

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF OUTBOARD AILERON LOCKOUT MECHANISM ASSEMBLY COMPONENT
MAINTENANCE MANUAL 27-11-11

REVISION NO. 9 DATED DEC 01/97

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 on the Record of Revision Sheet.

CHAPTER/SECTION

AND PAGE NO.

DESCRIPTION OF CHANGE

101

Added note to clarify test procedure.

1033

Added effectivity codes for items (410A) and (415A).

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HIGHLIGHTS

01.1

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OUTBOARD AILERON LOCKOUT MECHANISM ASSY
PART NUMBERS 251T1710-5 THRU -12

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.

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REVISION RECORD

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
27-128		PRR B11857 PRR B12597	OCT 01/89 MAR 01/95 MAR 01/95

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TR & SB RECORD

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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.

Verification:

Disassembly	AUG 5/83
Assembly	AUG 5/83

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OUTBOARD AILERON LOCKOUT MECHANISM ASSEMBLY

DESCRIPTION AND OPERATION

1. Description

A. The outboard aileron lockout mechanism assembly is a mechanical device consisting of forged aluminum levers, link assemblies, cable quadrant, crank assembly, and a cast aluminum housing. The cable quadrant pivots from the housing and is connected to the idler link. The opposite end of the idler link is attached to an actuator link and drag link. The actuator link connects to an actuator lever splined to the crank assembly. The drag link connects to an output crank mounted on the crank assembly. The moving parts of the mechanism rotate on antifriction ball bearings.

2. Operation

A. The lockout mechanism which is operated by an electric actuator, isolates the outboard ailerons from the lateral control system during high speed flight, holding the outboard aileron in a faired position.

3. Leading Particulars (Approximate)

Length -- 14 inches
Width -- 8 inches
Height -- 12 inches
Weight -- 27 lb

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DESCRIPTION & OPERATION

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TESTING AND TROUBLE SHOOTING1. Test Equipment and Materials

NOTE: Equivalent substitutes may be used.

A. Outboard Aileron Lockout Mechanism Test Equipment -- A27037-1

2. Test

A. With lever (70A) held in Position 1, check that quadrant assembly (180) is free to rotate plus or minus 50° from rig position. There shall be no binding or interference with travel in either direction.

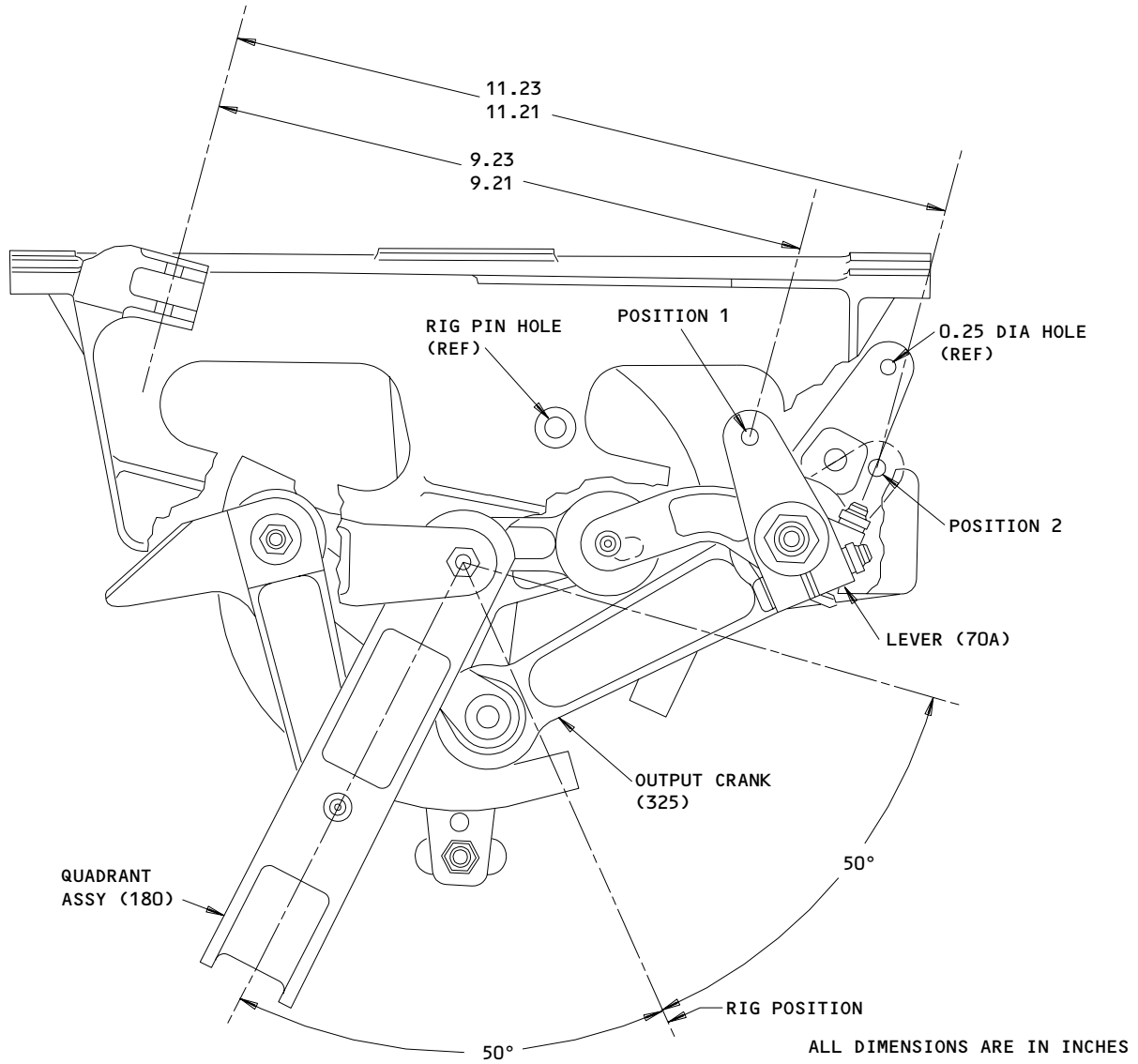
NOTE: Rig position is determined by placing a 0.313-0.315 inch dia pin through rig pin holes in quadrant assembly and housing assembly.

B. Repeat procedure with lever held in Position 2. Additionally, output crank assembly (325) must not move more than 0.03 inch (measured at 0.25 inch dia hole) in either direction during Position 2 check.

C. With quadrant assembly (180) held in the rig position, move actuator lever (70A) from Position 1 to Position 2. Output crank assembly (325) must not move more than 0.03 inch (measured at 0.25 inch dia hole) in either direction.

NOTE: Measurement taken from the 0.25 inch dia hole should be accomplished with the use of a pin or bolt through the 0.25 inch dia hole and a dial indicator place perpendicular to the pin or bolt.

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Testing
 Figure 101

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DISASSEMBLY

NOTE: See Testing and Trouble Shooting to establish the condition of the component or most probable cause of its malfunction. This is to determine the extent of disassembly required without completely tearing down and rebuilding the component.

1. Disassembly (IPL Fig. 1)

A. Remove parts (10 thru 20) from housing assembly.

NOTE: Do not remove rivets (35), bolt (25) or retainer (30) unless necessary for repair or replacement.

B. Remove parts (45 thru 65, and 275 thru 285) and separate parts (70A, 80 thru 110, 290, 325) from shaft (75). Note thickness of shims (90, 95) for reference during assembly.

C. Remove parts (115 thru 135) and remove quadrant assembly (180 or 185) from housing assembly.

NOTE: Do not disassemble quadrant assembly (180 or 185) unless necessary for repair or replacement.

D. Remove parts (310 thru 320) and remove output crank assembly (325) from drag link (345).

NOTE: Do not remove bearings (330, 335) from crank assembly (325) unless necessary for repair or replacement.

E. Remove parts (140 thru 175) and remove idler link assembly (245) from quadrant assembly (180 or 185).

F. Remove parts (265 and 270) and remove actuator lever (290) from actuator link assembly (295).

G. Remove parts (225 thru 240) and remove actuator link assembly (295) and drag link (345) from idler link assembly (245).

NOTE: Do not remove bearings (300) from actuator link assembly (295) unless necessary for repair or replacement.

H. Remove parts (350 thru 360) from housing assembly.

NOTE: Do not remove bolt (390) from bolt retainer (380) or covers (395 thru 405) from housing assembly unless necessary for repair or replacement.

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DISASSEMBLY

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CLEANING

1. Clean all parts except bearings using standard industry practices (Ref 20-30-03).
2. Clean all teflon sealed bearings (105, 205, 240, 250, 300, 330, 335, 375, IPL Fig. 1) per manufacturer's instructions.

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CLEANING
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CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.
2. Check all shaft and bolt shanks for excessive wear.
3. Magnetic particle check per 20-20-01 -- Shaft (75, IPL Fig. 1).
4. Penetrant check per 20-20-02 the following listed items:
 - A. Actuator lever (290)
 - B. Actuator link (305)
 - C. Cable guard (40)
 - D. Carrier link (210)
 - E. Drag link (345)
 - F. Housing (410, 415)
 - G. Idler link (255)
 - H. Lever (70A)
 - I. Output crank (340)
 - J. Quadrant (215, 220)
 - K. Spacers (80, 85, 100, 110)

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CHECK
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REPAIR – GENERAL1. 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>
251T1701	HOUSING	1-1
251T1703	OUTPUT CRANK	2-1
251T1711	QUADRANT	3-1, 3-2
251T1724	ACTUATOR LINK	4-1
251T1726	IDLER LINK	5-1
- - -	MISC PARTS REFINISH	6-1
251T1714	LEVER	7-1
251T1725	DRAG LINK	8-1
251T1715	SHAFT	9-1

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
20-10-03	Shot Peening
20-10-04	Grinding of Chrome Plated Parts
20-41-01	Decoding Table for Boeing Finish Codes
20-42-01	Low Hydrogen Embrittlement Cadmium Plating
20-42-03	Hard Chrome Plating
20-42-05	Bright Cadmium Plating
20-43-01	Chromic Acid Anodizing
20-50-01	Bolt and Nut Installation
20-50-03	Bearing Installation and Retention
20-50-12	Application of Adhesives

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3. Materials

NOTE: Equivalent substitutes may be used.

A. Primer -- BMS 10-11, type 1 (Ref 20-60-02)

B. Sealant -- BMS 5-95 (Ref 20-60-04)

C. Adhesive -- Type 93 (Ref 20-50-12) or BMS 5-95 (Ref 20-60-04).

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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

$\boxed{\text{—} \quad 0.002}$	STRAIGHT WITHIN 0.002	$\boxed{\textcircled{C} \quad \varnothing \quad 0.0005}$	CONCENTRIC TO C WITHIN 0.0005 DIAMETER (FULL INDICATOR MOVEMENT)
$\boxed{\perp \quad B \quad 0.002}$	PERPENDICULAR TO B WITHIN 0.002	$\boxed{\equiv \quad A \quad 0.010}$	SYMMETRICAL WITH A WITHIN 0.010
$\boxed{\parallel \quad A \quad 0.002}$	PARALLEL TO A WITHIN 0.002	$\boxed{\sphericalangle \quad A \quad 0.005}$	ANGULAR TOLERANCE 0.005 WITH A
$\boxed{\bigcirc \quad 0.002}$	ROUND WITHIN 0.002	$\boxed{\oplus \quad B \quad \varnothing \quad 0.002 \quad \textcircled{S}}$	LOCATED AT TRUE POSITION WITHIN 0.002 DIA IN RELATION TO DATUM B, REGARDLESS OF FEATURE SIZE
$\boxed{\bigcirc \quad 0.010}$	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER	$\boxed{\perp \quad A \quad \varnothing \quad 0.010 \quad \textcircled{M} \quad 0.510 \quad \textcircled{P}}$	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
$\boxed{\frown \quad A \quad 0.006}$	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	$\boxed{2.000}$	EXACT DIMENSION IS 2.000
$\boxed{\triangle \quad A \quad 0.020}$	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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HOUSING ASSEMBLY – REPAIR 1-1

251T1701-15, -16, -19, -20, -24, -25

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of housing (410, 415) which may only require stripping and restoration of the original finish, refer to Refinish instructions.

1. Bearing Replacement (Fig. 601)

- A. Remove bearing (375).
- B. Install new bearing and roller swage housing over bearing per 20-50-03. Assemble with BMS 5-95 sealant.

2. Cover Replacement (IPL Fig. 1)

- A. Remove covers (395, 400, 405)
- B. Clean surfaces and bond new covers with type 93 adhesive per 20-50-12 or BMS 5-95 sealant (Ref 20-60-04).

3. Hole Repair (Fig. 601)

- A. Install oversize bushing to replace bushing (130).
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture oversize bushing (Fig. 602).
 - (3) Attach bushing to housing assembly (365, 370) with tag stating "Hole has been machined oversize. Use attached bushing in place of bushing 251T3741-13."
- B. Install oversize bushing to replace bushing (125).
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture oversize bushing (Fig. 603).
 - (3) Attach bushing to housing assembly (365, 370) with tag stating "Hole has been machined oversize. Use attached bushing in place of bushing 251T3742-3."
- C. Install repair bushings for 0.2495-0.2505 diameter holes (2 required).
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture the applicable repair bushings (Fig. 604). Minimum wall thickness of bushing to be 0.032 inch.

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| (3) Install bushings with wet sealant per 20-50-03.

| (4) Machine hole through to design dimension and finish shown.

| D. Install repair bushing for 1.5000-1.5005 diameter hole.

| (1) Machine as required, within repair limit, to remove defects.

| (2) Manufacture the applicable repair bushing (Fig. 604). Minimum wall thickness of bushing to be 0.032 inch.

| (3) Install bushing with wet sealant per 20-50-03.

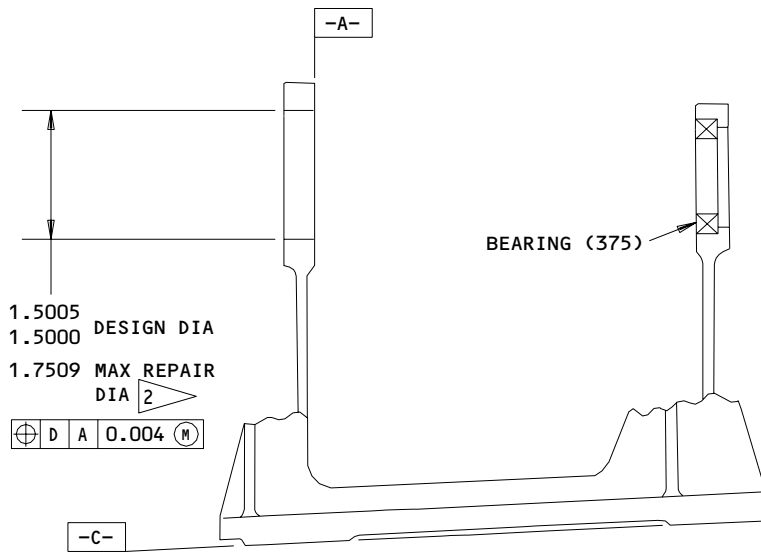
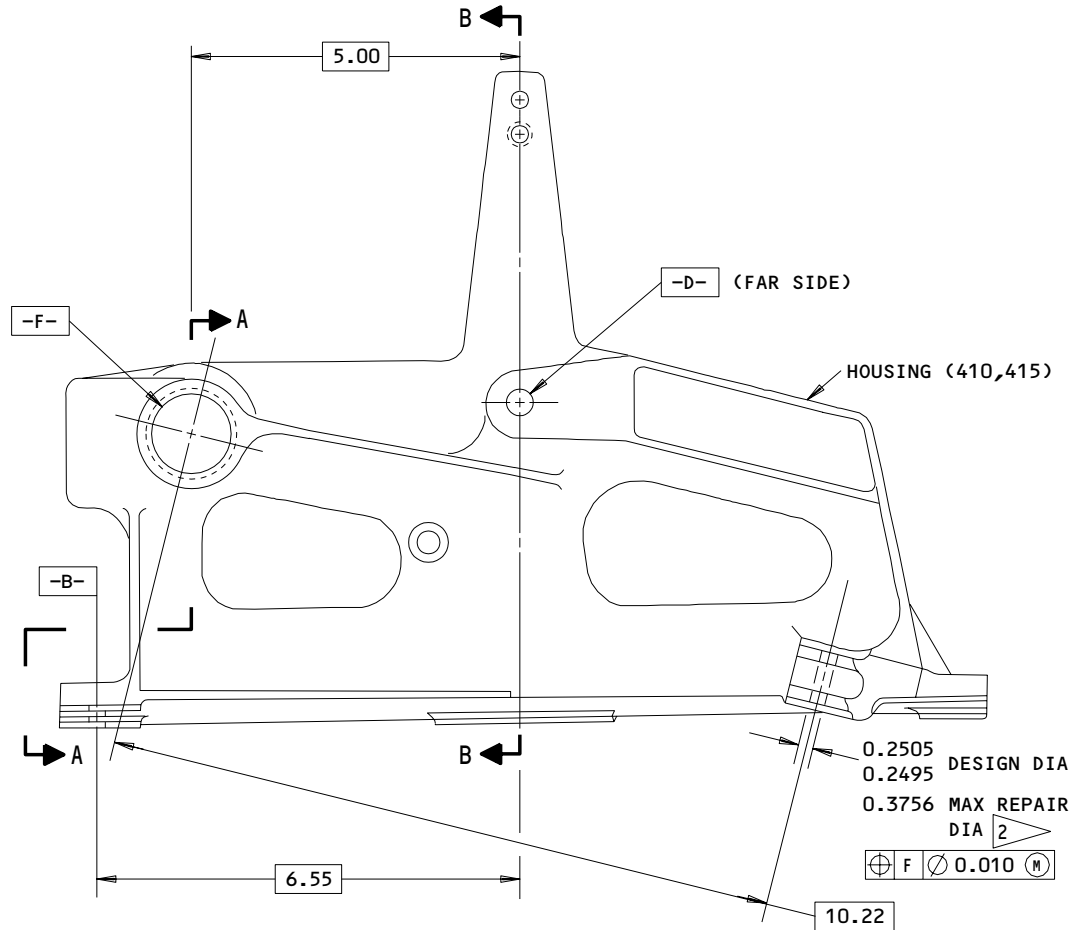
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REPAIR 1-1

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A-A

COVERS (395,400,405) NOT SHOWN

251T1701-15,-16,-19,-20,-24,-25
 Housing Repair
 Figure 601 (Sheet 1)

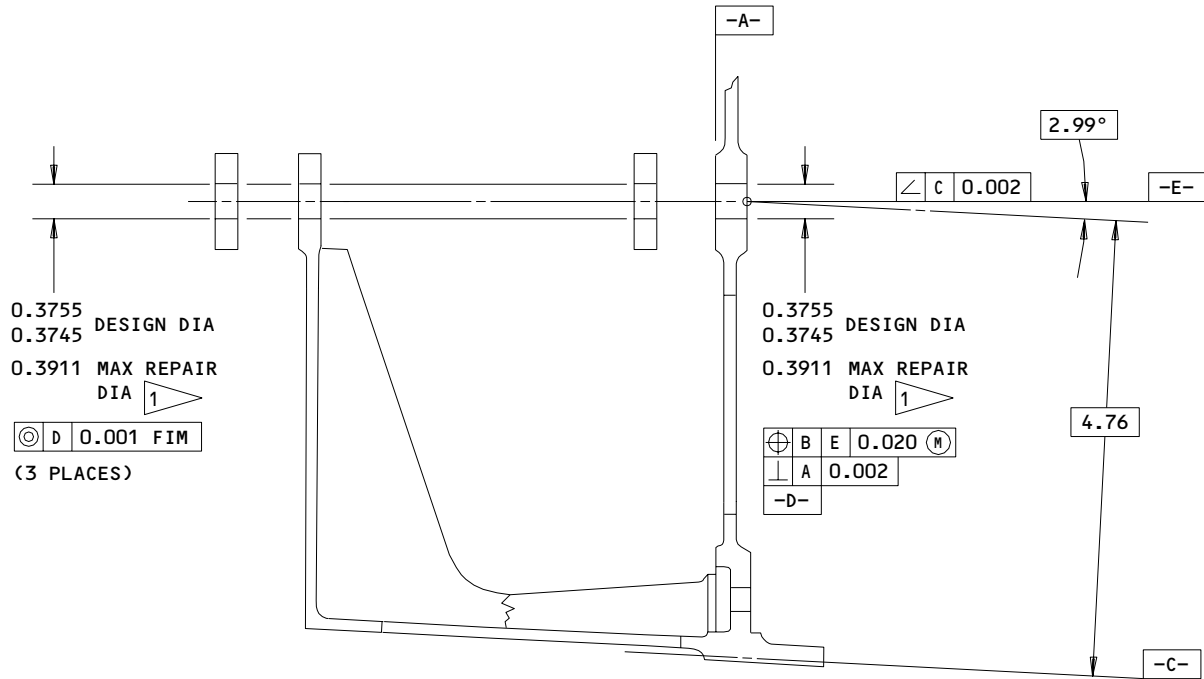
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B-B

REFINISH

HOUSING (410,415) -- CHROMIC ACID ANODIZE OR SULFURIC ACID ANODIZE, TYPE 1 OR 2 (F-17.05) ALL OVER. APPLY ONE COAT BMS 10-11, TYPE 1, PRIMER (F-20.02) ALL OVER EXCEPT NO PRIMER IN BOLT HOLES OR BEARING HOLES

1 REPAIR LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

2 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF 1 2

250/ ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008 R

MATERIAL: ALL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1701-15,-16,-19,-20,-24,-25
 Housing Repair
 Figure 601 (Sheet 2)

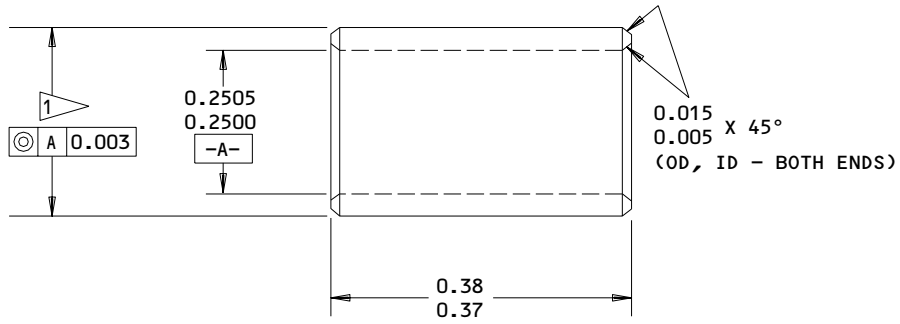
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OVERSIZE BUSHING TO REPLACE BUSHING (130)

1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR
 DIA OF HOUSING MINUS 0.0000-0.0015 CLEARANCE

63/ ALL MACHINED SURFACES, EXCEPT AS NOTED
 ANGULAR TOLERANCE, ±2.0 DEG

ALL DIMENSIONS ARE IN INCHES
 DIMENSIONS APPLY AFTER PLATING

MATERIAL: 4340 STEEL
 FINISH: CADMIUM PLATE

Oversize Bushing Details
 Figure 602

292791

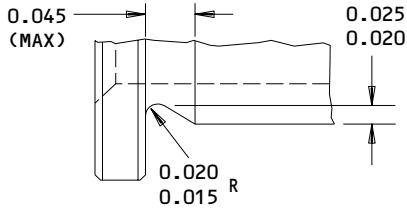
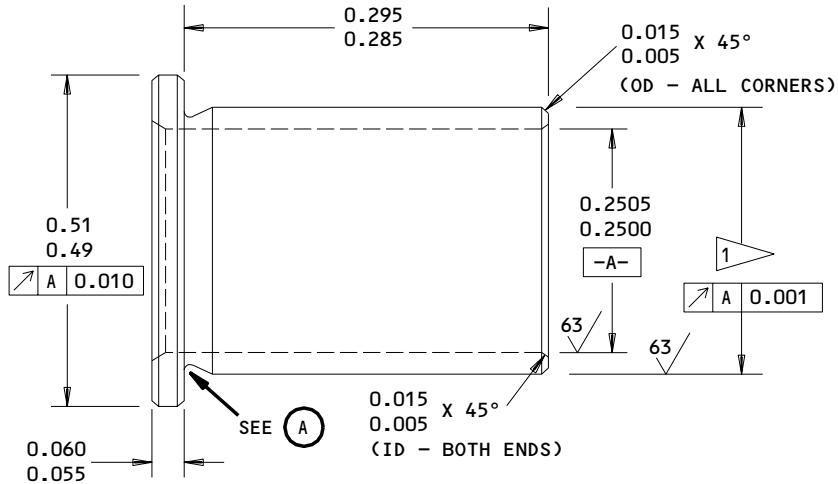
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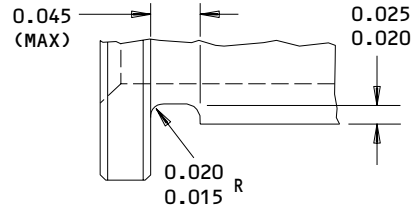
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TYPE I



TYPE II

TYPE II OPTIONAL TO TYPE I

(A)

OVERSIZE BUSHING TO REPLACE BUSHING (125)

1 FINAL BUSHING OUTSIDE DIA
 EQUALS REPAIR DIA OF HOUSING
 MINUS 0.0000-0.0015 CLEARANCE

ALL DIMENSIONS ARE IN INCHES
 DIMENSIONS APPLY AFTER PLATING

125 ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ± 2.0 DEG

MATERIAL: AL-NI-BRONZE

FINISH: CADMIUM PLATE

Oversize Bushing Details
 Figure 603

292769

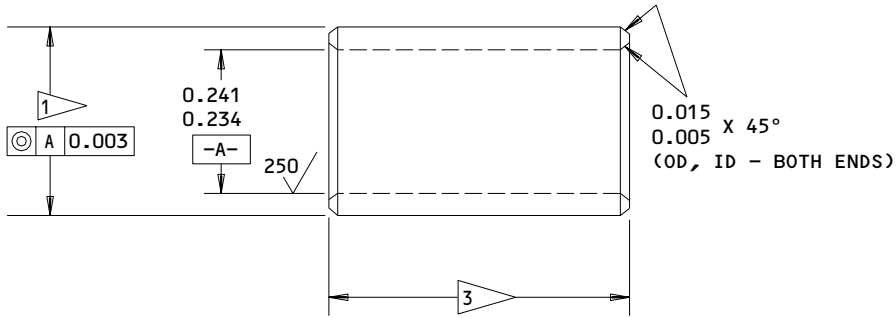
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REPAIR 1-1

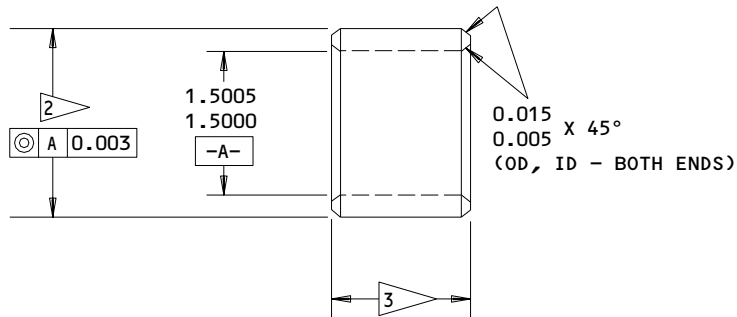
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REPAIR BUSHING FOR
 0.2495-0.2505 DIAMETER HOLE
 (2 REQUIRED)



REPAIR BUSHING FOR
 1.5000-1.5005 DIAMETER HOLE

- 1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR DIA OF HOUSING PLUS 0.0003-0.0015 INTERFERENCE
- 2 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR DIA OF HOUSING PLUS 0.0002-0.0012 INTERFERENCE
- 3 BUSHING LENGTH TO BE FLUSH, MINUS 0.000-0.003, TO HOUSING AT REPAIR HOLE

63/ ALL MACHINED SURFACES, EXCEPT AS NOTED
 ANGULAR TOLERANCE, ±0.5 DEG
 MATERIAL: AL-NI-BRONZE
 FINISH: CADMIUM PLATE
 ALL DIMENSIONS ARE IN INCHES
 DIMENSIONS APPLY AFTER PLATING

Repair Bushing Details
 Figure 604

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REPAIR 1-1

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OUTPUT CRANK ASSEMBLY – REPAIR 2-1

251T1703-7, -10, -12, -13

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

1. Bearing Replacement

A. Remove bearings (330, 335, IPL Fig. 1).

B. Install new bearings and secure by roller swaging per 20-50-03. Assemble with BMS 5-95 sealant.

2. Hole Repair (Fig. 601)

A. Install repair bushing.

- (1) Machine as required, within repair limit, to remove defects.
- (2) Manufacture repair bushing (Fig. 602). Minimum wall thickness of bushing to be 0.032 inch.
- (3) Install bushing with wet sealant. Refer to 20-50-03.

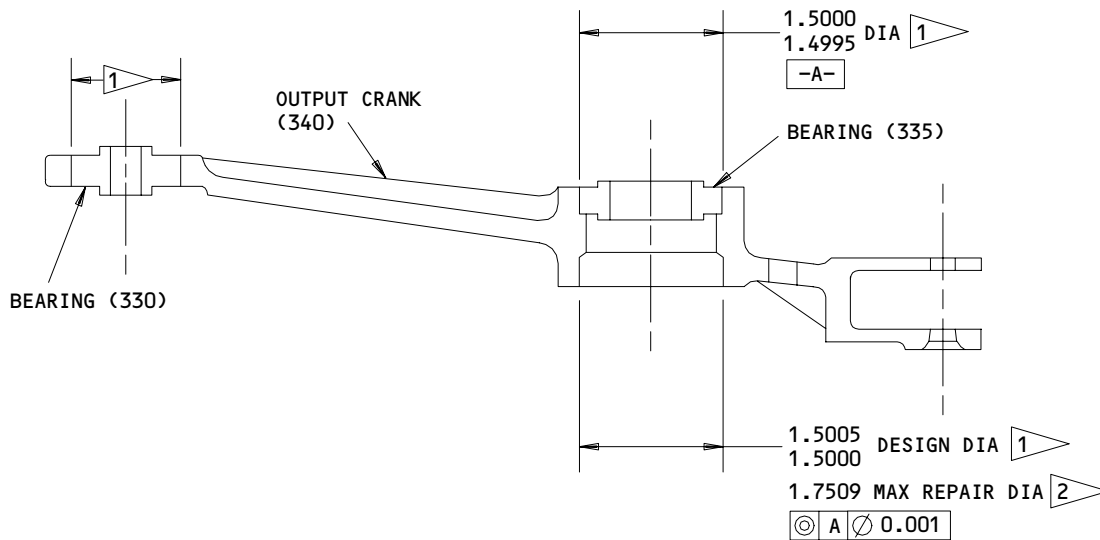
27-11-11

REPAIR 2-1

01.1

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REFINISH

CRANK (340) -- CHROMIC ACID ANODIZE (F-17.04) AND APPLY TWO COATS OF BMS 10-11, TYPE 1 PRIMER (F-20.03) ALL OVER EXCEPT AS NOTED

1 OMIT BMS 10-11, TYPE 1 PRIMER (F-20.03) THIS SURFACE

2 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF 2

125/ ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008 R

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1703-7,-10,-12,-13

Output Crank Repair
 Figure 601

29609

27-11-11

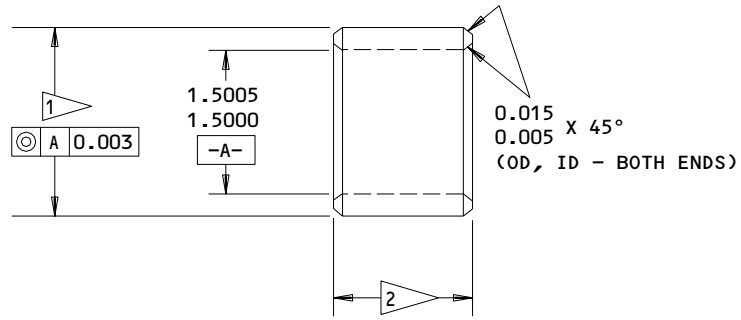
REPAIR 2-1

01.1

Page 602

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BOEING
 COMPONENT
 MAINTENANCE MANUAL



1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR
 DIA OF CRANK PLUS 0.0011-0.0029 INTERFERENCE

2 BUSHING LENGTH TO BE FLUSH, MINUS
 0.000-0.003, TO CRANK AT REPAIR HOLE

63/ ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ±0.5 DEG

MATERIAL: AL-NI-BRONZE

FINISH: CADMIUM PLATE

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

Repair Bushing Details
 Figure 602

292790

27-11-11

REPAIR 2-1

01.1

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QUADRANT ASSEMBLY – REPAIR 3-1

251T1711-1 thru -6

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of quadrant assy (180 thru 185) which may only require stripping and restoration of the original finish, refer to Refinish instructions (Fig. 601).

1. Bearing Replacement

A. Remove bearings (205, IPL Fig. 1).

B. Install new bearings and secure by roller swaging (Ref 20-50-03). Assemble with BMS 5-95 sealant.

2. Hole Repair (Fig. 601)

A. Install oversize bushing to replace bushing (175).

(1) Machine as required, within repair limit, to remove defects.

(2) Manufacture the applicable oversize bushing (Fig. 602).

(3) Attach bushing to quadrant assembly (180, 185) with tag stating "Hole has been machined oversize. Use attached bushing in place of bushing 251T1729-1."

B. Install oversize bushing to replace bushing (155).

(1) Machine as required, within repair limit, to remove defects.

(2) Manufacture the applicable oversize bushing (Fig. 602).

(3) Attach bushing to quadrant assembly (180, 185) with tag stating "Hole has been machined oversize. Use attached bushing in place of bushing 251T3741-12."

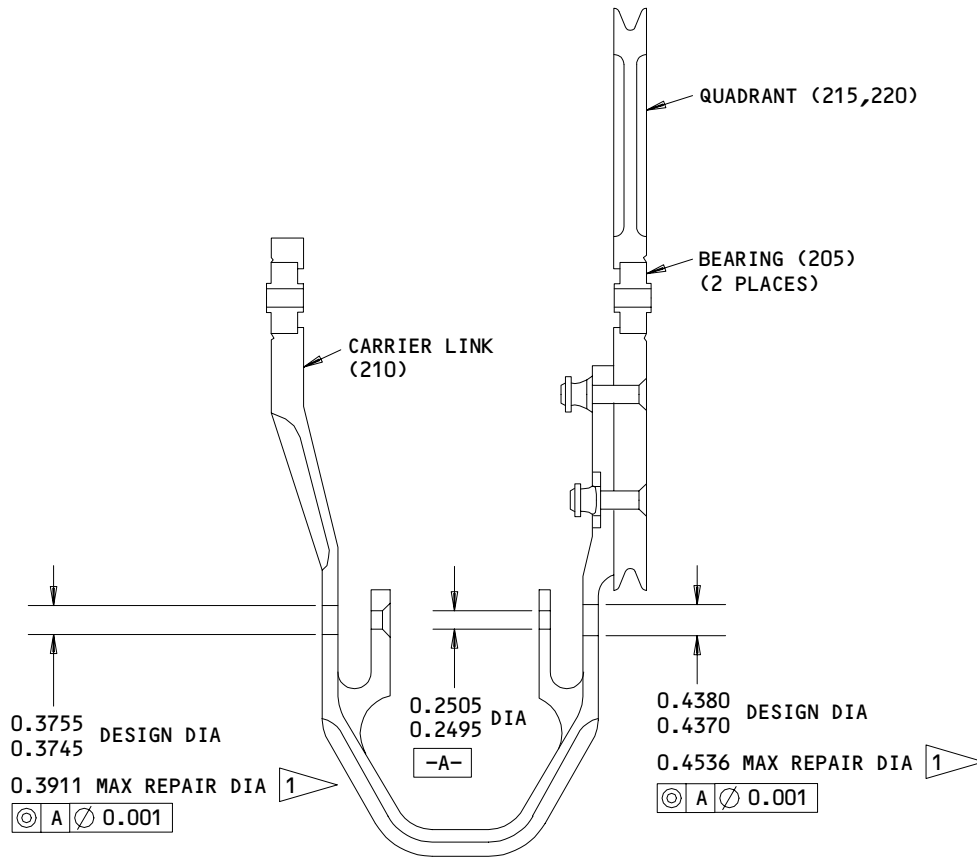
27-11-11

REPAIR 3-1

01.1

Page 601

Mar 01/95



REFINISH

QUADRANT (215,220) -- CHROMIC ACID OR SULFURIC ACID ANODIZE (F-17.05) ALL OVER. APPLY TWO COATS BMS 10-11, TYPE 1 PRIMER (F-20.03) ALL OVER EXCEPT OMIT PRIMER FROM BOLT HOLES AND BEARING BORES.

CARRIER LINK (210) -- CHROMIC ACID ANODIZE, TYPE 1, (F-17.04) AND APPLY TWO COATS BMS 10-11, TYPE 1, PRIMER (F-20.03) ALL OVER EXCEPT NO PRIMER IN BOLT HOLES OR BEARING BORE.

1 REPAIR LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

REPAIR

REF 1

125/ ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008 R

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1711-1 THRU -6

Quadrant Assembly Repair
 Figure 601

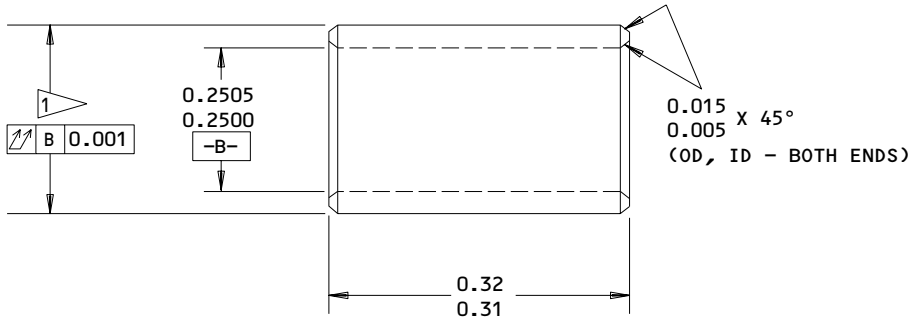
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REPAIR 3-1

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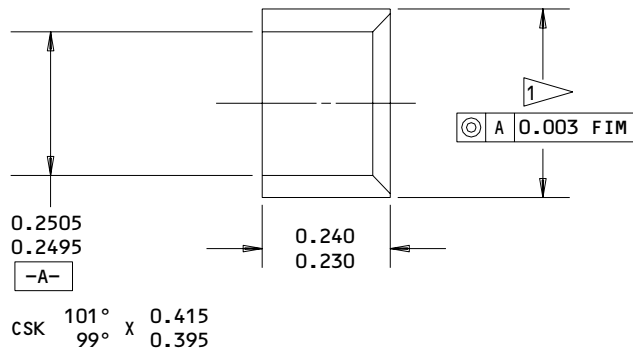
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01.1



MATERIAL: 4340 STEEL

OVERSIZE BUSHING TO REPLACE BUSHING (155)



MATERIAL: 15-5PH CRES

OVERSIZE BUSHING TO REPLACE BUSHING (175)

1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR
 DIA OF LINK MINUS 0.0000-0.0015 CLEARANCE

63/ ALL MACHINED SURFACES, EXCEPT AS NOTED

ALL DIMENSIONS ARE IN INCHES

ANGULAR TOLERANCE, ±2.0 DEG, UNLESS
 OTHERWISE NOTED

DIMENSIONS APPLY AFTER PLATING

FINISH: CADMIUM PLATE

BREAK SHARP EDGES 0.008 R

Oversize Bushing Details
 Figure 602

27-11-11

REPAIR 3-1

01.1

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QUADRANT ASSEMBLY – REPAIR 3-2

251T1711-1 thru -6

1. Quadrant Replacement (IPL Fig. 1, Fig. 601)
 - A. Remove bolts (190, 195) and collars (200).
 - B. Insert bolt (195) thru quadrant (215, 220) and carrier link (210).
 - C. Align quadrant and carrier link per Fig. 601, clamp in place, and machine bolt (190) hole in the quadrant using existing hole in carrier link as a guide.
 - D. Separate parts and deburr.
 - E. Install bolts (190, 195) with BMS 5-95 through quadrant (215, 220) and carrier link (210) and install collars (200).
 - F. Machine bearing (205) hole using the location of bearing (205) in carrier link (210) as a guide.
2. Carrier Link Replacement
 - A. Remove bolts (190, 195) and collars (200).
 - B. Insert bolt (195) thru quadrant (215, 220) and carrier link (210).
 - C. Align quadrant and carrier link per Fig. 601, clamp in place, and drill bolt (190) hole full size from pilot hole in quadrant (215, 220).
 - D. Separate parts and deburr.
 - E. Install bolts (190, 195) with BMS 5-95 through quadrant (215, 220) and carrier link (210) and install collars (200).
 - F. Machine bearing (205) hole using the location of bearing (205) in quadrant (215, 220) as a guide.
 - G. Machine bolt (140, 160) and bushing (155, 175) holes in carrier link (210) using locating dimensions in Fig. 601.

27-11-11

REPAIR 3-2

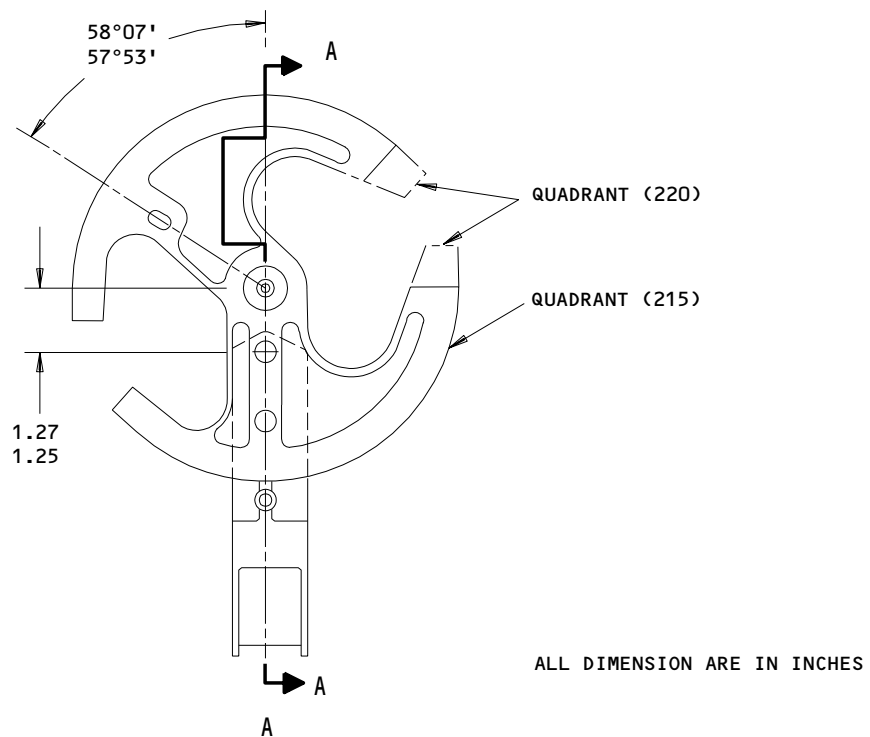
01.1

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3. Quadrant & Carrier Link Replacement

- A. Insert bolt (195) thru quadrant (215, 220) and carrier link (210).
- B. Align quadrant and carrier link per Fig. 601, clamp in place, and drill bolt (190) hole full size from pilot hole in quadrant (215, 220).
- C. Separate parts and deburr.
- D. Install bolts (190, 195) with BMS 5-95 through quadrant (215, 220) and carrier link (210) and install collars (200).
- E. Machine bearing (205) holes in quadrant and carrier link using pilot hole in quadrant for location.
- F. Machine bolt (140, 160) and bushing (155, 175) holes in carrier link (210) using locating dimensions in Fig. 601.



Quadrant/Carrier Link - Replacement Details
 Figure 601 (Sheet 1)

29362

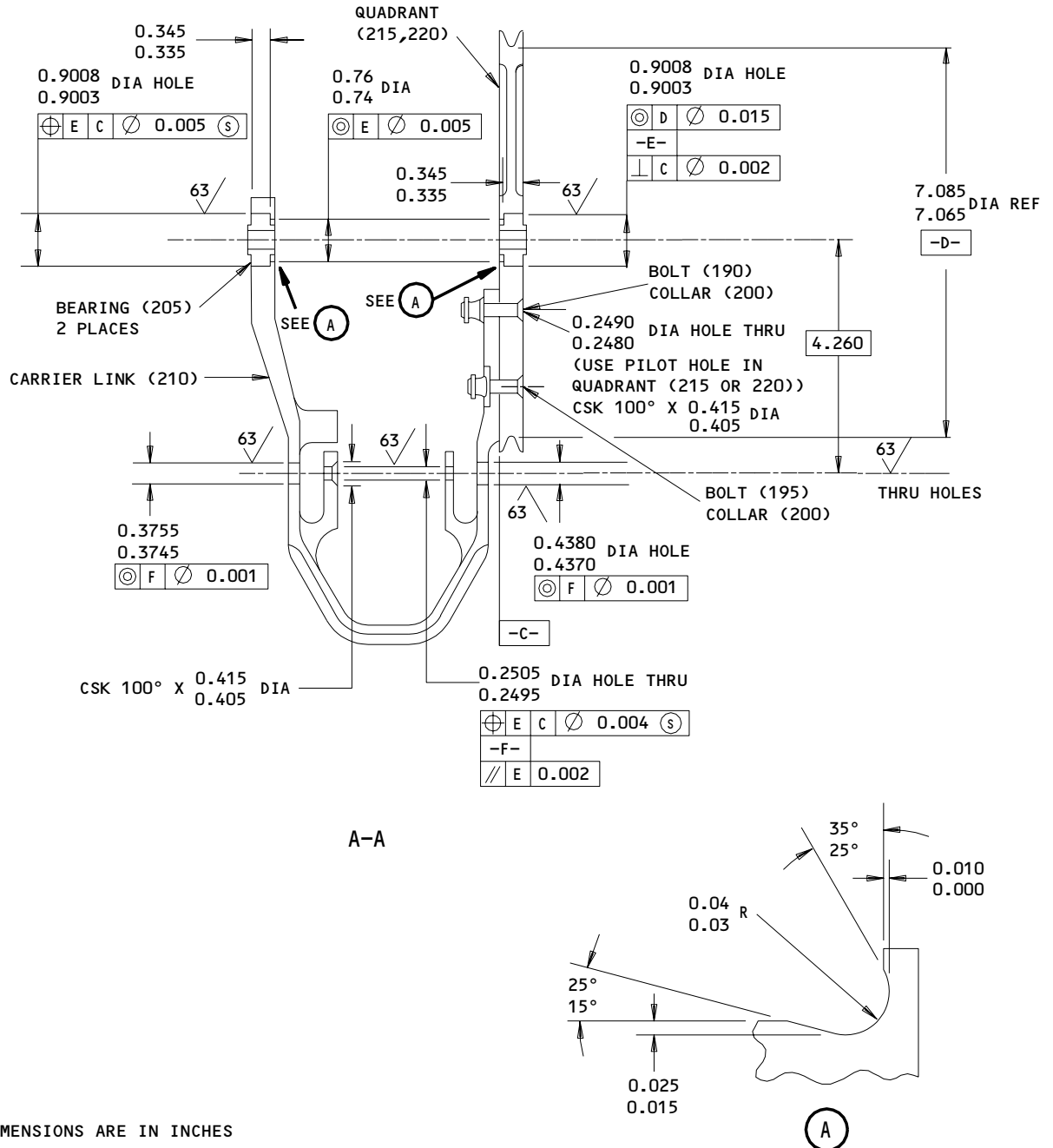
27-11-11

REPAIR 3-2

01.1

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ALL DIMENSIONS ARE IN INCHES

251T1711-1 THRU -6

Quadrant/Carrier Link-Replacement Details
 Figure 601 (Sheet 2)

27-11-11

REPAIR 3-2

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01.1

ACTUATOR LINK ASSEMBLY – REPAIR 4-1

251T1724-1, -4

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of link assy (295) which may only require stripping and restoration of the original finish, refer to Refinish instructions.

1. Bearing Replacement

- A. Remove bearings (300, IPL Fig. 1).
- B. Install new bearings and roller swage both sides per 20-50-03.

2. Refinish

- A. Link (305) -- Chromic acid anodize, type 1 (F-17.04) all over. Apply two coats BMS 10-11, type 1 primer (F-20.03) all over except no primer in bearing holes. Material: Al alloy.

27-11-11

REPAIR 4-1

01.1

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IDLER LINK ASSEMBLY - REPAIR 5-1

251T1726-6, -9, -11, -12

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of idler link assy (245) which may only require stripping and restoration of the original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Replacement (Fig. 601)

- A. Remove bearings (250, IPL Fig. 1).
- B. Install new bearings according to Fig. 601.

2. Hole Repair (Fig. 601)

- A. Install repair bushing.
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture repair bushing (Fig. 602). Minimum wall thickness of bushing to be 0.032 inch.
 - (3) Install bushing with wet sealant. Refer to 20-50-03.

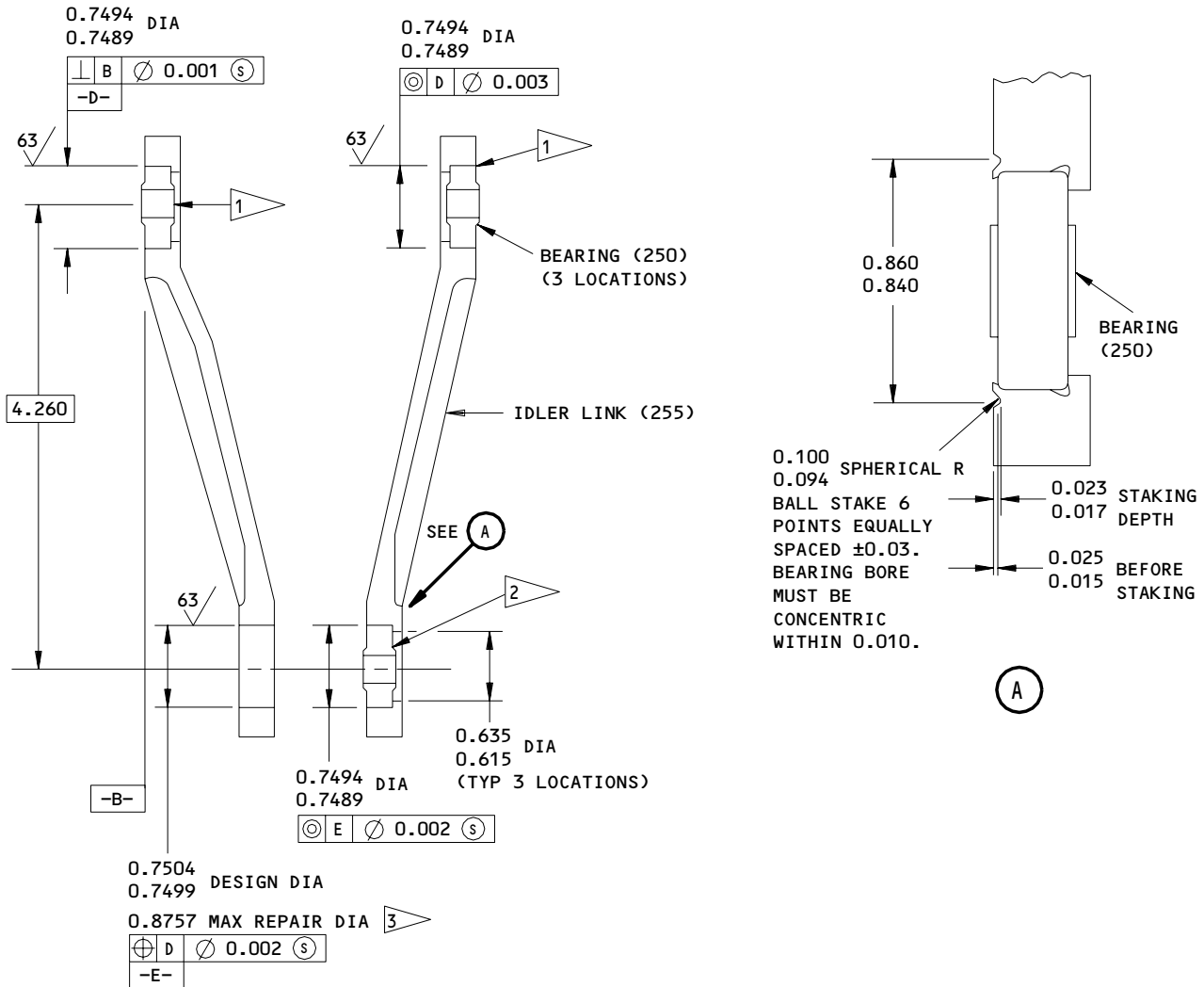
27-11-11

REPAIR 5-1

01.1

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REFINISH

LINK (255) -- CHROMIC ACID ANODIZE, TYPE 1 (F-17.04) ALL OVER. APPLY TWO COATS OF BMS 10-11, TYPE 1 PRIMER (F-20.03) ALL OVER EXCEPT IN BEARING BORES

- 1 INSTALL AND ROLLER SWAGE AS SHOWN IN SOPM 20-50-03 USING BMS 5-95 SEALANT
- 2 INSTALL AND BALL STAKE AS SHOWN IN SOPM 20-50-03 USING BMS 5-95 SEALANT
- 3 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF 3

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.008 R

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1726-6,-9,-11,-12
 Idler Link Assembly Repair
 Figure 601

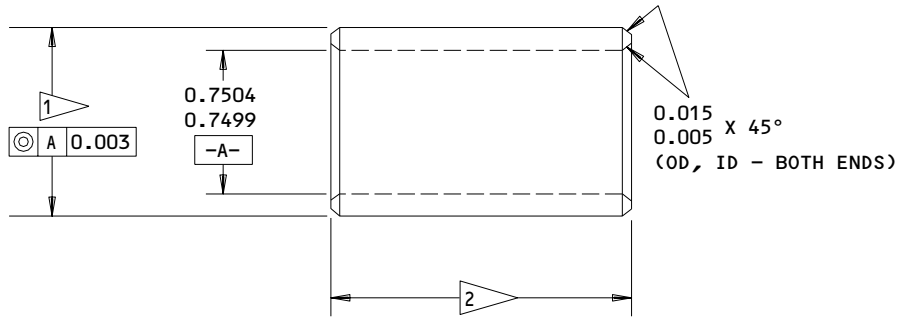
27-11-11

REPAIR 5-1

01.1

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1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR
 DIA OF LINK PLUS 0.0006-0.0020 INTERFERENCE

2 BUSHING LENGTH TO BE FLUSH, MINUS
 0.000-0.003, TO LINK AT REPAIR HOLE

63 ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ±0.5 DEG

MATERIAL: AL-NI-BRONZE

FINISH: CADMIUM PLATE

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

Repair Bushing Details
 Figure 602

292792

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REPAIR 5-1

01.1

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MISC PARTS REFINISH - REPAIR 6-1

1. Repair of parts listed in Fig. 601 consists of restoration of the original finish.

IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Cable guard (40)	Al alloy	Chromic acid anodize, type 1 (F-17.04) all over. Apply two coats of BMS 10-11, type 1 primer (F-20.03) all over except omit primer from bolt hole.
Spacers (80,85, 100,110)	Al alloy	Chemical treat and apply one coat BMS 10-11, type 1 primer (F-18.07) all over.
Covers (395, 400, 405)	Al alloy	Apply one coat BMS 10-11, type 1 primer (F-18.06).
Actuator Lever (290)	Al alloy	Chromic acid anodize, type 1 (F-17.04) all over. Apply two coats BMS 10-11, type 1 primer (F-20.03) all over except omit primer from 0.2495-2505 in. diameter holes and spline.

Refinish Details
 Figure 601

27-11-11

REPAIR 6-1

01.101

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LEVER - REPAIR 7-1

251T1714-3

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

1. Hole Repair (Fig. 601)

A. Install repair bushings (two required).

- (1) Machine as required, within repair limit, to remove defects.
- (2) Manufacture repair bushings (Fig. 602). Minimum wall thickness of bushing to be 0.032 inch.
- (3) Install bushings with wet sealant. Refer to 20-50-03.
- (4) Machine hole through to design dimension and finish shown.
- (5) Machine countersink as shown.

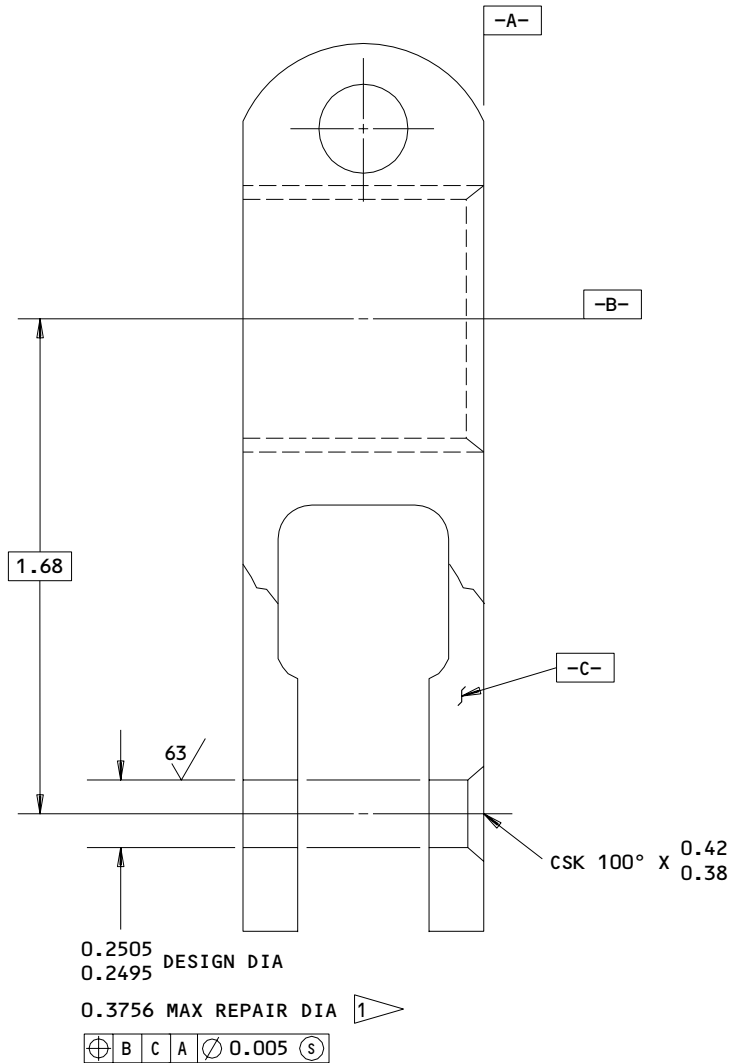
27-11-11

REPAIR 7-1

01.1

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REFINISH

CHROMIC ACID ANODIZE, TYPE 1, (F-17.04) ALL OVER. APPLY TWO COATS OF BMS 10-11, TYPE 1, PRIMER (F-20.03) EXCEPT OMIT PRIMER FROM SPLINE AND COUNTERSINK HOLES.

∇ 1 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHINGS

REPAIR

REF ∇ 1
 ∇ 125 ALL MACHINED SURFACES EXCEPT AS NOTED
 BREAK SHARP EDGES 0.008 R
 MATERIAL: AL ALLOY
 ALL DIMENSIONS ARE IN INCHES

251T1714-3
 Lever Repair
 Figure 601

27-11-11

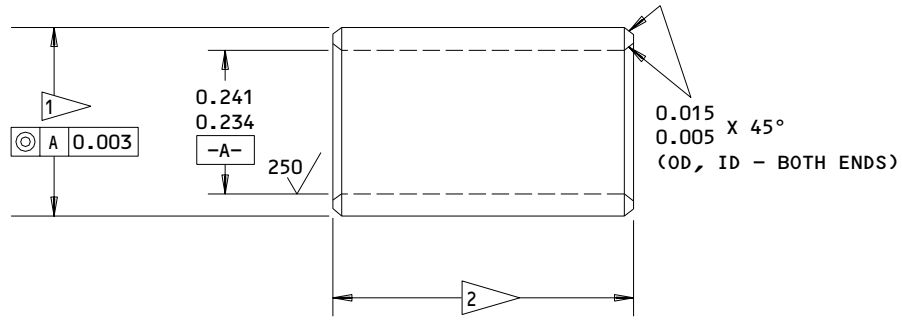
REPAIR 7-1

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01.1

BOEING
COMPONENT
MAINTENANCE MANUAL



1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR DIA OF LEVER PLUS 0.0003-0.0015 INTERFERENCE

2 BUSHING LENGTH TO BE FLUSH, MINUS 0.000-0.003, TO LEVER AT REPAIR HOLE. COUNTERSINK TO BE MACHINED AFTER INSTALLATION

63/ ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ±0.5 DEG

MATERIAL: AL-NI-BRONZE

FINISH: CADMIUM PLATE

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

Repair Bushing Details
 Figure 602

292921

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REPAIR 7-1

01.1

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DRAG LINK - REPAIR 8-1

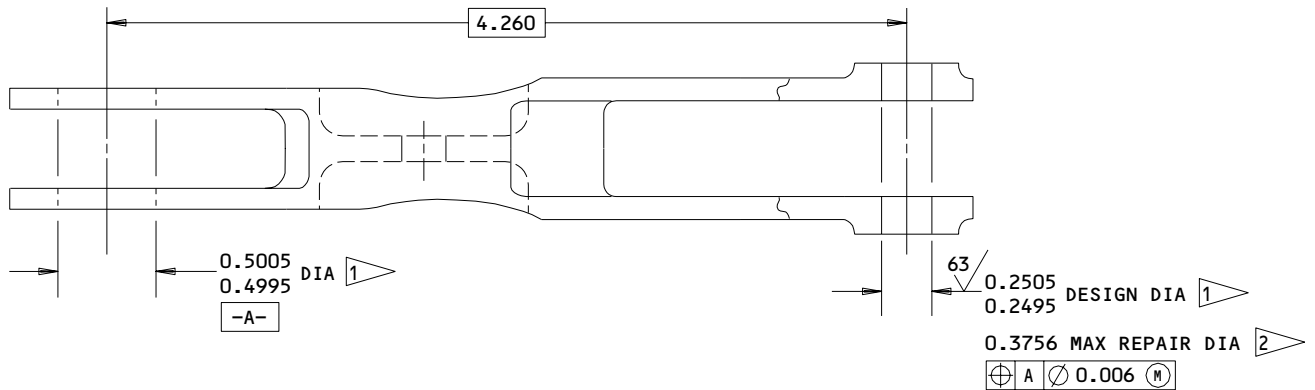
251T1725-1, -3

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

1. Hole Repair (Fig. 601)

A. Install repair bushings (two required).

- (1) Machine as required, within repair limit, to remove defects.
- (2) Manufacture repair bushings (Fig. 602). Minimum wall thickness of bushing to be 0.032 inch.
- (3) Install bushings with wet sealant. Refer to 20-50-03.
- (4) Machine hole through to design dimension and finish shown.



REFINISH

CHROMIC ACID ANODIZE, TYPE 1, (F-17.04)
 ALL OVER. APPLY ONE (251T1725-3) OR TWO
 (251T1725-1) COATS BMS 10-11, TYPE 1, PRIMER
 (F-20.02, F-20.03) ALL OVER, EXCEPT OMIT
 PRIMER AS NOTED

- 1 OMIT PRIMER THIS SURFACE
- 2 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF 2
 125 ALL MACHINED SURFACES EXCEPT AS NOTED
 BREAK SHARP EDGES 0.008 R
 MATERIAL: AL ALLOY
 ALL DIMENSIONS ARE IN INCHES

251T1725-1,-3
 Drag Link Repair
 Figure 601

292956

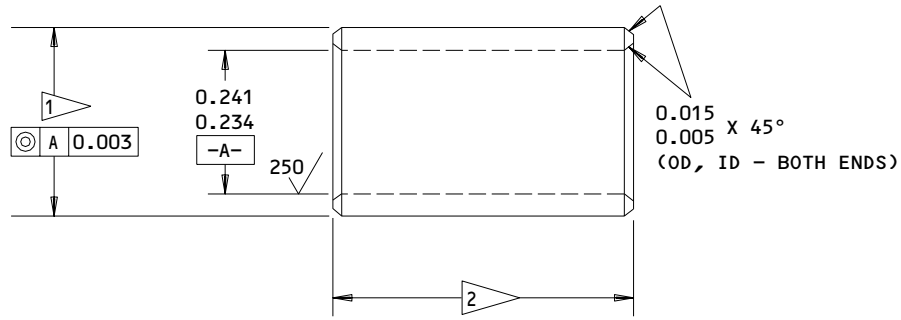
27-11-11

REPAIR 8-1

01.1

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1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR
 DIA OF LINK PLUS 0.0003-0.0015 INTERFERENCE

2 BUSHING LENGTH TO BE FLUSH, MINUS
 0.000-0.003, TO LINK AT REPAIR HOLE

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

63/ ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ± 0.5 DEG

MATERIAL: AL-NI-BRONZE

FINISH: CADMIUM PLATE

Repair Bushing Details
 Figure 602

292922

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REPAIR 8-1

01.1

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SHAFT - REPAIR 9-1

251T1715-2

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 instructions, Fig. 601.

1. Shaft Repair (Fig. 601)

- A. Machine shaft (75) as required, within repair limits shown, to remove defects.
- B. Shot peen as indicated.
- C. Build up repaired area with chrome plate and grind to design dimension and finish shown. Chrome plate must not exceed 0.015 inch after grinding.

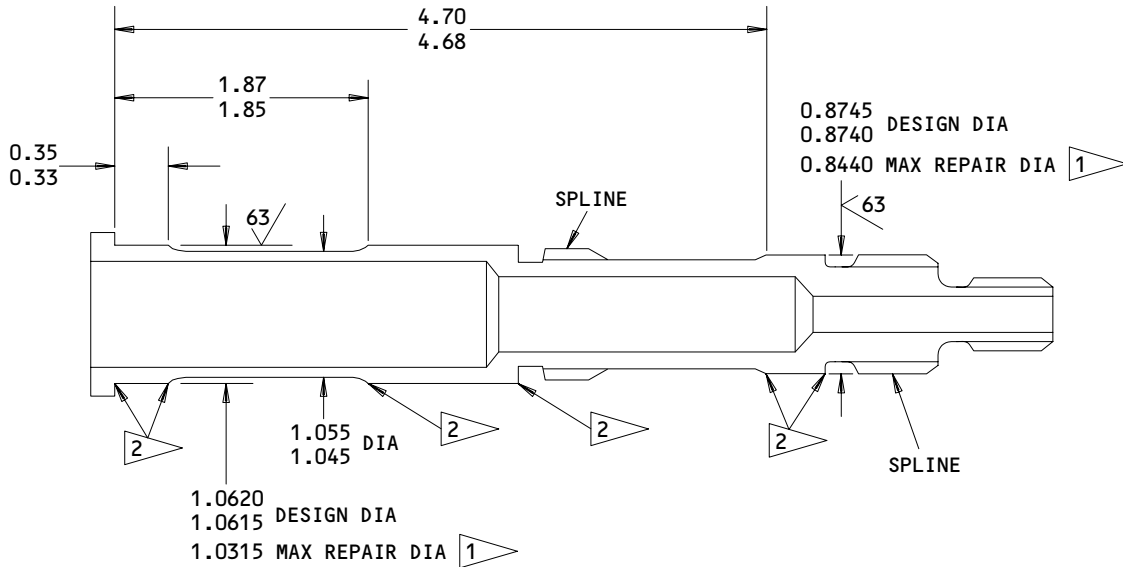
27-11-11

REPAIR 9-1

01.1

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REFINISH

PASSIVATE, TYPE 2 (F-17.09) ALL INTERIOR SURFACES. CADMIUM PLATE (0.0002-0.0004 INCH) (F-15.25) ALL EXTERIOR SURFACES

- 1 BUILD UP WITH CHROME PLATE (F-15.03) AND GRIND TO DESIGN DIMENSION AND FINISH SHOWN. CHROME PLATE AT BEARING INTERFACE ONLY. MINIMUM PLATING THICKNESS 0.005 INCH
- 2 OBSERVE 0.00-0.08 CHROME PLATING RUNOUT AREA AT 0.00-0.02 FROM INTERFACE EDGE AND FILLET RADII

REPAIR

REF 1 2

125/ ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008 R

SHOT PEEN: 170-460 SHOT NO.
0.014 A INTENSITY
2.0 COVERAGE

MATERIAL: 15-5PH CRES (150-170 KSI)

ALL DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING

251T1715-2

Shaft Repair
 Figure 601

27-11-11

REPAIR 9-1

01.1

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ASSEMBLY1. Materials

NOTE: Equivalent substitutes may be used.

- A. Grease -- BMS 3-24 (Ref 20-60-03)
- B. Primer -- BMS 10-11, type 1 (Ref 20-60-02)

2. Assembly (IPL Fig. 1, Fig. 701)

- A. Install spacer (350), washer (355), nut (360) to housing assembly (365 or 370).
- B. Attach actuator lever (290) to actuator link assembly (295) with bolt (265) and collar (270).
- C. Install bearing (240) in idler link assembly (245) per 20-50-03 with BMS 3-24 grease.
- D. Secure actuator link assembly (295), drag link (345) and idler link assembly (245) together with bolt (225), washer (230), and nut (235).
- E. Attach output crank assembly (325) to drag link (345) with washer (320), spindle (315) and rivet (310).
- F. Secure quadrant assembly (180 or 185) to housing assembly (365 or 370) with bushings (125, 130) per 20-50-03 except use grease, bolts (115), washers (120), and nuts (135).
- G. Secure idler link assembly (245) to quadrant assembly (180 or 185) by installing bushings (155, 175), washers (150, 170), bolts (140, 160) and collars (145, 165). Install bushings (155, 175) per 20-50-03 with grease. Install as many washers (150) as required to fill gap snugly without binding bearings before tightening fasteners.
- H. Install spacer (100) and bearings (105) into output crank assembly (325) and housing assembly (365 or 370) per 20-50-03 with grease.

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01.1

- I. Apply grease to outside diameter of shaft (75) and position through housing assembly (365 or 370), spacers (80, 85, 110), output crank assembly (325), actuator lever (290), shims (90, 95), lever (70) (countersunk side next to housing), washer (65) and nut (60) as shown in Fig. 701. Tighten nut (60) to 95-110 lb-in.
- J. Attach bolt (45), washers (50) and nut (55) to lever (70). Attach bolt (275), washers (280) and nut (285) to actuator lever (290).
- K. Attach cable guard assembly (20) to housing assembly (345 or 350) with washer (15) and nut (10).
- L. Check 0.10 inch minimum clearance between quadrant (215 or 220) and housing (410 or 415) after assembly. Shim per Fig. 701 as applicable.
- M. Install outboard aileron lockout mechanism test equipment and check rotational movement of quadrant assembly (180 or 185) per TESTING AND TROUBLE SHOOTING.

3. Storage

- A. Prepare unit for storage in accordance with standard industry practices.

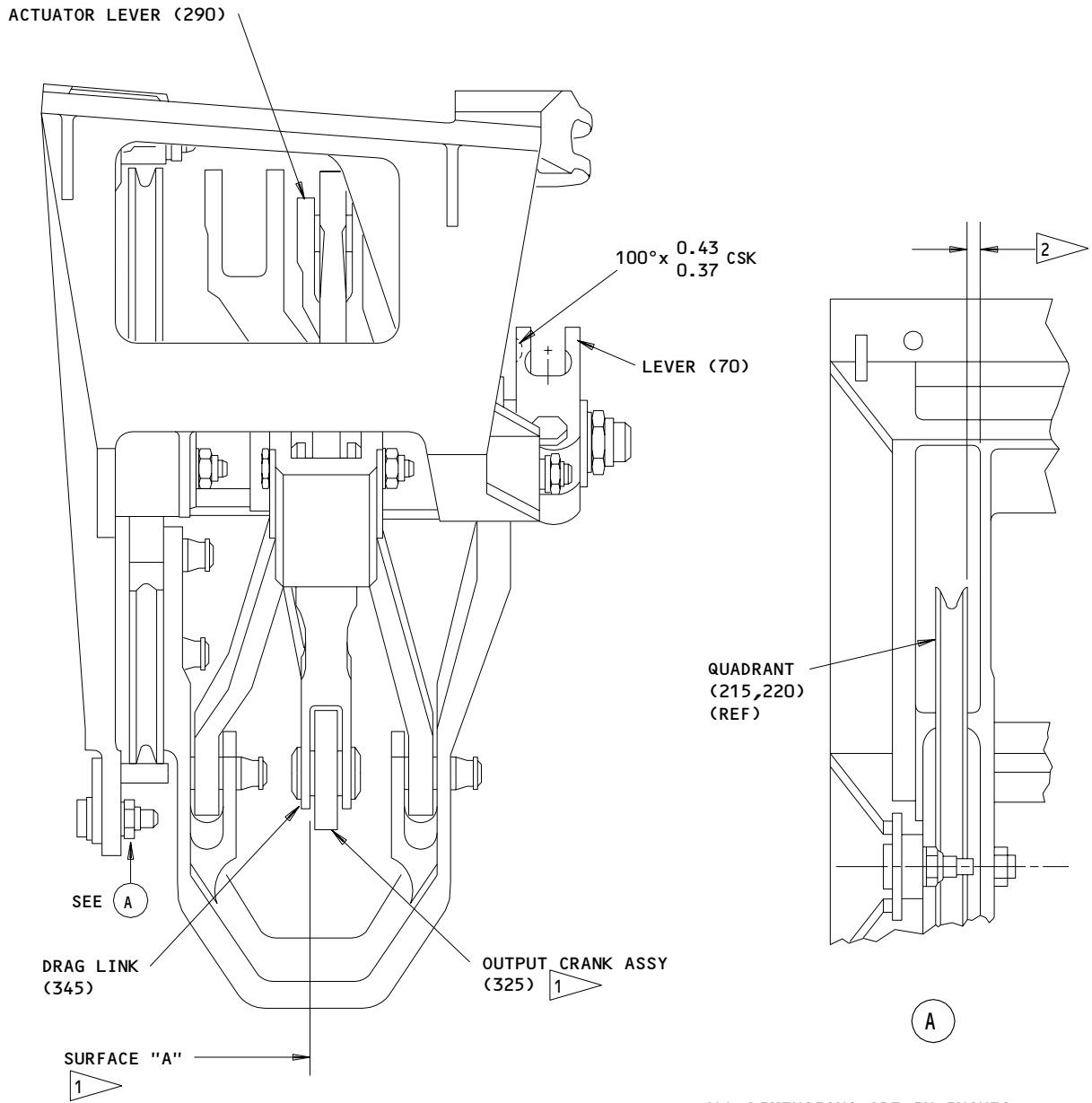
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ASSEMBLY

01.1

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ALL DIMENSIONS ARE IN INCHES

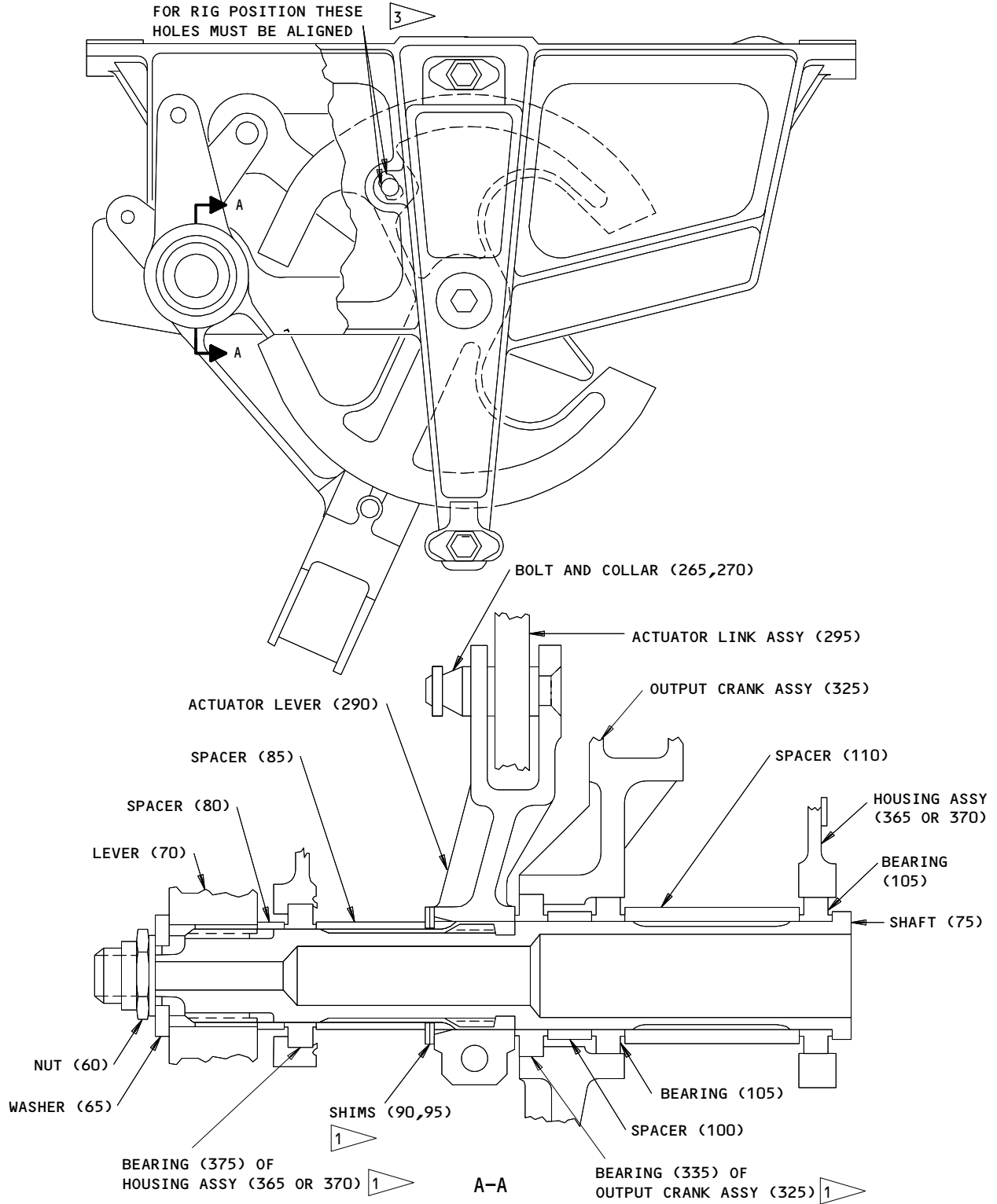
- 1 ALLOW FREE END OF OUTPUT CRANK ASSEMBLY (325) TO RELAX AT ITS UNSTRAINED POSITION WITH SPACER (85) AND ACTUATOR LEVER (290) IN PLACE. MEASURE GAP BETWEEN SPACER (85) AND ACTUATOR LEVER (290) WHEN SPACER (85) IS IN CONTACT WITH BEARING (375) OF HOUSING ASSEMBLY (365) AND ACTUATOR LEVER (290) IS IN CONTACT WITH BEARING (335) OF OUTPUT CRANK ASSEMBLY (325). AFTER ASSEMBLY, MECHANISM MUST MOVE FREELY WITH NO BINDING. LAMINATIONS MAY BE REMOVED FROM SHIMS (90,95) AS REQUIRED TO POSITION OUTPUT CRANK ASSEMBLY AS NOTED. APPLY ONE COAT OF BMS 10-11, TYPE 1 PRIMER (F-20,02) AFTER DELAMINATING.
- 2 0.10 INCH MINIMUM CLEARANCE AFTER ASSEMBLY

Assembly Details
 Figure 701 (Sheet 1)

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ASSEMBLY
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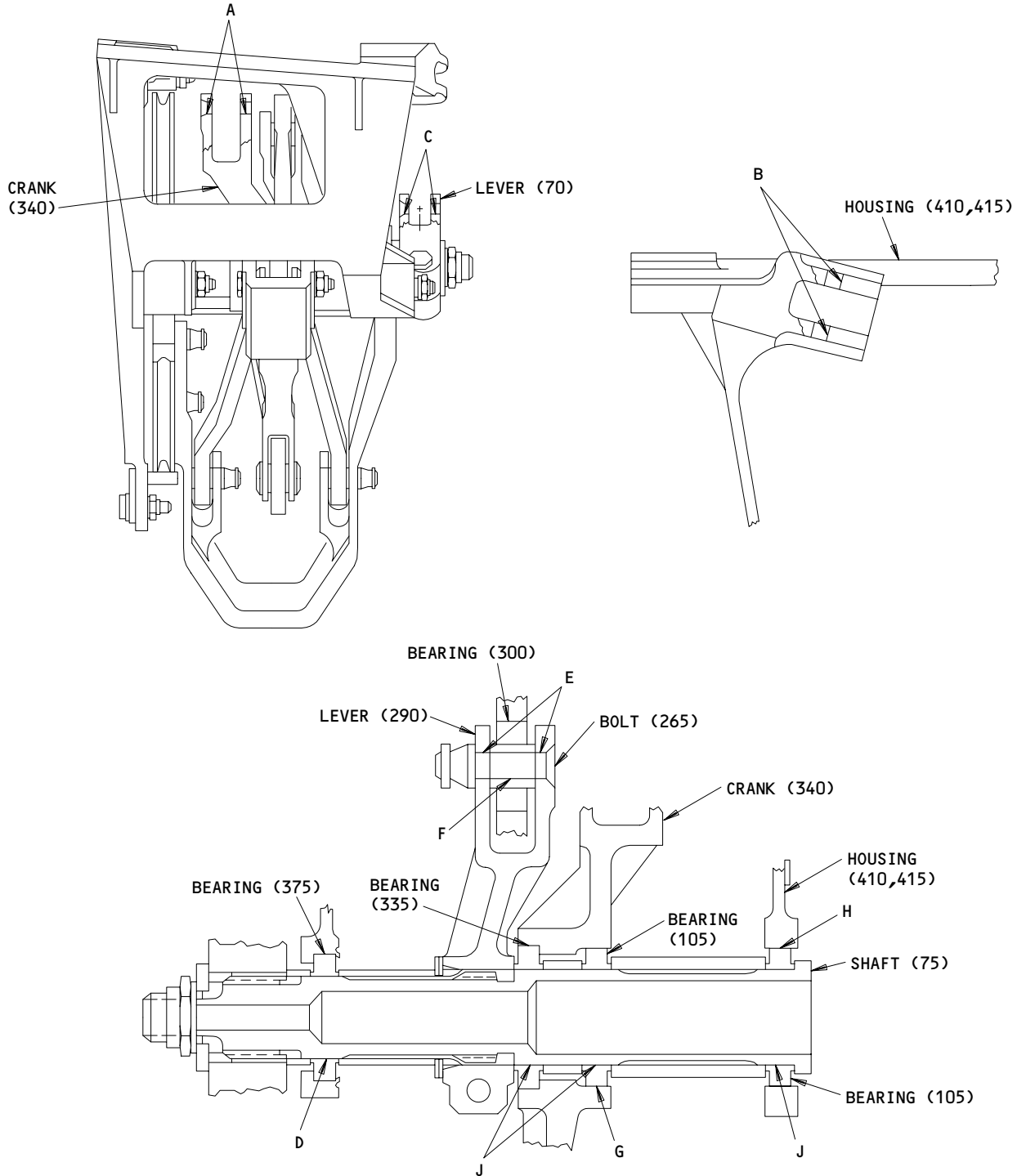
Assembly Details
Figure 701 (Sheet 2)

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ASSEMBLY
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01

FITS AND CLEARANCES



Fits and Clearances
Figure 801 (Sheet 1)

27-11-11

FITS AND CLEARANCES
01.1 Page 801
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BOEING
 COMPONENT
 MAINTENANCE MANUAL

Ref Letter Fig.801	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 340	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0035
	OD *[2]	0.2485	0.2495					
B	ID 410,415	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0040
	OD *[3]	0.2485	0.2495					
C	ID 70A	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0035
	OD *[4]	0.2485	0.2495					
D	ID 375	0.8745	0.8750	0.0000	0.0010	0.8725	0.8770	0.0025
	OD 75	0.8740	0.8745					
E	ID 290	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0035
	OD 265	0.2485	0.2495					
F	ID 300	0.2495	0.2500	0.0000	0.0015	0.2475	0.2520	0.0030
	OD 265	0.2485	0.2495					
G	ID 340	1.5000	1.5005	0.0000	0.0010	1.4975	1.5030	0.0030
	OD 105	1.4995	1.5000					
H	ID 410,415	1.5000	1.5005	0.0000	0.0010	1.4975	1.5030	0.0030
	OD 105	1.4995	1.5000					
J	ID 105,335	1.0620	1.0625	0.0000	0.0010	1.0595	1.0650	0.0030
	OD 75	1.0615	1.0620					
K	ID 130	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0035
	OD 115	0.2485	0.2495					
L	ID 205	0.2497	0.2500	0.0002	0.0015	0.2465	0.2530	0.0035
	OD 115	0.2485	0.2495					
M	ID 410,415	0.3745	0.3755	0.0000	0.0015	0.3720	0.3780	0.0035
	OD 130	0.3740	0.3745					
N	ID 255	0.7499	0.7504	-0.0001 *[1]	0.0008	0.7476	0.7528	0.0028
	OD 240	0.7496	0.7500					

Fits and Clearances
 Figure 801 (Sheet 3)

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FITS AND CLEARANCES
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Ref Letter Fig.801	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
P	ID 345	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0035
	OD 225	0.2485	0.2495					
Q	ID 300	0.2495	0.2500	0.0000	0.0015	0.2465	0.2530	0.0035
	OD 225	0.2485	0.2495					
R	ID 240,250	0.2497	0.2500	0.0002	0.0015	0.2465	0.2530	0.0035
	OD 225	0.2485	0.2495					
S	ID 125	0.2500	0.2505	0.0005	0.0020	0.2470	0.2530	0.0035
	OD 115	0.2485	0.2495					
T	ID 410,415	0.3745	0.3755	0.0000	0.0015	0.3720	0.3780	0.0035
	OD 125	0.3740	0.3745					
U	ID 210	0.4370	0.4380	0.0000	0.0015	0.4345	0.4405	0.0035
	OD 175	0.4365	0.4370					
V	ID 175	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0035
	OD 160	0.2485	0.2495					
W	ID 345	0.4995	0.5005	-0.0002 *[1]	0.0013	0.4972	0.5030	0.0033
	OD 315	0.4992	0.4997					
X	ID 330	0.4997	0.5000	0.0000	0.0008	0.4972	0.5025	0.0028
	OD 315	0.4992	0.4997					
Y	ID 210	0.2495	0.2505	0.0000	0.0020	0.2470	0.2530	0.0035
	OD 140	0.2485	0.2495					
Z	ID 250	0.2497	0.2500	0.0002	0.0015	0.2460	0.2530	0.0035
	OD 140	0.2485	0.2495					
AA	ID 210	0.3745	0.3755	0.0000	0.0015	0.3720	0.3780	0.0035
	OD 155	0.3740	0.3745					

ALL DIMENSIONS ARE IN INCHES

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

*[2] INSTALLATION BOLT BACB30FN8-16

*[3] INSTALLATION BOLT BACB30NF4-13

*[4] INSTALLATION BOLT BACB30FN8-14

Fits and Clearances
 Figure 801 (Sheet 4)

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FOR TORQUE VALUES OF STANDARD FASTENERS, REFER TO 20-50-01		
ITEM NO. IPL FIG. 1	NAME	TORQUE POUND-INCHES
60	Nut	95 - 110

Torque Table
Figure 802

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FITS AND CLEARANCES
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SPECIAL TOOLS

NOTE: Equivalent substitutes may be used.

- A. Outboard Aileron Lockout Mechanism Test Equipment -- A27037-1

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SPECIAL TOOLS

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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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ILLUSTRATED PARTS LIST

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VENDORS

K8455 RHP BEARINGS PLC RHP AEROSPACE
OLDENDS LANE
STONEHOUSE GL10 3RM UK

08073 MAMCO MANUFACTURING CO INC
1411 NORTHWEST 50TH
SEATTLE, WASHINGTON 98107-5123

08524 DEUTSCH FASTENER CORP SEE CODE V97928

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

15653 MICRODOT INC AEROSPACE FASTENING SYS KAYNAR MFG DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92634-3001

21335 TORRINGTON CO FAFNIR BEARING DIV
59 FIELD STREET
TORRINGTON, CONNECTICUT 06790-4942

38443 MRC BEARINGS
402 CHANDLER STREET
JAMESTOWN, NEW YORK 14701-3802

40920 MPB MINIATURE PRECISION BEARING DIV
PRECISION PARK PO BOX 547
KEENE, NEW HAMPSHIRE 03431

43991 FAG BEARING INCORPORATED
118 HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904

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

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

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

71087 BOOTS ACFT NUT DIV TOWNSEND CO SEE TEXTRON INC CHERRY
FASTENER TOWNSEND DIV V11815

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**BOEING**
COMPONENT
MAINTENANCE MANUALVENDORS

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

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

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

80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
2701 SOUTH HARBOR BOULEVARD PO BOX 1259
SANTA ANA, CALIFORNIA 92702-1259

83086 NEW HAMPSHIRE BALL BEARINGS, INCORPORATED
ROUTE 202
PETERBOROUGH, NEW HAMPSHIRE 03458

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

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

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ACMB540DDA3908		1	375A	1
		1	375B	1
ACMB540DDP28LY1		1	375A	1
ACMB541DDA3908		1	105A	2
		1	105B	2
		1	335A	1
		1	335B	1
ACMB541DDP28LY1		1	105A	2
		1	335A	1
ACMKP4AA3908		1	240A	1
		1	240B	1
		1	250A	3
		1	250B	3
ACMKP8AA3908		1	330A	1
		1	330B	1
AN960-416		1	230	1
AN960-416L		1	120	1
AN960PD416		1	15	1
		1	50	2
		1	170	1
		1	280	2
		1	355	1
AN960PD416L		1	150	1
BACB10AN4		1	205	2
BACB10AP4		1	240	1
		1	250	3
BACB10AP8		1	330	1
BACB10AS14		1	375	1
BACB10AS17		1	105	2
		1	335	1
BACB10CK4		1	300	2
BACB10FS4R		1	240A	1
		1	250A	3
BACB10FS8R		1	330A	1
BACB10FT4R		1	205A	2
BACB10FU14R		1	375A	1
BACB10FU17R		1	105A	2
		1	335A	1
BACB30FN8-10		1	195	1
BACB30FN8-11		1	190	1
BACB30FN8-12		1	160	1
BACB30FN8-14		1	140	1
		1	265	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACB30NF4-18		1	275	1
BACB30NF4-19		1	115	2
BACB30NF4-22		1	45	1
BACB30NF4-23		1	225	1
BACB30NF4-6		1	25	1
BACB30NR4K15		1	390	1
BACC30M8		1	145	1
		1	165	1
		1	200	2
		1	270	1
BACN10JC4		1	10	1
		1	55	1
		1	135	2
		1	235	1
		1	285	1
		1	360	1
BACN10JC8		1	60	1
BACR10G43		1	30	1
		1	380	1
BACR15BA3AD		1	35	2
		1	385	2
BACR15BA8D		1	310	1
BACS18K25-47W		1	350	1
BACW10P109D		1	65	1
BMN4122AD3-8		1	60	1
BRH10A4		1	10	1
		1	55	1
		1	135	2
		1	235	1
		1	285	1
		1	360	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
HL19PB8-10		1	195	1
HL19PB8-11		1	190	1
HL19PB8-12		1	160	1
HL19PB8-14		1	140	1
		1	265	1
HL79-8		1	145	1
		1	165	1
		1	200	2
		1	270	1
H10-4BAC		1	10	1
		1	55	1
		1	135	2
		1	235	1
		1	285	1
		1	360	1
H10-8BAC		1	60	1
JMP4P25LY196		1	205	2
LLMB540		1	375	1
LLMB541		1	105	2
		1	335	1
LLMKP4		1	205	2
LLMKP4A		1	240	1
		1	250	3
LLMKP8A		1	330	1
MB540-2TS		1	375	1
MB540DDFS428		1	375	1
MB540DDG20		1	375	1
MB540TT		1	375	1
MB541-2TS		1	105	2
		1	335	1
MB541DDFS428		1	105	2
		1	335	1
MB541DDG20		1	105	2
		1	335	1
MB541TT		1	105	2
		1	335	1

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 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MKP4		1	205	2
MKP4A		1	240	1
		1	250	3
MKP4AFS428		1	240	1
		1	250	3
MKP4AG20		1	240	1
		1	250	3
MKP4ALY196		1	240	1
		1	250	3
MKP4ATT		1	240	1
		1	250	3
MKP4A2TS		1	240	1
		1	250	3
MKP4E6531		1	205	2
MKP4E6531		1	240	1
		1	250	3
MKP4FS428		1	205	2
MKP8A		1	330	1
MKP8AFS428		1	330	1
MKP8AG20		1	330	1
MKP8ALY196		1	330	1
MKP8ATT		1	330	1
MKP8A2TS		1	330	1
MKP8E6531		1	330	1
MT340E		1	375	1
MT341E		1	105	2
		1	335	1
NS202101-048		1	10	1
		1	55	1
		1	135	2
		1	235	1
		1	285	1
		1	360	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
PACMKP4AA3908		1	240A	1
		1	250A	3
RMLH9074-8		1	60	1
RMLH9075-4W		1	10	1
		1	55	1
		1	135	2
		1	235	1
		1	285	1
		1	360	1
SA4-16A1-502		1	300A	2
		1	300B	2
SA4-16A4		1	300	2
S012T236-401		1	300A	2
		1	300B	2
SSMKP4SD706		1	240A	1
		1	250A	3
T6S428J		1	10	1
		1	55	1
		1	135	2
		1	235	1
		1	285	1
		1	360	1
VN303A048		1	10	1
		1	55	1
		1	135	2
		1	235	1
		1	285	1
		1	360	1
WC258-10		1	195	1
WC258-11		1	190	1
WC258-12		1	160	1
WC258-14		1	140	1
		1	265	1
251T1701-15		1	365B	1
251T1701-16		1	370B	1
251T1701-17		1	410B	1
251T1701-18		1	415B	1
251T1701-19		1	365A	1
251T1701-20		1	370A	1
251T1701-21		1	410A	1
251T1701-22		1	415A	1
251T1701-24		1	370C	1
251T1701-25		1	365C	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
251T1703-10		1	325A	1
251T1703-11		1	340A	1
251T1703-12		1	325B	1
251T1703-13		1	325C	1
251T1703-7		1	325	1
251T1703-8		1	340	1
251T1705-6		1	290	1
251T1706-1		1	215	1
251T1706-2		1	220	1
251T1706-4		1	215A	1
251T1706-5		1	220A	1
251T1710-10		1	5C	RF
251T1710-11		1	1D	RF
251T1710-12		1	5D	RF
251T1710-5		1	1A	RF
251T1710-6		1	5A	RF
251T1710-7		1	1B	RF
251T1710-8		1	5B	RF
251T1710-9		1	1C	RF
251T1711-1		1	180	1
251T1711-2		1	185	1
251T1711-3		1	180A	1
251T1711-4		1	185A	1
251T1711-5		1	180B	1
251T1711-6		1	185B	1
251T1712-1		1	395	1
251T1712-2		1	400	1
251T1712-3		1	405	1
251T1714-3		1	70A	1
251T1715-2		1	75	1
251T1716-1		1	110	1
251T1716-2		1	100	1
251T1716-3		1	85	1
251T1716-4		1	80	1
251T1718-1		1	90	1
251T1718-2		1	95	1
251T1721-4		1	210	1
251T1721-5		1	210A	1
251T1723-1		1	20	1
251T1723-2		1	40	1
251T1724-1		1	295	1
251T1724-2		1	305	1
251T1724-4		1	295B	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
251T1725-1		1	345	1
251T1725-3		1	345A	1
251T1726-10		1	255A	1
251T1726-11		1	245B	1
251T1726-12		1	245C	1
251T1726-6		1	245	1
251T1726-7		1	255	1
251T1726-9		1	245A	1
251T1729-1		1	175	1
251T3741-12		1	155	1
251T3741-13		1	130	3
251T3742-3		1	125	1
48FT820		1	60	1
62547-8-10		1	195	1
62547-8-11		1	190	1
62547-8-12		1	160	1
62547-8-14		1	140	1
		1	265	1
66014-8		1	145	1
		1	165	1
		1	200	2
		1	270	1
6800D048		1	30	1
		1	380	1
69B81690-1		1	315	1
69B81691-1		1	320	1
96-048		1	10	1
		1	55	1
		1	135	2
96-048		1	235	1
		1	285	1
		1	360	1

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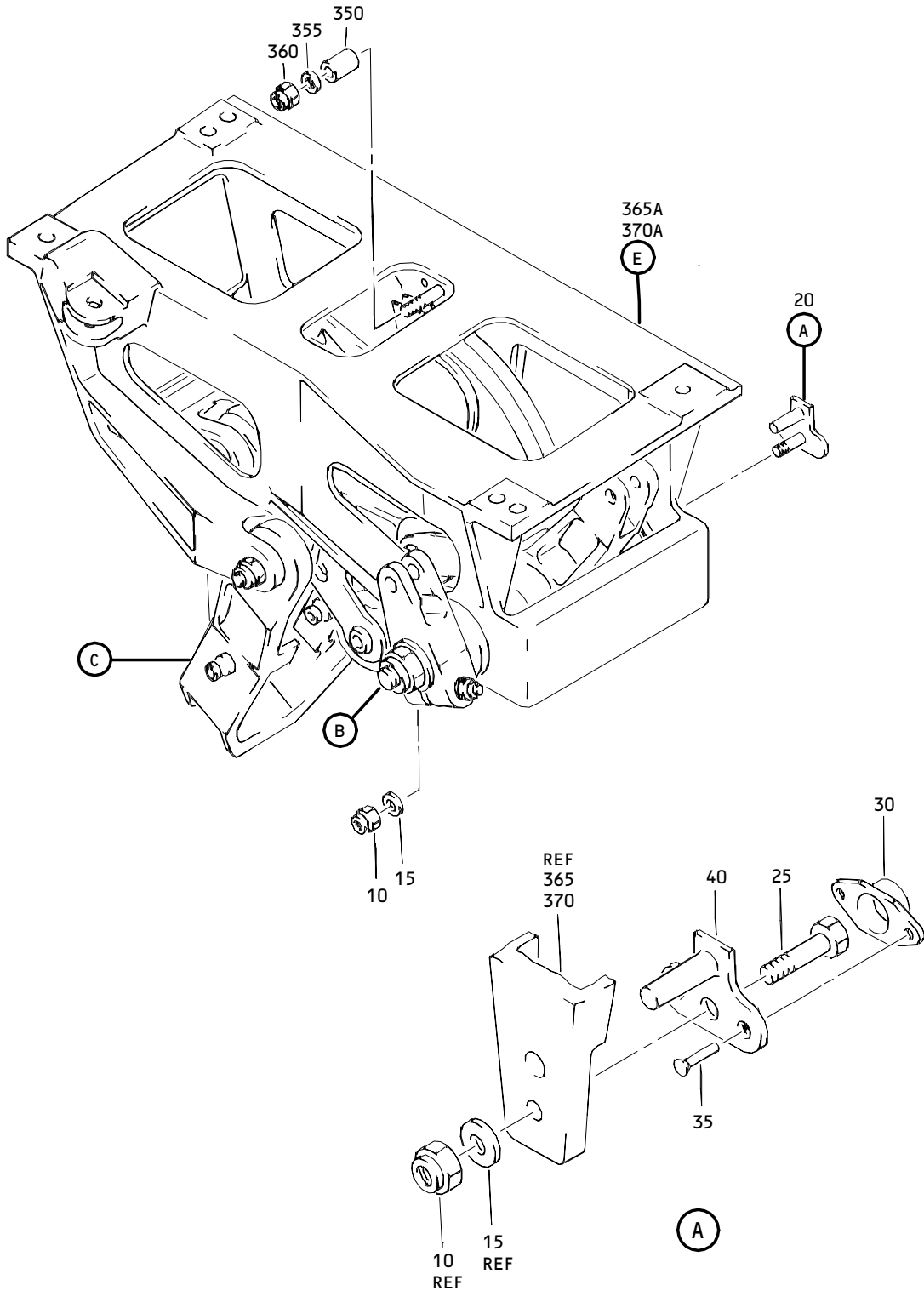
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COMPONENT
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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ

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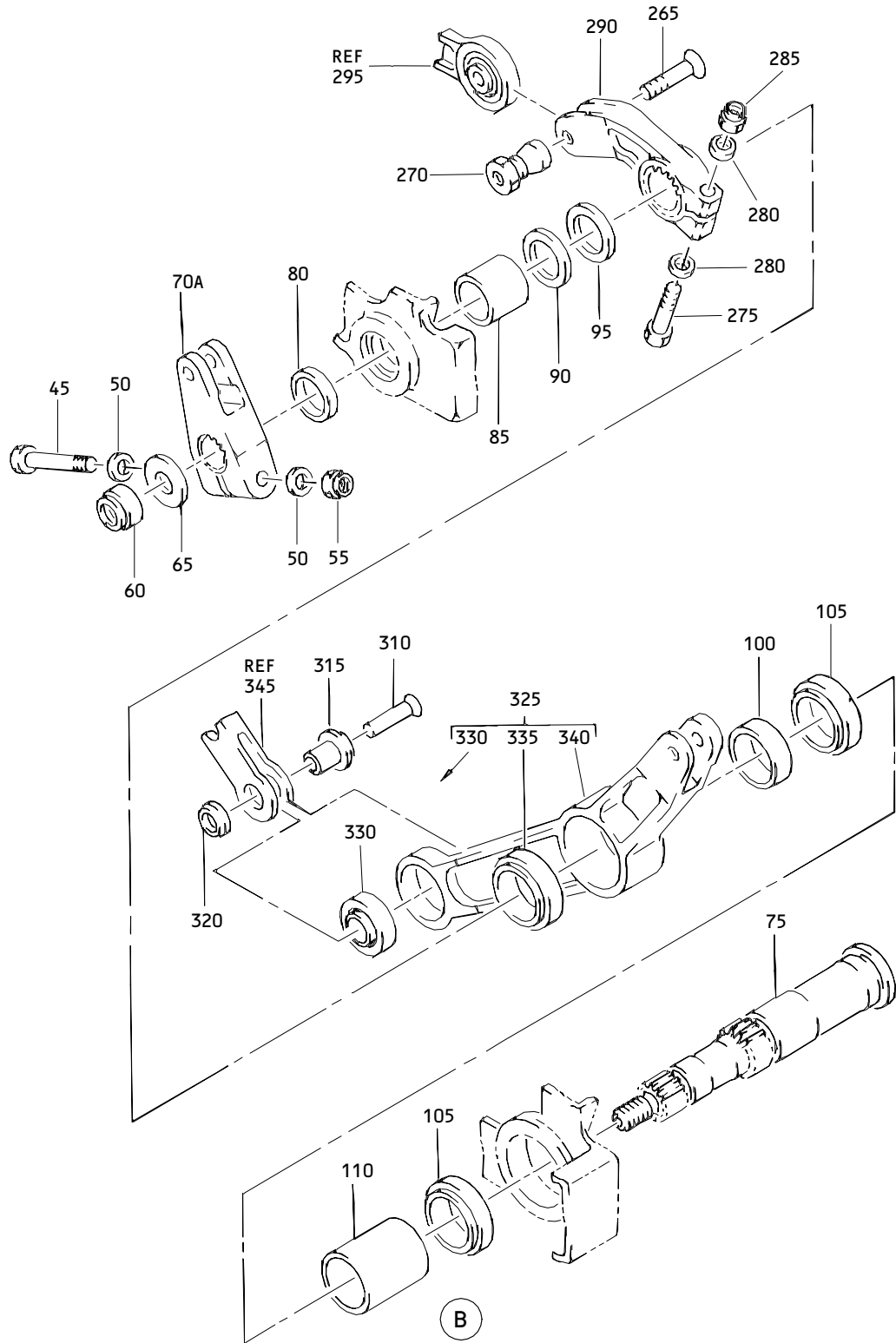
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Outboard Aileron Lockout Mechanism Assembly
Figure 1 (Sheet 1)

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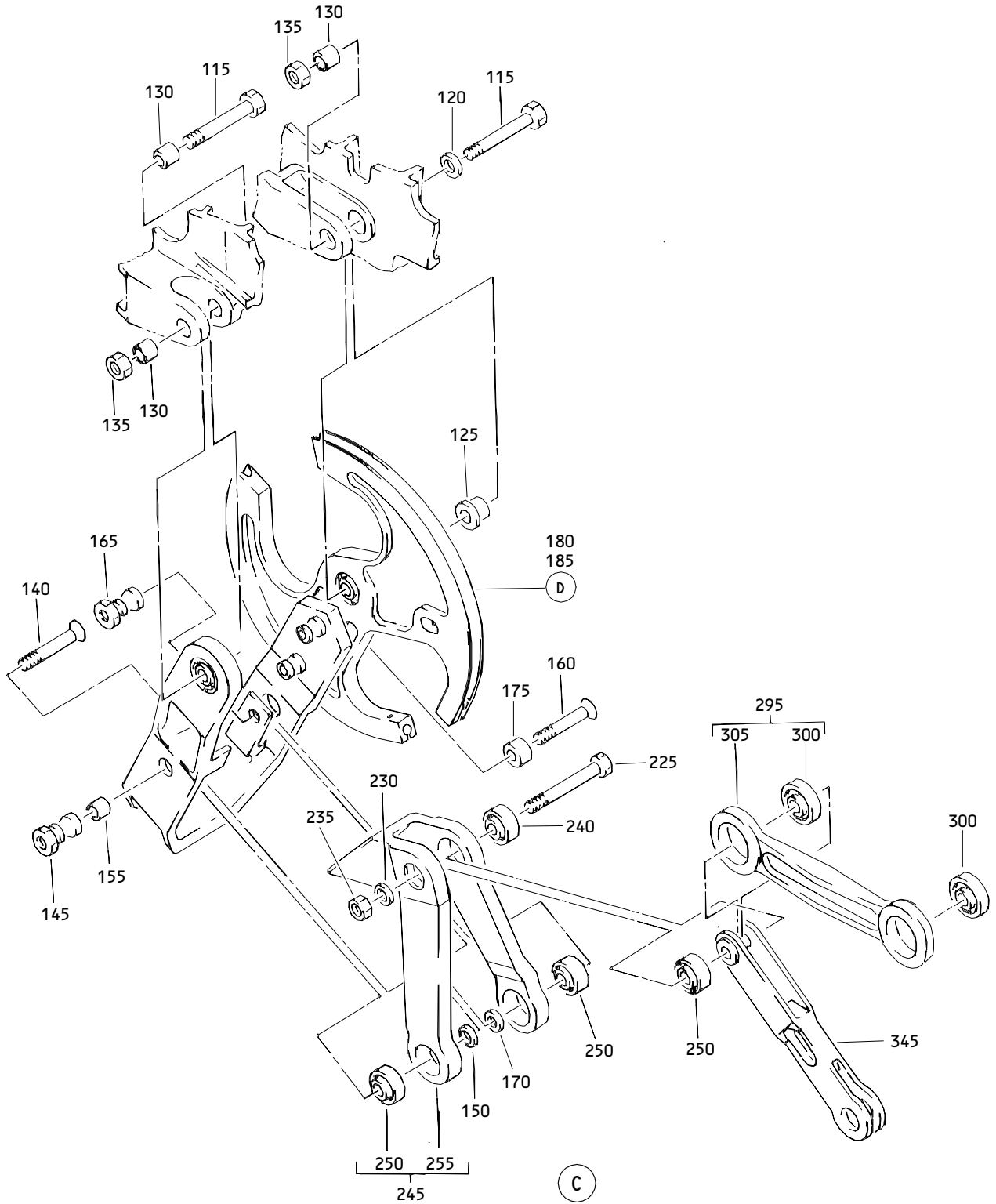
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Outboard Aileron Lockout Mechanism Assembly
 Figure 1 (Sheet 2)

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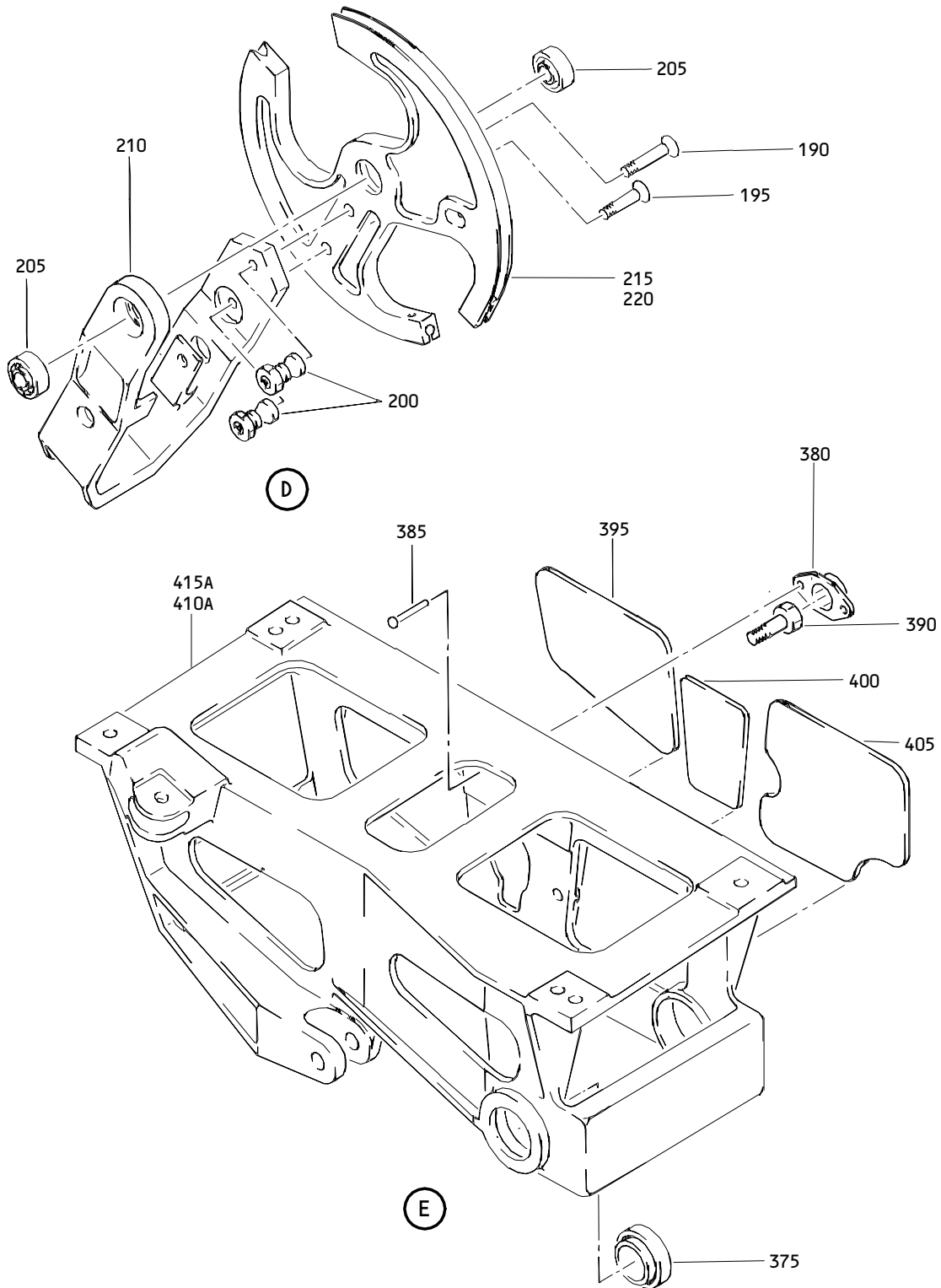
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Outboard Aileron Lockout Mechanism Assembly
Figure 1 (Sheet 3)

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Outboard Aileron Lockout Mechanism Assembly
 Figure 1 (Sheet 4)

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 COMPONENT
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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-			DELETED		
-1	251T1710-3		MECHANISM ASSY-OUTBD AIL.	A	RF
-1A	251T1710-5		LOCKOUT		
-1B	251T1710-7		MECHANISM ASSY-OUTBD AIL.	C	RF
			LOCKOUT		
R -1C	251T1710-9		MECHANISM ASSY-OUTBD AIL.	E	RF
			LOCKOUT		
-1D	251T1710-11		MECHANISM ASSY-OUTBD AIL.	G	RF
			LOCKOUT		
-5	251T1710-4		DELETED		
-5A	251T1710-6		MECHANISM ASSY-OUTBD AIL.	B	RF
			LOCKOUT		
-5B	251T1710-8		MECHANISM ASSY-OUTBD AIL.	D	RF
			LOCKOUT		
R -5C	251T1710-10		MECHANISM ASSY-OUTBD AIL.	F	RF
			LOCKOUT		
-5D	251T1710-12		MECHANISM ASSY-OUTBD AIL.	H	RF
			LOCKOUT		
10	H10-4BAC		.NUT- (V15653) (SPEC BACN10JC4) (OPT NS202101-048 (V80539)) (OPT RMLH9075-4W (V72962)) (OPT T6S428J (V71087)) (OPT VN303A048 (V92215)) (OPT 96-048 (V80539)) (OPT BRH10A4 (V52828))		1

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COMPONENT
MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-15	AN96OPD416		.WASHER		1
20	251T1723-1		.GUARD ASSY-CABLE		1
25	BACB30NF4-6		..BOLT		1
30	6800D048		..RETAINER- (V80539) (SPEC BACR10G43) ATTACHING PARTS		1
35	BACR15BA3AD		..RIVET- (SIZE DETERMINE ON INST) -----*		2
40	251T1723-2		..GUARD		1
45	BACB30NF4-22		.BOLT		1
50	AN96OPD416		.WASHER		2
55	H10-4BAC		.NUT- (V15653) (SPEC BACN10JC4) (OPT NS202101-048 (V80539)) (OPT RMLH9075-4W (V72962)) (OPT T6S428J (V71087)) (OPT VN303A048 (V92215)) (OPT 96-048 (V80539)) (OPT BRH10A4 (V52828))		1
60	H10-8BAC		.NUT- (V15653) (SPEC BACN10JC8) (OPT RMLH9074-8 (V72962)) (OPT BMN4122AD3-8 (V08524)) (OPT RMLH9074-8 (V72962)) (OPT 48FT820 (V56878)) (OPT BMN4122AD3-8 (V08524))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-65	BACW10P109D		.WASHER- (V10630) (SPEC BACW10P109D)		1
70	251T1714-2		DELETED		
70A	251T1714-3		.LEVER		1
75	251T1715-2		.SHAFT		1
80	251T1716-4		.SPACER		1
85	251T1716-3		.SPACER		1
90	251T1718-1		.SHIM		AR
95	251T1718-2		.SHIM		AR
100	251T1716-2		.SPACER		1
105	MB541DDG20		.BEARING- (V38443) (SPEC BACB10AS17) (OPT LLMB541 (V38443)) (OPT MB541-2TS (V43991)) (OPT MB541DDFS428 (V21335)) (OPT MB541TT (V43991)) (OPT MT341E (VK8455)) (REPLD BY ITEM 105B) (PRE SB 27-128)	A-D	2
R -105A	ACMB541DDA3908		.BEARING- (V21335) (SPEC BACB10FU17R) (OPT ACMB541DDP28LY198 (V40920))	E-H	2
R -105B	ACMB541DDA3908		.BEARING- (V21335) (SPEC BACB10FU17R) (OPT ACMB541DDP28LY198 (V40920)) (REPLS ITEM 105) (POST SB 27-128)	A-D	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
110	251T1716-1		.SPACER		1
115	BACB30NF4-19		.BOLT		2
120	AN960-416L		.WASHER		1
125	251T3742-3		.BUSHING		1
130	251T3741-13		.BUSHING		3
135	H10-4BAC		.NUT-		2
			(V15653)		
			(SPEC BACN10JC4)		
			(OPT NS202101-048		
			(V80539))		
			(OPT RMLH9075-4W		
			(V72962))		
			(OPT T6S428J		
			(V71087))		
			(OPT VN303A048		
			(V92215))		
			(OPT 96-048		
			(V80539))		
			(OPT BRH10A4		
			(V52828))		
140	HL19PB8-14		.BOLT-		1
			(V56878)		
			(SPEC BACB30FN8-14)		
			(OPT HL19PB8-14		
			(V73197))		
			(OPT HL19PB8-14		
			(V92215))		
			(OPT HL19PB8-14		
			(V97928))		
			(OPT 62547-8-14		
			(V56878))		
			(OPT HL19PB8-14		
			(V80539))		
			(OPT WC258-14		
			(V60516))		
			(OPT HL19PB8-14		
			(V60516))		
			(OPT HL19PB8-14		
			(V08524))		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-145	HL79-8		.COLLAR- (V56878) (SPEC BACC30M8) (OPT HL79-8 (V73197)) (OPT HL79-8 (V92215)) (OPT 66014-8 (V56878))		1
150	AN960PD416L		.WASHER		1
155	251T3741-12		.BUSHING		1
160	HL19PB8-12		.BOLT- (V56878) (SPEC BACB30FN8-12) (OPT HL19PB8-12 (V73197)) (OPT HL19PB8-12 (V92215)) (OPT HL19PB8-12 (V97928)) (OPT 62547-8-12 (V56878)) (OPT HL19PB8-12 (V80539)) (OPT WC258-12 (V60516)) (OPT HL19PB8-12 (V60516)) (OPT HL19PB8-12 (V08524))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-165	HL79-8		.COLLAR- (V56878) (SPEC BACC30M8) (OPT HL79-8 (V73197)) (OPT HL79-8 (V92215)) (OPT 66014-8 (V56878))		1
170	AN960PD416		.WASHER		1
175	251T1729-1		.BUSHING		1
180	251T1711-1		.QUADRANT ASSY	A	1
-180A	251T1711-3		.QUADRANT ASSY	C	1
R -180B	251T1711-5		.QUADRANT ASSY	E,G	1
-185	251T1711-2		.QUADRANT ASSY-	B	1
-185A	251T1711-4		.QUADRANT ASSY-	D	1
R -185B	251T1711-6		.QUADRANT ASSY ATTACHING PARTS	F,H	1
190	HL19PB8-11		.BOLT- (V56878) (SPEC BACB30FN8-11) (OPT HL19PB8-11 (V73197)) (OPT HL19PB8-11 (V92215)) (OPT HL19PB8-11 (V97928)) (OPT 62547-8-11 (V56878)) (OPT HL19PB8-11 (V80539)) (OPT WC258-11 (V60516)) (OPT HL19PB8-11 (V60516)) (OPT HL19PB8-11 (V08524))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-195	HL19PB8-10		.BOLT- (V56878) (SPEC BACB30FN8-10) (OPT HL19PB8-10 (V73197)) (OPT HL19PB8-10 (V92215)) (OPT HL19PB8-10 (V97928)) (OPT 62547-8-10 (V56878)) (OPT HL19PB8-10 (V80539)) (OPT WC258-10 (V60516)) (OPT HL19PB8-10 (V60516)) (OPT HL19PB8-10 (V08524))		1
200	HL79-8		.COLLAR- (V56878) (SPEC BACC30M8) (OPT HL79-8 (V73197)) (OPT HL79-8 (V92215)) (OPT 66014-8 (V56878)) -----*		2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-205	JMP4P25LY196		..BEARING- (V40920) (SPEC BACB10AN4) (OPT MKP4FS428 (V21335)) (OPT MKP4G20 (V38443)) (OPT LLMKP4 (V38443)) (OPT MKP4 (V38443)) (OPT MKP4-2TS (V43991)) (OPT MKP4E6531 (V21335)) (OPT MKP4TT (V43991)) (REPLD BY ITEM 205B) (PRE SB 27-128)	A-D	2
R -205A	BACB10FT4R		..BEARING	E-H	2
R -205B	BACB10FT4R		..BEARING (REPLS ITEM 205) (POST SB 27-128)	A-D	2
210	251T1721-4		..LINK-CARRIER (OPT ITEM 210A)		1
-210A	251T1721-5		..LINK-CARRIER (OPT ITEM 210)		1
215	251T1706-1		..QUADRANT	A	1
-215A	251T1706-4		..QUADRANT	C,E,G	1
-220	251T1706-2		..QUADRANT	B	1
-220A	251T1706-5		..QUADRANT	D,F,H	1
225	BACB30NF4-23		.BOLT		1
230	AN960-416		.WASHER		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
			1234567		
01-235	H10-4BAC		.NUT- (V15653) (SPEC BACN10JC4) (OPT NS202101-048 (V80539)) (OPT RMLH9075-4W (V72962)) (OPT T6S428J (V71087)) (OPT VN303A048 (V92215)) (OPT 96-048 (V80539)) (OPT BRH10A4 (V52828))		1
240	MKP4A		.BEARING- (V38443) (SPEC BACB10AP4) (OPT LLMKP4A (V38443)) (OPT MKP4AFS428 (V21335)) (OPT MKP4ATT (V43991)) (OPT MKP4A2TS (V43991)) (OPT MKP4E6531 (V21335)) (OPT MKP4AG20 (V38443)) (OPT MKP4ALY196 (V40920)) (OPT MKP4A (V38443)) (REPLD BY ITEM 240B) (PRE SB 27-128)	A-D	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01- -240A	ACMKP4AA3908		.BEARING (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086))	E-H	1
R -240B	ACMKP4AA3908		.BEARING- (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086)) (REPLS ITEM 240) (POST SB 27-128)	A-D	1
245	251T1726-6		.LINK ASSY-IDLER (OPT ITEM 245A)	A-D	1
-245A	251T1726-9		.LINK ASSY-IDLER (OPT ITEM 245)	A-D	1
R -245B	251T1726-11		.LINK ASSY-IDLER (OPT ITEM 245C)	E-H	1
R -245C	251T1726-12		.LINK ASSY-IDLER (OPT ITEM 245B)	E-H	1
250	MKP4A		..BEARING- (V38443) (SPEC BACB10AP4) (OPT LLMKP4A (V38443)) (OPT MKP4AFS428 (V21335)) (OPT MKP4ATT (V43991)) (OPT MKP4A2TS (V43991)) (OPT MKP4E6531 (V21335)) (OPT MKP4AG20 (V38443)) (OPT MKP4ALY196 (V40920)) (OPT MKP4A (V38443)) (REPLD BY ITEM 250B) (PRE SB 27-128)	A-D	3

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01- -250A	ACMKP4AA3908		..BEARING (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086))	E-H	3
R -250B	ACMKP4AA3908		..BEARING (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086)) (REPLS ITEM 250) (POST SB 27-128)	A-D	3
255	251T1726-7		..LINK- (USED ON ITEMS 245, 245B)	A-F	1
-255A	251T1726-10		..LINK- (USED ON ITEMS 245A, 245C)	A-F	1
265	HL19PB8-14		.BOLT- (V56878) (SPEC BACB30FN8-14) (OPT HL19PB8-14 (V73197)) (OPT HL19PB8-14 (V92215)) (OPT HL19PB8-14 (V97928)) (OPT 62547-8-14 (V56878)) (OPT HL19PB8-14 (V80539)) (OPT WC258-14 (V60516)) (OPT HL19PB8-14 (V60516)) (OPT HL19PB8-14 (V08524))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-270	HL79-8		.COLLAR- (V56878) (SPEC BACC30M8) (OPT HL79-8 (V73197)) (OPT HL79-8 (V92215)) (OPT 66014-8 (V56878))		1
275	BACB30NF4-18		.BOLT		1
280	AN960PD416		.WASHER		2
285	H10-4BAC		.NUT- (V15653) (SPEC BACN10JC4) (OPT NS202101-048 (V80539)) (OPT RMLH9075-4W (V72962)) (OPT T6S428J (V71087)) (OPT VN303A048 (V92215)) (OPT 96-048 (V80539)) (OPT BRH10A4 (V52828))		1
290	251T1705-6		.LEVER-ACTR		1
295	251T1724-1		.LINK ASSY-ACTR	A-F	1
295B	251T1724-4		.LINK ASSY-ACTR	GH	1
300	SA4-16A4		..BEARING (V77896) (SPEC BACB10CK4) (REPLD BY ITEM 300B)	A-F	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -300A	SA4-16A1-502		..BEARING (V77896) (SPEC S012T236-401)	G-H	2
-300B	SA4-16A1-502		..BEARING (V77896) (SPEC S012T236-401) (REPLS ITEM 300)	A-F	2
305	251T1724-2		..LINK		1
310	BACR15BA8D		.RIVET- (SIZE DETERMINE ON INST)		1
315	69B81690-1		.SPINDLE		1
320	69B81691-1		.WASHER		1
325	251T1703-7		.CRANK ASSY-OUTPUT (OPT ITEM 325A)	A-D	1
-325A	251T1703-10		.CRANK ASSY-OUTPUT (OPT ITEM 325)	A-D	1
R -325B	251T1703-12		.CRANK ASSY-OUTPUT (OPT ITEM 325C)	E-H	1
R -325C	251T1703-13		.CRANK ASSY-OUTPUT (OPT ITEM 325B)	E-H	1
330	MKP8A		..BEARING- (V38443) (SPEC BACB10AP8) (OPT LLMKP8A (V38443)) (OPT MKP8AFS428 (V21335)) (OPT MKP8ATT (V43991)) (OPT MKP8A2TS (V43991)) (OPT MKP8E6531 (V21335)) (OPT MKP8AG20 (V38443)) (OPT MKP8ALY196 (V40920)) (OPT MKP8A (V38443)) (REPLD BY ITEM 330B) (PRE SB 27-128)	A-D	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-330A	ACMKP8AA3908		..BEARING (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920))	E-H	1
R -330B	ACMKP8AA3908		..BEARING (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (REPLS ITEM 330) (POST SB 27-128)	A-D	1
335	MB541DDG20		..BEARING (V38443) (SPEC BACB10AS17) (OPT LLMB541 (V38443)) (OPT MB541-2TS (V43991)) (OPT MB541DDFS428 (V21335)) (OPT MB541TT (V43991)) (OPT MT341E (VK8455)) (REPLD BY ITEM 335B) (PRE SB 27-128)	A-D	1
R -335A	ACMB541DDA3908		..BEARING (V21335) (SPEC BACB10FU17R) (OPT ACMB541DDP28LY198 (V40920))	E-H	1
R -335B	ACMB541DDA3908		..BEARING (V21335) (SPEC BACB10FU17R) (OPT ACMB541DDP28LY198 (V40920)) (REPLS ITEM 335) (POST SB 27-128)	A-D	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-340	251T1703-8		..CRANK- (USED ON ITEMS 325, 325B)		1
-340A	251T1703-11		..CRANK- (USED ON ITEMS 325A, 325C)		1
345	251T1725-1		.LINK-DRAG (OPT ITEM 345A)		1
-345A	251T1725-3		.LINK-DRAG (OPT ITEM 345)		1
350	BACS18K25-47W		.SPACER- (V08073) (SPEC BACS18K25-47W)		1
355	AN960PD416		.WASHER		1
360	H10-4BAC		.NUT- (V15653) (SPEC BACN10JC4) (OPT NS202101-048 (V80539)) (OPT RMLH9075-4W (V72962)) (OPT T6S428J (V71087)) (OPT VN303A048 (V92215)) (OPT 96-048 (V80539)) (OPT BRH10A4 (V52828))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-365	251T1701-15		DELETED		
365A	251T1701-19		.HOUSING ASSY- (OPT ITEM 365B)	A,C	1
-365B	251T1701-15		.HOUSING ASSY- (OPT ITEM 365A)	A,C	1
R -365C	251T1701-25		.HOUSING ASSY	F,H	1
-370	251T1701-16		DELETED		
-370A	251T1701-20		.HOUSING ASSY- (OPT ITEM 370B)	B,D	1
-370B	251T1701-16		.HOUSING ASSY- (OPT ITEM 370A)	B,D	1
R -370C	251T1701-24		.HOUSING ASSY	E,G	1
375	MB540DDG20		..BEARING- (V38443) (SPEC BACB10AS14) (OPT LLMB540 (V38443)) (OPT MB540-2TS (V43991)) (OPT MB540DDFS428 (V21335)) (OPT MB540TT (V43991)) (OPT MT340E (VK8455)) (REPLD BY ITEM 375B) (PRE SB 27-128)	A-D	1
R -375A	ACMB540DDA3908		..BEARING (V21335) (SPEC BACB10FU14R) (OPT ACMB540DDP28LY198 (V40920))	E-H	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01- -375B	ACMB540DDA3908		..BEARING (V21335) (SPEC BACB10FU14R) (OPT ACMB540DDP28LY198 (V40920)) (REPLS ITEM 375) (POST SB 27-128)	A-D	1
380	6800D048		..RETAINER- (V80539) (SPEC BACR10G43) ATTACHING PARTS		1
385	BACR15BA3AD		..RIVET- (SIZE DETERMINE ON INST) -----*-----		2
390	BACB30NR4K15		..BOLT		1
395	251T1712-1		..COVER-BONDED		1
400	251T1712-2		..COVER-BONDED		1
405	251T1712-3		..COVER-BONDED		1
410	251T1701-17		DELETED		
410A	251T1701-21		..HOUSING (USED ON ITEMS 365A)	A,C,E G	1
-410B	251T1701-17		..HOUSING (USED ON ITEM 365B)	A,C	1
-415	251T1701-18		DELETED		
-415A	251T1701-22		..HOUSING (USED ON ITEMS 370A)	B,D,F H	1
-415B	251T1701-18		..HOUSING (USED ON ITEM 370B)	B,D	1

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