COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

NOSE LANDING GEAR DRAG STRUT ASSEMBLY

PART NUMBER 162A2100–2, –3, –4, –5, –6, –7

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COMPONENT MAINTENANCE MANUAL

Revision No. 18
Jul 01/2009

To: All holders of NOSE LANDING GEAR DRAG STRUT ASSEMBLY 32-21-22.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

The COMPONENT MAINTENANCE MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

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Location of Change	Description of Change
	NO HIGHLIGHTS

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A = Added, R = Revised, D = Deleted, O = Overflow

A = Added, R = Revised, D = Deleted, O = Overflow

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR 38106	JUN 01/97
32-1305		PRR 38258	JUL 01/03
		PRR 38610-5	NOV 01/06
		PRR 3800A-3	JUL 01/08

All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

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All temporary revisions to this manual will be accompanied by a cover sheet bearing the temporary revision number. Enter the temporary revision number in numerical order, together with the temporary revision date, the date the temporary revision is inserted and the initials of the person filing.
When the temporary revision is incorporated or cancelled, and the pages are removed, enter the date the pages are removed and the initials of the person who removed the temporary revision.

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

INTRODUCTION

1. General

A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.

B. This manual is divided into different parts:

(1) Title Page

(2) Transmittal Letter

(3) Highlights

(4) List of Effective Pages

(5) Table of Contents

(6) Temporary Revision & Service Bulletin Record

(7) Record of Revisions

(8) Record of Temporary Revisions

(9) Introduction

(10) Procedures & IPL Sections

C. Components that can be repaired have a different repair number for each specified repair. To find the repair number location of a component, look in the Repair-General procedure at the beginning of the REPAIR section. The Repair-General procedure also has an explanation of the True Position Dimension symbols used.

D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.

E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.

F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.

G. The tool reference numbers found in the individual procedures and in the Special Tools, Fixtures, and Equipment section are used to identify if a tool is a standard tool (STD-XXXX), a commercial tool (COM-XXXX), or a Special Tool (SPL-XXXX). This reference number is also used to distinguish between tools with similar names in the same procedure. These reference numbers are for use in the documentation only. They are not to be used for ordering tools.

NOSE LANDING GEAR DRAG STRUT ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

A. The drag strut assembly has a titanium lower drag strut, an aluminum upper drag strut, and an aluminum lock link.

2. Operation

A. The upper drag strut assembly transmits loads from the lower drag strut assembly to the airplane structure. The lock link assembly locks the drag strut assembly in its position.

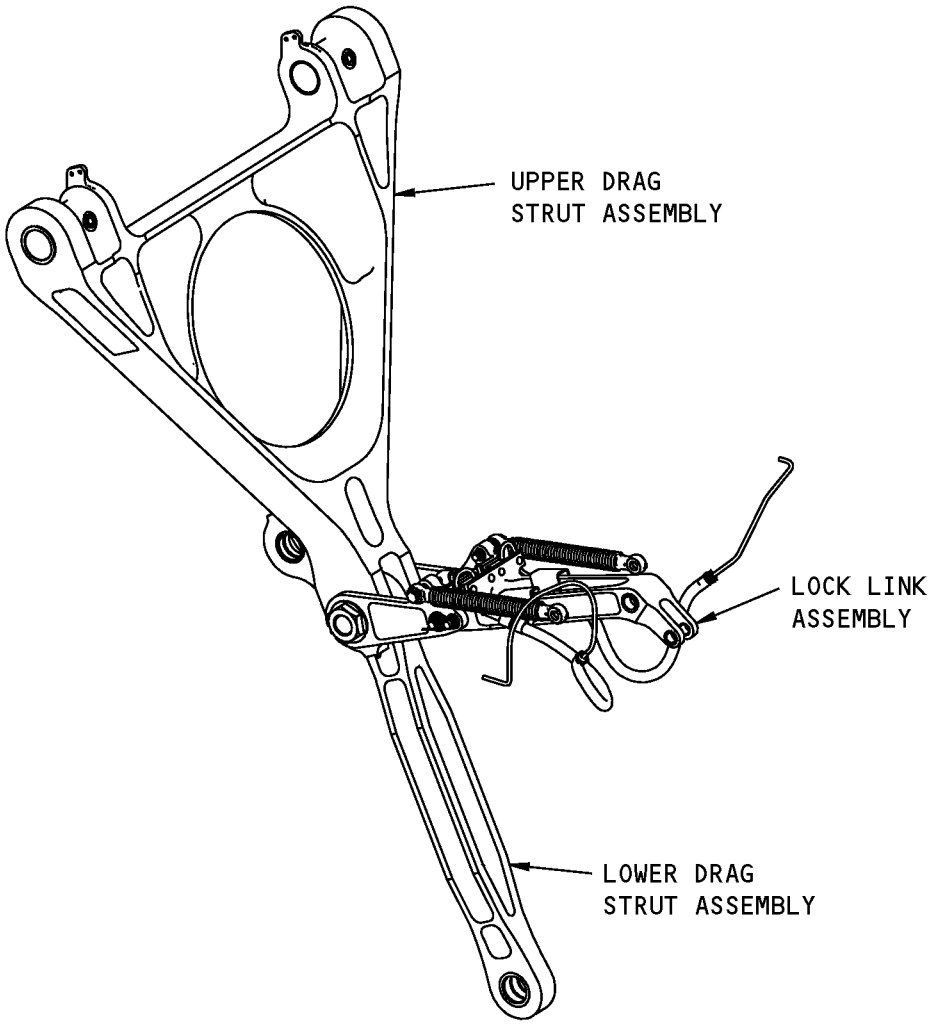
3. Leading Particulars (approximate)

A. Length – 30 inches

B. Width – 53 inches

C. Height – 7 inches

D. Weight – 63 pounds



Nose Landing Gear Drag Strut Assembly
Figure 1

(NOT APPLICABLE)

DISASSEMBLY

1. General

A. This procedure has the data necessary to disassemble the drag strut assembly.

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

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

2. Drag Strut Disassembly

A. Part Replacement

NOTE: These parts are recommended for replacement. Replacement of other parts can be by in-service experience.

(1) Cotter pins (4, 40, 209)

(2) Shim (115, 135)

B. Procedure

(1) Remove wire bundle provision (340 IPL Figure 1). Refer to IPL Figure 2 for these items.

(a) Remove screws (5, 65), washers (10, 70), nuts (15), clamps (20A, 75) and wire bundles (80, 85).

(b) Remove bolts (25), washers (30, 35), nuts (40) and bracket assembly (75).

(2) Disassemble the drag strut assembly.

(a) Remove cotter pin (4), bolt (5C), washer (10), and nut (15B) from nut (30).

(b) Remove pin (20), washer (25), and nut (30).

(c) Remove lock link assembly (35A), lower drag strut assembly (265), and upper strut assembly (290A).

(3) Disassemble lock link assembly (35A).

(a) Remove cotter pins (40) if applicable, bolts (45), washers (50, 55), and nuts (60).

(b) Remove sleeves (65) and spring assemblies (70).

(c) Remove cotter pin (209), nuts (211), caps (213), shaft (216), and pin (218).

(d) Remove bolt (150) and nut (165) from forward link assembly (175A).

(e) When you remove shim (115), make a note of the thickness of the shim for later assembly.

(NOT APPLICABLE)

CHECK

1. **General**
   A. Use this procedure to find defects in the specified parts.
   B. Refer to FITS AND CLEARANCES for design dimensions and wear limits.
   C. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
   D. Refer to IPL Figure 1 for item numbers.
2. **Check**
   A. References

Reference	Title
SOPM 20-11-04	ELECTRICAL AND ELECTRONIC COMPONENT STANDARD MAINTENANCE INSTRUCTIONS
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

   B. Procedure

NOTE: For electrical and electronic component standard maintenance instructions, refer to SOPM 20-11-04.

(1) Use standard industry practices to examine all parts for defects.
(2) Do a magnetic particle check (SOPM 20-20-01) on these parts:
   (a) Pin (20)
   (b) Washer (25)
   (c) Nut (30)
   (d) Sleeve (65)
   (e) End fitting (85)
   (f) Stop bolt (95)
   (g) Shaft (216)
   (h) End cap (213)
   (i) Pin (218)
(3) Do a penetrant check (SOPM 20-20-02) on these parts:
   (a) Spring (90)
   (b) Aft lock link (260)
   (c) Upper drag strut (325A)
   (d) Lower drag strut (285)
(4) Do a tension load check on the spring assembly (70).
   (a) Load must be 68-84 pounds at 12.042 inches.
   (b) Load must be 112-135 pounds at 13.9500 inches.
(5) Do a continuity check (SOPM 20-11-04) of the wire bundle assemblies (IPL Figure 2, 80, 85).

REPAIR

1. General

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

Table 601:

PART NUMBER	NAME	REPAIR
—	REFINISH OF OTHER PARTS	1-1
162A2101	UPPER DRAG STRUT ASSEMBLY	2-1, 2-2
162A2103	LOWER DRAG STRUT ASSEMBLY	3-1, 3-2
162A2302	PIN - DRAG STRUT ASSEMBLY	4-1
162A2112	FORWARD LOCK LINK ASSEMBLY	5-1, 5-2
162A2115	AFT LOCK LINK ASSEMBLY	6-1, 6-2
162A2111	SPRING ASSEMBLY	7-1
162A2114	END FITTING ASSEMBLY	8-1
162A2123	APEX PIN	9-1
162A2124	APEX SHAFT	10-1

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 tells how to refinish the parts which are not given in the other repairs.

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

C. Refer to IPL Figure 1 for item numbers.

2. Refinish of Other Parts

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
C00260	Coating - Chemical And Solvent Resistant Finish, Epoxy Resin Enamel	BMS10-11, Type II

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For general cleaning procedures, refer to SOPM 20-30-03. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Instructions for the repair of the parts listed in REPAIR 1-1, Table 601 is for replacement of the original finish.

Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Tang washer (25)	15-5PH CRES 180-200 KSI	Passivate (F-17.25).
Sleeve (65)	15-5PH CRES 180-200 KSI	Passivate (F-17.25). Chrome plate (F-15.34) the shank to 0.4985-0.4995 inch diameter and 32 microinch finish.
Apex end cap (213)	15-5PH CRES 150-170 KSI	Passivate (F-17.25).

Table 601: Refinish Details (Continued)

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 2		
Bracket (60)	Al alloy	Boric acid-sulfuric acid anodize (F-17.31). Apply primer, C00259 (F-20.02) and enamel coating, C00260 (F-21.02).

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UPPER DRAG STRUT ASSEMBLY - REPAIR 2-1

162A2101–3, –5, –7

1. General

A. This repair tells how to replace the parts of upper drag strut assembly (290A).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

2. Repair procedures (REPAIR 2-1, Figure 601)

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00032	Coating - Exterior Protective Enamel, General Use	BMS10-60, Type I
D00633	Grease - Aircraft General Purpose	BMS3-33

B. References

Reference	Title
32-00-03	Landing Gear Parts - Lubrication Fitting Replacement
CMM 32-21-07	NOSE LANDING GEAR INSTALLATION COMPONENTS
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-50-10	APPLICATION OF STENCILS, INSIGNIA, SILK SCREEN, PART NUMBERING AND IDENTIFICATION MARKINGS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Bushing Replacement

NOTE: For application of stencils, insignia, silk screen, part numbering and identification markings, refer to SOPM 20-50-10. For miscellaneous materials, refer to SOPM 20-60-04.

(1) Remove the old bushings.

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

(3) Install replacement bushings by the shrink-fit procedure (SOPM 20-50-03).

(a) After you install each bushing (300), but before you install bushings (295), be sure to drill a hole through the walls of bushing (300) in line with, and the same size as the empty Diameter 3 hole as shown in REPAIR 2-2, Figure 601. Each of these holes is for the cross bolt that will hold the left and right drag strut trunnion pins (CMM 32-21-07, IPL Fig. 1, item 10) in the bushing (300) bore when the nose gear is installed in the airplane.

(b) Now install bushings (295).

(4) Machine the bushing bores to design dimensions and finish.

(5) Adjust the sealant and, after you replace the lube fittings (REPAIR 2-1, Paragraph 2.D.), apply grease, D00633 as shown.

D. Lube Fitting Replacement (REPAIR 2-1, Figure 601)

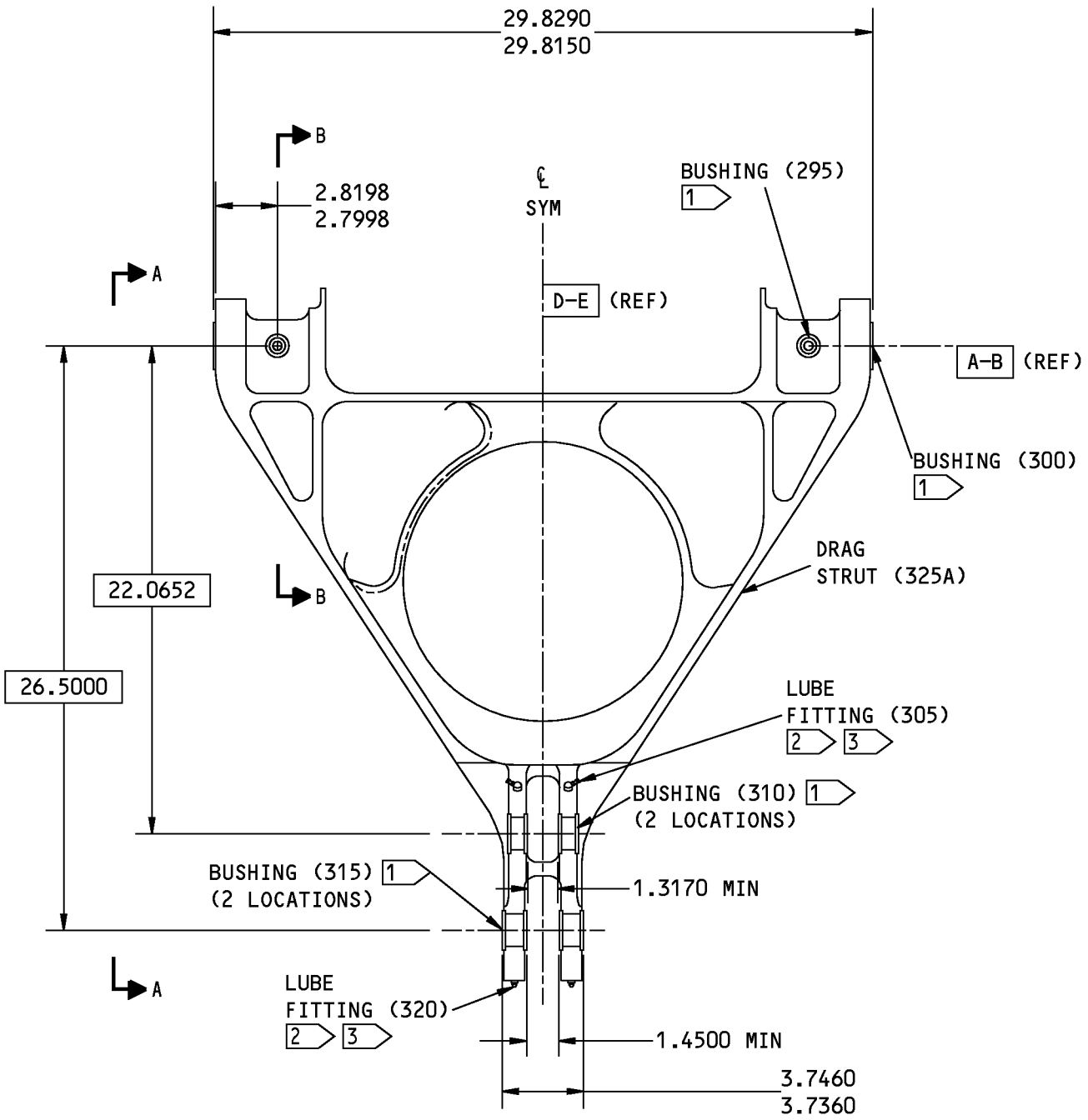
(1) Install replacement lube fittings (305, 320) per 32-00-03.

(2) Apply grease, D00633 to the lube fitting (305, 320) until the grease appears at the bushing inner diameter.

E. Upper Drag Strut Assembly Refinish

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For general cleaning requirements, refer to SOPM 20-30-03.

(1) Apply coating, C00032 (F-19.39-707) to all external surfaces. Do not apply the coating to bushing flange faces or lubrication fittings.



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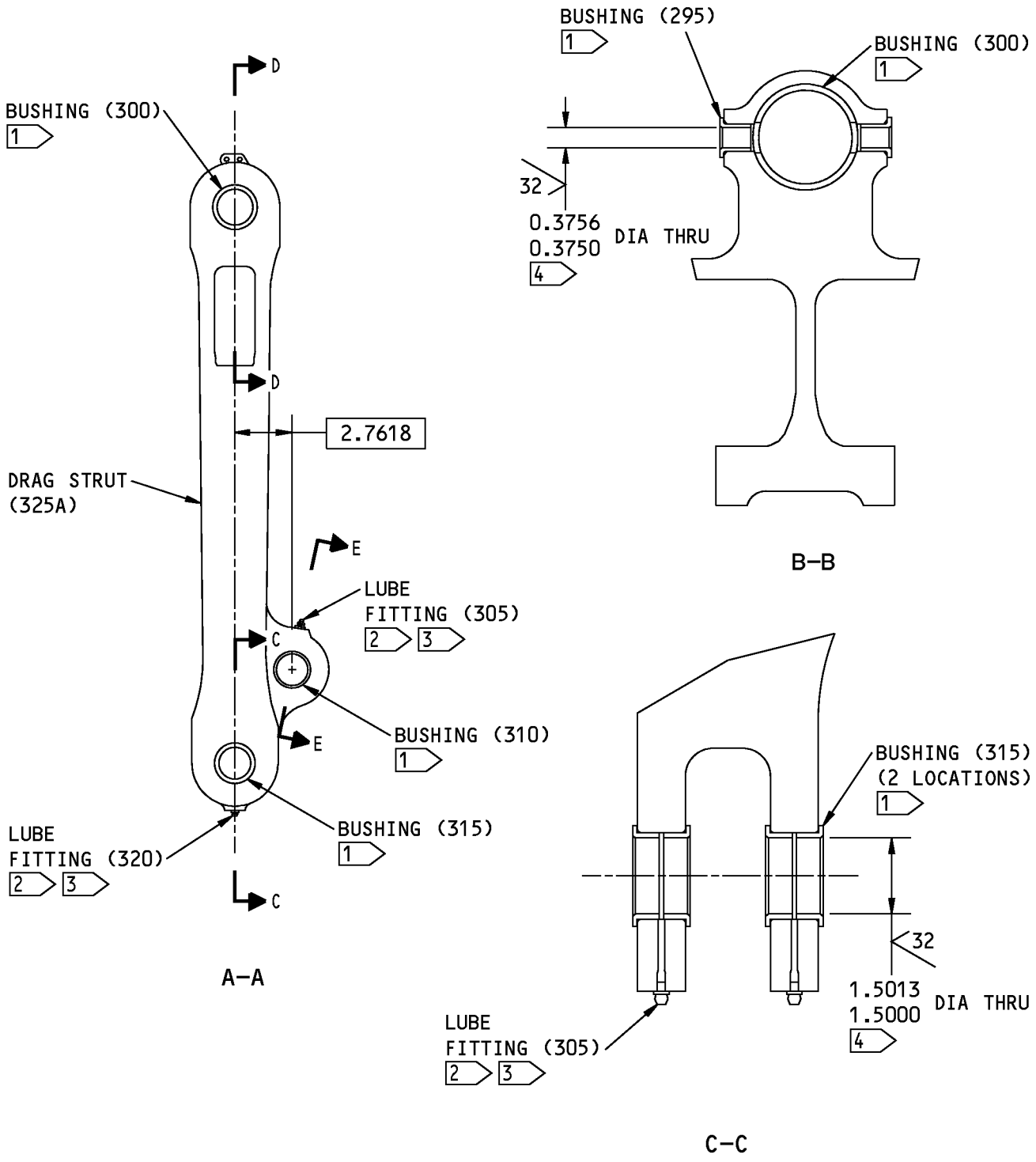
162A2101-3,-5, -7 Upper Drag Strut Assembly Parts Replacement
Figure 601 (Sheet 1 of 3)



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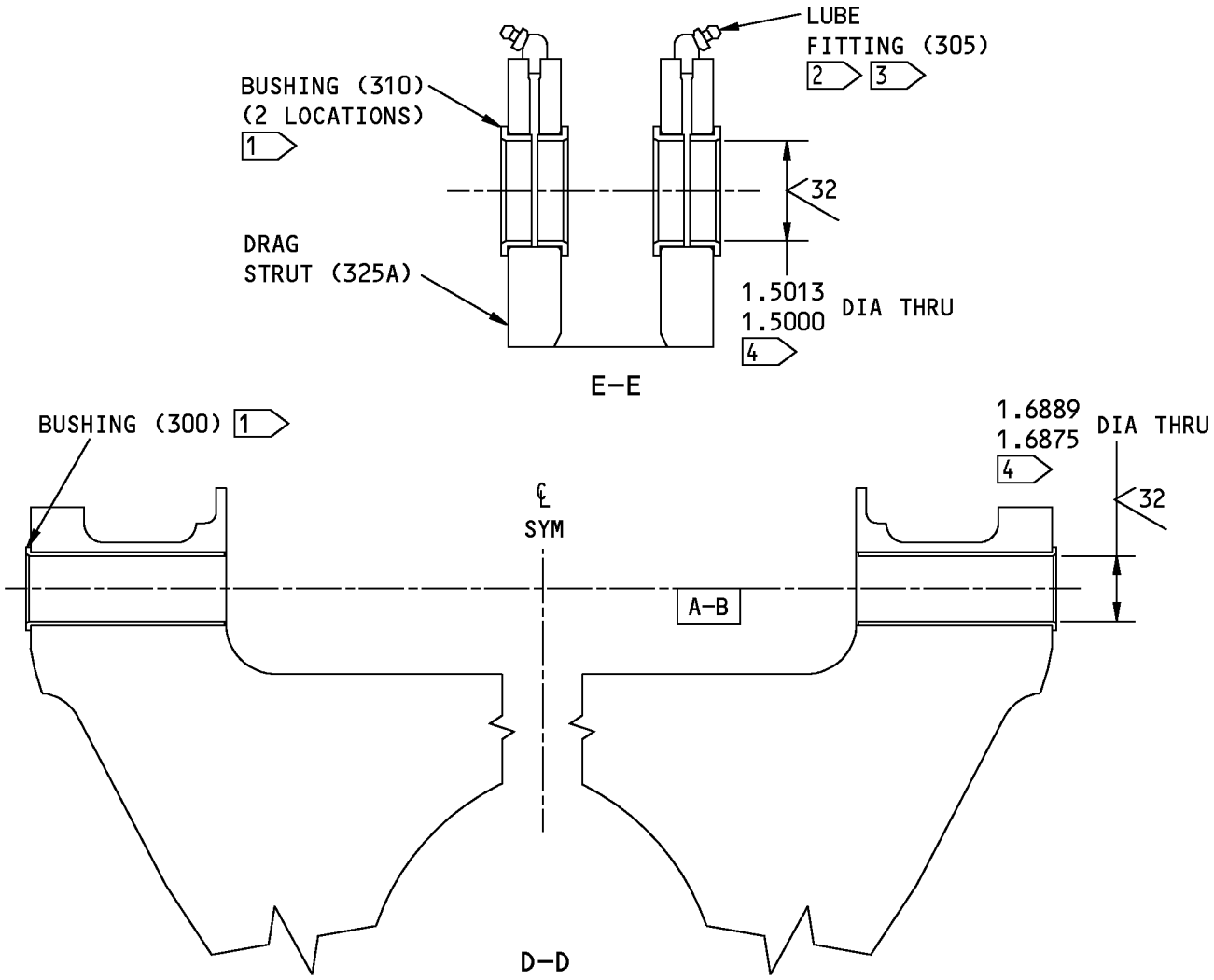
162A2101-3,-5, -7 Upper Drag Strut Assembly Parts Replacement
Figure 601 (Sheet 2 of 3)



1 AFTER BUSHING INSTALLATION, REMOVE UNWANTED SEALANT FROM THE GAP (WHEN APPLICABLE) BETWEEN THE BUSHINGS

2 INSTALL THE LUBE FITTING WITH BMS 5-95 SEALANT

3 AFTER BUSHING INSTALLATION AND BEFORE THE SEALANT DRIES, APPLY BMS 3-33 GREASE TO THE LUBRICATION FITTING UNTIL THE GREASE APPEARS AT THE BUSHING INSIDE DIAMETER

4 INSTALLED DIMENSION. ADJUST TO THIS SIZE 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

F65022 S0004998171_V3

162A2101-3,-5, -7 Upper Drag Strut Assembly Parts Replacement
Figure 601 (Sheet 3 of 3)

UPPER DRAG STRUT - REPAIR 2-2

162A2101–4, –6, –8

1. General

A. This procedure tells how to repair and refinish the upper drag strut (325).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: Aluminum alloy

(2) Shot peen: Intensity 0.010A2

2. Repair procedures (REPAIR 2-2, Figure 601)

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

B. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

C. Lug Faces and Holes

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

(2) Penetrant examine (SOPM 20-20-02).

(3) Shot peen as indicated (SOPM 20-10-03).

(4) Refinish as indicated.

(5) Make oversize bushings (REPAIR 2-2, Figure 602 and on) as necessary to adjust for the materials removed.

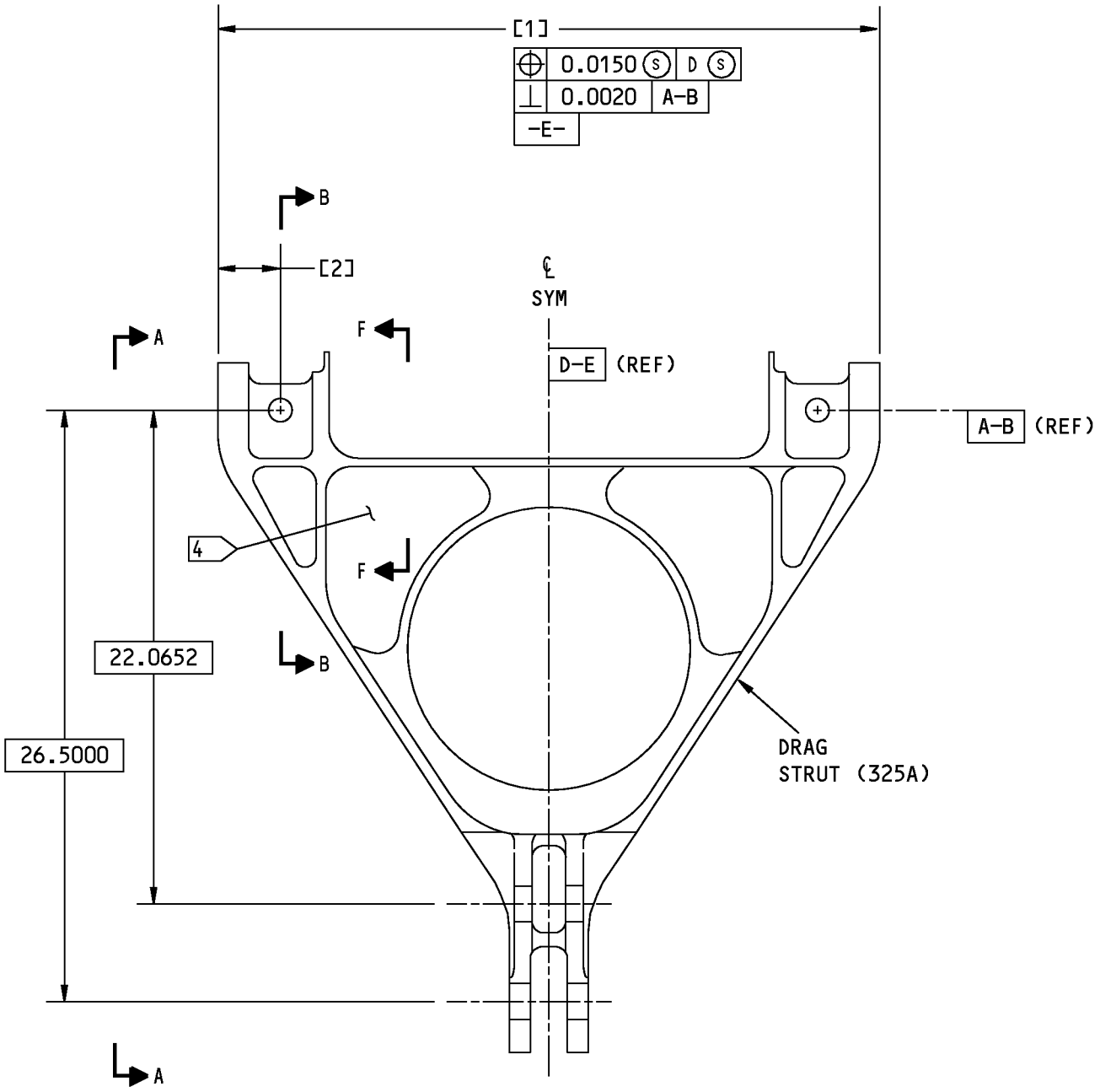
(6) Install the oversize bushings as shown in REPAIR 2-1.

D. Upper Drag Strut Refinish (REPAIR 2-2, Figure 601)

NOTE: For general cleaning procedures, refer to SOPM 20-30-03. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01.

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

(2) Apply primer, C00175 (F-19.47), but not in lube passages.



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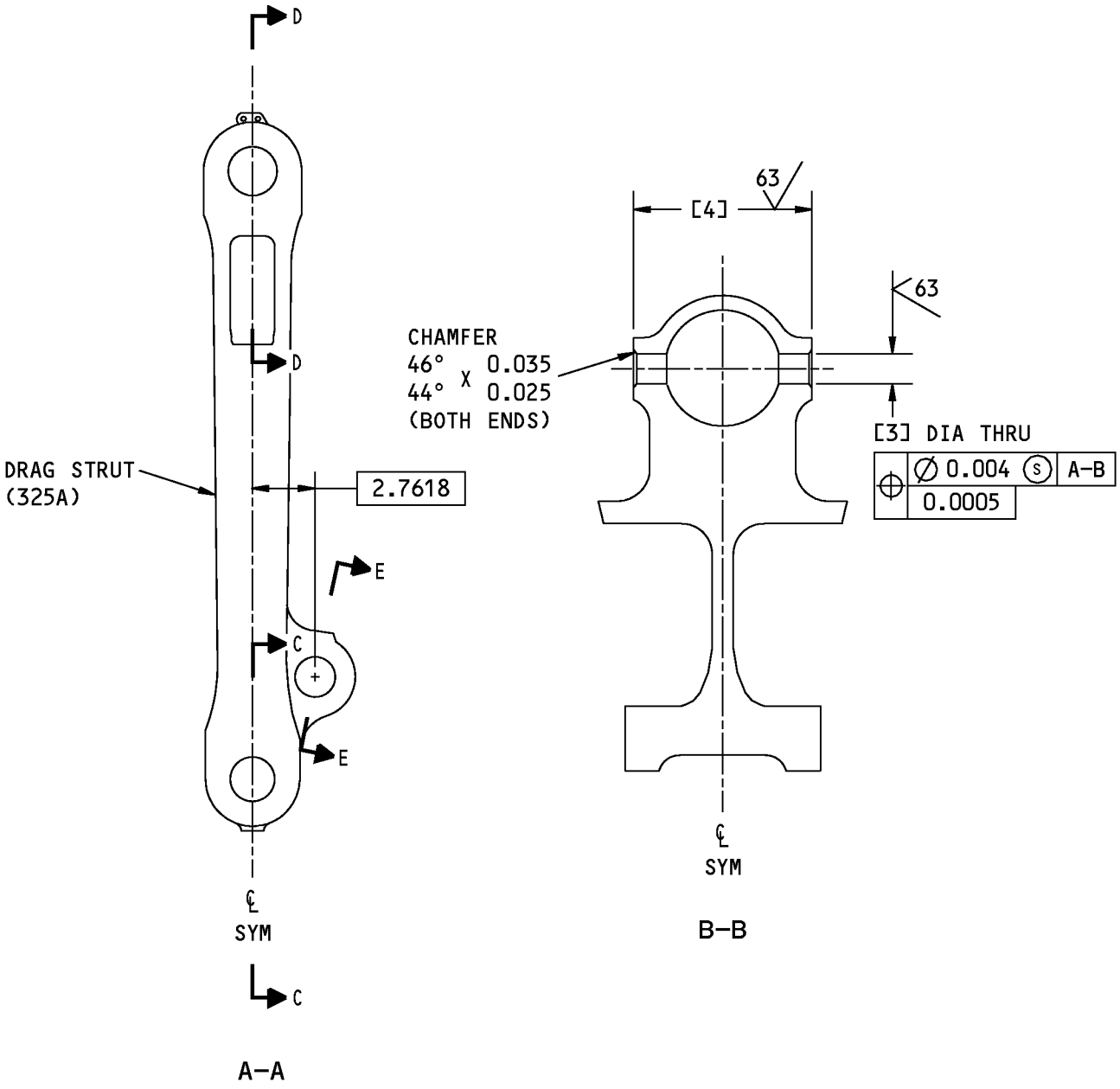
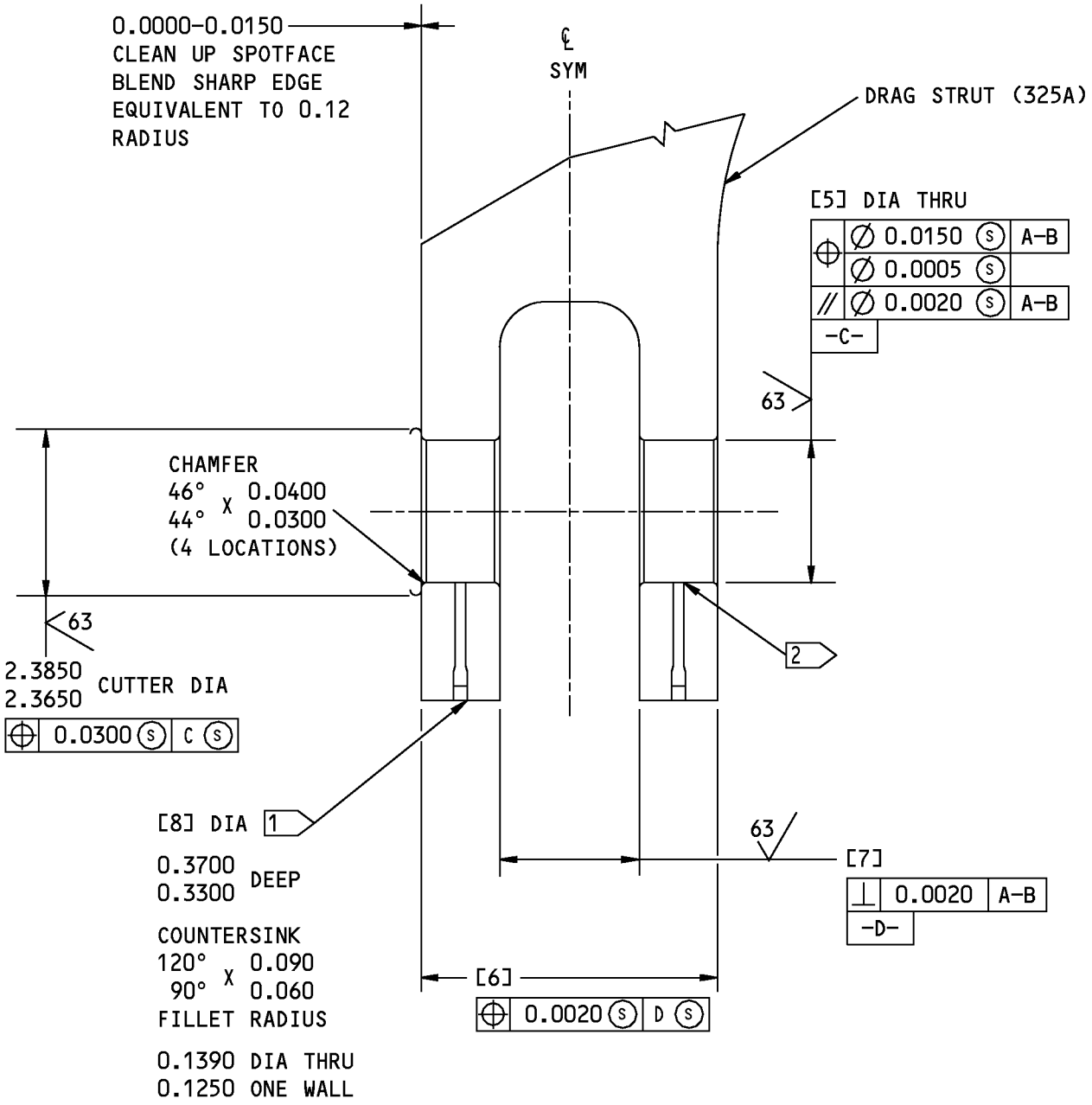
162A2101-4,-6, -8 Drag Strut Repair and Refinish
Figure 601 (Sheet 1 of 6)



F65158 S0004998175_V3

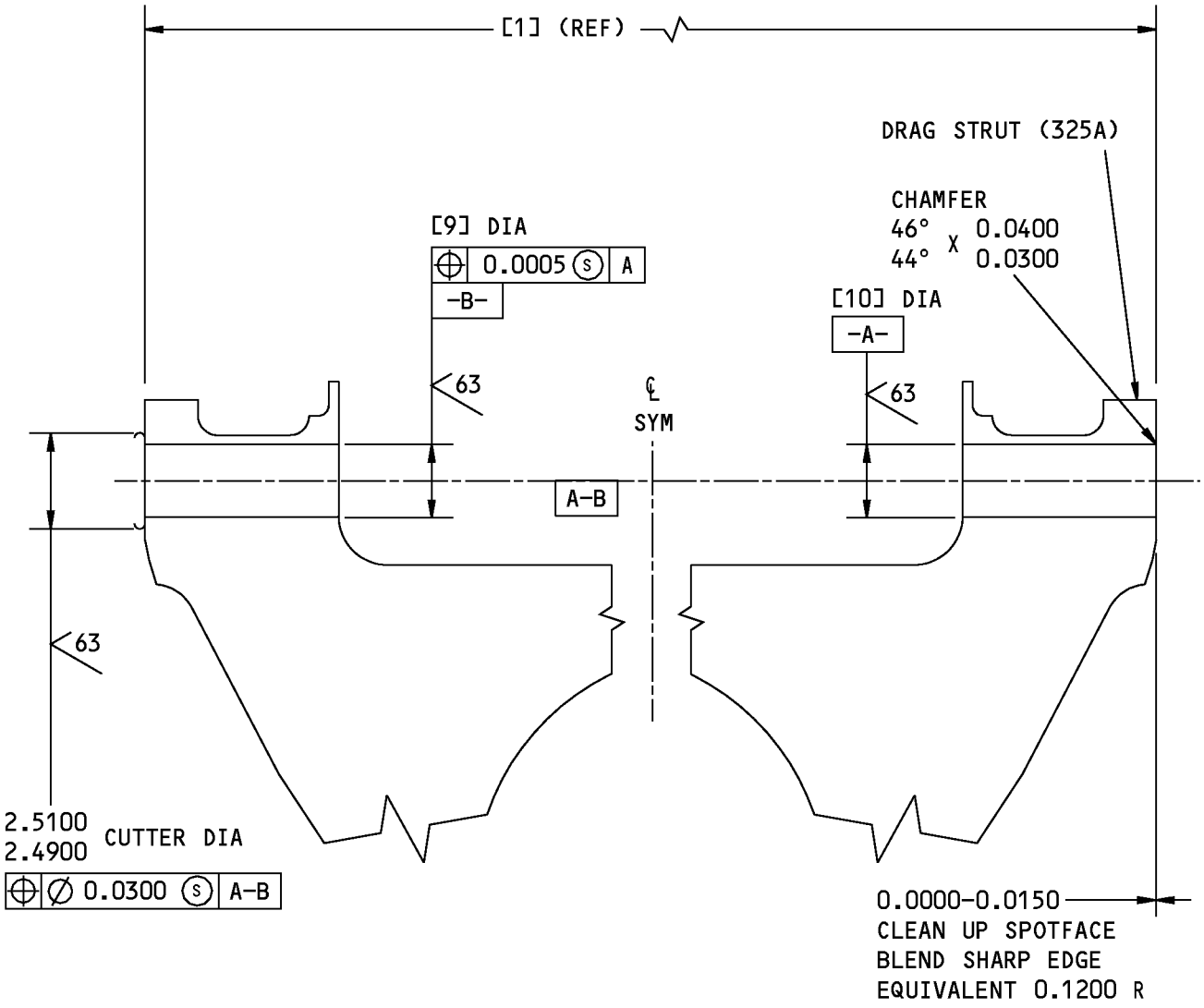
162A2101-4,-6, -8 Drag Strut Repair and Refinish
Figure 601 (Sheet 2 of 6)



C-C

F65235 S0004998176_V3

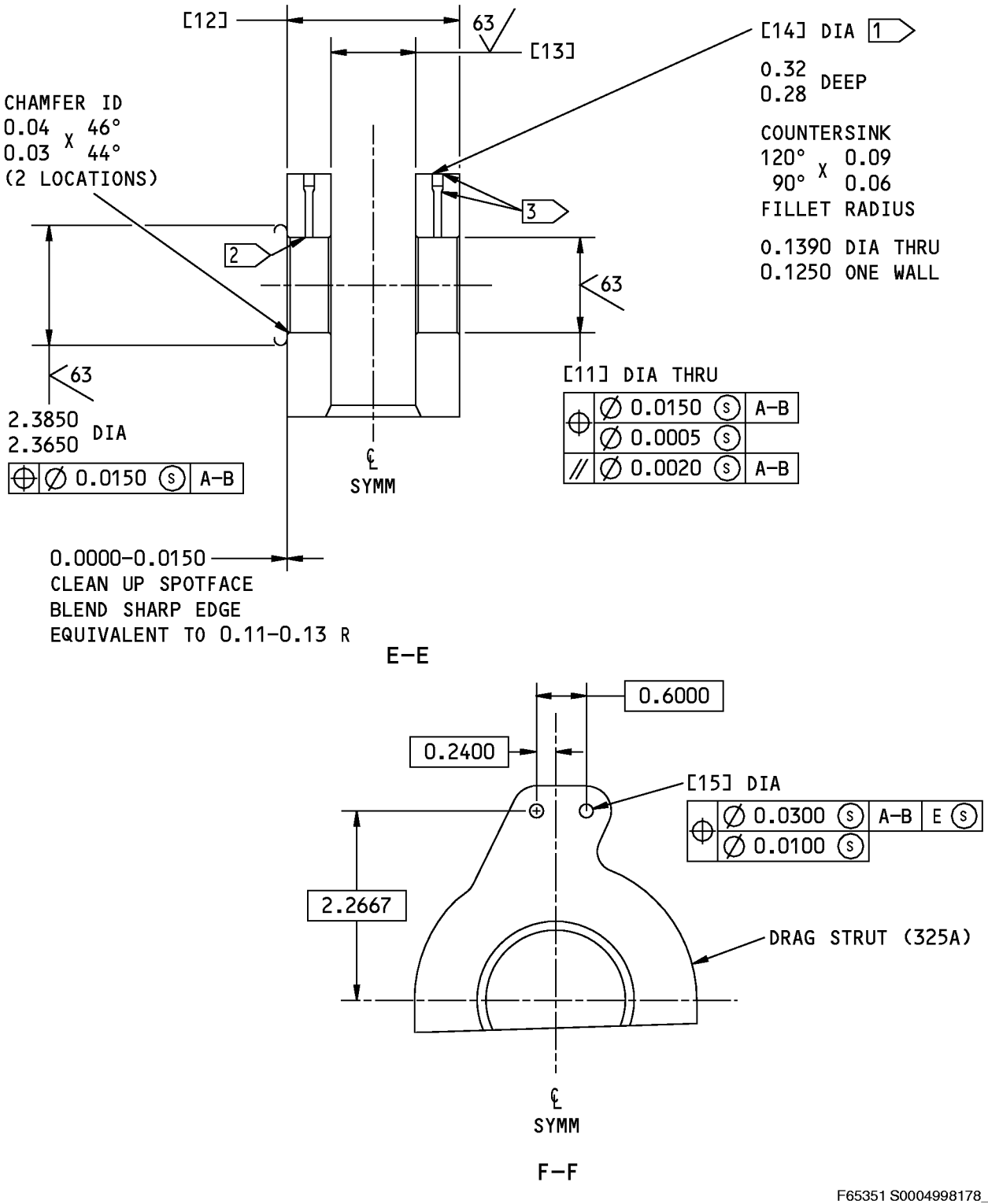
162A2101-4,-6, -8 Drag Strut Repair and Refinish
Figure 601 (Sheet 3 of 6)



D-D

F65283 S0004998177_V3

162A2101-4,-6, -8 Drag Strut Repair and Refinish
Figure 601 (Sheet 4 of 6)



F65351 S0004998178_V3

162A2101-4,-6, -8 Drag Strut Repair and Refinish
Figure 601 (Sheet 5 of 6)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	29.6350 29.6270	2.8198 2.7998	0.5016 0.5010	2.9500 2.9300	1.6893 1.6880	3.5520 3.5480	1.6480 1.6440	0.1860 0.1850
REPAIR LIMIT	29.5670 5	2.7698 5	0.5616 5	2.8700 5	1.7493 5	3.4880 5	1.7080 5	---

REFERENCE NUMBER	[9]	[10]	[11]	[12]	[13]	[14]	[15]
DESIGN DIMENSION	1.8769 1.8755	1.8769 1.8755	1.6893 1.6880	3.1220 3.1180	1.5180 1.5110	0.1860 0.1850	0.1710 0.1660
REPAIR LIMIT	1.9369 5	1.9369 5	1.7493 5	3.0580 5	1.5780 5	---	---

1 IT IS OPTIONAL TO APPLY BORIC ACID-SULFURIC ACID ANODIZE OR CHROMIC ACID ANODIZE (F-17.31) IN THE LUBE PASSAGE. DO NOT APPLY PRIMER (F-19.47) HERE

2 BREAK SHARP EDGE AROUND HOLE TO 0.06-0.09 R AND 63 MICROINCH FINISH

3 BREAK SHARP EDGE AROUND HOLE TO 0.01-0.03 R AND 63 MICROINCH FINISH

4 PART NUMBER AND SERIAL NUMBER LOCATION

5 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

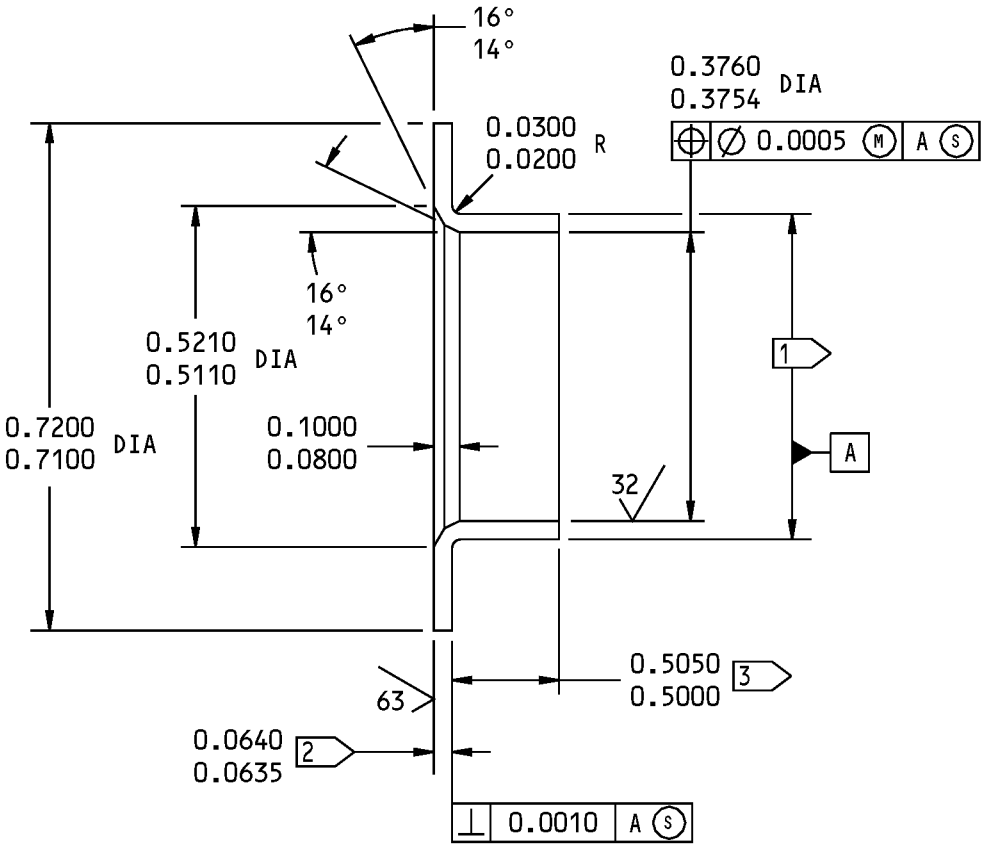
ITEM NUMBERS REFER TO IPL FIG. 1

DIMENSIONS ARE BEFORE FINISH

ALL DIMENSIONS ARE IN INCHES

F65362 S0004998179_V3

162A2101-4,-6, -8 Drag Strut Repair and Refinish
Figure 601 (Sheet 6 of 6)



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS 0.0006–0.0015 INTERFERENCE

2 PLUS AMOUNT REMOVED FROM LUG FACE

3 MINUS AMOUNT REMOVED FROM LUG FACE

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–15.36)

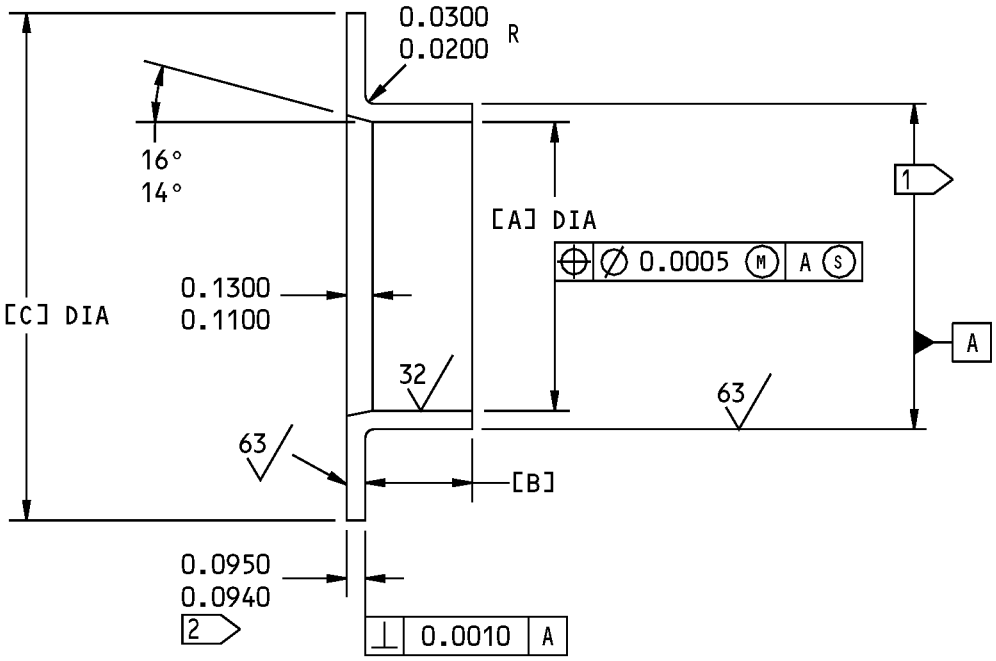
ITEM NUMBERS REFER TO IPL FIG. 1

DIMENSIONS ARE BEFORE PLATING

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [3] FIG. 601
REPLACES BUSHING (295) 162A2105–5

Oversize Bushing Details
Figure 602



HOLE LOCATION (FIG. 601)	REPLACES BUSHING ITEM NO.	[A]	[B] 3	[C]	INTER-FERENCE
[10]	300 162A2105-1	1.6902 1.6887	4.9700 4.9650	2.1400 2.1300	0.0035 0.0011
[11]	310 162A2105-3	1.5024 1.5011	0.3400 0.3350	1.9500 1.9400	0.0040 0.0015
[5]	315 162A2105-2	1.5024 1.5011	0.4200 0.4150	1.9500 1.9400	0.0040 0.0015

1 THE OUTSIDE DIAMETER OF THE BUSHING (BEFORE PLATING, IF APPLICABLE) IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS THE INTERFERENCE

2 PLUS AMOUNT REMOVED FROM LUG FACE

3 MINUS AMOUNT REMOVED FROM LUG FACE

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-15.36)

ITEM NUMBERS REFER TO IPL FIG. 1

DIMENSIONS ARE BEFORE PLATING

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603

LOWER DRAG STRUT ASSEMBLY - REPAIR 3-1

162A2103–1, –3

1. General

A. This procedure tells how to replace the parts of lower drag strut assembly (265).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

2. Repair procedures

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

B. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS

C. Bushing Replacement (REPAIR 3-1, Figure 601)

NOTE: For lubricants, refer to SOPM 20-60-03.

(1) Remove the old bushings (280).

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

(3) Install replacement bushings by the shrink-fit procedure (SOPM 20-50-03).

(4) Make a check of the dimensions and, if necessary, machine them to the dimensions shown.

(5) Apply grease at the lube fittings to make sure the lube passages are not blocked with sealant.

D. Insert and Lube Fitting Replacement (REPAIR 3-1, Figure 601)

NOTE: For lubricants, refer to SOPM 20-60-03.

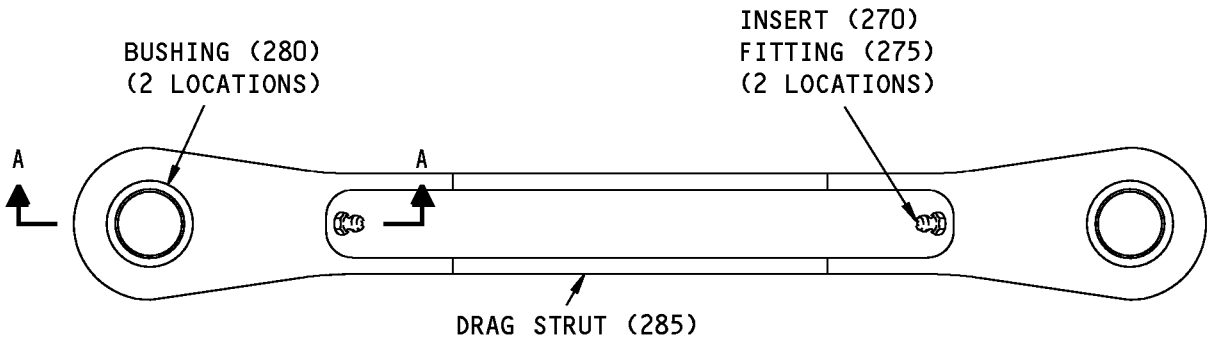
(1) Remove the lube fittings (215).

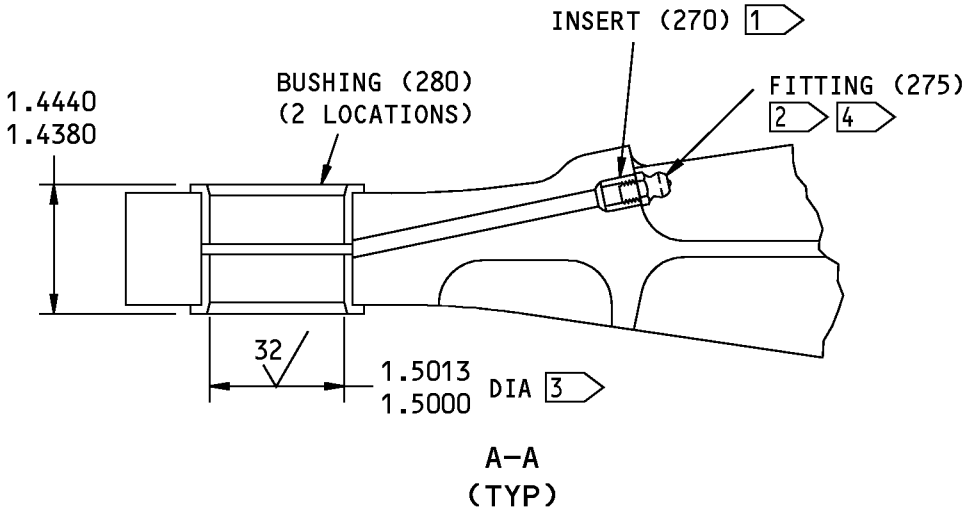
(2) Remove the inserts (270).

(3) Install replacement inserts (270) flush with the lower drag strut (285) as shown.

(4) Install a replacement lube fitting (275) and tighten it as shown.

(5) Apply grease, D00633 to the lube fitting until the grease appears at the bushing inside diameter.





A–A
(TYP)

1 INSTALL THE INSERT FLUSH WITH THE DRAG STRUT TO WITHIN ±0.0200

2 AFTER BUSHING INSTALLATION AND BEFORE THE SEALANT DRIES, APPLY BMS 3-33 GREASE TO THE LUBE FITTING UNTIL THE GREASE APPEARS AT THE BUSHING INSIDE DIAMETER

3 INSTALLED DIMENSION. ADJUST TO THIS SIZE IF NECESSARY

4 TIGHTEN THE LUBE FITTING TO 25-30 POUND-INCHES

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

F65462 S0004998183_V2

162A2103-1, -3 Lower Drag Strut Assembly Repair
Figure 601

LOWER DRAG STRUT - REPAIR 3-2

162A2103–2, –4

1. General

A. This procedure tells how to repair and refinish lower drag strut (285).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: Ti alloy

(2) Shot peen: 0.014A2 intensity, Coverage 2.0

2. Repair procedures

A. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-07	MACHINING OF TITANIUM
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

B. Lug Faces and Holes (REPAIR 3-2, Figure 601)

(1) Machine as necessary, within repair limits, to remove defects (SOPM 20-10-07).

(2) Shot peen as indicated (SOPM 20-10-03).

(3) Penetrant examine (SOPM 20-20-02).

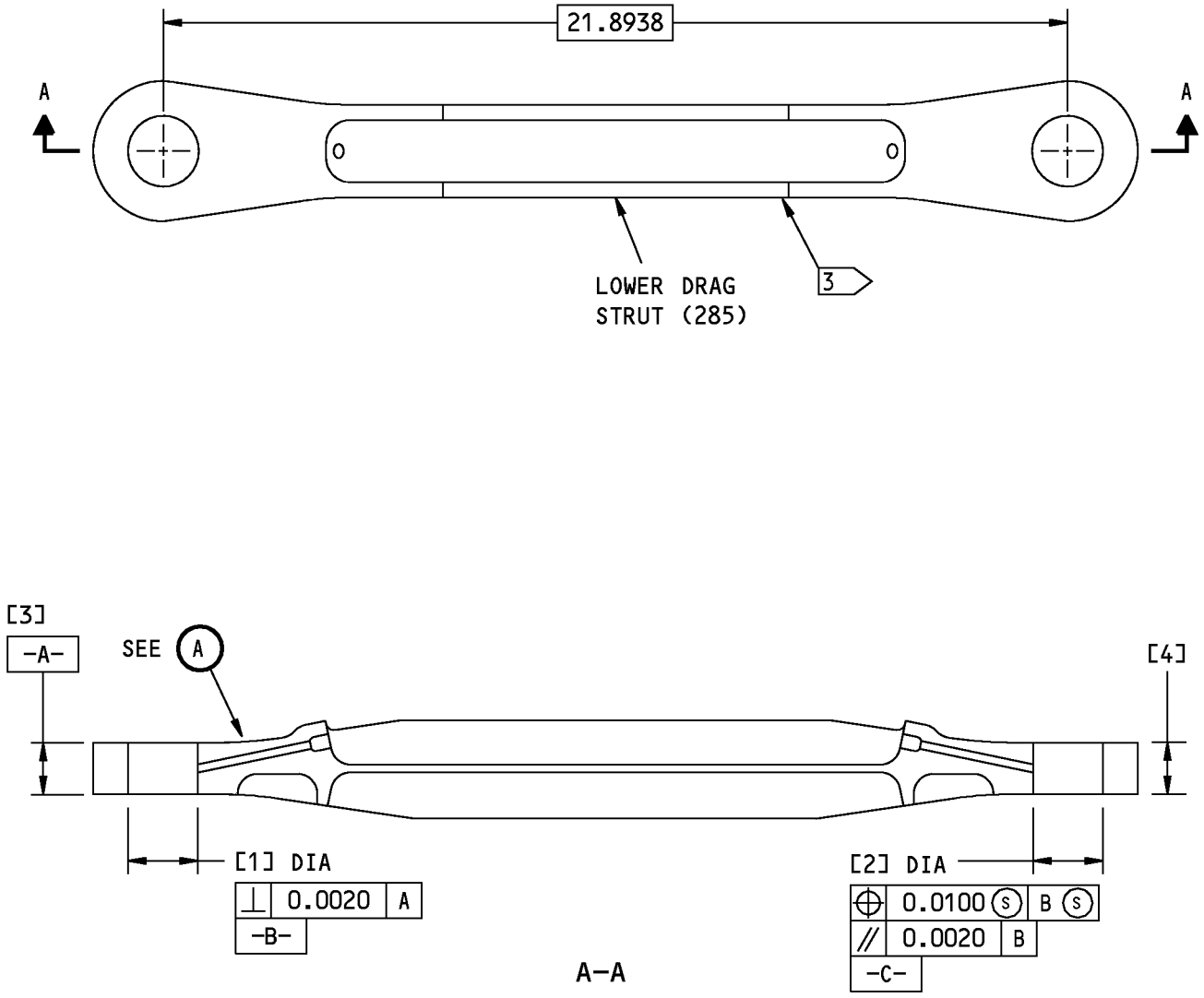
(4) Make oversize bushings (REPAIR 3-2, Figure 602) as necessary to adjust for the material removed.

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

C. Lower Drag Strut Refinish (REPAIR 3-2, Figure 601)

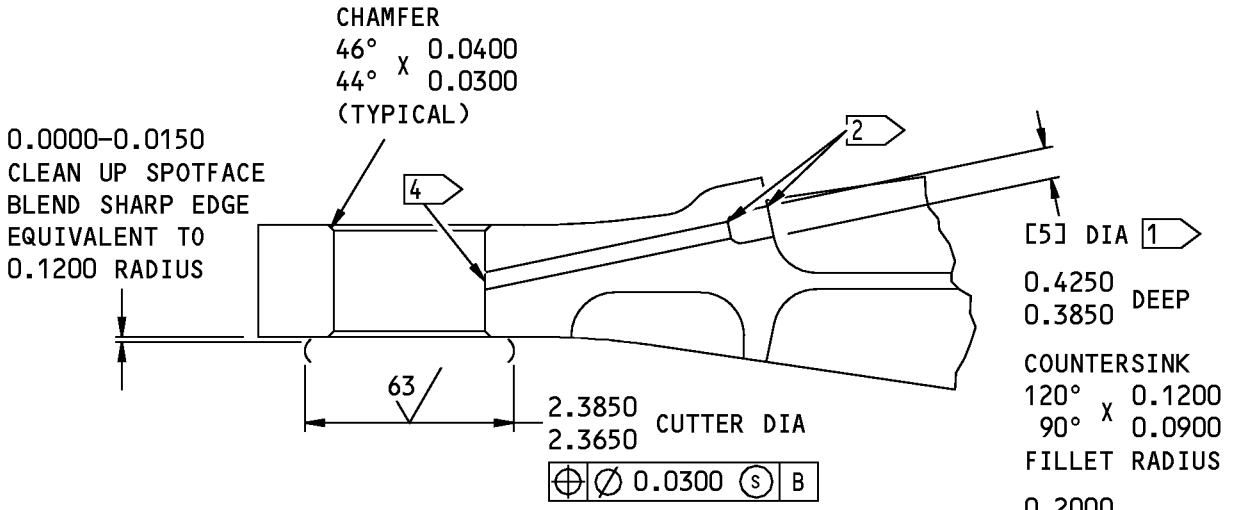
NOTE: For general cleaning procedures, refer to SOPM 20-30-03. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01.

(1) Apply no finish (F-25.01).



F65676 S0004998185_V2

162A2103-2, -4 Lower Drag Strut Repair
Figure 601 (Sheet 1 of 2)



A

(TYPICAL)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]
DESIGN DIMENSION	1.6893 1.6880	1.6893 1.6880	1.2540 1.2500	1.2540 1.2500	0.3448 0.3443
REPAIR LIMIT	1.7493 5	1.7493 5	1.1900 5	1.1900 5	---

1 THE DEPTH OF THE CLOSE TOLERANCE DIAMETER IS 0.3500–0.3600. MAKE THE TRANSITION SMOOTH

2 BREAK SHARP EDGES AROUND THE HOLE TO 0.01–0.03 R AND 63 MICROINCH FINISH

3 PART NUMBER AND SERIAL NUMBER

4 BREAK SHARP EDGES AROUND THE HOLE TO 0.06–0.09 R AND 63 MICROINCH FINISH

5 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

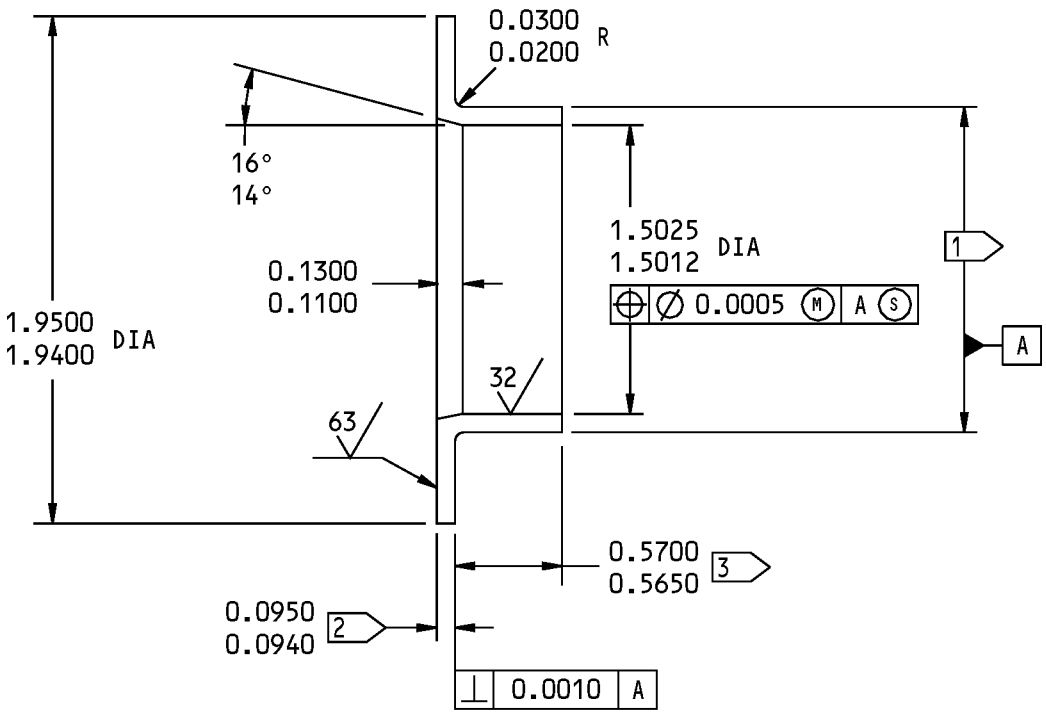
BREAK ALL SHARP EDGES 0.06–0.09 R UNLESS SHOWN DIFFERENTLY

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

F65685 S0004998186_V3

162A2103-2, -4 Lower Drag Strut Repair
Figure 601 (Sheet 2 of 2)



1 THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE INSIDE DIAMETER OF THE LUG HOLE PLUS 0.0015-0.0040 INTERFERENCE

2 PLUS AMOUNT REMOVED FROM LUG FACE

3 MINUS AMOUNT REMOVED FROM LUG FACE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01-0.02 R

MATERIAL: AL-NI-BRONZE (AMS 4640)

FINISH: NO FINISH (F-25.01)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATIONS [1],[2] FIG. 601
REPLACES BUSHING (280) 162A2105-4

Oversize Bushing Details
Figure 602

DRAG STRUT PIN - REPAIR 4-1

162A2302–2, –4

1. General

A. This procedure tells how to repair and refinish drag strut pin (20).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices identified in the procedure.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: 4340M steel, 275-300 ksi

(2) Shot peen: All surfaces, but not in holes, Hard Shot Rc 55-65, Shot size 0.016-0.033, Intensity 0.014-0.018A2, Coverage 2.0, Overspray is permitted.

2. Pin Repair and Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III
C50001	Compound - Corrosion Preventive, Petroleum Hot Application (Hard Film)	MIL-C-11796, Class I

B. References

Reference	Title
32-00-05	Repair of High Strength Steel Landing Gear Parts
SOPM 20-10-01	REPAIR AND REFINISH OF HIGH STRENGTH STEEL PARTS
SOPM 20-10-02	MACHINING OF ALLOY STEEL
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-04	GRINDING OF CHROME PLATED PARTS
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-42-03	HARD CHROME PLATING
SOPM 20-60-02	FINISHING MATERIALS

C. Repair REPAIR 4-1, Figure 601

NOTE: For repair and refinish of high strength steel parts, refer to SOPM 20-10-01. For machining of alloy steel, refer to SOPM 20-10-02. For grinding of chrome plated parts, refer to SOPM 20-10-04. For hard chrome plating, refer to SOPM 20-42-03. For repair of high-strength steel landing gear parts, refer to 32-00-05.

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

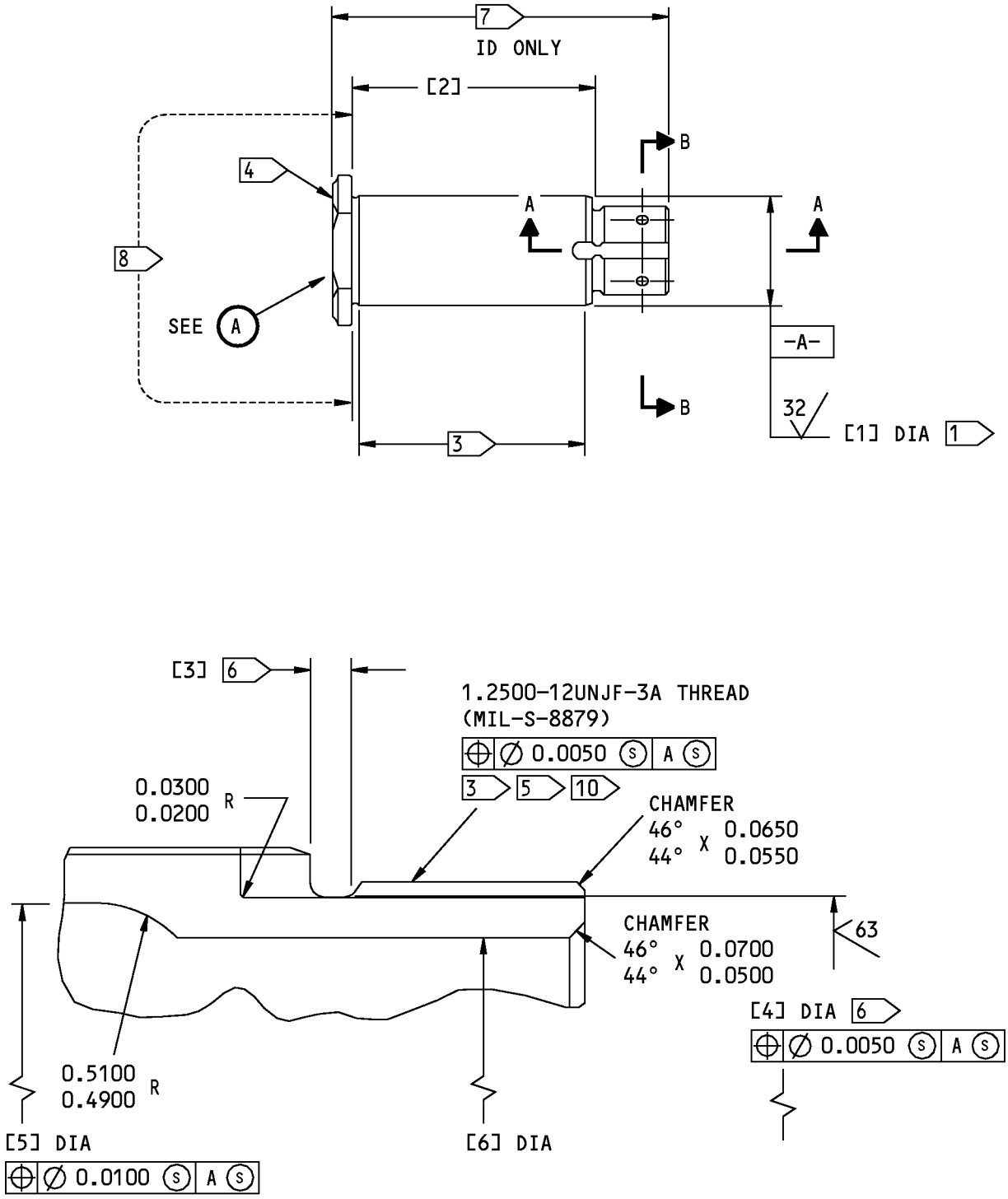
(2) Build up with chrome plate and grind to the after-plating dimensions shown.

(3) Refinish other surfaces as indicated.

D. Refinish REPAIR 4-1, Figure 601

NOTE: For shot peening, refer to SOPM 20-10-03. For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

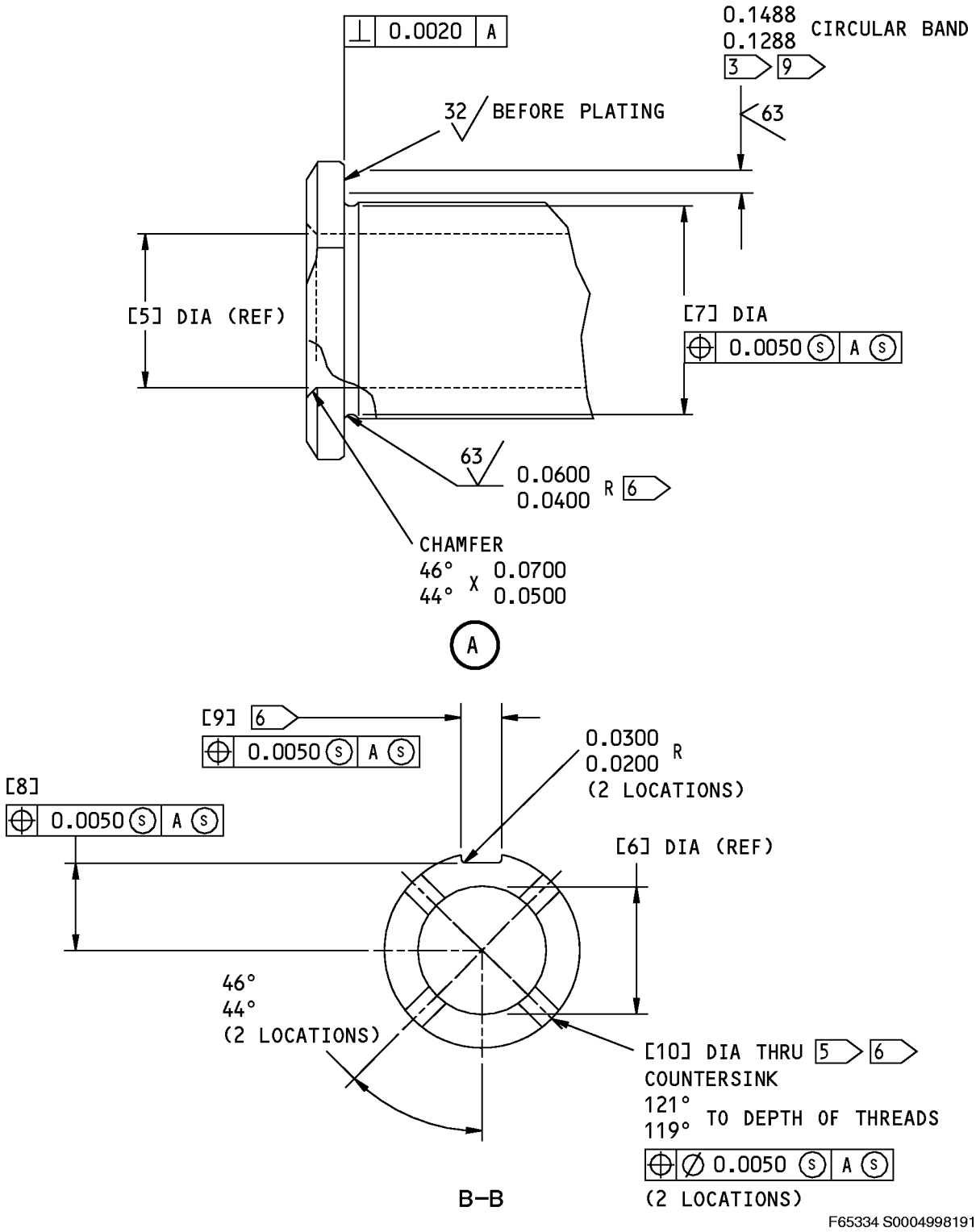
(1) Plate and apply primer, C00175, coating, C00033, and compound, C50001 as shown.



A-A

F65211 S0004998190_V2

162A2302-2, -4 Drag Strut Pin Repair
Figure 601 (Sheet 1 of 3)



162A2302-2, -4 Drag Strut Pin Repair
Figure 601 (Sheet 2 of 3)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	1.4990 1.4980 <11>	5.2875 5.2775	0.1770 0.1570	1.1350 1.1250	1.0600 1.0400	0.8100 0.7900	1.4700 1.4600	0.5700 0.5500
REPAIR LIMIT	1.4680 <12>	---	---	---	---	---	---	---

REFERENCE NUMBER	[9]	[10]
DESIGN DIMENSION	0.2550 0.2500	0.2120 0.2010
REPAIR LIMIT	---	---

<1> CHROME PLATE (F-15.34), 0.003 THICKNESS MINIMUM AFTER GRINDING

<2> CHROME PLATE RUNOUT AREA

<3> WIPE WITH BMS 10-79 PRIMER (F-19.451)

<4> PART NUMBER AND SERIAL NUMBER LOCATION

<5> DO NOT SHOT PEEN THIS SURFACE

<6> CADMIUM-TITANIUM PLATE (F-15.01) THEN APPLY BMS 10-79 PRIMER (F-19.47)

<7> CADMIUM-TITANIUM PLATE (F-15.01) THEN APPLY PRIMER (F-19.66) AND CORROSION PREVENTIVE COMPOUND (F-19.03)

<8> CADMIUM-TITANIUM PLATE (F-15.01), THEN APPLY BMS 10-79 PRIMER (F-19.47) AND BMS 10-60, TYPE 2 GLOSS ENAMEL (F-19.39-707)

<9> CHROME PLATE (F-15.34), 0.0003-0.0005 THICK. DO NOT GRIND

<10> CADMIUM-TITANIUM PLATE (F-15.32)

<11> AFTER PLATING

<12> LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH (SOPM 20-10-04)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

DIMENSIONS APPLY BEFORE PLATING UNLESS NOTED

SURFACE FINISHES AND DIMENSIONS APPLY BEFORE SHOT PEENING UNLESS NOTED

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

F65474 S0004998192_V2

162A2302-2, -4 Drag Strut Pin Repair
Figure 601 (Sheet 3 of 3)

FORWARD LOCK LINK ASSEMBLY - REPAIR 5-1

162A2112–3, –5

1. General

A. Use this procedure to replace the bushings and paint forward lock link assembly (175A).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

2. Repair

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

B. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Bushing Replacement (REPAIR 5-1, Figure 601)

NOTE: For miscellaneous materials, refer SOPM 20-60-04.

(1) Remove the old bushings.

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

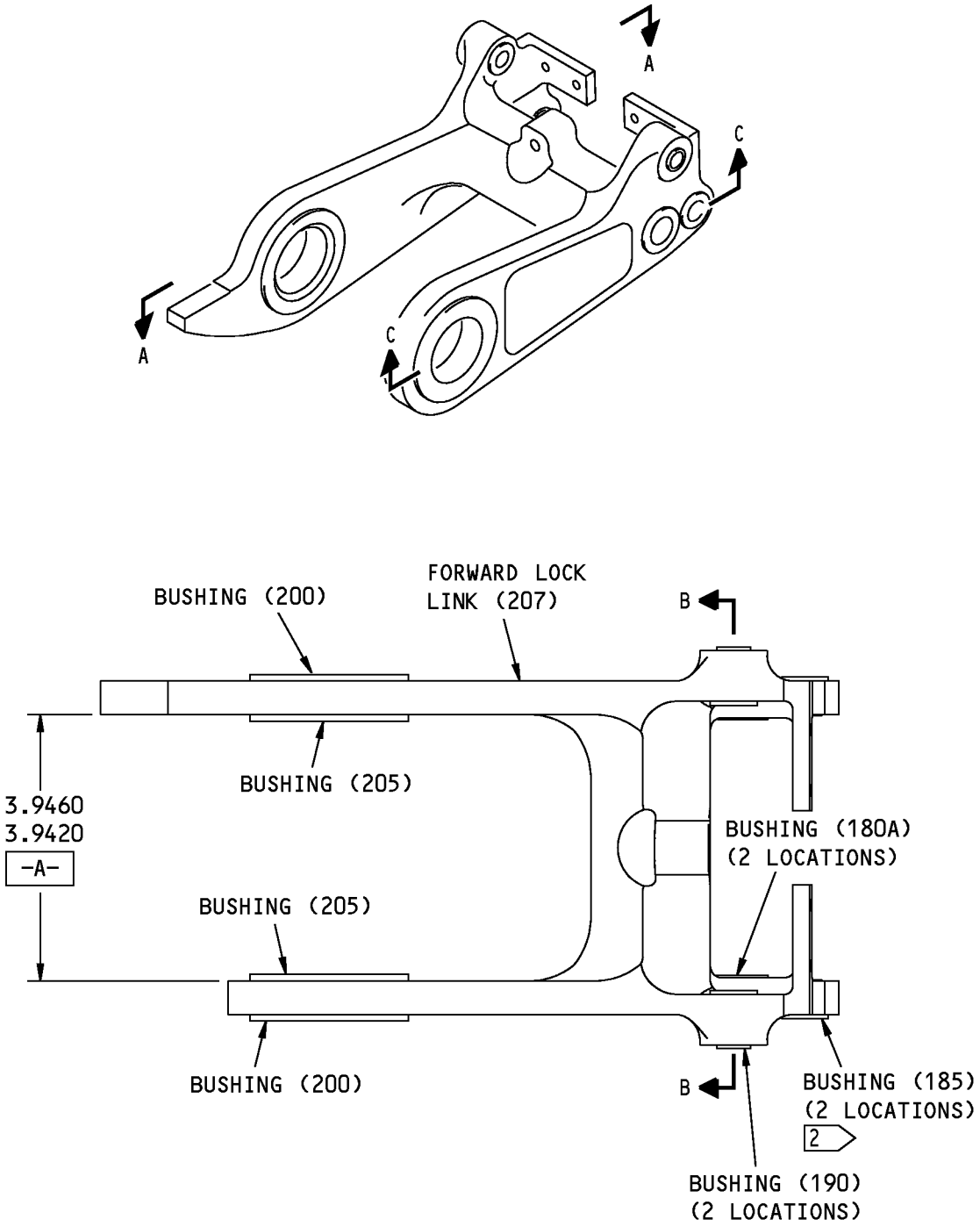
(3) Install replacement bushings by the shrink-fit procedure (SOPM 20-50-03).

(4) Roller swage the tail ends of bushings (180A, 185) (SOPM 20-50-03).

D. Refinish

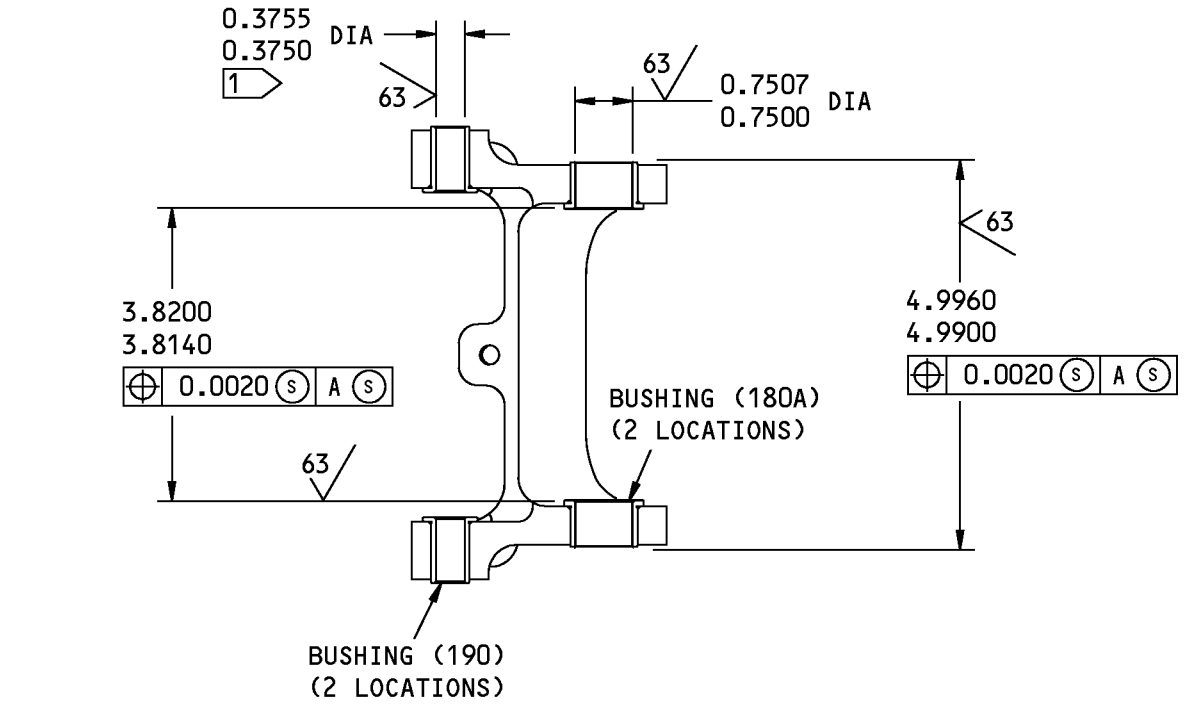
NOTE: For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Touch up base surfaces (F-17.10). Apply primer, C00175 (F-19.47) and enamel coating, C00033 (F-19.39-707) to all external surfaces but not on bushing flange faces or bores.

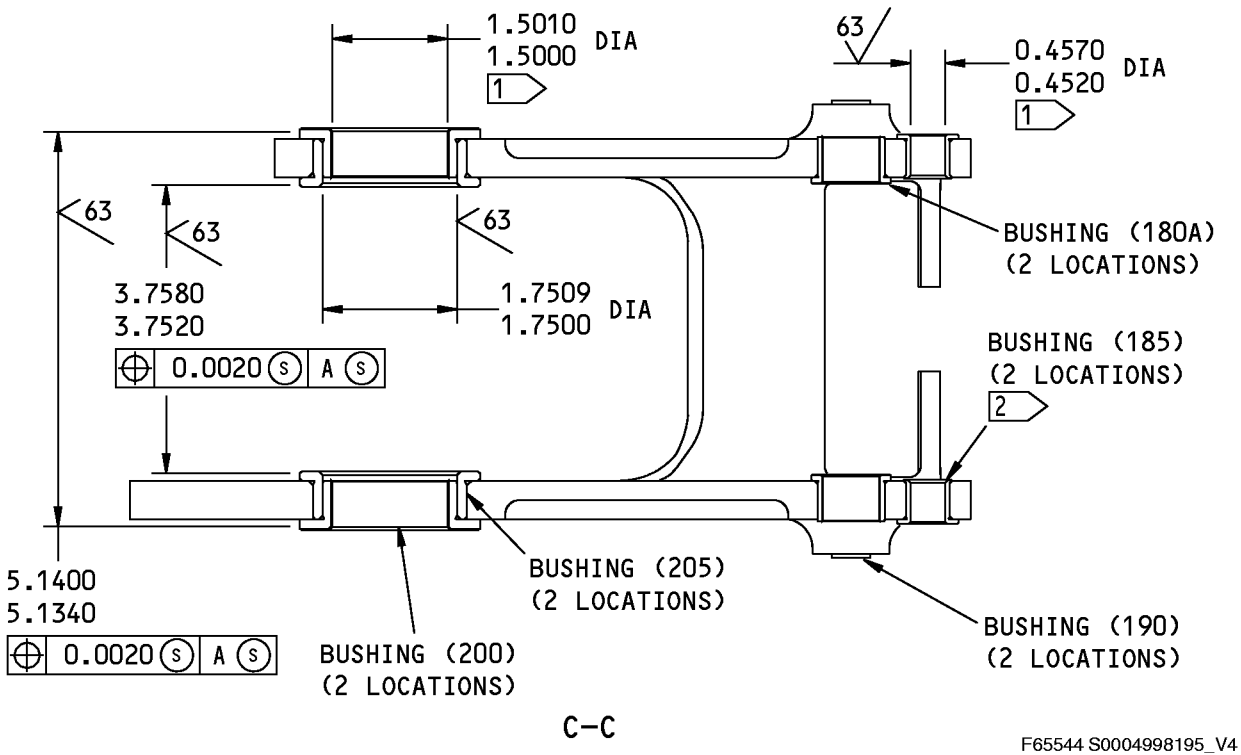


F65422 S0004998194_V3

162A2112-3, -5 Forward Lock Link Assembly Repair
Figure 601 (Sheet 1 of 3)



B–B



C–C

F65544 S0004998195_V4

162A2112-3, -5 Forward Lock Link Assembly Repair
Figure 601 (Sheet 2 of 3)

1 INSTALLED DIMENSION. ADJUST TO THIS SIZE IF NECESSARY

2 ROLLER SWAGE (SOPM 20-50-03)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.04-0.06 R

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

F65553 S0004998196_V2

162A2112-3, -5 Forward Lock Link Assembly Repair
Figure 601 (Sheet 3 of 3)

FORWARD LOCK LINK - REPAIR 5-2

162A2112–2, –6

1. General

A. Use this procedure to repair lock link (207).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: Al alloy

(2) Shot Peen: Intensity 0.007-0.012A2

2. Repair

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

B. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. Lug Faces and Holes (REPAIR 5-2, Figure 601)

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

(2) Refinish as indicated (REPAIR 5-2, Paragraph 2.D.).

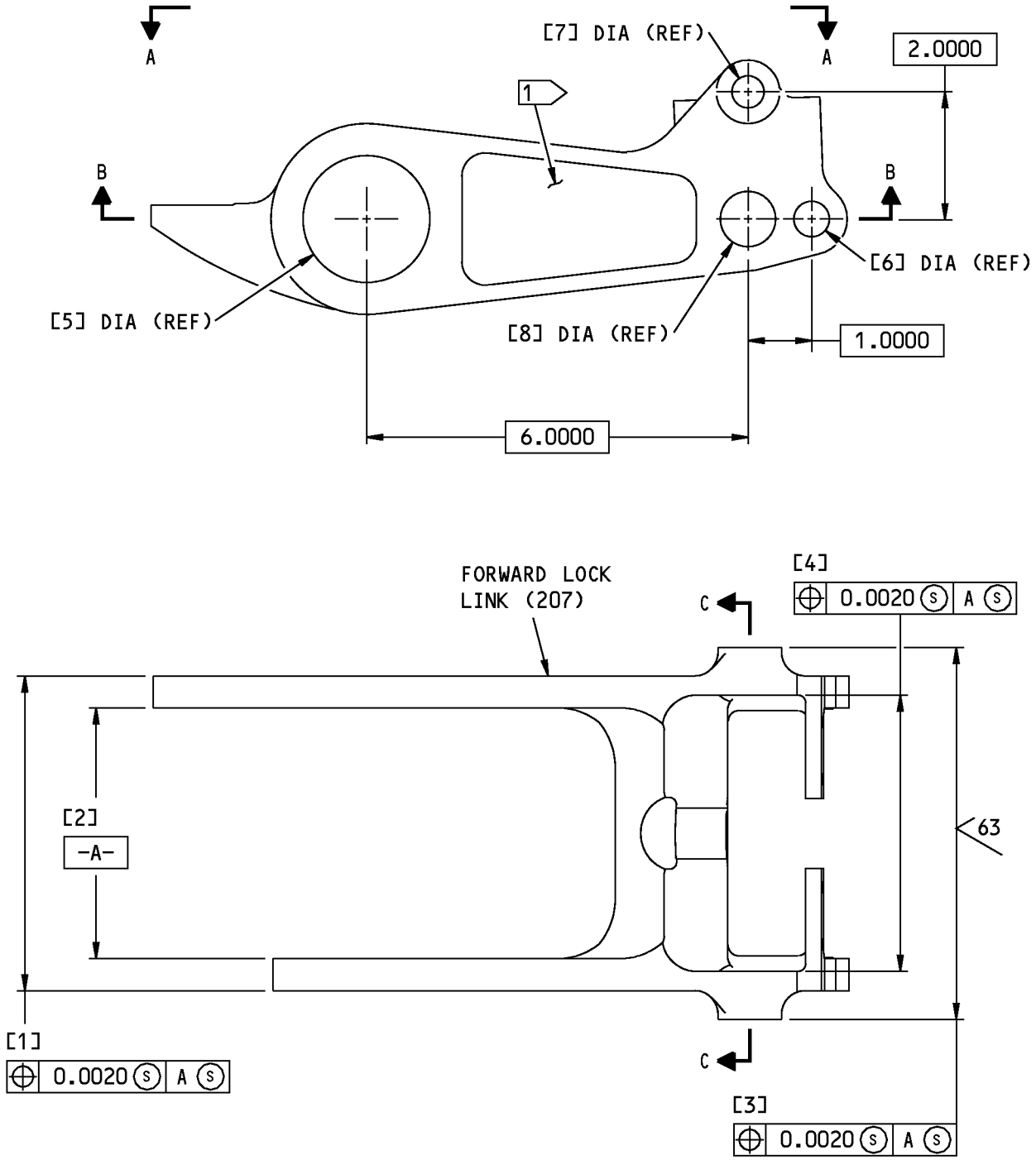
(3) Make or get oversize bushings (REPAIR 5-2, Figure 602 and on), as necessary to adjust for the material removed.

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

D. Lock Link Refinish (REPAIR 5-2, Figure 601)

NOTE: For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02

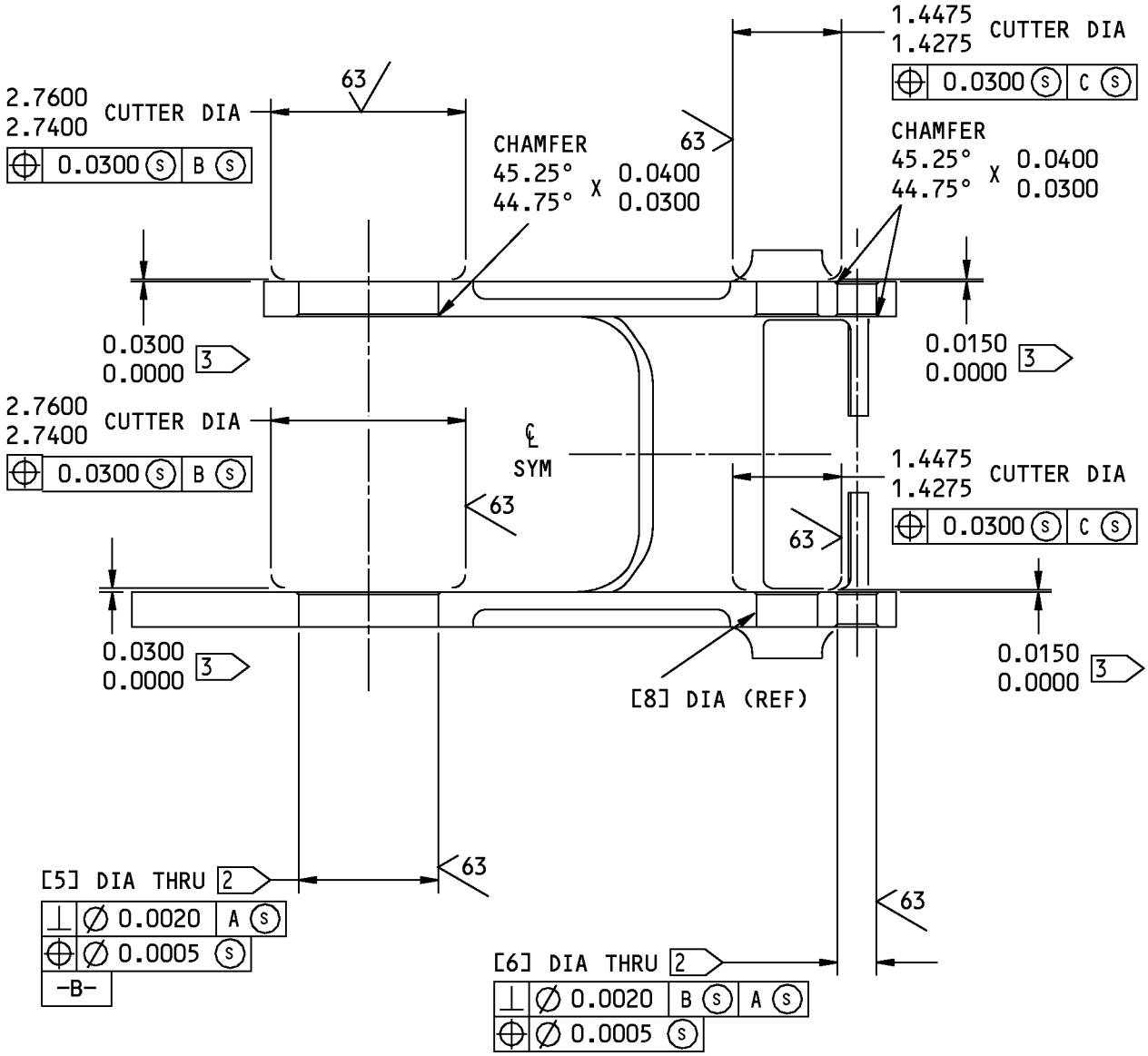
(1) Boric acid - sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00175 (F-19.47) but not in holes for bushings.



A-A

F67143 S0004998198_V3

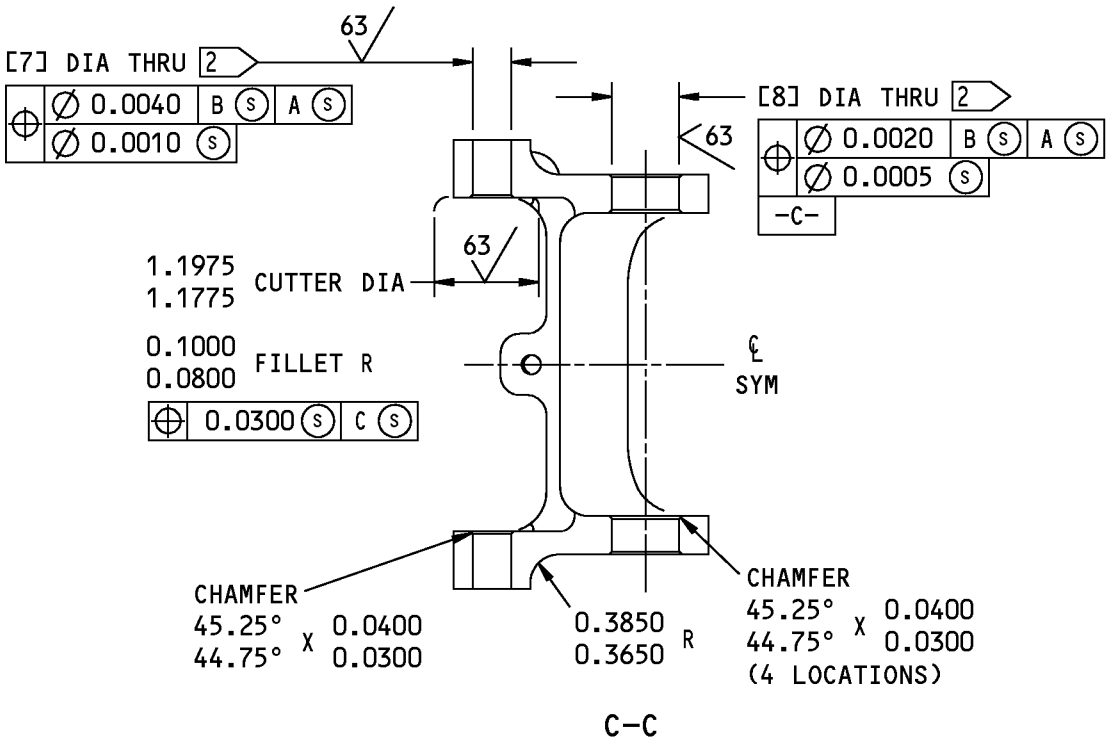
162A2112-2, -6 Forward Lock Link Repair
Figure 601 (Sheet 1 of 4)



B–B

F67593 S0004998199_V3

162A2112-2, -6 Forward Lock Link Repair
Figure 601 (Sheet 2 of 4)



F67671 S0004998200_V3

162A2112-2, -6 Forward Lock Link Repair
Figure 601 (Sheet 3 of 4)

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	4.9500 4.9460	3.9460 3.9420	5.8500 5.8460	4.3460 4.3420	2.0009 2.0000	0.5631 0.5625	0.5006 0.5000	0.8757 0.8750
REPAIR LIMIT	---	4.0060 4	5.7860 4	4.2820 4	2.0609 4	0.6231 4	0.5606 4	SEE TABLE B

TABLE A

[8] 5 REPAIR LIMIT	REPAIR BUSHING PART NUMBER
0.8857 0.8850	BACB28AZ12B054AT
0.8957 0.8950	BACB28AZ12B054AU
0.9057 0.9050	BACB28AZ12B054AV
0.9157 0.9150	BACB28AZ12B054AW
0.9257 0.9250	BACB28AZ12B054AX
0.9357 0.9350	BACB28AZ12B054AY

TABLE B

1 PART NUMBER AND SERIAL NUMBER LOCATION

2 DO NOT PAINT OR SHOT PEEN THE HOLES

3 SPOTFACE DEPTH. BLEND SHARP EDGES 0.1200 R

4 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

5 RANGE FOR INSTALLATION OF OVERSIZE BUSHING

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

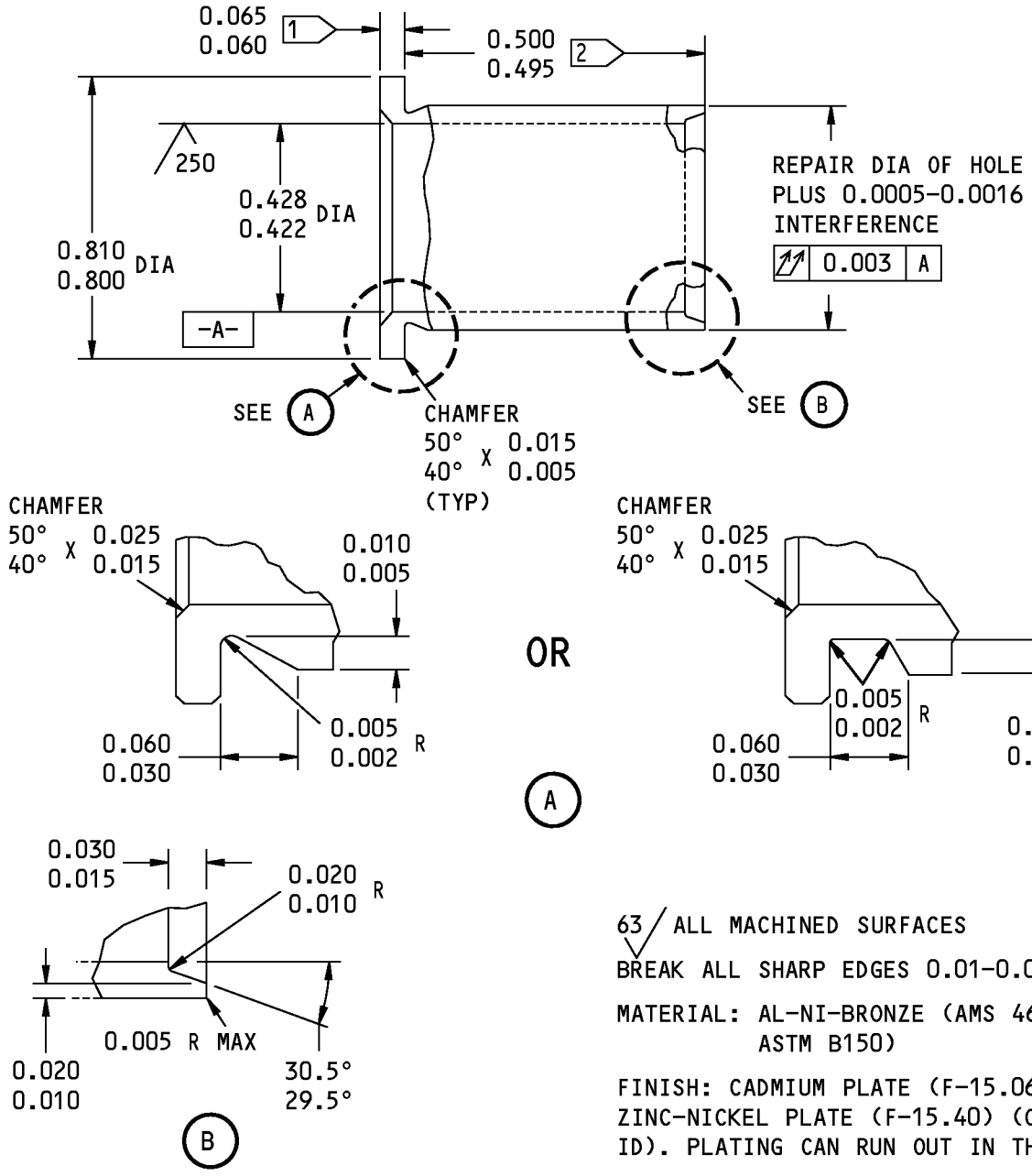
BREAK ALL SHARP EDGES 0.04-0.06 R

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

1382085 S0000251736_V2

162A2112-2, -6 Forward Lock Link Repair
Figure 601 (Sheet 4 of 4)



1 PLUS AMOUNT REMOVED FROM LUG FACE

2 MINUS AMOUNT REMOVED FROM LUG FACE

63 ALL MACHINED SURFACES

BREAK ALL SHARP EDGES 0.01-0.02 R

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

FINISH: CADMIUM PLATE (F-15.06) OR ZINC-NICKEL PLATE (F-15.40) (OPT IN ID). PLATING CAN RUN OUT IN THE BORE

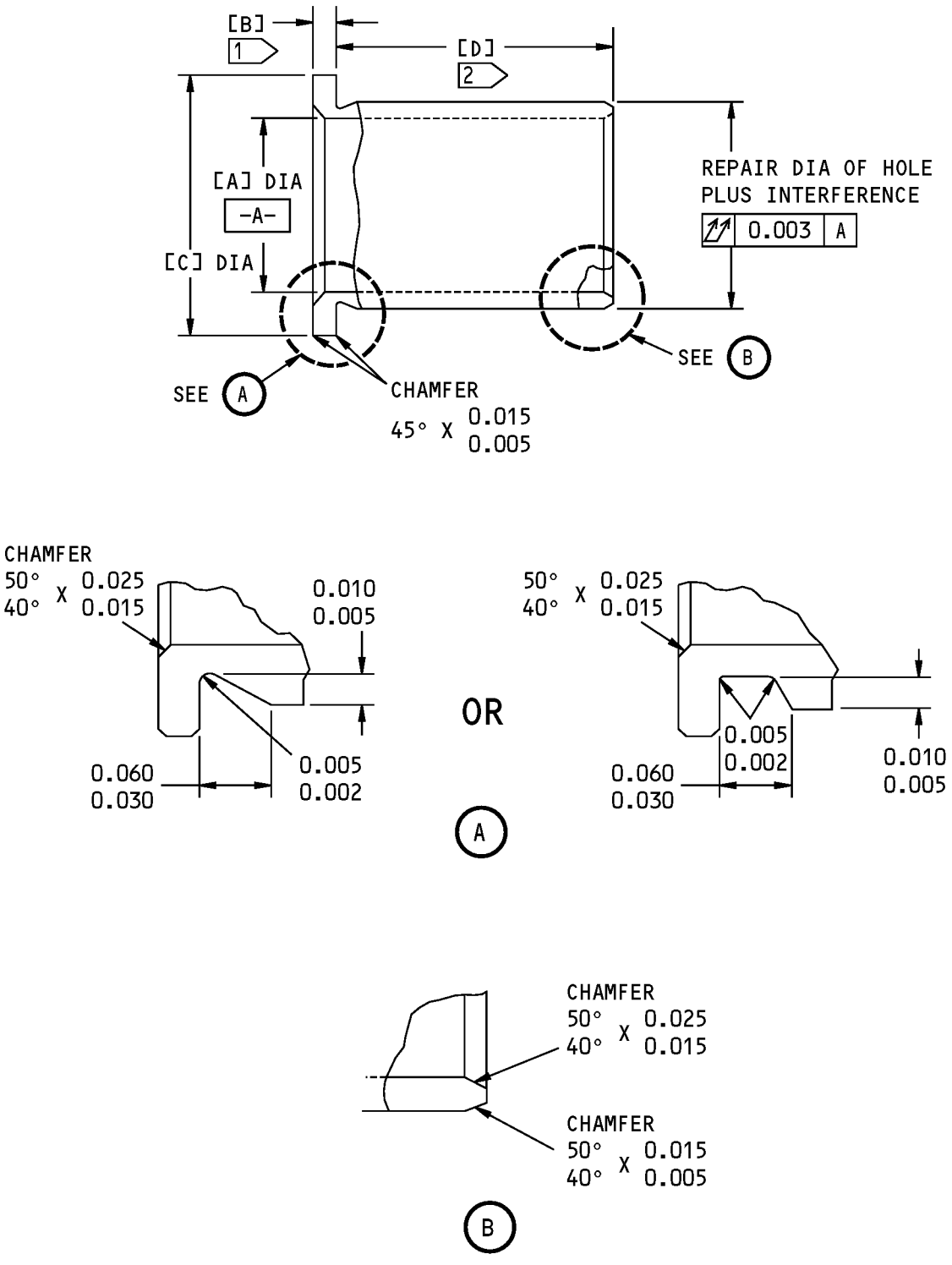
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS APPLY AFTER PLATING, BUT THE BORE IS NOT PLATED

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [6] FIG. 601 -- REPLACES BUSHING (185)
BACB28AU07A050CG

Oversize Bushing Details
Figure 602



Oversize Bushing Details
Figure 603 (Sheet 1 of 2)

HOLE LOCATION (FIG. 601)	REPLACES BUSHING (IPL FIG. 1)	[A]	[B]	[C]	[D]	INTERFERENCE
[5]	(205) BACB28AT28D049C	1.734 1.719	0.180 0.175	2.360 2.350	0.495 0.485	0.0040 0.0020
[7]	(190) BACB28AP06P080	0.366 0.359	0.065 0.060	0.800 0.700	0.800 0.795	0.0015 0.0004

1 PLUS AMOUNT REMOVED FROM LUG FACE

2 MINUS AMOUNT REMOVED FROM LUG FACE

63 ALL MACHINED SURFACES

BREAK ALL SHARP EDGES

MATERIAL: 15-5PH CRES (AMS 5659), OR 17-4PH CRES (AMS 5643)

FINISH: CADMIUM PLATE (F-15.06) OR ZINC-NICKEL PLATE (F-15.40) (OPT IN ID) PLATING CAN RUN OUT IN THE BORE

ALL DIMENSIONS APPLY AFTER PLATING, BUT THE BORE IS NOT PLATED

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603 (Sheet 2 of 2)

AFT LOCK LINK ASSEMBLY - REPAIR 6-1

162A2115–3, –5, –7

1. General

A. Use this procedure to replace the bushings of aft lock link assembly (220A).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

2. Repair

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

B. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-02	FINISHING MATERIALS

C. Bushing Replacement (REPAIR 6-1, Figure 601 or REPAIR 6-1, Figure 602)

(1) Remove the old bushings.

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

(3) Install replacement bushings by the shrink-fit procedure (SOPM 20-50-03).

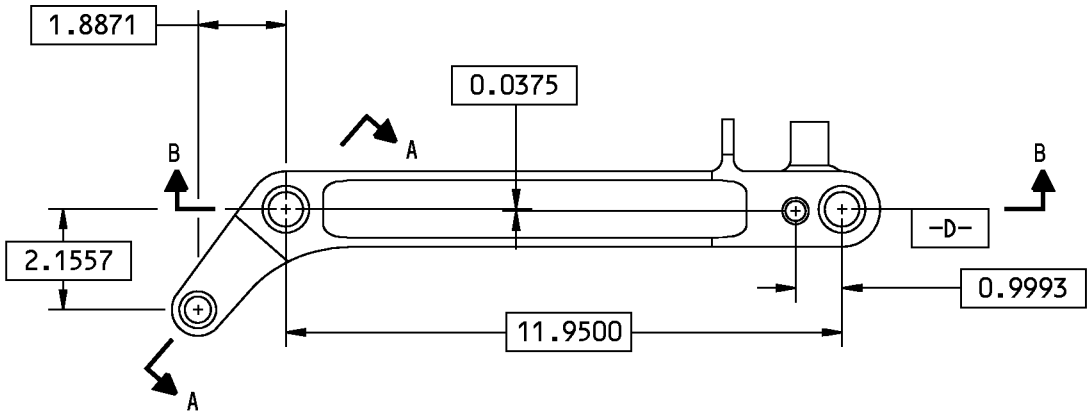
(4) Roller swage the tail ends of bushings (235) (SOPM 20-50-03).

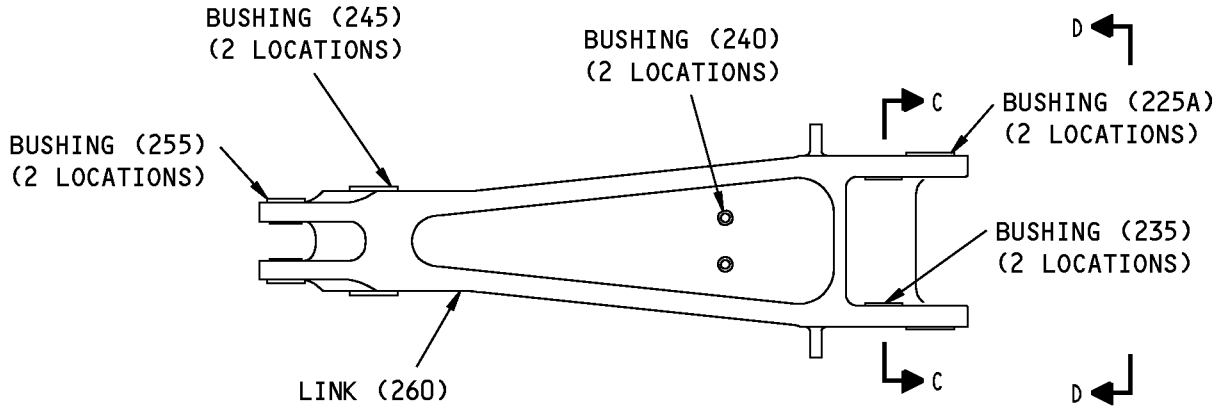
D. Refinish

NOTE: For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

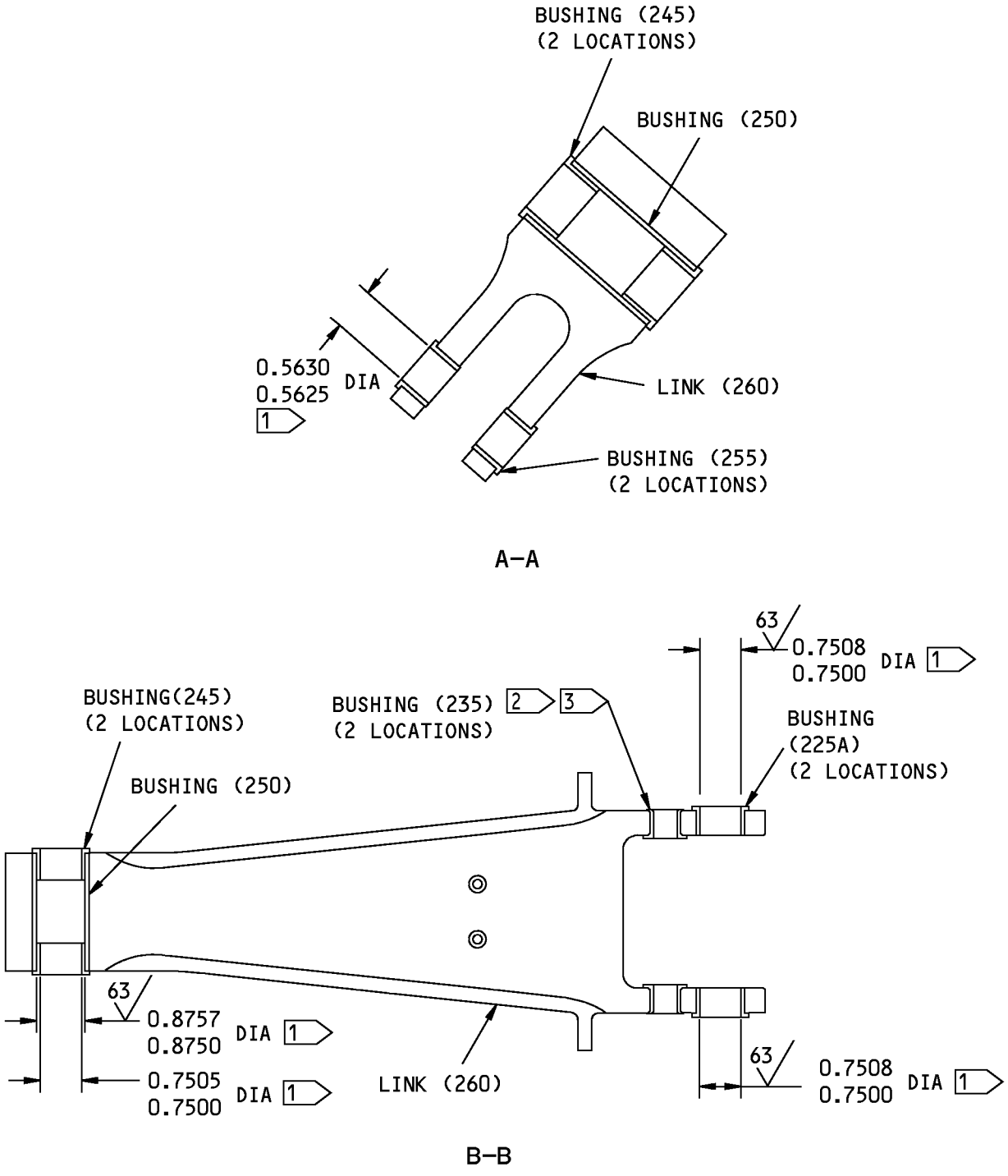
(1) Touch up bare surfaces (F-17.10).

(2) Apply primer, C00175 (F-19.47) and enamel coating, C00033 (F-19.39-707) to all external surfaces but not on bushing flange faces or bores.

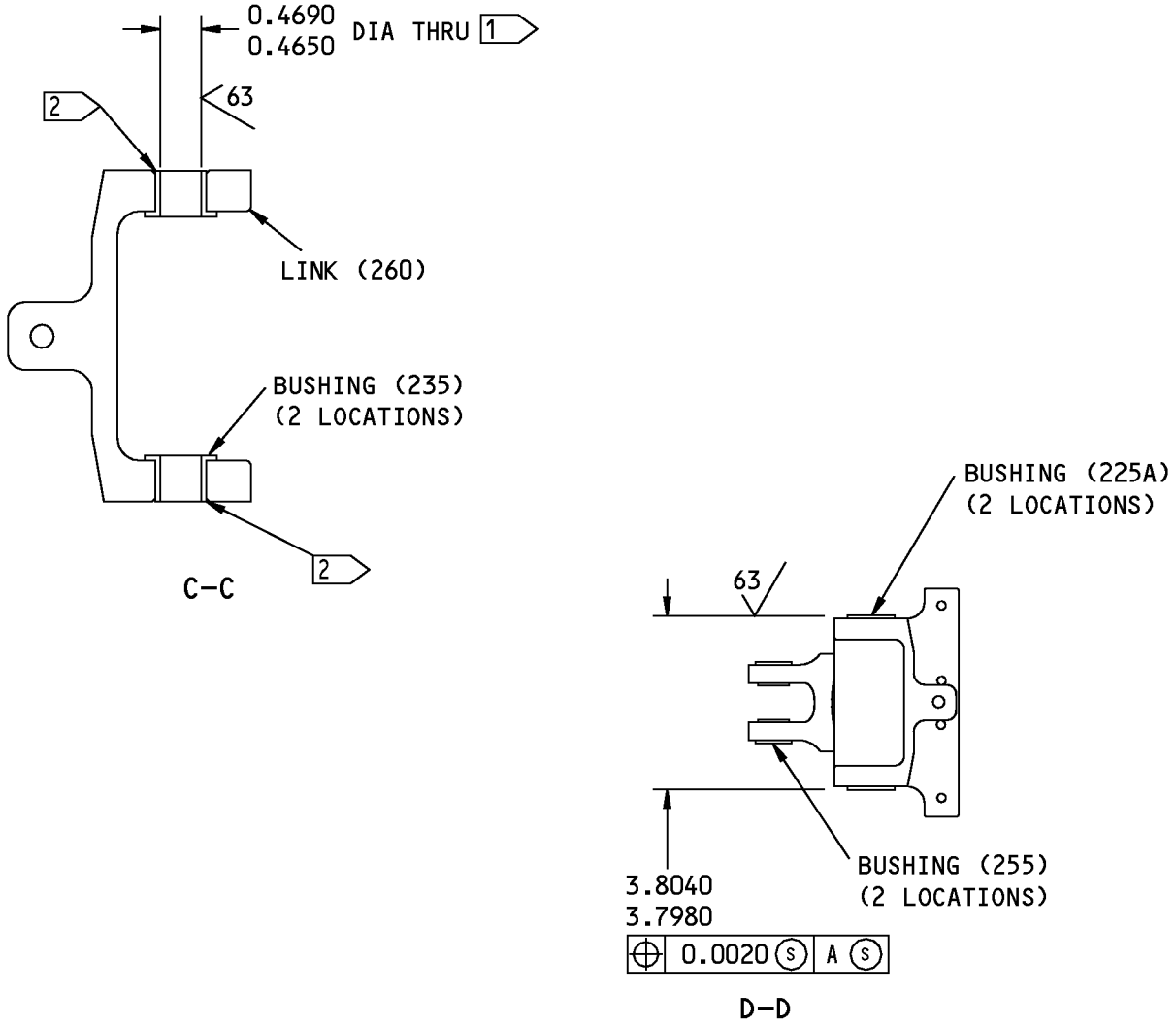




162A2115-3 Aft Lock Link Assembly Repair
Figure 601 (Sheet 1 of 3)



162A2115-3 Aft Lock Link Assembly Repair
Figure 601 (Sheet 2 of 3)



1 INSTALLED DIMENSION. ADJUST TO THIS SIZE IF NECESSARY

2 ROLLER SWAGE (SOPM 20-50-03)

3 MAXIMUM GAP 0.0010 BETWEEN THE LINK AND THE INSIDE FACE OF THE BUSHING FLANGE

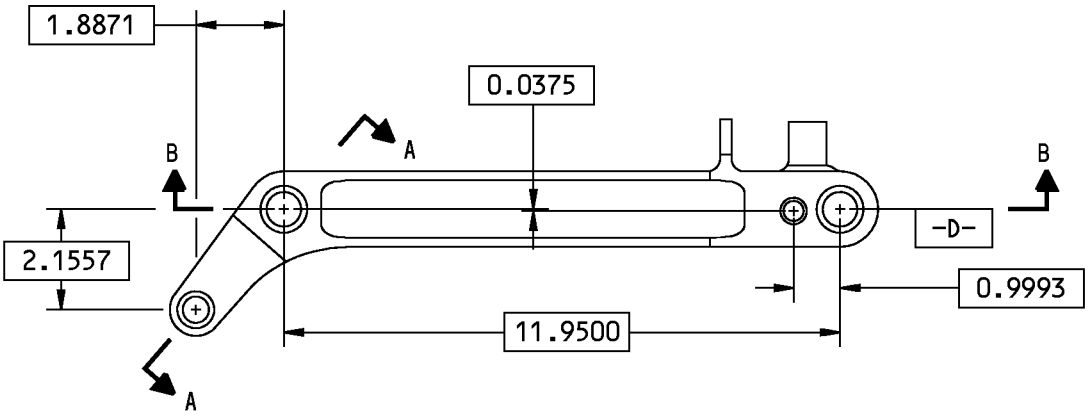
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

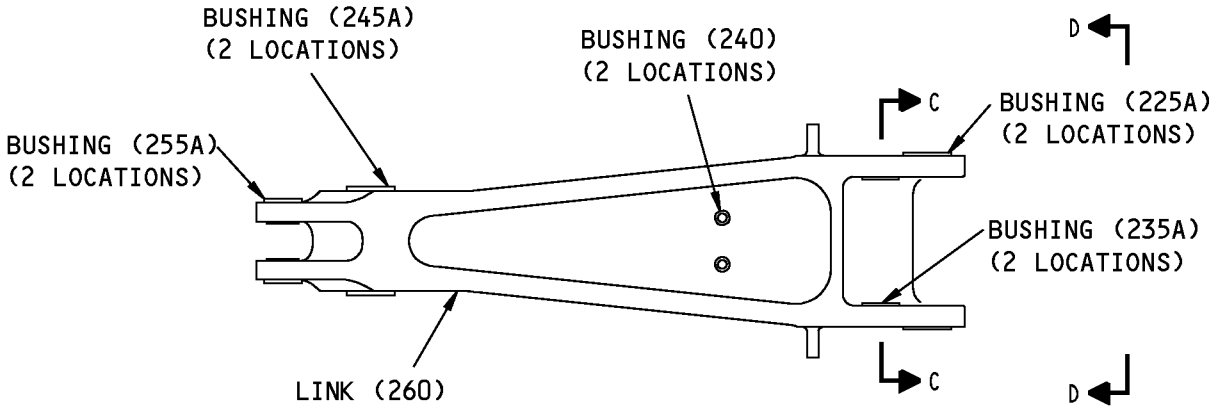
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

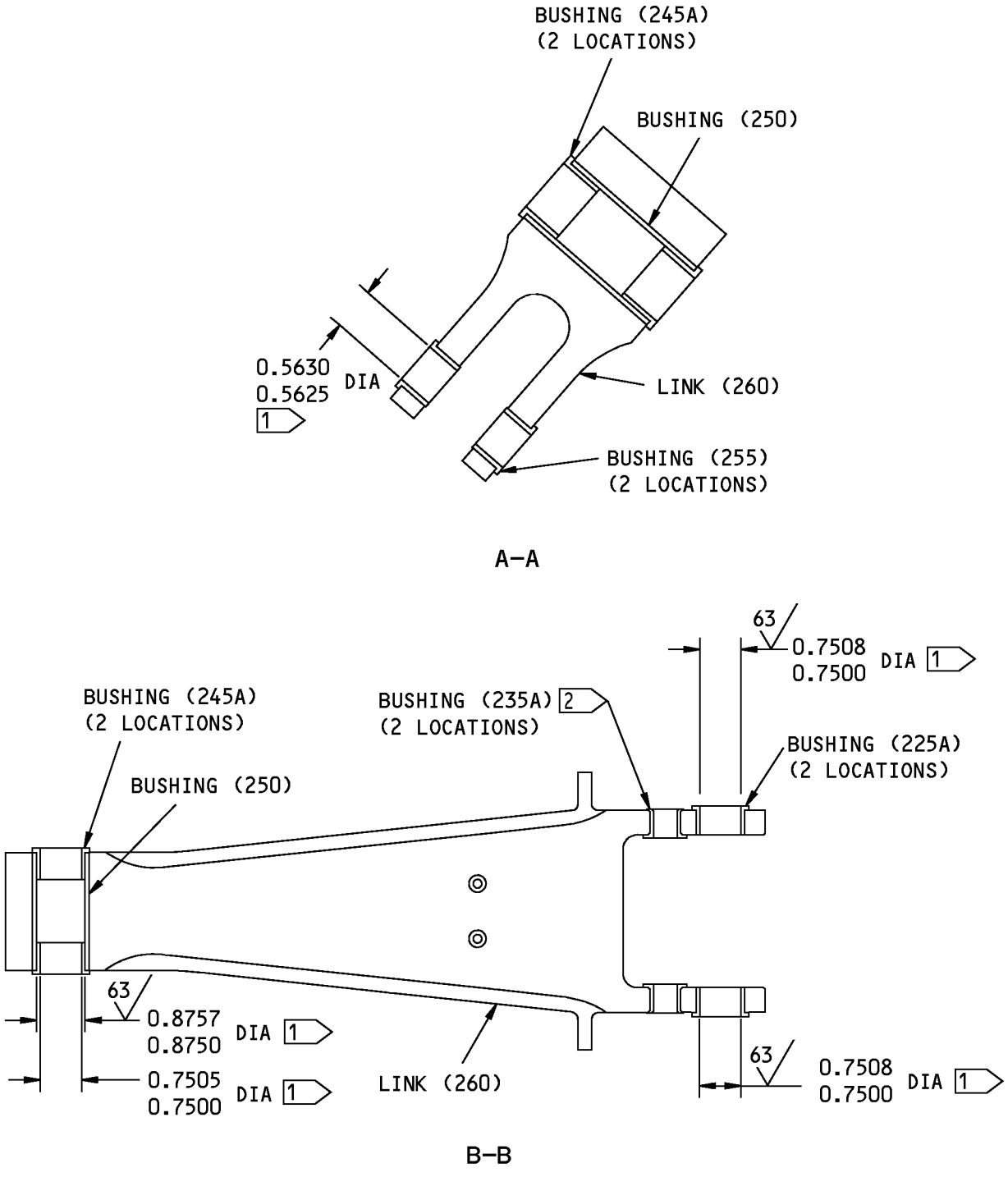
162A2115-3 Aft Lock Link Assembly Repair
Figure 601 (Sheet 3 of 3)





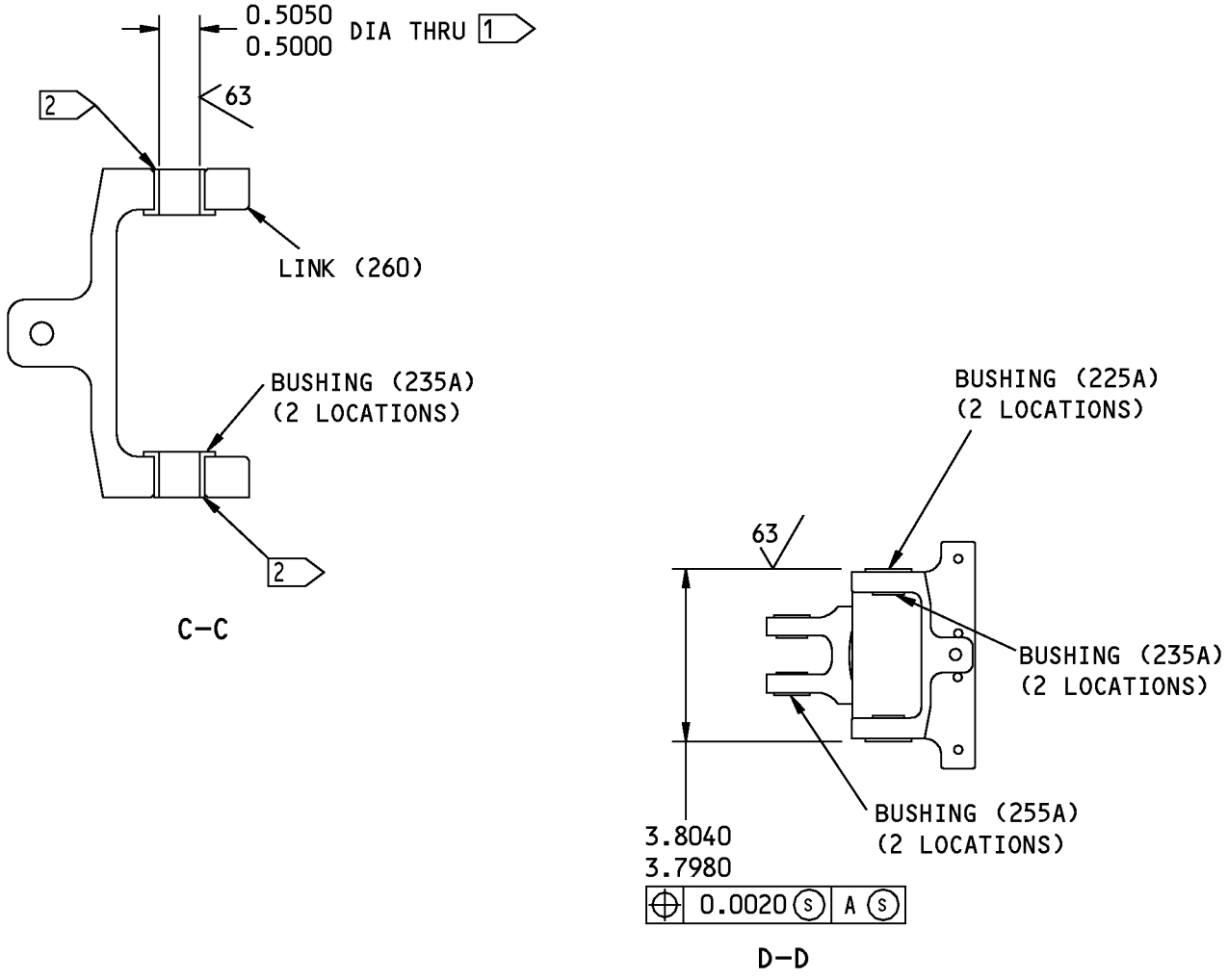
K24058 S0004998208_V3

162A2115-5, -7 Aft Lock Link Assembly Repair
Figure 602 (Sheet 1 of 3)



K24063 S0004998209_V3

162A2115-5, -7 Aft Lock Link Assembly Repair
Figure 602 (Sheet 2 of 3)



1 INSTALLED DIMENSION. ADJUST TO THIS SIZE IF NECESSARY

2 ROLLER SWAGE (SOPM 20-50-03)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

K24072 S0004998210_V3

162A2115-5, -7 Aft Lock Link Assembly Repair
Figure 602 (Sheet 3 of 3)

AFT LOCK LINK - REPAIR 6-2

162A2115–2, –6, –8

1. General

A. Use this procedure to repair lock link (260).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: Al alloy

(2) Shot Peen: Intensity 0.007-0.012A2

2. Lug Faces and Holes

A. Procedure (REPAIR 6-2, Figure 601)

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

(2) Refinish as indicated (REPAIR 6-2, Paragraph 3.).

(3) Make oversize bushings (REPAIR 6-2, Figure 603 and on), as necessary to adjust for the material removed.

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

3. Refinish

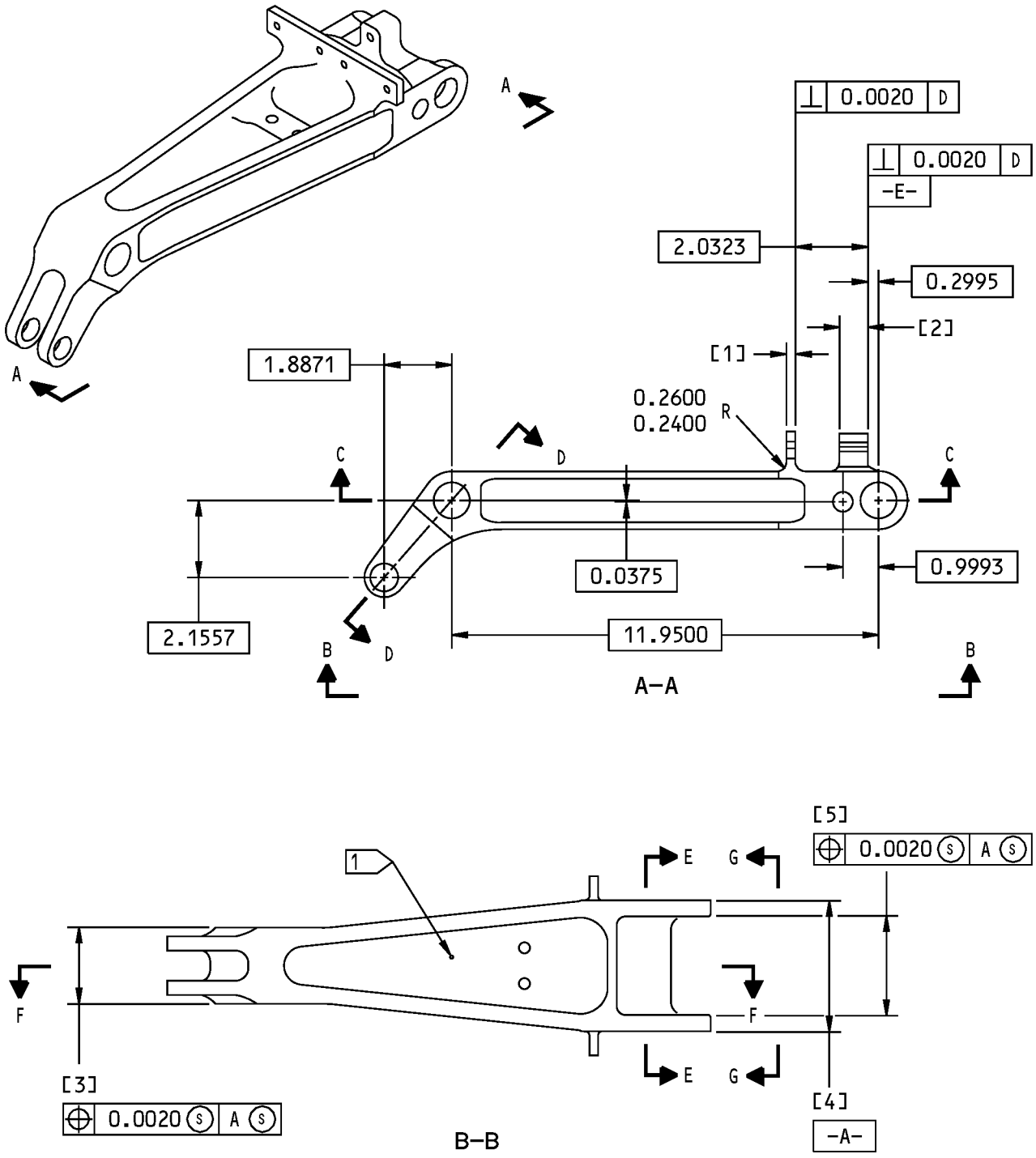
NOTE: For the decoding table for Boeing finish codes, refer to SOPM 20-41-01.

For finishing materials, refer to SOPM 20-60-02

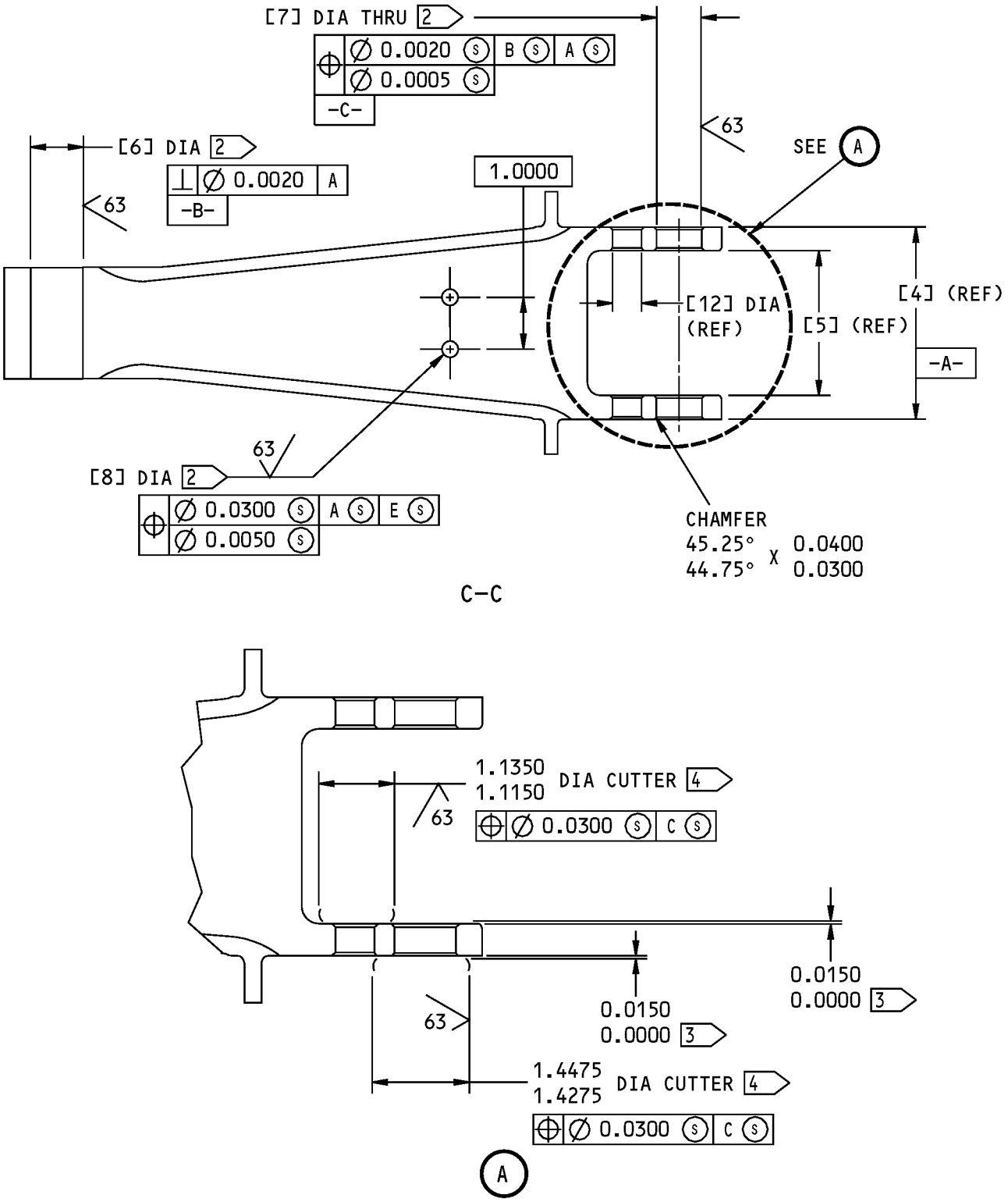
A. Procedure (REPAIR 6-2, Figure 601 or REPAIR 6-2, Figure 602)

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

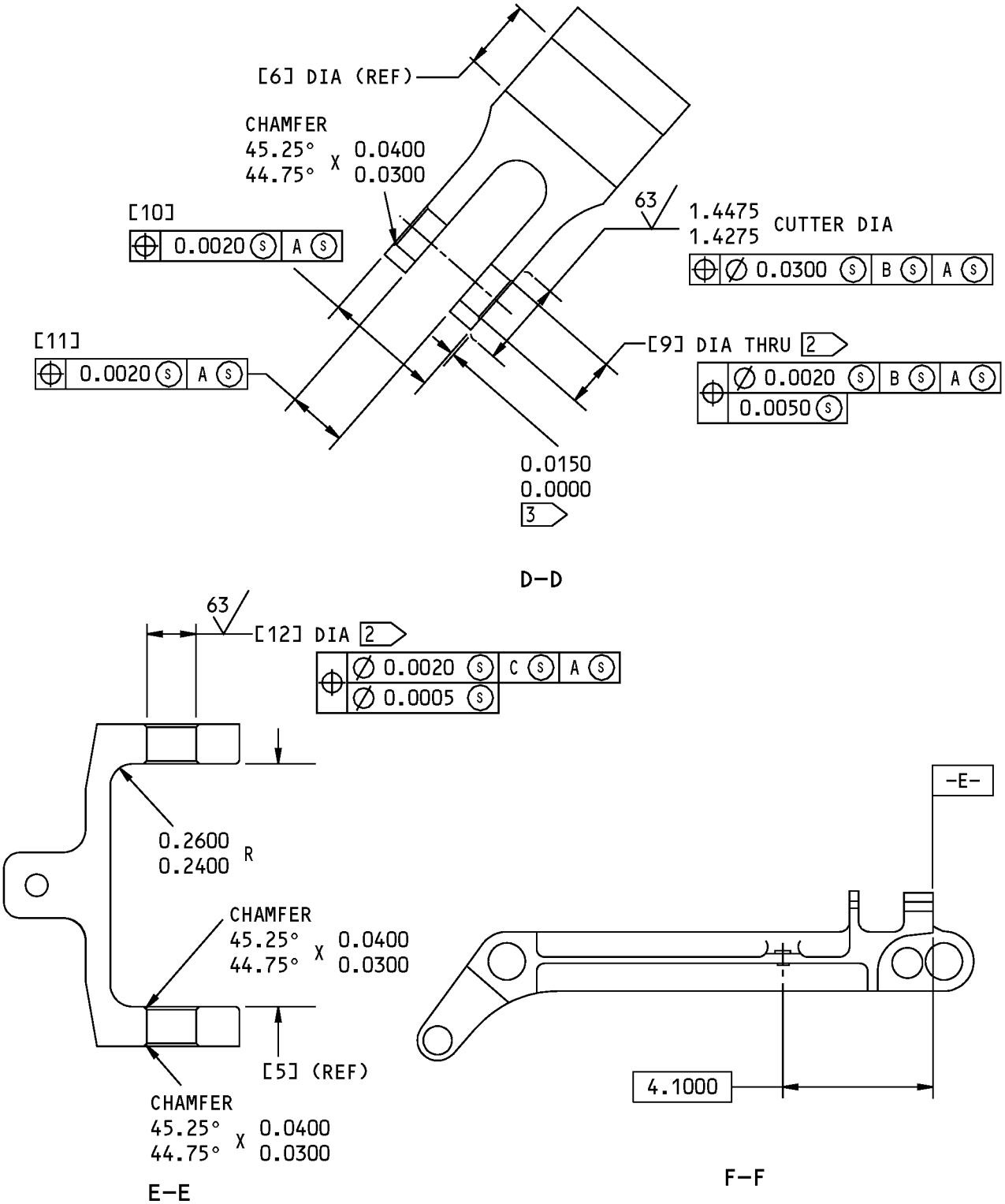
(2) Apply primer, C00175 (F-19.47).



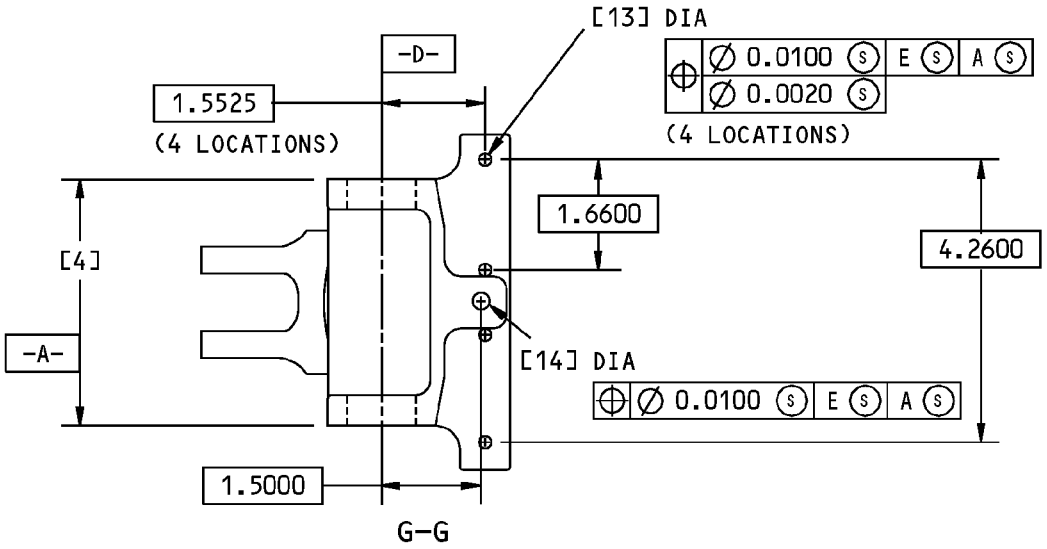
162A2115-2 Aft Lock Link Repair
Figure 601 (Sheet 1 of 4)



162A2115-2 Aft Lock Link Repair
Figure 601 (Sheet 2 of 4)



162A2115-2 Aft Lock Link Repair
Figure 601 (Sheet 3 of 4)



REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	0.2600 0.2400	0.8100 0.7900	2.1370 2.1330	3.6760 3.6720	2.7720 2.7680	1.0007 1.0000	0.8757 0.8750	0.3129 0.3123
REPAIR LIMIT	---	---	---	---	2.8320 (5)	1.0607 (5)	---	---

REFERENCE NUMBER	[9]	[10]	[11]	[12]	[13]	[14]
DESIGN DIMENSION	0.6882 0.6875	1.6440 1.6400	0.8400 0.8360	0.5631 0.5625	0.1940 0.1900	0.2540 0.2500
REPAIR LIMIT	---	---	---	0.6231 (5)	---	---

1. PART NUMBER AND SERIAL NUMBER LOCATION
2. DO NOT PAINT OR SHOT PEEN HOLES
3. SPOTFACE DEPTH. BLEND SHARP EDGES 0.12 R
4. MAXIMUM GAP 0.0010 BETWEEN THE LINK AND THE INSIDE FACE OF THE BUSHING FLANGE
5. LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

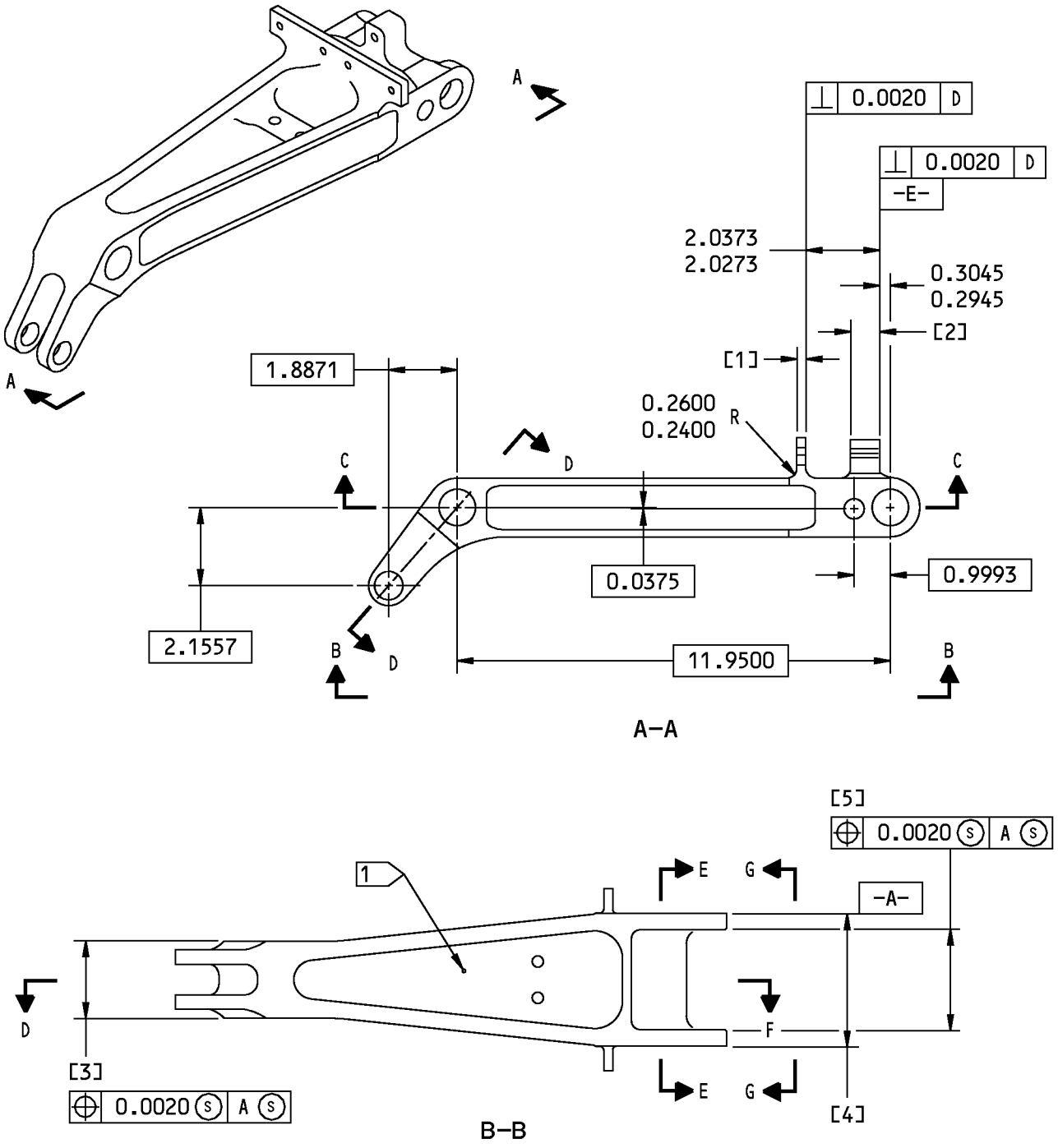
125 ALL MACHINED SURFACES BEFORE SHOT PEENING UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

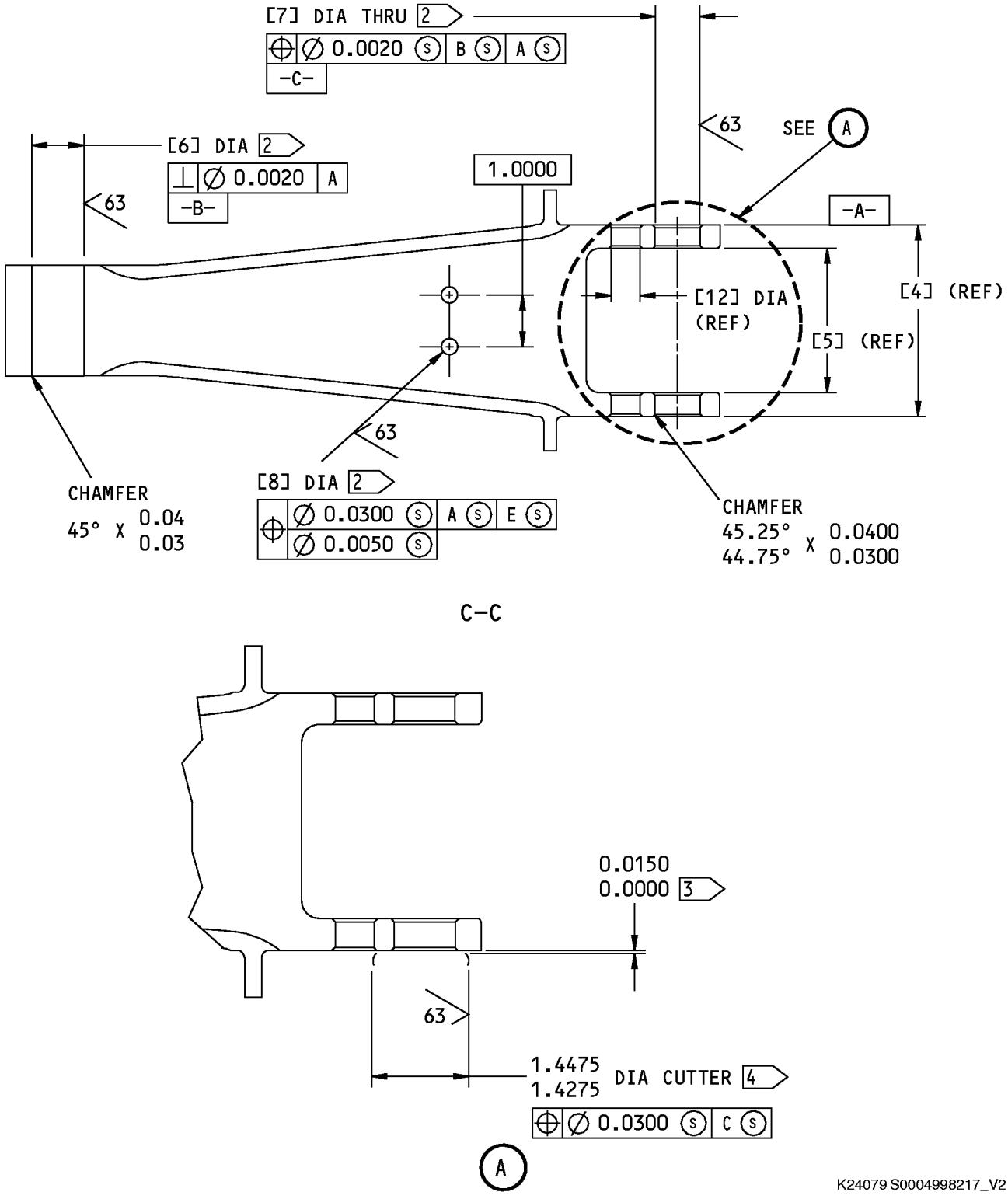
ALL DIMENSIONS ARE IN INCHES

162A2115-2 Aft Lock Link Repair
Figure 601 (Sheet 4 of 4)

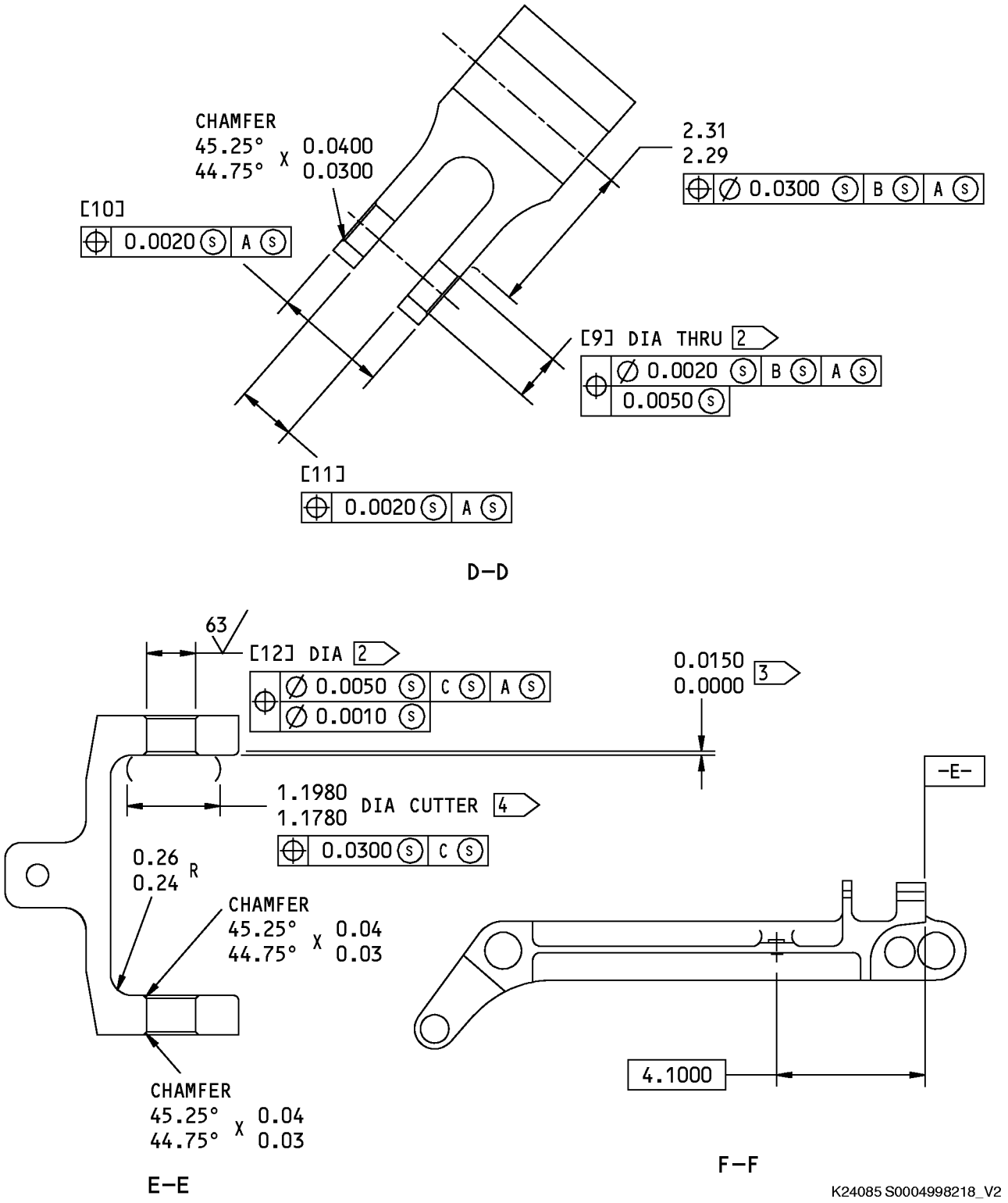


K24076 S0004998216_V2

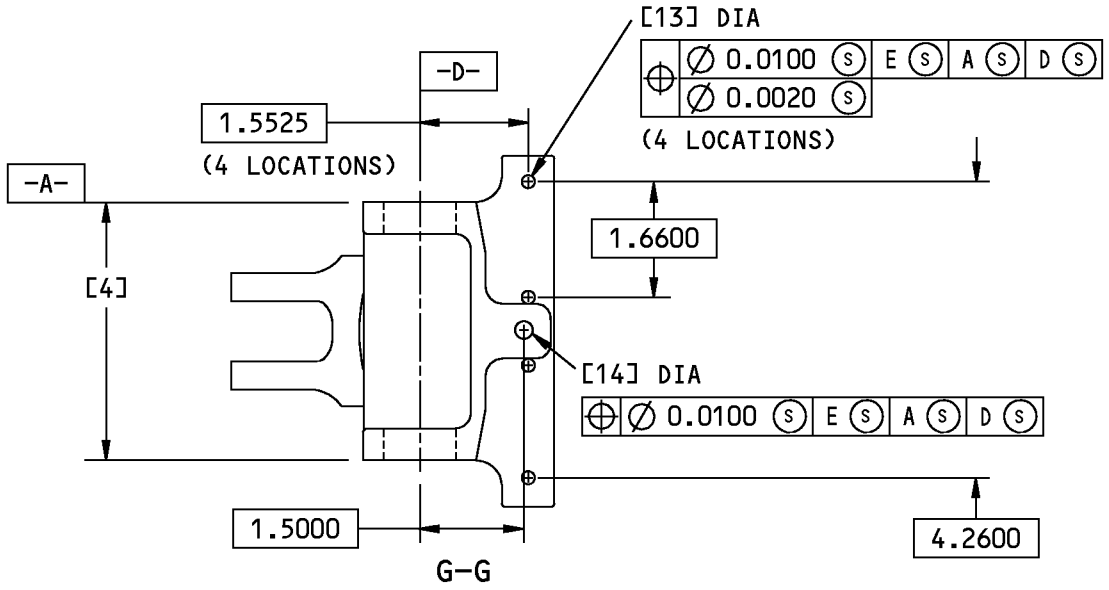
162A2115-6, -8 Aft Lock Link Repair
Figure 602 (Sheet 1 of 4)



162A2115-6, -8 Aft Lock Link Repair
Figure 602 (Sheet 2 of 4)



162A2115-6, -8 Aft Lock Link Repair
Figure 602 (Sheet 3 of 4)



REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DESIGN DIMENSION	0.2600 0.2400	0.8100 0.7900	2.1370 2.1330	3.6760 3.6720	2.7720 2.7680	1.0007 1.0000	0.8757 0.8750	0.3129 0.3123
REPAIR LIMIT	---	---	---	---	2.8320 <5>	1.0607 <5>	---	---

REFERENCE NUMBER	[9]	[10]	[11]	[12]	[13]	[14]
DESIGN DIMENSION	0.6882 0.6875	1.6440 1.6400	0.8400 0.8360	0.6256 0.6250	0.1940 0.1900	0.2540 0.2500
REPAIR LIMIT	---	---	---	0.6856 <5>	---	---

<1> PART NUMBER AND SERIAL NUMBER LOCATION

<2> DO NOT PAINT OR SHOT PEEN HOLES

<3> SPOTFACE DEPTH. BLEND SHARP EDGES 0.12 R

<4> MAXIMUM GAP 0.0010 BETWEEN THE LINK AND THE INSIDE FACE OF THE BUSHING FLANGE

<5> LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

125 ALL MACHINED SURFACES BEFORE SHOT PEENING UNLESS SHOWN DIFFERENTLY

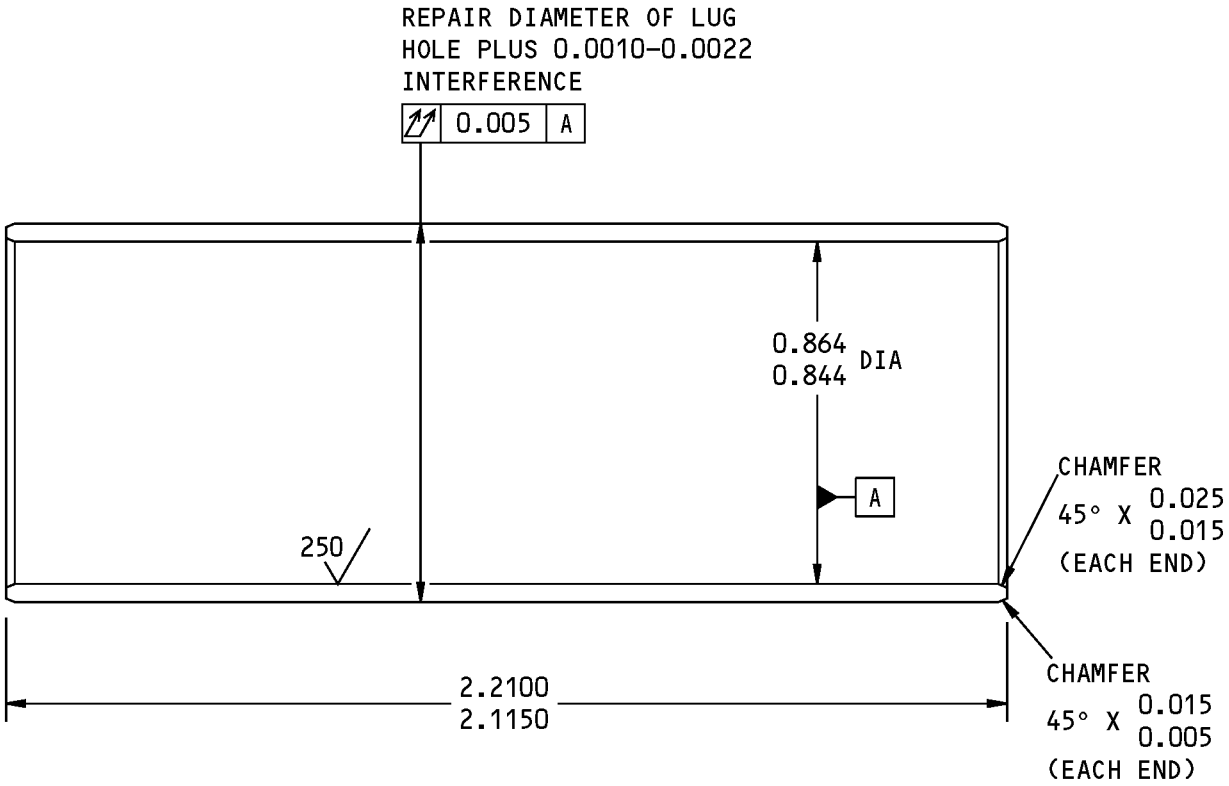
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

K24090 S0004998219_V2

162A2115-6, -8 Aft Lock Link Repair
Figure 602 (Sheet 4 of 4)



HOLE LOCATION [6] FIG. 601,602
REPLACES BUSHING (250) BACB28AW14B212C

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: AL-NI-BRONZE (AMS 4640)

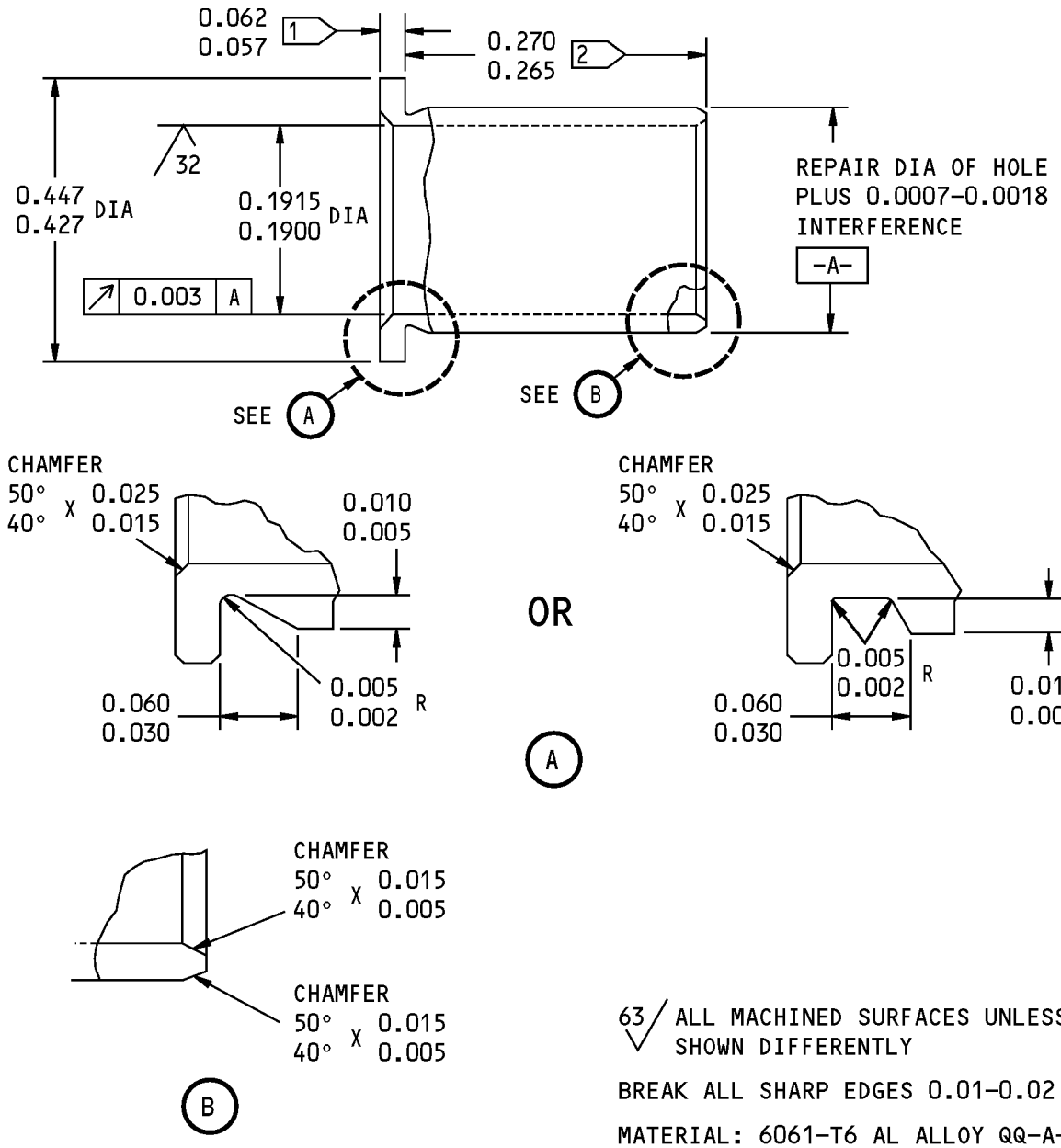
FINISH: CADMIUM PLATE (F-15.06) OR
ZINC-NICKEL PLATE (F-15.40)
PLATING CAN RUN OUT IN BORE

ITEM NUMBERS REFER TO IPL FIG. 1

DIMENSIONS ARE AFTER PLATING BUT THE BORE IS NOT PLATED

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603



1 PLUS AMOUNT REMOVED FROM LUG FACE

2 MINUS AMOUNT REMOVED FROM LUG FACE

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01-0.02 R

MATERIAL: 6061-T6 AL ALLOY QQ-A-225/8

FINISH: ANODIZE (F-17.05)

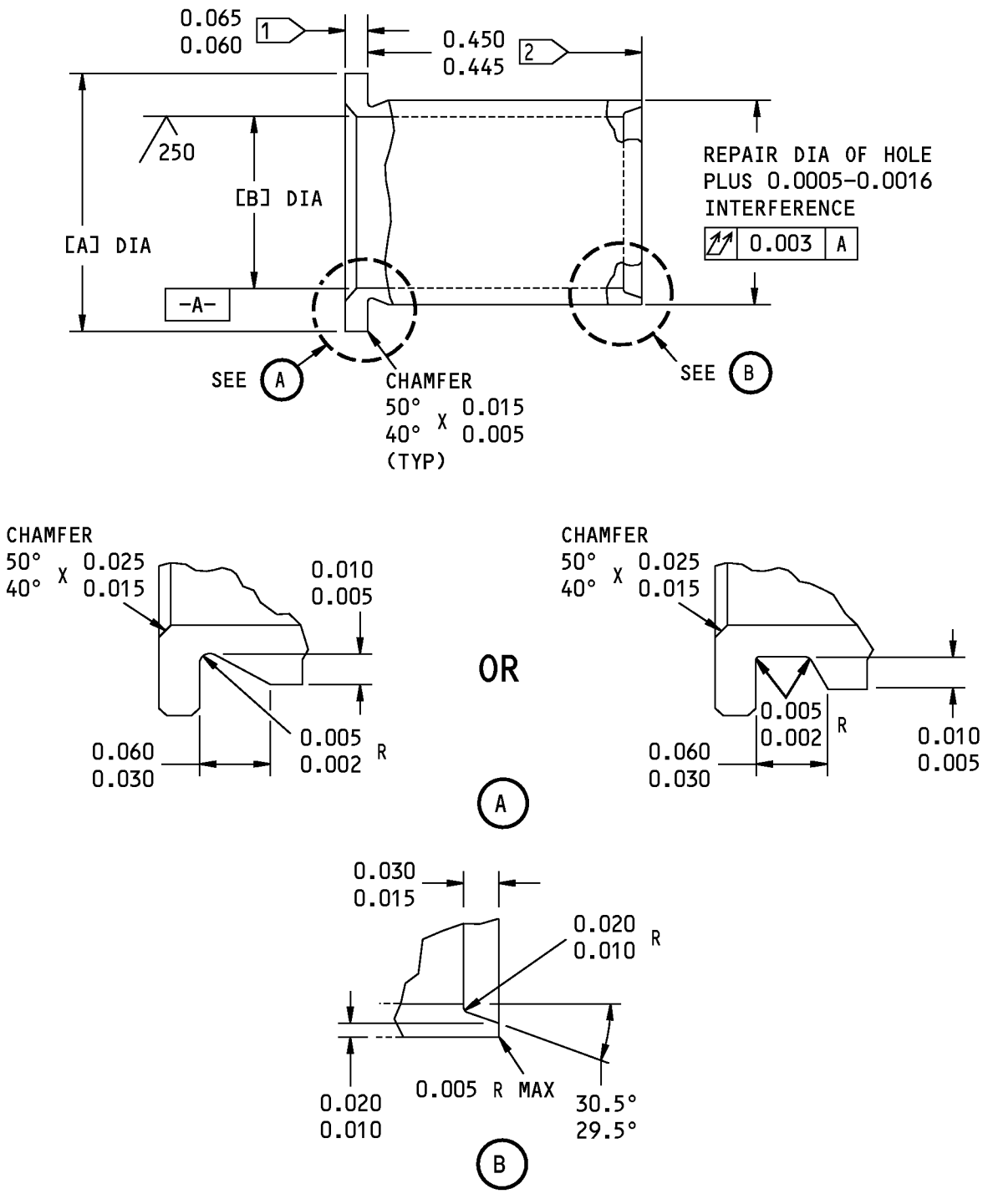
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS APPLY AFTER FINISH

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION [8] FIG. 601,602
REPLACES BUSHING (240) BACB28X3D027

Oversize Bushing Details
Figure 604



Oversize Bushing Details
Figure 605 (Sheet 1 of 2)

HOLE LOCATION	REPAIR FIGURE	REPLACES BUSHING	[A]	[B]
[12]	601	(235) BACB28AU07A045CG	0.810 0.800	0.428 0.422
[12]	602	(235A) BACB28AU08A045CG	0.890 0.880	0.491 0.484

63 ALL MACHINED SURFACES

BREAK ALL SHARP EDGES 0.01-0.02 R

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

FINISH: CADMIUM PLATE (F-15.06) OR ZINC-NICKEL PLATE (F-15.40) (OPT IN ID). PLATING CAN RUN OUT IN THE BORE

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS APPLY AFTER PLATING, BUT THE BORE IS NOT PLATED

ALL DIMENSIONS ARE IN INCHES

1 PLUS AMOUNT REMOVED FROM LUG FACE

2 MINUS AMOUNT REMOVED FROM LUG FACE

Oversize Bushing Details
Figure 605 (Sheet 2 of 2)

SPRING ASSEMBLY - REPAIR 7-1

162A2111–1

1. General

A. This procedure tells how to repair spring assembly (70).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 1 for item numbers.

D. General details for spring (90)

(1) Material: Ti-3Al-8V-6Cr-4Mo-4Zr alloy (BMS 7-320 Type 2) titanium alloy

(2) Shot Peen: 0.014-0.016A2 intensity, Coverage 2.0. Extend the spring as necessary for good coverage. Be sure not to extend the spring more than 14.0 inches between end fitting centers.

2. Spring Assembly Parts Replacement

A. Disassembly of the spring assembly is not necessary to do these repairs.

B. If you find defects on the spring, refer to REPAIR 7-1, Paragraph 3. below for repair instructions.

C. If you find defects on the end fitting assemblies, refer to REPAIR 8-1 for repair instructions.

3. Spring Repair

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I

B. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

C. Procedure (REPAIR 7-1, Figure 601)

NOTE: If the damage is between the coils, then extend the spring until the spaces between the coils are a sufficient width to let you do the repairs. Be sure not to extend the spring more than 14.0 inches between end fitting centers.

(1) Coating defect without bare metal.

(a) Sand the area with 280 grit or finer abrasive paper. Make all edges of this area smooth with adjacent areas.

(b) Solvent clean (SOPM 20-30-03) the area.

(c) Dry abrasive blast clean (SOPM 20-30-03) the surface. If necessary, use compressed air to remove the abrasive dust from the spring.

(d) Refinish the spring as shown in REPAIR 7-1, Paragraph 4. below. Optional: touch up with BMS 10-11, Type 1 primer, C00259 and BMS 10-60, Type 2 coating, C00033. Keep overspray to a minimum.

(2) Coating defects with bare metal.

(a) Sand the area with 280 grit or finer abrasive paper. Make all edges of this area smooth with adjacent areas.

(b) Solvent clean (SOPM 20-30-03) the area.

(c) Penetrant examine (SOPM 20-20-02) the bare metal areas.

(d) If the penetrant check finds crack indications, remove the spring from service.

(e) If there are no crack indications, lightly sand the bare metal to remove small scratches, but do not go deeper than 5% of the wire diameter.

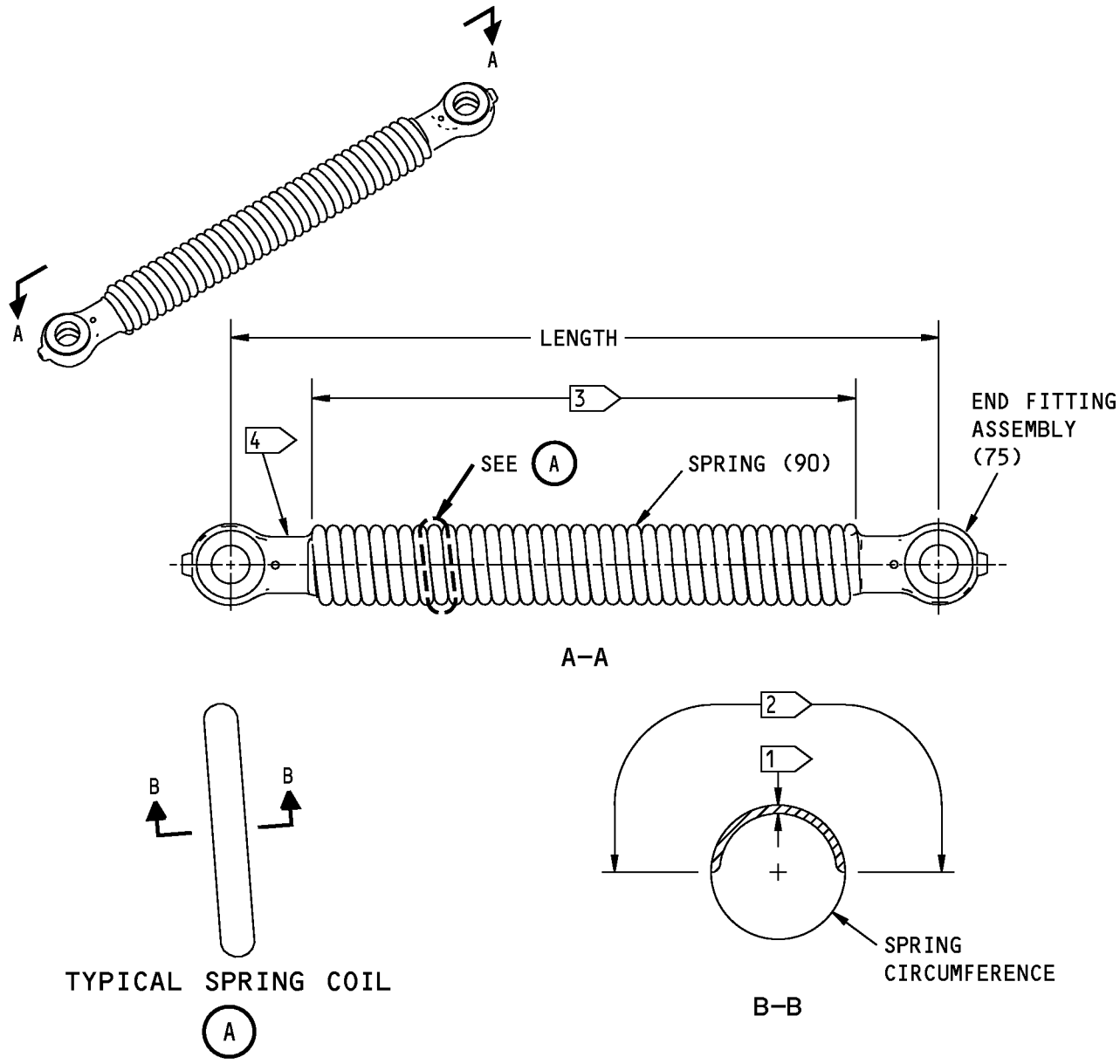
(f) Shot peen (SOPM 20-10-03) the blended area.

(g) Refinish the spring as shown in REPAIR 7-1, Paragraph 4. below. Optional: touch up with BMS 10-11, Type 1 primer, C00259 and BMS 10-60, Type 2 coating, C00033. Keep overspray to a minimum.

4. Spring Refinish

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

A. Apply gray nylon Type 49 coating, C00802 (F-21.14). Apply the coating with the spring held extended in a fixture, with the spaces between the coils equal to the wire diameter. Be sure not to extend the spring more than 14.0 inches between end fitting centers.



1 THE MAXIMUM DEPTH OF THE BLEND-OUT MUST BE LESS THAN 0.010 INCH

2 THE TOTAL LENGTH OF ALL OF THE DAMAGED AREAS MUST BE LESS THAN HALF OF THE DISTANCE OF THE CIRCUMFERENCE OF THE SPRING

3 APPLY GRAY BAC5710 TYPE 49 COATING (F-21.14) TO THIS AREA

4 PART NUMBER

162A2111-1 Spring Assembly Repair and Refinish
Figure 601

END FITTING ASSEMBLY REPAIR 8-1

162A2114–1

1. General

A. This procedure tells how to replace the bushing of end fitting assembly (75).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices specified in the procedure.

C. Refer to IPL Figure 1 for item numbers.

2. Bushing Replacement

A. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

B. Procedure (REPAIR 8-1, Figure 601)

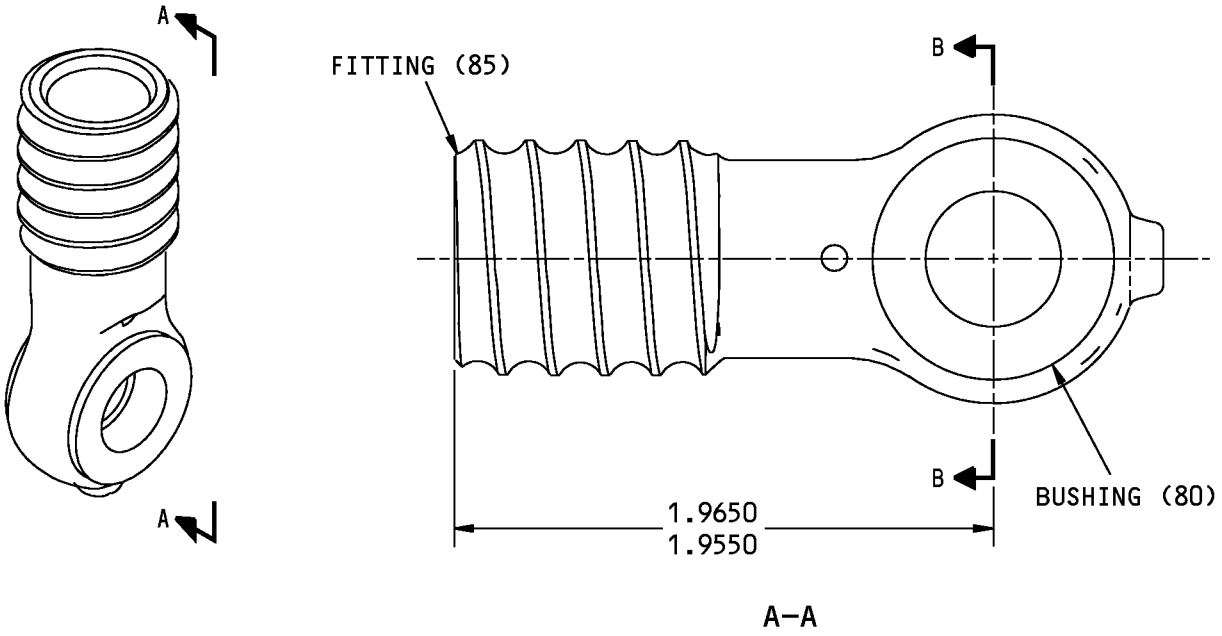
NOTE: For miscellaneous materials, refer to SOPM 20-60-04.

(1) Remove the old bushings.

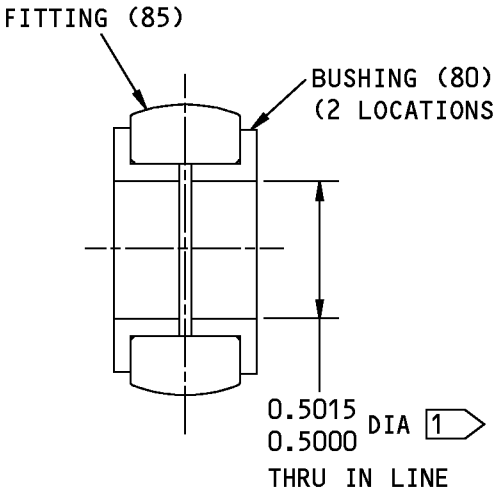
(2) If you find defects on the fitting surfaces, refer to REPAIR 8-2 for repair instructions.

(3) Install replacement bushings by the shrink fit method (SOPM 20-50-03) with BMS 5-95 sealant as the installation finish.

(4) If necessary, machine the bushing bores to design dimensions and finish. Be careful, because the bushings have a self-lubricated liner.



A–A



B–B

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

1 INSTALLED DIMENSION. ADJUST TO THIS SIZE IF NECESSARY

162A2114-1 End Fitting Assembly Bushing Replacement
Figure 601

END FITTING - REPAIR 8-2

162A2114–2

1. General

A. This procedure tells how to repair and refinish end fitting (85).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices specified in the procedure.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: 15-5PH CRES, 150-170 ksi

(2) Shot peen: not necessary

2. End Fitting Repair - Bore for Bushings

A. Because the bushings for this hole have a self-lubricating liner applied by a vendor-proprietary process, it is not possible to locally make oversize equivalents for the oversize hole. But oversize equivalents of the bushings are available in 0.010 inch increments. This procedure gives a series of related repair ranges to give the correct design interference fit with the oversize bushings you will use.

B. Machine the bore as necessary, within repair limits, to remove defects. If possible, machine within a repair range, to let you use an oversize equivalent of the bushings without adjustment.

C. Get two of the applicable oversize equivalent of bushing (80). If you machined the fitting bore outside of a specified repair range, get a larger size of the oversize bushings and machine each bushing OD to get a 0.0005-0.0016 inch interference fit with the oversize hole in the fitting. Passivate (F-17.25) the adjusted bushing surfaces.

D. Install the bushings (REPAIR 8-1).

3. End Fitting Refinish

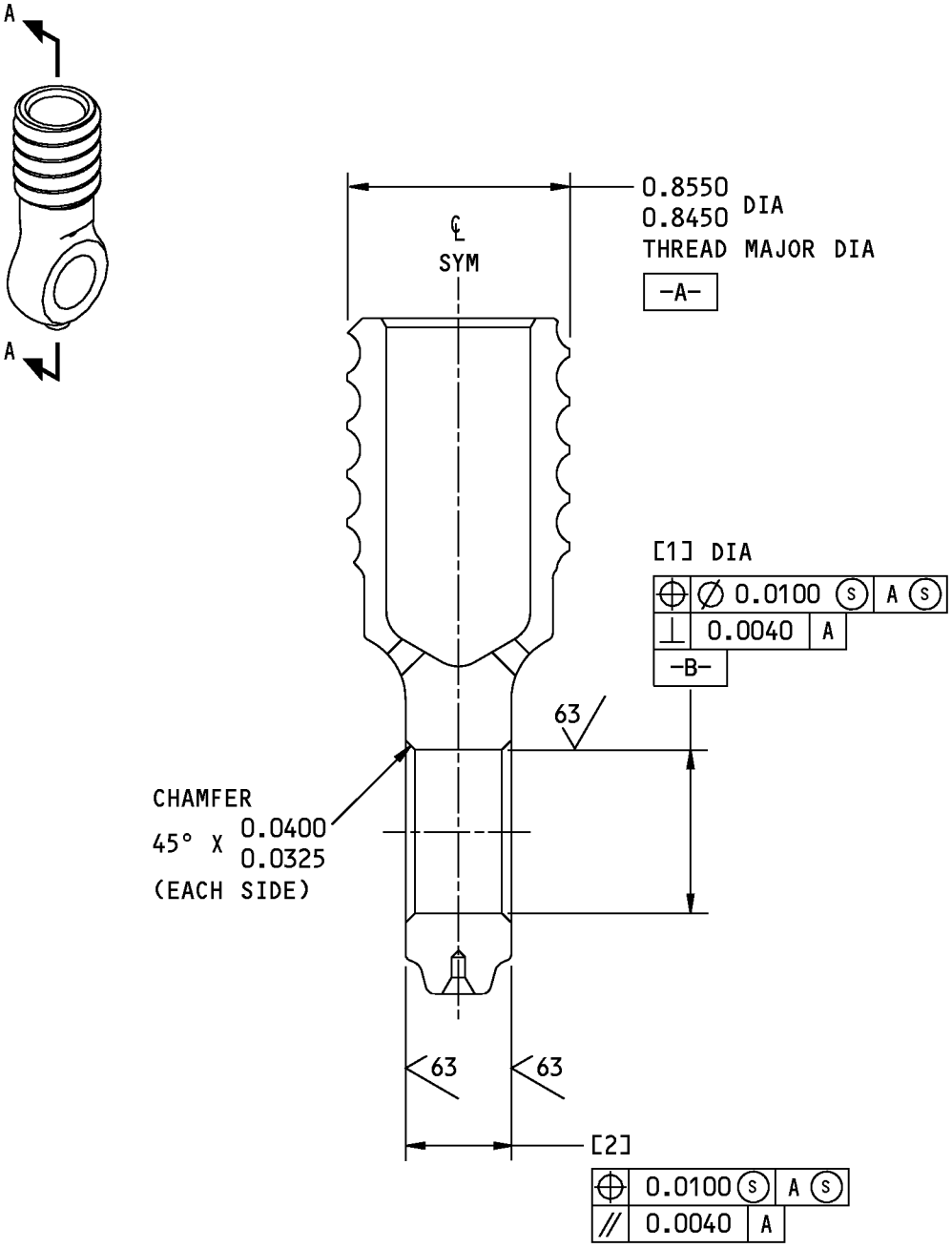
A. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

B. Procedure (REPAIR 8-2, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01.

(1) Passivate (F-17.25).



162A2114-2 End Fitting Repair and Refinish
Figure 601 (Sheet 1 of 2)

REFERENCE NUMBER	[1]	[2]
DESIGN DIMENSION	0.6256 0.6250	0.4090 0.3990
REPAIR LIMIT	SEE TABLE B	---

TABLE A

HOLE [1] REPAIR RANGE 1	APPLICABLE OVERSIZE BUSHING
0.6356 0.6350	BACB28BB08B018AT
0.6456 0.6450	BACB28BB08B018AU
0.6556 0.6550	BACB28BB08B018AV
0.6656 0.6650	BACB28BB08B018AW
0.6756 0.6750	BACB28BB08B018AX
0.6856 0.6850	BACB28BB08B018AY

TABLE B

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ALL DIMENSIONS ARE IN INCHES

1 RANGE FOR INSTALLATION OF OVERSIZE BUSHING SHOWN

162A2114-2 End Fitting Repair and Refinish
Figure 601 (Sheet 2 of 2)

APEX PIN - REPAIR 9-1

162A2123–1, –2

1. General

A. This procedure tells how to repair and refinish apex pin (218).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices identified in the procedure.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: 15-5PH CRES, 180-200 ksi

(2) Shot peen: All surfaces, Hard Shot RC - 55-65, Intensity 0.012-0.01872, Coverage 2.0.

2. Pin Repair and Refinish

A. References

Reference	Title
32-00-05	Repair of High Strength Steel Landing Gear Parts
SOPM 20-10-01	REPAIR AND REFINISH OF HIGH STRENGTH STEEL PARTS
SOPM 20-10-02	MACHINING OF ALLOY STEEL
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-04	GRINDING OF CHROME PLATED PARTS
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-42-03	HARD CHROME PLATING

B. Repair REPAIR 9-1, Figure 601

NOTE: For repair and refinish of high strength steel parts, refer to SOPM 20-10-01. For machining of alloy steel, refer to SOPM 20-10-02. For grinding of chrome plated parts, refer to SOPM 20-10-04. For hard chrome plating, refer to SOPM 20-42-03. For repair of high-strength steel landing gear parts, refer to 32-00-05.

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

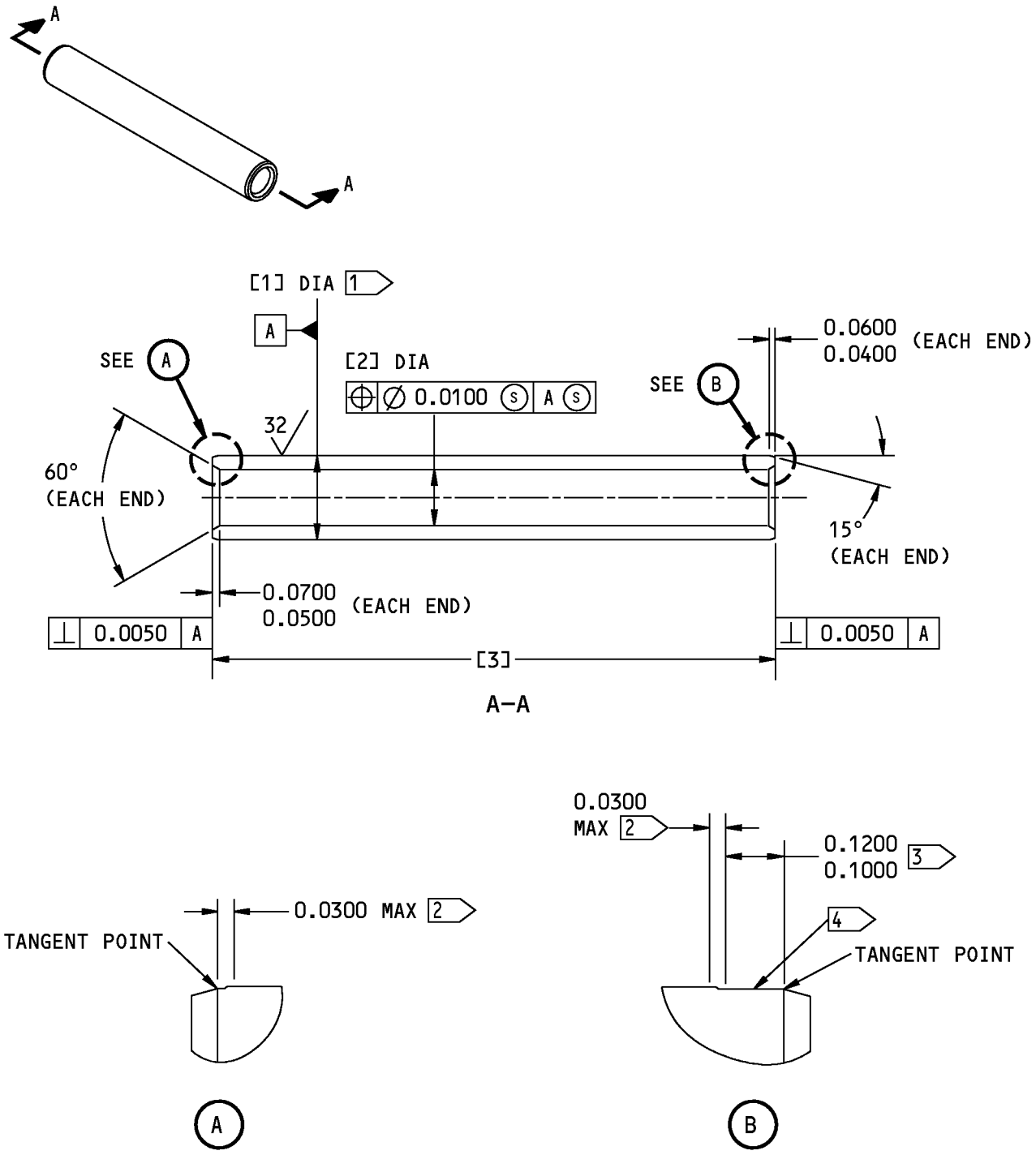
(2) Build up with chrome plate and grind to the after-plating dimensions shown.

(3) Refinish other surfaces as indicated.

C. Refinish REPAIR 9-1, Figure 601

NOTE: For shot peening, refer to SOPM 20-10-03. For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01.

(1) Chrome plate as shown. Passivate (F-17.25) other surfaces.



U83362 S0000218876_V2

162A2123-1, -2 Apex Pin Repair and Refinish
Figure 601 (Sheet 1 of 2)

REFERENCE NUMBER	[1]	[2]	[3]
DESIGN DIMENSION	0.7490 0.7480 5	0.5100 0.5000	5.0160 5.0060
REPAIR LIMIT	0.7280 6	---	---

1 CHROME PLATE (F-15.34), 0.003-0.005 THICK AFTER GRINDING

2 CHROME PLATE RUNOUT

3 NO CHROME PLATE

4 PART NUMBER AND SERIAL NUMBER

5 AFTER PLATING

6 LIMIT FOR CHROME PLATE BUILDUP AND GRIND TO DESIGN DIMENSIONS AND FINISH.

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.020-0.030 R UNLESS SHOWN DIFFERENTLY

DIMENSIONS ARE BEFORE PLATING UNLESS SHOWN BY 5

ALL DIMENSIONS ARE IN INCHES

U83539 S0000218879_V2

162A2123-1, -2 Apex Pin Repair and Refinish
Figure 601 (Sheet 2 of 2)

APEX SHAFT - REPAIR 10-1

162A2124–1

1. General

A. This procedure tells how to repair and refinish apex shaft (216).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices identified in the procedure.

C. Refer to IPL Figure 1 for item numbers.

D. General repair details:

(1) Material: 15-5PH CRES, 180-200 ksi

(2) Shot peen: All surfaces, but not on threads, Hard Shot RC - 55-65, Intensity 0.012-0.01872, Coverage 2.0.

2. Pin Repair and Refinish

A. References

Reference	Title
SOPM 20-10-01	REPAIR AND REFINISH OF HIGH STRENGTH STEEL PARTS
SOPM 20-10-02	MACHINING OF ALLOY STEEL
SOPM 20-10-04	GRINDING OF CHROME PLATED PARTS
SOPM 20-42-03	HARD CHROME PLATING

B. Repair REPAIR 10-1, Figure 601

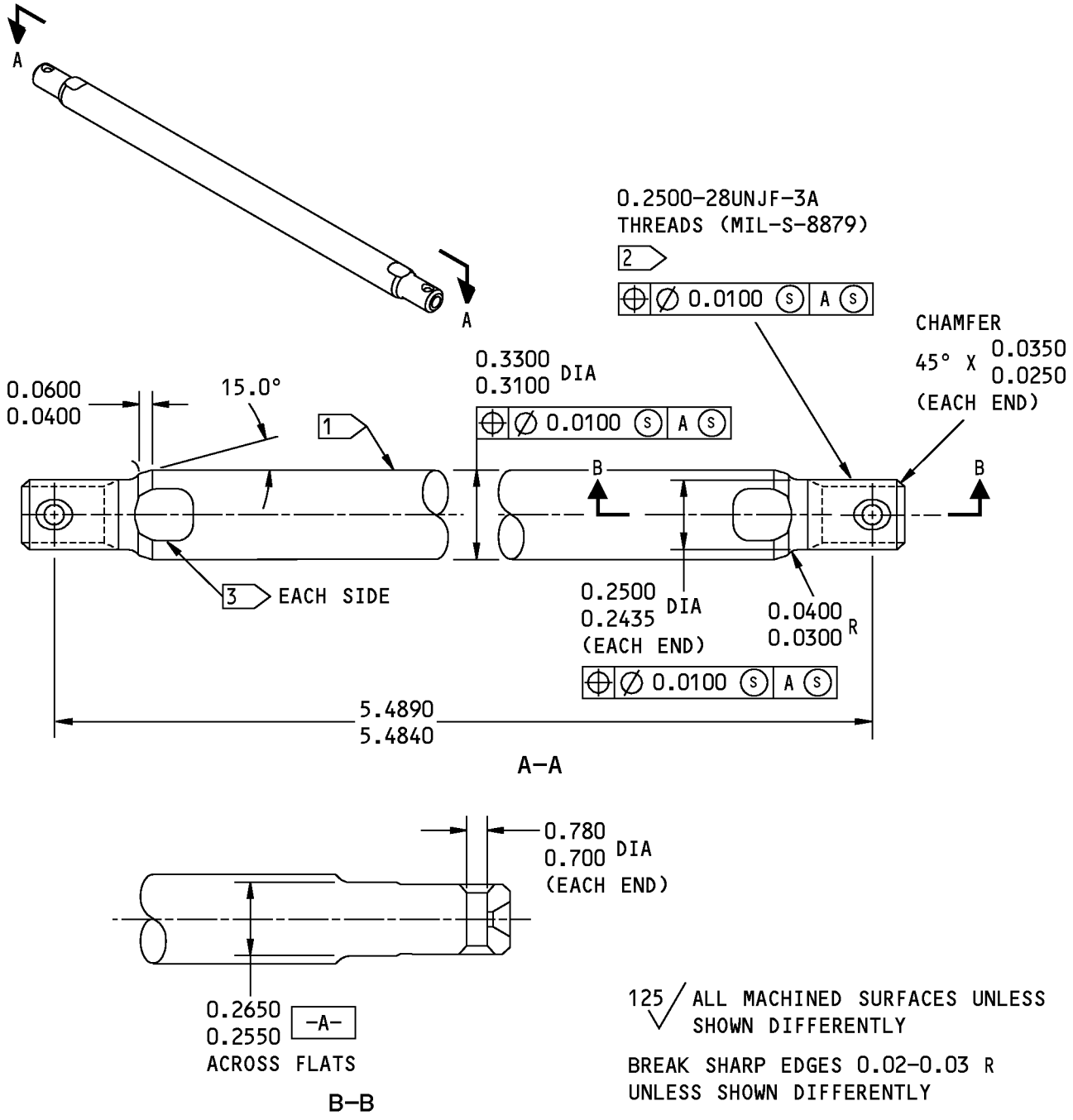
(1) Repair is only replacement of the original finish. Refer to REPAIR 10-1, Paragraph 2.C. below for details.

(2) If you think there are defects on important surfaces, see REPAIR 10-1, Figure 601 for dimension details.

C. Refinish REPAIR 10-1, Figure 601

NOTE: For repair and refinish of high strength steel parts, refer to SOPM 20-10-01. For machining of alloy steel, refer to SOPM 20-10-02. For grinding of chrome plated parts, refer to SOPM 20-10-04. For hard chrome plating, refer to SOPM 20-42-03.

(1) Passivate (F-17.25)



162A2124-1 Apex Shaft Repair and Refinish
Figure 601

ASSEMBLY

1. General

A. Use this procedure to assemble the drag strut assembly.

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

C. Refer to IPL Figure 1 for item numbers.

2. Drag Strut Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00913	Compound - Corrosion Inhibiting Material, Nondrying Resin Mix	BMS 3-27
D00633	Grease - Aircraft General Purpose	BMS3-33

B. References

Reference	Title
SOPM 20-41-05	APPLICATION OF CORROSION INHIBITING COMPOUNDS
SOPM 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-03	LUBRICANTS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure ASSEMBLY, Figure 701

NOTE: For application of corrosion inhibiting compounds, refer to SOPM 20-41-05. For bolt and nut installation, refer to SOPM 20-50-01. For finishing materials, refer to SOPM 20-60-02. For lubricants, refer to SOPM 20-60-03. For miscellaneous materials, refer to SOPM 20-60-04.

(1) Install aft link assembly (220A) on forward link assembly (175A).

(a) Install shims (135) and targets (140) with screws (120), washers (125) and nuts (130).

(b) Install pin (218), shaft (216), end caps (213), and nuts (211).

(c) Tighten nuts (211) hand-tight.

(d) Install cotter pins (209) only to hold links assemblies (175A, 220A) temporarily. These parts will be removed later.

(e) Install bolt (150) and nut (165).

(f) Install stop bolts (95), shim (115), washers (100, 105) and nuts (110).

(g) Remove 0.003-inch shim laminations from shim (115) to get the overcenter dimensions shown in ASSEMBLY, Figure 703.

(2) Install spring assembly (70) on forward link assembly (175A).

(a) Install sleeve (65) on forward link assembly (175A).

(b) Install springs (70), bolt (45), washers (50, 55) and nut (60).

1) On drag struts 162A2100-2, -3, -4, tighten nuts (60) hand tight.

2) On drag strut 162A2100-5, tighten nuts (60) to 20-24 pound-inches above run-on torque. Back them off as necessary to the nearest castellation. Install cotter pins (40).

(c) Do a check of the link assembly (35A) (ASSEMBLY, Figure 704).

1) Move forward link assembly (175A) through the angle shown.

2) Make sure forward link assembly (175A) moves freely.

(3) Install lock link assembly (35A), upper drag strut assembly (290A) and lower drag strut assembly (265).

(a) Apply grease, D00633 to the chrome-plated surfaces of pin (20).

WARNING: BMS 3-27 CORROSION INHIBITING COMPOUND CONTAINS SOLVENTS, CHROMATES, AND A SMALL AMOUNT OF BOUND ASBESTOS. CONSULT THE APPLICABLE SAFETY STANDARDS FOR APPROVED HANDLING PROCEDURES.

CAUTION: BMS 3-27 COMPOUND IS ONLY USED IN STATIC JOINTS WHERE GREASE CANNOT BE APPLIED. BMS 3-27 COMPOUND IN DYNAMIC JOINTS WILL NOT LET THEM MOVE FREELY.

(b) Apply a thin layer of compound, C00913 to the surfaces shown in ASSEMBLY, Figure 702.

(c) Install pin (20), washer (25), and nut (30).

(d) Tighten nut (30) to 95-115 ft-lbs more than the run-on torque. Then loosen the nut to align the nearest castellation with the hole through pin (20).

(e) Install bolt (5C), washer (10) and nut (15B).

(f) Install cotter pin (4).

(g) Do a check of the drag strut assembly (ASSEMBLY, Figure 701).

1) Move lower strut assembly (265) to the dimension shown.

2) Move lock link assembly (35A) to the dimensions shown.

3) Open lower strut assembly (265) and lock link assembly (35A) to the initial position.

4) Make sure that the parts move freely.

(4) Install the wire bundles on the link assembly (ASSEMBLY, Figure 706) (IPL Figure 2).

WARNING: BMS 3-27 CORROSION INHIBITING COMPOUND CONTAINS SOLVENTS, CHROMATES, AND A SMALL AMOUNT OF BOUND ASBESTOS. CONSULT THE APPLICABLE SAFETY STANDARDS FOR APPROVED HANDLING PROCEDURES.

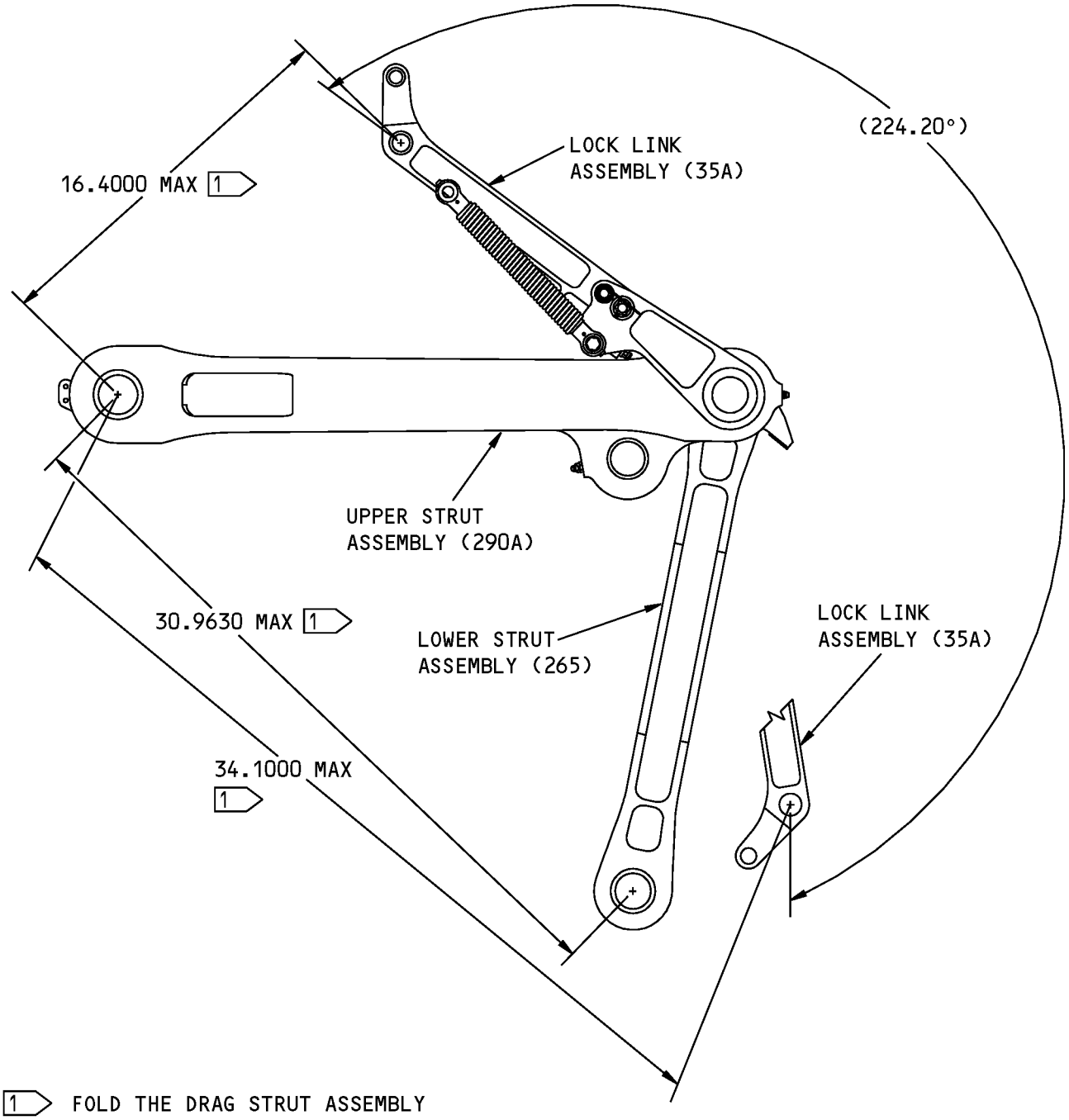
CAUTION: BMS 3-27 COMPOUND IS ONLY USED IN STATIC JOINTS WHERE GREASE CANNOT BE APPLIED. BMS 3-27 COMPOUND IN DYNAMIC JOINTS WILL NOT LET THEM MOVE FREELY.

(a) Apply a thin layer of compound, C00913 to the bolt shank, threads and washer faces before installation.

(b) Install bracket assembly (IPL Figure 2, 45) on aft link assembly (IPL Figure 1, 220A) with bolts (IPL Figure 2, 25), washers (30, 35), and nuts (40).

(c) Install wire bundle assemblies (80, 85) on bracket assembly (45) with screws (65), washers (70) and clamps (75).

(d) Install wire bundle assemblies (80, 85) on aft link lock assembly (IPL Figure 1, 220A) with screws (IPL Figure 2, 5), washers (10), nuts (15), and clamps (20A).

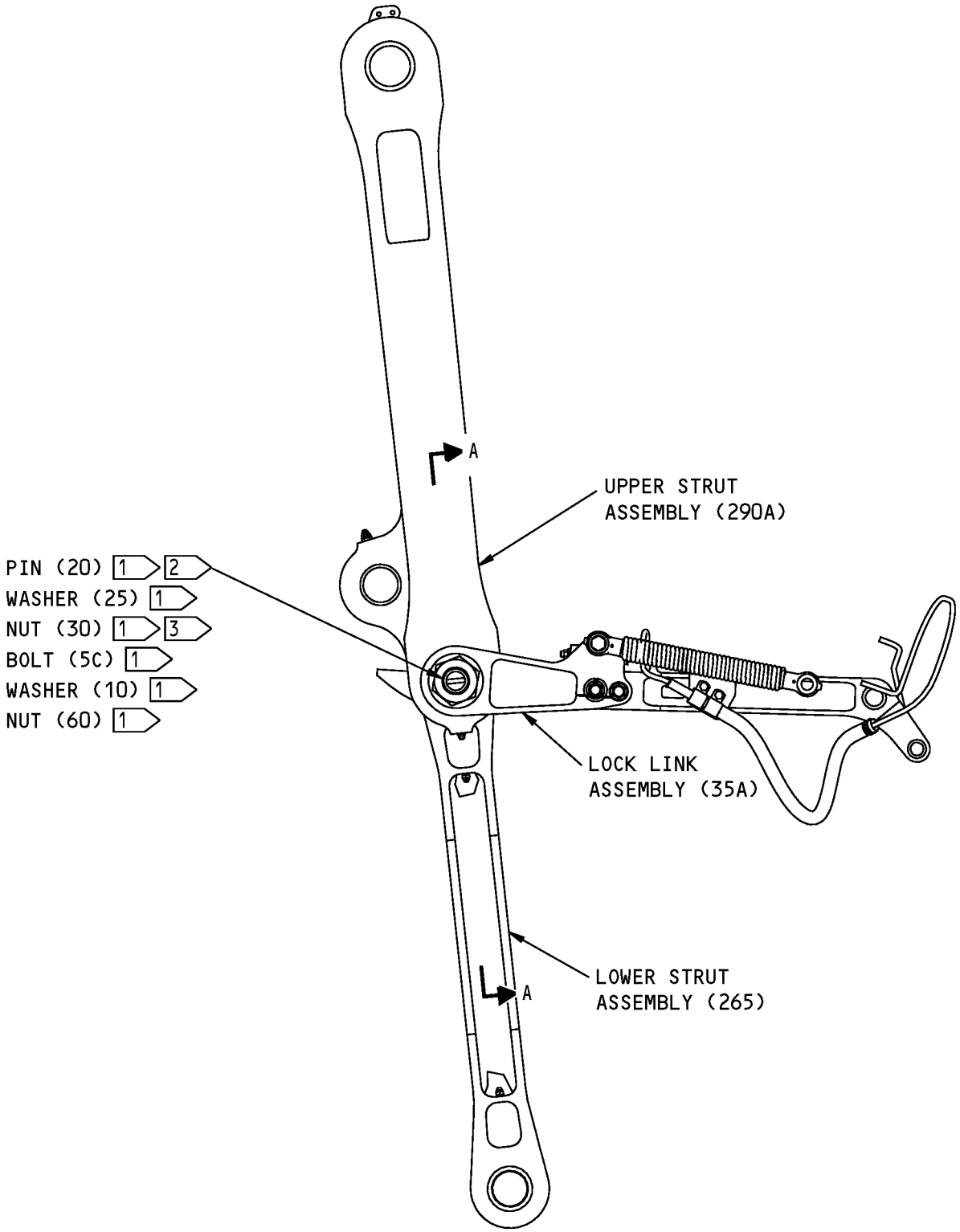


1 FOLD THE DRAG STRUT ASSEMBLY THROUGH THE MOVEMENT SHOWN. FOLD TO GET THE DIMENSIONS SHOWN, THEN OPEN TO THE INITIAL POSITION. MAKE SURE THAT THE PARTS MOVE FREELY

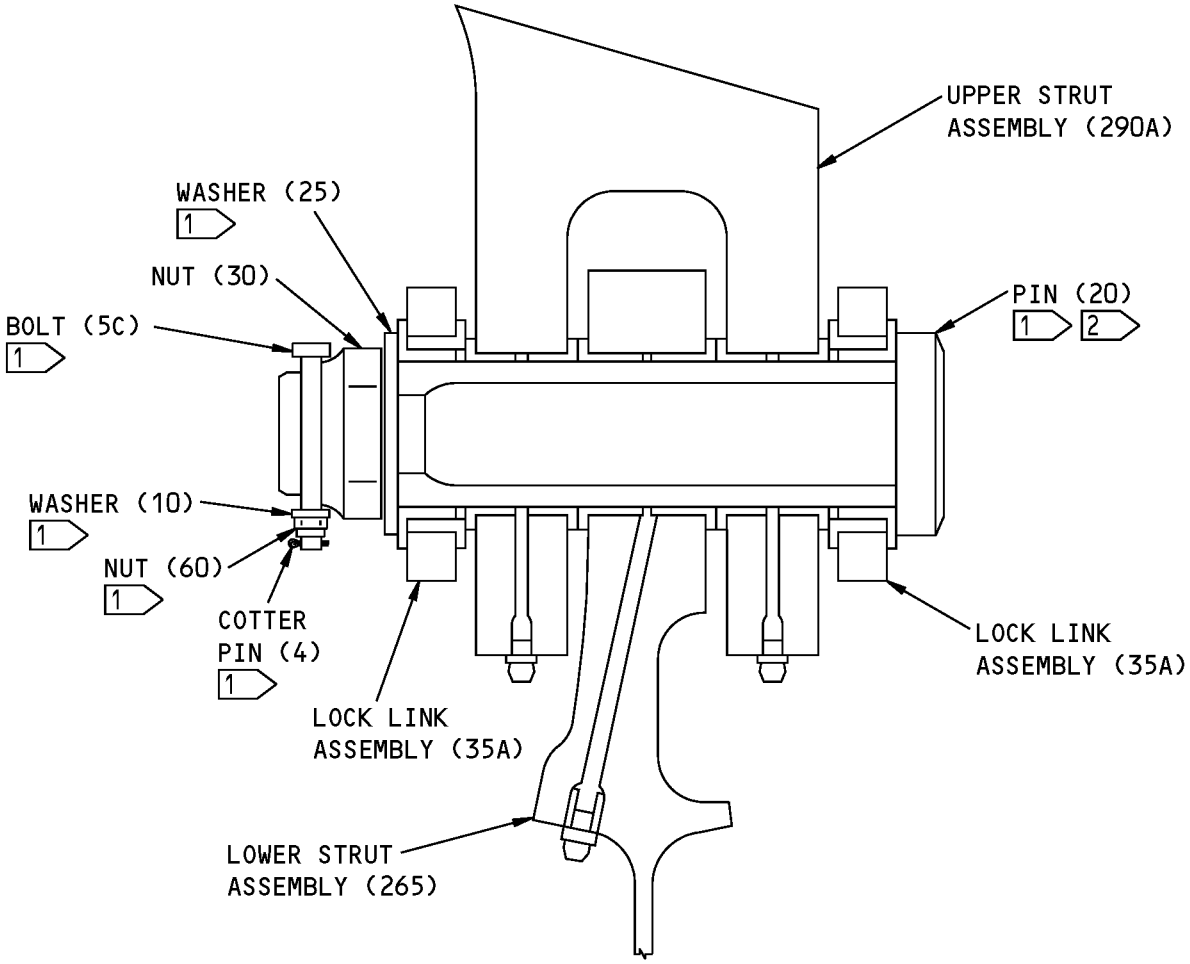
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A2100-2 thru -5 Drag Strut Assembly Check
Figure 701



162A2100-2 thru -5 Drag Strut Assembly Details
Figure 702 (Sheet 1 of 2)



A–A

1 APPLY A THIN LAYER OF BMS 3-27 CORROSION PREVENTIVE COMPOUND TO THE THREAD RELIEF, THE THREADS, THE WASHER FACES, AND COTTER PIN BEFORE ASSEMBLY. WIPE OFF UNWANTED COMPOUND

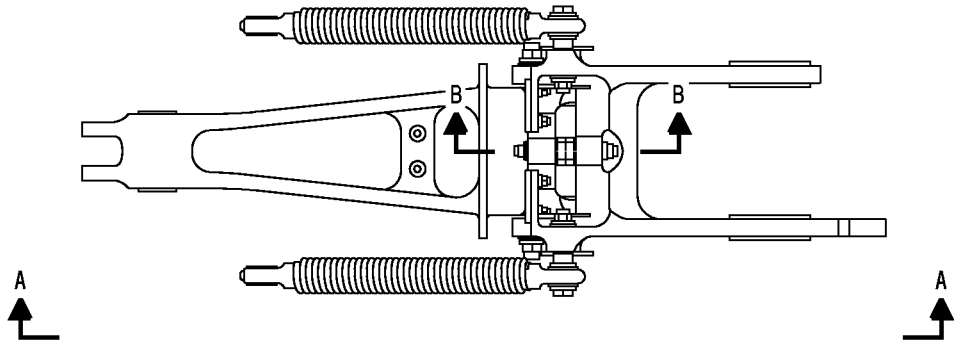
2 APPLY BMS 3-33 GREASE TO THE CHROME PLATED SURFACE OF THE PIN (20) BEFORE ASSEMBLY

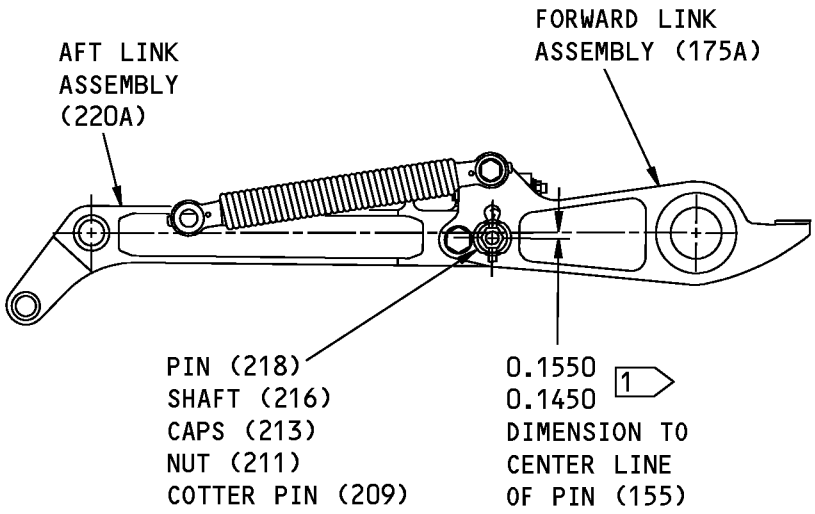
3 INSTALL TO 95-115 FT-LBS ABOVE THE RUN-ON TORQUE. BACK OFF THE NUT TO ALIGN TO THE NEAREST CASTELLATION WITH THE HOLE THROUGH THE PIN

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A2100-2 thru -5 Drag Strut Assembly Details
Figure 702 (Sheet 2 of 2)

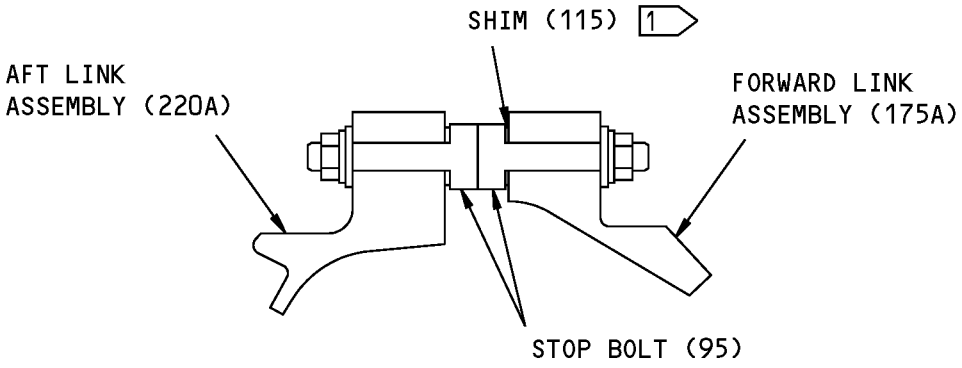




A-A

F67128 S0004998228_V2

162A2120-2,-3,-4 Lock Link Assembly-Over Center Check Details
Figure 703 (Sheet 1 of 2)



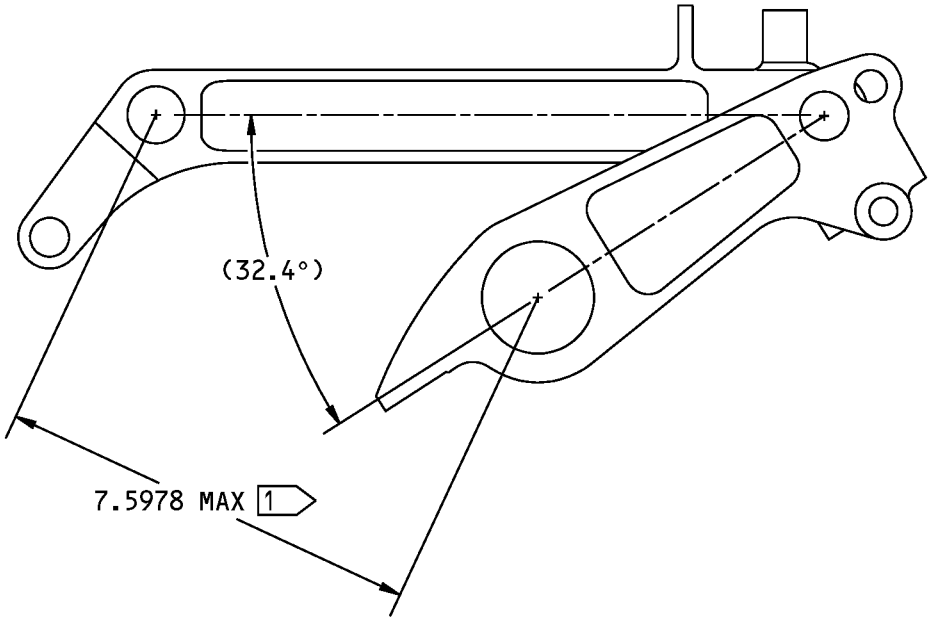
B–B

1 REMOVE 0.003 INCH SHIM LAMINATIONS OF THE SHIM (115) AS NECESSARY TO GET THE OVER CENTER DIMENSIONS OF 0.1450–0.1550 TO LET THE DOWN LOCK PIN GO INTO THE DOWNLOCK HOLE. THE STOP BOLTS (95) MUST TOUCH OVER THE ENTIRE TOP SURFACE OF THEIR HEADS

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A2120-2,-3,-4 Lock Link Assembly-Over Center Check Details
Figure 703 (Sheet 2 of 2)

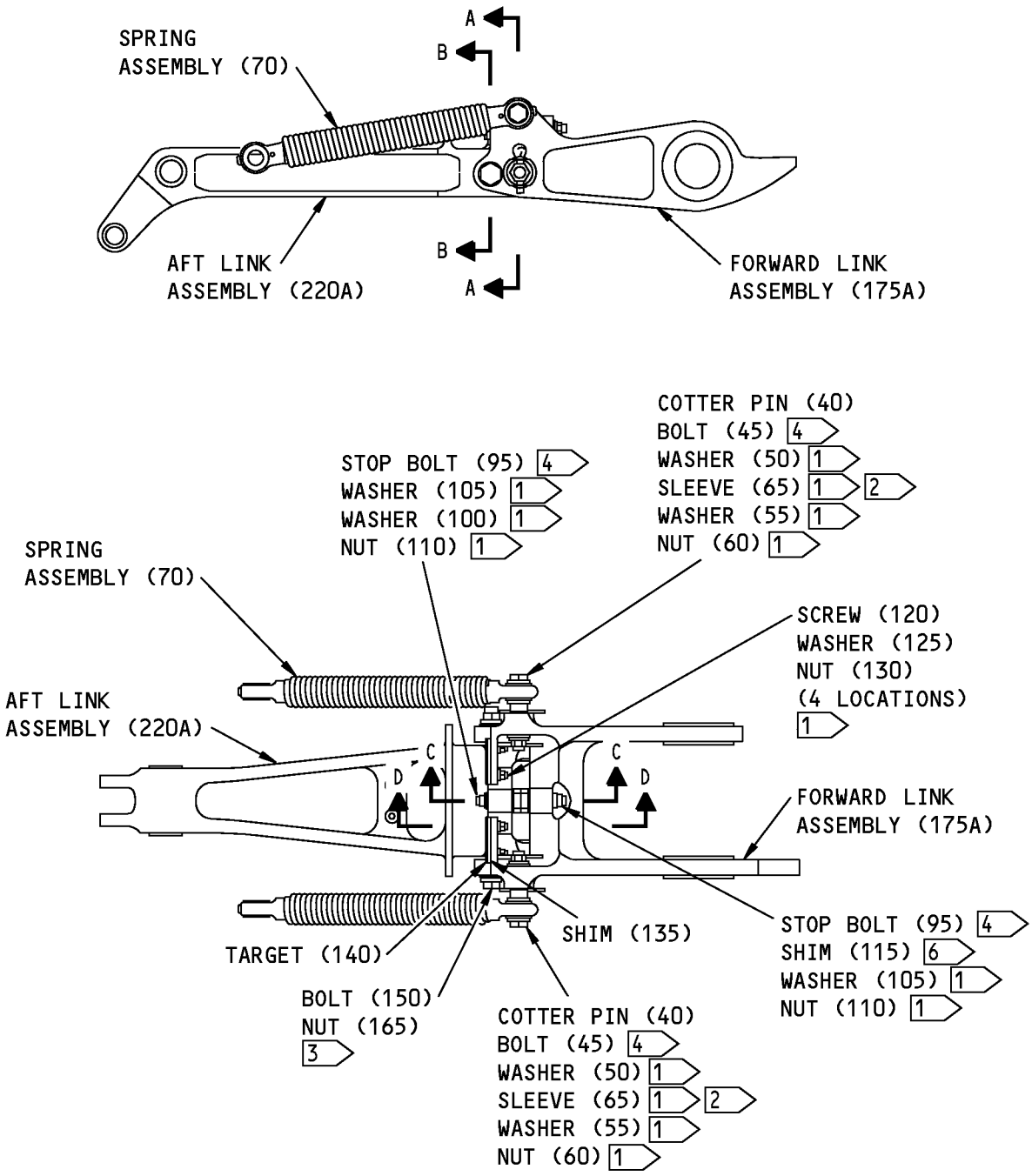


1 MOVE THE LOCK LINK ASSEMBLY THROUGH THE ANGLE SHOWN. MAKE SURE THE PARTS MOVE FREELY

ITEM NUMBERS REFER TO IPL FIG. 1

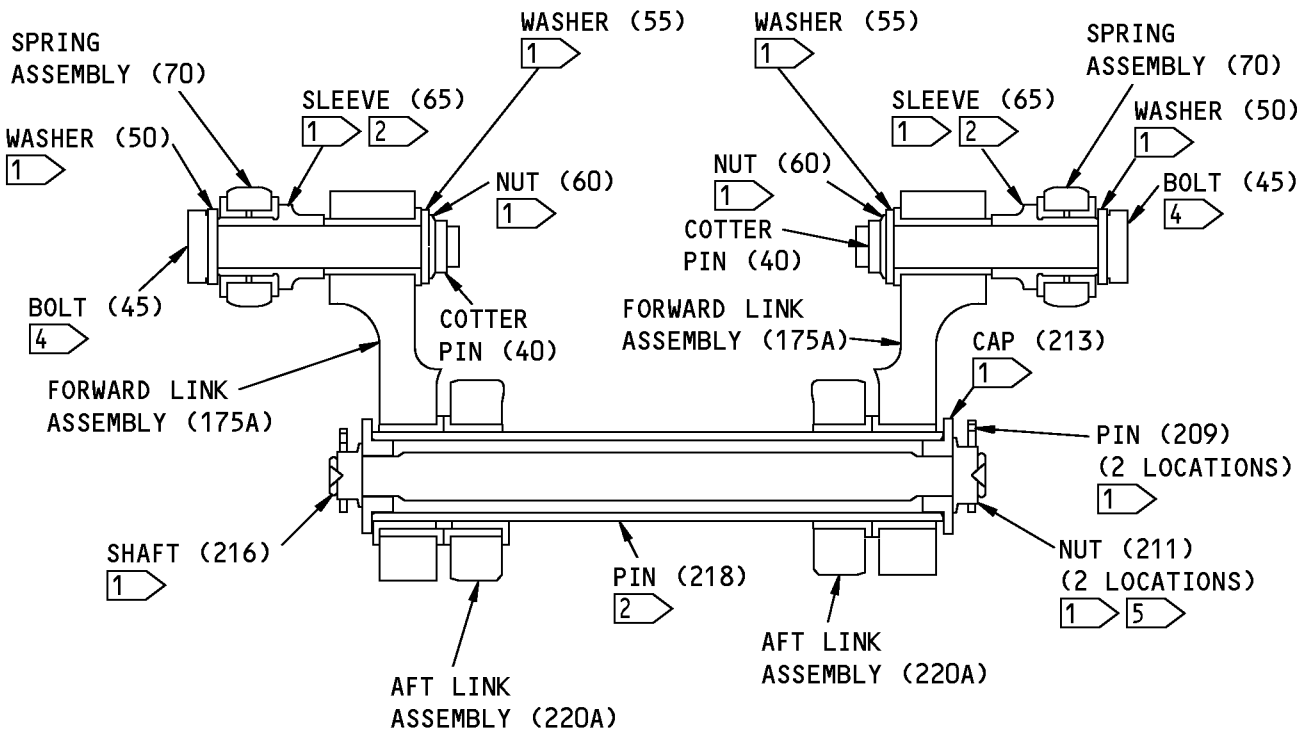
ALL DIMENSIONS ARE IN INCHES

162A2120-2,-3,-4 Lock Link Assembly Check
Figure 704

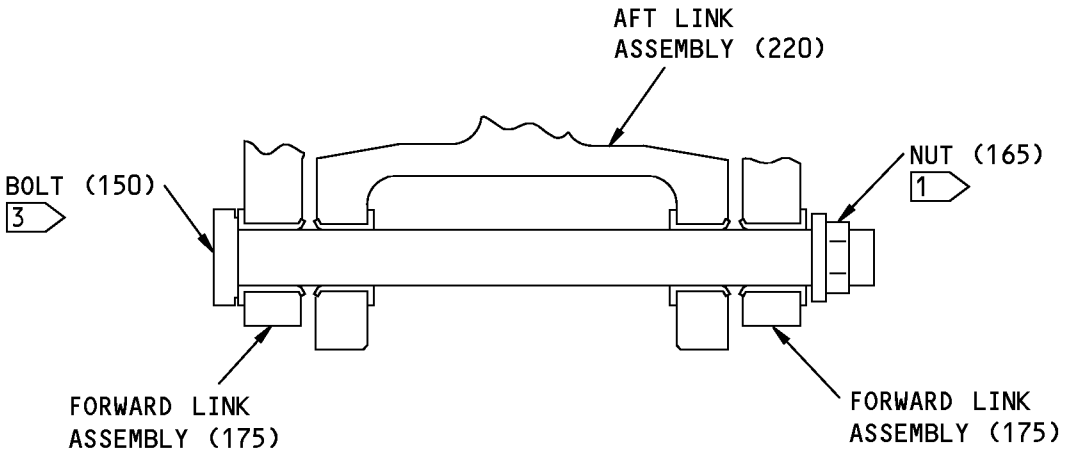


F67141 S0004998231_V2

162A2120-2,-3,-4 Lock Link Assembly Details
Figure 705 (Sheet 1 of 3)



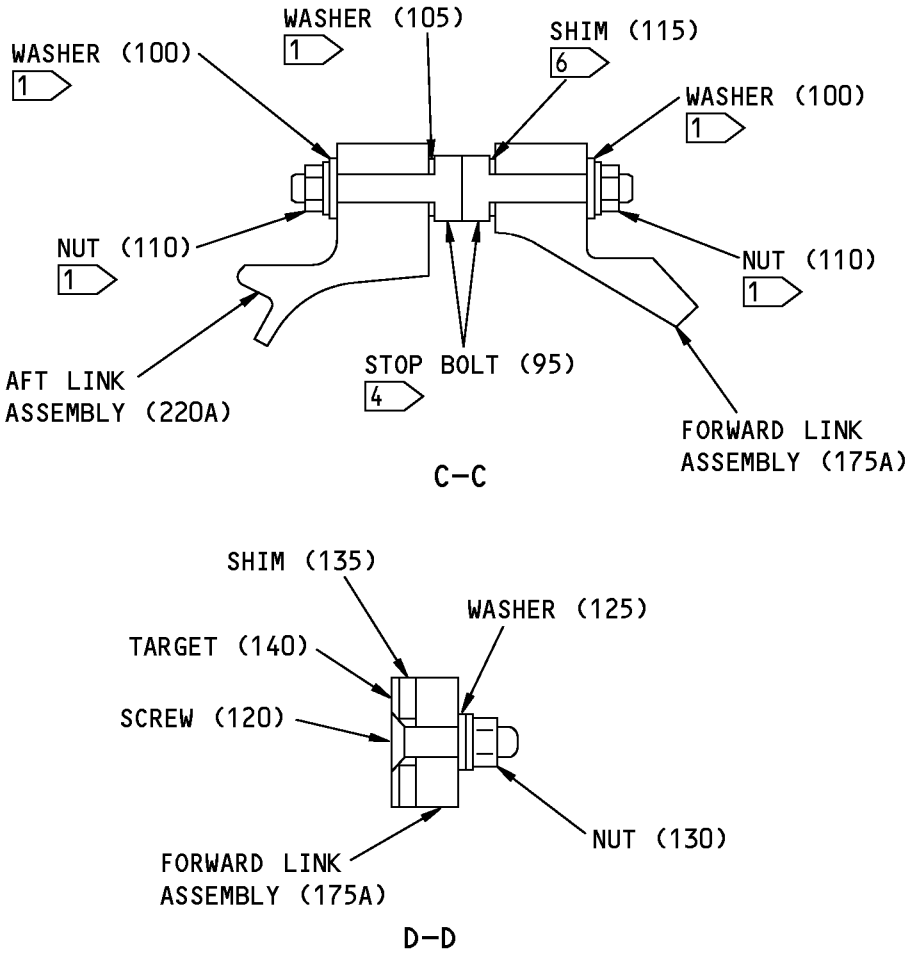
A–A



B–B

F67178 S0004998232_V2

162A2120-2,-3,-4 Lock Link Assembly Details
Figure 705 (Sheet 2 of 3)



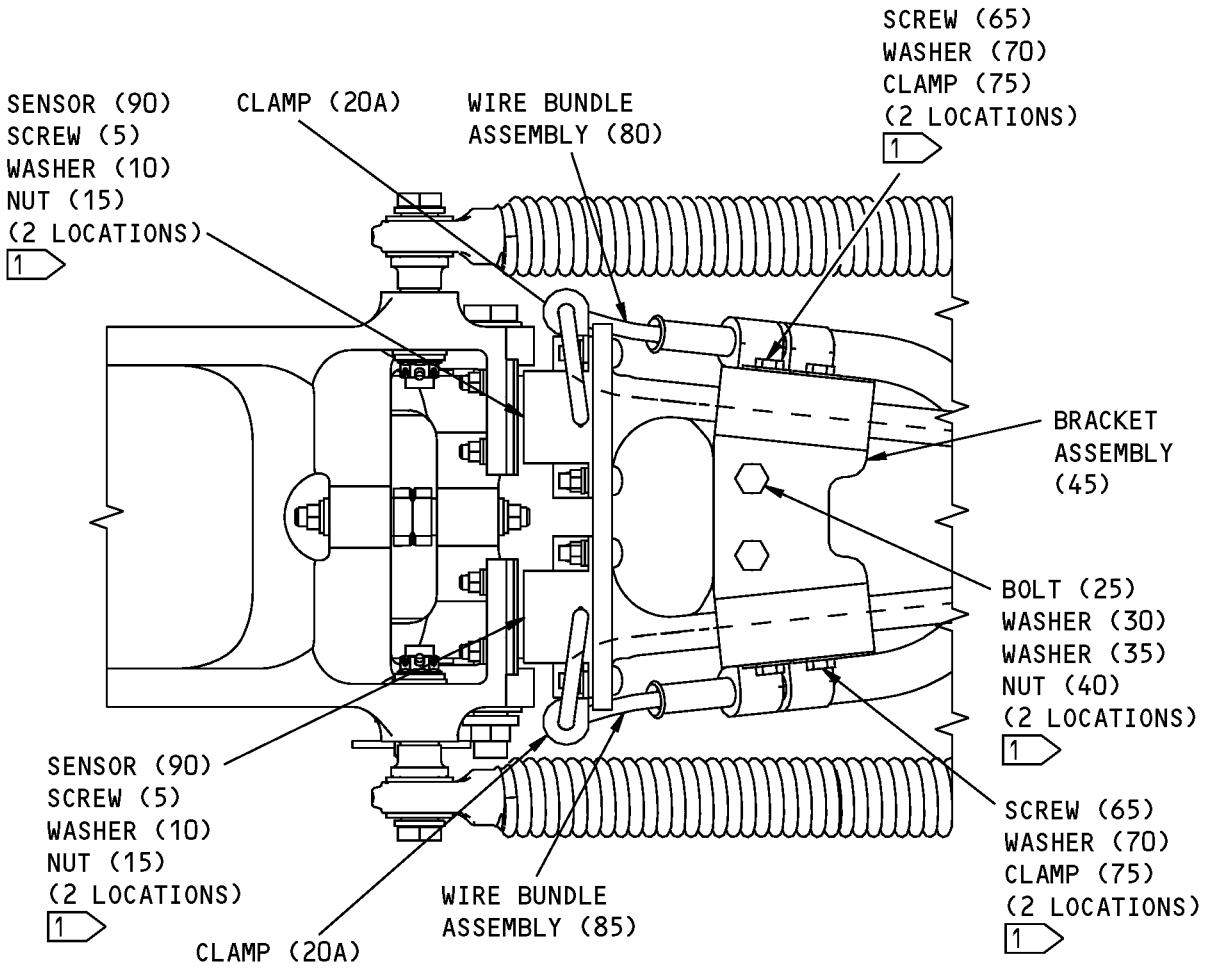
1. APPLY BMS 3-27 CORROSION PREVENTIVE COMPOUND TO THE THREAD RELIEFS, THREADS, WASHER FACES AND COTTER PINS BEFORE ASSEMBLY. WIPE OFF UNWANTED COMPOUND
2. APPLY BMS 3-33 GREASE TO THE CHROME PLATED SURFACES OF THE PINS AND SLEEVES BEFORE ASSEMBLY
3. THIS BOLT AND NUT ARE FOR SHIPPING AND SAFETY ONLY. INSTALL THE NUT ON THE BOLT ONLY TO HOLD THE BOLT IN POSITION FOR THE SHIPMENT. DO NOT TIGHTEN THE NUT PER SOPM 20-50-01
4. APPLY A THICK LAYER OF BMS 3-27 CORROSION PREVENTIVE COMPOUND TO THE SHANK AND THE THREADS. WIPE OFF UNWANTED COMPOUND
5. INSTALL TO 25-50 POUND-INCHES ABOVE RUN-ON TORQUE
6. FAY SEAL THE SHIM TO THE FORWARD LOCK LINK WITH BMS 5-95 SEALANT
7. FOR 162A2120-4 ONLY

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

F67213 S0004998233_V2

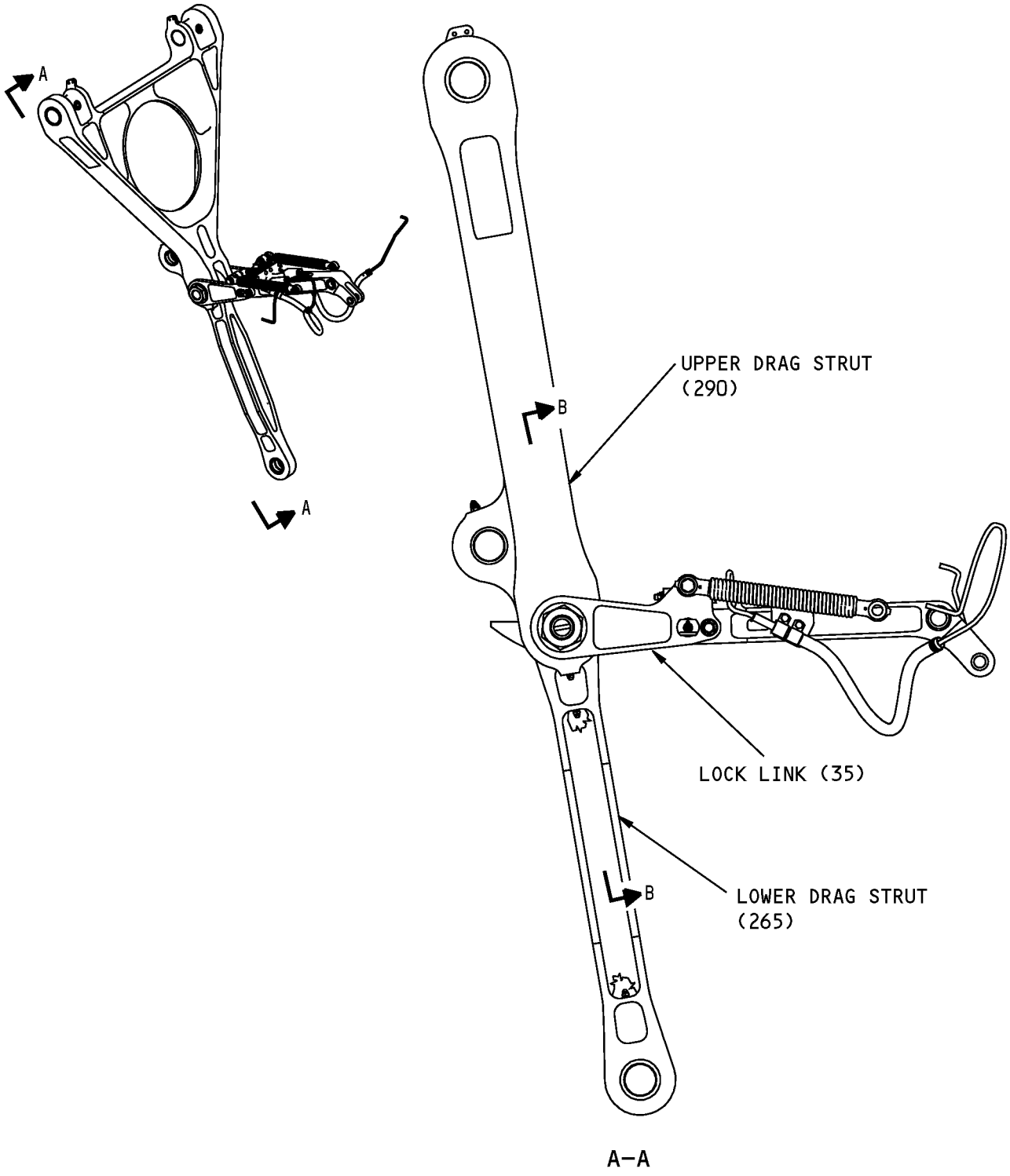
162A2120-2,-3,-4 Lock Link Assembly Details
Figure 705 (Sheet 3 of 3)



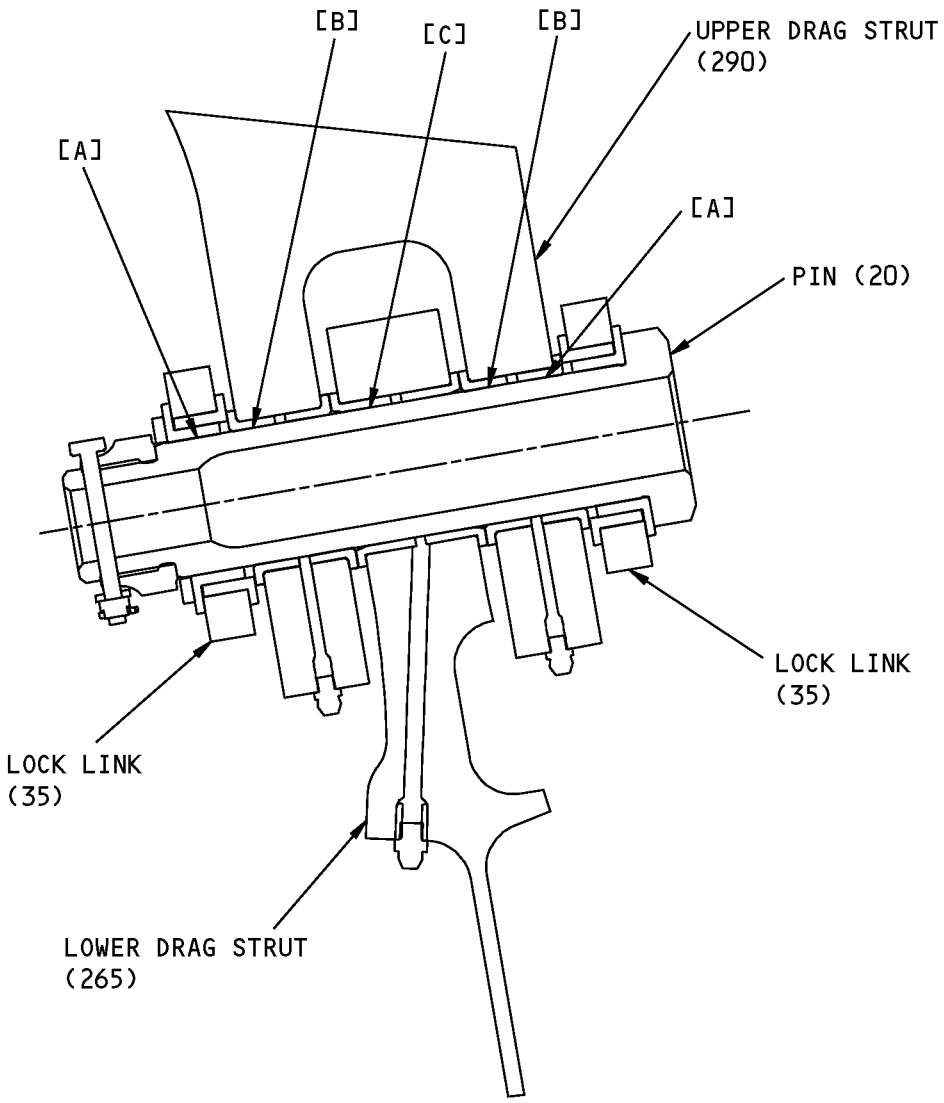
1 APPLY A THIN LAYER OF BMS 3-27 CORROSION PREVENTIVE COMPOUND TO THE THREAD RELIEF, THE THREADS, AND THE WASHER FACES BEFORE ASSEMBLY. WIPE OFF UNWANTED COMPOUND

ITEM NUMBERS REFER TO IPL FIG. 2

287A6217-2,-3 Drag Strut Wire Provision Details
Figure 706



Fits and Clearances
Figure 801 (Sheet 1 of 3)



B–B

Fits and Clearances
Figure 801 (Sheet 2 of 3)

REF LETTER	REFERENCE	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	IPL ITEM NO. FIG. 1	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[A]	ID 200	1.5000	1.5010	0.0010	0.0030		1.5044	0.0054
	OD 20	1.4980	1.4990			1.4956		
[B]	ID 315	1.5000	1.5013	0.0010	0.0033		1.5047	0.0057
	OD 20	1.4980	1.4990			1.4953		
[C]	ID 280	1.5000	1.5013	0.0010	0.0033		1.5047	0.0057
	OD 20	1.4980	1.4990			1.4953		

* ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801 (Sheet 3 of 3)

REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
1	15	Nut	18-25 [1]	
1	30	Nut		19-115 [1]
1	60 [2]	Nut	[4]	
1	60 [3]	Nut	20-24 [1]	
1	290	Air Valve Nut		5-7

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

[1] ABOVE RUN-ON TORQUE. BACK OFF TO NEAREST CASTELLATION TO INSTALL CROSSBOLT OR COTTER PIN, AS APPLICABLE

[2] 162A2100-1 THRU -4

[3] 162A2100-5

[4] HAND TIGHT

Torque Table
Figure 802

(NOT APPLICABLE)

ILLUSTRATED PARTS LIST

1. Introduction

A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.

B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1 2 3 4 5 6 7

. Assembly

. Attaching parts for assembly

. . Detail parts for assembly

. . Subassembly

. . Attaching parts for subassembly

. . . Detail parts for subassembly

. . . Sub-subassembly

. . . Attaching parts for subassembly

. . . . . Details parts for sub-subassembly

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

C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.

D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.

E. Color-coded parts are identified with a single digit alpha following the dash number or with ''SP'' suffix. If the ''SP'' suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.

F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a ''~'' at the end of the line and will be continued on the next line. The ''~'' denotes that the part number continues on the next line.

G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.

(1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.

(2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.

H. Interchangeable Parts

Optional (OPT)	The part is optional to and interchangeable with other parts that have the same item number.
Replaces, Replaced by and not interchangeable with (REPLACES, REPLACED BY AND NOT INTCHG/W)	The part replaces and is not interchangeable with the initial part.
Replaces, Replaced by (REPLACES, REPLACED BY)	The part replaces and is interchangeable with, or is an alternative to, the initial part.

VENDOR CODES

Code	Name
08748	CRANE ELDEC CORP 16700 13TH AVE WEST LYNNWOOD, WASHINGTON 98036 FORMERLY VB0043; FORMERLY ELECTRO DEVELOPMENT CORP; FORMERLY ELDEC CORP.
0FKM1	ALEMITE CORP 167 ROWLAND DR JOHNSON CITY, TENNESSEE 37601
15653	ALCOA GLOBAL FASTENERS INC DIV KAYNAR PRODUCTS 800 S STATE COLLEGE BLVD FULLERTON, CALIFORNIA 92831-3001 FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH FORMERLY FAIRCHILD FASTENERS KAYNAR DIV
62554	SIMMONDS MECAERO FASTENERS INC 1734 SEQUOIA AVENUE ORANGE, CALIFORNIA 92668
72962	HARVARD INDUSTRIES INC 3 WERNER WAY SUITE 210 LEBANON, NEW JERSEY 08833 FORMERLY ESNA V7A079 FORMERLY ELASTIC STOP NUT IN UNION, NJ
80539	SPS TECHNOLOGIES INC DIV AERPSOACE - SANTA ANA 2701 SOUTH HARBOR BOULEVARD SANTA ANA, CALIFORNIA 92704-5803 FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539 AND STANDARD PRESSED STEEL WESTERN DIV V17279

Code	Name
81205	BOEING CO THE 7755 EAST MARGINAL WAY PO BOX 3707 SEATTLE, WASHINGTON 98124
84971	TA MFG CO TA DIV 28065 W FRANKLIN PKY PO BOX 931 VALENCIA, CALIFORNIA 91380-9031 FORMERLY IN LA, CALIF; SUB OF CRITON CORP, GLENDALE, CALIF

NUMERICAL INDEX

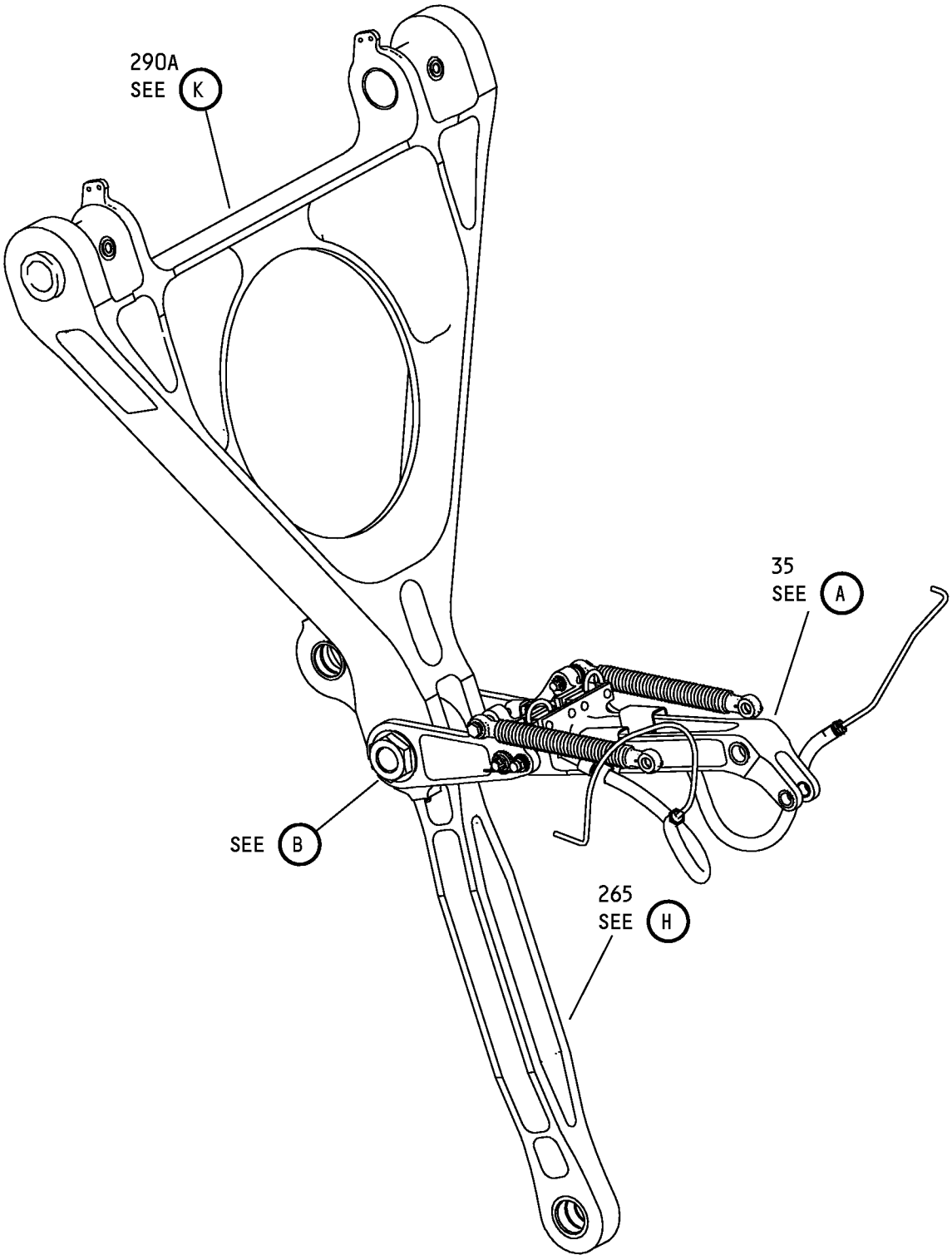
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
1-899-29		2	90	1
10-61226-29		2	90	1
102F9209M3		2	55	4
161W7010-1		1	270	2
162A2100-2		1	1B	RF
162A2100-3		1	1C	RF
162A2100-4		1	1D	RF
162A2100-5		1	1E	RF
162A2100-6		1	1F	RF
162A2100-7		1	1G	RF
162A2101-3		1	290A	1
162A2101-4		1	325A	1
162A2101-5		1	290B	1
162A2101-6		1	325B	1
162A2101-7		1	290C	1
162A2101-8		1	325C	1
162A2103-1		1	265	1
162A2103-2		1	285	1
162A2103-3		1	265A	1
162A2103-4		1	285A	1
162A2105-1		1	300	2
162A2105-2		1	315	4
162A2105-3		1	310	4
162A2105-4		1	280	4
162A2105-5		1	295	4
162A2111-1		1	70	2
162A2111-2		1	90	1
162A2112-2		1	207	1
162A2112-3		1	175A	1
162A2112-5		1	175B	1
162A2112-6		1	207A	1
162A2114-1		1	75	2
162A2114-2		1	85	1
162A2115-2		1	260	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
162A2115-3		1	220A	1
162A2115-5		1	220B	1
162A2115-6		1	260A	1
162A2115-7		1	220C	1
162A2115-8		1	260B	1
162A2119-1		1	95	2
162A2120-2		1	35A	1
162A2120-3		1	35B	1
162A2120-4		1	35C	1
162A2120-5		1	35D	1
162A2121-1		1	65	2
162A2123-1		1	218	1
162A2123-2		1	218A	1
162A2124-1		1	216	1
162A2125-1		1	213	2
162A2302-2		1	20	1
162A2302-4		1	20A	1
162A2304-1		1	25	1
162A2305-1		1	30	1
1646B1		1	305	2
1728B		1	320	2
284A3303-1		1	140	2
284A3303-2		1	135	2
287A6212-7		2	100	1
287A6213-2		2	85	1
287A6213-3		2	80	1
287A6217-2		1	327	1
		2	1	RF
287A6217-3		1	327A	1
		2	1A	RF
287A6245-1		2	45	1
287A6245-2		2	60	1
287A6245-3		2	45A	1
287A6245-4		2	60A	1
AS15004-1		1	275A	2

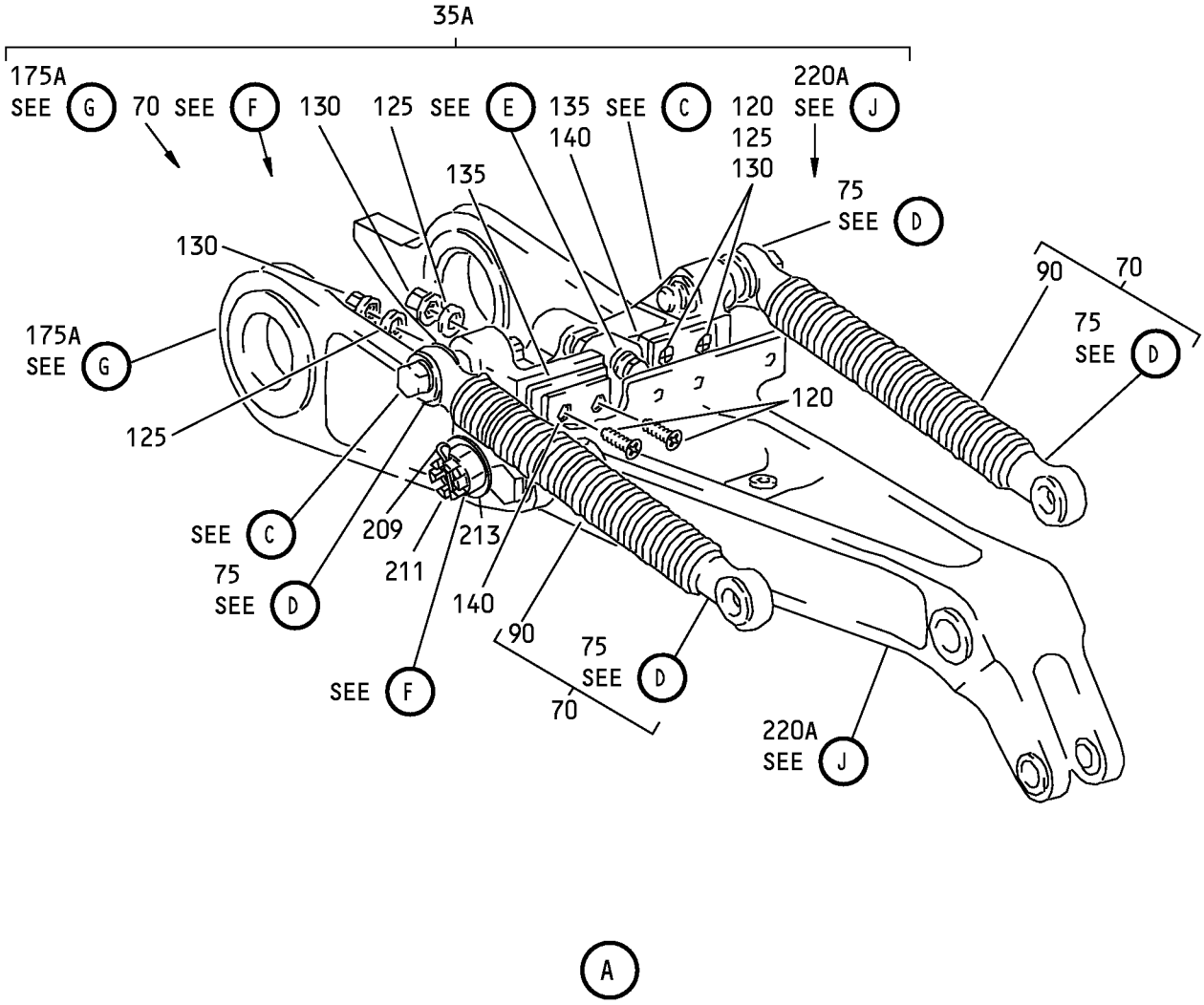
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BAC27DEX6267		1	335	1
BAC27DEX6268		1	330	1
BACB28AP06P080		1	190	2
BACB28AT28D049C		1	205	2
BACB28AU07A045CG		1	235	2
BACB28AU07A050CG		1	185	2
BACB28AU08A045CG		1	235A	2
BACB28AW14B212C		1	250	1
BACB28AZ09A042C		1	255A	2
BACB28AZ09B042A		1	255	2
BACB28AZ12B045A		1	225A	2
BACB28AZ12B050A		1	245	2
BACB28AZ12B054A		1	180A	2
BACB28BB08B018A		1	80	2
BACB28BB12A050C		1	245A	2
BACB28BB24B050A		1	200	2
BACB28X3D027		1	240	2
BACB30LJ6DU30		1	45	2
BACB30LJ7-82		1	150A	1
BACB30LT3D23		1	5C	1
BACB30NF7-82		1	150	1
BACB30NM3K8		2	25	2
BACN10KH3CD		2	55	4
BACN10YR3CD		1	130	4
		2	15	4
BACN10YR4CD		1	110	2
BACN10YR7CD		1	165	1
BACN11N103CD		1	15A	1
		1	15C	1
BACN11N104CD		1	211	2
		1	211B	2
BACN11N106CD		1	60	2
		1	60B	2
BACP18BC02C06P		1	4	1
		1	209	2

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACP18BC03C10P		1	40	2
		1	145	1
BACR15BA3AD		2	50	8
BACS12CK3-11		2	5	4
BACS12GU3K7		2	65	4
BACS40U4N3C		1	115	1
BACW10BP3CD		2	30	2
BACW10BP3DP		1	10	1
		2	35	2
BACW10BP4CD		1	105	1
BACW10BP4DP		1	100	2
BACW10BP6ACU		1	50	2
BACW10BP6DP		1	55	2
BACW10EC3S		1	125A	4
BCREF12310		1	235	2
BCREF12311		1	185	2
BCREF13436		1	235A	2
FS1651-3		2	55	4
H52732-3CD		1	130	4
		2	15	4
H52732-4CD		1	110	2
H52732-7CD		1	165	1
M39029-1-102		2	95	3
MS14145L3		1	15B	1
MS14145L4		1	211A	2
MS14145L6		1	60A	2
MS15004-1		1	275	2
MS35338-43		1	125	4
		2	10	4
NAS1149D0332J		2	70	4
NAS1805-3L		2	40	2
NAS514P1032-12P		1	120	4
NS202496-02		2	55	4
PLH53CD		1	130	4
		2	15	4

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
PLH54CD		1	110	2
PLH57CD		1	165	1
TA027000PH03EP1		2	20	2
TA027067		2	75	4



Drag Strut Assembly
IPL Figure 1 (Sheet 1 of 7)



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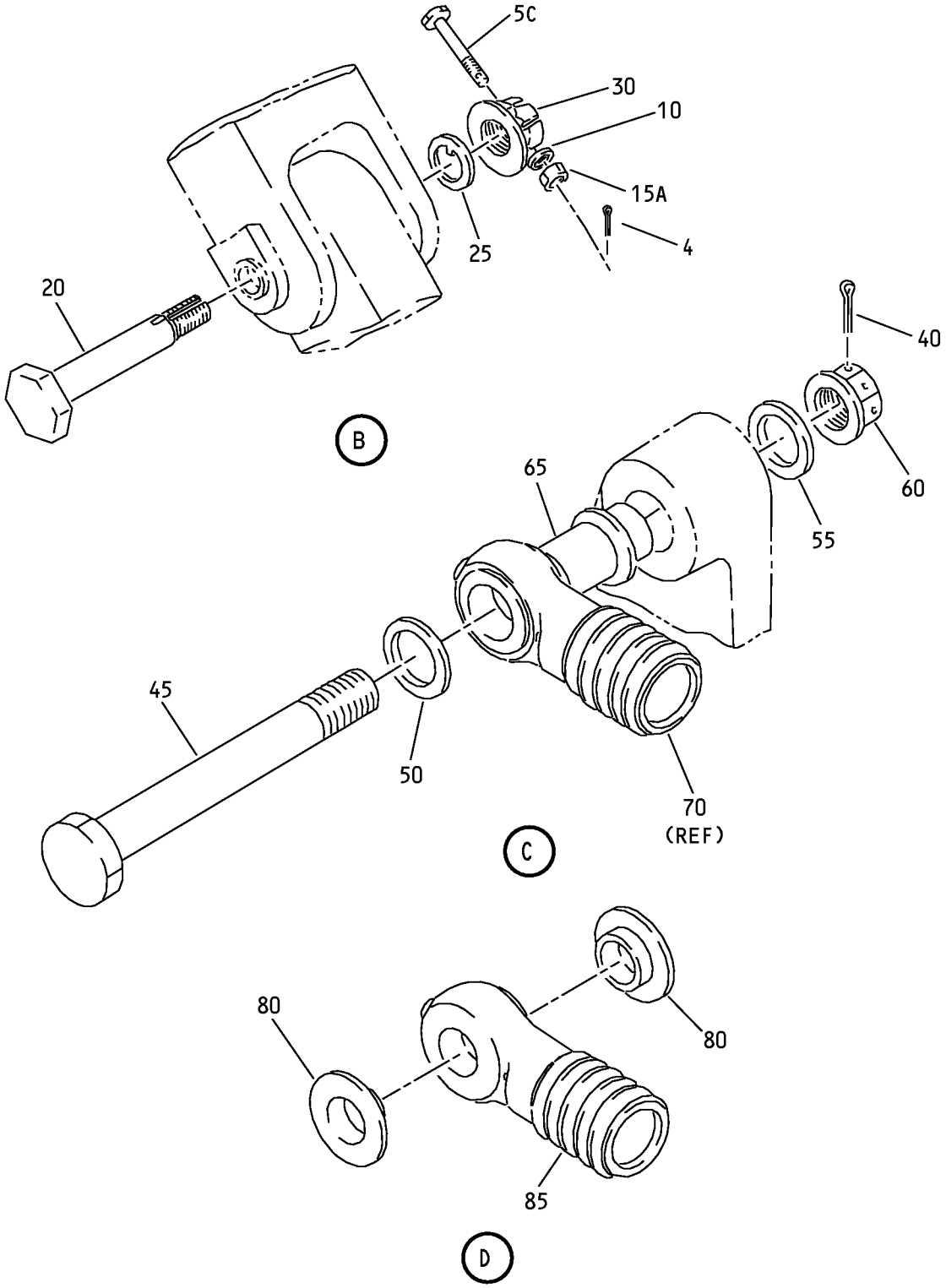
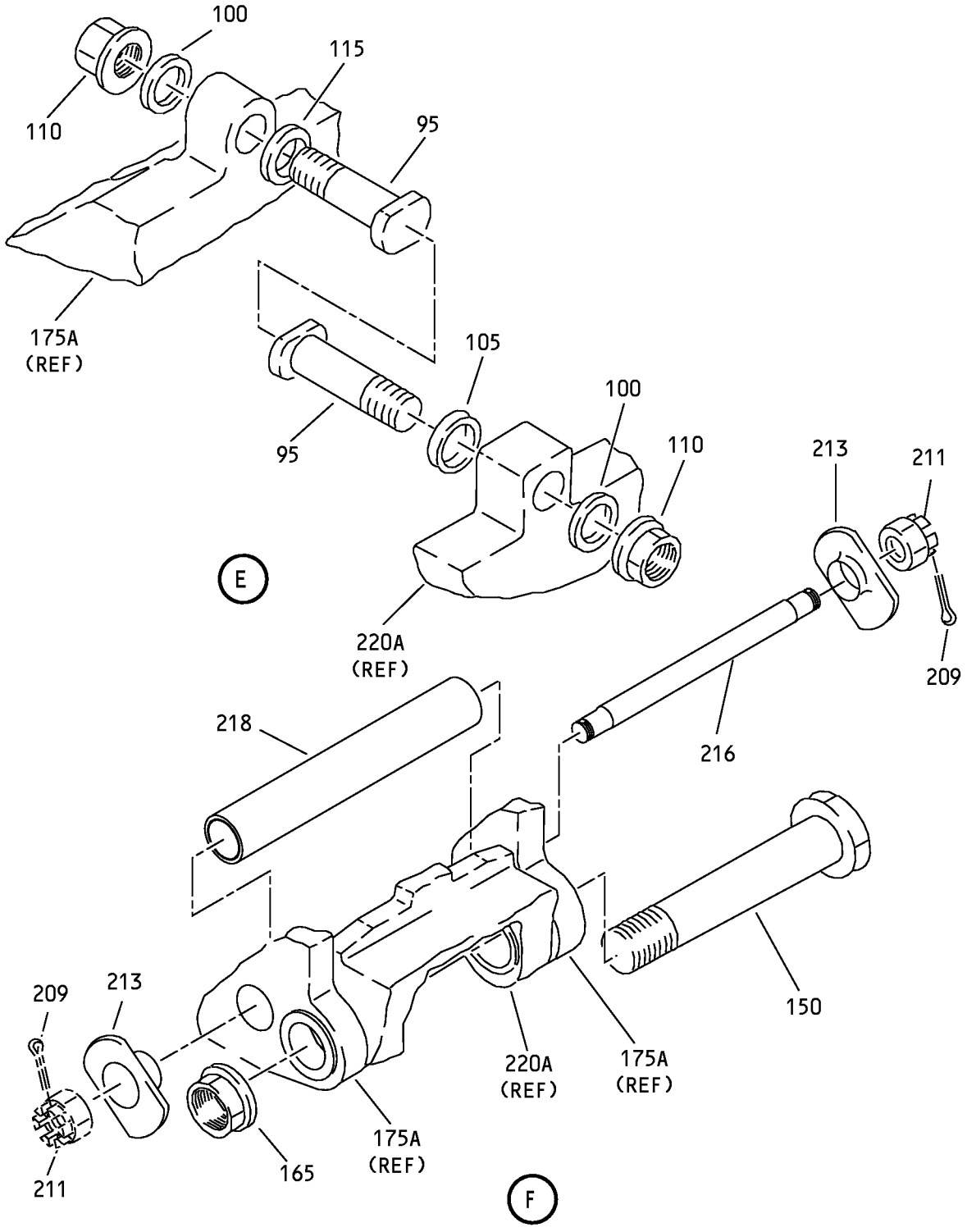
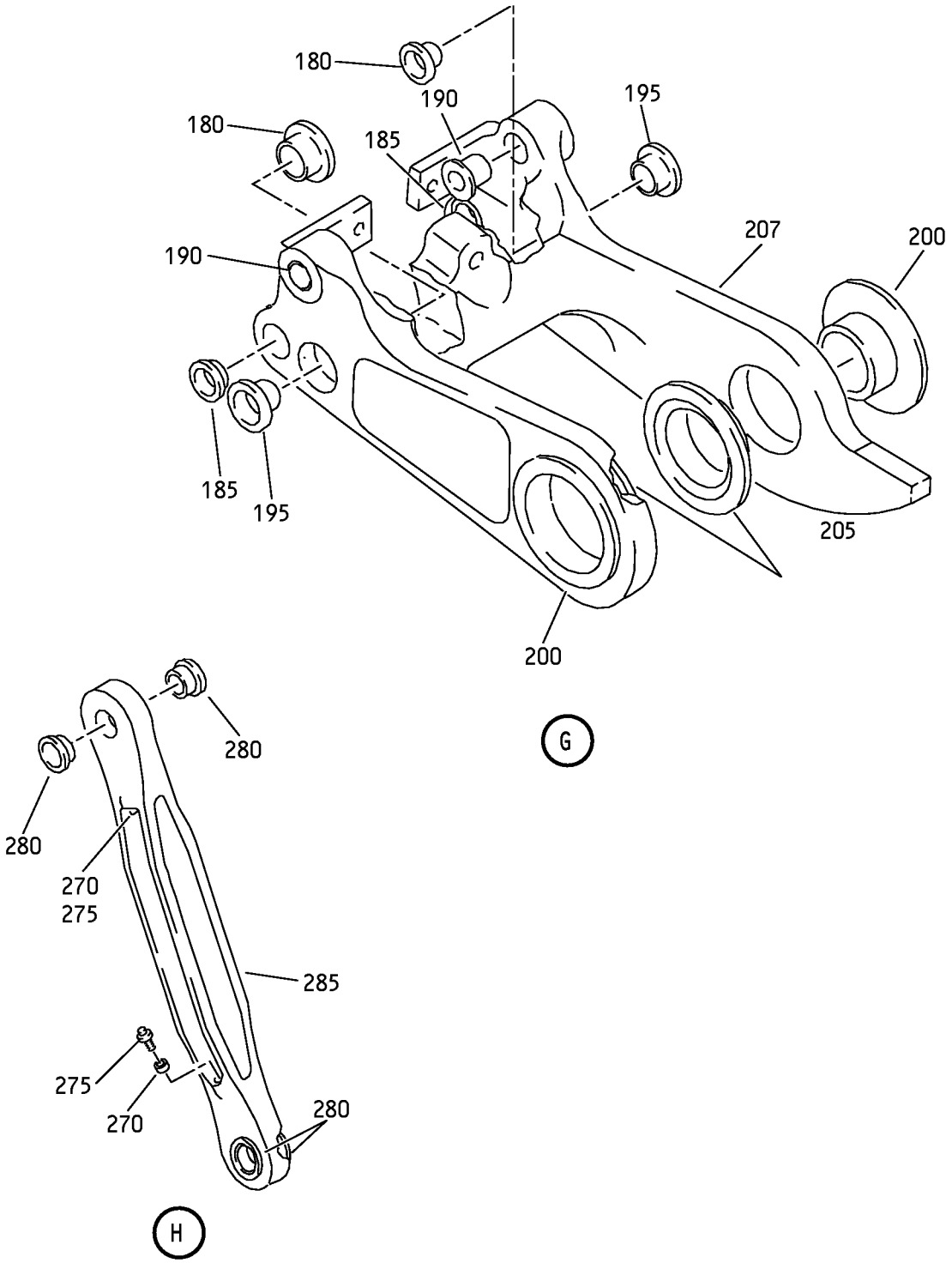
IPL Figure 1 (Sheet 2 of 7)



Drag Strut Assembly
IPL Figure 1 (Sheet 3 of 7)



Drag Strut Assembly
IPL Figure 1 (Sheet 4 of 7)



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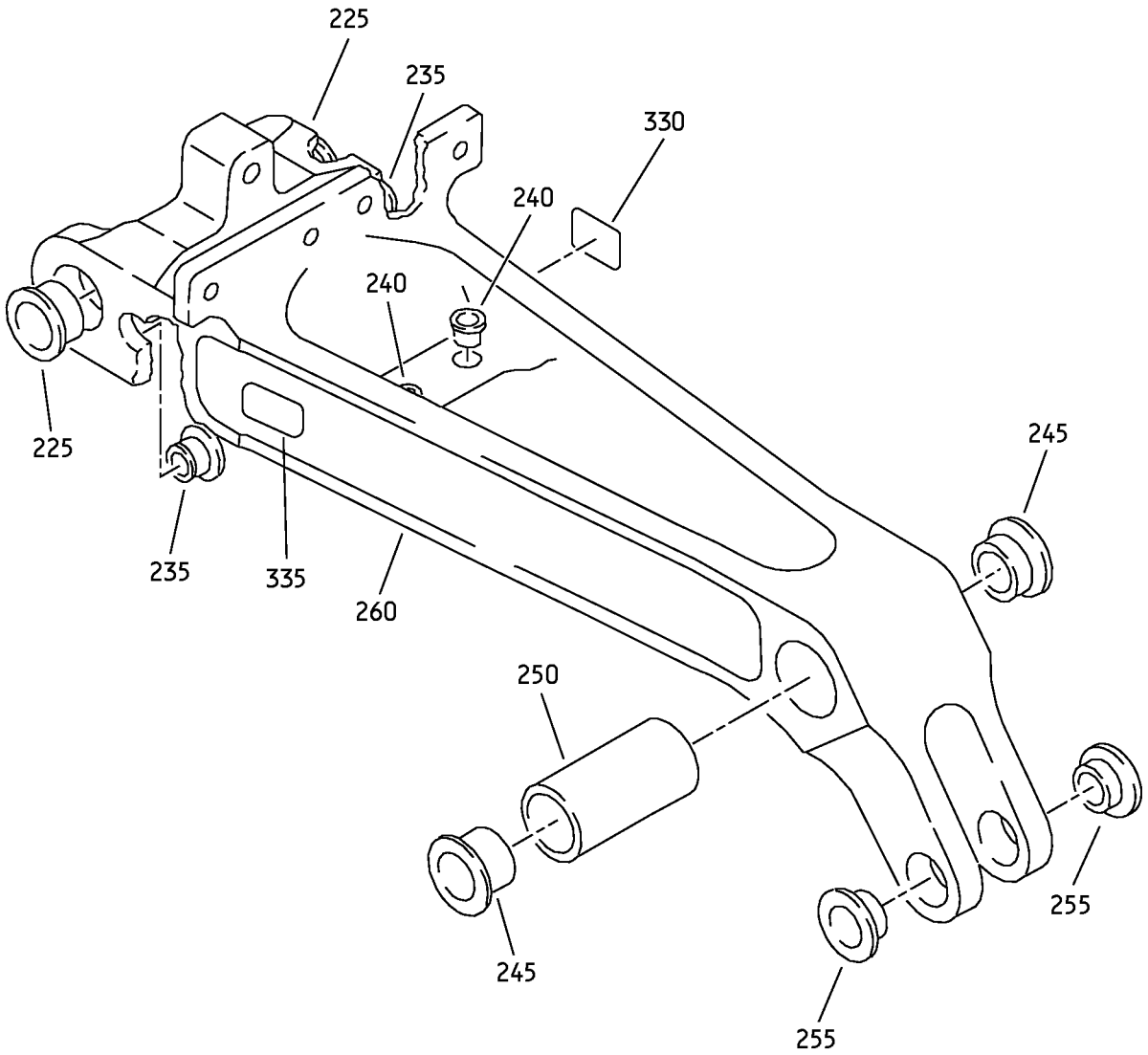
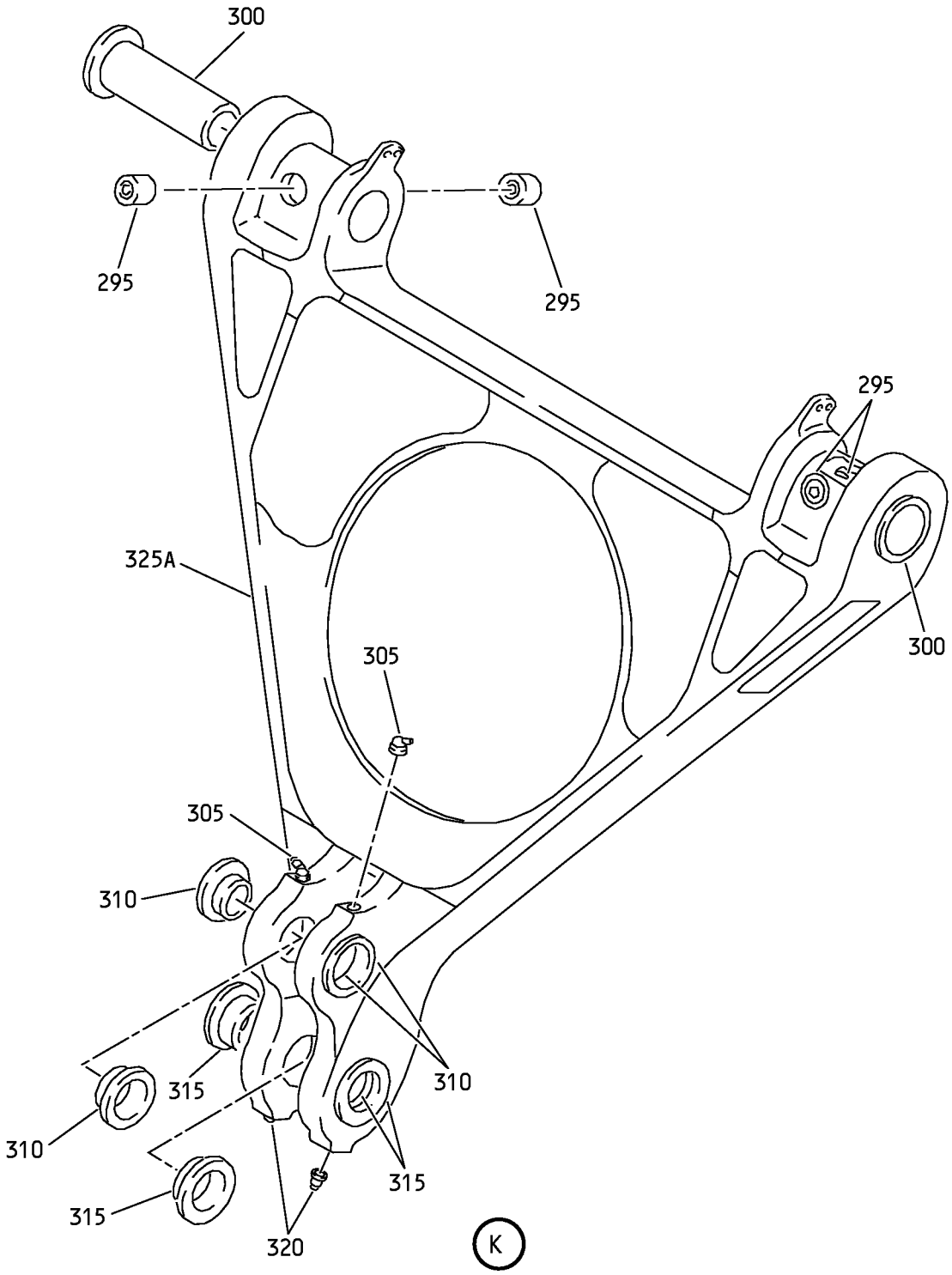
IPL Figure 1 (Sheet 5 of 7)



Drag Strut Assembly
IPL Figure 1 (Sheet 6 of 7)



Drag Strut Assembly
IPL Figure 1 (Sheet 7 of 7)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–1A	162A2100-1		DELETED		
–1B	162A2100-2		STRUT ASSY-DRAG NLG (PRE SB 32-1305)	A	RF
–1C	162A2100-3		STRUT ASSY-DRAG NLG (POST SB 32-1305)	B	RF
–1D	162A2100-4		STRUT ASSY-DRAG NLG	C	RF
–1E	162A2100-5		STRUT ASSY-DRAG NLG	D	RF
–1F	162A2100-6		STRUT ASSY-DRAG NLG	E	RF
–1G	162A2100-7		STRUT ASSY-DRAG NLG	F	RF
4	BACP18BC02C06P		. PIN-COTTER		1
5	BACB30LT3-26		DELETED		
5A	BACB30LT3D26		DELETED		
5B	BACB30LT3D25		DELETED		
5C	BACB30LT3D23		. BOLT		1
10	BACW10BP3DP		. WASHER		1
15	H52732-3CD		DELETED		
15A	BACN11N103CD		. NUT (OPT ITEM 15B)	A-D	1
–15B	MS14145L3		. NUT (OPT ITEM 15A)	A-D	1
–15C	BACN11N103CD		. NUT	E, F	1
20	162A2302-2		. PIN	A-E	1
–20A	162A2302-4		. PIN	F	1
25	162A2304-1		. WASHER		1
30	162A2305-1		. NUT		1
35	162A2120-1		DELETED		
35A	162A2120-2		. LINK ASSY-LOCK	A	1
–35B	162A2120-3		. LINK ASSY-LOCK	B, C	1
–35C	162A2120-4		. LINK ASSY-LOCK	D, E	1
–35D	162A2120-5		. LINK ASSY-LOCK	F	1
40	BACP18BC03C10P		. . PIN-COTTER		2
45	BACB30LJ6DU30		. . BOLT		2

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
50	BACW10BP6ACU		. . WASHER		2
55	BACW10BP6DP		. . WASHER		2
60	BACN11N106CD		. . NUT (OPT ITEM 60A) (USED ON ITEMS 35A-35C)		2
–60A	MS14145L6		. . NUT (OPT ITEM 60) (USED ON ITEMS 35A-35C)		2
–60B	BACN11N106CD		. . NUT (USED ON ITEM 35D)		2
65	162A2121-1		. . SLEEVE		2
70	162A2111-1		. . SPRING ASSY		2
75	162A2114-1		. . . FITTING ASSY-END		2
80	BACB28BB08B018A		. . . . BUSHING		2
85	162A2114-2		. . . . FITTING		1
90	162A2111-2		. . . SPRING		1
95	162A2119-1		. . BOLT-STOP		2
100	BACW10BP4DP		. . WASHER		2
105	BACW10BP4CD		. . WASHER		1
110	H52732-4CD		. . NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
115	BACS40U4N3C		. . SHIM		1
120	NAS514P1032-12P		. . SCREW		4
125	MS35338-43		. . WASHER (USED ON ITEMS 35A-35C)		4
–125A	BACW10EC3S		. . WASHER-SPRING (USED ON ITEM 35D)		4
130	H52732-3CD		. . NUT (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))		4
135	284A3303-2		. . SHIM		2
140	284A3303-1		. . TARGET		2
145	BACP18BC03C10P		. . PIN-COTTER		1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
150	BACB30NF7-82		. . BOLT (USED ON ITEMS 35A-35C)		1
–150A	BACB30LJ7-82		. . BOLT (USED ON ITEM 35D)		1
155	162A2110-1		DELETED		
160	162A2117-1		DELETED		
165	H52732-7CD		. . NUT (V15653) (SPEC BACN10YR7CD) (OPT PLH57CD (V62554))		1
170	BACN11N108CD		DELETED		
–170A	MS14145L8		DELETED		
175	162A2112-1		DELETED		
175A	162A2112-3		. . LINK ASSY-FWD (USED ON ITEMS 35A-35C)		1
–175B	162A2112-5		. . LINK ASSY-FWD (USED ON ITEM 35D)		1
180	BACB28AT12D049C		DELETED		
180A	BACB28AZ12B054A		. . . BUSHING		2
185	BCREF12311		. . . BUSHING (V81205) (BACB28AU07A050CG)		2
190	BACB28AP06P080		. . . BUSHING		2
195	BACB28BB10B050A		DELETED		
200	BACB28BB24B050A		. . . BUSHING		2
205	BACB28AT28D049C		. . . BUSHING		2
207	162A2112-2		. . . LINK (USED ON ITEM 175A)		1
–207A	162A2112-6		. . . LINK (USED ON ITEM 175B)		1
209	BACP18BC02C06P		. . PIN-COTTER		2
210	162A2122-1		DELETED		
211	BACN11N104CD		. . NUT (OPT ITEM 211A) (USED ON ITEMS 35A-35C)		2

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–211A	MS14145L4		. . NUT (OPT ITEM 211) (USED ON ITEMS 35A-35C)		2
–211B	BACN11N104CD		. . NUT (USED ON ITEM 35D)		2
213	162A2125-1		. . CAP		2
215	162A2112-2		DELETED		
216	162A2124-1		. . SHAFT		1
218	162A2123-1		. . PIN (USED ON ITEMS 35A-35C)		1
–218A	162A2123-2		. . PIN (USED ON ITEM 35D)		1
220	162A2115-1		DELETED		
220A	162A2115-3		. . LINK ASSY-AFT (USED ON ITEM 35A)		1
–220B	162A2115-5		. . LINK ASSY-AFT (USED ON ITEMS 35B, 35C)		1
–220C	162A2115-7		. . LINK ASSY-AFT (USED ON ITEM 35D)		1
225	BACB28AT12D044C		DELETED		
225A	BACB28AZ12B045A		. . . BUSHING		2
230	BACB28BB10B045A		DELETED		
235	BCREF12310		. . . BUSHING (V81205) (BACB28AU07A045CG) (USED ON ITEM 220A)		2
–235A	BCREF13436		. . . BUSHING (V81205) (BACB28AU08A045CG) (USED ON ITEMS 220B, 220C)		2
240	BACB28X3D027		. . . BUSHING		2
245	BACB28AZ12B050A		. . . BUSHING (USED ON ITEM 220A)		2
–245A	BACB28BB12A050C		. . . BUSHING (USED ON ITEMS 220B, 220C)		2
250	BAC˜ B28AW14B212C		. . . BUSHING		1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
255	BACB28AZ09B042A		. . . BUSHING (USED ON ITEM 220A)		2
–255A	BACB28AZ09A042C		. . . BUSHING (USED ON ITEMS 220B, 220C)		2
260	162A2115-2		. . . LINK (USED ON ITEM 220A)		1
–260A	162A2115-6		. . . LINK (USED ON ITEM 220B)		1
–260B	162A2115-8		. . . LINK (USED ON ITEM 220C)		1
265	162A2103-1		. STRUT ASSY-LWR	A-E	1
–265A	162A2103-3		. STRUT ASSY-LWR	F	1
270	161W7010-1		. . INSERT		2
275	MS15004-1		. . FITTING (USED ON ITEM 265)		2
–275A	AS15004-1		. . FITTING (USED ON ITEM 265A)		2
280	162A2105-4		. . BUSHING		4
285	162A2103-2		. . STRUT (USED ON ITEM 265)		1
–285A	162A2103-4		. . STRUT (USED ON ITEM 265A)		1
290	162A2101-1		DELETED		
290A	162A2101-3		. STRUT ASSY-UPR	A-D	1
–290B	162A2101-5		. STRUT ASSY-UPR	E	1
–290C	162A2101-7		. STRUT ASSY-UPR	F	1
295	162A2105-5		. . BUSHING		4
300	162A2105-1		. . BUSHING		2
305	1646B1		. . FITTING-LUBE (V0FKM1)		2
310	162A2105-3		. . BUSHING		4
315	162A2105-2		. . BUSHING		4
320	1728B		. . FITTING-LUBE (V0FKM1)		2
325	162A2101-2		DELETED		

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
325A	162A2101-4		. . STRUT (USED ON ITEM 290A)		1
–325B	162A2101-6		. . STRUT (USED ON ITEM 290B)		1
–325C	162A2101-8		. . STRUT (USED ON ITEM 290C)		1
327	287A6217-2		. WIRE PROVISIONS (FOR DETAILS SEE FIG. 2)	A, B	1
–327A	287A6217-3		. WIRE PROVISIONS (FOR DETAILS SEE FIG. 2)	C-F	1
330	BAC27DEX6268		. MARKER		1
335	BAC27DEX6267		. MARKER		1

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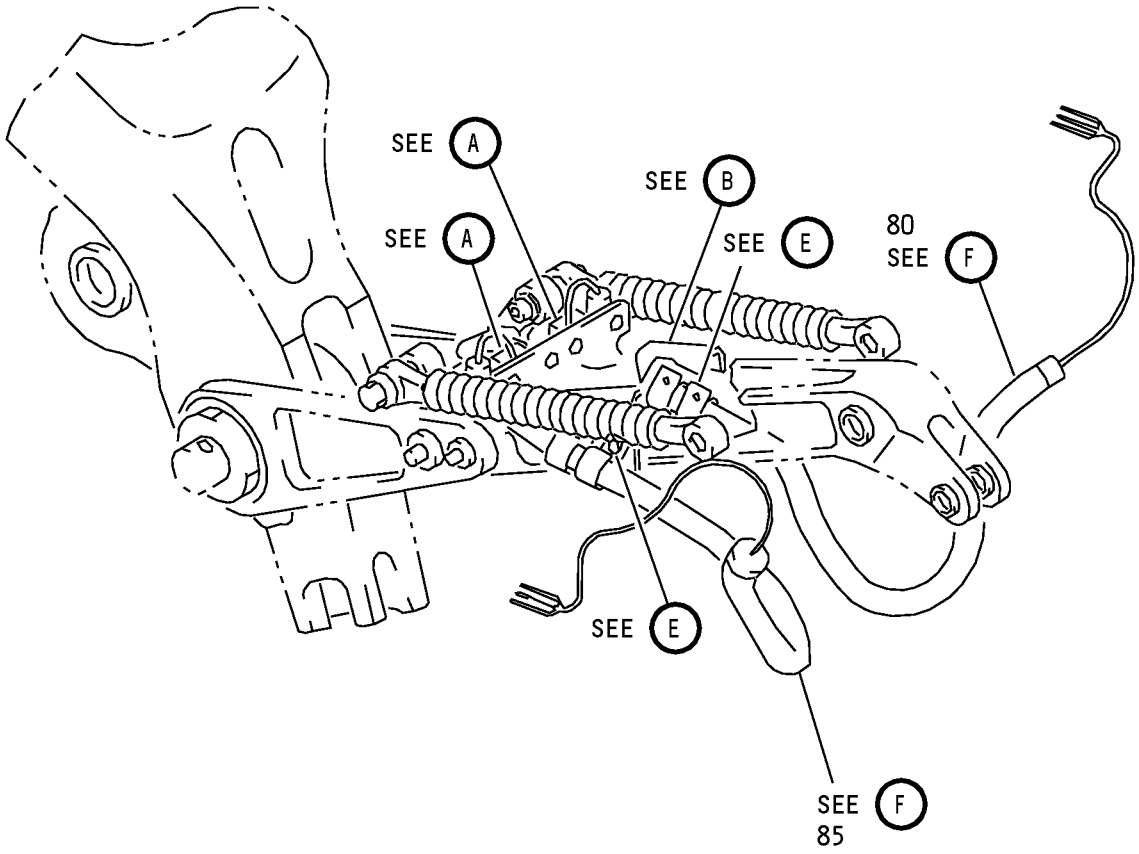
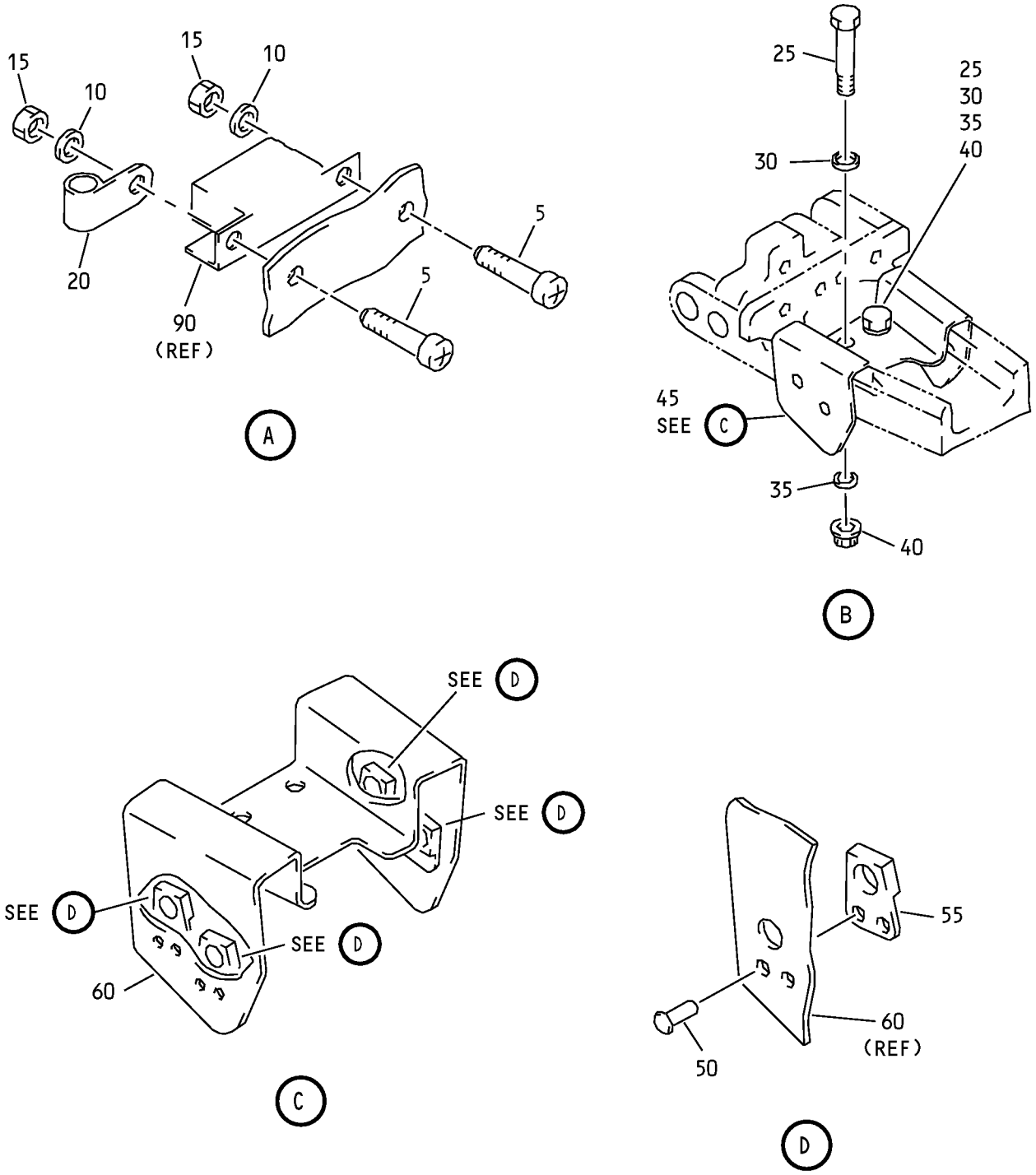
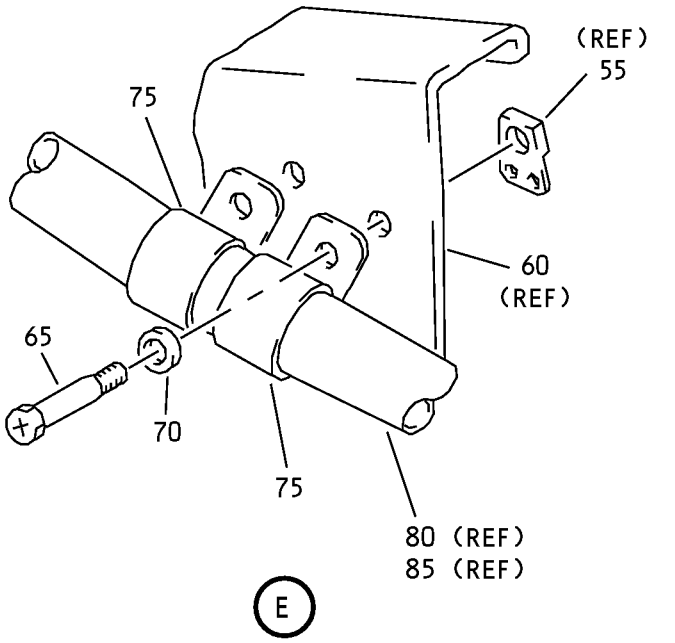
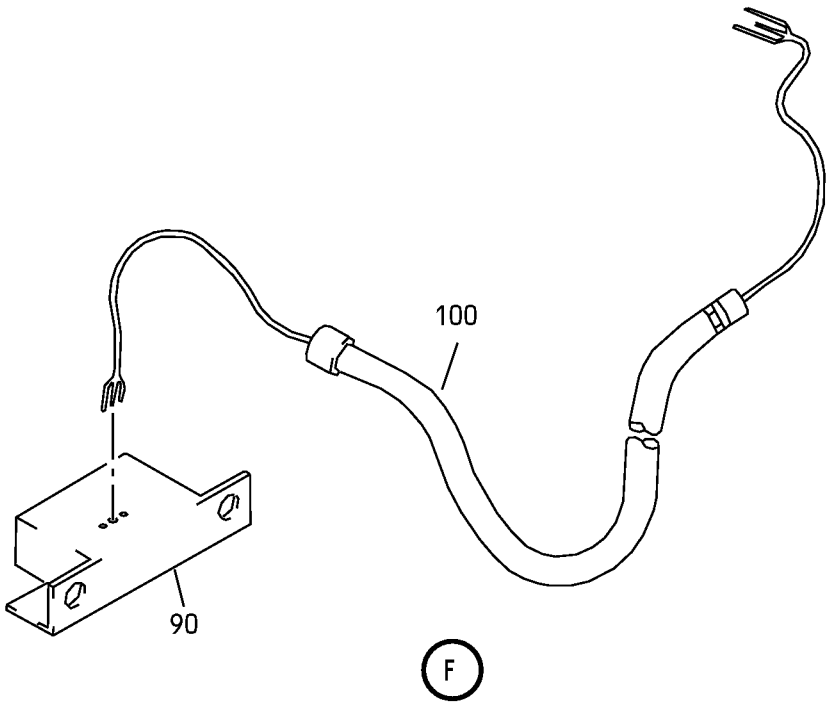


Wire Provisions
IPL Figure 2 (Sheet 1 of 3)



Wire Provisions
IPL Figure 2 (Sheet 2 of 3)





Wire Provisions
IPL Figure 2 (Sheet 3 of 3)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
–1	287A6217-2		WIRE PROVISIONS	A, B	RF
–1A	287A6217-3		WIRE PROVISIONS	C-E	RF
5	BACS12CK3-11		. SCREW		4
10	MS35338-43		. WASHER		4
15	H52732-3CD		. NUT (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))		4
20	TA027000PH03EP1		. CLAMP (V84971)		2
25	BACB30NM3K8		. BOLT		2
30	BACW10BP3CD		. WASHER		2
35	BACW10BP3DP		. WASHER		2
40	NAS1805-3L		. NUT		2
45	287A6245-1		. BRACKET ASSY	A, B	1
–45A	287A6245-3		. BRACKET ASSY	C-E	1
50	BACR15BA3AD		. . RIVET (SIZE DETERMINED ON INST)		8
55	102F9209M3		. . NUTPLATE (V72962) (SPEC BACN10KH3CD) (OPT FS1651-3 (V15653)) (OPT NS202496-02 (V80539))		4
60	287A6245-2		. . BRACKET	A, B	1
–60A	287A6245-4		. . BRACKET	C-E	1
65	BACS12GU3K7		. SCREW		4
70	NAS1149D0332J		. WASHER		4
75	TA027067		. CLAMP		4
80	287A6213-3		. WIRE BUNDLE ASSY		1
85	287A6213-2		. WIRE BUNDLE ASSY		1
90	1-899-29		. . SENSOR-PROXIMITY (V08748) (SPEC 10-61226-29)		1
–95	M39029-1-102		. . CONTACT		3

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2– 100	287A6212-7		. . CONDUIT ASSY		1

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