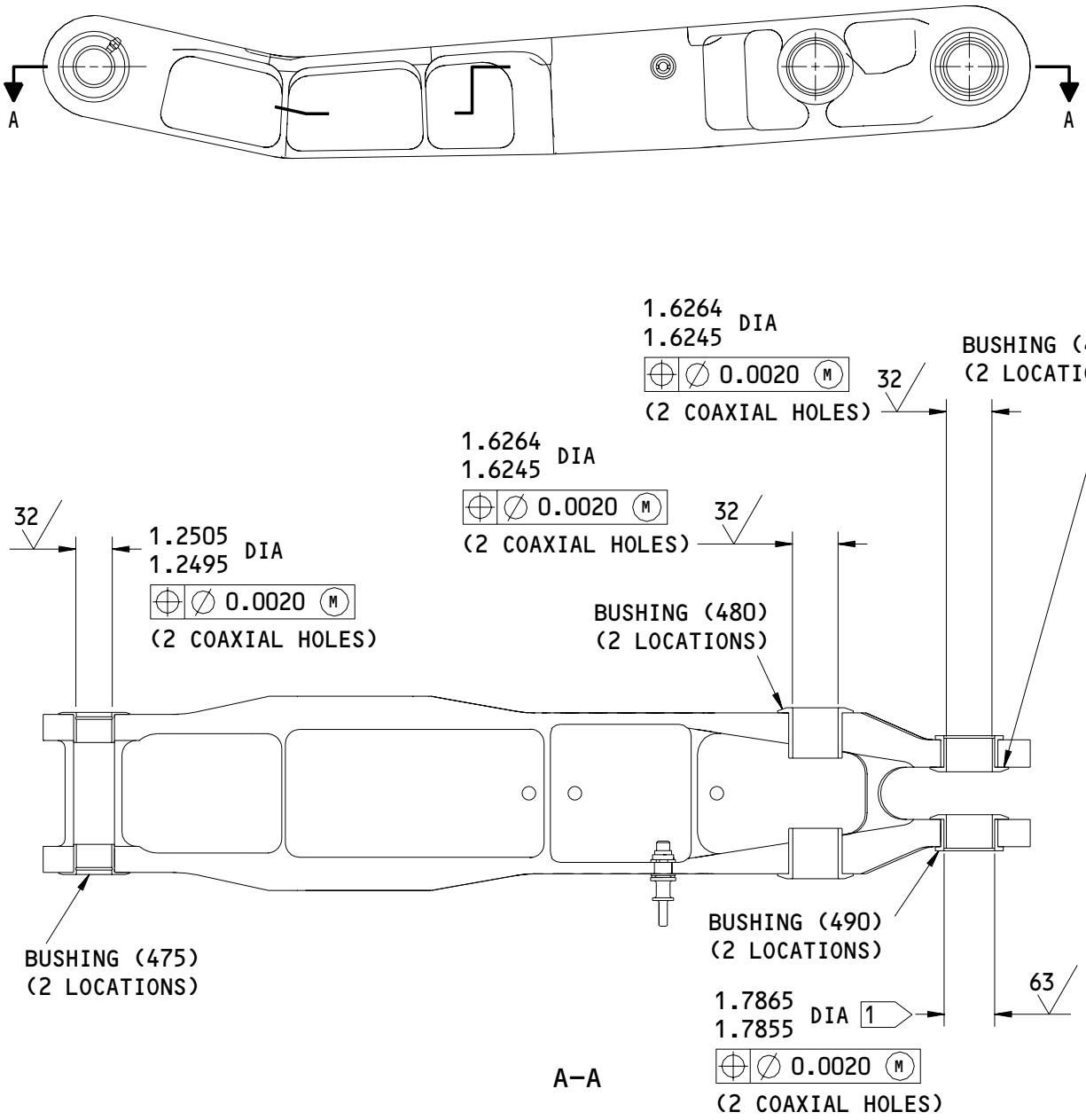
B. References

(1) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(2) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) Apply BMS 10-60 enamel (SRF-14.9813) all over except on the lube fitting (530), bushing holes, bushing flanges, and the fitting (525).



1 INSIDE DIAMETER OF BUSHINGS (490)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

113T1314-41,-42
1-3 Fitting Assembly Repair
Figure 601

L02423

FITTING - REPAIR 10-2

113T1314-43

1. General

A. This procedure has the data necessary to repair and refinish the fitting (535).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

C. Refer to the REPAIR - GENERAL (27-52-97/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 2 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

(2) Shot peen: Intensity 0.012A

2. Fitting Repair

A. Reference

(1) SOPM 20-10-03, Shot Peening

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

B. Procedure

(1) Machine the damaged holes for the bushings (475, 480, 485, 490) to remove defects. Do not machine more than the limit shown in Fig. 601.

(2) Break all the sharp edges.

(3) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(4) Make the oversize bushings to replace the damaged bushings (490) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- 15-5PH CRES
Heat treat 180-200 ksi.

(b) Break all the sharp edges.

(c) Do a magnetic particle check of the machined areas as shown in SOPM 20-20-01.

(d) Cadmium plate (F-15.06) on the external surfaces of bushings. Cadmium plate is optional in the bushing bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0011-0.0028 inch.

(5) Install the oversize bushings as shown in REPAIR 9-1.

(6) Shot peen the holes per SOPM 20-10-03.

(7) Make the oversize bushings to replace the bushings (480) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- Aluminum-nickel-bronze per AMS4640 or AMS4880.

(b) Break all the sharp edges.

(c) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(d) Cadmium plate (F-15.06) on the external surfaces of bushings. Cadmium plate is optional in the bushing bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0011-0.0029 inch.

(8) Install the oversize bushings as shown in REPAIR 10-1.

(9) Make the oversize bushings to replace the damaged bushings (475) as shown in Fig. 602 and in the following instructions.

(a) Bushing material -- Copper-berylium (UNS C17200) per AMS4533 Solution treated and aged (TF00)
Optional: Copper-berylium (UNS C17200) per AMS4535.

(b) Break all the sharp edges 0.005-0.015 inch.

(c) Do a penetrant check of the machined areas as shown in SOPM 20-20-02.

(d) Cadmium plate (F-15.36) on the external surfaces of bushings. Cadmium plate is optional in the bushing bore.

(e) Make sure the interference between the bushing outside diameter and the oversize hole inside diameter is 0.0009-0.0026 inch.

(10) Install the oversize bushings as shown in REPAIR 10-1.

3. Fitting Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00432 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

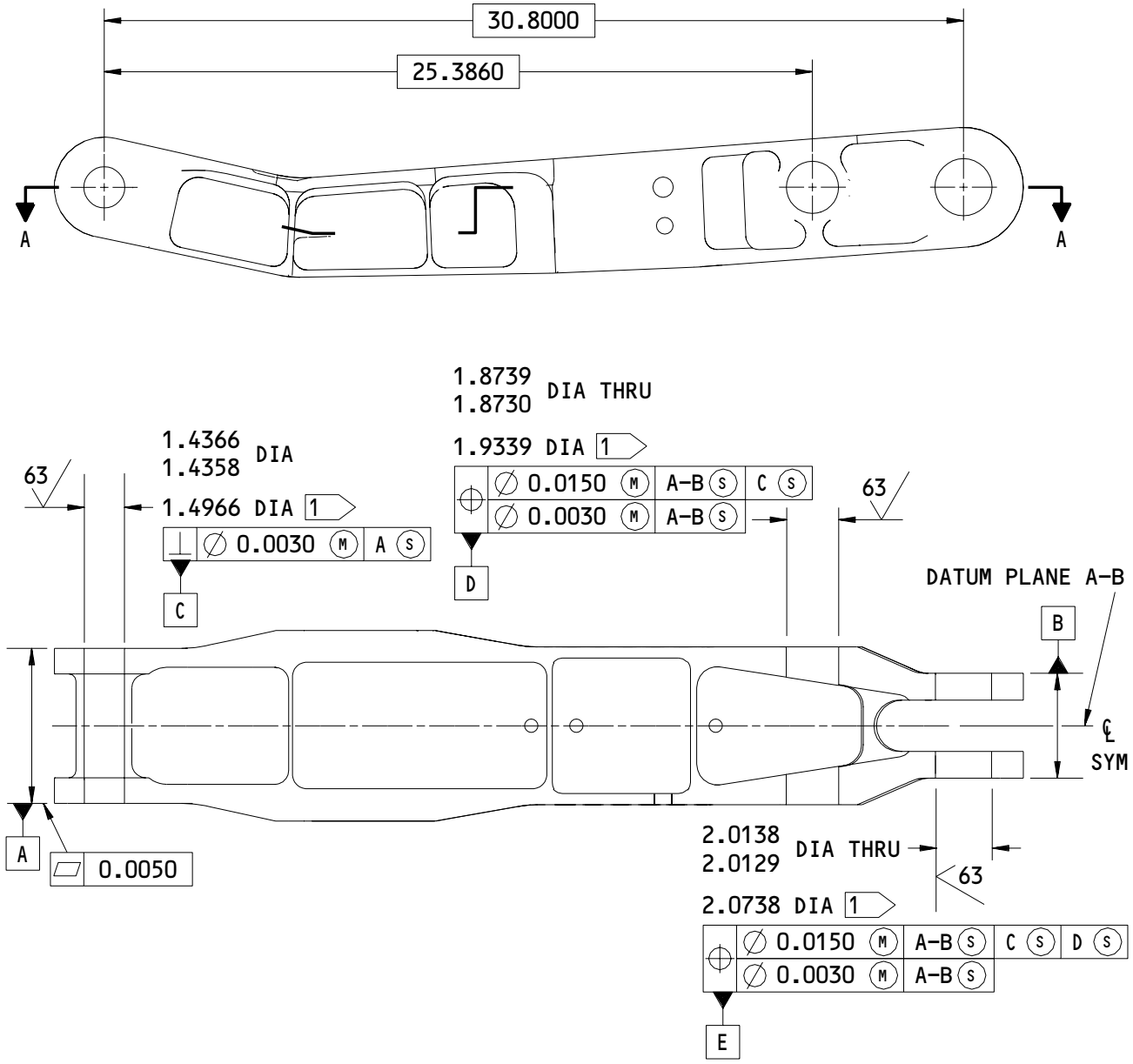
(1) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(2) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) Boric acid-sulfuric acid anodize (F-17.31).

(2) Apply BMS 10-11, type 1 primer (F-20.02).



A-A

1 REPAIR LIMIT

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

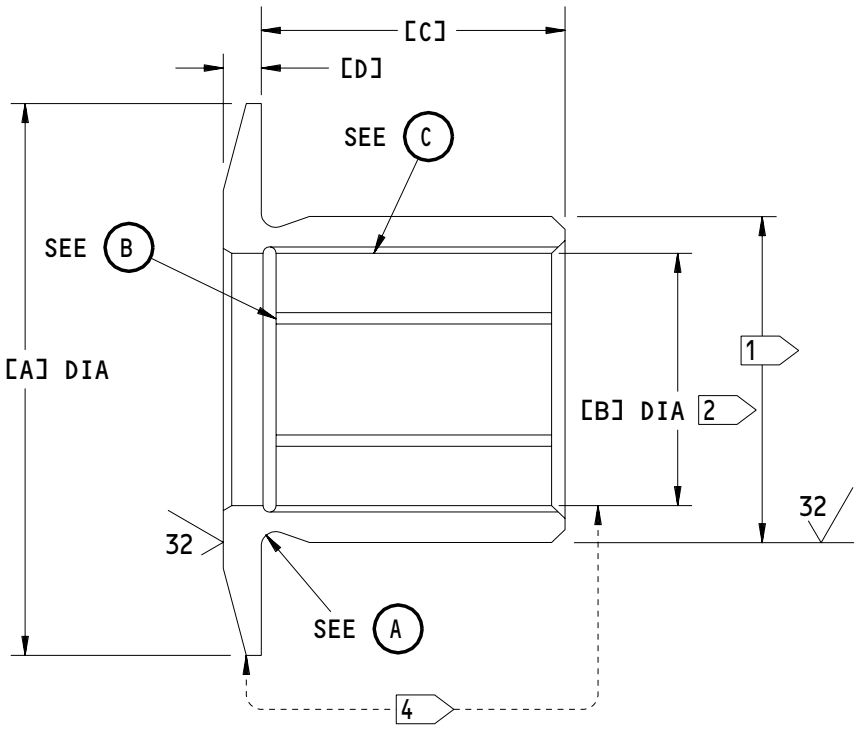
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

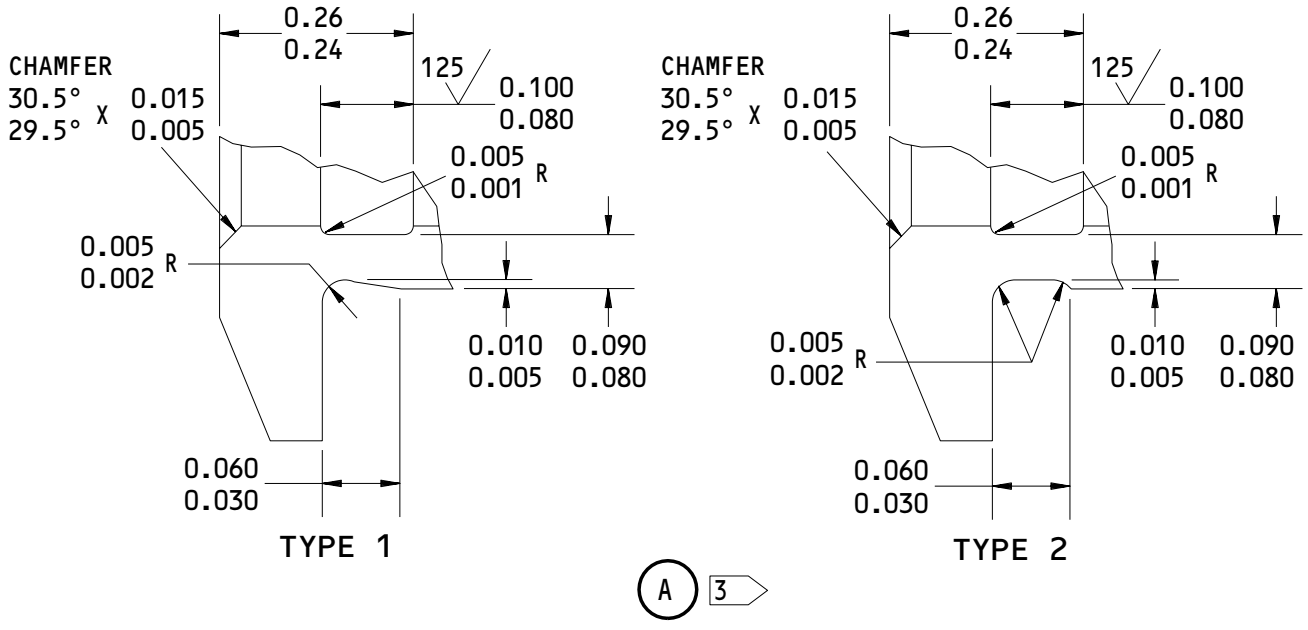
ALL DIMENSIONS ARE IN INCHES

113T1314-43
Fitting Repair
Figure 601

L02496

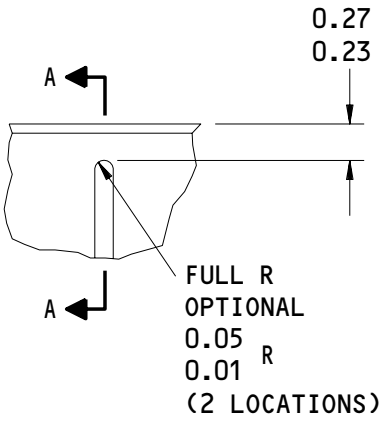


OVERSIZE REPLACEMENT FOR BUSHING (475,480) 3



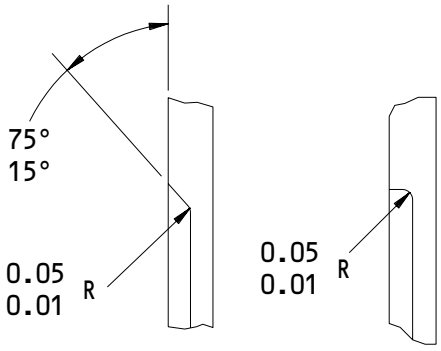
Oversize Bushing Details
Figure 602 (Sheet 1)

L02518

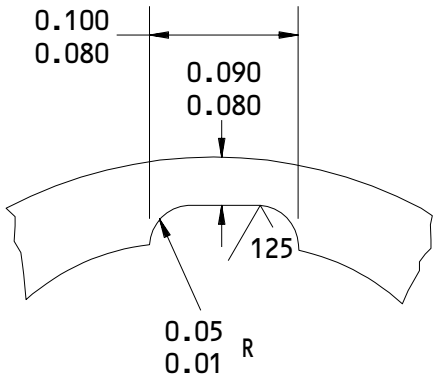


LUBE GROOVE TERMINATION

B 3



C–C



TYPICAL LUBE GROOVE DETAIL
6 GROOVES EQUALLY SPACED ON INNER FACE

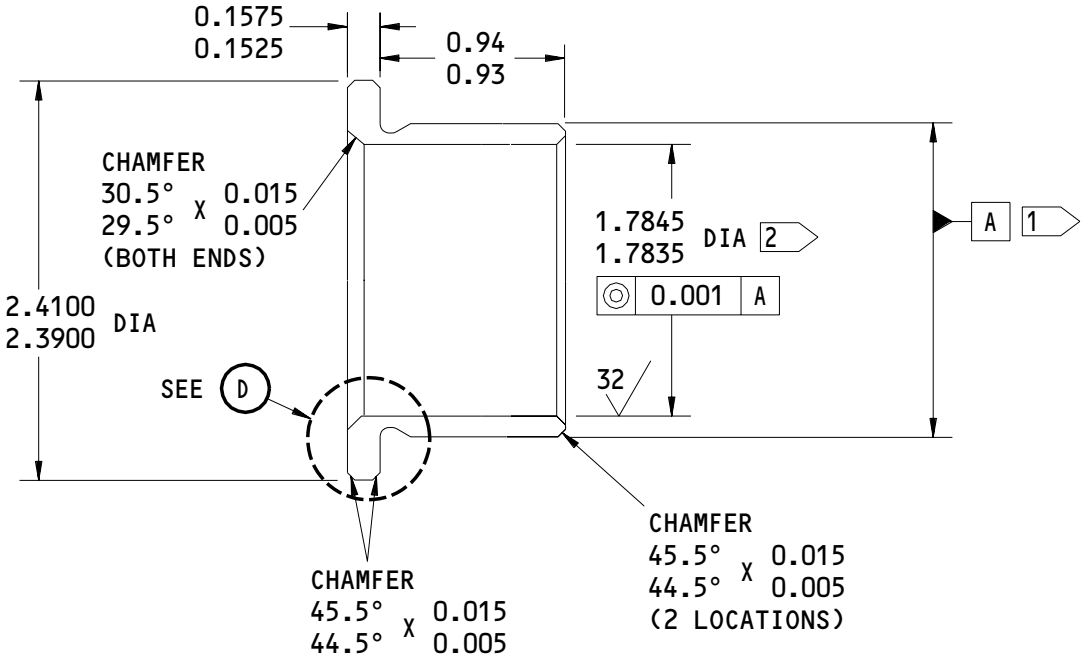
C 3

Oversize Bushing Details
Figure 602 (Sheet 2)

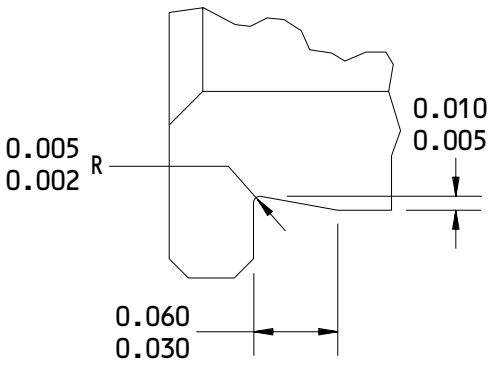
L07606

REPLACES BUSHING (IPL FIG. 2)	[A]	[B]	[C]	[D]	INTER-FERENCE
475	2.51 2.49	1.2485 1.2475	1.00 0.99	0.070 0.065	0.0011 0.0000
480	2.67 2.65	1.6230 1.6220	1.59 1.58	0.1825 0.1820	0.0019 0.0007

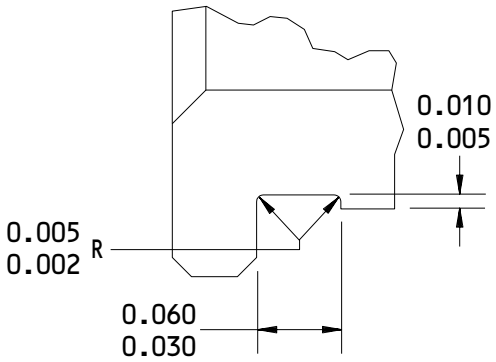
Oversize Bushing Details
Figure 602 (Sheet 3)



OVERSIZE REPLACEMENT FOR BUSHING (490)



TYPE 1



TYPE 2

D

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS INTERFERENCE

2 THE BUSHING INSIDE DIAMETER TO BE MACHINED UPON INSTALLATION AS SHOWN IN REPAIR

3 LUBE GROOVES AND CIRCUMFERENTIAL GROOVE ARE FOR BUSHING (480) ONLY

4 CADMIUM PLATE (F-15.36)

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 4)

2-8 LINK ASSEMBLY - REPAIR 11-1

113T1319-3, -5

1. Refer to 767 CMM 27-51-97, REPAIR 5-1 for instruction.

2-8 LINK ASSEMBLY - REPAIR 12-1

113T1320-1, -3

1. Refer to 767 CMM 27-51-97, REPAIR 5-1 for instruction.

5-8 LINK ASSEMBLY - REPAIR 13-1

113T1335-9, -13

1. Refer to 767 CMM 27-51-97, REPAIR 2-1 for instruction.

5-8 LINK ASSEMBLY - REPAIR 14-1

113T1336-7, -11

1. Refer to 767 CMM 27-51-97, REPAIR 3-1 for instruction.

ASSEMBLY

1. General

   A. This procedure has the data necessary to assemble the linkage assembly (1A).

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to IPL Fig. 1 and IPL Fig. 2 for item numbers.

2. Assembly

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) D00633 Grease - BMS 3-33 (SOPM 20-60-03)

      (2) G02436 Lockwire - MS20995NC40

   B. References

      (1) SOPM 20-50-01, Bolt and Nut Installation

      (2) SOPM 20-50-02, Installation of Safetying Devices

      (3) SOPM 20-60-03, Lubricants

   C. Procedure

      (1) Use standard industry procedures and the steps shown below to assemble this component.

      (2) For IPL Fig. 1:

         (a) Procedures at the joint 9: At 6-9 link assembly and the 9-10 beam assembly:

            1) Tighten the nut (IPL Fig. 1; 120) to 1200-5000 pound-inches. If the bolt (IPL Fig. 1; 105B) can not be installed, then add up to two washers P/N NAS1149C1816R as required.

            2) Tighten the nut (IPL Fig. 1; 115) to 20-25 pound-inches.

(b) Procedures at the joint 8: At 2-8 link assemblies, 5-8 link assembly, and 6-9 link assembly:

1) Tighten the nut (IPL Fig. 1; 30) to 1500-2000 pound-inches.

2) Tighten the nut (IPL Fig. 1; 15) to 510-840 pound-inches. Add up to two washers (IPL Fig. 1; 20), as required, to obtain proper cotter pin installation.

3) Install the cotter pin (IPL Fig. 1; 10) per SOPM 20-50-02.

4) Install the lockwire P/N MS20995NC40 on the nut (IPL Fig. 1; 30) and the washer (IPL Fig. 1; 35) per SOPM 20-50-02. Install the lockwire in two places.

(c) Procedures at the joint 10: At 3-10 link assembly, 9-10 beam assembly, and 9-10 swivel plate assembly:

1) Tighten the nut (IPL Fig. 1; 310) to 1500-2000 pound-inches.

2) Tighten the nut (IPL Fig. 1; 295) to 300-500 pound-inches. Add up to two washers (IPL Fig. 1; 300), as required, to obtain proper cotter pin installation.

3) Install the cotter pin (IPL Fig. 1; 290) per SOPM 20-50-02.

4) Install the lockwire P/N MS20995NC40 on the nut (IPL Fig. 1; 310) and the washer (IPL Fig. 1; 315) per SOPM 20-50-02. Install the lockwire in two places.

(d) Procedures at the joint 2: At 1-3 fitting assembly and 2-8 link assemblies:

1) Tighten the nut (IPL Fig. 1; 230) to 1200-5000 pound-inches. If the bolt (IPL Fig. 1; 215) can not be installed, then add up to two washers P/N NAS1149C1816R as required.

2) Tighten the nut (IPL Fig. 1; 225) to 20-25 pound-inches.

(e) Procedures at the joint 3: At 1-3 fitting assembly and the 3-10 link assembly:

1) Tighten the nut (IPL Fig. 1; 420) to 1200-5000 pound-inches. If the bolt (IPL Fig. 1; 405B) can not be installed, then add up to two washers P/N NAS1149C1816R as required.

2) Tighten the nut (IPL Fig. 1; 415) to 20-25 pound-inches.

(f) Lubricate the joints through the lube fittings (IPL Fig. 1; 80A, 145, 395, 510) with BMS 3-33 grease. Apply the grease until you can see the grease at the exits of the lube holes.

(3) For IPL Fig. 2:

(a) Procedures at the joint 9: At 6-9 link assembly and the 9-10 beam assembly:

1) Tighten the nut (IPL Fig. 2; 145) to 1200-5000 pound-inches. If the bolt (IPL Fig. 2; 130) can not be installed, then add up to two washers P/N NAS1149C1816R as required.

2) Tighten the nut (IPL Fig. 2; 140) to 20-25 pound-inches.

(b) Procedures at the joint 8: At 2-8 link assemblies, 5-8 link assembly, and 6-9 link assembly:

1) Tighten the nut (IPL Fig. 2; 30) to 1900-2600 pound-inches.

2) Tighten the nut (IPL Fig. 2; 15) to 510-840 pound-inches. Add up to two washers (IPL Fig. 1; 20), as required, to obtain proper cotter pin installation.

3) Install the cotter pin (IPL Fig. 2; 10) per SOPM 20-50-02.

4) Install the lockwire P/N MS20995NC40 on the nut (IPL Fig. 2; 30) and the washer (IPL Fig. 2; 35) per SOPM 20-50-02. Install the lockwire in two places.

(c) Procedures at the joint 10: At 3-10 link assembly, 9-10 beam assembly, and 9-10 swivel plate assembly:

1) Tighten the nut (IPL Fig. 2; 330) to 1900-2600 pound-inches.

2) Tighten the nut (IPL Fig. 2; 315) to 510-840 pound-inches. Add up to two washers (IPL Fig. 2; 320), as required, to obtain proper cotter pin installation.

3) Install the cotter pin (IPL Fig. 2; 310) per SOPM 20-50-02.

4) Install the lockwire P/N MS20995NC40 on the nut (IPL Fig. 2; 330) and the washer (IPL Fig. 2; 335) per SOPM 20-50-02. Install the lockwire in two places.

(d) Procedures at the joint 2: At 1-3 fitting assembly and 2-8 link assemblies:

1) Tighten the nut (IPL Fig. 2; 250) to 1200-5000 pound-inches. If the bolt (IPL Fig. 2; 245) can not be installed, then add up to two washers P/N NAS1149C1816R as required.

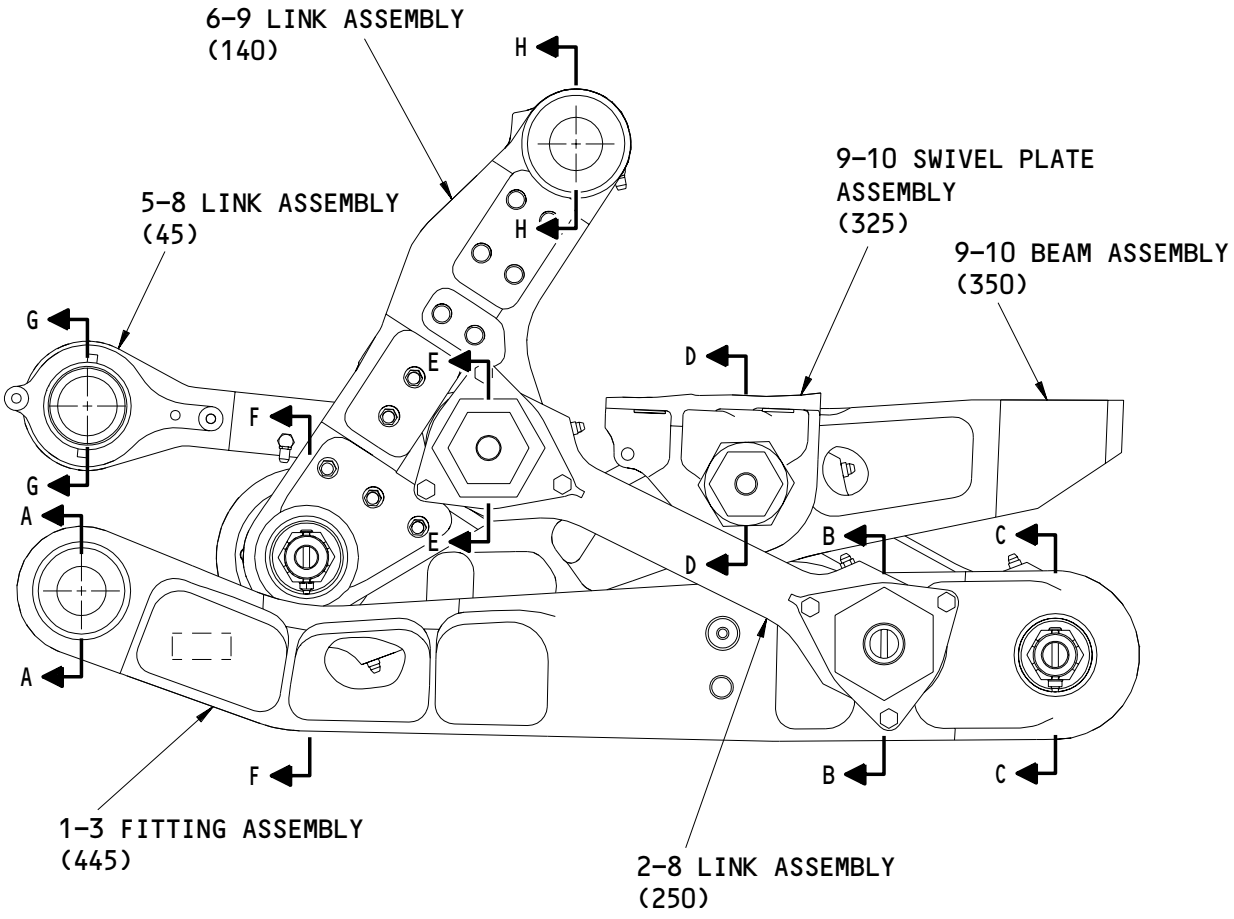
2) Tighten the nut (IPL Fig. 2; 245) to 20-25 pound-inches.

(e) Procedures at the joint 3: At 1-3 fitting assembly and the 3-10 link assembly:

1) Tighten the nut (IPL Fig. 2; 440) to 1200-5000 pound-inches. If the bolt (IPL Fig. 2; 425) can not be installed, then add up to two washers P/N NAS1149C1816R as required.

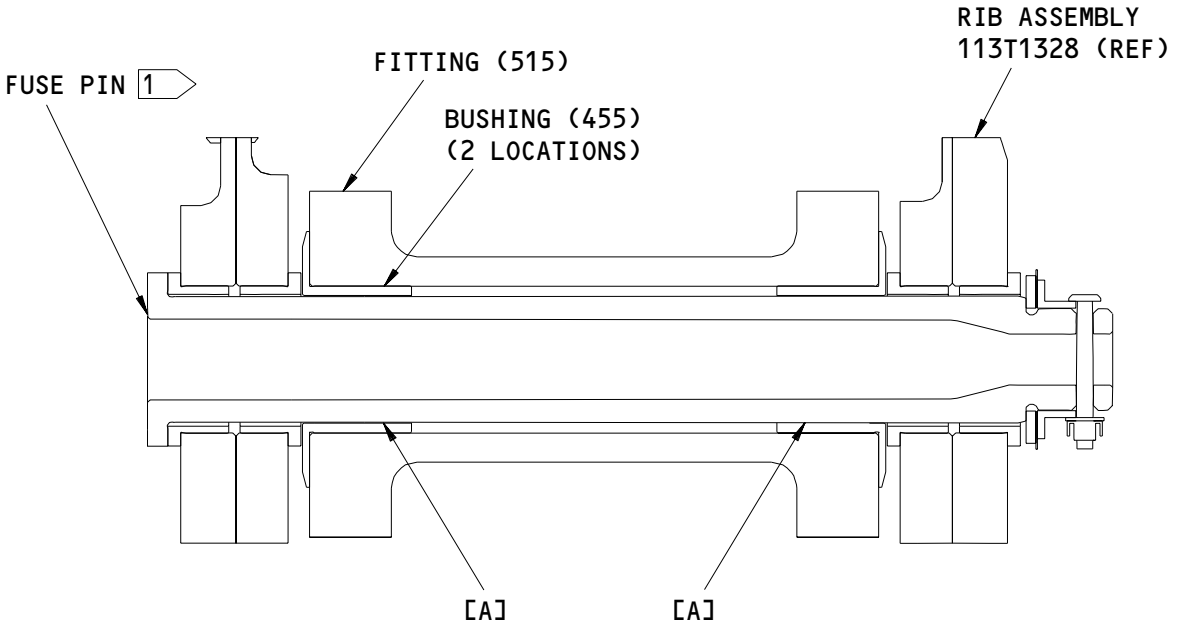
2) Tighten the nut (IPL Fig. 2; 435) to 20-25 pound-inches.

(f) Lubricate the joints through the lube fittings (IPL Fig. 2; 170, 300, 415, 530) with BMS 3-33 grease. Apply the grease until you can see the grease at the exits of the lube holes.

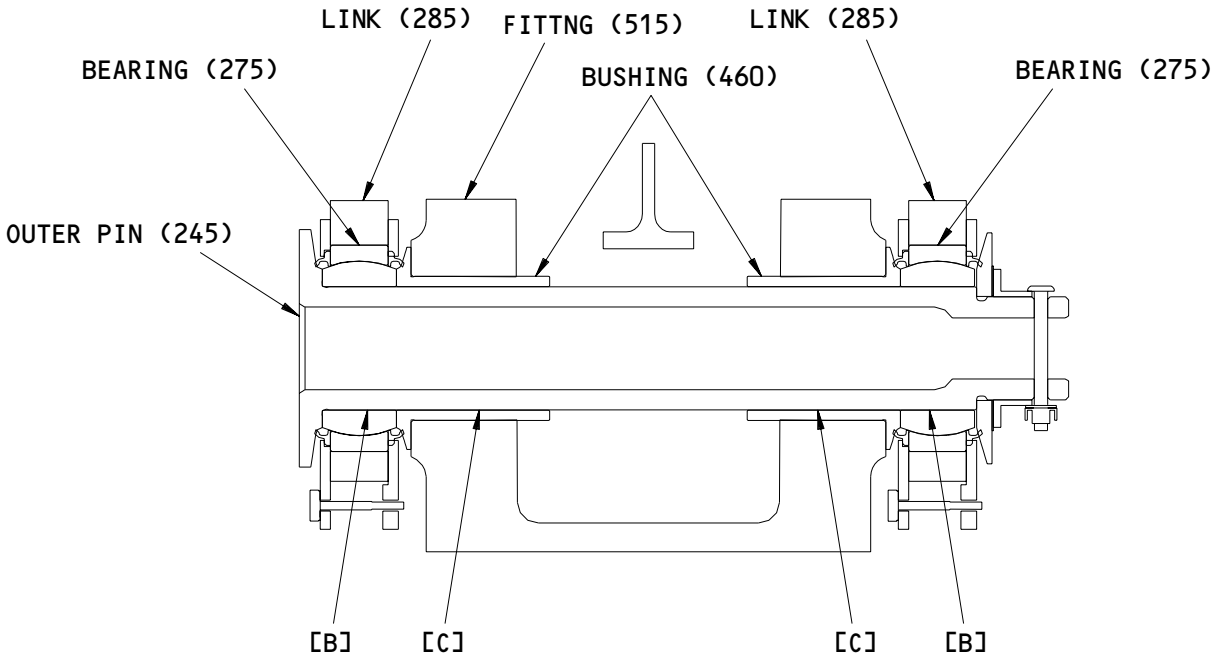


Fits and Clearances
Figure 801 (Sheet 1)

K97597



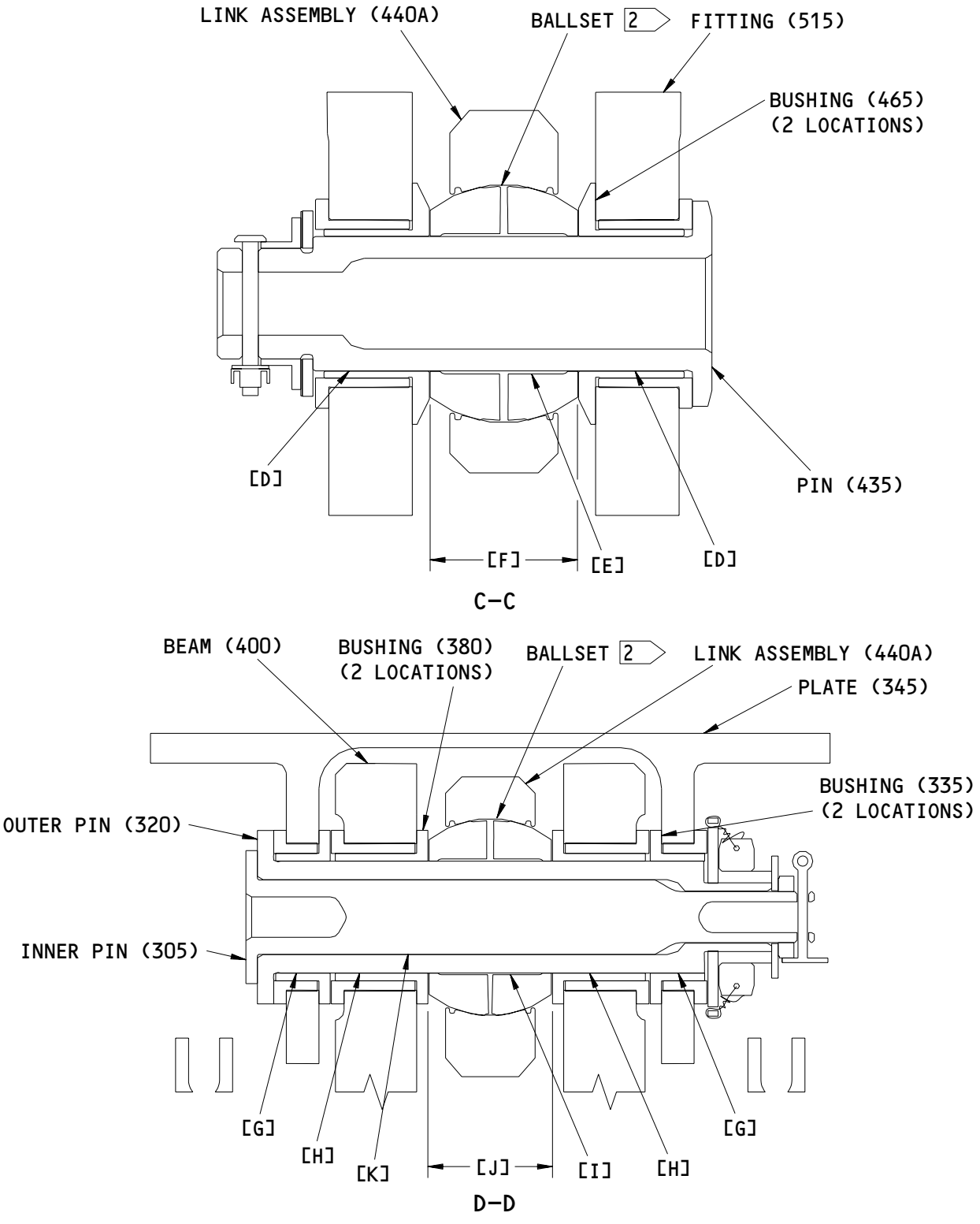
A–A



B–B

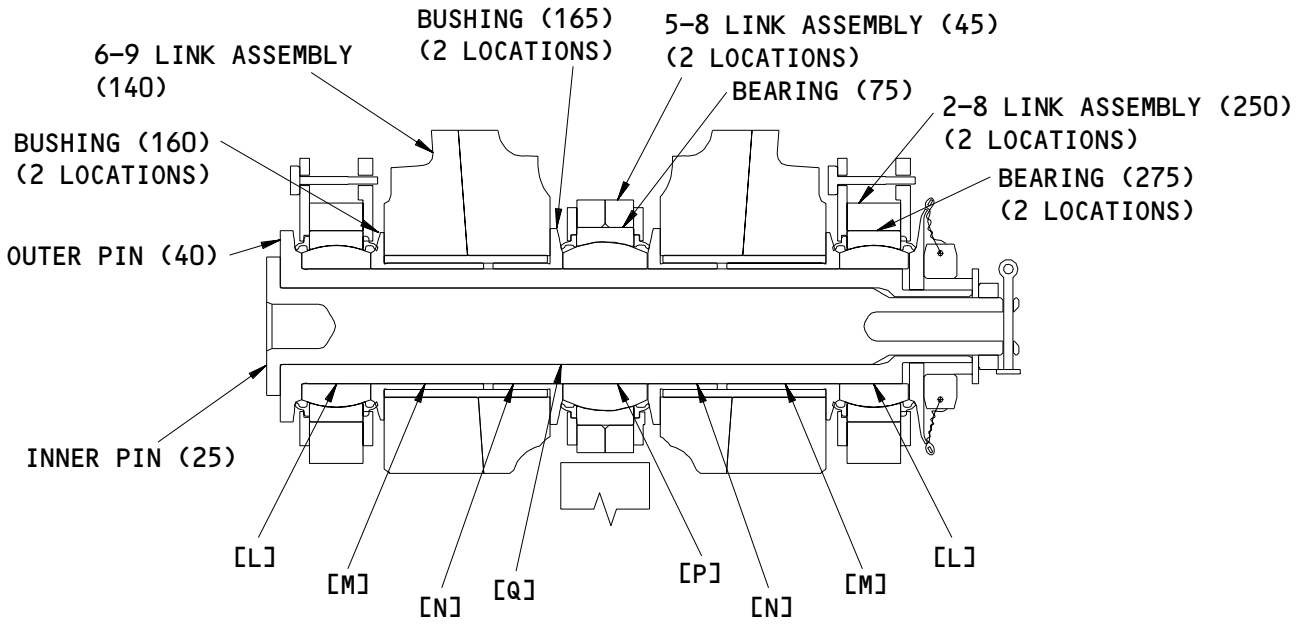
Fits and Clearances
Figure 801 (Sheet 2)

K97639

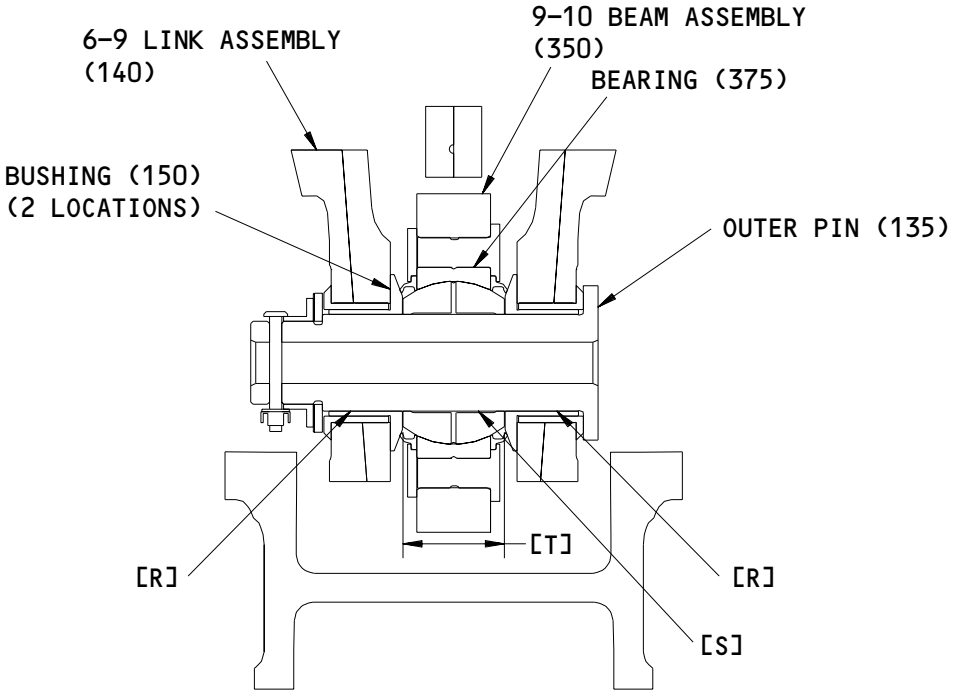


Fits and Clearances
Figure 801 (Sheet 3)

K97656



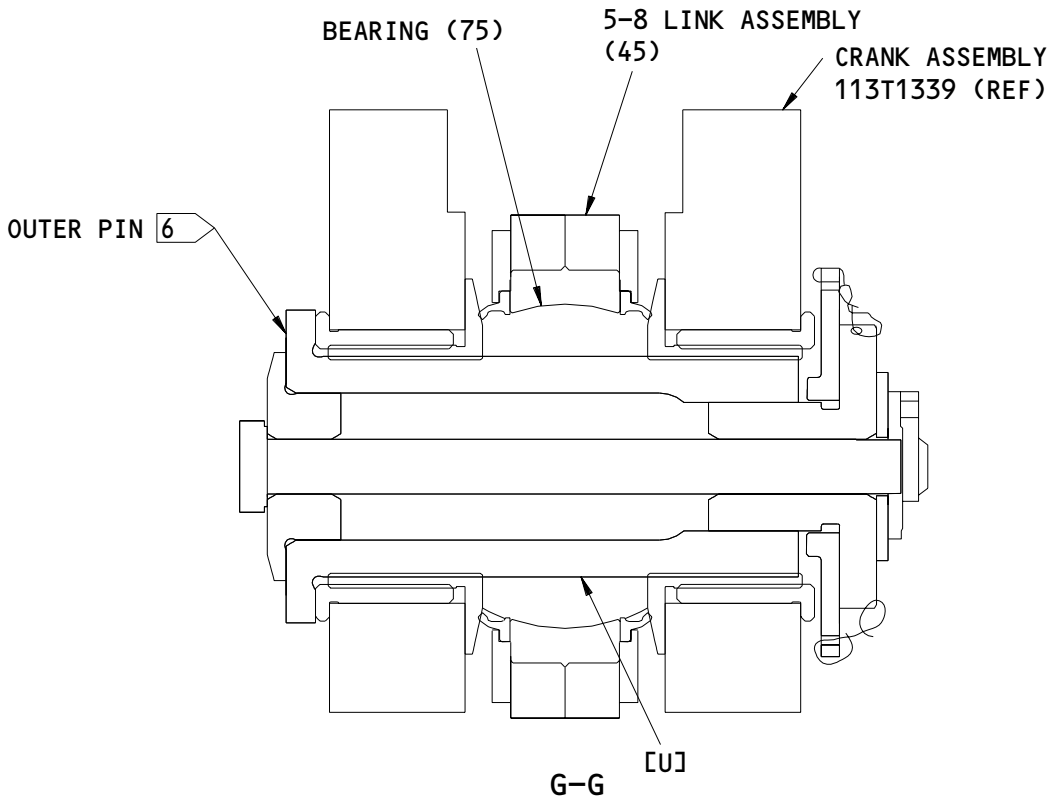
E-E



F-F

Fits and Clearances
Figure 801 (Sheet 4)

K97746



ITEM NUMBERS REFER TO IPL FIG. 1

Fits and Clearances
Figure 801 (Sheet 5)

K97820

REF LETTER	REF IPL FIG. 1, MATING ITEM NO.	DESIGN DIMENSION* DIMENSION MIN	DESIGN DIMENSION* DIMENSION MAX	DESIGN DIMENSION* ASSEMBLY CLEARANCE MIN	DESIGN DIMENSION* ASSEMBLY CLEARANCE MAX	SERVICE WEAR LIMIT* DIMENSION MIN	SERVICE WEAR LIMIT* DIMENSION MAX	SERVICE WEAR LIMIT* MAXIMUM CLEARANCE
[A]	ID 455 OD 1	1.2495 1.2480	1.2505 1.2490	0.0005	0.0025	1.2422	1.2563	0.0073
[B]	ID 275 OD 245	1.5000 1.4985	1.5006 1.4991	0.0009	0.0021	1.4916	1.5075	0.0084
[C]	ID 460 OD 245	1.4996 1.4985	1.5015 1.4991	0.0005	0.0030	1.4912	1.5075	0.0084
[D]	ID 465 OD 435	1.3745 1.3734	1.3764 1.3740	0.0005	0.0030	1.3667	1.3818	0.0078
[E]	ID 2 OD 435	1.3745 1.3734	1.3755 1.3740	0.0005	0.0021	1.3667	1.3818	0.0078
[F]	3	1.5110	1.5310				1.5510	
[G]	ID 335 OD 320	1.3745 1.3734	1.3755 1.3740	0.0005	0.0021	1.3667	1.3818	0.0078
[H]	ID 380 OD 320	1.3745 1.3734	1.3755 1.3740	0.0005	0.0021	1.3667	1.3818	0.0078
[I]	ID 2 OD 320	1.3745 1.3734	1.3755 1.3740	0.0005	0.0021	1.3667	1.3818	0.0078
[J]	4	1.5150	1.5350				1.5550	
[K]	ID 320 OD 305	0.9190 0.9140	0.9240 0.9160	0.0030	0.0100	0.9090	0.9260	0.0100
[L]	ID 275 OD 40	1.5000 1.4985	1.5006 1.4990	0.0010	0.0021	1.4916	1.5074	0.0084

Fits and Clearances
Figure 801 (Sheet 6)

K98312

REF LETTER	REF IPL FIG. 1, MATING ITEM NO.	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
		DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[M]	ID 160	1.4995	1.5006	0.0005	0.0021		1.5074	0.0084
	OD 40	1.4985	1.4990			1.4911		
[N]	ID 165	1.4995	1.5006	0.0005	0.0021		1.5074	0.0084
	OD 40	1.4985	1.4990			1.4911		
[P]	ID 75	1.5000	1.5006	0.0010	0.0021		1.5074	0.0084
	OD 40	1.4985	1.4990			1.4916		
[Q]	ID 40	1.0000	1.0030	0.0020	0.0070		1.0080	0.0100
	OD 25	0.9960	0.9980			0.9900		
[R]	ID 150	1.3120	1.3131	0.0005	0.0022	1.3045	1.3190	0.0075
	OD 135	1.3109	1.3115					
[S]	ID 375	1.3125	1.3131	0.0010	0.0022		1.3190	0.0075
	OD 135	1.3109	1.3115			1.3050		
[T]	5	1.3810	1.4110				1.4410	
[U]	ID 75	1.5000	1.5006	0.0010	0.0022			
	OD 6	1.4984	1.4990					
[V]	ID 175	1.3750	1.3756	0.0010	0.0022		1.3818	0.0078
	OD 7	1.3734	1.3740			1.3672		

* ALL DIMENSIONS ARE IN INCHES

1 INSTALLATION PIN P/N 113T1351-7

2 BALL SET S113W102-210B IS USED ON LINK ASSEMBLY S113W102-210

3 DIMENSION BETWEEN THE INNER FLANGES OF BUSHINGS (465) P/N 113T1347-17

4 DIMENSION BETWEEN THE INNER FLANGES OF BUSHINGS (380) P/N 113T1347-163

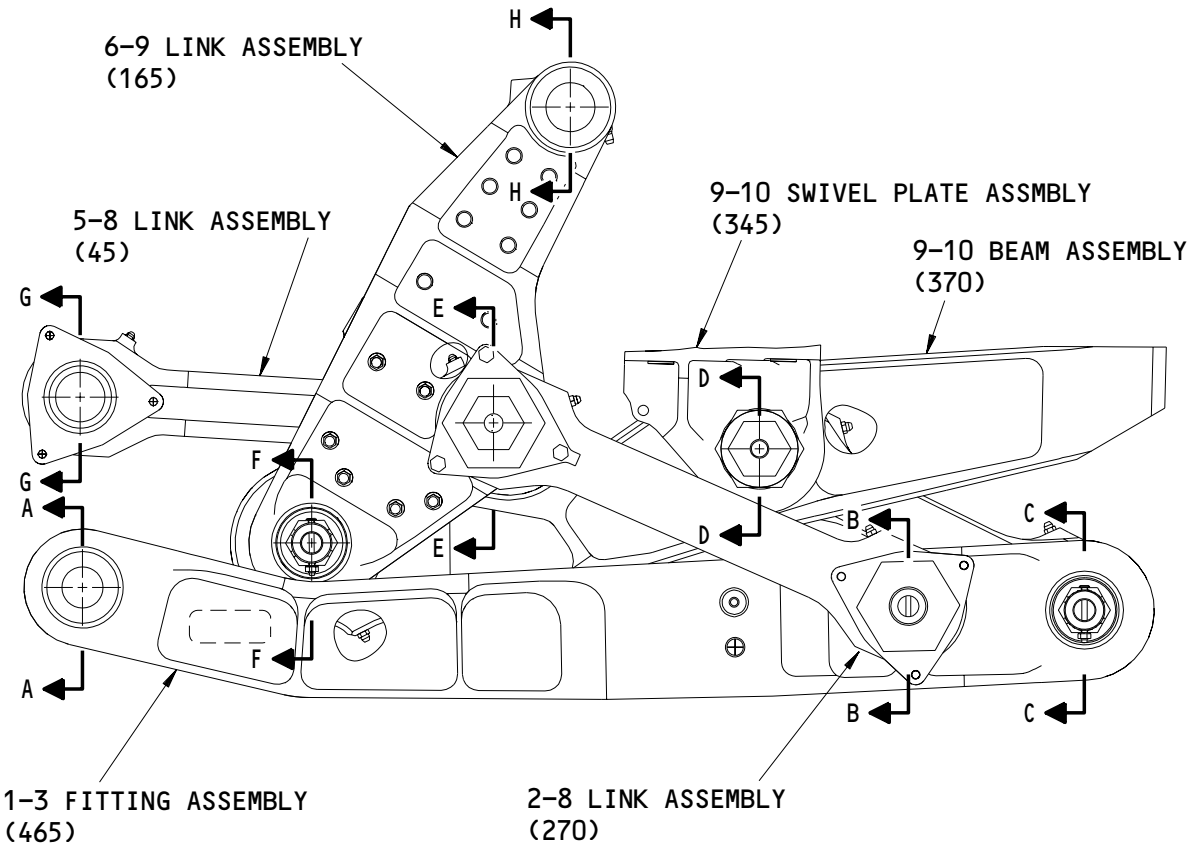
5 DIMENSION BETWEEN THE INNER FLANGES OF BUSHINGS (150) P/N 113T1347-1

6 INSTALLATION PIN P/N 113T1263-13

7 INSTALLATION PIN P/N 113T1263-15

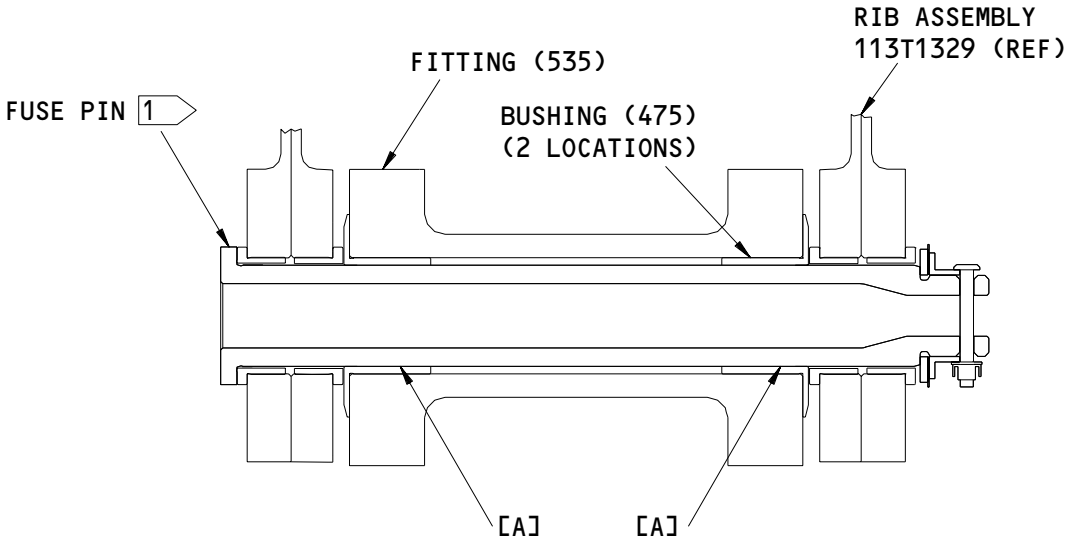
Fits and Clearances
Figure 801 (Sheet 7)

K98333

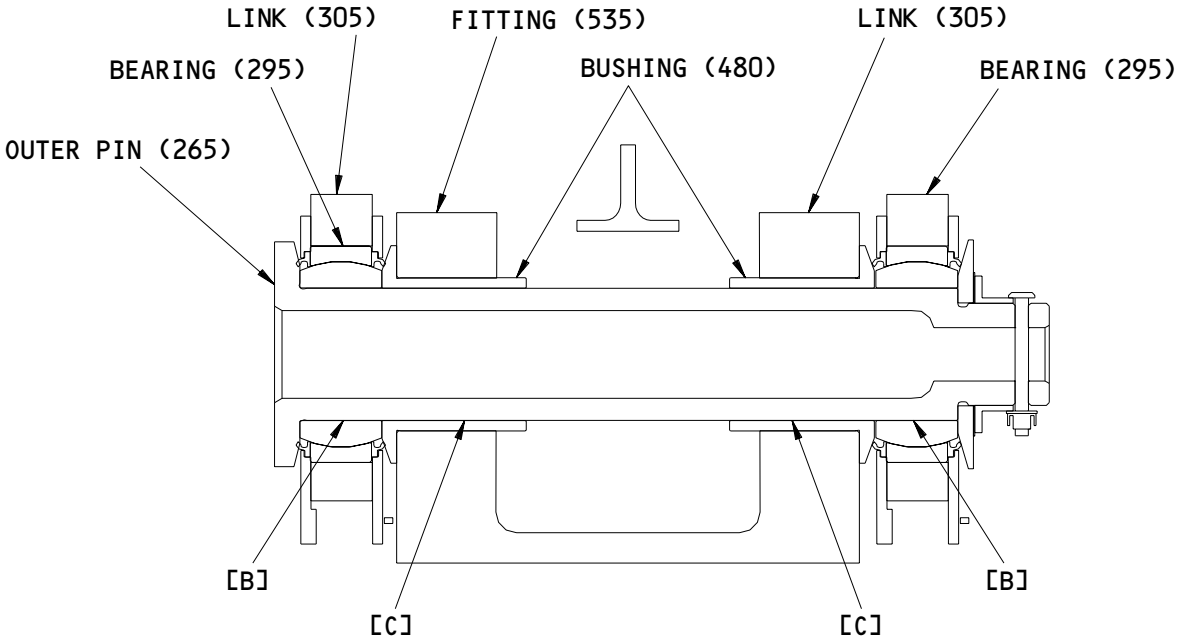


Fits and Clearances
Figure 802 (Sheet 1)

K97915



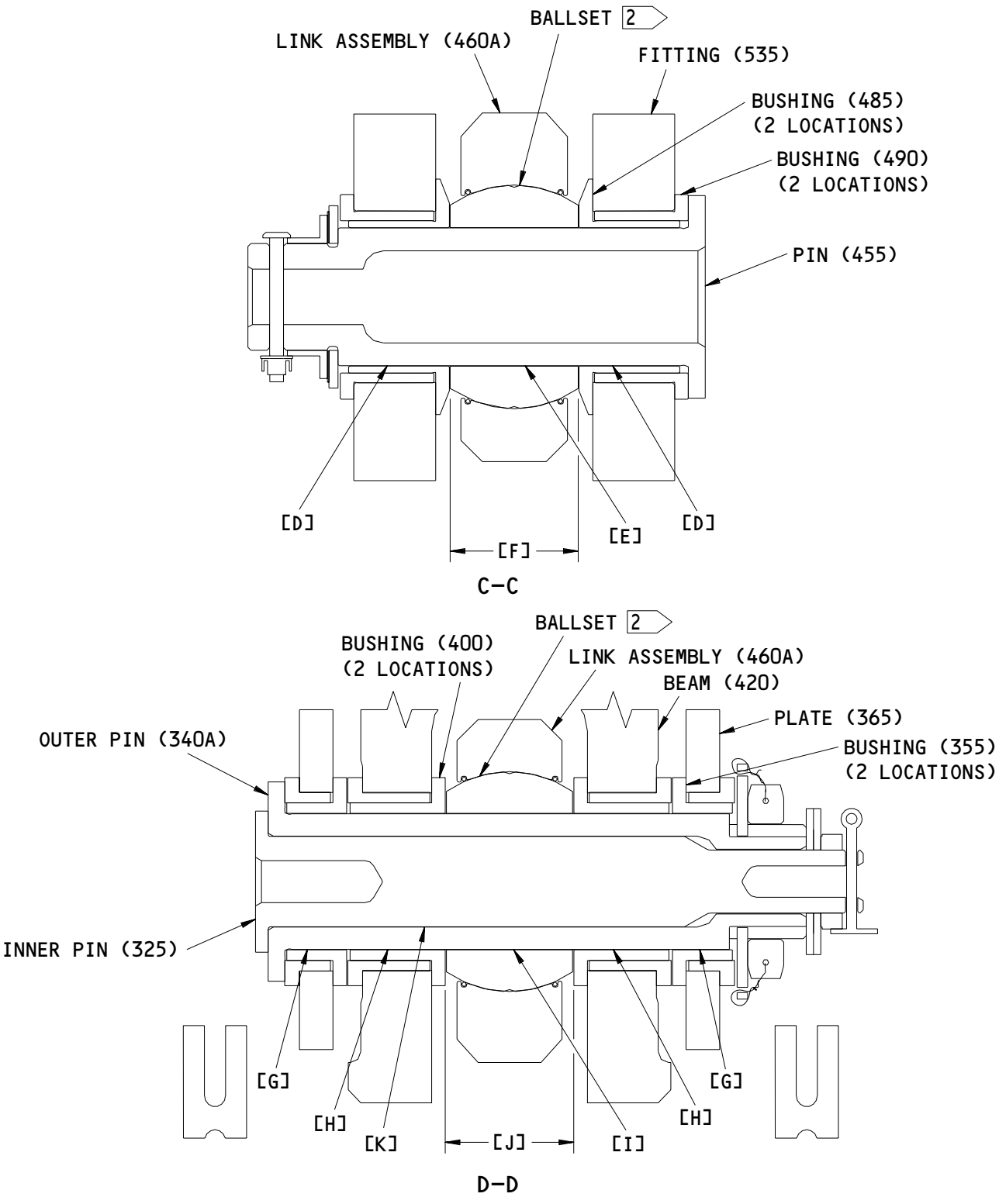
A–A



B–B

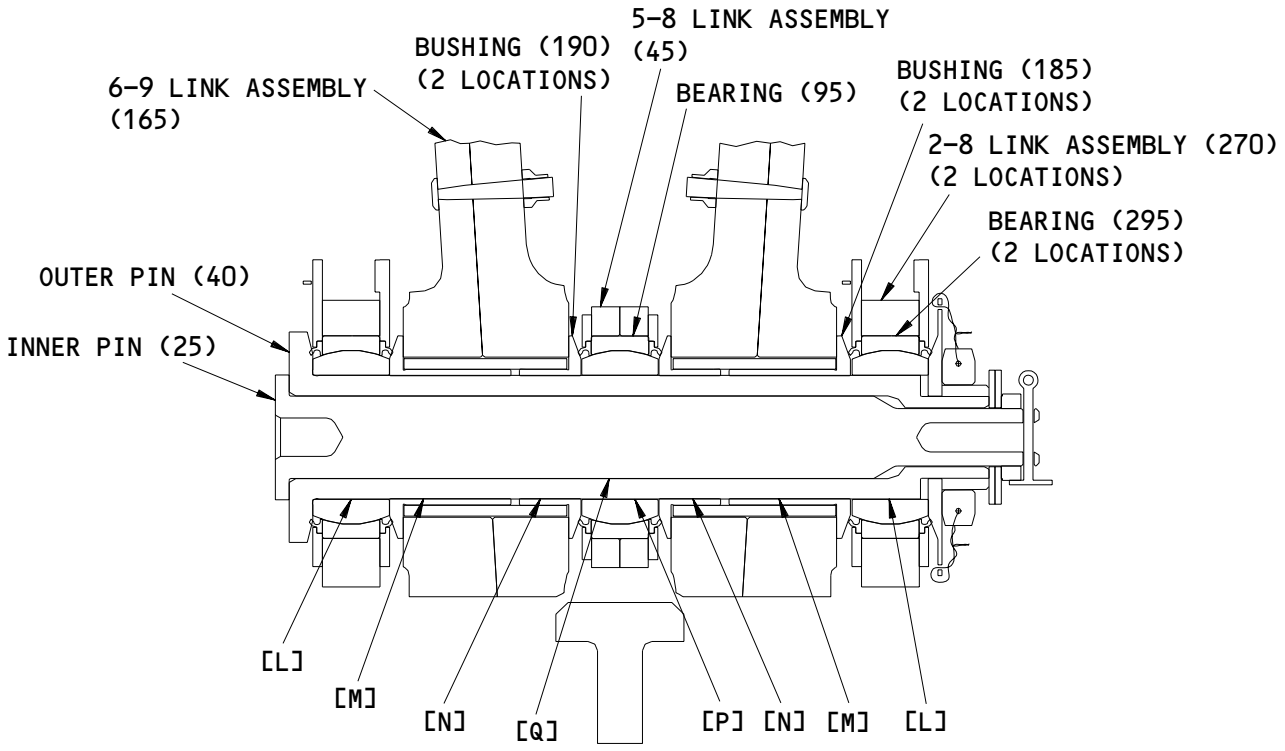
Fits and Clearances
Figure 802 (Sheet 2)

K97962

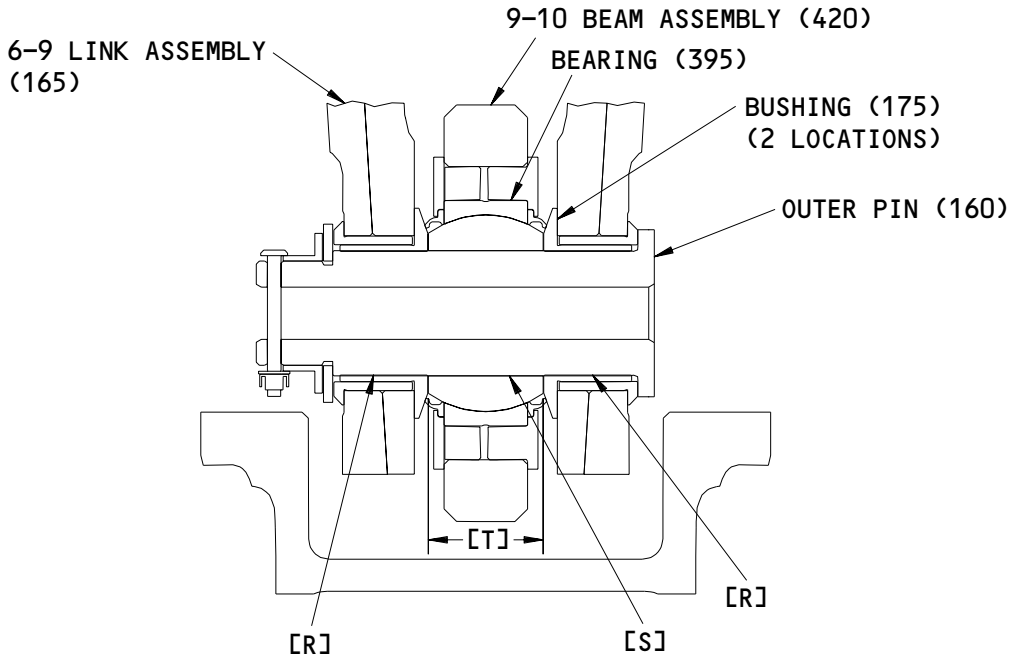


Fits and Clearances
Figure 802 (Sheet 3)

K97989



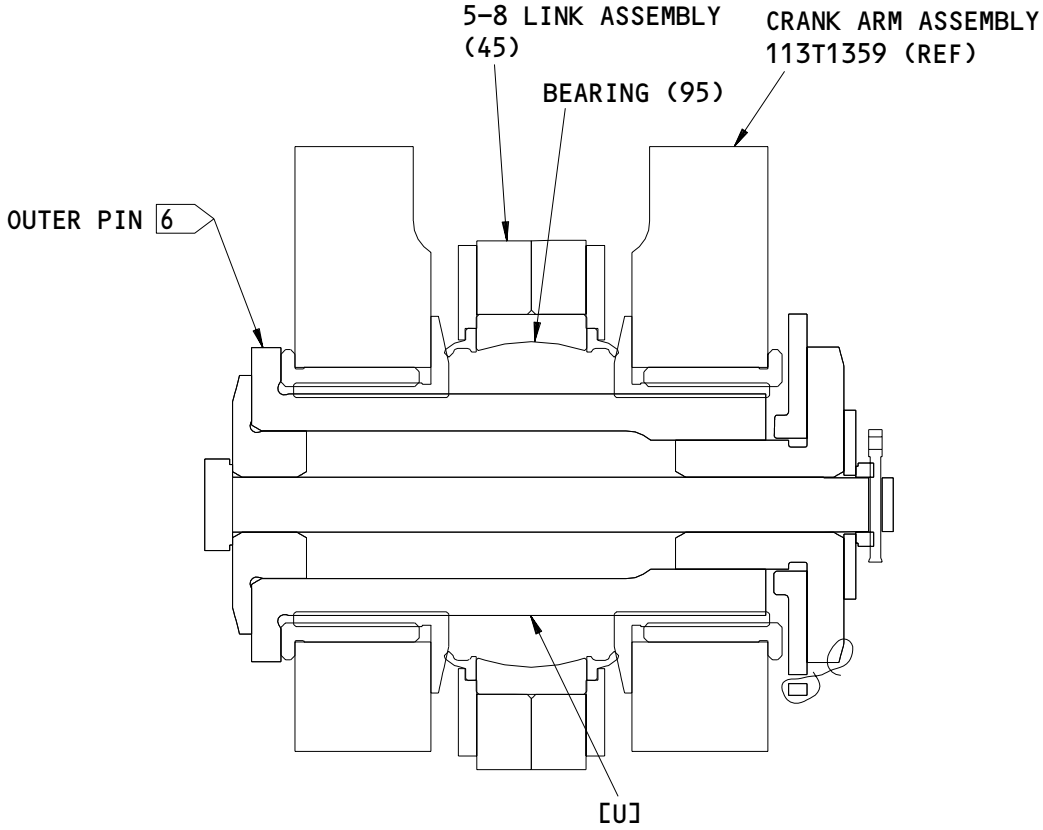
E-E



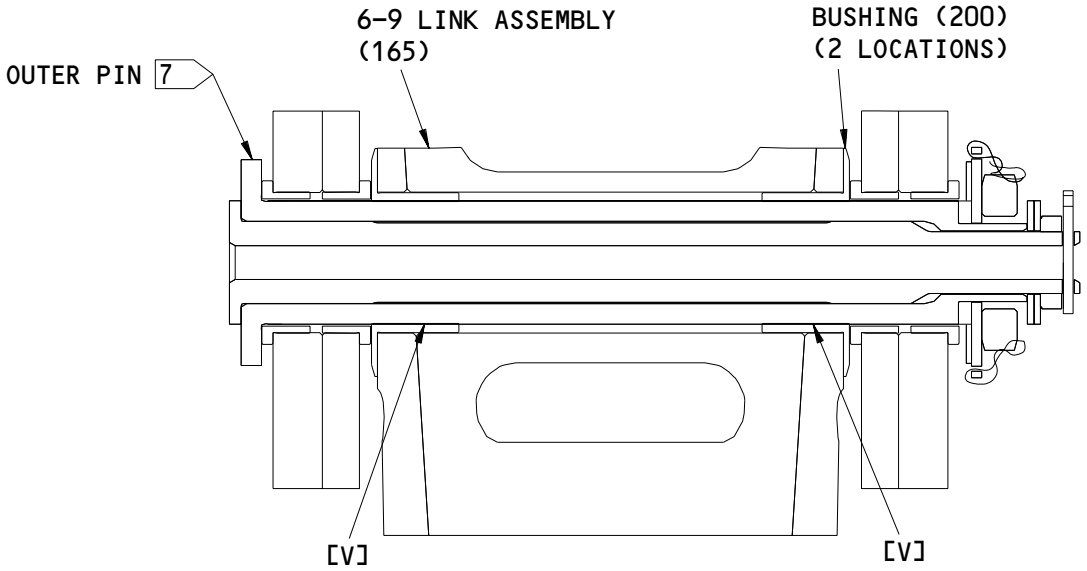
F-F

Fits and Clearances
Figure 802 (Sheet 4)

K98169



G-G



H-H

ITEM NUMBERS REFER TO IPL FIG. 2

Fits and Clearances
Figure 802 (Sheet 5)

K98247

REF LETTER	REF IPL FIG. 2, MATING ITEM NO.	DESIGN DIMENSION* DIMENSION MIN	DESIGN DIMENSION* DIMENSION MAX	DESIGN DIMENSION* ASSEMBLY CLEARANCE MIN	DESIGN DIMENSION* ASSEMBLY CLEARANCE MAX	SERVICE WEAR LIMIT* DIMENSION MIN	SERVICE WEAR LIMIT* DIMENSION MAX	SERVICE WEAR LIMIT* MAXIMUM CLEARANCE
[A]	ID 475 OD 1	1.2495 1.2480	1.2505 1.2490	0.0005	0.0025	1.2422	1.2563	0.0073
[B]	ID 295 OD 265	1.6250 1.6234	1.6256 1.6240	0.0010	0.0022	1.6160	1.6330	0.0090
[C]	ID 480 OD 265	1.6246 1.6234	1.6264 1.6240	0.0006	0.0030	1.6155	1.6330	0.0090
[D]	ID 485 OD 455	1.6245 1.6234	1.6264 1.6240	0.0005	0.0030	1.6155	1.6330	0.0090
[E]	ID 460A OD 2	1.6245 1.6234	1.6255 1.6240	0.0005	0.0021	1.6155	1.6330	0.0090
[F]	ID 3 OD	1.5110	1.5310				1.5510	
[G]	ID 355 OD 340A	1.6245 1.6234	1.6255 1.6240	0.0005	0.0021	1.6155	1.6330	0.0090
[H]	ID 400 OD 340A	1.6245 1.6234	1.6255 1.6240	0.0005	0.0021	1.6155	1.6330	0.0090
[I]	ID 2 OD 340A	1.6245 1.6234	1.6255 1.6240	0.0005	0.0021	1.6155	1.6330	0.0090
[J]	ID 4 OD	1.5150	1.5350				1.5550	
[K]	ID 340A OD 325	1.0800 1.0745	1.0830 1.0765	0.0035	0.0085	1.0700	1.0865	0.0100
[L]	ID 295 OD 40	1.6250 1.6234	1.6256 1.6240	0.0010	0.0022	1.6160	1.6330	0.0090

Fits and Clearances
Figure 802 (Sheet 6)

K98403

REF LETTER	REF IPL FIG. 2, MATING ITEM NO.	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
		DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[M]	ID 185 OD 40	1.6245 1.6234	1.6256 1.6240	0.0005	0.0022	1.6155	1.6330	0.0090
[N]	ID 190 OD 40	1.6245 1.6234	1.6256 1.6240	0.0005	0.0022	1.6155	1.6330	0.0090
[P]	ID 95 OD 40	1.6250 1.6234	1.6256 1.6240	0.0010	0.0022	1.6160	1.6330	0.0090
[Q]	ID 40 OD 25	1.0800 1.0760	1.0830 1.0780	0.0020	0.0070	1.0700	1.0880	0.0100
[R]	ID 175 OD 160	1.4995 1.4984	1.5006 1.4990	0.0005	0.0022	1.4911	1.5074	0.0084
[S]	ID 395 OD 160	1.5000 1.4984	1.5006 1.4990	0.0010	0.0022	1.4916	1.5074	0.0084
[T]	5	1.3810	1.4110				1.4410	
[U]	ID 95 OD 6	1.5000 1.4984	1.5006 1.4990	0.0010	0.0022	1.4916	1.5074	0.0084
[V]	ID 200 OD 7	1.4995 1.4984	1.5006 1.4990	0.0005	0.0022	1.4911	1.5074	0.0084

* ALL DIMENSIONS ARE IN INCHES

1 INSTALLATION PIN P/N 113T1351-7

2 BALL SET S113W102-202B IS USED ON LINK ASSEMBLY S113W102-211

3 DIMENSION BETWEEN THE INNER FLANGES OF BUSHINGS (485) P/N 113T1347-26

4 DIMENSION BETWEEN THE INNER FLANGES OF BUSHINGS (400) P/N 113T1347-167

5 DIMENSION BETWEEN THE INNER FLANGES OF BUSHINGS (175) P/N 113T1347-8

6 INSTALLATION PIN P/N 113T1263-13

7 INSTALLATION PIN P/N 113T1263-19

Fits and Clearances
Figure 802 (Sheet 7)

K98437

REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
1	15	Nut	510-840	
1	30,310	Nut	1500-2000	
1	50,255	Bolt 1	12-15	
1	55	Bolt 1	50-60	
1	115,225,415	Nut	20-25	
1	120,230,420	Nut	1200-5000	
1	295	Nut	300-500	
2	15,315	Nut	510-840	
2	30,330	Nut	1900-2600	
2	50,55,275B	Bolt 1	12-15	
2	52,60A	Bolt 1	50-60	
2	140,245,435	Nut	20-25	
2	145,250,440	Nut	1200-5000	

* REFER TO SOPM 20-50-01 FOR TORQUE VALUES OF STANDARD FASTENERS.

1 REFER TO CMM 27-51-97 FOR INSTALLATION PROCEDURES FOR THESE PARTS

Torque Table
Figure 803

W77393

ILLUSTRATED PARTS LIST

1. This section lists and illustrates replaceable or repairable component parts. The Illustrated Parts Catalog contains a complete explanation of the Boeing part numbering system.

2. Indentures show parts relationships as follows:

    Assembly
      Detail Parts for Assembly
      Subassembly
      Attaching Parts for Subassembly
        Detail Parts for Subassembly

    Detail Installation Parts (Included only if installation parts may be returned to shop as part of assembly)

3. One use code letter (A, B, C, etc.) is assigned in the EFF CODE column for each variation of top assembly. All listed parts are used on all top assemblies except when limitations are shown by use code letter opposite individual part entries.

4. Letter suffixes (alpha-variants) are added to item numbers for optional parts, Service Bulletin modification parts, configuration differences (Except left- and right-hand parts), product improvement parts, and parts added between two sequential item numbers. The alpha-variant is not shown on illustrations when appearance and location of all variants of the part is the same.

5. Service Bulletin modifications are shown by the notations PRE SB XXXX and POST SB XXXX.

    A. When a new top assembly part number is assigned by Service Bulletin, the notations appear at the top assembly level only. The configuration differences at detail part level are then shown by use code letter.

    B. When the top assembly part number is not changed by the Service Bulletin, the notations appear at the detail part level.

6. Parts Interchangeability

Optional (OPT)	The parts are optional to and interchangeable with other parts having the same item number.
Supersedes, Superseded By (SUPSDS, SUPSD BY)	The part supersedes and is not interchangeable with the original part.
Replaces, Replaced By (REPLS, REPLD BY)	The part replaces and is interchangeable with, or is an alternate to, the original part.

VENDORS

S0352 NIPPON MINIATURE BEARING CO LTD
TOKYO, JAPAN

U6153 SENSITITRE LTD
EAST GRINSTEAD, W SUSSES UNITED KINGDOM
OBSOLETE, LOCATION OF COMPANY UNKNOWN

0PTK6 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
5195 W 4700 SPO BOX 18459
KEARNS, UTAH 84118

02758 NETWORKS ELECTRONIC CORP U S BEARING DIV
9750 DE SOTO AVENUE
CHATSWORTH, CALIFORNIA 91311-4409
FORMERLY U S BEARING DIV NETWORKS ELEC CORP

06725 AIR INDUSTRIES CORPORATION
12570 KNOTT STREET
GARDEN GROVE, CALIFORNIA 92641-3932
FORMERLY AIR INDUSTRIES OF CALIF IN GARDENA, CALIF.

06950 SCREWCORP VSI AEROSPACE PRODUCTS DIV FAIRCHILD IND DIV
13001 EAST TEMPLE AVENUE PO BOX 730
CITY OF INDUSTRY, CALIFORNIA 91746-1417
FORMERLY VB0096 AND VSI CORP SCREWCORP DIV
FORMERLY IN CULVER CITY, CALIFORNIA

08524 DEUTSCH FASTENER CORP SEE CODE V97928

11815 CHERRY AEROSPACE FASTENERS DIV OF TEXTRON
1224 EAST WARNER AVENUE PO BOX 2157
SANTA ANA, CALIFORNIA 92707-0157
FORMERLY IN LOS ANGELES, CALIF , FORMERLY CHERRY FASTENERS
TOWNSEND DIV OF TEXTRON INC V71087

VENDORS

15653 FAIRCHILD FASTENERS KAYNAR PRODUCTS DIV
800 S STATE COLLEGE BLVD
FULLERTON, CALIFORNIA 92831-3001
FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH
KAYNAR DIV

15860 NEW HAMPSHIRE BALL BEARINGS, INC ASTRO DIVISION
155 LEXINGTON AVENUE
LACONIA, NEW HAMPSHIRE 03246-2937
FORMERLY ASTRO BEARING CORP, LOS ANGELES, CALIF.

16746 SPECLINE INCORPORATED
2230 MOUTON DR
CARSON CITY, NV 89706
FORMERLY IN SUN VALLEY, CAIFORNIA

25099 CASCADE GASKET AND MFG CO
8825 SOUTH 228TH STREET
KENT, WASHINGTON 98031-2437

5M902 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
3016 W LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5103
FMLY IN REDONDO BEACH, CALIF

52828 REPUBLIC FASTENER MFG CORP
1300 RANCHO CONEJO BLVD
NEWBURY PARK, CALIFORNIA 91320-1405
FORMERLY IN SYLMAR, CALIFORNIA

56644 AURORA BEARING CO
970 SOUTH LAKE STREET
AURORA, ILLINOIS 60506-5929

VENDORS

56878 SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV
301 HIGHLAND AVE
JENKINTOWN, PENNSYLVANIA 19046
FORMERLY STANDARD PRESSED STEEL

57606 REXNORD CORP PSI BEARINGS DIV
2175 UNION PL
SIMI VALLEY, CALIFORNIA 93065-1661
FORMERLY PSI BEARINGS

60516 WEST COAST AEROSPACE INC
812 MIRAFLORES STREET
SAN PEDRO, CALIFORNIA 90731-1439

72962 HARVARD INDUSTRIES INC
3 WERNER WAY SUITE 210
LEBANON, NEW JERSEY 08833
FORMERLY AMERACE CORP ESNA DIV
FORMERLY ELASTIC STOP NUT IN UNION, NJ

73134 ROLLER BEARING COMPANYOF AMER DBA HEIM BEARINGS DIV
60 ROUND HILL RD
FAIRFIELD, CONNECTICUT 06430-0000
FORMERLY INCOM INTL HEIM DIV; HEIM UNIVERSAL CORP INCOM;
FORMERLY HEIM DIV INCOM INTL; IMO IND HEIM BEARINGS DIV

73197 HI-SHEAR TECHNOLOGY CORP
2600 SKYPARK DRIVE
TORRANCE, CALIFORNIA 90509

80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
2701 SOUTH HARBOR BOULEVARD PO BOX 1259
SANTA ANA, CALIFORNIA 92702-1259
FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539
AND STANDARD PRESSED STEEL WESTERN DIV V17279

83086 NEW HAMPSHIRE BALL BEARING, INC HITECH DIVISION
172 JAFFREY ROAD
PETERBOROUGH, NEW HAMPSHIRE 03458

9N513 VOI SHAN/CHATSWORTH DIV OF VSI CORP SUB OF FAIRCHILD IND
CHATSWORTH, CALIFORNIA 91311-5013
COMPANY NO LONGER WISHES TO BE CONSIDERED FOR FED CONTRCTG

VENDORS

92215 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
3010 W LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102
FORMERLY VOI-SHAN IN CULVER CITY, CALIF

97928 SEE V17446 HUCK INTL
SEE V17446 HUCK INTL
HUCK INTL SEE V17446 HUCK INTL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ABS24-102		1	75	2
		2	100	1
ASB21-101		1	375	1
ASB24-101		1	275	4
ASB24-103		2	395	1
ASB26-101		2	95	1
		2	295	4
ASSB21-4		1	375	1
ASSB24-101		1	275	4
ASSB26-4		2	295A	4
AS15001-3		1	145A	1
		2	170B	1
AS15001-4		1	80D	2
AS15004-1		1	280A	4
		2	300B	4
		2	105B	2
		2	300B	4
BACB10ZV5		2	215A	28
BACB28AP08P039		1	485	1
		2	505	1
BACB30LH3PU13		2	375	6
BACB30LH3PU14		1	355	6
BACB30LJ4HSU10		1	255	8
		1	257	4
		2	50	4
BACB30LJ4HSU11		1	55A	2
		2	55	1
		2	275B	8
		2	277	4
BACB30LR4PU11		1	50	4
		2	60A	1
BACB30MB5A20NU		1	105B	1
		1	405B	1
BACB30MB5A22NU		1	215	1
		2	130	1
		2	235	1
		2	425	1
BACB30MY8K12		1	85	2
BACB30MY8K8		2	110	4
BACB30VT10K10		1	180	6
BACB30VT10K12		1	185	4
BACB30VT10K14		1	190	12

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACB30VT10K15		2	205	8
BACB30VT10K18		2	210A	20
BACB30VT12K8		1	475	1
		2	495	1
BACB30VT5HK20		1	105C	1
BACB30VT5HK20		1	405C	1
BACB30VT5HK22		1	215A	1
		2	130A	1
		2	235A	1
		2	425A	1
BACC30AB8		1	90	2
		2	115	4
BACC30AB8S		2	115A	4
BACC30BL12		1	480	1
		2	500	1
BACN10JC08CM		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
		2	435	1
BACN10JC8CD		1	500	1
		2	520	1
BACN10JD110ASU		1	295	1
BACN10JD112ASU		1	15	1
		2	15	1
		2	315	1
BACN10ZV5		1	195A	22
BACN11N118CS		1	120	1
		1	420	1
BACN11N120CS		1	230	1
		2	145	1
		2	250	1
		2	440	1
BACP18BC04A12P		1	290	1
BACP18BC04A14P		1	10	1
		2	10	1
		2	310	1
BACW10BP18APU		1	130	1
		1	430	1
BACW10BP20APU		2	155	1
		2	450	1
BACW10BP8ACU		1	490	1
		2	510	1
BLP21F232		1	375	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BLP24F233		1	75	2
		2	100	1
BLP24F236		2	395	1
BLP26F234		2	95	1
		2	295	4
BMN4122CPD8-8		1	500	1
		2	520	1
BRH10C08M		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
		2	435	1
B30MY8K12		1	85	2
B30MY8K8		2	110	4
CG3102		2	95	1
		2	295	4
HL10VAZ8-12		1	85	2
HL10VAZ8-8		2	110	4
HL448PY5-20		1	105B	1
		1	405B	1
HL448PY5-22		1	215	1
		2	130	1
		2	235	1
		2	425	1
HL48PY5-20		1	105B	1
		1	405B	1
HL48PY5-22		1	215	1
		2	130	1
		2	235	1
		2	425	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
HL97DU8		2	115A	4
HSP21-102		1	375	1
HSP21-106		2	95	1
		2	295	4
HSP24-136		2	395	1
HSP26-106		2	95	1
		2	295	4
HST10AG10-10		1	180	6
HST10AG10-12		1	185	4
HST10AG10-14		1	190	12
HST10AG10-15		2	205	8
HST10AG10-18		2	210A	20
HST10AG12-8		1	475	1
		2	495	1
HST79-12		1	480	1
		2	500	1
HST79CY12		1	480	1
		2	500	1
H01-08BAC		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
		2	435	1
H51650-8BAC		1	500	1
		2	520	1
KFN587-5BAC		1	195A	22
LHCB21BA		1	375	1
LHCB24BA		1	275	4
		2	295	4
LHCB24BAD		2	395	1
LHCB26BA		2	95	1
		2	295	4
MS15001-1		1	510	1
		2	530	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MS15001-3		1	145	1
		2	170	1
		2	170A	1
MS15001-4		1	80	2
		1	80C	2
MS15004-1		1	280	4
MS15004-1		1	280	4
		1	395	1
		2	105	2
		2	105A	2
		2	105C	2
		2	300	4
		2	300A	4
		2	300C	4
		2	415	1
NAS1149CN832R		1	110	1
		1	220	1
		1	410	1
		2	135	1
		2	240	1
		2	430	1
NAS1149C1816R		1	125	1
		1	425	1
NAS1149C2016R		1	235	1
		2	150	1
NAS1149C2016R		2	255	1
		2	445	1
NC211		1	375	1
NC24-3		2	395	1
NC26-1		2	95	1
		2	295	4
NS202101SE82		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
		2	435	1

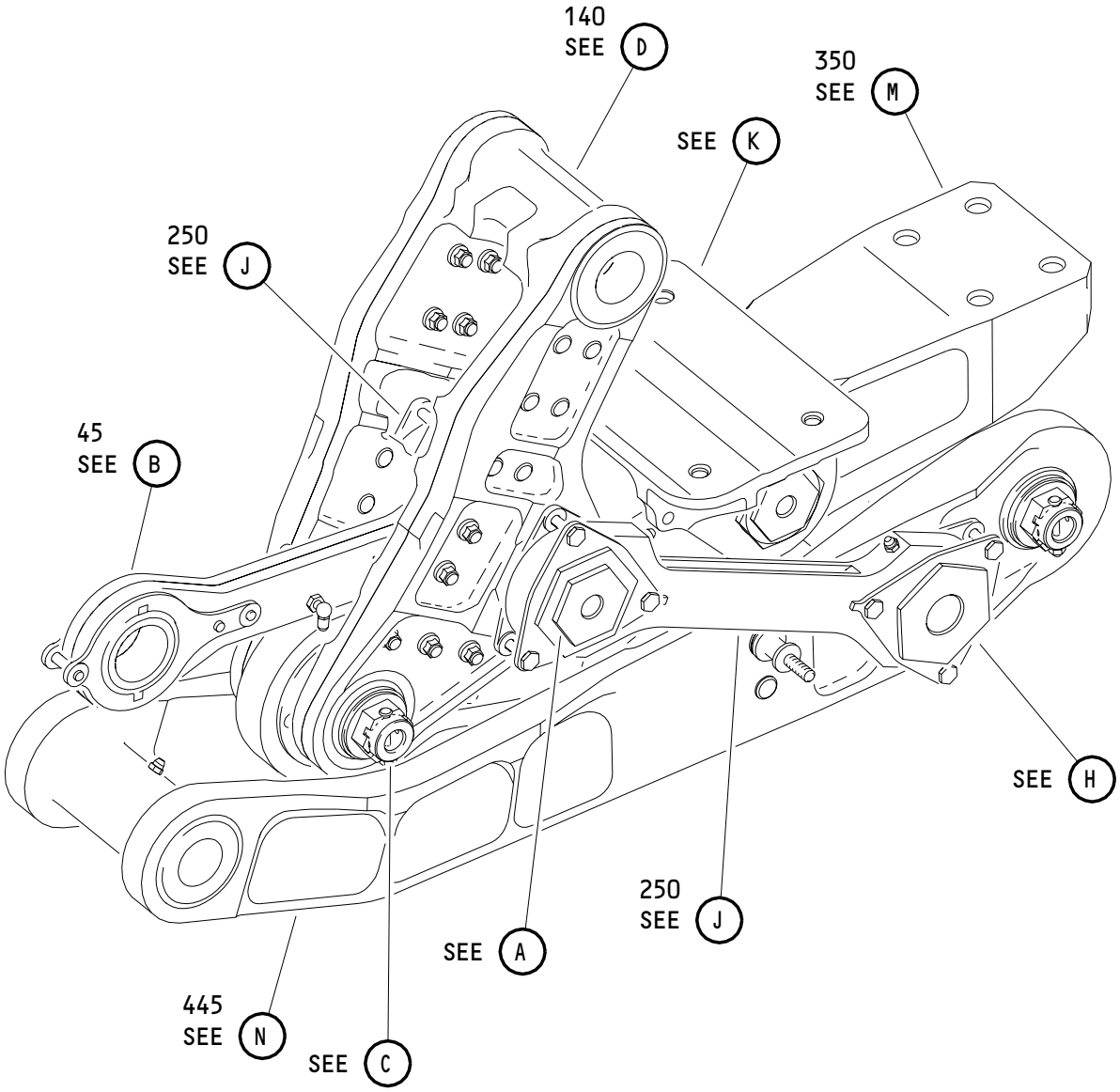
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
P3A357O		1	44OA	1
P3A358O		2	46OA	1
S113W1O2-211		2	46OA	1
T6C832JM		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
		2	435	1
VL31OAG5-2O		1	105C	1
		1	405C	1
VL31OAG5-22		1	215A	1
		2	13OA	1
		2	235A	1
		2	425A	1
VN3O3D82		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
VN3O3D82		2	435	1
1O2LH9O74-8		1	500	1
		2	520	1
1O9LH9O75-82W		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
		2	435	1
113T1254-13		1	20	1
113T1254-24		1	300	1
113T1254-25		2	20	2
		2	320	2
113T1254-41		2	35	1
113T1254-57		2	335	1
113T1254-58		1	315	1
113T1254-59		1	240	1
		2	260	1
113T1254-9		1	35	1
113T1256-1		1	370	2
113T1256-2		2	390	2
113T1256-22		1	270	8
113T1256-3		2	65	2
		2	290	8

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
113T1256-6		1	70	4
		2	70	2
113T1262-2		1	310	1
113T1262-3		1	30	1
113T1262-9		2	30	1
		2	330	1
113T1263-16		1	40	1
113T1263-18		2	40	1
113T1263-61		2	265	1
113T1263-66		1	320	1
113T1263-67		2	340A	1
113T1263-68		1	435	1
113T1263-69		1	135	1
113T1263-70		2	455	1
113T1263-71		2	160	1
113T1263-72		1	245	1
113T1264-66		1	305	1
113T1264-67		2	325	1
113T1264-71		1	25	1
113T1264-72		2	25	1
113T1301-31		1	325	1
113T1301-33		1	345	1
113T1301-41		1	350	1
113T1301-43		1	400	1
113T1302-31		2	345	1
113T1302-33		2	365	1
113T1302-41		2	370	1
113T1302-43		2	420	1
113T1307-41		1	140	1
113T1307-43		1	210	1
113T1307-45		1	200	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
113T1307-46		1	205	1
113T1308-41		2	165	1
113T1308-43		2	230	1
113T1308-45		2	220A	1
113T1308-46		2	225	1
113T1308-47		2	165A	1
113T1308-49		2	230A	1
113T1313-41		1	445	1
113T1313-42		1	450	1
113T1313-43		1	515	1
113T1314-41		2	465	1
113T1314-42		2	470	1
113T1314-43		2	535	1
113T1319-3		1	250	2
113T1319-4		1	285	2
113T1319-5		1	250A	2
113T1319-6		1	285A	2
113T1320-1		2	270	2
113T1320-2		2	305	2
113T1320-3		2	270B	2
113T1320-4		2	305A	2
113T1330-1		1	1A	RF
113T1330-2		1	5	RF
113T1330-21		1	1B	RF
		2	1	RF
113T1330-22		1	5A	RF
		2	5	RF
113T1330-23		1	1C	RF
		2	1A	RF
113T1330-24		1	5B	RF
		2	5A	RF

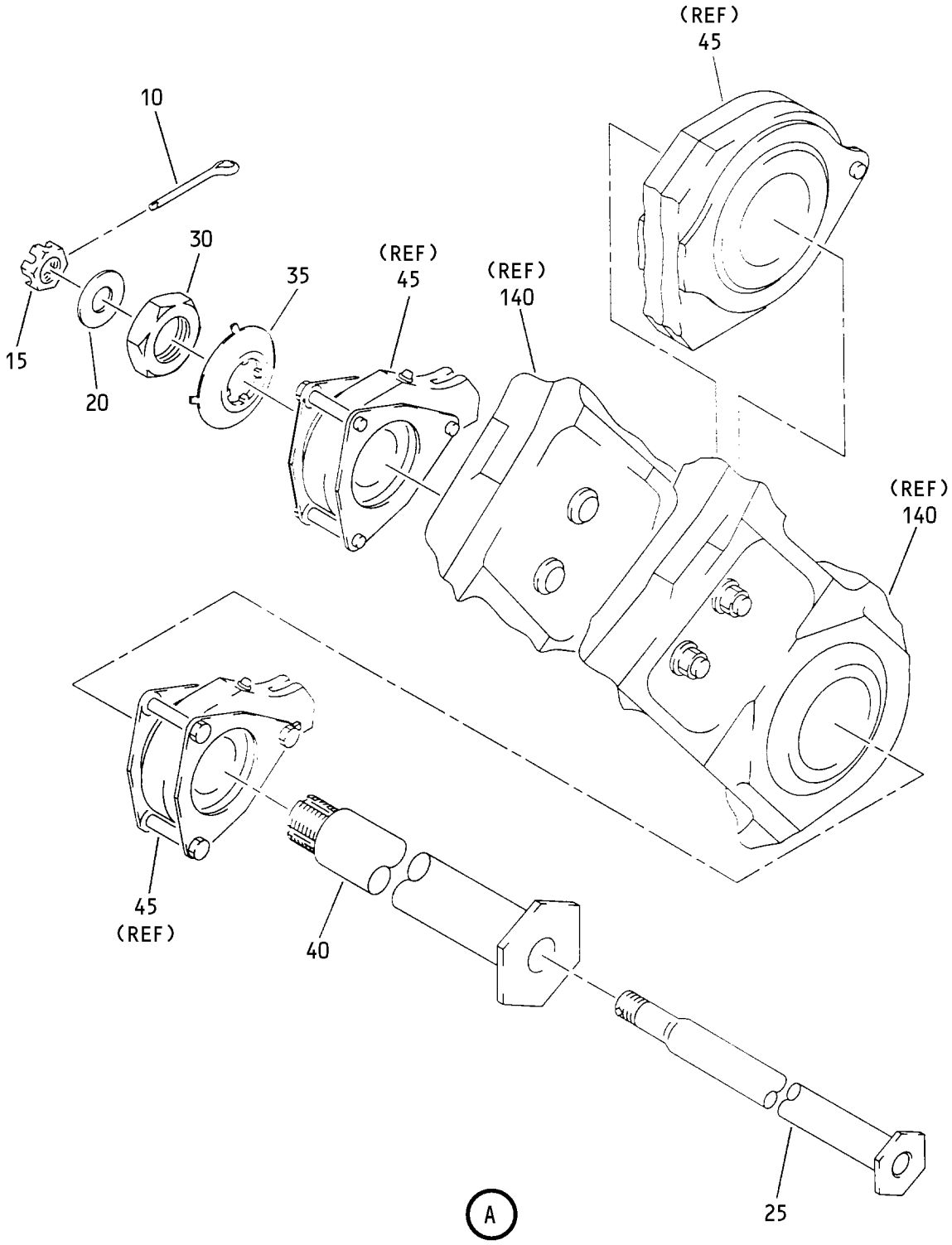
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
113T1335-10		1	95	1
113T1335-11		1	100	1
113T1335-13		1	45A	1
113T1335-14		1	95A	1
113T1335-15		1	100A	1
113T1335-9		1	45	1
113T1336-11		2	45B	1
113T1336-12		2	120A	1
113T1336-13		2	125A	1
113T1336-7		2	45	1
113T1336-8		2	120	1
113T1336-9		2	125	1
113T1347-1		1	150	2
113T1347-10		2	185	2
113T1347-11		2	190	2
113T1347-12		2	195	2
113T1347-13		2	200	2
113T1347-149		1	390	4
		2	410	4
113T1347-150		1	330	4
		2	350	4
113T1347-153		1	455	2
		2	475	2
113T1347-162		1	385	2
113T1347-163		1	380	2
113T1347-164		1	340	2
113T1347-165		1	335	2
113T1347-166		2	405	2
113T1347-167		2	400	2
113T1347-168		2	360	2
113T1347-169		2	355	2
113T1347-17		1	465	2
113T1347-18		1	470	2
113T1347-19		1	460	2
113T1347-2		1	155	2
113T1347-26		2	485	2
113T1347-27		2	490	2
113T1347-28		2	480	2
113T1347-3		1	160	2
113T1347-4		1	165	2
113T1347-5		1	170	2

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
113T1347-6		1	175	2
113T1347-8		2	175	2
113T1347-9		2	180	2
113T1362-1		1	360	1
113T1362-16		1	260A	4
113T1362-18		2	280	4
113T1362-19		2	285	4
113T1362-2		1	365	1
113T1362-24		1	265A	4
113T1362-27		1	60	2
113T1362-28		1	65	2
113T1362-29		2	80	1
113T1362-3		2	380	1
113T1362-30		2	75	1
113T1362-31		2	90	1
113T1362-32		1	260	4
113T1362-33		1	265	4
113T1362-36		2	85	1
113T1362-4		2	385	1
113T1829-5		1	495	1
		2	515	1
113T1829-7		1	505	1
		2	525	1
60B00180-230		1	275	4
60B00180-232		1	375	1
60B00180-233		1	75	2
		2	100	1
60B00180-234		2	95	1
		2	295	4
60B00180-236		2	395	1
69235-820CD		1	500	1
		2	520	1
97E82		1	115	1
		1	225	1
		1	415	1
		2	140	1
		2	245	1
		2	435	1



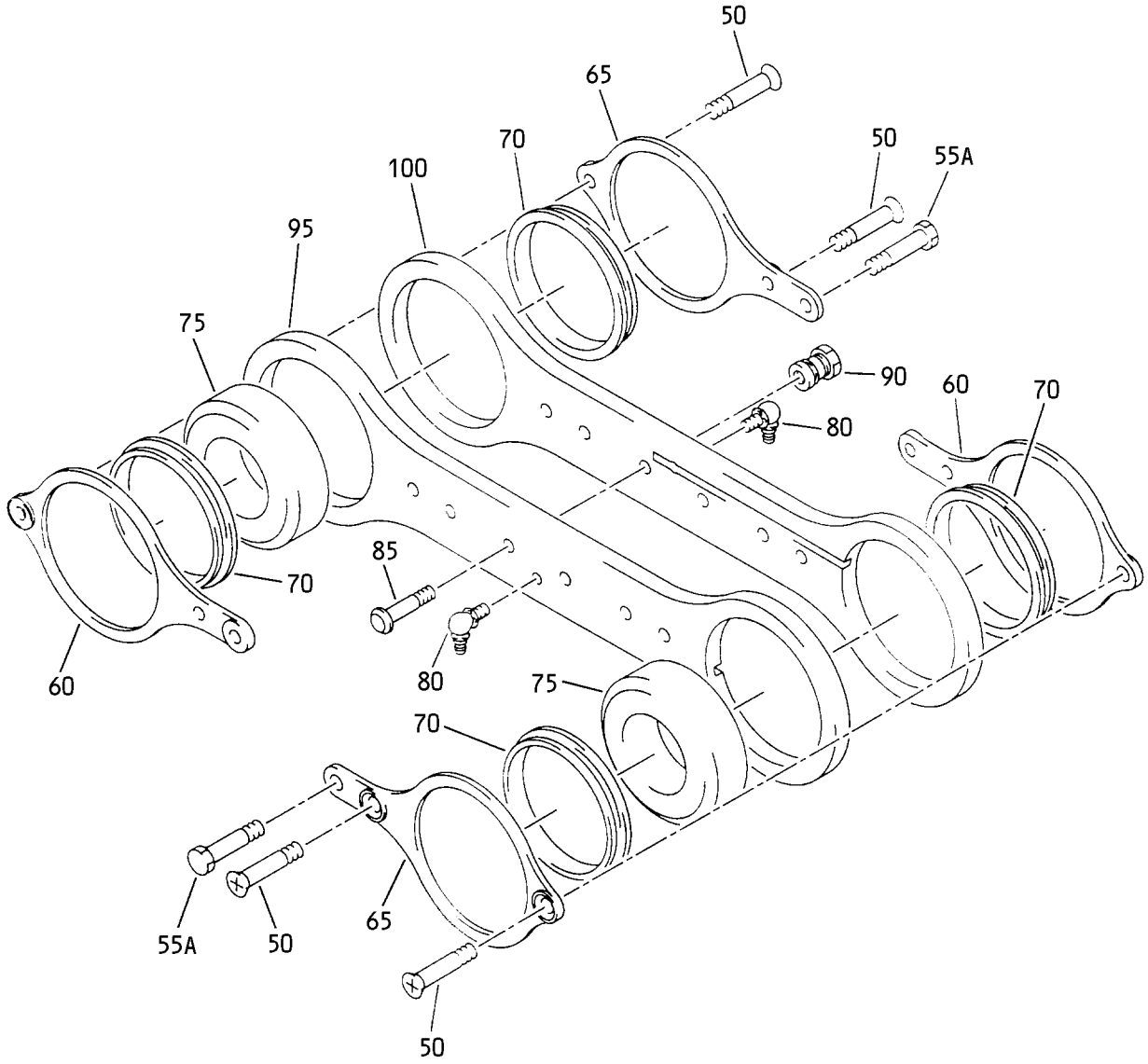
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 1)

K30562



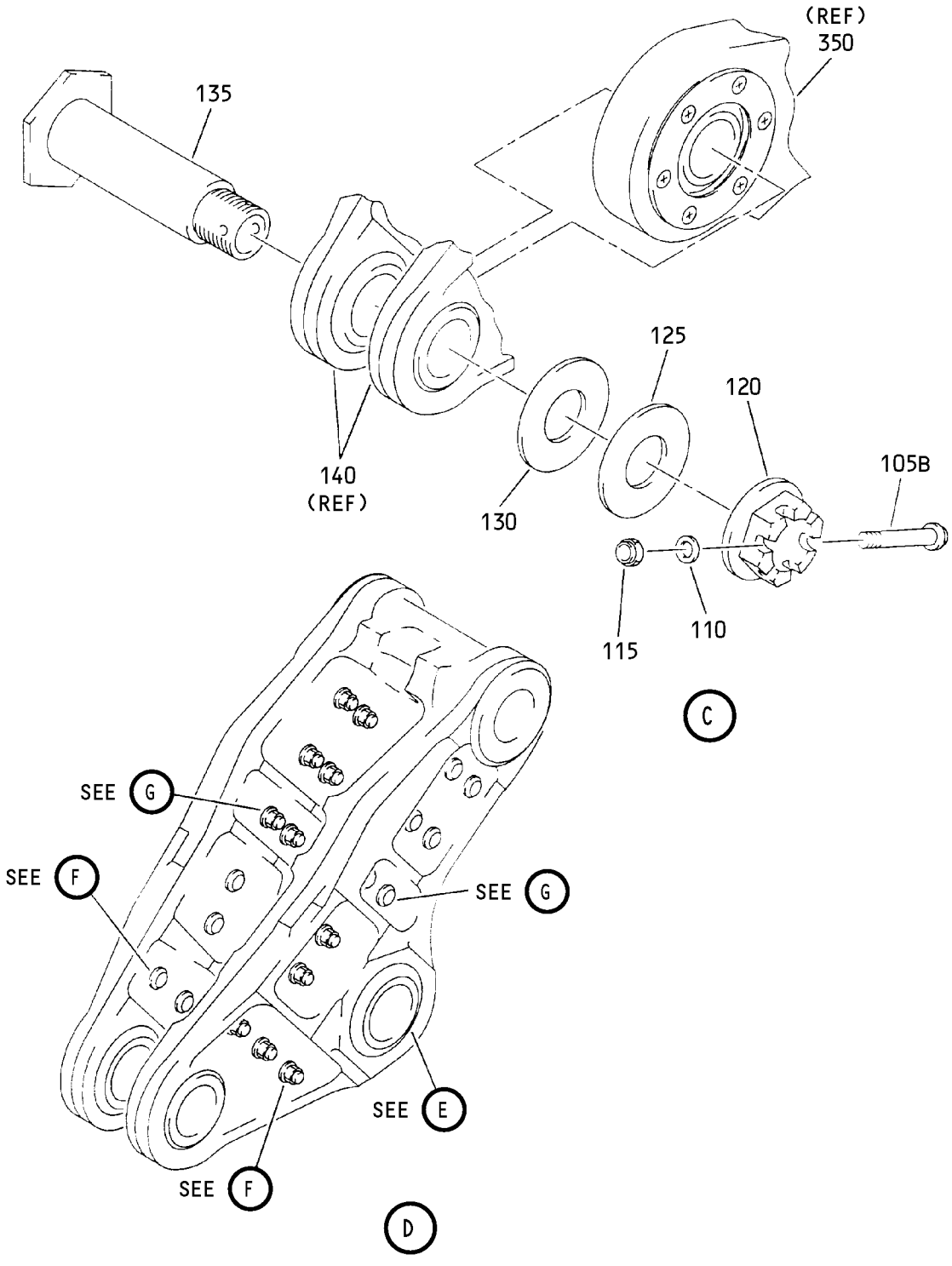
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 2)

K30687



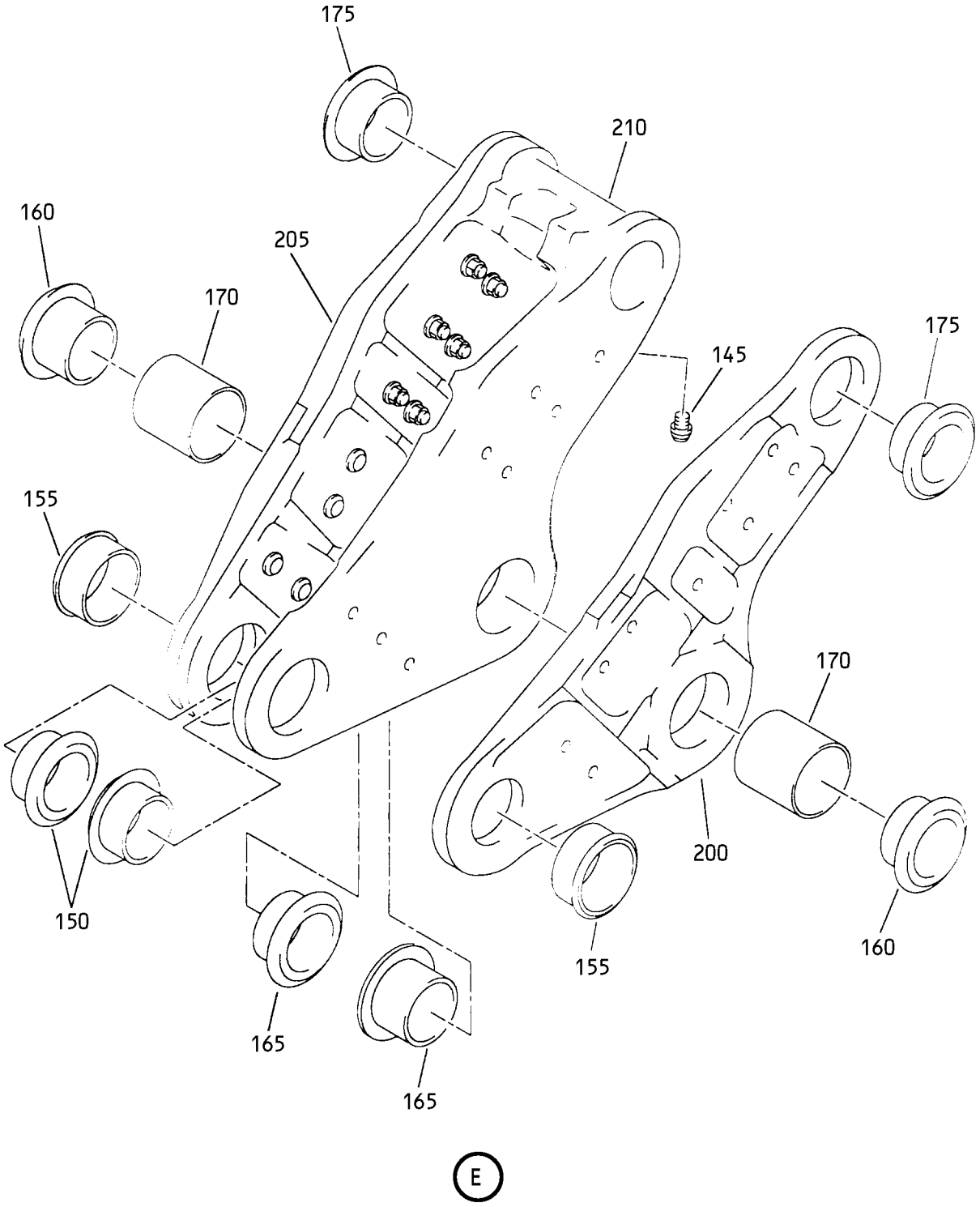
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 3)

K30698



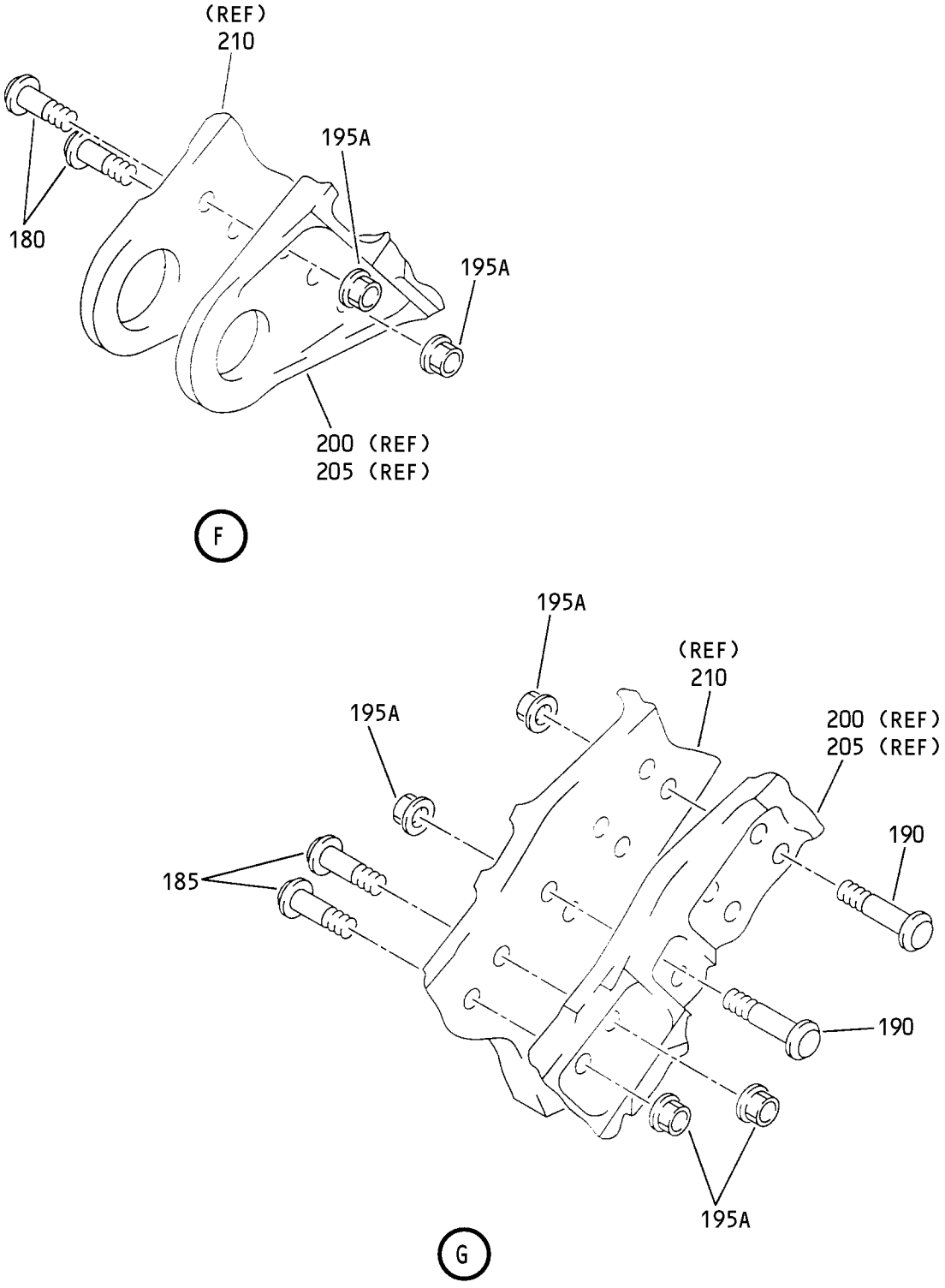
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 4)

K30707



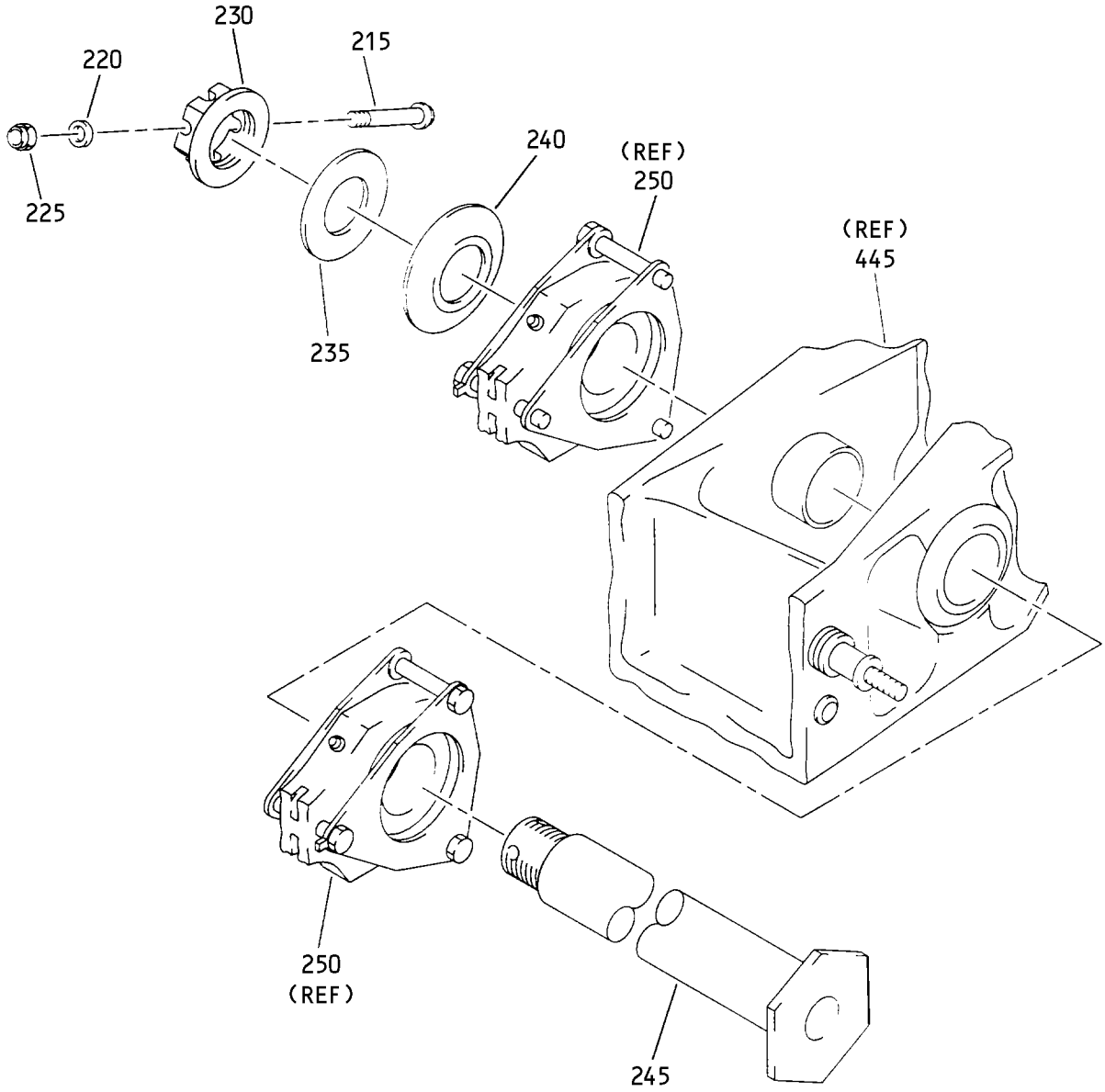
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 5)

K30780



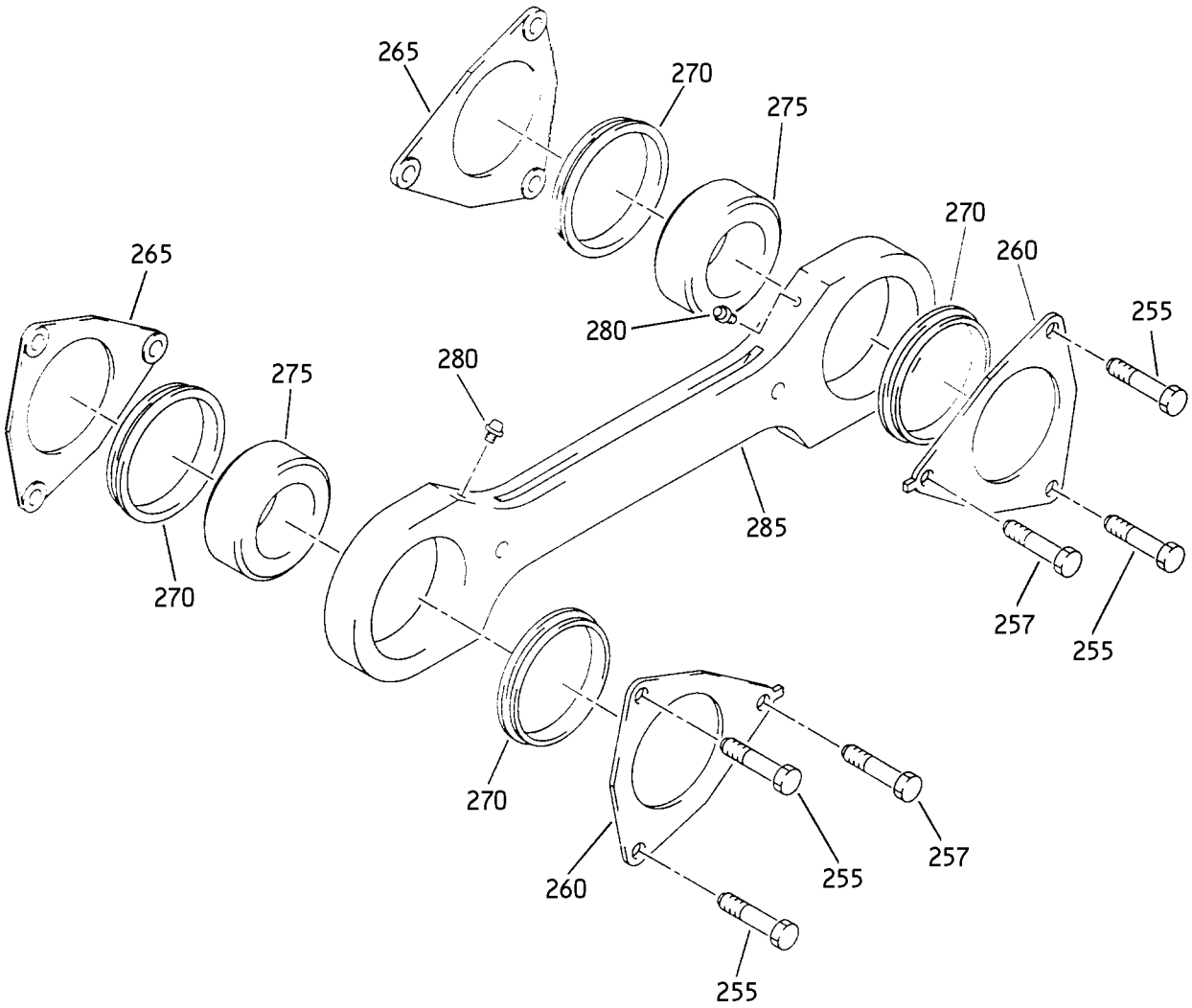
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 6)

K30798



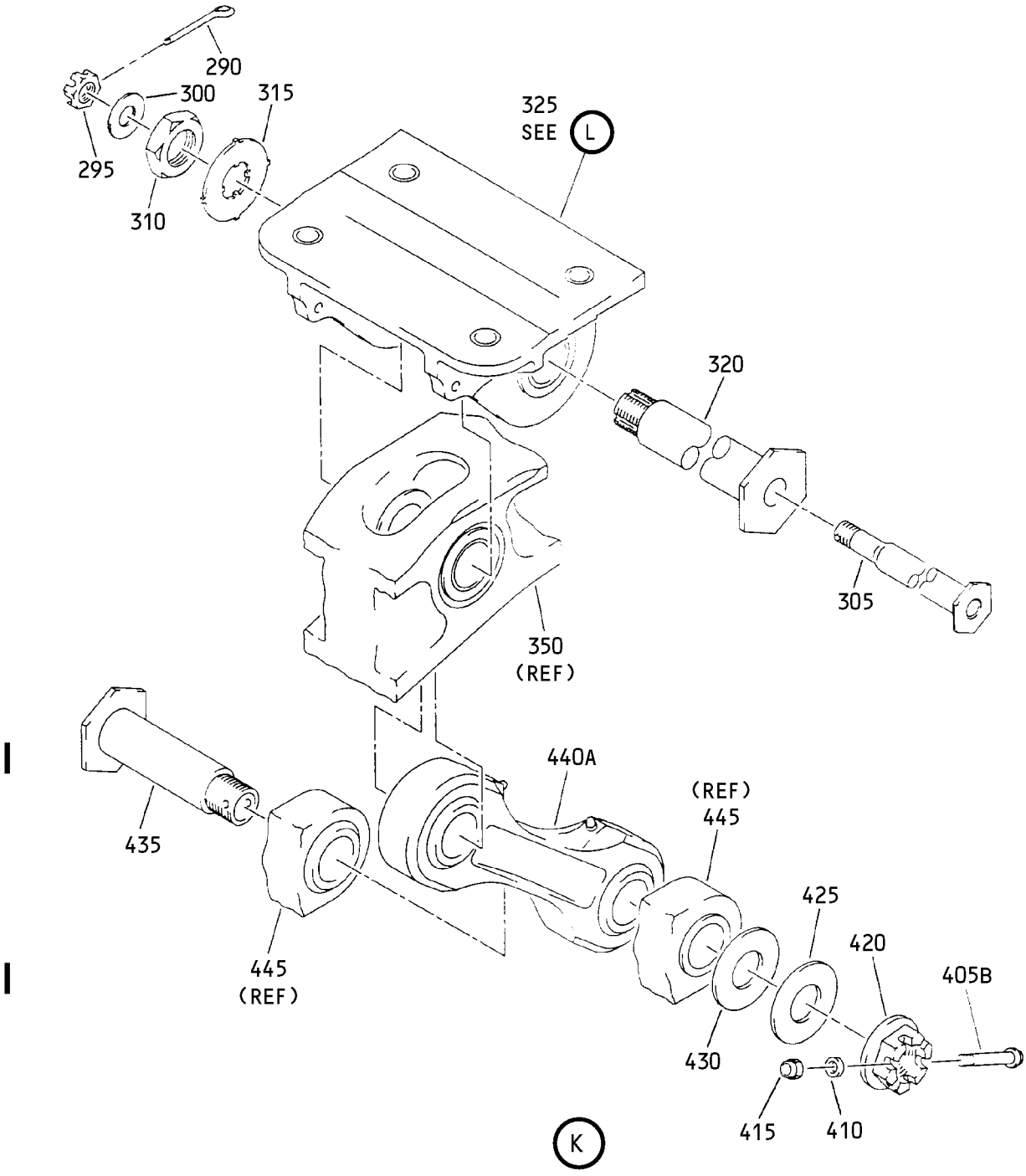
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 7)

K30819



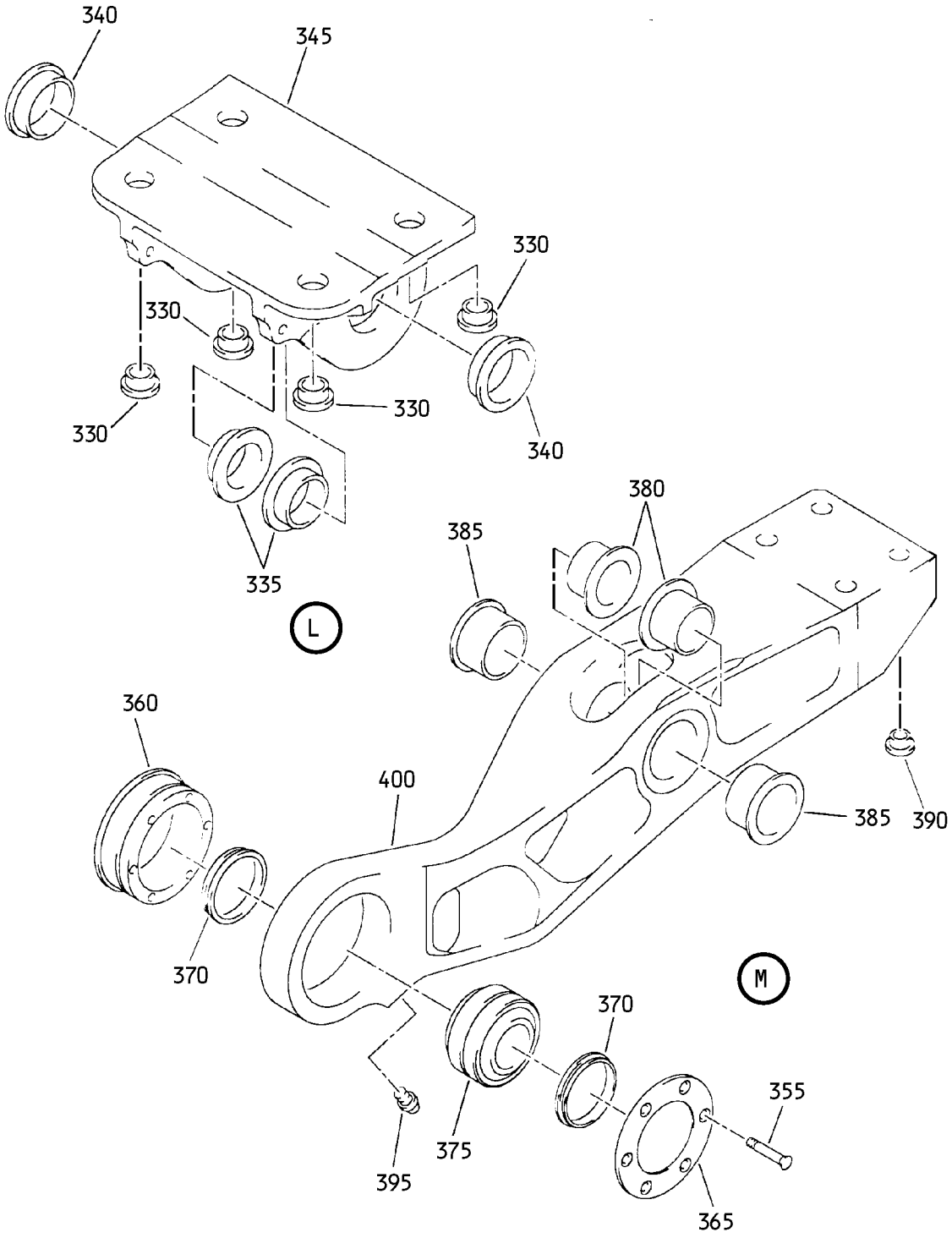
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 8)

K30857



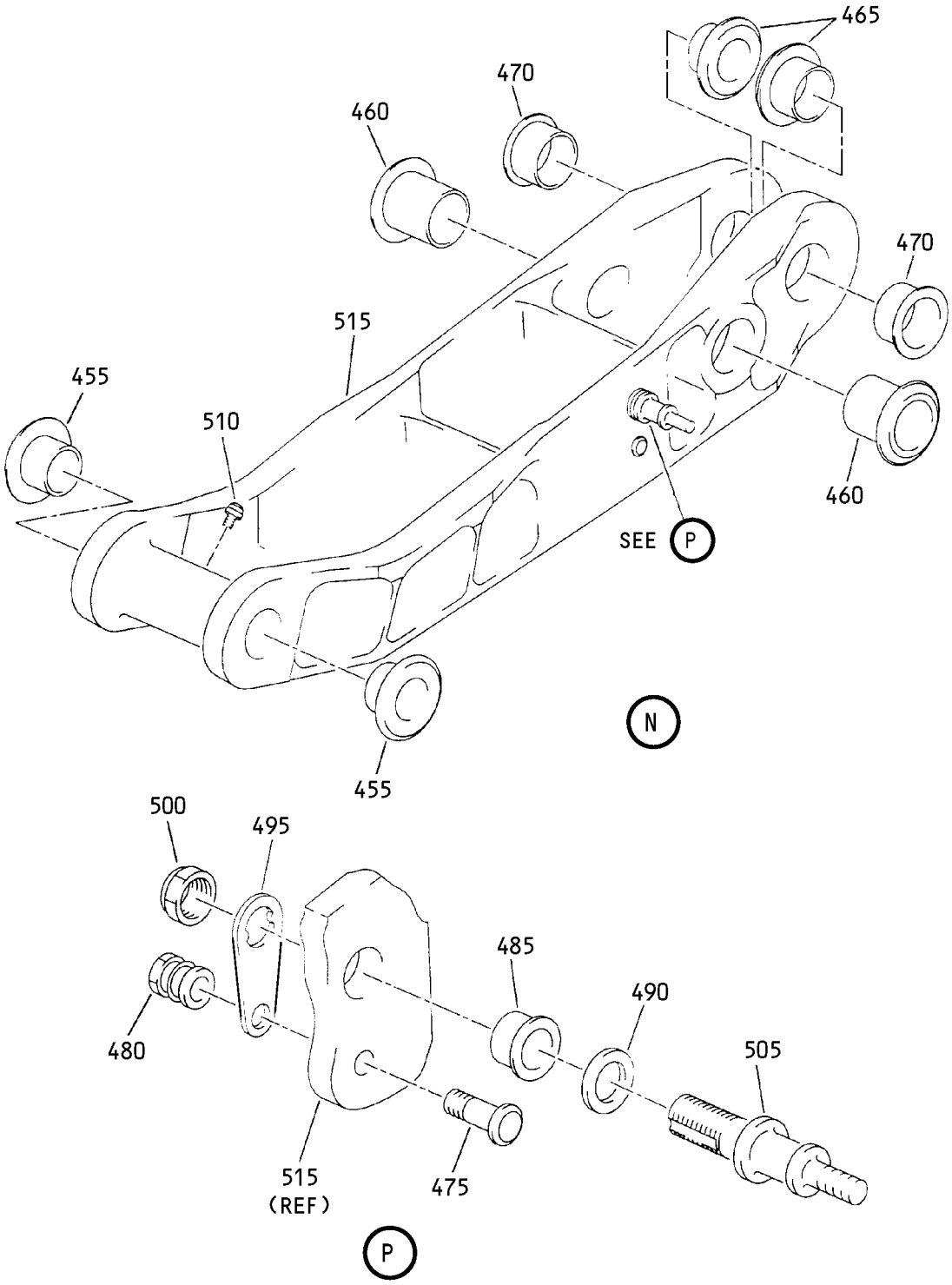
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 9)

K30876



Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 10)

K30883



Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 1 (Sheet 11)

K30895

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1A	113T1330-1		LINKAGE ASSY-OUTBD FLAP WING T.E.	A	RF
-1B	113T1330-21		LINKAGE ASSY-OUTBD FLAP WING T.E. (FOR DETAILS SEE FIG. 2)	C	RF
-1C	113T1330-23		LINKAGE ASSY-OUTBD FLAP WING TE (FOR DETAILS SEE FIG. 2)	E	RF
-5	113T1330-2		LINKAGE ASSY-OUTBD FLAP WING T.E.	B	RF
-5A	113T1330-22		LINKAGE ASSY-OUTBD FLAP WING T.E. (FOR DETAILS SEE FIG. 2)	D	RF
-5B	113T1330-24		LINKAGE ASSY-OUTBD FLAP WING TE (FOR DETAILS SEE FIG. 2)	F	RF
10	BACP18BC04A14P		.PIN-COTTER	A,B	1
15	BACN10JD112ASU		.NUT	A,B	1
20	113T1254-13		.WASHER	A,B	1
25	113T1264-71		.PIN-INNER	A,B	1
30	113T1262-3		.NUT	A,B	1
35	113T1254-9		.WASHER	A,B	1
40	113T1263-16		.PIN-OUTER	A,B	1
45	113T1335-9		.LINK ASSY-5-8 (OPT ITEM 45A)	A,B	1
-45A	113T1335-13		.LINK ASSY-5-8 (OPT ITEM 45)	A,B	1
50	BACB30LR4PU11		..BOLT	A,B	4
55	BACB30LR4HSU11		DELETED		
55A	BACB30LJ4HSU11		..BOLT	A,B	2
60	113T1362-27		..RETAINER	A,B	2
65	113T1362-28		..RETAINER	A,B	2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
70	113T1256-6		..SEAL	A,B	4
75	BLP24F233		..BEARING-	A,B	2
			(V16746)		
			(SPEC 60B00180-233)		
			(OPT ABS24-102		
			(VS0352))		
80	MS15001-4		..FITTING-LUBE	A,B	2
			(USED ON ITEM 45		
80	MS15001-4		DELETED		
80A	MS15004-1		DELETED		
80B	AS15004-1		DELETED		
-80C	MS15001-4		..FITTING-LUBE	A,B	2
			(OPT ITEM 80D)		
			(USED ON ITEM 45A)		
-80D	AS15001-4		..FITTING-LUBE C	A,B	2
			(OPT ITEM 80A)		
			(USED ON ITEM 45A)		
85	HL10VAZ8-12		..BOLT-	A,B	2
			(V60516)		
			(SPEC BACB30MY8K12)		
			(OPT B30MY8K12		
			(V97928))		
90	BACC30AB8		..COLLAR	A,B	2
95	113T1335-10		..LINK-	A,B	1
			(USED ON ITEM 45)		
-95A	113T1335-14		..LINK-	A,B	1
			(USED ON ITEM 45A)		
100	113T1335-11		..LINK-	A,B	1
			(USED ON ITEM 45)		
-100A	113T1335-15		..LINK-	A,B	1
			(USED ON ITEM 45A)		
105	BACB30MB5A22NU		DELETED		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-105A	BACB30VT5HK22		DELETED		
105B	HL448PY5-20		.BOLT- (V9N513) (SPEC BACB30MB5A20NU) (OPT HL448PY5-20 (V97928)) (OPT HL448PY5-20 (V80539)) (OPT HL448PY5-20 (V73197)) (OPT HL448PY5-20 (V60516)) (OPT HL448PY5-20 (V56878)) (OPT HL48PY5-20 (V9N513)) (OPT HL48PY5-20 (V97928)) (OPT HL48PY5-20 (V08524)) (OPT HL48PY5-20 (V80539)) (OPT HL48PY5-20 (V92215)) (OPT HL48PY5-20 (V73197)) (OPT HL48PY5-20 (V56878)) (OPT ITEM 105B)	A,B	1
-105C	VL310AG5-20		.BOLT- (V06950) (SPEC BACB30VT5HK20) (OPT VL310AG5-20 (V9N513)) (OPT VL310AG5-20 (V97928)) (OPT ITEM 105B)	A,B	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
110	NAS1149CN832R		.WASHER	A,B	1
115	BRH10C08M		.NUT-	A,B	1
			(V52828)		
			(SPEC BACN10JC08CM)		
			(OPT T6C832JM		
			(V11815))		
			(OPT 97E82		
			(V80539))		
			(OPT 109LH9075-82W		
			(V72962))		
			(OPT VN303D82		
			(V92215))		
			(OPT NS202101SE82		
			(V80539))		
			(OPT H01-08BAC		
			(V15653))		
120	BACN11N118CS		.NUT	A,B	1
125	NAS1149C1816R		.WASHER	A,B	AR
130	BACW10BP18APU		.WASHER	A,B	1
135	113T1263-69		.PIN-OUTER	A,B	1
140	113T1307-41		.LINK ASSY-6-9	A,B	1
145	MS15001-3		..FITTING-LUBE	A,B	1
			(OPT ITEM 145A)		
-145A	AS15001-3		..FITTING-LUBE	A,B	1
			(OPT ITEM 145)		
150	113T1347-1		..BUSHING	A,B	2
155	113T1347-2		..BUSHING	A,B	2
160	113T1347-3		..BUSHING	A,B	2
165	113T1347-4		..BUSHING	A,B	2
170	113T1347-5		..BUSHING	A,B	2
175	113T1347-6		..BUSHING	A,B	2
180	HST10AG10-10		..BOLT-	A,B	6
			(VOPTK6)		
			(SPEC BACB30VT10K10)		
			(OPT HST10AG10-10		
			(V06725))		
			(OPT HST10AG10-10		
			(V56878))		
			(OPT HST10AG10-10		
			(V73197))		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
185	HST10AG10-12		..BOLT- (V0PTK6) (SPEC BACB30VT10K12) (OPT HST10AG10-12 (V06725)) (OPT HST10AG10-12 (V56878)) (OPT HST10AG10-12 (V73197))	A,B	4
190	HST10AG10-14		..BOLT- (V0PTK6) (SPEC BACB30VT10K14) (OPT HST10AG10-14 (V06725)) (OPT HST10AG10-14 (V56878)) (OPT HST10AG10-14 (V73197))	A,B	12
195	BACBN10ZV10		DELETED		
195A	KFN587-5BAC		..NUT- (V15653) (SPEC BACN10ZV5)	A,B	22
200	113T1307-45		..LINK-SIDE	A,B	1
205	113T1307-46		..LINK-SIDE	A,B	1
210	113T1307-43		..LINK-CTR	A,B	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-215	HL448PY5-22		.BOLT- (V80539) (SPEC BACB30MB5A22NU) (OPT HL448PY5-22 (V97928)) (OPT HL448PY5-22 (V9N513)) (OPT HL448PY5-22 (V73197)) (OPT HL448PY5-22 (V60516)) (OPT HL448PY5-22 (V56876)) (OPT HL48PY5-22 (V9N513)) (OPT HL48PY5-22 (V97928)) (OPT HL48PY5-22 (V08524)) (OPT HL48PY5-22 (V80539)) (OPT HL48PY5-22 (V92215)) (OPT HL48PY5-22 (V73197)) (OPT HL48PY5-22 (V56878)) (OPT ITEM 215A)	A,B	1
-215A	VL310AG5-22		.BOLT- (V06950) (SPEC BACB30VT5HK22) (OPT VL310AG5-22 (V9N513)) (OPT VL310AG5-22 (V97928)) (OPT ITEM 215)	A,B	1
220	NAS1149CN832R		.WASHER	A,B	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
225	BRH10C08M		.NUT-	A,B	1
			(V52828)		
			(SPEC BACN10JC08CM)		
			(OPT T6C832JM		
			(V11815))		
			(OPT 97E82		
			(V80539))		
			(OPT 109LH9075-82W		
			(V72962))		
			(OPT VN303D82		
			(V92215))		
			(OPT NS202101SE82		
			(V80539))		
			(OPT H01-08BAC		
			(V15653))		
230	BACN11N120CS		.NUT	A,B	1
235	NAS1149C2016R		.WASHER	A,B	AR
240	113T1254-59		.WASHER	A,B	1
245	113T1263-72		.PIN-OUTER	A,B	1
250	113T1319-3		.LINK ASSY-2-8	A,B	2
			(OPT ITEM 250A)		
-250A	113T1319-5		.LINK ASSY-2-8	A,B	2
			(OPT ITEM 250)		
255	BACB30LJ4HSU10		..BOLT	A,B	4
257	BACB30LJ4HSU10		..BOLT	A,B	2
260	113T1362-32		..RETAINER-BRG	A,B	2
			(OPT ITEM 260A)		
			(USED ON ITEM 250)		
-260A	113T1362-16		..RETAINER-BRG	A,B	2
			(OPT ITEM 260)		
			(USED ON ITEM 250)		
-260B	113T1362-16		..RETAINER-BRG	A,B	2
			(USED ON ITEM 250A)		
265	113T1362-33		..RETAINER-BRG	A,B	2
			(OPT ITEM 265A)		
			(USED ON ITEM 250)		
-265A	113T1362-24		..RETAINER-BRG	A,B	2
			(OPT ITEM 265)		
			(USED ON ITEM 250)		
-265B	113T1362-24		..RETAINER-BRG	A,B	2
			(USED ON ITEM 250A)		
270	113T1256-22		..SEAL	A,B	4

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
275	ASSB24-101		..BEARING-SPERICAL (V15860) (SPEC 60B00180-230) (OPT ASB24-101 (VS0352)) (OPT LHCB24BA (V73134))	A,B	2
280	MS15004-1		..FITTING-LUBE (USED ON ITEM 250)	A,B	2
-280A	AS15004-1		..FITTING-LUBE (OPT ITEM 280B) (USED ON ITEM 250A)	A,B	2
-280B	MS15004-1		..FITTING-LUBE (OPT ITEM 280A) (USED ON ITEM 250A)	A,B	2
285	113T1319-4		..LINK- (USED ON ITEM 250)	A,B	1
-285A	113T1319-6		..LINK- (USED ON ITEM 250A)	A,B	1
290	BACP18BC04A12P		.PIN-COTTER	A,B	1
295	BACN10JD110ASU		.NUT	A,B	1
300	113T1254-24		.WASHER	A,B	1
305	113T1264-66		.PIN-INNER	A,B	1
310	113T1262-2		.NUT	A,B	1
315	113T1254-58		.WASHER	A,B	1
320	113T1263-66		.PIN-OUTER	A,B	1
325	113T1301-31		.SWIVEL PLT ASSY-9-10	A,B	1
330	113T1347-150		..BUSHING	A,B	4
335	113T1347-165		..BUSHING	A,B	2
340	113T1347-164		..BUSHING	A,B	2
345	113T1301-33		..PLATE	A,B	1
350	113T1301-41		.BEAM ASSY-9-10	A,B	1

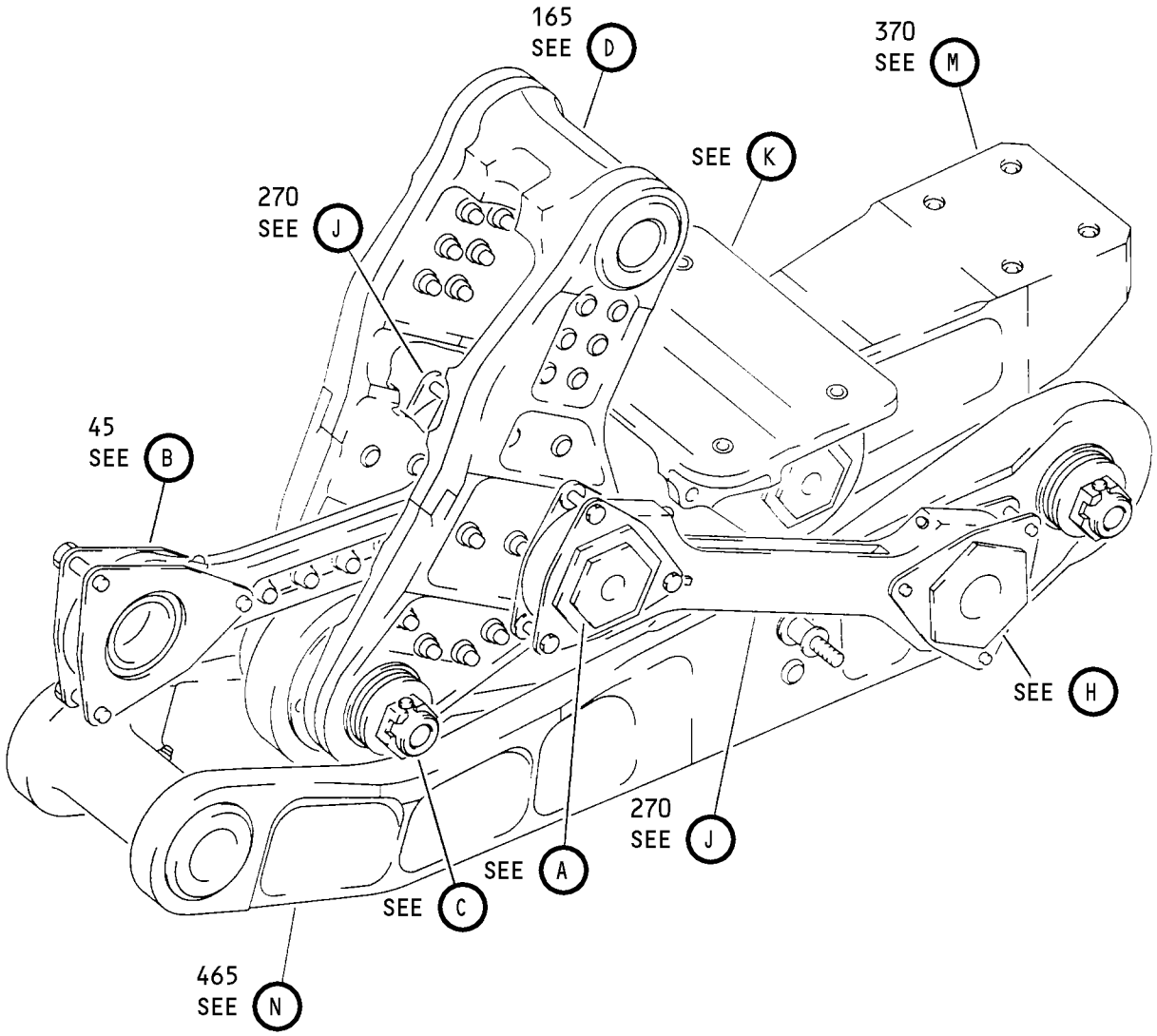
FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
355	BACB30LH3PU14		..BOLT	A,B	6
360	113T1362-1		..RETAINER	A,B	1
365	113T1362-2		..RETAINER	A,B	1
370	113T1256-1		..SEAL	A,B	2
375	BLP21F232		..BEARING- (V16746) (SPEC 60B00180-232) (OPT ASB21-101 (VS0352)) (OPT HSP21-102 (02758)) (OPT LHCB21BA (V73134)) (OPT ASSB21-4 (V83086)) (OPT NC211 (V56644))	A,B	1
380	113T1347-163		..BUSHING	A,B	2
385	113T1347-162		..BUSHING	A,B	2
390	113T1347-149		..BUSHING	A,B	4
395	MS15004-1		..FITTING-LUBE	A,B	1
400	113T1301-43		..BEAM-SUPT	A,B	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-405	BACB30MB5A22NU		DELETED		
-405A	BACB30VT5HK22		DELETED		
405B	HL448PY5-20		.BOLT- (V9N513) (SPEC BACB30MB5A20NU) (OPT HL448PY5-20 (V97928)) (OPT HL448PY5-20 (V80539)) (OPT HL448PY5-20 (V73197)) (OPT HL448PY5-20 (V60516)) (OPT HL448PY5-20 (V56878)) (OPT HL48PY5-20 (V9N513)) (OPT HL48PY5-20 (V97928)) (OPT HL48PY5-20 (V08524)) (OPT HL48PY5-20 (V80539)) (OPT HL48PY5-20 (V92215)) (OPT HL48PY5-20 (V73197)) (OPT HL48PY5-20 (V56878)) (OPT ITEM 405C)	A,B	1
-405C	VL310AG5-20		.BOLT- (V06950) (SPEC BACB30VT5HK20) (OPT VL310AG5-20 (V9N513)) (OPT VL310AG5-20 (V97928)) (OPT ITEM 405B)	A,B	1
410	NAS1149CN832R		.WASHER	A,B	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
415	BRH10C08M		.NUT-	A,B	1
			(V52828)		
			(SPEC BACN10JC08CM)		
			(OPT T6C832JM		
			(V11815))		
			(OPT 97E82		
			(V80539))		
			(OPT 109LH9075-82W		
			(V72962))		
			(OPT VN303D82		
			(V92215))		
			(OPT NS202101SE82		
			(V80539))		
			(OPT H01-08BAC		
			(V15653))		
420	BACN11N118CS		.NUT	A,B	1
425	NAS1149C1816R		.WASHER	A,B	AR
430	BACW10BP18APU		.WASHER	A,B	1
435	113T1263-68		.PIN	A,B	1
440	S113w102-210		DELETED		
440A	P3A3570		.LINK ASSY-3-10	A,B	1
			(V57606)		
			(SPEC S113W102-210)		
445	113T1313-41		.FITTING ASSY-1-3	A	1
-450	113T1313-42		.FITTING ASSY-1-3	B	1
455	113T1347-153		..BUSHING	A,B	2
460	113T1347-19		..BUSHING	A,B	2
465	113T1347-17		..BUSHING	A,B	2
470	113T1347-18		..BUSHING	A,B	2
475	HST10AG12-8		..BOLT-	A,B	1
			(V0PTK6)		
			(SPEC BACB30VT12K8)		
			(OPT HST10AG12-8		
			(V06725))		
			(OPT HST10AG12-8		
			(V56878))		
			(OPT HST10AG12-8		
			(V73197))		

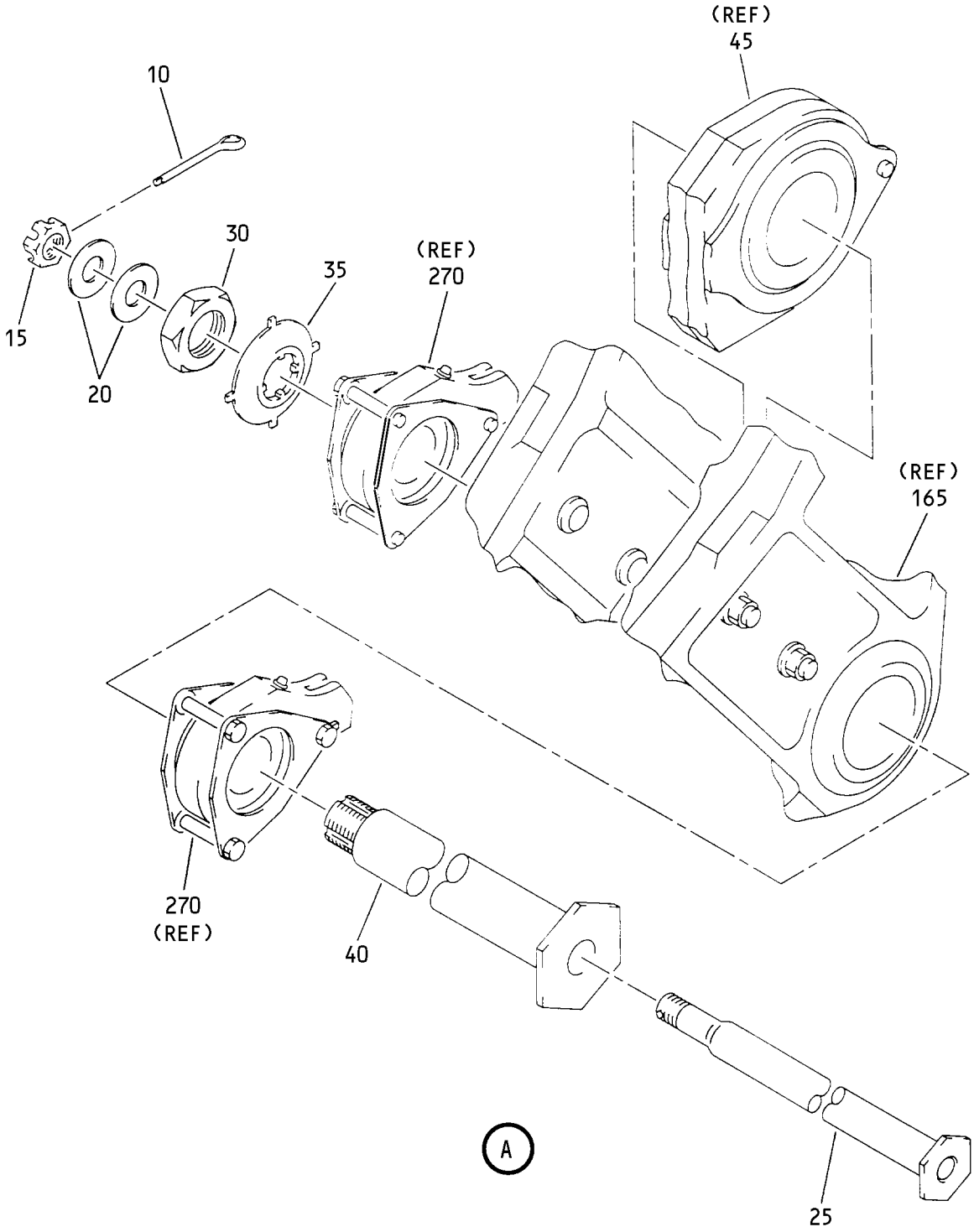
	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	480	HST79CY12		..COLLAR- (V73197) (SPEC BACC30BL12) (OPT HST79CY12 (V56878)) (OPT HST79CY12 (V5M902)) (OPT HST79-12 (V92215))	A,B	1
	485	BACB28AP08P039		..BUSHING	A,B	1
	490	BACW10BP8ACU		..WASHER	A,B	1
	495	113T1829-5		..WASHER	A,B	1
	500	H51650-8BAC		..NUT- (V15653) (SPEC BACN10JC8CD) (OPT 102LH9074-8 (V72962)) (OPT 69235-820CD (V92215)) (OPT BMN4122CPD8-8 (V97928))	A,B	1
	505	113T1829-7		..FITTING	A,B	1
	510	MS15001-1		..FITTING-LUBE	A,B	1
R	515	113T1313-43		..FITTING	A,B	1

- Item Not Illustrated



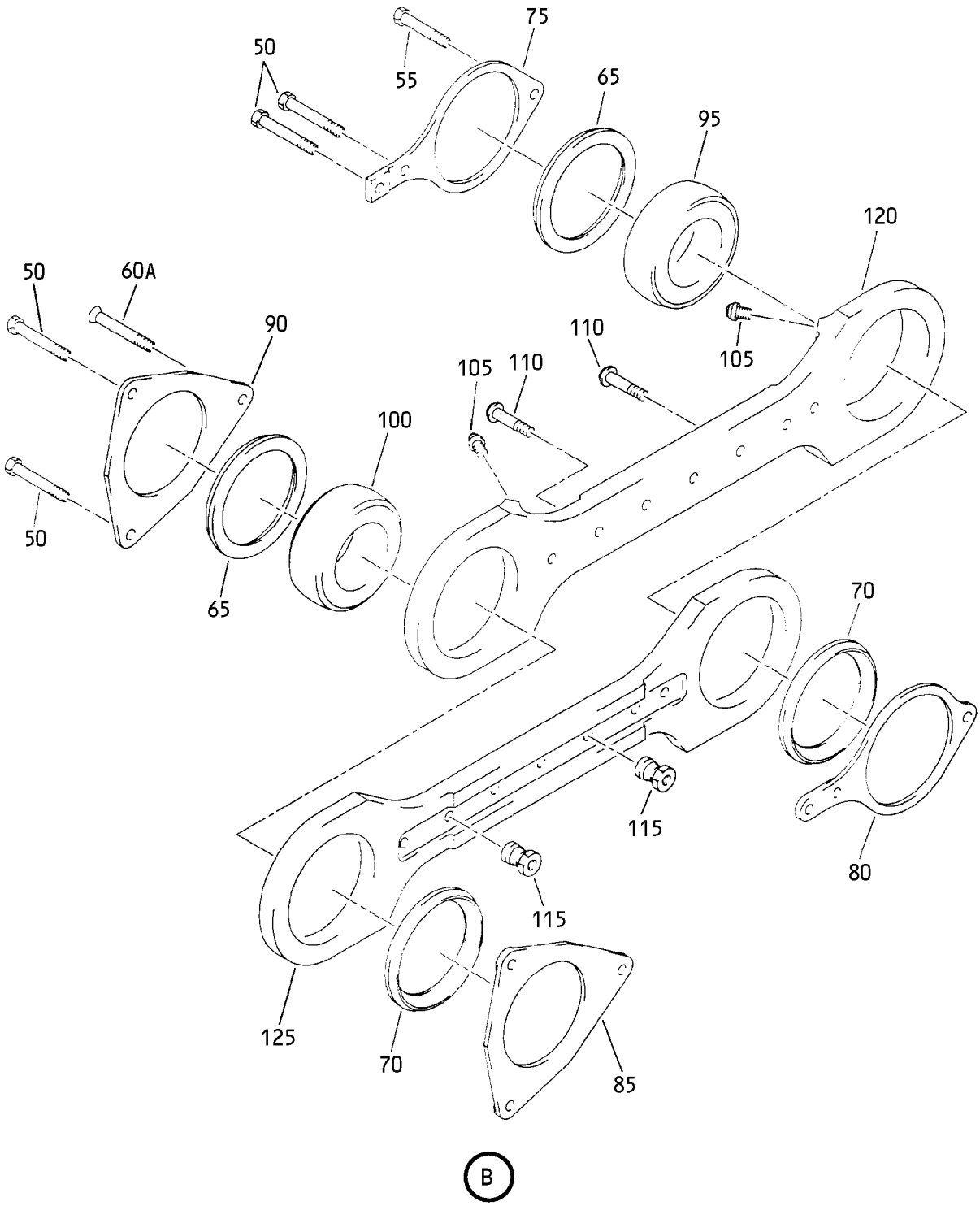
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 1)

K30925



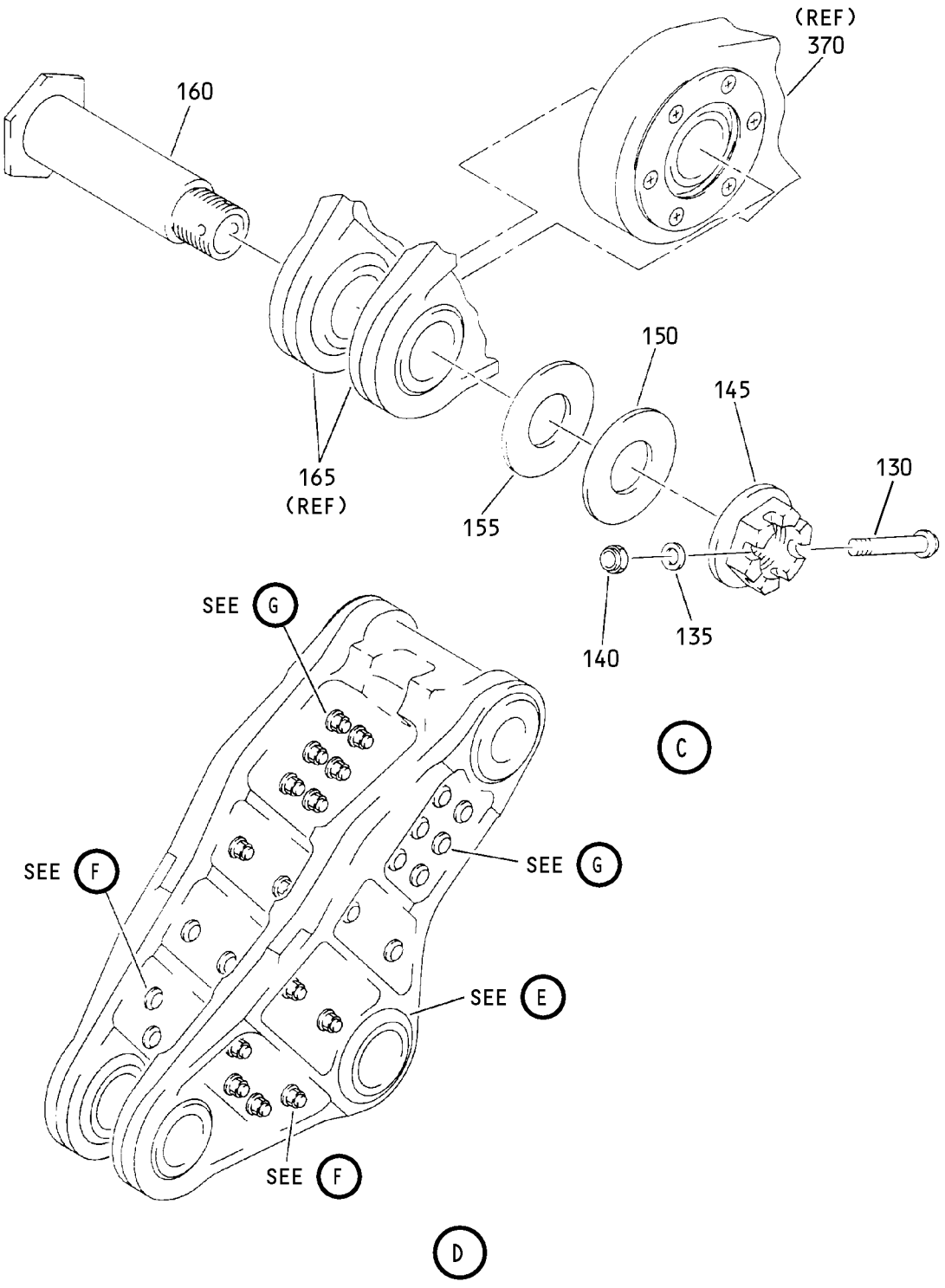
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 2)

K30932



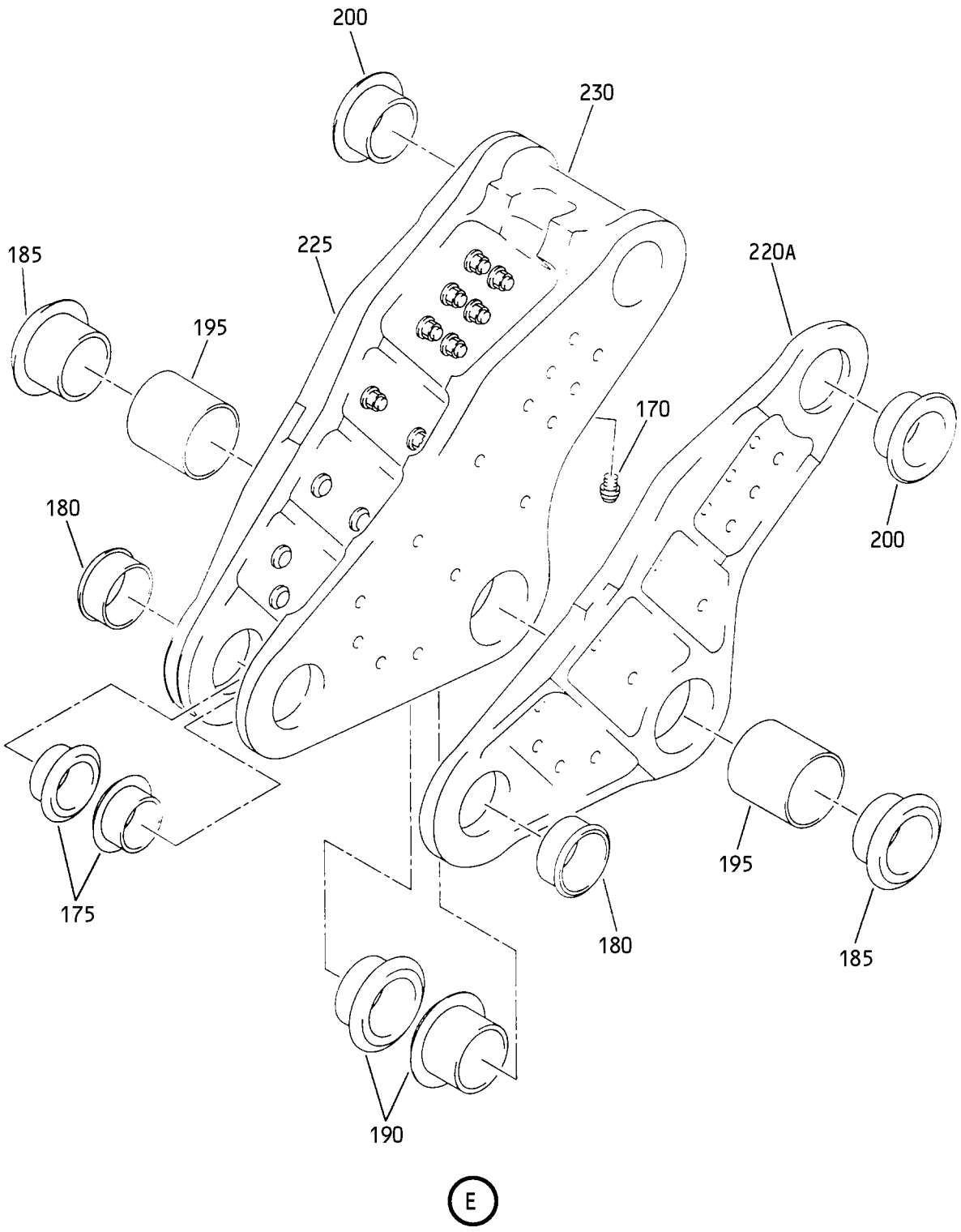
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 3)

K30940



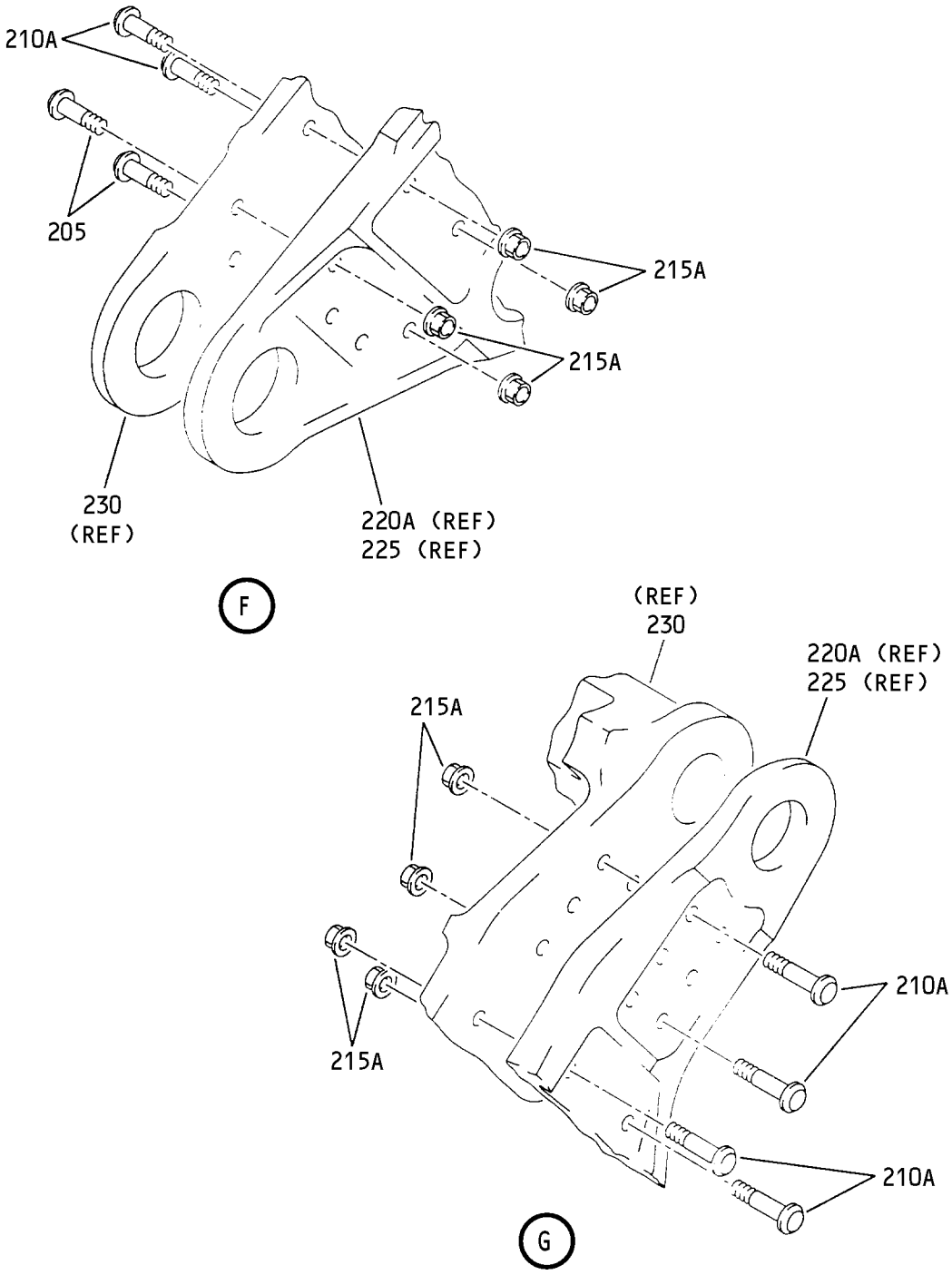
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 4)

K31076



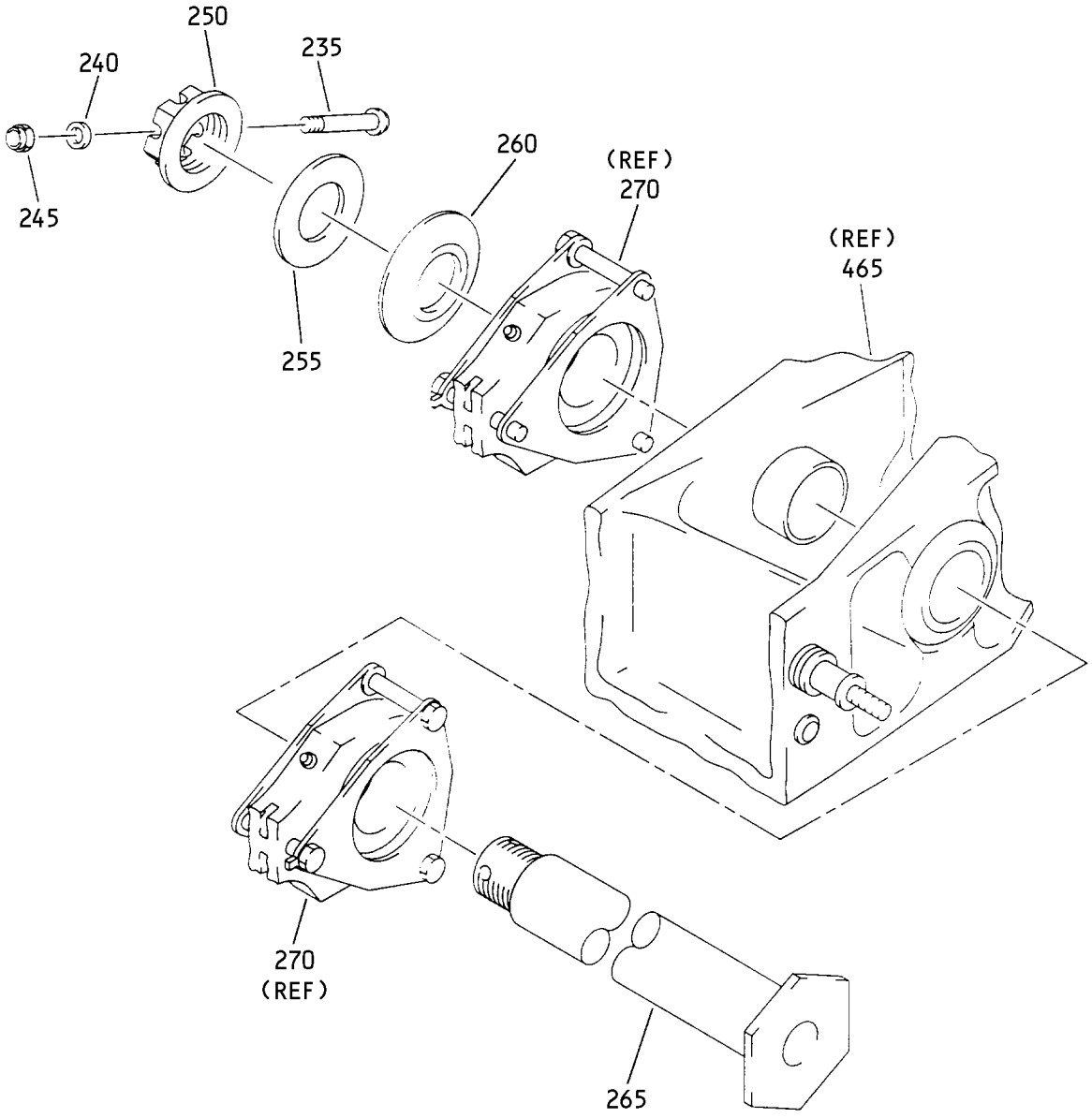
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 5)

K31107



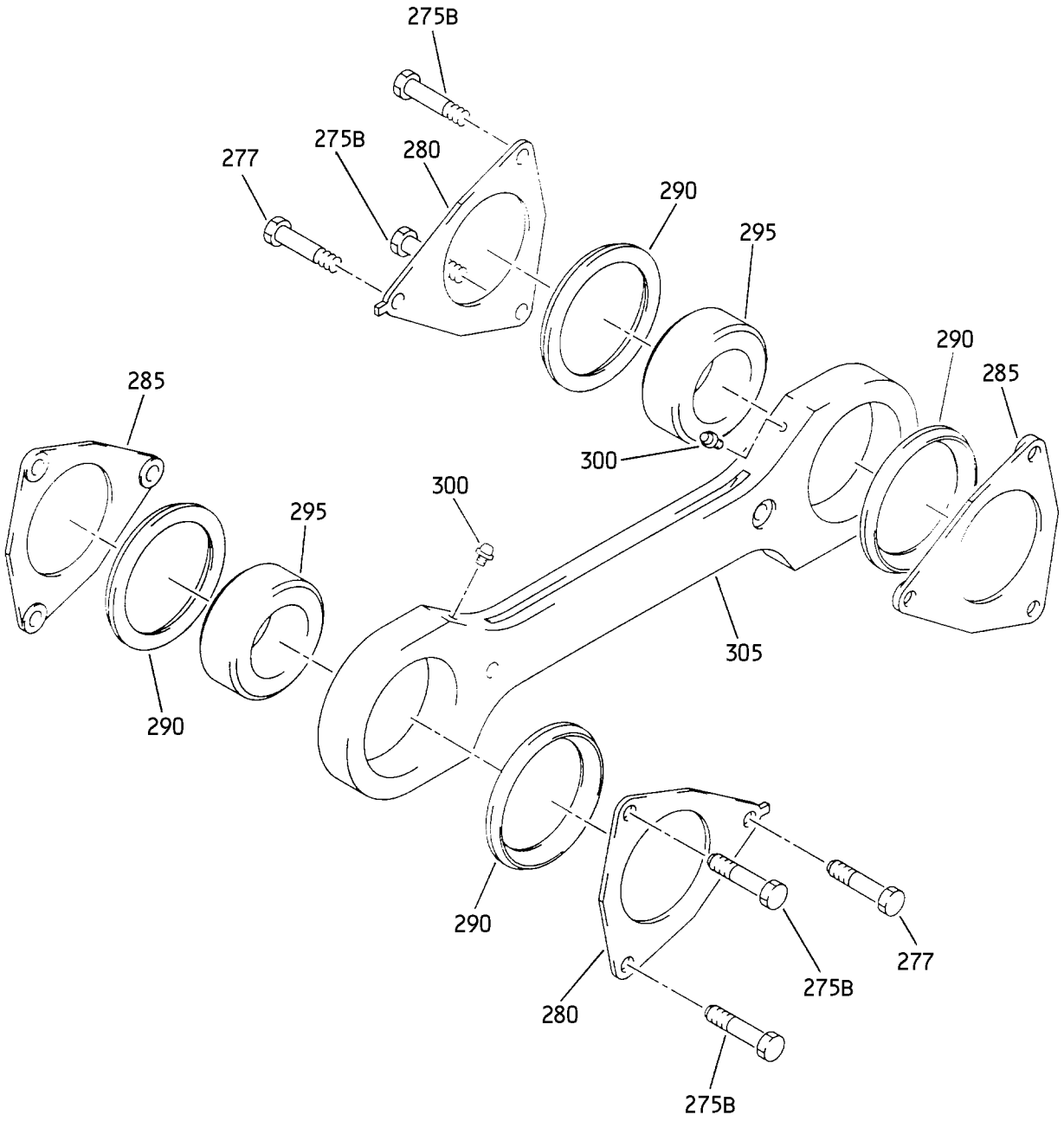
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 6)

K31137



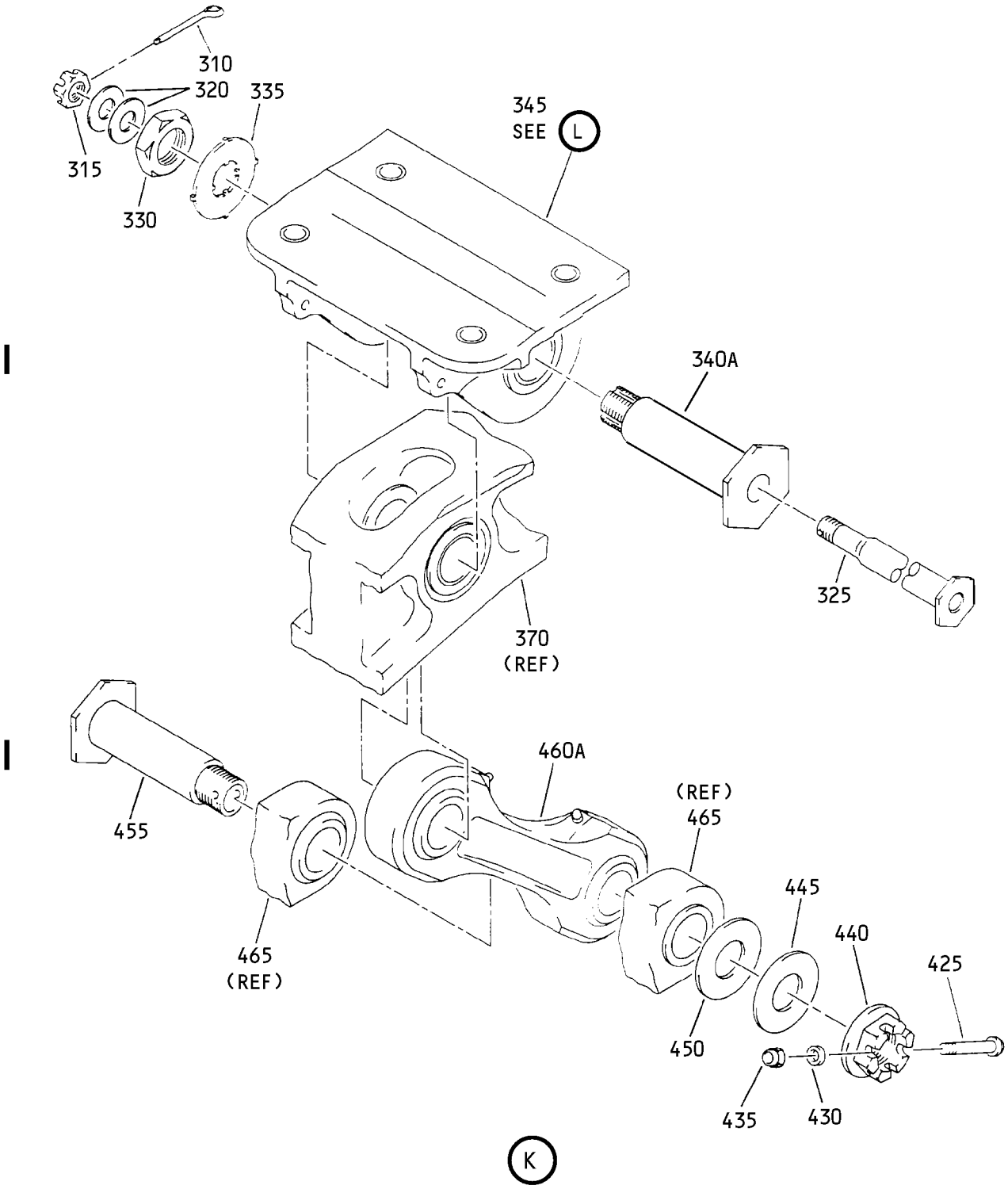
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 7)

K31151



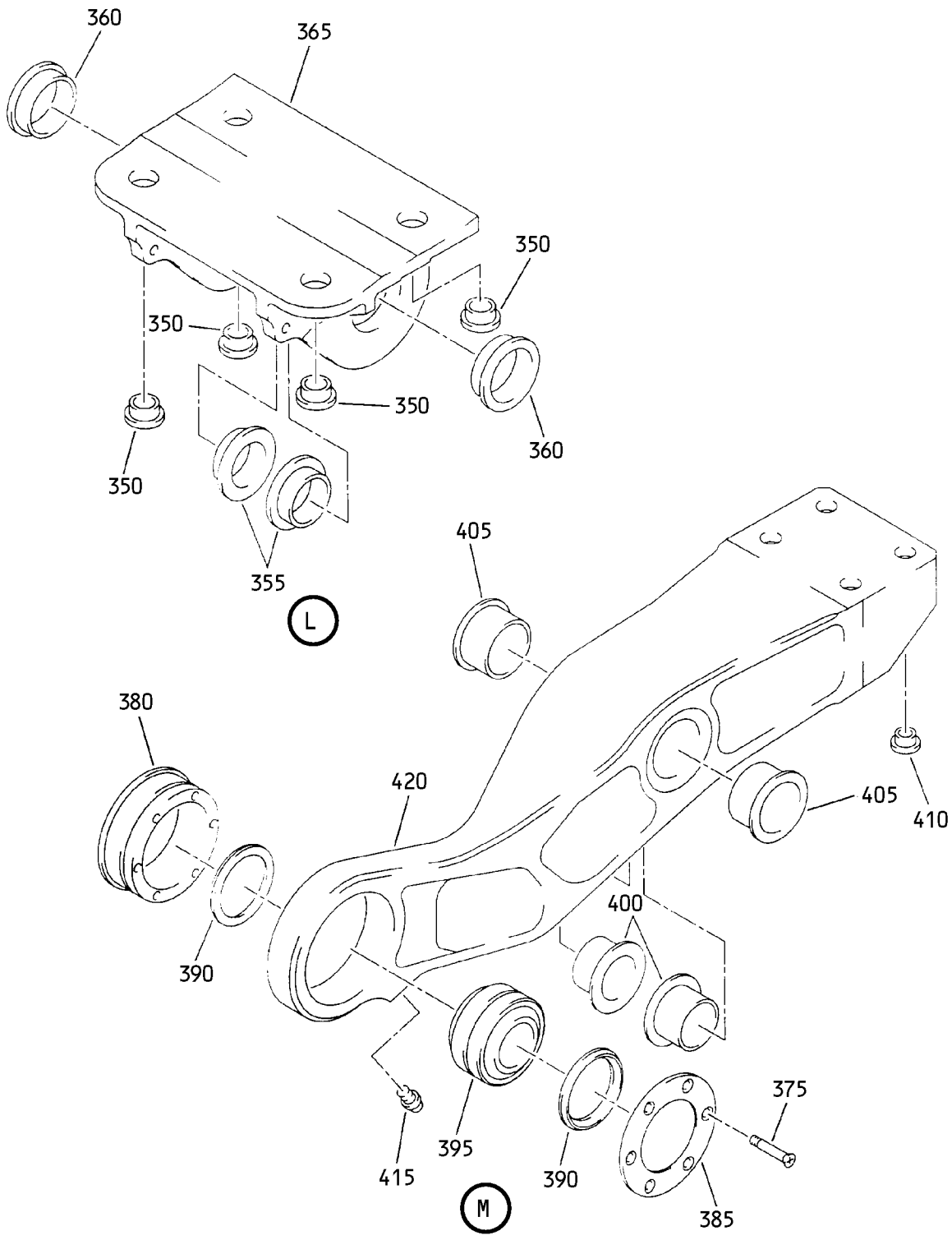
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 8)

K31165



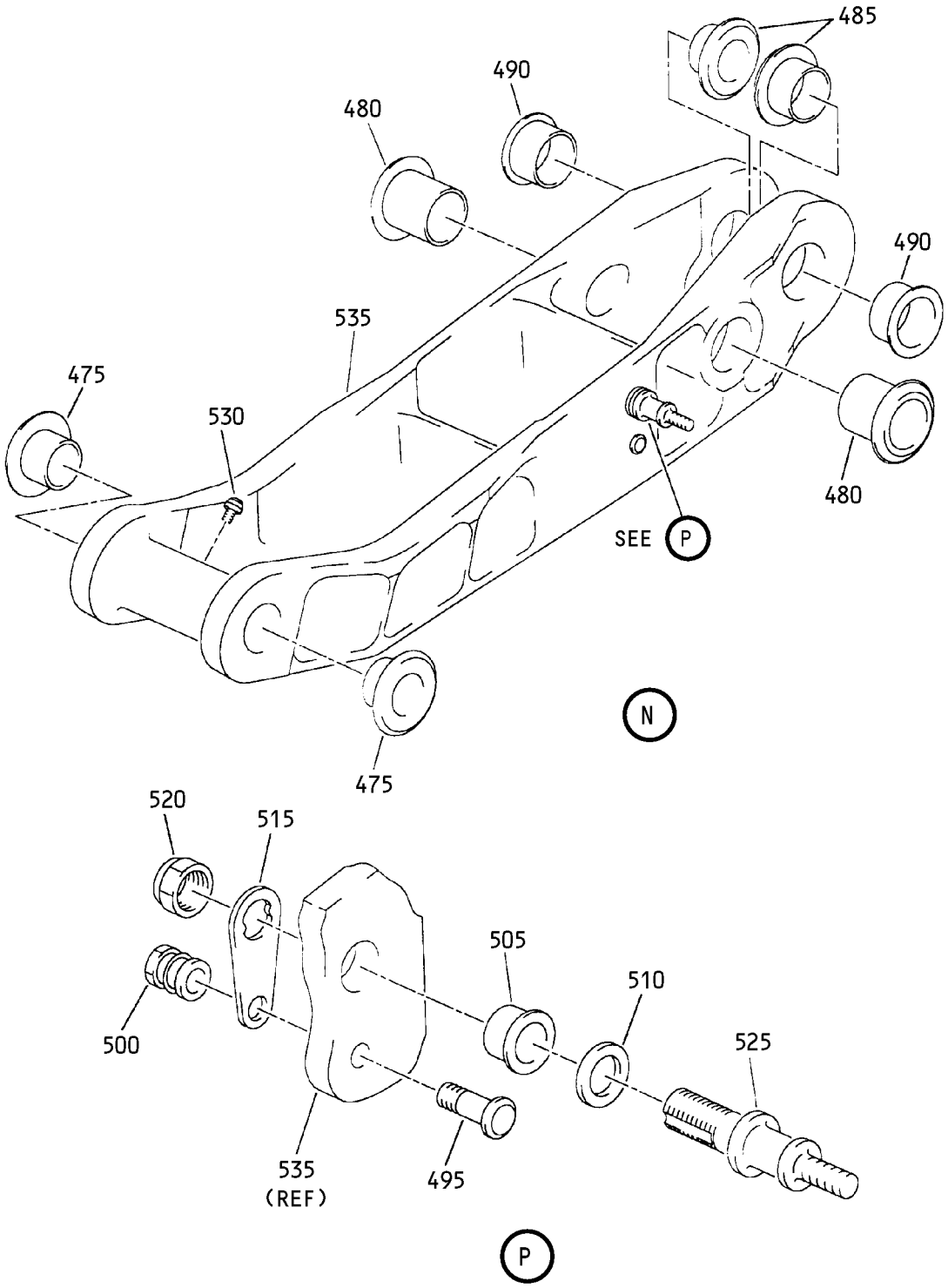
Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 9)

K31188



Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 10)

K31245



Wing Trailing Edge Outboard Flap Linkage Assembly
Figure 2 (Sheet 11)

K31262

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
-1	113T1330-21		LINKAGE ASSY-OUTBD FLAP WING T.E.	C	RF
-1A	113T1330-23		LINKAGE ASSY-OUTBD FLAP WING TE	E	RF
-5	113T1330-22		LINKAGE ASSY-OUTBD FLAP WING T.E.	D	RF
-5A	113T1330-24		LINKAGE ASSY-OUTBD FLAP WING TE	F	RF
10	BACP18BC04A14P		.PIN-COTTER	C-F	1
15	BACN10JD112ASU		.NUT	C-F	1
20	113T1254-25		.WASHER	C-F	2
25	113T1264-72		.PIN-INNER	C-F	1
30	113T1262-9		.NUT	C-F	1
35	113T1254-41		.WASHER	C-F	1
40	113T1263-18		.PIN-OUTER	C-F	1
45	113T1336-7		.LINK ASSY-5-8	C,D	1
-45A	113T1336-7		.LINK ASSY-5-8 (OPT ITEM 45B)	E,F	1
-45B	113T1336-11		.LINK ASSY-5-8 (OPT ITEM 45A)	E,F	1
50	BACB30LJ4HSU10		..BOLT	C-F	4
55	BACB30LJ4HSU11		..BOLT	C-F	1
60	BACB30LJ4PU11		DELETED		
60A	BACB30LR4PU11		..BOLT	C-F	1
65	113T1256-3		..SEAL	C-F	2
70	113T1256-6		..SEAL	C-F	2
70A	MS15001-3		DELETED		
70B	AS15001-3		DELETED		
75	113T1362-30		..RETAINER-BRG	C-F	1
80	113T1362-29		..RETAINER-BRG	C-F	1
85	113T1362-36		..RETAINER-BRG	C-F	1
90	113T1362-31		..RETAINER-BRG	C-F	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
95	NC26-1		..BEARING- (V56644) (SPEC 60B00180-234) (OPT ASB26-101 (VS0352)) (OPT BLP26F234 (V16746)) (OPT HSP21-106 (V02758)) (OPT HSP26-106 (V02758)) (OPT LHCB26BA (V73134)) (OPT ASSB26-4 (V15860)) (OPT CG3102 (V25099))	C-F	1
100	BLP24F233		..BEARING- (V16746) (SPEC 60B00180-233) (OPT ABS24-102 (VS0352))	C-F	1
105	MS15004-1		..FITTING-LUBE	C,D	2
-105A	MS15004-1		..FITTING-LUBE (USED ON ITEM 45A)	E,F	2
-105B	AS15004-1		..FITTING-LUBE (OPT ITEM 105C) (USED ON ITEM 45B)	E,F	2
-105C	MS15004-1		..FITTING-LUBE (OPT ITEM 105B) (USED ON ITEM 45B)	E,F	2
110	HL10VAZ8-8		..BOLT- (V60516) (SPEC BACB30MY8K8) (OPT B30MY8K8 (V97928))	C-F	4
115	BACC30AB8		..COLLAR	C,D	4
-115A	HL97DU8		..COLLAR- (V73197) (SPEC BACC30AB8S) (OPT HL97DU8 (V56878)) (OPT HL97DU8 (V5M902))	E,F	4

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
120	113T1336-8		..LINK- (USED ON ITEMS 45, 45A)	C-F	1
-120A	113T1336-12		..LINK- (USED ON ITEM 45B)	E,F	1
125	113T1336-9		..LINK- (USED ON ITEM 45, 45A)	C-F	1
-125A	113T1336-13		..LINK- (USED ON ITEM 45B)	E,F	1
130	HL448PY5-22		.BOLT- (V80539) (SPEC BACB30MB5A22NU) (OPT HL448PY5-22 (V97928)) (OPT HL448PY5-22 (V9N513)) (OPT HL448PY5-22 (V73197)) (OPT HL448PY5-22 (V60516)) (OPT HL448PY5-22 (V56876)) (OPT HL48PY5-22 (V9N513)) (OPT HL48PY5-22 (V97928)) (OPT HL48PY5-22 (V08524)) (OPT HL48PY5-22 (V80539)) (OPT HL48PY5-22 (V92215)) (OPT HL48PY5-22 (V73197)) (OPT HL48PY5-22 (V56878)) (OPT ITEM 130A)	C-F	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
-130A	VL310AG5-22		.BOLT-	C-F	1
			(V06950)		
			(SPEC BACB30VT5HK22)		
			(OPT VL310AG5-22		
			(V9N513))		
			(OPT VL310AG5-22		
			(V97928))		
			(OPT ITEM 130)		
135	NAS1149CN832R		.WASHER	C-F	1
140	BRH10C08M		.NUT-	C-F	1
			(V52828)		
			(SPEC BACN10JC08CM)		
			(OPT T6C832JM		
			(V11815))		
			(OPT 97E82		
			(V80539))		
			(OPT 109LH9075-82W		
			(V72962))		
			(OPT VN303D82		
			(V92215))		
			(OPT NS202101SE82		
			(V80539))		
			(OPT H01-08BAC		
			(V15653))		
145	BACN11N120CS		.NUT	C-F	1
150	NAS1149C2016R		.WASHER	C-F	AR
155	BACW10BP20APU		.WASHER	C-F	1
160	113T1263-71		.PIN-OUTER	C-F	1
165	113T1308-41		.LINK ASSY-6-9	C,D	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
-165A	113T1308-47		.LINK ASSY-6-9	E,F	1
170	MS15001-3		..FITTING-LUBE	C,D	1
-170A	MS15001-3		..FITTING-LUBE (OPT ITEM 170B)	E,F	1
-170B	AS15001-3		..FITTING-LUBE (OPT ITEM 170A)	E,F	1
175	113T1347-8		..BUSHING	C-F	2
180	113T1347-9		..BUSHING	C-F	2
185	113T1347-10		..BUSHING	C-F	2
190	113T1347-11		..BUSHING	C-F	2
195	113T1347-12		..BUSHING	C-F	2
200	113T1347-13		..BUSHING	C-F	2
205	HST10AG10-15		..BOLT- (VOPTK6) (SPEC BACB30VT10K15) (OPT HST10AG10-15 (V06725)) (OPT HST10AG10-15 (V56878)) (OPT HST10AG10-15 (V73197))	C-F	8
210	HST10AG10-20		DELETED		
210A	HST10AG10-18		..BOLT- (VOPTK6) (SPEC BACB30VT10K18) (OPT HST10AG10-18 (V06725)) (OPT HST10AG10-18 (V56878))	C-F	20

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
215	12EV10-117		DELETED		
215A	BACB10ZV5		..NUT	C-F	28
220	113T1308-43		DELETED		
220A	113T1308-45		..LINK-SIDE	C-F	1
225	113T1308-46		..LINK-SIDE	C-F	1
230	113T1308-43		..LINK-CTR	C,D	1
-230A	113T1308-49		..LINK-CTR	E,F	1
235	HL448PY5-22		.BOLT- (V80539) (SPEC BACB30MB5A22NU) (OPT HL448PY5-22 (V97928)) (OPT HL448PY5-22 (V9N513)) (OPT HL448PY5-22 (V73197)) (OPT HL448PY5-22 (V60516)) (OPT HL448PY5-22 (V56876)) (OPT HL48PY5-22 (V9N513)) (OPT HL48PY5-22 (V97928)) (OPT HL48PY5-22 (V08524)) (OPT HL48PY5-22 (V80539)) (OPT HL48PY5-22 (V92215)) (OPT HL48PY5-22 (V73197)) (OPT HL48PY5-22 (V56878)) (OPT ITEM 235A)	C-F	1
-235A	VL310AG5-22		.BOLT- (V06950) (SPEC BACB30VT5HK22) (OPT VL310AG5-22 (V9N513)) (OPT VL310AG5-22 (V97928)) (OPT ITEM 235)	C-F	1
240	NAS1149CN832R		.WASHER	C-F	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
245	BRH10C08M		.NUT-	C-F	1
			(V52828)		
			(SPEC BACN10JC08CM)		
			(OPT T6C832JM		
			(V11815))		
			(OPT 97E82		
			(V80539))		
			(OPT 109LH9075-82W		
			(V72962))		
			(OPT VN303D82		
			(V92215))		
			(OPT NS202101SE82		
			(V80539))		
			(OPT H01-08BAC		
			(V15653))		
250	BACN11N120CS		.NUT	C-F	1
255	NAS1149C2016R		.WASHER	C-F	AR
260	113T1254-59		.WASHER	C-F	1
265	113T1263-61		.PIN-OUTER	C-F	1
270	113T1320-1		.LINK ASSY-2-8	C,D	2
-270A	113T1320-1		.LINK ASSY-2-8	E,F	2
			(OPT ITEM 270B)		
-270B	113T1320-3		.LINK ASSY-2-8	E,F	2
			(OPT ITEM 270A)		
275	BACB30LJ4HSU10		DELETED		
275A	BACB30LJ4HSU17		DELETED		
275B	BACB30LJ4HSU11		..BOLT	C-F	4
277	BACB30LJ4HSU11		..BOLT	C-F	2
280	113T1362-18		..RETAINER-BRG	C-F	2
285	113T1362-19		..RETAINER-BRG	C-F	2
290	113T1256-3		..SEAL	C-F	4

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-295	NC26-1		..BEARING-SPERICAL (V56644) (SPEC 60B00180-234) (OPT ASB26-101 (VS0652) (OPT LHCB26BA (V73134)) (OPT HSP21-106 (V02758)) (OPT HSP26-106 (V02758)) (OPT BLP26F234 (V16746)) (OPT LHCB24BA (V73134)) (OPT ASSB26-4 (V15860)) (OPT CG3102 (V25099))	C-F	2
-295A	ASSB26-4		..BEARING-SPERICAL (V15860) (SPEC 60B00180-234) (OPT ASB26-101 (VS0652) (OPT LHCB26BA (V73134)) (OPT HSP21-106 (V02758)) (OPT HSP26-106 (V02758)) (OPT BLP26F234 (V16746)) (OPT LHCB24BA (V73134)) (OPT CG3102 (V25099))	C-F	2
300	MS15004-1		..FITTING-LUBE	C,D	2
-300A	MS15004-1		..FITTING-LUBE (USED ON ITEM 270A)	E,F	2
-300B	AS15004-1		..FITTING-LUBE (OPT ITEM 300C) (USED ON ITEM 270B)	E,F	2
-300C	MS15004-1		..FITTING-LUBE (OPT ITEM 300B) (USED ON ITEM 270B)	E,F	2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
305	113T1320-2		..LINK- (USED ON ITEMS270, 270A)	C-F	1
-305A	113T1320-4		..LINK- (USED ON ITEM 270B)	E,F	1
310	BACP18BC04A14P		.PIN-COTTER	C-F	1
315	BACN10JD112ASU		.NUT	C-F	1
320	113T1254-25		.WASHER	C-F	2
325	113T1264-67		.PIN-INNER	C-F	1
330	113T1262-9		.NUT	C-F	1
335	113T1254-57		.WASHER	C-F	1
340	113T1254-67		DELETED		
340A	113T1263-67		.PIN-OUTER	C-F	1
345	113T1302-31		.SWIVEL PLT ASSY-9-10	C-F	1
350	113T1347-150		..BUSHING	C-F	4
355	113T1347-169		..BUSHING	C-F	2
360	113T1347-168		..BUSHING	C-F	2
365	113T1302-33		..PLATE	C-F	1
370	113T1302-41		.BEAM ASSY-9-10	C-F	1
375	BACB30LH3PU13		..BOLT	C-F	6
380	113T1362-3		..RETAINER-BRG	C-F	1
385	113T1362-4		..RETAINER-BRG	C-F	1
390	113T1256-2		..SEAL	C-F	2
395	NC24-3		..BEARING- (V56644) (SPEC 60B00180-236) (OPT ASB24-103 (VS0352)) (OPT BLP24F236 (V16746)) (OPT HSP24-136 (V02758)) (OPT LHCB24BAD (V73134))	C-F	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
400	113T1347-167		..BUSHING	C-F	2
405	113T1347-166		..BUSHING	C-F	2
410	113T1347-149		..BUSHING	C-F	4
415	MS15004-1		..FITTING-LUBE	C-F	1
420	113T1302-43		..BEAM-SUPT	C-F	1
425	HL448PY5-22		.BOLT- (V80539) (SPEC BACB30MB5A22NU) (OPT HL448PY5-22 (V97928)) (OPT HL448PY5-22 (V9N513)) (OPT HL448PY5-22 (V73197)) (OPT HL448PY5-22 (V60516)) (OPT HL448PY5-22 (V56876)) (OPT HL48PY5-22 (V9N513)) (OPT HL48PY5-22 (V97928)) (OPT HL48PY5-22 (V08524)) (OPT HL48PY5-22 (V80539)) (OPT HL48PY5-22 (V92215)) (OPT HL48PY5-22 (V73197)) (OPT HL48PY5-22 (V56878)) (OPT ITEM 425A)	C-F	1
-425A	VL310AG5-22		.BOLT- (V06950) (SPEC BACB30VT5HK22) (OPT VL310AG5-22 (V9N513)) (OPT VL310AG5-22 (V97928)) (OPT ITEM 425)	C-F	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
430	NAS1149CN832R		.WASHER	C-F	1
435	BRH10C08M		.NUT-	C-F	1
			(V52828)		
			(SPEC BACN10JC08CM)		
			(OPT T6C832JM		
			(V11815))		
			(OPT 97E82		
			(V80539))		
			(OPT 109LH9075-82W		
			(V72962))		
			(OPT VN303D82		
			(V92215))		
			(OPT NS202101SE82		
			(V80539))		
			(OPT H01-08BAC		
			(V15653))		
440	BACN11N120CS		.NUT	C-F	1
445	NAS1149C2016R		.WASHER	C-F	AR
450	BACW10BP20APU		.WASHER	C-F	1
455	113T1263-70		.PIN	C-F	1
460	S113W102-211		DELETED		
460A	P3A3580		.LINK ASSY-3-10	C-F	1
			(V57606)		
			(SPEC S113W102-211)		
465	113T1314-41		.FITTING ASSY-1-3	C,E	1
-470	113T1314-42		.FITTING ASSY-1-3	D,F	1
475	113T1347-153		..BUSHING	C-F	2
480	113T1347-28		..BUSHING	C-F	2
485	113T1347-26		..BUSHING	C-F	2
490	113T1347-27		..BUSHING	C-F	2
495	HST10AG12-8		..BOLT-	C-F	1
			(VOPTK6)		
			(SPEC BACB30VT12K8)		
			(OPT HST10AG12-8		
			(V06725))		
			(OPT HST10AG12-8		
			(V56878))		
			(OPT HST10AG12-8		
			(V73197))		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
500	HST79CY12		..COLLAR- (V73197) (SPEC BACC30BL12) (OPT HST79CY12 (V56878)) (OPT HST79CY12 (V5M902)) (OPT HST79-12 (V92215))	C-F	1
505	BACB28AP08P039		..BUSHING	C-F	1
510	BACW10BP8ACU		..WASHER	C-F	1
515	113T1829-5		..WASHER	C-F	1
520	H51650-8BAC		..NUT- (V15653) (SPEC BACN10JC8CD) (OPT 102LH9074-8 (V72962)) (OPT 69235-820CD (V92215)) (OPT BMN4122CPD8-8 (V97928))	C-F	1
525	113T1829-7		..FITTING	C-F	1
530	MS15001-1		..FITTING-LUBE	C-F	1
535	113T1314-43		..FITTING	C-F	1

- Item Not Illustrated