TO: ALL HOLDERS OF MAIN LANDING GEAR BUILDUP ASSEMBLY COMPONENT MAINTENANCE MANUAL 32-11-36

REVISION NO. 3 DATED JUL 01/03

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter the Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
REPAIR-GEN 602 REPAIR 13-2 602-604 REPAIR 30-1 601-605	Added repair of brake sleeve 161W1211-1.
REPAIR 16-1 601 723-725,729	Added clarifications and updated callouts.

MAIN LANDING GEAR BUILDUP ASSEMBLY

PART NUMBERS 161T7100-1,-2,-5,-6

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

L05856

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

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

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

PAGE	DATE	CODE
32-11-36		
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	JUL 01/03	01
THRU LAST PAGE		
CONTENTS		
1	MAR 01/00	01
2	BLANK	
INTRODUCTION		
1	MAR 01/00	01
2	BLANK	
DESCRIPTION & OPERATION		
1	MAR 01/00	01
2	MAR 01/00	01
3	MAR 01/00	01
4	BLANK	
DISASSEMBLY		
301	MAR 01/01	01.1
302	MAR 01/01	01.1
303	MAR 01/01	01.1
304	MAR 01/01	01.1
CHECK		
501	MAR 01/01	01.1
502	MAR 01/01	01.1

PAGE	DATE	CODE
REPAIR-GENERAL		
601	MAR 01/00	01
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REPAIR 1-1		
601	MAR 01/01	01.1
602	MAR 01/01	01.101
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604	MAR 01/01	01.1
605	MAR 01/01	01.1
606	MAR 01/01	01.1
607	MAR 01/01	01.1
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615	MAR 01/01	01.1
616	MAR 01/01	01.1
617	MAR 01/01	01.1
618	MAR 01/01	01.1
619	MAR 01/01	01.1
620	MAR 01/01	01.1
REPAIR 2-1		
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602	MAR 01/01	01.1
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602	MAR 01/01	01.1
603	MAR 01/01	01.1
604	MAR 01/01	01.1
605	MAR 01/01	01.1
606	MAR 01/01	01.1

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
REPAIR 2-2		CONT.
607	MAR 01/01	01.1
608	MAR 01/01	01.1
609	MAR 01/01	01.1
610	MAR 01/01	01.1
REPAIR 3-1		
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602	MAR 01/01	01.1
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604	MAR 01/01	01.1
REPAIR 4-2		
601	MAR 01/01	01.1
602	MAR 01/01	01.1
603	MAR 01/01	01.1
604	MAR 01/01	01.1
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606	MAR 01/01	01.1
REPAIR 5-1		
601	MAR 01/01	01.1
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PAGE	DATE	CODE
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REPAIR 6-1		
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REPAIR 6-2		
601	MAR 01/01	01.1
602	MAR 01/01	01.1
603	MAR 01/01	01.1
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605	MAR 01/01	01.1
606	MAR 01/01	01.1
607	MAR 01/01	01.1
608	MAR 01/01	01.1
REPAIR 7-1		
601	MAR 01/01	01.1
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* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
REPAIR 7-2		
601	MAR 01/01	01.1
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REPAIR 8-1		
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606	MAR 01/01	01.1
REPAIR 9-1		
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602	MAR 01/01	01.1
603	MAR 01/01	01.1
604	MAR 01/01	01.1

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
REPAIR 12-2		CONT.
605	MAR 01/01	01.1
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REPAIR 13-2		
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608	MAR 01/01	01.1
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PAGE	DATE	CODE
REPAIR 14-1		
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604	MAR 01/01	01.1

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
REPAIR 16-1		CONT.
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607	MAR 01/01	01.1
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REPAIR 17-1		
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REPAIR 18-1		
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REPAIR 18-2		
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PAGE	DATE	CODE
REPAIR 18-2		CONT.
607	MAR 01/01	01.1
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REPAIR 19-1		
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REPAIR 20-1		
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REPAIR 20-2		
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615	MAR 01/01	01.1
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* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
REPAIR 21-1		
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REPAIR 22-1		
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PAGE	DATE	CODE
REPAIR 24-1		
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607	MAR 01/01	01.1
608	MAR 01/01	01.1

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
REPAIR 28-1		
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PAGE	DATE	CODE
ASSEMBLY		CONT.
711	MAR 01/01	01.1
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FITS AND CLEARANCES		
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803	MAR 01/00	01
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* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
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ILLUSTRATED PARTS LIST		
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1003	MAR 01/00	01
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1038	JUL 01/00	01.101

PAGE	DATE	CODE
ILLUSTRATED PARTS LIST		CONT.
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1058	JUL 01/00	01.101
1059	JUL 01/00	01.1
1060	JUL 01/00	01.101

* = 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:

MAIN LANDING GEAR BUILDUP ASSEMBLY

DESCRIPTION AND OPERATION

1. Description

A. The main landing gear buildup assembly consists of:

(1) Hydraulic support bracket assembly.

(2) Side strut fitting assembly.

(3) Down lock fitting assembly.

(4) Lock link drag strut fitting assembly, with a drag strut spindle assembly installed in it.

(5) Wire support bracket assemblies.

(6) Lock link side strut spindle assembly.

(7) Lower side strut spindle assembly.

(8) Lower drag strut spindle assembly.

(9) Upper and lower torque link assemblies.

(10) Shock strut assembly.

(11) Truck beam assembly.

(12) Axle assemblies.

(13) Brake sleeves.

(14) Wheel nuts and associated tang washers.

(15) Tow fitting assemblies.

(16) Sensor mechanism assemblies.

(17) Brake rod assemblies and associated pin assemblies.

(18) Uplock assembly.

(19) Uplock stabilizer assembly.

2. Operation

A. The main landing gear buildup assembly supports the airplane on the ground, absorbs landing and taxi shocks, and dampens vibration.

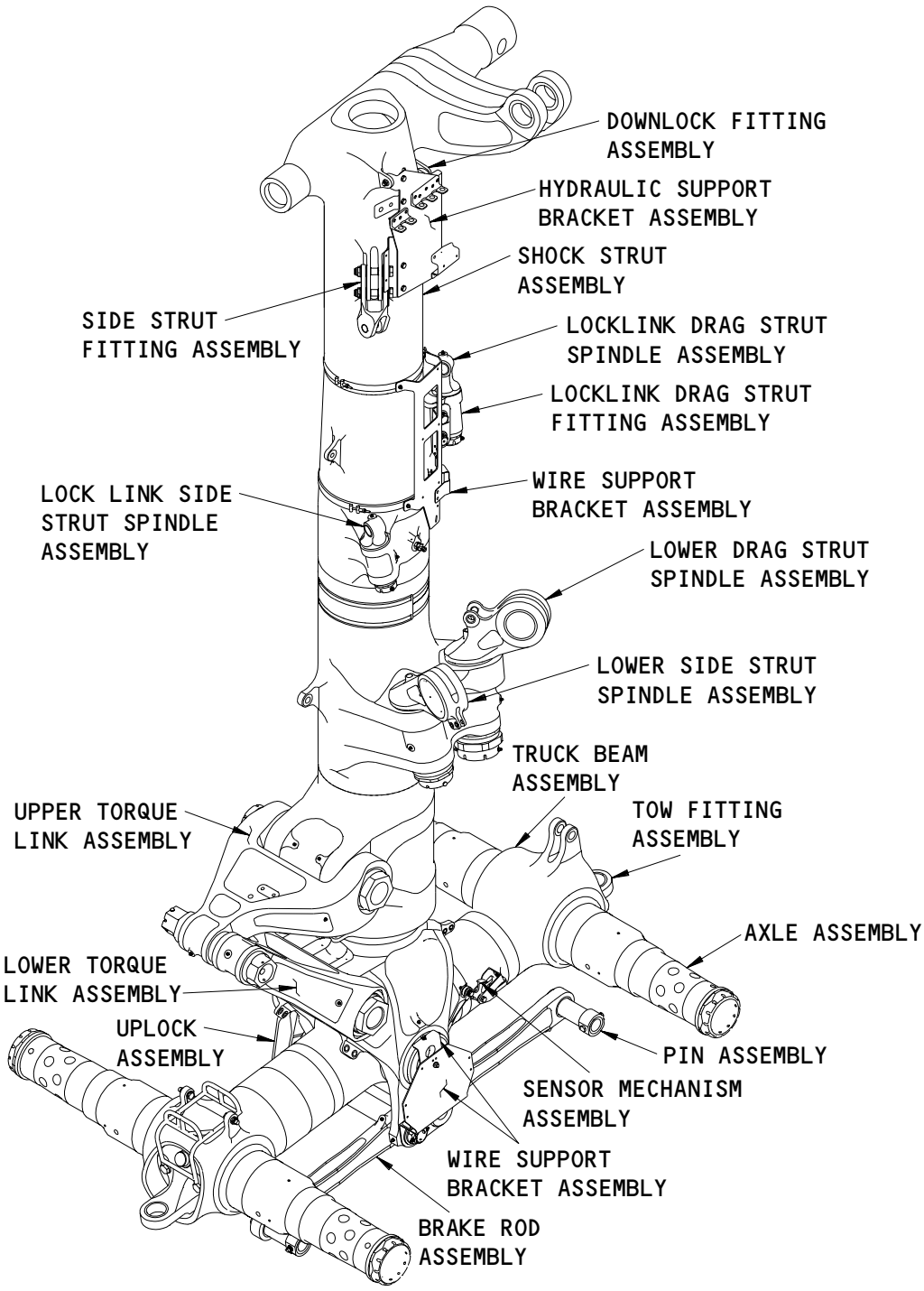
3. Leading Particulars (Approximate)

A. Length -- 67.0 inches

B. Width -- 60.0 inches

C. Height -- 130.0 inches

D. Weight -- 3561 pounds (dry)



Description and Operation
Figure 1

DISASSEMBLY

1. General

   A. This procedure has the necessary data to disassemble the main landing gear buildup assembly.

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

2. Special Tools

   NOTE: Equivalent substitutes can be used.

   A. A32109 Pin Removal And Installation Equipment

   B. A32110 Brake Rod Pin Puller Equipment.

   C. A32114 Truck Position Retainer and Oleo Lock.

   D. A32115 Overhead Installation/Removal Equipment.

   E. A32116 MLG Bogie Pivot Pin Removal Equipment.

      (1) A32116-2 Hub Assembly.

      (2) A32116-3 Crowfoot Wrench.

      (3) A32116-4 Drift Pin

   F. B32050 MLG Buildup Assembly Fixture.

   G. J32031-12 MLG Axle Protector Equipment.

3. Parts Replacement

   NOTE: Replacement of these parts is recommended. Replacement of other parts can be by in-service experience.

   A. All o-rings and cotter pins.

4. Procedure

NOTE: Use standard industry procedures and these instructions.

CAUTION: BEFORE YOU LIFT THE MAIN LANDING GEAR ASSEMBLY, MAKE SURE THE OLEO LOCK IS INSTALLED, TO PREVENT ACCIDENTAL EXTENSION OF THE SHOCK STRUT ASSEMBLY.

A. Lift the main gear unit and put it in the assembly fixture.

B. Remove bracket assemblies (459, 489) from truck pivot pin (750).

C. Removal of the brake rod assemblies (867).

(1) Remove the nuts (780, 861) from the pins (777, 855).

(2) Install the brake rod pin thread protector.

CAUTION: AS THE PINS (777, 855) ARE PULLED OUT, THERE WILL BE LOOSE PARTS THAT COULD FALL AND BE DAMAGED. PROTECT THE UPLOCK SPACER ASSEMBLY (795), UPLOCK SPACER (843) AND THE SPACER ASSEMBLIES (864).

(3) Remove the brake pin assemblies (561) with the brake pin puller.

D. Remove the sensor mechanism assembly (666, 669).

E. Remove the fitting assemblies (37, 66).

F. Remove the spindle nuts (225, 255, 285, 318) and the spindles (231, 261, 291, 324).

G. Remove the fitting assembly (180), the pin assembly (168) and the pin (177).

WARNING: BE SURE THE OLEO LOCK IS INSTALLED.

H. Removal of the apex pin (369).

(1) Remove the apex pin nut (378) with the apex nut wrench and apex pin adapter.

(2) Install the torsion link apex pin (369) thread protector.

CAUTION: WHEN THE APEX PIN (369) IS REMOVED, THE SPACER (375) CAN FALL AND BE DAMAGED.

(3) Remove the apex pin (369) and the spacer (375).

I. Removal of the torque links (381, 423).

(1) Remove the torsion link pin nuts (351, 420) with the link pin nut wrench set.

(2) Install the link pin (357, 414) thread protectors.

(3) Remove the link pins (357, 414).

J. Removal of the truck pivot pin (750), and the uplock assembly (813, 816).

(1) Remove the truck pivot pin (750), the nut (756) and the splined washer (753) with the A32116-2 hub assembly, the A32116-3 crowfoot assembly and the A32116-4 drift pin.

(2) Remove the uplock stabilizer assembly (795) from the uplock assembly (813, 816).

K. Lift the shock strut assembly (960) off the truck beam assembly (510) with the MLG lifting equipment A32115.

L. Install the J32031-12 thread protectors.

M. Remove the brake sleeves (573).

N. Remove the bolts (585, 591) and the bracket (588).

O. Remove the axle assemblies (621).

P. Remove the tow fitting assemblies (597).

CHECK

1. General

A. This procedure has the data necessary to find defects in 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 subjects identified in this procedure.

D. Refer to IPL Fig. 1 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) Examine all parts for defects by standard industry practices.

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

(a) Pin (54, 174, 177, 357, 369, 414, 567, 624, 750, 753, 777, 855, 987)

(b) Fitting (210, 840, 841, 842)

(c) Nut (225, 255, 285, 318, 351, 378, 420, 543, 756, 861, 980, 990)

(d) Washer (228, 258, 288, 321, 354, 372, 417, 546, 858, 981)

(e) Spindle (243, 273, 306, 339)

(f) Spacer (375)

(g) Beam (540)

(h) Sleeve (627)

(i) Axle (636)

(j) Target (720)

(k) Bolt (786)

(l) Stabilizer (810)

(m) Rod (879)

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

(a) Fitting (48, 87, 618)

(b) Torque Link (402A, 444)

(c) Bracket (735)

(d) Link (708)

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
161T2108	SPINDLE ASSEMBLY	2-1, 2-2
161T2121	SPINDLE ASSEMBLY	3-1, 3-2
161T2141	FITTING ASSEMBLY	4-1, 4-2
161T6105	SPINDLE ASSEMBLY	5-1, 5-2
161T6118	FITTING ASSEMBLY	6-1, 6-2
161T6119	FITTING ASSEMBLY	7-1, 7-2
161T6121	PIN ASSEMBLY	8-1, 8-2
161T6122	PIN	9-1
161T6130	SPINDLE ASSEMBLY	10-1, 10-2
161T7125	PIN	11-1
161T7130	BEAM ASSEMBLY	12-1, 12-2
161T7133	AXLE ASSEMBLY	13-1, 13-2
161T7134	FITTING ASSEMBLY	14-1, 14-2
161T7138	ROD ASSEMBLY	15-1, 15-2
161T7140	PIN	16-1
161T7142	LINK ASSEMBLY	17-1, 17-2
161T7144	LINK ASSEMBLY	18-1, 18-2
161T7193	PIN	19-1

PART NUMBER	NAME	REPAIR
161T7197	UPLOCK ASSEMBLY	20-1, 20-2
161T7199	STABILIZER ASSEMBLY	21-1, 21-2
161T7206	LINK ASSEMBLY	22-1, 22-2
161T7207	TARGET ASSEMBLY	23-1, 23-2
161T7208	BRACKET ASSEMBLY	24-1, 24-2
162T1103	NAME PLATE	25-1
287T6140	BRACKET ASSEMBLY	26-1, 26-2
161W1144	APEX PIN	27-1
161W1178	PIN ASSEMBLY	28-1, 28-2
161T5010	PIN	29-1
161W1211	BRAKE SLEEVE	30-1

2. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in SOPM 20-00-00.

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 subjects identified in this procedure.

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

2. Refinish

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) C00032 Enamel -- BMS 10-60 (SOPM 20-60-02)

      (2) C00175 Primer -- BMS 10-79 Type 3 (SOPM 20-60-02)

      (3) D00113 Lubricant -- Solid Film, BMS 3-8 Type 8 (SOPM 20-50-08)

   B. 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 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

      (6) SOPM 20-42-05, Bright Cadmium Plating

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

(8) SOPM 20-44-04, Application of Urethane Compatible Primer

(9) SOPM 20-50-08, Application of Bonded Solid Film Lubricants

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

C. Procedure

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Nut (225, 255)	4330M steel 180-200 KSI	Cadmium-titanium plate (F-15.02).
Washer (228,258)	4340 steel AMS 6409 180-200 KSI	Cadmium-titanium plate (F-15.01), unless as shown in Fig. 601.
Nut (285)	4340M steel 275-300 KSI	Cadmium-titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.66) and BMS 10-60 enamel (F-19.39-707), shonwn in Fig. 602.
Washers (288,354,417)	4330M steel 180-200 KSI	Cadmium-titanium plate (F-15.06). Apply BMS 10-79, type 3 primer (F-19.66) unless shown in Fig. 603.
Nut (318)	4340M steel 275-300 KSI	Cadmium-titanium plate (F-15.01). Apply BMS 10-79, Type 3 primer (F-19.47) and BMS 10-60 enamel (F-19.39-707), unless shown in Fig. 604.
Splined Washer (321)	4340M steel 275-300 KSI	Cadmium-Titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.66) and BMS 10-60 enamel (F-19.39-707), shown in Fig. 605.
Nut (351, 420)	4340M steel 275-300 KSI	Cadmium-titanium plate (F-15.01). Apply BMS 10—79, type 3 primer (F—19.66) and BMS 10—60 enamel (F—19.39—707), unless shown in Fig. 606.
Washer (372)	4330M steel 220-240 KSI	See Fig. 607.

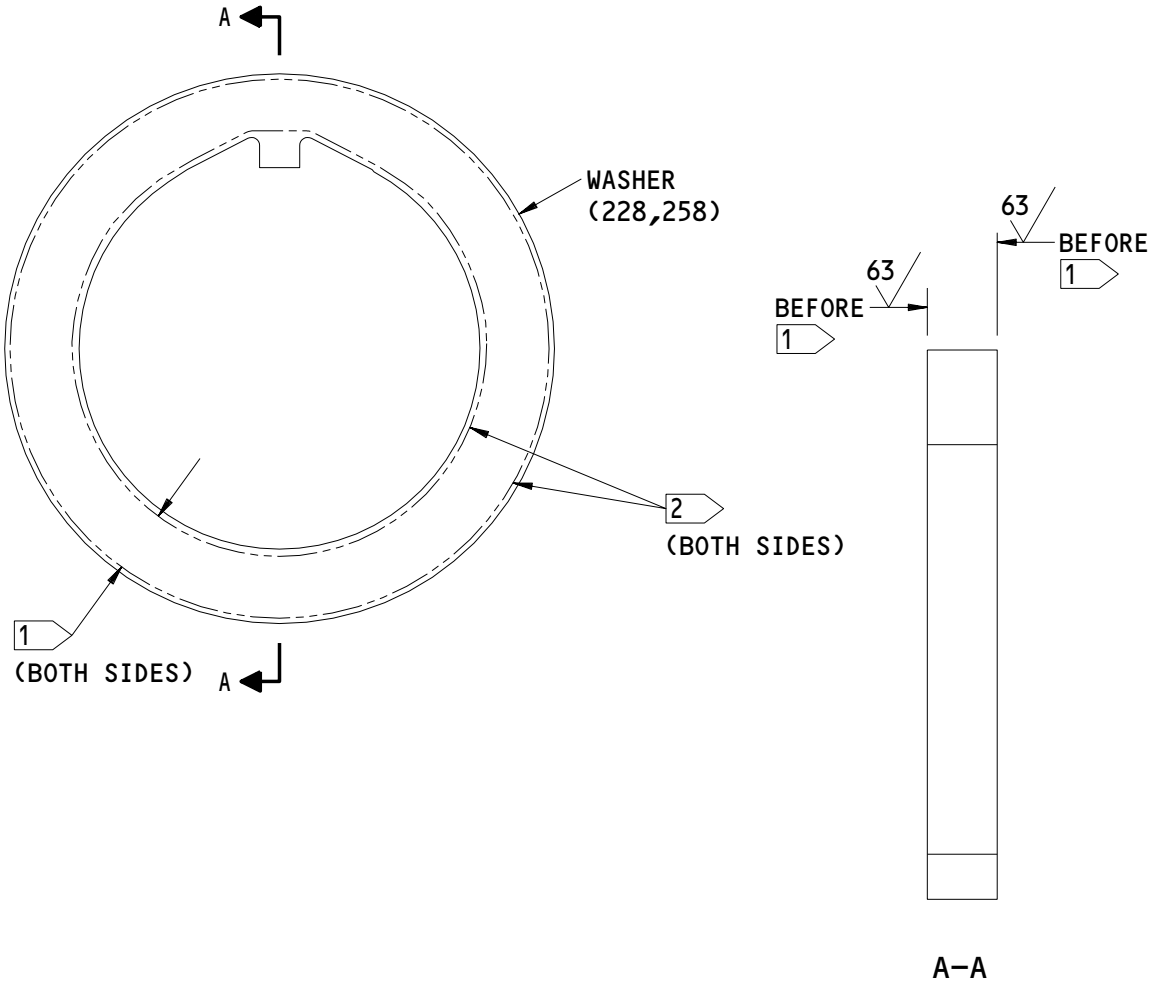
Refinish Details
Table 601 (Sheet 1)

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1 (Cont)		
Spacer (375)	15-5PH CRES 150-170 KSI	Passivate (F-17.25), unless shown in Fig. 608.
Nut (378)	4340M steel 275-300 KSI	Cadmium-titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.47), unless shown in Fig. 609.
Bracket Assemblies (465,489)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35). Apply BMS 10-79, type 3 primer (F-19.47), and BMS 10-60 enamel (F-19.39-707), but not in bushing bores.
Nut (543)	4330M steel 180-200 KSI	Cadmium-titanium plate (F-15.32), unless shown in Fig. 610.
Tang Washer (546)	15-5PH 180-200 KSI	Passivate (F-17.25).
Bracket Assembly (588)	CRES	Passivate (F-17.25).
Retainer (623)	4340M steel 180-200 KSI	Cadmium plate (F-15.02), 0.002-0.004 inch thick.
Washer (753)	4330M steel 180-200 KSI	Cadmium-titanium plate (F-15.06). Apply BMS 10-79, type 3 primer (F-19.66) and BMS 10-60 enamel (F-19.39-707), unless shown in Fig. 611.
Nut (756)	4340M steel 275-300 KSI	Cadmium-titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.47) and BMS 10-60 enamel (F-19.39-707), unless shown in Fig. 612.

Refinish Details
Table 601 (Sheet 2)

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1 (Cont)		
Bolt (786)	A286 Steel AMS 5853	Passivate (F-17.25).
Tang Washer (858)	15-5PH CRES 180-200 KSI	Cadmium plate (F-16.11). Apply BMS 10-79, type 3 primer (F-19.47).
Nut (861)	4330M steel 220-240 KSI	Cadmium-titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.47) and BMS 10-60 enamel (F-19.39-707), unless shown in Fig. 613.
Bracket Assembly (903)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply BMS 10-79, type 3 primer (F-19.47), and BMS 10-60 enamel (F-19.39-707).
Nut (980)	15-5PH CRES 180-200 KSI	Passivate (F-17.25). Apply BMS 3-8 solid film lubricant (F-19.10) to the threads.
Washer (981)	15-5PH CRES 180-200 KSI	Passivate (F-17.25).
Nut (990)	15-5PH CRES 150-170 KSI	Passivate (F-17.25). Apply BMS 3-8 solid film lubricant (F-19.10) to the threads.

Refinish Details
Table 601 (Sheet 3)

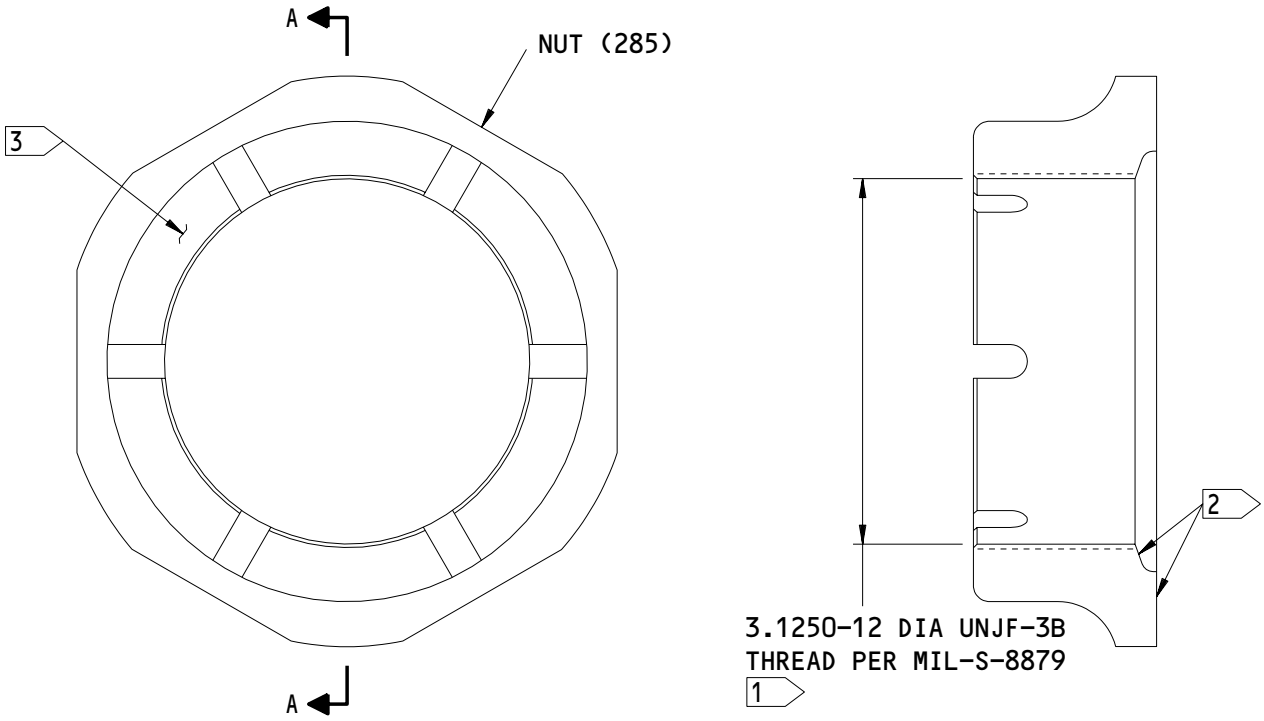


ITEM NUMBERS REFER TO IPL FIG. 1

1 CHROME PLATE (F-15.34) 0.0025-0.0030 INCH THICK. DO NOT GRIND

2 CHROME PLATE MUST NOT TERMINATE WITH A SQUARE EDGE BUT MUST TAPER FROM FULL TO ZERO THICKNESS OVER A MINIMUM LENGTH OF 0.005 INCH. THE TAPERED EDGE OF THE CHROME PLATE MUST BE CONTAINED WITHIN A 0.03 INCH WIDE BAND

161W0125-1
Washer Refinish
Figure 601



1 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

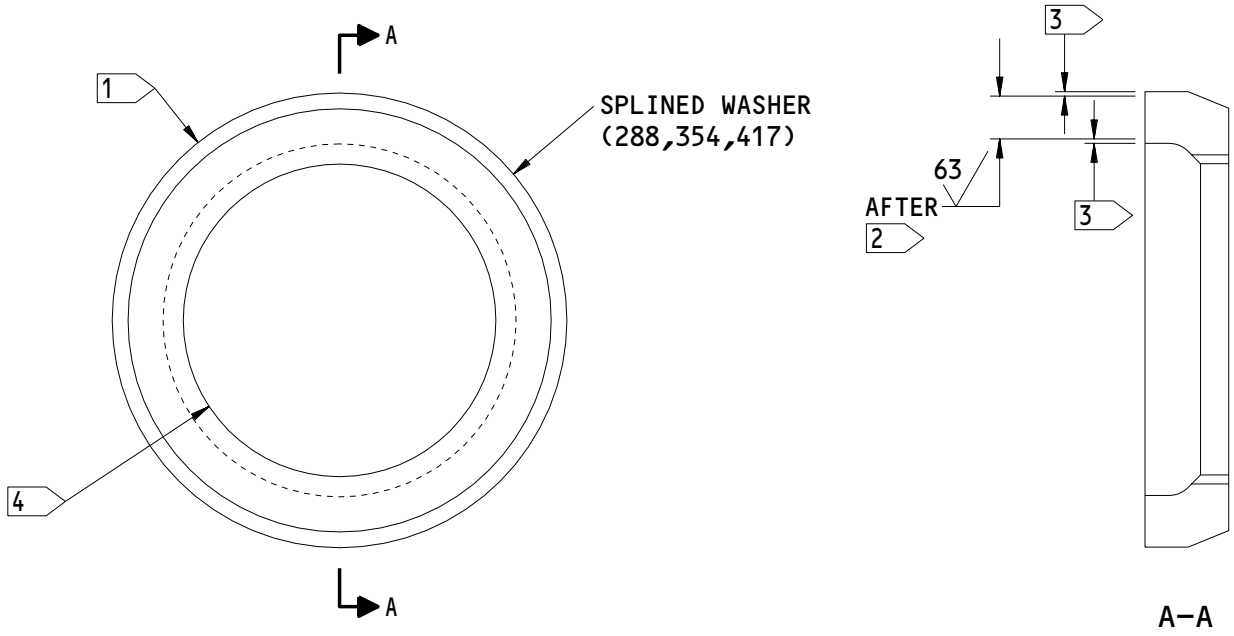
2 CADMIUM-TITANIUM PLATE (F-15.01) AND BMS 10-79, TYPE 3 PRIMER (F-19.66)

3 PART NUMBER AND SERIAL NUMBER LOCATION

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T2126-1
Nut Refinish
Figure 602



ITEM NUMBERS REFER TO IPL FIG. 1

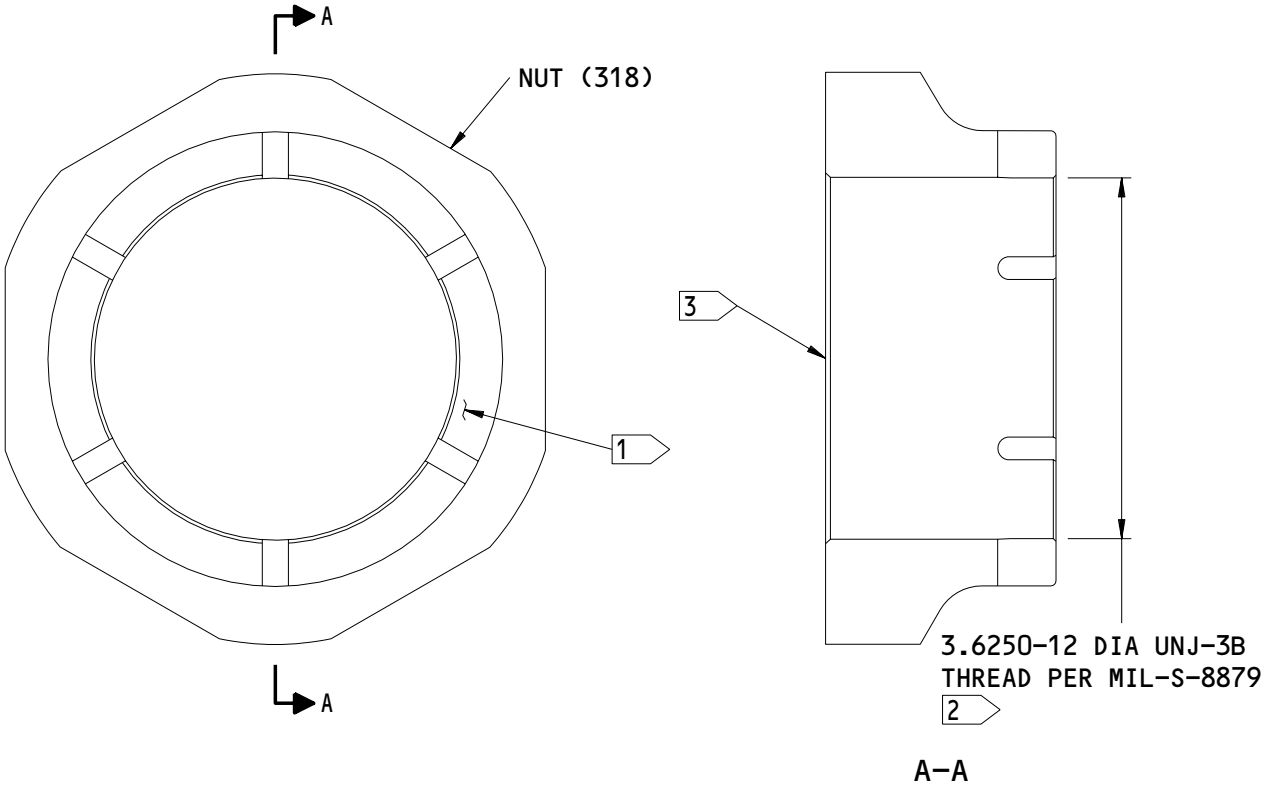
1 PART NUMBER LOCATION

2 CHROME PLATE (F-15.34) 0.0025-0.0035 INCH THICK. DO NOT GRIND. WIPE CHROME PLATE WITH PRIMER (F-19.451)

3 CHROME PLATE RUNOUT: CHROME PLATE MUST NOT TERMINATE WITH A SQUARE EDGE BUT MUST TAPER FROM FULL TO ZERO THICKNESS OVER A MINIMUM LENGTH OF 0.005 INCH. THE TAPERED EDGE OF THE CHROME PLATE MUST BE CONTAINED WITHIN A 0.08 INCH WIDE BAND

4 CADMIUM-TITANIUM PLATE (F-15.36). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451)

161T7123-1,-2
Splined Washer Refinish
Figure 603



1 PART NUMBER AND SERIAL NUMBER LOCATION

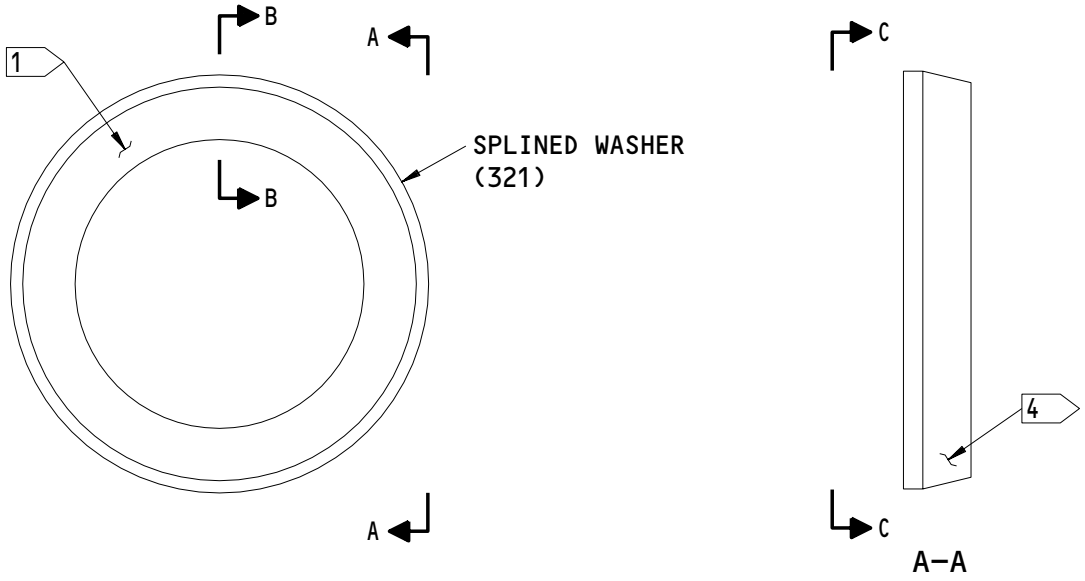
2 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

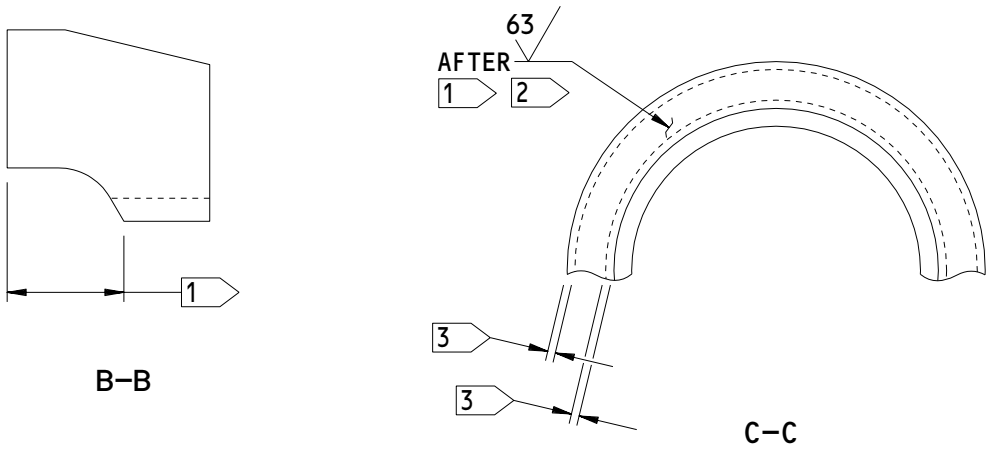
3 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79 TYPE 3 PRIMER (F-19.66)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6114-2
Nut Refinish
Figure 604





161T6132-5
Washer Refinish
Figure 605 (Sheet 1)

ITEM NUMBERS REFER TO IPL FIG. 1

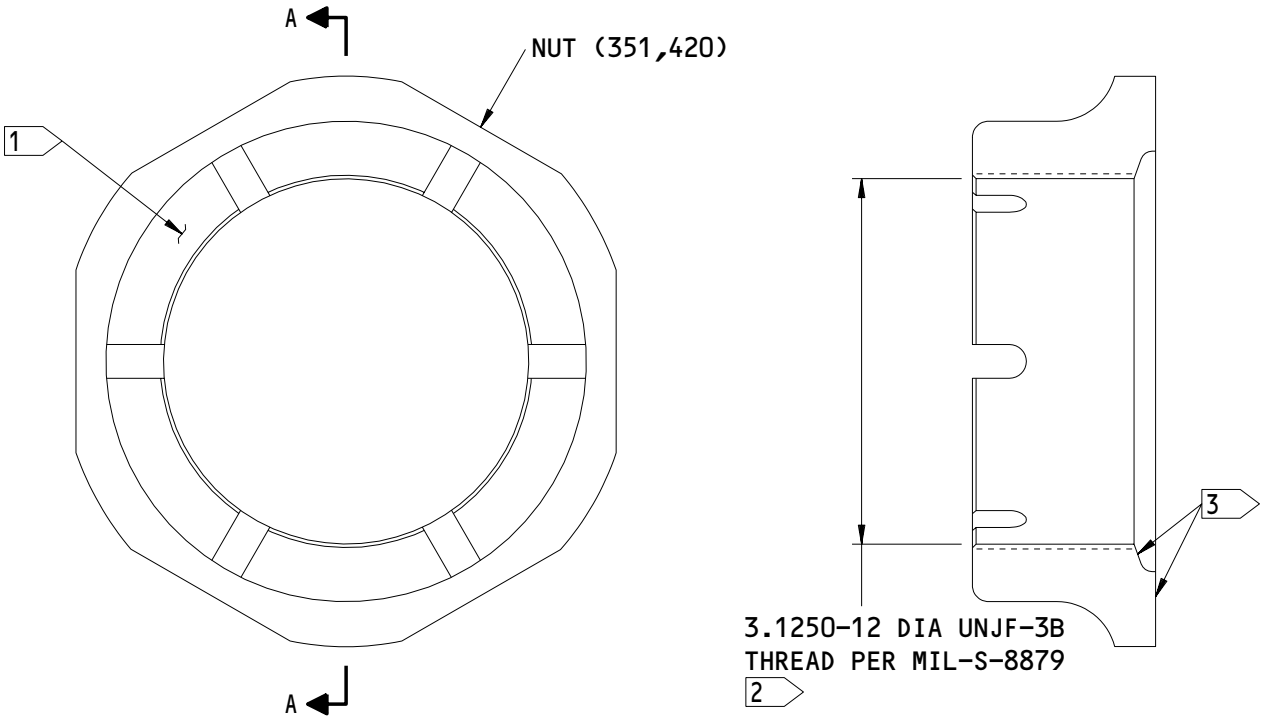
1 > DO NOT APPLY ENAMEL

2 > CHROME PLATE (F-15.34) 0.0015-0.0025 INCH THICK. WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451)

3 > CHROME PLATE RUNOUT: CHROME PLATE MUST NOT TERMINATE WITH A SQUARE EDGE BUT MUST TAPER FROM FULL TO ZERO THICKNESS OVER A MINIMUM LENGTH OF 0.005 INCH. THE TAPERED EDGE OF THE CHROME PLATE MUST BE CONTAINED WITHIN A 0.08 INCH WIDE BAND

4 > PART NUMBER AND SERIAL NUMBER LOCATION

161T6132-5
Washer Refinish
Figure 605 (Sheet 2)



ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

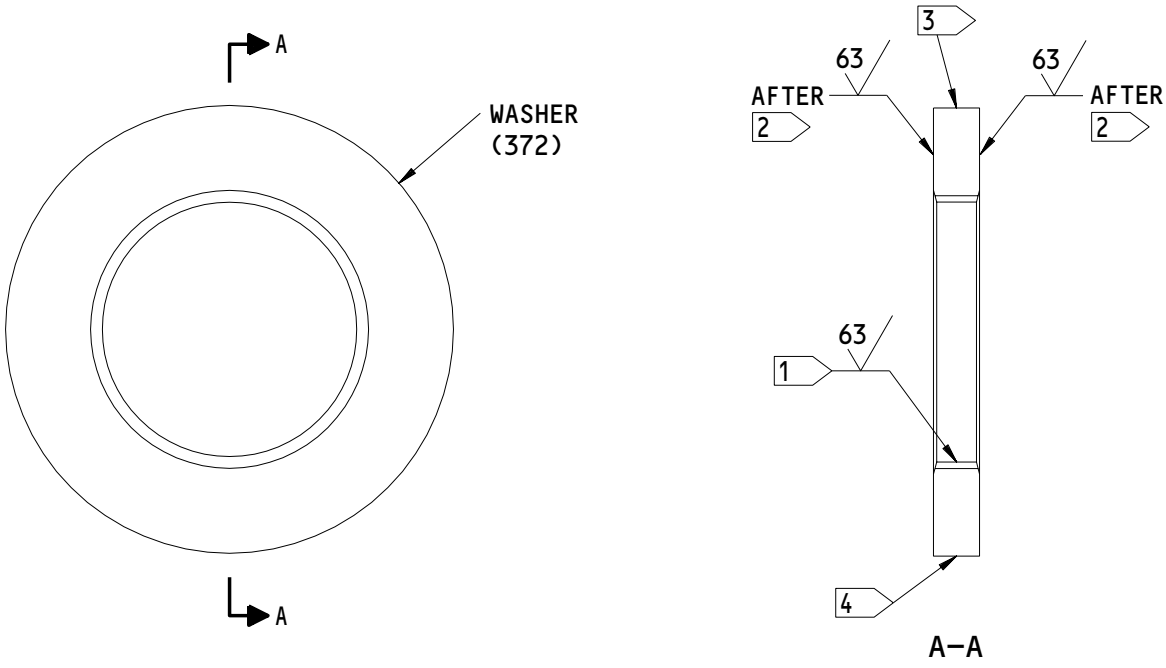
1 PART NUMBER LOCATION

2 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

3 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66)

161T7122-1
Nut Refinish
Figure 606

L06171



ITEM NUMBERS REFER TO IPL FIG. 1

1 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451)

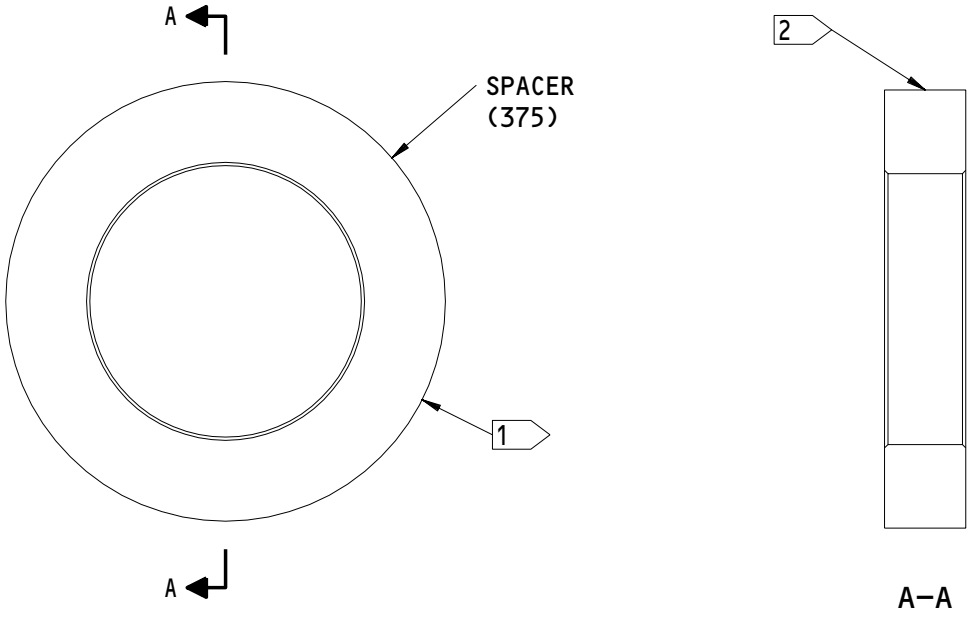
2 THIN DENSE CHROME PLATE (F-15.43 WHICH REPLACES F-14.892) 0.0003-0.0005 INCH THICK. DO NOT GRIND. WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451)

3 CADMIUM-TITANIUM PLATE(F-15.01). APPLY BMS 10-79 TYPE 3 PRIMER (F-19.47) AND BMS 10-60 ENAMEL (F-14.9813)

4 PART NUMBER LOCATION

161W1235-1
Splined Washer Refinish
Figure 607

L06177

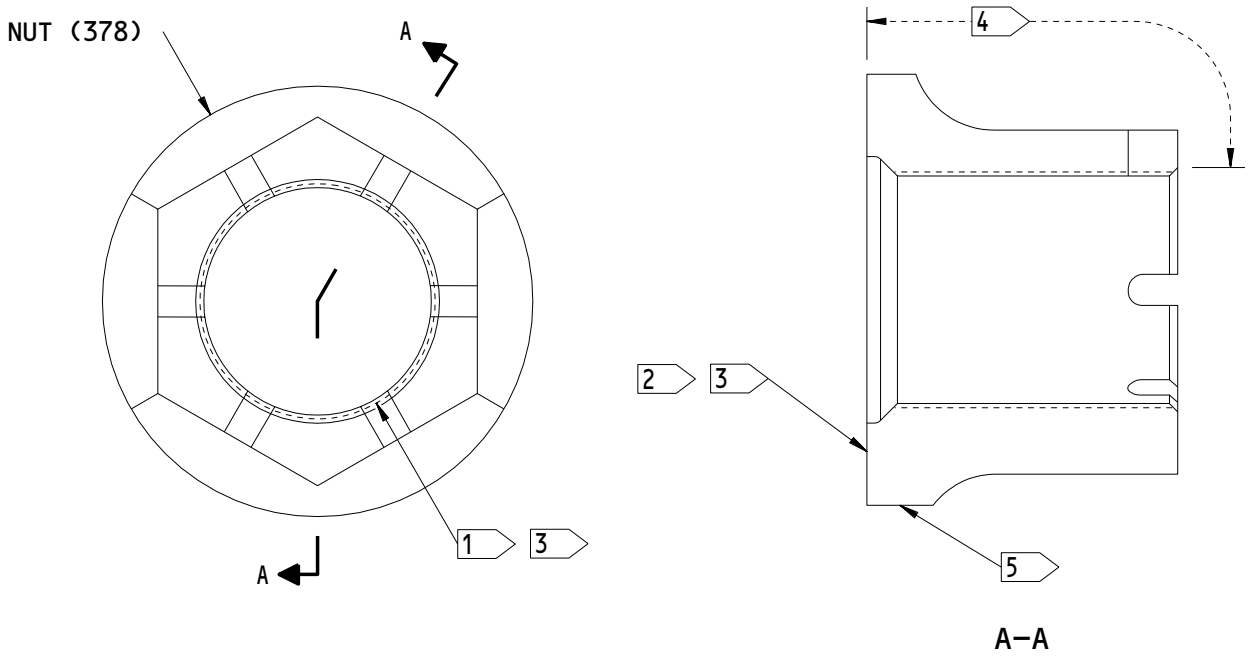


ITEM NUMBERS REFER TO IPL FIG. 1

1 APPLY BMS 10-79 TYPE 3 PRIMER (F-19.47) AND BMS 10-60 ENAMEL (F-14.9813 WHICH REPLACES SRF-14.9813)

2 PART NUMBER AND SERIAL NUMBER LOCATIONS

161W1234-1
Spacer Refinish
Figure 608



A–A

ITEM NUMBERS REFER TO IPL FIG. 1

1 CADMIUM–TITANIUM PLATE (F–15.32). THREAD DIMENSIONS APPLY AFTER PLATING

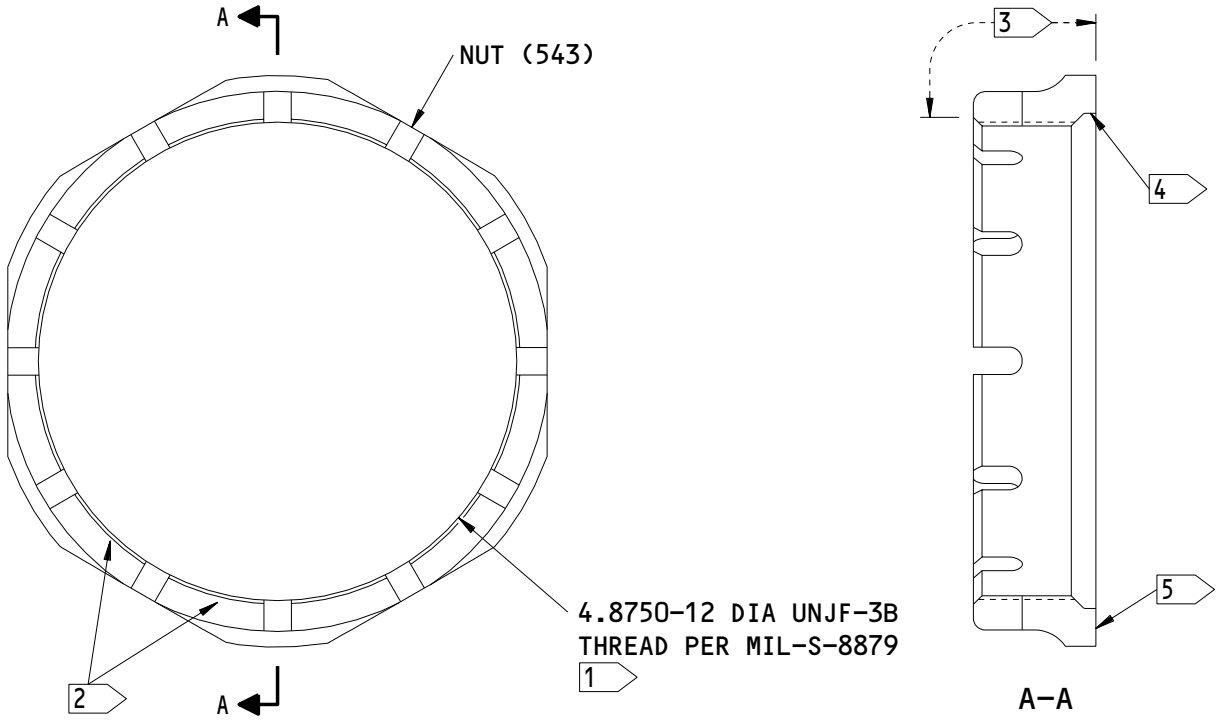
2 THIN DENSE CHROME PLATE (F–15.43 WHICH REPLACES F–14.892) 0.0003–0.0005 INCH THICK. DO NOT GRIND

3 WIPE THE PLATING WITH BMS 10–79 TYPE 3 PRIMER (F–19.451)

4 CADMIUM–TITANIUM PLATE (F–15.01). APPLY BMS 10–79 TYPE 3 PRIMER (F–19.47) AND BMS 10–60 ENAMEL (F–14.9813 WHICH REPLACES SRF–14.9813)

5 PART NUMBER AND SERIAL NUMBER LOCATION

161W1149–1
Nut Refinish
Figure 609



ITEM NUMBERS REFER TO IPL FIG. 1

1 WIPE THE THREADS WITH BMS 10-79 TYPE 3 PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

2 PART NUMBER LOCATION

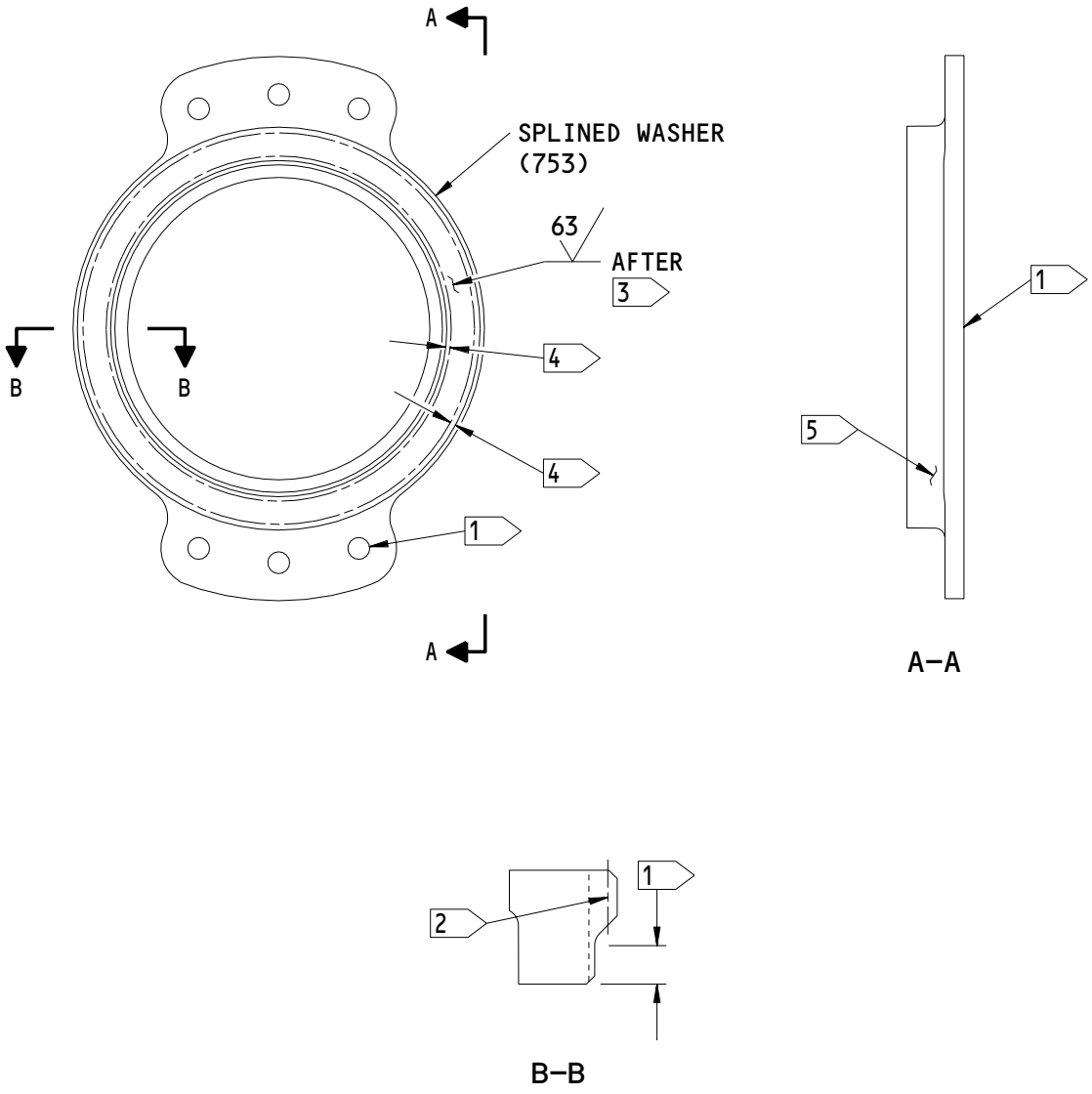
3 APPLY BMS 10-79 TYPE 3 PRIMER (F-19.47) AND BMS 10-60 ENAMEL (F-14.9813, WHICH REPLACES SRF-14.9813)

4 APPLY BMS 10-79 TYPE 3 PRIMER (F-19.66)

5 THIN DENSE CHROME PLATE (F-15.43, WHICH REPLACES F-14.892). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451)

161W1308-1
Nut Refinish
Figure 610

L06226



161T7194-1
Splined Washer Refinish
Figure 611 (Sheet 1)

ITEM NUMBERS REFER TO IPL FIG. 1

1 CADMIUM PLATE (F-15.06). APPLY BMS 10-79 TYPE 3 PRIMER (F-19.66)

2 CADMIUM PLATE (F-15.36). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER. SPLINE DIMENSIONS APPLY AFTER PLATING

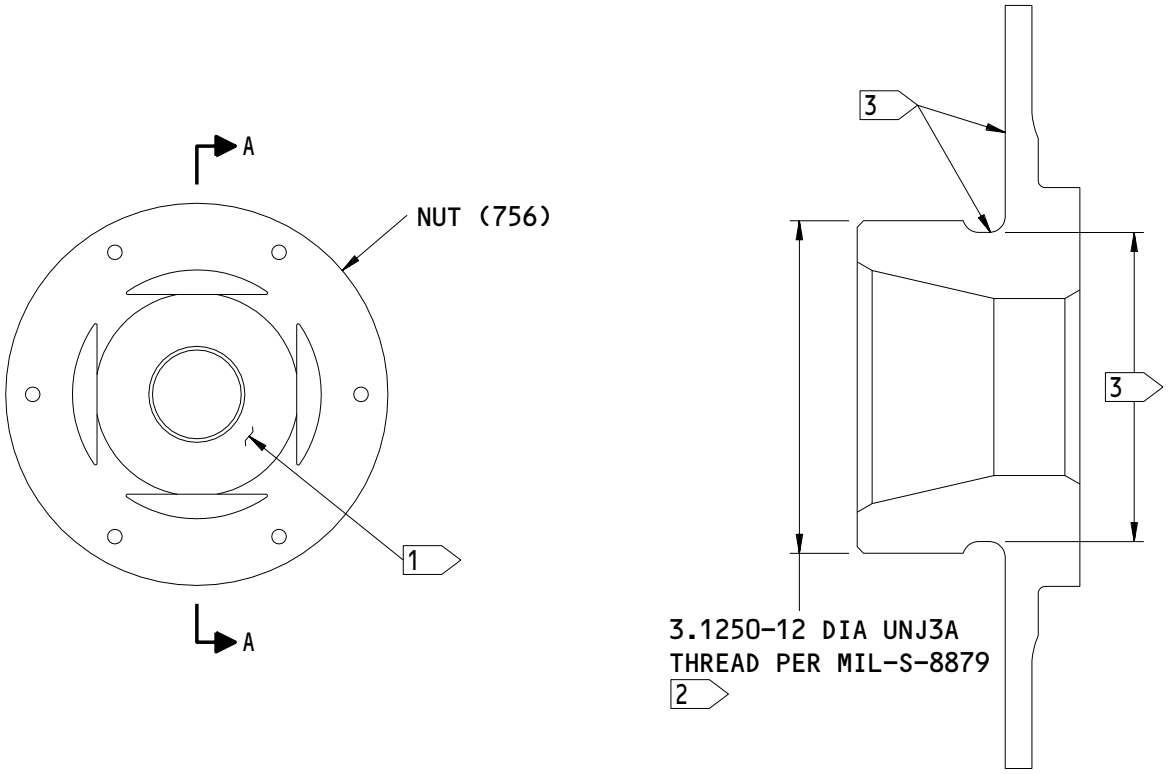
3 CHROME PLATE (F-15.34) 0.0015-0.0020 INCH THICK. WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451)

4 CHROME PLATE RUNOUT: CHROME PLATE MUST NOT TERMINATE WITH A SQUARE EDGE BUT MUST TAPER FROM FULL TO ZERO THICKNESS OVER A MINIMUM LENGTH OF 0.005 INCH. THE TAPERED EDGE OF THE CHROME PLATE MUST BE CONTAINED WITHIN A 0.08 INCH WIDE BAND

5 PART NUMBER AND SERIAL NUMBER LOCATION

161T7194-1
Splined Washer Refinish
Figure 611 (Sheet 2)

L06241



A-A

ITEM NUMBERS REFER TO IPL FIG. 1

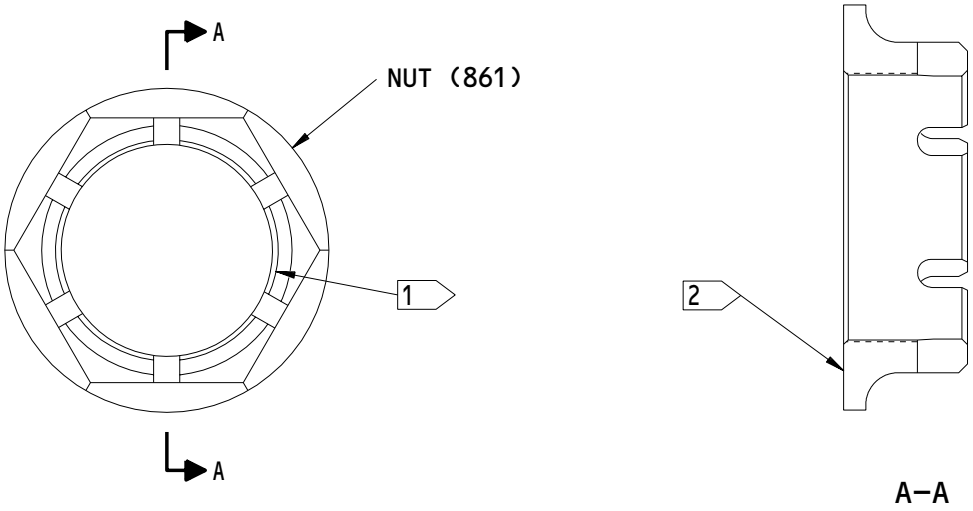
1 PART NUMBER LOCATION

2 APPLY CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451)

3 APPLY CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79 TYPE 3 PRIMER (F-19.66)

161T7196-1
Nut Refinish
Figure 612

L06259



ITEM NUMBERS REFER TO IPL FIG. 1

1 APPLY CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH BMS 10-79 TYPE 3 PRIMER (F-19.451). DIMENSIONS APPLY AFTER PLATING

2 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79 TYPE 3 PRIMER (F-19.66)

161T7190-2
Nut Refinish
Figure 613

LOWER SIDE STRUT SPINDLE ASSEMBLY - REPAIR 2-1

161T2108-1

1. General

A. This procedure has the necessary data to replace parts of and refinish the lower side strut spindle assembly (291).

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

(2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

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

B. References

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

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

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

(4) SOPM 20-60-03, Lubricants

(5) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Remove the bushings (294, 297).

(2) If you find defects on hole surfaces, refer to REPAIR 2-2 for repair instructions.

(3) Install replacement bushings (294, 297) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound

(4) On bushing (294), make sure the lubrication passage is not blocked. Apply BMS 3-33 grease at the lube fitting until grease comes out at the bushing inner diameter.

(5) Fillet seal the bushings (294, 297) with BMS 5-95 sealant.

(6) Machine bushings (294, 297) to design dimensions and finish.

3. Lubrication Fitting Replacement (Fig. 601)

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

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

B. References

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

(2) SOPM 20-60-03, Lubricants

(3) SOPM 20-60-04, Miscellaneous Materials

C. Procedure

(1) Remove the old inserts (303) and lubrication fittings (300).

(2) Use the shrink-fit procedure (SOPM 20-50-03) to install the new inserts (303) with BMS 5-95 sealant. Make sure that the inserts are installed above the adjacent flat surface as shown.

(3) Install replacement lubrication fittings (300) with BMS 3-33 grease.

(a) Tighten the fittings to 25-30 pound-inches.

(b) Apply BMS 3-33 grease to the lubrication fittings (300) until the grease comes out at the inside diameter of the bushings (294).

4. Refinish

A. Consumable Materials

NOTE: Equivalent materials may be used.

(1) B00571 Coating - Hydraulic Fluid Resistant, Type 41 (SOPM 20-44-01)

(2) C00033 Enamel - BMS 10-60, Type 2, 701 Black (SOPM 20-60-02)

(3) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

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

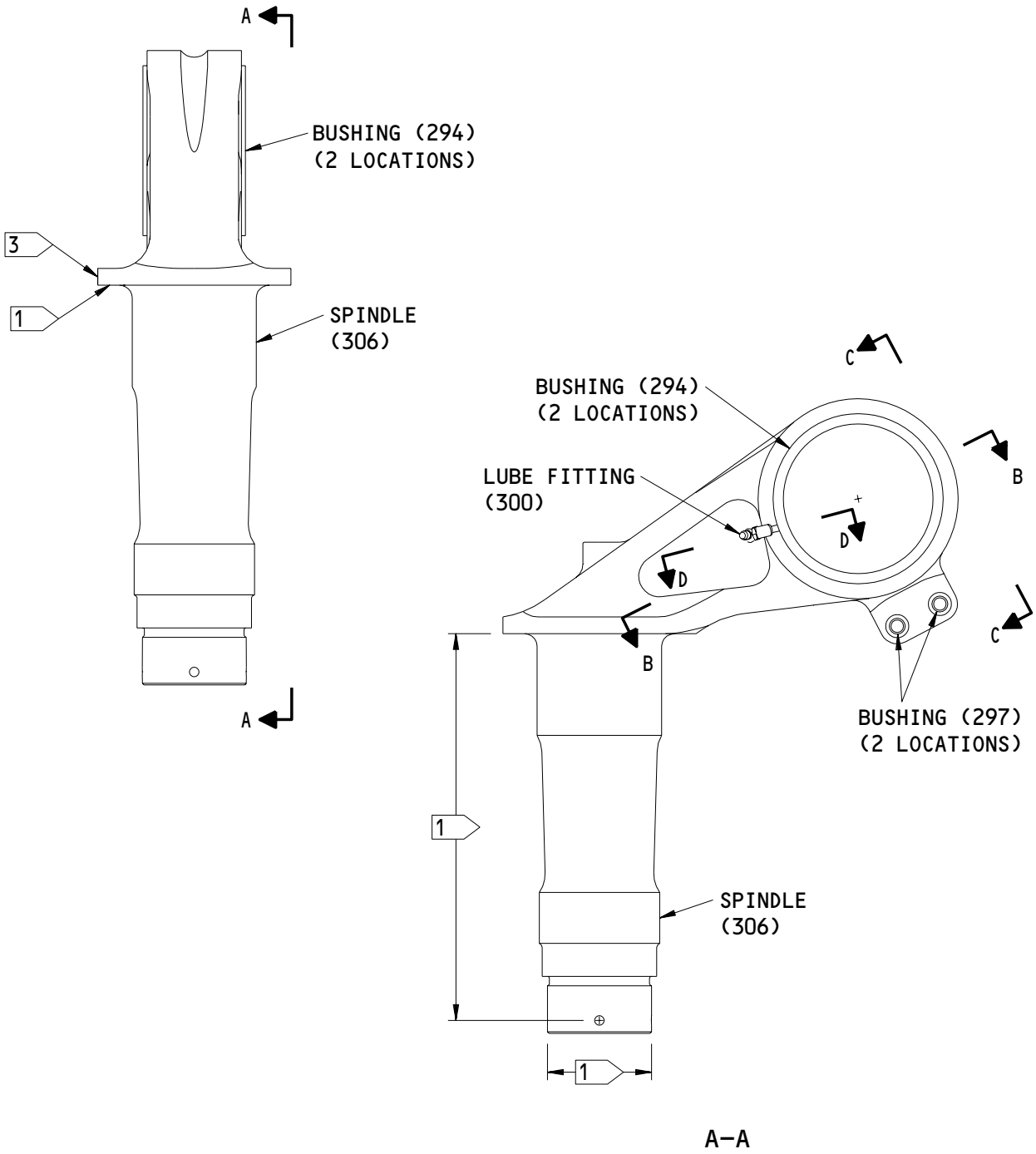
C. Procedure (Fig. 601)

(1) Apply BMS 10-60, type 2, enamel (F-20.56) to the external surfaces, unless shown. Do not apply enamel to the lubrication fittings, bushing inner diameters and flange faces.

(2) Do not apply enamel (F-20.56) in the part mark area. The part mark area must be finished as follows:

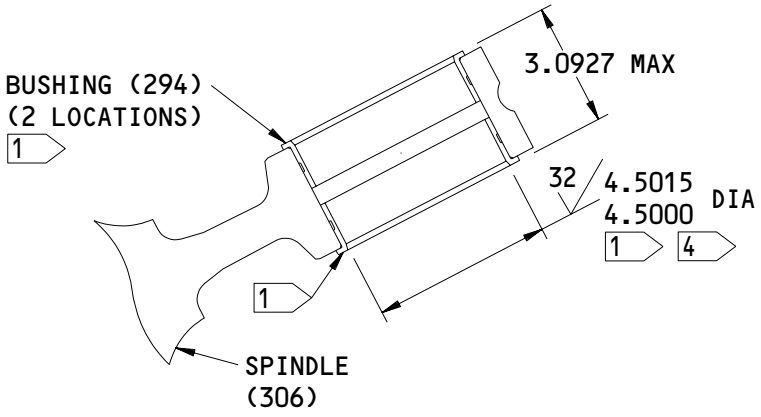
(a) Make sure the part number and serial number are visible.

(b) Apply BMS 10-60 enamel (F-19.39-707) and let dry. Then, apply a coat of BMS 10-60 enamel (F-19.39-701) to the identification numbers only and let dry. Apply type 41 clear coating (F-21.34) to the area, to a thickness equivalent to the surrounding enamel area.

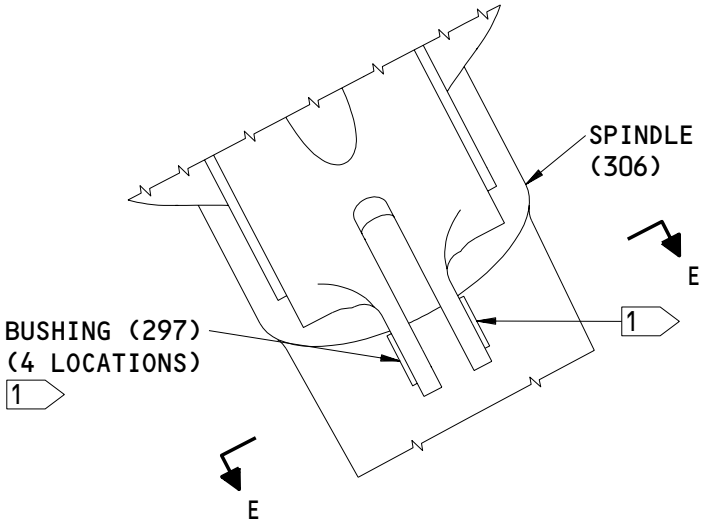


161T2108-1
Lower Side Strut Spindle Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)

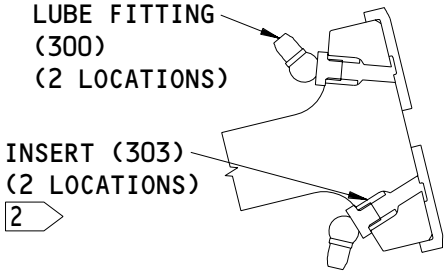
K51418



B–B



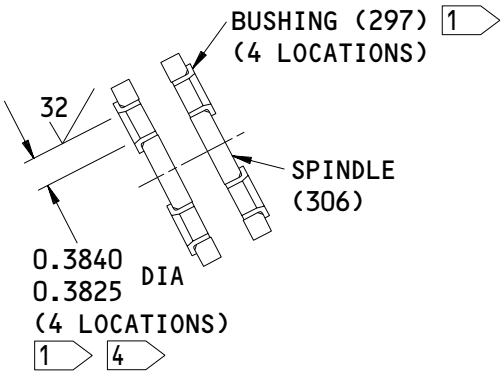
C–C



D–D

161T2108-1
Lower Side Strut Spindle Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

K52082



E–E

1 NO ENAMEL THIS SURFACE

2 INSERT TO BE INSTALLED 0.015–0.035 ABOVE THE ADJACENT FLAT SURFACE

3 NO ENAMEL (F–20.56) ON PART MARK AREA. REFER TO REFINISH TEXT

4 ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T2108–1
Lower Side Strut Spindle Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 3)

K52086

LOWER SIDE STRUT SPINDLE - REPAIR 2-2

161T2108-2

1. General

A. This procedure has the necessary data to repair and refinish the lower side strut spindle (306).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Spindle Repair

A. The application of thermal spray (F-15.384) is used for the original manufacture of the spindle (306). Repair of worn thermal spray areas will be limited to those procedures given in the repair section below.

B. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

C. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

(5) SOPM 20-20-02, Penetrant Method of Inspection

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

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

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

(9) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(11) SOPM 20-42-05, Bright Cadmium Plating

(12) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(14) SOPM 20-60-04, Miscellaneous Materials

D. Procedure (Fig. 601)

(1) Holes for bushings.

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen the hole (SOPM 20-10-03).

(d) Cadmium-titanium plate (F-15.32), and apply BMS 10-79, type 3 primer (F-19.47) to the hole.

(e) Make oversize bushings (Fig. 602 and on) to adjust for the material removed.

(f) Install the bushings as shown in REPAIR 2-1.

(2) Shank.

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check as shown in (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(3) Thread Relief.

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points shown.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to the design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00308 Compound - MIL-C-11796 Corrosion Preventive (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(5) SOPM 20-44-04, Application of Urethane Compatible Primer

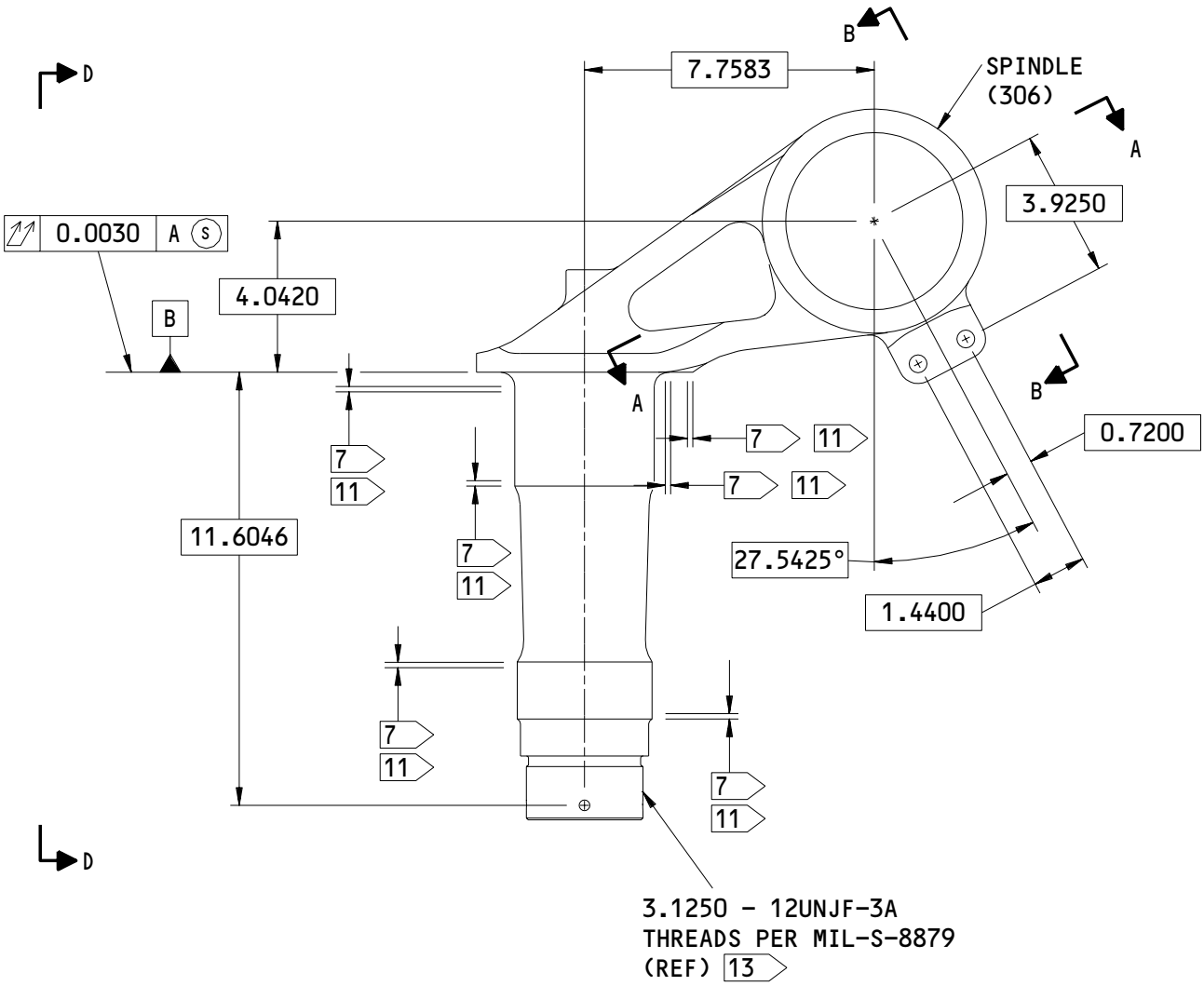
(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

C. Procedure

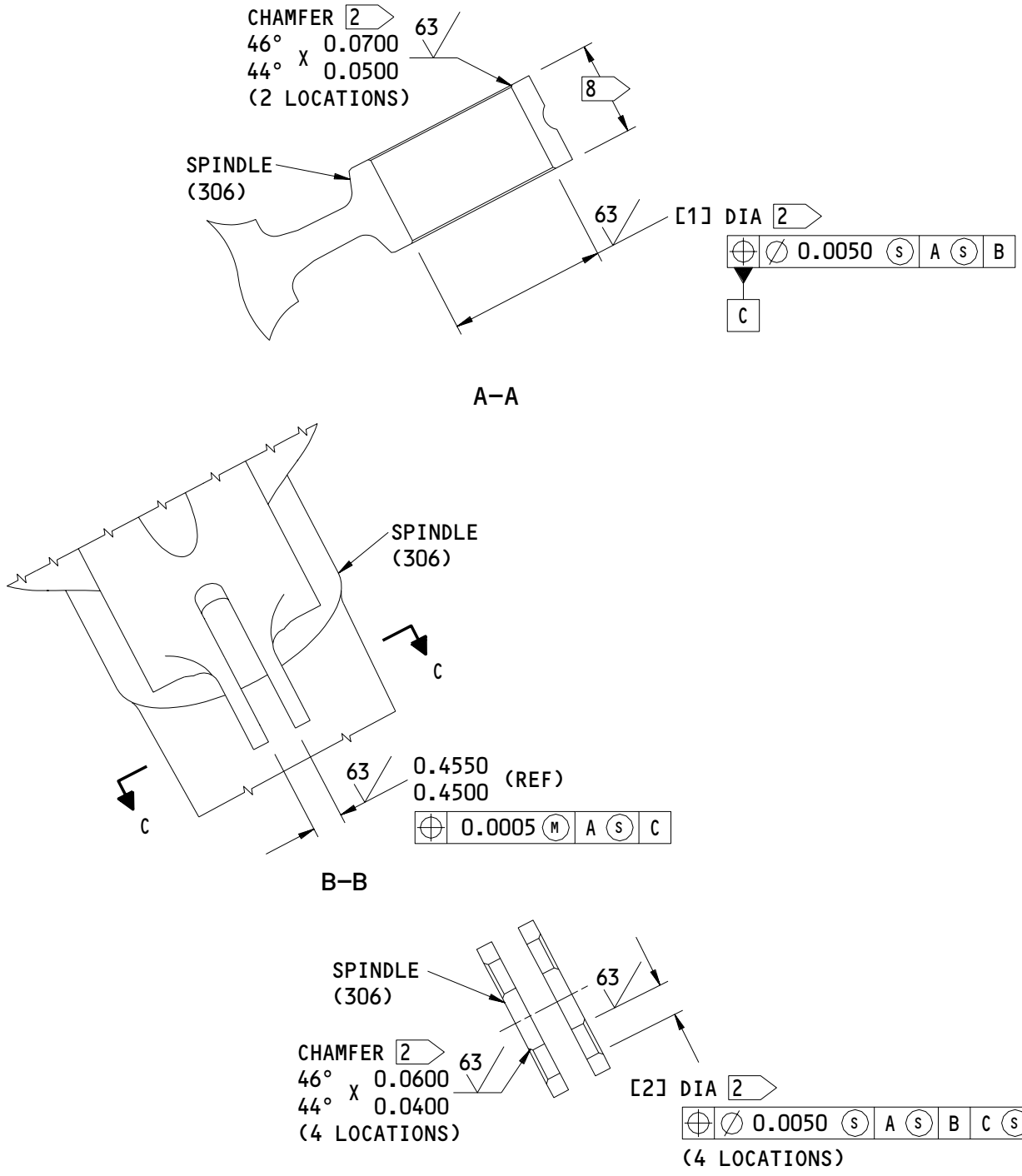
(1) Cadmium titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.66), unless shown in Fig. 601.

(2) Make sure that the part number is visible after repair and refinish procedures. If necessary repair the markings (REPAIR 2-1).



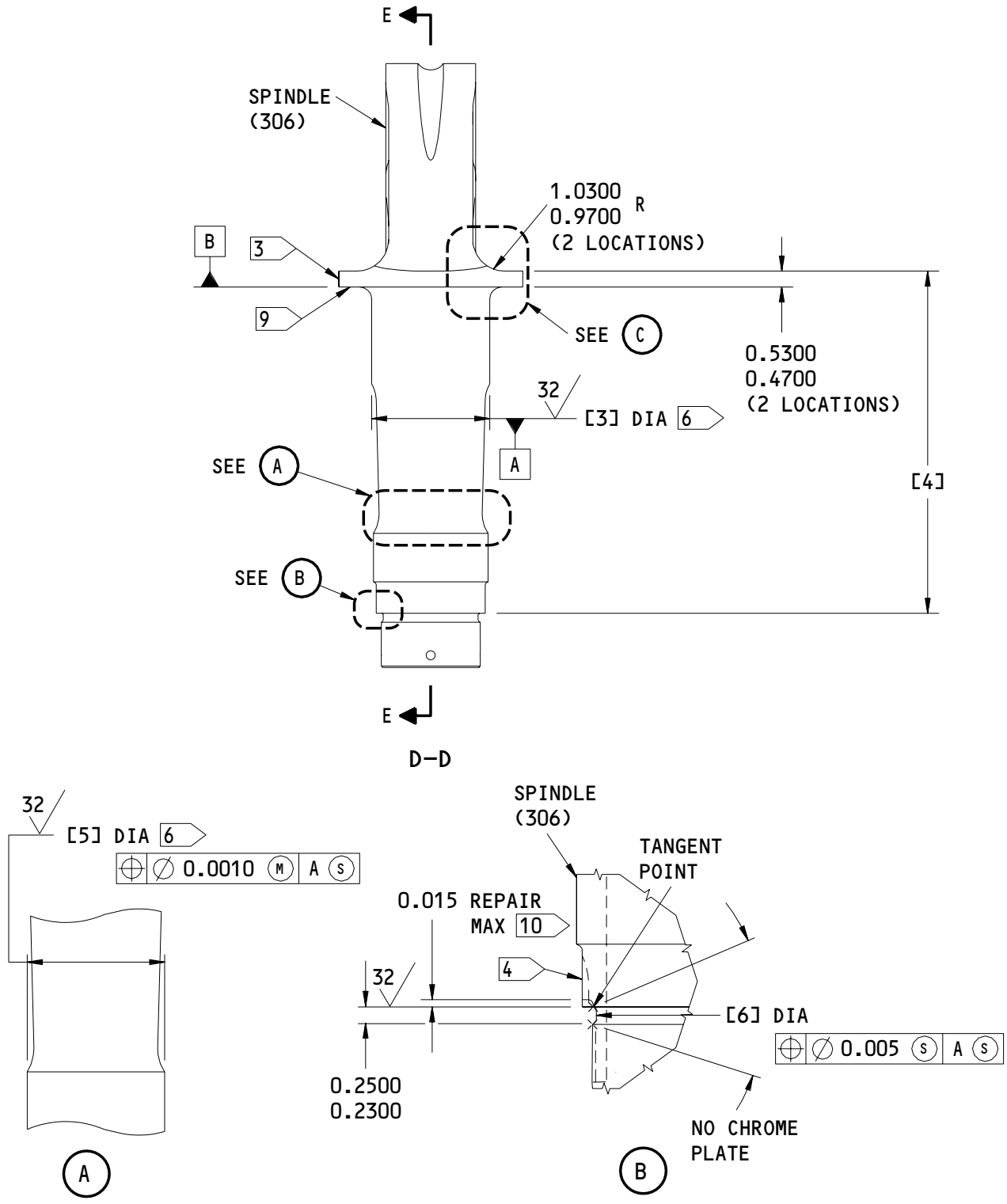
161T2108-2
Lower Side Strut Spindle Repair
Figure 601 (Sheet 1)

K52289



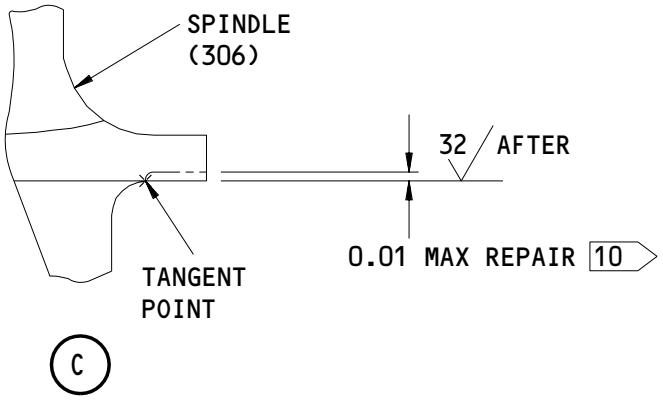
161T2108-2
Lower Side Strut Spindle Repair
Figure 601 (Sheet 2)

K53713



161T2108-2
Lower Side Strut Spindle Repair
Figure 601 (Sheet 3)

K55440



REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	4.7515 4.7500	0.5016 0.5000	3.7490 3.7480	10.2935 10.2735	3.6240 3.6230	3.0050 2.9950
REPAIR LIMIT	4.8115 1	0.5616 1	3.7190 10	----	3.5940 10	2.9750 12

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

2 CADMIUM-TITANIUM PLATE (F-15.32). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

3 PART NUMBER AND SERIAL NUMBER LOCATION

4 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451)

5 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND APPLY MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

6 THERMAL SPRAY AREA (F-15.384) 0.003 INCH MINIMUM THICKNESS

7 THERMAL SPRAY AREA RUNOUT/CADMIUM PLATE OVERLAP

8 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

9 THERMAL SPRAY AREA (F-15.384) 0.003-0.005 INCH THICK

10 REPAIR LIMIT FOR CHROME PLATE BUILDUP

11 CHROME PLATE RUNOUT

12 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

13 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

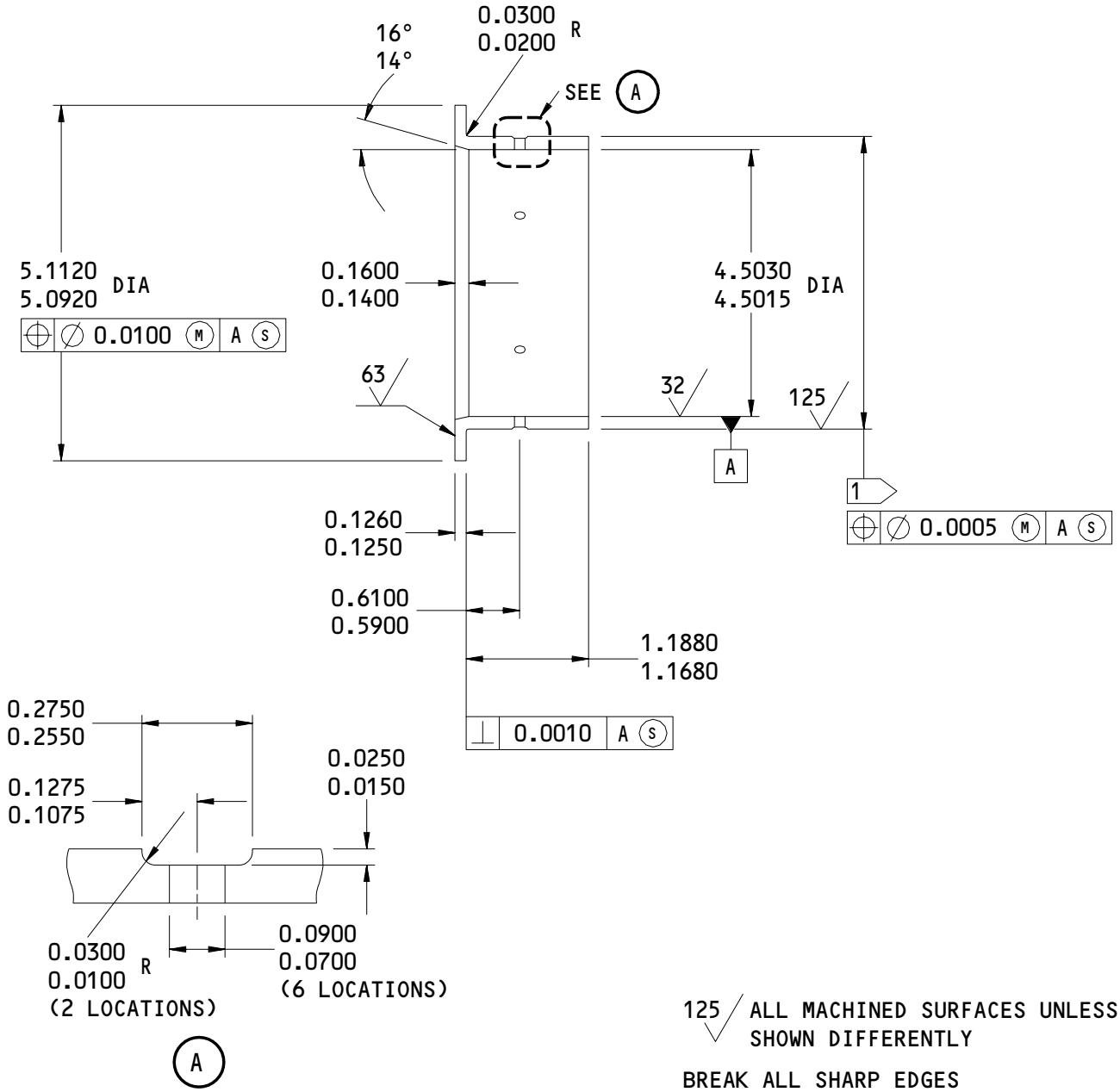
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T2108-2
Lower Side Strut Spindle Repair
Figure 601 (Sheet 4)

K55451



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36)

ITEM NUMBERS REFER TO IPL FIG. 1

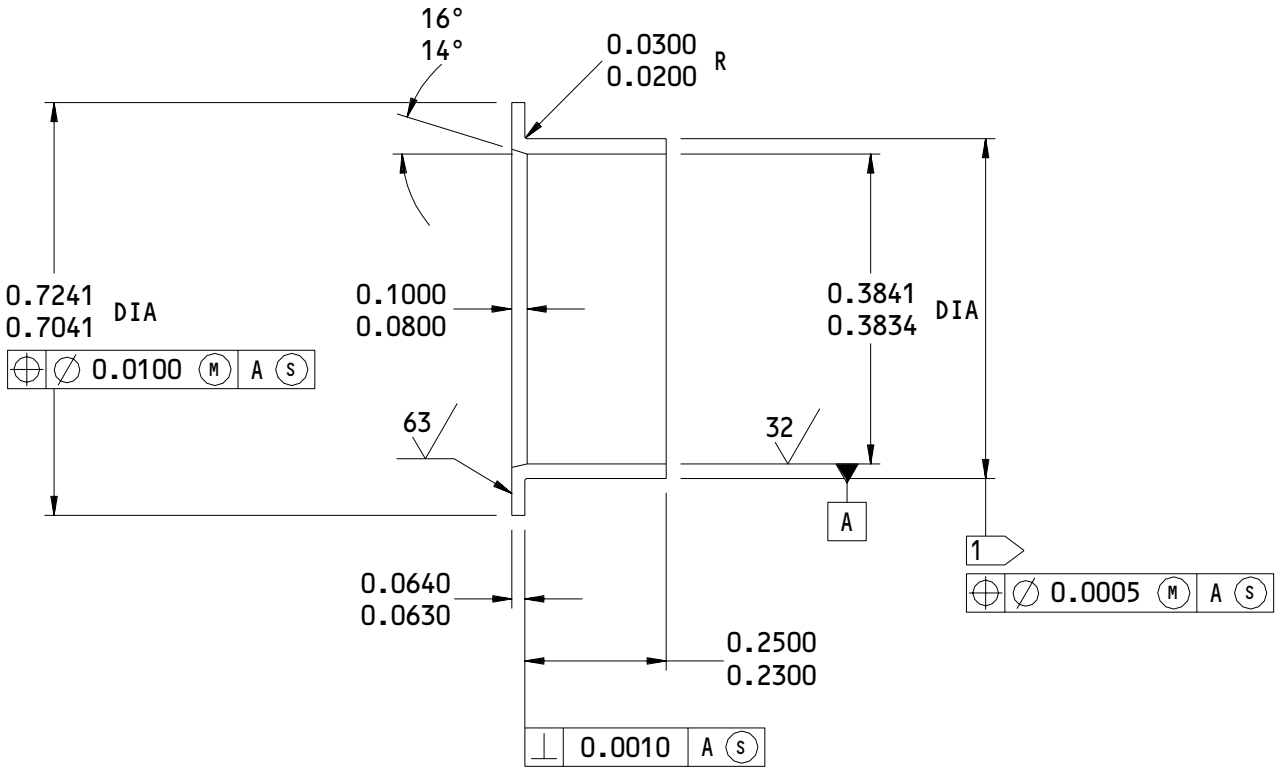
ALL DIMENSIONS ARE IN INCHES

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE BUSHING HOLE PLUS THE INTERFERENCE OF 0.0018-0.0048

HOLE LOCATION [1] FIG. 601 - REPLACES BUSHING (294)

Oversize Bushing Details
Figure 602

K56967



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0004-0.0015

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [2] FIG. 601 - REPLACES BUSHING (297)

Oversize Bushing Details
Figure 603

K56981

LOCK LINK SIDE STRUT SPINDLE ASSEMBLY - REPAIR 3-1

161T2121-1

1. General

   A. This procedure has the necessary data to replace the bushings (264) and refinish the lock link side strut spindle assembly (261).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

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

   B. References

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

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

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

      (4) SOPM 20-60-03, Lubricants

      (5) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushings (264).

      (2) If you find defects on hole surfaces, refer to REPAIR 3-2 for repair instructions.

(3) Install replacement bushings (264) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(4) Machine the bushings (264) to design dimensions and finish.

(5) Make sure the lubrication passage is not blocked. Apply BMS 3-33 grease at the lube fitting until grease comes out at the bushing inner diameter.

(6) Fillet seal the bushings (264) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

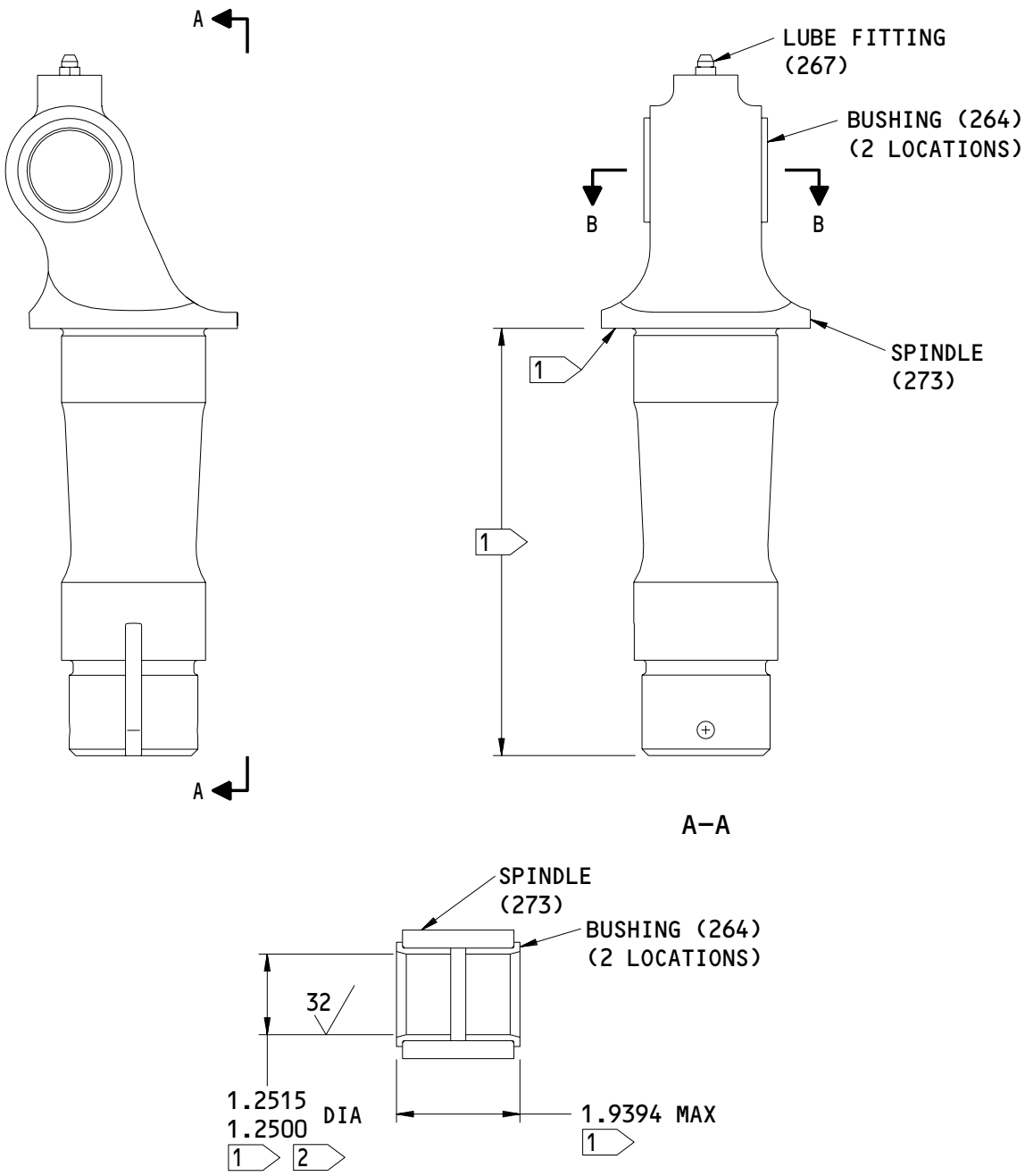
(1) SOPM 20-30-02, Stripping of Protective Finishes

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

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

C. Procedure (Fig. 601)

(1) Apply BMS 10-60 enamel (F-19.39-707) to the external surface only, unless shown. Do not apply enamel to lubrication fittings, bushing inner diameters or flange faces.



1 NO ENAMEL THIS SURFACE

2 ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T2121-1
Side Strut Lock Link Spindle Assembly Bushing Replacement and Refinish
Figure 601

LOCK LINK SIDE STRUT SPINDLE - REPAIR 3-2

161T2121-2

1. General

A. This procedure has the necessary data to repair and refinish the lock link side strut spindle (273).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Spindle Repair

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

(5) SOPM 20-20-02, Penetrant Method of Inspection

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

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

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

(9) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(11) SOPM 20-42-05, Bright Cadmium Plating

(12) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(14) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Hole for Bushings.

(a) Machine as necessary, within repair limits, to remove detects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen the hole (SOPM 20-10-03).

(d) Cadmium-titanium plate (F-15.32), and apply BMS 10-79, type 3 primer (F-19.47) to the hole.

(e) Make oversize bushings (Fig. 602) to adjust for the material removed.

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

(2) Shank.

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(3) Thread Relief.

(a) Machine as necessary within the repair limits, to remove defects. Blend smoothly into the tangent points shown.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00308 Compound - MIL-C-11796 (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

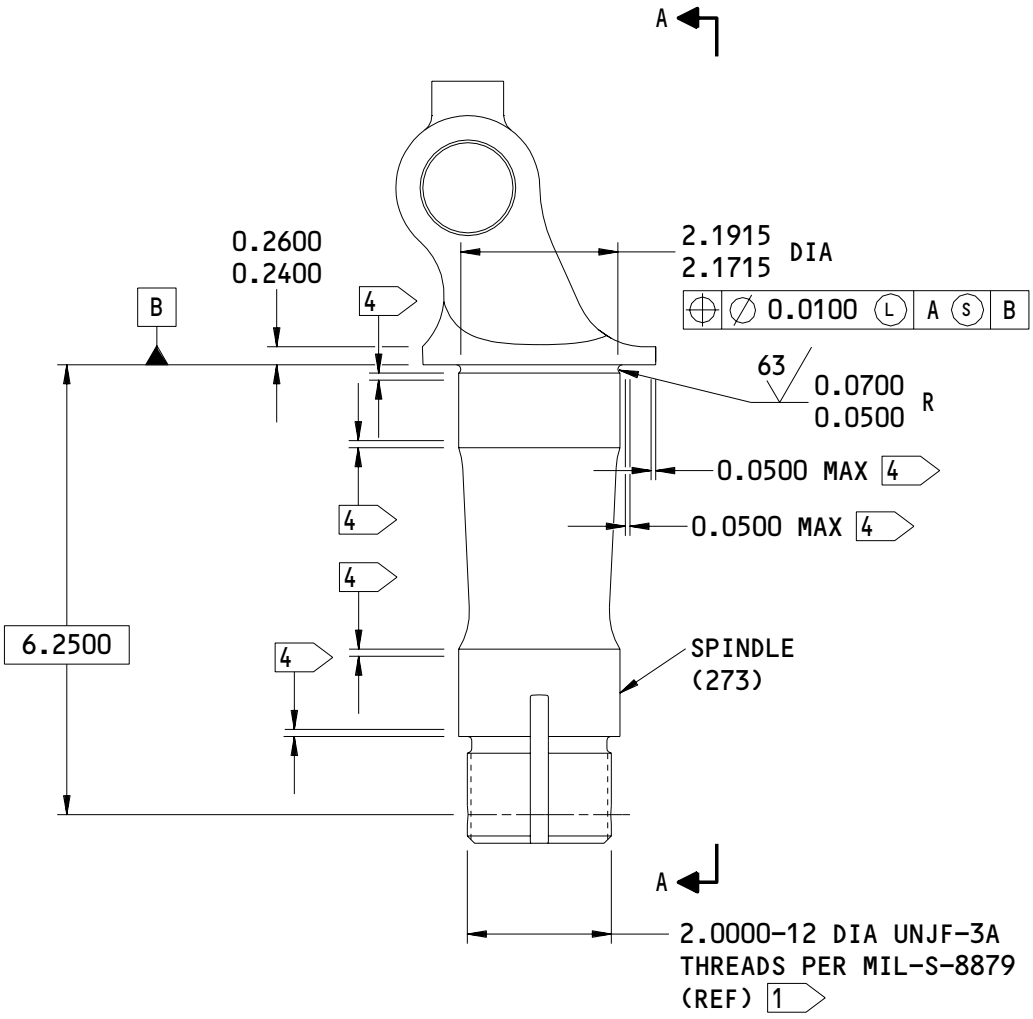
(5) SOPM 20-44-04, Application of Urethane Compatible Primer

(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

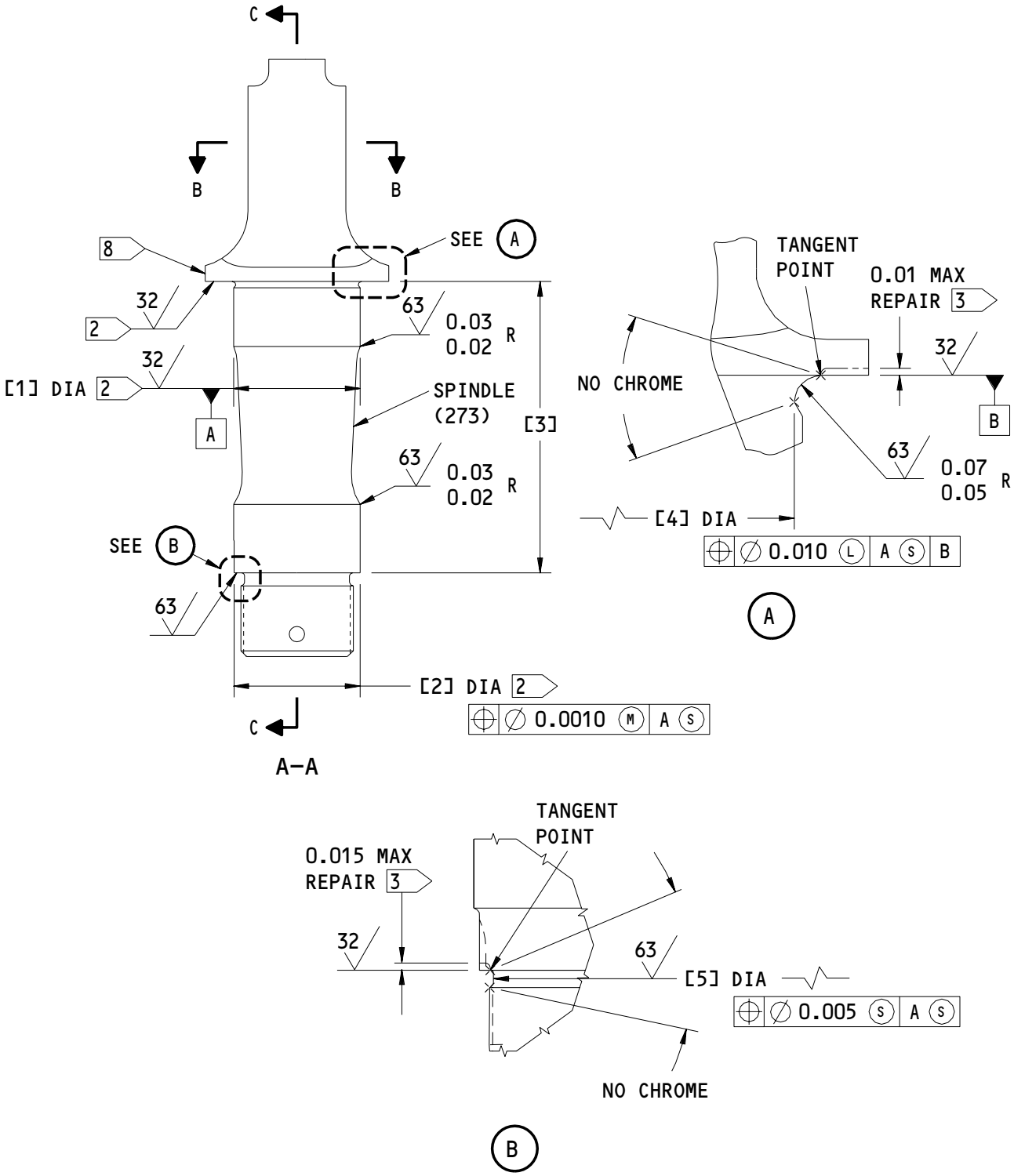
C. Procedure (Fig. 601)

(1) Cadmium titanium plate (F-15.01), and apply BMS 10-79, type 3 primer (F-19.66), unless shown.



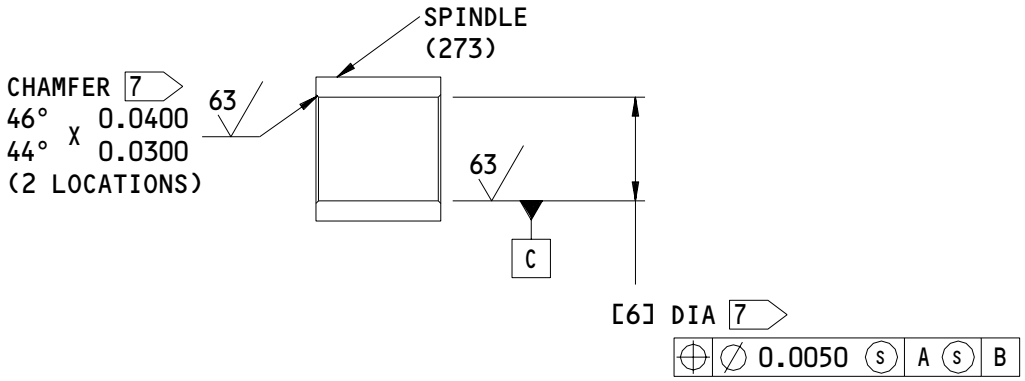
161T2121-2
Side Strut Lock Link Spindle Repair
Figure 601 (Sheet 1)

K59334

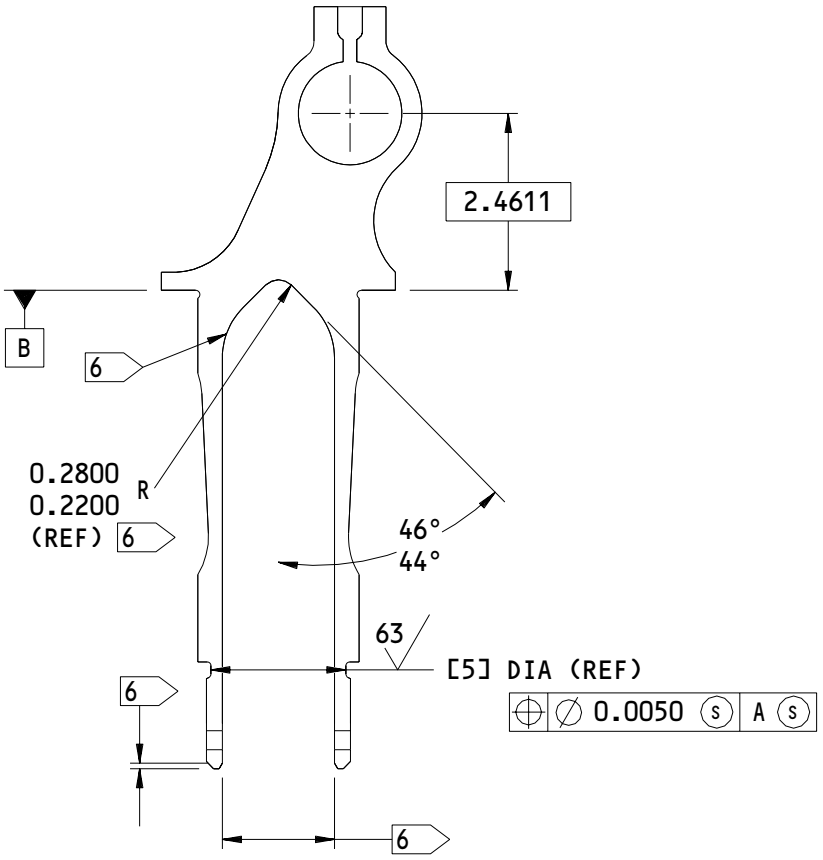


161T2121-2
Side Strut Lock Link Spindle Repair
Figure 601 (Sheet 2)

K59597



B–B



C–C

161T2121-2
Side Strut Lock Link Spindle Repair
Figure 601 (Sheet 3)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	2.2490 2.2480	2.2490 2.2480	5.1760 5.1660	2.1915 2.1715	1.8800 1.8700	1.4395 1.4380
REPAIR LIMIT	2.2190 <3>	2.2190 <3>	----	2.1515 <5>	1.8500 <5>	1.4995 <9>

<1> CADMIUM-TITANIUM PLATE (F-15.32). WIPE PLATING WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING.

<2> CHROME PLATE (F-15.34) 0.003-0.005 AFTER GRINDING. WIPE PLATING WITH PRIMER (F-19.451)

<3> LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

<4> CHROME PLATE RUNOUT AREA

<5> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<6> CADMIUM-TITANIUM PLATE (F-15.01). APPLY PRIMER (F-19.66) AND CORROSION PREVENTIVE COMPOUND (F-19.03)

<7> CADMIUM-TITANIUM PLATE (F-15.32). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

<8> PART NUMBER AND SERIAL NUMBER LOCATION

<9> LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

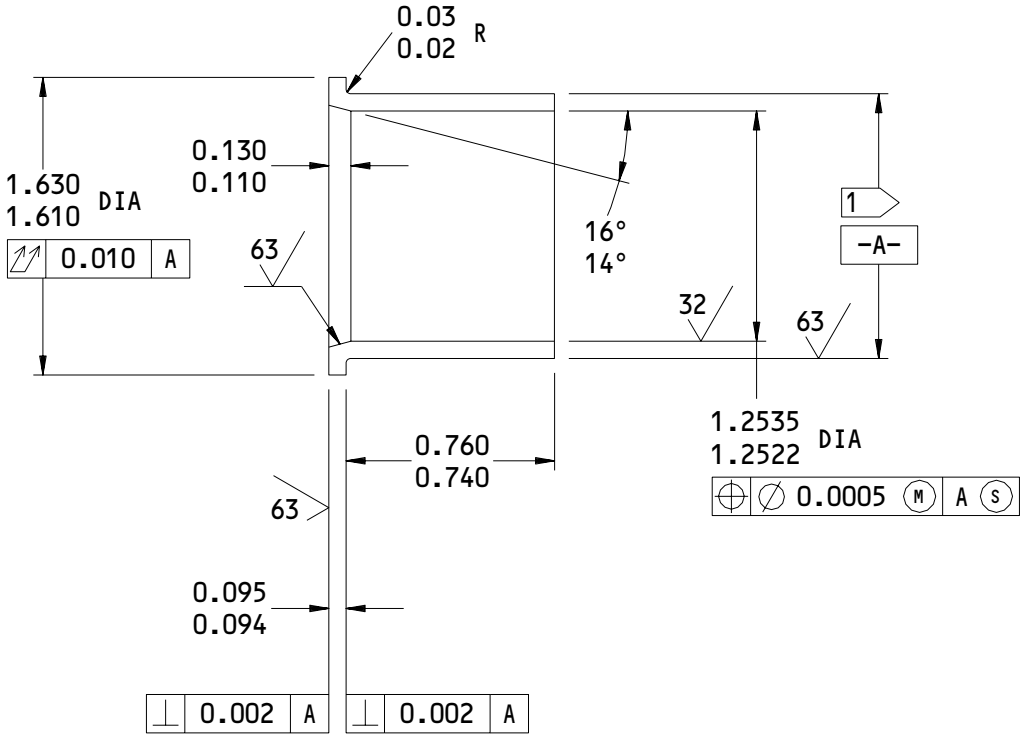
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T2121-2
Side Strut Lock Link Spindle Repair
Figure 601 (Sheet 4)

K60551



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0004-0.0030

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.06)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [6] FIG. 601 - REPLACES BUSHING (264)

Oversize Bushing Details
Figure 602

SIDE STRUT DOWNLOCK ACTUATOR FITTING ASSEMBLY - REPAIR 4-1

161T2141-5, -6

1. General

   A. This procedure has the necessary data to replace the bushings (39, 45, 46) and refinish the side strut downlock actuator fitting assembly (37).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

   B. References

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

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

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

      (4) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushings (39, 45, 46).

      (2) If you find defects on hole surfaces, refer to REPAIR 4-2 for repair instructions.

(3) Install replacement bushings (39, 45, 46) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(4) Machine the bushings to design dimensions and finish.

(5) Fillet seal the bushings (39, 45, 46) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

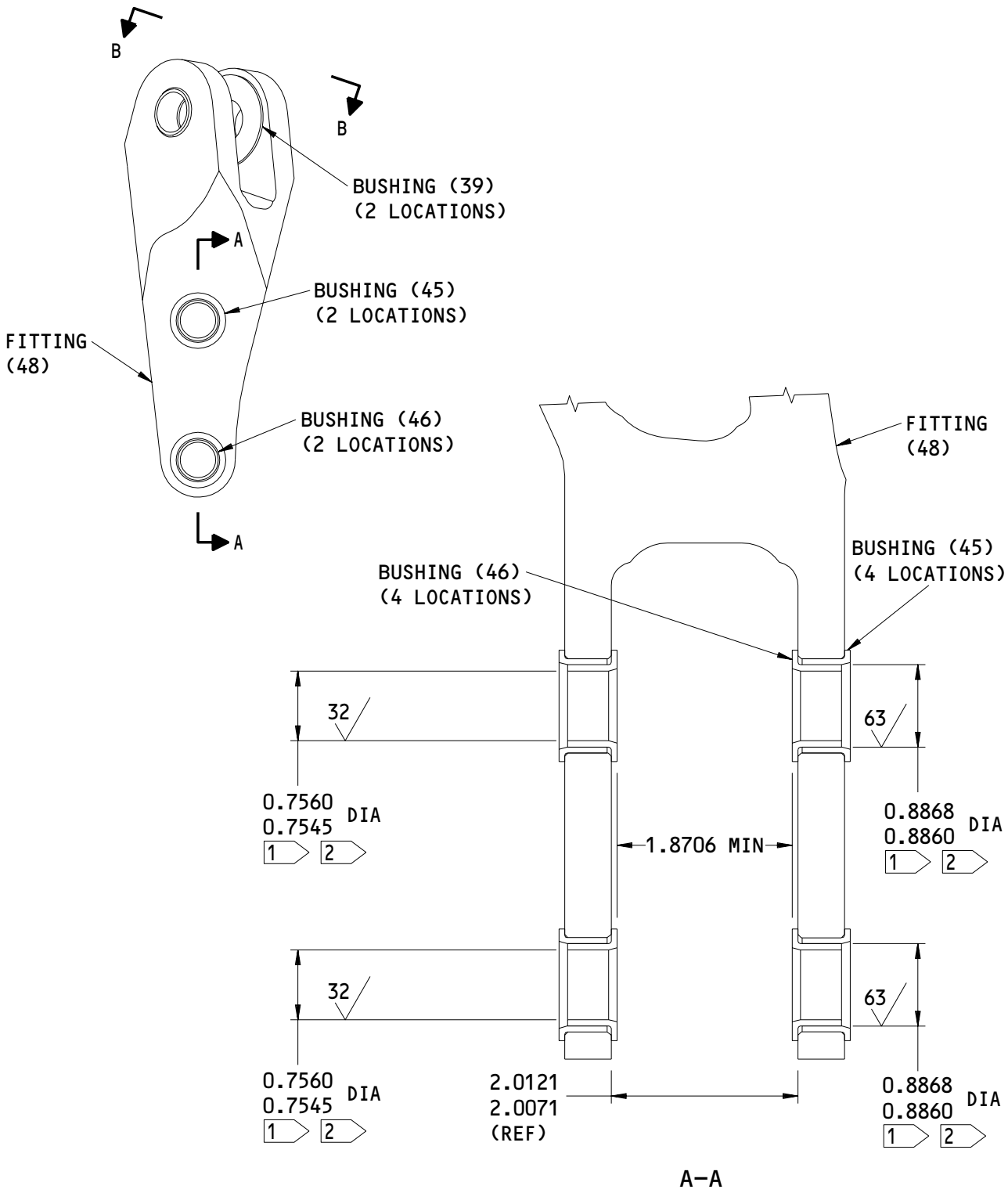
(1) SOPM 20-30-02, Stripping of Protective Finish

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

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

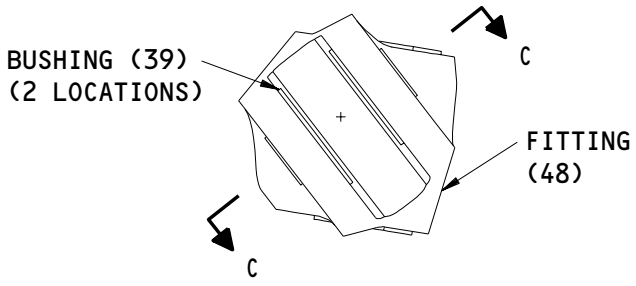
C. Procedure (Fig. 601)

(1) Apply BMS 10-60 enamel (F-19.39-707), unless shown. Do not apply enamel to bushing inner diameters or flange faces.

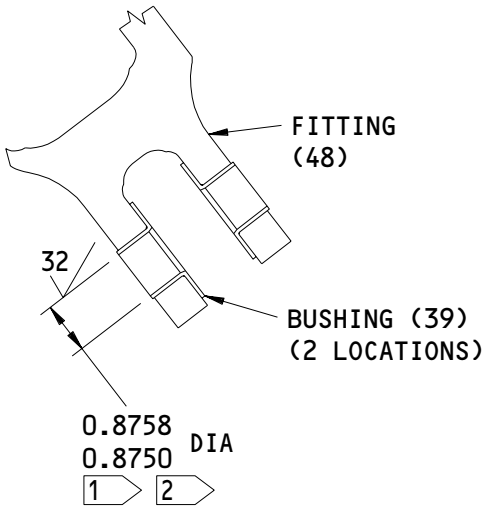


161T2141-5,-6
Side Strut Downlock Actuator Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)

K61434



B–B



C–C

1 ADJUST TO THIS DIMENSION, IF NECESSARY

2 NO ENAMEL THIS SURFACE

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T2141-5,-6
Side Strut Downlock Actuator Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

K61443

SIDE STRUT DOWNLOCK ACTUATOR FITTING - REPAIR 4-2

161T2141-3, -4

1. General

A. This procedure has the necessary data to repair and refinish the side strut downlock actuator fitting (48).

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

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

D. General repair details:

(1) Material: Aluminum Alloy

(2) Shot Peen: Intensity 0.014A2
Coverage 2.0

2. Holes for Bushings

A. References

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

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

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

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

(5) SOPM 20-42-05, Bright Cadmium Plating

B. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a penetrant check (SOPM 20-20-02).

(3) Shot peen the hole (SOPM 20-10-03).

(4) Make oversize bushings (Fig. 602) to adjust for the material removed.

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

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

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

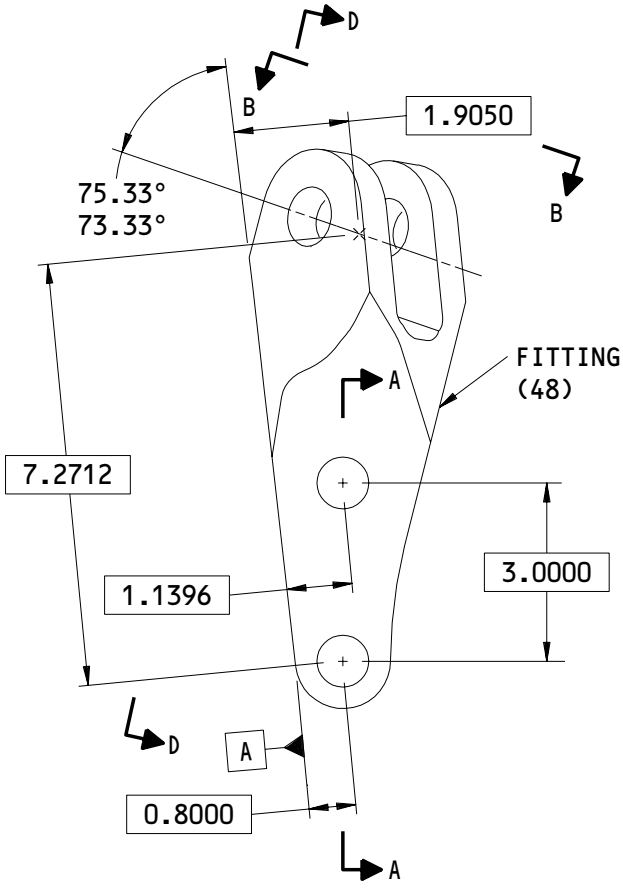
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

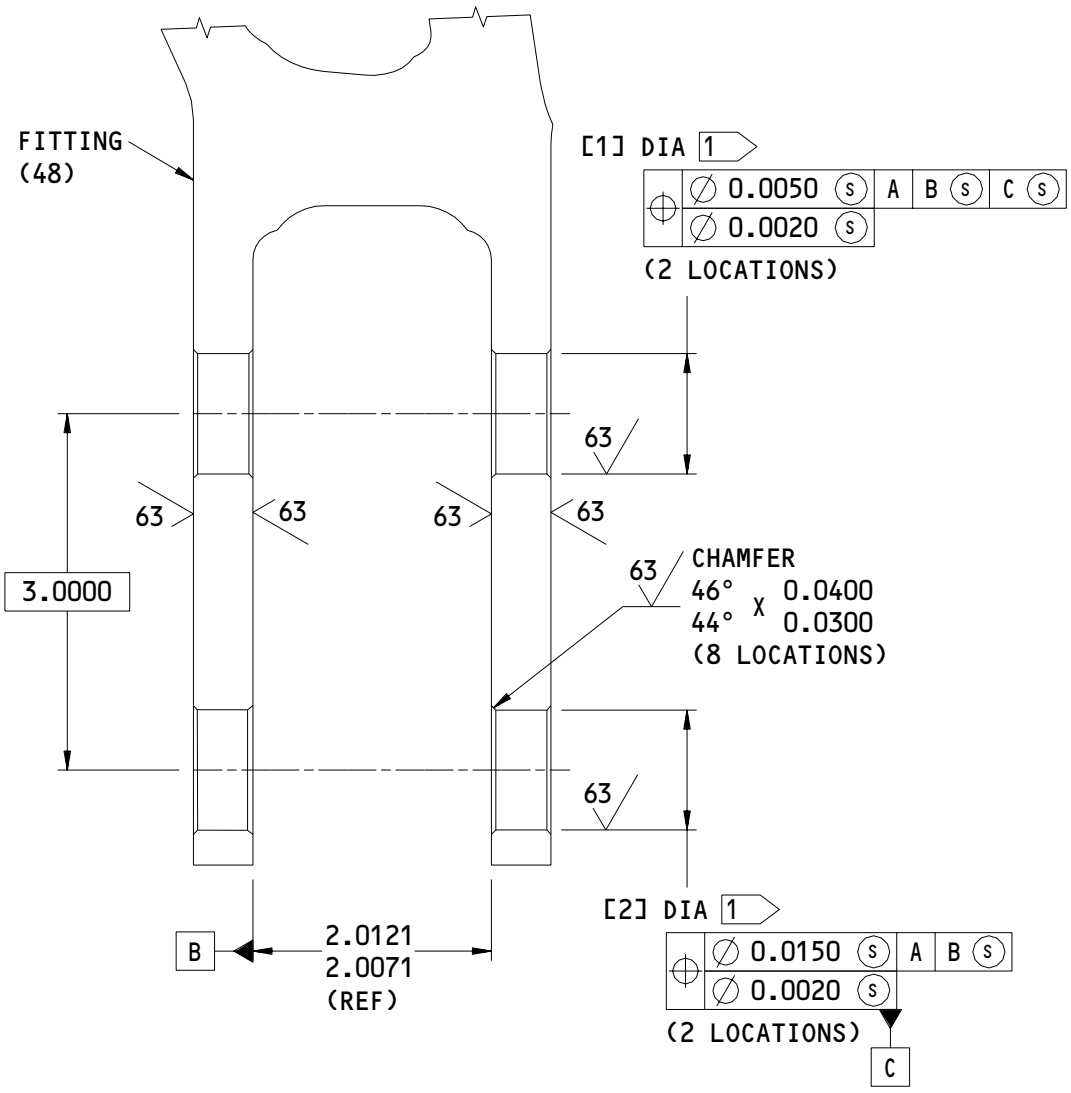
C. Procedure

(1) Boric acid-sulfuric acid anodize (F-17.31). Apply BMS 10-79, type 3 primer (F-19.47).



161T2141-3,-4
Side Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 1)

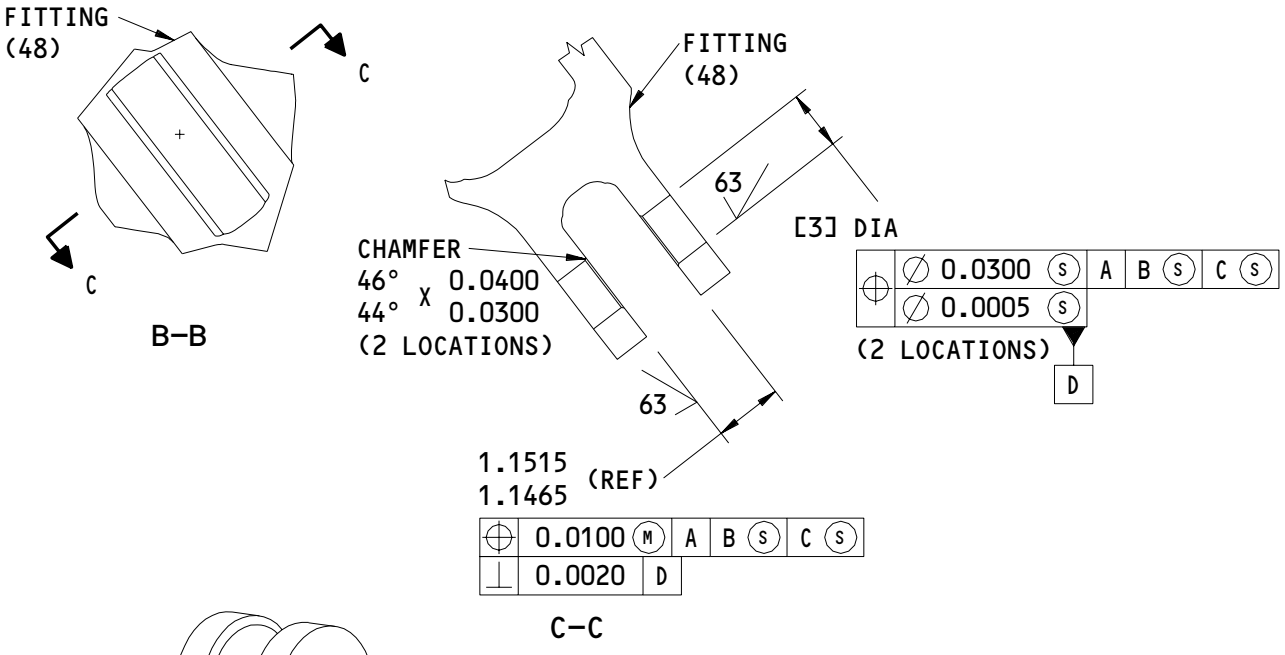
K61648

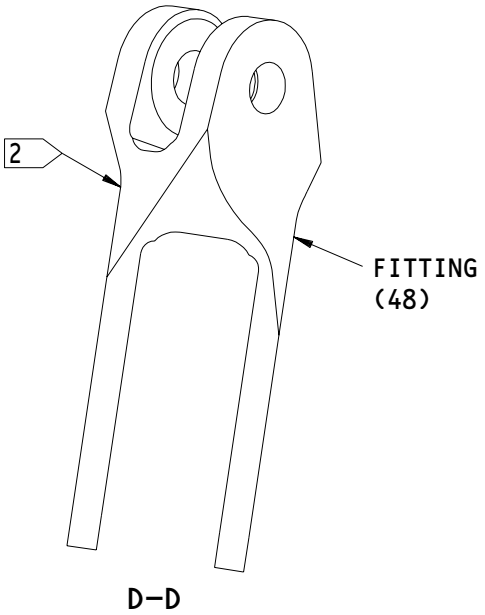


A–A

161T2141-3,-4
Side Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 2)

K61700





REFERENCE NUMBER	[1]	[2]	[3]
DESIGN DIMENSION	1.0129 1.0120	1.0129 1.0120	1.0019 1.0010
REPAIR LIMIT	1.0729 1	1.0729 1	1.0619 1

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

2 PART NUMBER LOCATION

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

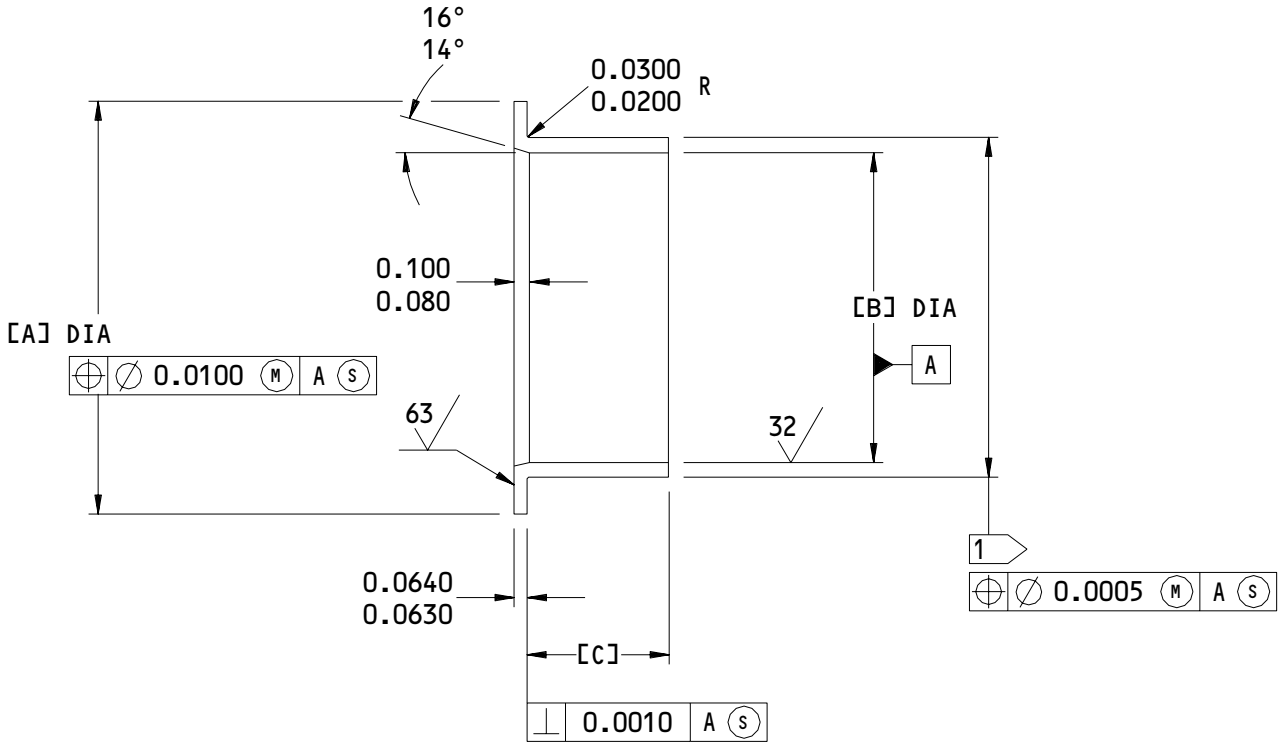
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T2141-3,-4
Side Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 3)

K62029



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B]	[C]	INTERFERENCE
[3]	39	2.0100 1.9900	0.8766 0.8757	0.6700 0.6600	0.0026 0.0010
[1],[2]	45	1.2100 1.1900	0.8876 0.8867	0.4600 0.4500	0.0026 0.0010

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.015-0.025

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.06)

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

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

Oversize Bushing Details
Figure 602

K63598

LOWER DRAG STRUT SPINDLE ASSEMBLY - REPAIR 5-1

161T6105-1

1. General

A. This procedure has the necessary data to replace the bushings (327, 330) and refinish the lower drag strut spindle assembly (324).

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

(2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

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

B. References

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

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

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

(4) SOPM 20-60-03, Lubricants

(5) SOPM 20-60-04, Miscellaneous Materials

C. Procedure

(1) Remove the bushings (327, 330).

(2) If you find defects on hole surfaces, refer to REPAIR 5-2 for repair instructions.

(3) Install the bushings (327, 330) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound

(4) Machine the bushings to design dimensions and finish.

(5) On the bushings (327), make sure the lubrication passage is not blocked. Apply BMS 3-33 grease at the lube fitting until grease comes out at the bushing inner diameter.

(6) Fillet seal the bushings (327, 330) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) BOO571 Coating - Hydraulic Fluid Resistant, Type 41 (SOPM 20-44-01)

(2) COO033 Enamel - BMS 10-60, Type 2, 701 Black (SOPM 20-60-02)

(3) COO033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

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

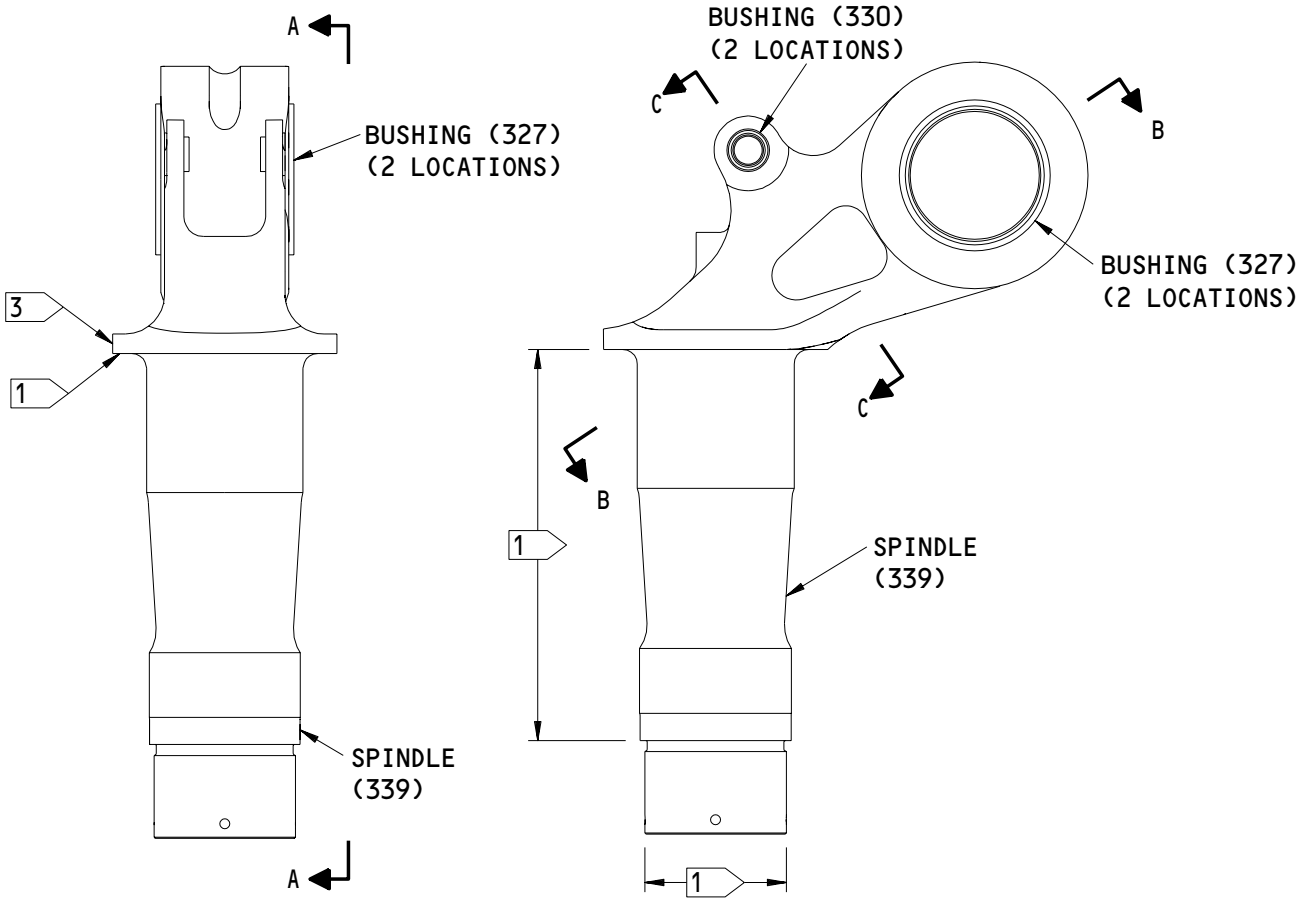
C. Procedure (Fig. 601)

(1) Apply BMS 10-60, type 2, enamel (F-20.56) to the external surfaces, unless shown. Do not apply enamel to the lubrication fittings, bushing inner diameters or flange faces.

(2) Do not apply enamel (F-20.56) in the part mark area. The part mark area must be finished as follows:

(a) Make sure the part number and serial number are visible.

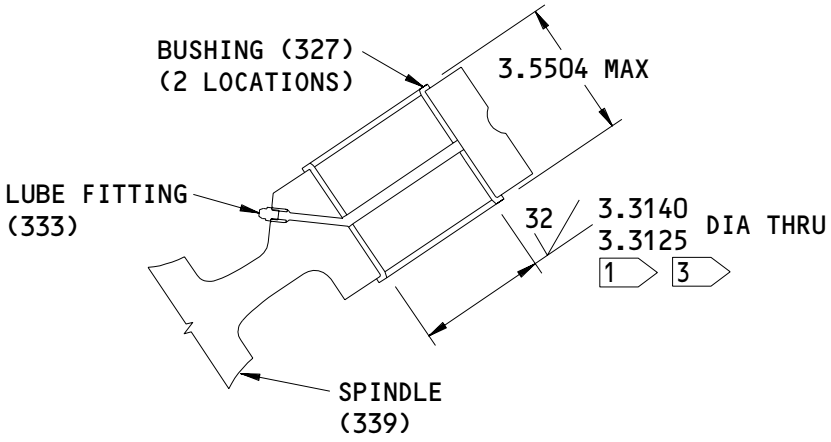
(b) Apply BMS 10-60 enamel (F-19.39-707) and let dry. Then, apply a coat of BMS 10-60 enamel (F-19.39-701) to the identification numbers only and let dry.



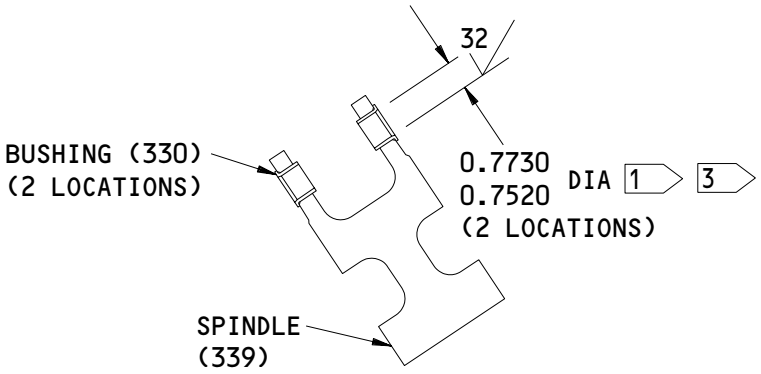
A–A

161T6105-1
Lower Drag Strut Spindle Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)

K63706



B–B



C–C

1 NO ENAMEL THIS SURFACE

2 NO ENAMEL (F-20.56) ON PART MARK AREA. REFER TO REFINISH TEXT

3 ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6105-1
Lower Drag Strut Spindle Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

LOWER DRAG STRUT SPINDLE - REPAIR 5-2

161T6105-2

1. General

A. This procedure has the necessary data to repair and refinish the lower drag strut spindle (339).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Spindle Repair

A. The application of thermal spray (F-15.384) is used for the original manufacture of the spindle (339). Repair of worn thermal spray areas will be limited to those procedures given in the repair section below.

B. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

C. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

(5) SOPM 20-20-02, Penetrant Method of Inspection

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

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

(8) SOPM 20-41-01, Decoding Table of Boeing Finish Codes

(9) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(11) SOPM 20-42-05, Bright Cadmium Plating

(12) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(14) SOPM 20-60-04, Miscellaneous Materials

D. Procedure (Fig. 601)

(1) Holes for Bushings.

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen the hole (SOPM 20-10-03).

(d) Cadmium-titanium plate (F-15.32), and apply BMS 10-79, type 3 primer (F-19.47) to the hole.

(e) Make oversize bushings (Fig. 602) to adjust for the material removed.

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

(2) Shank

(a) Machine as necessary, within the repair limits, to remove defects.

(b) Do a magnetic particle check as shown in SOPM 20-20-01.

(c) Shot peen, chrome plate and grind to the design dimensions and finish.

(3) Thread Relief

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points shown.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) C00308 Compound - MIL-C-11796 Corrosion Preventive (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(5) SOPM 20-44-04, Application of Urethane Compatible Primer

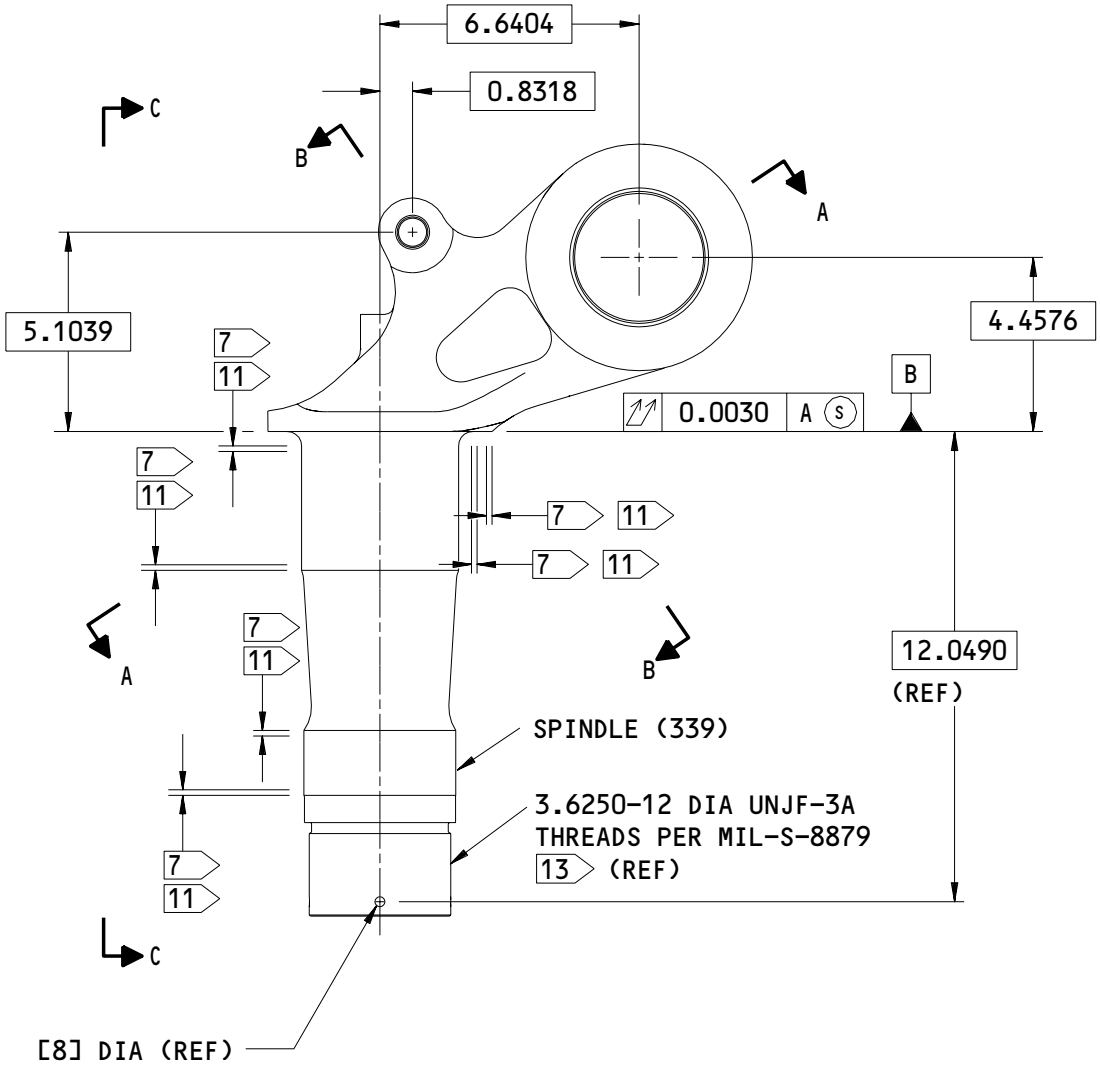
(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

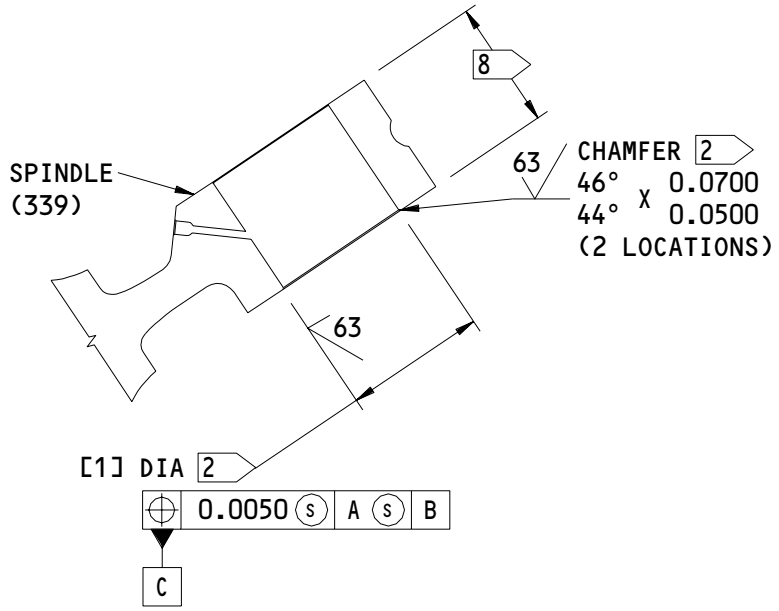
C. Procedure

(1) Cadmium titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.66), unless shown in Fig. 601.

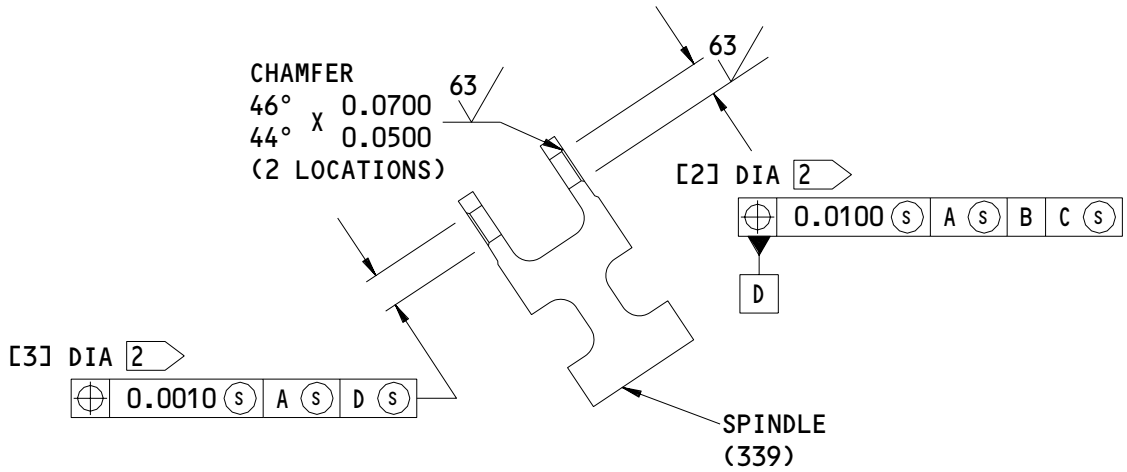
(2) Make sure that the part identification number is visible after repair and refinish procedure. If necessary, repair the markings (REPAIR 5-1).



161T6105-2
Lower Drag Strut Spindle Repair
Figure 601 (Sheet 1)



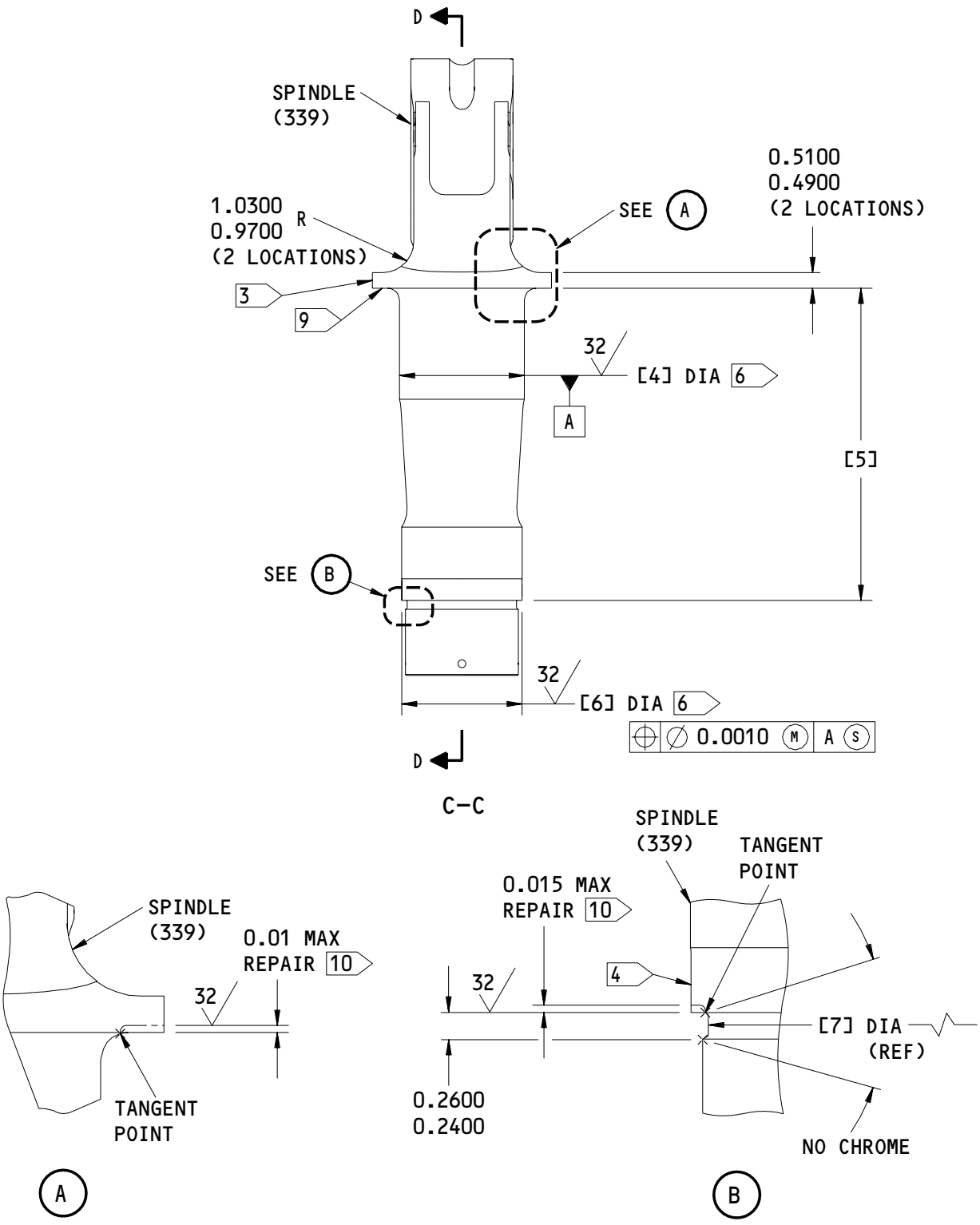
A–A



B–B

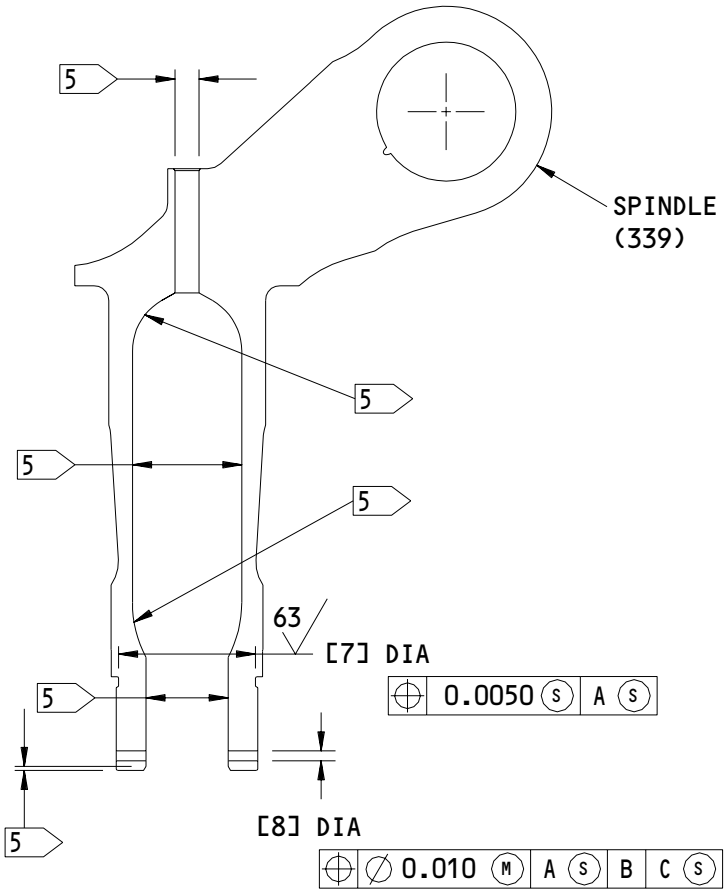
161T6105-2
Lower Drag Strut Spindle Repair
Figure 601 (Sheet 2)

K65268



161T6105-2
Lower Drag Strut Spindle Repair
Figure 601 (Sheet 3)

K66995



D–D

161T6105-2
Lower Drag Strut Spindle Repair
Figure 601 (Sheet 4)

K67144

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	3.5640 3.5625	0.8990 0.8982	0.8990 0.8982	4.0255 4.0245	10.0294 10.0094	3.9005 3.8995	3.5050 3.4950	0.2910 0.2790
REPAIR LIMIT	3.6240 <1>	0.9590 <1>	0.9590 <1>	3.9945 <10>	----	3.8095 <10>	3.4750 <12>	----

<1> REPAIR LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

<2> CADMIUM-TITANIUM PLATE (F-15.32). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

<3> PART NUMBER AND SERIAL NUMBER LOCATION

<4> CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451)

<5> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

<6> THERMAL SPRAY AREA (F-15.384) 0.003 INCH MINIMUM THICKNESS

<7> THERMAL SPRAY AREA RUNOUT/CADMIUM PLATE OVERLAP

<8> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

<9> THERMAL SPRAY AREA (F-15.384) 0.003-0.005 INCH THICK

<10> LIMIT FOR CHROME PLATE BUILDUP

<11> CHROME PLATE RUNOUT

<12> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<13> CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

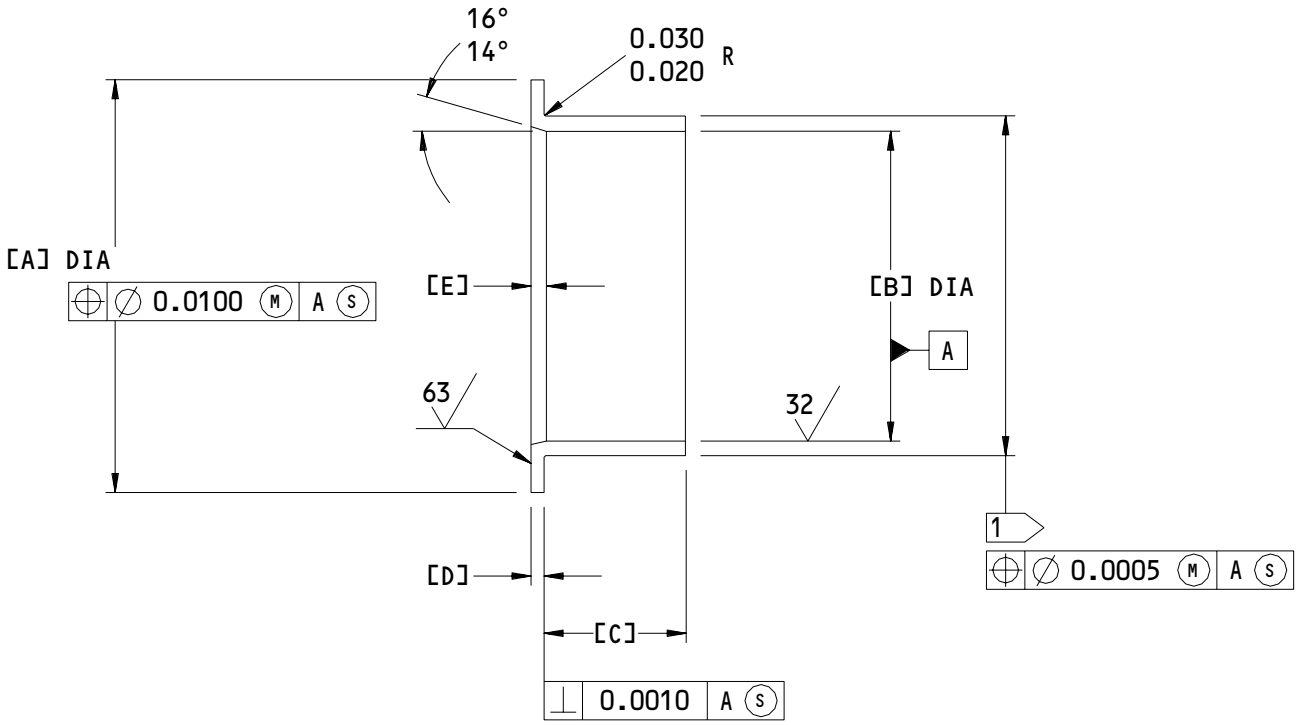
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6105-2
Lower Drag Strut Spindle Repair
Figure 601 (Sheet 5)



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B]	[C]	[D]	[E]	INTERFERENCE
[1]	327	3.8845 3.8645	3.3153 3.3138	1.5120 1.4930	0.1260 0.1250	0.1600 0.1400	0.0044 0.0014
[2],[3]	330	1.1082 1.0882	0.7735 0.7505	0.4650 0.4450	0.0640 0.0630	0.1000 0.0800	0.0021 0.0006

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

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

Oversize Bushing Details
Figure 602

K67179

DRAG STRUT DOWNLOCK SPINDLE FITTING ASSEMBLY - REPAIR 6-1

161T6118-1, -2

1. General

   A. This procedure has the necessary data to replace the bushings (186, 189, 192, 195, 198, 201A) and refinish the drag strut downlock spindle fitting assembly (180).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

   B. References

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

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

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

      (4) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushings (186, 189, 192, 195, 198, 201A).

      (2) If you find defects on hole surfaces, refer to REPAIR 6-2 for repair instructions.

(3) Install the bushings (186, 189, 192, 195, 198, 201A) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(4) Machine the inside diameter of the bushings (186, 189, 192, 195, 198, 201A) to design dimensions and finish.

(5) Make sure the lubrication passage is not blocked. Apply BMS 3-33 grease at the lube fitting until grease comes out at the bushing inner diameter.

(6) Fillet seal the bushings (186, 189, 192, 195, 198, 201A) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

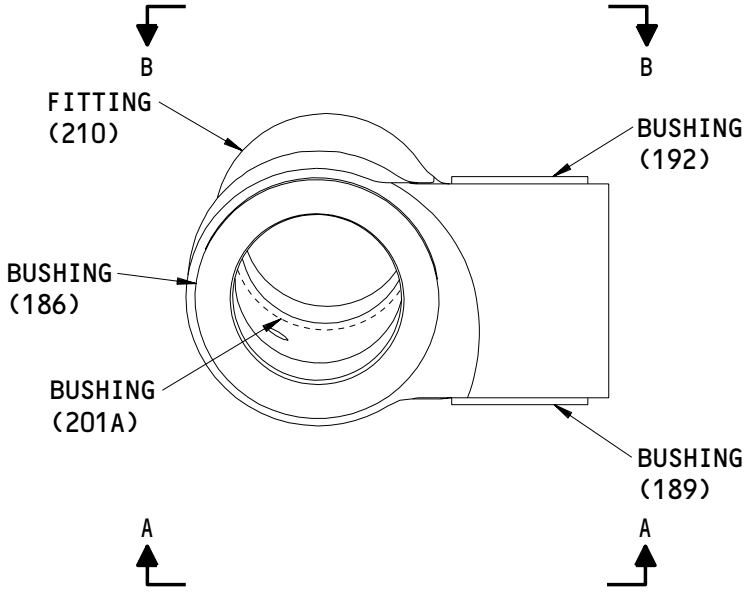
(1) SOPM 20-30-02, Stripping of Protective Finish

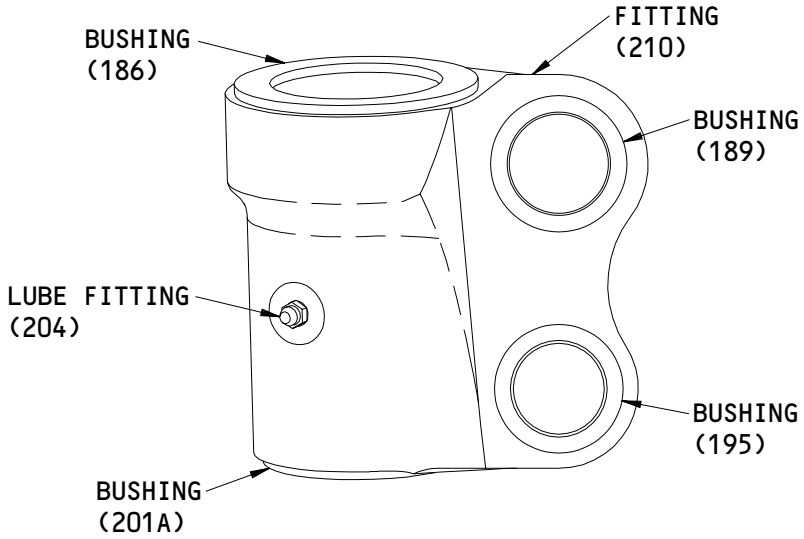
(2) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

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

C. Procedure

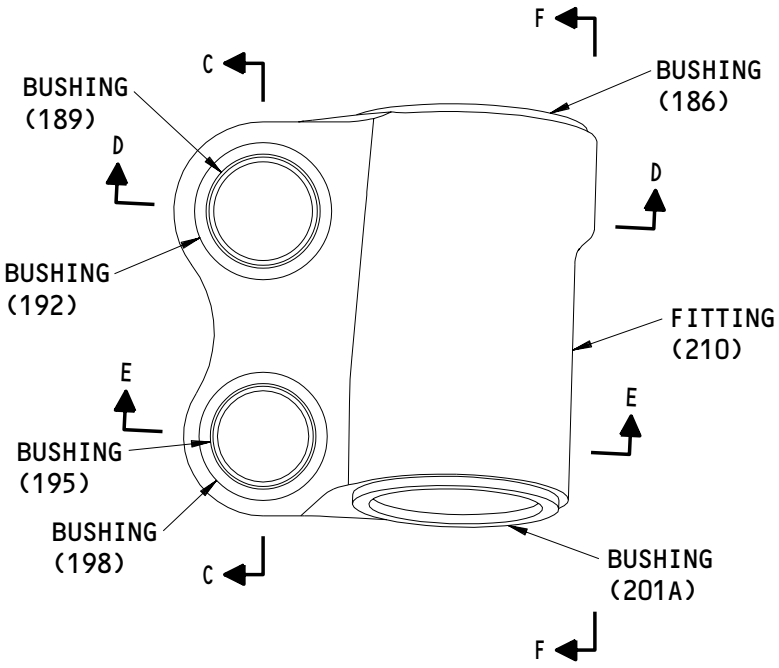
(1) Apply BMS 10-60 enamel (F-19.39-707), unless shown in Fig. 601. Do not apply enamel to bushing inner diameters or flange faces.



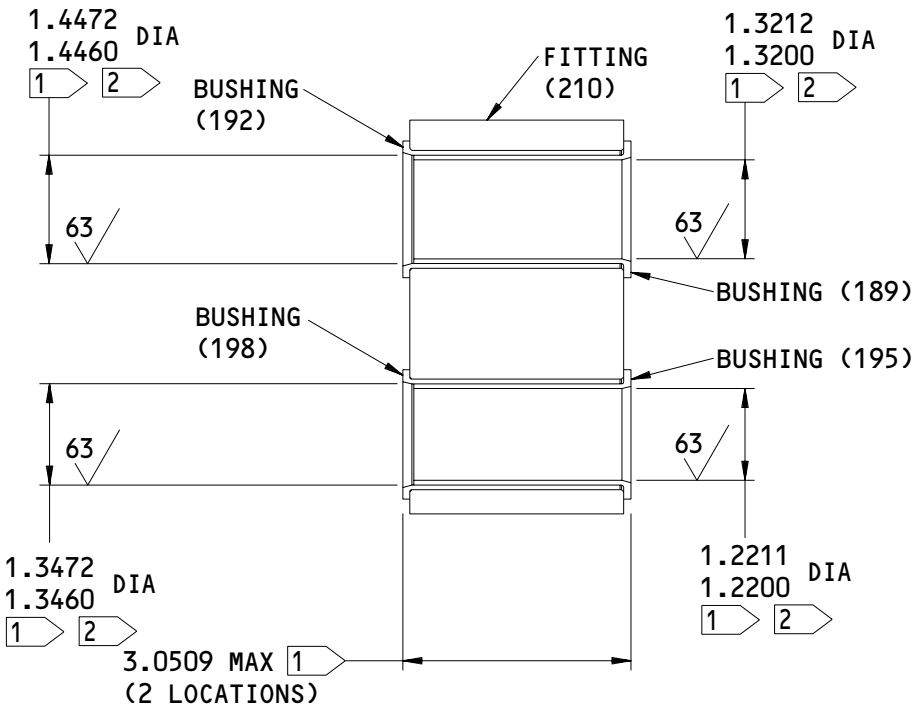


A–A

161T6118-1,-2
Drag Strut Downlock Spindle Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)



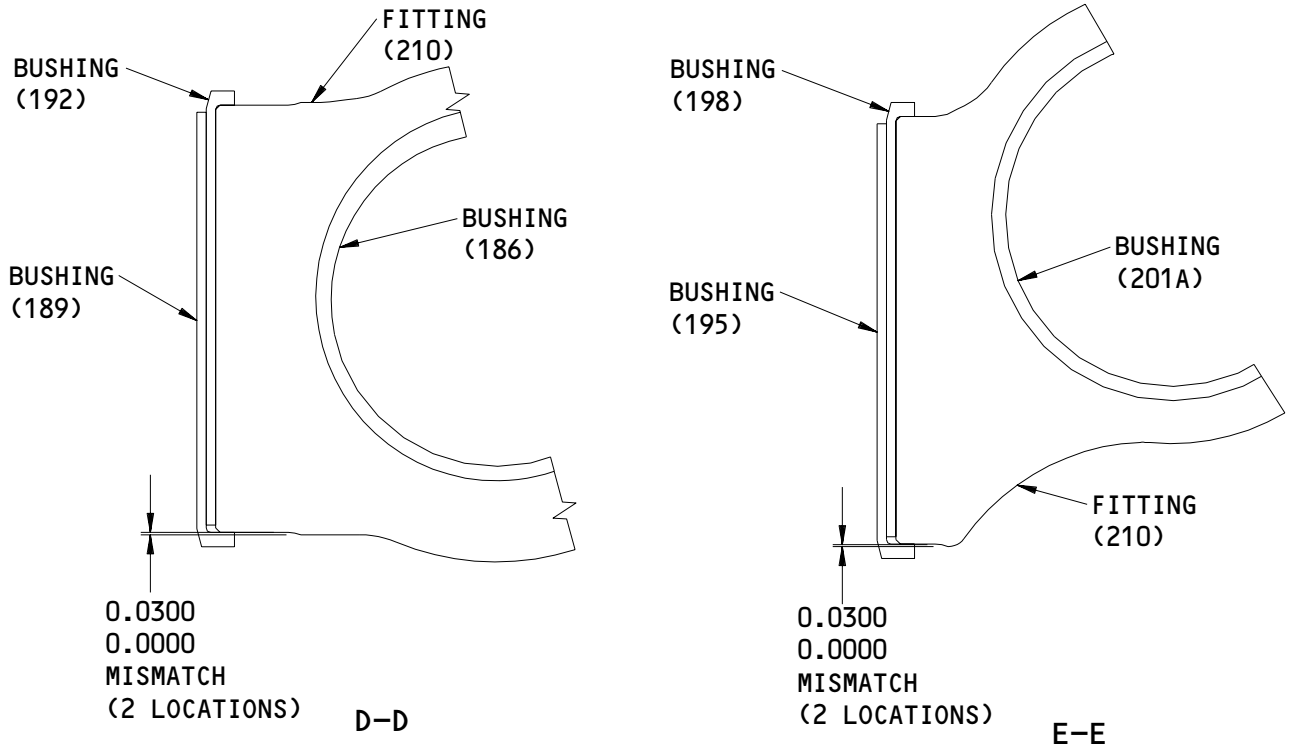
B–B



C–C

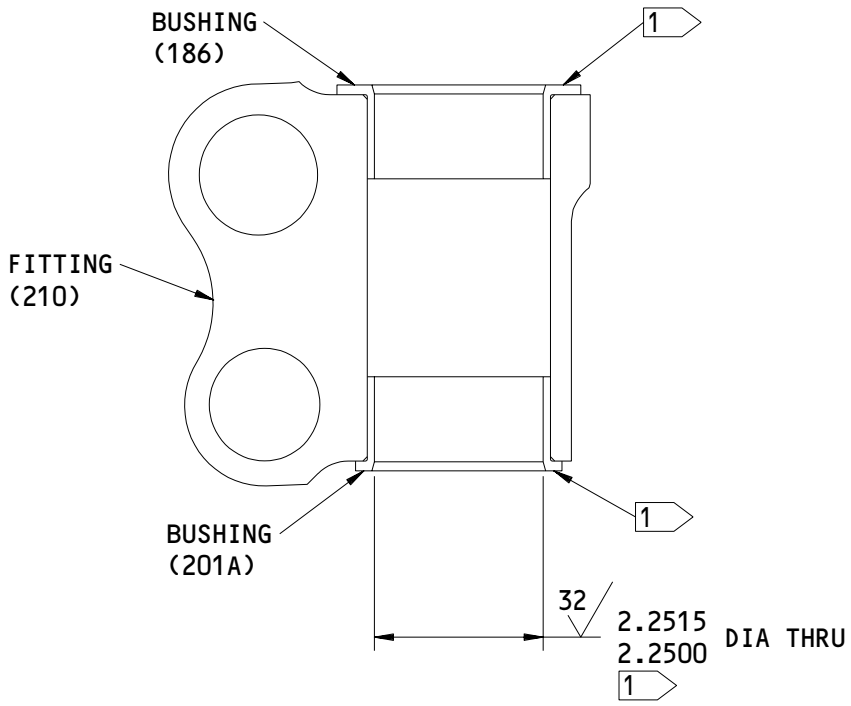
161T6118-1,-2
Drag Strut Downlock Spindle Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

K67357



161T6118-1,-2
Drag Strut Downlock Spindle Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 3)

K67367



G–G

1 NO ENAMEL THIS SURFACE

2 ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6118-1,-2
Drag Strut Downlock Spindle Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 4)

K67369

DRAG STRUT DOWNLOCK SPINDLE FITTING - REPAIR 6-2

161T6118-3, -4

1. General

A. This procedure has the necessary data to repair and refinish the drag strut downlock spindle fitting (210).

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

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

D. General repair details:

(1) Material: 4340M Steel
275-300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Holes for Bushings

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

(6) SOPM 20-41-01, Decoding of Boeing Finish Codes

(7) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(8) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(10) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a magnetic particle check (SOPM 20-20-01).

(3) Shot peen the hole SOPM 20-10-03.

(4) Cadmium-titanium plate (F-15.32). Apply BMS 10-79, type 3 primer (F-19.47) to the hole.

(5) Make oversize bushings (Fig. 602, 603 and on) to adjust for the material removed.

(6) Install the bushing as shown in REPAIR 6-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

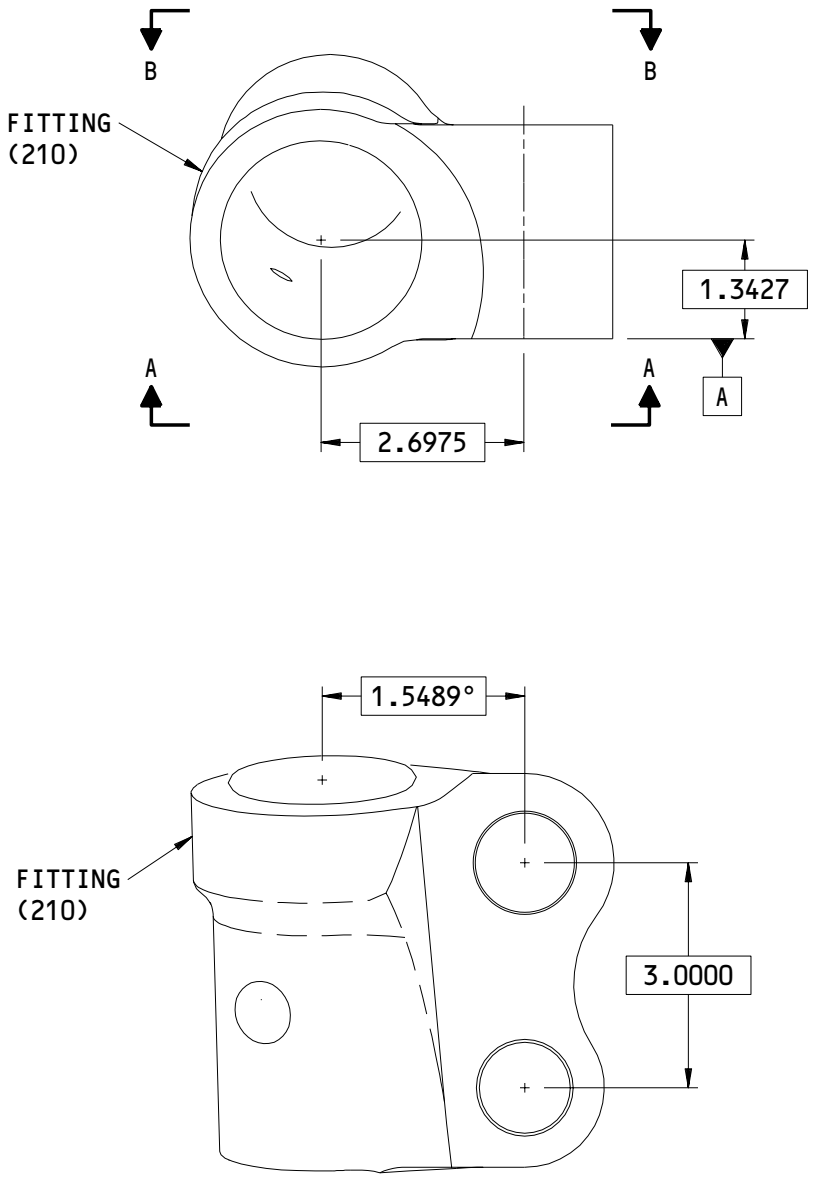
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

C. Procedure

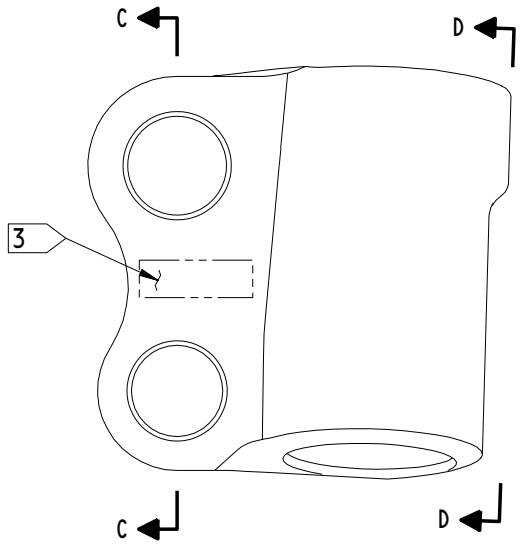
(1) Cadmium titanium plate (F-15.01), and apply primer (F-19.66), shown in Fig. 601.



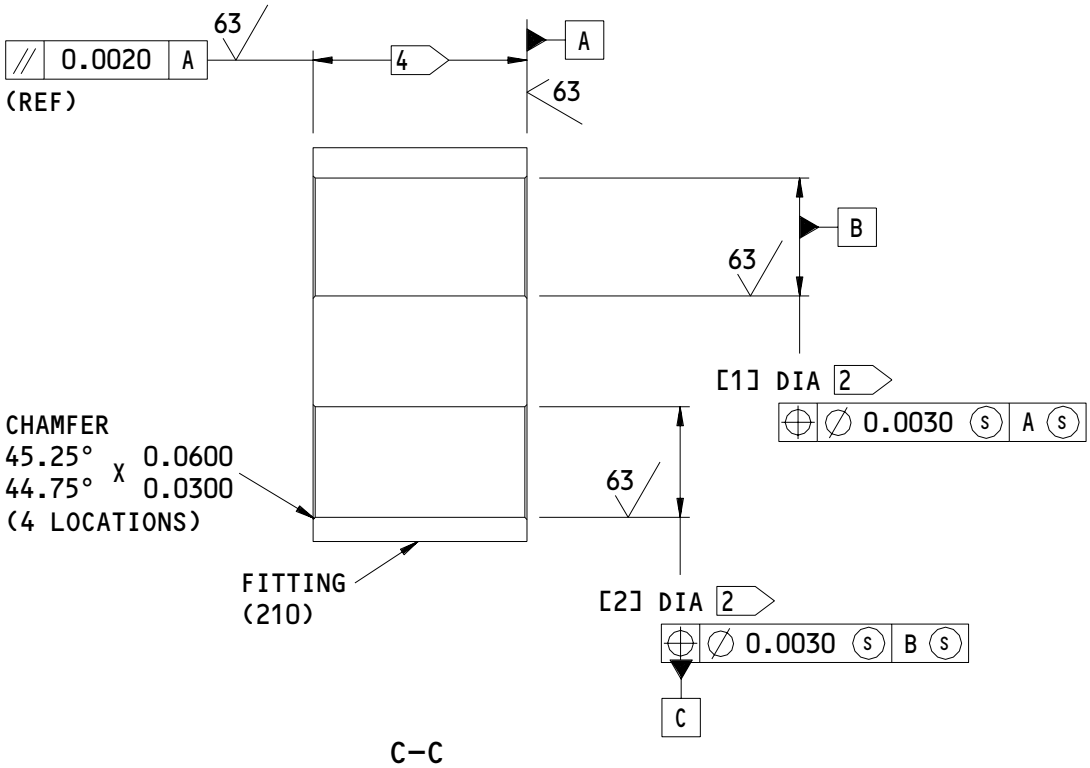
A–A

161T6118-3,-4
Drag Strut Downlock Spindle Fitting Repair
Figure 601 (Sheet 1)

K67388



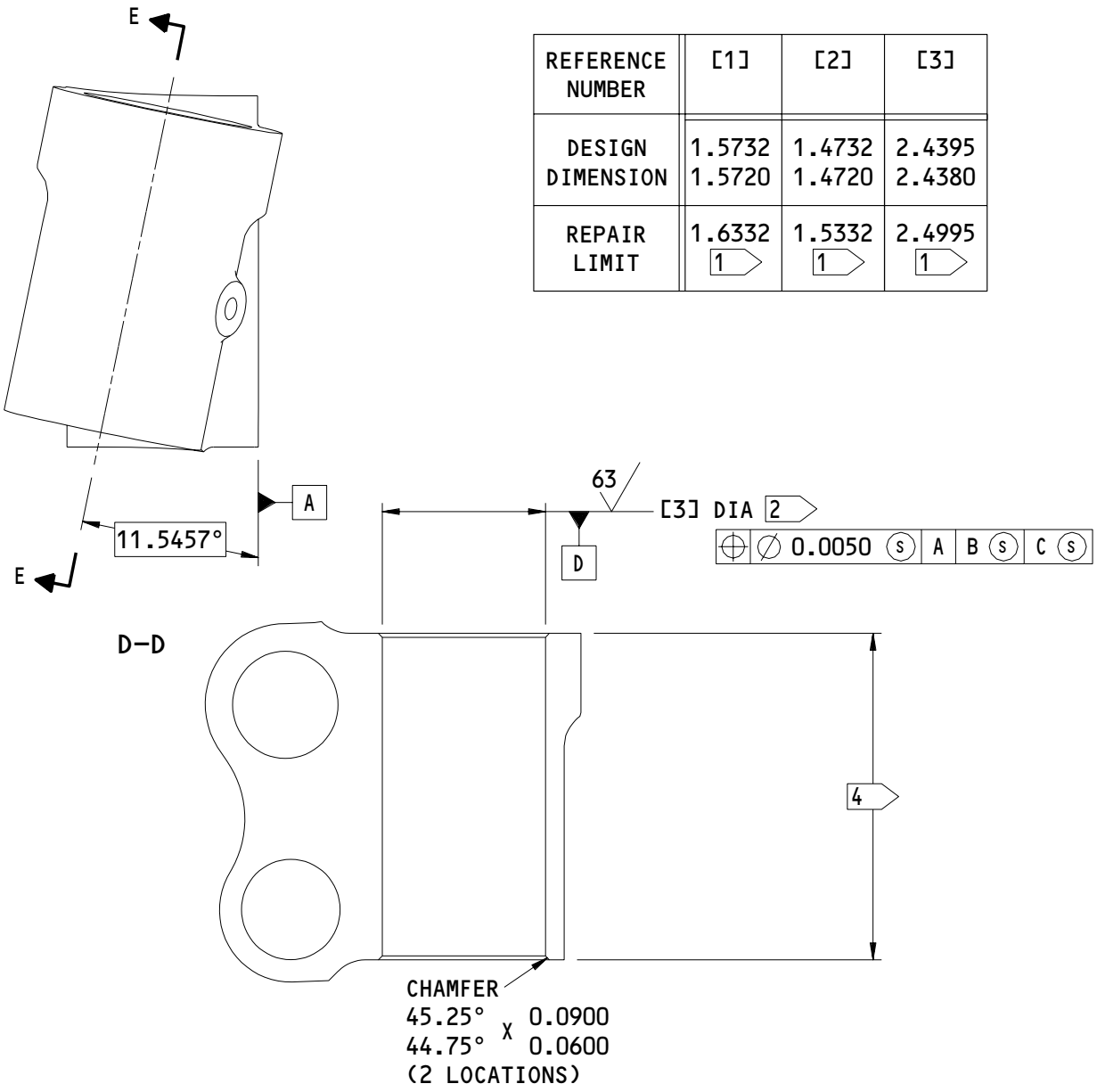
B–B



C–C

161T6118-3,-4
Drag Strut Downlock Spindle Fitting Repair
Figure 601 (Sheet 2)

K67394



REFERENCE NUMBER	[1]	[2]	[3]
DESIGN DIMENSION	1.5732 1.5720	1.4732 1.4720	2.4395 2.4380
REPAIR LIMIT	1.6332 <1>	1.5332 <1>	2.4995 <1>

1> LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

2> CADMIUM-TITANIUM PLATE (F-15.32). APPLY PRIMER (F-19.47)

3> PART NUMBER AND SERIAL NUMBER LOCATION

4> CADMIUM-TITANIUM PLATE (F-15.01). APPLY PRIMER (F-19.47)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

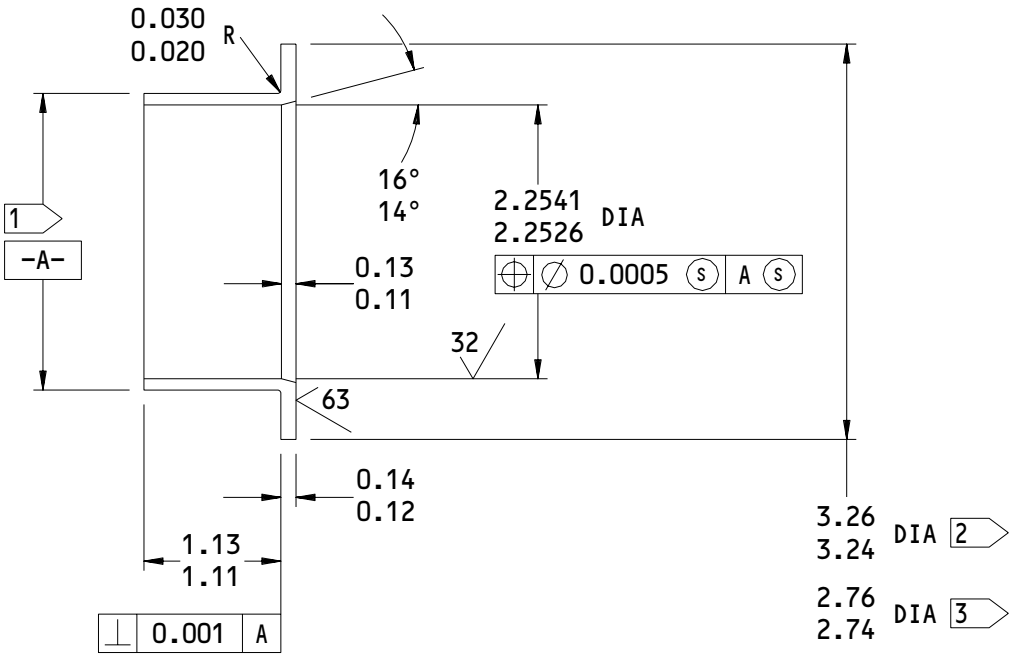
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6118-3,-4
Drag Strut Downlock Spindle Fitting Repair
Figure 601 (Sheet 3)

K67403



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS 0.0010-0.0040 INTERFERENCE

2 FOR BUSHING (186)

3 FOR BUSHING (201A)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.06)

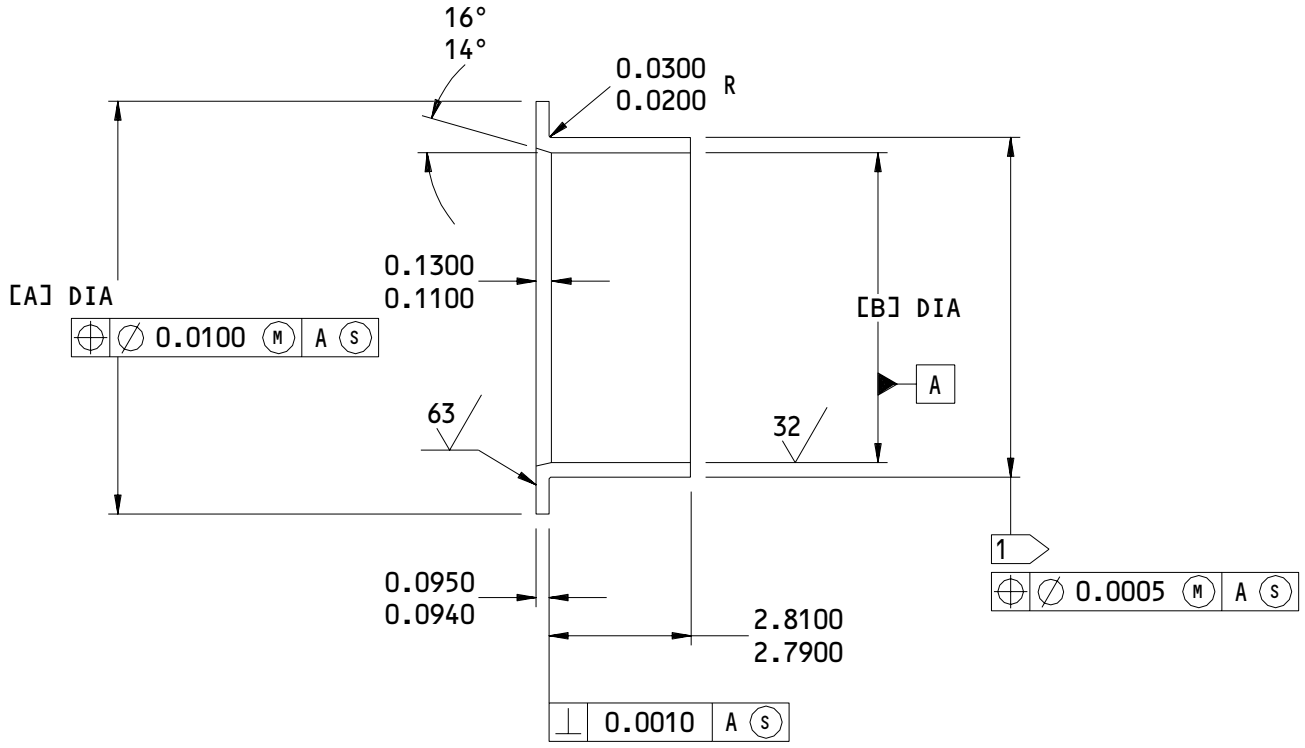
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [3] FIG. 601 - REPLACES BUSHINGS (186,201A)

Oversize Bushing Details
Figure 602

K67415



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B]	INTERFERENCE
[1]	192	1.8320 1.8120	1.4479 1.4466	0.0032 0.0008
[2]	198	1.7320 1.7120	1.3478 1.3466	0.0031 0.0007

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

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603

K67425

DRAG STRUT DOWNLOCK ACTUATOR FITTING ASSEMBLY - REPAIR 7-1

161T6119-1, -2

1. General

A. This procedure has the necessary data to replace the bushings (72, 75, 78, 81, 84) and refinish the drag strut downlock actuator fitting assembly (66).

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

(2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

B. References

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

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

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

(4) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Remove the bushings (72, 75, 78, 81, 84).

(2) If you find defects on hole surfaces, refer to REPAIR 7-2 for repair instructions.

(3) Install replacement bushings (72, 75, 78, 81, 84) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with C1546 C11 mpound.

(4) Machine the bushings to design dimensions and finish.

(5) Fillet seal the bushings (72, 75, 78, 81, 84) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) COOO33 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

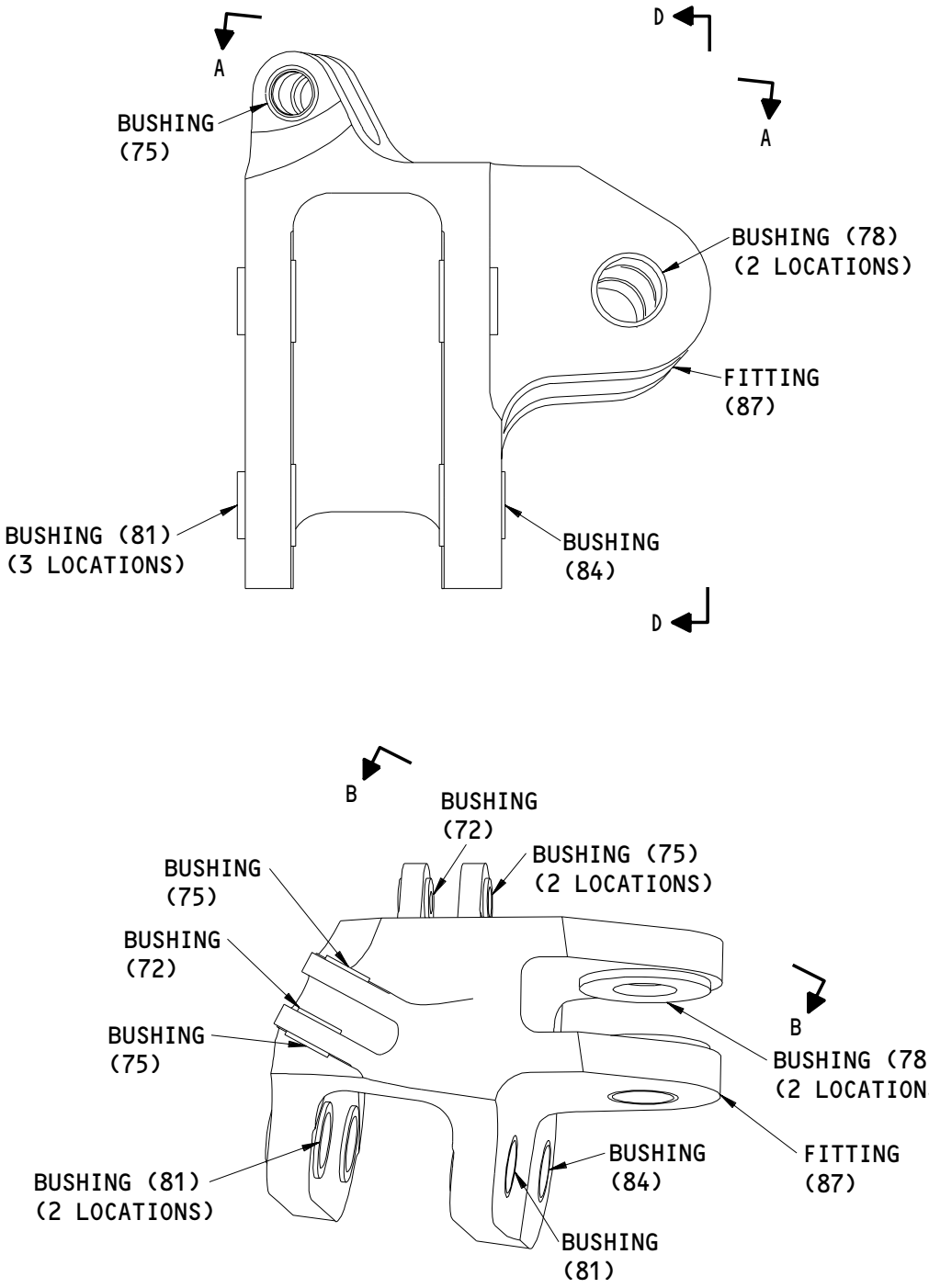
(1) SOPM 20-30-02, Stripping of Protective Finish

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

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

C. Procedure

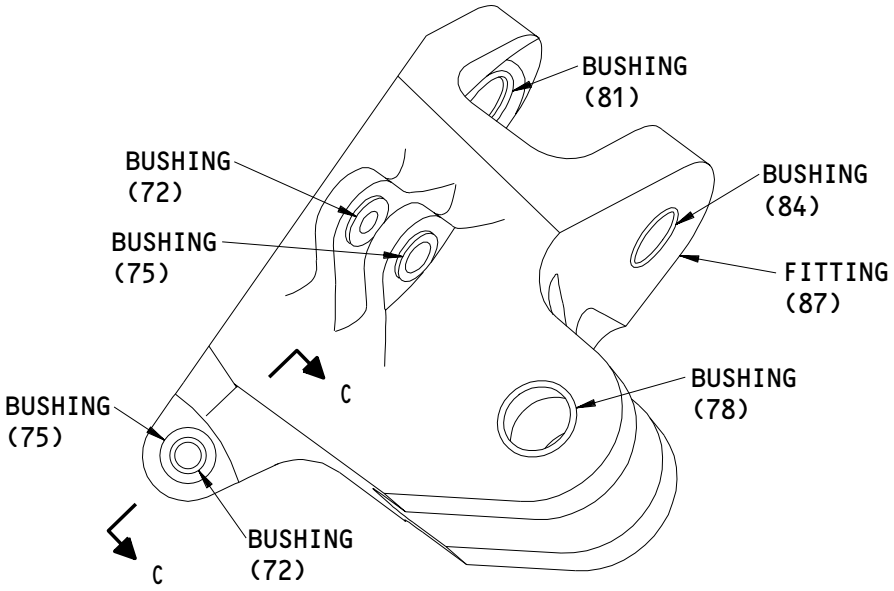
(1) Apply BMS 10-60 enamel (F-19.39-707). Do not apply enamel to bushing inner diameters or flange faces.



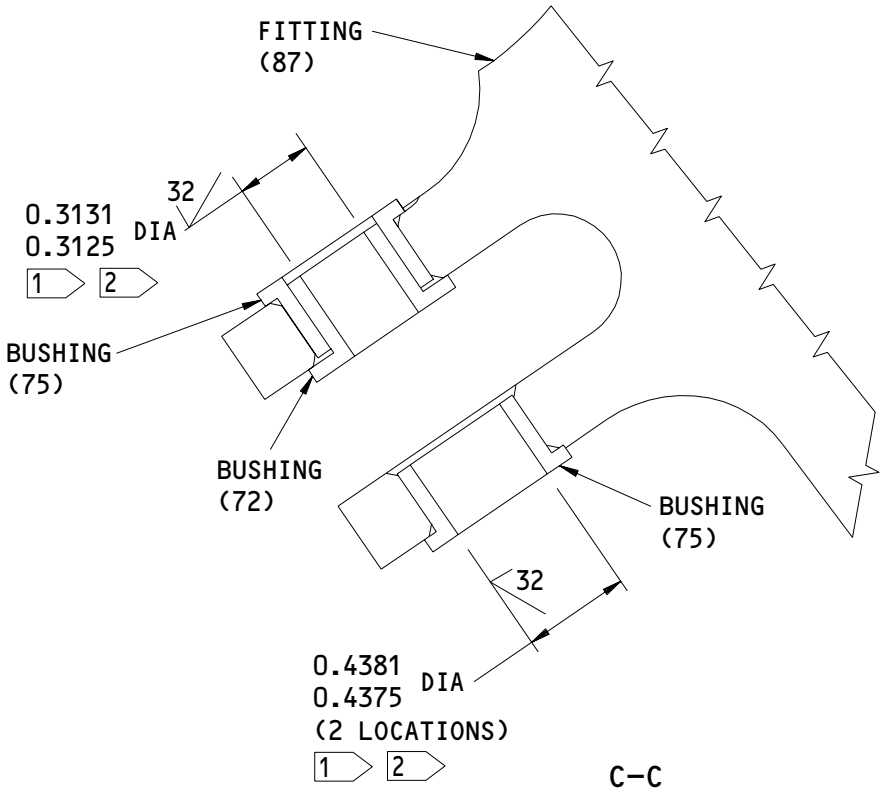
A–A

161T6119-1,-2
Drag Strut Downlock Actuator Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)

K67477



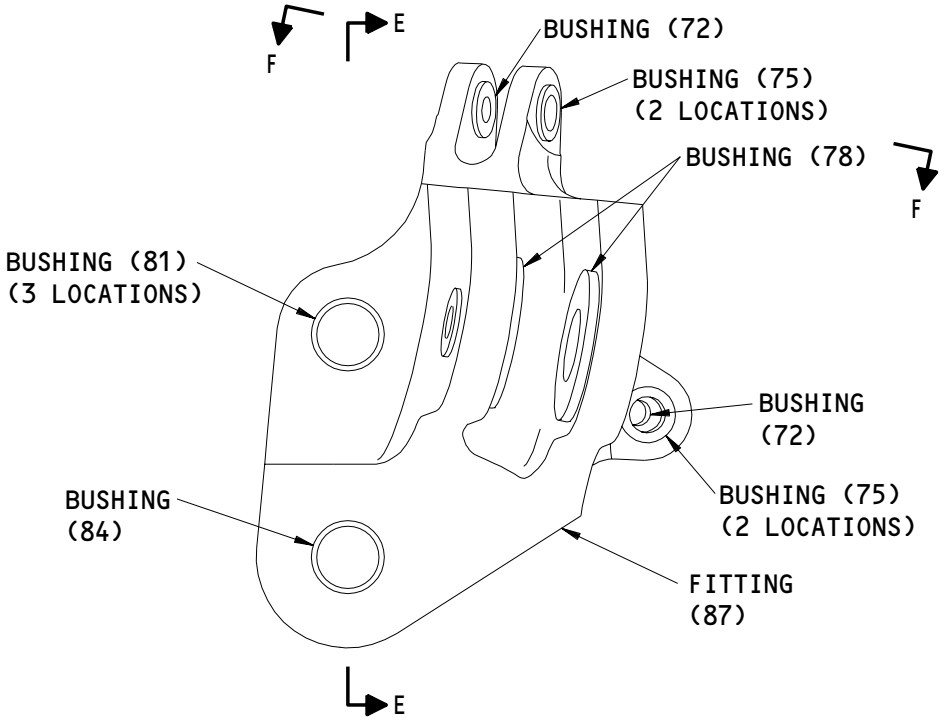
B–B



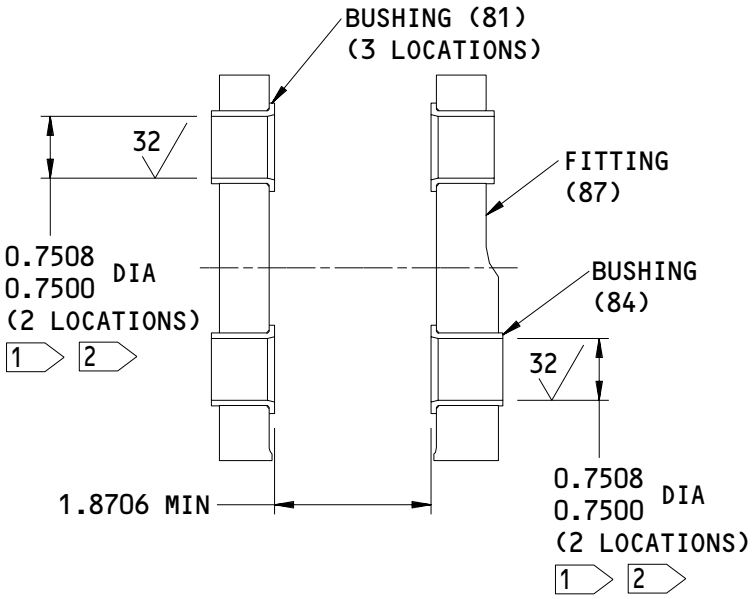
C–C

161T6119-1,-2
Drag Strut Downlock Actuator Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

K76113



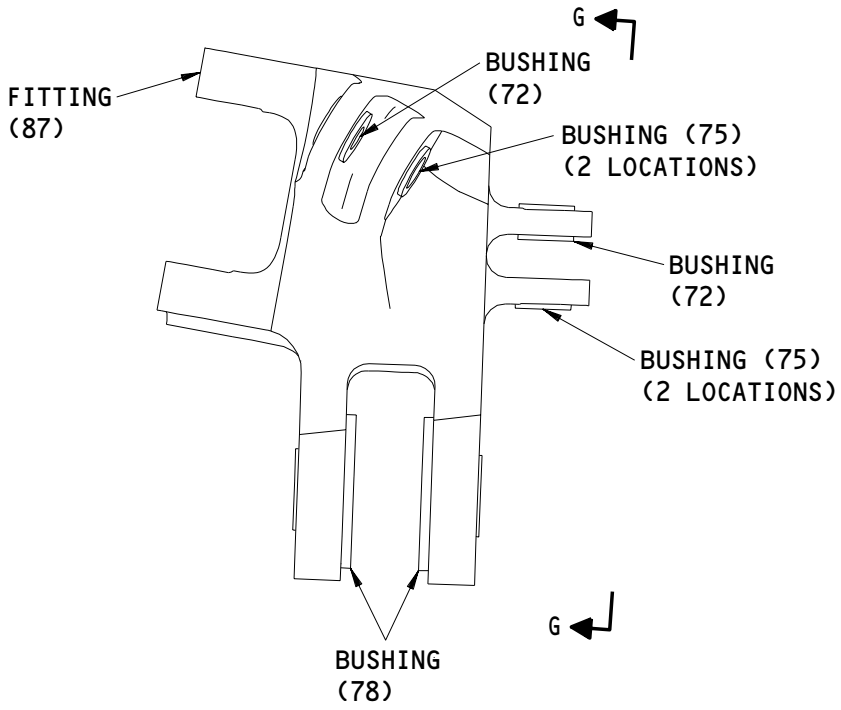
D–D



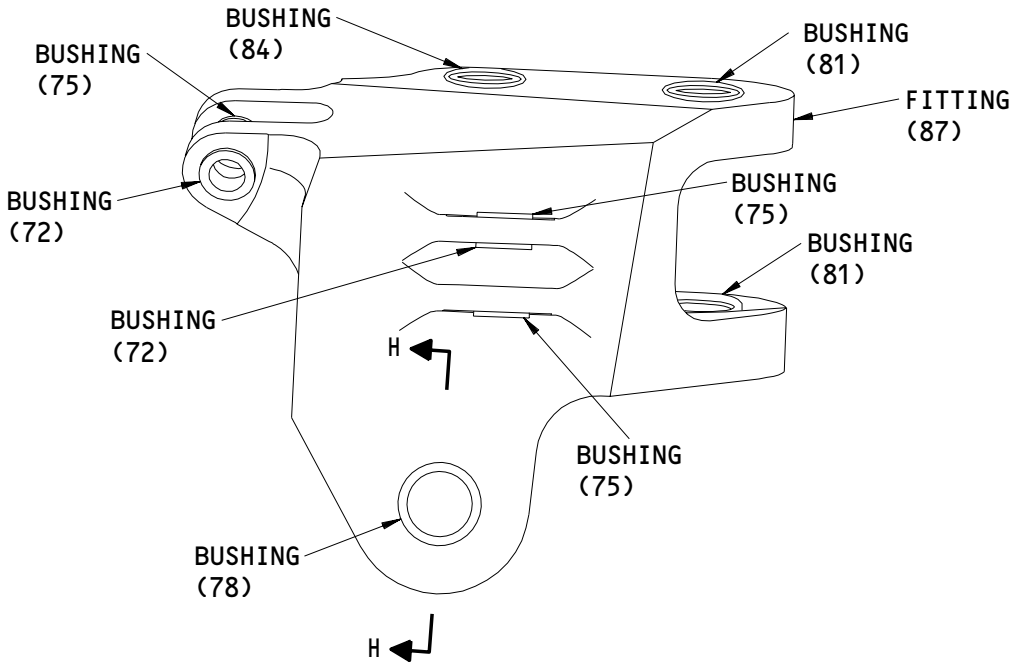
E–E

161T6119-1,-2
Drag Strut Downlock Actuator Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 3)

K76268



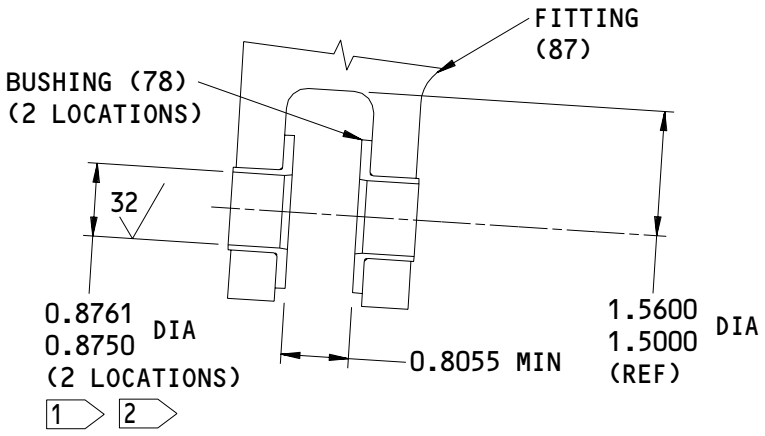
F–F



G–G

161T6119-1,-2
Drag Strut Downlock Actuator Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 4)

K76278



H–H

1 NO ENAMEL THIS SURFACE

2 ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6119-1,-2
Drag Strut Downlock Actuator Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 5)

DRAG STRUT DOWNLOCK ACTUATOR FITTING - REPAIR 7-2

161T6119-3, -4

1. General

A. This procedure has the necessary data to repair and refinish the drag strut downlock actuator fitting (87).

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

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

D. General repair details:

(1) Material: Aluminum Alloy

(2) Shot Peen: Intensity 0.014 - 0.018A2
Coverage 2.0

2. Holes for Bushings

A. References

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

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

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

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

(5) SOPM 20-42-05, Bright Cadmium Plating

B. Procedure

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a penetrant check (SOPM 20-20-02).

(3) Shot peen the hole (SOPM 20-10-03).

(4) Make oversize bushings (75, 78, 81, 84), (Fig. 602, 603 and on) to adjust for the material removed. Oversize equivalent of bushing (72) is not necessary because the standard bushing (72) fits into bushing (75) which is made to design dimensions.

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

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

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

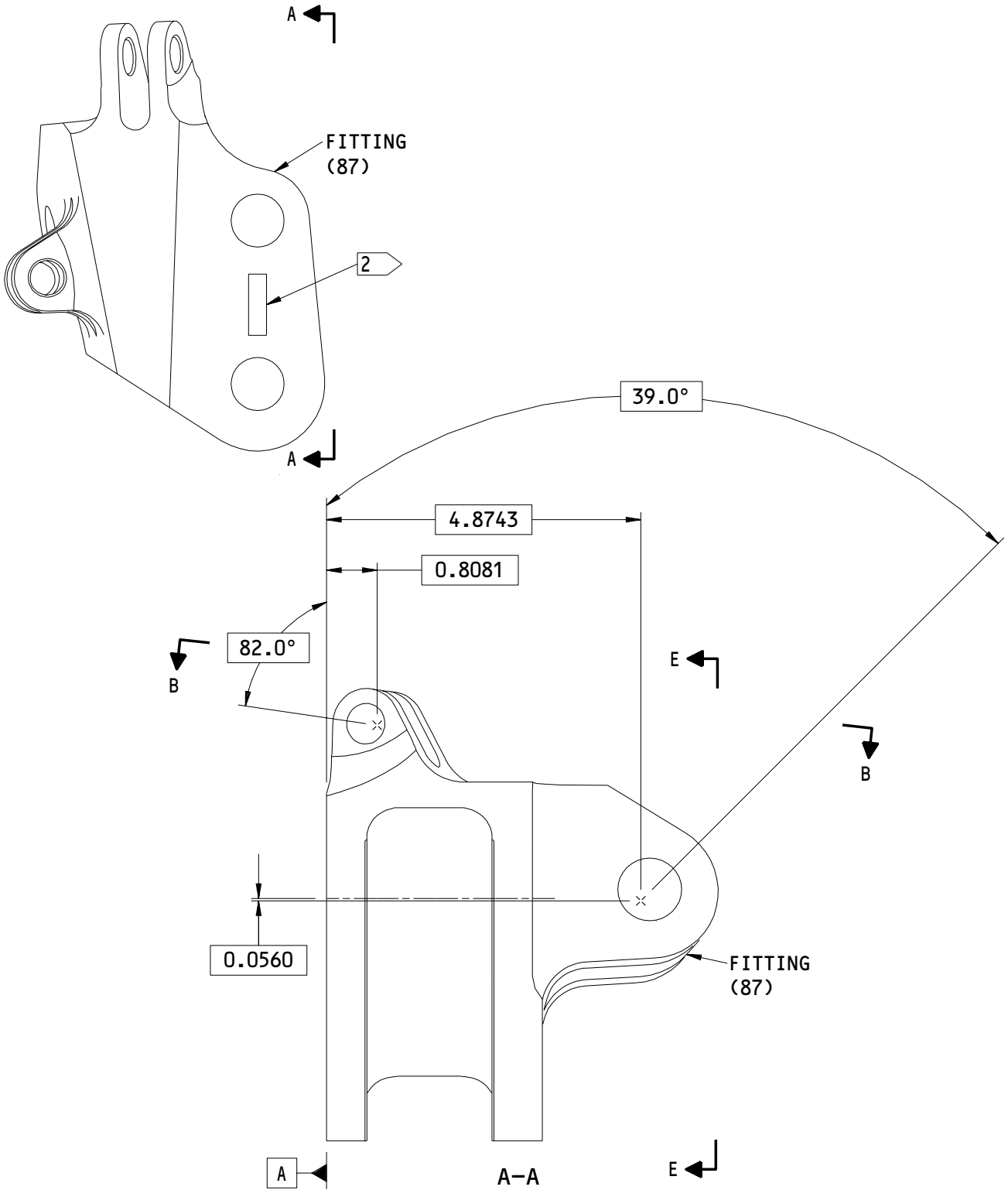
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

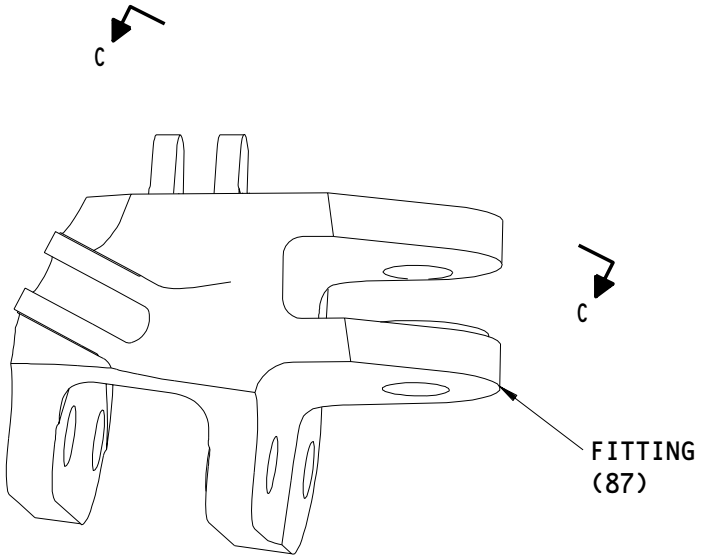
C. Procedure

(1) Boric acid-sulfuric acid anodize (F-17.31) and apply BMS 10-79, type 3 primer (F-19.47).

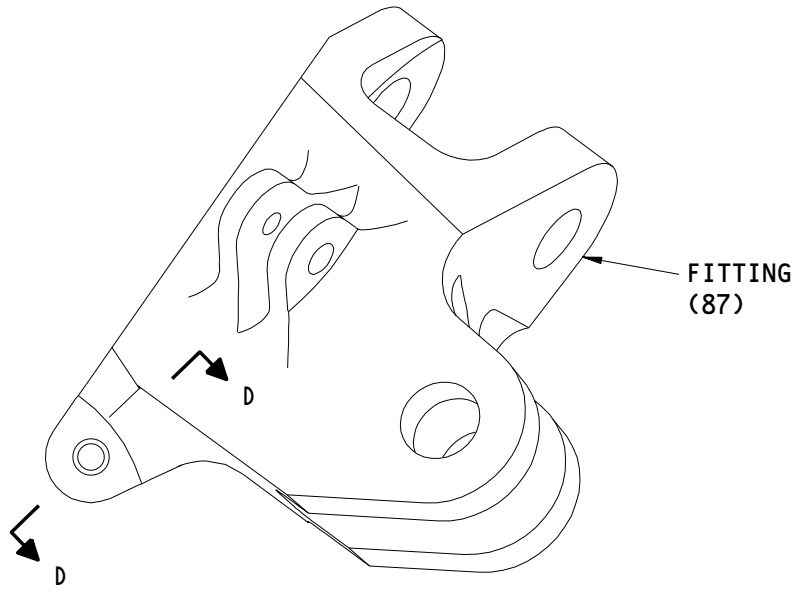


161T6119-3,-4
Drag Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 1)

K77505



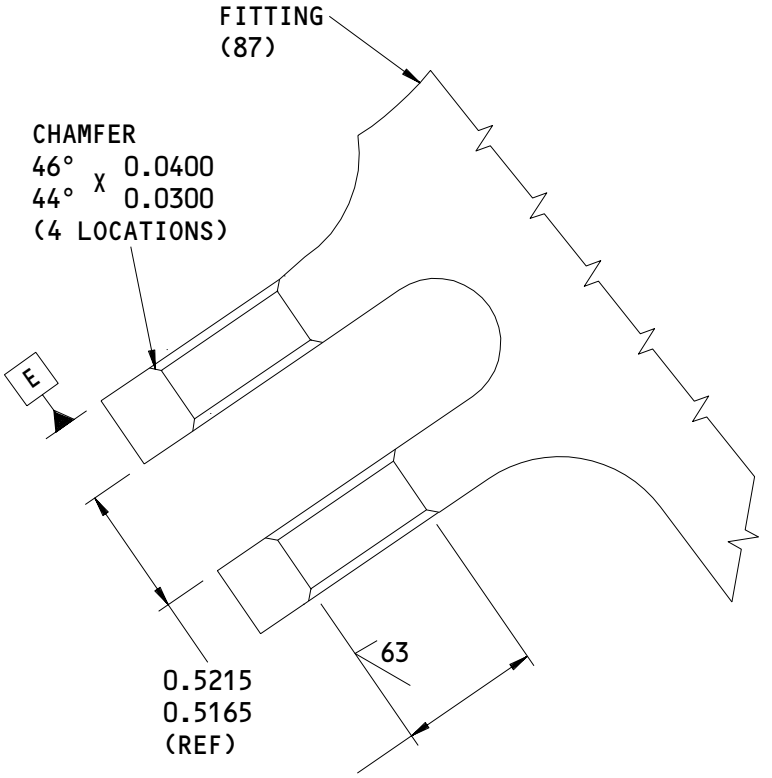
B–B



C–C

161T6119-3,-4
Drag Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 2)

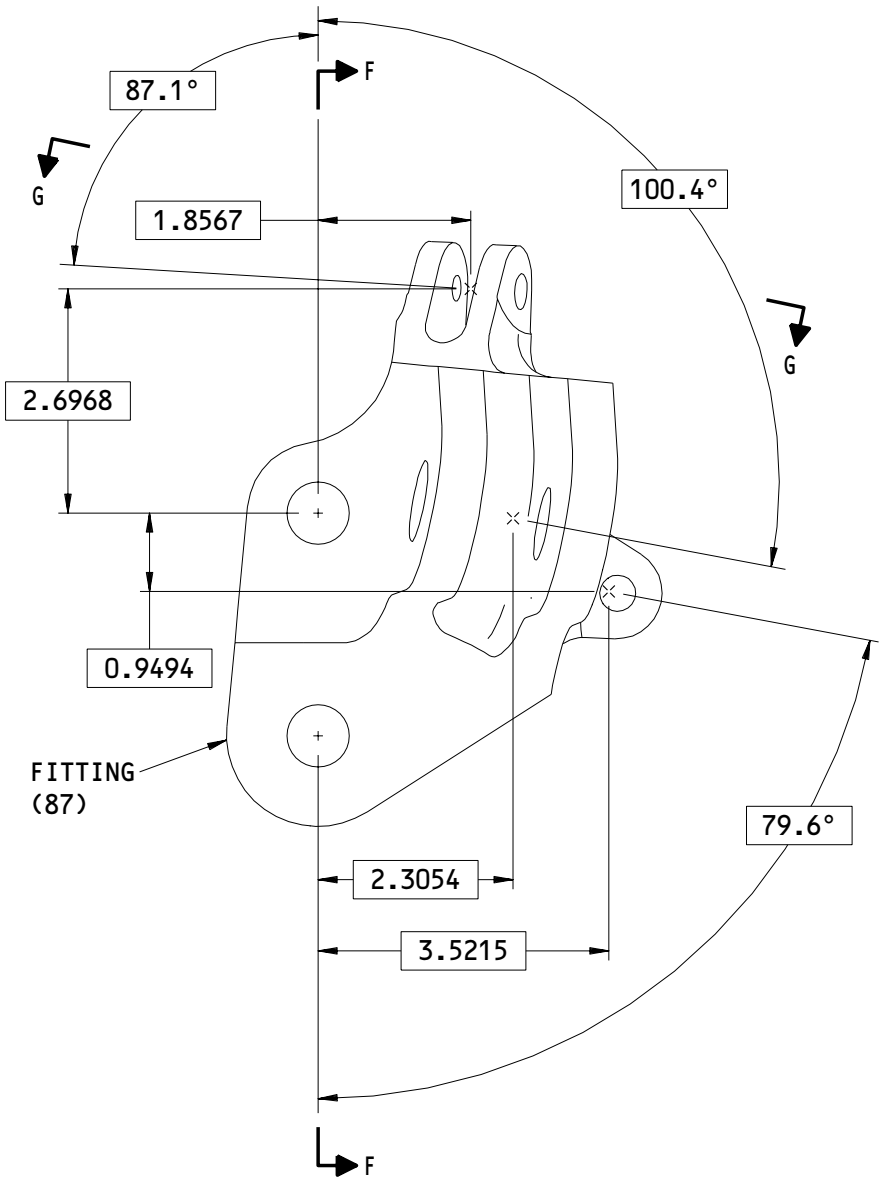
K77520



D–D

161T6119-3,-4
Drag Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 3)

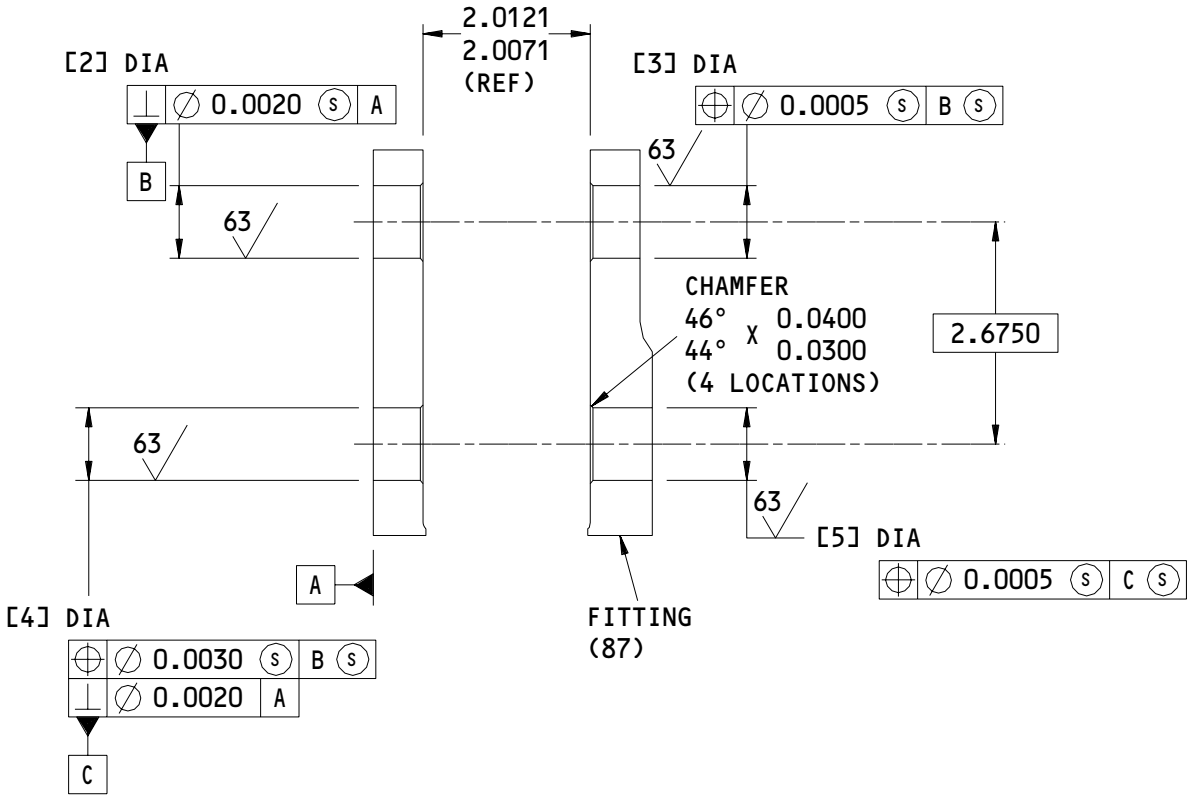
K77642



E–E

161T6119-3,-4
Drag Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 4)

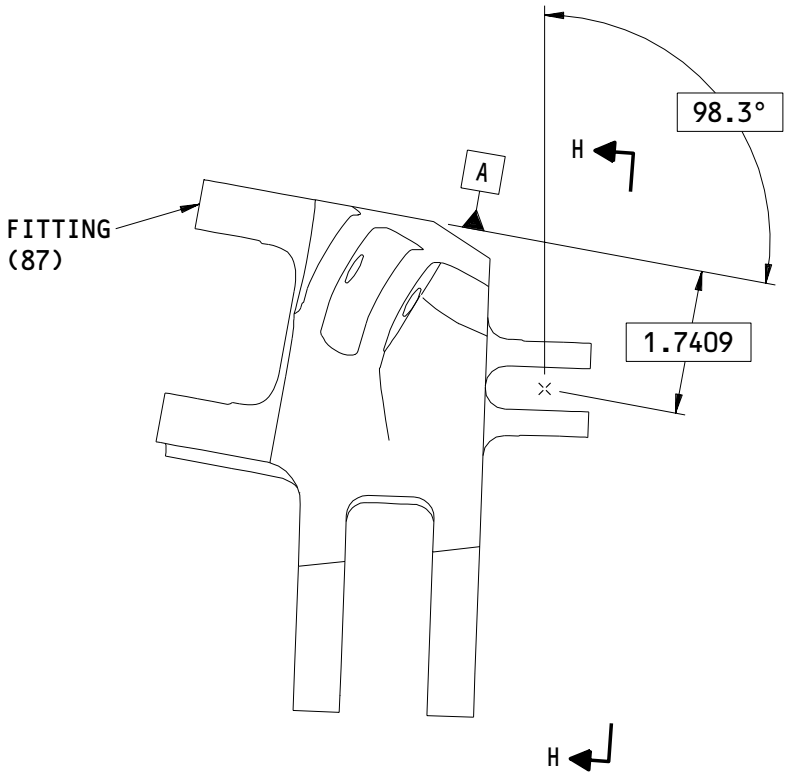
K77669

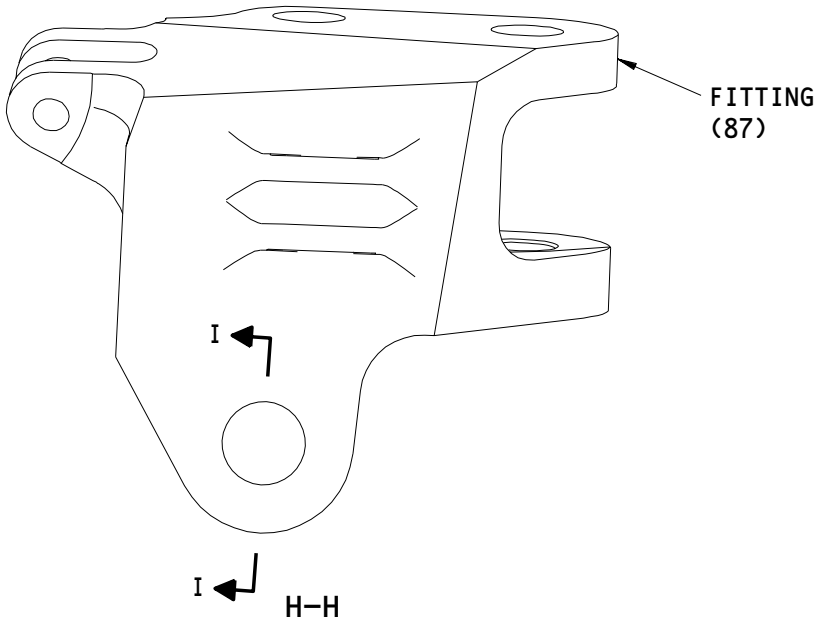


F–F

161T6119-3,-4
Drag Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 5)

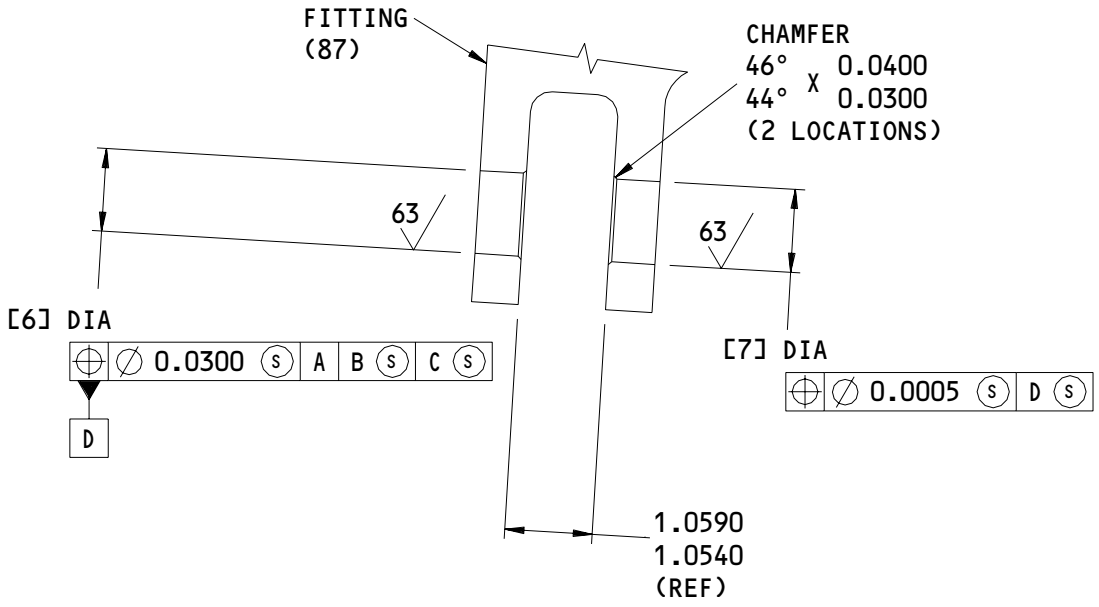
K78210





161T6119-3,-4
Drag Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 6)

K78234



I–I

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]
DESIGN DIMENSION	0.5631 0.5625	0.8768 0.8760	0.8768 0.8760	0.8768 0.8760	0.8768 0.8760	1.0021 1.0010	1.0021 1.0010
REPAIR LIMIT	0.6231 1	0.9368 1	0.9368 1	0.9368 1	0.9368 1	1.0621 1	1.0621 1

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

2 PART NUMBER AND SERIAL NUMBER LOCATION

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

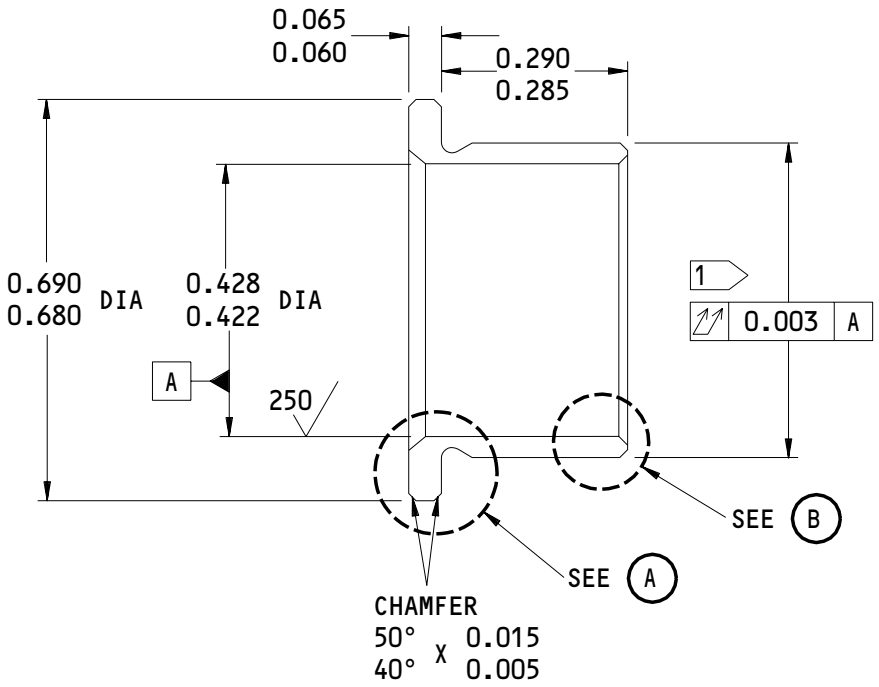
BREAK ALL SHARP EDGES

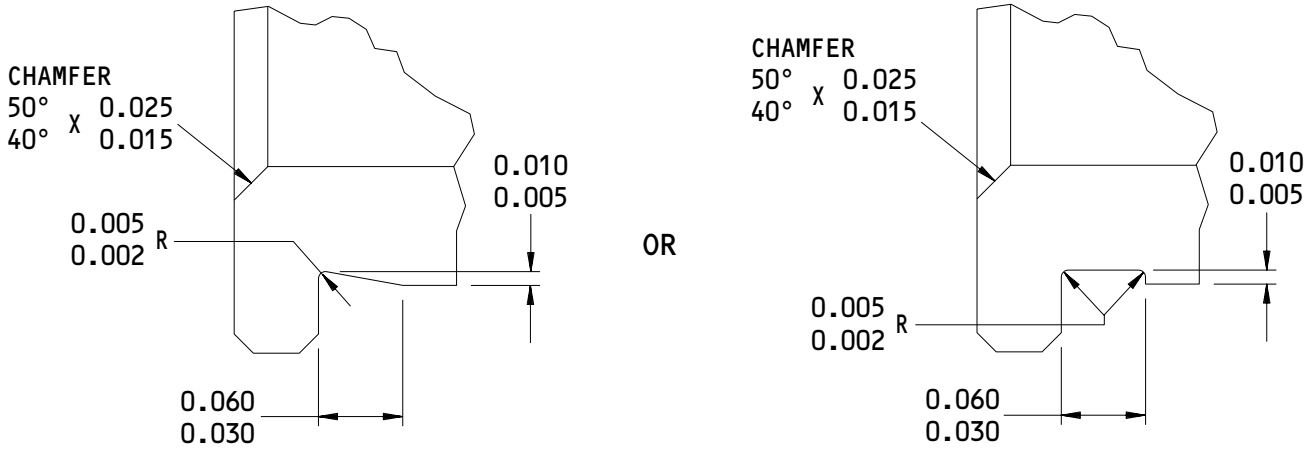
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6119-3,-4
Drag Strut Downlock Actuator Fitting Repair
Figure 601 (Sheet 7)

K78249





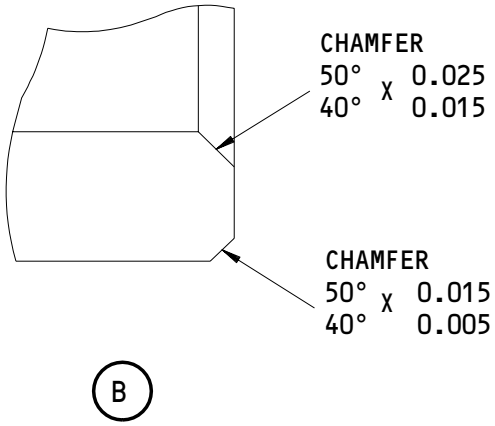
TYPE 1

TYPE 2

A

HOLE LOCATION [1] FIG. 601 – REPLACES BUSHING (75)

Oversize Bushing Details
Figure 602 (Sheet 1)



1 THE OUTSIDE DIAMETER OF THE BUSHING AFTER PLATING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0005-0.0016

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4635 OR ASTM B150)

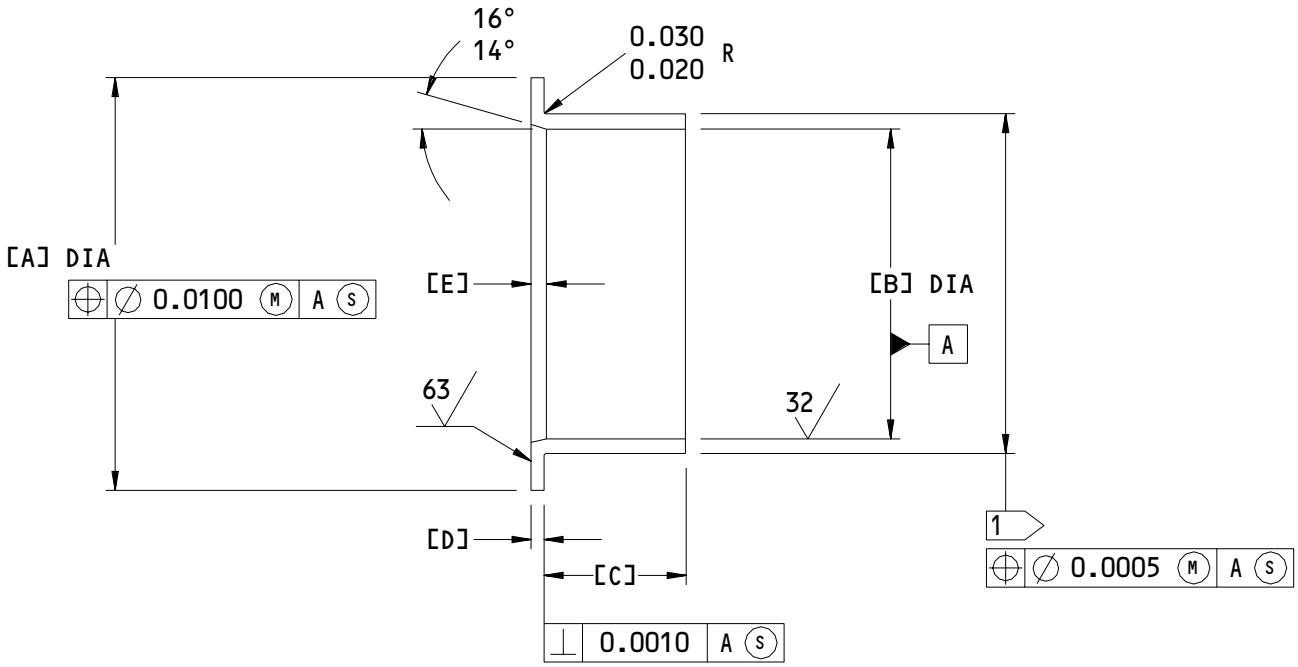
FINISH: CADMIUM PLATE (F-15.06) OR ZINC-NICKEL PLATE (F-15.40)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K78610



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B]	[C]	[D]	[E]	INTERFERENCE
[6],[7]	78	1.8600 1.8400	0.8778 0.8767	0.6000 0.5900	0.1200 0.1190	0.1300 0.1100	0.0026 0.0008
[2],[3], [4]	81	1.0860 1.0660	0.7512 0.7504	0.7100 0.6900	0.0640 0.0630	0.1000 0.0800	0.0023 0.0009
[5]	84	1.0860 1.0660	0.7512 0.7504	0.8100 0.7900	0.0640 0.0630	0.1000 0.0800	0.0023 0.0009

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

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

Oversize Bushing Details
Figure 603

K78717

DRAG STRUT ATTACH PIN ASSEMBLY - REPAIR 8-1

161T6121-1

1. General

   A. This procedure has the necessary data to replace the bearing (171) and refinish the drag strut attach pin assembly (168).

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

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

2. Bearing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

   B. References

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

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

      (3) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure

      (1) Remove the bearing (171).

(2) If you find defects on hole surfaces, refer to REPAIR 8-2 for repair instructions.

(3) Install a replacement bearing (171) with BMS 5-95 sealant and roller swage it (SOPM 20-50-03).

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

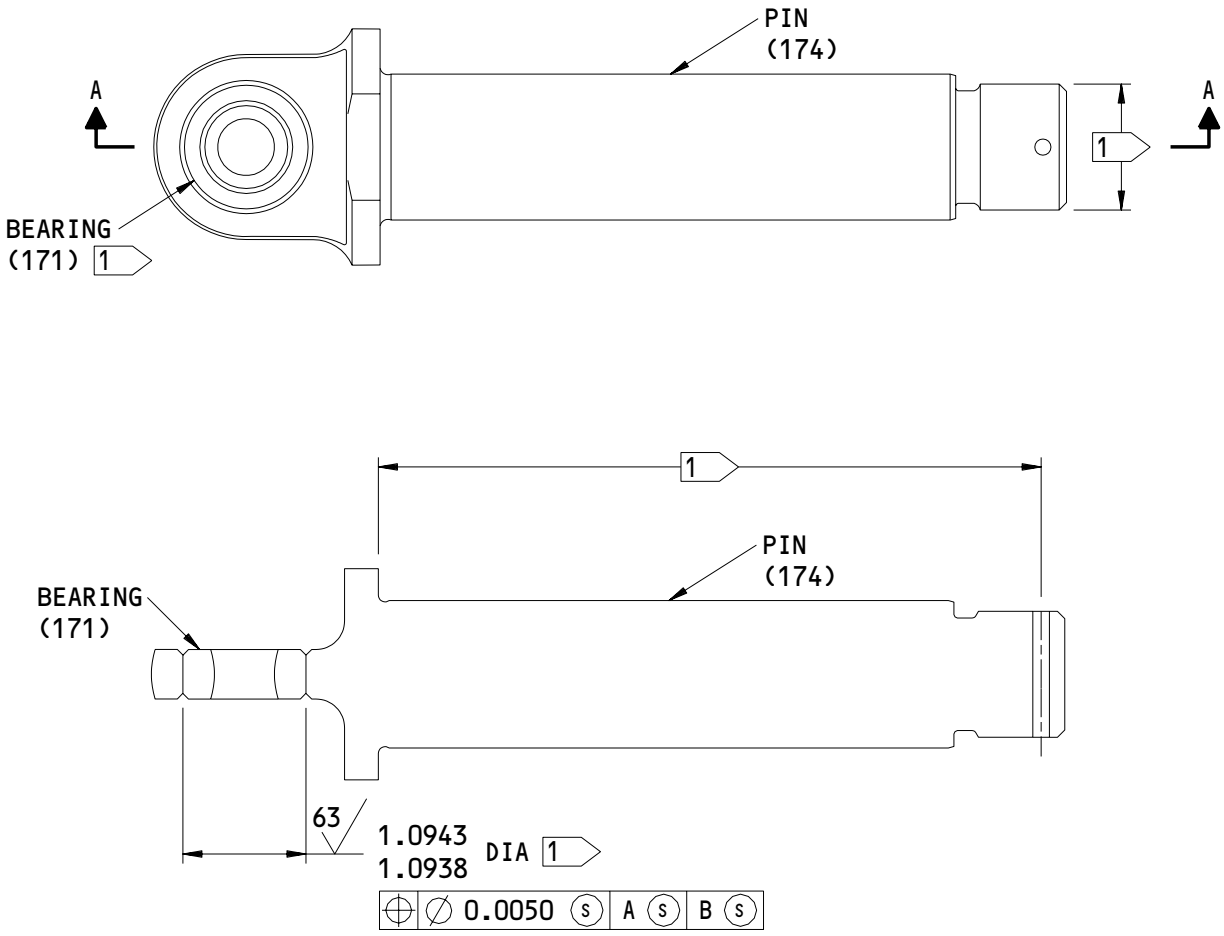
(1) SOPM 20-30-02, Stripping of Protective Finishes.

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

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

C. Procedure

(1) Apply BMS 10-60 enamel (F-19.39-707) to the external surface only, unless shown in Fig. 601.



A–A

1 NO ENAMEL

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6121-1
Drag Strut Attach Pin Assembly Bearing Replacement and Refinish
Figure 601

DRAG STRUT ATTACH PIN - REPAIR 8-2

161T6121-2

1. General

   A. This procedure has the necessary data to repair and refinish the drag strut attach pin (174).

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

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

   D. General repair details:

      (1) Material: 4340M Steel
      275 - 300 KSI

      (2) Shot Peen: Intensity 0.014 - 0.018A2
      Shot Size 0.016 - 0.033
      Hard Shot (RC 55-65)
      Coverage 2.0

2. Pin Repair

   A. Consumable Materials

      NOTE: Equivalent materials can be used.

      (1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

      (2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

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

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

(9) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(11) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig,. 601)

(1) Shank

(a) Machine as necessary, within the repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(2) Reliefs

(a) Machine as necessary, within the repair limits, to remove defects. Bleend smoothly into the tangent points shown.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen. If applicable, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

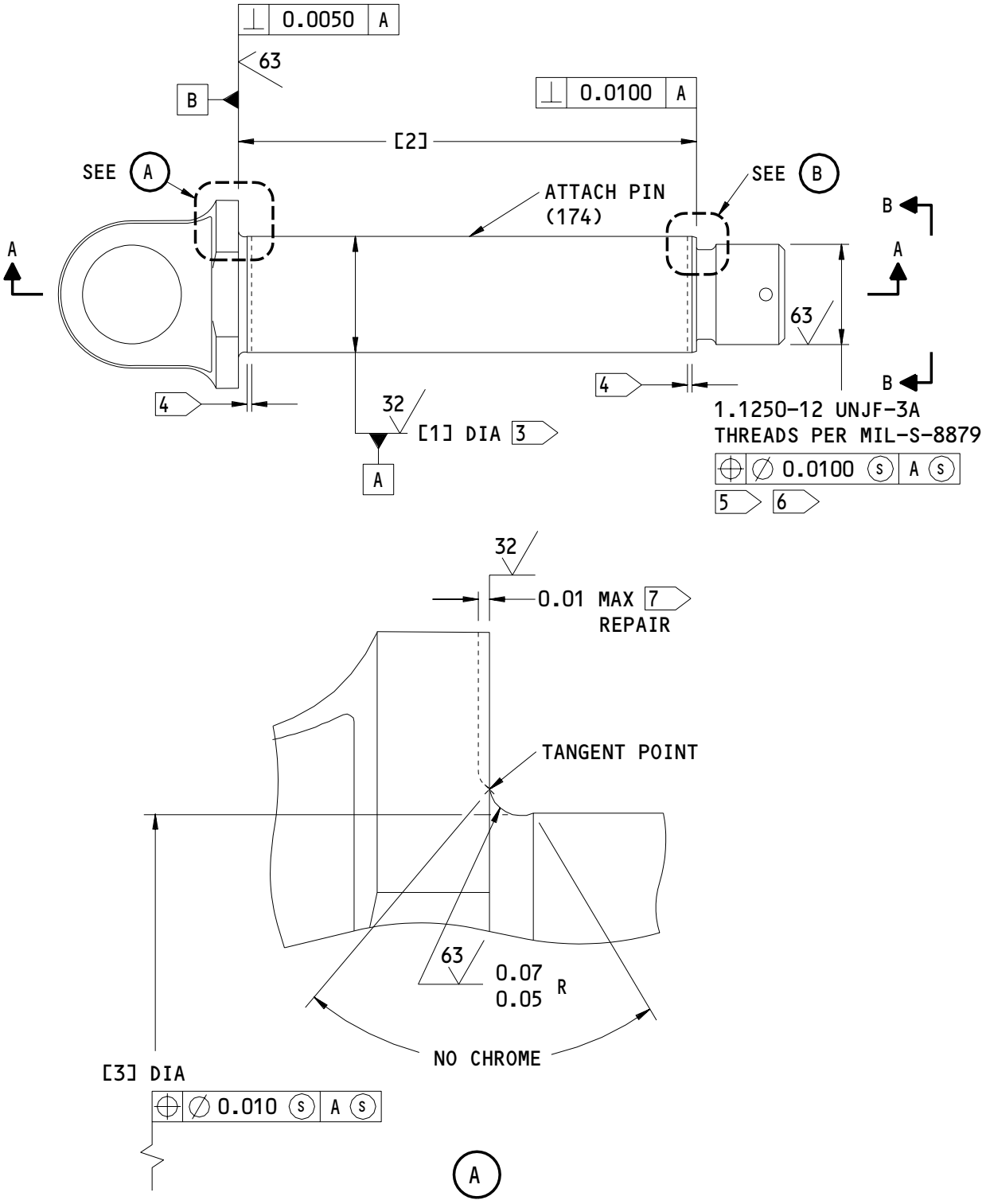
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

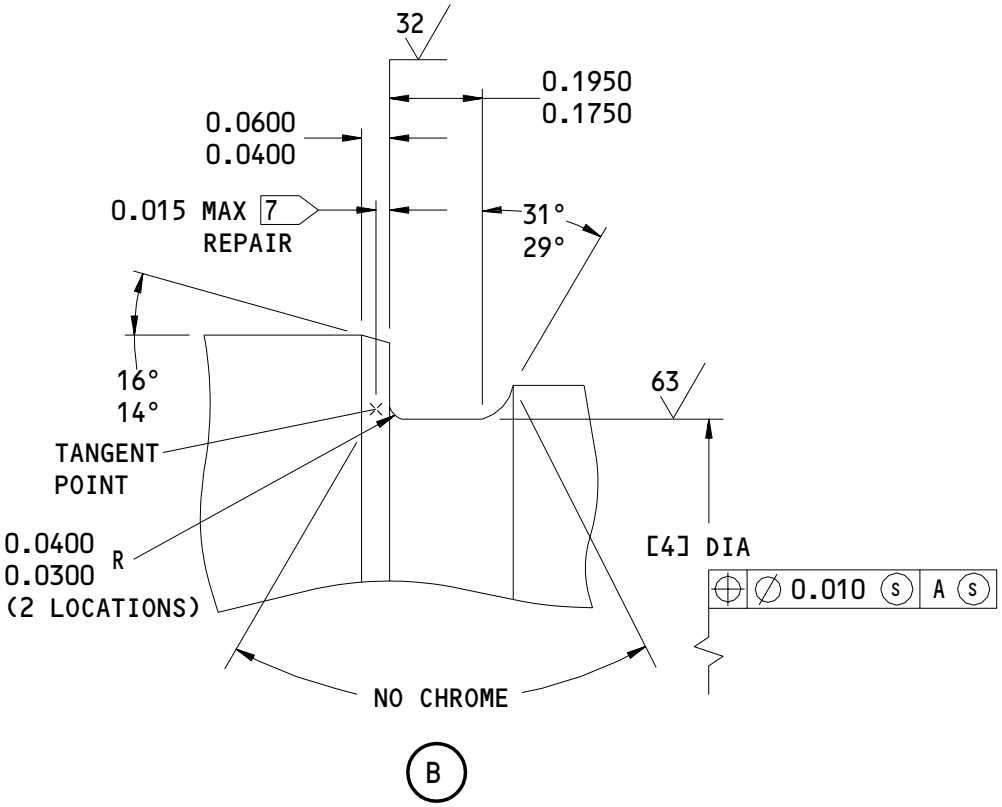
C. Procedure

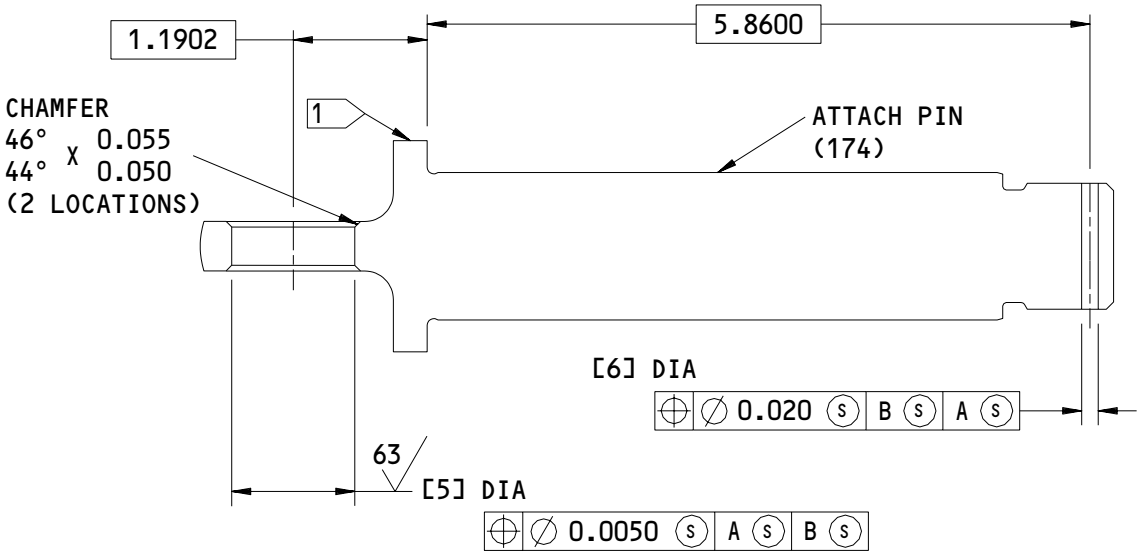
(1) Cadmium titanium plate (F-15.01), and apply BMS 10-79, type 3 primer (F-19.47), shown in Fig. 601.



161T6121-2
Drag Strut Attach Pin Repair
Figure 601 (Sheet 1)

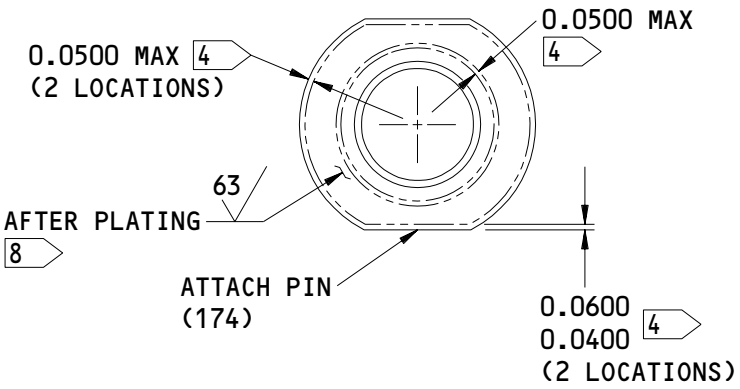
K79451





161T6121-2
Drag Strut Attach Pin Repair
Figure 601 (Sheet 2)

K80831



B–B

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	1.3190 1.3180	5.120 5.110	1.2900 1.2800	1.0050 0.9950	1.0943 1.0938	0.151 0.141
REPAIR LIMIT	1.2900 2	----	1.2600 7	0.9750 7	----	----

1 PART NUMBER AND SERIAL NUMBER LOCATION

2 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

3 CHROME PLATE (F-15.34) 0.003-0.015 THICK AFTER GRINDING. WIPE PLATING WITH PRIMER (F-19.451)

4 CHROME PLATE RUNOUT AREA

5 PROTECT THREADS BEFORE SHOT PEENING

6 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THREADS WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

7 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

8 CHROME PLATE (F-15.34) 0.0025-0.0035 THICK. DO NOT GRIND. WIPE CHROME PLATE WITH PRIMER (F-19.451)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6121-2
Drag Strut Attach Pin Repair
Figure 601 (Sheet 3)

DRAG STRUT FITTING ATTACH PIN - REPAIR 9-1

161T6122-1, -2

1. General

A. This procedure has the necessary data to repair and refinish the drag strut fitting attach pin (54, 177).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Pin Repair

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

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

(8) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(10) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(12) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Shank

(a) Machine as necessary, within the repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(2) Pin Relief Feature Repair.

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points shown.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen. If applicable, Chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2 (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

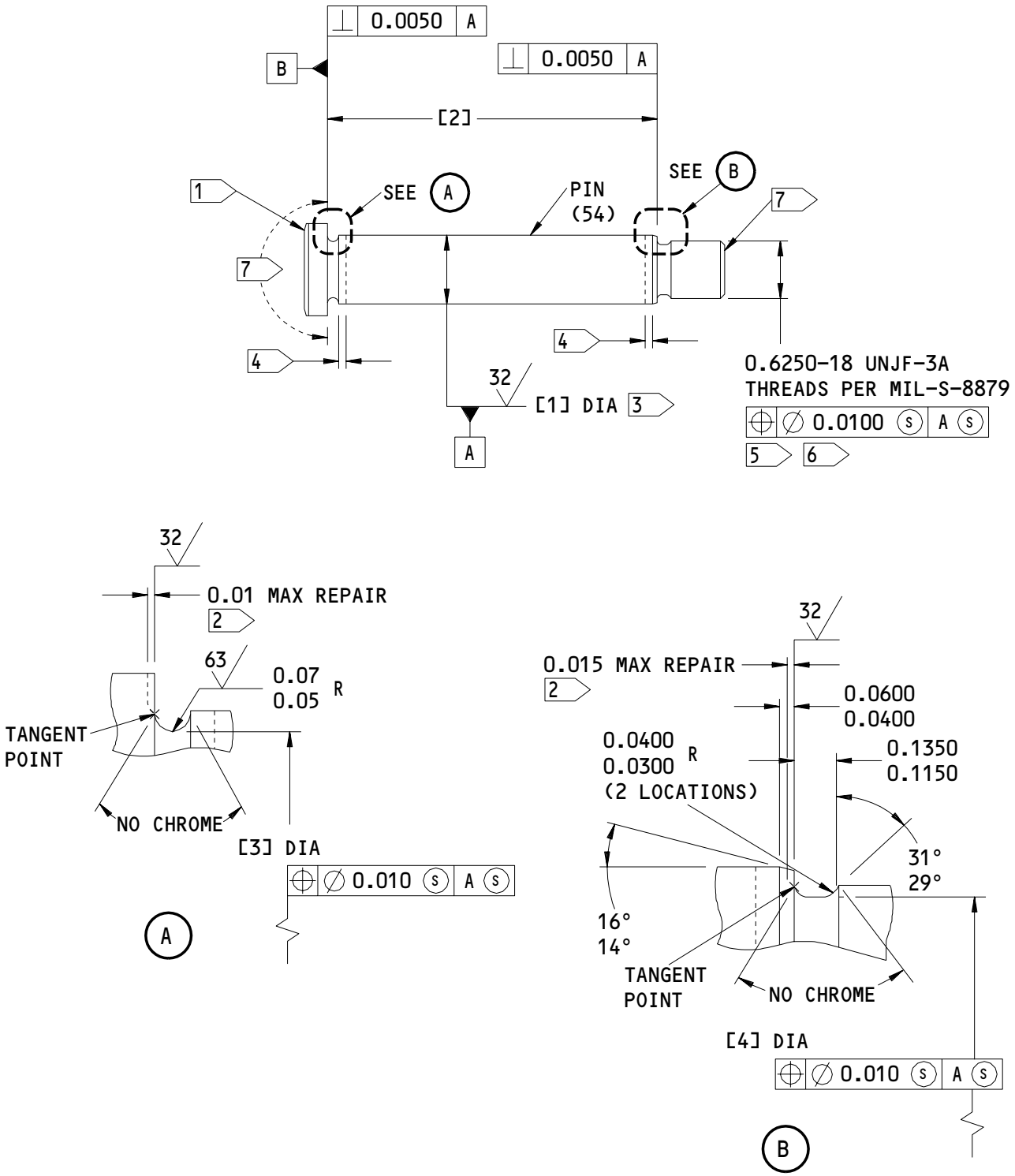
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

C. Procedure (Fig. 601, 602)

(1) Cadmium titanium plate (F-15.01), and apply primer (F-19.47), unless shown.



161T6122-1
Drag Strut Attach Pin Repair
Figure 601 (Sheet 1)

K82026

REFERENCE NUMBER	[1]	[2]	[3]	[4]
DESIGN DIMENSION	0.7490 0.7480	3.5522 3.5472	0.6050 0.5950	0.5440 0.5370
REPAIR LIMIT	0.7190 <2>	----	0.5750 <8>	0.5170 <8>

<1> PART NUMBER AND SERIAL NUMBER LOCATION

<2> LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

<3> CHROME PLATE (F-15.34) 0.003-0.015 THICK AFTER GRINDING. WIPE PLATING WITH PRIMER (F-19.451)

<4> CHROME PLATE RUNOUT AREA

<5> DO NOT SHOT PEEN

<6> CADMIUM-TITANIUM PLATE (F-15.32). WIPE THREADS WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

<7> CADMIUM-TITANIUM PLATE (F-15.01). APPLY PRIMER (F-19.47) AND ENAMEL (F-19.39-707)

<8> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<9> CHROME PLATE (F-15.34) 0.0025-0.0035 THICK. DO NOT GRIND. WIPE THE PLATING WITH PRIMER (F-19.451)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

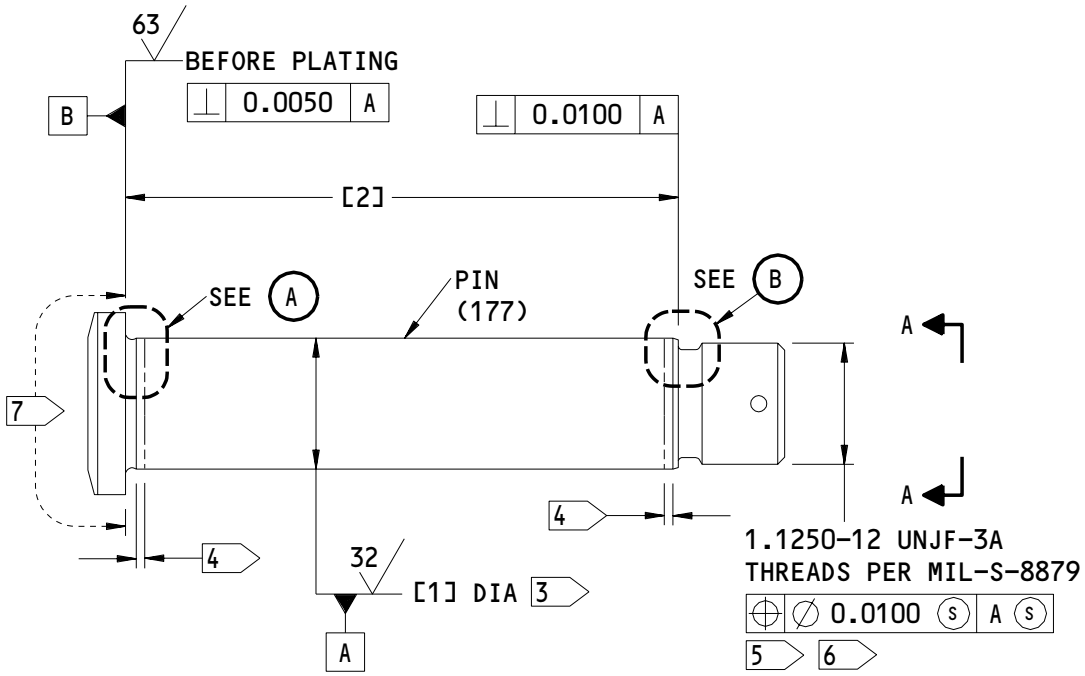
BREAK ALL SHARP EDGES

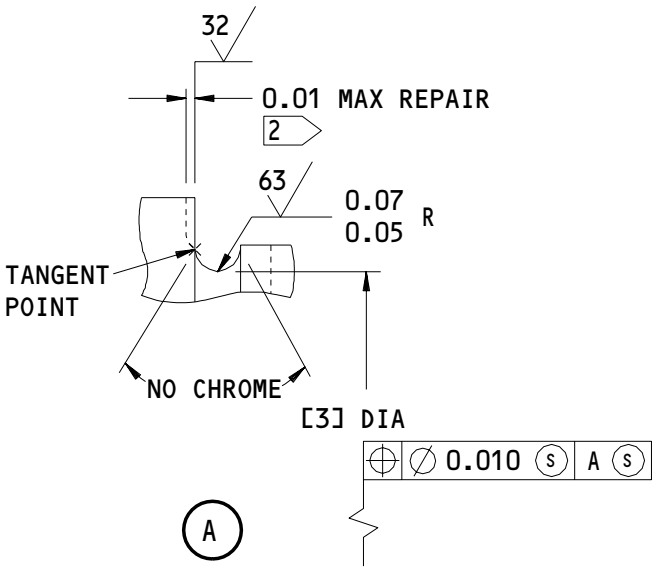
ITEM NUMBERS REFER TO IPL FIG. 1

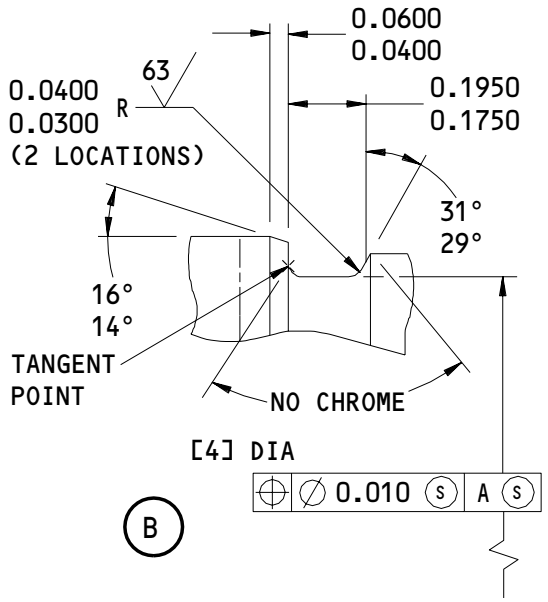
ALL DIMENSIONS ARE IN INCHES

161T6122-1
Drag Strut Attach Pin Repair
Figure 601 (Sheet 2)

K82595

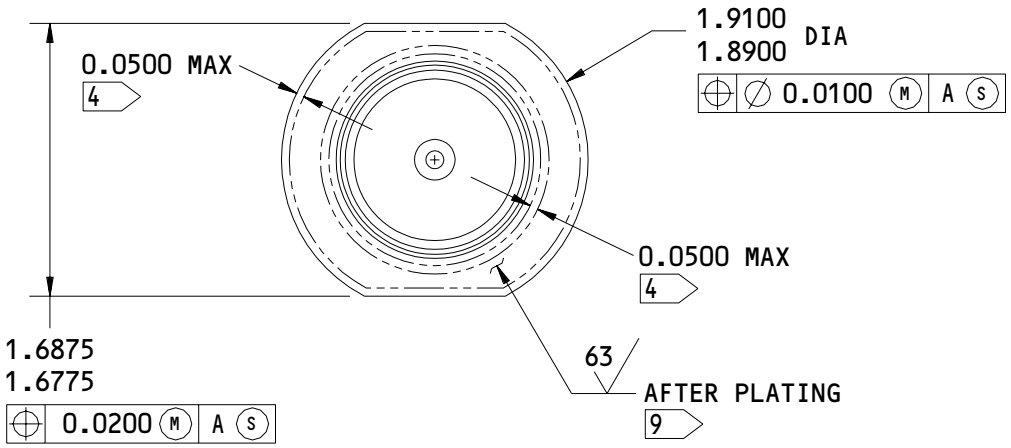






161T6122-2
Drag Strut Attach Pin Repair
Figure 602 (Sheet 1)

K82069



A–A

REFERENCE NUMBER	[1]	[2]	[3]	[4]
DESIGN DIMENSION	1.2190 1.2180	5.1200 5.1100	1.1900 1.1800	1.0050 0.9950
REPAIR LIMIT	1.1890 2	----	1.1600 8	0.9750 8

1 PART NUMBER AND SERIAL NUMBER LOCATION

2 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

3 CHROME PLATE (F-15.34) 0.003-0.015 THICK AFTER GRINDING. WIPE PLATING WITH PRIMER (F-19.451)

4 CHROME PLATE RUNOUT AREA

5 DO NOT SHOT PEEN

6 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THREADS WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

7 CADMIUM-TITANIUM PLATE (F-15.01). APPLY PRIMER (F-19.47) AND ENAMEL (F-19.39-707)

8 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

9 CHROME PLATE (F-15.34) 0.0025-0.0035 THICK. DO NOT GRIND. WIPE THE PLATING WITH PRIMER (F-19.451)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6122-2
Drag Strut Attach Pin Repair
Figure 602 (Sheet 2)

DRAG STRUT LOCK LINK SPINDLE ASSMBLY - REPAIR 10-1

161T6130-1

1. General

   A. This procedure has the necessary data to replace the bushings (234) and refinish the side strut lock link spindle assembly (231).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

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

   B. References

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

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

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

      (4) SOPM 20-60-03, Lubricants

      (5) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushings (234).

      (2) If you find defects on hole surfaces, refer to REPAIR 10-2 for repair instructions.

(3) Install replacement bushings with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(4) Machine the bushings to design dimensions and finish shown.

(5) Make sure the lubrication passage is not blocked. Apply BMS 3-33 grease at the lube fitting until grease comes out at the bushing inner diameter.

(6) Fillet seal the bushings with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

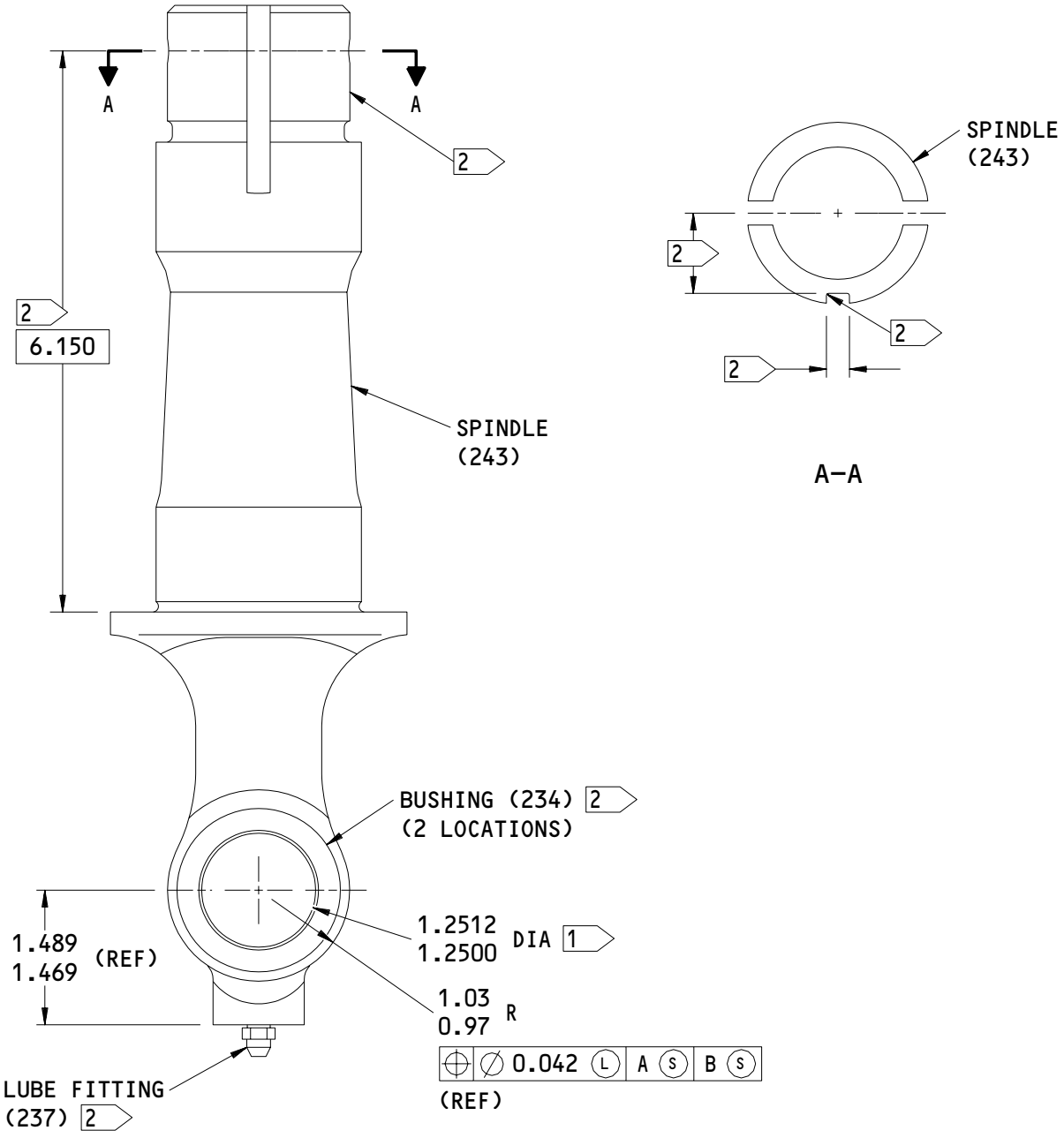
(1) SOPM 20-30-02, Stripping of Protective Finish

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

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

C. Procedure

(1) Apply BMS 10-60 enamel (F-19.39-707) to the external surface only, unless shown in Fig. 601. Do not apply enamel to the lubrication fitting, bushing inner diameters or flange faces.



1 ADJUST TO THIS DIMENSION, IF NECESSARY

2 NO ENAMEL THIS SURFACE

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6130-1
Drag Strut Lock Link Spindle Assembly Bushing Replacement and Refinish
Figure 601

DRAG STRUT LOCK LINK SPINDLE - REPAIR 10-2

161T6130-2

1. General

A. This procedure has the necessary data to repair and refinish the drag strut lock link spindle (243).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Spindle Repair

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

(5) SOPM 20-20-02, Penetrant Method of Inspection

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

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

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

(9) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(11) SOPM 20-42-05, Bright Cadmium Plating

(12) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(14) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Holes for Bushings.

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen the hole (SOPM 20-10-03).

(d) Cadmium-titanium plate (F-15.32), and apply BMS 10-79, type 3 primer (F-19.47) to the hole.

(e) Make oversize bushings (Fig. 602) to adjust for the material removed.

(f) Install the bushing as shown in REPAIR 10-1.

(2) Shank

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(3) Reliefs

(a) Machine as necessary within repair limits, to remove defects. Blend smoothly into the tangent points shown.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00308 Compound - MIL-C-11796 (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

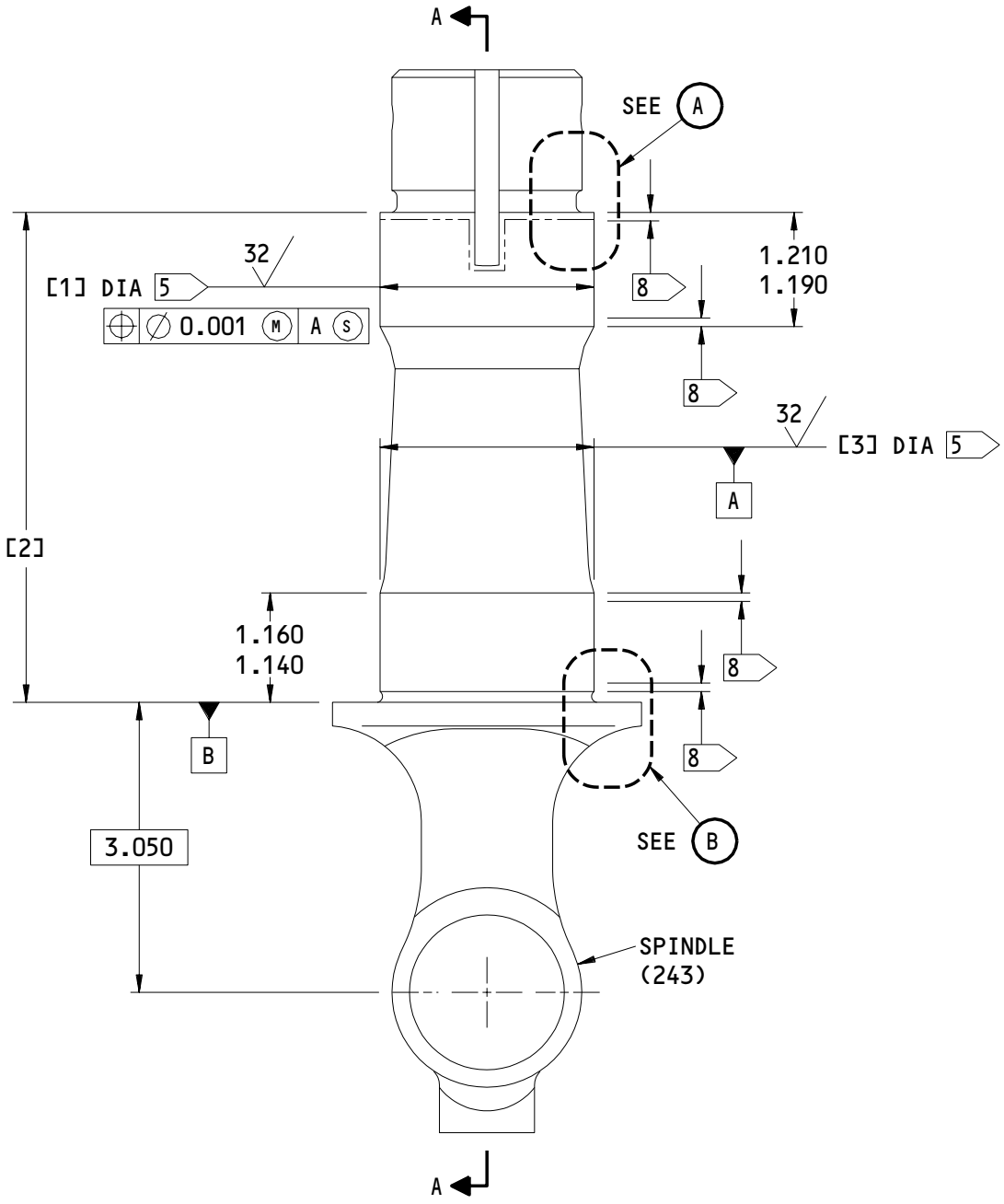
(5) SOPM 20-44-04, Application of Urethane Compatible Primer

(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

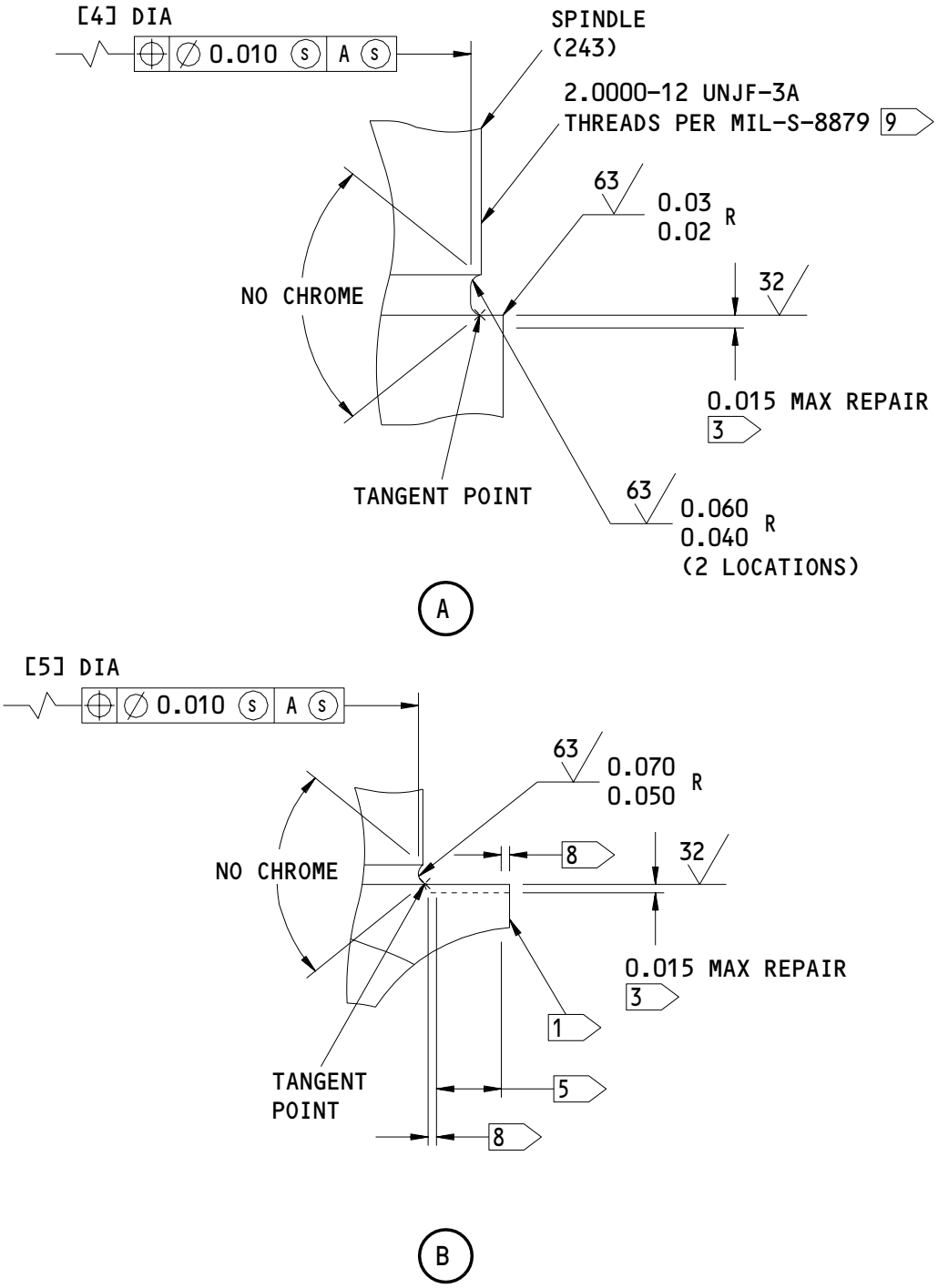
C. Procedure

(1) Cadmium titanium plate (F-15.01), and apply BMS 10-79, type 3 primer (F-19.66), unless shown in Fig. 601.



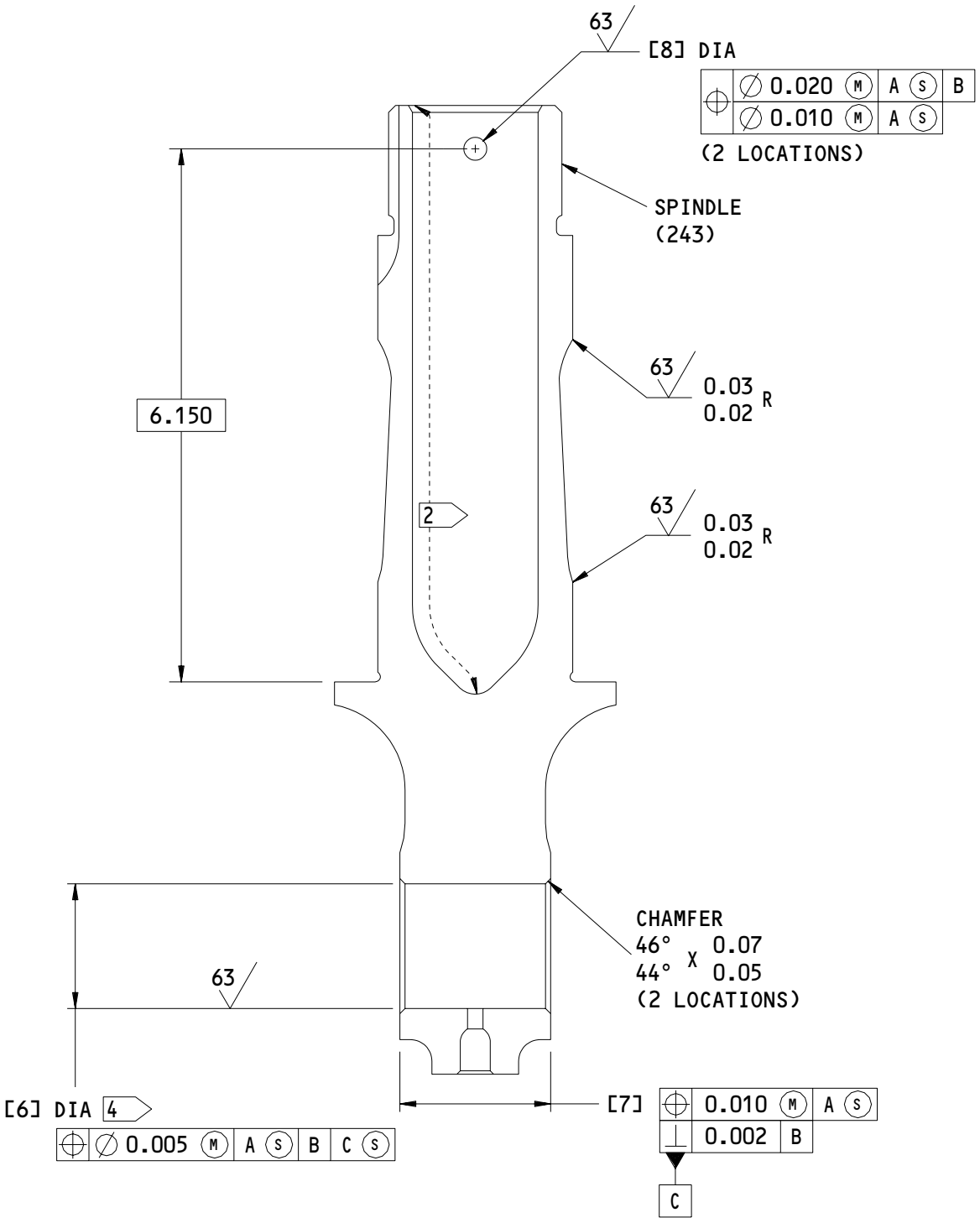
161T6130-2
Drag Strut Lock Link Spindle Repair
Figure 601 (Sheet 1)

K82614



161T6130-2
Drag Strut Lock Link Spindle Repair
Figure 601 (Sheet 2)

K82625



A–A

161T6130-2
Drag Strut Lock Link Spindle Repair
Figure 601 (Sheet 3)

K82633

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	2.249 2.248	5.155 5.145	2.249 2.248	1.880 1.870	2.204 2.184	1.4394 1.4380	1.742 1.737	0.267 0.260
REPAIR LIMIT	2.218 3	----	2.218 3	1.850 6	2.164 6	1.4994 7	----	----

1 PART NUMBER AND SERIAL NUMBER LOCATION

2 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

3 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

4 CADMIUM-TITANIUM PLATE (F-15.32). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

5 CHROME PLATE (F-15.34) 0.003-0.015 THICK. WIPE THE PLATING WITH PRIMER (F-19.451)

6 RESTORATION TO DESIGN DIMENSION NOT REQUIRED

7 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

8 CHROME PLATE RUNOUT AREA

9 CADMIUM-TITANUM PLATE (F-15.32). WIPE PLATING WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

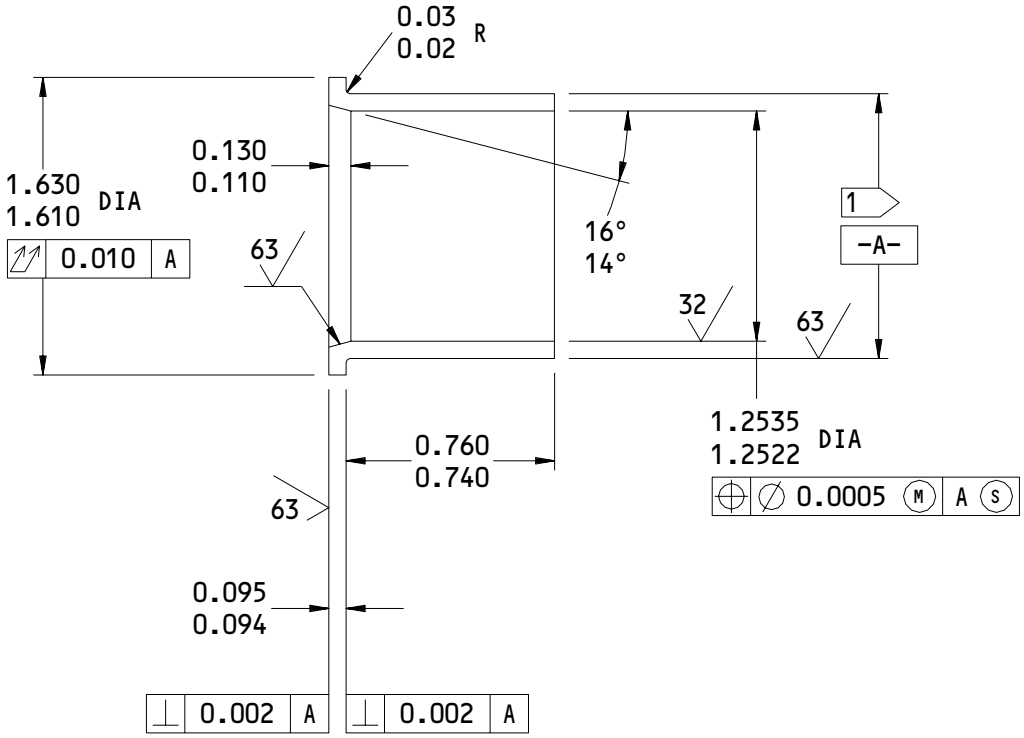
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T6130-2
Drag Strut Lock Link Spindle Repair
Figure 601 (Sheet 4)

K82634



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0005–0.0030

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL–NI–BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F–15.06)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [7] FIG. 601 – REPLACES BUSHING (234)

Oversize Bushing Details
Figure 602

K82635

TORSION LINK ATTACH PIN - REPAIR 11-1

161T7125-1, -2

1. General

A. This procedure has the necessary data to repair and refinish the torsion link attach pin (357, 414).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Pin Repair

A. The application of thermal spray (F-15.384) is used for the original manufacture of the pin (357, 414). Repair of worn thermal spray areas will be limited to those procedures given in the repair section of this repair.

B. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

C. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

(7) SOPM 20-41-01, Decoding of Boeing Finish Codes

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

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

(10) SOPM 20-60-04, Miscellaneous Materials

D. Procedure (Fig. 01, 602)

(1) Shank

(a) Machine as necessary within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) For the outside diameter, shot peen, chrome plate and grind to design dimensions and finish.

(d) For the inside diameter, refinish only, as shown in the Refinish section below.

(2) Reliefs

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points shown.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(3) C00308 Compound - MIL-C11796 Corrosion Preventive (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

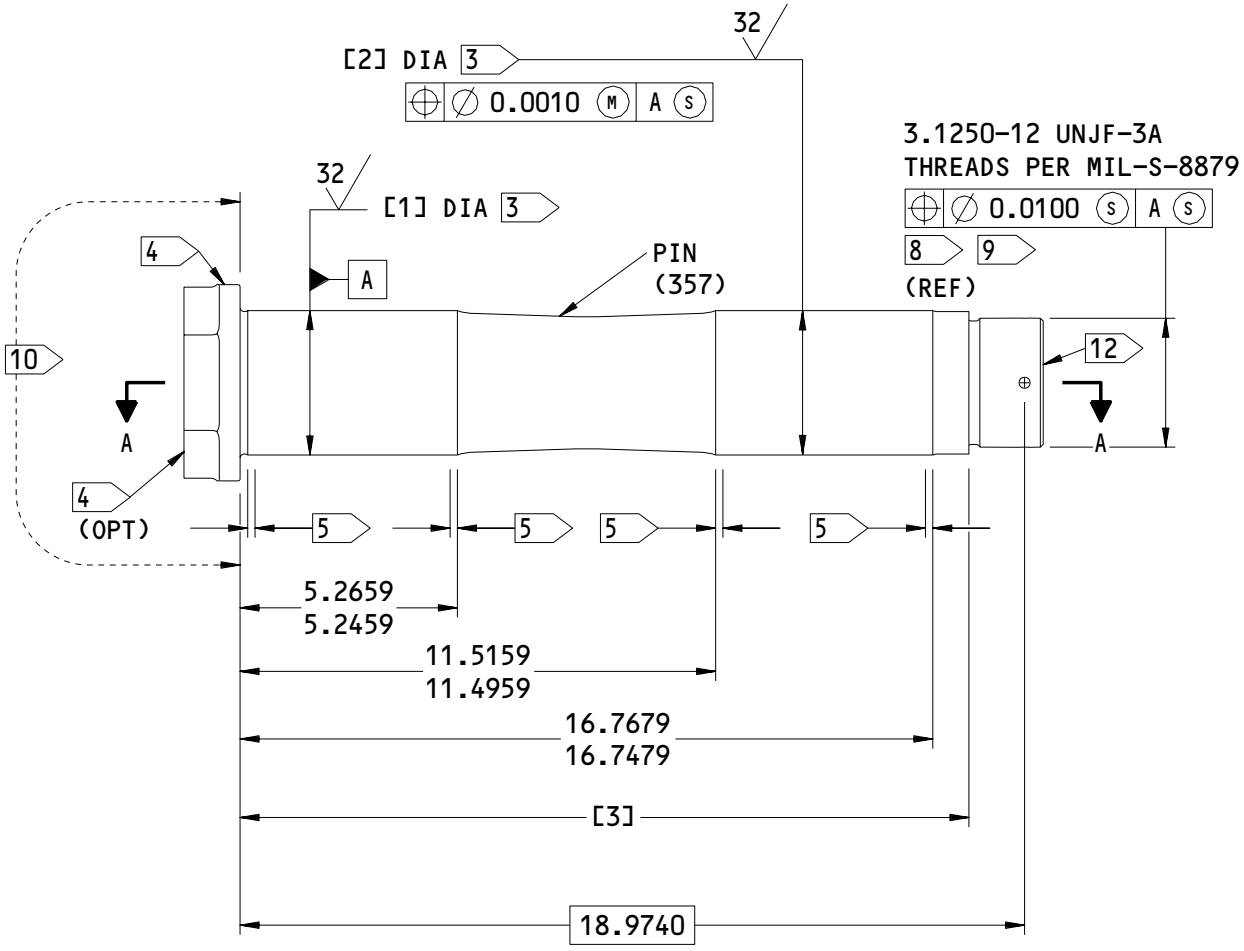
(5) SOPM 20-44-04, Application of Urethane Compatible Primer

(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

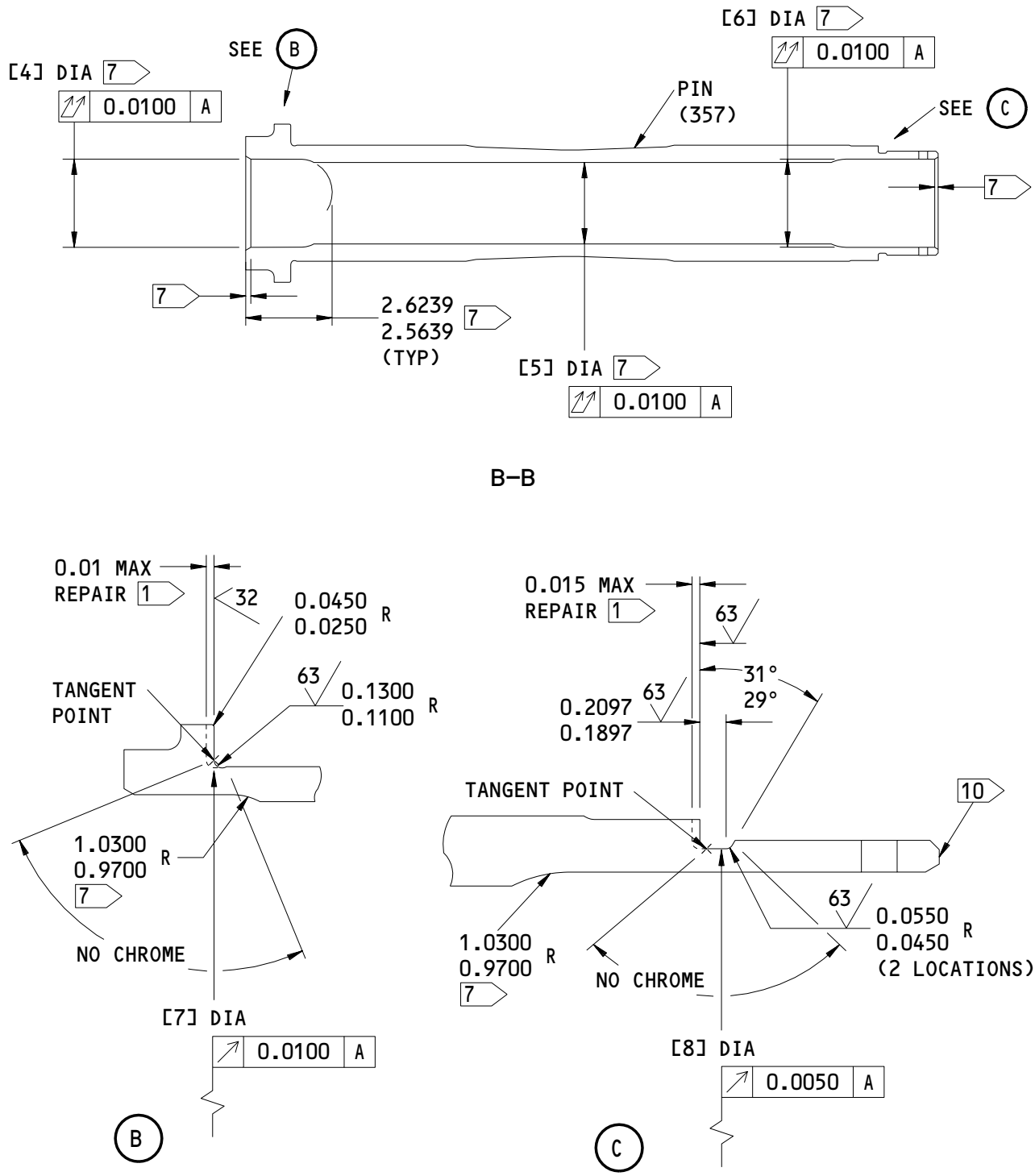
C. Procedure (Fig. 601, 602)

(1) Cadmium titanium plate (F-15.01). Apply primer (F-19.66), unless shown.



161T7125-1
Torsion Link Attach Pin Repair
Figure 601 (Sheet 1)

K84509



161T7125-1
Torsion Link Attach Pin Repair
Figure 601 (Sheet 2)

K84777

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	3.4990 3.4980	3.4990 3.4980	17.6375 17.6175	2.6600 2.6400	2.4500 2.4300	2.6600 2.6400	3.4555 3.4455	3.0050 2.9950
REPAIR LIMIT	3.4690 <1>	3.4690 <1>	----	2.6200 <2>	2.4100 <2>	2.6200 <2>	3.4255 <2>	2.9750 <2>

<1> LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

<2> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<3> THERMAL SPRAY AREA (F-15.384) 0.003 INCH MINIMUM

<4> PART NUMBER AND SERIAL NUMBER LOCATION

<5> CHROME PLATE RUNOUT AREA

<6> THERMAL SPRAY AREA (F-15.384) 0.003-0.005 INCH THICK

<7> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

<8> CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

<9> DO NOT SHOT PEEN

<10> CADMIUM-TITANIUM PLATE (F-15.01). PLUS APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) PLUS APPLY ENAMEL (F-19.39-707)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

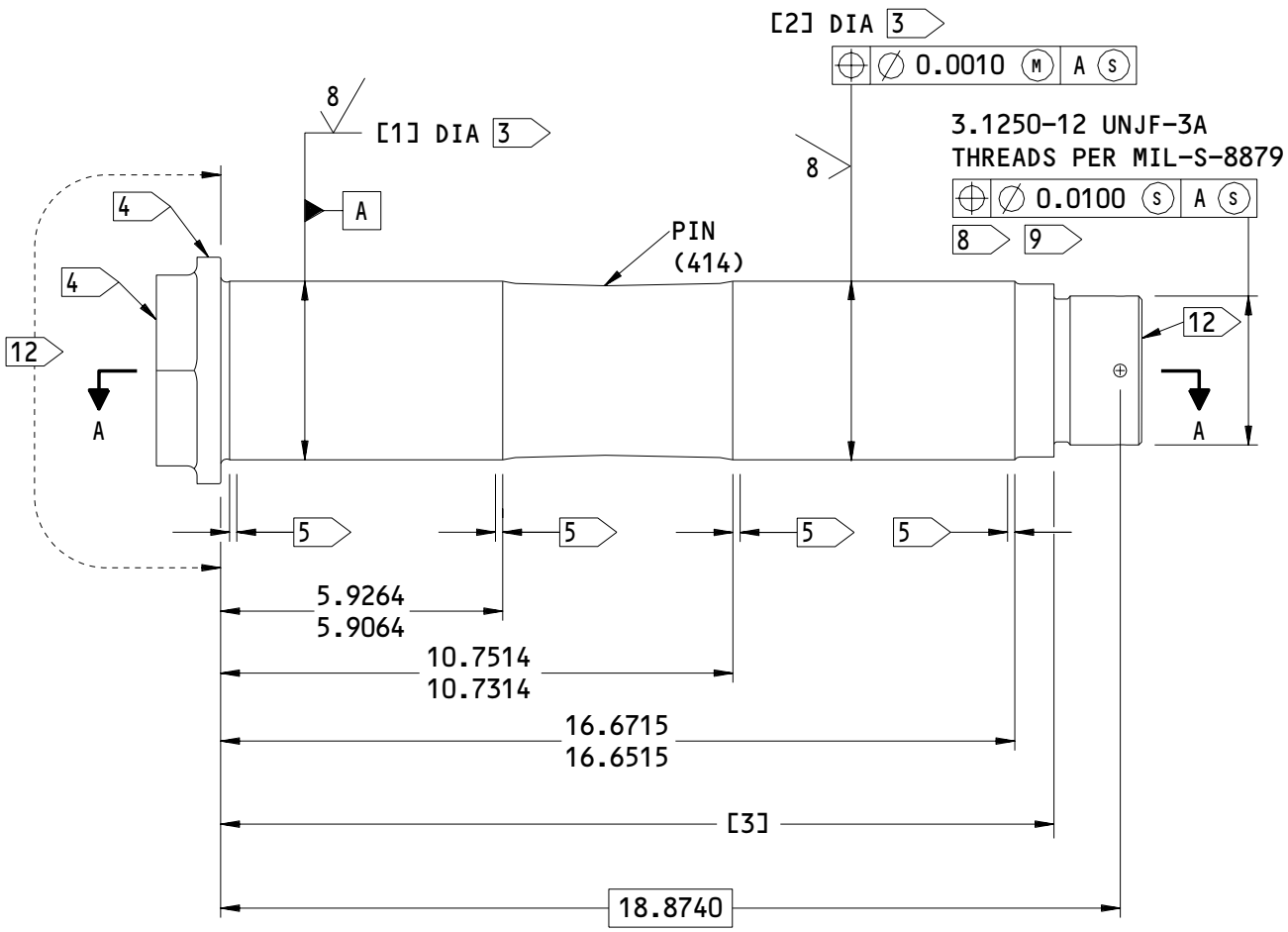
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

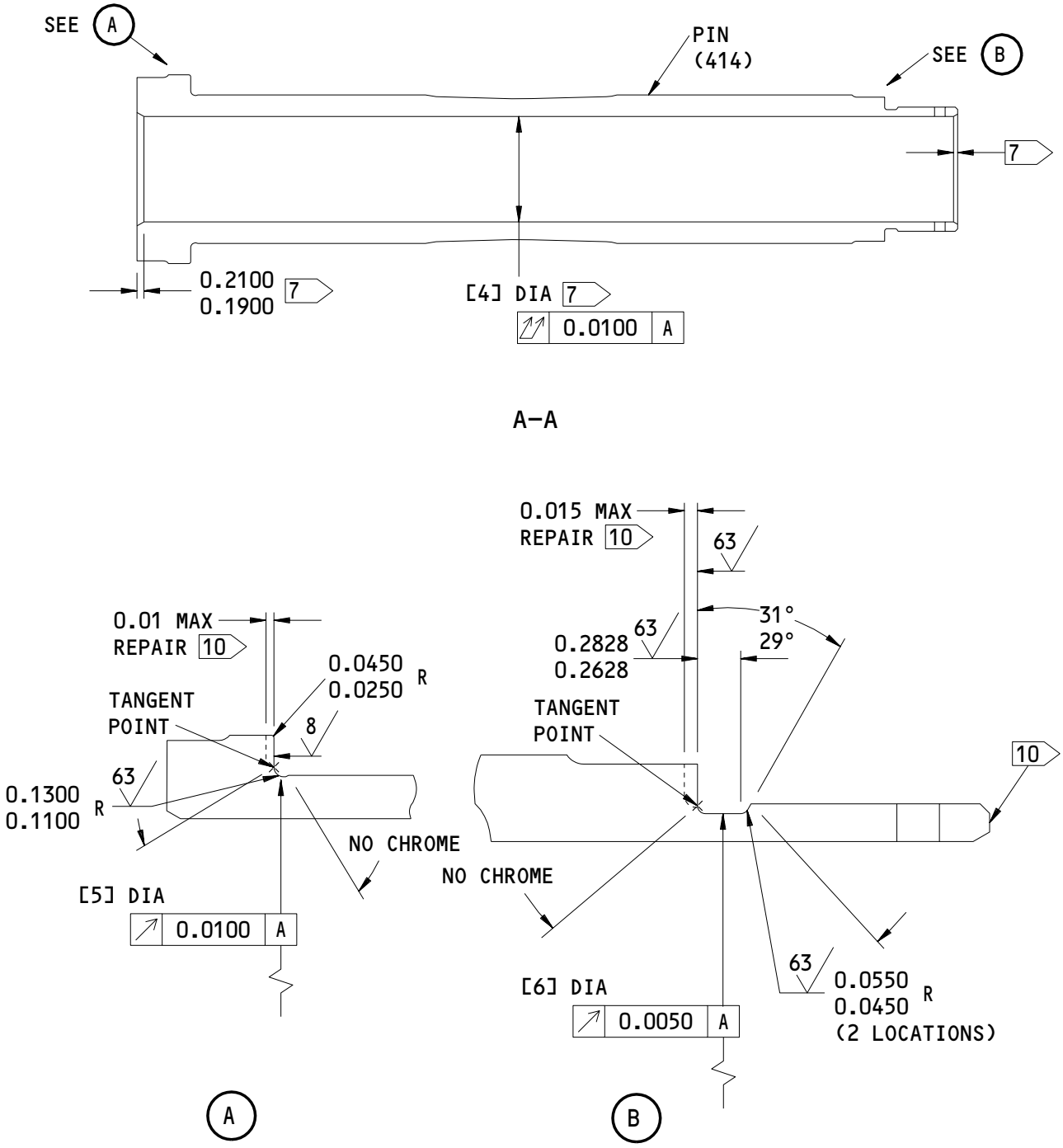
161T7125-1
Torsion Link Attach Pin Repair
Figure 601 (Sheet 3)

K84796



161T7125-2
Torsion Link Attach Pin Repair
Figure 602 (Sheet 1)

K84858



161T7125-2
Torsion Link Attach Pin Repair
Figure 602 (Sheet 2)

K84993

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	3.7490 3.7480	3.7490 3.7480	17.4940 17.4740	2.6600 2.6400	3.7055 3.6955	3.0050 3.9950
REPAIR LIMIT	3.7190 <1>	3.7190 <1>	----	2.6200 <2>	3.6755 <2>	2.9750 <2>

<1> LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

<2> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<3> THERMAL SPRAY AREA (F-15.384) 0.003 MINIMUM

<4> PART NUMBER AND SERIAL NUMBER LOCATION

<5> CHROME PLATE RUNOUT AREA

<6> THERMAL SPRAY AREA (F-15.384) 0.003-0.005 INCH THICK

<7> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

<8> CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING

<9> DO NOT SHOT PEEN

<10> CADMIUM-TITANIUM PLATE (F-15.01). PLUS APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) PLUS APPLY ENAMEL (F-19.39-707)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7125-2
Torsion Link Attach Pin Repair
Figure 602 (Sheet 3)

K84994

TRUCK BEAM ASSEMBLY - REPAIR 12-1

161T7130-1

1. General

A. This procedure has the necessary data to replace the bushings (513, 516, 519, 522, 525, 528, 531) and refinish the truck beam assembly (510).

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

(2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

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

B. References

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

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

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

(4) SOPM 20-60-03, Lubricants

(5) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Remove the bushings (513, 516, 519, 522, 525, 528, 531).

(2) If you find defects on hole surfaces, refer to REPAIR 12-2 for repair instructions.

(3) Install replacement bushings (513, 516, 519, 522, 525, 528, 531) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(4) Machine the inside diameter of the bushings (513, 516, 519, 522, 525, 528, 531) to design dimensions and finish.

(5) For the bushings (531), make sure the lubrication passage are not blocked. Apply BMS 3-33 grease at the lube fittings until grease comes out at the bushing inner diameter.

(6) Fillet seal the bushings (513, 516, 519, 522, 525) with BMS 5-95 sealant. Bushings (528, 531) are not fillet sealed because the mating bores of the truck beam are chrome plated.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) BOO571 Coating - Hydraulic Fluid Resistant, Type 41 (SOPM 20-44-01)

(2) COO033 Enamel - BMS 10-60, Type 2, 701 Black (SOPM 20-60-02)

(3) COO033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

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

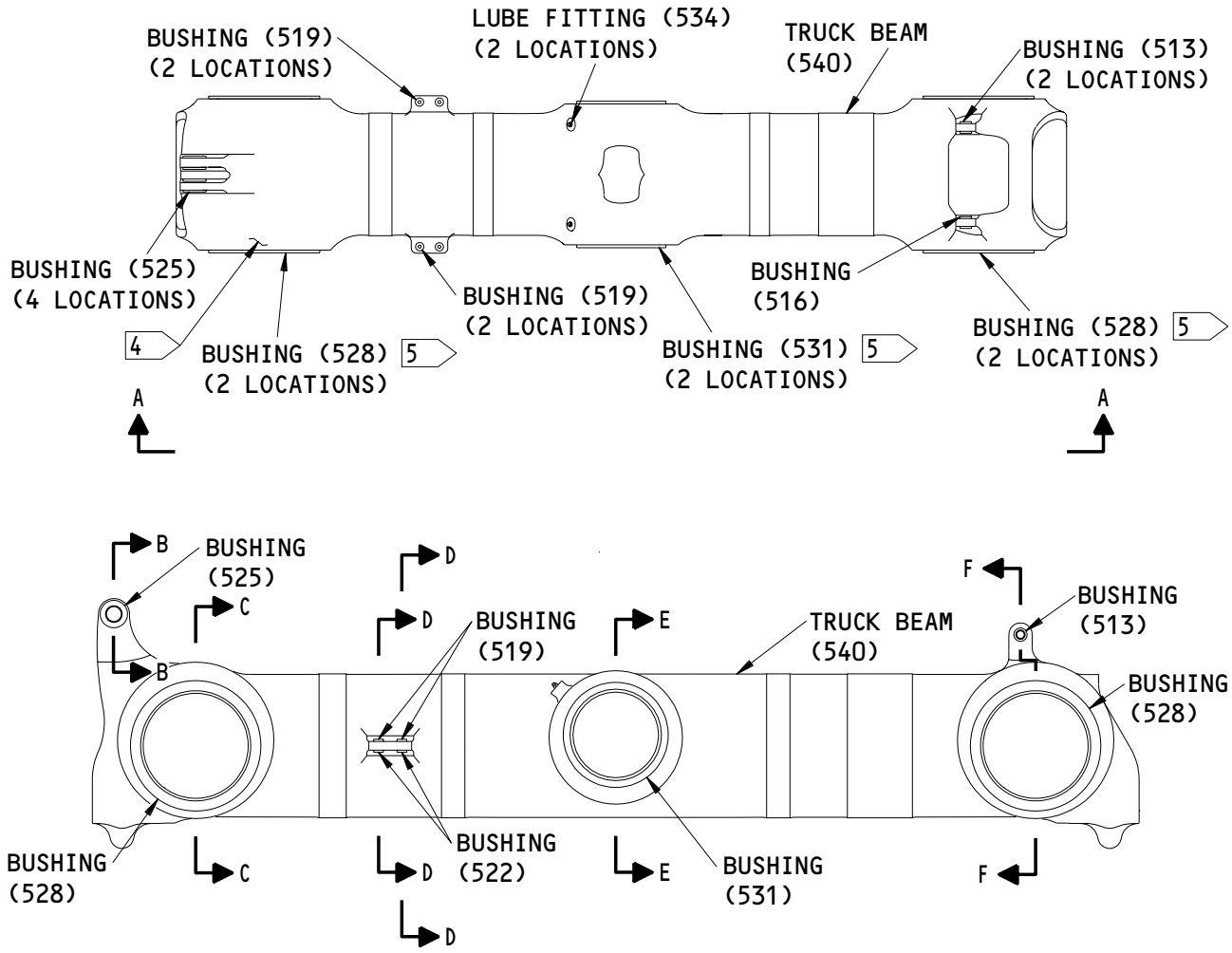
C. Procedure (Fig. 601)

(1) Apply BMS 10-60, type 2, enamel (F-20.56) to the external surfaces, unless shown. Do not apply enamel to the lubrication fittings, bushing inner diameters and flange faces.

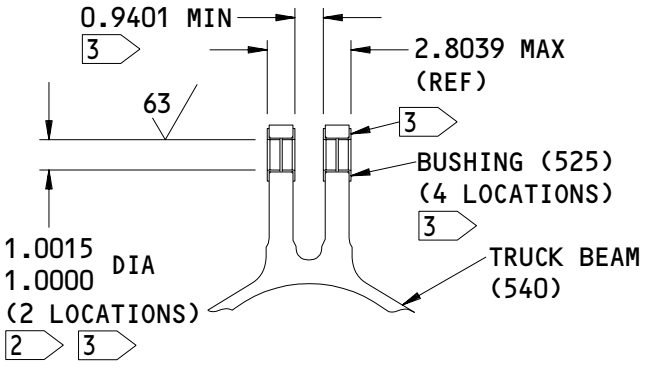
(2) Do not apply enamel (F-20.56) in the part mark area shown. The part mark area must be finished as follows:

(a) Make sure the part number and serial number are visible.

(b) Apply BMS 10-60 enamel (F-19.39-707) and let dry. Then, apply a coat of BMS 10-60 enamel (F-19.39-701) to the identification numbers only and let dry. Apply to the area type 41 clear coating (F-21.34) to a thickness equivalent to the adjacent enamel area.

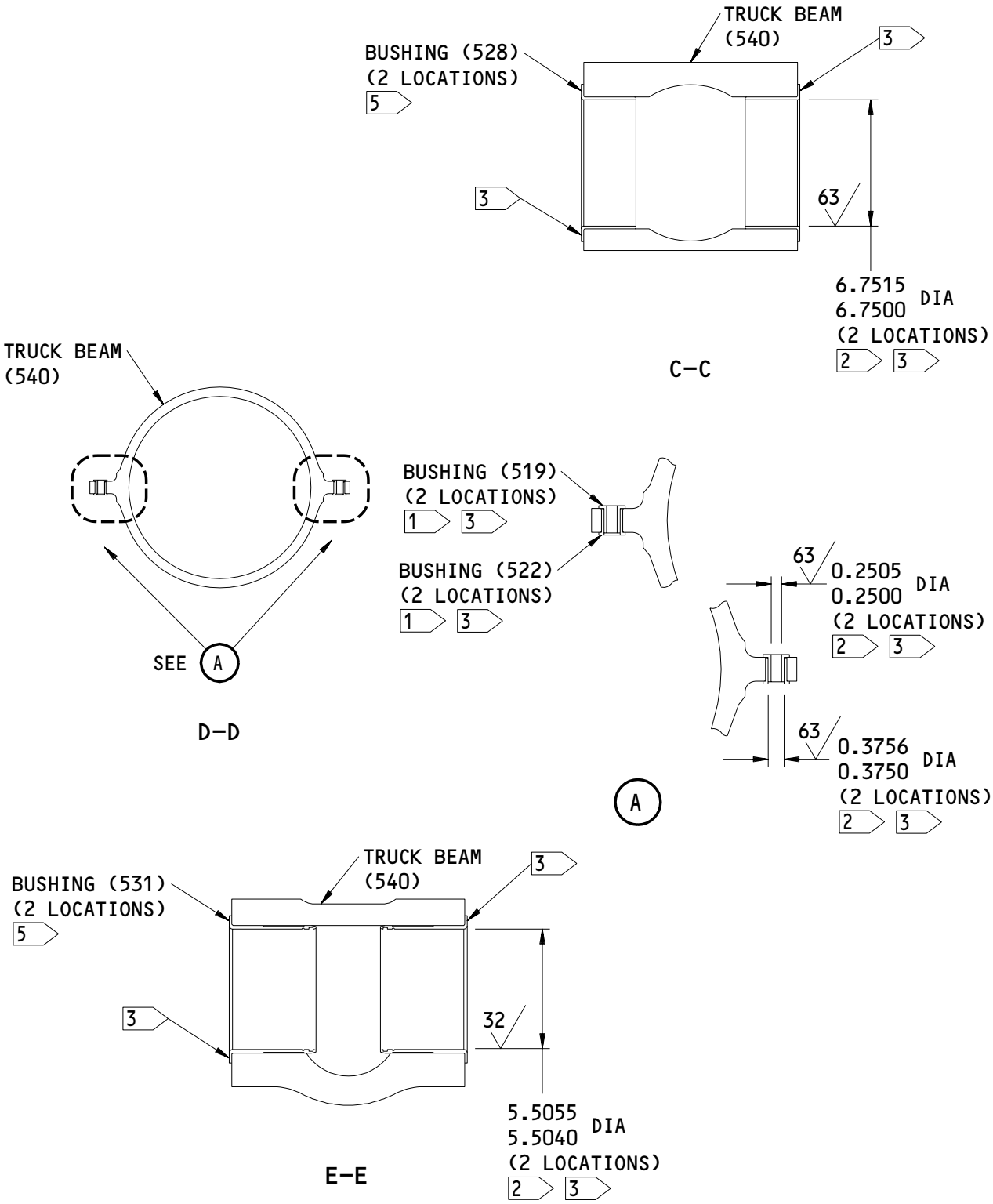


A–A



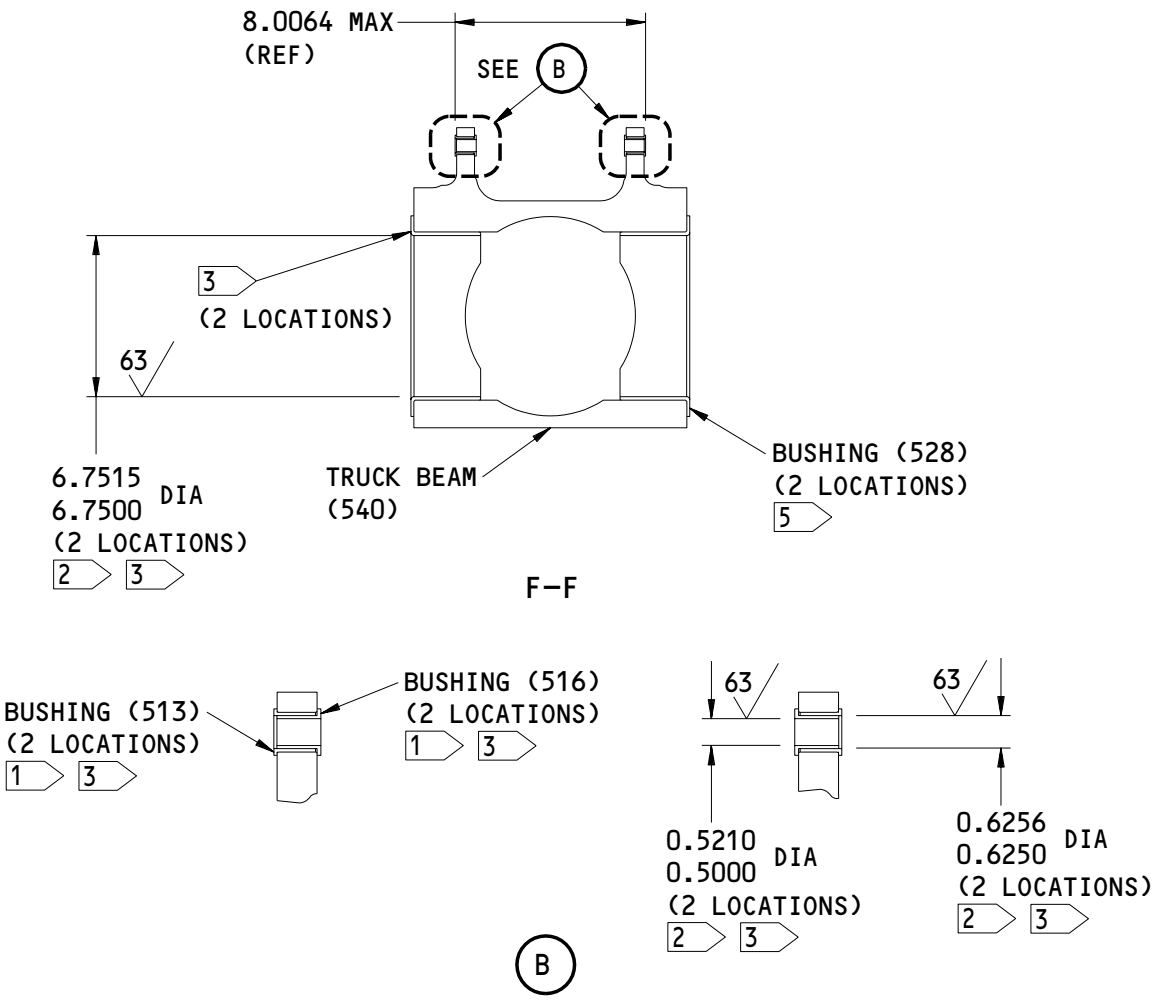
B–B

161T7130-1
Truck Beam Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)



161T7130-1
Truck Beam Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

K91815



1 INSTALLATION DIRECTION OF NESTED BUSHINGS OPTIONAL

2 ADJUST TO THIS DIMENSION, IF NECESSARY

3 NO ENAMEL THIS SURFACE

4 NO ENAMEL (F-20.56) ON PART MARK AREA. REFER TO REFINISH TEXT

5 THE GAP BETWEEN THE BUSHING FLANGE AND THE CHROME PLATED SURFACE MUST BE 0.0010 INCH MAXIMUM AND MUST BE FILLED WITH BMS 3-27 COMPOUND

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7130-1
Truck Beam Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 3)

K91830

TRUCK BEAM - REPAIR 12-2

161T7130-2

1. General

A. This procedure has the necessary data to repair and refinish the truck beam (540).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Holes for Bushings

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) C00308 Compound - MIL-C-11796 (SOPM 20-60-02)

(3) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

(5) SOPM 20-20-02, Penetrant Method of Inspection

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

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

(8) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(9) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(11) SOPM 20-42-05, Bright Cadmium Plating

(12) SOPM 20-42-10, Low Hydrogen Embrittlement Stylus Cadmium Plating

(13) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(15) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a magnetic particle check (SOPM 20-20-01).

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

(4) Chrome plate and cadmium plate as shown.

(5) Make oversize bushings (Fig. 602 and on) to adjust for the material removed.

(6) Install the bushings as shown in REPAIR 12-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) C00308 Compound - MIL-C-11796 Corrosion Preventive (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(5) SOPM 20-44-04, Application of Urethane Compatible Primer

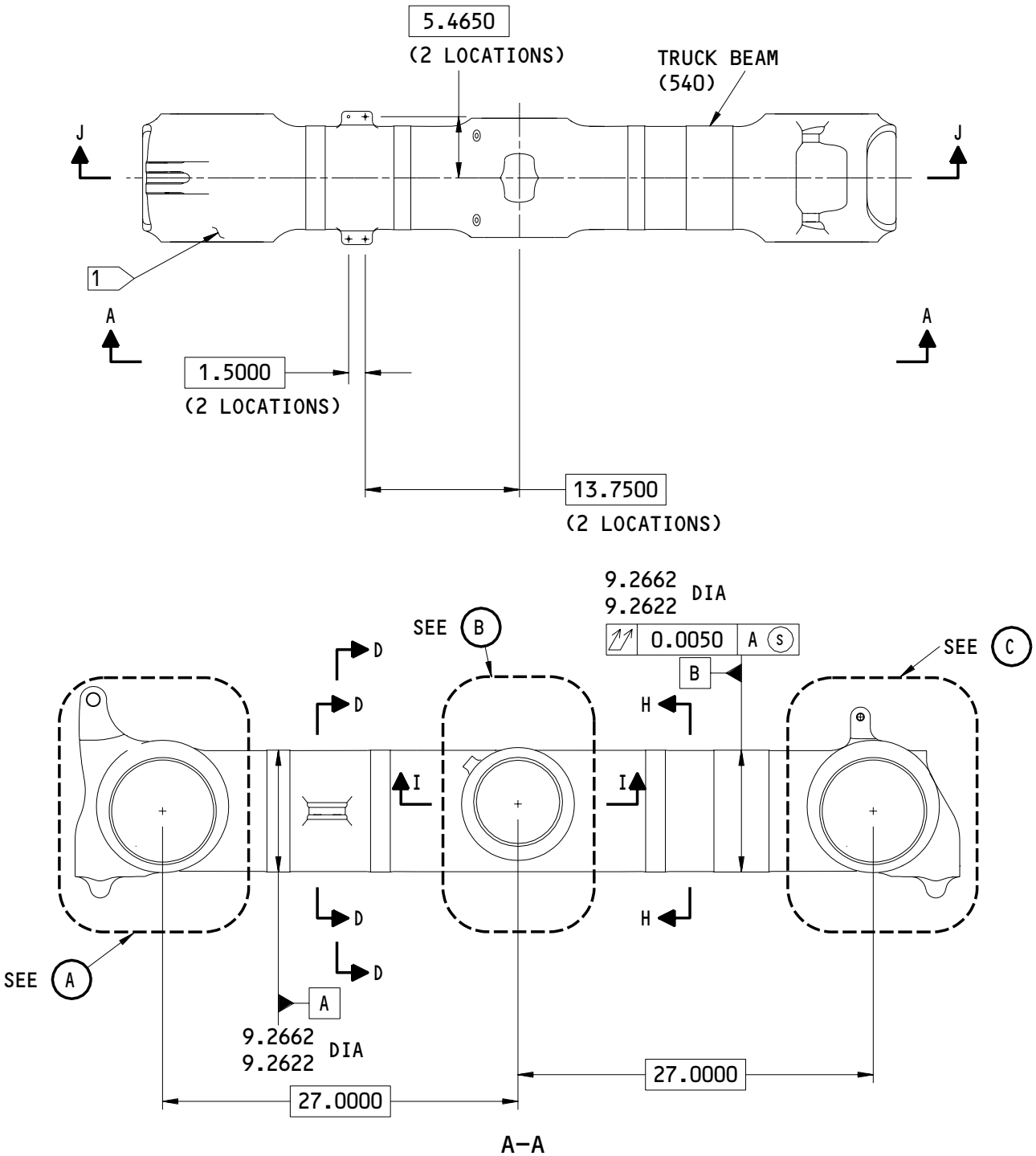
(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

C. Procedure

(1) Cadmium titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.66), unless shown in Fig. 601.

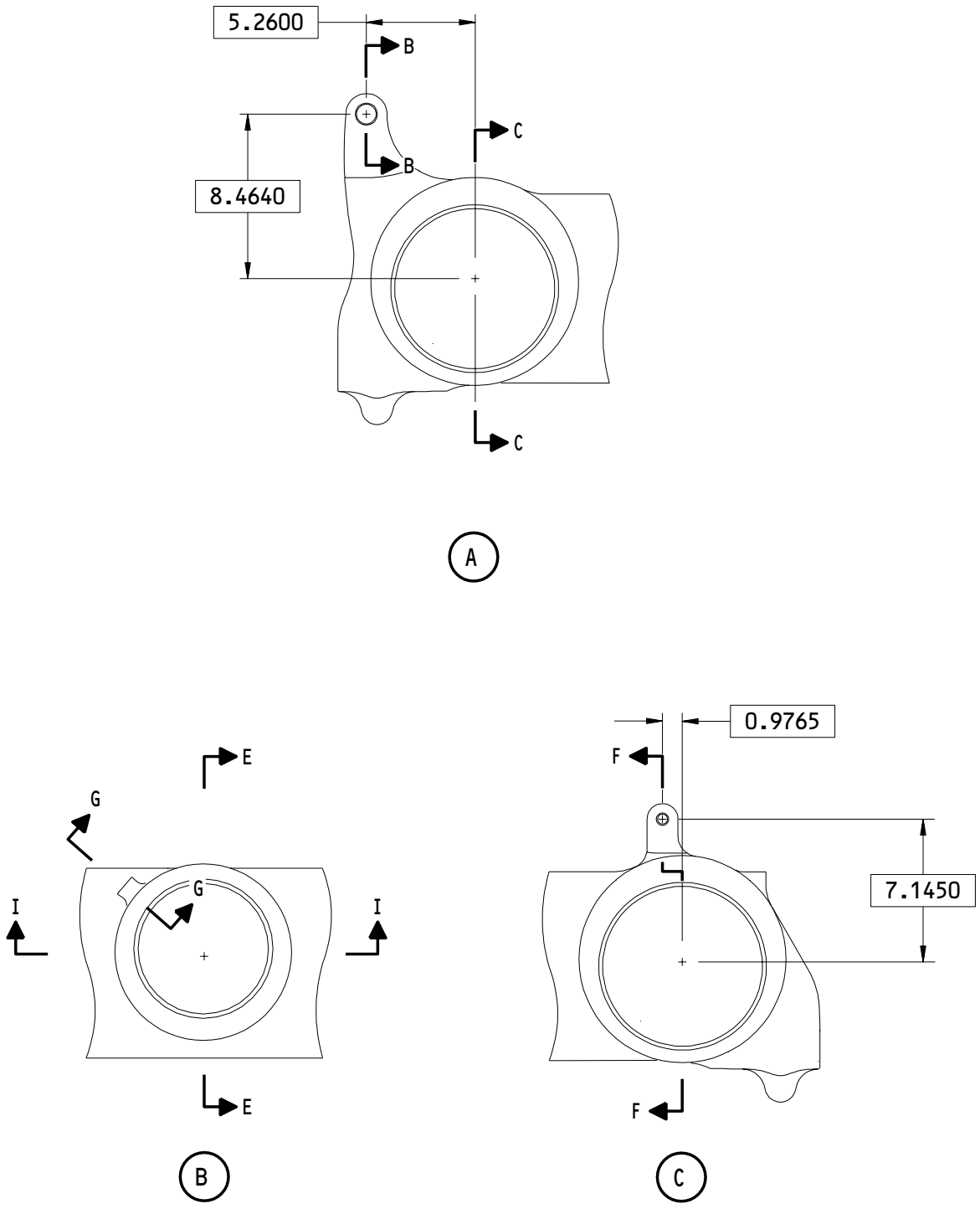
(2) Make sure that the part number is visible after repair and refinish procedures. If necessary, repair the markings (REPAIR 12-1).



A–A

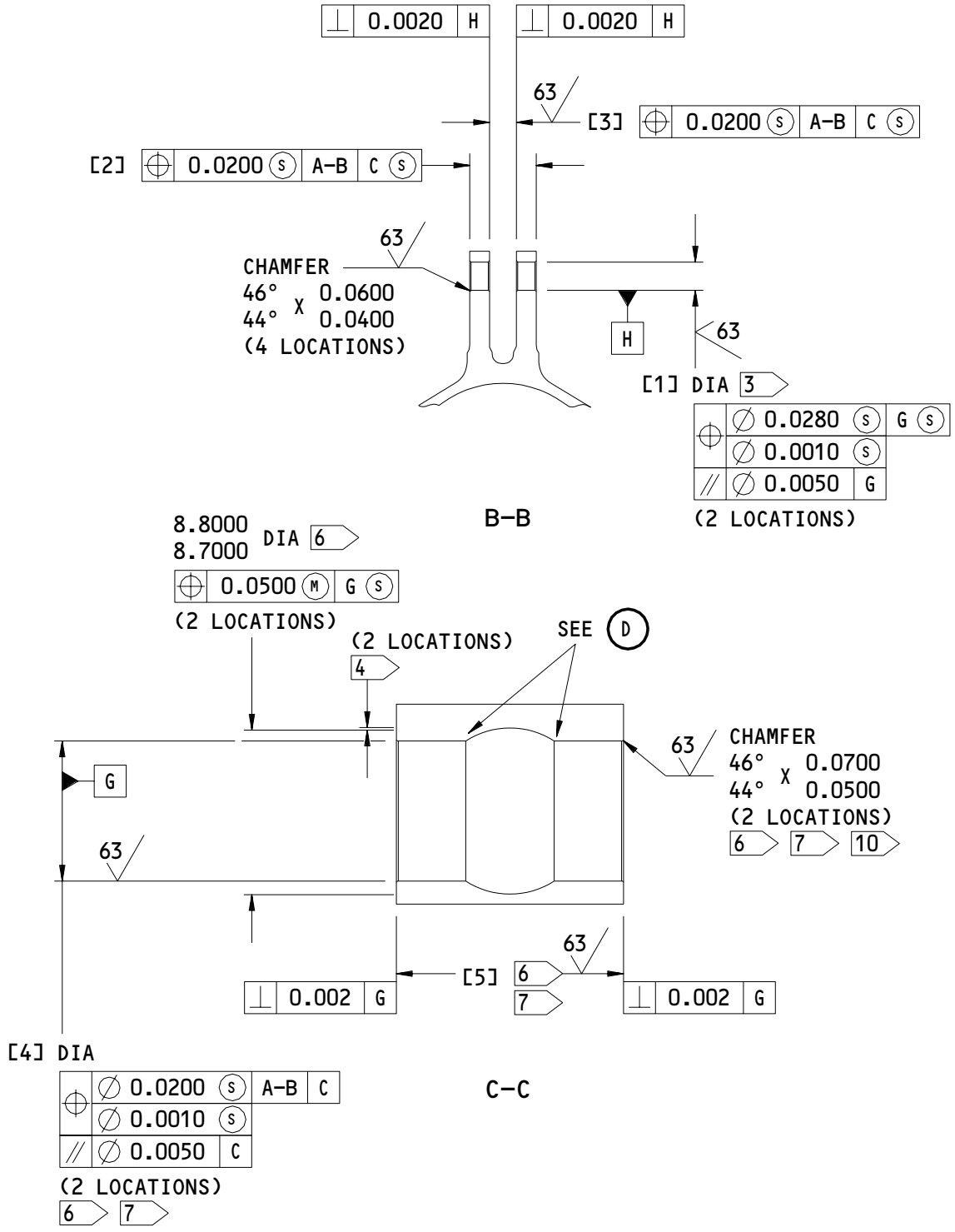
161T7130-2
Truck Beam Repair
Figure 601 (Sheet 1)

K92274



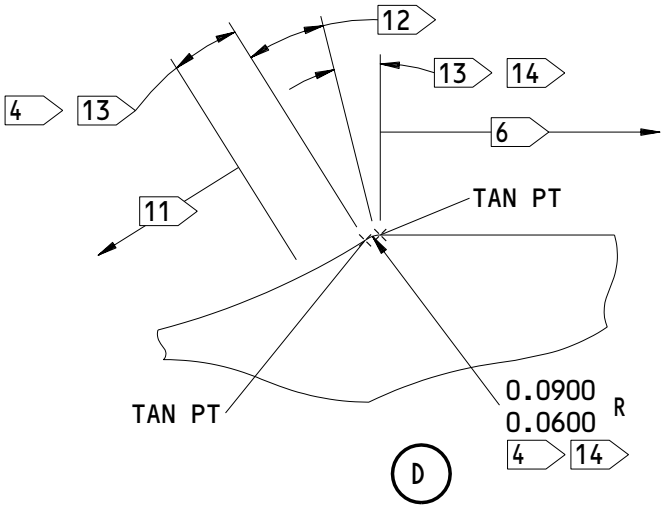
161T7130-2
Truck Beam Repair
Figure 601 (Sheet 2)

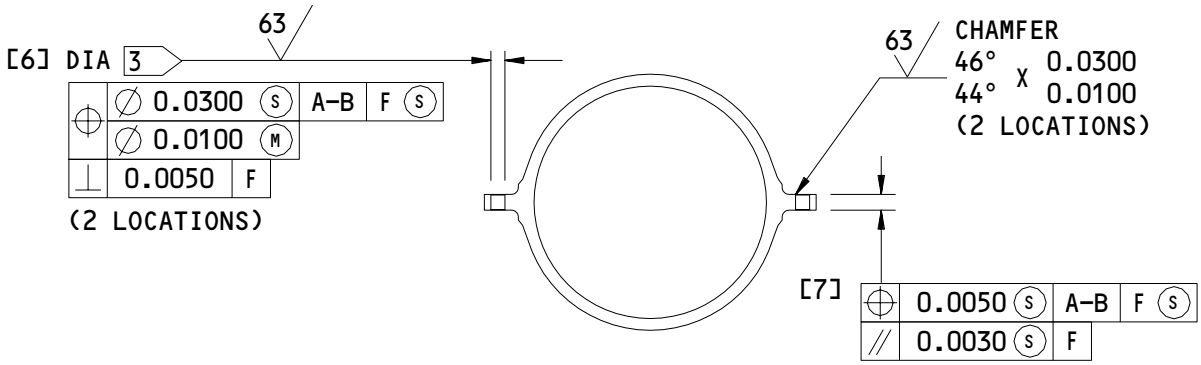
K92683



161T7130-2
Truck Beam Repair
Figure 601 (Sheet 3)

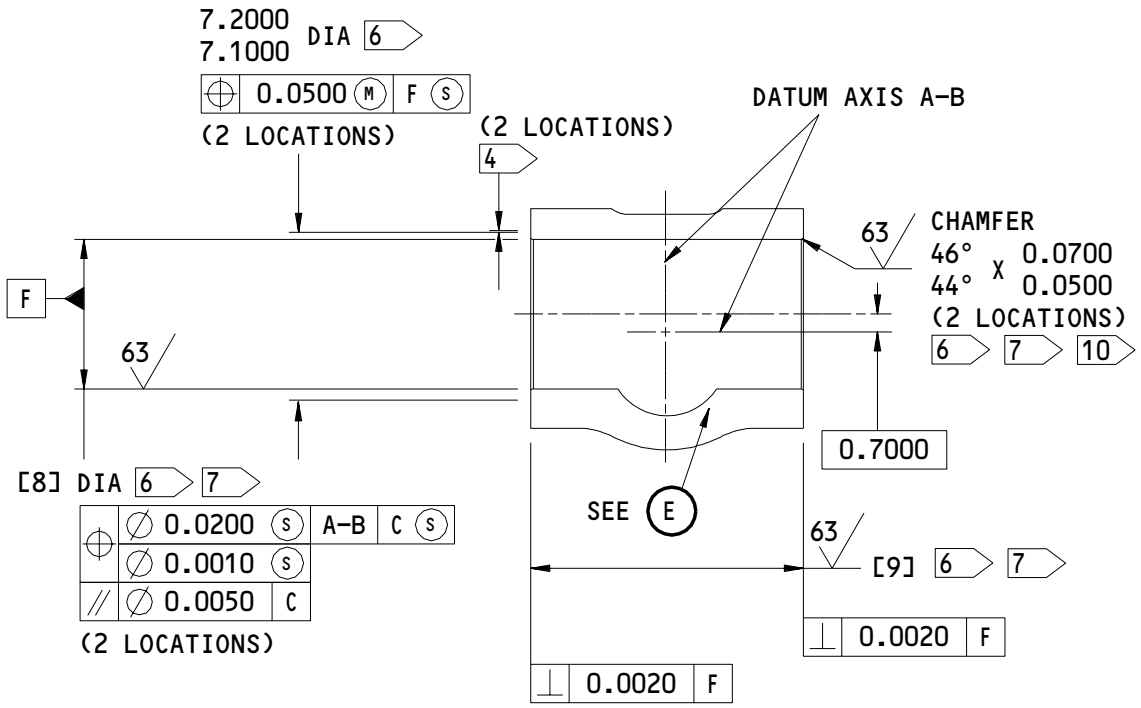
K94882



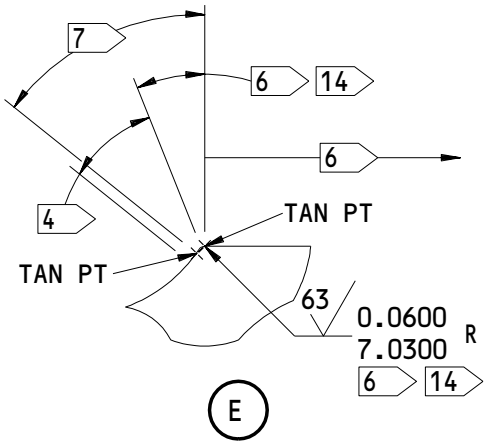


D–D

161T7130-2
Truck Beam Repair
Figure 601 (Sheet 4)

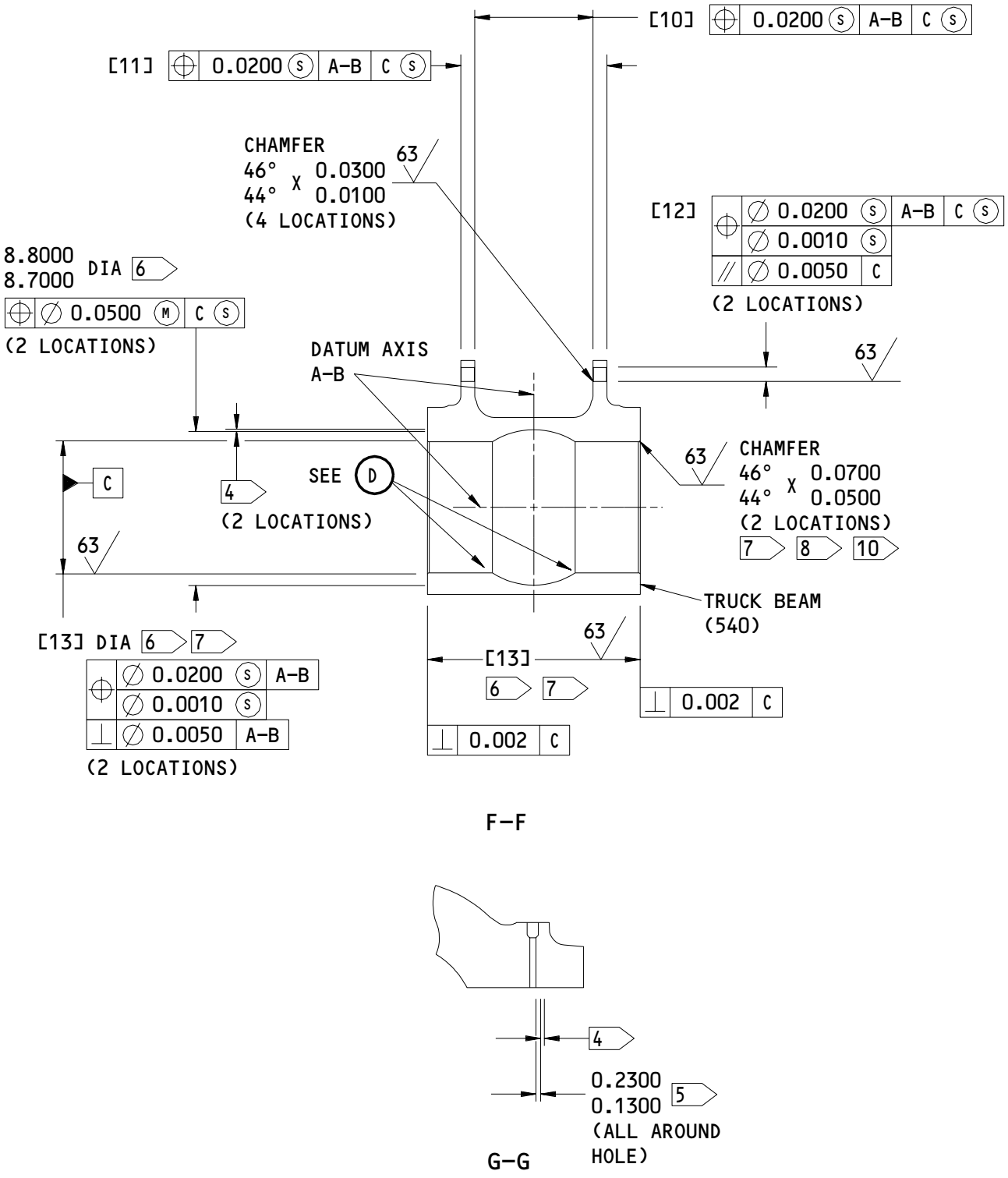


E-E



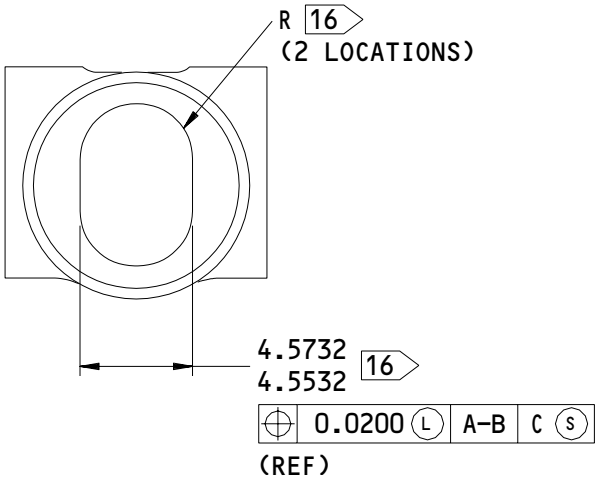
161T7130-2
Truck Beam Repair
Figure 601 (Sheet 5)

K95159

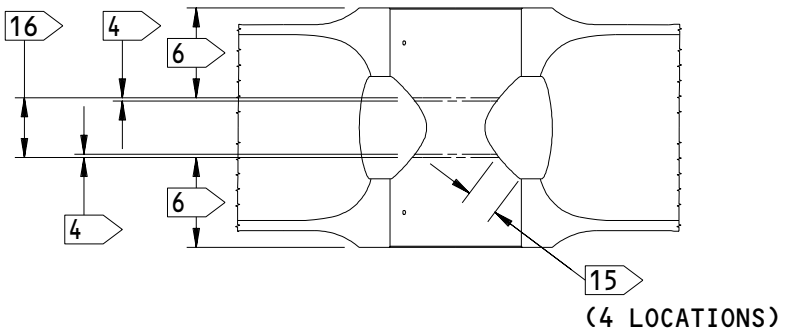


161T7130-2
Truck Beam Repair
Figure 601 (Sheet 6)

K95161



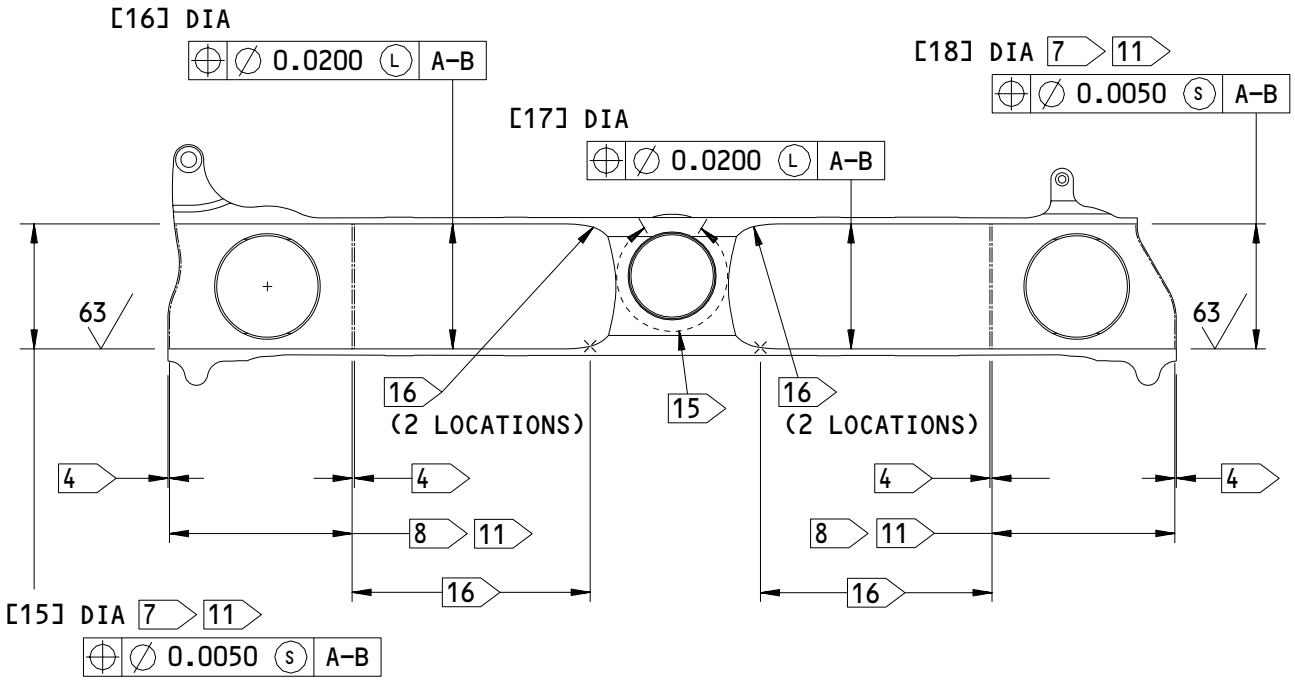
H–H



I–I

161T7130-2
Truck Beam Repair
Figure 601 (Sheet 7)

K95471



J–J

161T7130-2
Truck Beam Repair
Figure 601 (Sheet 8)

K95498

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	1.1270 1.1260	2.6665 2.6615	1.0825 1.0775	7.0441 7.0421	11.4425 11.4355	0.5006 0.5000	0.5700 0.5500	5.8355 5.8335
REPAIR LIMIT	1.1870 9	----	----	7.1091 9	----	0.5606 9	----	5.9005 9

REFERENCE NUMBER	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
DESIGN DIMENSION	10.6607 10.6535	6.3610 6.3410	7.8610 7.8410	0.7507 0.7500	7.0441 7.0421	11.4425 11.4355	8.3290 8.3240	8.3450 8.3250
REPAIR LIMIT	----	----	----	0.8107 9	7.1091 9	----	----	----

REFERENCE NUMBER	[17]	[18]
DESIGN DIMENSION	8.3450 8.3250	8.3290 8.3240
REPAIR LIMIT	----	----

161T7130-2
Truck Beam Repair
Figure 601 (Sheet 9)

L77592

1 PART NUMBER AND SERIAL NUMBER LOCATION

2 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

3 CADMIUM-TITANIUM PLATE (F-15.32). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

4 CHROME PLATE RUNOUT

5 NO CHROME PLATE

6 CHROME PLATE (F-15.34), 0.0015-0.025 THICK. DO NOT GRIND. WIPE THE PLATING WITH PRIMER (F-19.451)

7 SURFACE FINISH BEFORE AND AFTER PLATING

8 TIGHT TOLERANCE IN THIS AREA OF THE BORE

9 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

10 TOUCH UP OF CHROME PLATED CHAMFER AREAS WHERE THE CHROME PLATE IS WORN OFF DUE TO SUBSEQUENT PROCEDURES:
1. DRY ABRASIVE BLAST THE REPAIR AREA, AND THE CHROME PLATE SURFACE ADJACENT TO REPAIR AREA (SOPM 20-30-03)
2. STYLUS CADMIUM PLATE (F-15.29)
3. APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66)
4. THE ABOVE REPAIR WILL BE LIMITED TO THE CHAMFER AND ONE HALF OF THE ADJACENT CORNER BREAK RADII

11 CHROME PLATE (F-15.34) 0.003 MINIMUM THICK. WIPE THE PLATING WITH PRIMER (F-19.451)

12 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) TO THE AREA THAT DID NOT GET CHROME PLATE

13 CADMIUM-TITANIUM PLATE AND PRIMER ON THE CHROME PLATING IN THIS AREA IS ACCEPTABLE AND RECOMMENDED

14 APPLICABLE TO ONE-HALF OF THE RADIUS

15 CHROME PLATE THE 0.0300-0.0600 RADIUS AND ONTO THE ADJACENT BORE IN THIS AREA

16 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND MIL-C-11796, CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

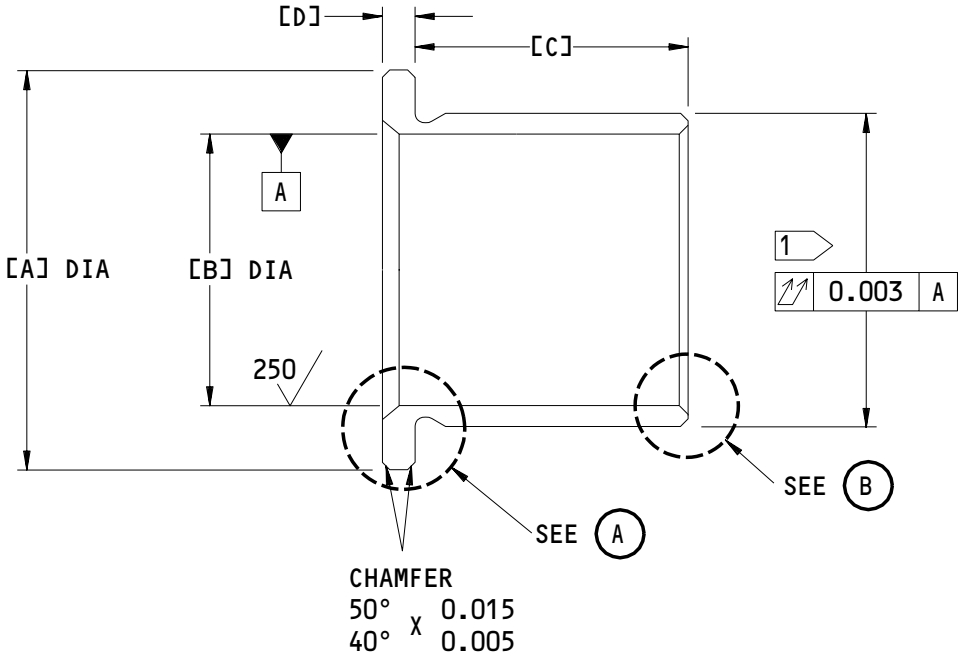
BREAK ALL SHARP EDGES

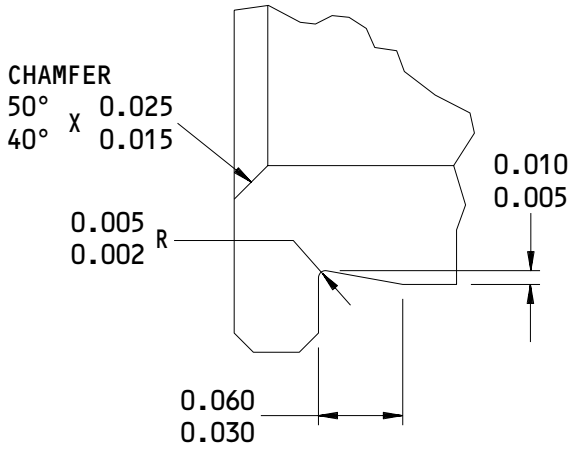
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

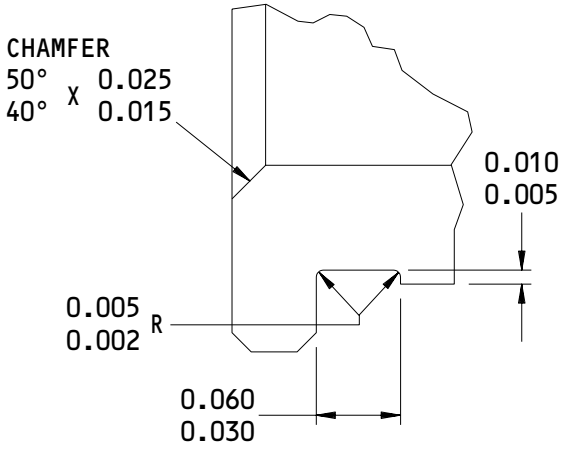
161T7130-2
Truck Beam Repair
Figure 601 (Sheet 10)

L06030





TYPE 1

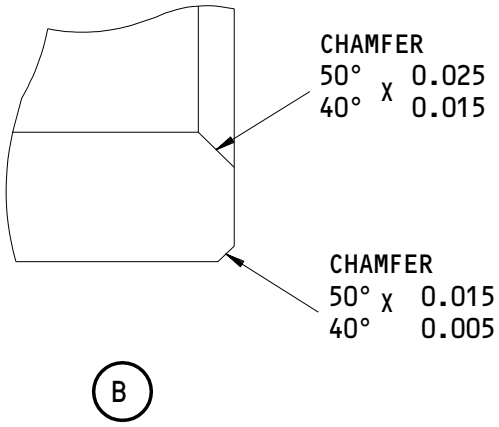


TYPE 2

A

Oversize Bushing Details
Figure 602 (Sheet 1)

K95559



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B]	[C]	[D]	INTERFERENCE
[12]	513	0.8900 0.8800	0.6150 0.6090	0.7300 0.7250	0.0680 0.0630	0.0007–0.0019
[6]	522	0.6300 0.6200	0.3660 0.3590	0.5400 0.5350	0.0650 0.0600	0.0004–0.0015

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

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL–NI–BRONZE (AMS 4640)

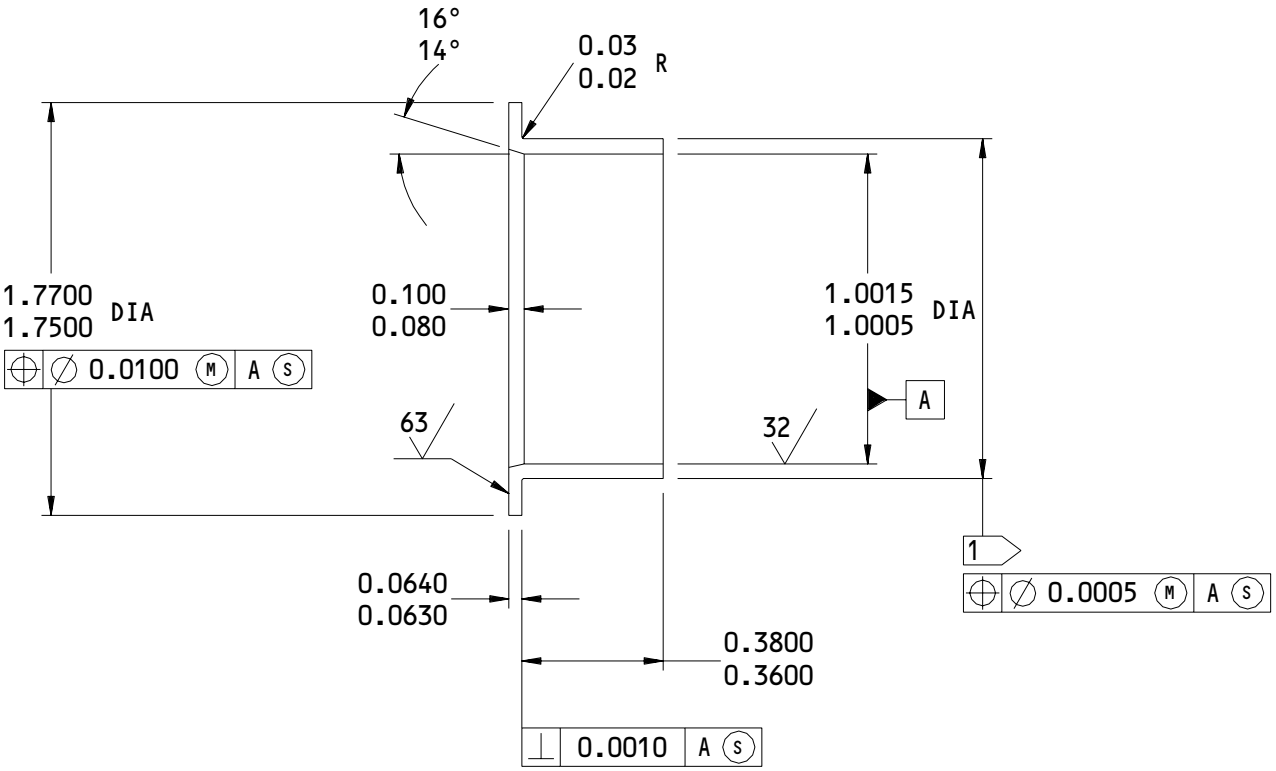
FINISH: CADMIUM PLATE (F–15.06)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K95564



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE DIAMETER PLUS THE INTERFERENCE OF 0.0006-0.0025

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

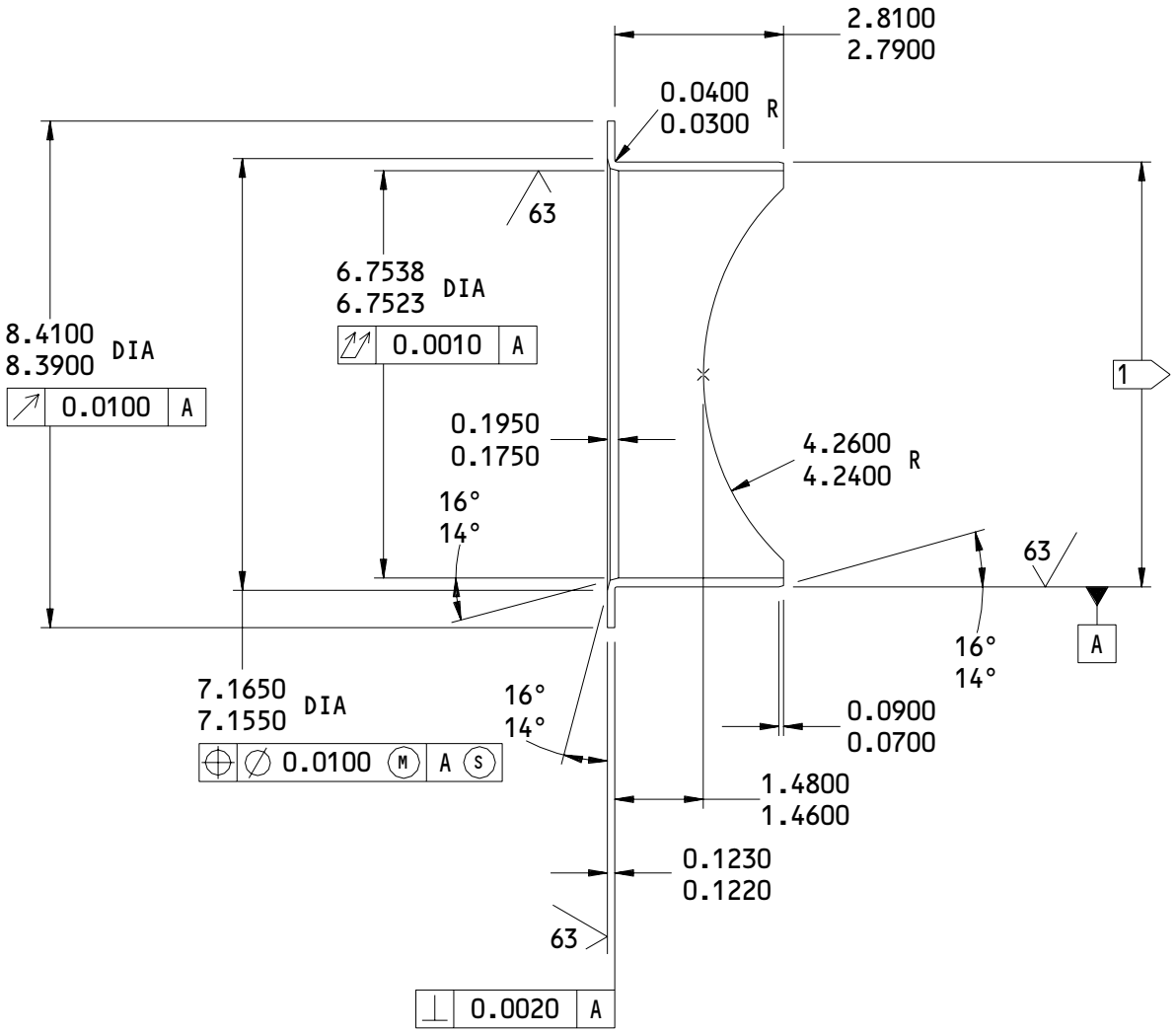
FINISH: CADMIUM PLATE (F-15.06)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [1] FIG. 601 - REPLACES BUSHING (525)

Oversize Bushing Details
Figure 603



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE DIAMETER PLUS THE INTERFERENCE OF 0.0025-0.0060

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

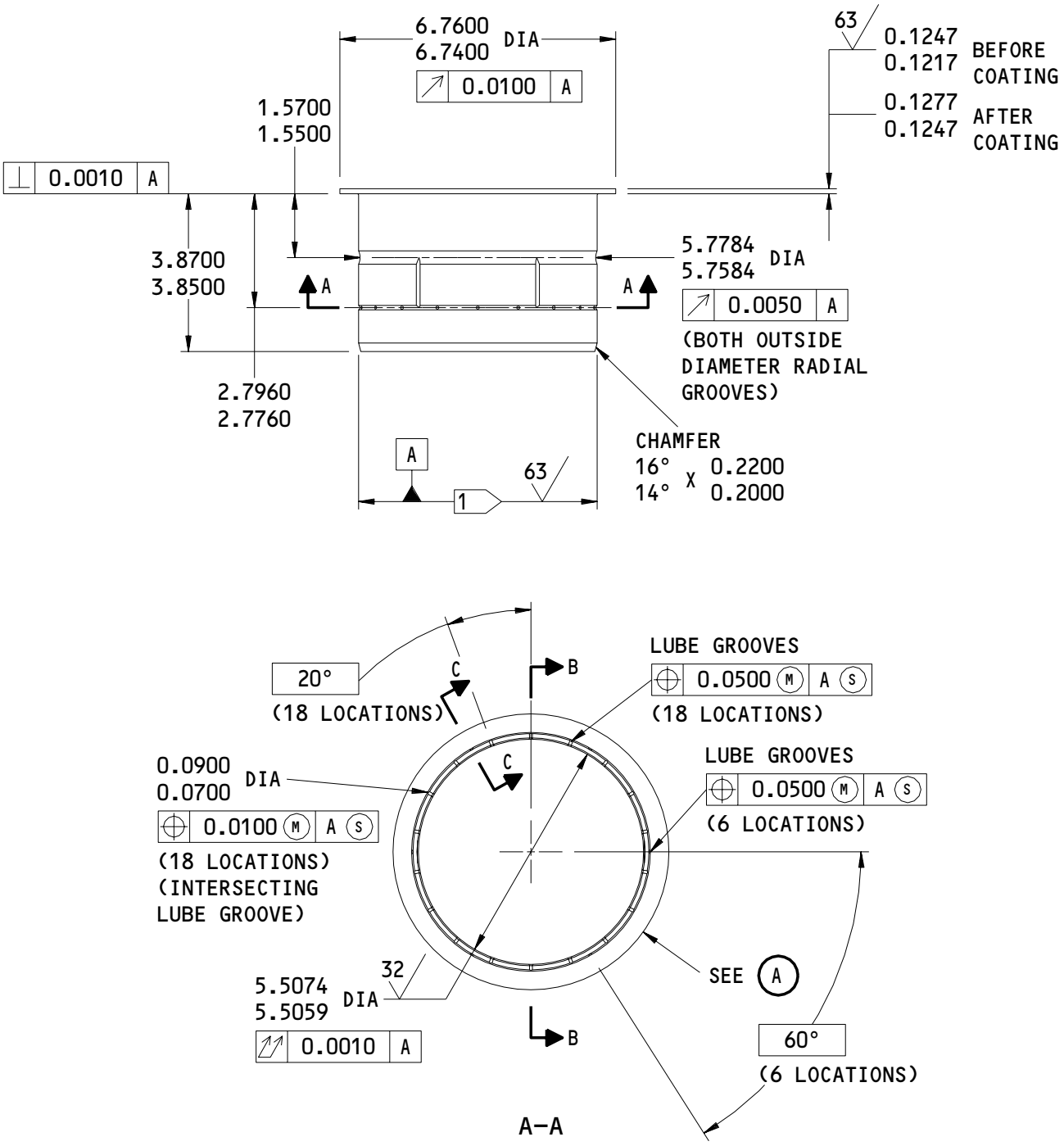
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [4] FIG. 601 - REPLACES BUSHING (528)

Oversize Bushing Details
Figure 604

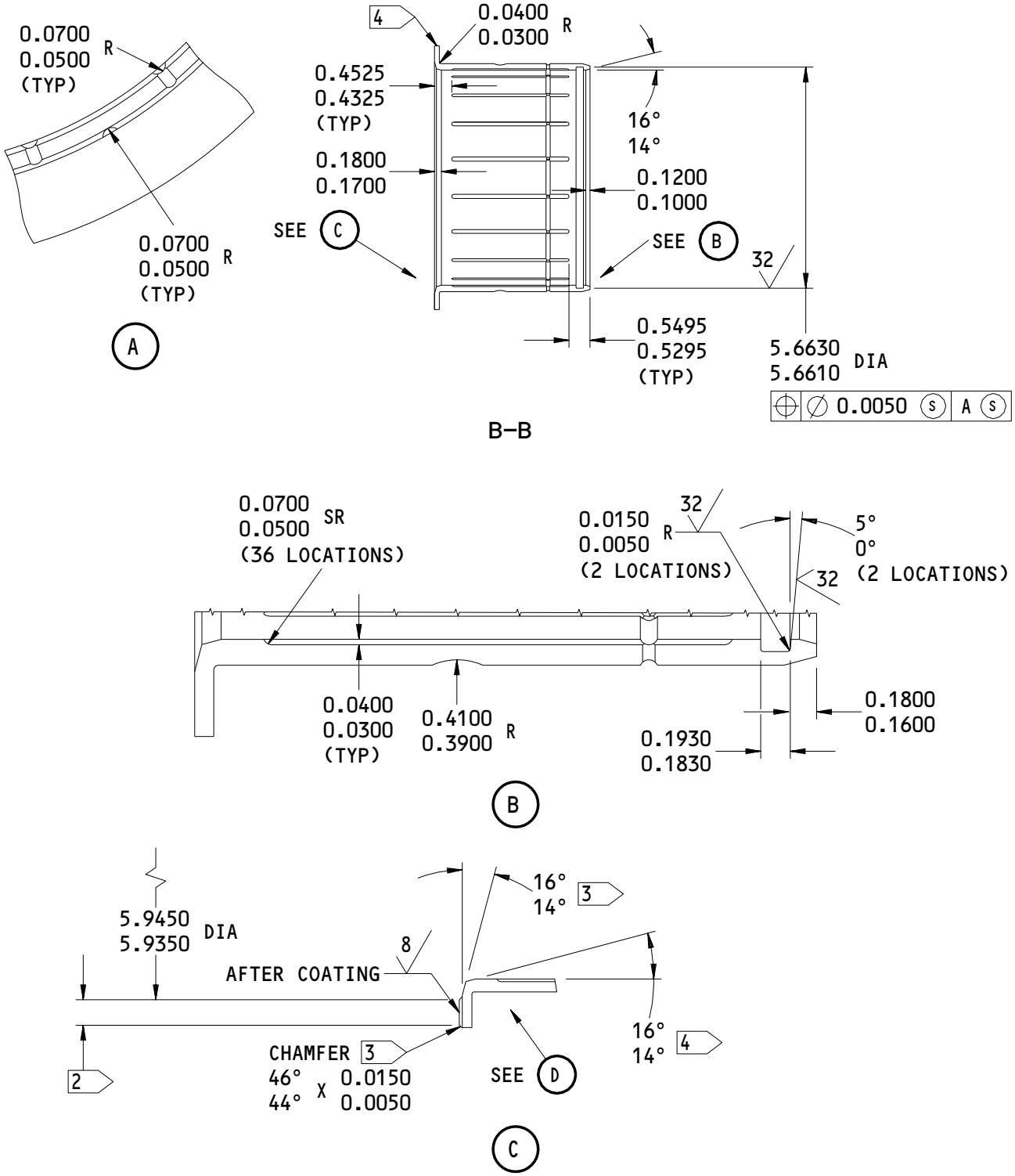
K95727



HOLE LOCATION [8] FIG. 601 – REPLACES BUSHING (531)

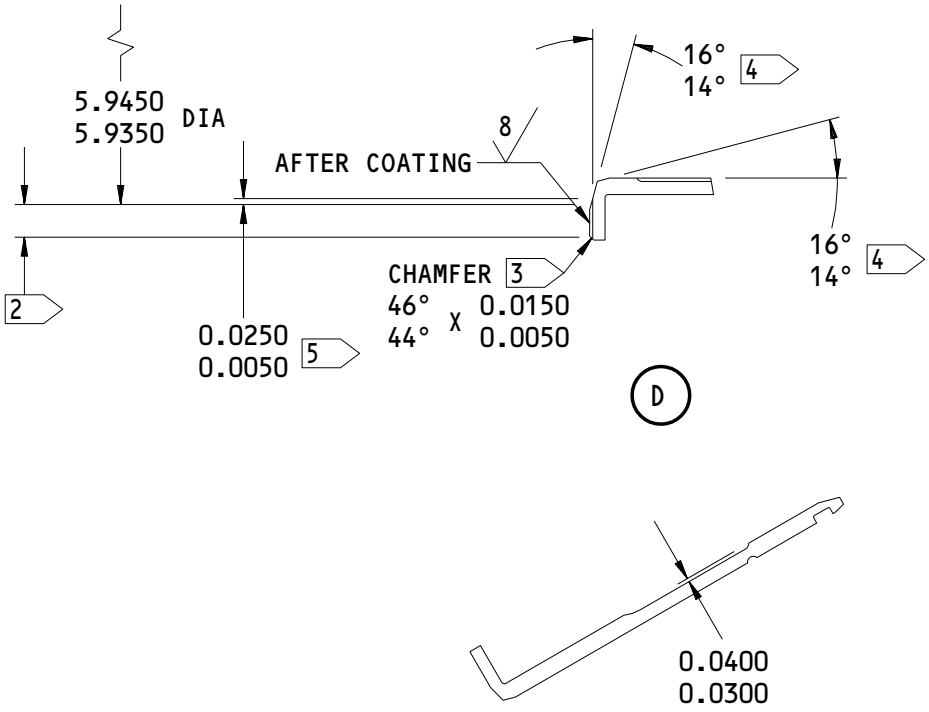
Oversize Bushing Details
Figure 605 (Sheet 1)

K95986



Oversize Bushing Details
Figure 605 (Sheet 2)

K96077



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE DIAMETER PLUS THE INTERFERENCE OF 0.0021–0.0056

2 APPLY BMS 10–67, TYPE 1 THERMAL SPRAY COATING (F–15.380), EXCEPT COBALT COMPOSITION TO BE A MINIMUM OF 15 PERCENT BY WEIGHT AND 0.0030 INCH MINIMUM THICK TO THE INDICATED SURFACE

3 CREATE THESE CHAMFERS AFTER THERMAL COATING

4 NO THERMAL COATING ALLOWED

5 THERMAL COATING RUNOUT: THE COATING MUST NOT TERMINATE WITH A SQUARE EDGE, BUT WILL TAPER FROM FULL TO ZERO THICKNESS OVER A LENGTH 0.0050 INCH MINIMUM

125 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 605 (Sheet 3)

K96092

TRUCK BEAM AXLE ASSEMBLY - REPAIR 13-1

161T7133-1

1. General

A. This procedure has the necessary data to replace the parts of the truck beam axle assembly.

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

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

2. Wheel Sleeve and Pin Retainer Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00913 Compound - BMS 3-27 Corrosion Preventive (SOPM 20-60-02)

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

B. References

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

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

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

(4) SOPM 20-60-03, Lubricants

C. Procedure (Fig. 601)

(1) Remove the pin retainers (624).

(2) Remove the wheel sleeves (627).

(3) Clean the outer diameter of the axle (636) and the inner diameter of the wheel sleeve (627).

(4) Install the wheel sleeves onto the axle.

(a) Apply a large amount of BMS 3-33 grease to the axle (636) lands before you install the wheel sleeve (627) onto the axle.

(b) Install the wheel sleeves (627) onto the axle (636) by the shrink-fit method (SOPM 20-50-03). Make sure that the wheel sleeve is in position on the axle to let the pin retainer (624) be installed through the wheel sleeve and axle.

(5) Install the pin retainers.

(a) Apply BMS 3-27 compound to the pin retainer hole in the wheel sleeve (627) and axle (636).

(b) Put the pin retainer (624) in the hole and tap the pin retainer into the hole. Make sure that the pin retainer head is flush with or below the outer diameter of the wheel sleeve (627).

(c) Apply BMS 3-33 grease to any gaps between the pin retainer (624) head and the outer diameter of the wheel sleeve (627). Make sure that the grease is smooth with the surface of the wheel sleeve outer diameter.

3. Axle Bushing Replacement

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00913 Compound - BMS 3-27 Corrosion Preventive (SOPM 20-60-02)

B. References

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

(2) SOPM 20-50-03, Bearing Removal, Installation and Retention

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

C. Procedure

(1) Remove the bushings (630, 633).

(2) If you find defects on hole surfaces, refer to REPAIR 13-2 for repair instructions.

(3) Install the bushings (633) by the shrink-fit method with BMS 3-27 compound and swage both ends (SOPM 20-50-03). Make sure that the bushing ends are flush with or below the outer diamter of the axle (636).

(4) Machine the inside diameter of the bushings (633) to design dimensions and finish shown.

(5) Install the bushing (630) by the shrink-fit method (SOPM 20-50-03) with BMS 3-27 compound. Make sure that the bushing end is flush with or below the outer diameter of the axle (636).

NOTE: The inside diameter of the bushing (630) is not machined after installation because it is only a hole for electrical wiring.

4. Axle Assembly Refinish

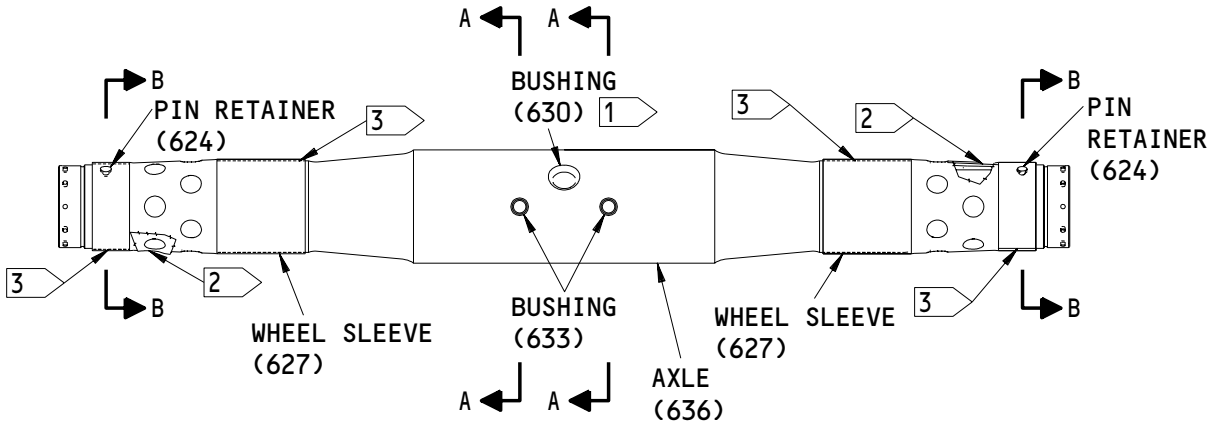
A. References

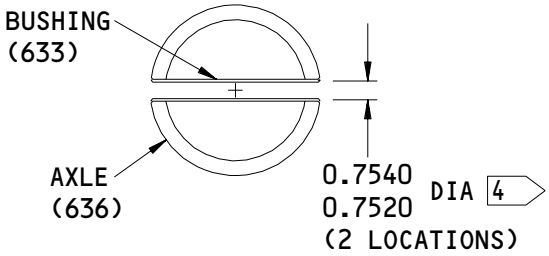
(1) SOPM 20-41-01, Decoding of Boeing Finish Codes

(2) SOPM 20-44-02, Temporary Protective Coatings

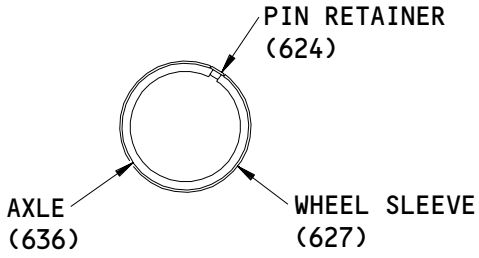
B. Procedure

(1) The assembly has no finish (F-25.01). Refer to REPAIR 13-2 for refinish of the bare axle (636).





A–A



B–B

1 THIS BUSHING MAKES A HOLE FOR ELECTRICAL WIRING. BORE ADJUSTMENT PER 4 IS NOT NECESSARY

2 DO NOT REMOVE UNWANTED GREASE FROM THIS AREA

3 APPLY A LARGE AMOUNT OF BMS 3-33 GREASE TO THE AXLE (636) LANDS BEFORE YOU INSTALL THE WHEEL SLEEVE (627)

4 ADJUST TO THIS DIMENSION, IF NECESSARY

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7133-1
Truck Beam Axle Assembly Parts Replacement
Figure 601

K96187

TRUCK BEAM AXLE - REPAIR 13-2

161T7133-2

1. General

A. This procedure has the necessary data to repair and refinish the truck beam axle (636).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Truck Beam Axle Repair

A. Thermal spray (F-15.384) is the original finish of the truck beam axle (636). Repair of worn thermal spray areas will be only by those procedures given in the repair section below.

B. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(2) G00034 Fabric - BMS 15-5, Cheese Cloth (SOPM 20-60-04)

C. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

(5) SOPM 20-20-02, Penetrant Method of Inspection

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

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

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

(9) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(11) SOPM 20-42-05, Bright Cadmium Plating

(12) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(14) SOPM 20-60-04, Miscellaneous Materials

D. Procedure (Fig. 601)

(1) Holes for Bushings

(a) Machine as necessary, within repair limits, to remove defects,

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen the hole (SOPM 20-10-03).

(d) Cadmium-titanium plate (F-15.32) and apply BMS 10-79, type 3 primer (F-19.47) to the holes.

(e) Make oversize bushing (Fig. 602, 603) to adjust for the material removed.

(f) Install the bushings as shown in REPAIR 13-1.

(2) OD

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(3) Reliefs

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points.

(b) Do a magnetic particle check (SOPM 20-20-01)

(c) Shot peen, chrome plate and grind to design dimensions and finish.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, Gray (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(4) SOPM 20-42-05, Bright Cadmium Plating

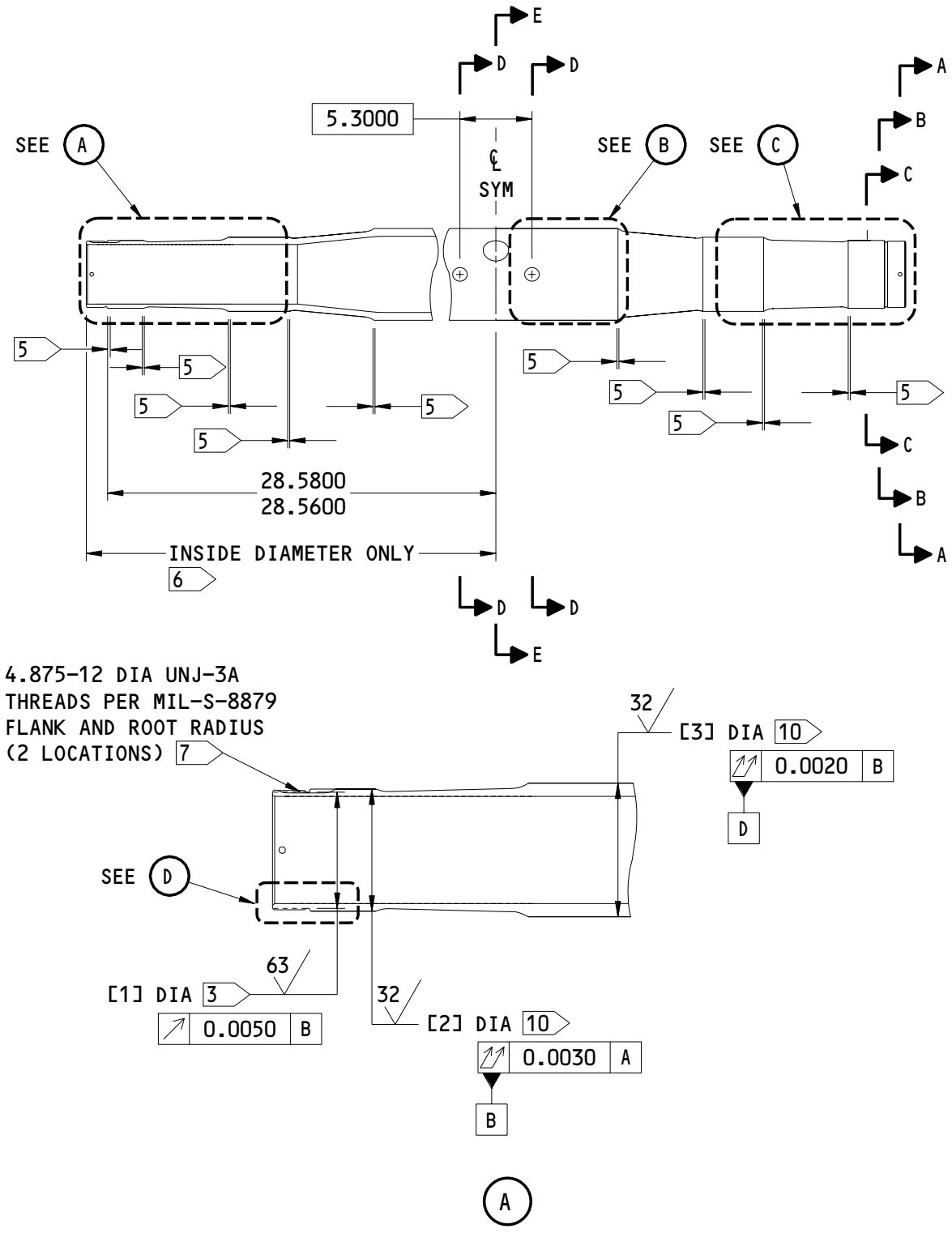
(5) SOPM 20-44-04, Application of Urethane Compatible Primer

(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

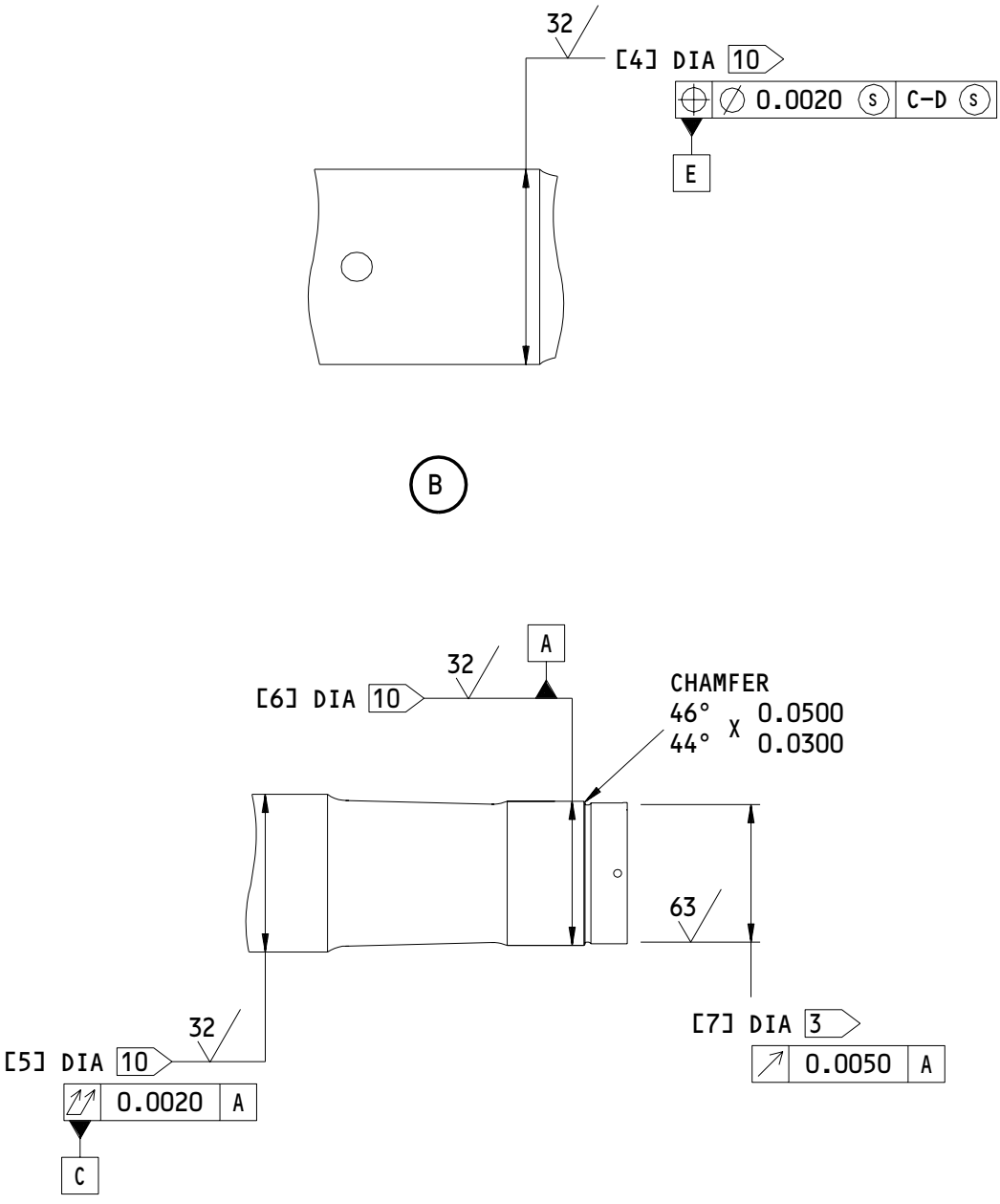
(7) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) Cadmium titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.66), and BMS 10-60, type 2, gray enamel (F-19.39-707), unless as shown in Fig. 601.

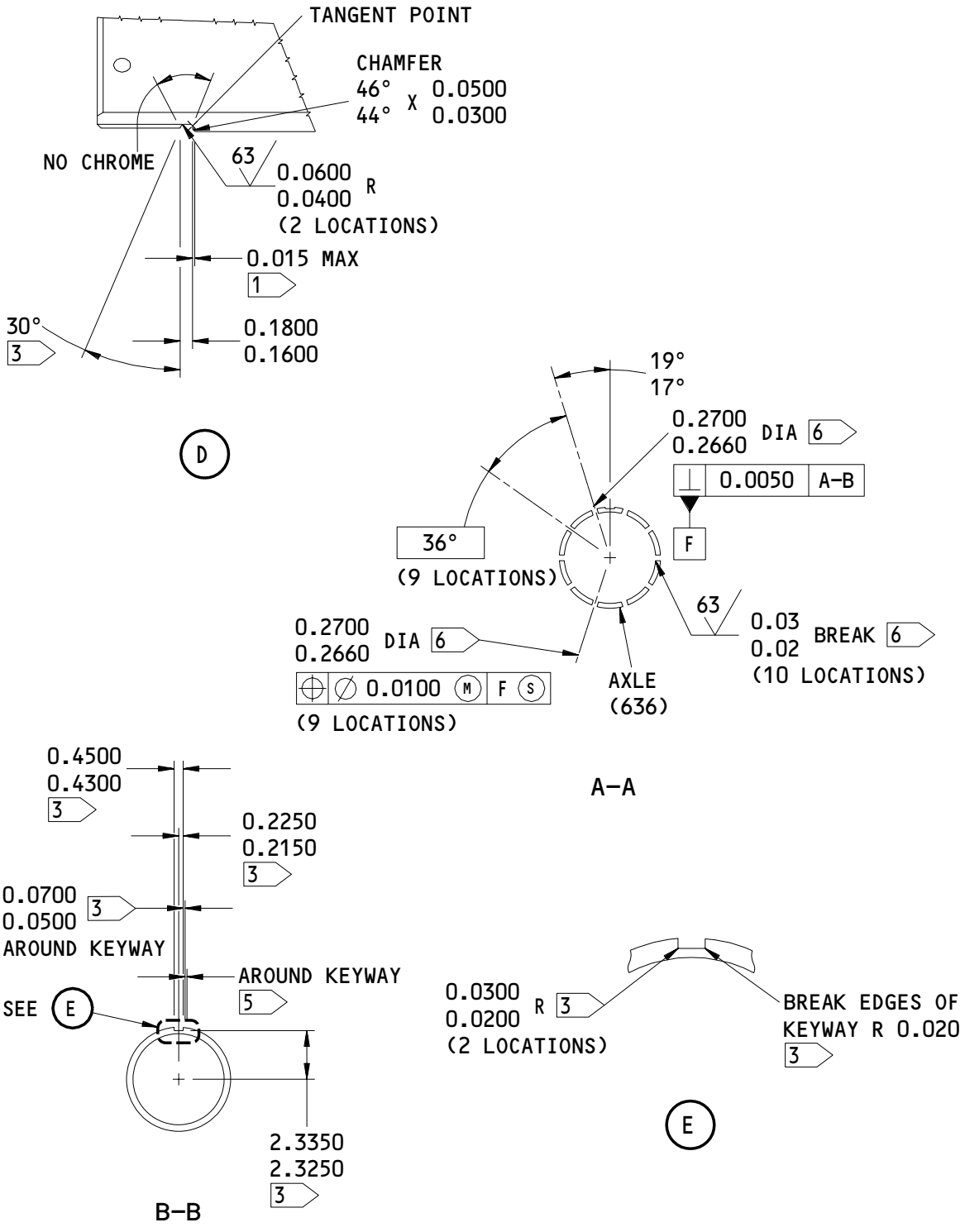


161T7133-2
Axle Repair
Figure 601 (Sheet 1)



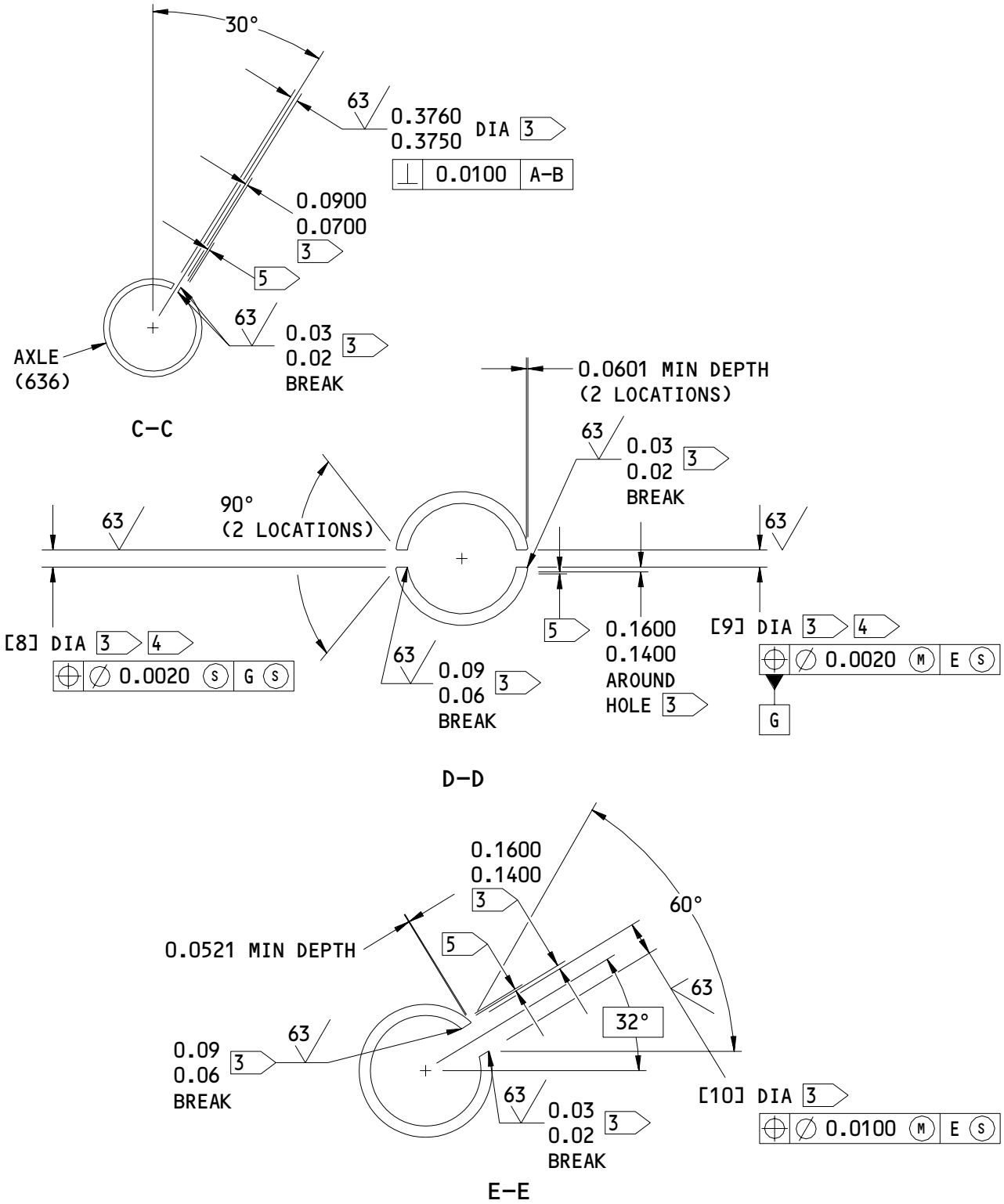
161T7133-2
Axle Repair
Figure 601 (Sheet 2)

K96229



161T7133-2
Axle Repair
Figure 601 (Sheet 3)

K96233



161T7133-2
Axle Repair
Figure 601 (Sheet 4)

K96579

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	4.7550 4.7450	5.0040 5.0030	5.4580 5.4570	6.7490 6.7480	5.4580 5.4570	5.0040 5.0030	4.7550 4.7450	0.8790 0.8780
REPAIR LIMIT	4.7250 8	4.9720 1	5.4260 1	6.7170 1	5.4260 1	4.9720 1	4.7250 8	0.9390 2

REFERENCE NUMBER	[9]	[10]
DESIGN DIMENSION	0.8790 0.8780	1.6806 1.6794
REPAIR LIMIT	0.9390 2	1.7406 2

1 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

2 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

3 CADMIUM-TITANIUM PLATE (F-15.32). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

4 THRU HOLES MUST BE VERTICAL WITHIN ±15 DEGREES WHEN CURING PRIMER

5 CHROME PLATE RUNOUT AREA

6 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66)

7 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451). THREAD DIMENSIONS APPLY AFTER PLATING. DO NOT SHOT PEEN

8 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

9 PART NUMBER AND SERIAL NUMBER LOCATION

10 THERMAL SPRAY AREA (F-15.384) 0.004 INCH MINIMUM THICKNESS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

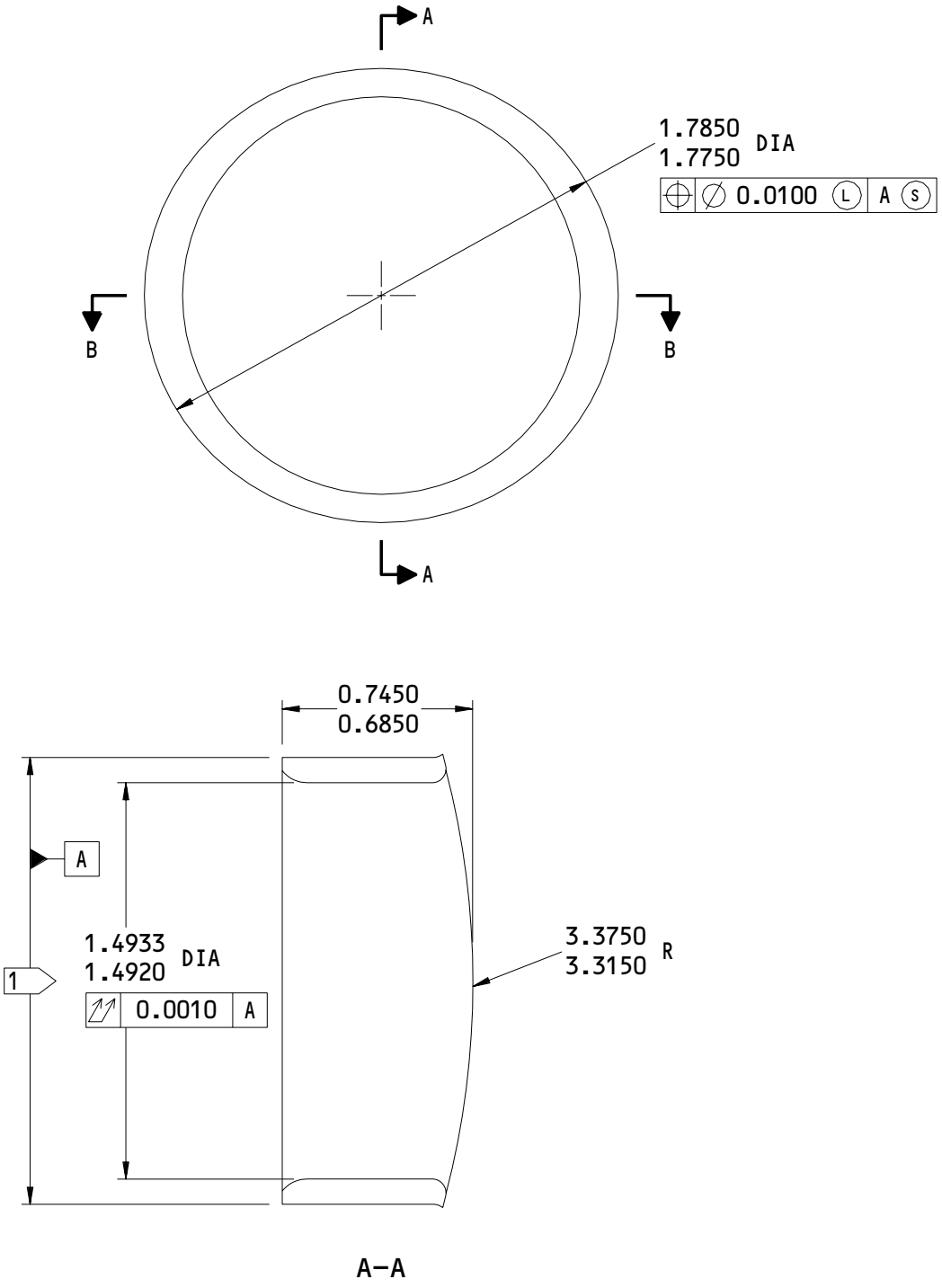
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7133-2
Axle Repair
Figure 601 (Sheet 5)

K96583

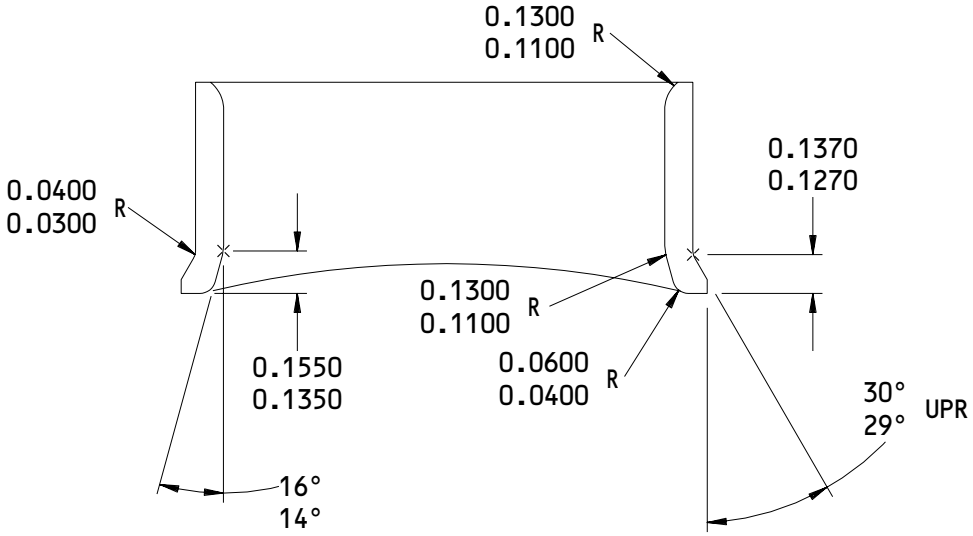


A–A

HOLE LOCATION [10] FIG. 601 – REPLACES BUSHING (630)

Oversize Bushing Details
Figure 602 (Sheet 1)

K96634



B–B

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS THE INTERFERENCE 0.0007–0.0032

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL–NI–BRONZE (AMS 4640)

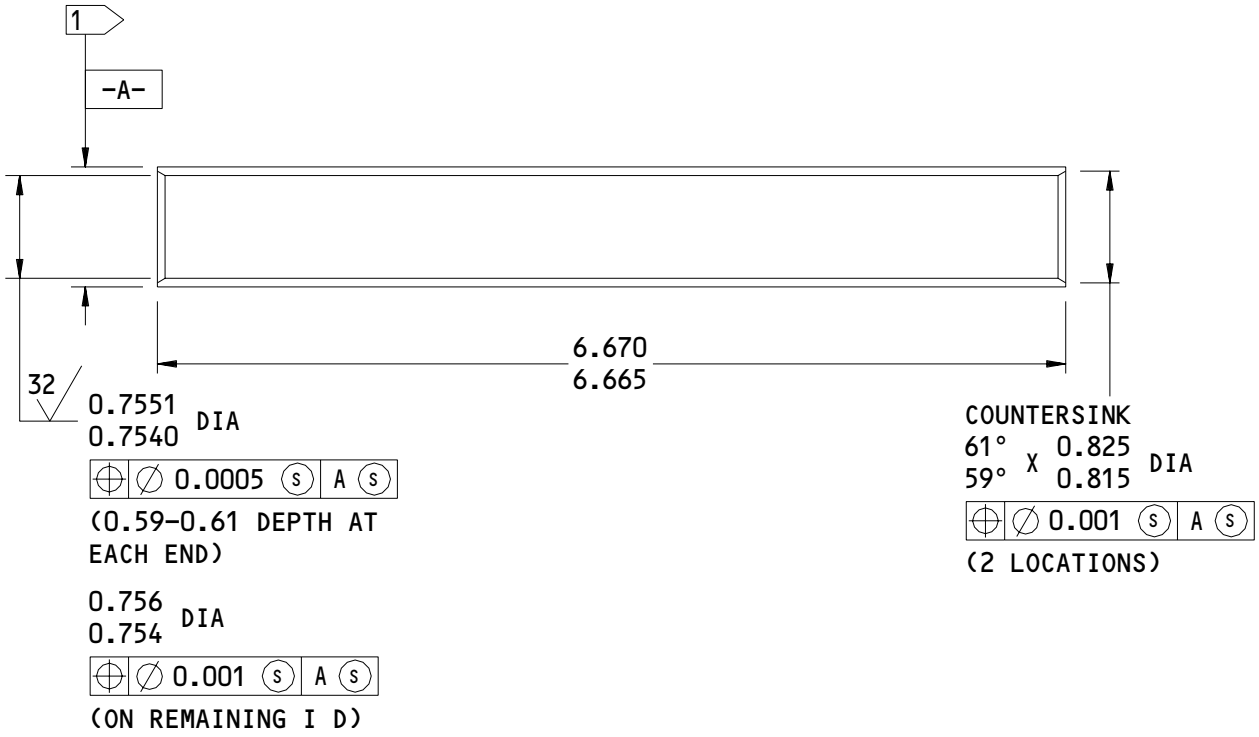
FINISH: CADMIUM PLATE (F–15.36) (OPTIONAL IN INSIDE DIAMETER)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K96670



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS THE INTERFERENCE 0.0004-0.0021

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36) BUT NOT IN INSIDE DIAMATER

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATIONS [8] [9] FIG. 601 - REPLACES BUSHING (633)

Oversize Bushing Details
Figure 603

K96724

TOW FITTING ASSEMBLY - REPAIR 14-1

161T7134-1

1. General

   A. This procedure has the necessary data to replace the bushings (606, 609, 612, 615) and refinish the tow fitting assembly (597).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

      (3) G01555 Lockwire - MS20995C47 (SOPM 20-60-04)

   B. References

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

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

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

      (4) SOPM 20-50-19, General Sealing

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

      (6) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushings (609, 612, 615).

(2) Remove the bolts (600) and the bushings (606).

(3) If you find defects on hole surfaces, refer to REPAIR 14-2 for repair instructions.

WARNING: MAKE SURE TO ALIGN THE BOLT HOLES THE BUSHINGS (606) WITH THE BOLT HOLES ON THE FITTING (618).

(4) Install replacement bushings with BMS 3-27 compound, by the shrink-fit method (SOPM 20-50-03). For the bushing (609, 615), make sure that the chamfer/radius is filled with BMS 3-27 compound.

(5) Machine the inside diameter of the bushings (609, 612, 615) to design dimensions and finish.

(6) Fillet seal the bushings (609, 615) with BMS 5-95 sealant.

(7) Install bolts (600) with BMS 5-95 sealant.

(8) Install lockwire, at the location shown in Fig. 601, by the double-twist method (SOPM 20-50-02).

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) BOO571 Coating - Hydraulic Fluid Resistant, Type 41 (SOPM 20-44-01)

(2) COO033 Enamel - BMS 10-60, Type 2, 701 Black (SOPM 20-60-02)

(3) COO033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

(4) COO175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

(4) SOPM 20-44-04, Application of Urethane Compatible Primer

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

C. Procedure (Fig. 601)

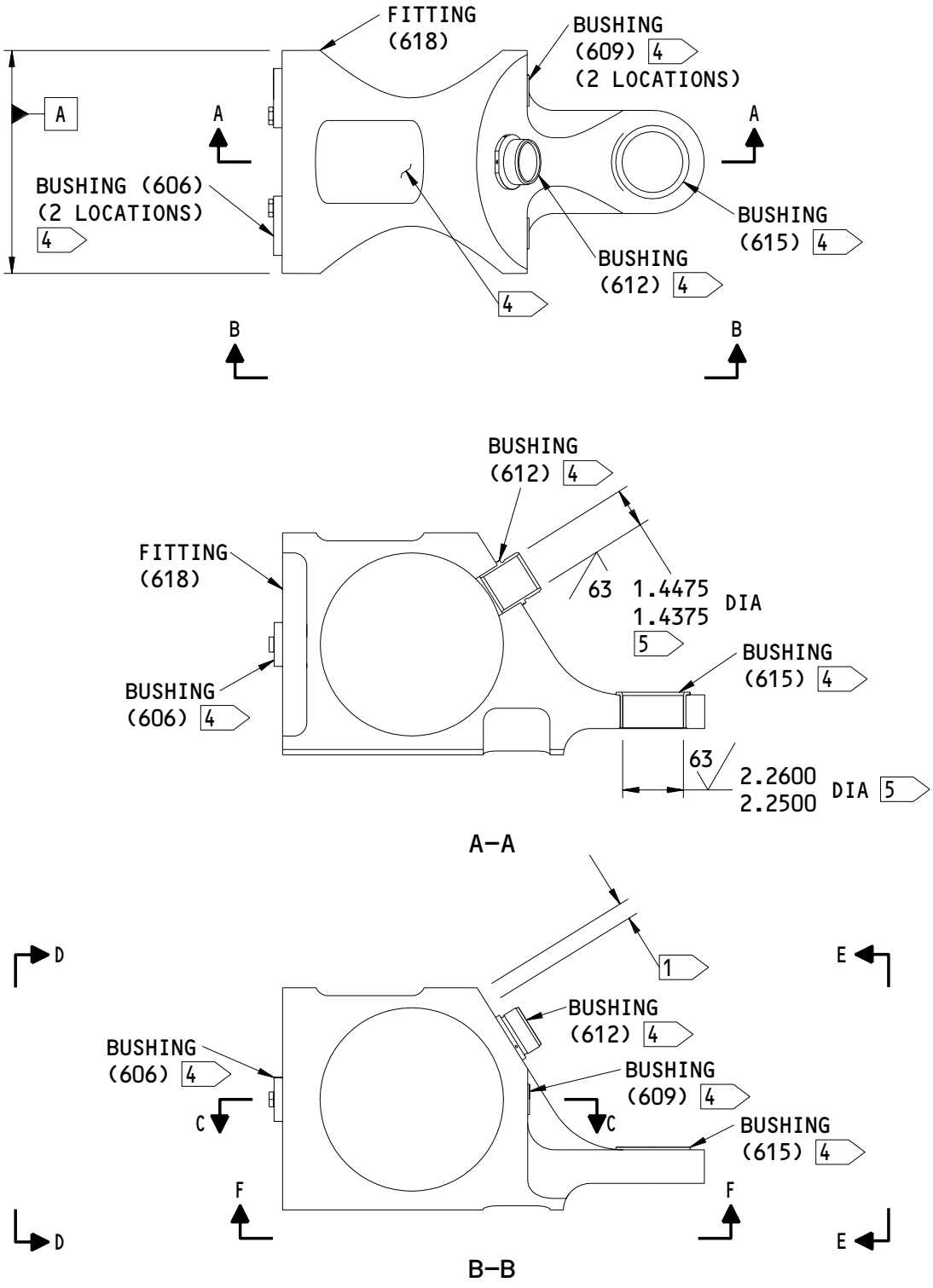
(1) Apply BMS 10-60, type 2, enamel (F-20.56) to the external surfaces, unless shown differently.

(2) Do not apply enamel (F-20.56) in the part mark area shown. Refinish the area as follows:

(a) Make sure the part number and serial number are visible.

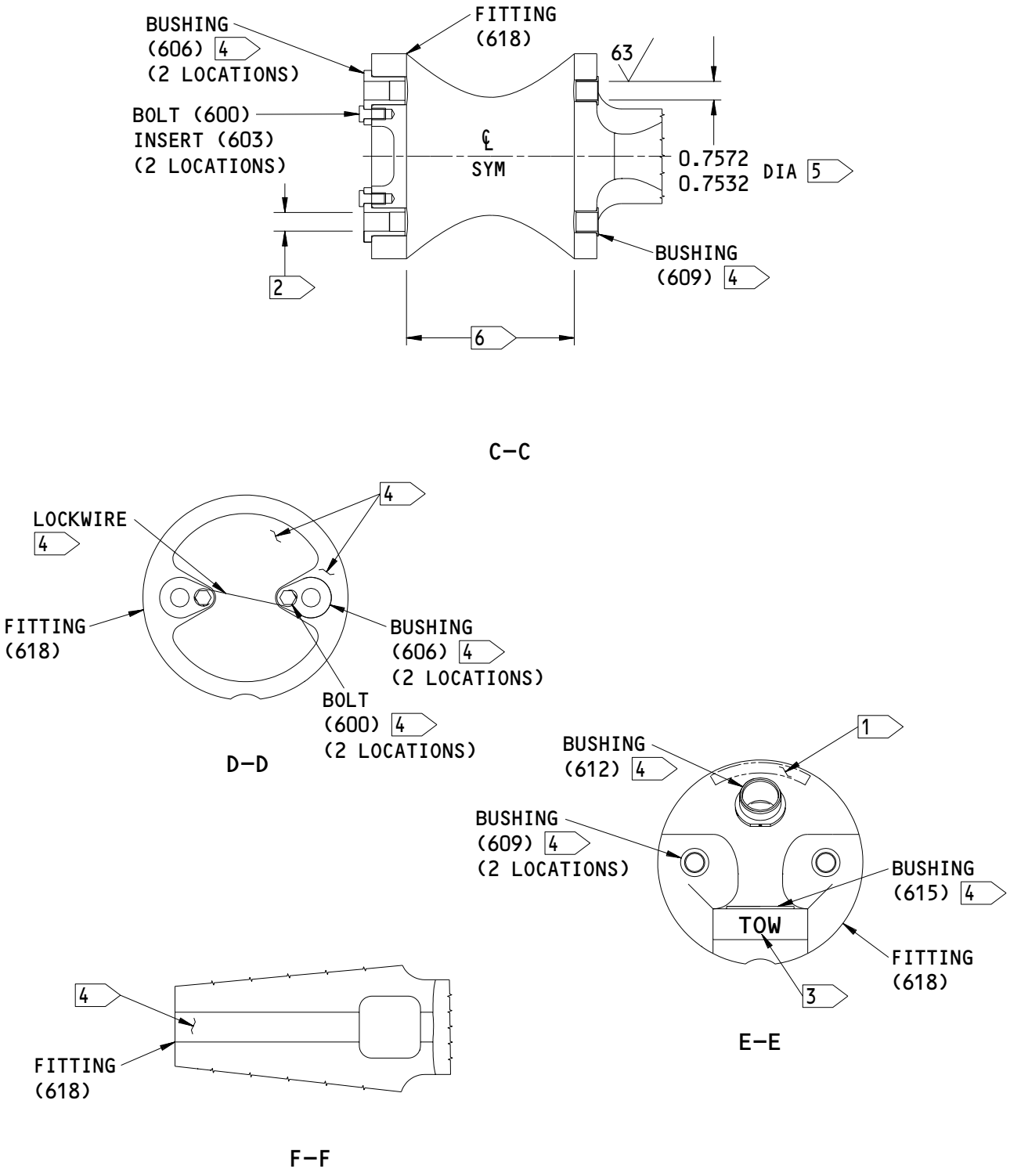
(b) Apply BMS 10-60 enamel (F-19.39-707) and let dry. Then, apply BMS 10-60 enamel (F-19.39-701) to the identification numbers only and let dry. Apply type 41 clear coating, (F-21.34) to the area, to a thickness equivalent to the surrounding enamel area.

(3) Stencil the letters as shown.



161T7134-1
Tow Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)

K96888



161T7134-1
Tow Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

1 > NO ENAMEL (F-20.56) ON PART MARK AREA. REFER TO REFINISH TEXT

2 > THREADED BUSHING

3 > STENCIL WITH 0.75 INCH HIGH LETTERS, THEN APPLY BMS 10-60 ENAMEL (F-19.39-701) TO LETTERS ONLY

4 > DO NOT APPLY ENAMEL

5 > ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7134-1
Tow Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 3)

K96941

TOW FITTING - REPAIR 14-2

161T7134-2, -3

1. General

A. This procedure has the necessary data to repair and refinish tow fitting (618).

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

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

D. General repair details:

(1) Material: Aluminum Alloy

2. Holes for Bushings

A. References

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

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

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

(4) SOPM 20-42-05, Bright Cadmium Plating

B. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a penetrant check (SOPM 20-20-02).

(3) Make oversize bushings (Fig. 602 and on) as necessary to adjust for the material removed.

(4) Install the bushings as shown in REPAIR 14-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

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

(4) SOPM 20-44-04, Application of Urethane Compatible Primer

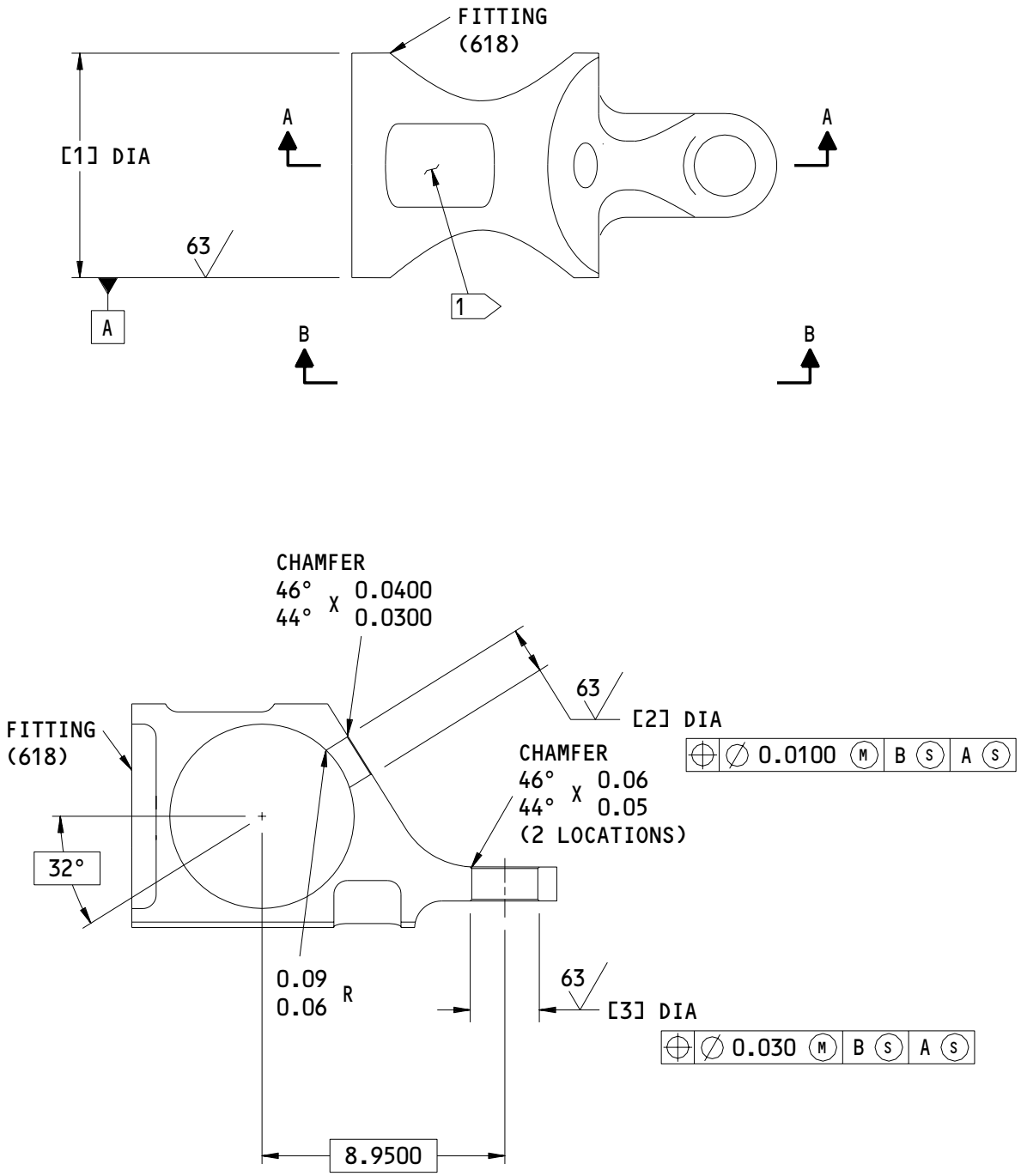
(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

C. Procedure

(1) Boric acid-sulfuric acid anodize (F-17.31). Apply BMS 10-79, type 3 primer (F-19.66) to indicated areas.

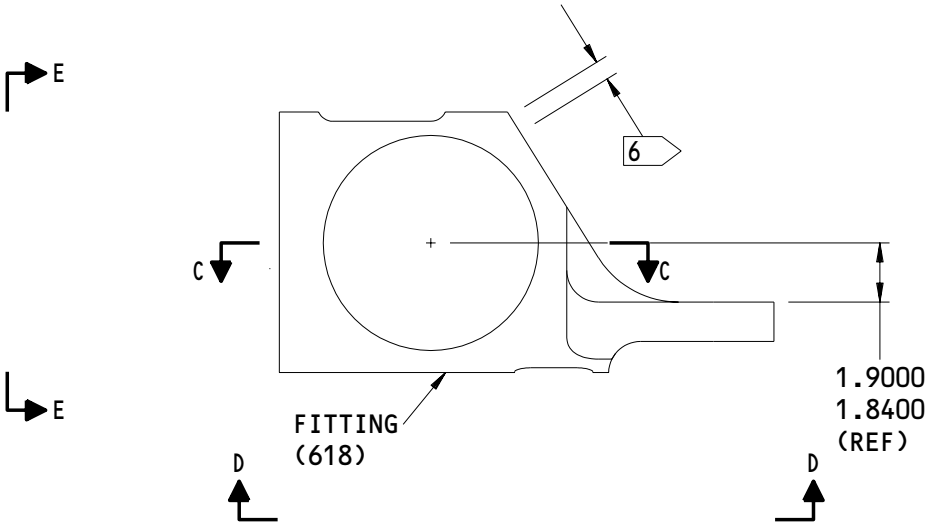
(2) Make sure that the part is visible after repair and refinish procedures. If necessary, repair the markings (REPAIR 14-1).



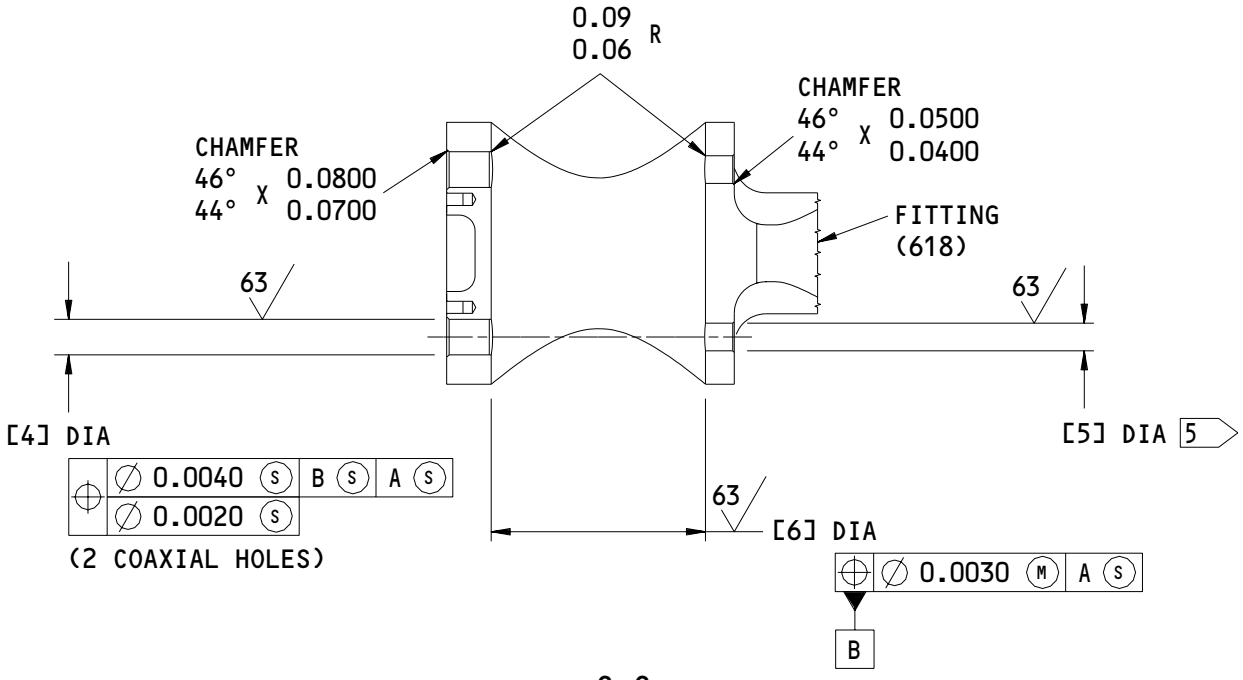
A–A

161T7134-2,-3
Tow Fitting Repair
Figure 601 (Sheet 1)

K97074

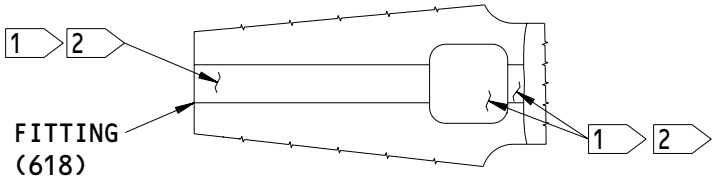


B–B

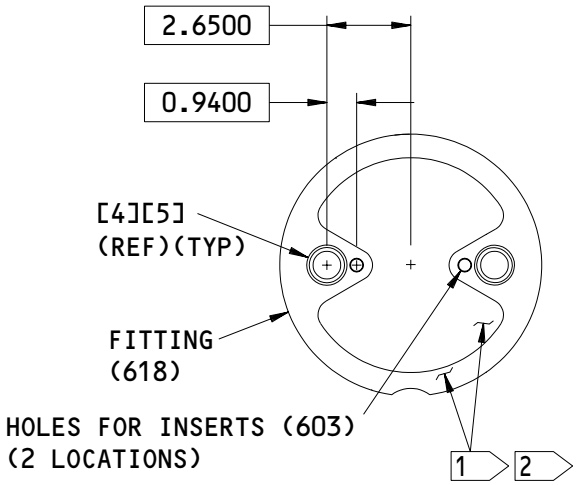


C–C

161T7134-2,-3
Tow Fitting Repair
Figure 601 (Sheet 2)



D–D



E–E

161T7134-2,-3
Tow Fitting Repair
Figure 601 (Sheet 3)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	8.3150 8.3130 3	1.6268 1.6255	2.4395 2.4380	1.1260 1.1250	0.8760 0.8755	6.7610 6.7580 3
REPAIR LIMIT	8.2930 8.2890 4	1.6868 5	2.4995 5	1.1860 5	0.9360 5	6.7840 6.7810 4

1 BORIC ACID-SULFURIC ACID ANODIZE (F-17.31)

2 APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66)

3 DIMENSIONS AFTER APPLICATION OF KARON B LINER (MIL-B-81934). THIS LINER TO BE APPLIED BY KAMATICS CORP. (V50632)

4 DIMENSIONS BEFORE APPLICATION OF KARON B LINER. 1

5 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

6 PART NUMBER AND SERIAL NUMBER LOCATION

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

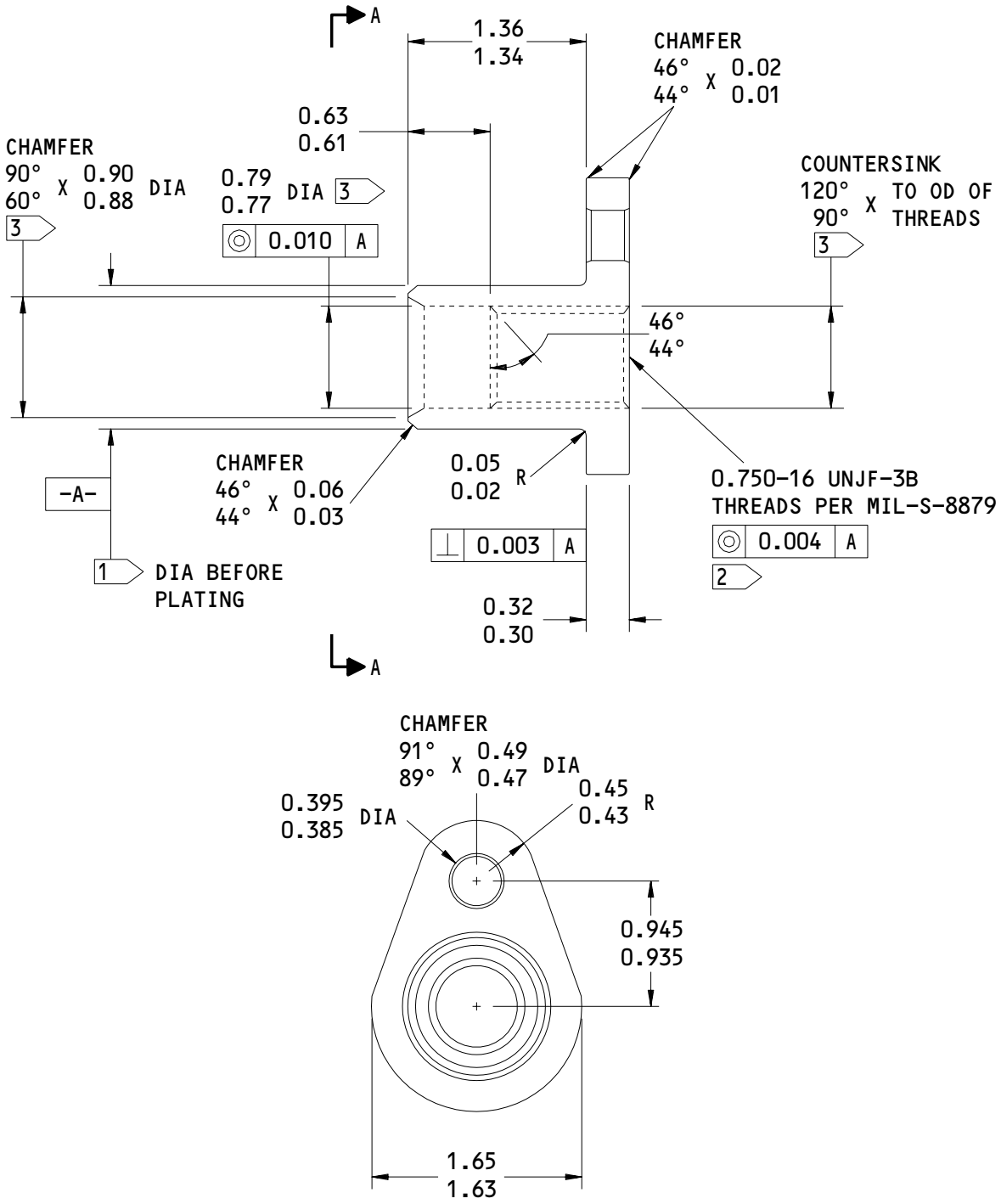
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7134-2,-3
Tow Fitting Repair
Figure 601 (Sheet 4)

K97238



A–A

HOLE LOCATION [4] FIG. 601 – REPLACES BUSHING (606)

Oversize Bushing Details
Figure 602 (Sheet 1)

K97428

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE 0.0007-0.0026

2 DO NOT PLATE

3 PLATING OPTIONAL

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4880 OR AMS 4640)

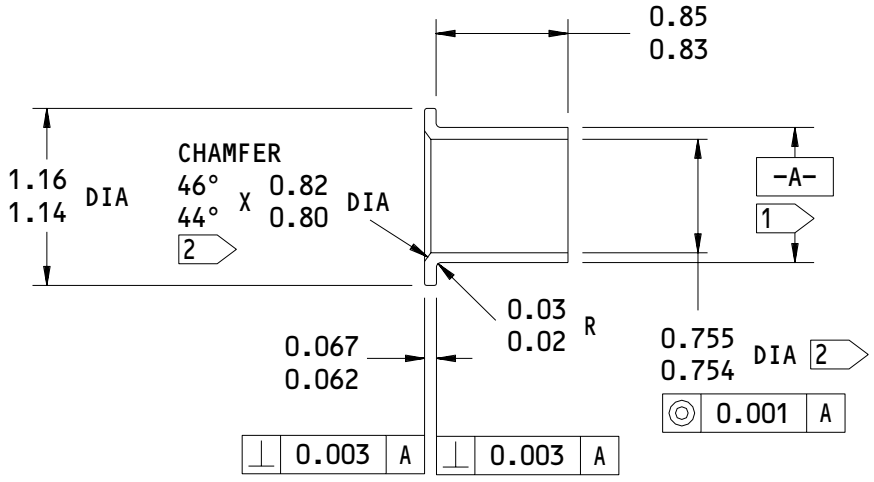
FINISH: CADMIUM PLATE (F-15.06) UNLESS SHOWN BY 2 3

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

K97430



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0005–0.0009

2 PLATING OPTIONAL

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01–0.02 X 30–60°

MATERIAL: AL–NI–BRONZE (AMS 4880 OR AMS 4640)

FINISH: CADMIUM PLATE (F–15.06) UNLESS SHOWN BY 2

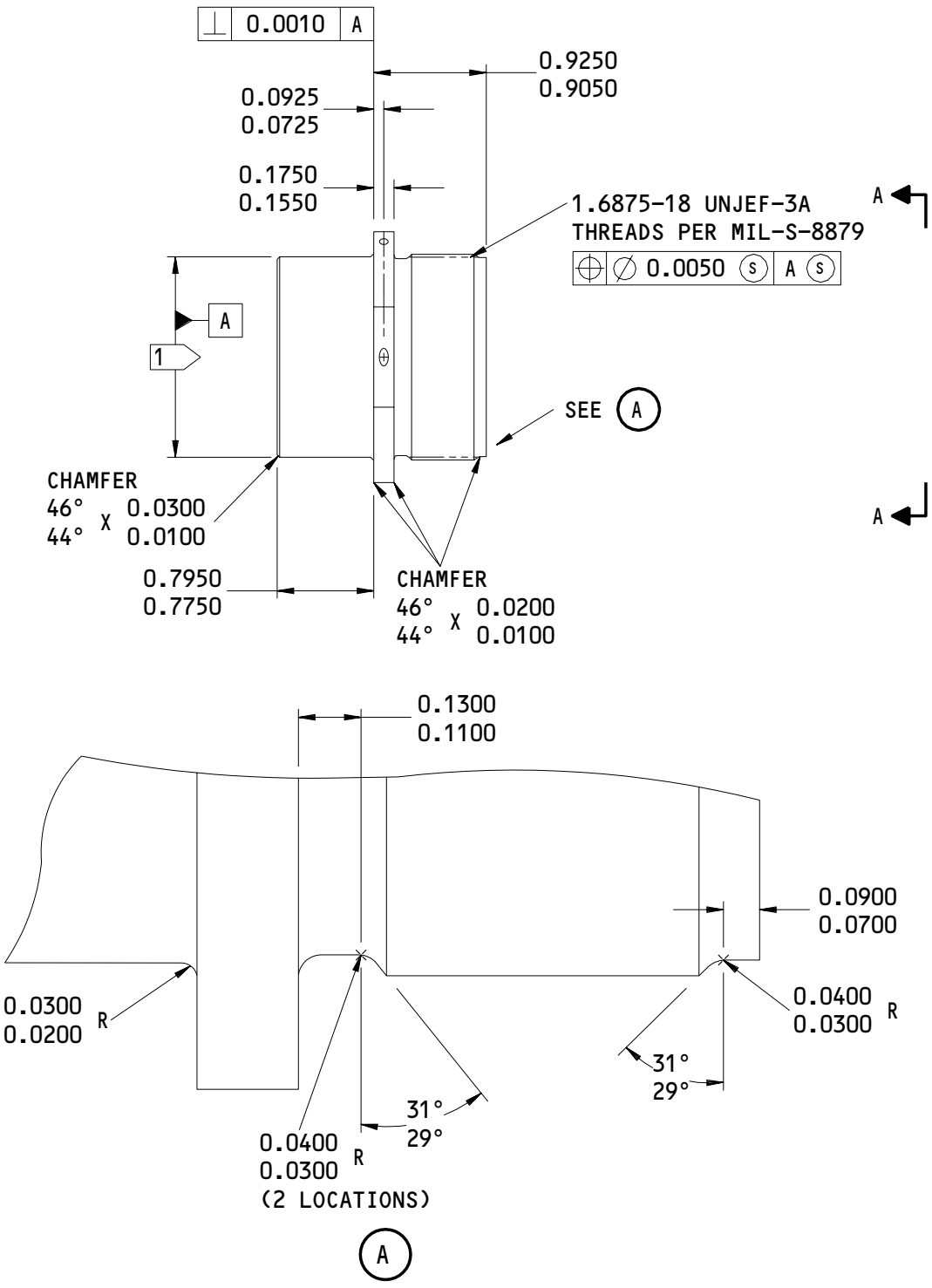
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [5] FIG. 601 – REPLACES BUSHING (609)

Oversize Bushing Details
Figure 603

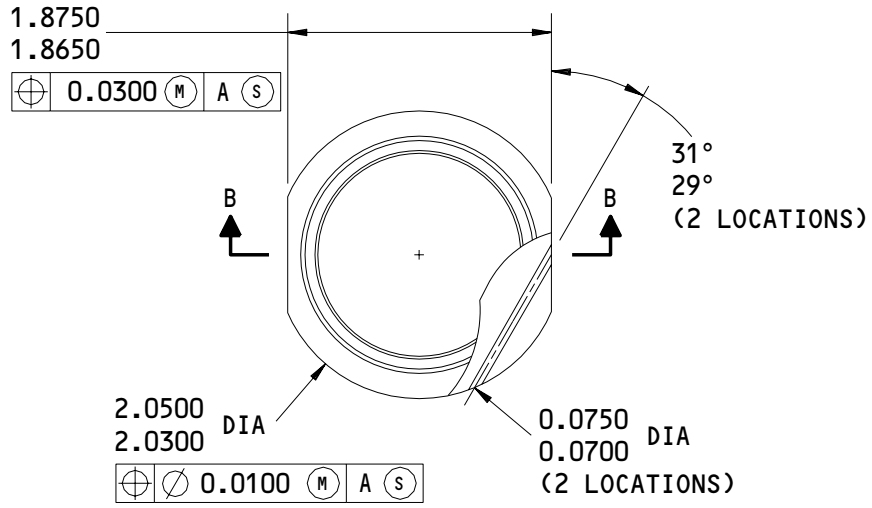
K97689



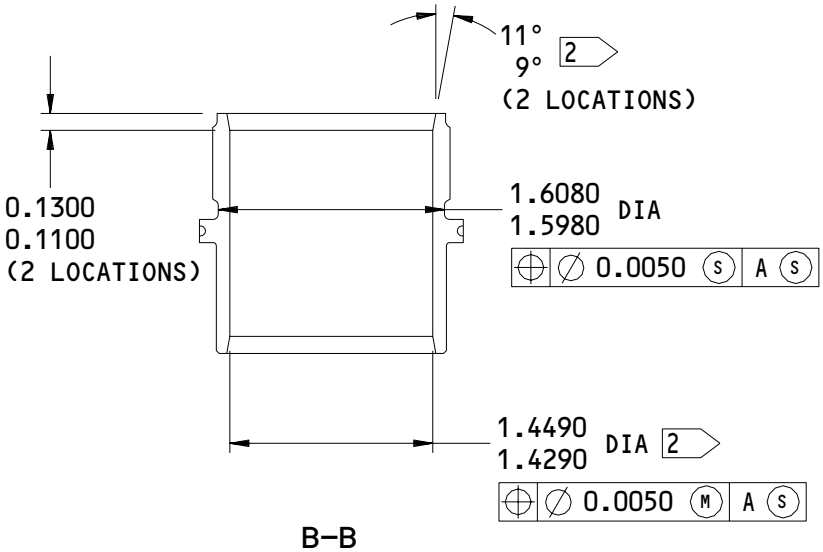
HOLE LOCATION [2] FIG. 601 - REPLACES BUSHING (612)

Oversize Bushing Details
Figure 604 (Sheet 1)

K97690



A–A



B–B

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0014–0.0039

2 PLATING OPTIONAL

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01–0.02 R

MATERIAL: 15–5PH CRES, 150–170 KSI

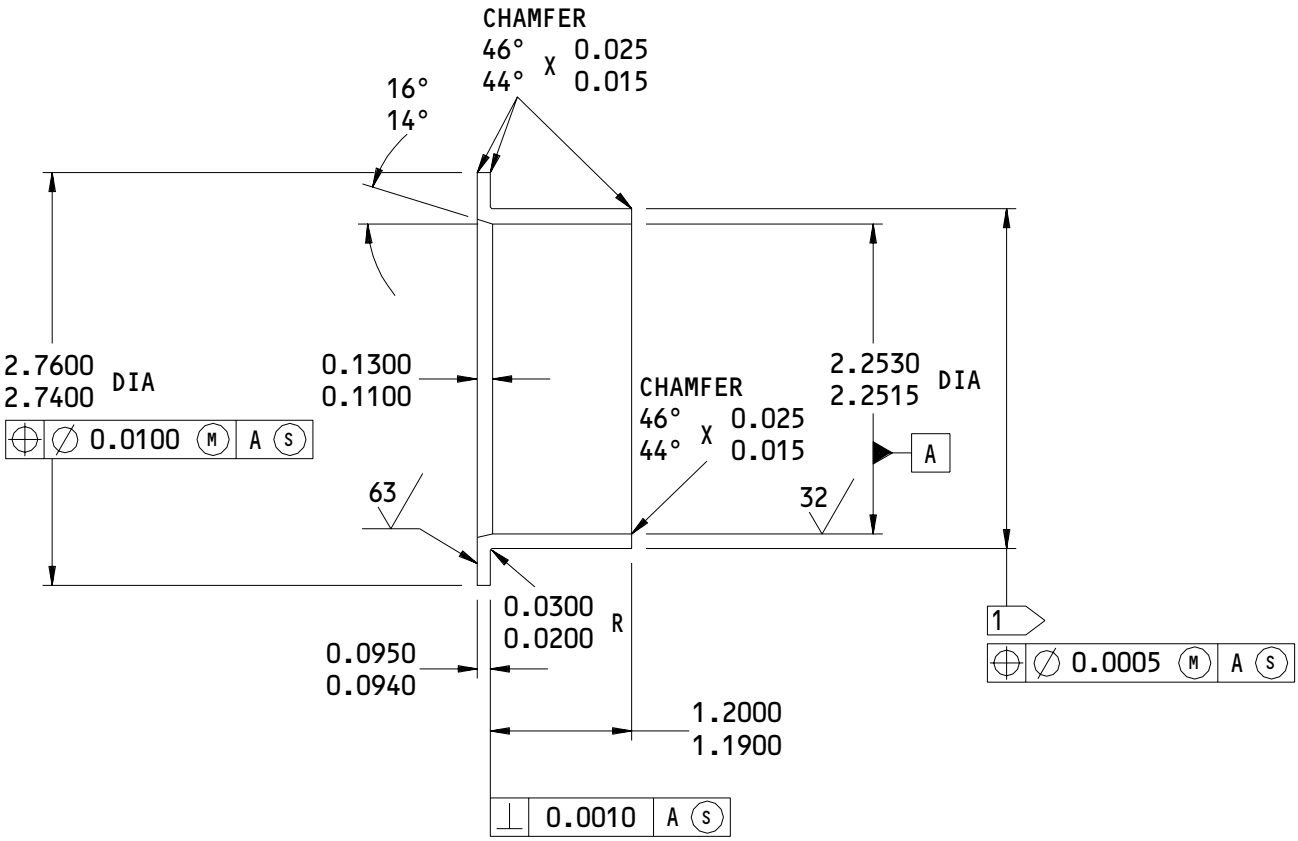
FINISH: CADMIUM PLATE (F–15.36) UNLESS SHOWN BY 2

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 604 (Sheet 2)

K97692



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0020-0.0051

2 NO PLATING

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36) UNLESS SHOWN BY 2

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [3] FIG. 601 - REPLACES BUSHING (615)

Oversize Bushing Details
Figure 605

K97693

BRAKE ROD ASSEMBLY - REPAIR 15-1

161T7138-1

1. General

   A. This procedure has the necessary data to replace the bushings (870) and refinish the brake rod assembly (867).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

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

   B. References

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

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

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

      (4) SOPM 20-60-03, Lubricants

      (5) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushings (870).

      (2) If you find defects on hole surfaces, refer to REPAIR 15-2 for repair instructions. .

(3) Install replacement bushings (870) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(4) Machine the bushings to design dimensions and finish.

(5) Make sure lubrication passages are not blocked. Apply BMS 3-33 grease at the lube fittings until grease comes out at the bushing inner diameter.

(6) Fillet seal the bushings (870) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) BOO571 Coating - Hydraulic Fluid Resistant, Type 41 (SOPM 20-44-01)

(2) COO033 Enamel - BMS 10-60, Type 2, 701 Black (SOPM 20-60-02)

(3) COO033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

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

C. Procedure (Fig. 601)

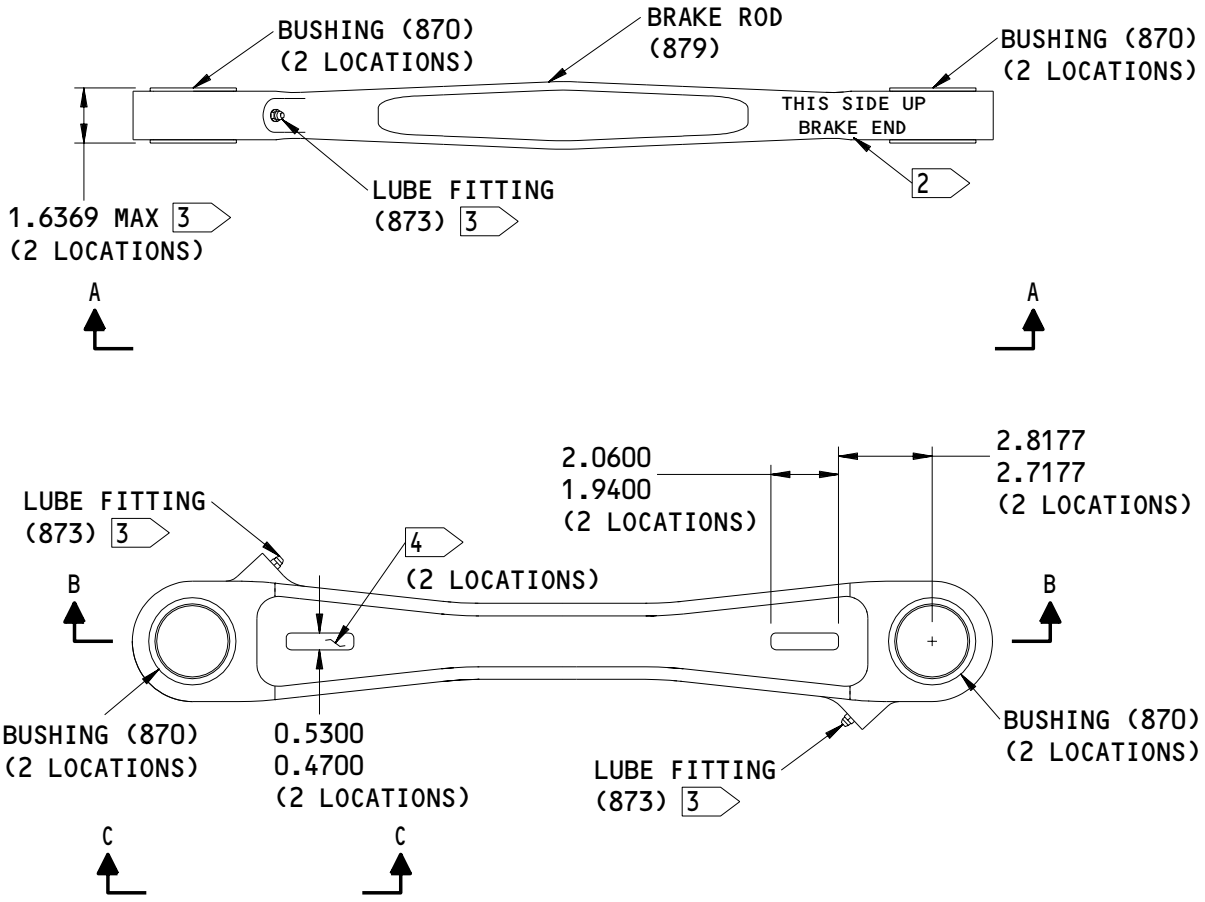
(1) Apply BMS 10-60, type 2 enamel (F-20.56-707) to the external surfaces, unless shown differently.

(2) Do not apply enamel (F-20.56-707) in the part mark area. The part mark area must be finished as follow.:

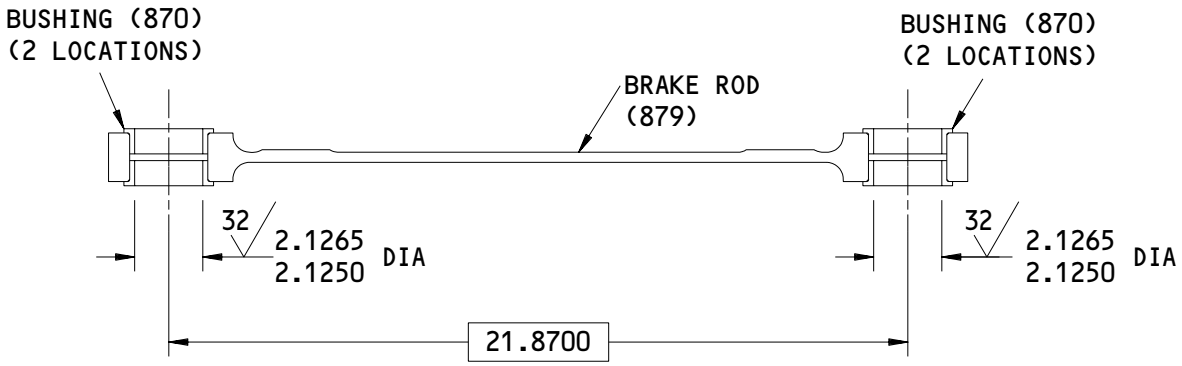
(a) Make sure the part number and serial number are visible.

(b) Apply BMS 10-60 enamel (F-19.39-707) and let dry. Then, apply a coat of BMS 10-60 enamel (F-19.39-701) to the identification numbers only and let dry. Overcoat the entire area with type 41 clear coating (F-21.34), filling to a thickness equivalent to the adjacent area.

(3) Stencil the letters as shown.



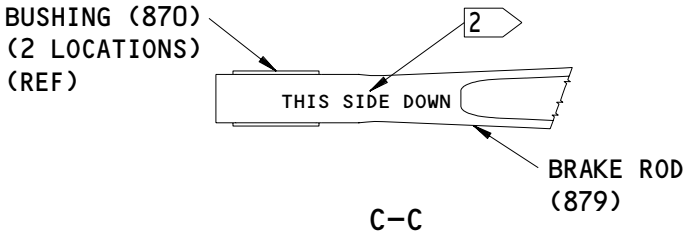
A–A



B–B

161T7138-1
Brake Rod Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)

K97709



C–C

1 ADJUST TO THIS DIMENSION, IF NECESSARY

2 STENCIL WITH 0.25 HIGH LETTERS, THEN APPLY BMS 10-60 ENAMEL (F-19.39-701) TO LETTERS ONLY

3 NO ENAMEL HERE

4 NO ENAMEL (F-20.56) ON THE PART MARK AREA. REFER TO REFINISH TEXT

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7138-1
Brake Rod Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

BRAKE ROD - REPAIR 15-2

161T7138-2

1. General

A. This procedure has the necessary data to repair and refinish the brake rod (879).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Holes for Bushings

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

(7) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(8) SOPM 20-42-05, Bright Cadmium Plating

(9) SOPM 20-44-04, Application of Urethane Compatible Primer

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

C. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a magnetic particle check (SOPM 20-20-01).

(3) Shot peen the hole (SOPM 20-10-03).

(4) Apply cadmium-titanium plate (F-15.32), plus BMS 10-79, type 3 primer (F-19.47) to the hole.

(5) Make oversize bushings (Fig. 602) to adjust for the material removed.

(6) Install the bushings as shown in REPAIR 15-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

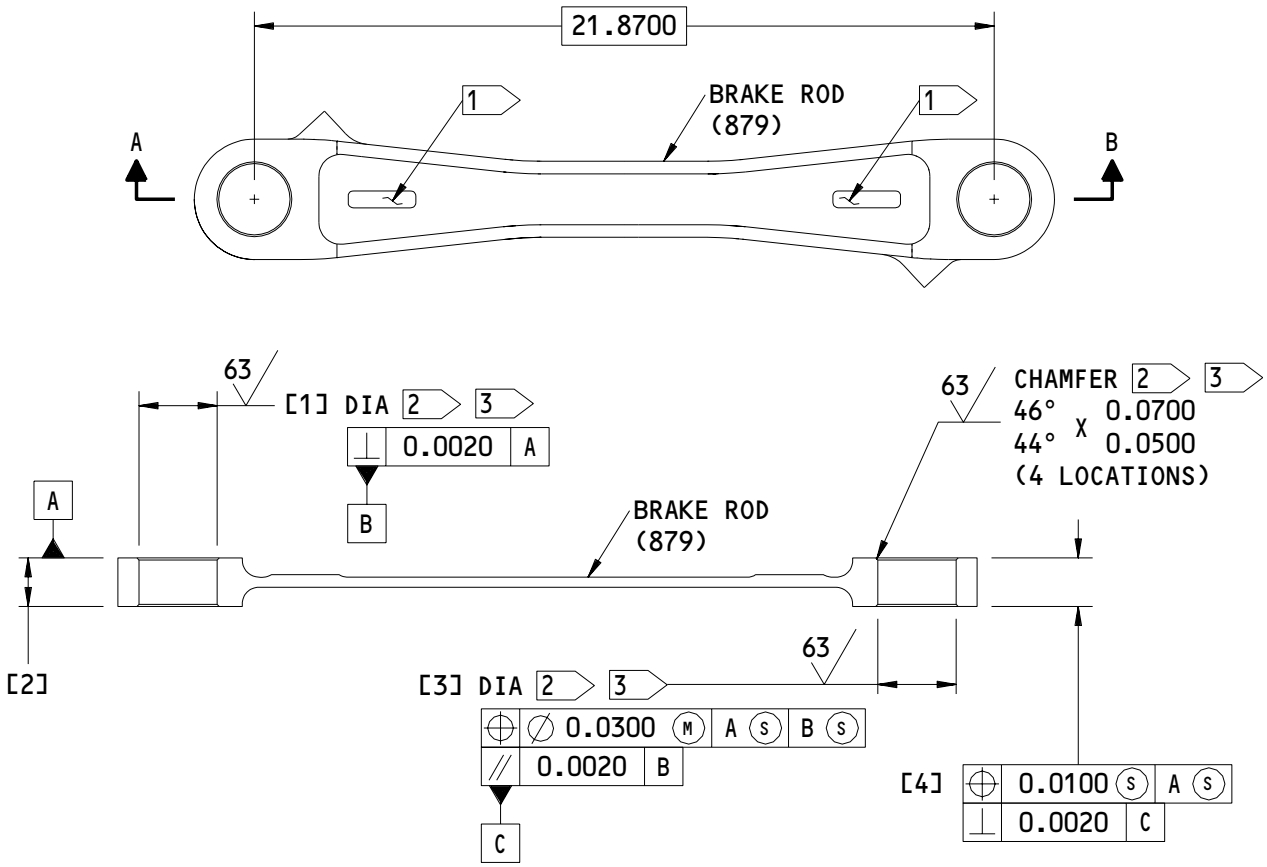
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

C. Procedure (Fig. 601)

(1) Cadmium titanium plate (F-15.01), and apply BMS 10-79, type 3 primer (F-19.47), unless shown differently.



A–A

REFERENCE NUMBER	[1]	[2]	[3]	[4]
DESIGN DIMENSION	2.3145 2.3130	1.4375 1.4325	2.3145 2.3130	1.4375 1.4325
REPAIR LIMIT	2.3745 3	----	2.3745 3	----

1 PART NUMBER AND SERIAL NUMBER LOCATION

2 CADMIUM–TITANIUM PLATE (F–15.32). APPLY BMS 10–79, TYPE 3 PRIMER (F–19.47)

3 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

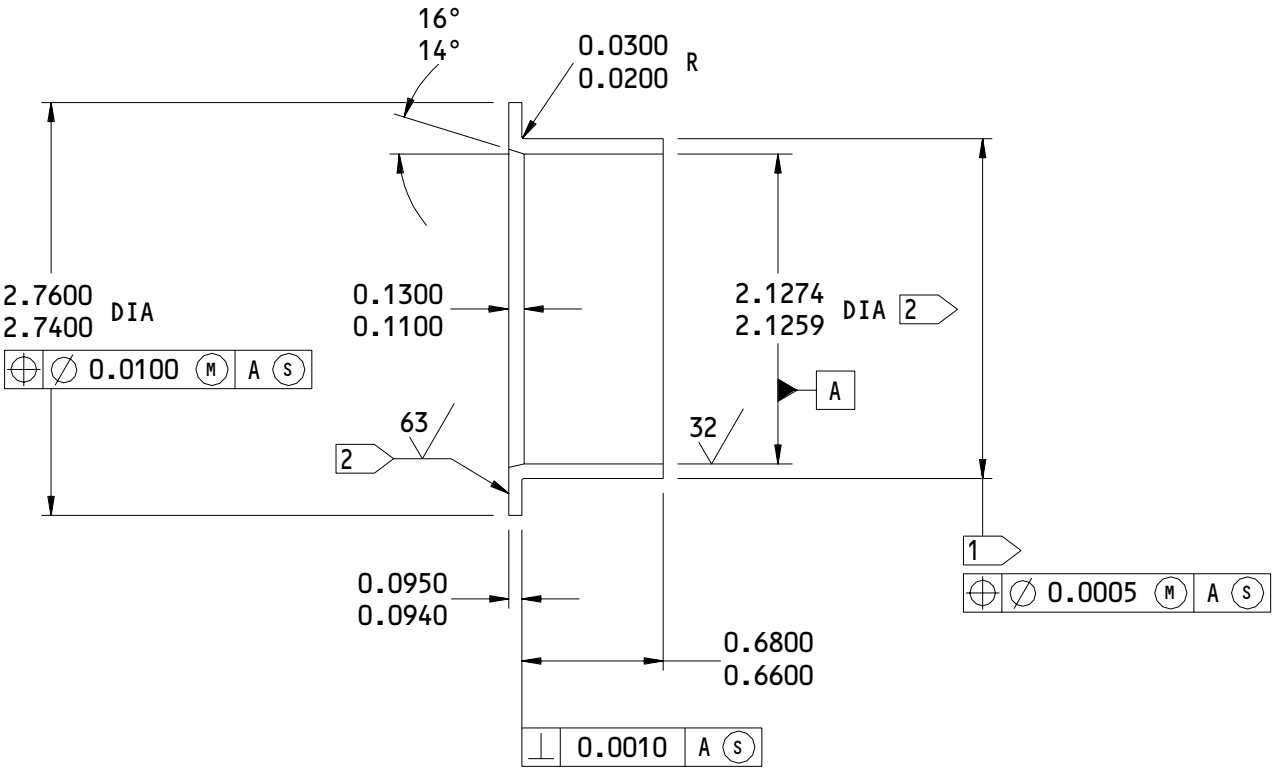
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7138–2
Brake Rod Repair and Refinish
Figure 601

K97717



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0010-0.0040

2 DO NOT PLATE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.36) UNLESS SHOWN BY 2

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATIONS [1] [3] FIG. 601 - REPLACES BUSHING (870)

Oversize Bushing Details
Figure 602

K97723

BRAKE ROD PIN - REPAIR 16-1

161T7140-1, -2

1. General

A. This procedure has the data to repair and refinish the brake rod pin (777, 855).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Pin Repair

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

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

(8) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(10) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(12) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601, 602)

(1) Shank

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) For the outside diameter, shot peen, chrome plate and grind to design dimensions and finish.

(d) For the inside diameter, refinish as indicated.

(2) Reliefs

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(3) C00308 Compound - MIL-C-11796 Class 1 Corrosion Preventive (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

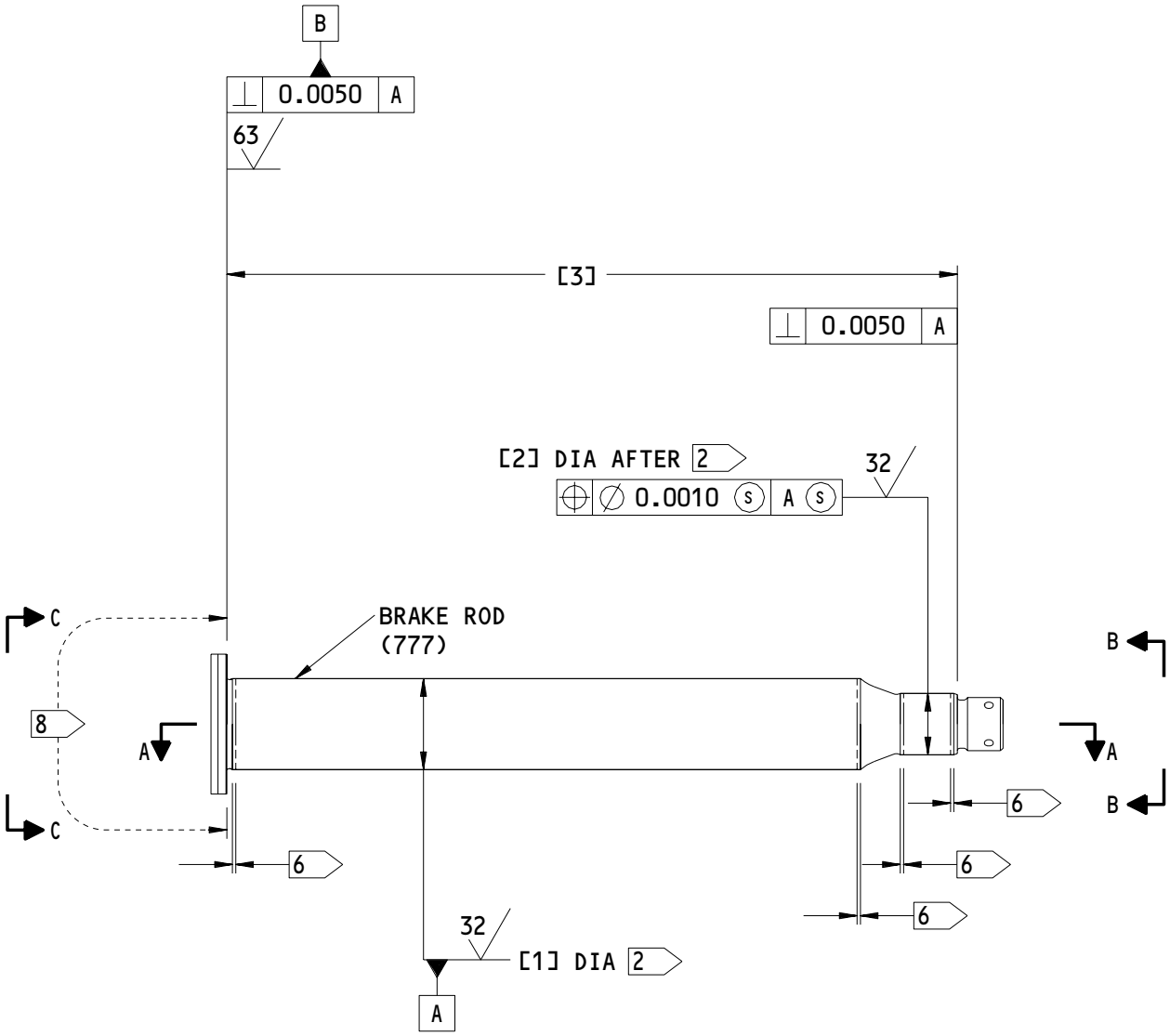
(5) SOPM 20-44-04, Application of Urethane Compatible Primer

(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

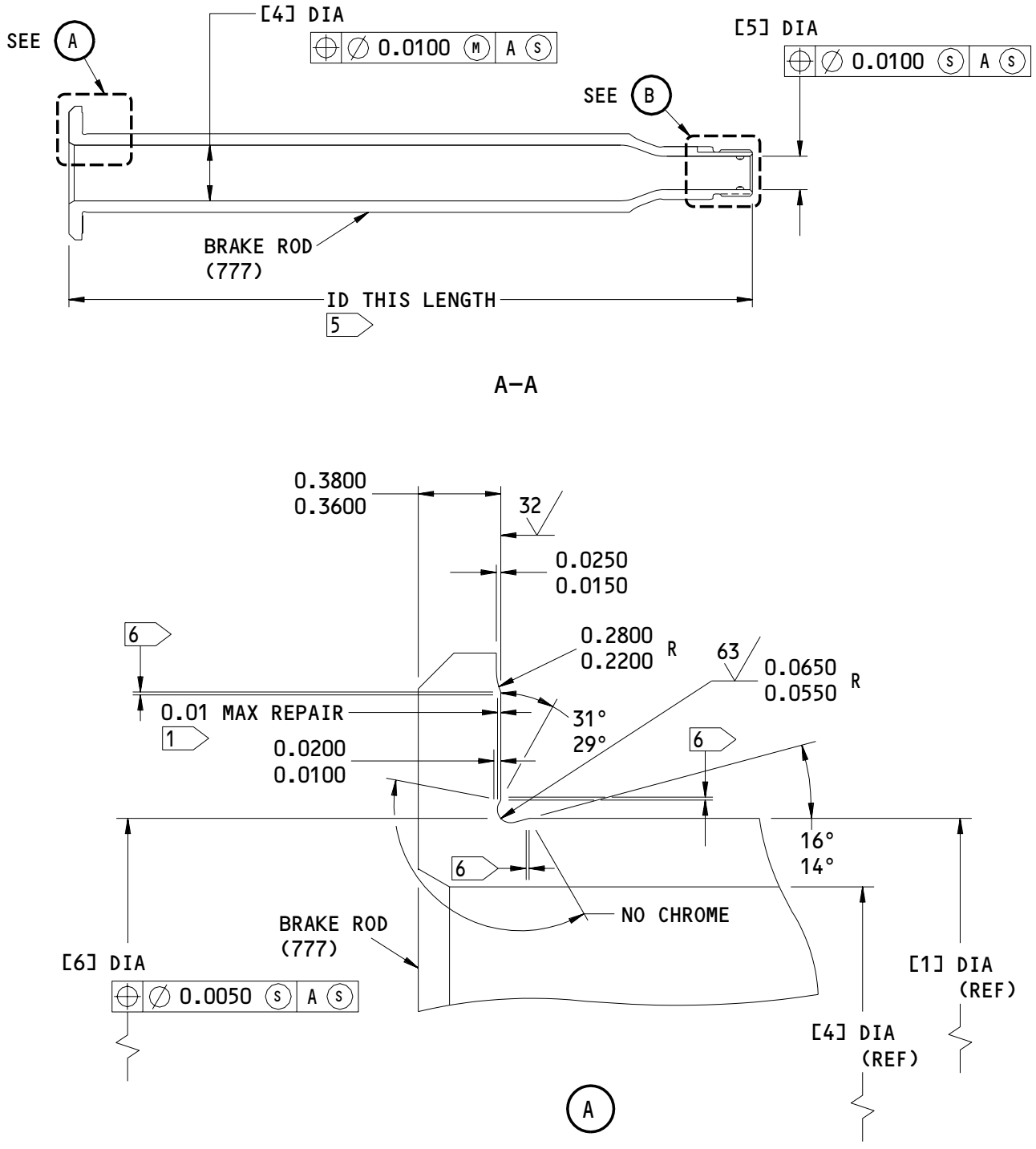
C. Procedure (Fig. 601, 602)

(1) Cadmium titanium plate (F-15.01), and apply BMS 10-79 type 3 primer (F-19.66), unless shown differently.

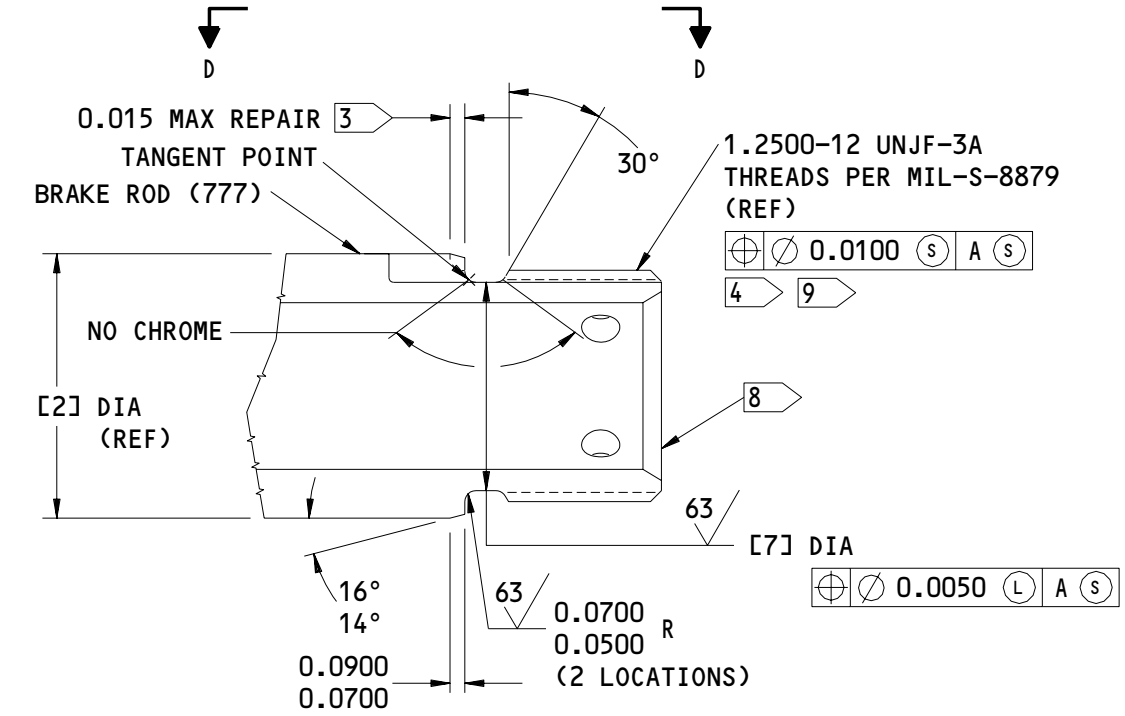


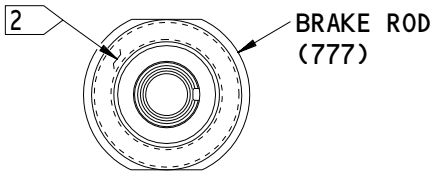
161T7140-1
Brake Rod Pin Repair and Refinish
Figure 601 (Sheet 1)

K99828

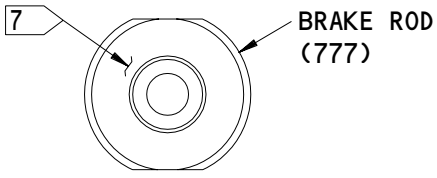


161T7140-1
Brake Rod Pin Repair and Refinish
Figure 601 (Sheet 2)

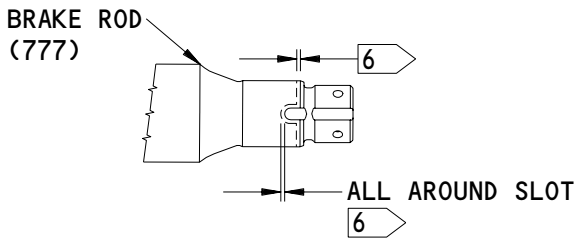




B–B



C–C



D–D

161T7140-1
Brake Rod Pin Repair and Refinish
Figure 601 (Sheet 3)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]
DESIGN DIMENSION	2.1240 2.1230	1.4365 1.4350	16.9808 16.9758	1.5100 1.4900	0.9100 0.8900	2.0805 2.0705	1.1300 1.1200
REPAIR LIMIT	2.0940 1	1.4065 1	----	1.5300 3	0.9300 3	2.0505 3	1.1000 3

1 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

2 THERMAL SPRAY AREA (F-15.384) 0.003 MINIMUM THICKNESS

3 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

4 DO NOT SHOT PEEN

5 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66). APPLY MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

6 CHROME PLATE RUNOUT AREA

7 PART NUMBER AND SERIAL NUMBER LOCATION

8 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66). APPLY BMS 10-60, TYPE 2 ENAMEL (F-19.39-707)

9 CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451). THREADED DIMENSIONS APPLY AFTER PLATING

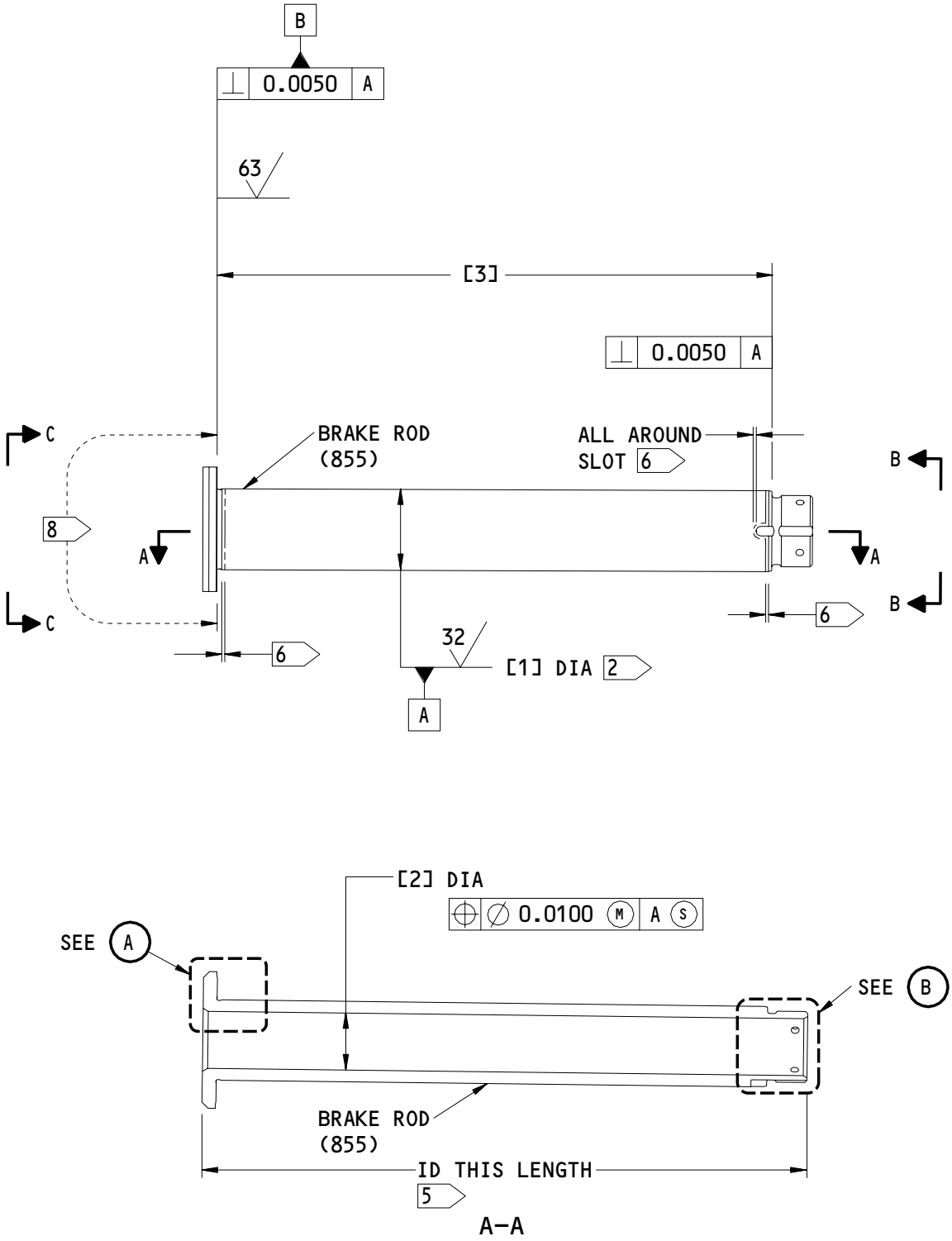
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

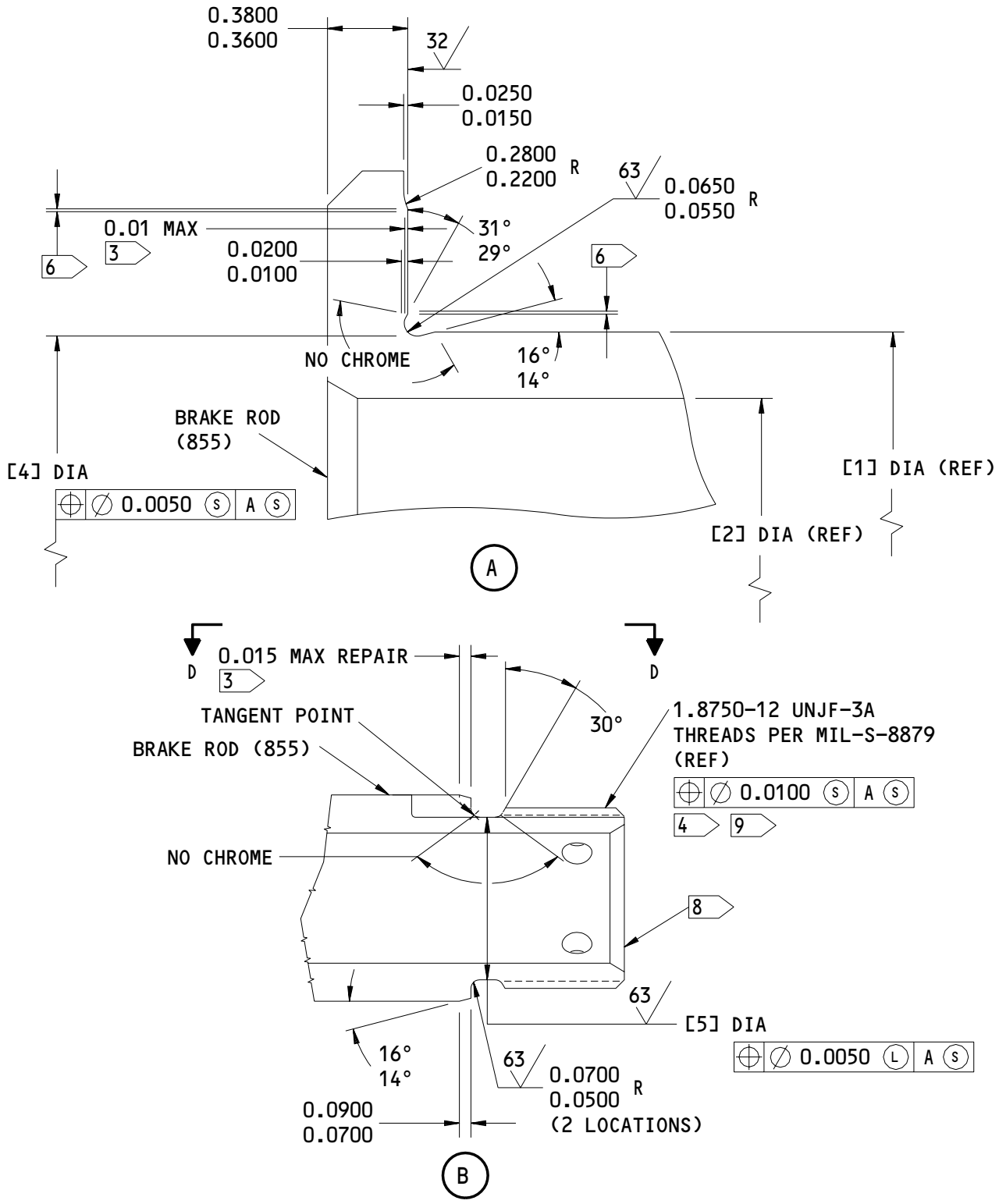
ALL DIMENSIONS ARE IN INCHES

161T7140-1
Brake Rod Pin Repair and Refinish
Figure 601 (Sheet 4)

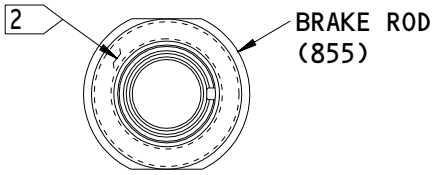


161T7140-2
Brake Rod Pin Repair and Refinish
Figure 602 (Sheet 1)

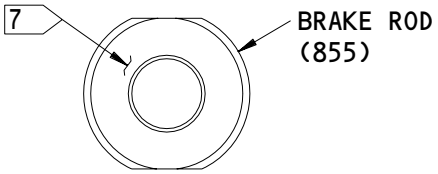
L00262



161T7140-2
Brake Rod Pin Repair and Refinish
Figure 602 (Sheet 2)



B–B



C–C

161T7140-2
Brake Rod Pin Repair and Refinish
Figure 602 (Sheet 3)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]
DESIGN DIMENSION	2.1240 2.1230	1.5100 1.4900	14.4965 14.4915	2.0805 2.0705	1.7550 1.7450
REPAIR LIMIT	2.0940 <1>	1.5300 <3>	----	2.0505 <3>	1.7250 <3>

<1> LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

<2> THERMAL SPRAY AREA (F-15.384) 0.003 MINIMUM THICKNESS

<3> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<4> DO NOT SHOT PEEN

<5> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66). APPLY MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

<6> CHROME PLATE RUNOUT AREA

<7> PART NUMBER AND SERIAL NUMBER LOCATION

<8> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66). APPLY BMS 10-60, TYPE 2 ENAMEL (F-19.39-707)

<9> CADMIUM-TITANIUM PLATE (F-15.32). WIPE THE PLATING WITH PRIMER (F-19.451). THREADED DIMENSIONS APPLY AFTER PLATING

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7140-2
Brake Rod Pin Repair and Refinish
Figure 602 (Sheet 4)

L00281

UPPER TORQUE LINK ASSEMBLY - REPAIR 17-1

161T7142-1

1. General

A. This procedure has the necessary data to replace the bushings (384, 387, 390, 393) in the upper torque link assembly (381).

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

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

B. References

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

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

(3) SOPM 20-60-03, Lubricants

C. Procedure (Fig. 601)

(1) Remove the bushings (384, 387, 390, 393).

(2) If you find defects on hole surfaces, refer to REPAIR 17-2 for repair instructions.

(3) Install replacement bushings (384, 387, 390, 393) with BMS 3-33 grease by the shrink-fit method (SOPM 20-50-03).

(4) Machine the bushings to design dimensions and finish.

3. Refinish

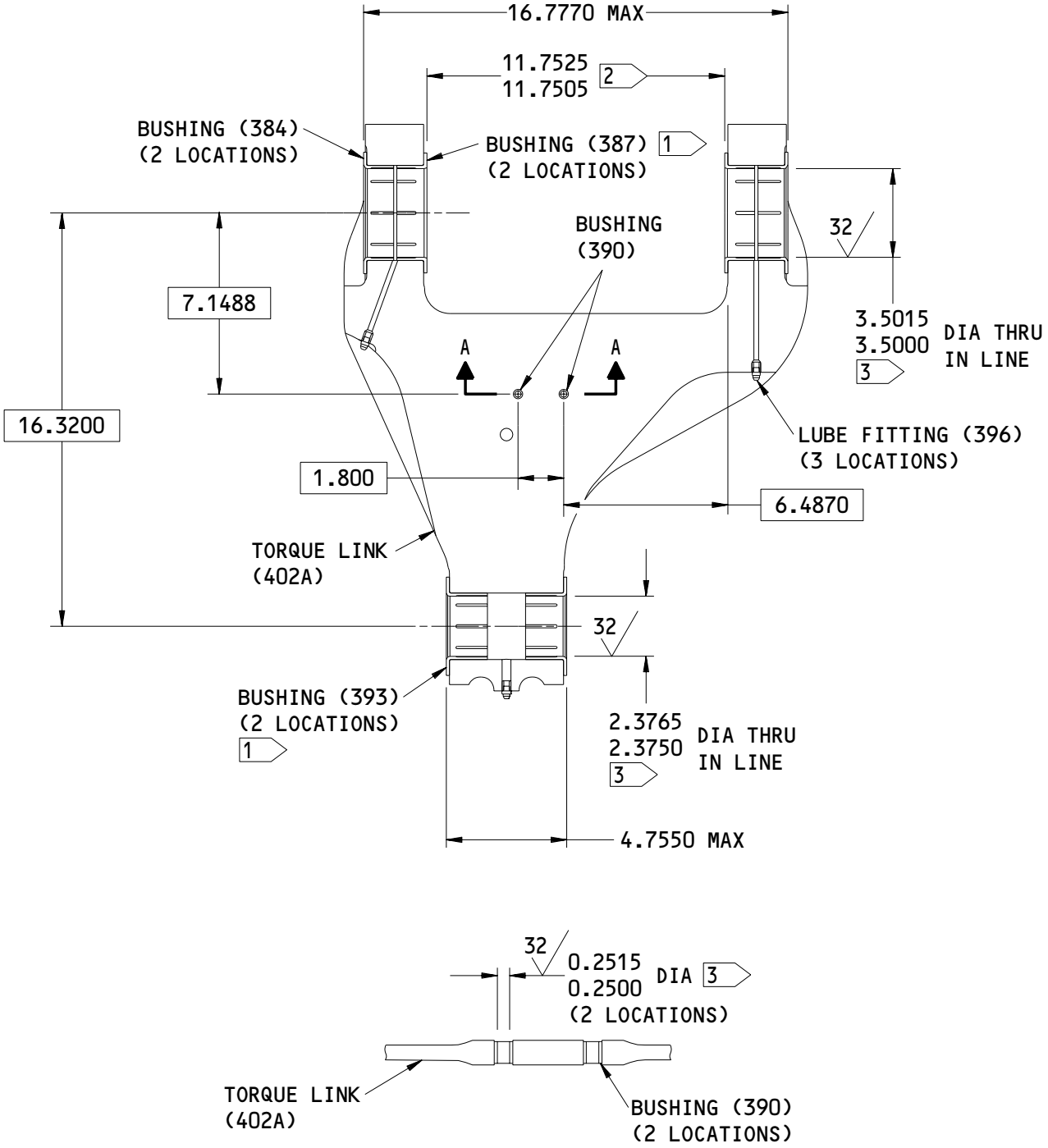
A. References

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

(2) SOPM 20-44-02, Temporary Protective Coatings

B. Procedure

(1) No finish, but temporary protective coatings (F-25.01) can be used.



A–A

161T7142-1
Upper Torque Link Assembly Bushing Replacement
Figure 601 (Sheet 1)

L01339

1 MAXIMUM GAP BETWEEN FACE OF LUG AND INSIDE FACE OF BUSHING FLANGE IS 0.0010

2 MACHINE UNCOATED UNDERSIDE FLANGE FACE OF BUSHINGS (387) AS NECESSARY TO GET THIS DIMENSION WHEN INSTALLED. SURFACE FINISH 63 MICROINCHES. MINIMUM FLANGE THICKNESS IS 0.1175

3 ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7142-1
Upper Torque Link Assembly Bushing Replacement
Figure 601 (Sheet 2)

L01341

UPPER TORQUE LINK - REPAIR 17-2

161T7142-2

1. General

A. This procedure has the necessary data to repair the upper torque link (402A).

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

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

D. General repair details:

(1) Material: Ti-10V-2Fe-3Al

(2) Shot Peen: Hard Shot (RC55-65)
Shot Size 0.023 - 0.046
Intensity 0.014A2
Coverage 2.0

2. Holes for Bushings

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) G00167 Thermal Spray - BMS 10-67, Type 1 (SOPM 20-10-05)

B. References

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

(2) SOPM 20-10-05, Application and Finishing of Thermal Spray Coatings

(3) SOPM 20-10-07, Machining of Titanium

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

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

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

(7) SOPM 20-42-05, Bright Cadmium Plating

C. Procedure (Fig. 601)

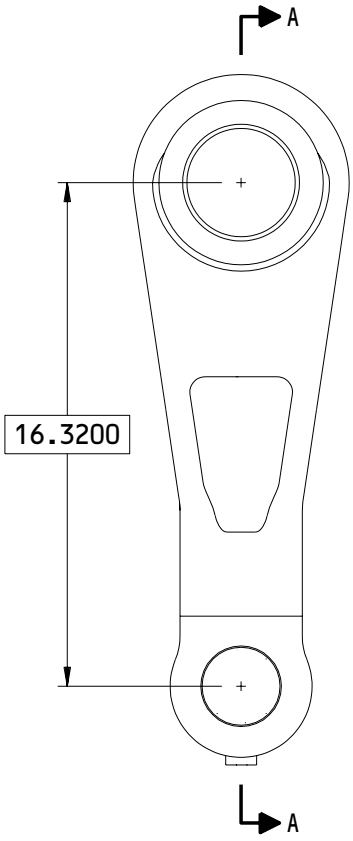
(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a penetrant check (SOPM 20-20-02).

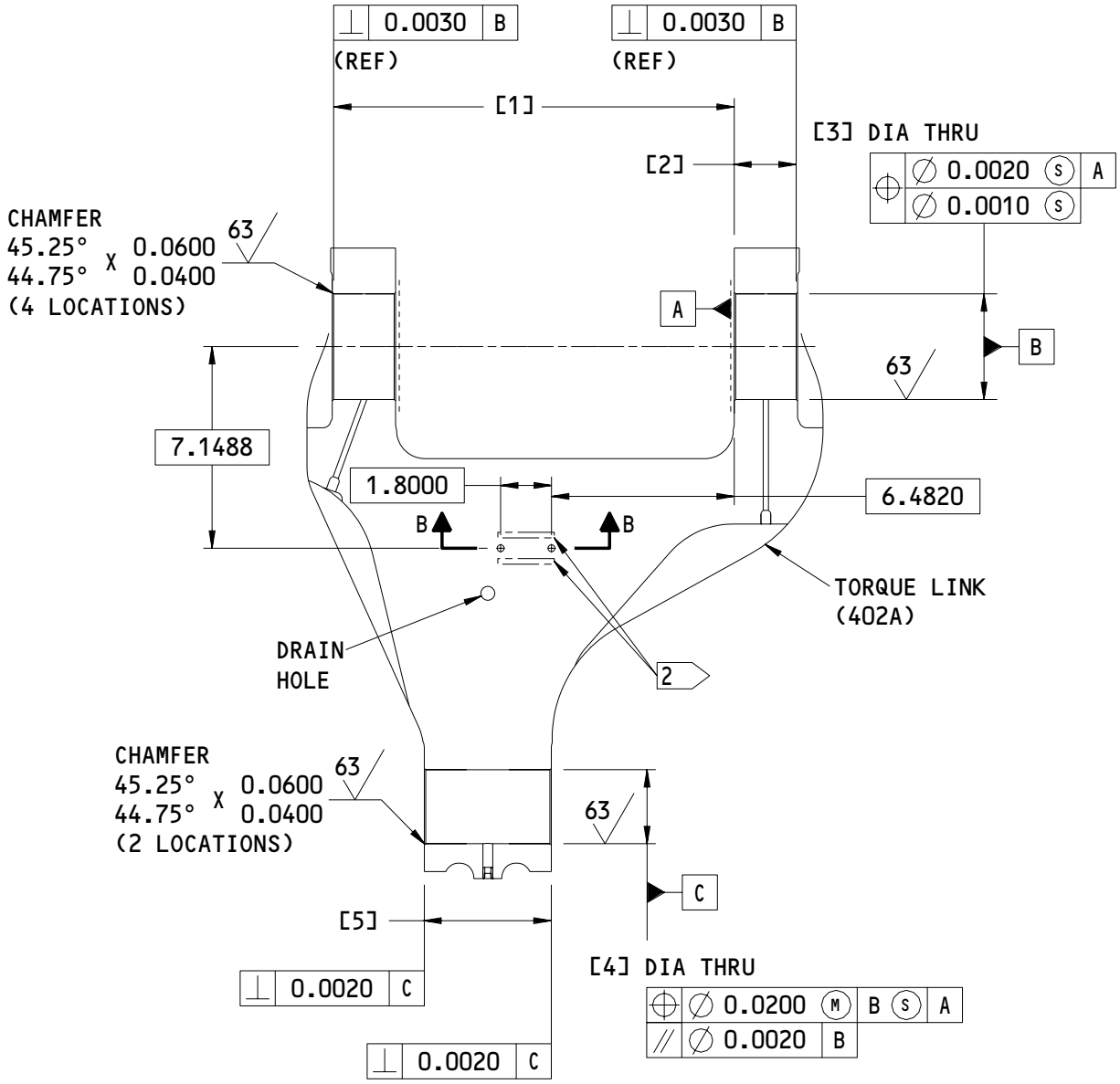
(3) Shot peen the hole SOPM 20-10-03.

(4) Make oversize bushings (Fig. 602 and on) to adjust for the material removed.

(5) Install the bushings as shown in REPAIR 17-1.

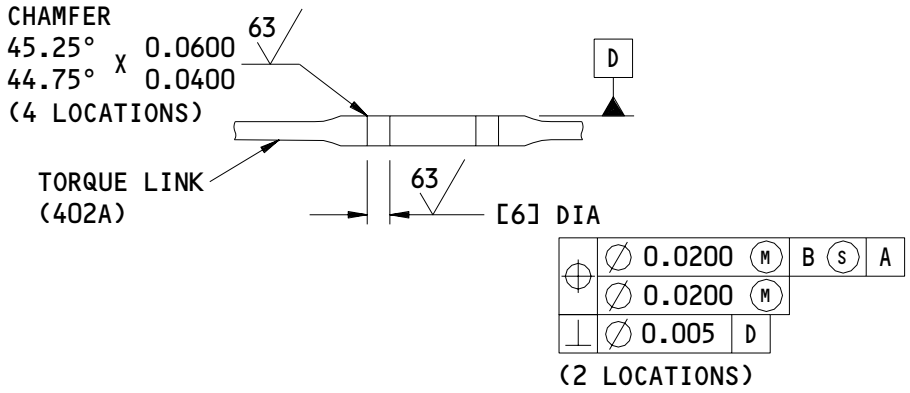


161T7142-2
Upper Torque Link Repair
Figure 601 (Sheet 1)



A–A

161T7142-2
Upper Torque Link Repair
Figure 601 (Sheet 2)



B–B

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	14.2635 14.2435	2.2565 2.2365	3.7515 3.7500	2.6265 2.6250	4.5025 4.4975	0.3754 0.3748
REPAIR LIMIT	----	----	3.8115 1	2.6865 1	----	0.4354 1

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

2 PART NUMBER AND SERIAL NUMBER LOCATION

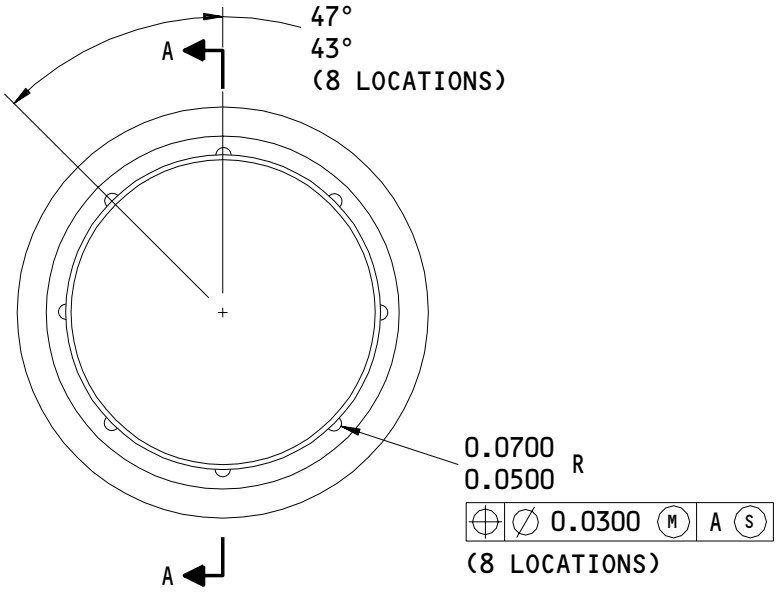
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

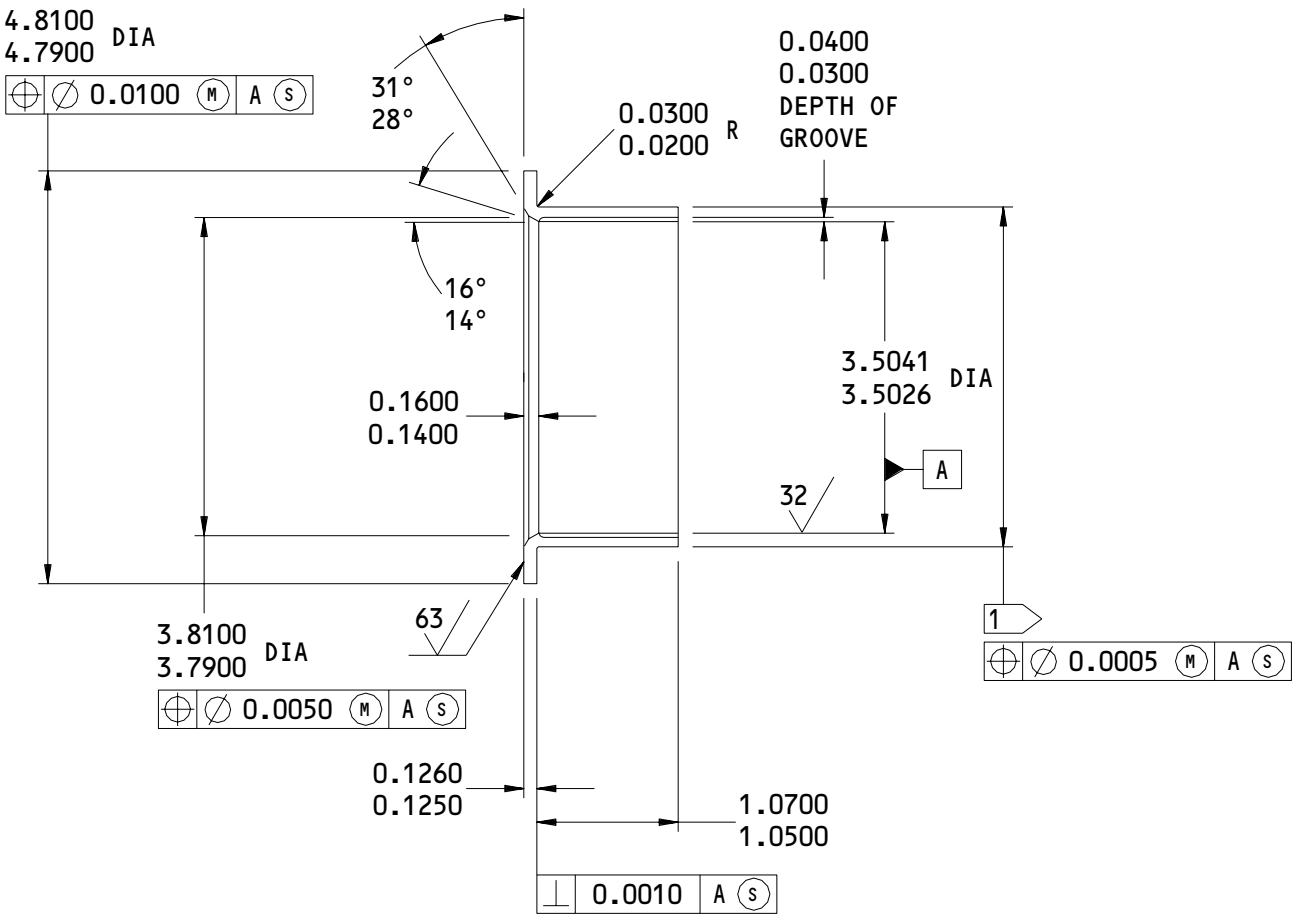
161T7142-2
Upper Torque Link Repair
Figure 601 (Sheet 3)



HOLE LOCATION [3] FIG. 601 - REPLACES BUSHING (384)

Oversize Bushing Details
Figure 602 (Sheet 1)

L02264



A–A

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS THE INTERFERENCE 0.0030–0.0060

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.015–0.025 R

MATERIAL: AL–NI–BRONZE (AMS 4640)

FINISH: NO FINISH

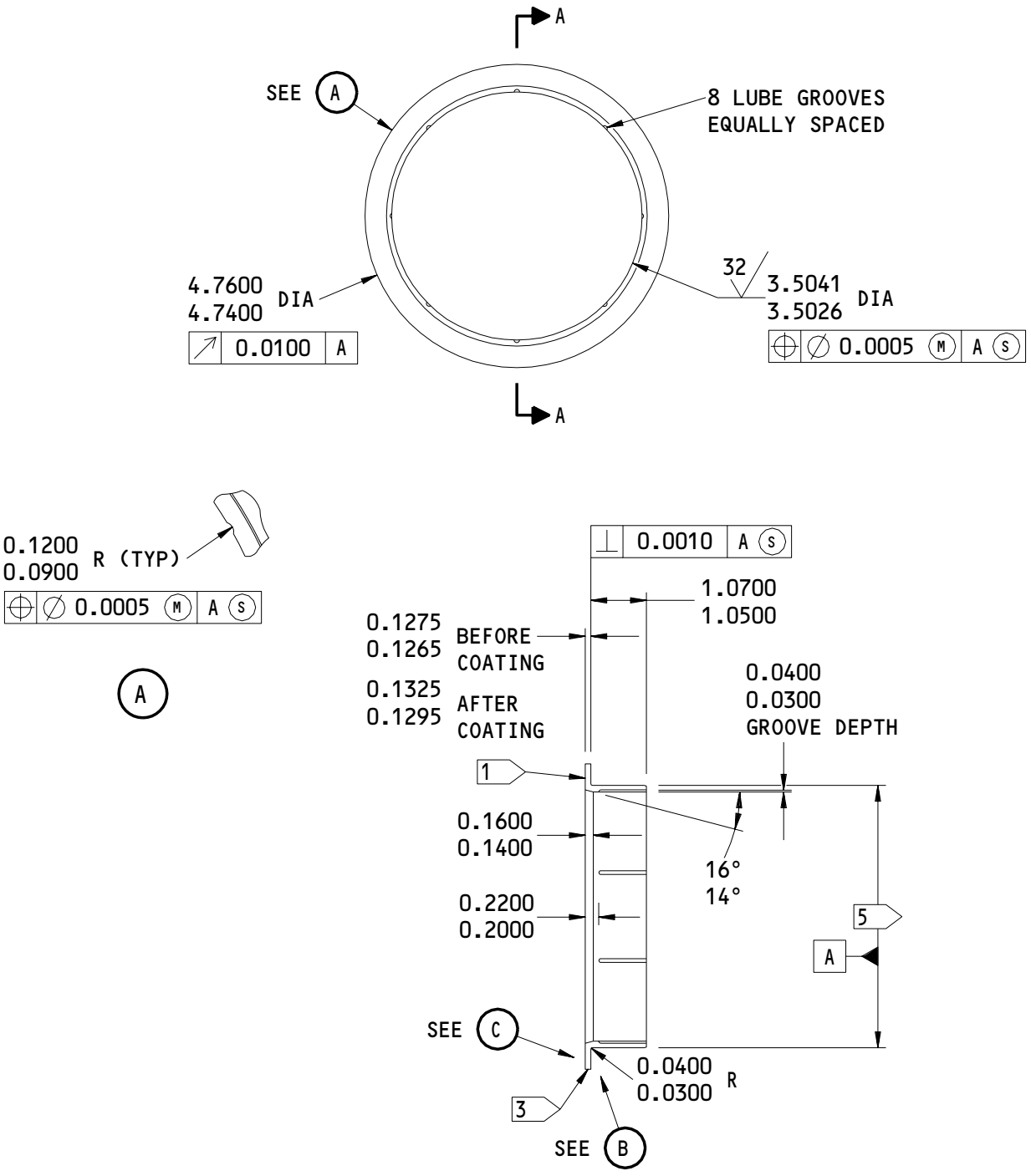
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [3] FIG. 601 – REPLACES BUSHING (384)

Oversize Bushing Details
Figure 602 (Sheet 2)

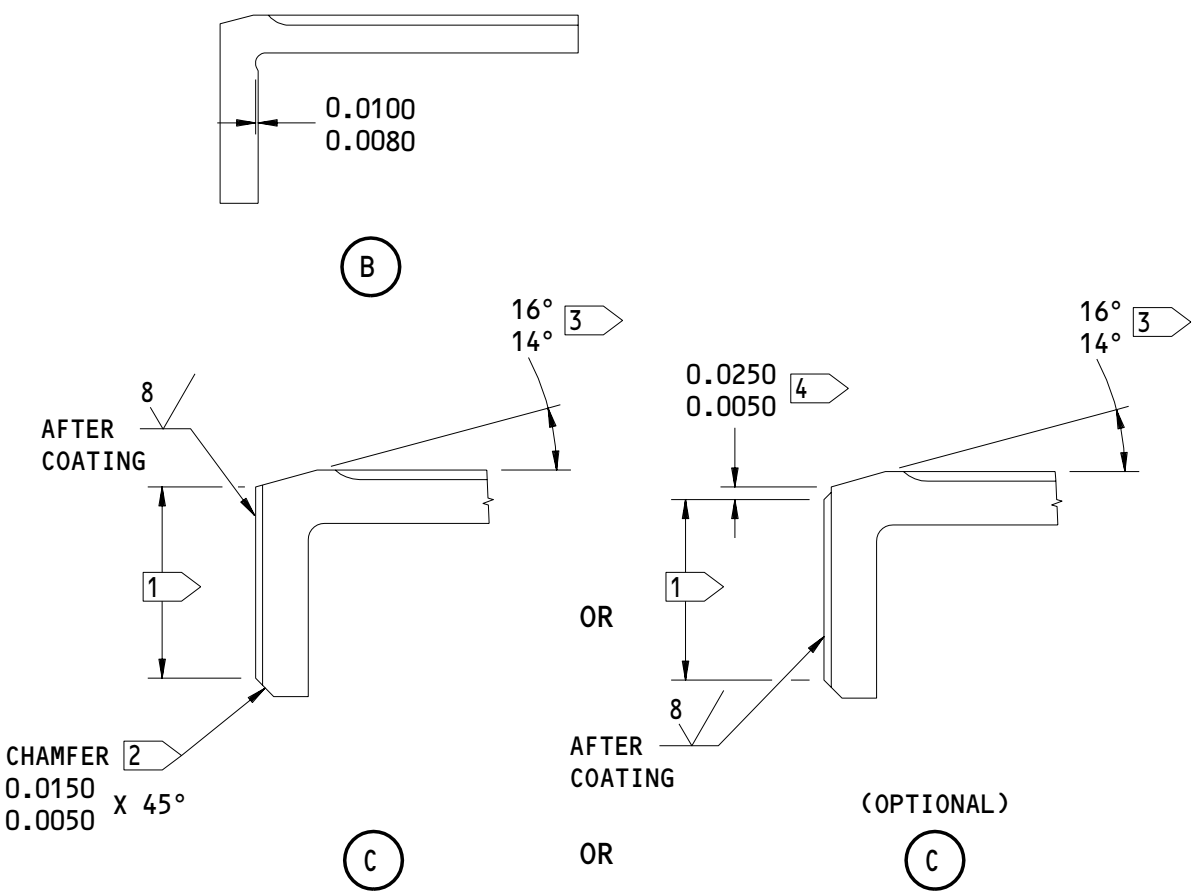
L02265



A–A

HOLE LOCATION [3] FIG. 601 – REPLACES BUSHING (387)

Oversize Bushing Details
Figure 603 (Sheet 1)



1 APPLY BMS 10-67, TYPE 1 THERMAL SPRAY COATING (F-15.380) 0.003 INCH MINIMUM, EXCEPT COBALT COMPOSITION TO BE A MINIMUM OF 15 PERCENT BY WEIGHT

2 CHAMFER MADE AFTER COATING

3 NO COATING OVERSPRAY IN THIS AREA

4 COATING RUNOUT AREA. THE COATING MUST NOT END WITH A SQUARE EDGE. THE COATING MUST GO FROM FULL TO ZERO THICKNESS OVER 0.0050 MINIMUM LENGTH

5 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS THE INTERFERENCE 0.0030-0.0060

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.010-0.020 R

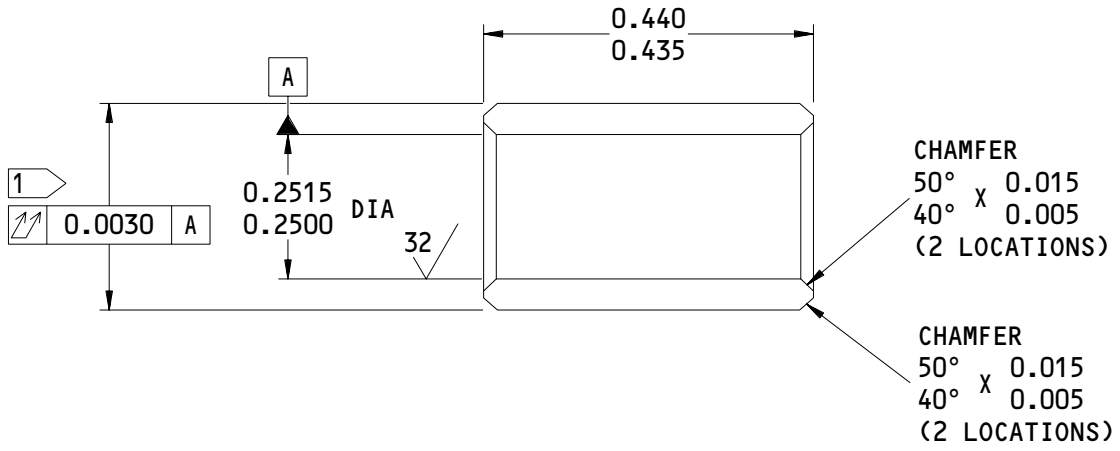
MATERIAL: AL-NI-BRONZE (AMS 4640 OR AMS 4880)

FINISH: AS SHOWN BY 1

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603 (Sheet 2)



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0002-0.0013

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: NO FINISH

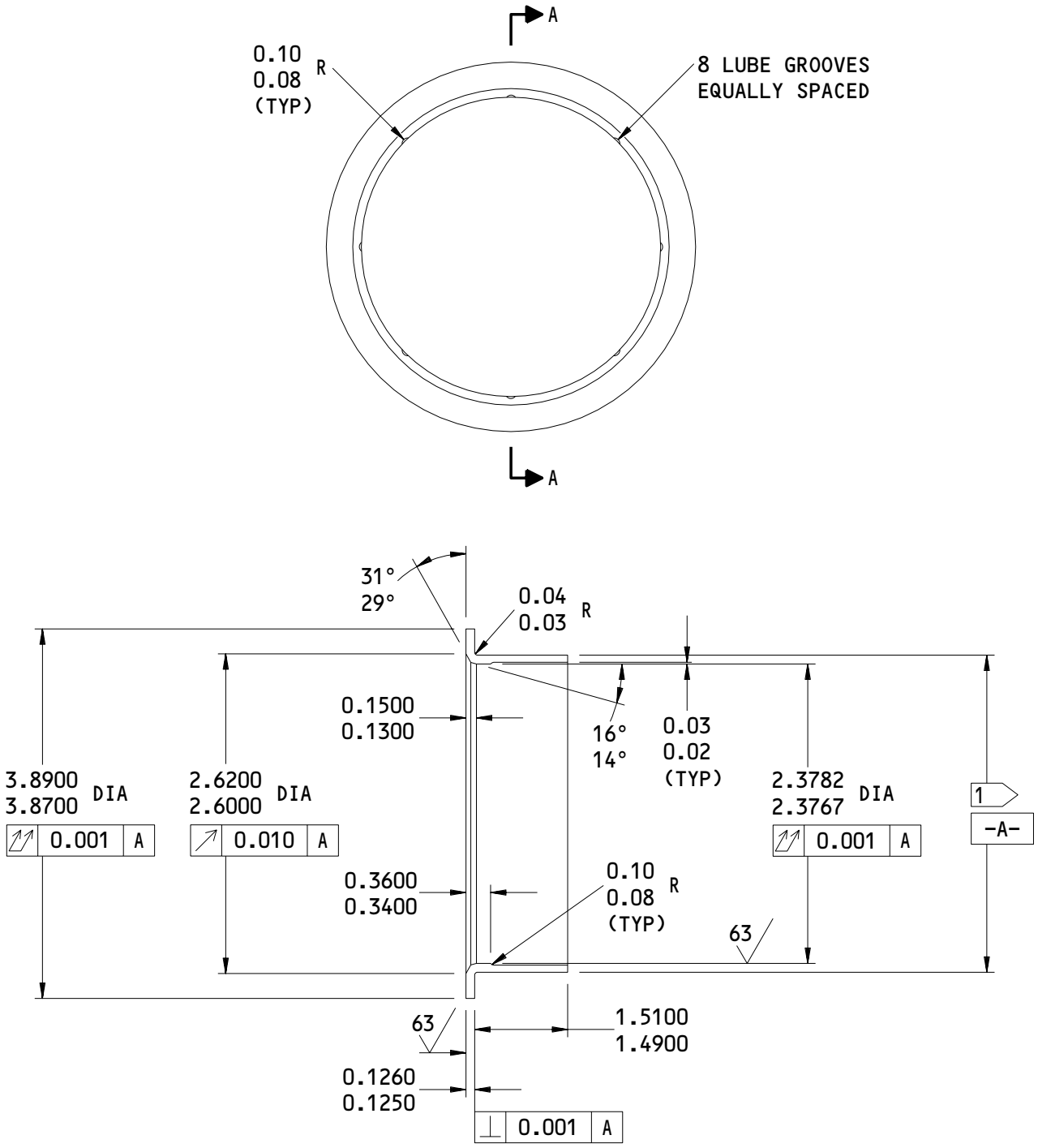
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [6] FIG. 601 - REPLACES BUSHING (390)

Oversize Bushing Details
Figure 604

L04697



A–A

HOLE LOCATION [4] FIG. 601 – REPLACES BUSHING (393)

Oversize Bushing Details
Figure 605 (Sheet 1)

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE 0.0022-0.0052

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01-0.02 R

MATERIAL: AL-NI-BRONZE (AMS 4640 OR AMS 4880)

FINISH: NO FINISH

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 605 (Sheet 2)

LOWER TORQUE LINK ASSEMBLY - REPAIR 18-1

161T7144-1

1. General

A. This procedure has the necessary data to replace the bushings (426, 429, 432, 435) in the lower torque link assembly (423).

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

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

B. References

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

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

(3) SOPM 20-60-03, Lubricants

C. Procedure (Fig. 601)

(1) Remove the bushings (426, 429, 432, 435).

(2) If you find defects on hole surfaces, refer to REPAIR 18-2 for repair instructions.

(a) Install replacement bushings with BMS 3-33 grease by the shrink-fit method (SOPM 20-50-03). tes.

(3) Machine the bushings to design dimensions and finish.

3. Refinish

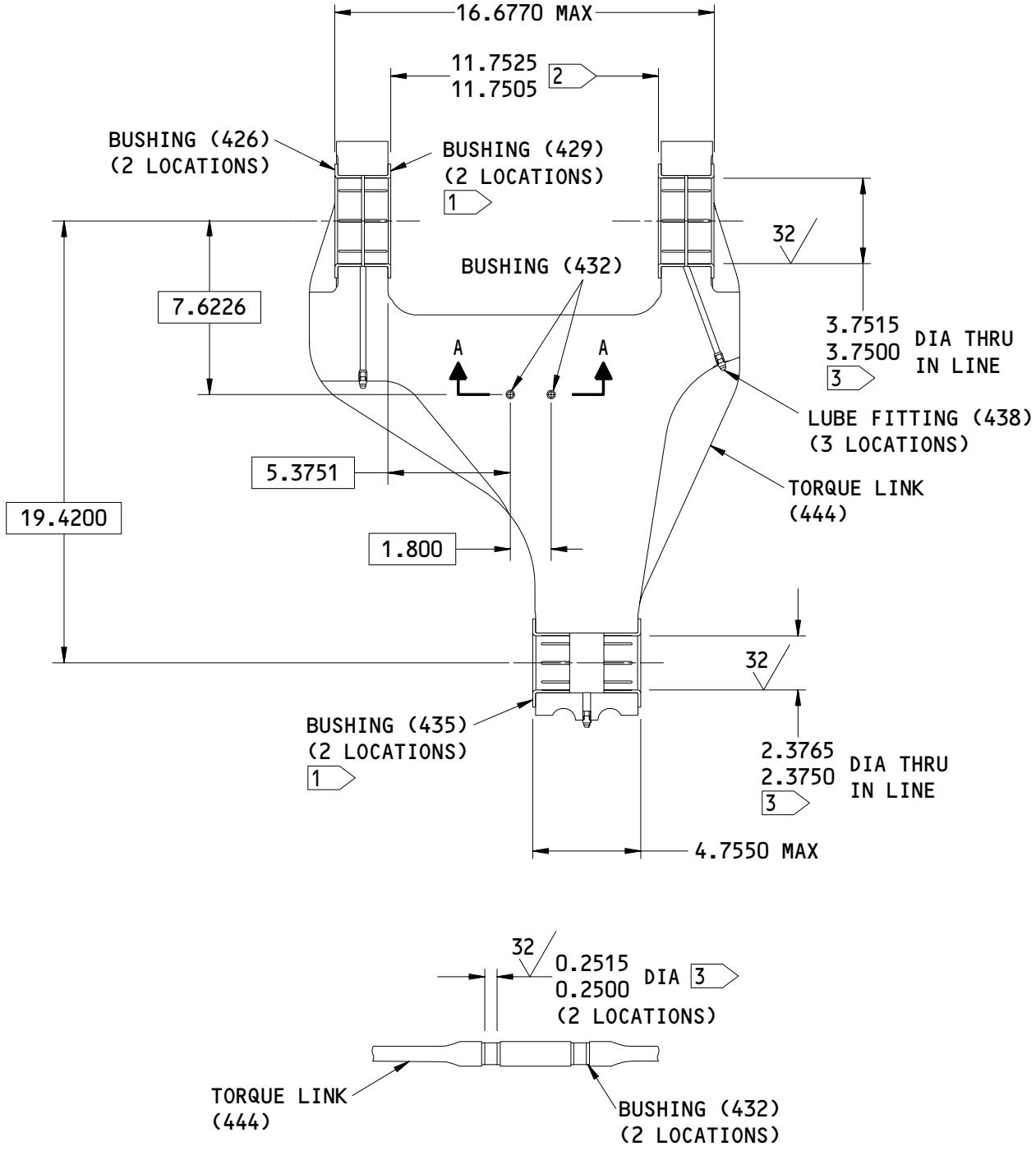
A. References

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

(2) SOPM 20-44-02, Temporary Protective Coatings

B. Procedure

(1) No finish, but temporary protective coatings (F-25.01) can be used.



A–A

161T7144-1
Lower Torque Link Assembly Bushing Replacement
Figure 601 (Sheet 1)

L02914

1 MAXIMUM GAP BETWEEN FACE OF LUG AND INSIDE FACE OF BUSHING FLANGE IS 0.0010

2 MACHINE UNCOATED UNDERSIDE FLANGE FACE OF BUSHING (429) AS NECESSARY TO GET THIS DIMENSION WHEN INSTALLED. SURFACE FINISH 63 MICROINCHES. MINIMUM FLANGE FACE THICKNESS IS 0.1175

3 ADJUST TO THIS DIMENSION, IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7144-1
Lower Torque Link Assembly Bushing Replacement
Figure 601 (Sheet 2)

L02915

LOWER TORQUE LINK - REPAIR 18-2

161T7144-2

1. General

A. This procedure has the necessary data to repair the lower torque link (444).

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

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

D. General repair details:

(1) Material: Ti-10V-2Fe-3Al

(2) Shot Peen: Hard Shot (RC55-65)
Shot Size 0.023 - 0.046
Intensity 0.014A2
Coverage 2.0

2. Holes for Bushings

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) G00167 Thermal Spray - BMS 10-67, Type 1 (SOPM 20-10-05)

B. References

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

(2) SOPM 20-10-05, Application and Finishing of Thermal Spray Coatings

(3) SOPM 20-10-07, Machining of Titanium

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

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

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

(7) SOPM 20-42-05, Bright Cadmium Plating

C. Procedure (Fig. 601)

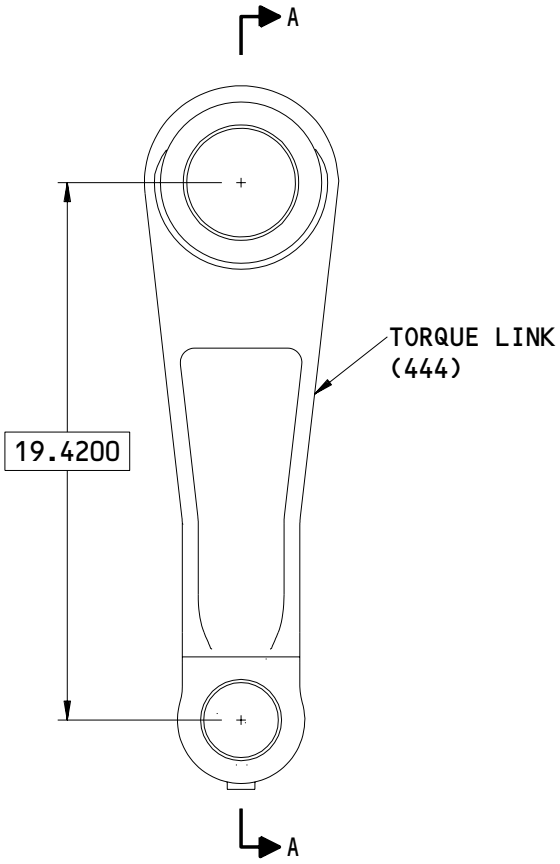
(1) Machine as necessary, within repair limits, to remove defects,

(2) Do a penetrant check (SOPM 20-20-02).

(3) Shot peen the hole (SOPM 20-10-03).

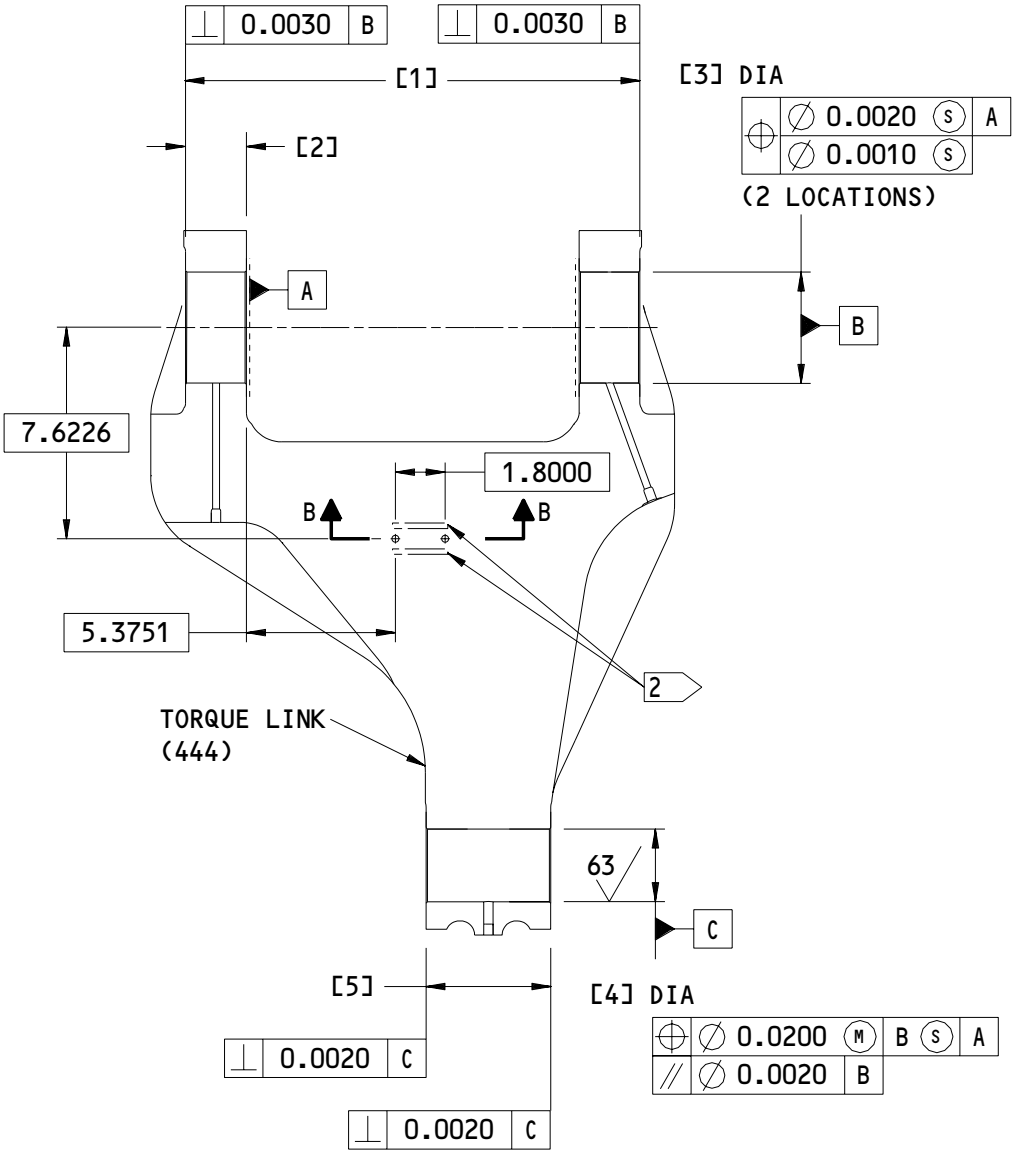
(4) Make oversize bushings (Fig. 602 and on) to adjust for the material removed.

(5) Install the bushings as shown in REPAIR 18-1.



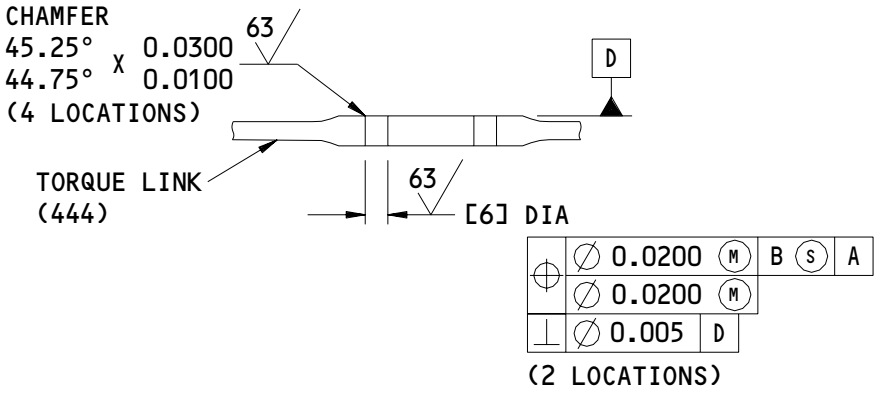
161T7144-2
Lower Torque Link Repair
Figure 601 (Sheet 1)

L02916



A–A

161T7144-2
Lower Torque Link Repair
Figure 601 (Sheet 2)



B–B

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	14.2135 14.1935	2.2065 2.1865	4.0015 4.0000	2.6265 2.6250	4.5025 4.4975	0.3754 0.3748
REPAIR LIMIT	----	----	4.0615 1	2.6865 1	----	0.4354 1

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

2 PART NUMBER AND SERIAL NUMBER LOCATION

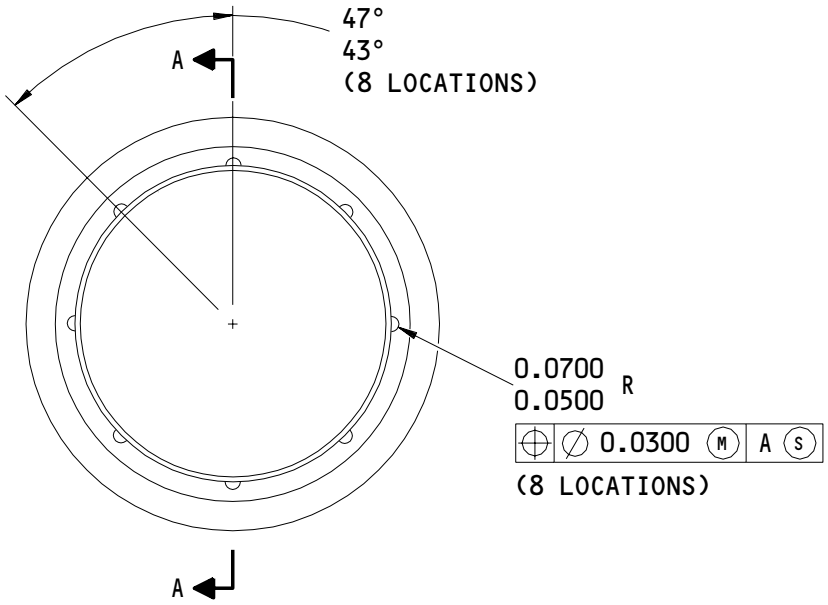
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

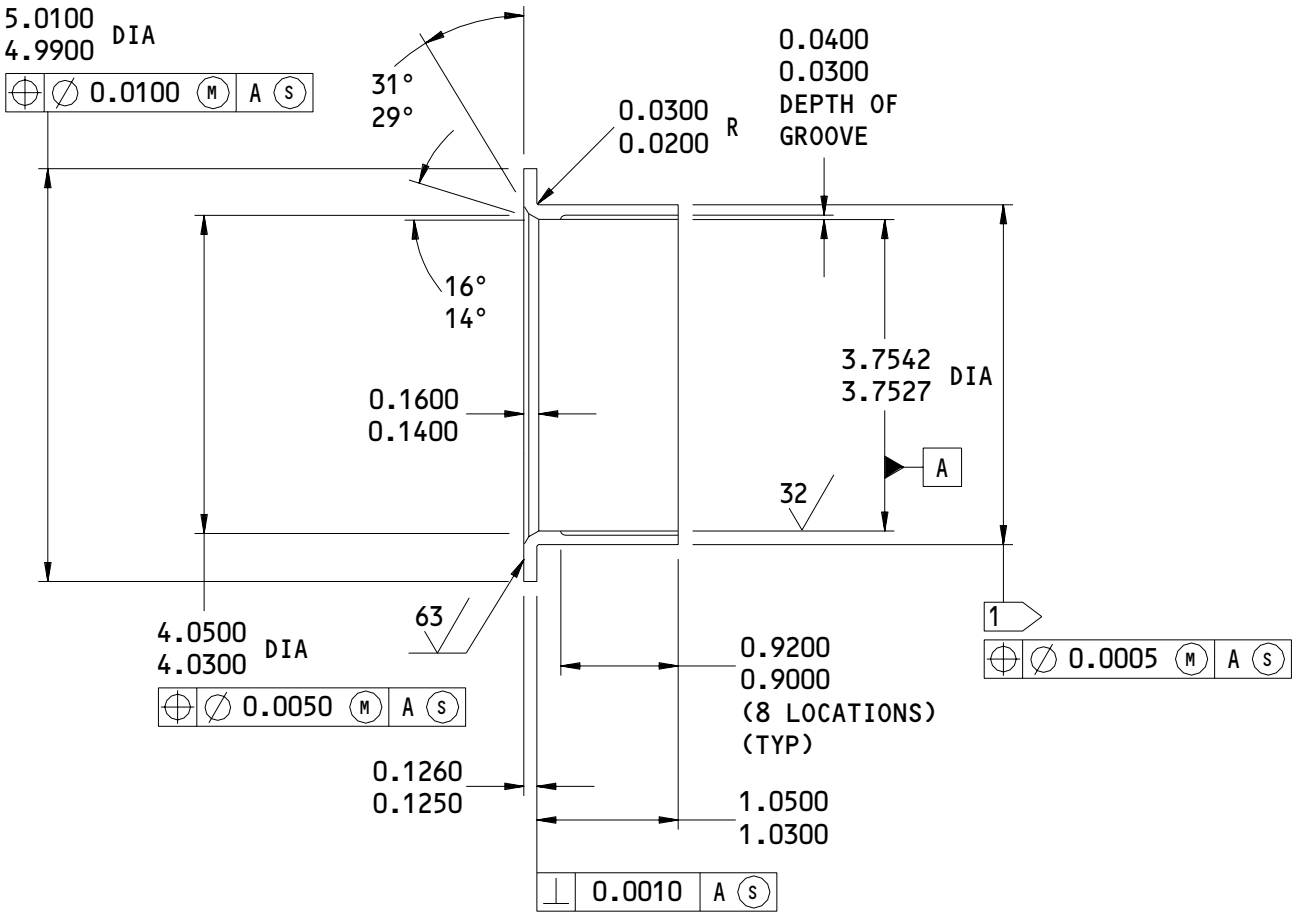
161T7144-2
Lower Torque Link Repair
Figure 601 (Sheet 3)



HOLE LOCATION [3] FIG. 601 - REPLACES BUSHING (426)

Oversize Bushing Details
Figure 602 (Sheet 1)

L02919



A–A

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS THE INTERFERENCE 0.0032–0.0062

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL–NI–BRONZE (AMS 4640)

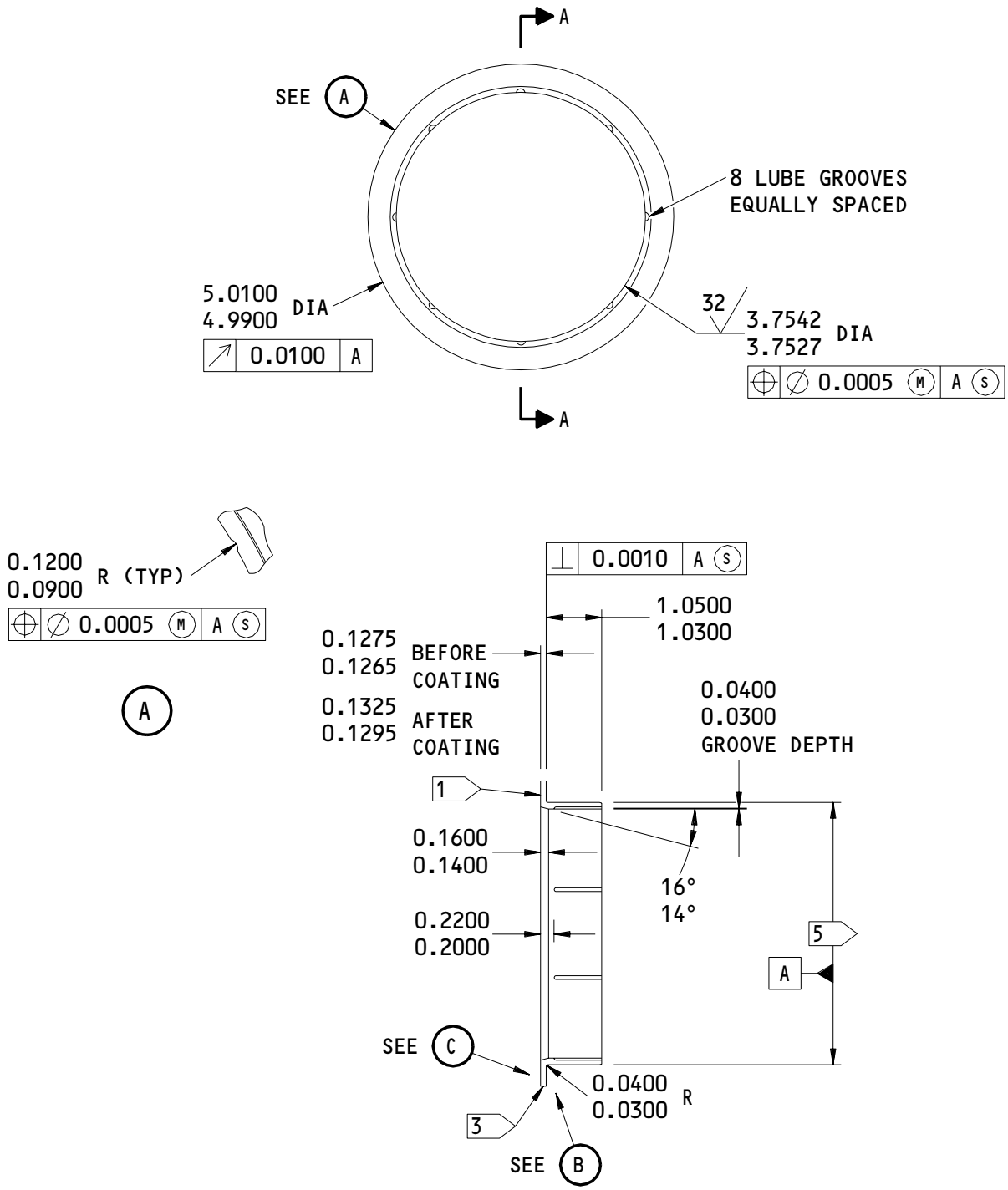
FINISH: NO FINISH

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [3] FIG. 601 – REPLACES BUSHING (426)

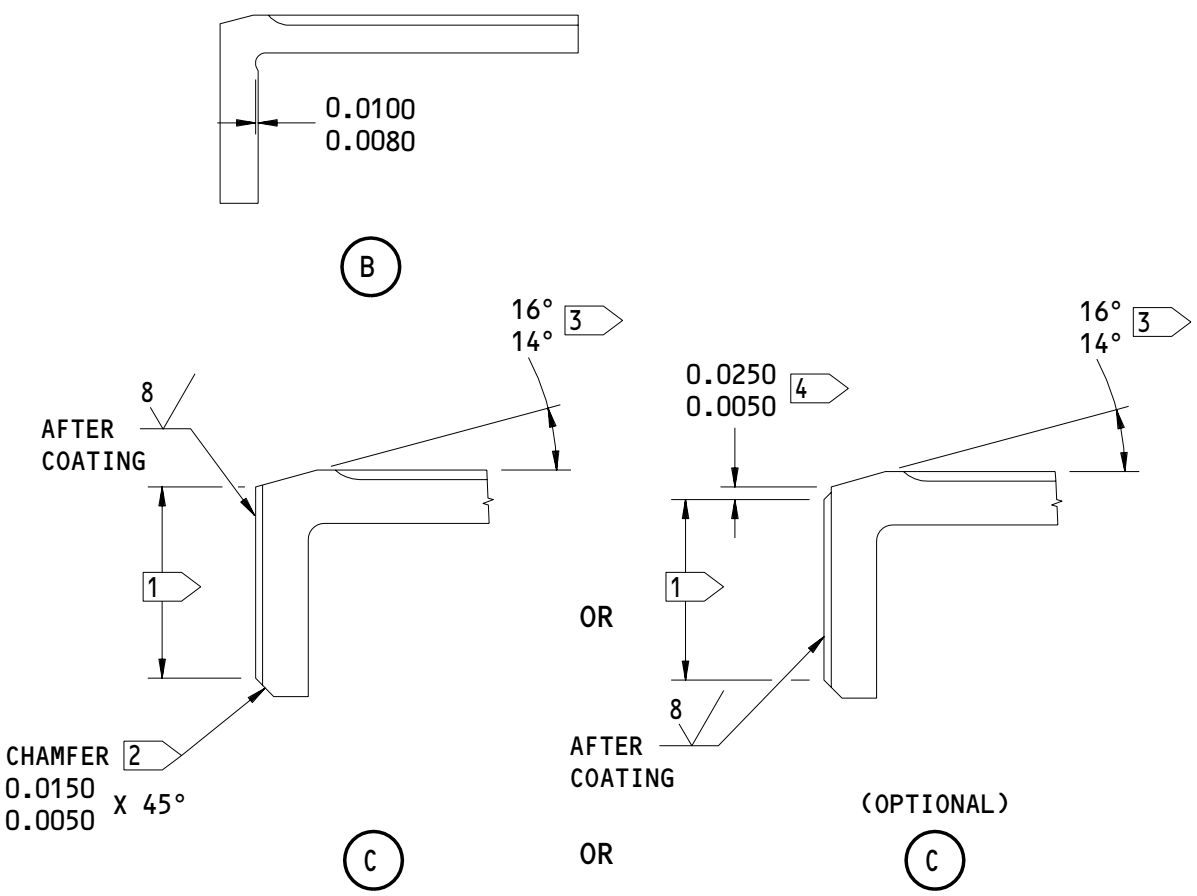
Oversize Bushing Details
Figure 602 (Sheet 2)



A–A

HOLE LOCATION [3] FIG. 601 – REPLACES BUSHING (429)

Oversize Bushing Details
Figure 603 (Sheet 1)



1 APPLY BMS 10-67, TYPE 1 THERMAL SPRAY COATING (F-15.380) 0.003 INCH MINIMUM, EXCEPT COBALT COMPOSITION TO BE A MINIMUM OF 15 PERCENT BY WEIGHT

2 CHAMFER MADE AFTER COATING

3 NO COATING OVERSPRAY IN THIS AREA

4 COATING RUNOUT AREA. THE COATING MUST NOT END WITH A SQUARE EDGE. THE COATING MUST GO FROM FULL TO ZERO THICKNESS OVER 0.0050 MINIMUM LENGTH

5 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS THE INTERFERENCE 0.0030-0.0060

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.010-0.020 R

MATERIAL: AL-NI-BRONZE (AMS 4640 OR AMS 4880)

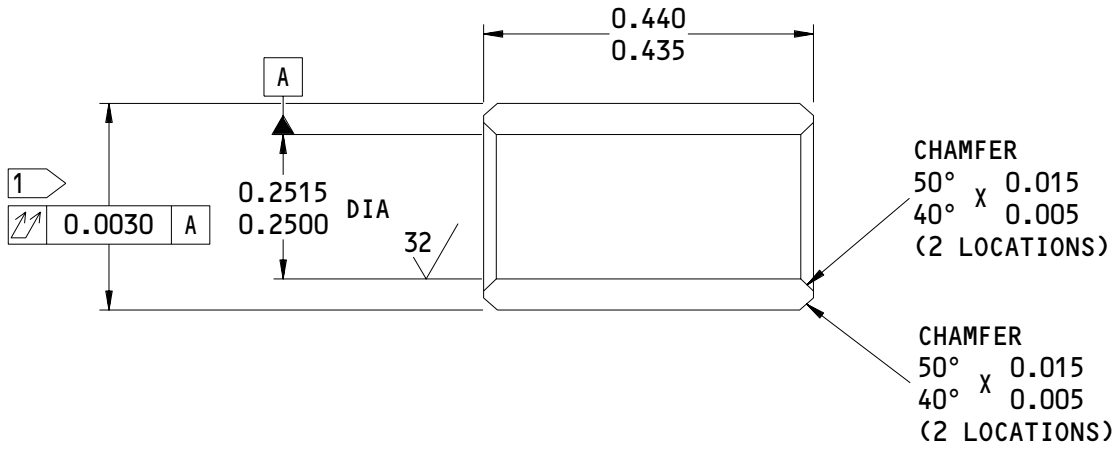
FINISH: AS SHOWN BY 1

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603 (Sheet 2)

L04702



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0002-0.0013

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: NO FINISH

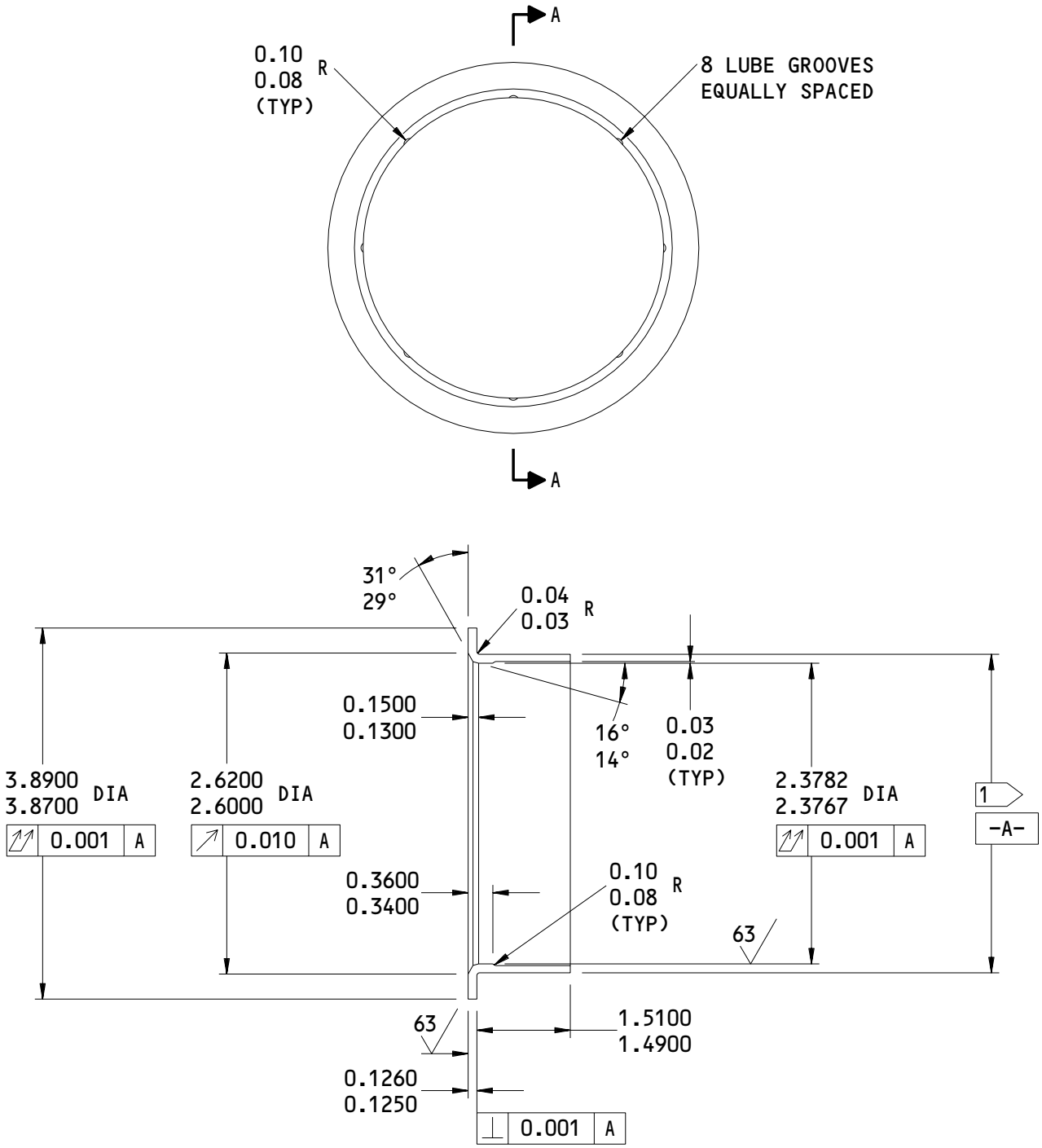
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [6] FIG. 601 - REPLACES BUSHING (432)

Oversize Bushing Details
Figure 604

L04703



A–A

HOLE LOCATION [4] FIG. 601 – REPLACES BUSHING (435)

Oversize Bushing Details
Figure 605 (Sheet 1)

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE 0.0022-0.0052

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01-0.02 R

MATERIAL: AL-NI-BRONZE (AMS 4640 OR AMS 4880)

FINISH: NO FINISH

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 605 (Sheet 2)

TRUCK PIVOT PIN - REPAIR 19-1

161T7193-1

1. General

A. This procedure has the necessary data to repair and refinish the truck pivot pin (750).

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

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

D. General repair details:

(1) Material: 9-Ni-4Co-.3C Steel Alloy
220 KSI Minimum

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Pin Repair

(1) Pin Shaft Repair.

(2) Pin Relief Feature Repair.

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

(7) SOPM 20-41-01, Decoding of Boeing Finish Codes

(8) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(10) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(12) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Shank

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(2) Reliefs

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2 (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(3) C00308 Compound - MIL-C-11796, Corrosion Preventive (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

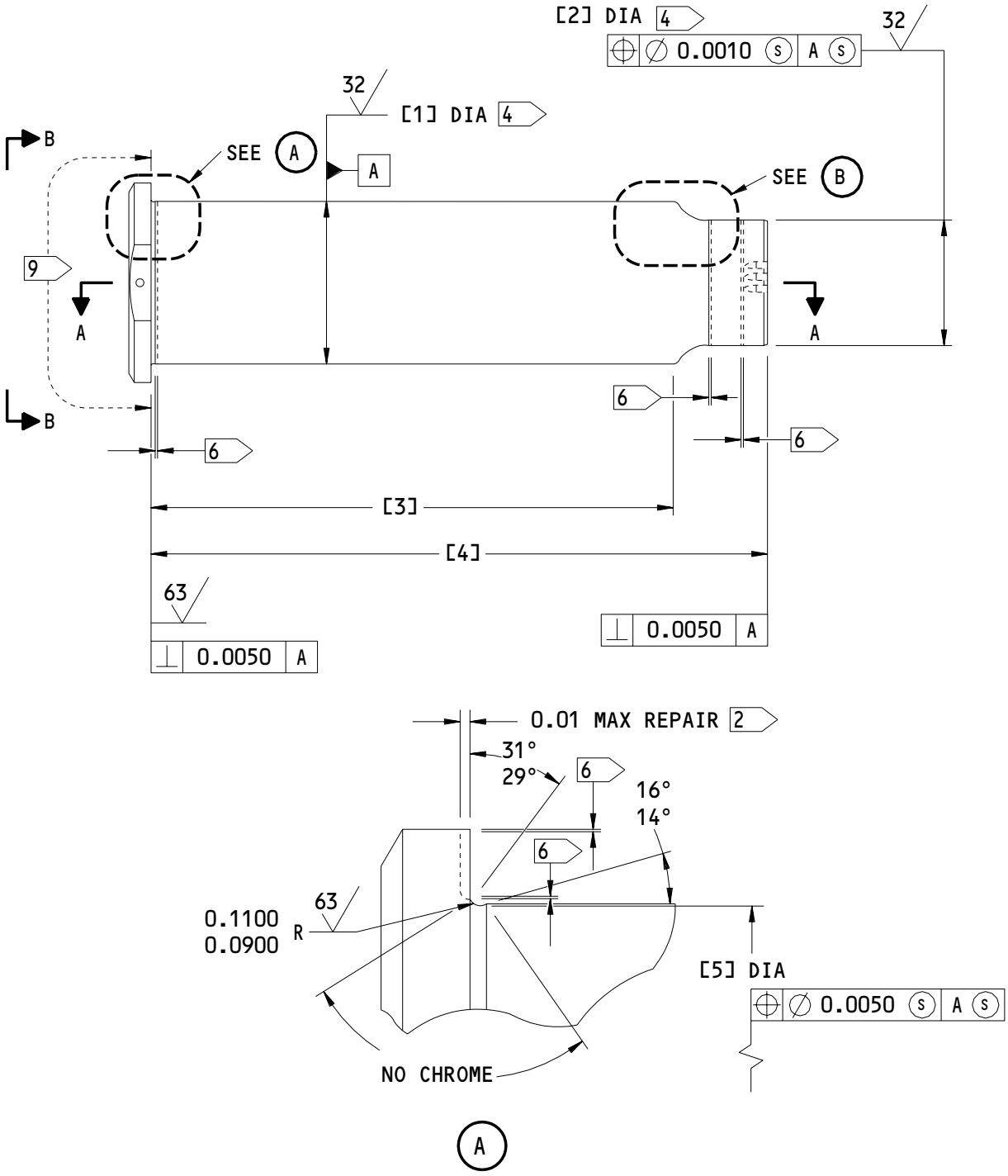
(5) SOPM 20-44-04, Application of Urethane Compatible Primer

(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

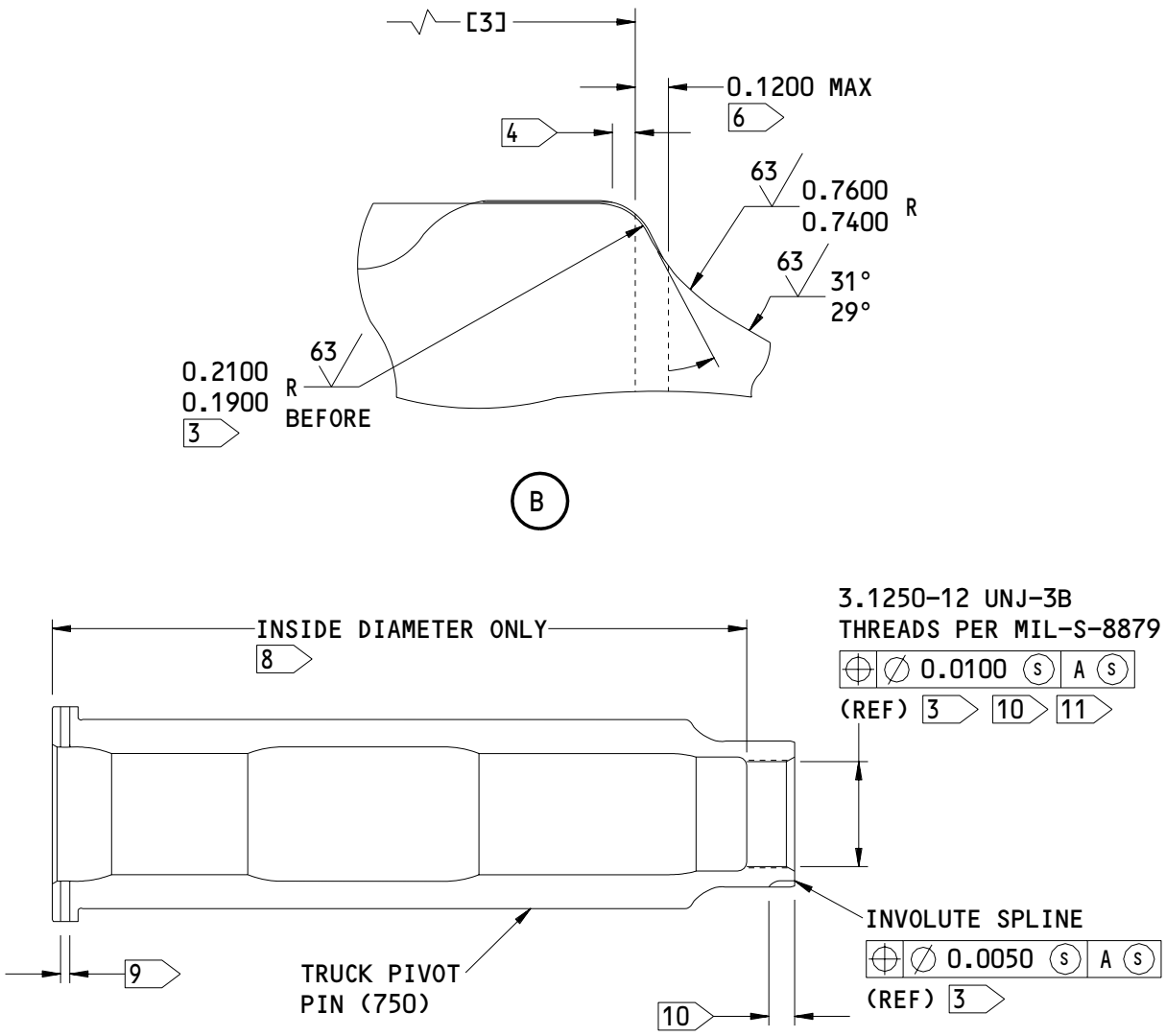
C. Procedure (Fig. 601)

(1) Cadmium titanium plate (F-15.01). Apply BMS 10-79, type 3 primer (F-19.66), unless shown differently.



161T7193-1
Truck Pivot Pin Repair
Figure 601 (Sheet 1)

L04765



161T7193-1
Truck Pivot Pin Repair
Figure 601 (Sheet 2)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]
DESIGN DIMENSION	5.4990 5.4970	4.2490 4.2470	17.780 17.760	20.8175 20.8075	5.4690 5.4590
REPAIR LIMIT	5.4690 <2>	4.2190 <2>	----	----	5.4390 <5>

<1> PART NUMBER AND SERIAL NUMBER LOCATION

<2> LIMIT FOR BUILDUP WITH CHROME PLATE AND GRIND TO DESIGN DIMENSIONS AND FINISH

<3> DO NOT SHOT PEEN

<4> THERMAL SPRAY (F-15.384) 0.003 MINIMUM THICKNESS. (ORIGINAL FINISH)

<5> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<6> CHROME PLATE RUNOUT AREA

<7> CADMIUM-TITANIUM PLATE (F-15.01) PLUS APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) PLUS APPLY BMS 10-60, TYPE 2 ENAMEL (F-19.39-707)

<8> CADMIUM-TITANIUM PLATE (F-15.01) PLUS APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) PLUS APPLY MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

<9> CADMIUM-TITANIUM PLATE (F-15.01) PLUS APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

<10> CADMIUM-TITANIUM PLATE (F-15.32) PLUS WIPE THE PLATING WITH PRIMER (F-19.451)

<11> THREAD DIMENSIONS APPLY AFTER PLATING

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7193-1
Truck Pivot Pin Repair
Figure 601 (Sheet 3)

UPLOCK FITTING ASSEMBLY - REPAIR 20-1

161T7197-1, -2, -7, -8, -13, -14

1. General

   A. This procedure has the necessary data to replace the parts of the uplock fitting assembly and to refinish the uplock fitting assembly (813).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent substitutes can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

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

   B. References

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

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

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

      (4) SOPM 20-60-03, Lubricants

      (5) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushings (819, 822, 825, 828, 831).

      (2) If you find defects on hole surfaces, refer to REPAIR 20-2 for repair instructions.

(3) Install replacement bushings with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Be sure to fill the chamfer/radius with BMS 3-27 compound.

(4) Machine the bushings to design dimensions and finish.

(5) Fillet seal the bushings with BMS 5-95 sealant.

3. Wear Pad Replacement on 161T7197-13, -14 (Fig. 601)

A. Consumable Materials

(1) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

B. Reference

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

C. Procedure

(1) Remove the fasteners (838 thru 838R) and the old pads (839, 839D).

(2) Apply a thin layer of BMS 3-27 compound to bolt shanks, threads, washer faces, and the mating surfaces of the replacement pads and the uplock fitting.

(3) Install the replacement pads with the fasteners. Wipe off unwanted compound.

4. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) B00571 Coating - Hydraulic Fluid Resistant, Type 41 (SOPM 20-44-01)

(2) C00033 Enamel - BMS 10-60, Type 2 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

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

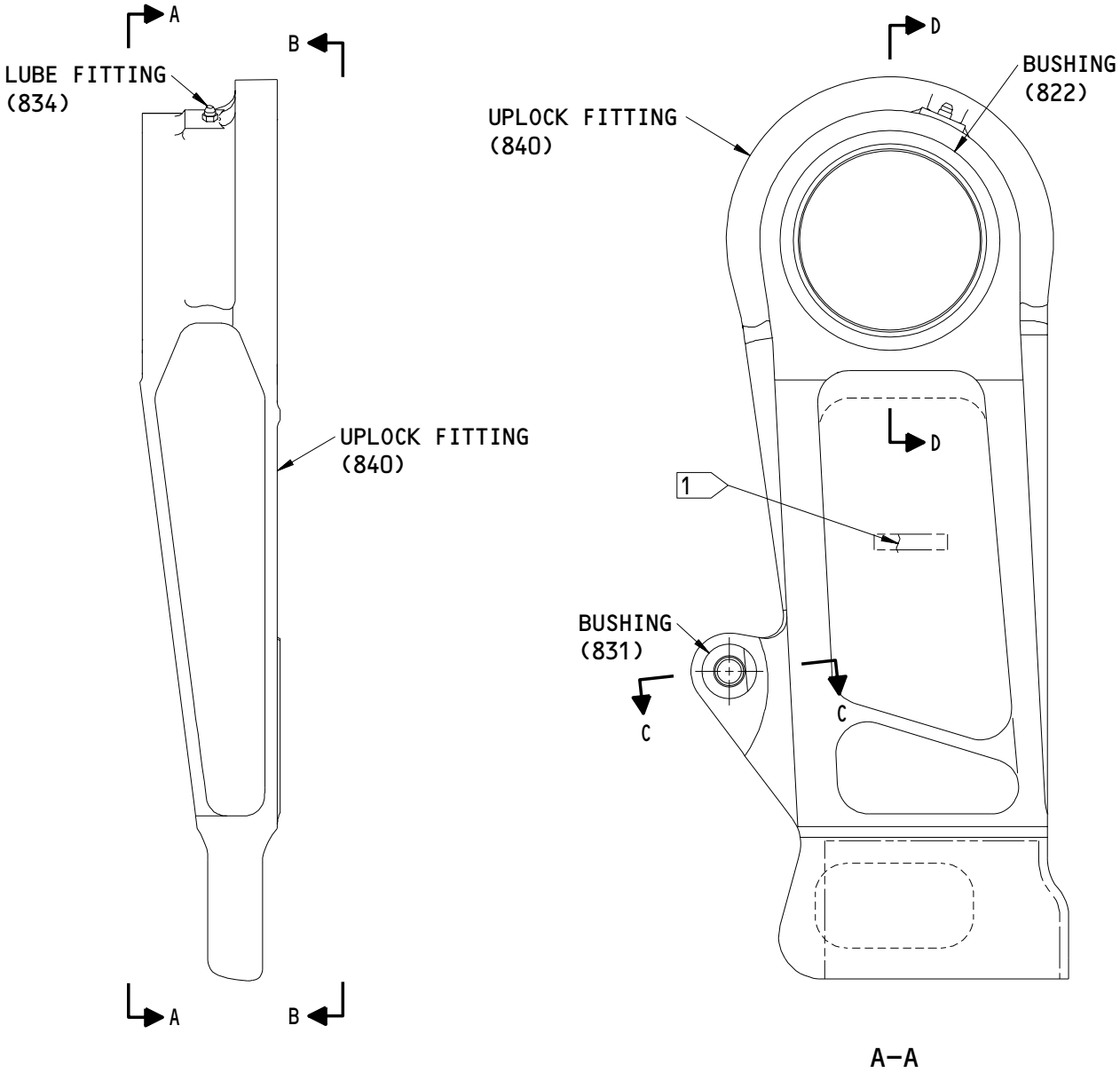
C. Procedure (Fig. 601)

(1) Apply BMS 10-60, type 2, enamel (F-20.56-707) to the external surfaces unless shown differently. Do not apply enamel to the lubrication fittings, bushing inner diameters or flange faces.

(2) Do not apply enamel (F-20.56-707) in the part mark area shown in Fig. 601. The part mark area must be finished as follows:

(a) Before you apply finish to the part mark area, make sure the part number and serial number are visible. Refer to REPAIR 20-2 refinish section for the instructions.

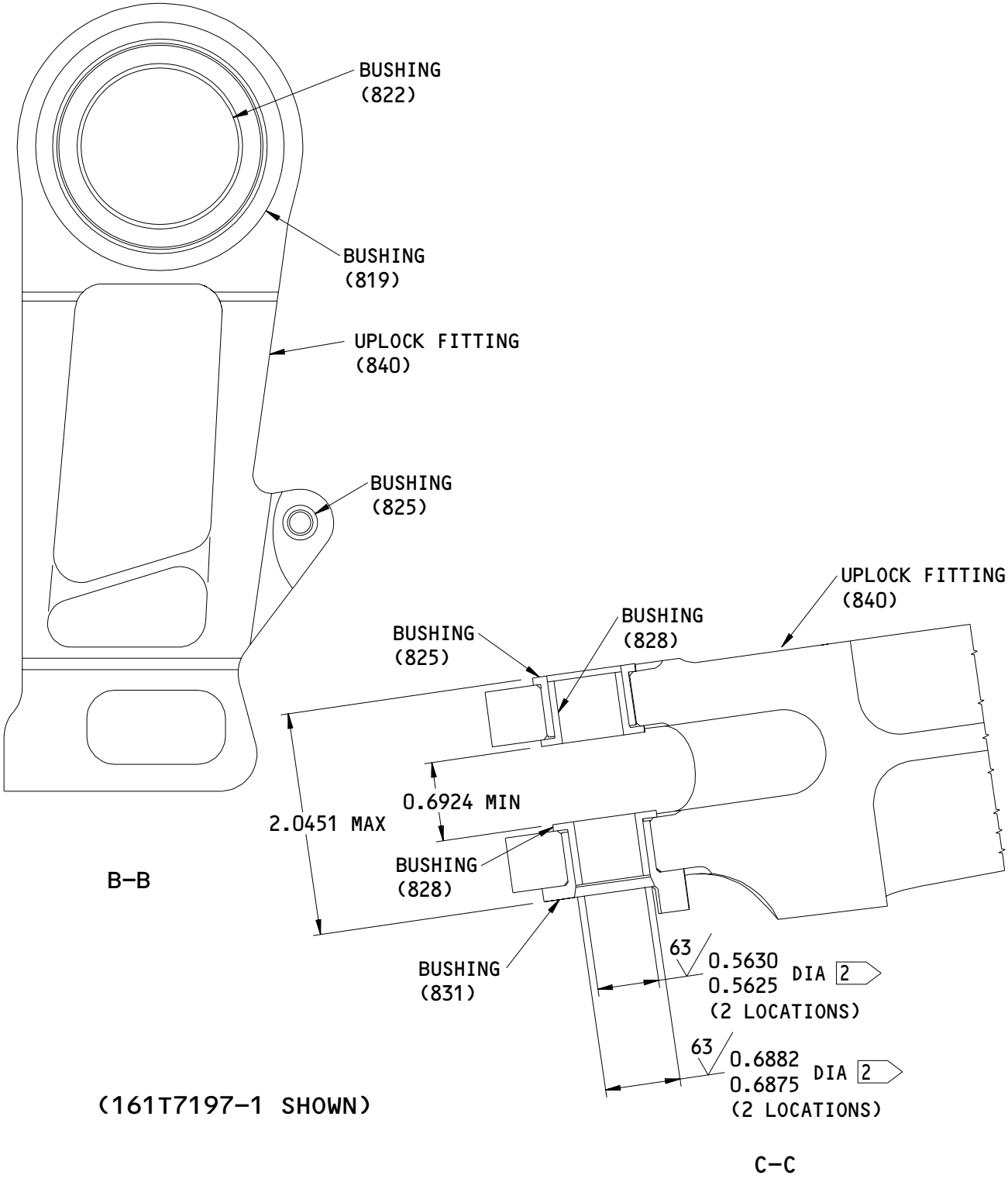
(b) Apply BMS 10-60 enamel (F-19.39-707) and let dry. Then, apply BMS 10-60 enamel (F-19.39-701) to the identification numbers only and let dry. Apply Type 41 coating (F-21.34) to the area. Fill the area to the same thickness as the adjacent enamel area.



(161T7197-1 SHOWN)

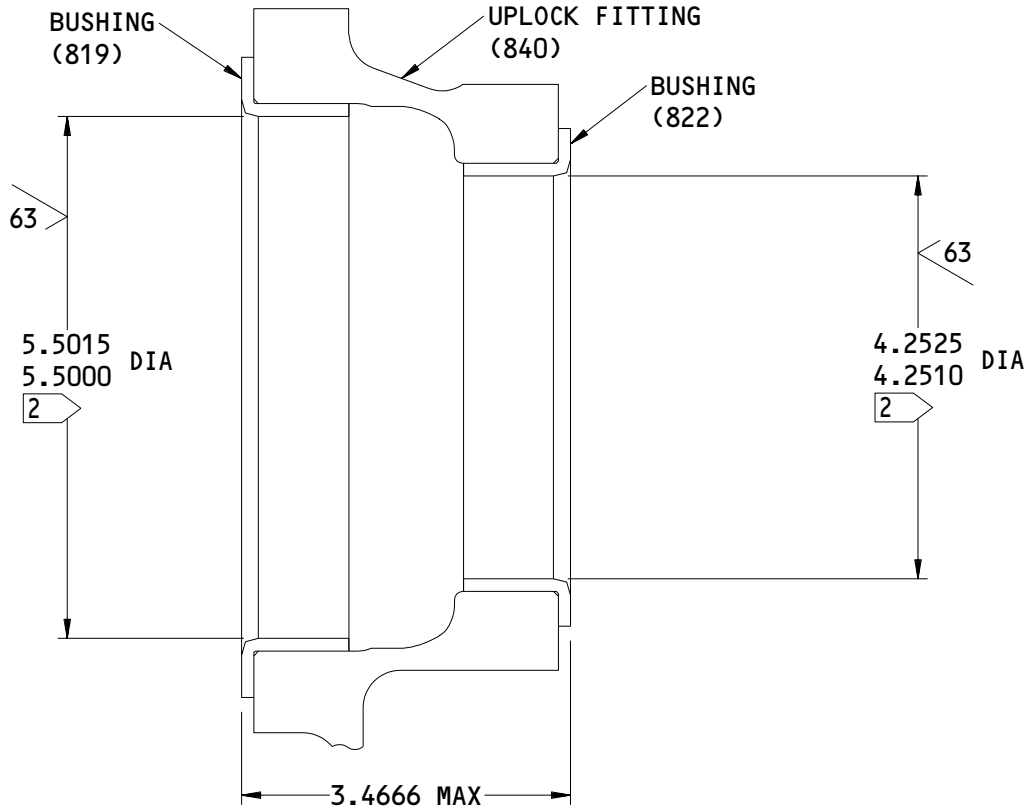
161T7197-1,-2,-7,-8,-13,-14
Uplock Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 1)

L04847



161T7197-1,-2,-7,-8,-13,-14
Uplock Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 2)

L04852



D–D

1 NO ENAMEL (F-20.56) ON PART MARK AREA

2 INSTALLED DIMENSION. ADJUST TO THIS SIZE IF NECESSARY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7197-1,-2,-7,-8,-13,-14
Uplock Fitting Assembly Bushing Replacement and Refinish
Figure 601 (Sheet 3)

L04885

UPLOCK FITTING - REPAIR 20-2

161T7197-3 THRU -6, -9 THRU -12, -17, -18

1. General

A. This procedure has the necessary data to repair and refinish the uplock fitting (840).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)

2. Bushing Hole Repair

A. Consumable Materials

NOTE: Equivalent substitutes can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

(7) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(8) SOPM 20-42-05, Bright Cadmium Plating

(9) SOPM 20-44-04, Application of Urethane Compatible Primer

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

C. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Magnetic particle examine (SOPM 20-20-01).

(3) Shot peen (SOPM 20-10-03).

(4) Refinish as indicated.

(5) Make oversize equivalents of bushings (Fig. 602 and on) to adjust for the material removed.

(6) Install the bushings as shown in REPAIR 20-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent substitutes can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

(1) SOPM 20-10-05, Thermal Spray Coatings

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

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

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

(5) SOPM 20-42-09, Electrodeposited Nickel Plating

(6) SOPM 20-44-04, Application of Urethane Compatible Primer

(7) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

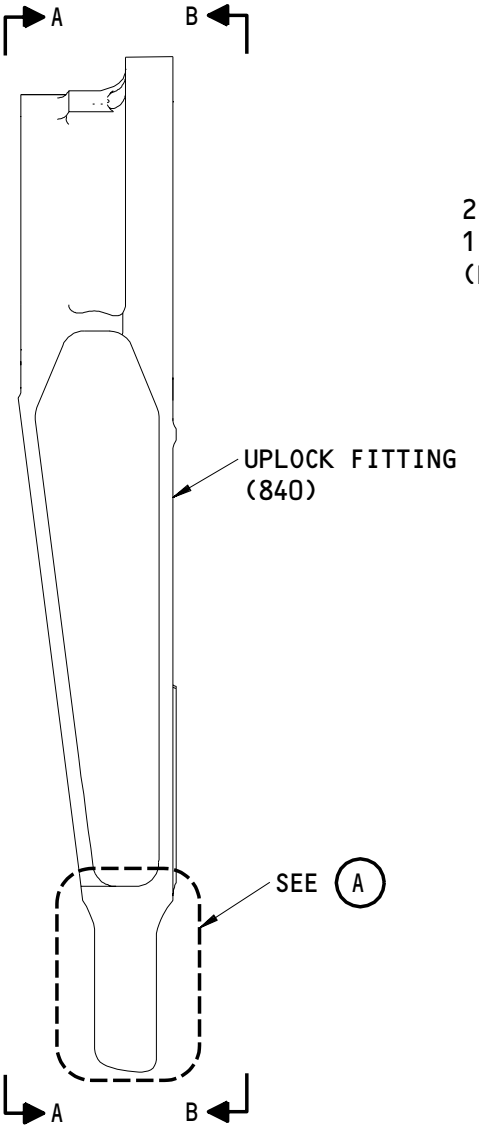
(8) SOPM 20-60-02, Finishing Materials

C. Procedure

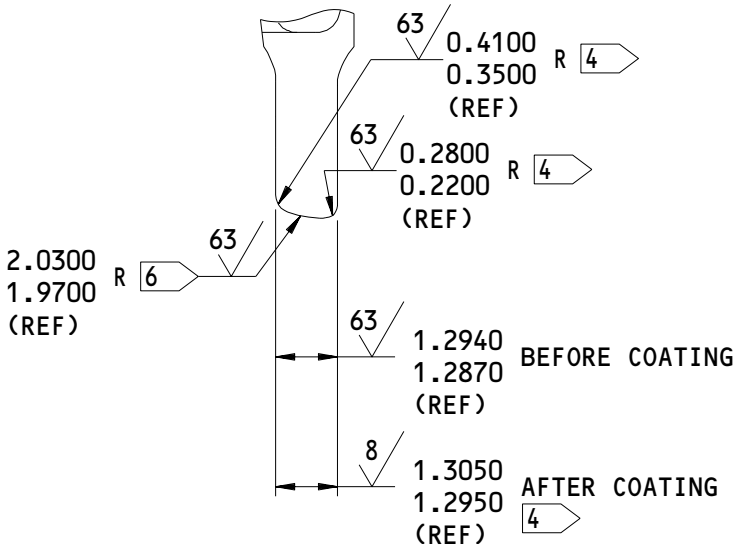
(1) As applicable, apply thermal spray coating or nickel plate to the areas indicated.

(2) Cadmium titanium plate and apply BMS 10-79, type 3 primer (F-19.47), as shown in Fig. 601.

(3) Make sure that the part identification data is visible after repair and refinish procedures. If not, repair the markings as shown in the refinish instructions in REPAIR 20-1 and SOPM 20-50-10.

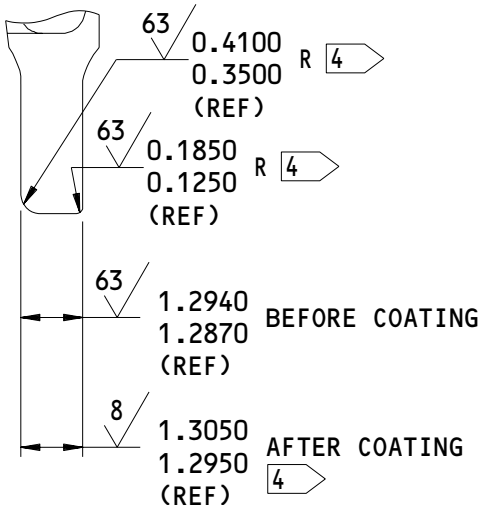


161T7197-3 THRU -6,-9 THRU -12



161T7197-3 THRU -6

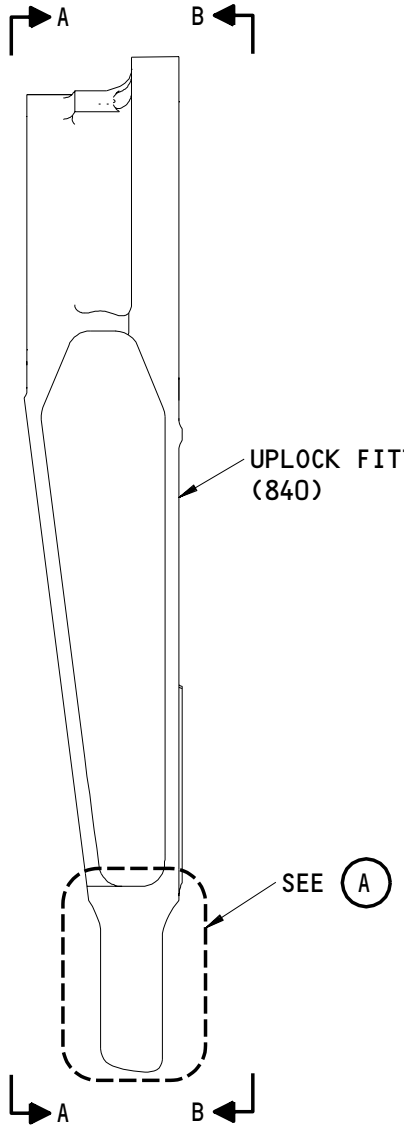
A



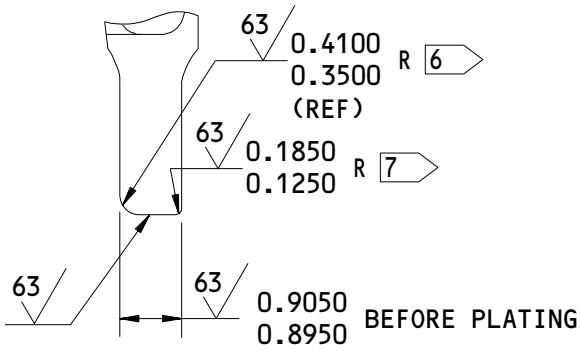
161T7197-9 THRU -12

A

161T7197-3,-4,-5,-6,-9,-10,-11,-12,-17,-18
Uplock Fitting Repair and Refinish
Figure 601 (Sheet 1)



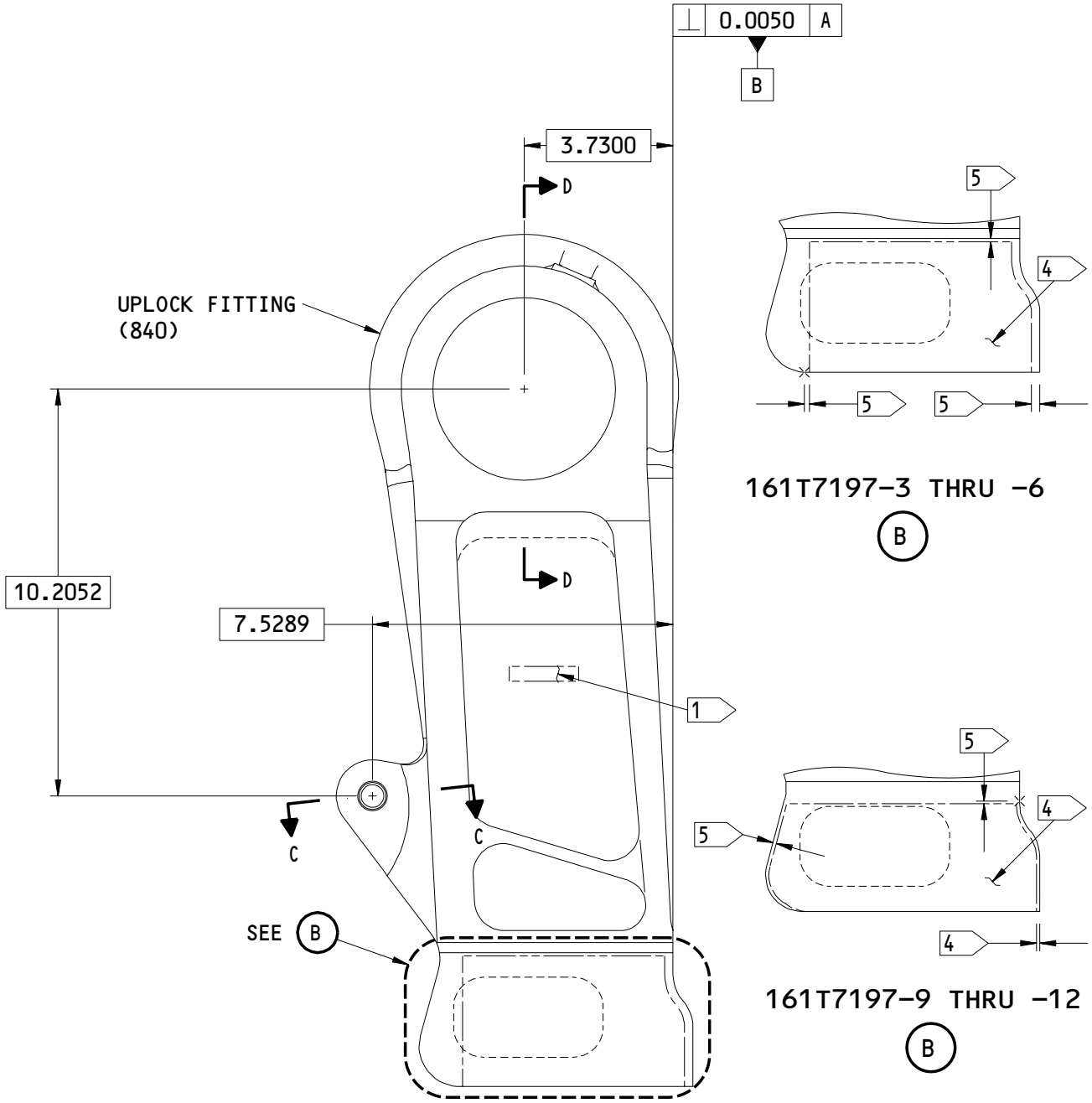
161T7197-17,-18



161T7197-17,-18

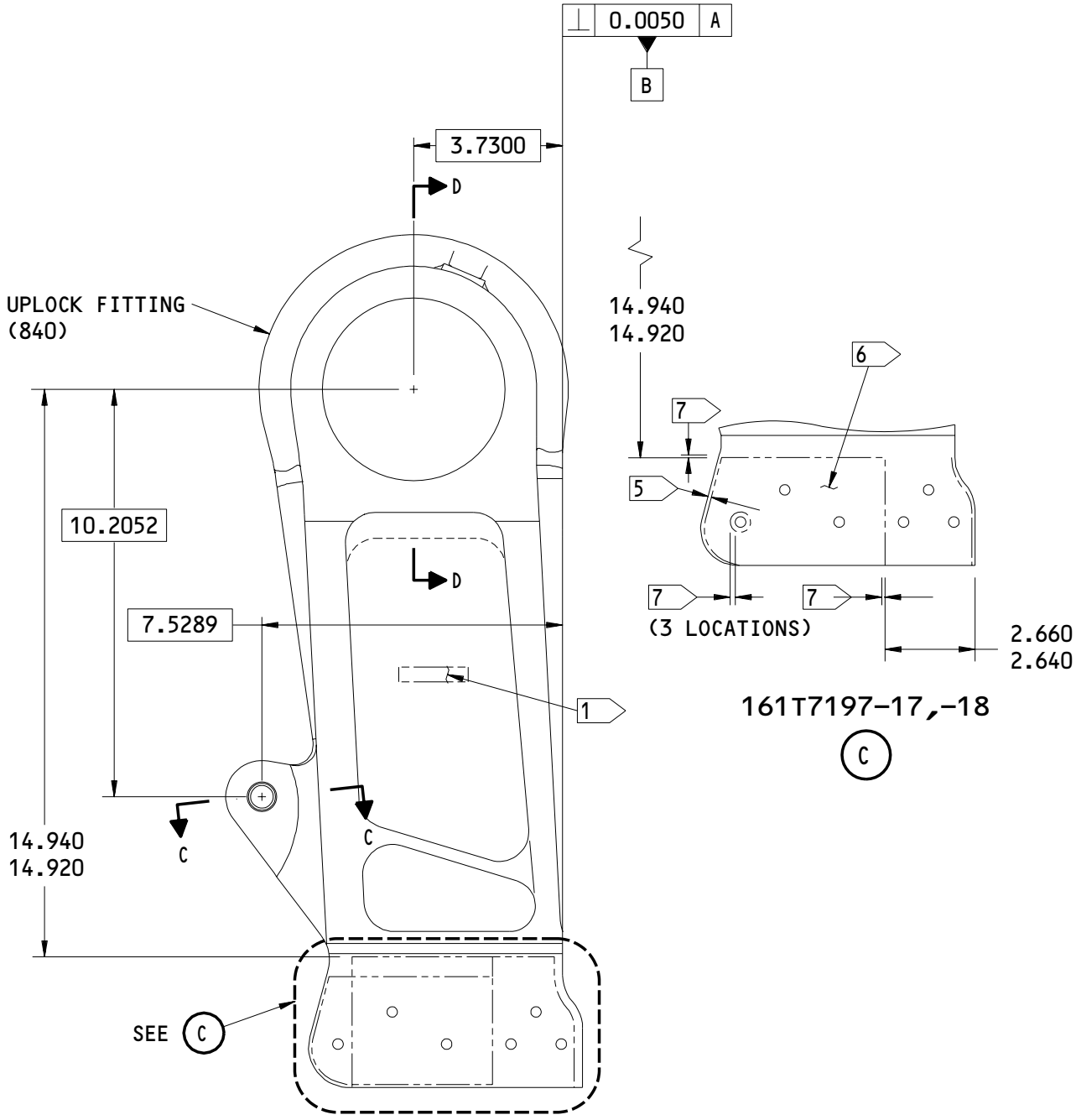
A

161T7197-3,-4,-5,-6,-9,-10,-11,-12,-17,-18
Uplock Fitting Repair and Refinish
Figure 601 (Sheet 2)



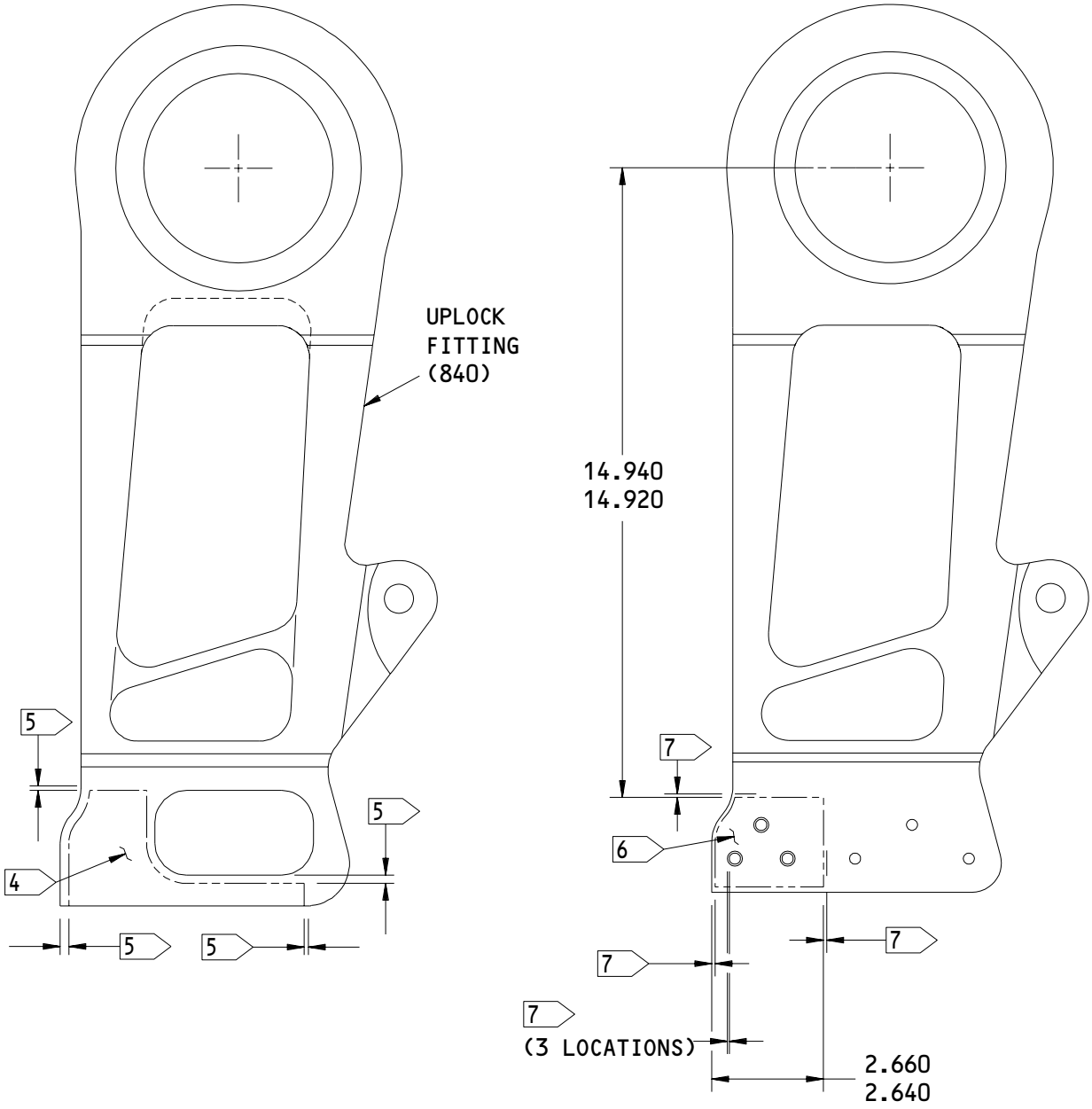
161T7197-3 THRU -6,-9 THRU -12
A-A

161T7197-3,-4,-5,-6,-9,-10,-11,-12,-17,-18
Uplock Fitting Repair and Refinish
Figure 601 (Sheet 3)



161T7197-17,-18
A-A

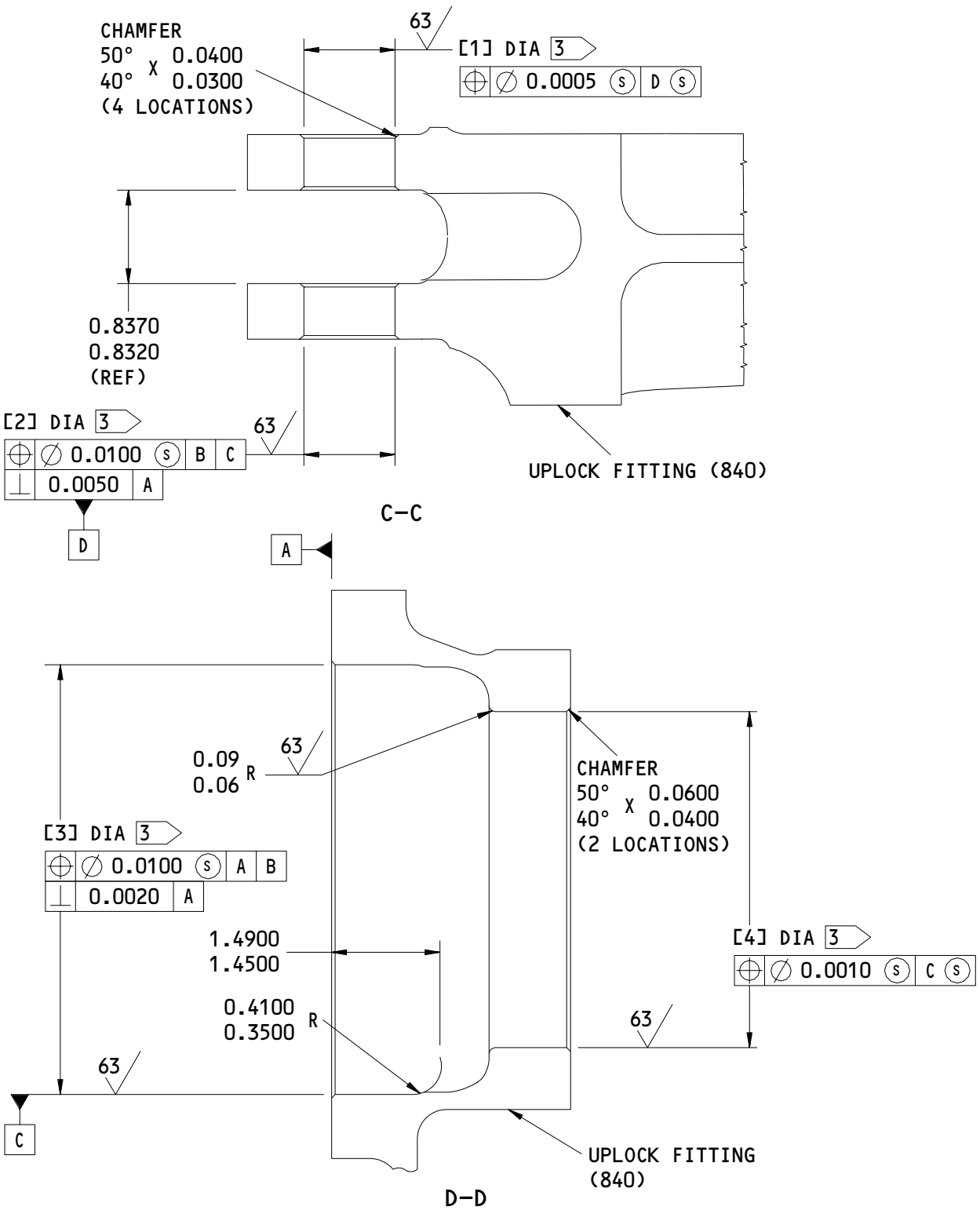
161T7197-3,-4,-5,-6,-9,-10,-11,-12,-17,-18
Uplock Fitting Repair and Refinish
Figure 601 (Sheet 4)



161T7197-3 THRU-6,-9 THRU -12
B-B

161T7197-17,-18
B-B

161T7197-3,-4,-5,-6,-9,-10,-11,-12,-17,-18
Uplock Fitting Repair and Refinish
Figure 601 (Sheet 5)



161T7197-3,-4,-5,-6,-9,-10,-11,-12,-17,-18
Uplock Fitting Repair and Refinish
Figure 601 (Sheet 6)

REFERENCE NUMBER	[1]	[2]	[3]	[4]
DESIGN DIMENSION	0.8132 0.8125	0.8143 0.8135	5.7515 5.7500	4.5015 4.5000
REPAIR LIMIT	0.8732 2	0.8743 2	5.8115 2	4.5615 2

1 PART NUMBER AND SERIAL NUMBER LOCATED HERE

2 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

3 CADMIUM-TITANIUM PLATE (F-15.32) APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47)

4 THERMAL SPRAY (F-15.384) AREA

5 THERMAL SPRAY (F-15.384) RUNOUT AND CADMIUM-TITANIUM PLATE OVERLAP

6 NICKEL PLATE (F-15.33), 0.003-0.005 THICK

7 NICKEL PLATE RUNOUT AREA, 0.08 WIDE. CADMIUM-TITANIUM PLATE (F-15.01) AND APPLY BMS 10-79 TYPE 3 PRIMER (F-19.47) AFTER NICKEL PLATE

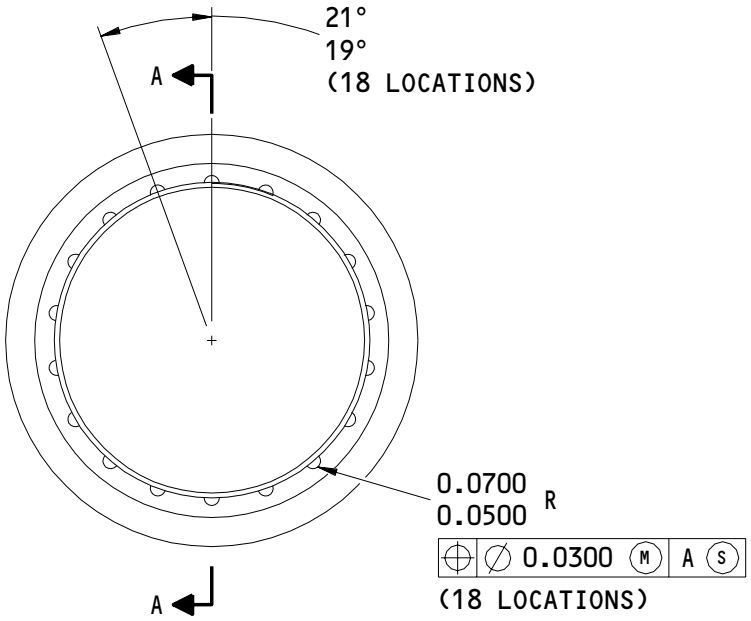
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

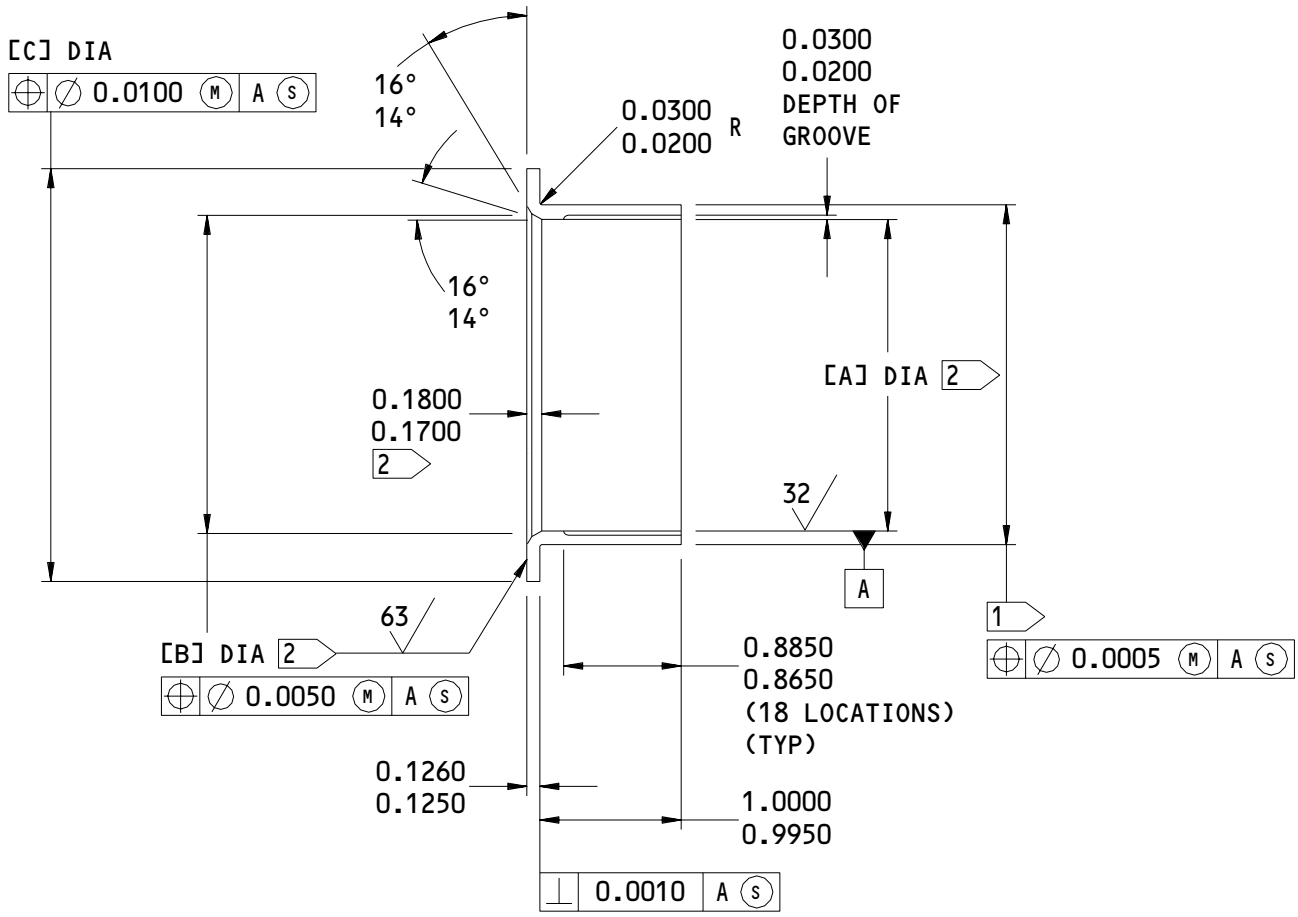
ALL DIMENSIONS ARE IN INCHES

161T7197-3,-4,-5,-6,-9,-10,-11,-12,-17,-18
Uplock Fitting Repair and Refinish
Figure 601 (Sheet 7)



Oversize Bushing Details
Figure 602 (Sheet 1)

L05028



A–A

Oversize Bushing Details
Figure 602 (Sheet 2)

L05038

HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B]	[C]	INTERFERENCE
[3]	819	5.5034 5.5019	5.8550 5.8450	6.7600 6.7400	0.0021–0.0051
[4]	822	4.2540 4.2525	4.6050 4.5950	5.2600 5.2400	0.0017–0.0047

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

2 NO PLATING

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL–NI–BRONZE (AMS 4640 OR AMS 4880)

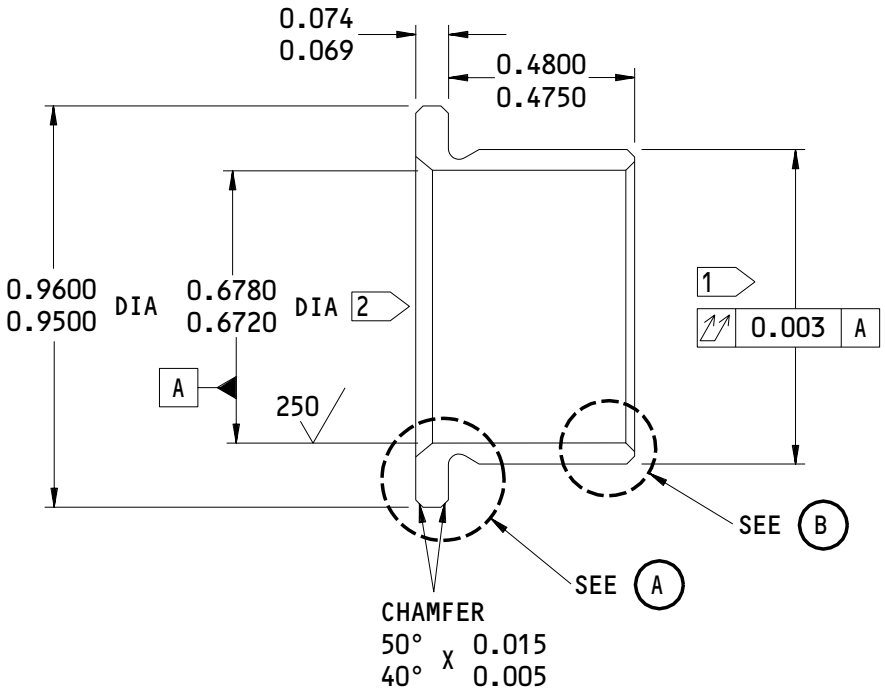
FINISH: CADMIUM PLATE (F–15.36) UNLESS SHOWN BY 2

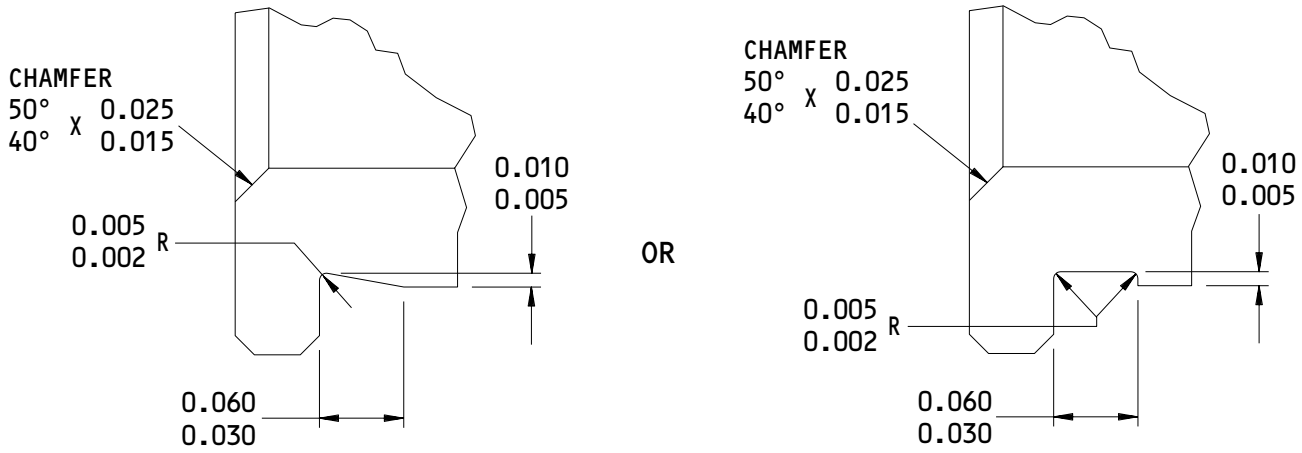
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 3)

L06682





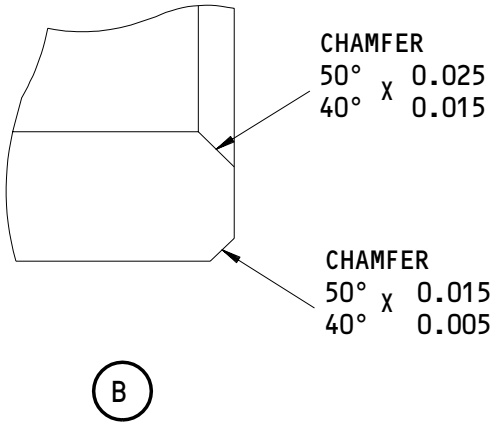
TYPE 1 TYPE 2

A

HOLE LOCATION [1] FIG. 601 – REPLACES BUSHING (825)

Oversize Bushing Details
Figure 603 (Sheet 1)

L05041



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0007-0.0019

2 PLATING OPTIONAL

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: CU-BE (AMS 4533 OR AMS 4535)

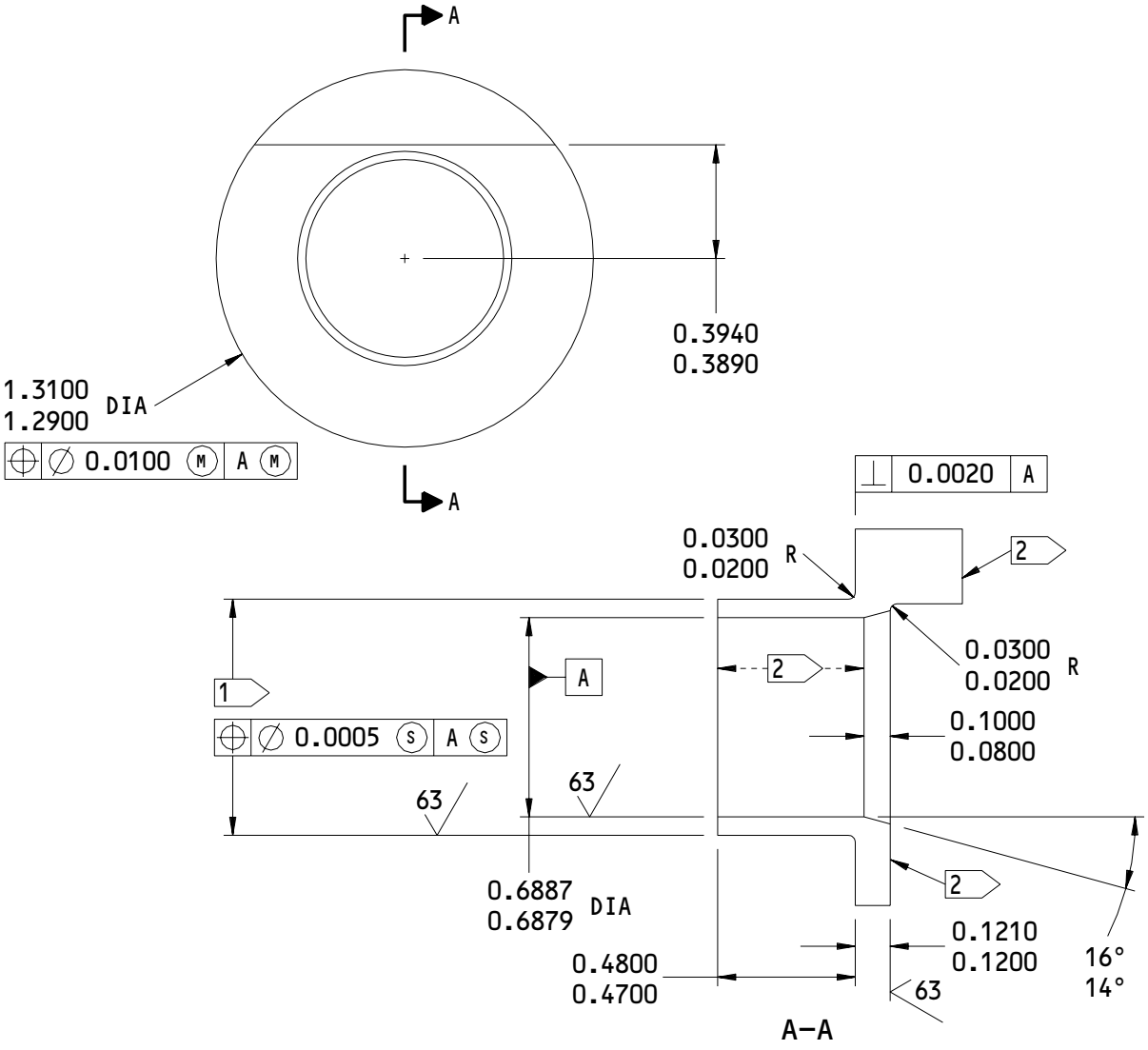
FINISH: CADMIUM PLATE (F-15.36) OR ZINC-NICKEL PLATE (F-15.40) UNLESS SHOWN BY 2

ITEM NUMBER REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603 (Sheet 2)

L05044



1 THE BUSHING OUTSIDE DIAMETER IS EQUAL TO THE LUG HOLE INSIDE DIAMETER PLUS THE INTERFERENCE 0.0005–0.0020

2 (OPTIONAL) NO FINISH ON THESE SURFACES

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: CU–BE (AMS 4533 OR AMS 4535)

FINISH: CADMIUM PLATE (F–15.36) UNLESS SHOWN BY 2

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [2] FIG. 601 – REPLACES BUSHING (831)

Oversize Bushing Details
Figure 604

STABILIZER ASSEMBLY - REPAIR 21-1

161T7199-1

1. General

   A. This procedure has the necessary data to replace the bearings (798, 807) in the stabilizer assembly (795).

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

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

2. Bearing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

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

   B. References

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

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

      (3) SOPM 20-60-03, Lubricants

   C. Procedure (Fig. 601)

      (1) Remove the bearings (798, 807).

      (2) If you find defects on hole surfaces, refer to REPAIR 21-2 for repair instructions.

      (3) Install the bearings.

         (a) Install the spherical split bearing (798) one half at a time, with BMS 3-33 grease.

         (b) Install the bearing (807) with BMS 3-33 grease and roller swage it (SOPM 20-50-03).

3. Refinish

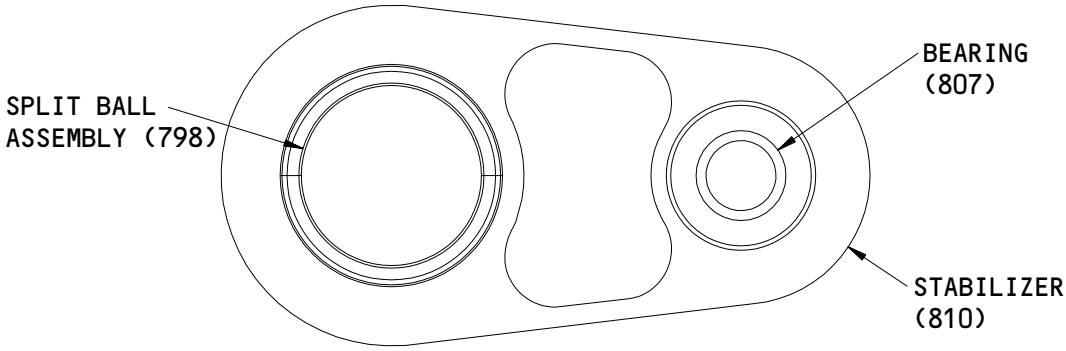
A. References

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

(2) SOPM 20-44-02, Temporary Protective Coatings

B. Procedure

(1) No finish, but temporary protective coatings (F-25.01) can be used.



BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7199-1
Stabilizer Assembly Bearing Replacement
Figure 601

STABILIZER - REPAIR 21-2

161T7199-2

1. General

A. This procedure has the necessary data to repair and refinish the stabilizer (810).

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

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

D. General repair details:

(1) Material: 15-5PH CRES
180-200 KSI

2. Holes for Bushings

A. References

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

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

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

B. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a magnetic particle check (SOPM 20-20-01).

(3) Get the applicable oversize replacement bearing (807).

NOTE: There are no oversize replacement bearings for the bearing (798).

(4) Install the bearing as shown in REPAIR 21-1.

3. Refinish

A. References

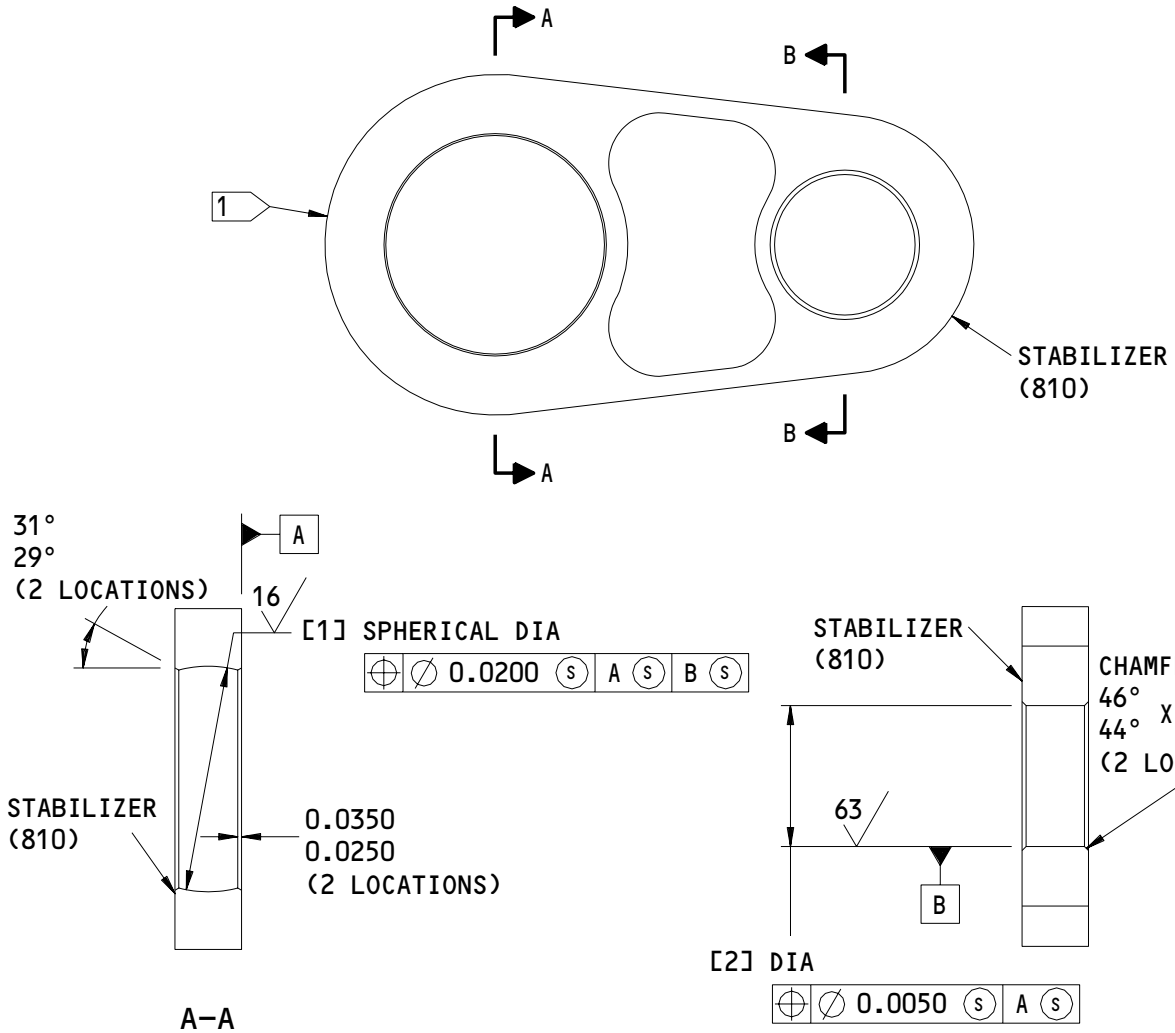
(1) SOPM 20-30-02, Stripping of Protective Finishes

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

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

B. Procedure

(1) Passivate (F-17.25) all over.



REFERENCE NUMBER	[1]	[2]
DESIGN DIMENSION	1.8025 1.8015	1.1255 1.1250
REPAIR LIMIT	----	SEE TABLE B

TABLE A

161T7199-2
Stabilizer Repair
Figure 601 (Sheet 1)

OVERSIZE REPAIR BEARING PART NUMBERS	BEARING OVERSIZE	BEARING OUTSIDE DIAMETER (REF)	HOLE [2] DIAMETER
BACB10AB09M	(DESIGN)	1.1250 1.1245	1.1255 1.1250
BACB10AB09MT	0.01	1.1350 1.1345	1.1355 1.1350
BACB10AB09MU	0.02	1.1450 1.1445	1.1455 1.1450
BACB10AB09MV	0.03	1.1550 1.1545	1.1555 1.1550
BACB10AB09MW	0.04	1.1650 1.1645	1.1655 1.1650
BACB10AB09MX	0.05	1.1750 1.1745	1.1755 1.1750
BACB10AB09MY	0.06	1.1850 1.1845	1.1855 1.1850

TABLE B

1 PART NUMBER AND SERIAL NUMBER LOCATION

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7199-2
Stabilizer Repair
Figure 601 (Sheet 2)

L05196

TRUCK TILT LINK ASSEMBLY - REPAIR 22-1

161T7206-1

1. General

A. This procedure has the necessary data to replace the bearing (699), the bushings (702, 705) and refinish the truck tilt link assembly (696).

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

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

2. Bearing/Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

(2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

B. References

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

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

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

(4) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig, 601)

(1) Remove the bearing (699) and the bushings (702, 705).

(2) If you find defects on hole surfaces, refer to REPAIR 22-2 for repair instructions.

(3) Install replacement bearing (699) with BMS 5-95 sealant and roller swage it (SOPM 20-50-03).

(4) Install replacement bushings (702, 705) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(5) Machine the inside diameter of the bushings (702, 705) to the dimensions and finish shown in Fig. 601.

(6) Fillet seal the bushings (702, 705) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

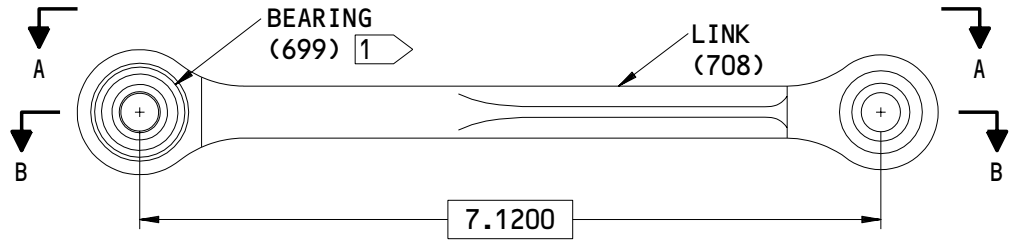
(1) SOPM 20-30-02, Stripping of Protective Finish

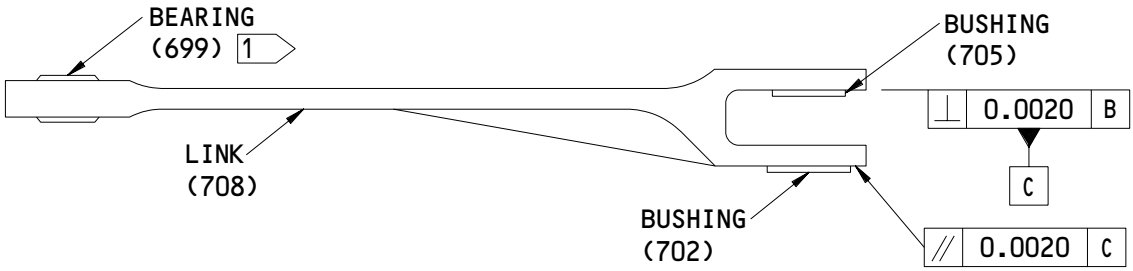
(2) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

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

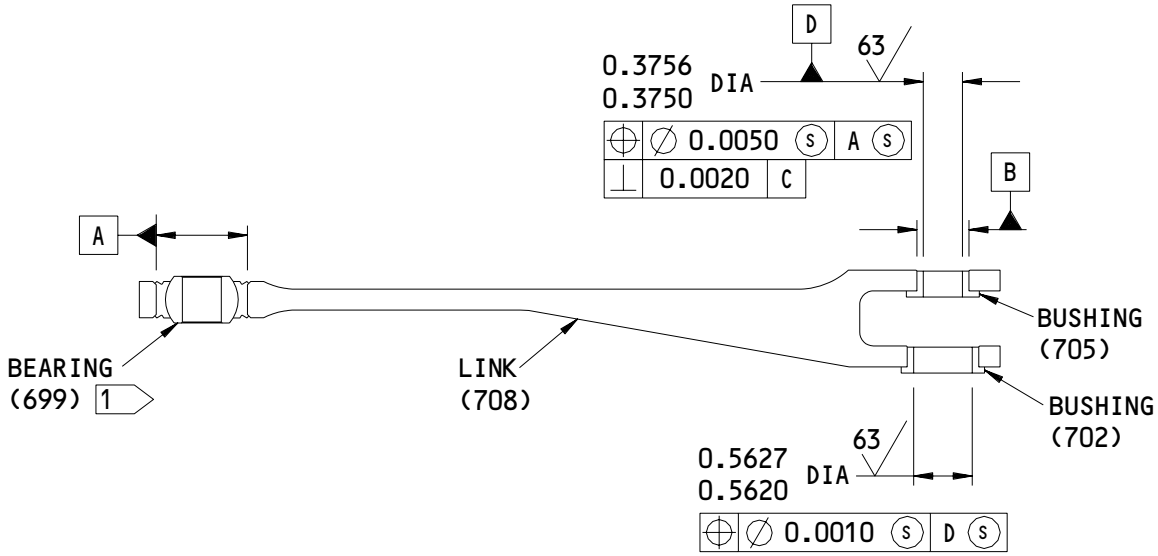
C. Procedure (Fig. 601)

(1) Apply BMS 10-60 enamel (F-19.39-707). Do not apply enamel to the bearings, bushing inner diameters or bushing flange faces.





A–A



B–B

1 NO ENAMEL

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7206-1
Link Assembly Bushing/Bearing Replacement
Figure 601

L05248

TRUCK TILT LINK - REPAIR 22-2

161T7206-2

1. General

A. This procedure has the necessary data to repair and refinish the truck tilt link (708).

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

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

D. General repair details:

(1) Material: Aluminum Alloy

2. Holes for Bushings

A. References

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

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

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

(4) SOPM 20-41-01, Decoding of Boeing Finish Codes

(5) SOPM 20-42-05, Bright Cadmium Plating

B. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a penetrant check (SOPM 20-20-02).

(3) Make oversize bushings (Fig. 602) to adjust for the material removed.

(4) Install the bushing as shown in REPAIR 22-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

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

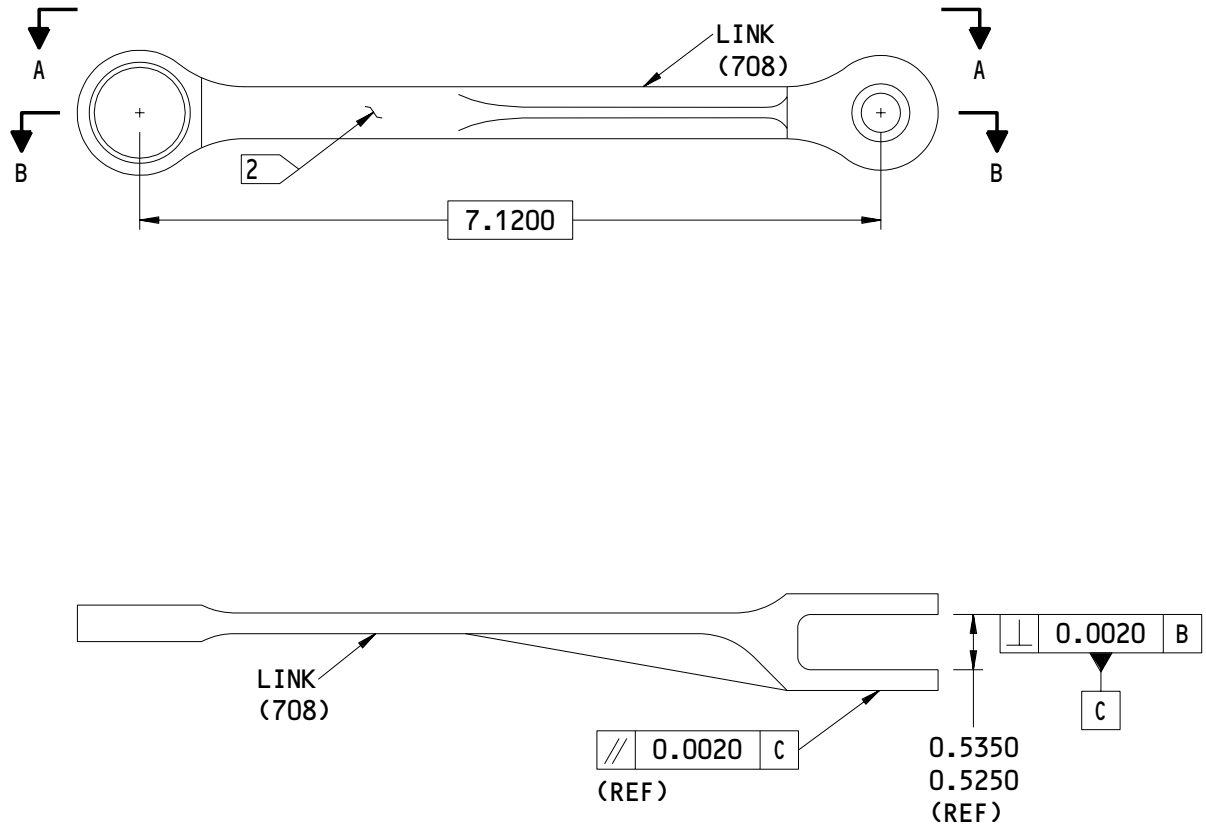
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

C. Procedure (Fig. 601)

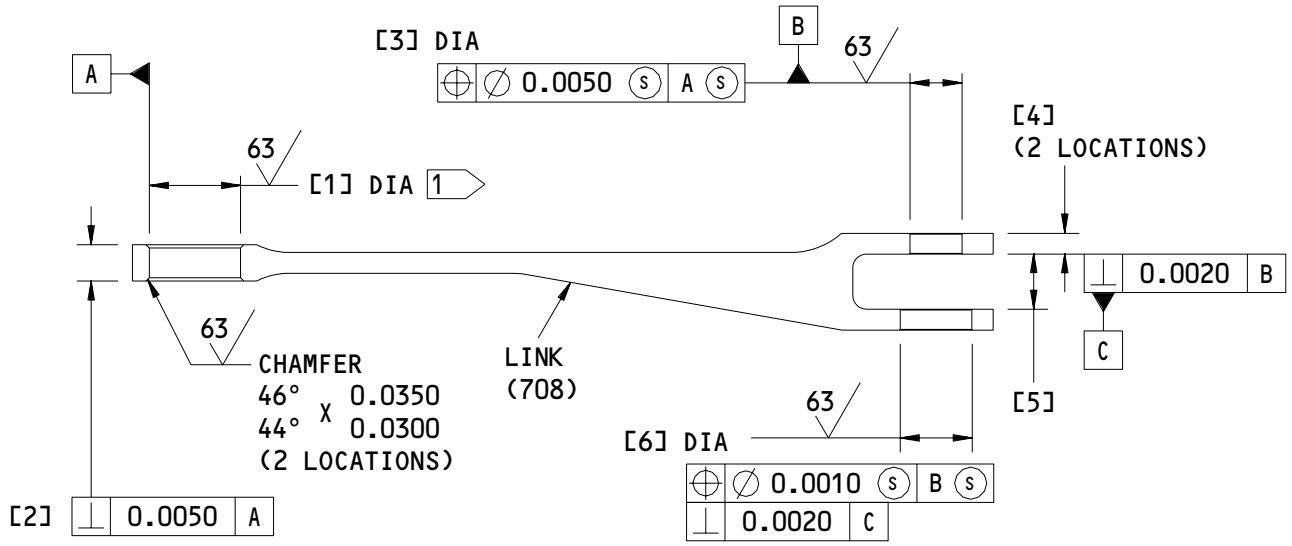
(1) Boric acid-sulfuric acid anodize (F-17.31), plus apply BMS 10-79, type 3 primer (F-19.47). Obey all flagnotes.



A–A

161T7206-2
Link Repair and Refinish
Figure 601 (Sheet 1)

L05267



B–B

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	0.8760 0.8750	0.3540 0.3440	0.5006 0.5000	0.2050 0.1950	0.5350 0.5250	0.6882 0.6875
REPAIR LIMIT	----	----	0.5606 3	----	----	0.7482 3

1 NO PRIMER OR ENAMEL (IN THIS HOLE ONLY)

2 PART NUMBER AND SERIAL NUMBER LOCATION

3 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

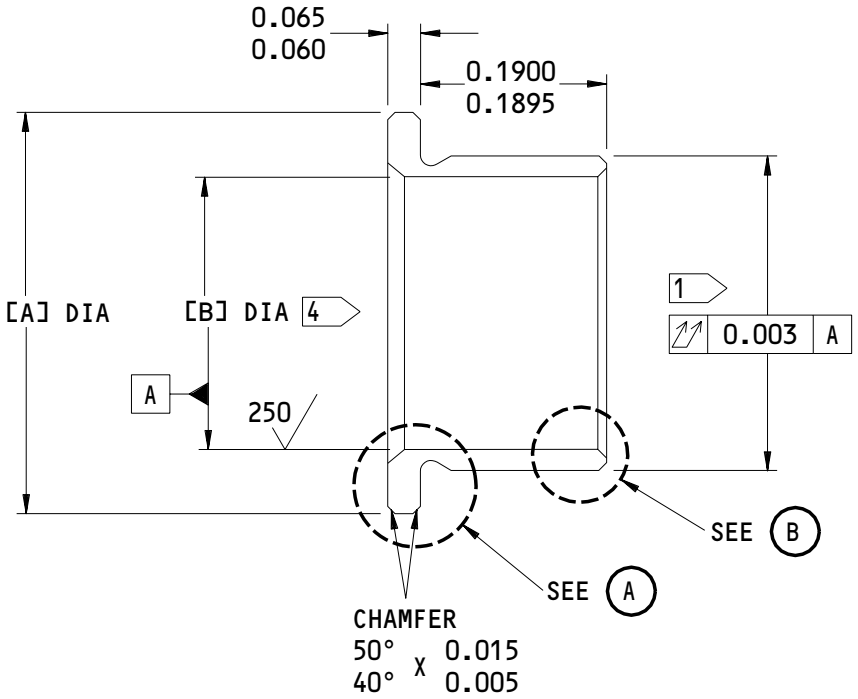
BREAK ALL SHARP EDGES

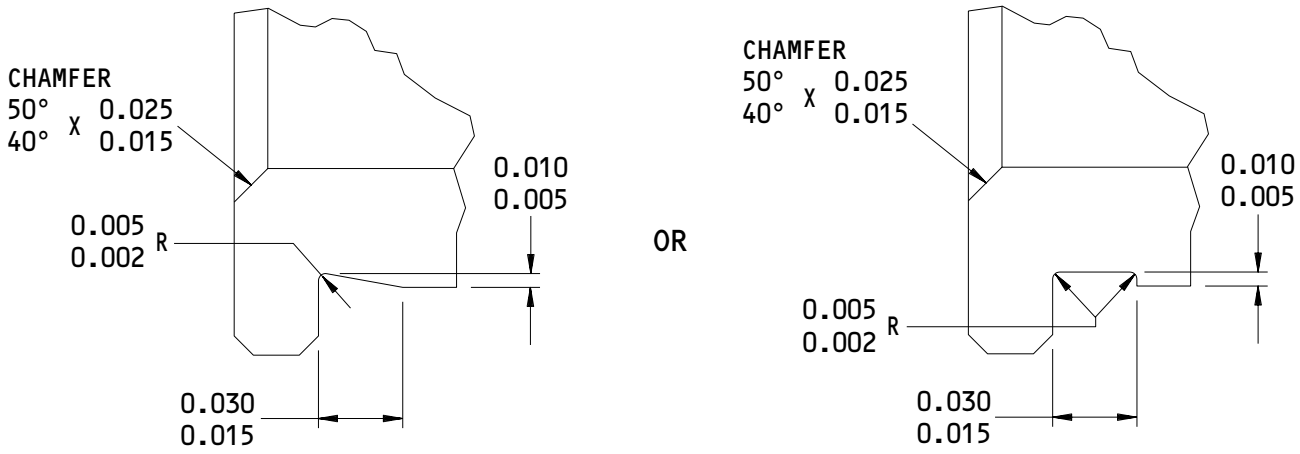
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7206-2
Link Repair and Refinish
Figure 601 (Sheet 2)

L05269

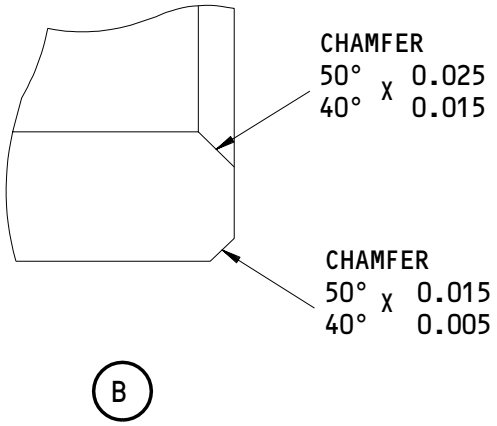




A

Oversize Bushing Details
Figure 602 (Sheet 1)

L05286



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B]	INTERFERENCE	MATERIAL
[6]	702	0.8100 0.8000	0.5530 0.5470	0.0018 0.0006	2
[3]	705	0.7100 0.7000	0.3660 0.3590	0.0015 0.0004	3

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

2 AL-NI-BRONZE (AMS 4640)

3 15-5PH CRES (AMS 5659) OR 17-4PH CRES (AMS 5643), 180-200 KSI

4 PLATING OPTIONAL

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AS SHOWN BY 2 3

FINISH: CADMIUM PLATE (F-15.36) OR ZINC-NICKEL PLATE (F-15.40) UNLESS SHOWN BY 4

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

L05288

TRUCK TILT TARGET ASSEMBLY - REPAIR 23-1

161T7207-1

1. General

   A. This procedure has the necessary data to replace the bushings (714) and the bearings (717) in the truck tilt target assembly (711).

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

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

2. Bushing/Bearing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

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

   B. References

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

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

      (3) SOPM 20-60-03, Lubricants

   C. Procedure (Fig. 601)

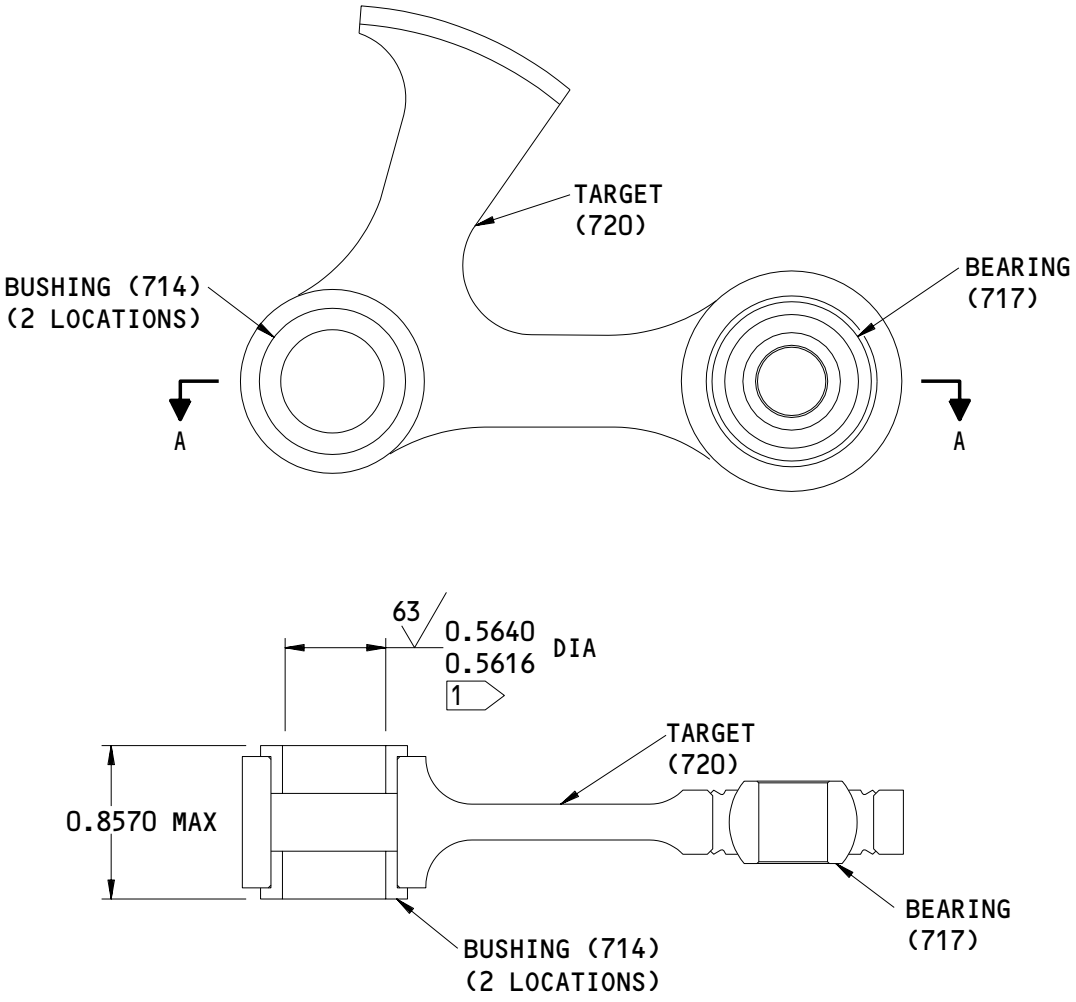
      (1) Remove the bushings (714) and the bearings (717).

      (2) If you find defects on hole surfaces, refer to REPAIR 23-2 for repair instructions.

      (3) Install replacement bushings (714) with BMS 3-33 grease by the shrink-fit method (SOPM 20-50-03).

         NOTE: It is not necessary to machine the installed bushings. These bushings come with a liner pre-machined to give final dimensions after installation.

(4) Install replacement bearing (717) with BMS 3-33 grease and roller swage it (SOPM 20-50-03).



A–A

1 APPROXIMATE INSTALLED DIMENSION. ADJUSTMENT IS NOT NECESSARY, BECAUSE THIS IS A LINED BUSHING

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7207-1
Truck Tilt Target Assembly Bushing/Bearing Replacement
Figure 601

L05317

TRUCK TILT TARGET - REPAIR 23-2

161T7207-2

1. General

A. This procedure has the necessary data to repair and refinish the truck tilt target (720).

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

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

D. General repair details:

(1) Material: 15-5PH CRES
150-170 KSI

2. Holes for Bushings and Bearing

A. References

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

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

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

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

B. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a magnetic particle check (SOPM 20-20-01).

(3) Make oversize bushings (Fig. 602) to adjust for the material removed.

(4) Install the bushings as shown in REPAIR 23-1.

3. Refinish

A. References

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

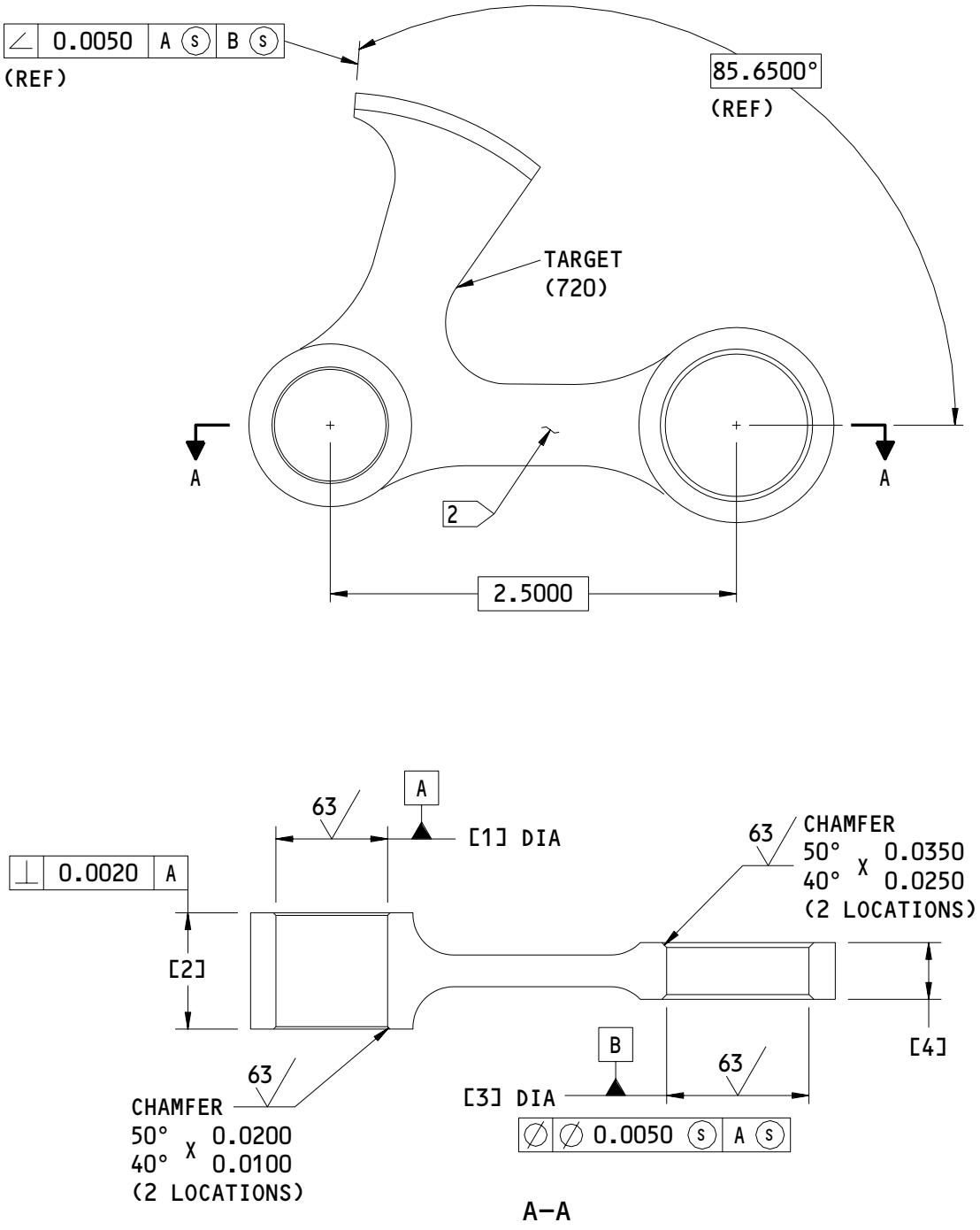
(2) SOPM 20-30-03, General Cleaning Procedures

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

(4) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

B. Procedure

(1) Passivate (F-17.25) all over.



161T7207-2
Truck Tilt Target Repair and Refinish
Figure 601 (Sheet 1)

L05335

REFERENCE NUMBER	[1]	[2]	[3]	[4]
DESIGN DIMENSION	0.6882 0.6875	0.7200 0.7100	0.8760 0.8750	0.3540 0.3440
REPAIR LIMIT	0.7482 <1>	----	----	----

<1> LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

<2> PART NUMBER AND SERIAL NUMBER LOCATION

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

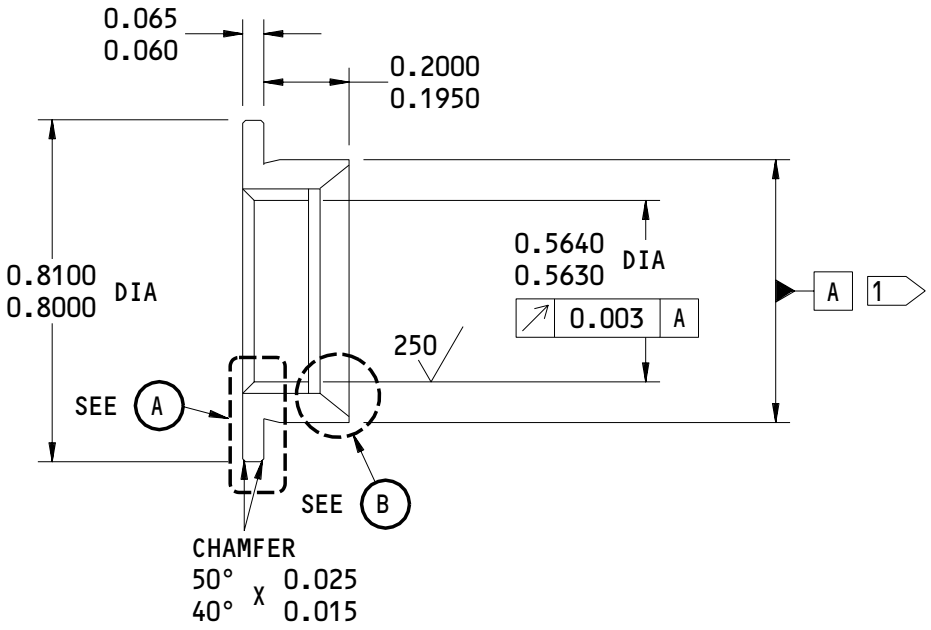
BREAK ALL SHARP EDGES

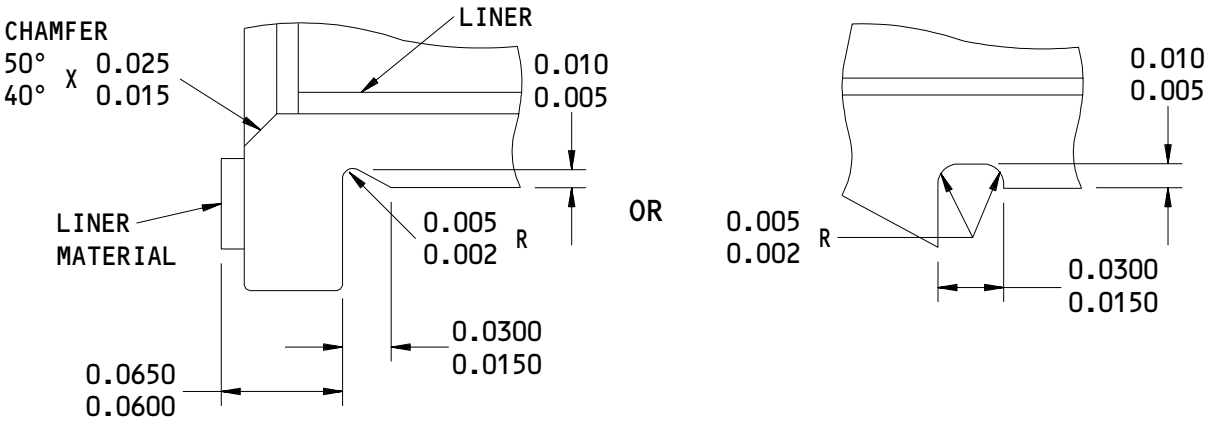
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7207-2
Truck Tilt Target Repair and Refinish
Figure 601 (Sheet 2)

L78177





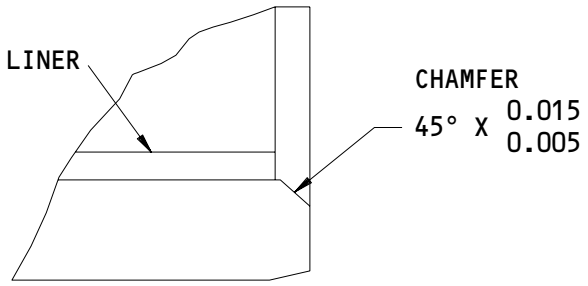
TYPE 1 TYPE 2

A

HOLE LOCATION [1] FIG. 601 – REPLACES BUSHING (714)

Oversize Bushing Details
Figure 602 (Sheet 1)

L05369



B

1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE OF 0.0006-0.0018

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL:
BUSHING - 15-5PH CRES (AMS 5669) OR 17-4PH CRES (AMS 5643), 140-160 KSI
LINER - PER MIL-B-81934

FINISH: PASSIVATE (F-17.25) (OPTIONAL)

ITEM NUMBERS REFER TO IPL FIG. 1

DIMENSIONS ARE AFTER PLATING

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

L05374

TRUCK TILT BRACKET ASSEMBLY - REPAIR 24-1

161T7208-1, -2

1. General

A. This procedure has the necessary data to replace the bushings (729, 732) and refinish the truck tilt bracket assembly (723, 726).

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

(2) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

B. References

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

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

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

(4) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Remove the bushings (729, 732).

(2) If you find defects on hole surfaces, refer to REPAIR 24-2 for repair instructions.

(3) Install the bushings.

(4) Install replacement bushings (729, 732) with BMS 3-27 compound by the shrink-fit method (SOPM 20-50-03). Make sure that the chamfer/radius is filled with BMS 3-27 compound.

(5) Machine the bushings to design dimensions and finish.

(6) Fillet seal the bushings (729, 732) with BMS 5-95 sealant.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

B. References

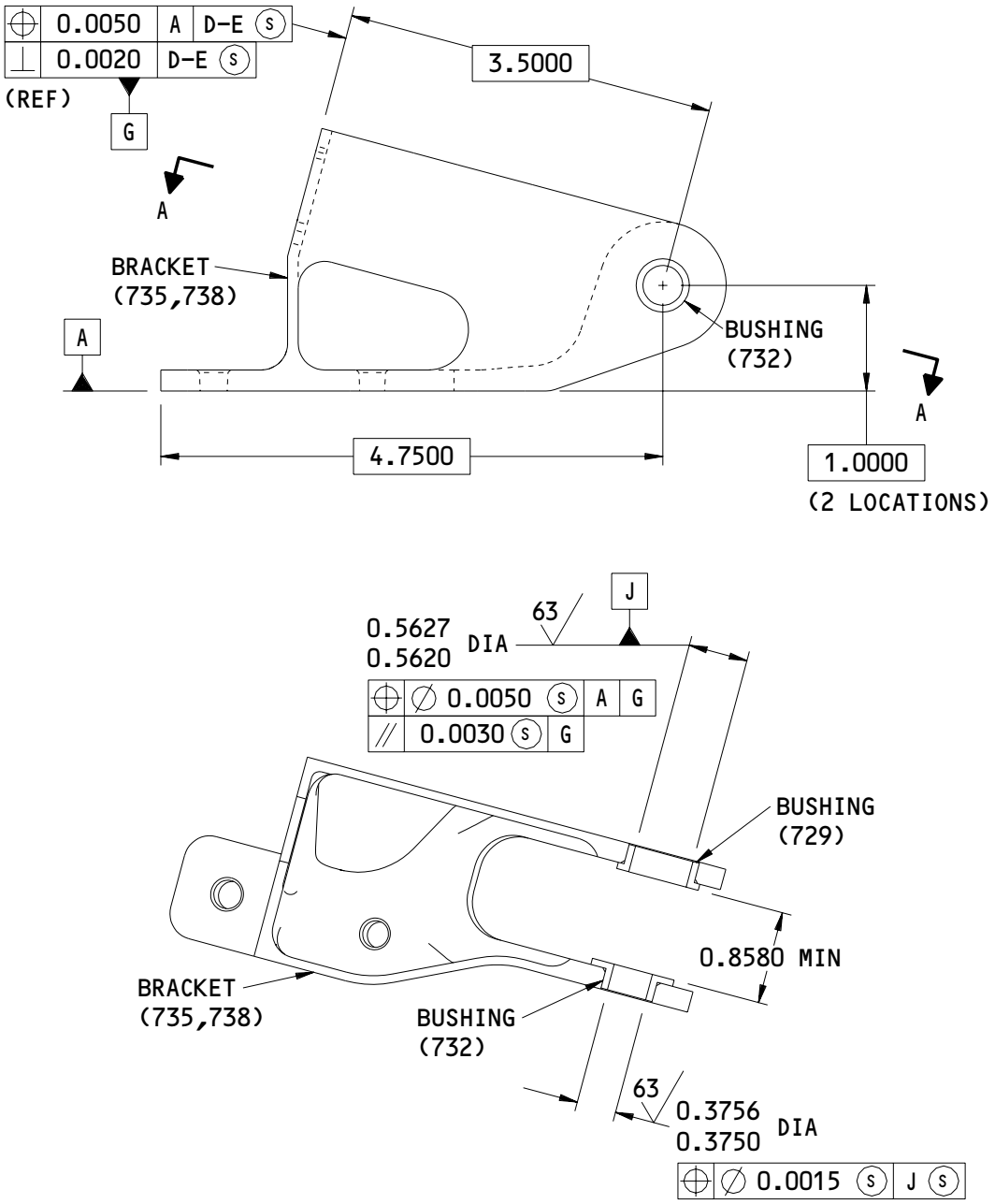
(1) SOPM 20-30-02, Stripping of Protective Finish

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

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

C. Procedure

(1) Apply BMS 10-60 enamel (F-19.39-707). Do not apply enamel to bushing inner diameters or flange faces.



A–A

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7208-1,-2
Truck Tilt Bracket Assembly Bushing Replacement and Refinish
Figure 601

L05463

TRUCK TILT BRACKET - REPAIR 24-2

161T7208-3, -4

1. General

A. This procedure has the necessary data to repair and refinish truck tilt bracket (735,738).

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

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

D. General repair details:

(1) Material: Aluminum Alloy

2. Holes for Bushings

A. References

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

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

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

(4) SOPM 20-42-05, Bright Cadmium Plating

B. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Do a penetrant check (SOPM 20-20-02).

(3) Make oversize bushings (Fig. 602) to adjust for the material removed.

(4) Install the bushings as shown in REPAIR 24-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

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

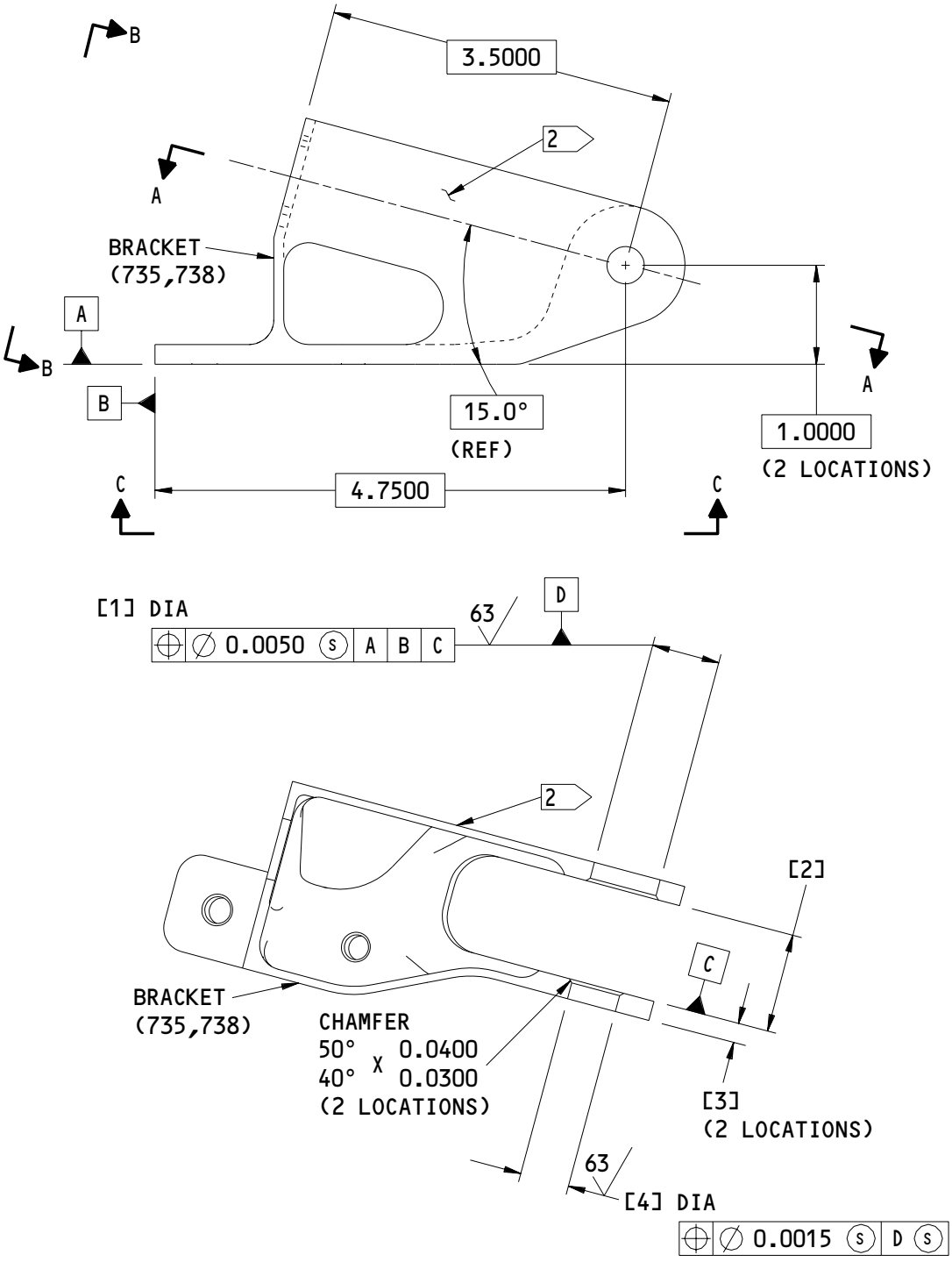
(4) SOPM 20-44-04, Application of Urethane Compatible Primer

(5) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

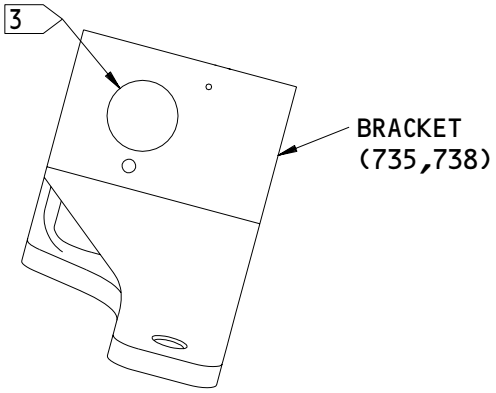
C. Procedure 9Fig. 601)

(1) Boric acid-sulfuric acid anodize (F-17.31). Apply BMS 10-79, type 3 primer (F-19.47) unless shown differently.

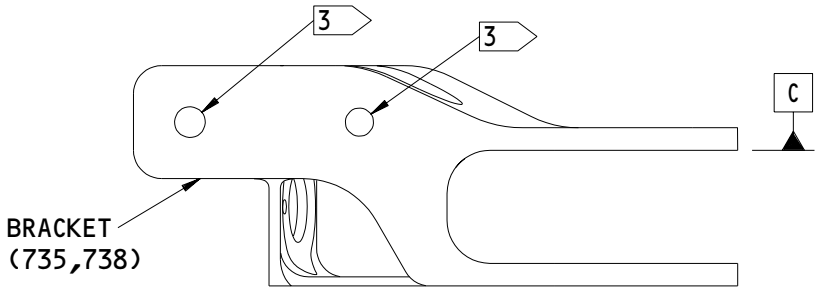


A–A

161T7208-3,-4
Truck Tilt Bracket Repair and Refinish
Figure 601 (Sheet 1)



B–B



C–C

REFERENCE NUMBER	[1]	[2]	[3]	[4]
DESIGN DIMENSION	0.6880 0.6800	1.0050 0.9950	0.2050 0.1950	0.5005 0.4995
REPAIR LIMIT	0.7480 1	----	----	0.5605 1

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

2 PART NUMBER AND SERIAL NUMBER LOCATION

3 NO ENAMEL (F-19.39-707) THIS SURFACE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

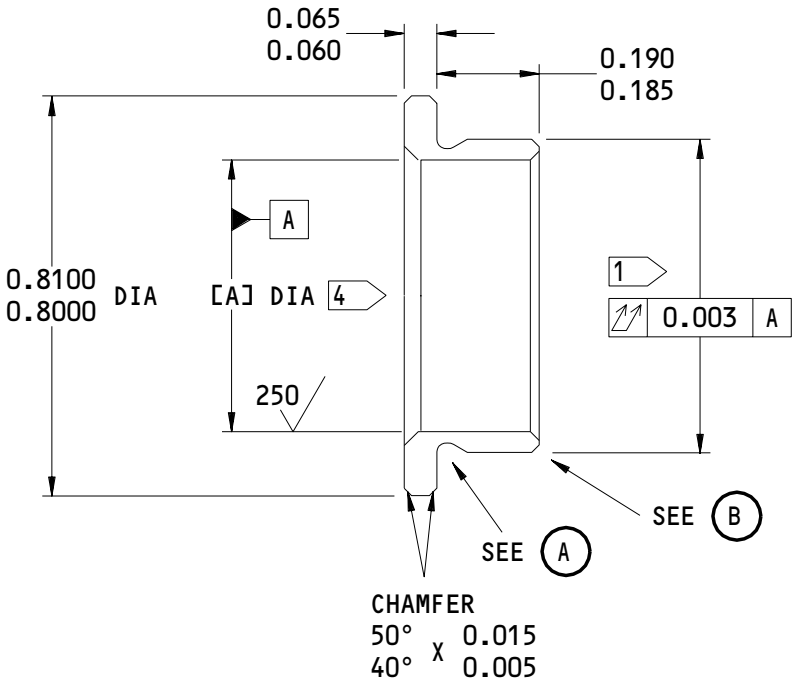
BREAK ALL SHARP EDGES

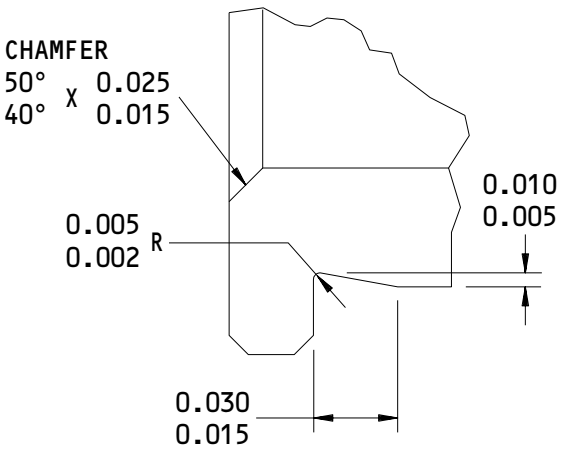
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T7208-3,-4
Truck Tilt Bracket Repair and Refinish
Figure 601 (Sheet 2)

L05493

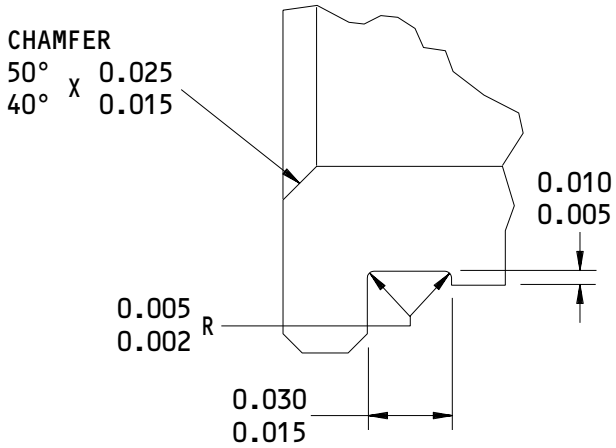




TYPE 1

A

OR

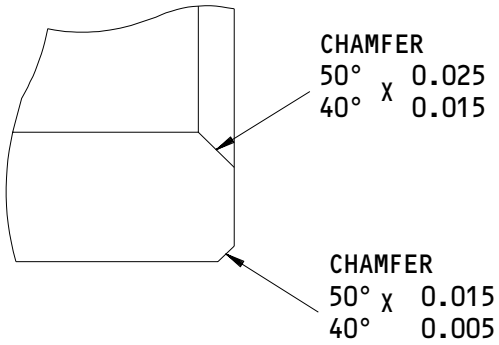


TYPE 2

A

Oversize Bushing Details
Figure 602 (Sheet 1)

L05513



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	INTERFERENCE	MATERIAL
[1]	729	0.5530 0.5470	0.0020 0.0008	2
[4]	732	0.3660 0.3590	0.0016 0.0005	3

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

2 AL-NI-BRONZE (AMS 4640)

3 15-5PH CRES (AMS 5659) OR 17-4PH CRES (AMS 5643), 180-200 KSI

4 PLATING OPTIONAL

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AS SHOWN BY 2 3

FINISH: CADMIUM PLATE (F-15.36) OR ZINC-NICKEL PLATE (F-15.40) UNLESS SHOWN BY 4

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602 (Sheet 2)

L05525

NAME PLATE REPLACEMENT - REPAIR 25-1

162T1103-2

1. General

A. This procedure has the necessary data to replace the name plate (957) on the main landing gear buildup assembly.

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

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

2. Nameplate and Strap Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

(2) B00571 Coating - Hydraulic Fluid Resistant Coating, Type 41 (SOPM 20-44-01)

(3) G01314 Tape - 3M-Y8412 (SOPM 20-60-04)

B. References

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

(2) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

(3) SOPM 20-50-12, Application of Adhesives

(4) SOPM 20-50-21, How to Install Nameplate Straps and Seals

(5) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Clean the shock strut assembly (960) outer diameter, where the nameplate and nameplate straps are to be installed (SOPM 20-30-03).

(2) Install one wrap of mylar tape (948) around the shock strut assembly, to make the tape ends overlap 1 inch.

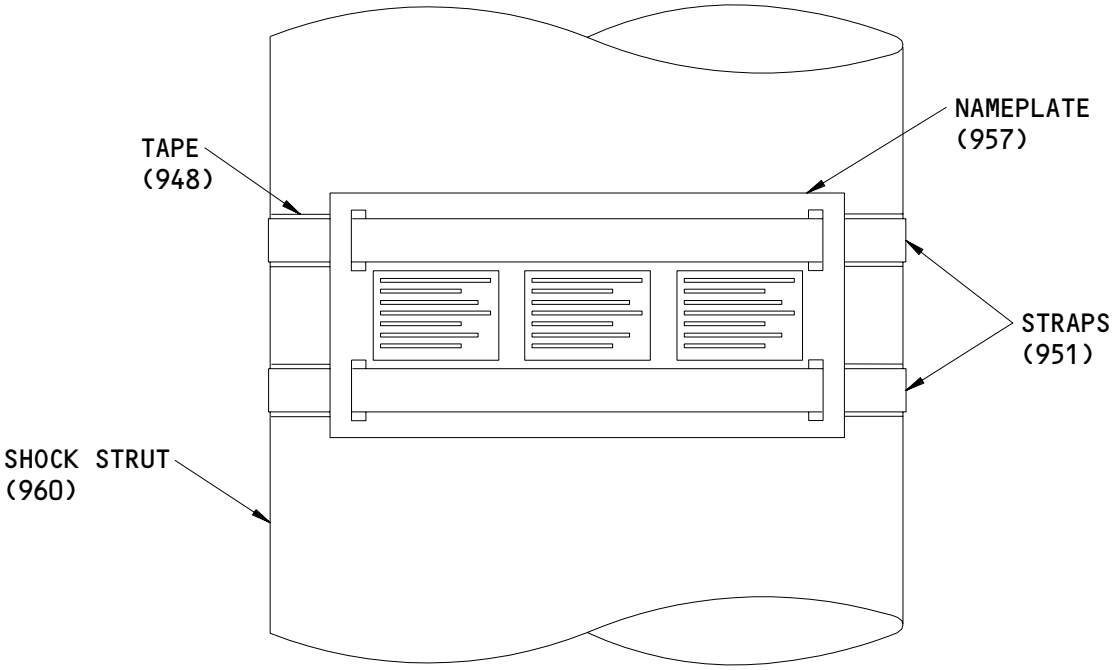
(3) Install the nameplate straps through the slots in the ends of the nameplate as shown in Fig. 601.

(4) Apply BMS 5-95 sealant to the underside of the nameplate that will touch the outer diameter of the shock strut assembly.

(5) Install the nameplate and straps over the mylar tape with seals (954) (SOPM 20-50-21).

(6) Fillet seal the edges of the nameplate with BMS 5-95 sealant.

(7) After the BMS 5-95 sealant is cured, dried, apply type 41 hydraulic fluid resistant coating (F-21.34) to the sealant, nameplate and the straps.



ITEM NUMBERS REFER TO IPL FIG. 1

162T1103-2
Nameplate Replacement
Figure 601

L05567

SUPPORT BRACKET ASSEMBLY - REPAIR 26-1

287T6140-1

1. General

A. This procedure has the necessary data to replace the bushing (462) in the support bracket assembly.

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

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

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

B. References

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

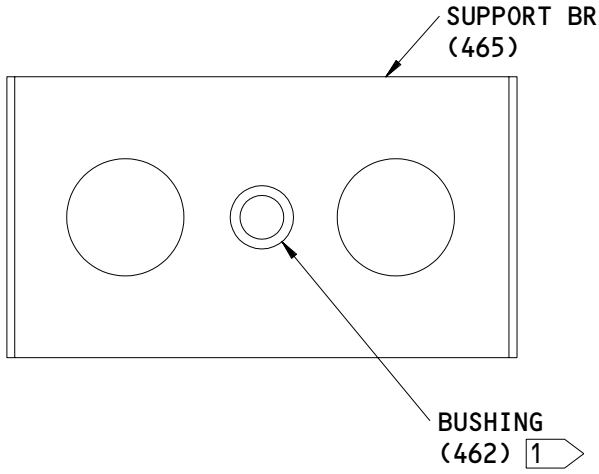
(2) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Remove the bushing (462).

(2) If you find defects on the hole surfaces, refer to REPAIR 26-2 for repair instructions.

(3) Install a replacement bushing (462) with BMS 5-95 sealant by the shrink-fit method (SOPM 20-50-03).



1 NET-FIT BUSHING, NO MACHINING REQUIRED

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

287T6140-1
Support Bracket Assembly Bushing Replacement
Figure 601

SUPPORT BRACKET - REPAIR 26-2

287T6140-7

1. General

A. This procedure has the necessary data to repair and refinish the support bracket (465).

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

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

D. General repair details:

(1) Material: Aluminum Alloy

2. Hole for Bushing

A. References

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

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

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

(4) SOPM 20-42-05, Bright Cadmium Plating

B. Procedure (Fig. 601)

(1) Machine as necessary, within repair limits, to remove defects.

(2) Break all the sharp edges.

(3) Do a magnetic particle check as shown in SOPM 20-20-01.

(4) Make an oversize bushing for the bushing (462) as shown in (Fig. 602) to adjust for the material removed.

(5) Install the bushing as shown in REPAIR 26-1.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2 (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

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

(4) SOPM 20-44-04, Application of Urethane Compatible Primer

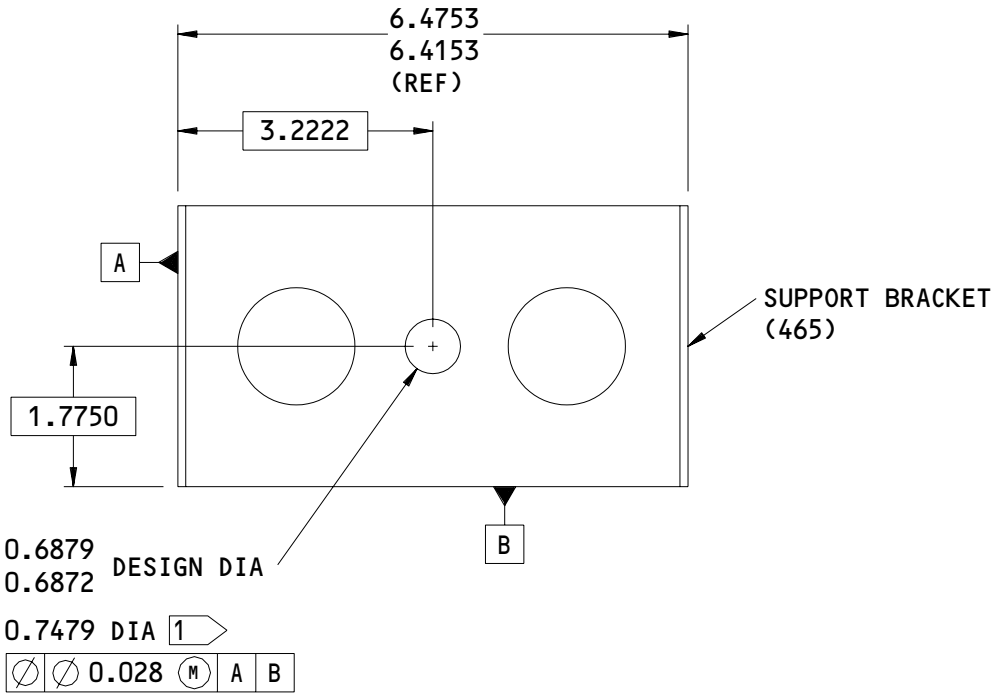
(5) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35).

(2) Apply BMS 10-79, type 3 primer (F-19.47).

(3) Apply BMS 10-60, type 2 enamel (F-19.39-707). Do not apply enamel to the hole for the bushing.



1 REPAIR LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

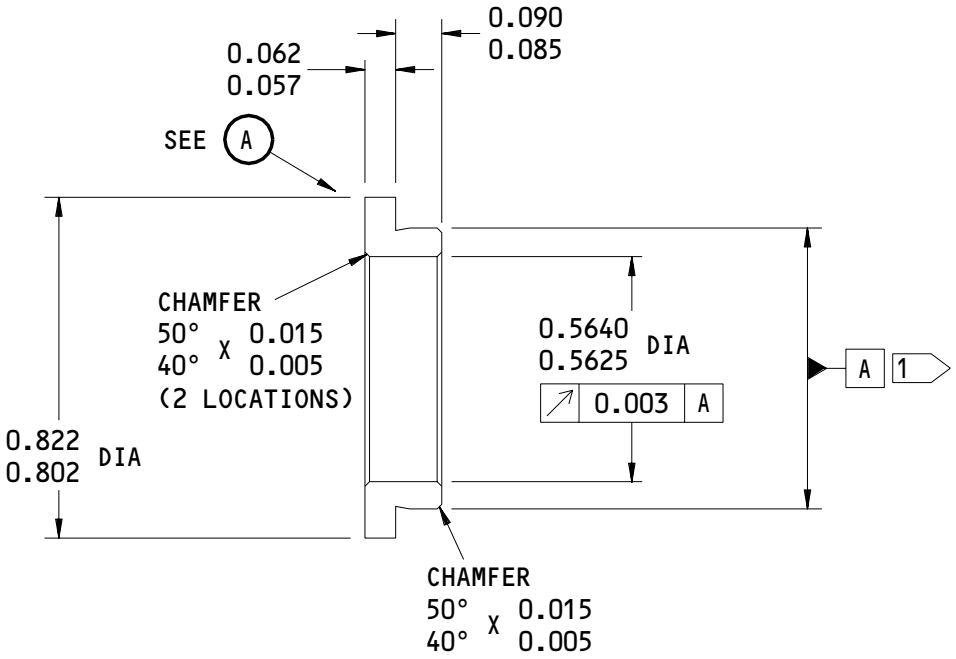
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

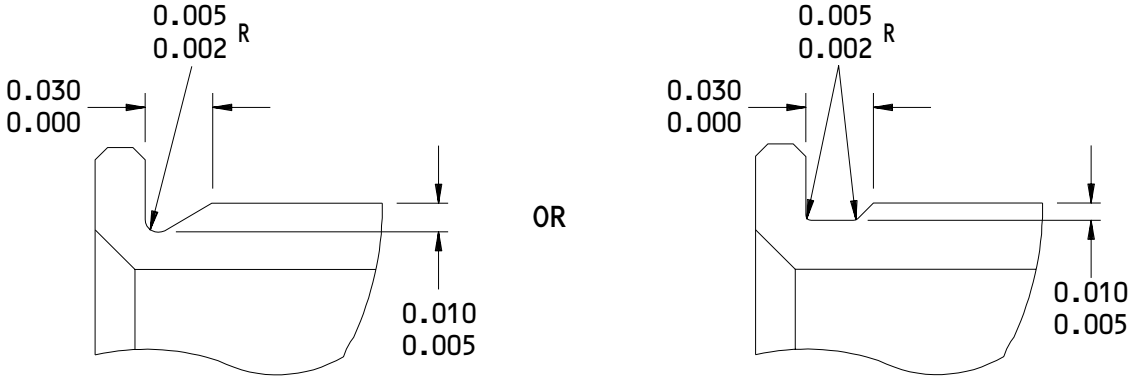
ALL DIMENSIONS ARE IN INCHES

287T6140-7
Support Bracket Repair and Refinish
Figure 601

L05566



REPLACES BUSHING (462)



TYPE 1 (A) TYPE 2

1 THE OUTSIDE DIAMETER OF THE BUSHING AFTER PLATING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUSS THE INTERFERENCE 0.0005-0.0020

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.06) BUT NOT IN BORE

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602

L05679

TORSION LINK APEX PIN - REPAIR 27-1

161W1144-1

1. General

   A. This procedure has the necessary data to repair and refinish the torsion link apex pin (369).

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

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

   D. General repair details:

      (1) Material: 4340M Steel
      275 - 300 KSI

      (2) Shot Peen: Intensity 0.014 - 0.018A2
      Shot Size 0.016 - 0.033
      Hard Shot (RC 55-65)
      Coverage 2.0

2. Pin Repair

   A. Consumable Materials

      NOTE: Equivalent materials can be used.

      (1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

   B. References

      (1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

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

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

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

(10) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Shank

(a) Machine as necessary, within the repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) For the outside diameter, shot peen, chrome plate and grind to design dimensions and finish.

(d) For the inside diameter, refinish only, as shown in the refinish section below.

(2) Reliefs

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00033 Enamel - BMS 10-60, Type 2, 707 Gray (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

(3) C00308 Compound - MIL-C11796 Corrosion Preventive (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

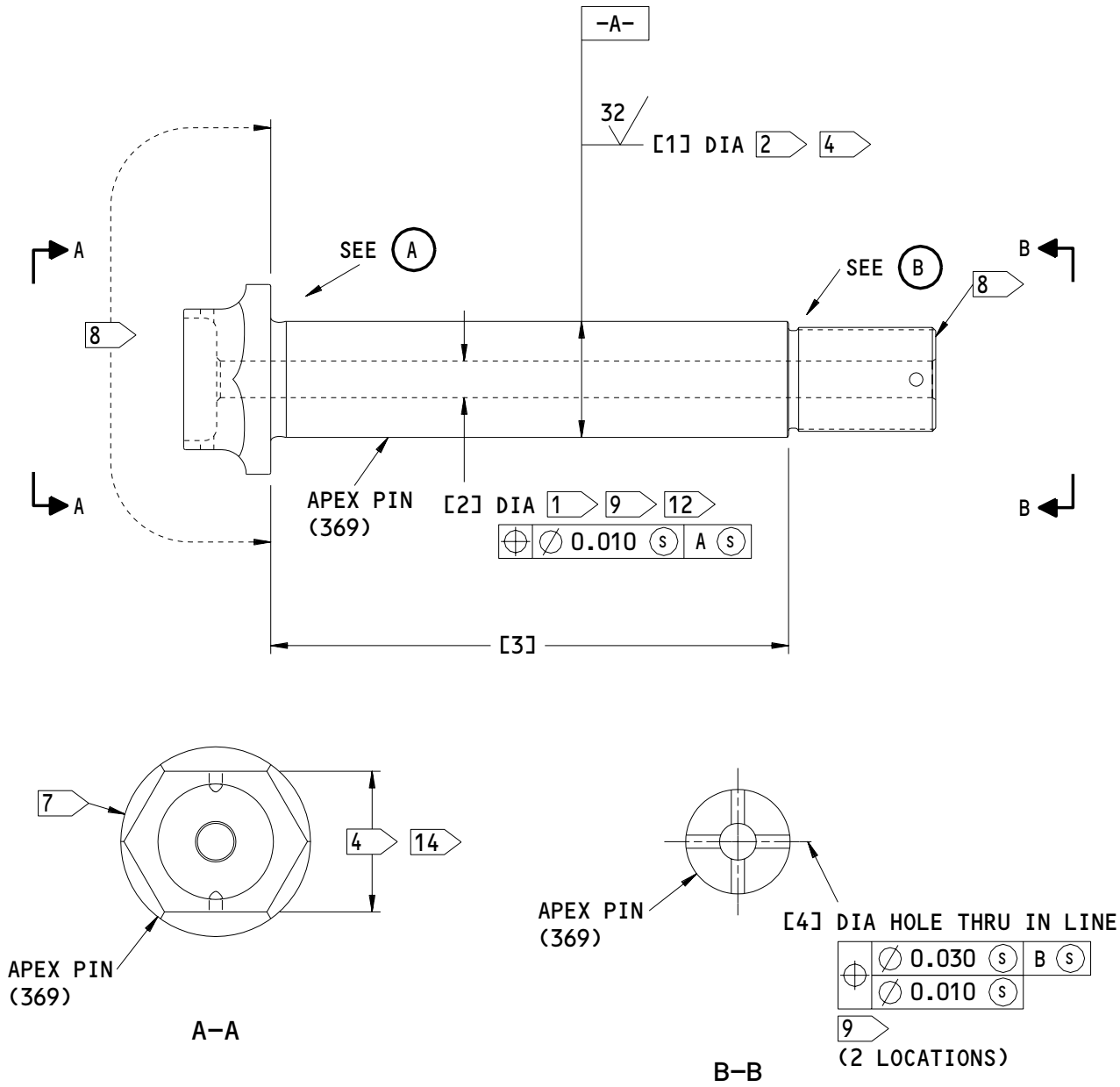
(6) SOPM 20-44-04, Application of Urethane Compatible Primer

(7) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

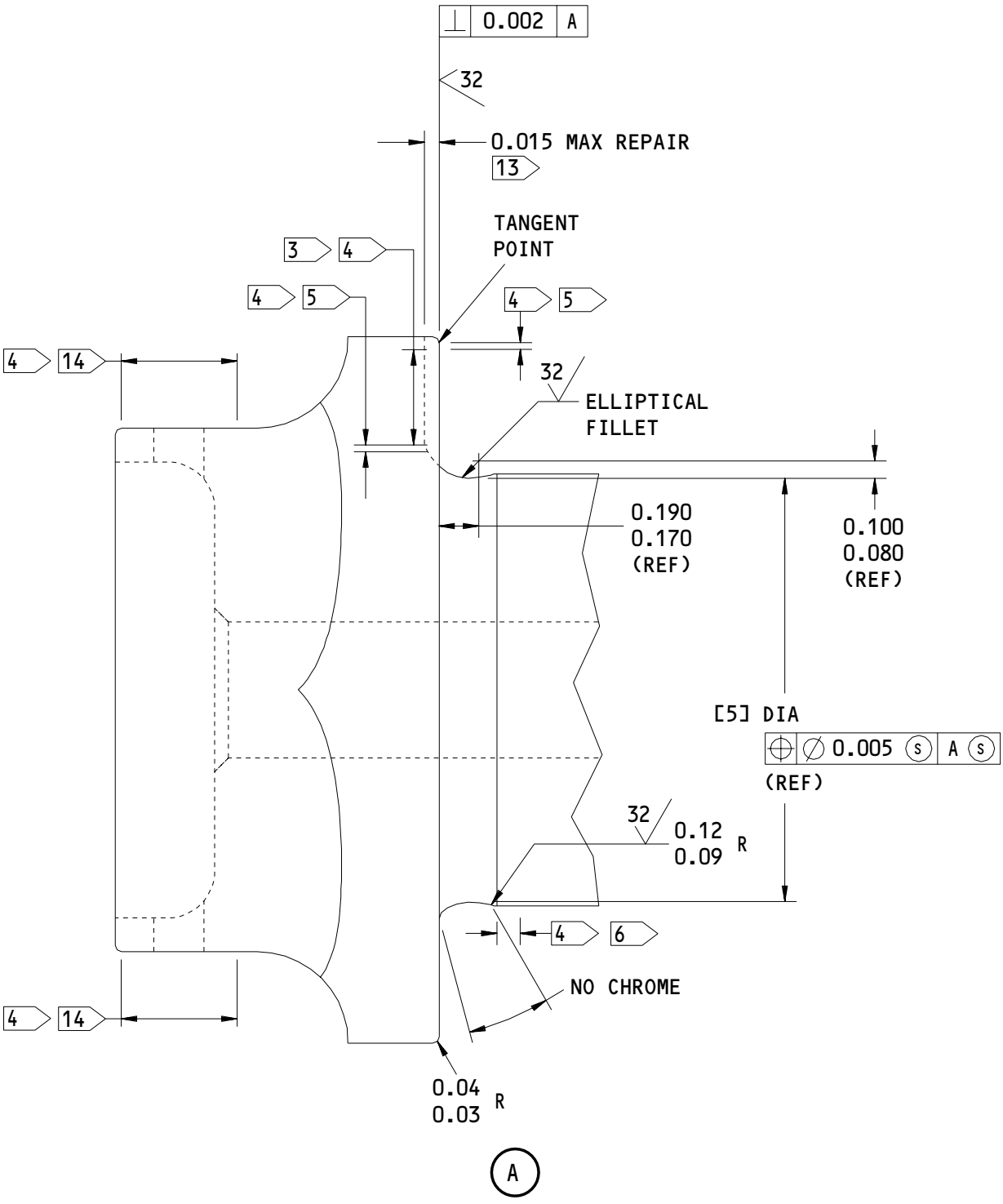
C. Procedure (Fig. 601)

(1) Cadmium titanium plate (F-15.01), and apply primer (F-19.66), unless shown differently.

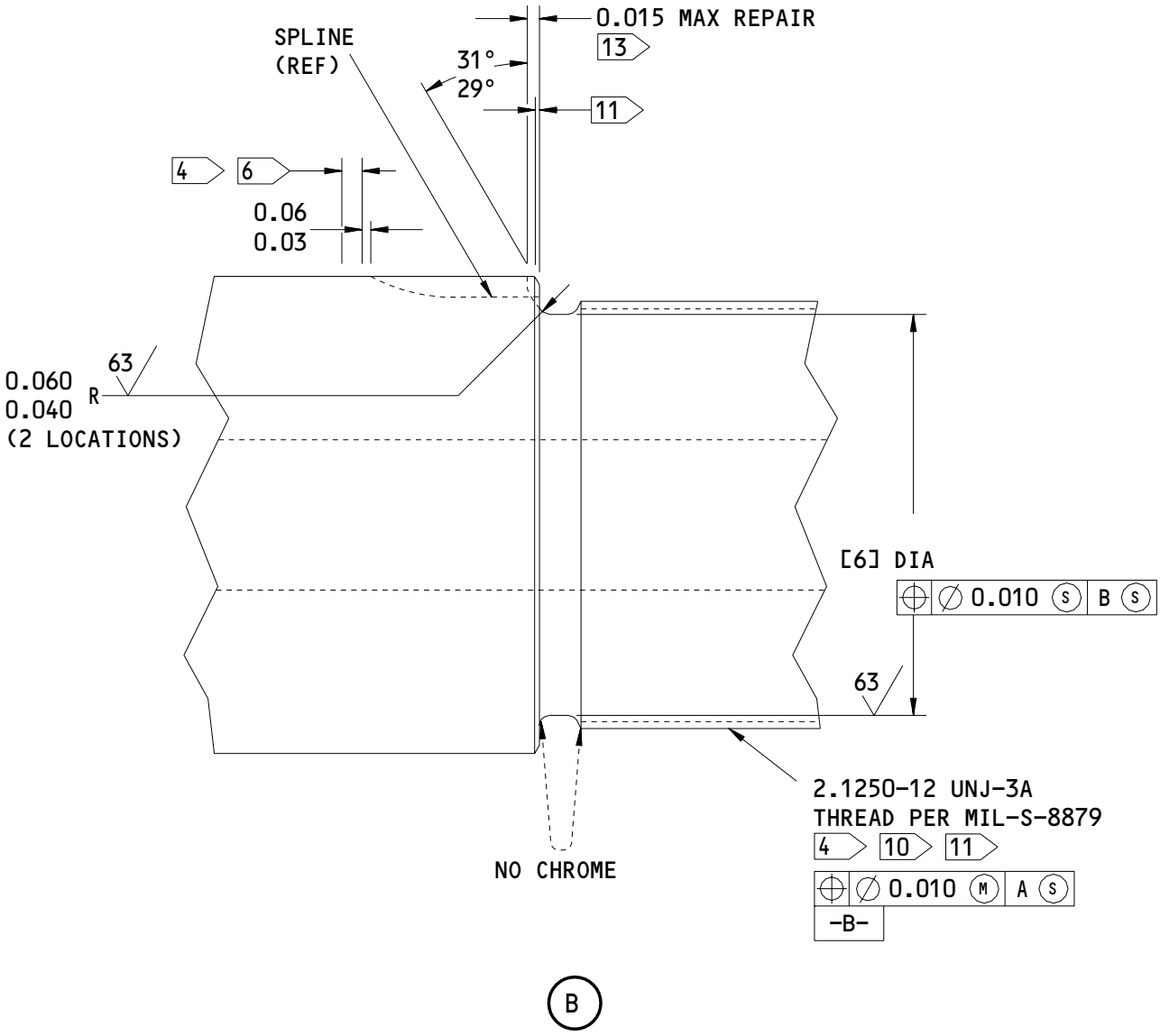


161W1144-1
Torsion Link Apex Pin Repair and Refinish
Figure 601 (Sheet 1)

L05757



161W1144-1
Torsion Link Apex Pin Repair and Refinish
Figure 601 (Sheet 2)



161W1144-1
Torsion Link Apex Pin Repair and Refinish
Figure 601 (Sheet 3)

L05839

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]
DESIGN DIMENSION	2.3740 2.3730	0.760 0.740	10.600 10.580	0.270 0.266	2.3350 2.3250	2.000 1.990
REPAIR LIMIT	2.3440 13	0.780 6	----	----	2.3050 6	1.970 6

1 SHOT PEEN OPTIONAL

2 CHROME PLATE (F-15.34) 0.003 MINIMUM THICK AFTER GRINDING

3 CHROME PLATE (F-15.34) (0.0015-0.0020). DO NOT GRIND

4 WIPE WITH BMS 10-79, TYPE 3 PRIMER (F-19.451)

5 CHROME PLATE RUNOUT

6 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

7 PART NUMBER AND SERIAL NUMBER LOCATION

8 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND BMS 10-60 ENAMEL (F-14.9813, WHICH REPLACES SRF-14.9813)

9 PLATING NOT REQUIRED IN BORE

10 CADMIUM-TITANIUM PLATE (F-15.32)

11 NO SHOT PEEN

12 CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66) AND MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

13 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

14 THIN DENSE CHROME PLATE (F-15.43, WHICH REPLACES F-14.892)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161W1144-1
Torsion Link Apex Pin Repair and Refinish
Figure 601 (Sheet 4)

L05844

BRAKE PIN ASSEMBLY - REPAIR 28-1

161W1178-1

1. General

   A. This procedure has the necessary data to replace the bushing (564) in the brake pin assembly (561).

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

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

2. Bushing Replacement

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

   B. References

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

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

      (3) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure (Fig. 601)

      (1) Remove the bushing (564).

      (2) If you find defects on hole surfaces, refer to REPAIR 28-2 for repair instructions.

      (3) Install replacement bushing with BMS 5-95 sealant, by the shrink-fit method (SOPM 20-50-03).

      (4) Machine the bushing to design dimensions and finish shown.

3. Refinish

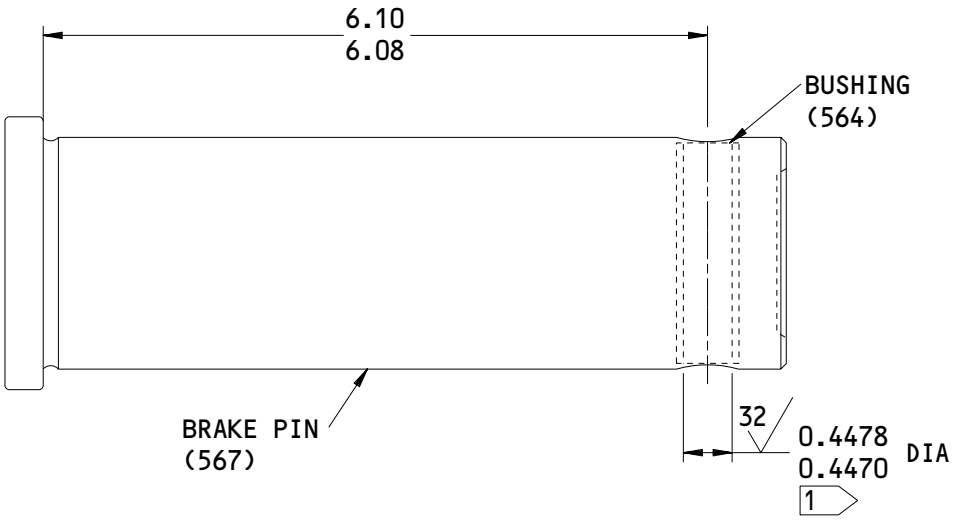
A. References

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

(2) SOPM 20-44-02, Temporary Protective Coatings

B. Procedure

(1) No finish, but temporary protective coatings (F-25.01) can be used.



1 ADJUST TO THIS DIMENSION, IF NECESSARY

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161W1178-1
Brake Pin Assembly Bushing Replacement
Figure 601

K82637

BRAKE PIN - REPAIR 28-2

161W1178-2

1. General

A. This procedure has the necessary data to repair and refinish the brake pin (567).

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

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

D. General repair details:

(1) Material: 4340M Steel
275 - 300 KSI

(2) Shot Peen: Intensity 0.014 - 0.018A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Pin Repair

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

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

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

(9) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

(11) SOPM 20-42-05, Bright Cadmium Plating

(12) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(14) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Hole for Bushing.

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen the hole (optional) (SOPM 20-10-03).

(d) Make an oversize bushing (Fig. 602) to adjust for the material removed.

(e) Install the bushing as shown in REPAIR 28-1.

(2) Shank

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) For the outside diameter, shot peen, chrome plate and grind to design dimensions and finish.

(d) For the inside diameter, refinish only, as shown in the refinish section below.

(3) Reliefs

(a) Machine as necessary, within repair limits, to remove defects. Blend smoothly into the tangent points.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the length is within design dimensions.

3. Refinish

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00308 Compound - MIL-C-11796 Corrosion Preventive (SOPM 20-60-02)

(2) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

(4) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

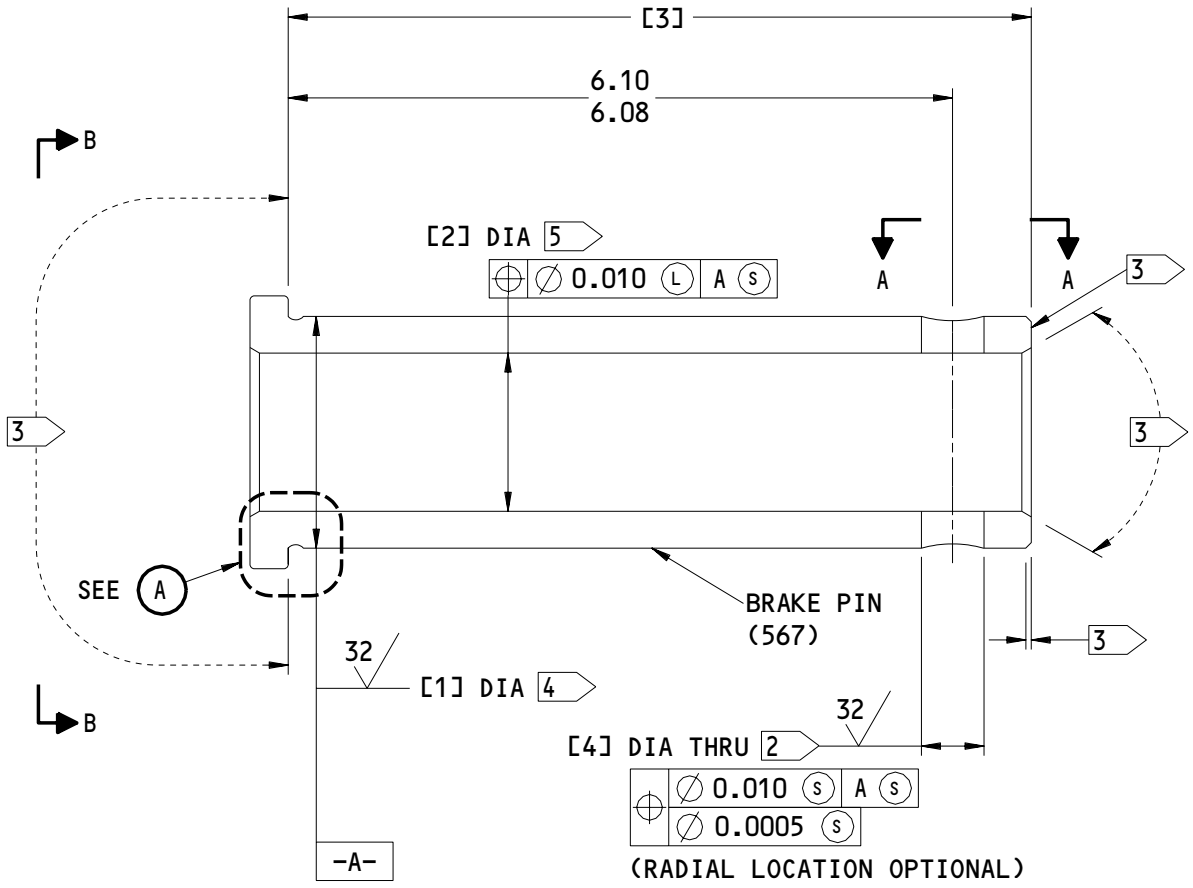
(5) SOPM 20-44-04, Application of Urethane Compatible Primer

(6) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

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

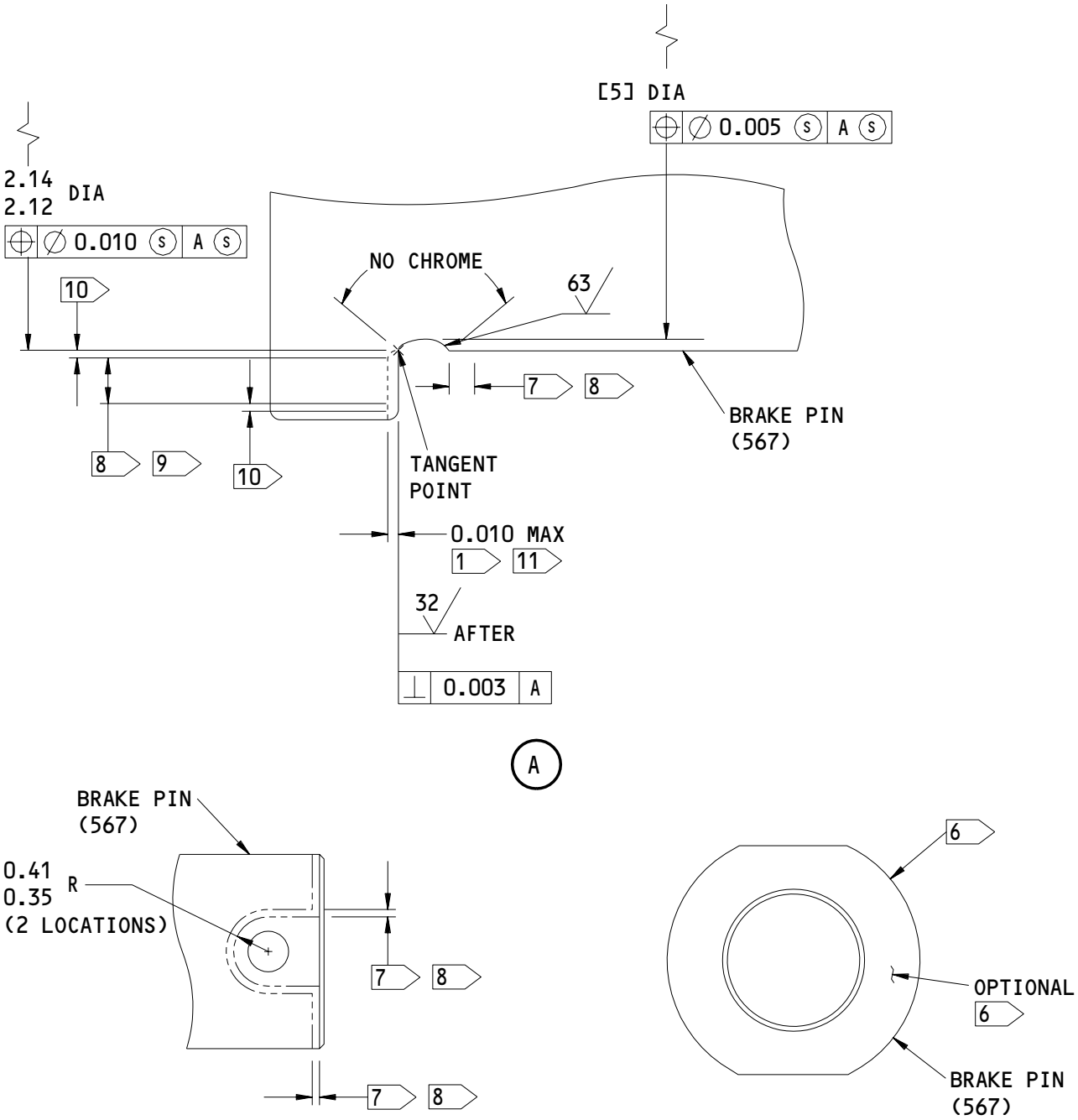
C. Procedure (Fig. 601)

(1) Cadmium titanium plate (F-15.01), and apply primer (F-19.66), unless shown differently.



161W1178-2
Brake Pin Repair
Figure 601 (Sheet 1)

K82643



161W1178-2
Brake Pin Repair
Figure 601 (Sheet 2)

K82644

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]
DESIGN DIMENSION	2.1240 2.1230	1.4600 1.4400	6.820 6.800	0.5738 0.5730	2.0650 2.0550
REPAIR LIMIT	2.0940 11	1.4200 10	----	0.5938 1	2.0350 10

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

2 SHOT PEEN OPTIONAL

3 CADMIUM-TITANIUM PLATE (F-15.01). APPLY PRIMER (F-19.66) AND ENAMEL (SRF-14.9813) ON SURFACES NOT CHROME PLATED

4 CHROME PLATE (F-15.34) 0.003-0.015 THICK AFTER GRINDING

5 CADMIUM-TITANIUM PLATE (F-15.01). APPLY PRIMER (F-19.66) AND CORROSION PREVENTIVE COMPOUND (F-19.03)

6 PART NUMBER AND SERIAL NUMBER LOCATION

7 CHROME PLATE RUNOUT AREA

8 WIPE CHROME PLATING WITH BMS 10-79, TYPE 3 PRIMER (F-19.451)

9 CHROME PLATE (F-15.34) 0.015 MAXIMUM THICKNESS

10 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

11 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

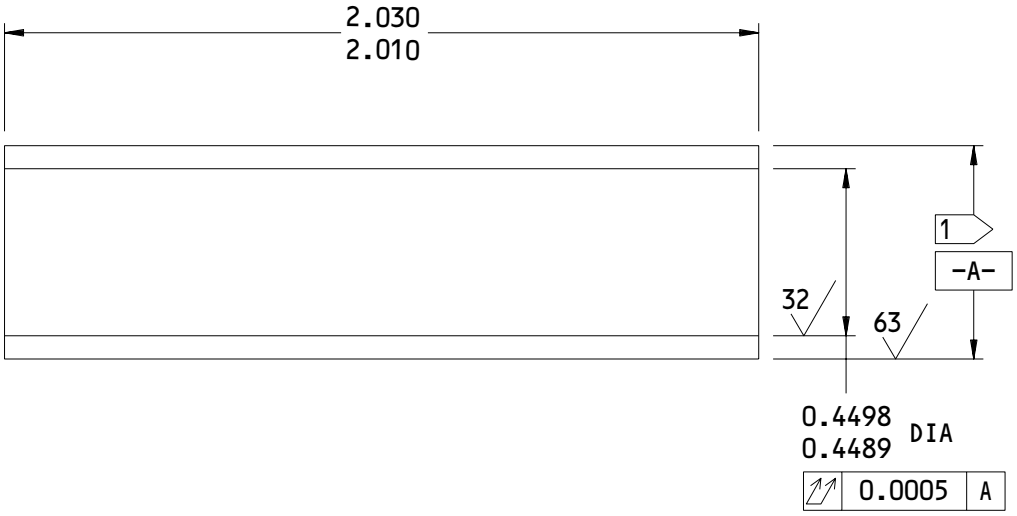
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161W1178-2
Brake Pin Repair
Figure 601 (Sheet 3)

K84048



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE BUSHING HOLE PLUS THE INTERFERENCE OF 0.0003-0.0016

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01-0.02 R

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: CADMIUM PLATE (F-15.06) BUT NOT IN BORE

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [4] FIG. 601 - REPLACES BUSHING (564)

Oversize Bushing Details
Figure 602

RETRACT ACTUATOR PIN - REPAIR 29-1

161T5010-1

1. General

A. This procedure has the necessary data to repair and refinish the retract actuator pin (987).

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

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

D. General repair details:

(1) Material: 15-5PH
180 - 200 KSI

(2) Shot Peen: Intensity 0.016A2
Shot Size 0.016 - 0.033
Hard Shot (RC 55-65)
Coverage 2.0

2. Pin Repair

A. Consumable Materials

NOTE: Equivalent materials can be used.

(1) C00175 Primer - BMS 10-79, Type 3 (SOPM 20-60-02)

B. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

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

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

(9) SOPM 20-44-04, Application of Urethane Compatible Primer

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

(11) SOPM 20-60-04, Miscellaneous Materials

C. Procedure (Fig. 601)

(1) Shank

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish.

(2) Reliefs

(a) Machine as required, within repair limits, to remove defects. Blend smoothly into the tangent points.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) Shot peen, chrome plate and grind to design dimensions and finish. Be sure to keep the grip length within design dimensions.

3. Refinish

A. References

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

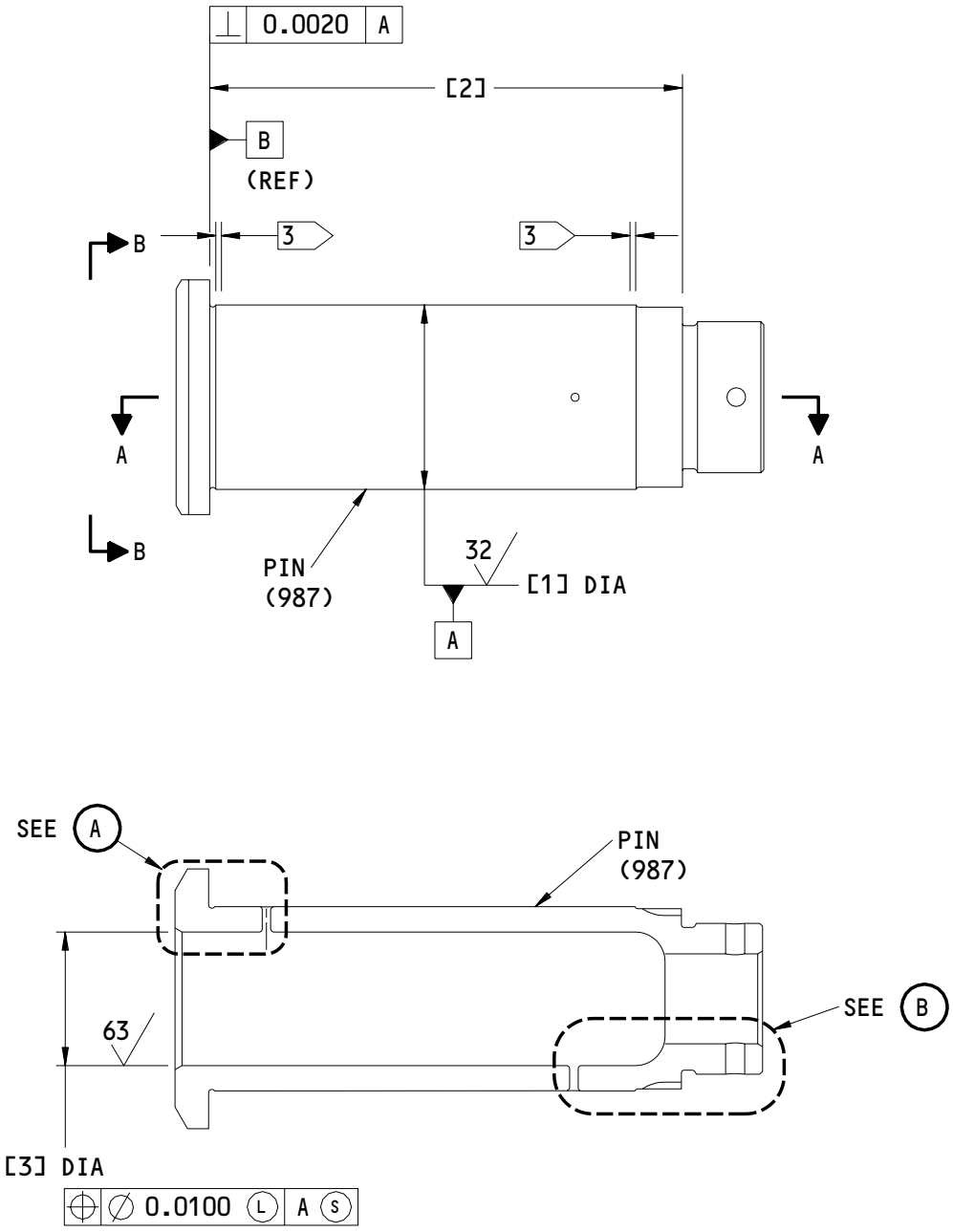
(2) SOPM 20-30-03, General Cleaning Procedures

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

(4) SOPM 20-50-10, Application of Stencils, Insignia, Silk Screen, Part Numbering and Identification Markings

B. Procedure

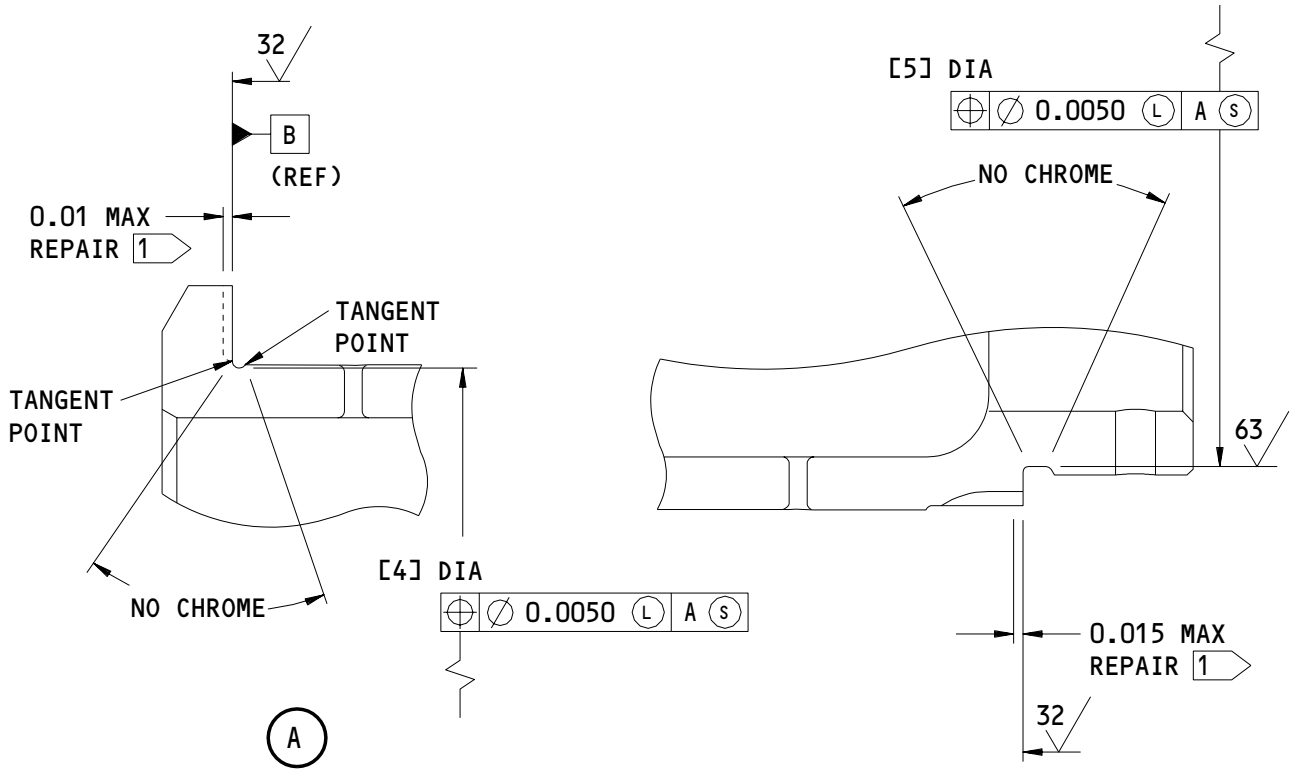
(1) Passivate (F-17.25).

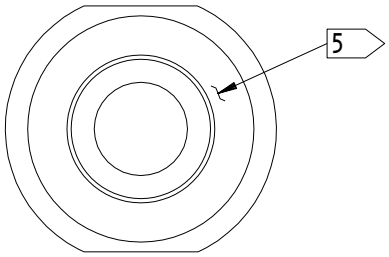


A–A

161T5010-1
Retract Actuator Pin Repair and Refinish
Figure 601 (Sheet 1)

L06296





B–B

161T5010-1
Retract Actuator Pin Repair and Refinish
Figure 601 (Sheet 2)

L06299

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]
DESIGN DIMENSION	2.7490 2.7480	7.0600 7.0400	1.9940 1.9920	2.7200 2.7100	2.1600 2.1520
REPAIR LIMIT	2.7190 <1>	----	2.0540 <4>	2.6900 <4>	2.1320 <4>

<1> LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

<2> CHROME PLATE (F-15.34) 0.003-0.015 THICK AFTER GRINDING. WIPE THE PLATING WITH PRIMER (F-19.451)

<3> CHROME PLATE RUNOUT AREA

<4> RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

<5> PART NUMBER AND SERIAL NUMBER LOCATION

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

161T5010-1
Retract Actuator Pin Repair and Refinish
Figure 601 (Sheet 3)

BRAKE SLEEVE - REPAIR 30-1

161W1211-1

1. General

A. This procedure has the data to repair and refinish the brake sleeve (573).

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

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

D. General repair details:

(1) Material: 15-5PH CRES
180-200 ksi

(2) Shot Peen: Intensity 0.006A2
Shot Size 0.014 - 0.018
Hard Shot (RC 55-65)
Coverage 2.0

2. Pin Repair

A. References

(1) CMM 32-00-05, Repair of High Strength Steel Landing Gear Parts

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

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

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

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

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

(7) SOPM 20-42-02, Low Hydrogen Embrittlement Cadmium-Titanium Alloy Plating

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

B. Procedure (Fig. 601)

(1) Shank

(a) Machine as necessary, within repair limits, to remove defects.

(b) Do a magnetic particle check (SOPM 20-20-01).

(c) For the outside diameter, shot peen, chrome plate and grind to design dimensions and finish.

(d) For the inside diameter, refinish as indicated.

3. Refinish

A. References

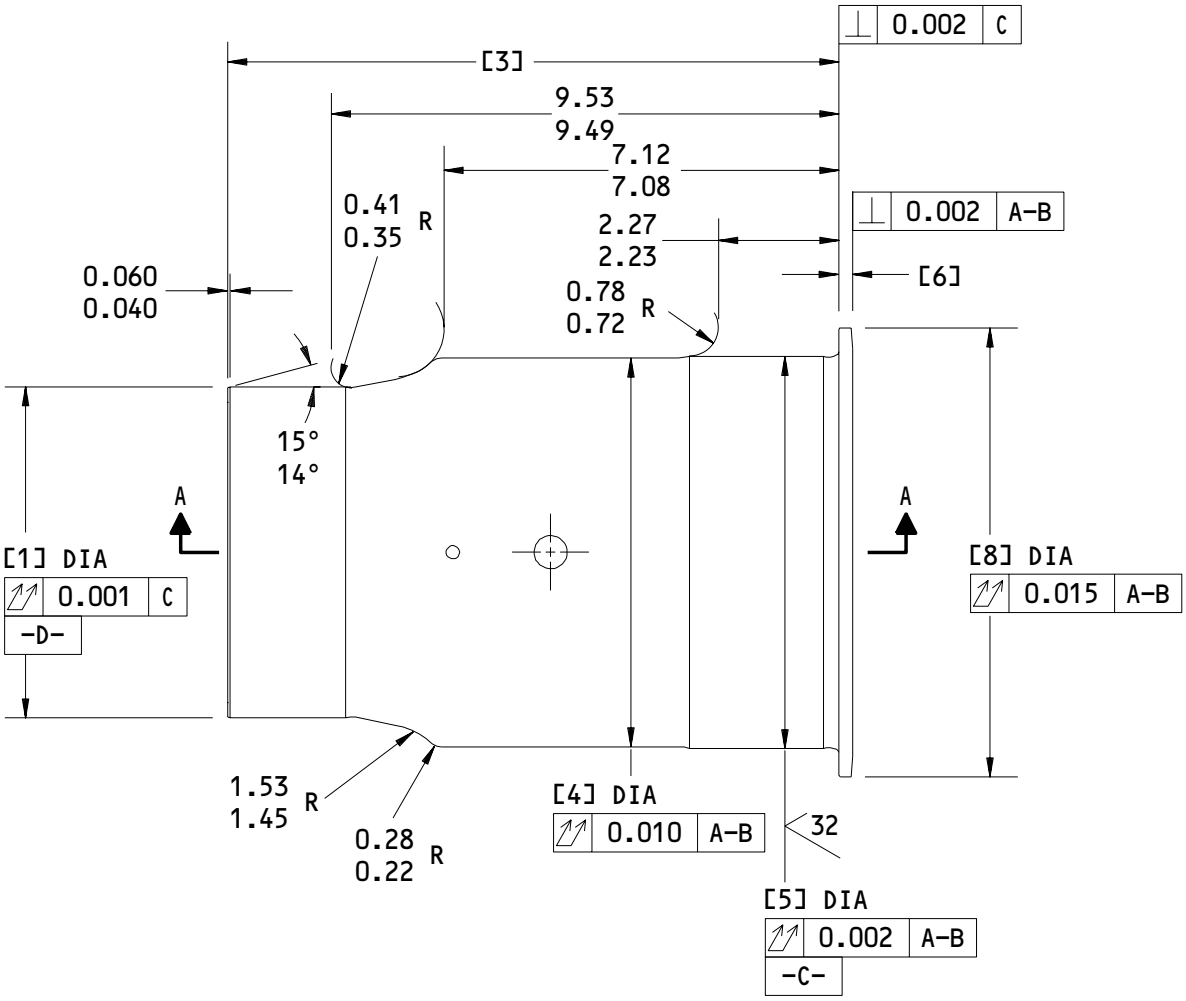
(1) SOPM 20-30-02, Stripping of Protective Finishes

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

B. Procedure (Fig. 601)

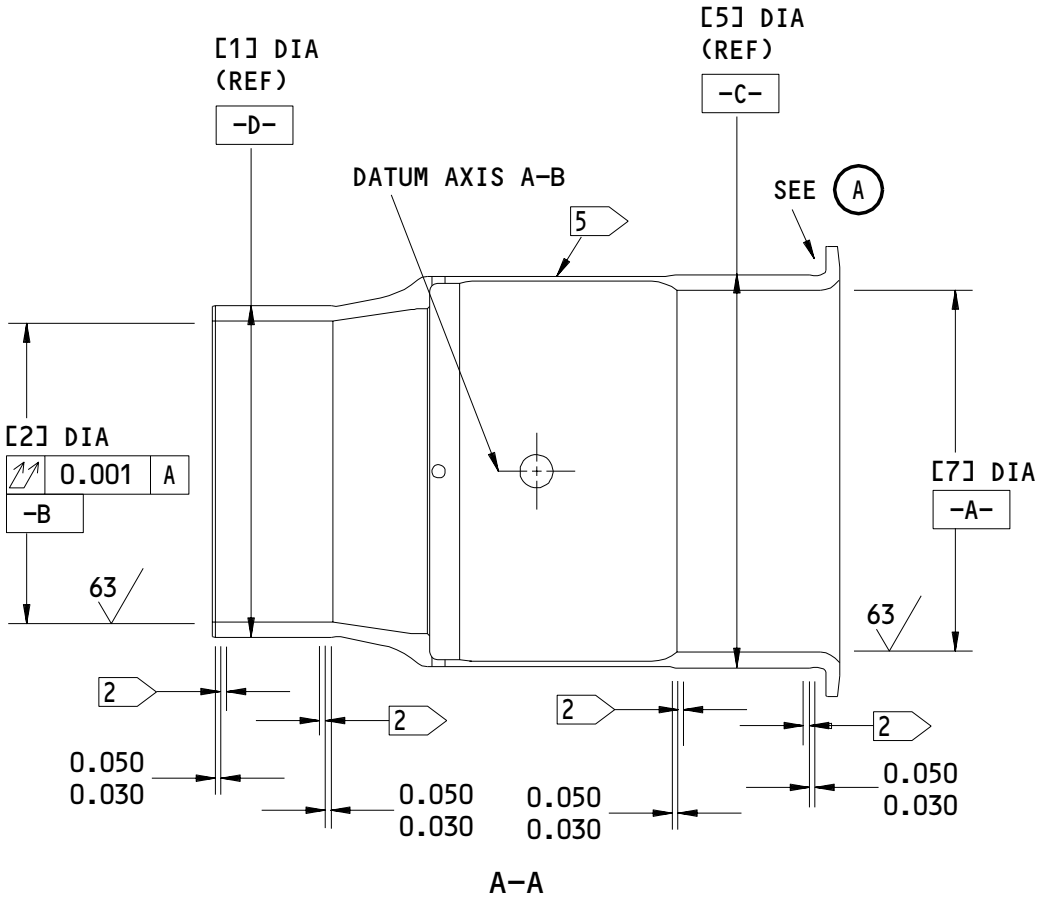
(1) Chrome plate indicated surfaces.

(2) Passivate (F-17.25) other surfaces.



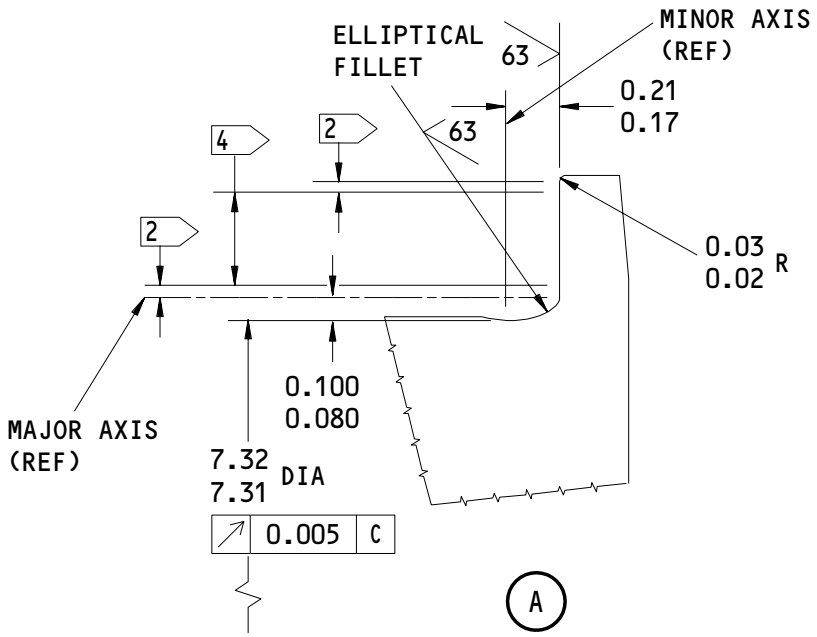
161W1211-1
Brake Sleeve Repair and Refinish
Figure 601 (Sheet 1)

W28671



161W1211-1
Brake Sleeve Repair and Refinish
Figure 601 (Sheet 2)

W28688



REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	6.201 6.200 3	5.6275 5.6255	11.460 11.440	7.300 7.280	7.351 7.350 3	0.260 0.255	6.7515 6.7495	8.410 8.390
REPAIR LIMIT 6	6.171	---	---	---	7.321	---	---	---

1 CHROME PLATE (F-15.34), 0.003 MINIMUM THICK AFTER GRINDING

2 CHROME PLATE RUNOUT

3 DIMENSION AFTER PLATING

4 CHROME PLATE (F-15.34), 0.0015-0.0020 THICK. DO NOT GRIND

5 PART NUMBER LOCATION

6 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01-0.03 R UNLESS SHOWN DIFFERENTLY

DIMENSIONS ARE BEFORE PLATING UNLESS SHOWN BY 3

ALL DIMENSIONS ARE IN INCHES

161W1211-1
Brake Sleeve Repair and Refinish
Figure 601 (Sheet 3)

ASSEMBLY

1. General

   A. This procedure has the necessary data to assemble the main landing gear buildup assembly.

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

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

2. Main Landing Gear Buildup Assembly - Assembly

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00226 Tamper Proof Putty - BMS 8-45 (SOPM 20-60-04)

      (2) A00247 Sealant - BMS 5-95 (SOPM 20-60-04)

      (3) C00913 Compound - BMS 3-27 (SOPM 20-60-02)

      (4) D00388 Grease - Aeroshell 5 (SOPM 20-60-03)

      (5) D00528 Grease - Royco 11 MS (SOPM 20-60-03)

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

      (7) G00434 Lockwire - MS20995C32 (SOPM 20-60-04)

   B. References

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

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

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

      (4) SOPM 20-60-03, Lubricants

      (5) SOPM 20-60-04, Miscellaneous Materials

C. Special Tools

NOTE: Equivalent substitutes can be used.

(1) A32109 Pin Removal and Installation Kit

(a) Thread Protectors -- A32109-14, -19, -20

(b) Wrenches -- A32109-2, -11, -36

(c) Adapter -- A32109-8

(2) A32114 Truck Position Retainier and Oleo Lock Equipment

(3) A32115 Main Gear Overhead Installation/Removal Equpiment

(4) A32116 MLG Bogie Pivot Pin Removal Equipment

(a) A32116-2 Hub Assembly

(b) A32116-3 Crowfoot Wrench

(5) B32050-50 MLG Buildup Assembly Fixture

(6) J32031-12 MLG Axle Protector Equipment

D. Procedure (Fig. 701, 702)

(1) Installation of the tow fitting assemblies (597) into the truck beam assembly (510).

(a) Apply a small amount of BMS 3-27 corrosion preventive compound to the chrome plated inside diameter of the truck beam assembly (510).

(b) Install the tow fitting assemblies (597) into the truck beam assembly (510).

(2) Installation of the axle assemblies (621) into the truck beam assembly (510).

(a) Apply a small amount of Aeroshell 5 grease to all of the inside diameter of the axle (636).

(b) Apply a small amount of BMS 3-33 grease to the truck beam assembly bushing bores.

(c) Apply a small amount of BMS 3-27 corrosion preventive compound to the locations shown in Fig. 701 and flagnote 3. Be sure to fill these locations completely.

(d) Install the thread protector J32031-12 onto the end of the axle assembly (621).

(e) Install the axle assemblies (621) into the truck beam assembly (510) and through the tow fitting assemblies (597) as shown in Fig. 701 and as follows:

1) Turn the axle assembly (621) so the key holes are upward.

2) Make sure that the bolt holes in the axle assembly (621) are aligned with the bolt holes in the tow fitting assembly (597).

3) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (576, 585), the washers (579), the mating surfaces of the bracket (588) and the nuts (582).

4) Install the bolts (576, 585), the washers (579), the nuts (582) and the bracket (588) as shown in Fig. 701.

5) Tighten the bolts (585) to 200-300 pound-inches.

6) Install lockwire between the bolts (585) and the bracket (588) as shown in Fig. 701 (SOPM 20-50-02).

7) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (591) and the washers (594).

8) Install the bolts (591) and the washers (594) as shown in Fig. 701.

9) Tighten the bolts (591) to 200-300 pound -inches.

10) Solvent clean the bolt (585, 591) heads, the washers (594) and around the braket (588) under the bolt (585) head. Then fillet seal these areas with BMS 5-95 sealant.

11) Solvent clean around the interface between the tow fitting assembly (597) and the truck beam assembly (510).

CAUTION: THE AFT TOW FITTING ASSEMBLY HAS A DRAIN HOLE THAT MUST STAY OPEN AND NOT BE SEALED WITH SEALANT. SEE FIG. 701, FLAGNOTE 5.

12) Fillet seal the interface between the tow fitting assembly (597) and the truck beam assembly (510) with BMS 5-95 sealant (Fig. 701 and flagnote 3). Be sure to completely fill and seal the drain hole in the forward tow fitting assembly.

(3) Installation of the brake sleeve (573) onto the axle assembly (621).

(a) Before you install the brake sleeve (573) apply a small amount of BMS 3-27 corrosion preventive compound to the painted area of the axle assembly (621). See Fig. 701 flagnote 2.

(b) Apply a small amount of BMS 3-33 grease to the inside diameter of the brake sleeve (573).

(c) Install the brake sleeve (573) onto the axle assembly (621) as shown in Fig. 701.

(4) Installation of the tang washer (546) and the wheel nut (543) onto the axle assembly (621).

(a) Apply a small amount of BMS 3-27 corrosion preventive compound to the axle assembly (621) threads and the washer (546).

(b) Remove the thread protector J32031-12 from the end of the axle assemblies (621).

(c) Install the tang washer (546) and the wheel nut (543) onto the axle assembly (621) as shown in Fig. 701.

NOTE: Do not tighten the nuts at this time. They will be tightened during wheel and brake installation.

(5) Installation of the bracket (93, 141) assembly onto the shock strut assembly (960).

NOTE: Because the bracket assemblies (93) and (141) are attached to each other by hiloks, they will be installed as a unit.

(a) Install the bracket (93, 141) assembly onto the shock strut assembly (960) with the bolt (6), the washers (12,15) and the nut (18).

(6) Installation of the shock strut assembly (960) onto the truck beam assembly (510).

(a) Put the truck beam assembly (510) on the B32050 fixture.

(b) Install the A32114 oleo lock on the shock strut assembly (960) to prevent accidental extension of the shock strut when it is installed onto the truck beam assembly (510).

(c) Install the two ring seal assemblies (759) into the inner diameter of the bushings (531), located in the truck beam assembly (510).

(d) Apply a small amount of Royco 11MS grease to the tungsten carbide coated surfaces of the truck pivot pin (750).

(e) Apply a small amount of BMS 3-27 corrision preventive compound to splines, thread relief, threads and lock bolt holes of the truck pivot pin (750).

WARNING: BE VERY CAREFUL WHEN YOU LIFT THE SHOCK STRUT ASSEMBLY (960) AND INSTALL IT ONTO THE TRUCK BEAM ASSEMBLY (510). BE SURE THE SHOCK STRUT ASSEMBLY IS SAFELY HELD UP IN THE B32050 MLG BUILDUP FIXTURE BEFORE YOU REMOVE THE A32115 LIFTING EQUIPMENT.

(f) Hang the shock strut assembly (960) in the A32115 equipment, and install the shock strut assembly into position on the truck beam assembly (510).

(g) Hold the shock strut assembly (960) in the B32050D MLG buildup fixture.

(h) Install the truck pivot pin (750) through the shock strut assembly (960) and the truck beam assembly as shown in Fig. 701.

(i) Apply a small amount of BMS 3-27 corrosion preventive compound to the truck pivot pin (750) as shown in Fig. 701 and flagnote 6.

(j) Install the uplock assembly (813, 816) as shown in Fig. 701.

(k) Apply a small amount of BMS 3-27 corrosion preventive compound to the splined truck pivot washer (753) and the truck pivot nut (756).

(l) Install the splined truck pivot washer (753) and the truck pivot nut (756) as shown in Fig. 701.

(m) With the A32116-2 hub assembly and the A32116-3 crowfoot wrench, tighten the truck pivot nut (756) 50-58 pound-feet. Loosen the nut if necessary to align the bolt holes in the truck pivot nut with the bolt holes in the splinedtruck pivot washer (753).

(n) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (741), the washers (744) and the nuts (747).

(o) Install the bolts (741), the washers (744) and the nuts (747) as shown in Fig. 701.

(7) Installation of the downlock fitting assembly (66) onto the shock strut assembly (960).

(a) Apply a small amount of BMS 3-33 grease to the chrome plated surfaces of the fitting attach pins (54).

(b) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads, undercuts and relief grooves of the fitting attach pins (54).

(c) Apply a small amount of BMS 3-27 corrosion preventive compound to the washers (60), the nuts (63), the mating surfaces of the bracket assembly (93)and the fitting assembly (66).

(d) Install the fitting assembly (66) onto the shock strut assembly (960) with the fitting attach pins (54), the washers (60) and the nuts (63). Make sure that the pins (54) go through the bracket (93).

(e) Tighten the nuts (63) to 25-29 pound-feet.

(f) Clean off unwanted BMS 3-33 grease and the BMS 3-27 corrosion preventive compound from the assembled joint.

(g) Apply BMS 8-45 tamper proof putty to the nuts (63).

(8) Installation of the side strut fitting assembly (37) onto the shock strut assembly (960).

(a) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolt (21) shanks, thread relief, threads, splines and mating surfaces before joint assembly.

(b) Apply a small amount of BMS 3-27 corrosion preventive compound to the washers (24, 27) and the nuts (30).

(c) Install the fitting (37) onto the shock strut assembly (960) with the bolts (21), the washers (24, 27) and the nuts (30). Make sure that the bolts (21) go through the bracket assembly (141).

(d) Tighten the nuts (30) to 33-38 pound-feet.

(e) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

(f) Apply BMS 8-45 tamper proof putty to the nuts (30) as shown in SOPM 20-60-04.

(9) Installation of the bracket assembly (903).

(a) Before you install the wiring support clamps (897, 900)

1) Clean the shock strut assembly (960) outer diameter, where the wiring support clamps (897, 900) are to be installed, (SOPM 20-30-03).

2) Install one wrap of mylar tape (948) around the shock strut assembly (960). Make the tape ends overlap each other by one inch.

3) Install the bracket assembly (903) with the wiring support clamps (897, 900), the clips (891), the bolts (882), the blocks (888), the washers (885) and the nuts (894) over the mylar tape (948).

(b) Tighten the wiring support clamps (897, 900).

(10) Installation of the lock link drag strut fitting assembly (180) onto the shock strut assembly (960).

(a) Apply a small amount of BMS 3-33 grease to the chrome plated surfaces of the fitting attach pins (168, 177).

(b) Apply a small amount of BMS 3-27 corrosion preventive compound threads, undercuts and relief grooves of the fitting attach pins (168, 177).

(c) Apply a small amount of BMS 3-27 corrosion preventive compound to the washers (166N), the nuts (167), the mating surfaces of the bracket assembly (903) and the fitting assembly (180).

(d) Install the fitting assembly (180) with the fitting attach pins (168, 177), the washers (166N), the nuts (167) and the nuts (167). Make sure the attach pins go though the bracket assembly (903).

(e) Tighten the nuts (167) to 50-58 pound-feet. Loosen the nuts if necessary to the nearest castellation to install the cotter pins (166).

(f) Install the cotter pins (166) (SOPM 20-50-02).

(g) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

(11) Installation of the lock link drag strut spindle assembly (231) into the lock link drag strut fitting assembly (180).

(a) Apply a small amount of BMS 3-33 grease to the chrome plated surfaces of the spindle assembly (231).

(b) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads, undercuts and relief grooves of the spindle assembly (231).

(c) Apply a small amount of BMS 3-27 corrosion preventive compound to the inner diameter lug, where the spindle assembly (231) will be installed. See Fig. 702 and flagnote 1.

(d) Apply a small amount of BMS 3-27 corrosion preventive compound to the washer (228) and the nut (225).

(e) Install the spindle assembly (231) into the drag strut fitting assembly (180) with the washer (228) and the nut (225).

(f) With an A32109 wrench, tighten the nut (225) to 50-58 pound-feet. Loosen the nut if necessary to the nearest castellation to install the bolts (216), the washers (219) and the nuts (222).

(g) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (216), the washers (219) and the nuts (222).

(h) Install the bolts (216), the washers (219) and the nuts (222).

(i) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

(j) Apply BMS 8-45 tamper proof putty to the nuts (222).

(12) Installation of the lock link side strut spindle assembly (261) onto the shock strut assembly (960).

(a) Apply a small amount of BMS 3-33 grease to the chrome plated surfaces of the spindle assembly (261).

(b) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads, undercuts and relief grooves of the spindle assembly (261).

(c) Apply a small amount of BMS 3-27 corrosion preventive compound to the inner diameter lug, where the spindle assembly (261) will be installed. See Fig. 702 and flagnote 1.

(d) Apply a small amount of BMS 3-27 corrosion preventive compound to the washer (258) and the nut (255).

(e) Install the spindle assembly (261) into the shock strut assembly (960) with the washer (258) and the nut (255).

(f) With an A32109 wrench, tighten the nut (255) to 50-58 pound-feet. Loosen the nut if necessary to the nearest castellation to install the bolts (246), the washers (249) and the nuts (252).

(g) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (246), the washers (249) and the nuts (252).

(h) Install the bolts (246), the washers (249) and the nuts (252).

(i) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

(j) Apply BMS 8-45 tamper proof putty to the nuts (252).

(13) Installation of the lower side strut spindle assembly (291) onto the shock strut assembly (960).

(a) Apply a small amount of BMS 3-33 grease to the tungsten carbide coated surfaces of the spindle assembly (291).

(b) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads, undercuts and relief grooves of the spindle assembly (291).

(c) Apply a small amount of BMS 3-27 corrosion preventive compound to the inner diameter lug, where the spindle assembly (291) will be installed. See Fig. 702 and flagnote 1.

(d) Apply a small amount of BMS 3-27 corrosion preventive compound to the washer (288) and the nut (285).

(e) Install the spindle assembly (291) into the shock strut assembly (960) with the washer (288) and the nut (285).

(f) With an A32109 wrench, tighten the nut (285) to 50-58 pound-feet, then loosen the nut (285). Tighten the nut (285) again, this time to 5-10 pound-feet with a 0.003 gage inserted between the washer (288) and the bushing. Loosen the nut if necessary to the nearest castellation to install the bolts (276), the washers (279) and the nuts (282).

CAUTION: MAKE SURE TO TURN BOLTS (276) AS SHOWN IN FIG. 702.

(g) Apply a small amount of BMS 2-27 corrosion preventive compound to the bolts (276), the washers (279) and the nuts (282).

(h) Install the bolts (276), the washers (279) and the nuts (282).

(i) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

(j) Apply BMS 8-45 tamper proof putty to the nuts (282).

(14) Installation of the lower drag strut spindle assembly (324) onto the shock strut assembly (960).

(a) Apply a small amount of BMS 3-33 grease to the tungsten carbide coated surfaces of the spindle assembly (324).

(b) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads, undercuts and relief grooves of the spindle assembly (324).

(c) Apply a small amount of BMS 3-27 corrosion preventive compound to the inner diameter lug, where the spindle assembly will be installed. See Fig. 702 and flagnote 1.

(d) Apply a small amount of BMS 3-27 corrosion preventive compound to the washer (321) and the nut (318).

(e) Install the spindle assembly (324) into the shock strut assembly (960) with the washer (321) and the nut (318).

(f) With an A32109 wrench, tighten the nut (318) to 50-58 pound-feet, then loosen the nut (318). Tighten the nut (318) again, this time to 5-10 pound-feet with a 0.003 gage inserted between the washer (321) and the bushing. Loosen the nut if necessary to the nearest castellation to install the bolts (309), the washers (312) and the nuts (315).

(g) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (309), the washers (312) and the nuts (315).

(h) Install the bolts (309), the washers (312) and the nuts (315).

(i) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

(j) Apply BMS 8-45 tamper proof putty to the nuts (315).

(15) Installation of the upper (381) and the lower (423) torque link assemblies onto the shock strut assembly (960).

(a) Install the upper torque link assembly (381) onto the shock strut assembly (960).

1) Apply a small amount of BMS 3-33 grease to the tungsten carbide coated surfaces of the torsion link pin (357).

2) Apply a small amount of BMS 3-27 corrosion preventive compound (F-19.71) to the outer diameter of the torsion link pin (357) as defined by Fig. 701 and flagnote 7.

3) Apply a small amount of BMS 3-27 corrosion preventive compound (F-19.71) to the undercuts and relief grooves of the torsion link pin (357) as shown by Fig. 701 and flagnote 6.

4) Apply a small amount of BMS 3-27 corrosion preventive compound (F-19.71) to the chrome plated surface of the torque link assembly (381), between the bushings, as shown by Fig. 701 and flagnote 7.

5) Apply a small amount of BMS 3-27 corrosion preventive compound (F-19.71) to the splined washer (354) and the torsion link pin nut (351).

6) Install the A32109 torsion link pin thread protector onto the torsion link pin (357).

7) Install the torsion link pin (357) through the upper torque link assembly (381) and through the shock strut assembly (960), with the splined washer (354) and the torsion link pin nut (351).

8) Remove the A32109 torsion link pin thread protector from the torsion link pin (357).

9) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads of the torsion link pin (357).

10) With the A32109 torsion link pin adapter and the A32109 torsion link pin nut wrench set, tighten the torsion link pin (351) to 50-58 pound-feet. Loosen the nut if necessary to the nearest castellation to install the bolts (342), the washers (345) and the nuts (348).

11) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (342), the washers (345) and the nuts (348).

12) Install the bolts (342), the washers (345) and the nuts (348).

13) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

14) Apply BMS 8-45 tamper proof putty to the nuts (348).

(b) Install the lower torque link assembly (423) onto the shock strut assembly (960).

1) Apply a small amount of BMS 3-33 grease to the tungsten carbide coated surfaces of the torsion link pin (414).

2) Apply a small amount of BMS 3-27 corrosion preventive compound to the outer diameter of the torsion link pin (414) as defined by Fig. 701 and flagnote 1.

3) Apply a small amount of BMS 3-27 corrosion preventive compound to the undercuts and relief grooves of the torsion link pin (414) as shown in Fig. 701 and flagnote 6.

4) Apply a small amount of BMS 3-27 corrosion preventive compound to the chrome plated surface of the torque link assembly (423), between the bushings as shown in Fig. 701 and flagnote 7.

5) Apply a small amount of BMS 3-27 corrosion preventive compound to the splined washer (417) and the torsion link pin nut (420).

6) Install the A32109 torsion link pin thread protector on the torsion link pin (414).

7) Install the torsion link pin (414) through the lower torque link assembly (423) and through the shock strut assembly (960), with the splined washer (417) and the torsion link pin nut (420).

8) Remove the A32109 torsion link pin thread protector from the torsion link pin (414).

9) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads of the torsion link pin (414).

10) With the A32109 torsion link pin adapter and the A32109 torsion link pin nut wrench set, tighten the torsion link pin (420) to 50-58 pound-feet. Loosen the nut if necessary to the nearest castellation to install the bolts (405), the washers (408) and the nuts (411).

11) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (405), the washers (408) and the nuts (411).

12) Install the bolts (405), the washers (408) and the nuts (411).

13) Clean off unwanted BMS 3-27 corrosion preventive compound from the assembled joint.

14) Apply BMS 8-45 tamper proof putty to the nuts (411).

(c) Installation of the torsion link apex pin (369) through the upper (381) and the lower (423) torque link assemblies.

1) Apply a small amount of BMS 3-33 grease to the chrome plated surfaces of the torsion link apex pin (369).

2) Apply a small amount of BMS 3-27 corrosion preventive compound to the undercuts, relief grooves and lock bolt holes of the torsion link apex pin (369).

3) Apply a small amount of BMS 3-33 grease to the spacer (375).

4) Apply a small amount of BMS 3-27 corrosion preventive compound to the splined washer (372) and the torsion link apex pin nut (378).

5) Install the A32109 torsion link apex pin thread protector onto the apex pin (369).

6) Install the torsion link apex pin (369), the spacer (375), the splined washer (372) and the torsion link apex pin nut (378).

7) Remove the A32109 torsion link apex pin thread protector from the apex pin (369).

8) Apply a small amount of BMS 3-27 corrosion preventive compound to the threads of the torsion link apex pin (369).

9) With the A32109 torsion link apex pin adapter and the A32109 torsion link apex nut wrench set, tighten the torsion link pin nut (378) to 50-58 pound-feet. Loosen the nut if necessary to the nearest castellation to install the bolt (360), the washer (363) and the nut (366).

10) Install the bolt (360), the washer (363) and the nut (366). These parts are installed for transportation only.

(16) Installation of the bracket assemblies (459, 489) onto the shock strut assembly (960).

(a) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (450, 468), the bushing (483), the washers (453, 471, 474, 477, 480) and the nuts (456, 486).

(b) Install the bolts (450, 468), the bushing (483), the washers (453, 471, 474, 477, 480), the nuts (456, 486) and the bracket assemblies (459, 489) as shown in Fig. 701.

(c) Install the cotter pins (447) through the nuts (456) and the bolts (450) (SOPM 20-50-02).

(17) Installation of the uplock stabilizer assembly (795) onto the uplock stabilizer (813, 816).

(a) Apply a small amount of BMS 3-33 grease to the uplock stabilizer bolt (786) shank and threads.

(b) Install the uplock stabilizer assembly (795) onto the uplock assembly (813, 816) with the uplock stabilizer bolt (786).

(c) Apply a small amount of BMS 3-33 grease to the washer (789) and the nut (792).

(d) Install the washer (789) and the nut (792) as shown in Fig. 701.

(e) Tighten the nut (792) to 16-20 pound-feet. Loosen the nut if necessary to the nearest castellation to install the cotter pin (783).

(f) Install the cotter pin (783) through the nut (792) and the uplock stabilizer bolt (786) (SOPM 20-50-02).

(18) Installation of the brake rod assemblies (867) onto the shock strut assembly (960).

(a) Apply a small amount of Royco 11MS grease to the tungsten carbide coated surfaces of the brake rod pin (855).

(b) Apply a small amount of BMS 3-27 corrosion preventive compound to the splines, thread reliefs and lock bolt holes of the brake rod pin (855).

(c) Install the A32110 brake rod pin thread protector on the brake rod (855).

(d) Install the brake rod pin (855) through the shock strut assembly (960), the brake rod assembly (867), the spacer assembly (864) and the bracket assembly (489) (SOPM 20-50-02).

(e) Remove the A32110 brake rod pin thread protector from the brake rod (855).

(f) Apply a small amount of BMS 3-27 corrosion preventive compound to the tang washer (858) and the brake rod pin nut (861) and the threads of the brake rod (855).

(g) Install the tang washer (858) and the brake rod pin nut (861) as shown in Fig. 702.

(h) Tighten the brake rod pin nut (861) to 50-58 pound-feet. Loosen the nut if necessary to the nearest castellation to install the bolts (846), the washer (849) and the nuts (852).

(i) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (846), the washers (849) and the nuts (852).

(j) Install the bolts (846), the washers (849) and the nuts (852) through the brake rod pin nut (861) and the brake rod pin (855).

(k) Apply a small amount of Royco 11MS grease to the tungsten carbide coated surfaces of the brake rod pin (777).

(l) Apply a small amount of BMS 3-27 corrosion preventive compound to the splines, thread relief and lock bolt holes of the brake rod pin (777).

(m) Install the A32110 brake rod pin thread protector on the brake rod pin (777).

(n) Install the brake rod pin (777) through the bracket assembly (489), the shock strut assembly (960), the brake rod assembly (867) and the spacer assembly (804).

(o) Remove the A32110 brake rod pin thread protector from the brake rod pin (777).

(p) Apply a small amount of BMS 3-27 corrosion preventive compound to the brake rod pin (777) at the location shown in Fig. 701 and flagnote 5.

(q) Install the uplock spacer (843) as shown in Fig. 701.

(r) Install the uplock stabilizer assembly (795) onto the brake rod pin (777) as shown in Fig. 701.

(s) Apply a small amount of BMS 3-27 corrosion preventive compound to the tang washer (774) and the brake rod pin nut (780).

(t) Install the tang washer (774) and the brake rod pin nut (780).

(u) Tighten the brake rod pin nut (780) to 50-58 pound-feet. Loosen the nut if necessary to the nearest castellation to install the bolt (765), the washer (768), the nut (771) and the cotter pin (762).

(v) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolt (765), the washer (768) and the nut (771).

(w) Install the bolt (765), the washer (768) and the nut (771) through the brake rod pin nut (780) and the brake rod pin (777).

(x) Install the cotter pin (762) through the nut (771) and the bolt (765) (SOPM 20-50-02).

(19) Installation of the sensor mechanism assemblies (666, 669) onto the main landing gear buildup assembly.

(a) Assemble the sensor mechanism assemblies (666, 669).

1) Installation of the target assembly (711) onto the bracket assembly (723, 726).

a) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolt (678), the washers (681, 690) and the nut (693).

b) Apply a small amount of BMS 3-33 grease to the chrome plated surfaces of the bushing (687).

c) Install the target assembly (711) onto the bracket assembly (723, 726) with the bolts (678), the washers (681, 690), the bushings (687) and the nut (693).

d) Tighten the nut (693) to 95 pound-inches. If necessary continue to the nearest castellation. Do not tighten the nut (693) more than 160 pound-inches.

e) Install the cotter pin (672) through the nut (693) and the bolt (678) (SOPM 20-50-02).

2) Installation of the link assembly (696) onto the target assembly (711).

a) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolt (675), the washers (681, 690) and the nut (693).

b) Apply a small amount of BMS 3-33 grease to the chrome plated surfaces of the bushing (684).

c) Install the link assembly (696) onto the target assembly (711) with the bolt (675), the washers (681, 690), the bushing (684) and the nut (693).

d) Tighten the nut (693) 95 pound-inches. If necessary continue tightening the nut (693) to the nearest castellation. Do not tighten the nut (693) more than 160 pound-inches.

e) Install the cotter pin (672) through the nut (693) and the bolt (675) (SOPM 20-50-02).

(b) Install the bracket assembly (711) end of the sensor mechanism assembly (666, 669) onto the truck beam assembly (510).

1) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolts (654), the washers (657,660) and the nuts (663).

2) Install the bracket assembly (711) onto the truck beam assembly (510) with the bolts (654), the washers (657, 660) and the nuts (663).

(c) Install the link assembly (696) end of the sensor mechanism assembly (666, 669) onto the shock strut assembly (960).

1) Apply a small amount of BMS 3-27 corrosion preventive compound to the bolt (642), the washers (645, 648) and the nut (651).

2) Install the link assembly (696) on the shock strut assembly (960) with the bolt (642), the washers (645, 648) and the nut (651).

NOTE: The nut castellations are not required to engage the cotter pin (639).

3) Install the cotter pin (639) through the nut (651) and the bolt (642).

(20) Installation of the brake pin assembly (561) onto the brake rod assembly (867).

(a) Apply a small amount of Royco 11MS grease to the brake pin assemblies (561) shank, relief groove and flange.

(b) Install the brake pin assemblies (561) through the brake rod assemblies (867).

(c) Apply a small amount of BMS 3-33 grease to the inner diameter of the collars (570).

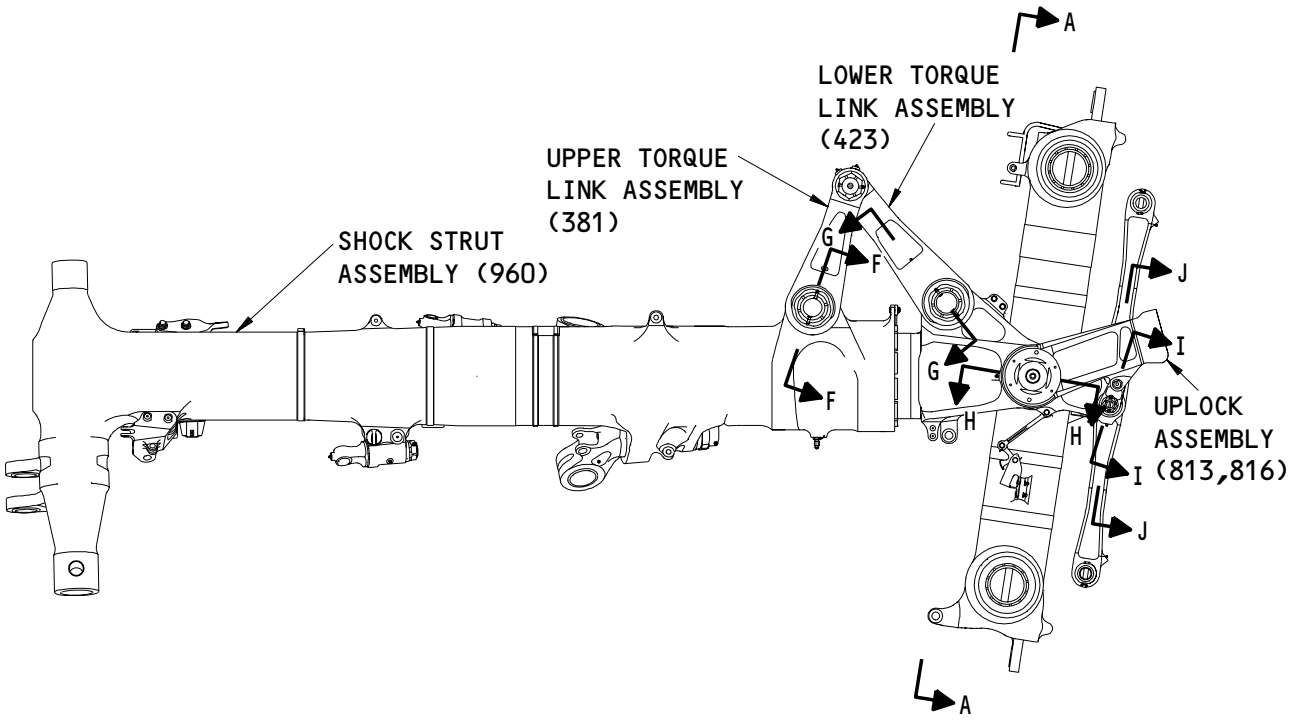
(d) Install the collars (570) onto the brake pin assemblies (561). Align the bolt holes in the collars (570) with the bushing (564) holes in the brake pin assemblies (561).

(e) Apply a small amount of BMS 3-33 grease to the bolts (552), the washers (555) and the nuts (558).

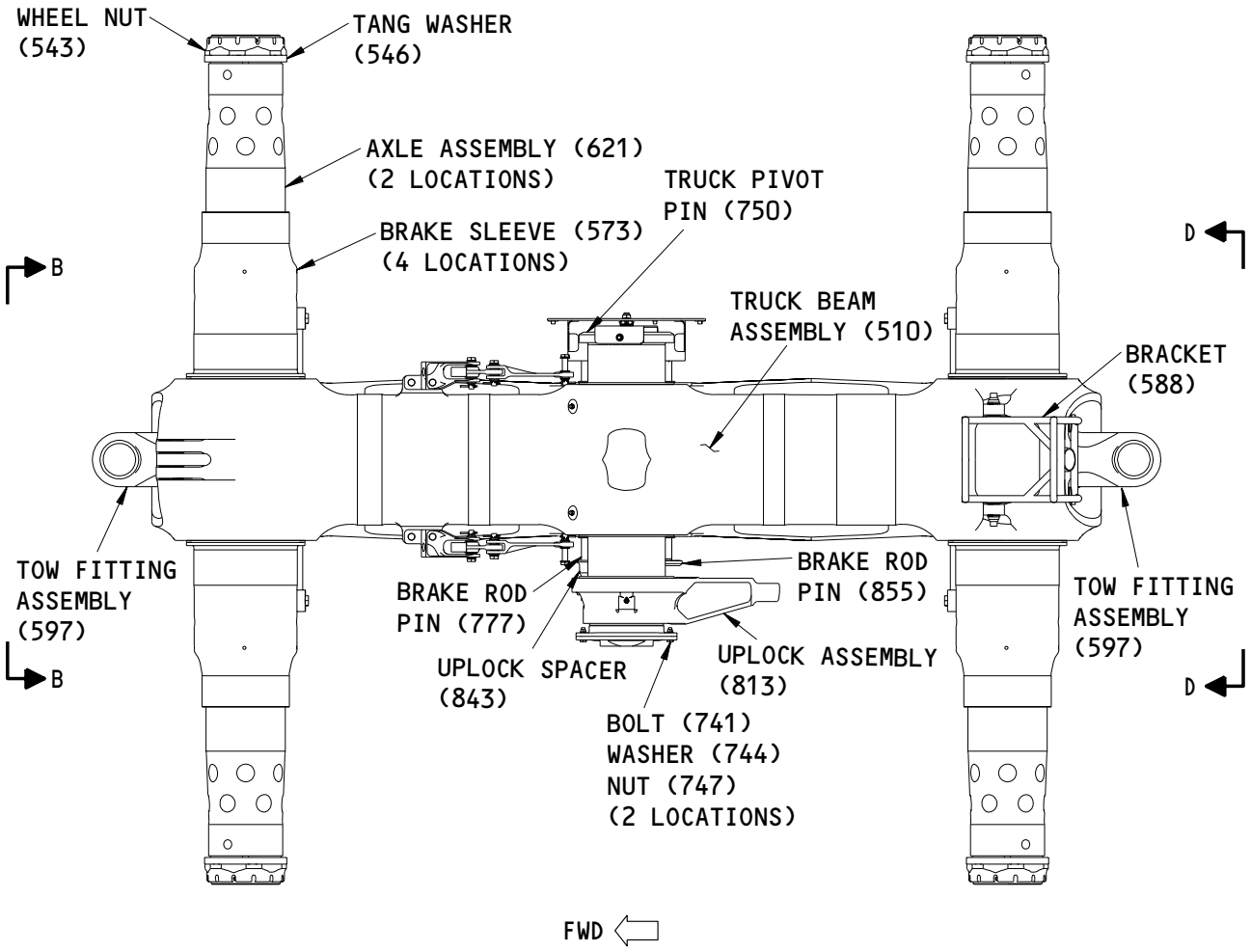
(f) Install the bolts (552) through the collars (570) and the brake pin assemblies (561).

(g) Install the washers (555) and the nuts (558) onto the bolts (552). Make sure to align a castellation with the cotter pin hole in the bolts (552).

(h) Install the cotter pins (549) through the nuts (558) and the bolts (552) (SOPM 20-50-02).



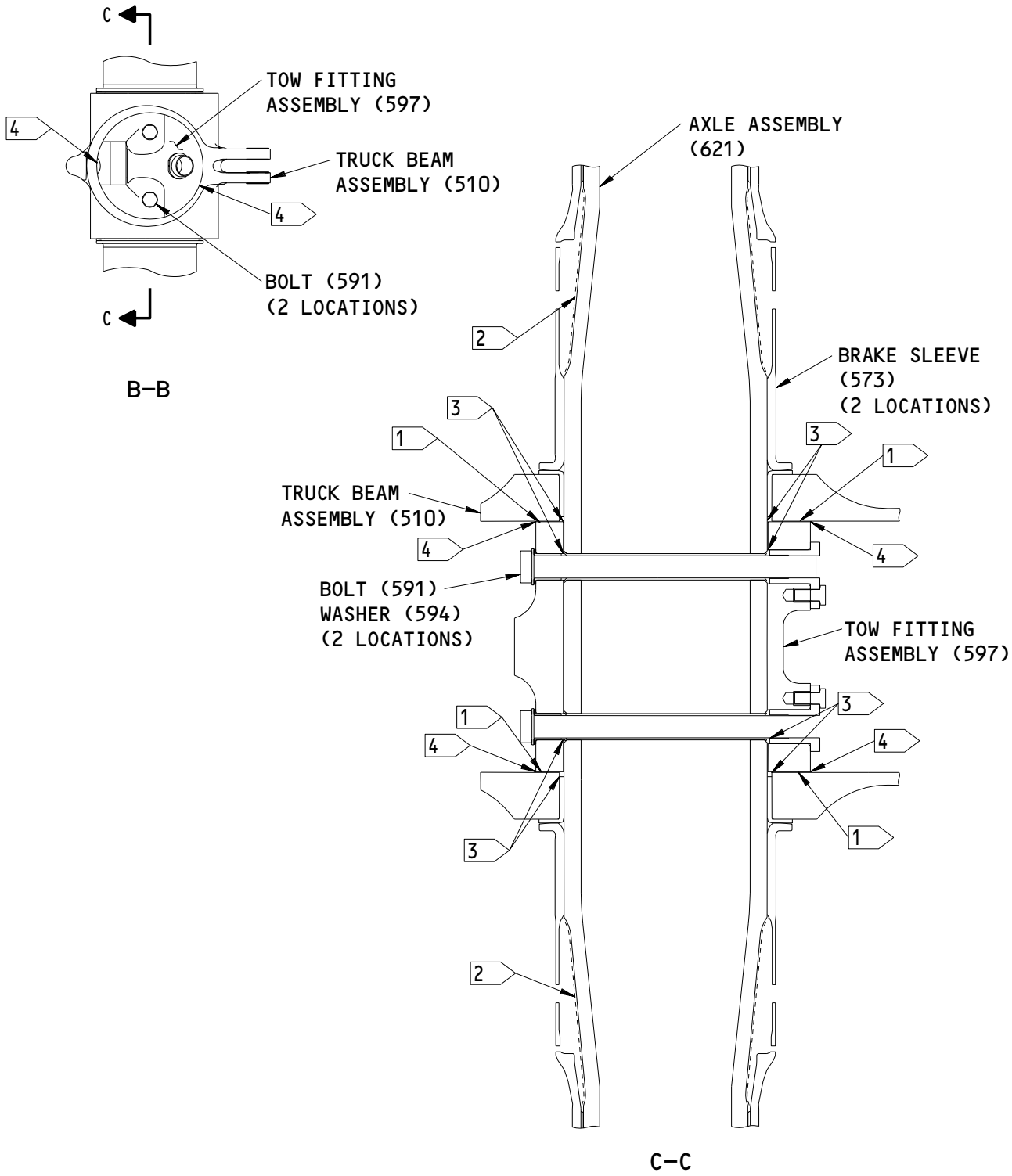
Main Landing Gear Buildup Assembly
Figure 701 (Sheet 1)



A–A

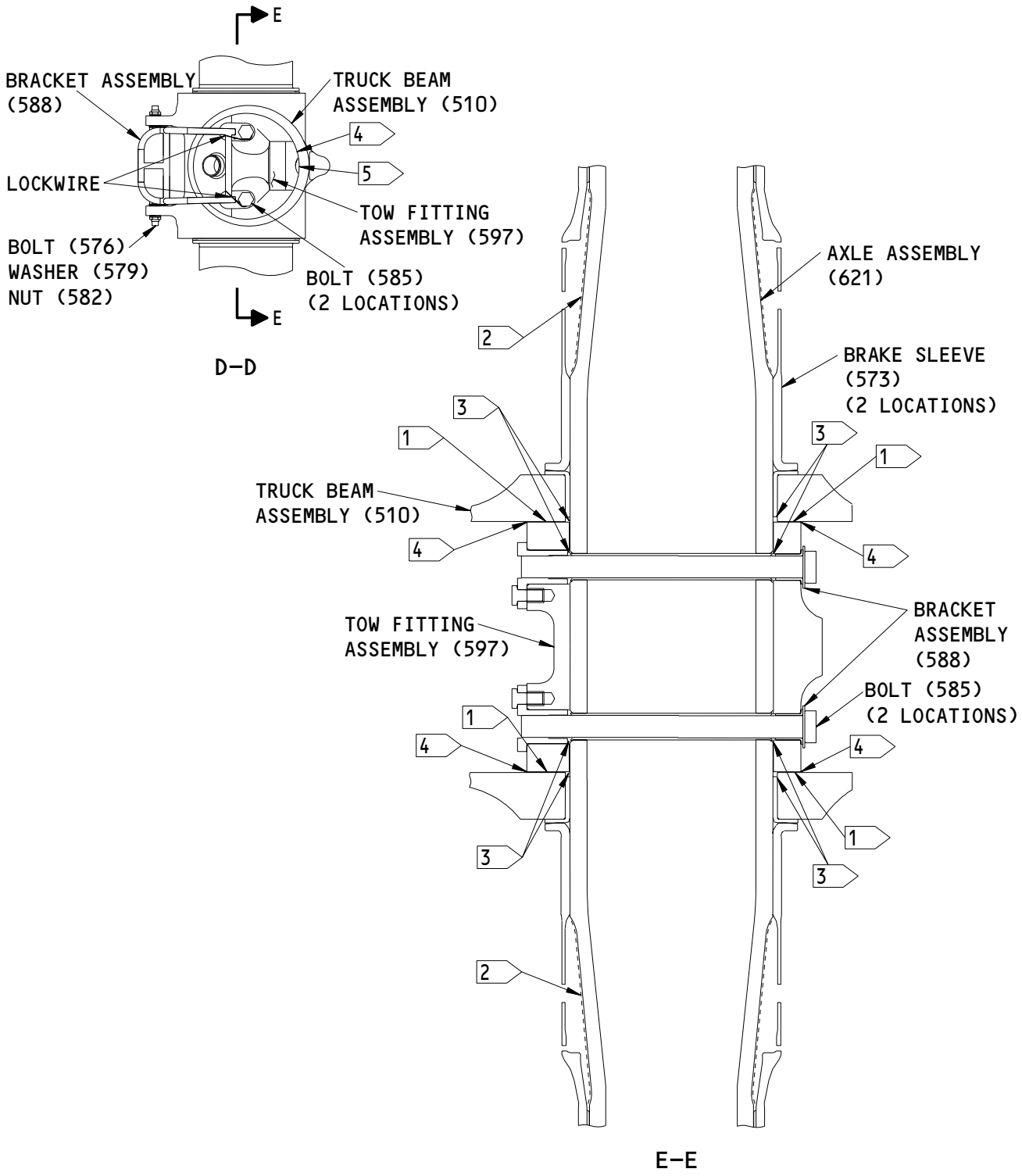
Main Landing Gear Buildup Assembly
Figure 701 (Sheet 2)

L06988



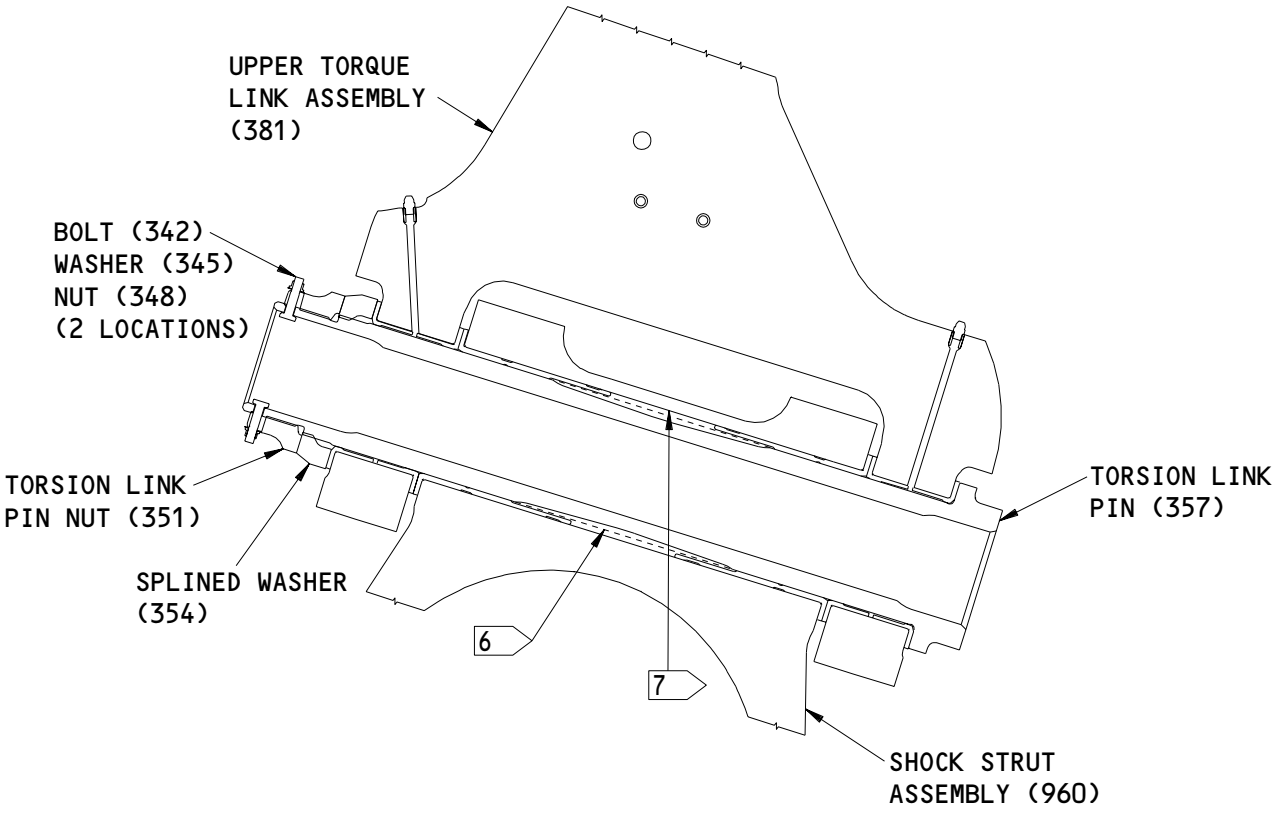
Main Landing Gear Buildup Assembly
Figure 701 (Sheet 3)

L07565



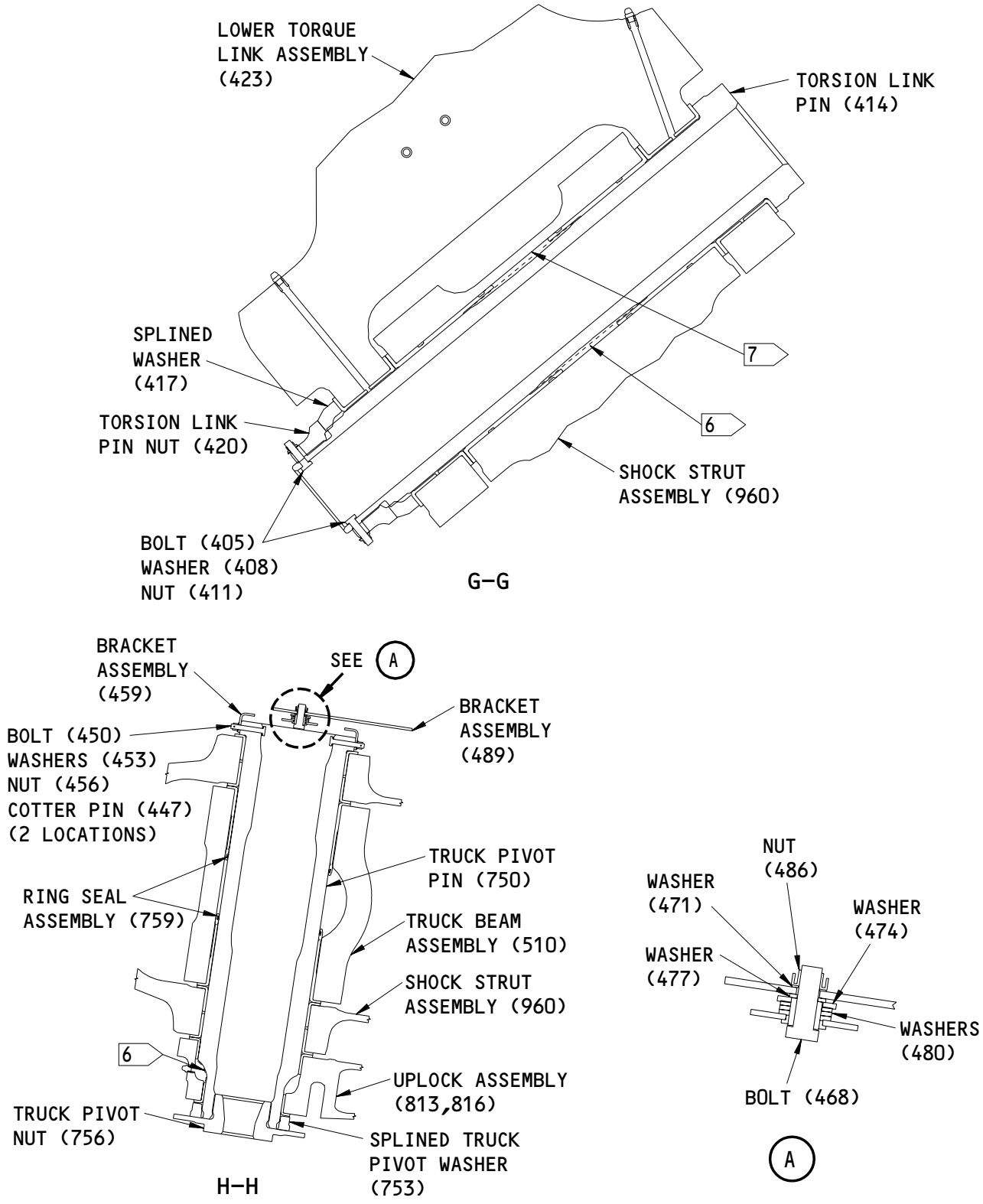
Main Landing Gear Buildup Assembly
Figure 701 (Sheet 4)

L07112

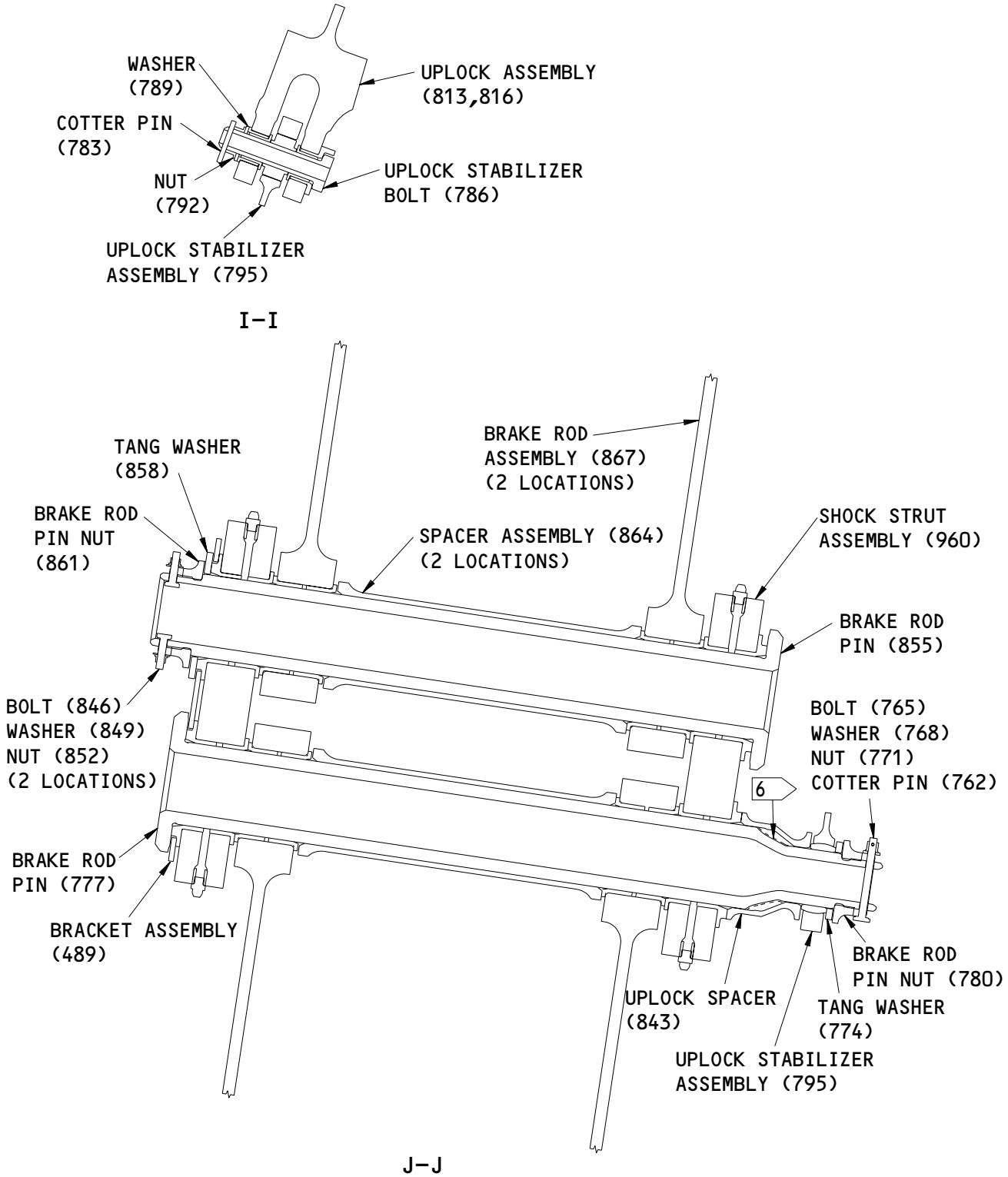


F–F

Main Landing Gear Buildup Assembly
Figure 701 (Sheet 5)



Main Landing Gear Buildup Assembly
Figure 701 (Sheet 6)



Main Landing Gear Buildup Assembly
Figure 701 (Sheet 7)

ITEM NUMBERS REFER TO IPL FIG. 1

1 APPLY BMS 3-27 CORROSION PREVENTIVE COMPOUND (F-19.71) TO THE CHROME PLATED INSIDE DIAMETER OF THE TRUCK BEAM ASSEMBLY

2 APPLY BMS 3-27 CORROSION PREVENTIVE COMPOUND (F-19.71) TO THE PAINTED SURFACE OF THE AXLE ASSEMBLY

3 FILL THIS VOLUME WITH BMS 3-27 CORROSION PREVENTIVE COMPOUND

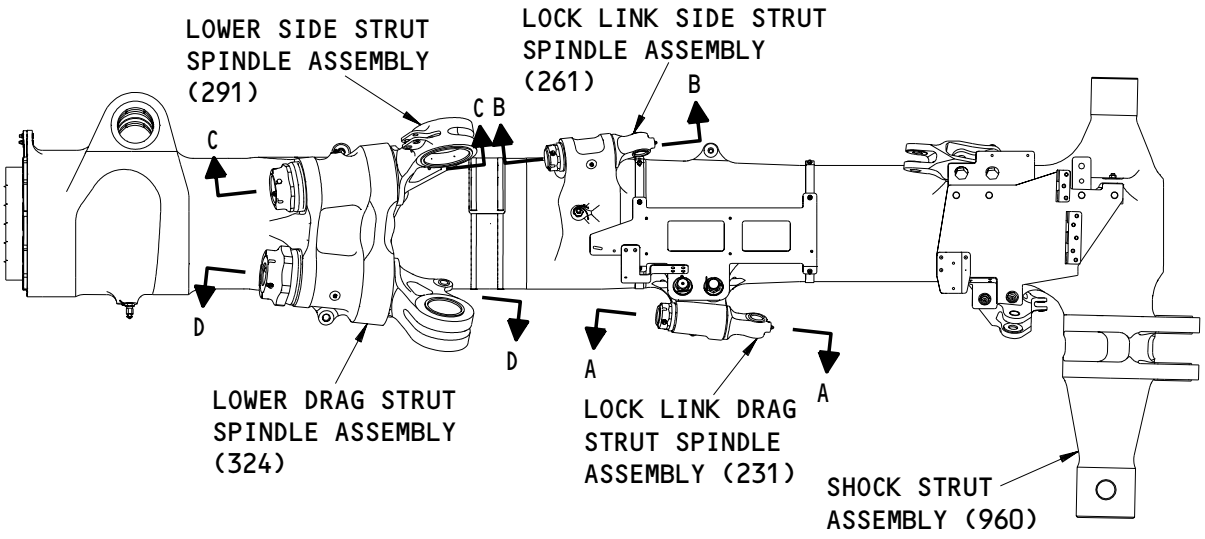
4 SOLVENT CLEAN AND FILLET SEAL WITH BMS 5-95 SEALANT

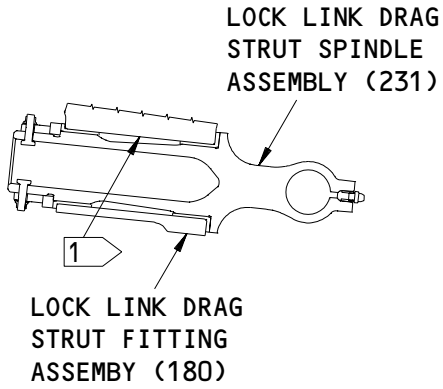
5 DO NOT FILLET SEAL THE DRAIN HOLE IN THE AFT TOW FITTING ASSEMBLY. MAKE SURE THE DRAIN HOLE IS NOT BLOCKED

6 APPLY BMS 3-27 CORROSION PREVENTIVE COMPOUND (F-19.71) TO THIS SURFACE

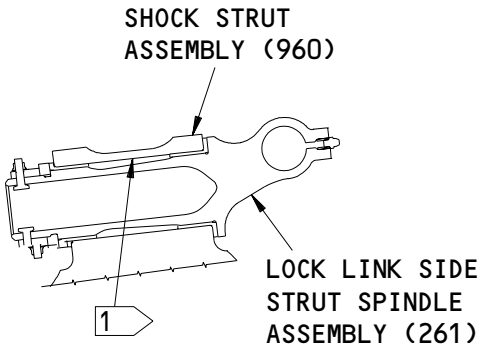
7 APPLY BMS 3-27 CORROSION PREVENTIVE COMPOUND (F-19.71) TO THE CHROME PLATED SURFACE BETWEEN BUSHING ENDS

Main Landing Gear Buildup Assembly
Figure 701 (Sheet 8)



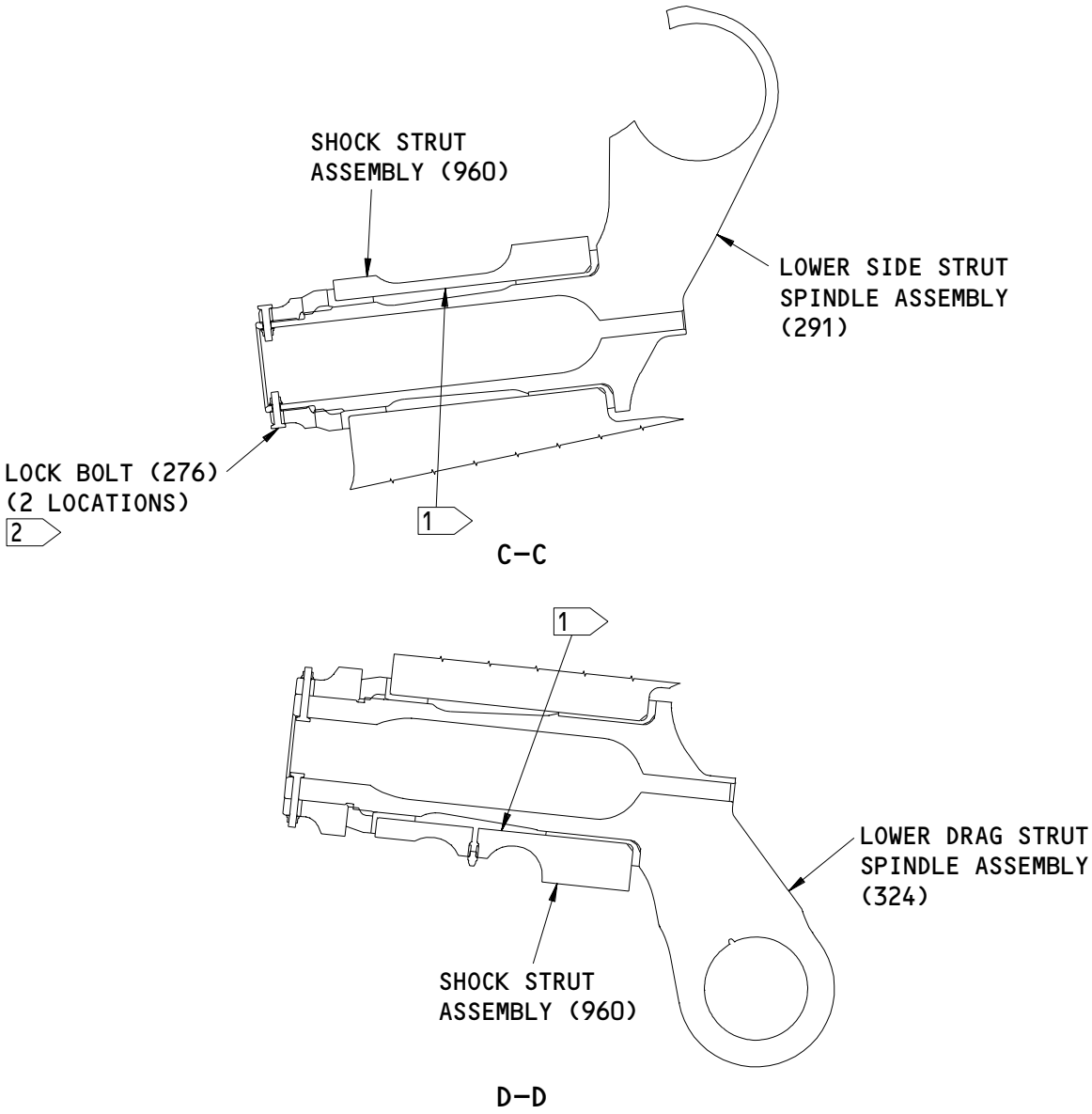


A–A



B–B

Main Landing Gear Buildup Assembly
Figure 702 (Sheet 1)

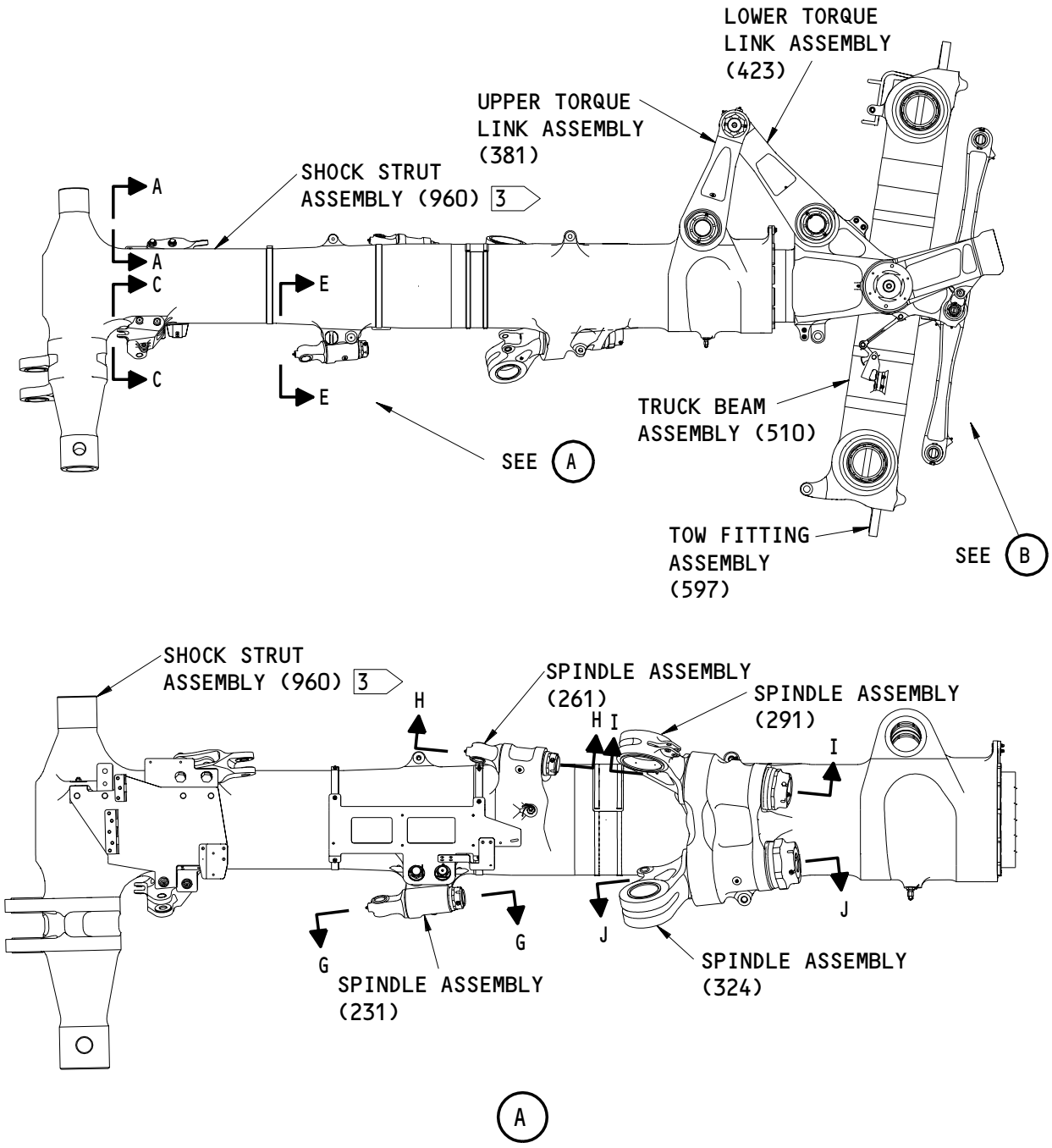


1 APPLY BMS 3-27 CORROSION PREVENTIVE COMPOUND (F-19.71) TO THE CHROME PLATED SURFACE BETWEEN BUSHING ENDS

2 CAUTION: ORIENTATION OF LOCK BOLTS (276) MUST BE AS SHOWN

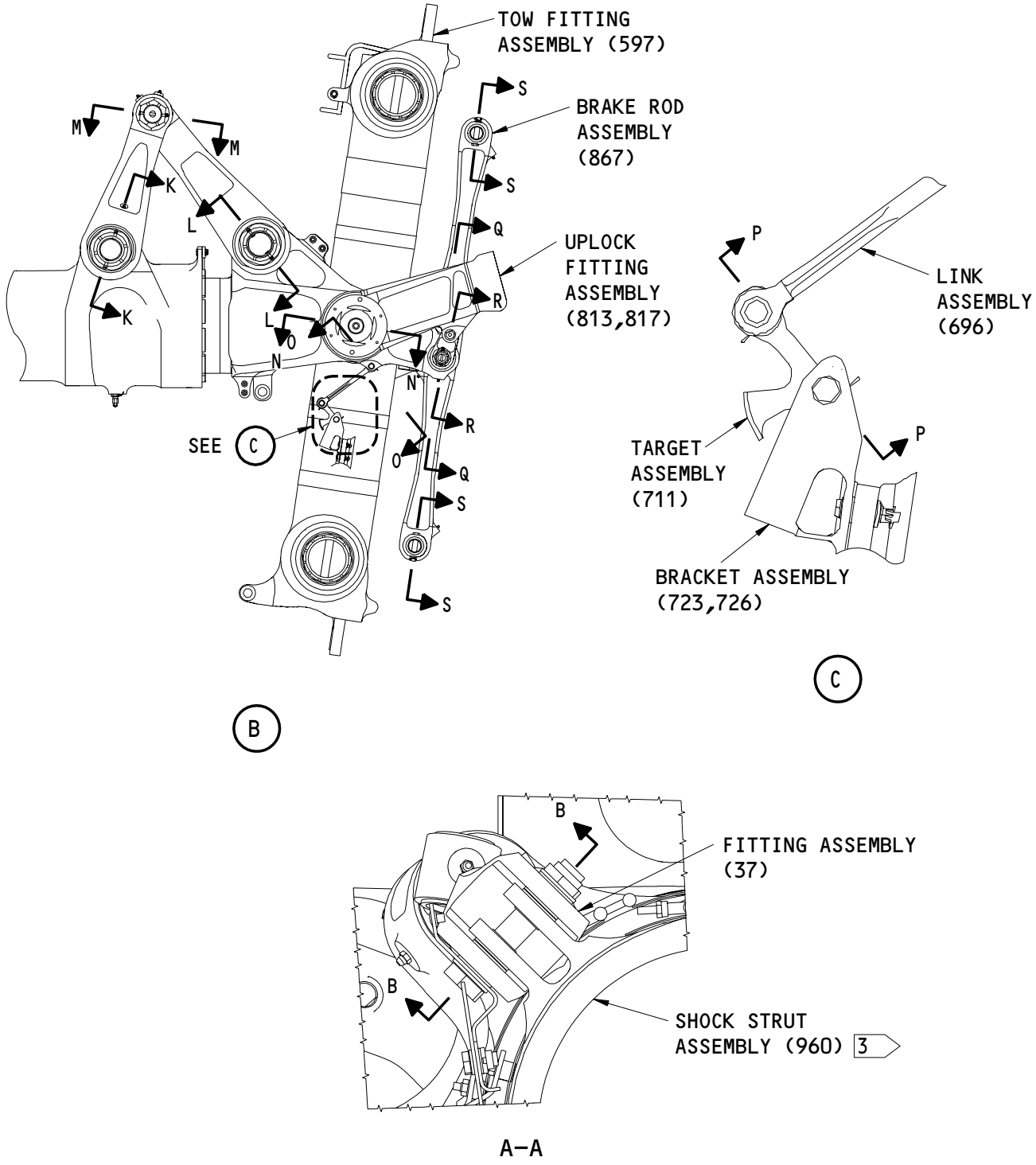
ITEM NUMBERS REFER TO IPL FIG. 1

Main Landing Gear Buildup Assembly
Figure 702 (Sheet 2)



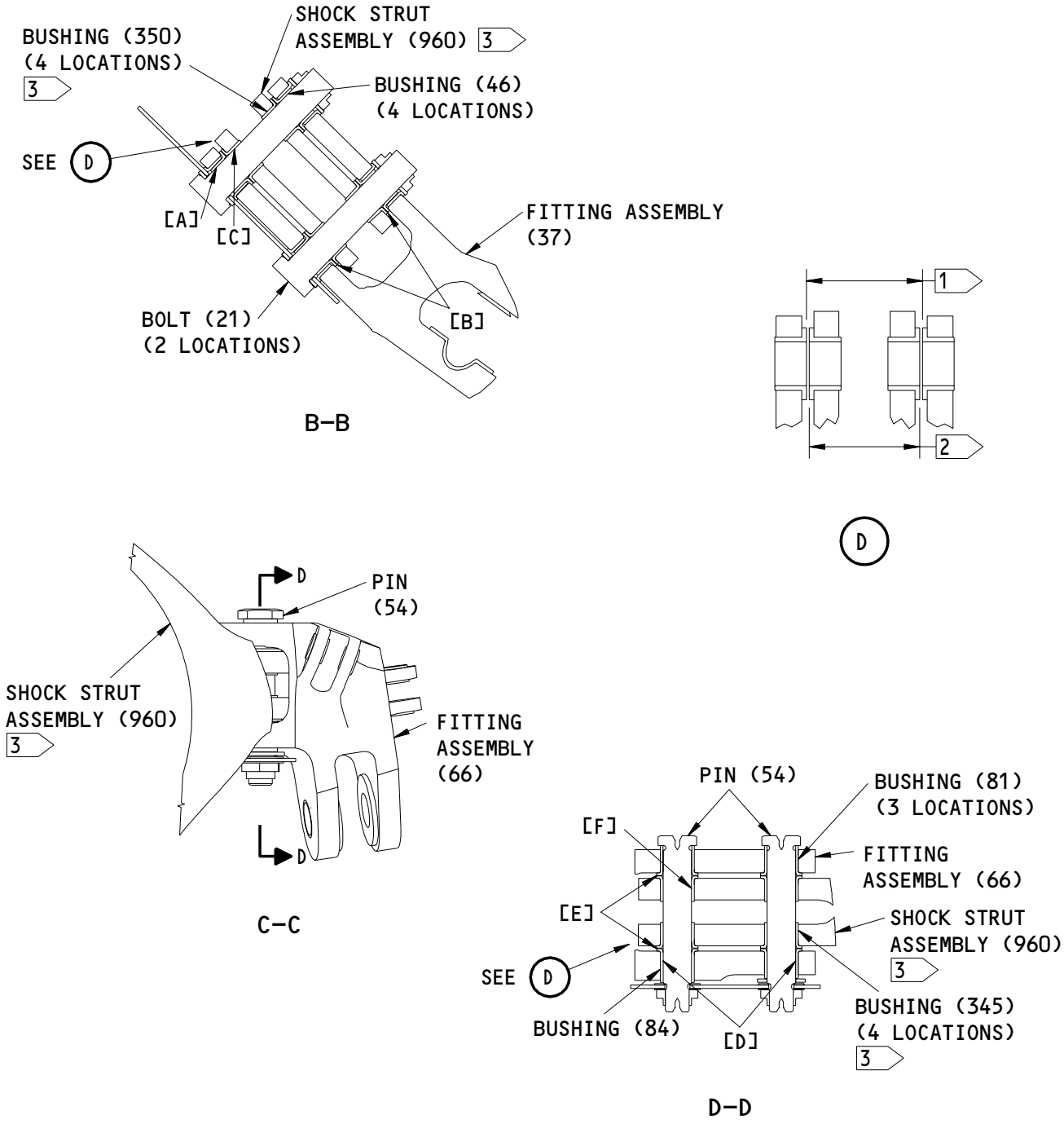
Fits and Clearances
Figure 801 (Sheet 1)

K88998

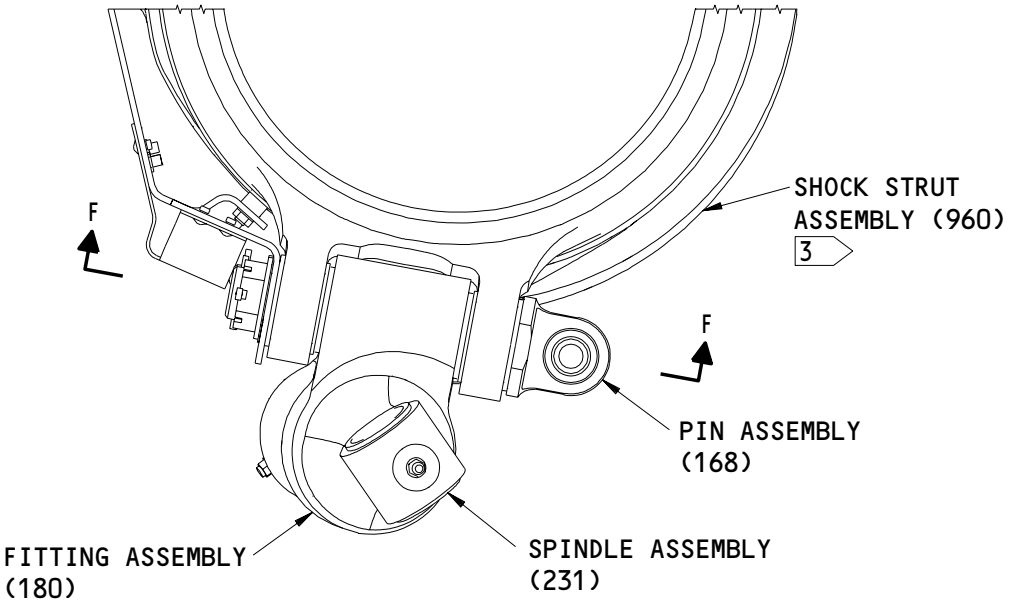


Fits and Clearances
Figure 801 (Sheet 2)

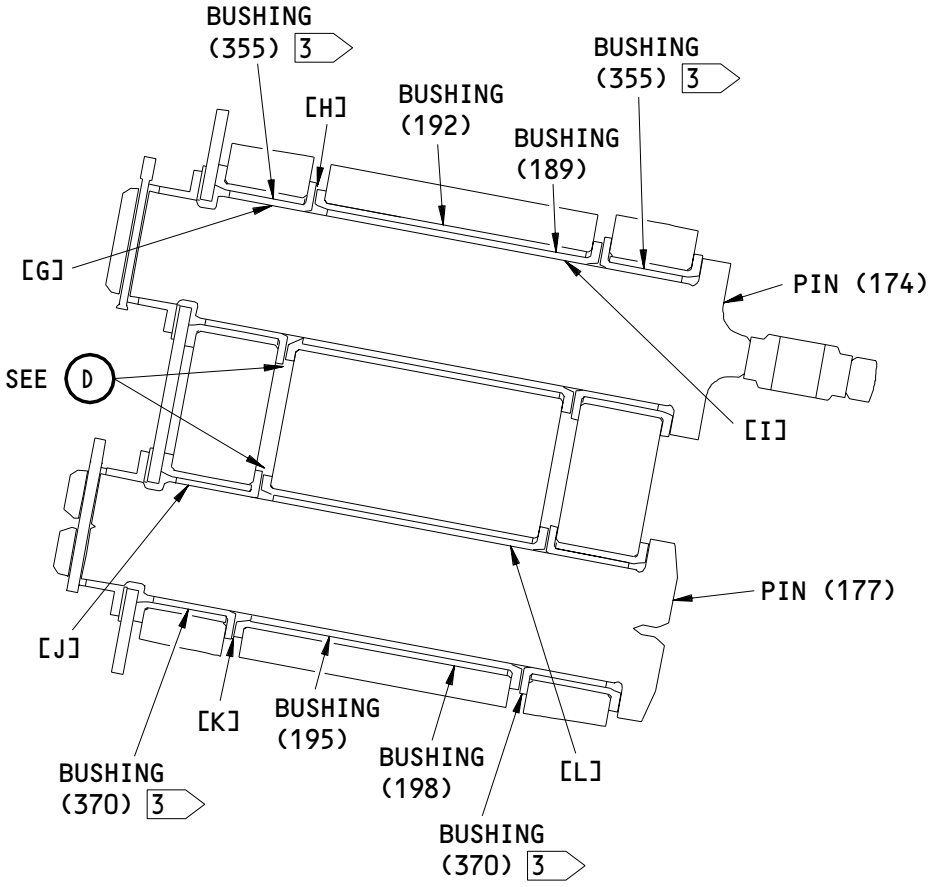
K88999



Fits and Clearances
Figure 801 (Sheet 3)



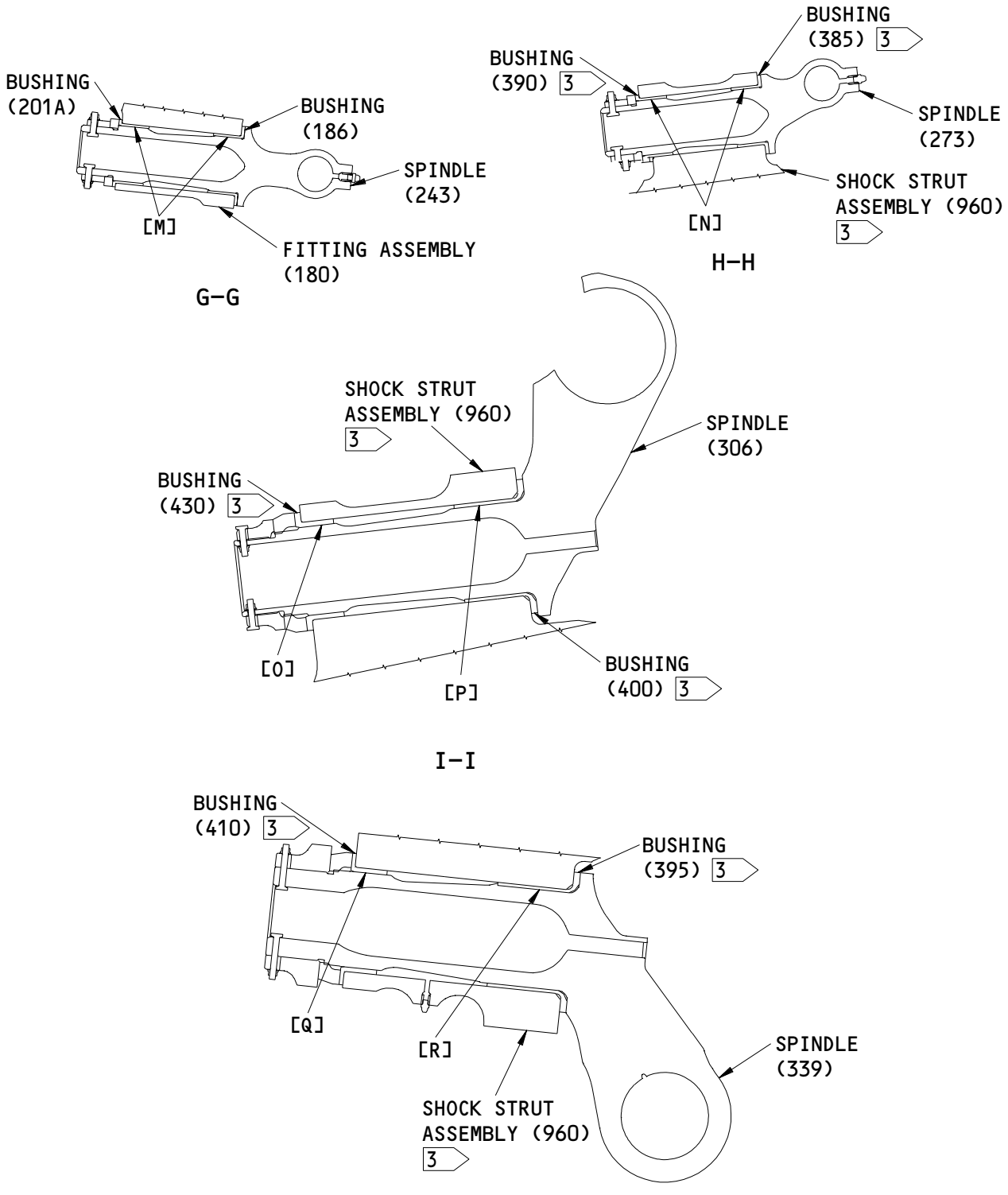
E–E



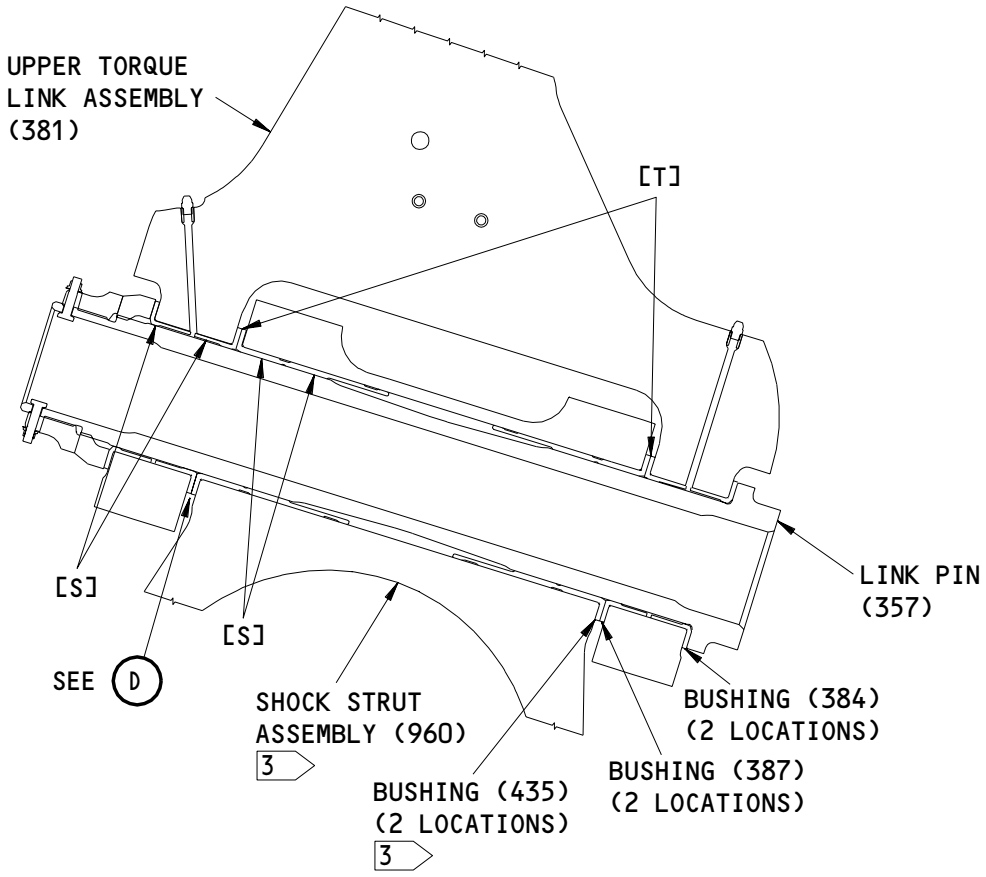
F–F

Fits and Clearances
Figure 801 (Sheet 4)

K89001



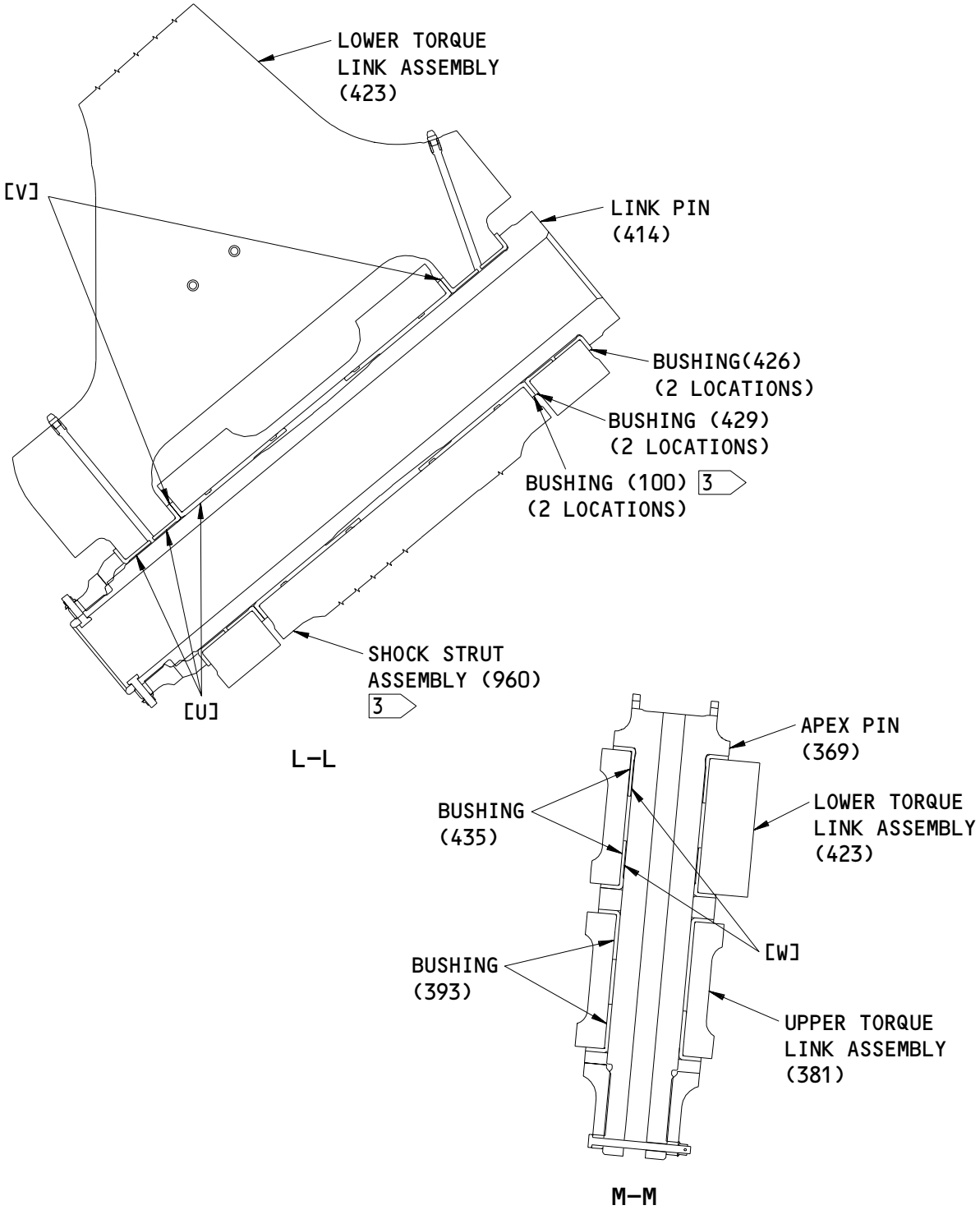
Fits and Clearances
Figure 801 (Sheet 5)



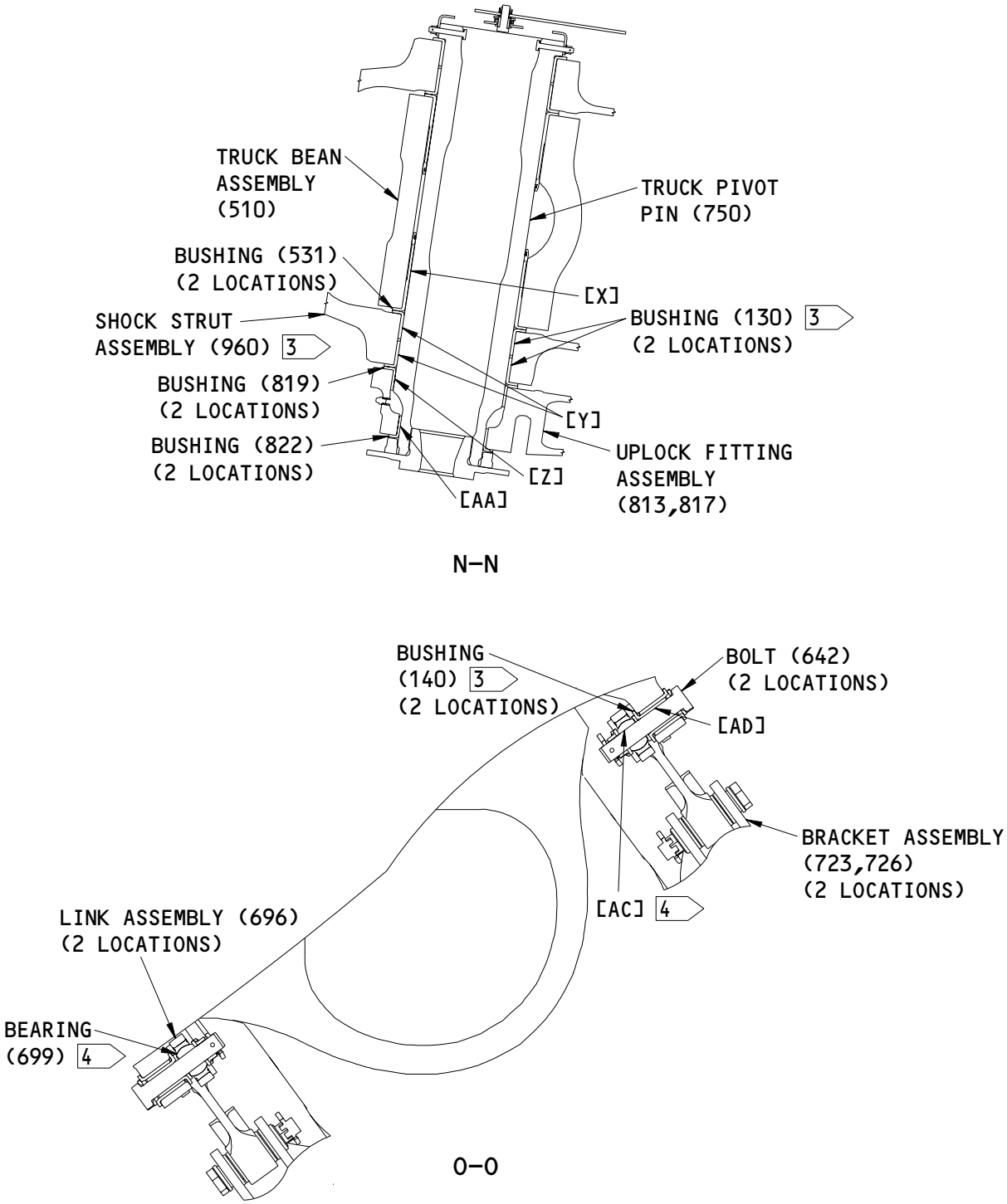
K–K

Fits and Clearances
Figure 801 (Sheet 6)

K89003

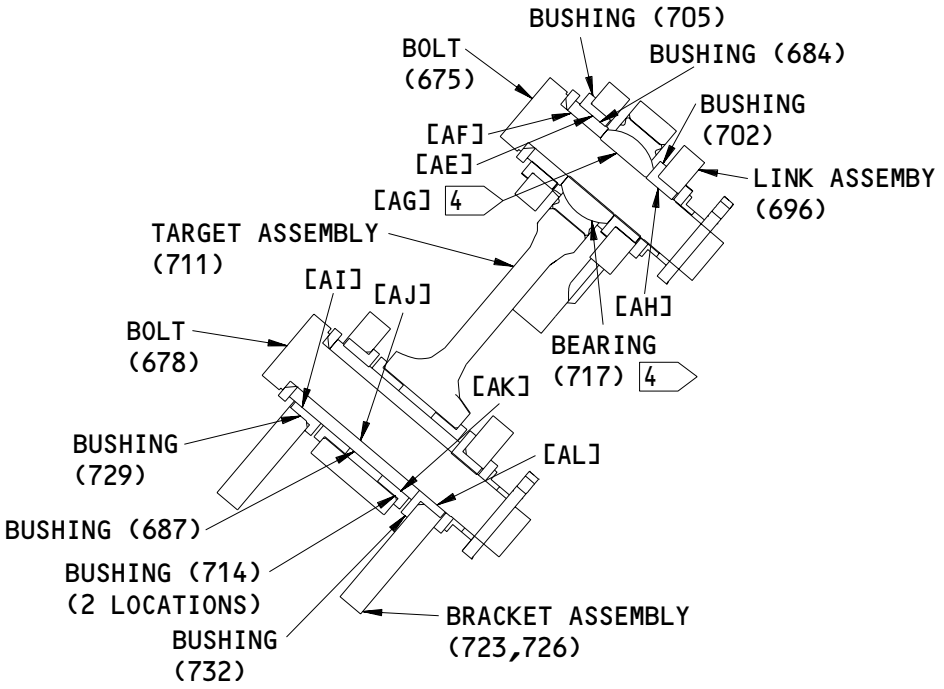


Fits and Clearances
Figure 801 (Sheet 7)



Fits and Clearances
Figure 801 (Sheet 8)

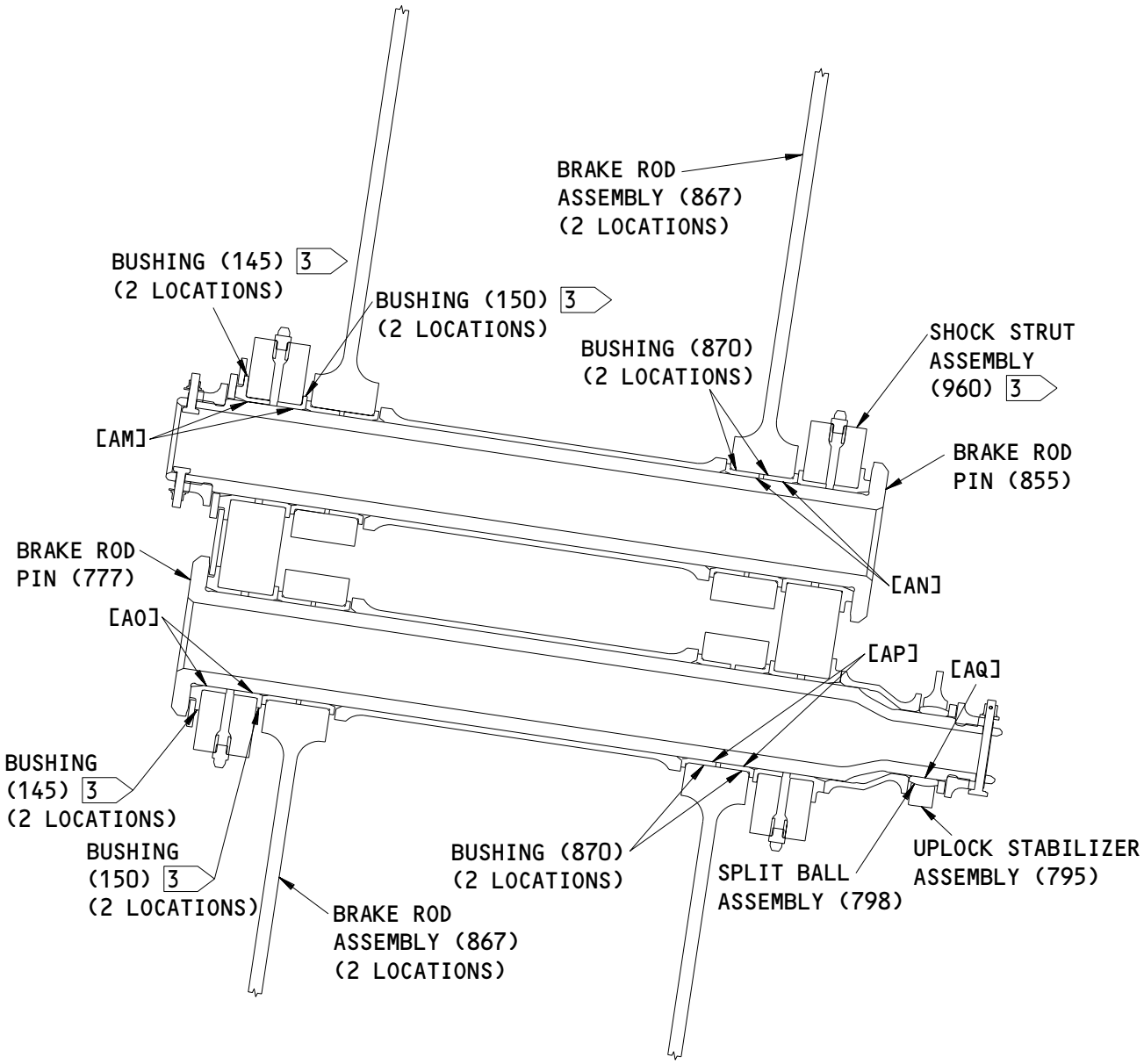
K89005



P–P

Fits and Clearances
Figure 801 (Sheet 9)

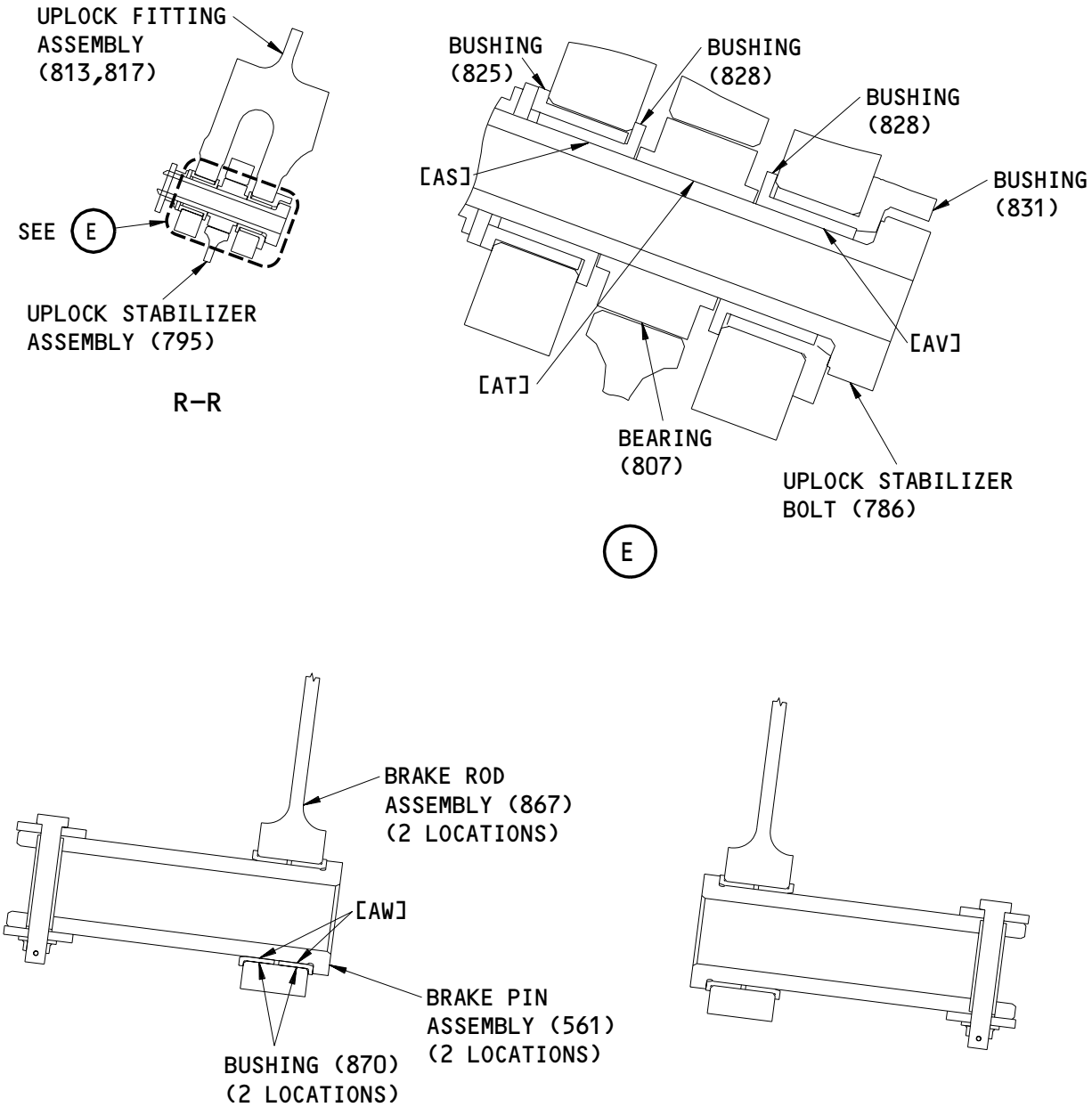
K89006



Q–Q

Fits and Clearances
Figure 801 (Sheet 10)

K89007



Fits and Clearances
Figure 801 (Sheet 11)

REF LETTER	REF IPL FIG. 1, MATING ITEM NO.	DESIGN DIMENSION* DIMENSION MIN	DESIGN DIMENSION* DIMENSION MAX	DESIGN DIMENSION* ASSEMBLY CLEARANCE [5] MIN	DESIGN DIMENSION* ASSEMBLY CLEARANCE [5] MAX	SERVICE WEAR LIMIT* DIMENSION MIN	SERVICE WEAR LIMIT* DIMENSION MAX	SERVICE WEAR LIMIT* MAXIMUM CLEARANCE
[A]	ID 46 OD 21	0.7545 0.7485	0.7560 0.7490	 0.0055	0.0075	 0.7468	0.7582	0.0092
[B]	46 [1] 350 [2] [3]	1.8706 1.8601	1.8806 1.8701	 0.0005	0.0205	 1.8396	1.9011	0.0410
[C]	ID 350 [3] OD 21	0.7550 0.7485	0.7565 0.7490	 0.0060	0.0080	 0.7468	0.7587	0.0097
[D]	ID 81,84 OD 54	0.7500 0.7480	0.7508 0.7490	 0.0010	0.0028	 0.7463	0.7535	0.0045
[E]	81,84 [1] 345 [2] [3]	1.8706 1.8601	1.8806 1.8701	 0.0005	0.0205	 1.8396	1.9011	0.0410
[F]	ID 345 [3] OD 54	0.7550 0.7480	0.7565 0.7490	 0.0060	0.0085	 0.7463	0.7592	0.0102
[G]	ID 355 [3] OD 174	1.3250 1.3180	1.3265 1.3190	 0.0060	0.0085	 1.3157	1.3298	0.0108
[H]	355 [1] [3] 189,192 [2] [3]	3.0564 3.0409	3.0664 3.0509	 0.0055	0.0255	 3.0154	3.0919	0.0510
[I]	ID 189 OD 174	1.3200 1.3180	1.3212 1.3190	 0.0010	0.0032	 1.3157	1.3245	0.0055
[J]	ID 370 [3] OD 177	1.2250 1.2180	1.2265 1.2190	 0.0060	0.0085	 1.2158	1.2297	0.0107
[K]	370 [1] [3] 195,198 [2] [3]	3.0564 3.0409	3.0664 3.0509	 0.0055	0.0255	 3.0154	3.0919	0.0510

Fits and Clearances
Figure 801 (Sheet 12)

K89545

REF LETTER	REF IPL FIG. 1, MATING ITEM NO.	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
		DIMENSION		ASSEMBLY CLEARANCE 5		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[L]	ID 195	1.2200	1.2211		0.0031		1.2243	0.0053
	OD 177	1.2180	1.2190	0.0010		1.2158		
[M]	ID 186,201A	2.2500	2.2515		0.0035		2.2555	0.0065
	OD 243	2.2480	2.2490	0.0010		2.2450		
[N]	ID 385,390 3	2.2500	2.2515		0.0035		2.2555	0.0065
	OD 273	2.2480	2.2490	0.0010		2.2450		
[O]	ID 430 3	3.6250	3.6265		0.0035		3.6313	0.0073
	OD 306	3.6230	3.6240	0.0010		3.6192		
[P]	ID 400 3	3.7500	3.7515		0.0035		3.7564	0.0074
	OD 306	3.7480	3.7490	0.0010		3.7441		
[Q]	ID 410 3	3.9025	3.9040		0.0045		3.9090	0.0085
	OD 339	3.8995	3.9005	0.0020		3.8955		
[R]	ID 395 3	4.0275	4.0290		0.0045		4.0340	0.0085
	OD 339	4.0245	4.0255	0.0020		4.0205		
[S]	ID 435,384,387 3	3.5000	3.5015		0.0035		3.5062	0.0072
	OD 357	3.4980	3.4990	0.0010		3.4943		
[T]	387 1	11.7505	11.7525		0.0125		11.7650	0.0250
	435 2 3	11.7400	11.7500	0.0005		11.7275		
[U]	ID 100,426,429 3	3.7500	3.7515		0.0035		3.7564	0.0074
	OD 414	3.7480	3.7490	0.0010		3.7441		
[V]	429 1	11.7505	11.7525		0.0125		11.7650	0.0250
	100 2 3	11.7400	11.7500	0.0005		11.7275		

Fits and Clearances
Figure 801 (Sheet 13)

K89574

REF LETTER	REF IPL FIG. 3, MATING ITEM NO.	DESIGN DIMENSION* DIMENSION MIN	DESIGN DIMENSION* DIMENSION MAX	DESIGN DIMENSION* ASSEMBLY CLEARANCE 5 MIN	DESIGN DIMENSION* ASSEMBLY CLEARANCE 5 MAX	SERVICE WEAR LIMIT* DIMENSION MIN	SERVICE WEAR LIMIT* DIMENSION MAX	SERVICE WEAR LIMIT* MAXIMUM CLEARANCE
[W]	ID 393,435	2.3750	2.3765		0.0035		2.3806	0.0066
	OD 369	2.3730	2.3740	0.0010		2.3699		
[X]	ID 531	5.5040	5.5055		0.0085		5.5122	0.0132
	OD 750	5.4970	5.4990	0.0050		5.4923		
[Y]	ID 130 3	5.5040	5.5055		0.0085		5.5122	0.0132
	OD 750	5.4970	5.4990	0.0050		5.4923		
[Z]	ID 819	5.5000	5.5015		0.0045		5.5082	0.0092
	OD 750	5.4970	5.4990	0.0010		5.4923		
[AA]	ID 822	4.2510	4.2525		0.0055		4.2586	0.0096
	OD 750	4.2470	4.2490	0.0020		4.2429		
[AB]	130 1 3	10.9193	10.9293		0.0213		10.9506	0.0426
	531 2	10.9080	10.9180	0.0013		10.8867		
[AC]	ID 699 4	---	---					
	OD 642	0.3740	0.3745					
[AD]	ID 140 3	3.3750	0.3756		0.0016		0.3773	0.0028
	OD 642	3.3740	0.3745	0.0005		0.3728		
[AE]	ID 705	0.5620	0.5627		0.0017		0.5647	0.0032
	OD 684	0.5610	0.5615	0.0005		0.5595		
[AF]	ID 684	0.3750	0.3755		0.0015		0.3772	0.0027
	OD 675	0.3740	0.3745	0.0005		0.3728		
[AG]	ID 717 4	---	---					
	OD 675	0.3740	0.3745					

Fits and Clearances
Figure 801 (Sheet 14)

K89588

REF LETTER	REF IPL FIG. 1, MATING ITEM NO.	DESIGN DIMENSION* DIMENSION MIN	DESIGN DIMENSION* DIMENSION MAX	DESIGN DIMENSION* ASSEMBLY CLEARANCE 5 MIN	DESIGN DIMENSION* ASSEMBLY CLEARANCE 5 MAX	SERVICE WEAR LIMIT* DIMENSION MIN	SERVICE WEAR LIMIT* DIMENSION MAX	SERVICE WEAR LIMIT* MAXIMUM CLEARANCE
[AH]	ID 702	0.3750	0.3756		0.0016		0.3773	0.0028
	OD 675	0.3740	0.3745	0.0005		0.3728		
[AI]	ID 729	0.5620	0.5627		0.0017		0.5647	0.0032
	OD 687	0.5610	0.5615	0.0005		0.5595		
[AJ]	ID 687	0.3750	0.3755		0.0015		0.3772	0.0027
	OD 678	0.3740	0.3745	0.0005		0.3728		
[AK]	ID 714	0.5616	0.5640		0.0030		0.5660	0.0045
	OD 687	0.5610	0.5615	0.0001		0.5595		
[AL]	ID 732	0.3750	0.3756		0.0016		0.3773	0.0028
	OD 678	0.3740	0.3745	0.0005		0.3728		
[AM]	ID 145,150 3	2.1250	2.1265		0.0035		2.1304	0.0064
	OD 855	2.1230	2.1240	0.0010		2.1201		
[AN]	ID 870	2.1250	2.1265		0.0035		2.1304	0.0064
	OD 855	2.1230	2.1240	0.0010		2.1201		
[AO]	ID 145,150 3	2.1250	2.1265		0.0035		2.1304	0.0064
	OD 777	2.1230	2.1240	0.0010		2.1201		
[AP]	ID 870	2.1250	2.1265		0.0035		2.1304	0.0064
	OD 777	2.1230	2.1240	0.0010		2.1201		
[AQ]	ID 798	1.4375	1.4380		0.0030		1.4419	0.0054
	OD 777	1.4350	1.4365	0.0010		1.4326		

Fits and Clearances
Figure 801 (Sheet 15)

K89627

REF LETTER	REF IPL FIG. 1, MATING ITEM NO.	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
		DIMENSION		ASSEMBLY CLEARANCE 5		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[AS]	ID 828	0.5625	0.5630		0.0020		0.5650	0.0035
	OD 786	0.5610	0.5615	0.0010		0.5595		
[AT]	ID 807	0.5620	0.5625		0.0015		0.5645	0.0030
	OD 786	0.5610	0.5615	0.0005		0.5595		
[AV]	ID 828	0.5625	0.5630		0.0020		0.5650	0.0035
	OD 786	0.5610	0.5615	0.0010		0.5595		
[AW]	ID 870	2.1250	2.1265		0.0035		2.1304	0.0064
	OD 561	2.1230	2.1240	0.0010		2.1201		

* ALL DIMENSIONS ARE IN INCHES

1 BETWEEN BUSHING FLANGES

2 ACROSS BUSHING FLANGES

3 CMM 32-11-33

4 REPLACE BEARING WHEN LINER MATERIAL IS WORN THROUGH

5 NEGATIVE NUMBERS DENOTE INTERFERENCE FIT

Fits and Clearances
Figure 801 (Sheet 16)

K89647

REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
1	30	Nut	---	33-38
1	63	Nut	---	25-29
1	167	Nut	---	50-58
1	225,255	Nut	---	50-58
1	285,318	Nut	---	50-58 1
1	351,420	Nut	---	50-58
1	378	Nut	---	50-58
1	585,591	Bolt	200-300	---
1	693	Nut	95	---
1	756	Nut	---	50-58
1	780	Nut	---	50-58
1	792	Nut	---	16-20
1	861	Nut	---	50-58

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

1 BACK OFF, PUT IN A GAGE TO GET 0.003 CLEARANCE. THEN TIGHTEN TO 5-10 POUND-FEET (SEE ASSEMBLY INSTRUCTIONS)

Torque Table
Figure 802

L05864

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

1. General

A. This is a list of the special tools, fixtures, and equipment used in this manual.

NOTE: Equivalent substitutes can be used.

(1) A32109 Pin Installation and Removal Kit.

(a) Thread Protectors - A32109-14, -19, -20.

(b) Wrenches - A32109-2, -11, -36.

(c) Adapter - A32109-8

(2) A32110 Brake Rod Pin Puller

(3) A32114 Truck Position Retainer and Oleo Lock Equpiment.

(4) A32115 Overhead Installation/Removal Equipment.

(5) A32116 MLG Bogie Pivot Pin Removal Equipment.

(a) A32116-2 Hub Assembly.

(b) A32116-3 Crowfoot Wrench.

(c) A32116-4 Drift Pin.

(6) B32050-50 MLG Buildup Assembly Fixture.

(7) J32031-12 MLG Axle Protector Equipment.

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

00266 ACME STEEL COMPANY
13500 SOUTH PERRY AVENUE
RIVERDALE, ILLINOIS 60627-1182

06725 AIR INDUSTRIES CORPORATION
12570 KNOTT STREET
GARDEN GROVE, CALIFORNIA 92641-3932

09455 BFM TRANSPORT DYNAMICS CORP
3131 WEST SEGERSTROM AVENUE PO BOX 1953
SANTA ANA, CALIFORNIA 92702-1953

11815 CHERRY AEROSPACE FASTENERS DIV OF TEXTRON
1224 EAST WARNER AVENUE PO BOX 2157
SANTA ANA, CALIFORNIA 92707-0157

15653 KAYNAR TECHNOLOGY KAYNAR DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92634-3001

15860 NEW HAMPSHIRE BALL BEARINGS, INCORPORATED ASTRO DIVISION
155 LEXINGTON AVENUE
LACONIA, NEW HAMPSHIRE 03246-2937

26066 MINNESOTA MINING & MFG CO INDUSTRIAL TAPE DIVISION
3M CENTER
ST. PAUL, MINNESOTA 55144-1000

5F573 GREENE TWEED AND CO INC
2075 DETWILER RD P.O. BOX 305
KULPSVILLE, PENNSYLVANIA 19443-0305

50294 NEW HAMPSHIRE BALL BEARINGS INC
9730 INDEPENDENCE AVENUE PO BOX 2515
CHATSWORTH, CALIFORNIA 91311-4323

50632 KAMATICS CORP SUB OF KAMAN CORP
1335 BLUE HILLS ROAD
BLOOMFIELD, CONNECTICUT 06002-1304

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

VENDORS

56878 SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV
HIGHLAND AVENUE
JENKINTOWN, PENNSYLVANIA 19046

62554 SIMMONDS MECAERO FASTENERS INC
1734 SEQUOIA AVENUE
ORANGE, CALIFORNIA 92668

72962 HARVARD INDUSTRIES INC
3 WERNER WAY SUITE 210
LEBANON, NEW JERSEY 08833

73134 IMO INDUSTRIES INC HEIM BEARINGS DIV
60 ROUND HILL ROAD PO BOX 430
FAIRFIELD, CONNECTICUT 06430

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

81376 SOUTHWEST PRODUCTS COMPANY
2240 BUENA VISTA STREET
IRVINDALE, CALIFORNIA 91706

85495 BRILES MFG CO SEE OMARK INDUSTRIES
PRECISION FASTENING SUB OF OMARK IND INC SEE DEUTSCH
FASTENER CORP V08524
OMARK INDUSTRIES SEE PRECISION FASTENING

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

92215 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
3010 W LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102

VENDORS

97613 SARGENT CONTROLS & AEROSPACE/KAHR BEARING DIV
5675 W BURLINGAME RD
TUCSON, ARIZONA 85743

97928 DEUTSCH FASTENER CORP
3969 PARAMONT BOULEVARD
LAKEWOOD, CALIFORNIA 90712-4193

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ADB6V301C		1	699	1
ADB8V301NC		1	171	1
BACB10AB09M		1	807	1
BACB10ES06G		1	717	1
BACB10ES06GC		1	699	1
BACB10FB08GC		1	171	1
BACB19F10S		1	888	4
BACB28AK06-032		1	684	1
BACB28AK06-050		1	483	1
BACB28AK06-119		1	687	1
BACB28AP06P019		1	705	1
BACB28AT06B054C		1	522	4
BACB28AT07A029C		1	75	3
BACB28AT09B019C		1	702	1
		1	729	1
BACB28AT10B073C		1	513	2
BACB28AT11C048C		1	825	1
BACB28AU04B058C		1	519	4
BACB28AU05A033C		1	72	2
BACB28AU08B077C		1	516	2
BACB28AU09C051C		1	828	2
BACB28AX06C019		1	732	1
BACB28AY09A020B		1	714	2
BACB28X9M009		1	462	1
BACB28Y4F044		1	390	2
		1	432	2
BACB30LJ12U53		1	21	2
BACB30LJ4-15		1	654	4
BACB30LJ6DU18		1	675	1
BACB30LJ6DU24		1	642	2
BACB30LJ6DU25		1	678	1
BACB30LJ7DU40		1	552	4
BACB30NM3K5		1	882	4
BACB30NR6K11		1	6	1
BACB30NR6K4		1	9	4
BACB30NX6K6		1	99	8
BACB30VF4K11		1	838D	1
BACB30VF4K18		1	838	5
BACC10FY114SE		1	897	1
BACC10FY126SE		1	900	1
BACC15AN10		1	891	4
BACC30BH6		1	102	8
BACN10JC10CD		1	63	2
BACN10JC12CD		1	30	2
BACN10JC3CD		1	894	4
BACN10JC6CD		1	18	1
		1	486	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACN10JC8CM		1	582	2
BACN10JN3CD		1	129	2
		1	150	2
		1	504	8
		1	921	1
		1	939	6
BACN10JR6CFD		1	156	4
BACN10YR3CD		1	852	2
BACN10YR4CD		1	222	2
		1	252	2
		1	282	2
		1	315	2
		1	348	2
		1	411	2
		1	663	4
		1	747	2
		1	838R	6
BACN11N106CS		1	651	2
		1	693	2
BACN11N107CD		1	558	4
BACN11N109CD		1	792	1
BACN11N118CD		1	167	2
BACN11N3CD		1	771	1
BACN11N4CD		1	366	1
		1	456	2
BACN11N4CS		1	979	1
BACP18BC02A05P		1	447	2
BACP18BC02A06P		1	976	1
BACP18BC02C04P		1	762	1
BACP18BC03A10P		1	639	2
		1	672	2
BACP18BC03C08P		1	549	4
BACP18BC04A12P		1	783	1
BACP18BC04C18P		1	166	4
BACR15BA3AD		1	126	4
		1	147	4
		1	501	16
		1	918	2
		1	936	12
BACR15BA4AD		1	153	8
BACR15BB5AD		1	492	8
		1	909	6
BACR15FT6AD		1	117	7
BACS11AK2		1	954	2
BACS12GU6K18		1	468	1
BACS38E8-50		1	951	2
BACW10BP12CD		1	24	2

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACW10BP12DP		1	27	2
		1	57	1
BACW10BP4CD		1	657	4
BACW10BP4DP		1	660	4
BACW10BP4NDP		1	219	2
		1	249	2
		1	279	2
		1	312	2
		1	345	2
		1	408	2
		1	744	2
BACW10BP6CD		1	12	5
		1	645	2
		1	681	2
BACW10BP6DP		1	15	1
		1	477	1
		1	648	4
		1	690	2
BACW10BP7APU		1	555	4
BACW10BP9APU		1	789	1
BACW10BP9DP		1	480	3
BACW10DS12U		1	594	2
BACW10P378L		1	474	1
BCREF15982		1	759	2
BMN4122CPD8-10		1	63	2
BMN4122CPD8-12		1	30	2
BMN4122C1D2-8		1	582	2
		1	582	2
BRFM20C3D		1	129	2
		1	150	2
		1	504	8
		1	921	1
		1	939	6
BRF200C6D		1	156	4
HL1087-6		1	102	8
HL12-6		1	99	8
HL12VAZ6-6		1	99	8
HTES06VC		1	699	1
HTFB08VC		1	171	1
H01-8BAC		1	582	2
H51650-10BAC		1	63	2
H51650-12BAC		1	30	2
H52732-3CD		1	852	2

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
H52732-4CD		1	222	2
		1	252	2
		1	282	2
		1	315	2
		1	348	2
		1	411	2
		1	663	4
		1	747	2
KNDB6-64		1	699	1
KNDB8-70		1	171	1
KSC130900B6GC		1	699	1
KSC145700BZ8GC		1	171	1
K51602-6BAC		1	156	4
L802-6K6		1	99	8
MF51637-3		1	129	2
		1	150	2
		1	504	8
		1	921	1
		1	939	6
MF53050-3CD		1	129	2
		1	150	2
		1	504	8
		1	921	1
		1	939	6
MS15001-2		1	984	2
MS15004-1		1	204	1
		1	237	1
		1	267	1
		1	300	2
		1	333	1
		1	396	3
		1	438	3
		1	534	2
		1	834	1
		1	873	2
MS21209F4-15P		1	983	2
MS21209F6-15P		1	603	2
M83248-1-133		1	986	3
NAS1149D0332J		1	885	4
NAS1149D0432J		1	453	4
NAS1149D0632J		1	471	1
NAS1149E0332P		1	849	2
NAS1149E0363P		1	768	1
NAS1149E0416R		1	978	1
NAS1149E0432P		1	363	1
NAS1149E0863R		1	579	2
NAS1149E1032P		1	60	4

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS1149E1832P		1	166N	2
NAS1149F0463P		1	838N	6
NAS1801-6-18		1	468A	1
NAS6606H4		1	600	2
NAS6703-7		1	846	2
NAS6703D27		1	765	1
NAS6704-10		1	342	2
		1	405	2
NAS6704-11		1	276	2
NAS6704-21		1	309	2
NAS6704-46		1	360A	1
NAS6704-7		1	216	2
		1	246	2
		1	741	2
NAS6704DU50		1	977	1
NAS6704D21		1	450	2
NAS6704D46		1	360	1
NAS6708U15		1	576	2
NAS6712EH134		1	585	2
		1	591	2
NE354C5		1	948C	AR
NRRS08FBGC		1	171	1
NRR06ESGC		1	699	1
NS202476-064		1	156	4
NS202487-02		1	129	2
		1	150	2
		1	504	8
		1	921	1
		1	939	6
PLH53CD		1	852	2
PLH54CD		1	222	2
		1	252	2
		1	282	2
		1	315	2
		1	348	2
		1	411	2
		1	663	4
		1	747	2
SWKN0652OG		1	717	1
T8092C624CD		1	156	4
WES08GC		1	171	1
Y8412		1	948A	
03-825-06E010		1	699	1
102F9201-6		1	156	4

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
102F9201M3		1	129	2
		1	150	2
		1	504	8
		1	921	1
		1	939	6
102LH9074-10		1	63	2
102LH9074-12		1	30	2
109LH9074-8		1	582	2
112T1625-1		1	990	1
161N1811-1		1	225	1
		1	255	1
161T1142-2		1	402	1
161T1329-2		1	201	
161T2108-1		1	291	1
161T2108-2		1	306	1
161T2121-1		1	261	1
161T2121-2		1	273	1
161T2126-1		1	285	1
161T2141-1		1	33	
161T2141-2		1	36	
161T2141-3		1	48	1
161T2141-4		1	51	1
161T2141-5		1	37	1
161T2141-6		1	38	1
161T2874-11		1	294	2
161T2874-12		1	297	4
161T2874-25		1	45	4
161T2874-26		1	42	
161T2874-27		1	39	2
161T2874-3		1	327	2
161T2874-36		1	525	4
161T2874-4		1	330	2
161T2874-43		1	870	4
161T2874-6		1	189	1
161T2874-67		1	819	1
161T2874-68		1	822	1
161T2874-69		1	78	2
161T2874-7		1	192	1
161T2874-70		1	81	3
161T2874-71		1	84	1
161T2874-77		1	384	2
161T2874-78		1	426	2
161T2874-8		1	195	1
161T2874-84		1	615	1
161T2874-9		1	198	1
161T2875-1		1	387	2
161T2875-3		1	429	2

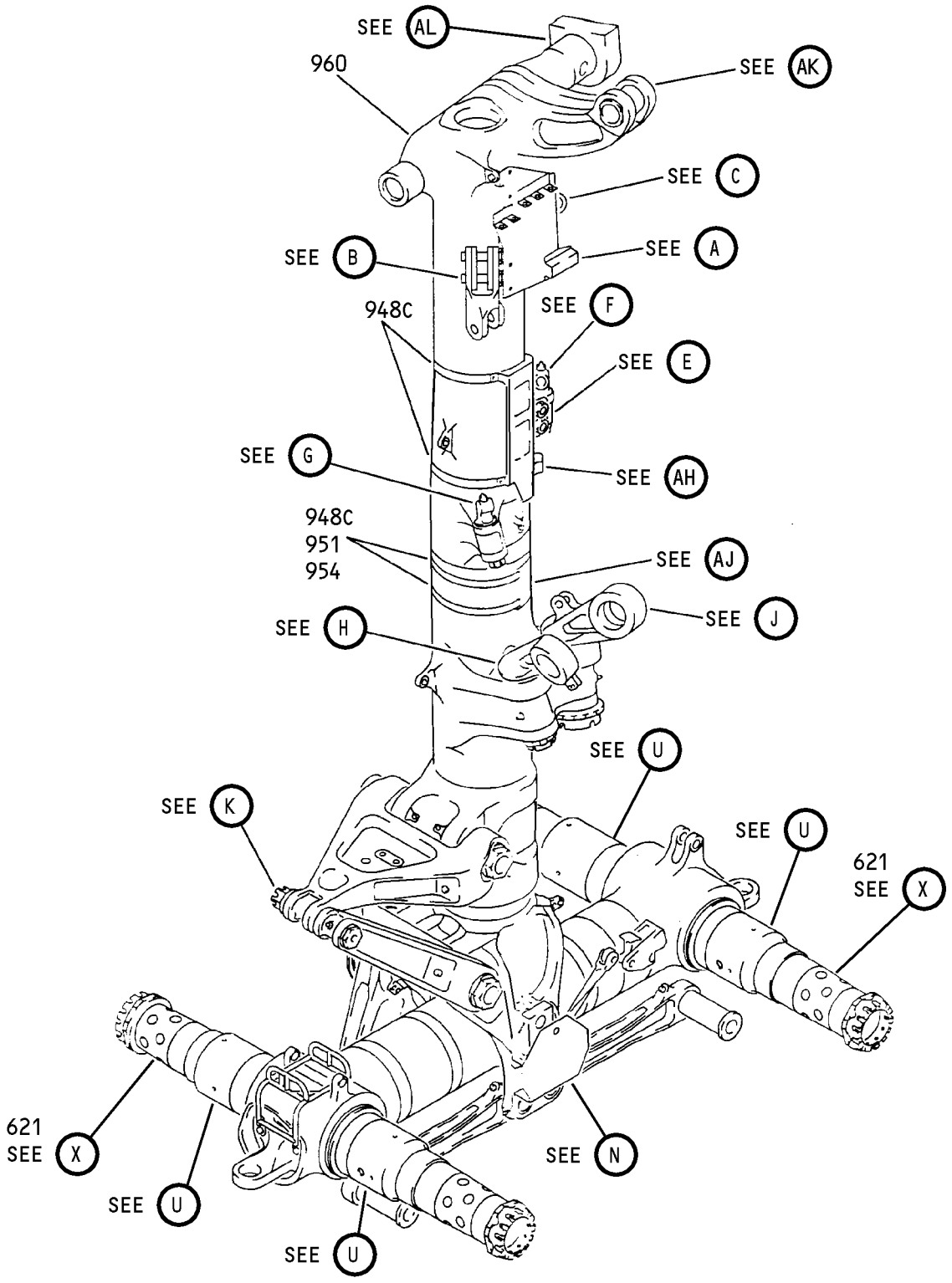
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
161T2876-1		1	831	1
161T2877-1		1	531	2
161T2878-1		1	630	1
161T2878-2		1	528	4
161T2879-1		1	612	1
161T2880-1		1	46	4
		1	42A	4
161T5010-1		1	987	1
161T5011-1		1	980	1
161T5012-1		1	981	1
161T5013-1		1	982	1
161T5013-2		1	985	1
161T6105-1		1	324	1
161T6105-2		1	339	1
161T6114-2		1	318	1
161T6118-1		1	180	1
161T6118-2		1	183	1
161T6118-3		1	210	1
161T6118-4		1	213	1
161T6119-1		1	66	1
161T6119-2		1	69	1
161T6119-3		1	87	1
161T6119-4		1	90	1
161T6121-1		1	168	1
161T6121-2		1	174	1
161T6122-1		1	54	2
161T6122-2		1	177	1
161T6130-1		1	231	1
161T6130-2		1	243	1
161T6132-5		1	321	1
161T7100-1		1	1A	RF
161T7100-2		1	3	RF
161T7100-3		1	960	1
161T7100-4		1	963	1
161T7100-5		1	1B	RF
161T7100-6		1	3A	RF
161T7100-7		1	960A	1
161T7100-8		1	963A	1
161T7122-1		1	351	1
		1	420	1
161T7123-1		1	288	1
		1	417	1
161T7123-2		1	354	1
161T7125-1		1	357	1
161T7125-2		1	414	1
161T7130-1		1	510	1
161T7130-2		1	540	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
161T7133-1		1	621	2
161T7133-2		1	636	2
161T7134-1		1	597	2
161T7134-2		1	618	1
161T7134-3		1	618A	1
161T7138-1		1	867	4
161T7138-2		1	879	1
161T7139-1		1	864	2
161T7140-1		1	777	1
161T7140-2		1	855	1
161T7142-1		1	381	1
161T7142-2		1	402A	1
161T7144-1		1	423	1
161T7144-2		1	444	1
161T7190-1		1	780	1
161T7190-2		1	861	1
161T7191-1		1	858	1
161T7191-2		1	774	1
161T7193-1		1	750	1
161T7194-1		1	753	1
161T7196-1		1	756	1
161T7197-1		1	813	1
161T7197-10		1	842	1
161T7197-11		1	841A	1
161T7197-12		1	842A	1
161T7197-13		1	813A	1
161T7197-14		1	816A	1
161T7197-15		1	840E	1
161T7197-16		1	840S	1
161T7197-17		1	840D	1
161T7197-18		1	840R	1
161T7197-2		1	816	1
161T7197-3		1	840	1
161T7197-4		1	840B	1
161T7197-5		1	840A	1
161T7197-6		1	840C	1
161T7197-7		1	817	1
161T7197-8		1	818	1
161T7197-9		1	841	1
161T7199-1		1	795	1
161T7199-2		1	810	1
161T7200-1		1	786	1
161T7201-1		1	798	1
161T7201-2		1	801	1
161T7201-3		1	804	1
161T7202-1		1	570	4
161T7203-1		1	839	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
161T7203-2		1	839D	1
161T7204-1		1	843	1
161T7205-1		1	666	1
161T7205-2		1	669	1
161T7206-1		1	696	1
161T7206-2		1	708	1
161T7207-1		1	711	1
161T7207-2		1	720	1
161T7208-1		1	723	1
161T7208-2		1	726	1
161T7208-3		1	735	1
161T7208-4		1	738	1
161T8101-1		1	995	1
161T8102-1		1	991	1
161T8102-2		1	992	1
161T8102-3		1	993	1
161T8103-1		1	996	1
161T8104-1		1	994	2
161W0125-1		1	228	1
		1	258	1
161W1127-1		1	564	1
161W1128-1		1	633	2
161W1144-1		1	369	1
161W1149-1		1	378	1
161W1178-1		1	561	4
161W1178-2		1	567	1
161W1210-1		1	627	2
161W1211-1		1	573	4
161W1234-1		1	375	1
161W1235-1		1	372	1
161W1238-3		1	393	2
		1	435	2
161W1308-1		1	543	4
161W1309-1		1	546	4
161W1329-1		1	186	1
161W1329-2		1	201A	1
161W4031-1		1	234	2
		1	264	2

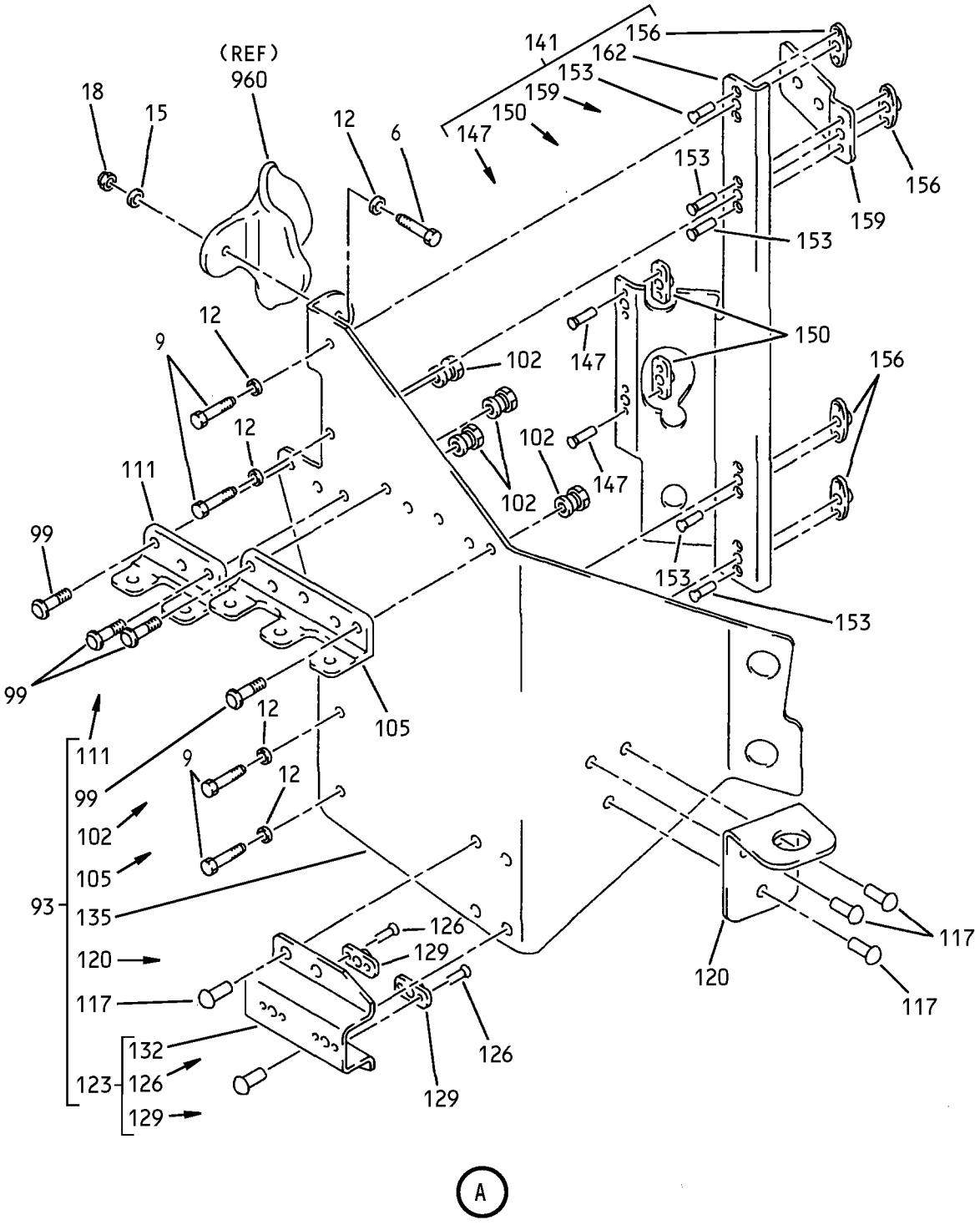
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
161W7010-1		1	207	1
		1	240	1
		1	270	1
		1	303	2
		1	336	1
		1	399	3
		1	441	3
		1	537	2
		1	837	1
		1	876	2
162T1103-2		1	957	1
272T6119-8		1	588	1
272T6146-27		1	135	1
272T6146-28		1	138	1
272T6146-29		1	123	1
272T6146-30		1	132	1
272T6146-31		1	159	1
272T6146-33		1	111	1
272T6146-34		1	114	1
272T6146-35		1	105	1
272T6146-36		1	108	1
272T6146-41		1	141	1
272T6146-42		1	144	1
272T6146-43		1	162	1
272T6146-44		1	165	1
272T6146-45		1	120	1
272T6146-7		1	93	1
272T6146-8		1	96	1
273T1183-1		1	988	1
273T1183-2		1	989	1
287T6111-4001		1	903	1
287T6111-4002		1	906	1
287T6111-4009		1	930	1
287T6111-4010		1	933	1
287T6111-4011		1	912	1
287T6111-4012		1	915	1
287T6111-4013		1	924	1
287T6111-4014		1	927	1
287T6111-4015		1	942	1
287T6111-4016		1	945	1
287T6140-1		1	459	1
287T6140-11		1	495	2
287T6140-13		1	498	1
287T6140-3		1	489	1
287T6140-7		1	465	1
287T6140-9		1	507	1
3M8412		1	948	

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
44PB134-4441		1	954	2
69B00270-1		1	609	2
69B00271-1		1	606	2
69B04172-1		1	624	2
69235-1018CD		1	63	2
69235-1216CD		1	30	2
69235-820CM		1	582	2
716A1FSL731-5717		1	759	2
7355		1	948B	

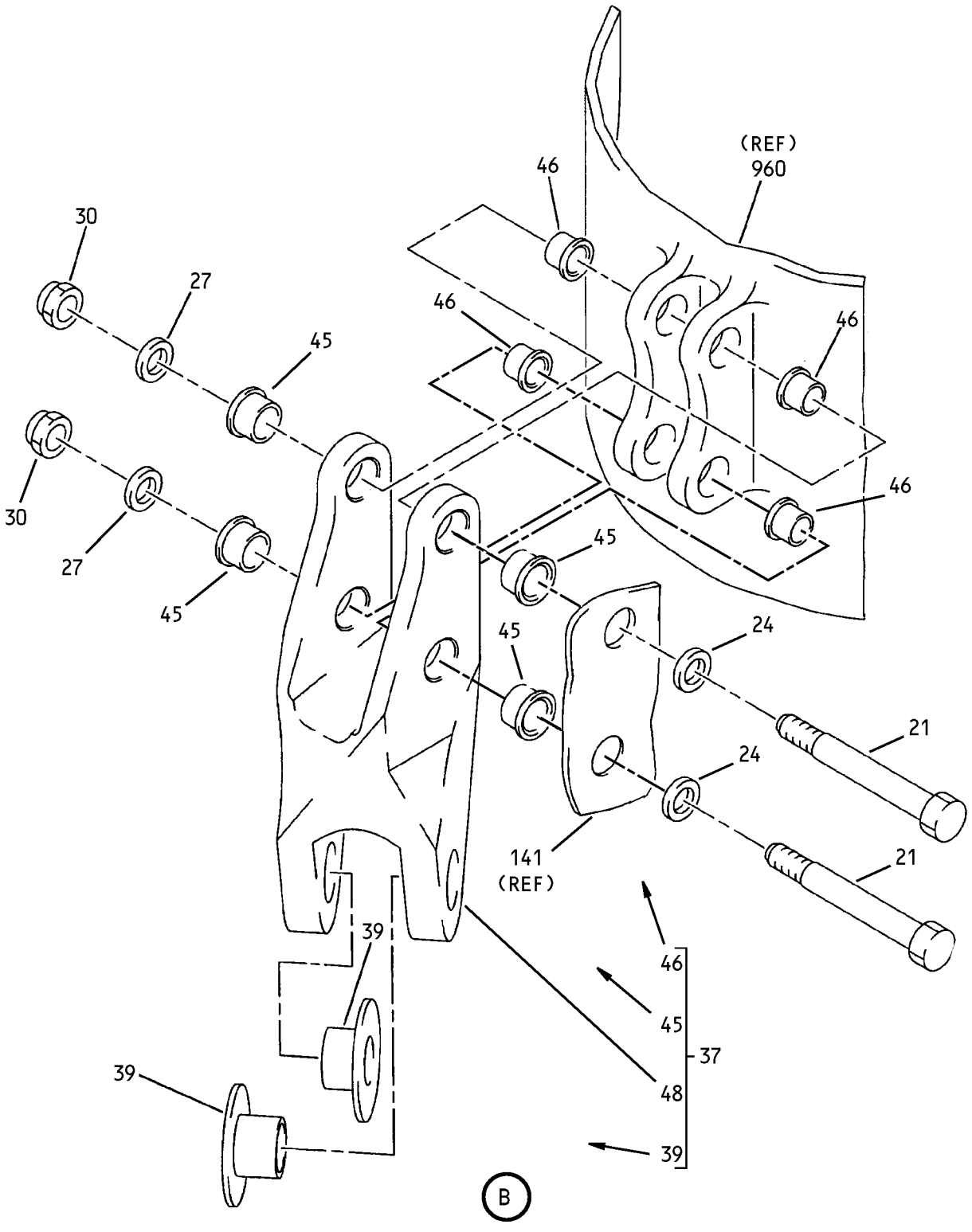


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 1)

L06058

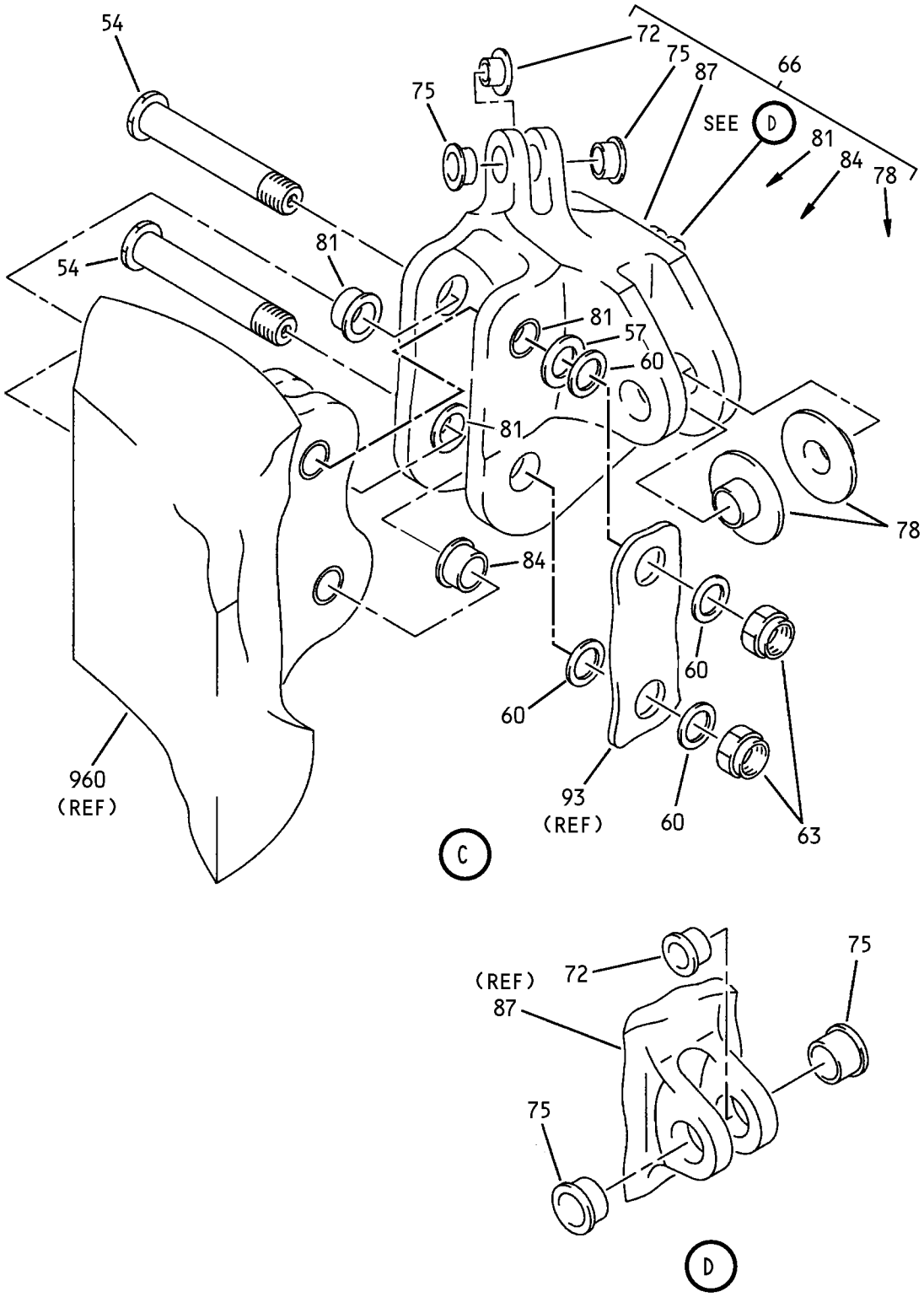


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 2)

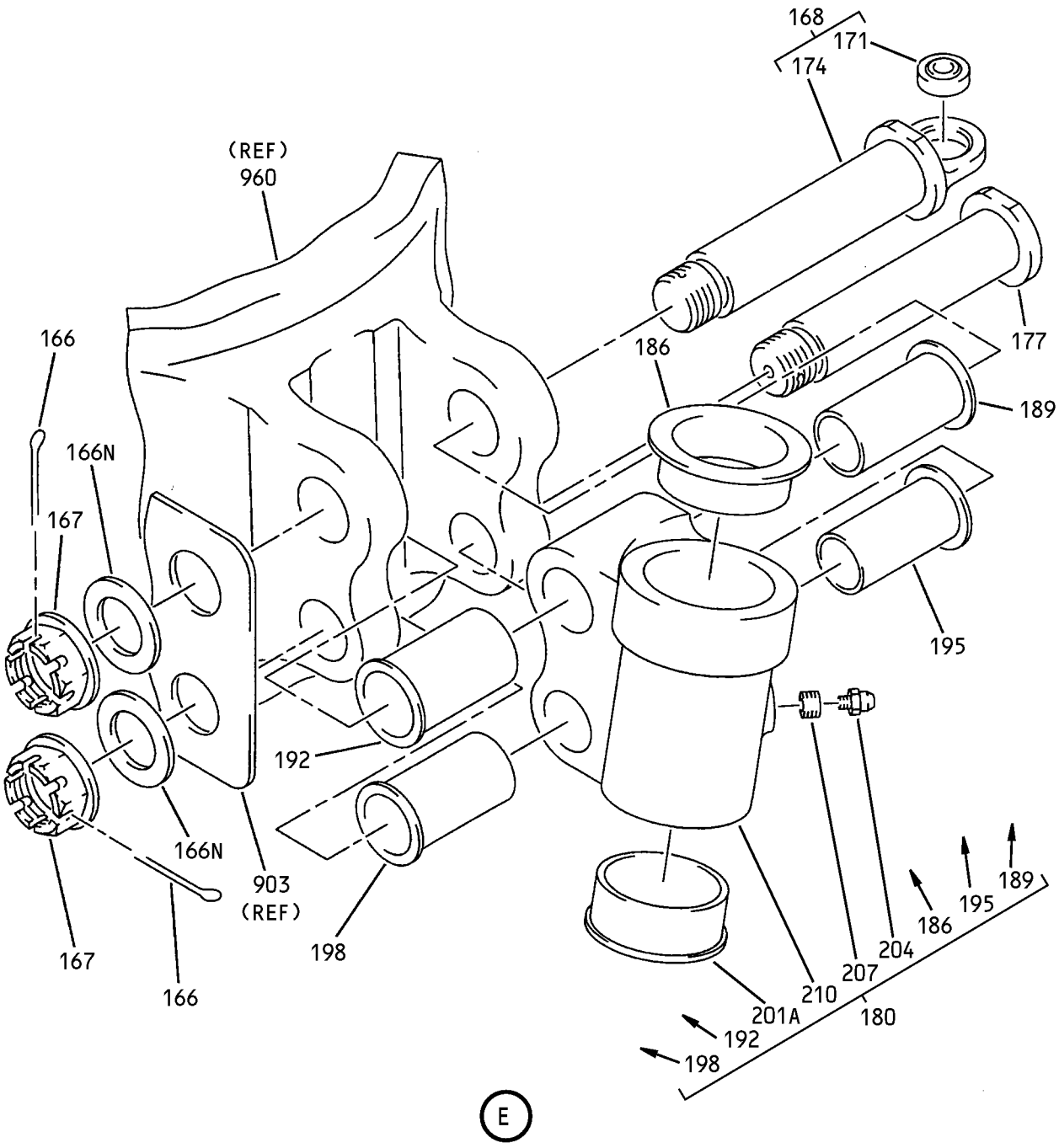


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 3)

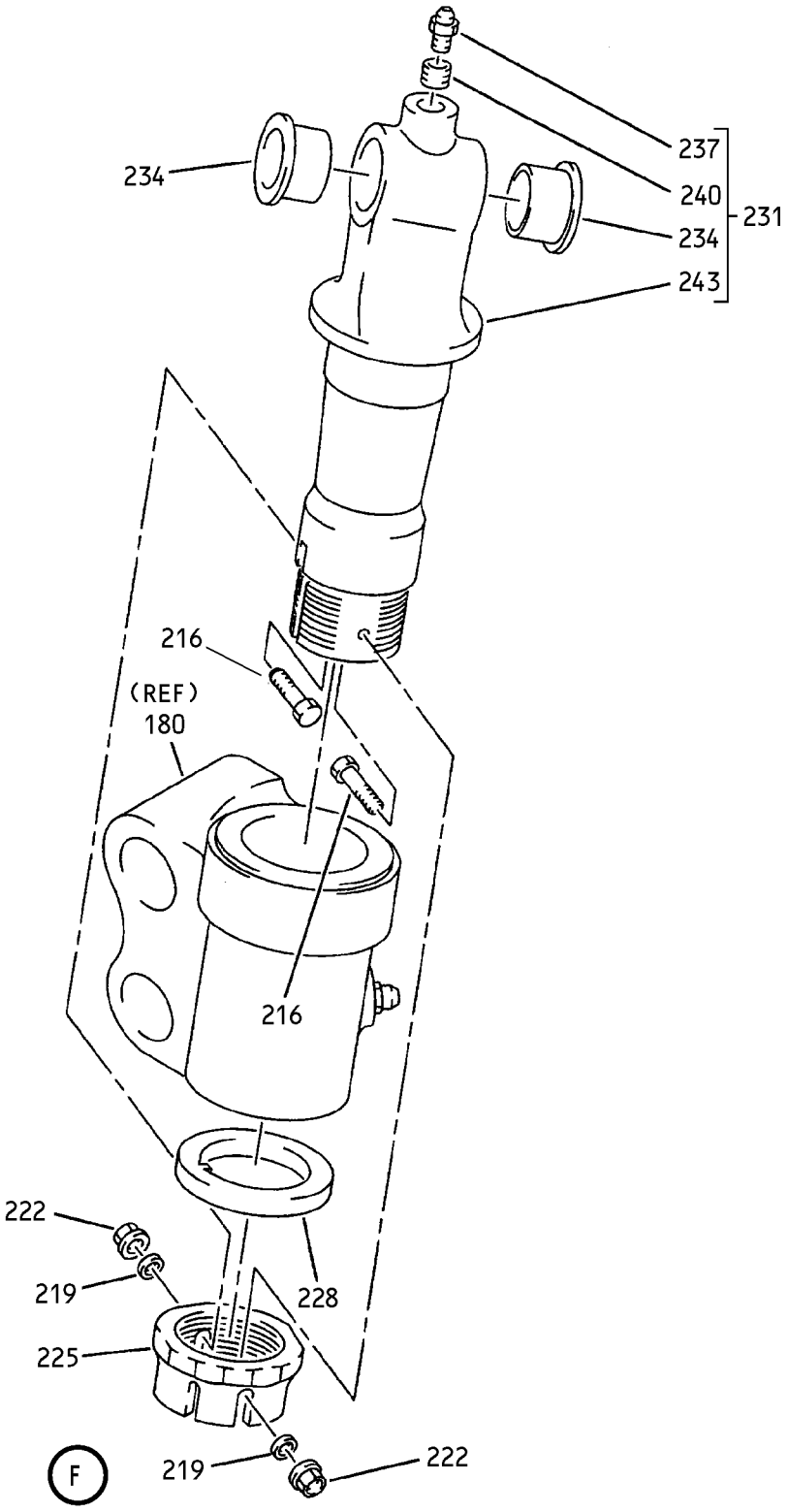
L06187



Main Landing Gear Buildup Assembly
Figure 1 (Sheet 4)

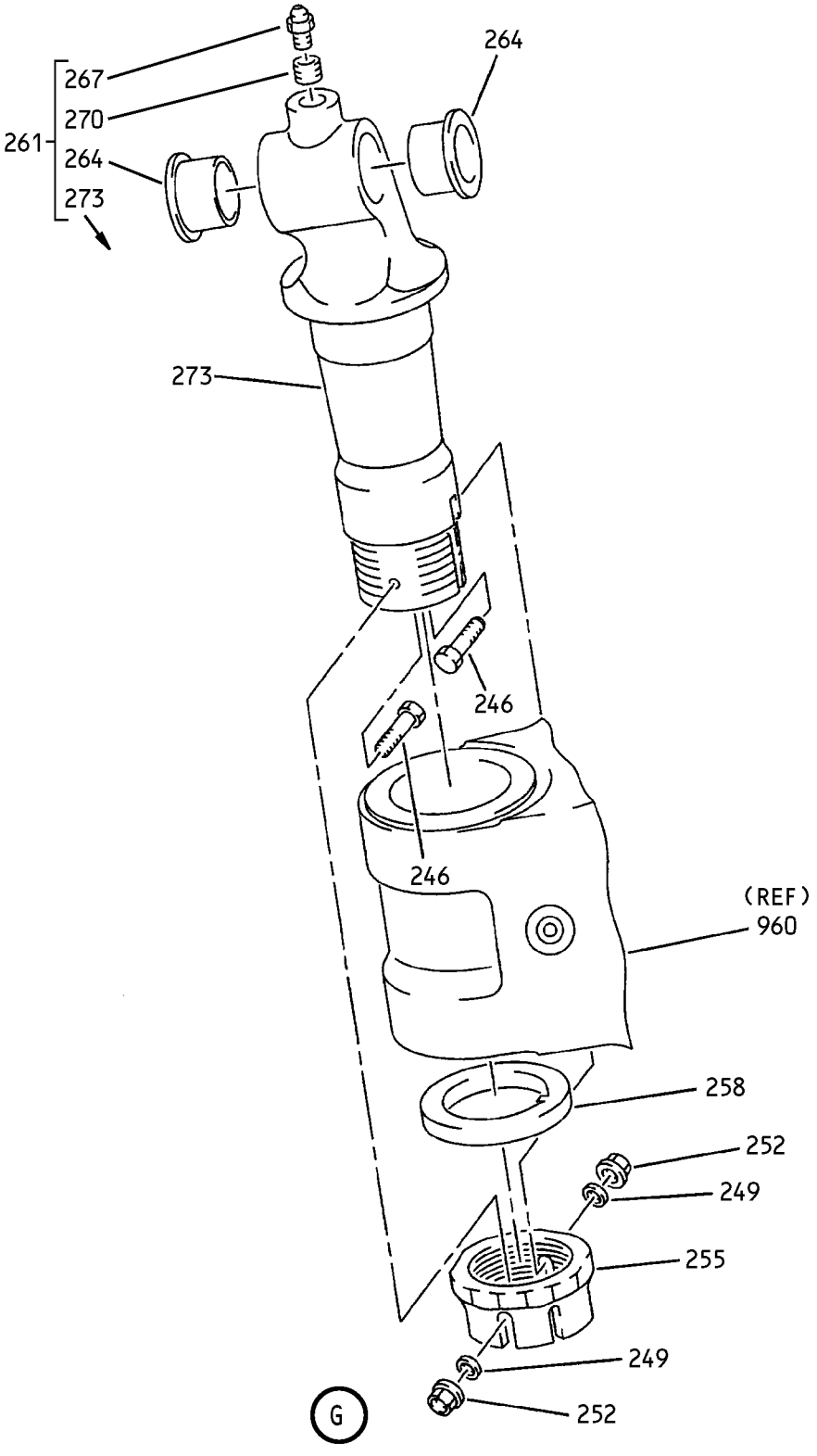


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 5)

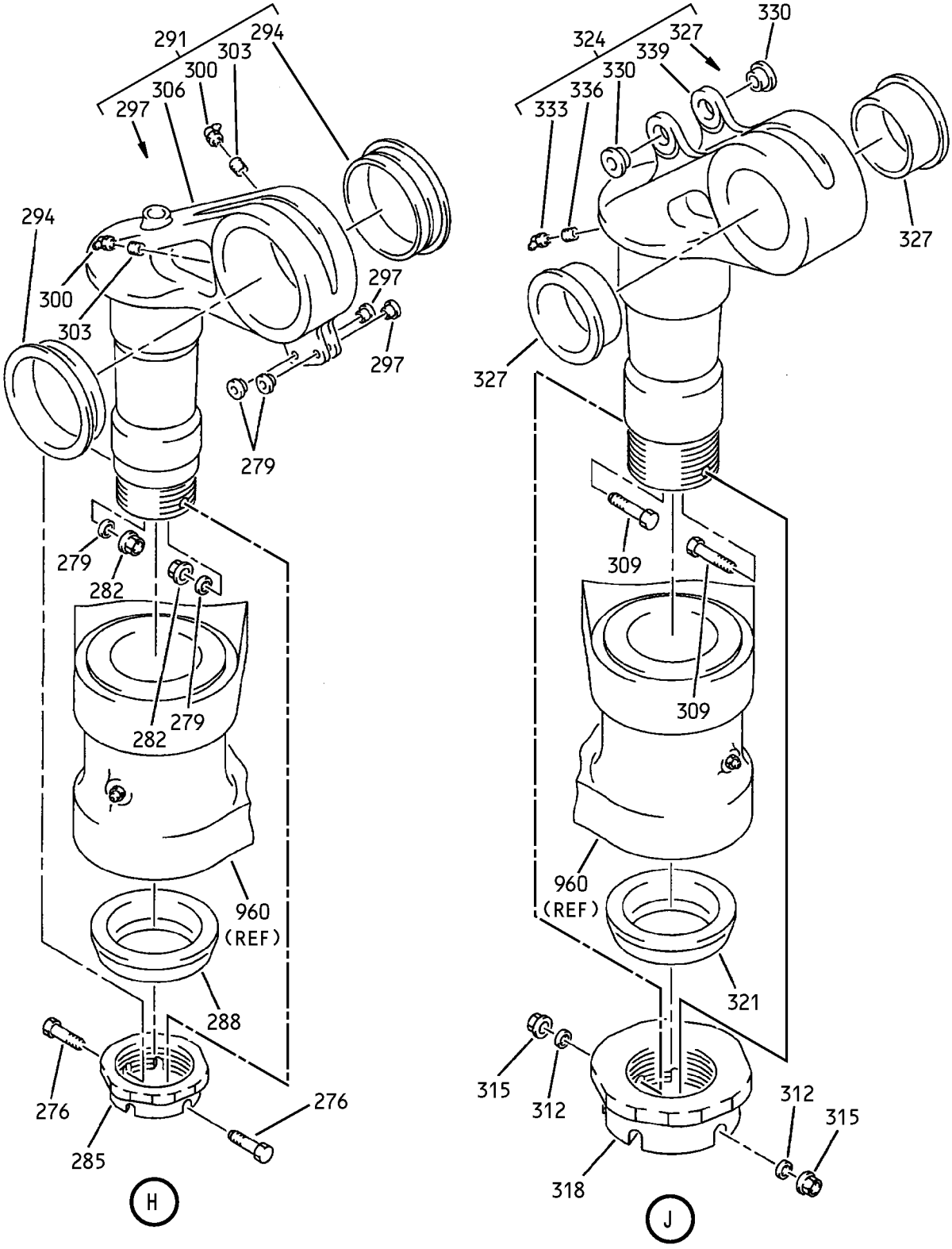


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 6)

L06227

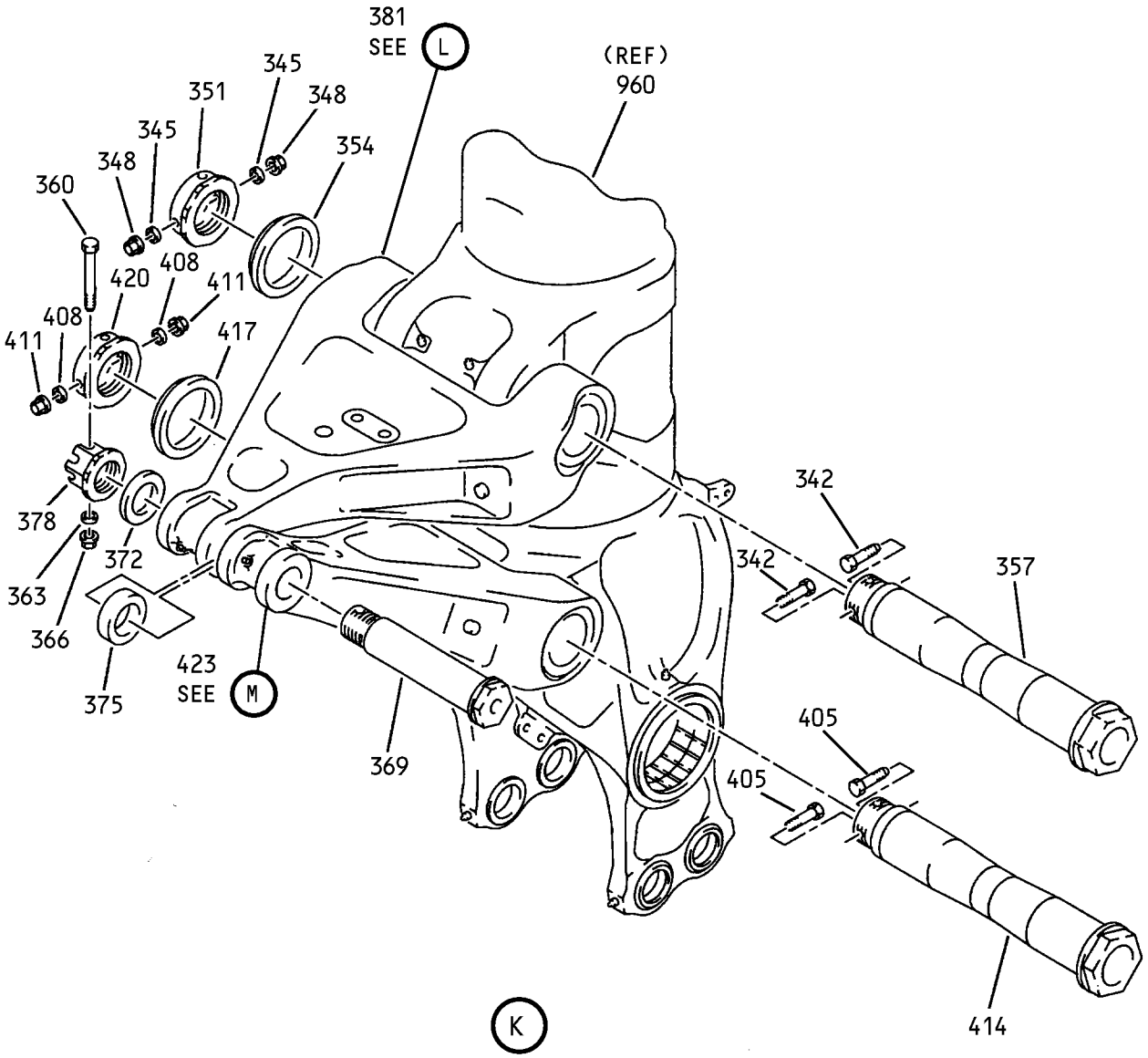


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 7)



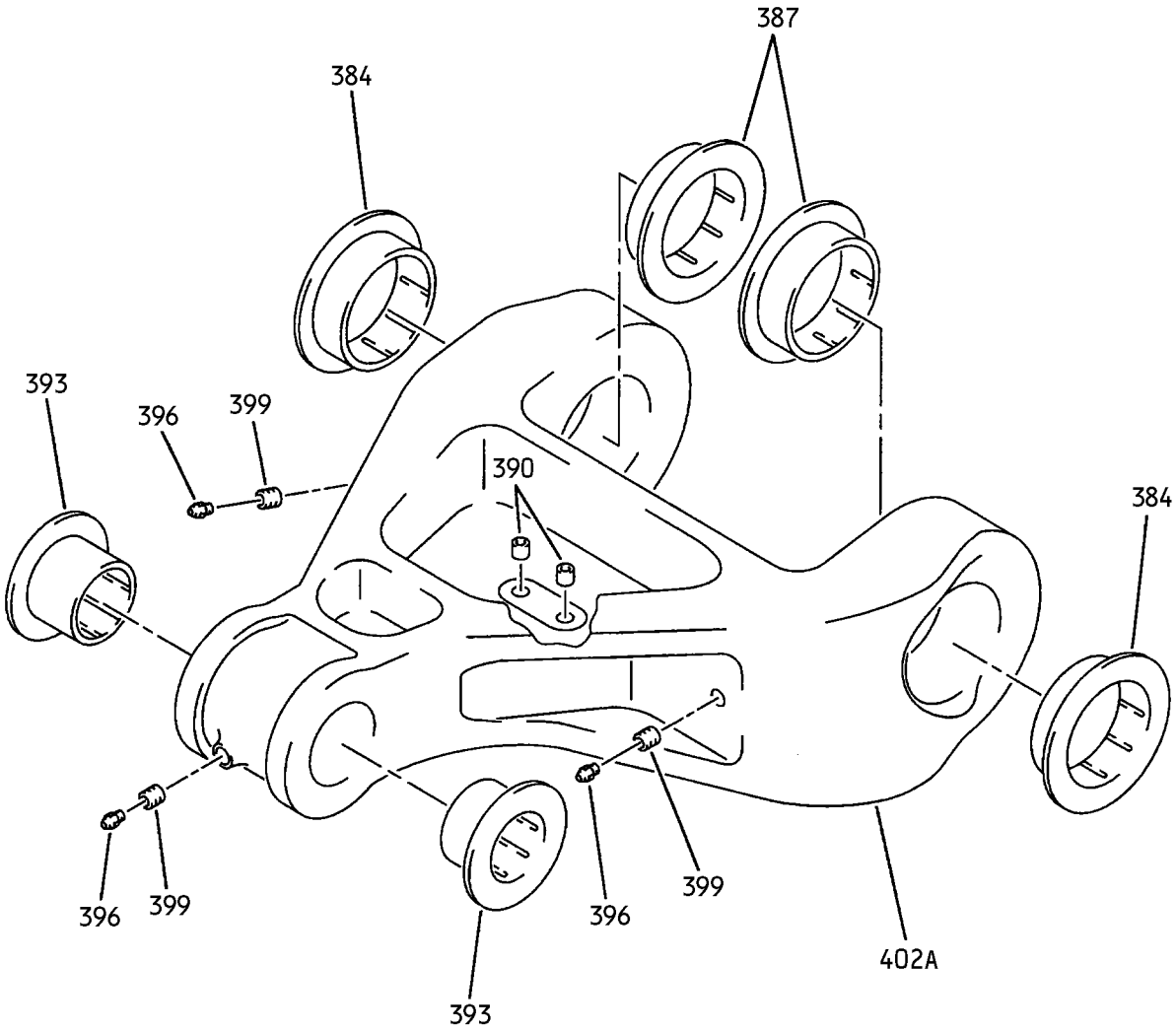
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 8)

L06232

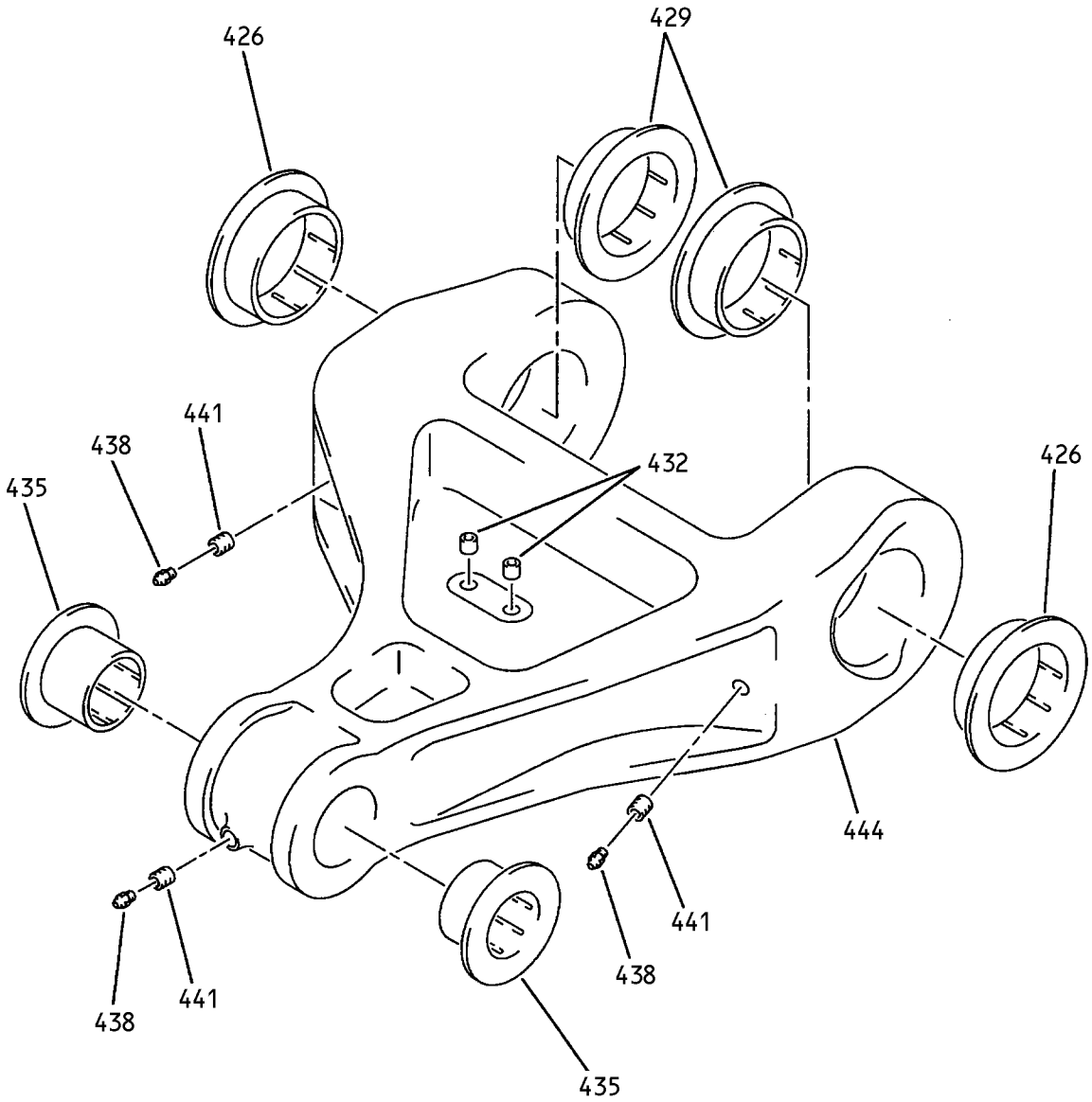


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 9)

L06247

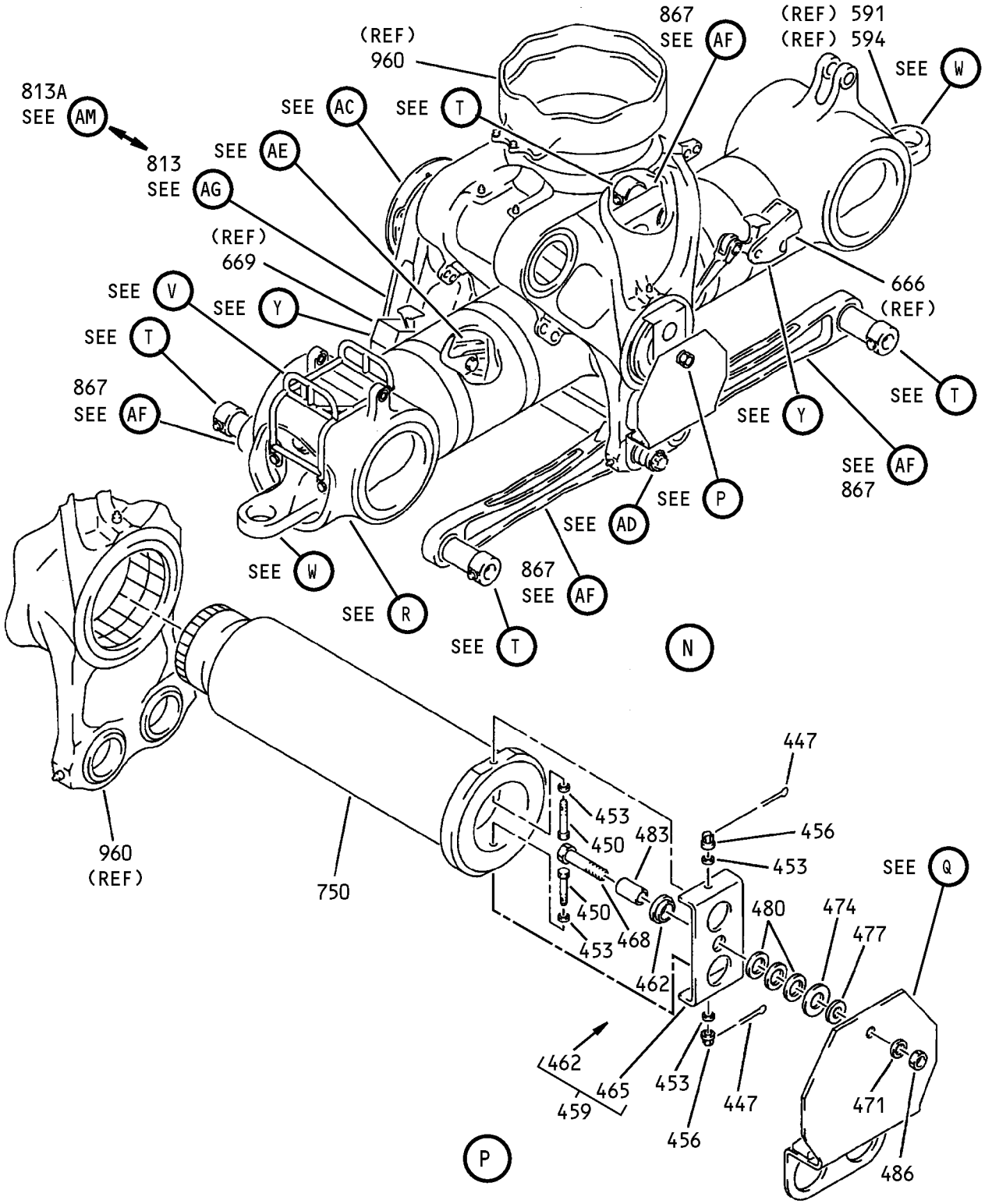


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 10)



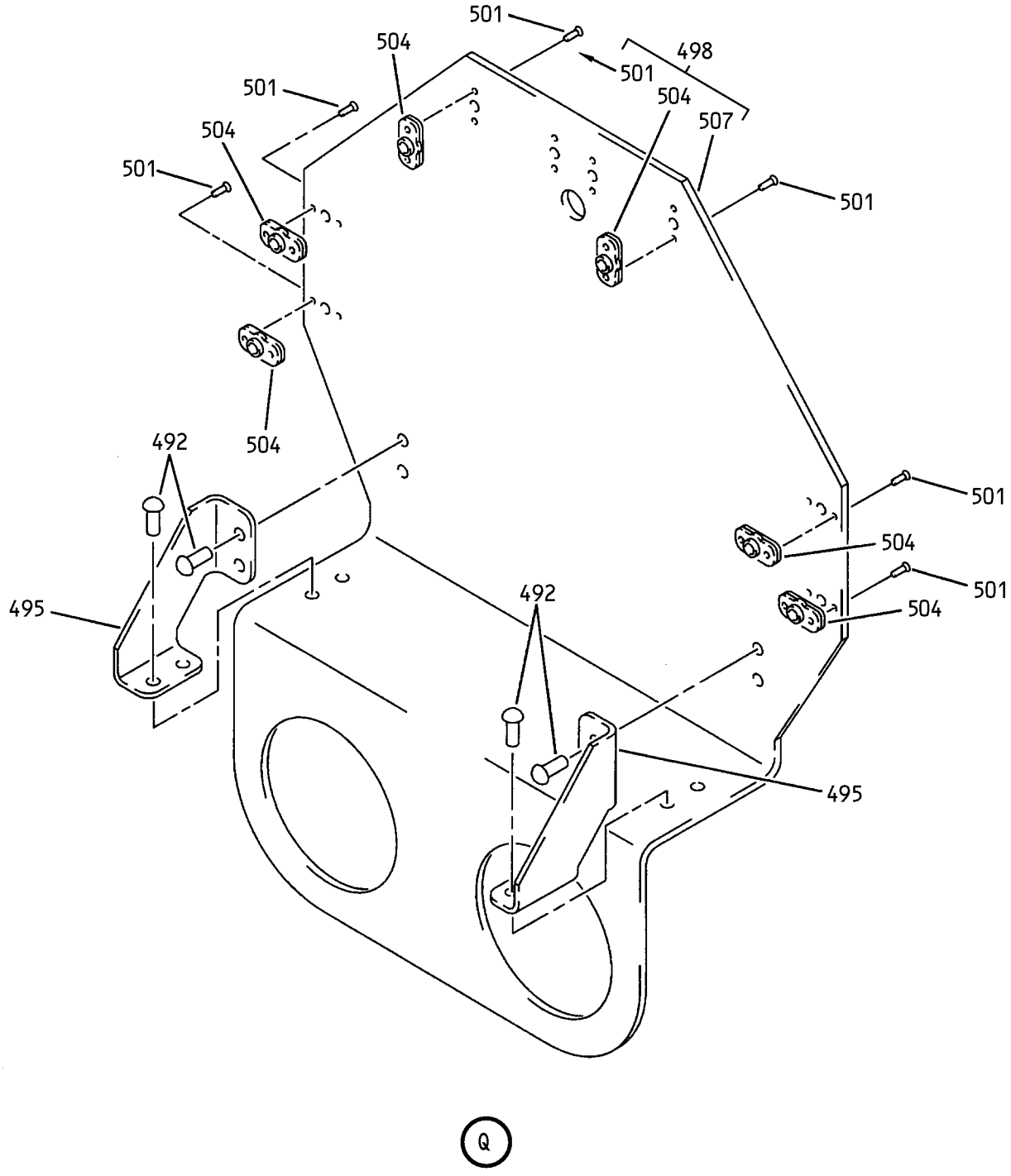
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 11)

L06264

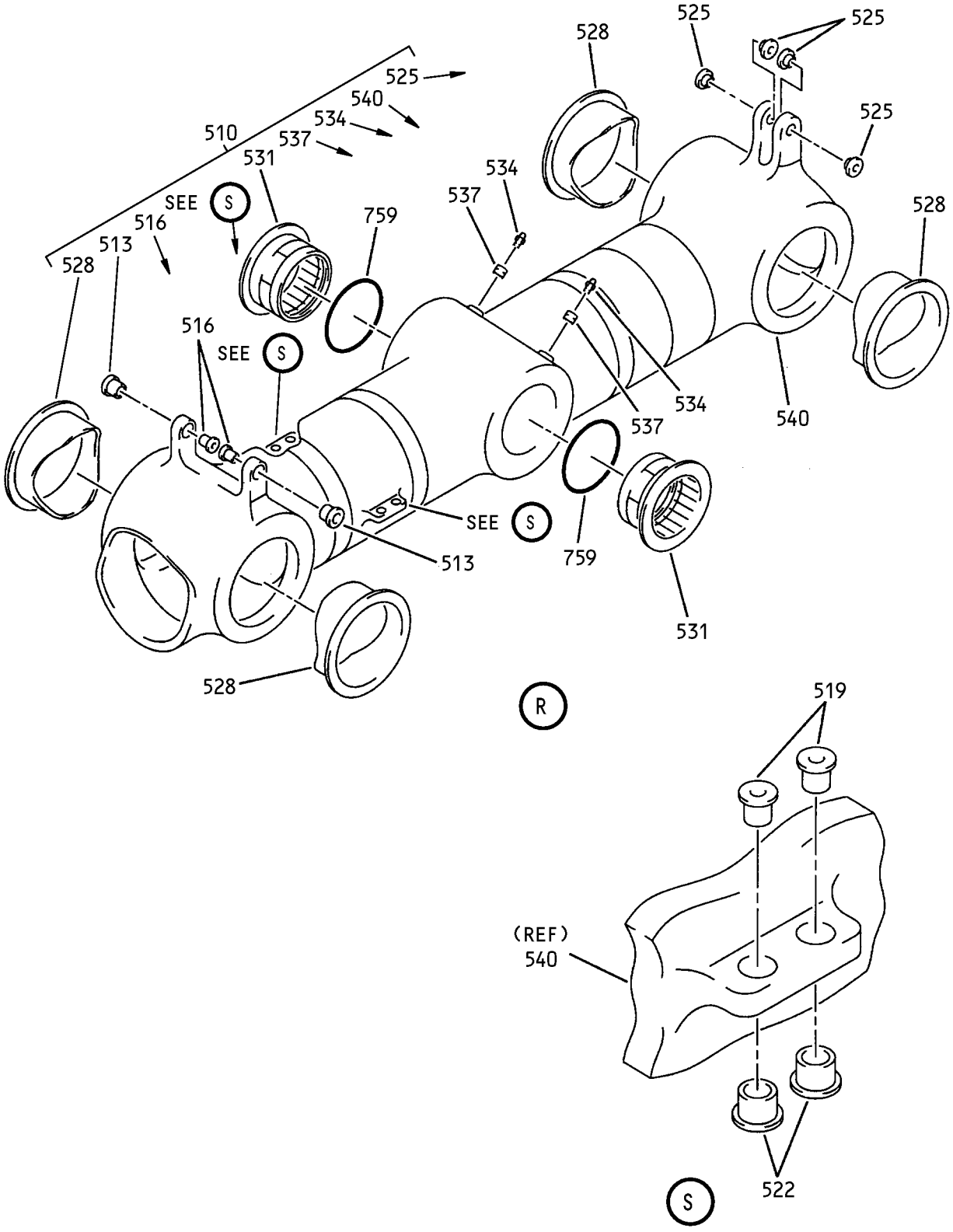


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 12)

L06269

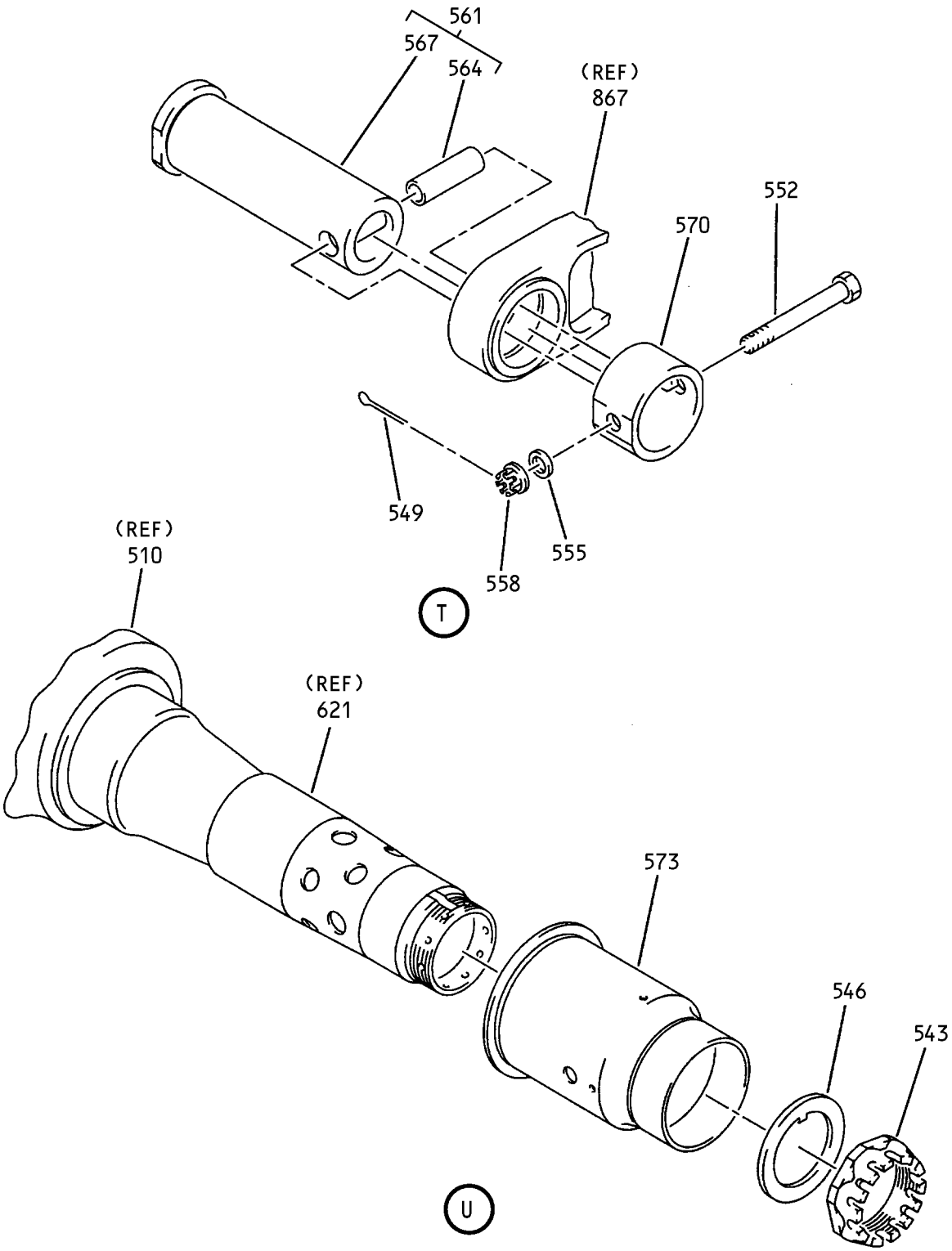


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 13)



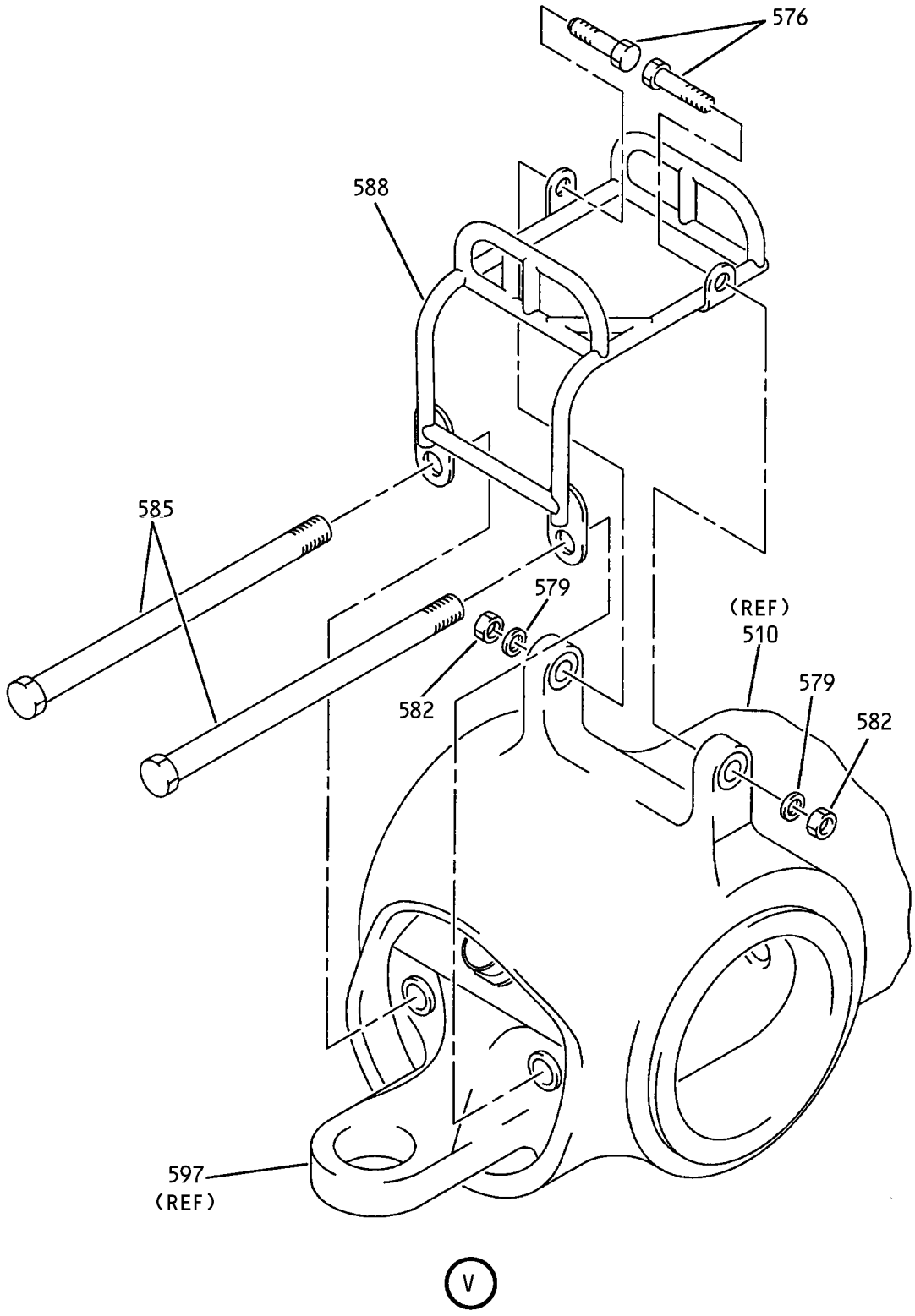
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 14)

L06314

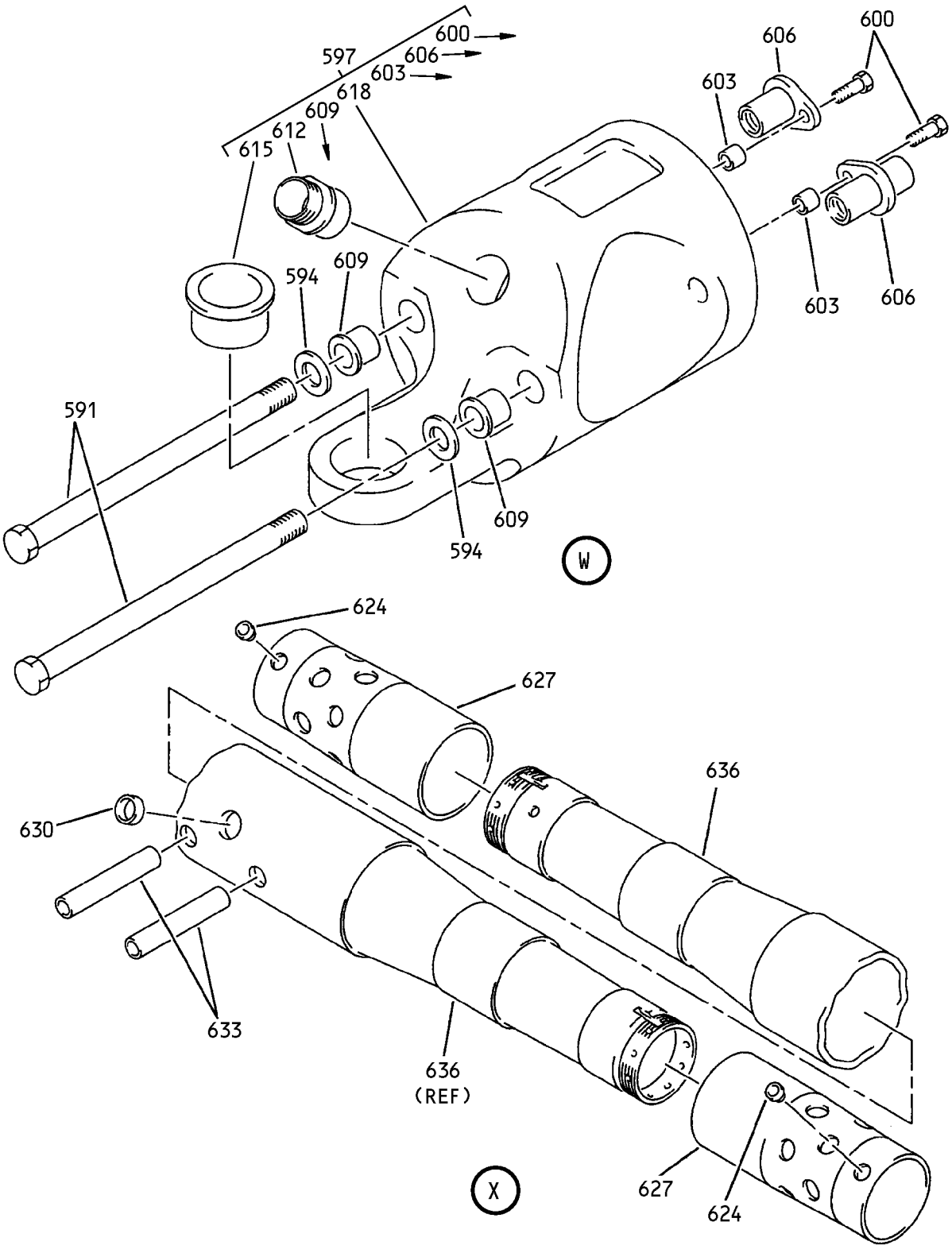


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 15)

L06321

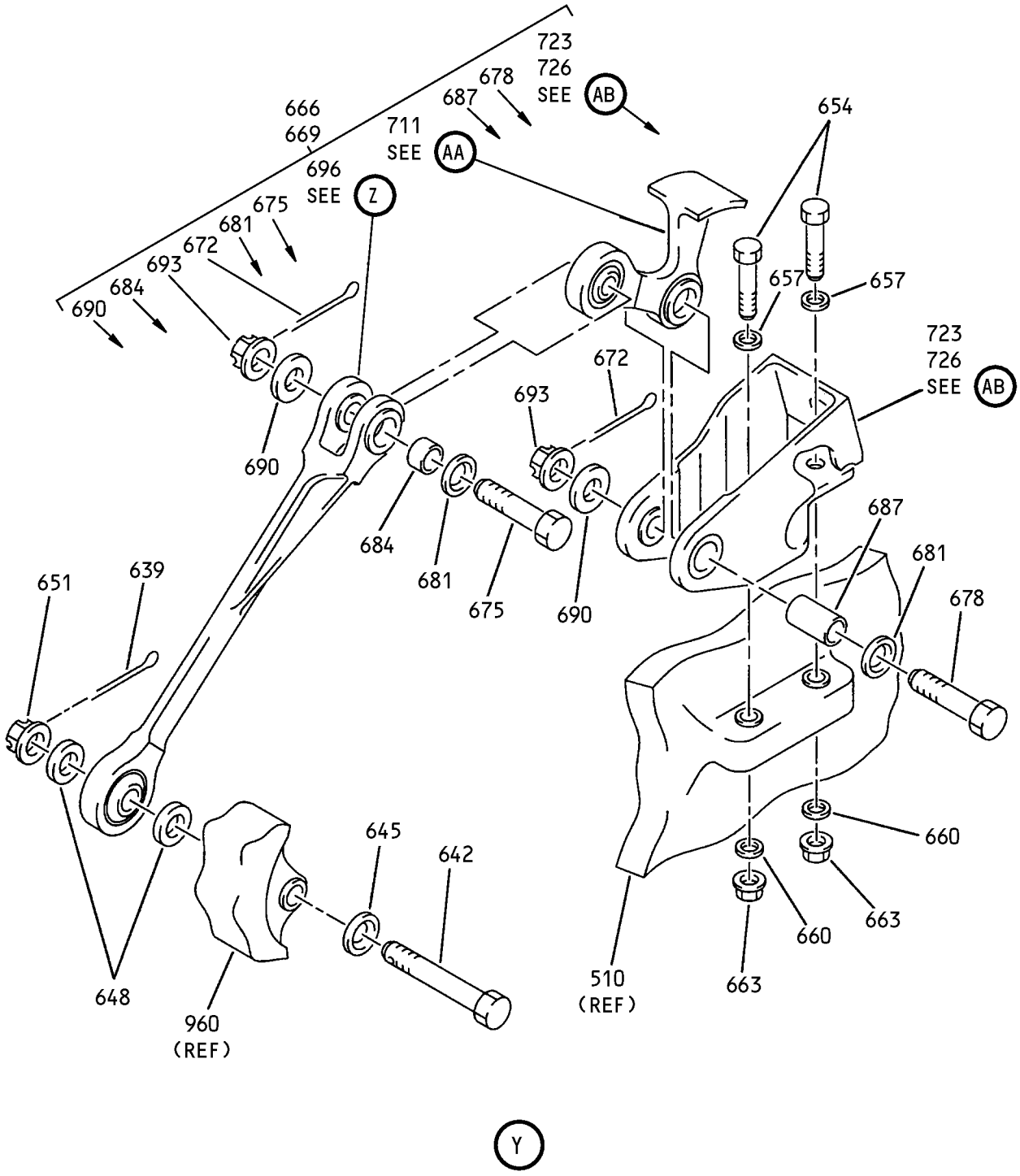


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 16)



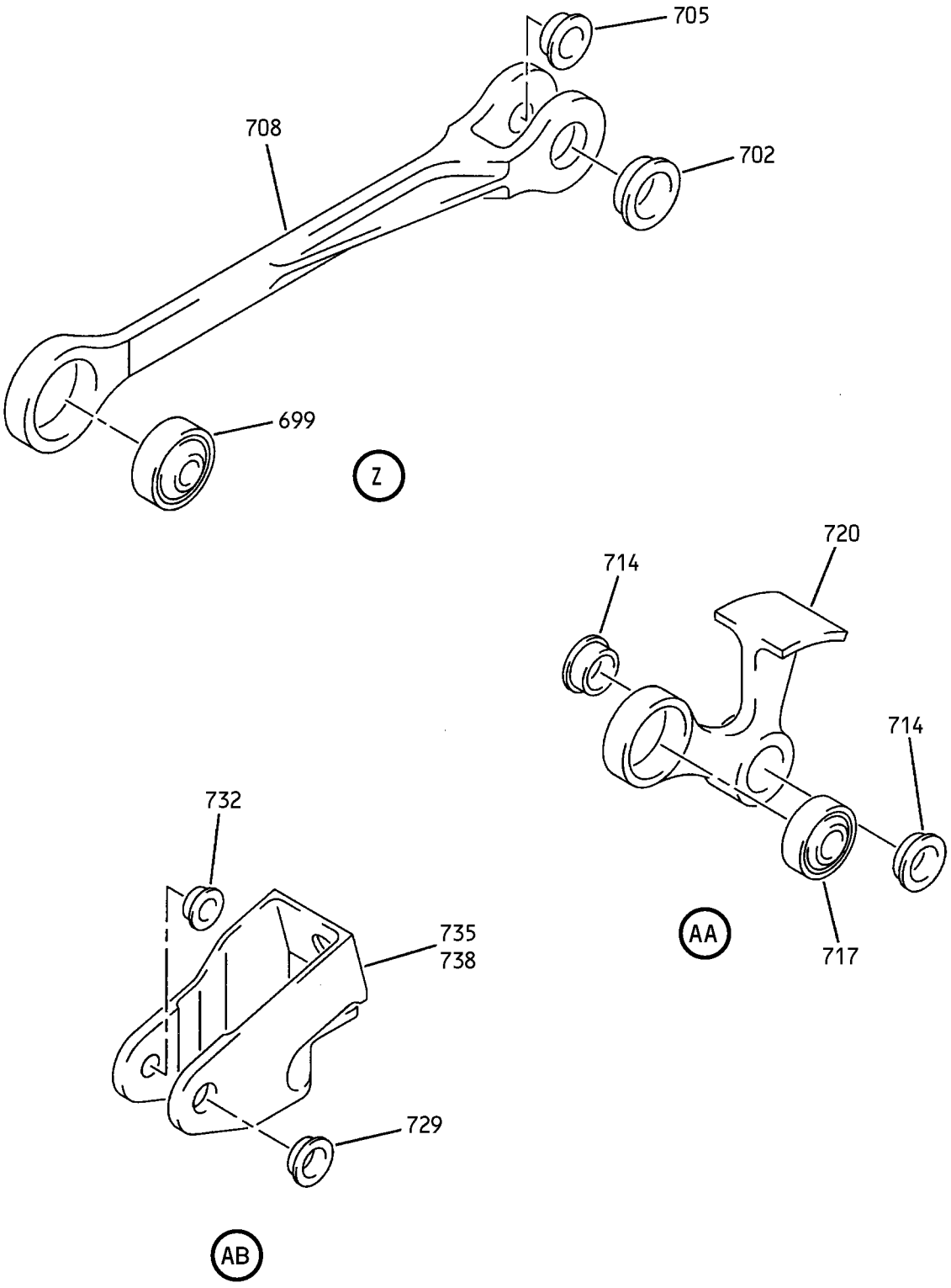
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 17)

L06327



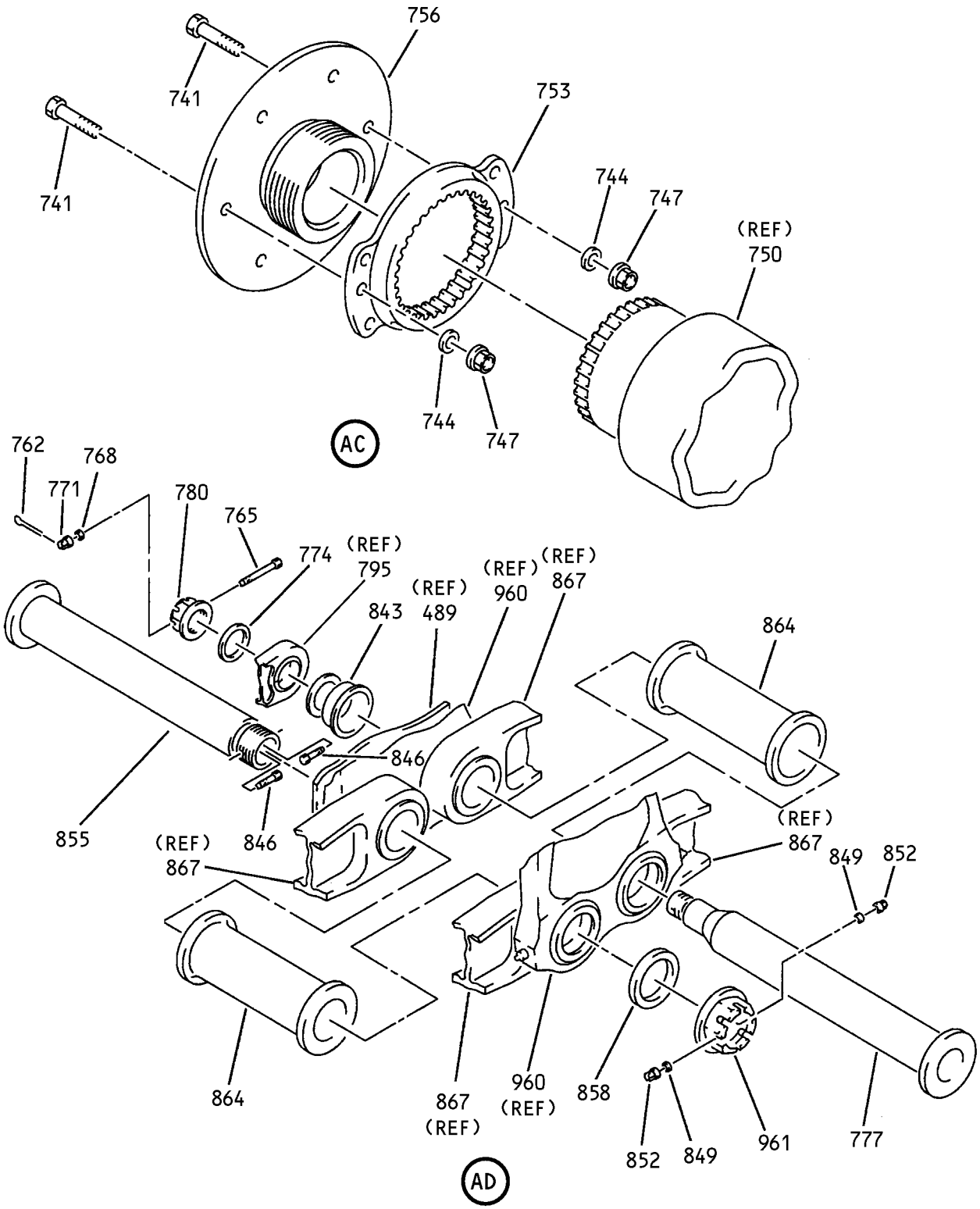
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 18)

L06335

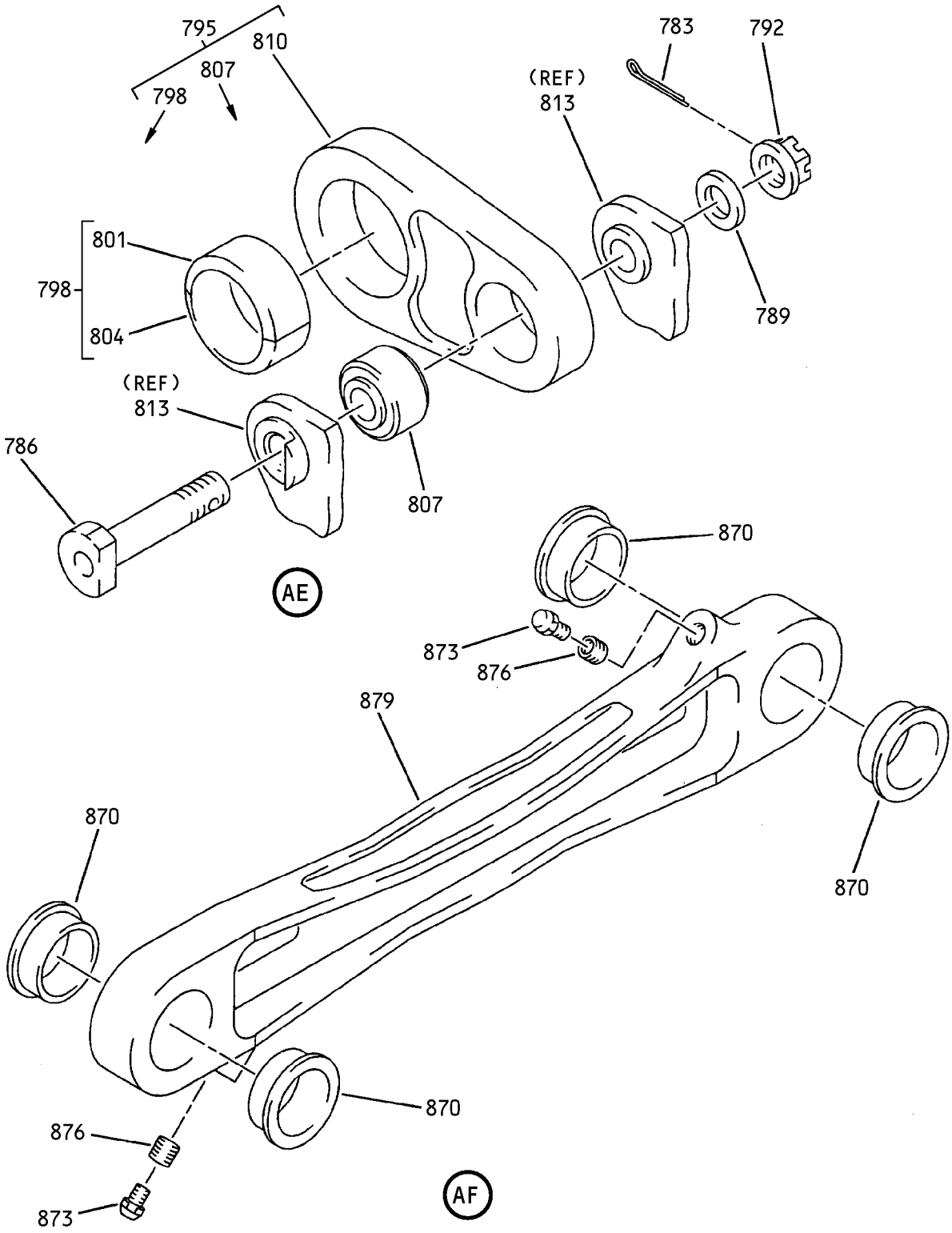


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 19)

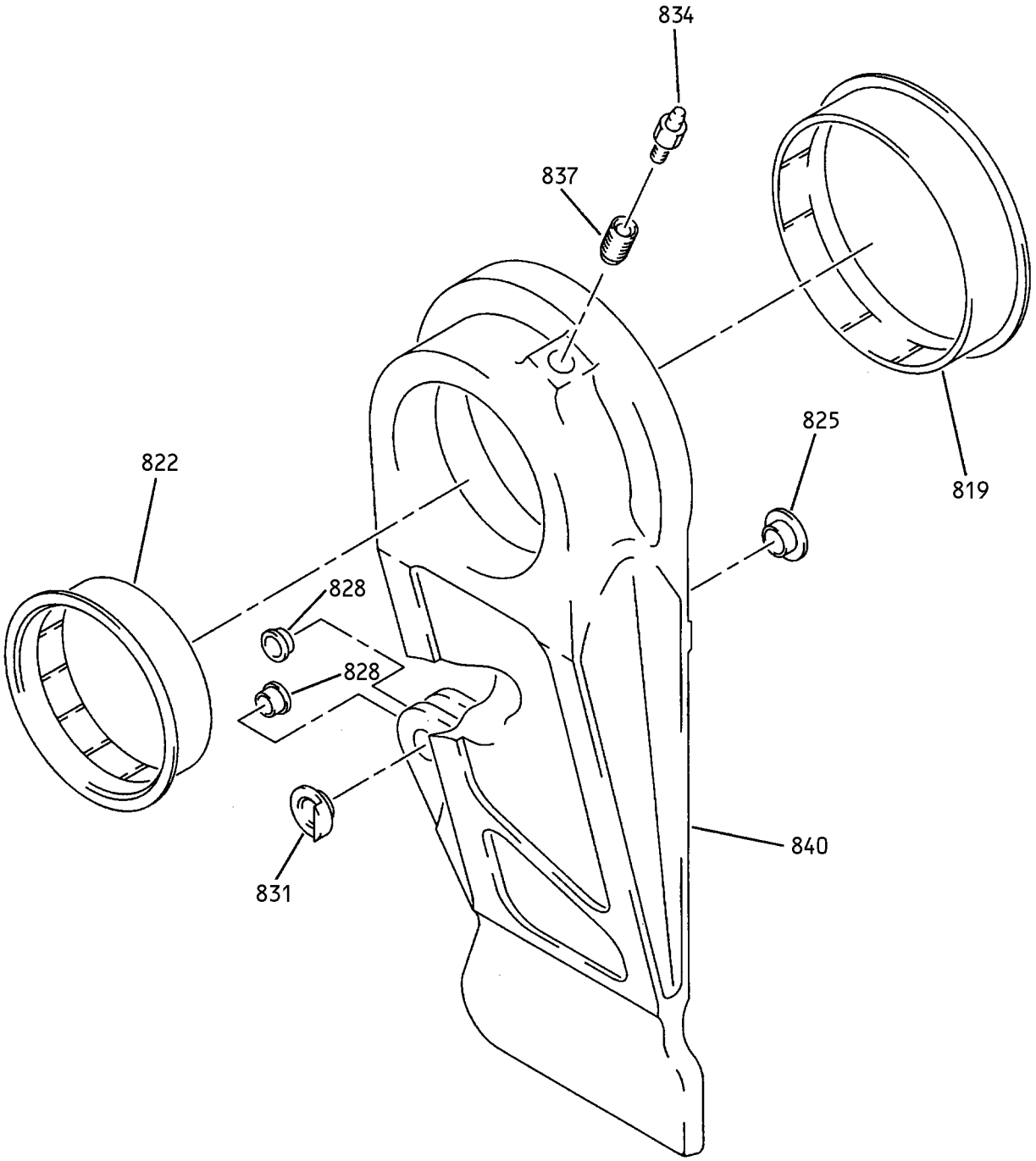
L06362



Main Landing Gear Buildup Assembly
Figure 1 (Sheet 20)

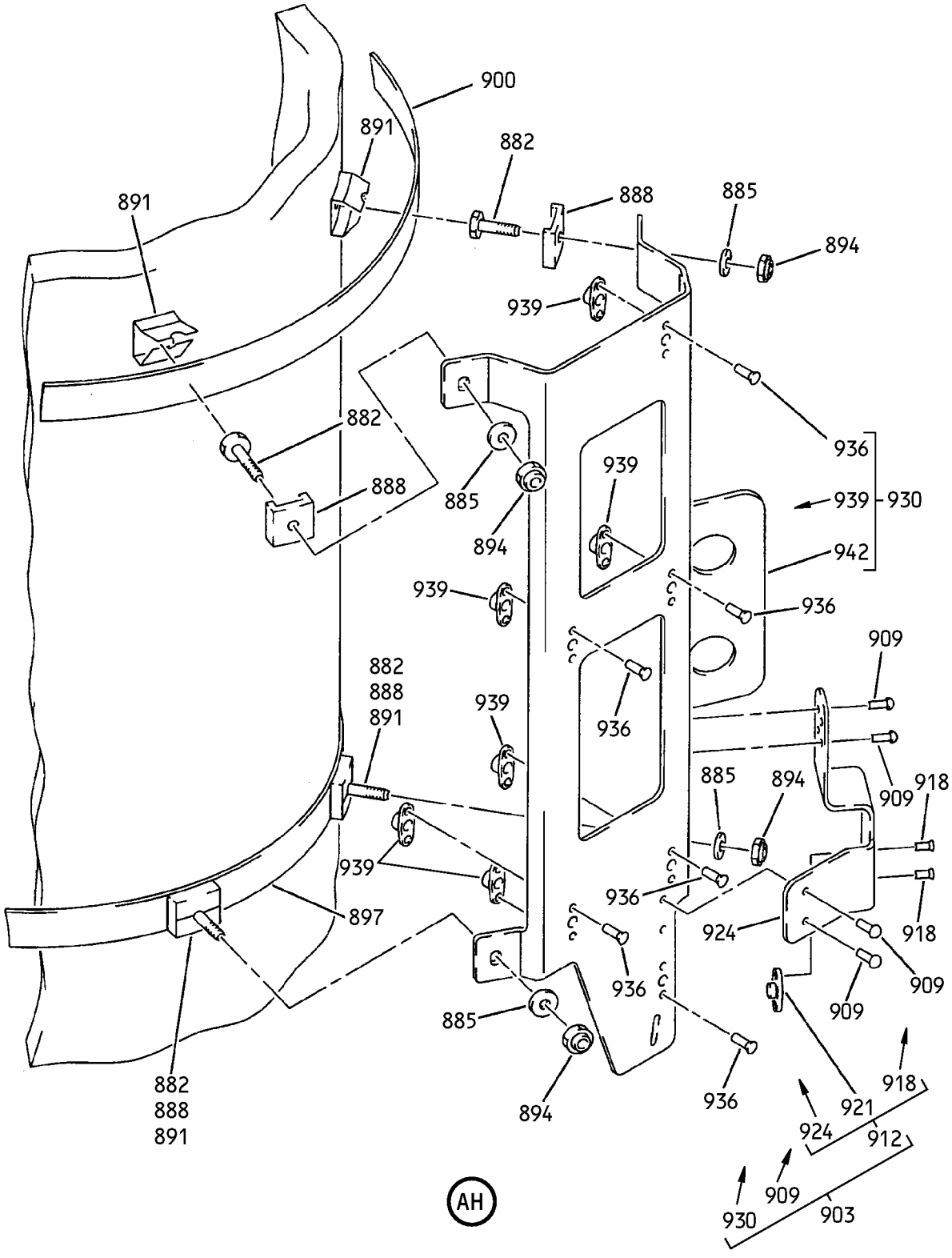


Main Landing Gear Buildup Assembly
Figure 1 (Sheet 21)



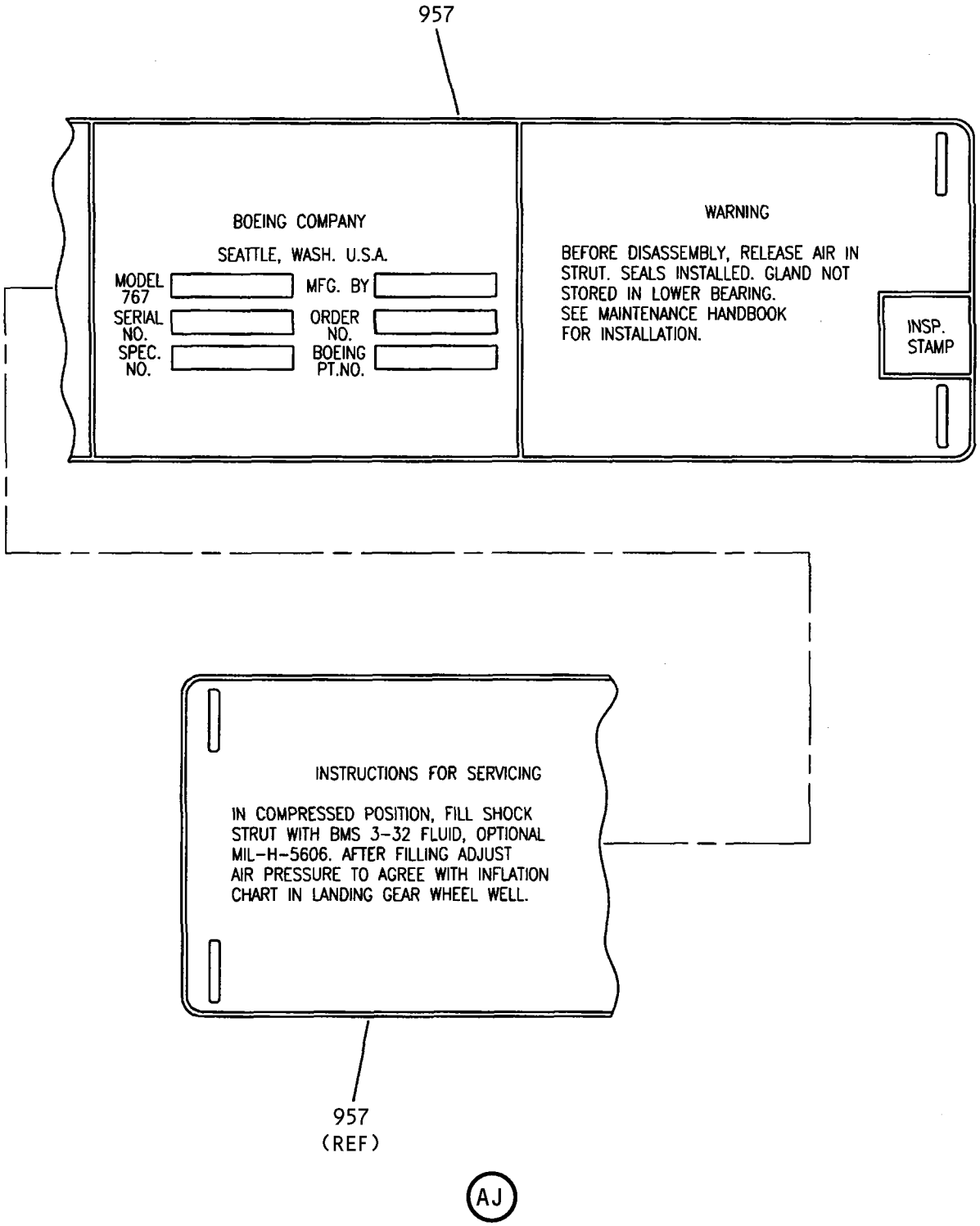
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 22)

L06439



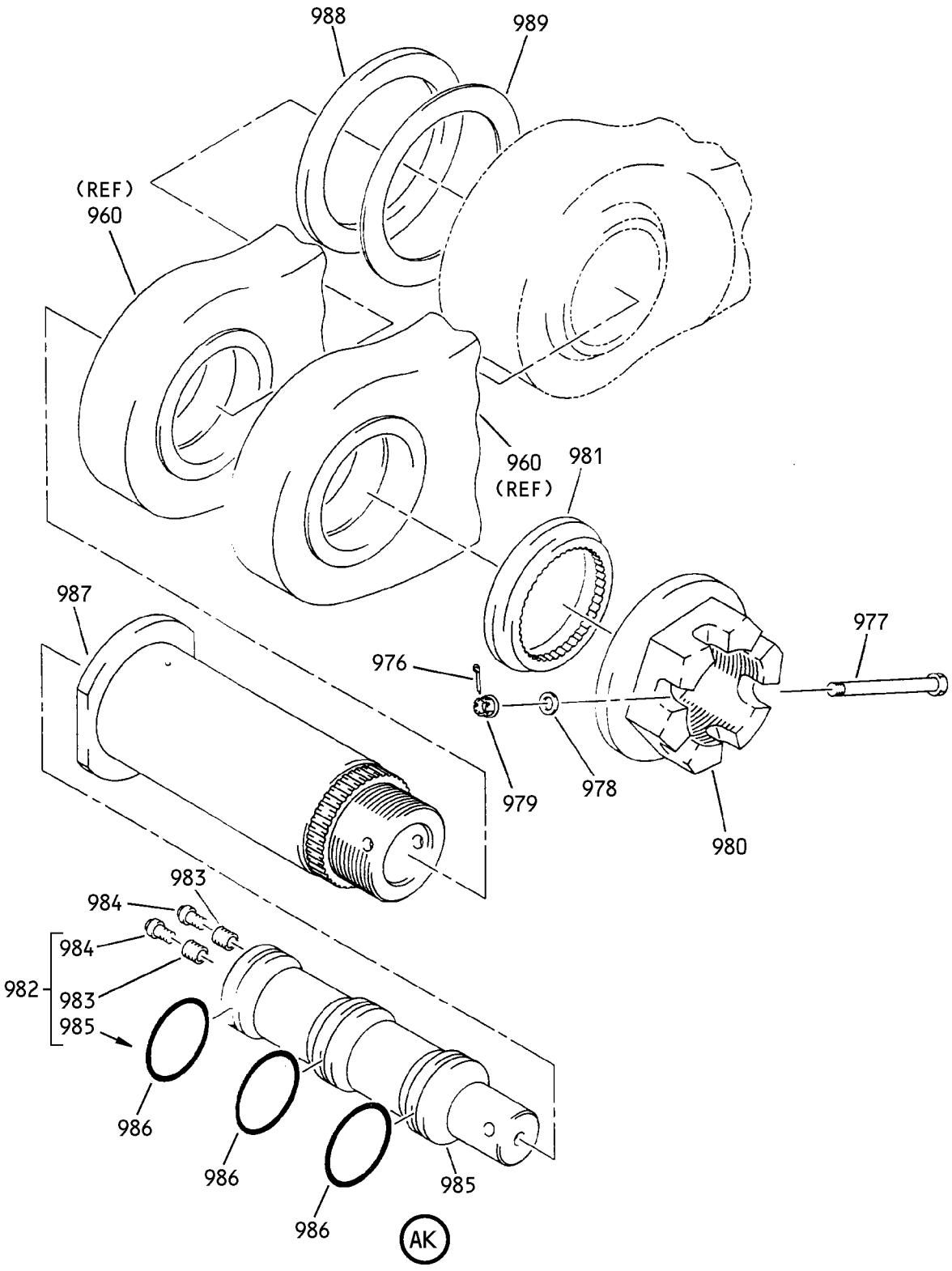
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 23)

L06442



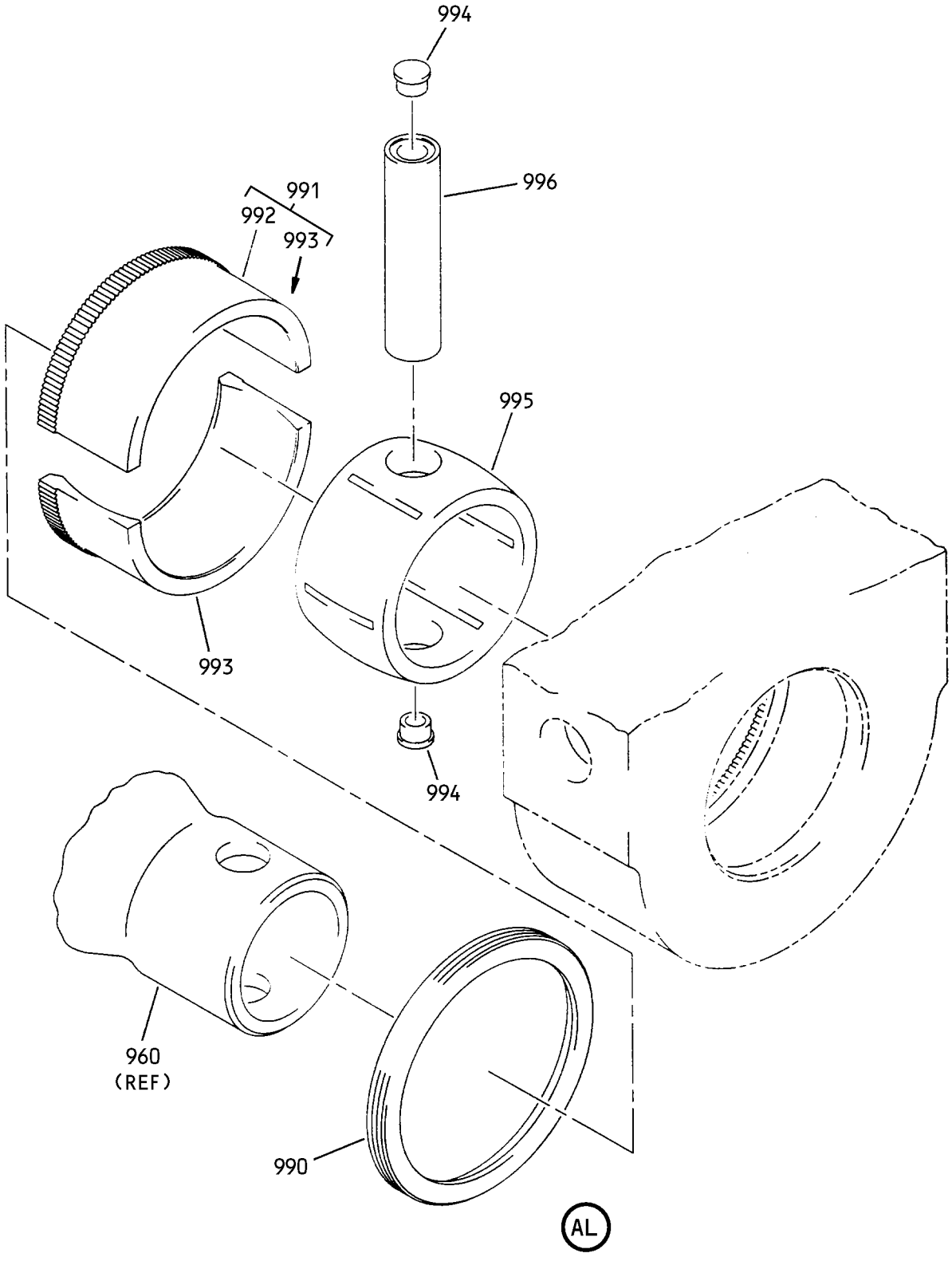
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 24)

L06473



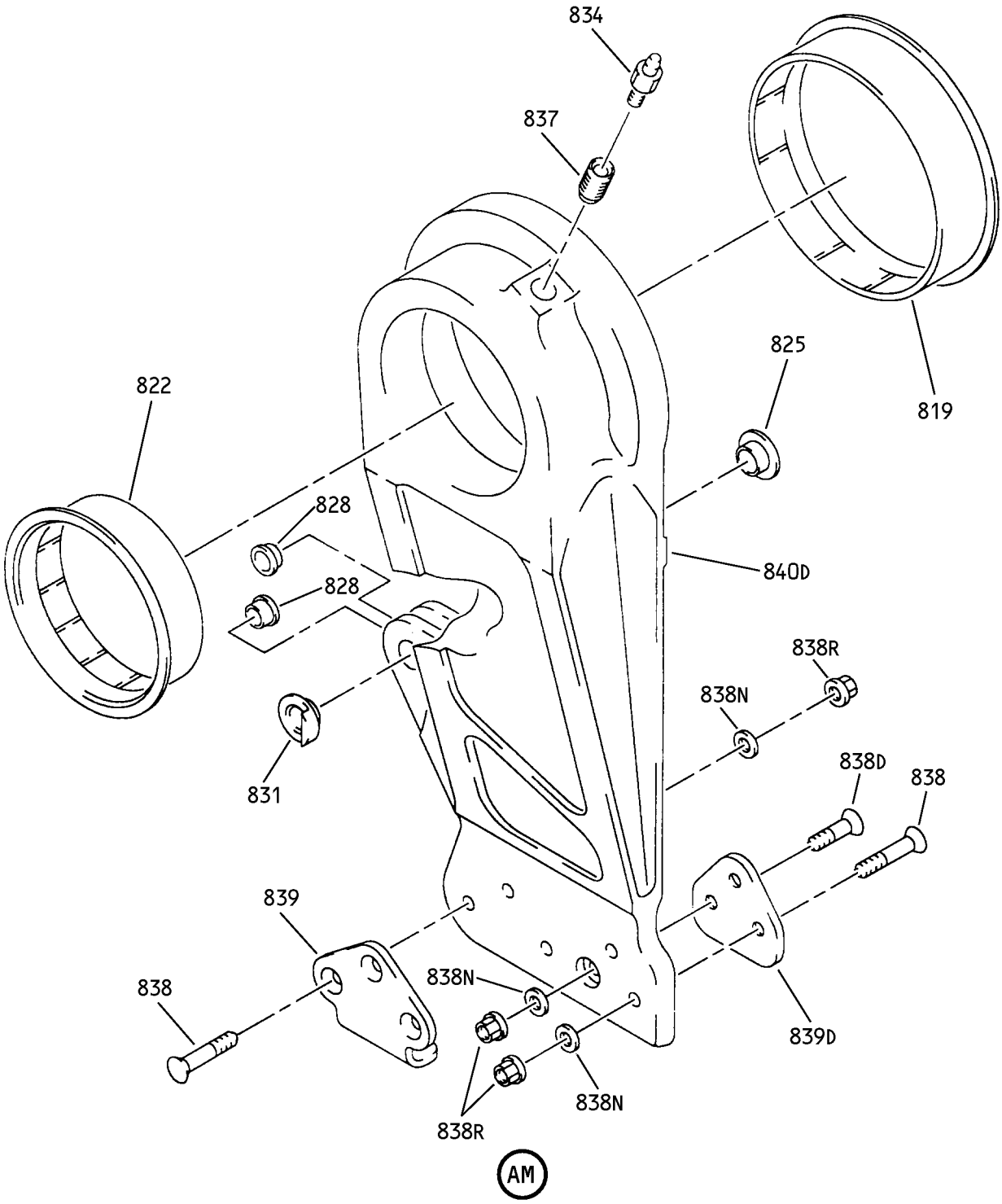
Main Landing Gear Buildup Assembly
Figure 1 (Sheet 25)

L06482



Main Landing Gear Buildup Assembly
Figure 1 (Sheet 26)

L06495



Main Landing Gear Buildup Assembly
Figure 1 (Sheet 27)

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1A	161T7100-1		BUILDUP ASSY-MLG	A	RF
-1B	161T7100-5		BUILDUP ASSY-MLG	C	RF
-3	161T7100-2		BUILDUP ASSY-MLG	B	RF
-3A	161T7100-6		BUILDUP ASSY-MLG	D	RF
6	BACB30NR6K11		.BOLT		1
9	BACB30NR6K4		.BOLT		4
12	BACW10BP6CD		.WASHER		5
15	BACW10BP6DP		.WASHER		1
18	BACN10JC6CD		.NUT		1
21	BACB30LJ12U53		.BOLT		2
24	BACW10BP12CD		.WASHER		2
27	BACW10BP12DP		.WASHER		2
30	H5165O-12BAC		.NUT- (V15653) (SPEC BACN10JC12CD) (OPT 102LH9074-12 (V72962)) (OPT 69235-1216CD (V92215)) (OPT BMN4122CPD8-12 (V97928))		2
33	161T2141-1		DELETED		
-36	161T2141-2		DELETED		
37	161T2141-5		.FITTING ASSY-SIDE STRUT DOWN LOCK ACTR	AC	1
38	161T2141-6		.FITTING ASSY-SIDE STRUT DOWN LOCK ACTR	BD	1
39	161T2874-27		..BUSHING		2
42	161T2874-26		DELETED		
42A	161T2880-1		..BUSHING		4
45	161T2874-25		..BUSHING		4
46	161T2880-1		..BUSHING		4
48	161T2141-3		..FITTING	AC	1
-51	161T2141-4		..FITTING	BD	1
54	161T6122-1		.PIN-FITTING ATTACH DRAG STRUT DOWN LOCK ACTR		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
57	BACW10BP12DP		.WASHER		1
60	NAS1149E1032P		.WASHER		4
63	102LH9074-10		.NUT- (V72962) (SPEC BACN10JC10CD) (OPT H51650-10BAC (V15653)) (OPT 69235-1018CD (V92215)) (OPT BMN4122CPD8-10 (V97928))		2
66	161T6119-1		.FITTING ASSY-L DRAG STRUT DOWN LOCK ACTR	AC	1
-69	161T6119-2		.FITTING ASSY-R DRAG STRUT DOWN LOCK ACTR	BD	1
72	BACB28AU05A033C		..BUSHING		2
75	BACB28AT07A029C		..BUSHING		3
78	161T2874-69		..BUSHING		2
81	161T2874-70		..BUSHING		3
84	161T2874-71		..BUSHING		1
87	161T6119-3		..FITTING	AC	1
-90	161T6119-4		..FITTING	BD	1
93	272T6146-7		.BRACKET ASSY-HYDR SPRT	AC	1
-96	272T6146-8		.BRACKET ASSY-HYDR SPRT	BD	1
99	HL12VAZ6-6		..BOLT- (V56878) (SPEC BACB30NX6K6) (OPT HL12VAZ6-6 (V73197)) (OPT HL12VAZ6-6 (V92215)) (OPT HL12VAZ6-6 (V97928)) (OPT L802-6K6 (V06725)) (OPT HL12-6 (V06725)) (OPT HL12VAZ6-6 (V97928))		8

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
102	HL1087-6		..COLLAR- (V73197) (SPEC BACC30BH6) (OPT HL1087-6 (V56878)) (OPT HL1087-6 (V92215)) (OPT HL1087-6 (V9N513))		8
105	272T6146-35		..BRACKET-SPRT	AC	1
-108	272T6146-36		..BRACKET-SPRT	BD	1
111	272T6146-33		..BRACKET-SPRT	AC	1
-114	272T6146-34		..BRACKET-SPRT	BD	1
117	BACR15FT6AD		..RIVET- (SIZE DETERMINE ON INST)		7
120	272T6146-45		..BRACKET-SPRT		1
123	272T6146-29		..BRACKET ASSY		1
126	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)		4
129	BRFM20C3D		...NUTPLATE- (V52828) (SPEC BACN10JN3CD) (OPT 102F9201M3 (V72962)) (OPT NS202487-02 (V80539)) (OPT MF51637-3 (V15653)) (OPT MF53050-3CD (V15653))		2
132	272T6146-30		..BRACKET-SPRT		1
135	272T6146-27		..BRACKET-SPRT	AC	1
-138	272T6146-28		..BRACKET-SPRT	BD	1
141	272T6146-41		.BRACKET ASSY-HYDR SPRT	AC	1
-144	272T6146-42		.BRACKET ASSY-HYDR SPRT	BD	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
147	BACR15BA3AD		..RIVET- (SIZE DETERMINE INST)		4
150	BRFM20C3D		..NUTPLATE- (V52828) (SPEC BACN10JN3CD) (OPT 102F9201M3 (V72962)) (OPT NS202487-02 (V80539)) (OPT MF51637-3 (V15653)) (OPT MF53050-3CD (V15653))		2
153	BACR15BA4AD		..RIVET- (SIZE DETERMINE ON INST)		8
156	K51602-6BAC		..NUTPLATE- (V15653) (SPEC BACN10JR6CFD) (OPT NS202476-064 (V80539)) (OPT 102F9201-6 (V72962)) (OPT T8092C624CD (V11815)) (OPT BRF200C6D (V52828))		4
159	272T6146-31		..BRACKET-SPRT		1
162	272T6146-43		..BRACKET-SPRT	AC	1
-165	272T6146-44		..BRACKET-SPRT	BD	1
166	BACP18BC04C18P		.PIN-COTTER		4
166N	NAS1149E1832P		.WASHER		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
167	BACN11N118CD		.NUT		2
168	161T6121-1		.PIN ASSY-DRAG STRUT LOCK LINK SPINDLE		1
171	ADB8V301NC		..BEARING- (V15860) (SPEC BACB10FB08GC) (OPT HTFB08VC (V50294)) (OPT KNDB8-70 (V97613)) (OPT KSC145700BZ8GC (V50632)) (OPT NRRS08FBGC (V73134)) (OPT WES08GC (V73134))		1
174	161T6121-2		..PIN		1
177	161T6122-2		.PIN-FITTING ATTACH DRAG STRUT LOCK LINK SPINDLE		1
180	161T6118-1		.FITTING ASSY-L DRAG STRUT LOCK LINK SPINDLE	AC	1
-183	161T6118-2		.FITTING ASSY-R DRAG STRUT LOCK LINK SPINDLE	BD	1
186	161W1329-1		..BUSHING		1
189	161T2874-6		..BUSHING		1
192	161T2874-7		..BUSHING		1
195	161T2874-8		..BUSHING		1
198	161T2874-9		..BUSHING		1
201	161T1329-2		DELETED		
201A	161W1329-2		..BUSHING		1
204	MS15004-1		..FITTING-LUBE		1
207	161W7010-1		..INSERT-THREADED		1
210	161T6118-3		..FITTING	AC	1
-213	161T6118-4		..FITTING	BD	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
216	NAS6704-7		.BOLT		2
219	BACW10BP4NDP		.WASHER		2
222	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
225	161N1811-1		.NUT		1
228	161W0125-1		.WASHER-LOCK LINK SPINDLE		1
231	161T6130-1		.SPINDLE ASSY-DRAG STRUT LOCK LINK		1
234	161W4031-1		..BUSHING		2
237	MS15004-1		..FITTING-LUBE		1
240	161W7010-1		..INSERT-THREADED		1
243	161T6130-2		..SPINDLE		1
246	NAS6704-7		.BOLT		2
249	BACW10BP4NDP		.WASHER		2
252	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
255	161N1811-1		.NUT		1
258	161W0125-1		.WASHER-LOCK LINK SPINDLE		1
261	161T2121-1		.SPINDLE ASSY-SIDE STRUT LOCK LINK		1
264	161W4031-1		..BUSHING		2
267	MS15004-1		..FITTING-LUBE		1
270	161W7010-1		..INSERT-THREADED		1
273	161T2121-2		..SPINDLE		1
276	NAS6704-11		.BOLT		2
279	BACW10BP4NDP		.WASHER		2
282	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
285	161T2126-1		.NUT-LWR SPINDLE		1
288	161T7123-1		.WASHER-SPLINED		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
291	161T2108-1		.SPLINDLE ASSY- LWR SIDE STRUT		1
294	161T2874-11		..BUSHING		2
297	161T2874-12		..BUSHING		4
300	MS15004-1		..FITTING-LUBE		2
303	161W7010-1		..INSERT-THREADED		2
306	161T2108-2		..SPINDLE		1
309	NAS6704-21		.BOLT		2
312	BACW10BP4NDP		.WASHER		2
315	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
318	161T6114-2		.NUT-LWR SPINDLE DRAG STRUT		1
321	161T6132-5		.WASHER-SPLINED DRAG STRUT		1
324	161T6105-1		.SPINDLE ASSY-LWR DRAG STRUT		1
327	161T2874-3		..BUSHING		2
330	161T2874-4		..BUSHING		2
333	MS15004-1		..FITTING-LUBE		1
336	161W7010-1		..INSERT-THREADED		1
339	161T6105-2		..SPINDLE		1
342	NAS6704-10		.BOLT		2
345	BACW10BP4NDP		.WASHER		2
348	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
351	161T7122-1		.NUT-TORSION LINK PIN		1
354	161T7123-2		.WASHER-SPLINED		1
357	161T7125-1		.PIN-TORSION LINK ATTACH UPR		1
360	NAS6704D46		.BOLT- (OPT ITEM 360)		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-360A	NAS6704-46		.BOLT-		1
			(OPT ITEM 360)		
363	NAS1149E0432P		.WASHER		1
366	BACN11N4CD		.NUT		1
369	161W1144-1		.PIN-TORSION LINK APEX		1
372	161W1235-1		.WASHER-SPLINED		1
			TORSION LINK APEX		
375	161W1234-1		.SPACER		1
378	161W1149-1		.NUT-TORSION LINK APEX		1
381	161T7142-1		.LINK ASSY-TORQUE UPR		1
384	161T2874-77		..BUSHING		2
387	161T2875-1		..BUSHING		2
390	BACB28Y4F044		..BUSHING		2
393	161W1238-3		..BUSHING		2
396	MS15004-1		..FITTING-LUBE		3
399	161W7010-1		..INSERT-THREADED		3
402	161T1142-2		..BUSHING-TORQUE		1
402A	161T7142-2		..BUSHING-TORQUE		1
405	NAS6704-10		.BOLT		2
408	BACW10BP4NDP		.WASHER		2
411	H52732-4CD		.NUT-		2
			(V15653)		
			(SPEC BACN10YR4CD)		
			(OPT PLH54CD		
			(V62554))		
414	161T7125-2		.PIN-TORSION LINK		1
			ATTACH LWR		
417	161T7123-1		.WASHER-SPLINED		1
420	161T7122-1		.NUT-TORSION LINK PIN		1
423	161T7144-1		.LINK ASSY-TORQUE LWR		1
426	161T2874-78		..BUSHING		2
429	161T2875-3		..BUSHING		2
432	BACB28Y4F044		..BUSHING		2
435	161W1238-3		..BUSHING		2
438	MS15004-1		..FITTING-LUBE		3
441	161W7010-1		..INSERT-THREADED		3
444	161T7144-2		..LINK-TORQUE		1
447	BACP18BC02A05P		.PIN-COTTER		2
450	NAS6704D21		.BOLT		2
453	NAS1149D0432J		.WASHER		4

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
456	BACN11N4CD		.NUT		2
459	287T6140-1		.BRACKET ASSY		1
462	BACB28X9M009		..BUSHING		1
465	287T6140-7		..BRACKET		1
468	BACS12GU6K18		.SCREW- (OPT ITEM 468A)		1
-468A	NAS1801-6-18		.SCREW- (OPT ITEM 468)		1
471	NAS1149D0632J		.WASHER		1
474	BACW10P378L		.WASHER		1
477	BACW10BP6DP		.WASHER		1
480	BACW10BP9DP		.WASHER		3
483	BACB28AK06-050		.BUSHING		1
486	BACN10JC6CD		.NUT		1
489	287T6140-3		.BRACKET ASSY-WIRING SPRT		1
492	BACR15BB5AD		..RIVET- (SIZE DETERMINE ON INST)		8
495	287T6140-11		..BRACKET		2
498	287T6140-13		..BRACKET ASSY		1
501	BACR15BA3AD		...RIVET		16
504	BRFM20C3D		...NUTPLATE- (V52828) (SPEC BACN10JN3CD) (OPT 102F9201M3 (V72962)) (OPT NS202487-02 (V80539)) (OPT MF51637-3 (V15653)) (OPT MF53050-3CD (V15653))		8
507	287T6140-9		...BRACKET		1
510	161T7130-1		.BEAM ASSY-TRUCK		1
513	BACB28AT10B073C		..BUSHING		2
516	BACB28AU08B077C		..BUSHING		2
519	BACB28AU04B058C		..BUSHING		4

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
522	BACB28AT06B054C		..BUSHING		4
525	161T2874-36		..BUSHING		4
528	161T2878-2		..BUSHING		4
531	161T2877-1		..BUSHING		2
534	MS15004-1		..FITTING-LUBE		2
537	161W7010-1		..INSERT-THREADED		2
540	161T7130-2		..BEAM-TRUCK		1
543	161W1308-1		.NUT-WHEEL		4
546	161W1309-1		.WASHER-TANG		4
549	BACP18BC03C08P		.PIN-COTTER		4
552	BACB30LJ7DU40		.BOLT		4
555	BACW10BP7APU		.WASHER		4
558	BACN11N107CD		.NUT		4
561	161W1178-1		.PIN ASSY-BRAKE		4
564	161W1127-1		..BUSHING		1
567	161W1178-2		..PIN-BRAKE		1
570	161T7202-1		.COLLAR-BRAKE ROD PIN		4
573	161W1211-1		.SLEEVE-BRAKE		4
576	NAS6708U15		.BOLT		2
579	NAS1149E0863R		.WASHER		2
582	H01-8BAC		.NUT- (V15653) (SPEC BACN10JC8CM) (OPT BMN4122C1D2-8 (V85495)) (OPT 109LH9074-8 (V72962)) (OPT 69235-820CM (V56878)) (OPT BMN4122C1D2-8 (V97928))		2
585	NAS6712EH134		.BOLT		2
588	272T6119-8		.BRACKET ASSY		1
591	NAS6712EH134		.BOLT		2
594	BACW10DS12U		.WASHER		2
597	161T7134-1		.FITTING ASSY-TOW		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
600	NAS6606H4		..BOLT		2
603	MS21209F6-15P		..INSERT		2
606	69B00271-1		..BUSHING-THREADED		2
609	69B00270-1		..BUSHING-CROSSBOLT		2
612	161T2879-1		..BUSHING		1
615	161T2874-84		..BUSHING		1
618	161T7134-2		..FITTING- (OPT ITEM 618A)		1
-618A	161T7134-3		..FITTING- (OPT ITEM 618)		1
621	161T7133-1		.AXLE ASSY-TRUCK BEAM		2
624	69B04172-1		..PIN-RETAINER		2
627	161W1210-1		..SLEEVE-WHEEL		2
630	161T2878-1		..BUSHING		1
633	161W1128-1		..BUSHING		2
636	161T7133-2		..AXLE		2
639	BACP18BC03A10P		.PIN-COTTER		2
642	BACB30LJ6DU24		.BOLT		2
645	BACW10BP6CD		.WASHER		2
648	BACW10BP6DP		.WASHER		4
651	BACN11N106CS		.NUT		2
654	BACB30LJ4-15		.BOLT		4
657	BACW10BP4CD		.WASHER		4
660	BACW10BP4DP		.WASHER		4
663	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		4
666	161T7205-1		.MECHANISM ASSY-SENSOR TRUCK TILT		1
669	161T7205-2		.MECHANISM ASSY-SENSOR TRUCK TILT		1
672	BACP18BC03A10P		..PIN-COTTER		2
675	BACB30LJ6DU18		..BOLT		1
678	BACB30LJ6DU25		..BOLT		1
681	BACW10BP6CD		..WASHER		2
684	BACB28AK06-032		..BUSHING		1
687	BACB28AK06-119		..BUSHING		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
690	BACW10BP6DP		..WASHER		2
693	BACN11N106CS		..NUT		2
696	161T7206-1		..LINK ASSY		1
699	ADB6V301C		...BEARING- (V15860) (SPEC BACB10ES06GC) (OPT HTES06VC (V50294)) (OPT KNDB6-64 (V97613)) (OPT KSC130900B6GC (V50632)) (OPT NRR06ESGC (V73134)) (OPT 03-825-06E010 (V09455))		1
702	BACB28AT09B019C		...BUSHING		1
705	BACB28AP06P019		...BUSHING		1
708	161T7206-2		...LINK		1
711	161T7207-1		..TARGET ASSY		1
714	BACB28AY09A020B		...BUSHING		2
717	SWKN06520G		...BEARING- (V81376) (SPEC BACB10ES06G)		1
720	161T7207-2		...TARGET		1
723	161T7208-1		..BRACKET ASSY- (USED ON ITEM 666)		1
726	161T7208-2		..BRACKET ASSY- (USED ON ITEM 669)		1
729	BACB28AT09B019C		...BUSHING		1
732	BACB28AX06C019		...BUSHING		1
735	161T7208-3		...BRACKET- (USED ON ITEM 723)		1
738	161T7208-4		...BRACKET- (USED ON ITEM 726)		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
741	NAS6704-7		.BOLT		2
744	BACW10BP4NDP		.WASHER		2
747	H52732-4CD		.NUT-		2
			(V15653)		
			(SPEC BACN10YR4CD)		
			(OPT PLH54CD		
			(V62554))		
750	161T7193-1		.PIN-TRUCK PIVOT		1
753	161T7194-1		.WASHER-SPLINED TRUCK PIVOT		1
756	161T7196-1		.NUT-TRUCK PIVOT		1
759	BCREF15982		.RING ASSY-SEAL		2
			(V5F573)		
			(716A1FSL731-5717)		
762	BACP18BC02C04P		.PIN-COTTER		1
765	NAS6703D27		.BOLT		1
768	NAS1149E0363P		.WASHER		1
771	BACN11N3CD		.NUT		1
774	161T7191-2		.WASHER-TANG		1
777	161T7140-1		.PIN-BRAKE ROD		1
780	161T7190-1		.NUT		1
783	BACP18BC04A12P		.PIN-COTTER		1
786	161T7200-1		.BOLT-UPLOCK STABILIZER		1
			ATTACH		
789	BACW10BP9APU		.WASHER		1
792	BACN11N109CD		.NUT		1
795	161T7199-1		.STABILIZER ASSY-UPLOCK		1
798	161T7201-1		..BALL ASSY-SPLIT		1
801	161T7201-2		...BALL HALF-		1
			(MATCHED SET)		
804	161T7201-3		...BALL HALF-		1
			(MATCHED SET)		
807	BACB10AB09M		..BEARING		1
810	161T7199-2		..STABILIZER		1
813	161T7197-1		.UPLOCK ASSY-	A	1
			(OPT ITEM 813A)		
813A	161T7197-13		.UPLOCK ASSY	C	1
			(OPT ITEM 813A)		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-816	161T7197-2		.UPLOCK ASSY- (OPT ITEM 818)	A	1
816A	161T7197-14		.UPLOCK ASSY	D	1
-817	161T7197-7		.UPLOCK ASSY- (OPT ITEM 813)	B	1
-818	161T7197-8		.UPLOCK ASSY- (OPT ITEM 816)	B	1
819	161T2874-67		..BUSHING		1
822	161T2874-68		..BUSHING		1
825	BACB28AT11C048C		..BUSHING		1
828	BACB28AU09C051C		..BUSHING		2
831	161T2876-1		..BUSHING		1
834	MS15004-1		..FITTING-LUBE		1
837	161W7010-1		..INSERT-THREADED		1
838	BACB30VF4K18		..BOLT	CD	5
838D	BACB30VF4K11		..BOLT	CD	1
838N	NAS1149F0463P		..WASHER	CD	6
838R	BACN10YR4CD		..NUT	CD	6
839	161T7203-1		..PAD	CD	1
839D	161T7203-2		..PAD	CD	1
840	161T7197-3		..FITTING-UPLOCK (OPT ITEM 840A)	A	1
840A	161T7197-5		..FITTING-UPLOCK (OPT ITEM 840)	A	1
-840B	161T7197-4		..FITTING-UPLOCK (OPT ITEM 840C)	A	1
-840C	161T7197-6		..FITTING-UPLOCK (OPT ITEM 840B)	A	1
840D	161T7197-17		..FITTING-UPLOCK (OPT ITEM 840E)	C	1
840E	161T7197-15		..FITTING-UPLOCK (OPT)	C	1
840R	161T7197-18		..FITTING-UPLOCK (OPT ITEM 840S)	D	1
840S	161T7197-16		..FITTING-UPLOCK (OPT)	D	1
-841	161T7197-9		..FITTING-UPLOCK (OPT ITEM 840C)	B	1
-841A	161T7197-11		..FITTING-UPLOCK (OPT ITEM 841)	B	1
-842	161T7197-10		..FITTING-UPLOCK (OPT ITEM 842A)	B	1
-842A	161T7197-12		..FITTING-UPLOCK (OPT ITEM 842)	B	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
843	161T7204-1		.SPACER-UPLOCK		1
846	NAS6703-7		.BOLT		2
849	NAS1149E0332P		.WASHER		2
852	H52732-3CD		.NUT- (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))		2
855	161T7140-2		.PIN-BRAKE ROD		1
858	161T7191-1		.WASHER-TANG		1
861	161T7190-2		.NUT-BRAKE ROD PIN		1
864	161T7139-1		.SPACER ASSY		2
867	161T7138-1		.ROD ASSY-BRAKE		4
870	161T2874-43		..BUSHING		4
873	MS15004-1		..FITTING-LUBE		2
876	161W7010-1		..INSERT-THREADED		2
879	161T7138-2		..ROD		1
882	BACB30NM3K5		.BOLT		4
885	NAS1149D0332J		.WASHER		4
888	BACB19F10S		.BLOCK		4
891	BACC15AN10		.CLIP		4
894	BACN10JC3CD		.NUT		4
897	BACC10FY114SE		.CLAMP-WIRING SPRT		1
900	BACC10FY126SE		.CLAMP-WIRING SPRT		1
903	287T6111-4001		.BRACKET ASSY	A	1
-906	287T6111-4002		.BRACKET ASSY	B	1
909	BACR15BB5AD		..RIVET- (SIZE DETERMINE ON INST)		6
912	287T6111-4011		..BRACKET ASSY	A	1
-915	287T6111-4012		..BRACKET ASSY	B	1
918	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
921	BRFM20C3D		...NUTPLATE- (V52828) (SPEC BACN10JN3CD) (OPT 102F9201M3 (V72962)) (OPT NS202487-02 (V80539)) (OPT MF51637-3 (V15653)) (OPT MF53050-3CD (V15653))		1
924	287T6111-4013		...BRACKET	A	1
-927	287T6111-4014		...BRACKET	B	1
930	287T6111-4009		..BRACKET ASSY	A	1
-933	287T6111-4010		..BRACKET ASSY	B	1
936	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)		12
939	BRFM20C3D		...NUTPLATE- (V52828) (SPEC BACN10JN3CD) (OPT 102F9201M3 (V72962)) (OPT NS202487-02 (V80539)) (OPT MF51637-3 (V15653)) (OPT MF53050-3CD (V15653))		6
942	287T6111-4015		...BRACKET	A	1
-945	287T6111-4016		...BRACKET	B	1
948	3M8412		DELETED		
-948A	Y8412		DELETED		
-948B	7355		DELETED		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
948C	NE354C5		.TAPE- (V26066)		AR
951	BACS38E8-50		.STRAP		2
954	44PB134-4441		.SEAL-STRAPPING (V00266) (SPEC BACS11AK2)		2
957	162T1103-2		.NAMEPLATE		1
960	161T7100-3		.STRUT ASSY-SHOCK (REF CMM 32-11-33)	A	1
960A	161T7100-7		.STRUT ASSY-SHOCK (REF CMM 32-11-33)	C	1
-963	161T7100-4		.STRUT ASSY-SHOCK (REF CMM 32-11-33)	B	1
963A	161T7100-8		.STRUT ASSY-SHOCK (REF CMM 32-11-33)	D	1
			INSTALLATION PARTS		
976	BACP18BC02A06P		PIN-COTTER		1
977	NAS6704DU50		BOLT		1
978	NAS1149E0416R		WASHER		1
979	BACN11N4CS		NUT		1
980	161T5011-1		NUT		1
981	161T5012-1		WASHER		1
982	161T5013-1		RETAINER ASSY		1
983	MS21209F4-15P		.INSERT		2
984	MS15001-2		.FITTING-LUBE		2
985	161T5013-2		.RETAINER		1
986	M83248-1-133		PACKING		3
987	161T5010-1		PIN		1
988	273T1183-1		WASHER		1
989	273T1183-2		WASHER		1
990	112T1625-1		NUT-RETAINING		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
991	161T8102-1		RACE ASSY		1
992	161T8102-2		.HALF-(MATCHED SET)		1
993	161T8102-3		.HALF-(MATCHED SET)		1
994	161T8104-1		PLUG		2
995	161T8101-1		BALL		1
996	161T8103-1		PIN		1

- Item Not Illustrated