

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF INBOARD AILERON INSTALLATION COMPONENTS
COMPONENT MAINTENANCE MANUAL 27-11-01

REVISION NO. 8 DATED SEP 01/95

HIGHLIGHTS

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

CHAPTER/SECTION

AND PAGE NO.

DESCRIPTION OF CHANGE

TITLE PAGE

Added top assembly 252T1154-6 and updated per latest engineering.

1

REPAIR 2-1

601-603

1002-1003,1005-1007,

1011-1015,1017-1018

301

Added trunnion assys 252T1170-7 to top assemblies 252T1100-6, -7 and updated per latest engineering.

701

802

1002-1003,1005-1007,

1009-1015,1017-1018

REPAIR-GEN

Edited without technical change.

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HIGHLIGHTS

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INBOARD AILERON INSTALLATION COMPONENTS

PART NUMBERS 252T1100-6,-7,
252T1154-1,-3,-6

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

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TITLE PAGE
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REVISION RECORD

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

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

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REVISION RECORD

01

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR B10661 PRR B11578 PRR B12129	JUL 10/82 JUL 01/88 APR 01/90

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TR & SB RECORD

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COMPONENT
MAINTENANCE MANUAL

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			602	BLANK	
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2	BLANK		*602	SEP 01/95	01.1
REVISION RECORD			*603	SEP 01/95	01.1
1	JUL 10/83	01	604	BLANK	
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* = REVISED, ADDED OR DELETED

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ILLUSTRATED PARTS LIST		CONT.			
*1009	SEP 01/95	01.1			
*1010	SEP 01/95	01.1			
*1011	SEP 01/95	01.1			
*1012	SEP 01/95	01.1			
*1013	SEP 01/95	01.1			
*1014	SEP 01/95	01.1			
*1015	SEP 01/95	01.1			
*1016	SEP 01/95	01.1			
*1017	SEP 01/95	01.1			
*1018	SEP 01/95	01.1			

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*[1] Special instructions not required. Use standard industry practices and information contained in 20-30-03.

INTRODUCTION

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

This manual is divided into separate sections:

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

Refer to the Table of Contents for the page location of applicable sections. An asterisked flagnote *[] in place of the page number indicates that no special instructions are provided since the function can be performed using standard industry practices.

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

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

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

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

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INTRODUCTION

01

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252T1100
252T1154



INBOARD AILERON INSTALLATION COMPONENTS

DESCRIPTION AND OPERATION

NOTE: This manual contains overhaul data for various components of the inboard aileron installation. Overhaul functions which cannot be performed by use of standard industry practices are included in the repair instructions for each component.

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DESCRIPTION & OPERATION

01

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DISASSEMBLY

NOTE: Standard industry practices are sufficient for disassembly of these components.

NOTE: The following parts are recommended for replacement. Unless otherwise specified, actual replacement may be based on in-service experience.

| Nut (25, 45A, 150, IPL Fig. 1)

NOTE: Do not remove lube fittings (30), inserts (55), bushings (60, 65A, 70, 105, 110, 125), bearing (130), or stop (100) unless repair or replacement is necessary (Ref IPL Fig. 1). Do not remove bushings (5, 10, IPL Fig. 2) or bracket (25, IPL Fig. 2) unless repair or replacement is necessary.

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DISASSEMBLY

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CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.
2. Refer to FITS AND CLEARANCES for design dimensions and wear limits.
3. Magnetic particle check pin (35, IPL Fig. 1) per 20-20-01.
4. Penetrant check trunnion (65A), link (115A), link (135), and brackets (25, 30, IPL Fig. 2) per 20-20-02.

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CHECK
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REPAIR – GENERAL

1. Content

A. Repair, refinish and replacement procedures are included in separate repair sections as follows:

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
252T1151	PIN	1-1
252T1154	BRACKET	2-1
252T1170	TRUNNION	3-1
252T1171	LINK	4-1
252T1172	LINK	5-1

2. Standard Practices

A. Refer to the following standard practices as applicable, for details of procedures in individual repairs.

- | 20-10-02 Machining of Alloy Steel
- 20-30-02 Stripping of Protective Finishes
- 20-41-01 Decoding Table for Boeing Finish Codes
- 20-42-03 Hard Chrome Plating
- 20-42-05 Bright Cadmium Plating
- 20-43-01 Chromic Acid Anodizing
- 20-50-03 Bearing Installation and Retention

3. Materials

NOTE: Equivalent substitutes may be used.

- A. Primer -- BMS 10-11, Type 1 (Ref 20-60-02)
- B. Grease -- MIL-G-23827 (Ref 20-60-03)
- C. Sealant -- BMS 5-95 (Ref 20-60-04)

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REPAIR-GENERAL

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4. Dimensioning Symbols

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

—	STRAIGHTNESS	\oplus	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
\square	FLATNESS	\varnothing	DIAMETER
\perp	PERPENDICULARITY (OR SQUARENESS)	BASIC (BSC) OR	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
//	PARALLELISM	DIM	
\bigcirc	ROUNDNESS	-A-	DATUM
\bigcirc	CYLINDRICITY	\textcircled{M}	MAXIMUM MATERIAL CONDITION (MMC)
\frown	PROFILE OF A LINE	\textcircled{S}	REGARDLESS OF FEATURE SIZE (RFS)
\triangle	PROFILE OF A SURFACE	\textcircled{P}	PROJECTED TOLERANCE ZONE
\odot	CONCENTRICITY		
\equiv	SYMMETRY		
\sphericalangle	ANGULARITY		
\nearrow	RUNOUT		

EXAMPLES

$\text{—} \quad 0.002$	STRAIGHT WITHIN 0.002	$\textcircled{\odot} \text{ C } \varnothing \quad 0.0005$	CONCENTRIC TO C WITHIN 0.0005 DIAMETER (FULL INDICATOR MOVEMENT)
$\perp \text{ B } \quad 0.002$	PERPENDICULAR TO B WITHIN 0.002	$\equiv \text{ A } \quad 0.010$	SYMMETRICAL WITH A WITHIN 0.010
$\parallel \text{ A } \quad 0.002$	PARALLEL TO A WITHIN 0.002	$\sphericalangle \text{ A } \quad 0.005$	ANGULAR TOLERANCE 0.005 WITH A
$\bigcirc \quad 0.002$	ROUND WITHIN 0.002	$\oplus \text{ B } \varnothing \quad 0.002 \textcircled{S}$	LOCATED AT TRUE POSITION WITHIN 0.002 DIA IN RELATION TO DATUM B, REGARDLESS OF FEATURE SIZE
$\bigcirc \quad 0.010$	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER	$\perp \text{ A } \varnothing \quad 0.010 \textcircled{M}$ $0.510 \textcircled{P}$	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
$\frown \text{ A } \quad 0.006$	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART IN RELATION TO DATUM PLANE A	2.000	EXACT DIMENSION IS 2.000
$\triangle \text{ A } \quad 0.020$	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE	OR 2.000 BSC	

True Position Dimensioning Symbols
Figure 601

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REPAIR-GENERAL

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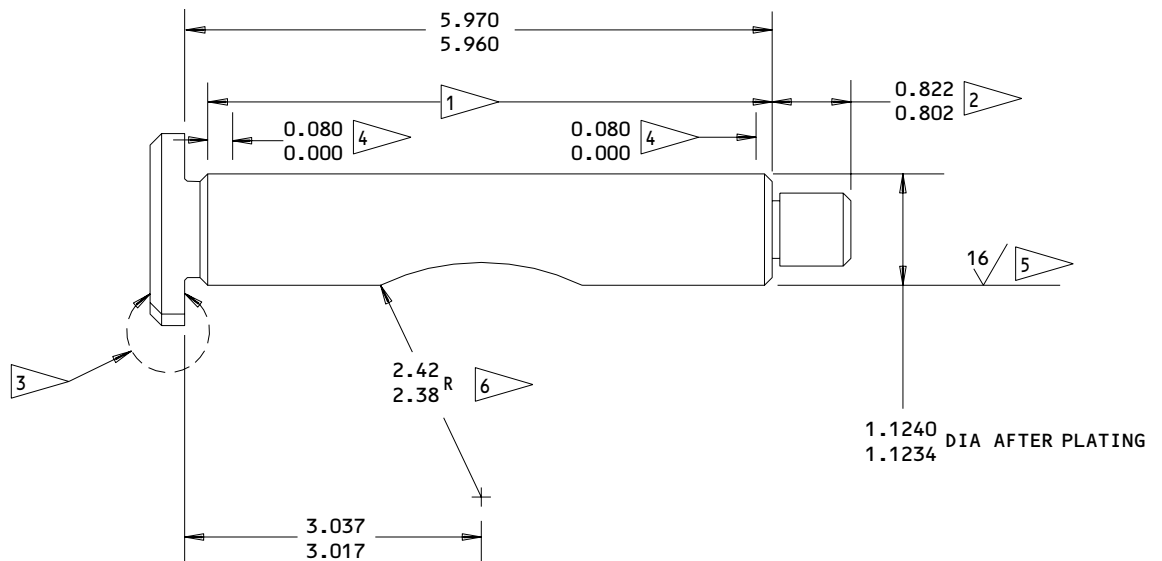
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PIN - REPAIR 1-1

252T1151-1, -2, -3

1. Plating Repair

NOTE: Repair consists of stripping and restoration of original finish. Refer to Refinish instruction in Fig. 601 and to REPAIR-GEN for list of applicable standard practices.



REFINISH

PASSIVATE (F-17.09) AND PLATE AS NOTED

MATERIAL: 15-5 PH CRES
180-200 KSI

- 1 CHROMIUM PLATE (F-15.03).
E1 AND -3 ONLY: SINGLE PLATE THICKNESS 0.003
AFTER GRINDING
E2 ONLY: SINGLE PLATE THICKNESS 0.0005-
0.001. DO NOT GRIND AFTER PLATING
- 2 NO PLATE IN THIS AREA
- 3 CADMIUM PLATE (F-15.02)
- 4 PLATING RUNOUT
- 5 E2 ONLY: REQUIRED SURFACE FINISH BEFORE
PLATING, EXCEPT $\sqrt{63}$ BEFORE PLATING
IS ACCEPTABLE IN AREA NOTED BY 6
- 6 RADIUS BEFORE PLATING. DO NOT GRIND
THIS RADIUS AFTER PLATING

ALL DIMENSIONS ARE IN INCHES

Pin Refinish
Figure 601

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REPAIR 1-1

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BRACKET ASSEMBLY – REPAIR 2-1

252T1154-1, -3, -6

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to Refinish instruction, Fig. 601.

1. Bushing Replacement (Ref IPL Fig. 2)

- A. Remove bushings (5, 10).
- B. Install replacement bushings with wet sealant using shrink-fit method.
- C. Machine ID to dimensions shown in Fig. 601.
- D. Fillet seal flanges with sealant.

2. Bracket Replacement (Ref IPL Fig. 2)

- A. Drill out rivets (15, 20) and remove bracket (25).
- B. Position replacement bracket per Fig. 601 and secure with rivets.
- C. Install bushing (10A) per instructions above.

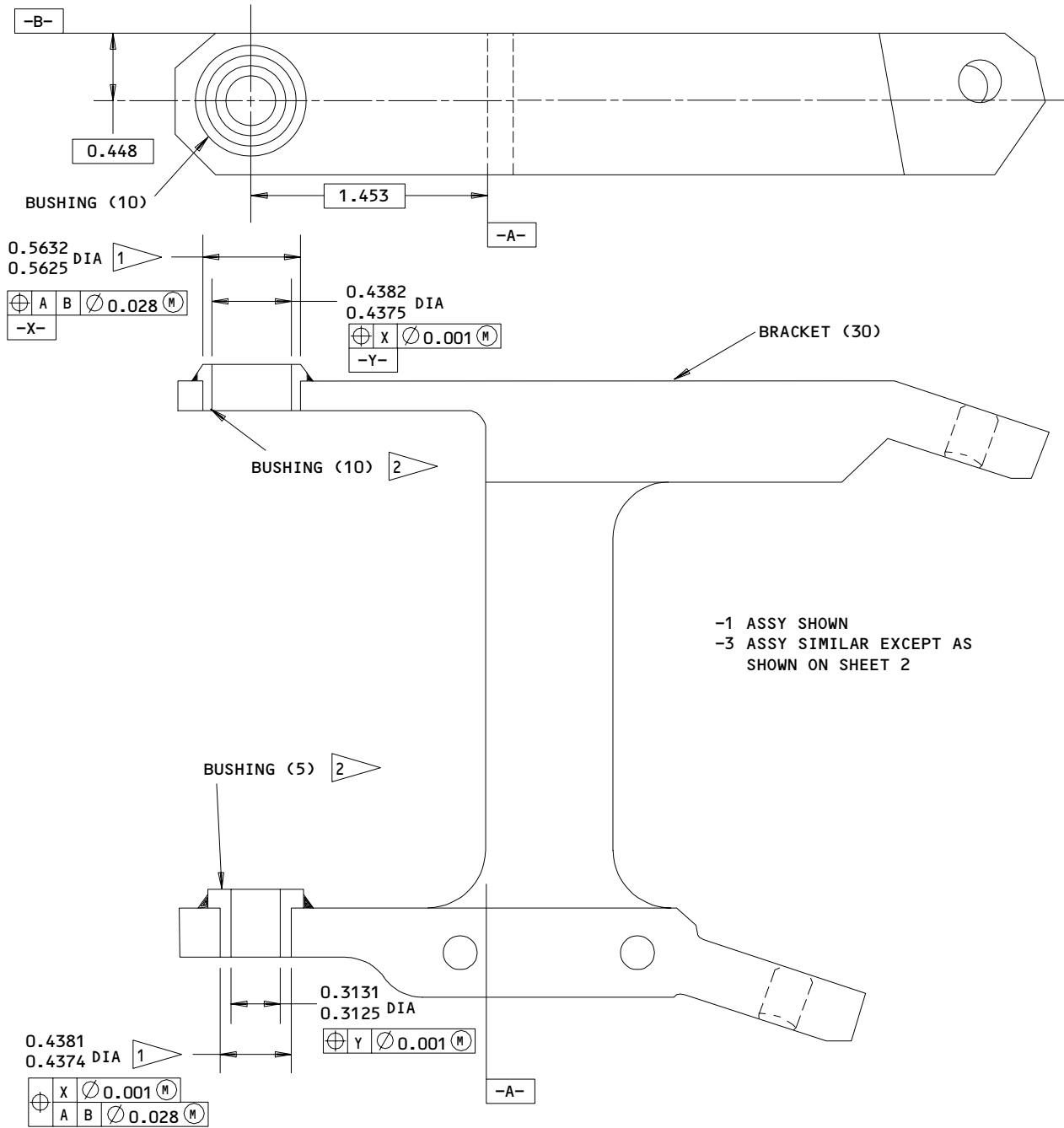
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REPAIR 2-1

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-1 ASSY SHOWN
 -3 ASSY SIMILAR EXCEPT AS SHOWN ON SHEET 2

REFINISH

CHROMIC ACID ANODIZE BRACKET (30,25) AND APPLY ONE COAT OF PRIMER BMS 10-11 TYPE I (F-18.13) EXCEPT AS NOTED

- 1 NO PRIMER ON THIS SURFACE
- 2 NO FINISH ON BORE AND FACE OF BUSHING

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 2

252T1154-1,-3,-6
 Bracket Assembly Repair
 Figure 601 (Sheet 1)

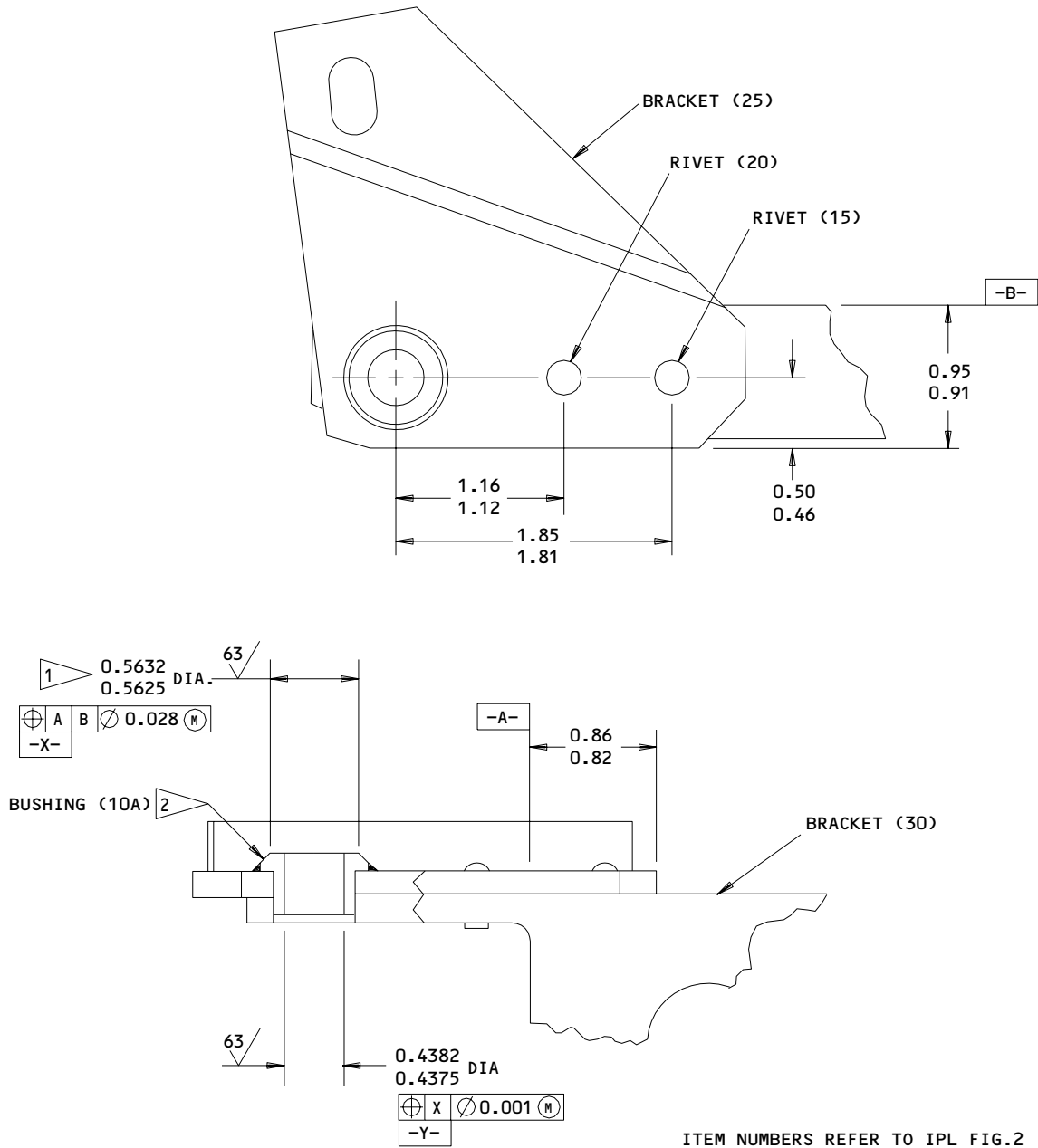
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REPAIR 2-1

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-3 ASSY DETAILS

252T1154-1,-3,-6
Bracket Assembly Repair
Figure 601 (Sheet 2)

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REPAIR 2-1

01.1

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TRUNNION ASSEMBLY - REPAIR 3-1

252T1170-5

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to Refinish instruction, Fig. 601.

1. Bushing Replacement (Ref IPL Fig. 1)
 - A. Remove bushing (60, 65A, 70).
 - B. Install replacement bushing with wet sealant using shrink-fit method.
 - C. Machine ID to dimension shown in Fig. 601.
 - D. Fillet seal flanges with sealant.

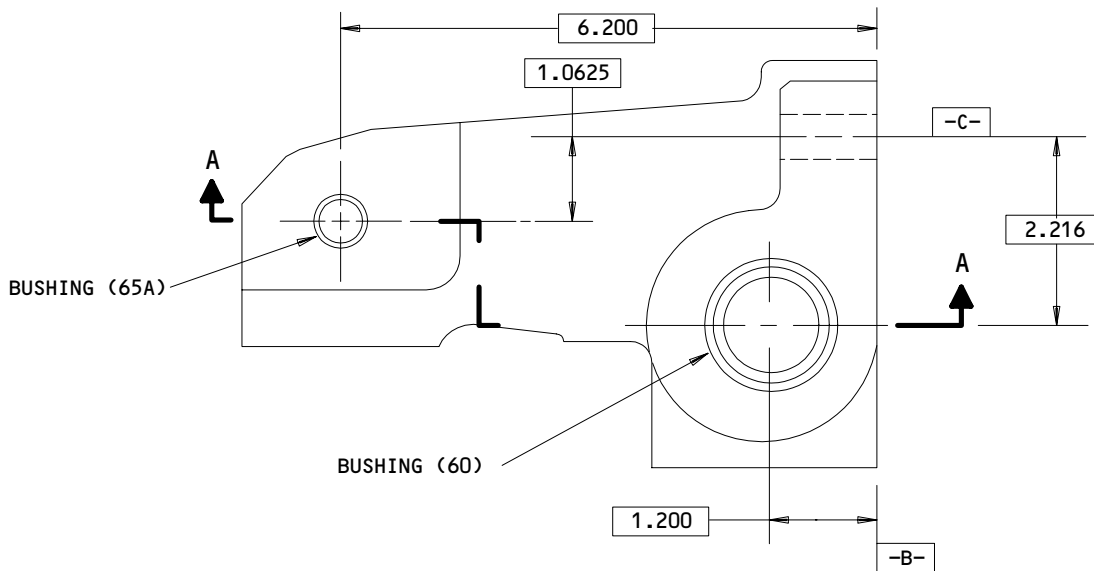
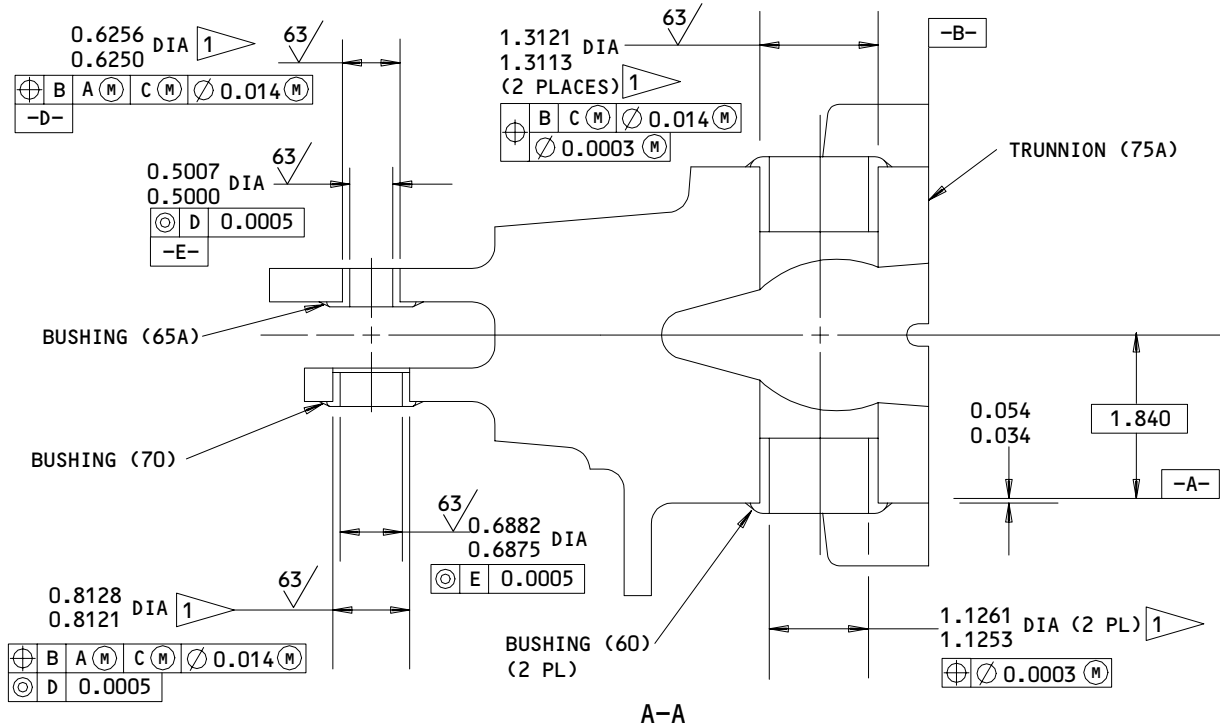
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REPAIR 3-1

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REFINISH

CHROMIC ACID ANODIZE TRUNNION (75A) AND APPLY ONE COAT OF PRIMER BMS 10-11, TYPE I (F-18.13) EXCEPT AS NOTED

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

1 NO PRIMER ON THIS SURFACE FOR LENGTH OF BUSHING

252T1170-5

Trunnion Assembly Repair
 Figure 601

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REPAIR 3-1

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01

LINK ASSEMBLY – REPAIR 4-1

252T1171-4

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to Refinish instruction, Fig. 601.

1. Bushing Replacement (Ref IPL Fig. 1)

- A. Remove bushings (105, 110).
- B. Install replacement bushings with wet sealant using shrink-fit method.
- C. Machine ID to dimension shown in Fig. 601.
- D. Fillet seal bushing flanges with sealant.

2. Stop Replacement (Ref IPL Fig. 1)

- A. Remove collars (95), bolts (85A, 90) and stop (100).
- B. Install replacement stop as shown in Fig. 601, with wet sealant applied to stop, bolts and collars.

3. Link Replacement (Ref IPL Fig. 1)

- A. Drill bolt holes in link (115A) using holes in stop as pattern. Counterbore as indicated in Fig. 601.
- B. Install stop and bushings per instructions above.

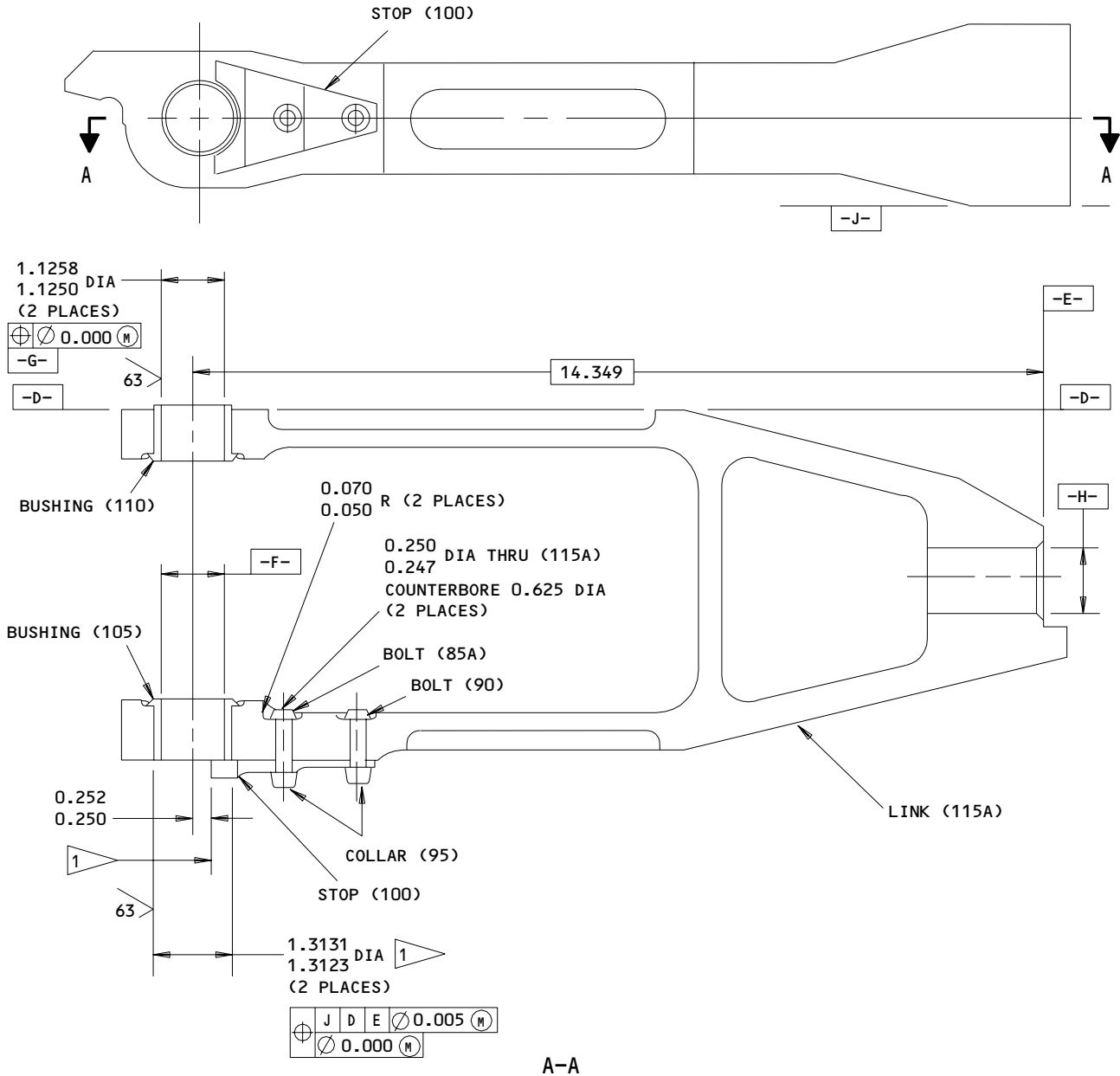
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REPAIR 4-1

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REFINISH

CHROMIC ACID ANODIZE (F-17.04) LINK (115A).
 CADMIUM PLATE (F-15.06) STOP (100). APPLY
 ONE COAT OF PRIMER BMS 10-11, TYPE 1 (F-20.02)
 TO LINK AND STOP EXCEPT AS NOTED

1 NO PRIMER ON THIS SURFACE

MATERIAL: LINK (115A) - AL ALLOY
 STOP (100) - 15-5 PH CRES
 (150-170 KSI)

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO 1PL FIG. 1

252T1171-4
 Link Assembly Repair
 Figure 601

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REPAIR 4-1

01.1

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LINK ASSEMBLY – REPAIR 5-1

252T1172-5

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to Refinish instruction, Fig. 601.

1. Bushing Replacement (Ref IPL Fig. 1)
 - A. Remove bushing (125).
 - B. Install replacement bushing with wet sealant using shrink-fit method.
 - C. Machine ID to dimension shown in Fig. 601.
 - D. Fillet seal bushing with sealant.
2. Bearing Replacement (Ref IPL Fig. 1)
 - A. Remove bearing (130).
 - B. Install replacement bearing with grease and roller swage in place.

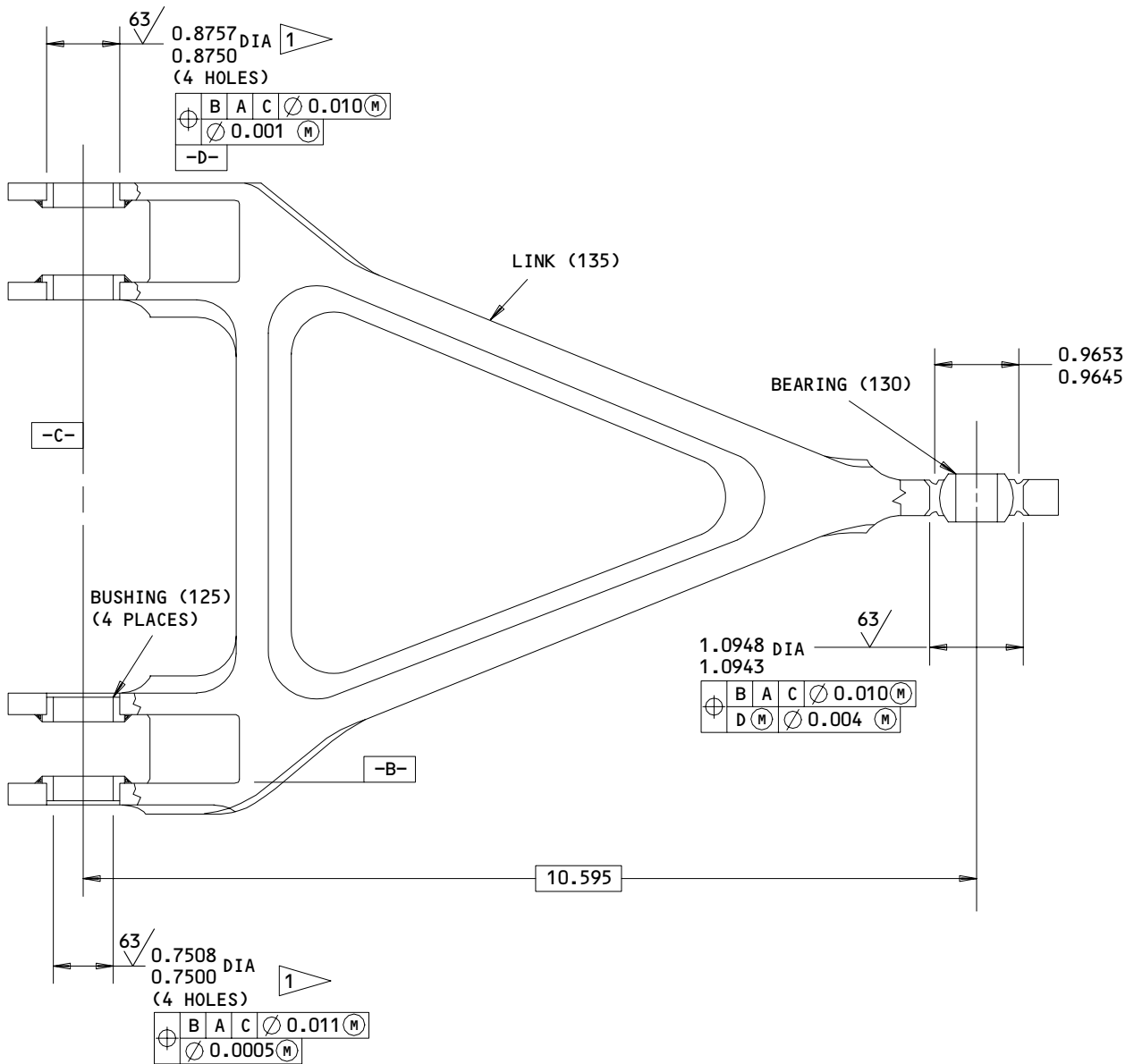
27-11-01

REPAIR 5-1

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REFINISH

CHROMIC ACID ANODIZE LINK (135)
 AND APPLY ONE COAT OF PRIMER
 BMS 10-11 TYPE I (F-18.13) TO
 LINK EXCEPT AS NOTED

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

1 NO PRIMER ON THIS SURFACE

252T1172-5
 Link Assembly Repair
 Figure 601

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REPAIR 5-1

01.1

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ASSEMBLY

1. Materials

NOTE: Equivalent substitutes may be used.

- A. Grease -- BMS 3-24 (Ref 20-60-03)
- B. Grease -- MIL-G-23827 (Ref 20-60-03)

2. Lubrication

- A. Apply light film of grease, BMS 3-24, to faying surfaces of bolt (10B), bushing (20), lube fittings (30), and pin (35) as parts are installed (Ref IPL Fig. 1).
- B. Apply grease, BMS 3-24, to shank and threads of bearing (140) prior to assembly.
- C. Apply grease, MIL-G-23827, through lube fittings after assembly. Rotate parts to ensure full coverage and wipe off excess.

3. Assembly (Ref IPL Fig. 1)

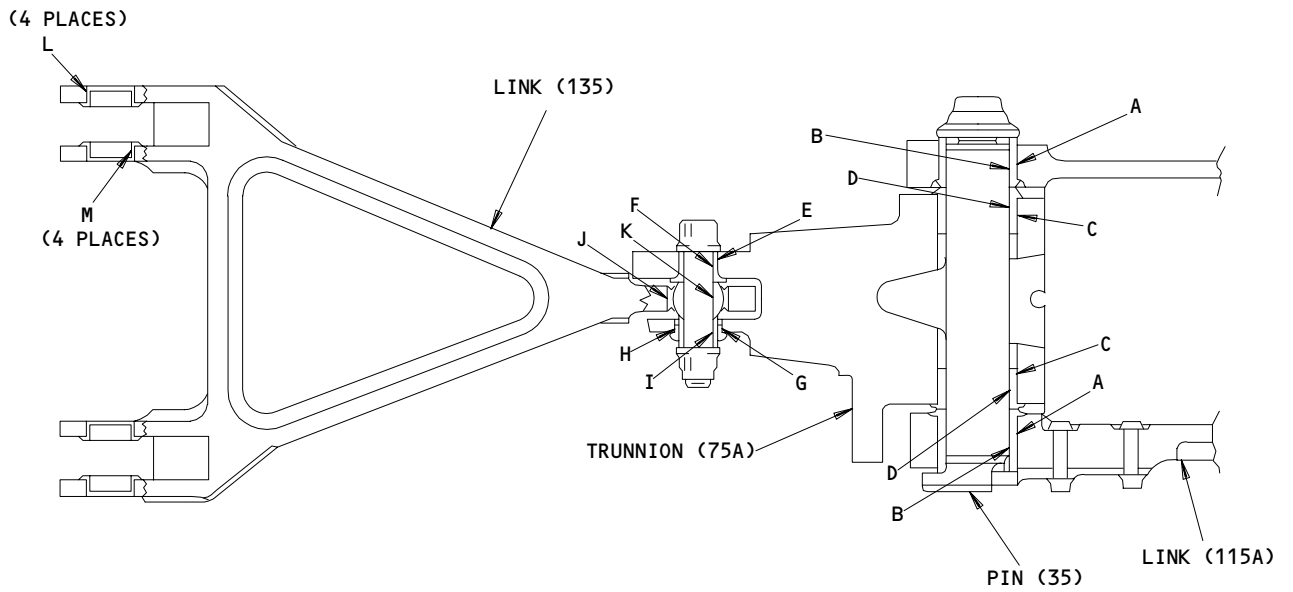
- A. Use standard industry practices for assembly of these components, observing special torque values given below.
 - (1) Tighten nut (25) to 520-650 lb-in.
 - (2) Tighten nut (45A) to 400-500 lb-in.
 - (3) Tighten nut (150) to 2000-2500 lb-in.

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ASSEMBLY
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FITS AND CLEARANCES



Fits and Clearances
Figure 801 (Sheet 1)

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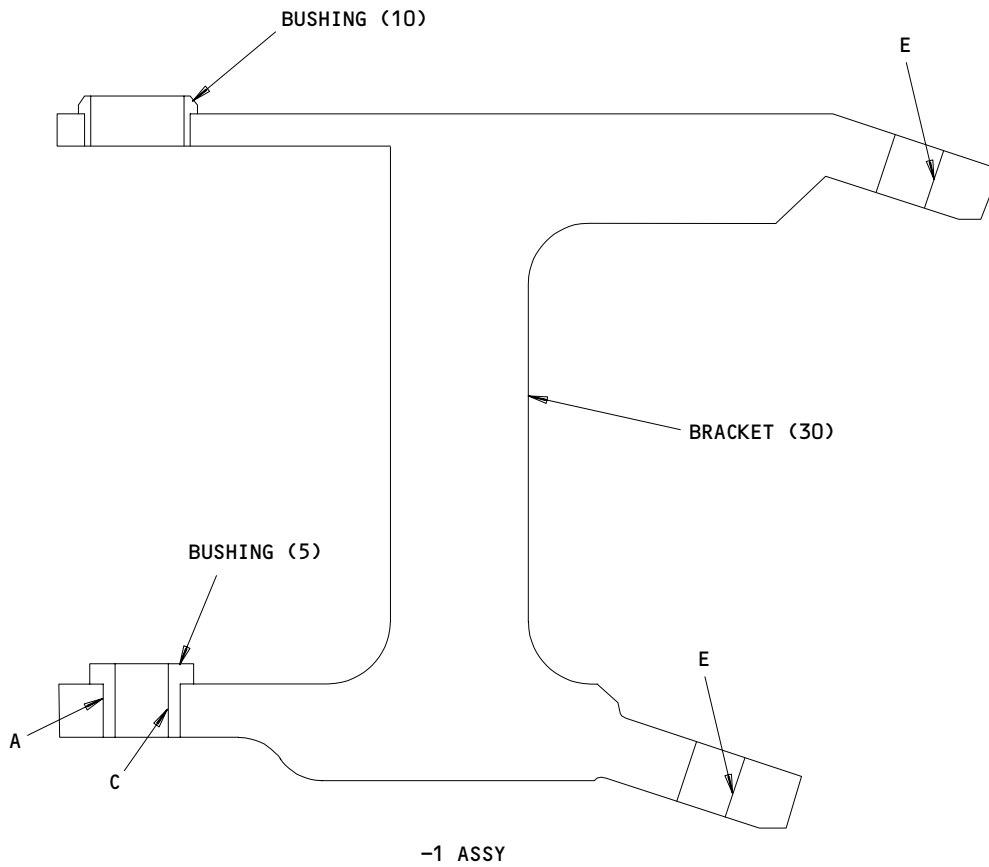
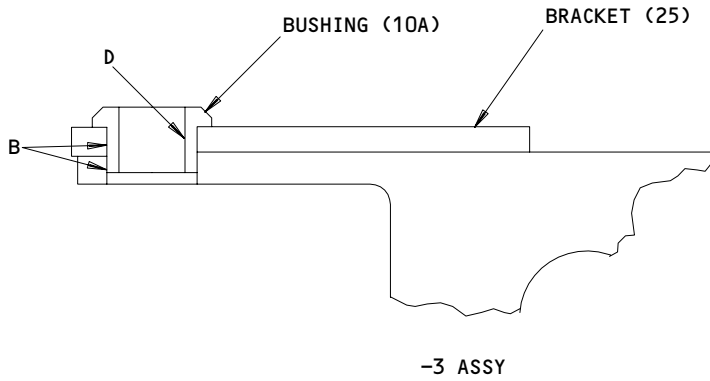
Ref Letter Fig.801	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance * 1		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 115A	1.3123	1.3131	-0.0026	-0.0010			
	OD 105,110	1.3141	1.3149					
B	ID 105,110	1.1250	1.1258	0.0010	0.0024	1.1223	1.1275	0.0035
	OD 35	1.1234	1.1240					
C	ID 75A	1.3113	1.3121	-0.0036	-0.0020			
	OD 60	1.3141	1.3149					
D	ID 60	1.1253	1.1261	0.0013	0.0027	1.1226	1.1275	0.0035
	OD 35	1.1234	1.1240					
E	ID 75A	0.6250	0.6256	-0.0017	-0.0005			
	OD 65A	0.6261	0.6267					
F	ID 65A	0.5000	0.5007	0.0005	0.0017			
	OD 10B	0.4990	0.4995					
G	ID 75A	0.8121	0.8128	-0.0023	-0.0009			
	OD 70	0.8137	0.8144					
H	ID 70	0.6875	0.6882	0.0010	0.0022	0.6852	0.6895	0.0030
	OD 20	0.6860	0.6865					
I	ID 20	0.5000	0.5005	0.0005	0.0015	0.4975	0.5025	0.0030
	OD 10B	0.4990	0.4995					
J	ID 135	1.0943	1.0948	0.0005	0.0016	1.0223	1.0963	0.0025
	OD 130	1.0932	1.0938					
K	ID 130	0.5000	0.5004	0.0005	0.0014	0.4974	0.5025	0.0030
	OD 10B	0.4990	0.4995					
L	ID 135	0.8750	0.8757	-0.0020	-0.0006			
	OD 125	0.8763	0.8770					
M	ID 125	0.7500	0.7508				0.7518	
--	ID 140	0.9995	1.0000				1.0020	

* 1 NEGATIVE VALUES DENOTE INTERFERENCE FIT
 ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
 Figure 801 (Sheet 2)

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FITS AND CLEARANCES
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Fits and Clearances
Figure 802 (Sheet 1)

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FITS AND CLEARANCES
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Ref Letter Fig.801	Mating Item No. IPL Fig.2	Design Dimension				Service Wear Limit		
				Assembly Clearance *[1]		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 30	0.4374	0.4381	-0.0016	-0.0003			
	OD 5	0.4384	0.4390					
B	ID 30,25	0.5625	0.5632	-0.0017	-0.0004			
	OD 10,10A	0.5636	0.5642					
C	ID 5	0.3125	0.3131				0.3150	
D	ID 10,10A	0.4375	0.4382				0.4400	
E	ID 30	0.250	0.251				0.2530	

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
 Figure 802 (Sheet 2)

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FOR TORQUE VALUES OF STANDARD FASTENERS, REFER TO 20-50-01			
ITEM NO. IPL FIG. 1	NAME	TORQUE	
		POUND-INCHES	POUND-FEET
25	NUT	520-650	
45	NUT	400-500	
150	NUT	2000-2500	

Torque Table
Figure 803

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ILLUSTRATED PARTS LIST

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

2. Indentures show parts relationships as follows:

Assembly

Detail Parts for Assembly

Subassembly

Attaching Parts for Subassembly

Detail Parts for Subassembly

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

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

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

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

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

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

6. Parts Interchangeability

Optional
(OPT)

The parts are optional to and interchangeable with other parts having the same item number.

Supersedes, Superseded By
(SUPSDS, SUPSD BY)

The part supersedes and is not interchangeable with the original part.

Replaces, Replaced By
(REPLS, REPLD BY)

The part replaces and is interchangeable with, or is an alternate to, the original part.

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VENDORS

06710 LAMSON AND SESSIONS CO THE VALLEY-TODECO
12975 BRADLEY AVENUE
SYLMAR, CALIFORNIA 91342-3830

09192 ALUMINUM COMPANY OF AMERICA VERNON WORKS
5151 ALCOA AVENUE
VERNON, CALIFORNIA 90058-3715

09455 BFM TRANSPORT DYNAMICS CORP
3131 WEST SEGERSTROM AVENUE PO BOX 1953
SANTA ANA, CALIFORNIA 92702-1953

10630 ANILLO INDUSTRIES, INCORPORATED
2090 NORTH GLASSELL
ORANGE, CALIFORNIA 92667

11815 CHERRY AEROSPACE FASTENERS DIV OF TEXTRON
1224 EAST WARNER AVENUE PO BOX 2157
SANTA ANA, CALIFORNIA 92707-0157

15653 KAYNAR TECHNOLOGY KAYNAR DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92634-3001

15860 NEW HAMPSHIRE BALL BEARINGS, INCORPORATED ASTRO DIVISION
155 LEXINGTON AVENUE
LACONIA, NEW HAMPSHIRE 03246-2937

17446 HUCK MFG CO GOV CONTRACTS LOS ANGELES DIV SUB OF FED-MOGUL
900 WATSON CENTER ROAD
CARSON, CALIFORNIA 90745

23589 NIPPON MINATURE BEARING CORP SEE NMB CORP V50294

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VENDORS

27238 BRISTOL INDUSTRIES
630 EAST LAMBERT ROAD PO BOX 630
BREA, CALIFORNIA 92621-4119

29666 HUCK MANUFACTURING CO SUB OF FEDERAL-MOGUL CORP
6 THOMAS
IRVINE, CALIFORNIA 92714

42838 NATIONAL RIVET AND MANUFACTURING COMPANY
1-21 EAST JEFFERSON STREET
WAUPUN, WISCONSIN 53963-2028

53551 ALLFAST FASTENING SYSTEMS INC
15200 EAST DON JULIAN ROAD PO BOX 3166
CITY OF INDUSTRY, CALIFORNIA 91745-1001

55580 BRILES RIVET CORP
2640 VISTA PACIFIC DRIVE
OCEANSIDE, CALIFORNIA 92056-3514

56878 SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV
HIGHLAND AVENUE
JENKINTOWN, PENNSYLVANIA 19046

62554 SIMMONDS MECAERO FASTENERS INC
1734 SEQUOIA AVENUE
ORANGE, CALIFORNIA 92668

72962 ELASTIC STOP NUT A DIV OF HARTFORD INDUSTRIES INC
2330 VAUXHALL ROAD
UNION, NEW JERSEY 07083-5038

73134 IMO INDUSTRIES INC HEIM BEARINGS DIV
60 ROUND HILL ROAD PO BOX 430
FAIRFIELD, CONNECTICUT 06430

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VENDORS

77896 REXNORD INC BEARING OPERATION
2400 CURTIS STREET
DOWNERS GROVE, ILLINOIS 60515-4005

92215 FAIRCHILD IND INC FAIRCHILD AEROSP FASTNR DIV DESIGN & ENGRG
3000 WEST LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102

97613 SARGENT TECHNOLOGIES
1851 SOUTH PANTANO ROAD
TUCSON, ARIZONA 85710

97928 DEUTSCH FASTENER CORP
3969 PARAMONT BOULEVARD
LAKEWOOD, CALIFORNIA 90712-4193

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
AG8V28C		1	130	1
ASBFP08VC		1	130	1
BACB10EP08GC		1	130	1
BACB28AH078019A		2	10B	1
BACB28AH078031A		2	10C	1
BACB28AK08-056		1	20	1
BACB28AP03P030		2	5A	1
BACB28AP08P033		1	65A	1
BACB30FH8A14		1	90A	1
BACB30FH8A15		1	85B	1
BACB30GW8A14		1	90	1
BACB30GW8A15		1	85A	1
BACB30LE8-14		1	810A	2
BACB30LE8-20		1	810	2
BACB30LE8K25		1	10B	1
BACC30K8		1	95	2
BACN10HR8CS		1	25	1
BACN10JC12CD		1	45A	1
BACR15BB5AD17		2	15	1
BACR15BB5AD8		2	20	1
BACW10BP18DP		1	145	1
BACW10BP8CD		1	15	1
BH003028CS		1	25	1
BH00303-8		1	25	1
BH003038		1	25	1
BMNN10HR8CS		1	25	1
BMN10HRCPD3-8		1	25	1
BMN5024CPD3-8		1	25	1
BMN5024CPD38		1	25	1
CR59068CS		1	25	1
CR59088		1	25	1
DMD16-18A1-501		1	140	1
DMD16-18A1-502		1	140A	1
H39953		1	25	1
H39953-8		1	25	1
H51650-12BAC		1	45A	1
H968CS		1	25	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
KSB8-38		1	130	1
LHB08EPGC		1	130	1
MS15001-1		1	30	3
MS21209F1-15		1	55	4
NAS1805-18		1	150	1
RMLH228CS		1	25	1
SALPYEU8-14C		1	90	1
SALPYEU8-15C		1	85A	1
SL705098		1	25	1
S012T236-15		1	140A	1
S012T236-3		1	140	1
VAL280098CS		1	25	1
03-525-08E003C		1	130	1
102LH9074-12		1	45A	1
109LH9031-8		1	25	1
109LH90318		1	25	1
2DCC8		1	95	2
252T1100-6		1	1B	RF
252T1100-7		1	1C	RF
252T1134-2		1	100	1
252T1150-10		1	110	1
252T1150-11		2	10A	1
252T1150-14		1	70A	1
252T1150-15		1	60B	2
252T1150-2		1	70	1
252T1150-3		1	125	4
252T1150-4		1	60	2
252T1150-5		1	105	1
252T1150-6		2	5	1
252T1150-7		2	10	1
252T1151-1		1	35	1
252T1151-2		1	35A	1
252T1151-3		1	35C	1
252T1152-1		1	40	1
252T1154-1		1	5	RF
		2	1	RF
252T1154-2		2	30	1
252T1154-3		1	5A	RF
		2	1A	RF
252T1154-4		2	30A	1
252T1154-6		1	5B	RF
		2	1B	RF
252T1154-7		2	30C	1
252T1156-2		2	25	1
252T1158-1		1	60A	2
252T1170-5		1	50A	1
252T1170-6		1	75A	1

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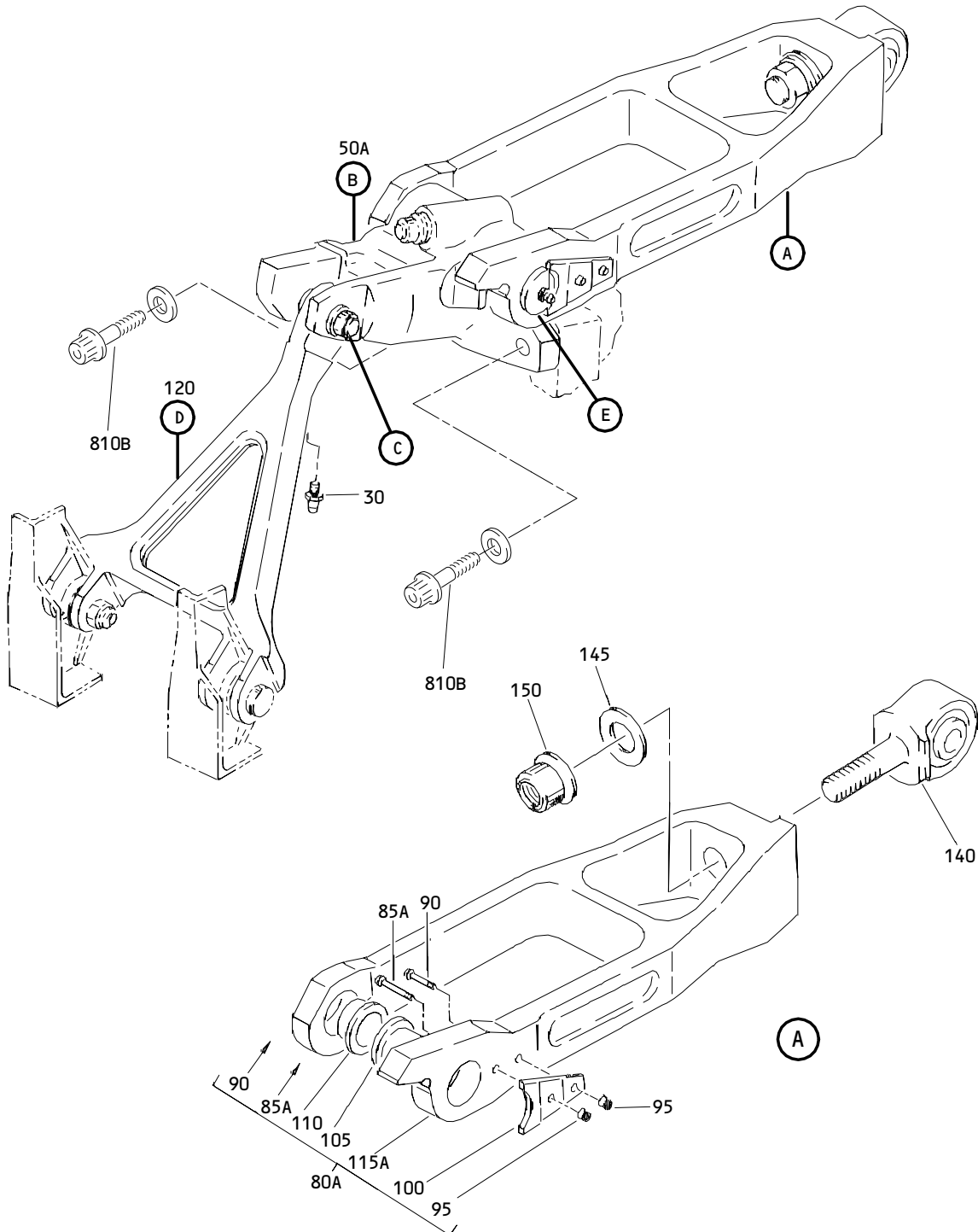
252T1100
252T1154

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
252T1170-7		1	50B	1
252T1170-8		1	75B	1
252T1171-4		1	80A	1
252T1171-5		1	115A	1
252T1172-2		1	135	1
252T1172-5		1	120	1
67832AS8		1	25	1
67832AS820		1	25	1
678328CS		1	25	1
69235-1216CD		1	45A	1

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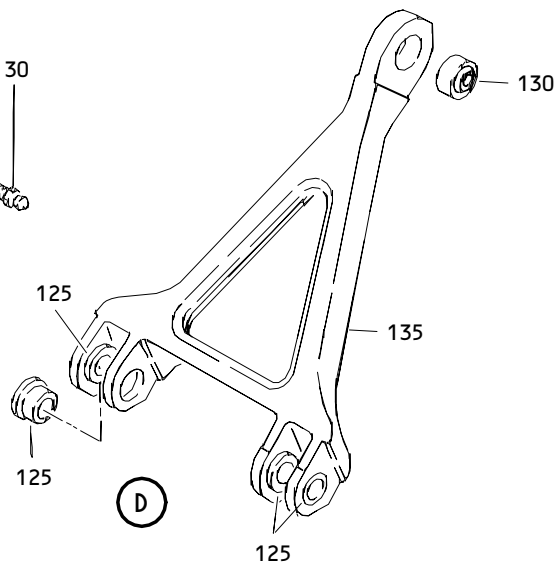
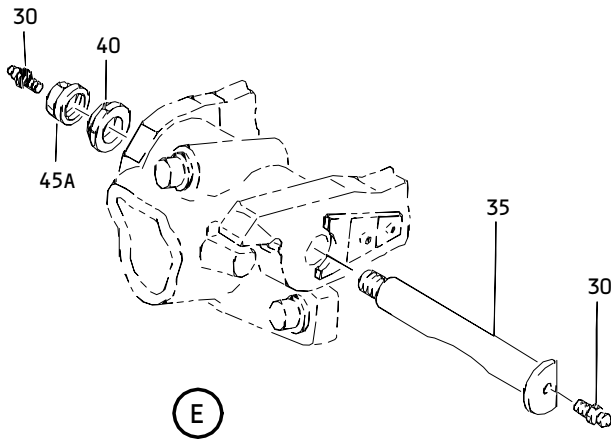
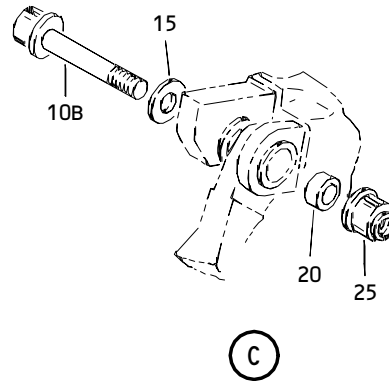
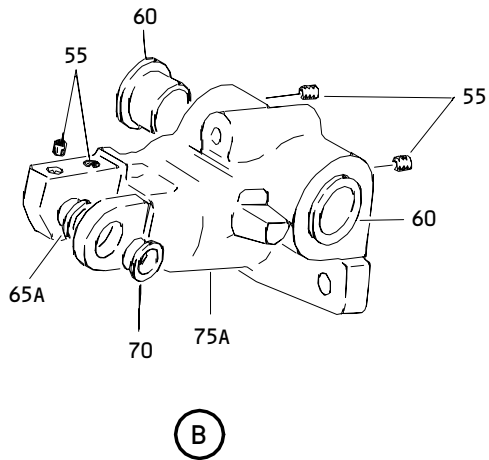
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Inboard Aileron Actuator Link Assembly
Figure 1 (Sheet 1)

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Inboard Aileron Actuator Link Assembly
 Figure 1 (Sheet 2)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-			INBOARD AILERON COMPONENTS DELETED		
R -1A	252T1100-5		LINK ASSY-INBD AIL. ACTR	A	RF
R -1B	252T1100-6		LINK ASSY-INBD AIL. ACTR	D	RF
R -1C	252T1100-7		LINK ASSY-INBD AIL. ACTR	D	RF
R -5	252T1154-1		BRACKET ASSY-INBD AIL. ACTR INPUT CRANK (FOR DETAILS SEE FIG. 2)	B	RF
R -5A	252T1154-3		BRACKET ASSY-INBD AIL. ACTR INPUT CRANK (FOR DETAILS SEE FIG. 2)	C	RF
R -5B	252T1154-6		BRACKET ASSY-INBD AIL. ACTR INPUT CRANK (FOR DETAILS SEE FIG. 2)	E	RF
10	BACB30LE8-29		DELETED		
10A	BACB30LE8-25		DELETED		
R 10B	BACB30LE8K25		.BOLT	A,D	1
R 15	BACW10BP8CD		.WASHER- (V10630) (SPEC BACW10BP8CD)	A,D	1
R 20	BACB28AK08-056		.BUSHING	A,D	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
R 01-25	H39953-8		1234567 .NUT- (V15653) (SPEC BACN10HR8CS) (OPT 109LH9031-8 (V72962)) (OPT 67832AS820 (V56878)) (OPT BMN5024CPD3-8 (V97928)) (OPT BH00303-8 (V27238)) (OPT BMN10HRCPD3-8 (V97928)) (OPT BH003038 (V27238)) (OPT BMN5024CPD38 (V97928)) (OPT CR59088 (V62554)) (OPT H39953 (V15653)) (OPT SL705098 (V11815)) (OPT 109LH90318 (V72962)) (OPT 67832AS8 (V56878)) (OPT BH003028CS (V27238)) (OPT BMNN10HR8CS (V97928)) (OPT CR59068CS (V62554)) (OPT H968CS (V15653)) (OPT RMLH228CS (V72962)) (OPT VAL280098CS (V06710)) (OPT 678328CS (V56878))	A,D	1
R 30	MS15001-1		.FITTING-LUBE	A,D	3
R 35	252T1151-1		.PIN- (OPT ITEM 35A)	A	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-35A	252T1151-2		.PIN- (OPT ITEM 35)	A	1
R -35B	252T1151-1		.PIN- (OPT ITEM 35C)	D	1
R -35C	252T1151-3		.PIN- (OPT ITEM 35B)	D	1
R 40	252T1152-1		.WASHER	A,D	1
R 45	BMN4122AD3-12		DELETED		
R 45A	H51650-12BAC		.NUT- (V15653) (SPEC BACN10JC12CD) (OPT 102LH9074-12 (V72962)) (OPT 69235-1216CD (V92215))	A,D	1
R 50	252T1170-1		DELETED		
R 50A	252T1170-5		.TRUNNION ASSY- (USED WITH ITEM 810B) (OPT ITEM 50B USED WITH ITEM 810C)	A,D	1
R -50B	252T1170-7		.TRUNNION ASSY- (USED WITH ITEM 810C) (OPT ITEM 50A USED WITH ITEM 810B)	A,D	1
R 55	MS21209F1-15		..INSERT	A,D	4
R 60	252T1150-4		..BUSHING- (USED ON ITEM 50A) (OPT ITEM 60B)	A,D	2
R -60A	252T1158-1		..BUSHING- (USED ON ITEM 50B)	A,D	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-60B	252T1150-15		..BUSHING- (USED ON ITEM 50A) (OPT ITEM 60)	A,D	2
R 65	252T1150-1		DELETED		
R 65A	BACB28AP08P033		..BUSHING	A,D	1
R 70	252T1150-2		..BUSHING- (OPT ITEM 70A)	A,D	1
R -70A	252T1150-14		..BUSHING- (OPT ITEM 70)	A,D	1
R 75	252T1170-2		DELETED		
R 75A	252T1170-6		..TRUNNION- (USED ON ITEM 50A)	A,D	1
R -75B	252T1170-8		..TRUNNION- (USED ON ITEM 50B)	A,D	1
R 80	252T1171-1		DELETED		
R 80A	252T1171-4		.LINK ASSY	A,D	1
R 85	SALPYEU8-12C		DELETED		
R 85A	SALPYEU8-15C		..BOLT- (USED WITH ITEM 95) (OPT ITEM 85B USED WITH ITEM 95A) (V11815) (SPEC BACB30GW8A15) (OPT SALPYEU8-15C (V29666)) (OPT SALPYEU8-15C (V17446))	A,D	1
-85B	BACB30FH8A15		..BOLT- (USED WITH ITEM 95A) (OPT ITEM 85A USED WITH ITEM 95)	A,D	1
R 90	SALPYEU8-14C		..BOLT- (USED WITH ITEM 95) (OPT ITEM 90A USED WITH ITEM 95A) (V11815) (SPEC BACB30GW8A14) (OPT SALPYEU8-14C (V29666)) (OPT SALPYEU8-14C (V17446))	A,D	1
-90A	BACB30FH8A14		..BOLT- (USED WITH ITEM 95A) (OPT ITEM 90 USED WITH ITEM 95)	A,D	1

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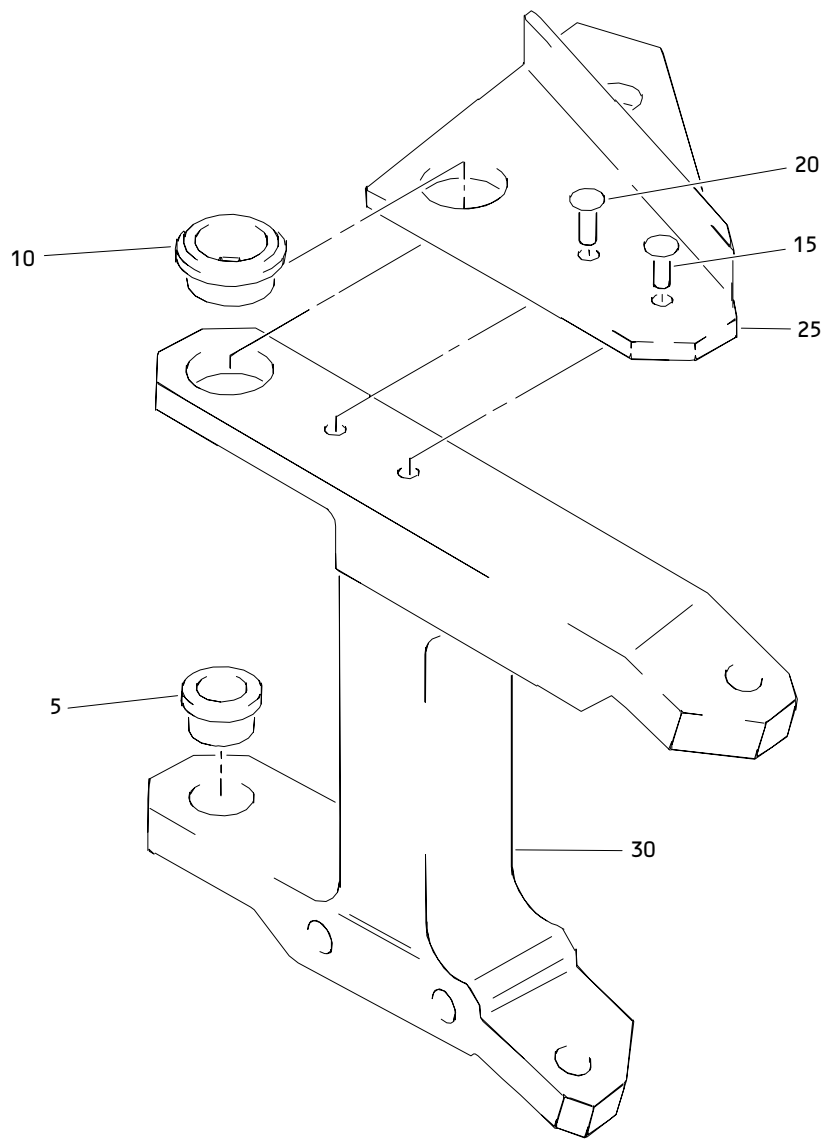
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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-95	2DCC8		..COLLAR- (V11815) (SPEC BACC30K8) (OPT 2DCC8 (V17446))	A,D	2
-95A	BACC30H8		..COLLAR- (USED WITH 85B,90A)	A,D	2
R 100	252T1134-2		..STOP	A,D	1
R 105	252T1150-5		..BUSHING	A,D	1
R 110	252T1150-10		..BUSHING	A,D	1
115	252T1171-2		DELETED		
R 115A	252T1171-5		..LINK	A,D	1
R 120	252T1172-5		.LINK ASSY	A,D	1
R 125	252T1150-3		..BUSHING	A,D	4
R 130	AG8V28C		..BEARING- (V15860) (SPEC BACB10EP08GC) (OPT ASBFP08VC (V23589)) (OPT KSB8-38 (V97613)) (OPT LHB08EPGC (V73134)) (OPT 03-525-08E003C (V09455))	A,D	1
R 135	252T1172-2		..LINK	A,D	1
R 140	DMD16-18A1-501		.BEARING- (V77896) (SPEC S012T236-3) (OPT ITEM 140A)	A,D	1
R -140A	DMD16-18A1-502		.BEARING- (V77896) (SPEC S012T236-15) (OPT ITEM 140)	A,D	1
R 145	BACW10BP18DP		.WASHER- (V10630) (SPEC BACW10BP18DP)		1
R 150	NAS1805-18		.NUT		1
R 810	BACB30LE8-20		INSTALLATION PARTS		
R -810A	BACB30LE8-14		DELETED		
R 810B	BACB30LE8K20		DELETED		
-810C	BACB30LE8K14		.BOLT (USED WITH ITEM 50A)		2
			.BOLT (USED WITH ITEM 50B)		2

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Inboard Aileron Actuator Input Crank Bracket Assembly
Figure 2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -1	252T1154-1		BRACKET ASSY-INBD AIL. ACTUATOR INPUT CRANK	B	RF
-1A	252T1154-3		BRACKET ASSY-INBD AIL. ACTUATOR INPUT CRANK	C	RF
R -1B	252T1154-6		BRACKET ASSY-INBD AIL. ACTUATOR INPUT CRANK	E	RF
5	252T1150-6		.BUSHING- (OPT ITEM 5A)	B,C,E	1
R -5A	BACB28AP03P030		.BUSHING- (OPT ITEM 5)	B,C,E	1
10	252T1150-7		.BUSHING- (OPT ITEM 10A)	B,E	1
-10A	252T1150-11		.BUSHING- (OPT ITEM 10C)	C	1
R -10B	BACB28AH078019A		.BUSHING- (OPT ITEM 10)	B,E	1
R -10C	BACB28AH078031A		.BUSHING- (OPT ITEM 10A)	C	1
R 15	BACR15BB5AD17		.RIVET- (V09192) (SPEC BACR15BB5AD17) (OPT BACR15BB5AD17 (V42838)) (OPT BACR15BB5AD17 (V53551)) (OPT BACR15BB5AD17 (V55580))	C	1
R 20	BACR15BB5AD8		.RIVET- (V09192) (SPEC BACR15BB5AD8) (OPT BACR15BB5AD8 (V42838)) (OPT BACR15BB5AD8 (V53551)) (OPT BACR15BB5AD8 (V55580))	C	1
25	252T1156-2		.BRACKET	C	1
30	252T1154-2		.BRACKET- (OPT ITEM 30A)	B	1
R -30A	252T1154-4		.BRACKET- (OPT ITEM 30)	B	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02- -30B	252T1154-8		.BRACKET- (OPT ITEM 30C)	E	1
R -30C	252T1154-7		.BRACKET- (OPT ITEM 30B)	E	1
-30D	252T1154-2		.BRACKET- (OPT ITEM 30E,30F,30G)	C	1
-30E	252T1154-4		.BRACKET- (OPT ITEM 30D,30F,30G)	C	1
-30F	252T1154-8		.BRACKET- (OPT ITEM 30D,30E,30G)	C	1
-30G	252T1154-7		.BRACKET- (OPT ITEM 30D,30E,30F)	C	1

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