

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF INBOARD AILERON CONTROL AND DROOP MECHANISM QUADRANT ASSEMBLY
COMPONENT MAINTENANCE MANUAL 27-11-28

REVISION NO. 5 DATED NOV 01/99

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.

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AND PAGE NO.

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DESCRIPTION OF CHANGE

Added top assemblies 251T1602-11 thru -14 per the latest engineering data.

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HIGHLIGHTS

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INBOARD AILERON CONTROL AND DROOP
MECHANISM QUADRANT ASSEMBLY

PART NUMBER 251T1602-5 THRU -14

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

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR B12597	JUN 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:

Assembly DEC 12/83

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INTRODUCTION

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INBOARD AILERON CONTROL AND DROOP MECHANISM QUADRANT ASSEMBLY

DESCRIPTION AND OPERATION

1. Description

A. The inboard aileron control and droop mechanism quadrant assembly is a mechanical device composed of two forged aluminum support assemblies, crank and lever assemblies, quadrant assembly and a corrosion resistant steel cam. The cam is bolted to the quadrant assembly which is attached to both support assemblies. The crank assembly rotates around the quadrant assembly on antifriction bearings. The opposite end of the lever and crank assemblies are connected by two springs that apply pressure to maintain contact between the lever assembly and the surface of the cam.

2. Operation

- A. The inboard aileron control and droop mechanism quadrant assembly controls motion of the ailerons relative to aileron control wheel movement. Aileron control wheel travel away from the neutral position produces aileron travel. The cam and lever assembly form a breakout assembly that prevents the quadrant from jamming if the inboard aileron will not operate.
- B. The flap drive angle gearbox provides input to the inboard aileron control and droop mechanism quadrant assembly. This input, which occurs as the flaps are being lowered, produces an aileron output motion of ten degrees.

3. Leading Particulars (approximate)

Width -- 7 inches
Length -- 12 inches
Height -- 15 inches
Weight -- 8 pounds

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DESCRIPTION & OPERATION

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DISASSEMBLY

NOTE: Disassemble this component only as necessary to complete fault isolation, determine the serviceability of parts, perform required repairs, and restore the unit to serviceable condition.

Do not remove flanged bushings from parts unless necessary for repair or replacement.

1. Remove parts (10A thru 20B) and remove support assemblies (25, 65A or 27, 67A). Remove parts (45 thru 60B) from support assembly (65A or 67A).
2. Remove retainer assembly (95), bushing (90), and spacer (110A) from quadrant assembly (365 or 370).

WARNING: USE EXTREME CARE WHEN REMOVING SPRINGS (305), NUT (230) OR PIVOT (270). SPRINGS (305) ARE HEAVILY LOADED.

3. Remove rivets (162), clip (163), collar (155), bearing (160), and bolt (145). Remove parts (225A thru 230) and remove lever assembly (215 or 220). Remove parts (190 thru 210) from lever assembly (215 or 220).

NOTE: Do not remove bearing (160, 235) unless necessary for repair or replacement.

4. Remove parts (115, 120 thru 140, 250 thru 305) and remove crank assembly (165B or 170B).
5. Remove parts (310 thru 360) from quadrant assembly (365 or 370).

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CLEANING

1. Clean all parts except bearings using standard industry practices (Ref 20-30-03) and additional procedures in following steps.
2. Clean all sealed bearings (100, 115, 160, 175, 205A, 235, 375, IPL Fig. 1) per manufacturer's instructions.

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CHECK

1. Check all parts for defects in accordance with standard industry practices.
2. Refer to Fits and Clearances for design dimensions and wear limits.
3. Magnetic particle check per 20-20-01 -- Springs (305, IPL Fig. 1), pivot (270), cam (310, 312).
4. Penetrant check per 20-20-02 -- Lever (240, 245), crank (180B, 185B), support (40, 42), quadrant (380, 385), spacer (135), retainer (105), plate top (290), plate bottom (295), support (80A, 82A).
5. Check springs (305).

CAUTION: DO NOT EXTEND SPRING (305) BEYOND 7.00 INCHES OR PERMANENT DEFORMATION MAY RESULT.

- A. Extend spring to 4.86-4.88 inches and check that load is 26.5-29.5 lbs.
- B. Extend spring to 6.92-6.94 inches and check that load is 84.9-102.9 lbs.
- C. Make sure the springs (305) are not corroded or unprimed. If the springs (305) are corroded or unprimed, replace the springs (305).

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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>
251T1610	SUPPORT	1-1
251T1620	SUPPORT	1-1
251T1611	QUADRANT	2-1
251T1612	SUPPORT	3-1
251T1621	SUPPORT	3-1
251T1618	CRANK	4-1
251T1619	LEVER	5-1
251T1628	RETAINER	6-1
- - -	MISCELLANEOUS PARTS REFINISH	7-1
- - -	BUSHING SEALING	8-1
251T1629	CAM	9-1
251T1631	PLATE	10-1
251T1640	PLATE	10-1
251T1626	SPACER	11-1
251T1632	SPACER	11-1
251T1639	PIVOT	11-1
251T1641	WASHER	11-1

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2. Standard Practices

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

20-30-03 General Cleaning Procedures
20-41-01 Decoding Table for Boeing Finish Codes
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. Sealant -- BMS 5-95 (Ref 20-60-04)

4. Dimensioning Symbols

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

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- STRAIGHTNESS
- ▭ FLATNESS
- ⊥ PERPENDICULARITY (OR SQUARENESS)
- // PARALLELISM
- ROUNDNESS
- ⊙ CYLINDRICITY
- ⌒ PROFILE OF A LINE
- △ PROFILE OF A SURFACE
- ◎ CONCENTRICITY
- ≡ SYMMETRY
- ∠ ANGULARITY
- ↗ RUNOUT
- ↗ TOTAL RUNOUT
- ⊏ COUNTERBORE OR SPOTFACE
- ∇ COUNTERSINK

- ⊕ THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
- ∅ DIAMETER
- S ∅ SPHERICAL DIAMETER
- R RADIUS
- SR SPHERICAL RADIUS
- () REFERENCE
- BASIC (BSC) OR DIM A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
- A- DATUM
- Ⓜ MAXIMUM MATERIAL CONDITION (MMC)
- Ⓛ LEAST MATERIAL CONDITION (LMC)
- Ⓢ REGARDLESS OF FEATURE SIZE (RFS)
- Ⓟ PROJECTED TOLERANCE ZONE
- FIM FULL INDICATOR MOVEMENT

EXAMPLES

<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">— 0.002</div> <div style="margin-left: 10px;">STRAIGHT WITHIN 0.002</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">◎ ∅ 0.0005 C</div> <div style="margin-left: 10px;">CONCENTRIC TO C WITHIN 0.0005 DIAMETER</div> </div>
<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">⊥ 0.002 B</div> <div style="margin-left: 10px;">PERPENDICULAR TO B WITHIN 0.002</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">≡ 0.010 A</div> <div style="margin-left: 10px;">SYMMETRICAL WITH A WITHIN 0.010</div> </div>
<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">// 0.002 A</div> <div style="margin-left: 10px;">PARALLEL TO A WITHIN 0.002</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">∠ 0.005 A</div> <div style="margin-left: 10px;">ANGULAR TOLERANCE 0.005 WITH A</div> </div>
<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">○ 0.002</div> <div style="margin-left: 10px;">ROUND WITHIN 0.002</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">⊕ ∅ 0.002 Ⓢ B</div> <div style="margin-left: 10px;">LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE</div> </div>
<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">⊙ 0.010</div> <div style="margin-left: 10px;">CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">⊥ ∅ 0.010 Ⓜ A</div> <div style="margin-left: 10px;">AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION</div> </div>
<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">⌒ 0.006 A</div> <div style="margin-left: 10px;">EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM PLANE A</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">2.000</div> <div style="margin-left: 10px;">THEORETICALLY EXACT DIMENSION IS 2.000</div> </div>
<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">△ 0.020 A</div> <div style="margin-left: 10px;">SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">OR 2.000 BSC</div> </div>
<p>NOTE: DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME</p>	<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">0.020 A</div> <div style="border: 1px solid black; padding: 2px 5px; margin-left: 5px;">A 0.020</div> </div>

True Position Dimensioning Symbols
Figure 601

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REPAIR-GENERAL

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SUPPORT ASSY – REPAIR 1-1

251T1610-1, -4, -6
251T1620-4, -6, -8

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of support (40, 42) which may only require stripping and restoration of the original finish, refer to Refinish instructions, Fig. 601.

1. Bushing Replacement (IPL Fig. 1)

- A. Remove bushings (30, 35).
- B. Install new bushings per 20-50-03 except use wet BMS 5-95 sealant.
- C. Seal bushings according to REPAIR 8-1.

2. Hole Repair (Fig. 601, Fig. 602, Fig. 603)

- A. Install repair bushing.
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture repair bushing per Fig. 603. Minimum wall thickness of bushing to be 0.032 inch.
 - (3) Install bushing with wet sealant per 20-50-03.

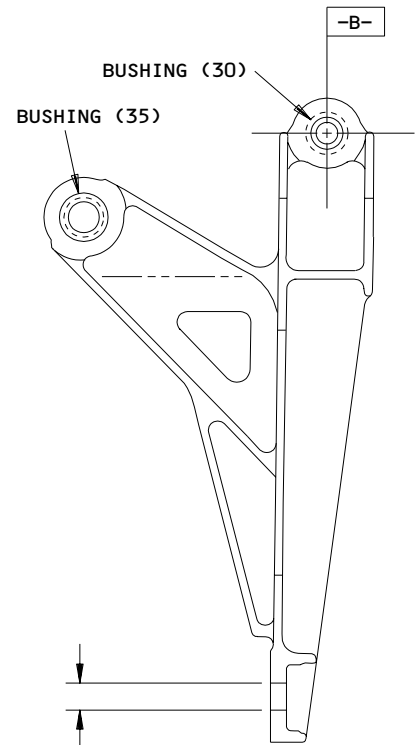
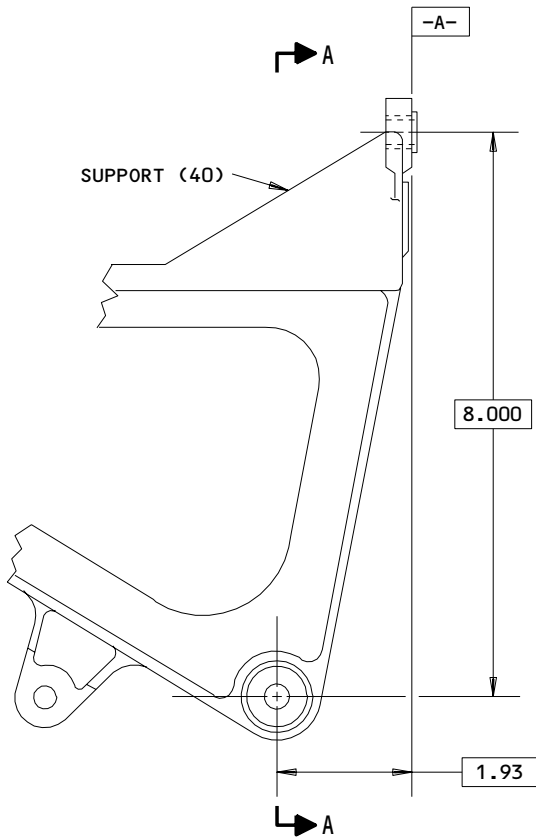
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0.3790
 0.3750 DESIGN DIA
 0.5006 1
⊕ ∅ 0.006 (M) A B
 SPOTFACE DIA 0.93-0.95
 TO FINAL THICKNESS OF 0.24-0.26
 FILLET RADIUS 0.05-0.07

A-A

251T1610-1 SHOWN
 251T1610-4,-6 SIMILAR

REFINISH

SUPPORT (40) -- CHROMIC ACID OR SULFURIC ACID ANODIZE (F-17.05) ALL OVER. APPLY ONE COAT OF BMS 10-11, TYPE 1, PRIMER (F-20.02) ALL OVER, EXCEPT OMIT PRIMER FROM ALL HOLES

1 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF 1

125 / ALL MACHINED SURFACES EXCEPT UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1610-1,-4,-6
 Support Repair
 Figure 601

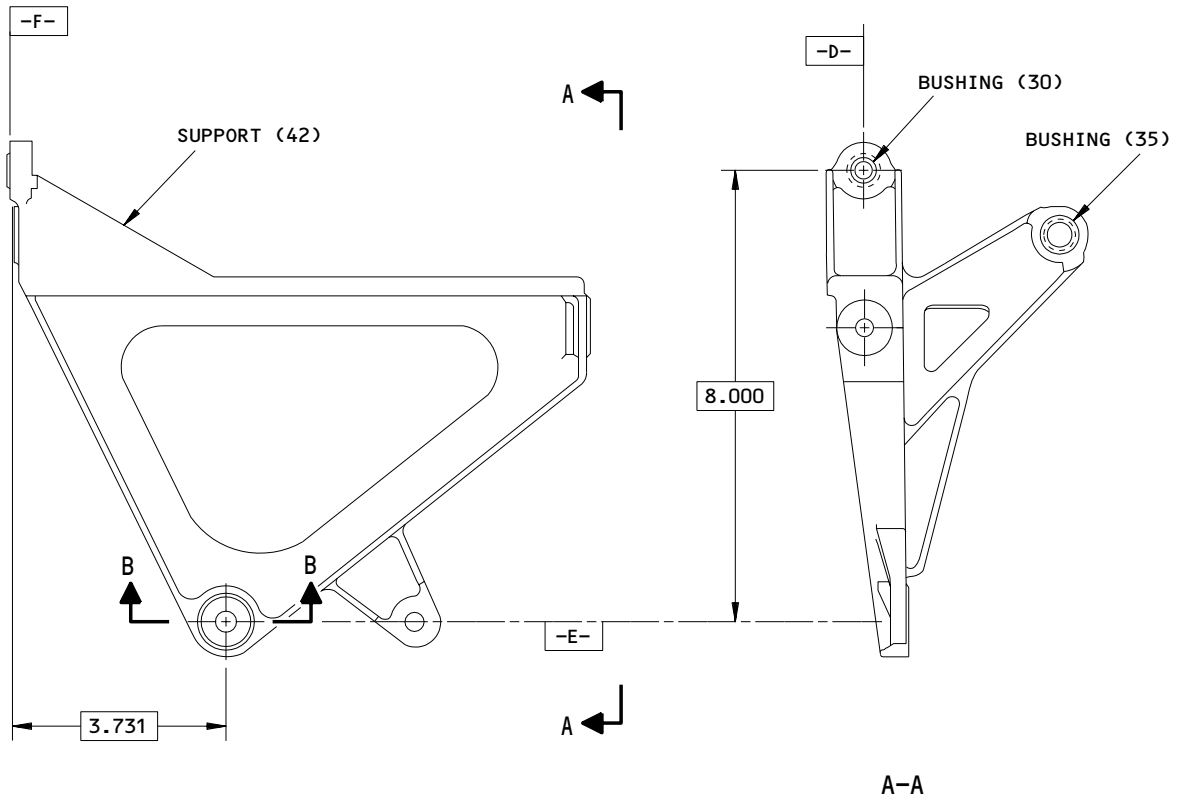
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251T1620-4 SHOWN
251T1620-6,-8 SIMILAR

251T1620-4,-6,-8
Support Repair
Figure 602 (Sheet 1)

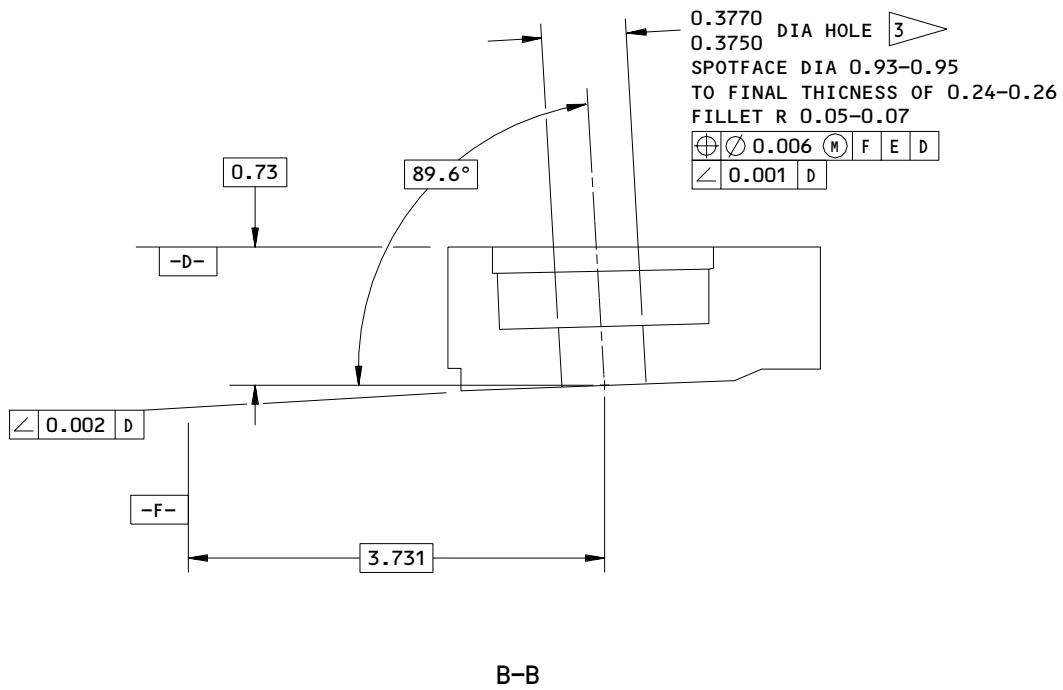
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REFINISH

SUPPORT (40) -- CHROMIC ACID OR SULFURIC ACID ANODIZE (F-17.05) ALL OVER. APPLY ONE COAT OF BMS 10-11, TYPE 1, PRIMER (F-20.02) ALL OVER, EXCEPT OMIT PRIMER FROM ALL HOLES

∇ 1 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF ∇ 1

125 ∇ ALL MACHINED SURFACES EXCEPT UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1620-4,-6,-8
 Support Repair
 Figure 602 (Sheet 2)

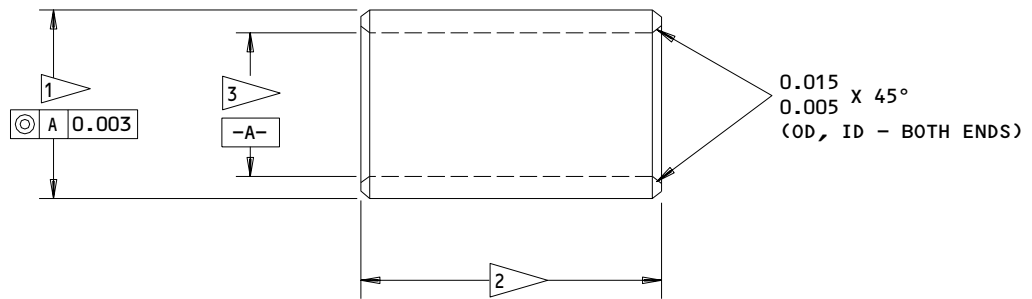
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REPAIR 1-1

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1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR
 DIA OF SUPPORT PLUS 0.0004-0.0016 INTERFERENCE

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

3 BUSHING ID:
 0.3750-0.3790 FOR 251T1610
 0.3750-0.3770 FOR 251T1620

ALL DIMENSIONS ARE IN INCHES
 DIMENSIONS APPLY AFTER PLATING

32/ ALL MACHINED SURFACES UNLESS SHOWN
 DIFFERENTLY

ANGULAR TOLERANCE, ± 0.5 DEG

MATERIAL: AL-NI-BRONZE

FINISH: CADMIUM PLATE

Repair Bushing Details
 Figure 603

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REPAIR 1-1

01.1

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QUADRANT ASSY – REPAIR 2-1

251T1611-1, -2, -9, -10

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of quadrant (380, 385) which may only require stripping and restoration of the original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Replacement (IPL Fig. 1, Fig. 601)

- A. Remove bearing (375).
- B. Install new bearing and roller swage per 20-50-03 except use wet BMS 10-11, type 1 primer (F-20.06) in lieu of MIL-G-23827 grease.

2. Hole Repair (Fig. 601)

- A. Install oversize bushing to replace installation bushing.
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture oversize bushing per Fig. 602.
 - (3) Attach bushing to quadrant (380, 385) with tag stating "Hole has been machined oversize. Use attached bushing in place of installation bushing BACB28AK04-038."
- B. Install repair bushing.
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture repair bushing per Fig. 603. Minimum wall thickness of bushing to be 0.032 inch.
 - (3) Install bushing with wet sealant per 20-50-03.
- C. Install oversize bolt to replace bolt (315).

NOTE: Installation of oversize bolt requires machining of both quadrant (380, 385) and cam (310, 312).

- (1) Machine holes to repair dimension shown to remove defects.
- (2) Machine applicable holes in cam (310, 312) to repair dimension shown in REPAIR 9-1 to permit installation of the oversize bolt.
- (3) Attach the required oversize bolts, BACB30LU3-20X, to quadrant (380, 385) with a tag stating "Hole has been machined oversize. Use attached bolt in place of bolt BACB30LU3-20."

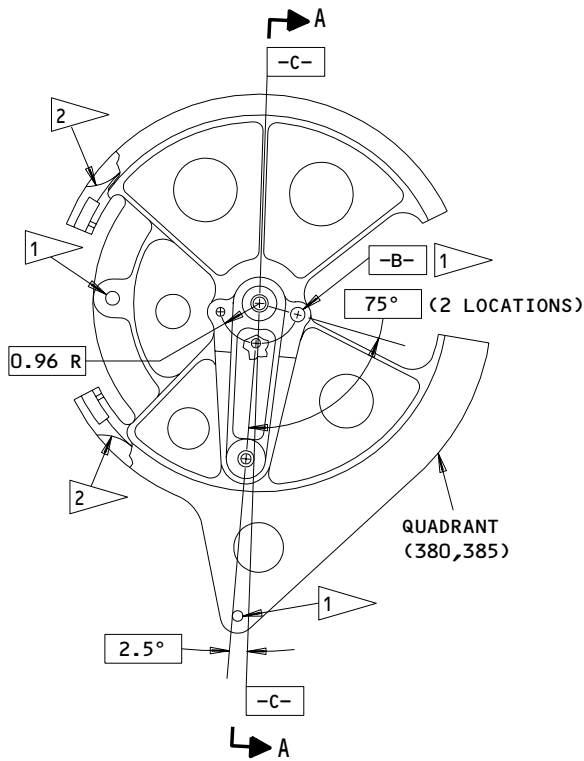
27-11-28

REPAIR 2-1

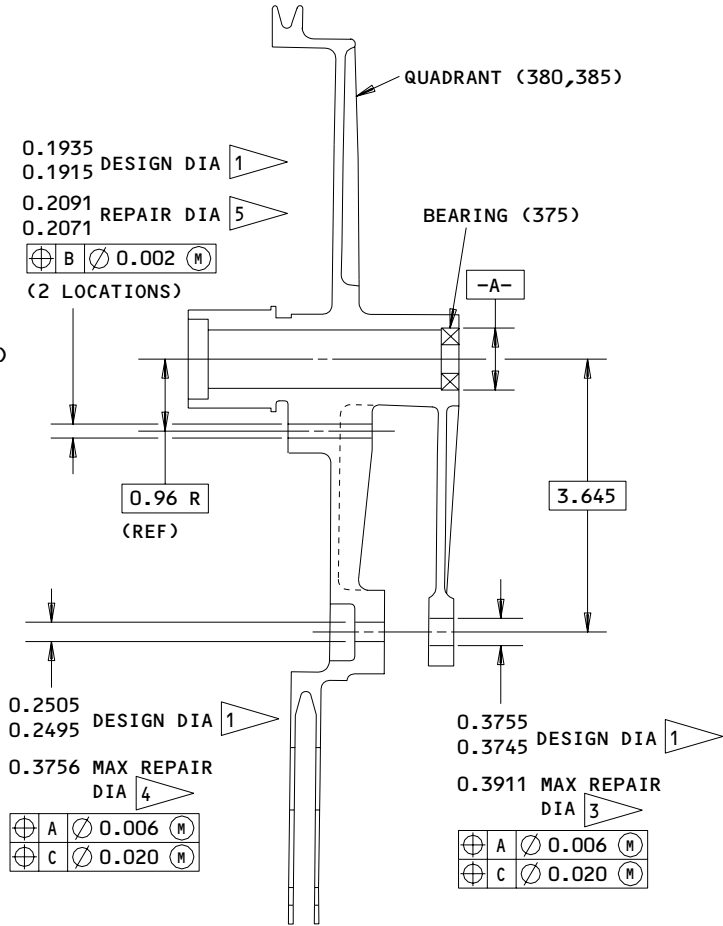
01.1

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251T1611-1 SHOWN
 251T1611-2 OPP



A-A

REFINISH

QUADRANT (380,385) -- SULFURIC ACID OR CHROMIC ACID ANODIZE (F-17.05) ALL OVER. APPLY ONE COAT OF BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER EXCEPT AS NOTED BY 1 2

- 1 OMIT BMS 10-11, TYPE 1 PRIMER (F-20.02) THIS SURFACE.
- 2 APPLY TWO COATS OF BMS 10-11, TYPE 1 PRIMER (F-20.03) TO CABLE GROOVE SURFACE ONLY.
- 3 REPAIR LIMIT FOR INSTALLATION OF OVER-SIZE BUSHING (FIG. 602).
- 4 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING (FIG. 603).
- 5 REPAIR DIMENSION FOR INSTALLATION OF OVERSIZE BOLT.

REPAIR

REF 3 4 5
 125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY
 BREAK SHARP EDGES 0.008 R
 ALL DIMENSIONS ARE IN INCHES
 MATERIAL: AL ALLOY

251T1611-1,-2,-9,-10

Quadrant Repair
 Figure 601

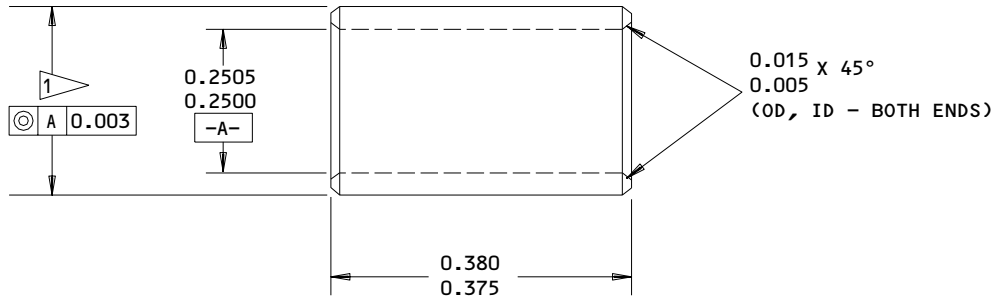
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REPAIR 2-1

01.1

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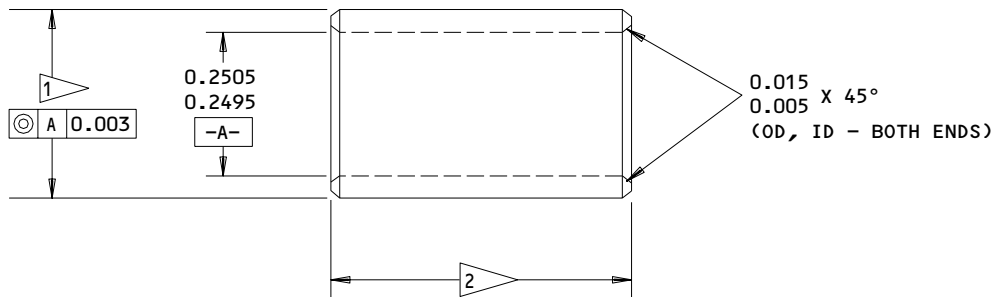
1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR DIA OF QUADRANT MINUS 0.0000-0.0015 CLEARANCE

32/ ALL MACHINED SURFACES, EXCEPT AS NOTED
 ANGULAR TOLERANCE, ±0.5 DEG

ALL DIMENSIONS ARE IN INCHES
 DIMENSIONS APPLY AFTER PLATING

MATERIAL: CRES
 FINISH: CHROME PLATE

Oversize Bushing Details
 Figure 602



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

32/ ALL MACHINED SURFACES, EXCEPT AS NOTED
 ANGULAR TOLERANCE, ±0.5 DEG

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

MATERIAL: AL-NI-BRONZE
 FINISH: CADMIUM PLATE

ALL DIMENSIONS ARE IN INCHES
 DIMENSIONS APPLY AFTER PLATING

Repair Bushing Details
 Figure 603

27-11-28

REPAIR 2-1

01.1

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292962

292963

SUPPORT ASSEMBLY – REPAIR 3-1

251T1612-7, -9, -11

251T1621-6, -8, -10

NOTE: Refer to REPAIR-GEN for a list of applicable standard practices. For repair of support (65, 67A) which may only require stripping and restoration of the original finish refer to Refinish instructions.

1. Bushing Replacement (IPL Fig. 1)

- A. Remove bushings (70, 75).
- B. Install new bushings per 20-50-03 except use wet BMS 5-95 sealant.
- C. Seal bushings according to REPAIR 8-1.

2. Refinish (IPL Fig. 1)

- A. Support (80A, 80B, 82A) -- Chromic acid or sulfuric acid anodize (F-17.05) all over. Apply one coat of BMS 10-11, type 1 primer (F-20.02) all over except omit primer on all holes. Material: Al alloy.
- B. Support (82B) -- Sulfuric acid anodize (F-17.03) all over. Apply BMS 10-11, type 1 primer (F-20.02) all over, except in holes. Material: Al alloy.
- C. Support (80C, 82C) -- Boric acid-sulfuric acid anodize (F-17.31) all over. Apply BMS 10-11, type 1 primer (F-20.03) all over, except in holes. Material: Al alloy.

27-11-28

REPAIR 3-1

01.1

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CRANK ASSY - REPAIR 4-1

251T1618-11, -12, -15, -16

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

1. Bearing Replacement (IPL Fig. 1, Fig. 601)

- A. Remove bearing (175).
- B. Install new bearing and roller swage per 20-50-03 except use wet BMS 10-11, type 1 primer (F-20.06) in lieu of MIL-G-23827 grease.

2. Hole Repair (Fig. 601)

- A. Install repair bushing for 1.7500-1.7505 diameter hole.
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture repair bushing per Fig. 602. Minimum wall thickness of bushing to be 0.032 inch.
 - (3) Install bushing with wet sealant per 20-50-03.
- B. Install repair bushing for 0.2495-0.2505 diameter hole.
 - (1) Machine as required, within repair limit, to remove defects.
 - (2) Manufacture repair bushing per Fig. 603. Minimum wall thickness of bushing to be 0.032 inch.
 - (3) Install bushing with wet sealant per 20-50-03.
- C. Install oversize bolt to replace bolt (120).

Note: Installation of oversize bolt requires machining of crank (180B, 185B) and spacers (135, 140).

- (1) Machine holes to repair dimension shown to remove defects.
- (2) Machine holes in spacers (135, 140) to repair dimensions shown in REPAIR 11-1 to permit installation of the oversize bolt.
- (3) Attach required oversize bolts, BACB30GY8-15X, to crank assembly (165B, 170B) with a tag stating "Hole has been machined oversize. Use attached bolt in place of bolt BACB30GY8-15."

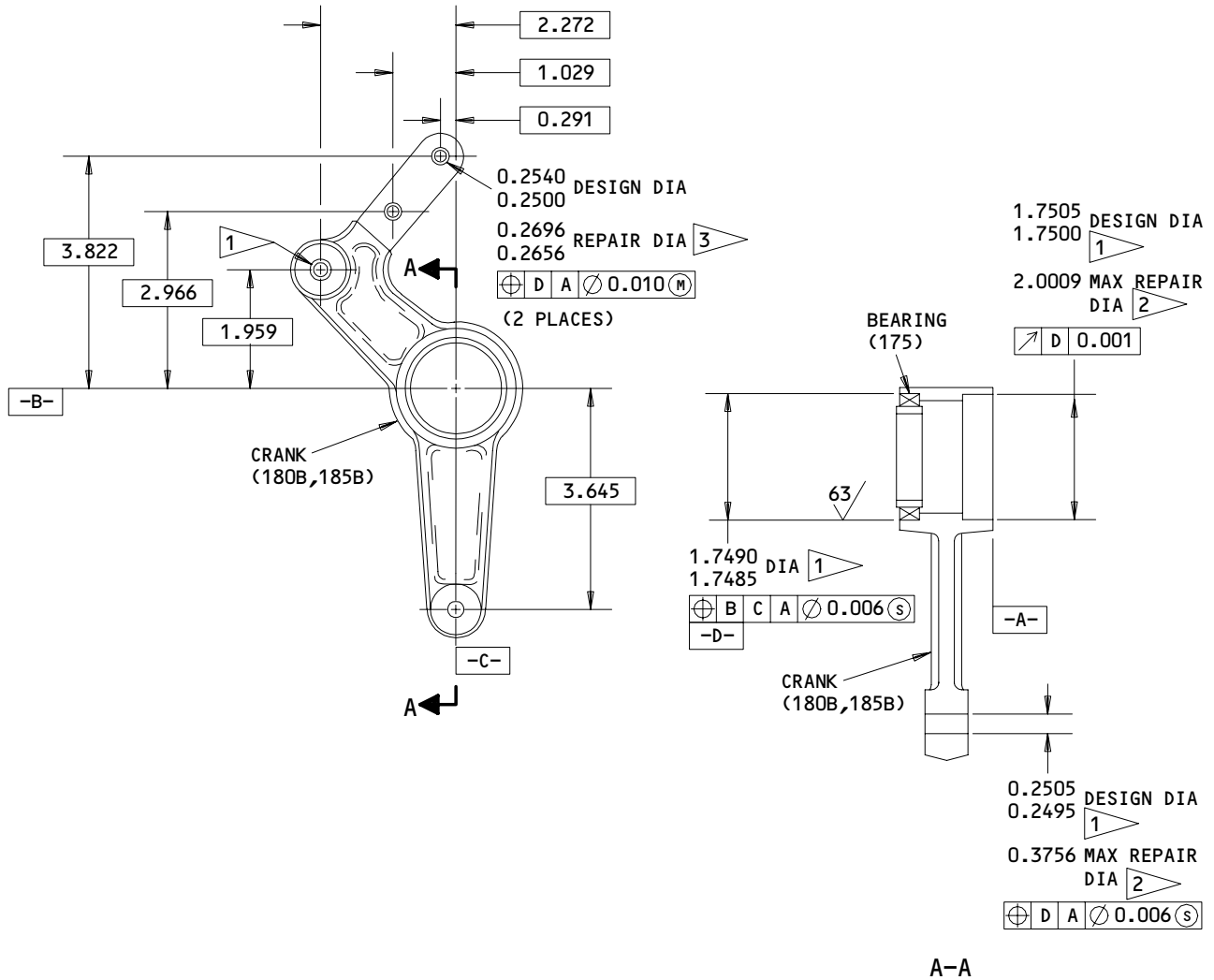
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REPAIR 4-1

01.1

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REFINISH

CRANK (180B,185B) -- CHROMIC ACID ANODIZE (F-17.04) ALL OVER. APPLY TWO COATS OF BMS 10-11, TYPE 1 PRIMER (F-20.03) ALL OVER EXCEPT AS NOTED BY 1

- 1 OMIT PRIMER FROM THIS SURFACE
- 2 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING
- 3 REPAIR DIMENSION FOR INSTALLATION OF OVERSIZE BOLT

REPAIR

REF 2 3
 125/ ALL MACHINED SURFACES EXCEPT AS NOTED
 BREAK SHARP EDGES 0.008 R
 MATERIAL: AL ALLOY
 ALL DIMENSIONS ARE IN INCHES

251T1618-11,-12,-15,-16

**Crank Repair
 Figure 601**

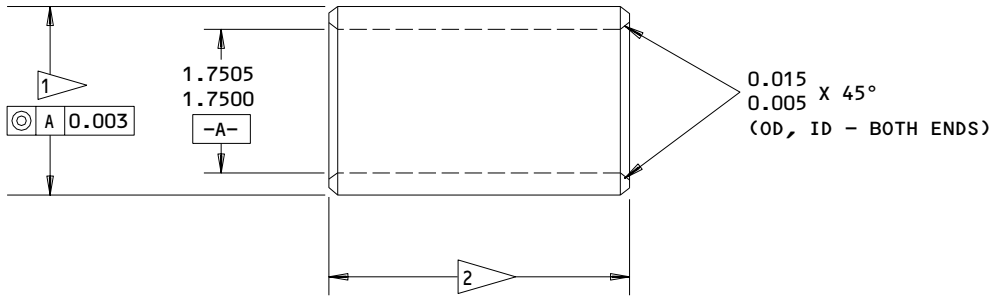
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REPAIR 4-1

01.1

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1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR DIA OF CRANK PLUS 0.0012-0.0031 INTERFERENCE

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

32/ ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ±0.5 DEG

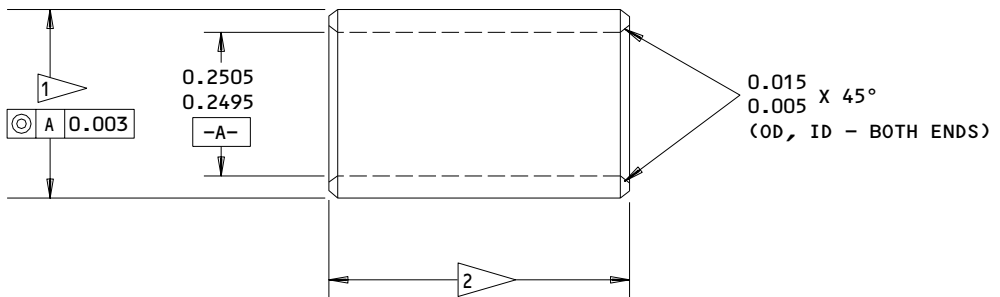
MATERIAL: AL-NI-BRONZE

FINISH: CADMIUM PLATE

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

Repair Bushing Details
 Figure 602



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

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

32/ 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 603

27-11-28

REPAIR 4-1

01.1

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292964

292965

LEVER ASSY - REPAIR 5-1

251T1619-1, -2, -7, -8

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of lever (240, 245) which may only require stripping and restoration of the original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Replacement (IPL Fig. 1, Fig. 601)

A. Remove bearing (235).

B. Install new bearing and roller swage per 20-50-03 except use wet BMS 10-11, type 1 primer (F-20.06) in lieu of MIL-G-23827 grease.

| 2. Hole Repair (Fig. 601)

| A. Install repair bushing.

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

| (2) Manufacture repair bushing per Fig. 602. Minimum wall thickness of bushing to be 0.032 inch.

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

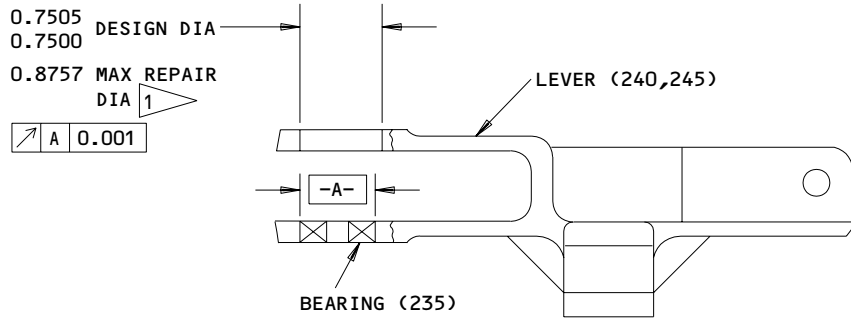
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REPAIR 5-1

01.1

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REFINISH

LEVER (240,245) -- CHROMIC ACID ANODIZE, TYPE 1 (F-17.04) AND APPLY 2 COATS OF PRIMER, BMS 10-11, TYPE 1 (F-20.03) ALL OVER EXCEPT OMIT PRIMER ON ALL HOLES

1 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

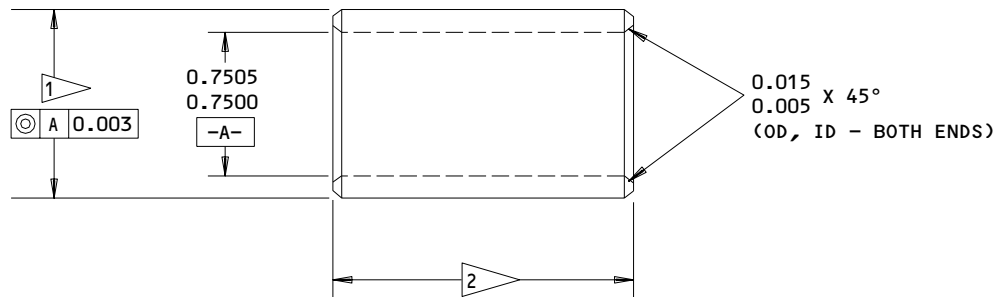
REF **1**
 125/ ALL MACHINES SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008 R

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1619-1,-2,-7,-8
 Lever Repair
 Figure 601



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

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

32/ 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

27-11-28

REPAIR 5-1

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01.1

RETAINER ASSY - REPAIR 6-1

251T1628-1, -3

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of retainer (105) which may only require stripping and restoration of the original finish, refer to Refinish instructions. Fig. 601.

1. Bearing Replacement (IPL Fig. 1)

- A. Remove bearing (100).
- B. Install new bearing and roller swage per 20-50-03 except use wet BMS 10-11, type 1 primer (F-20.06) in lieu of MIL-G-23827 grease.

2. Refinish

- A. Retainer (105) -- Chromic acid anodize (F-17.04) all over. Material: Al alloy.

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REPAIR 6-1

01.1

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MISC PARTS REFINISH - REPAIR 7-1

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

IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Bushing (90)	4340 Steel, 125-145 ksi	Cadmium plate (F-15.06) all over.
Clip (163)	Al alloy	Chromic acid anodize, type 1 (F-18.13).
Spring (305)	9254 Steel	Apply two coats BMS 10-11, type 1 primer (F-20.03) all over.

Refinish Details
Figure 601

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REPAIR 7-1

01.101

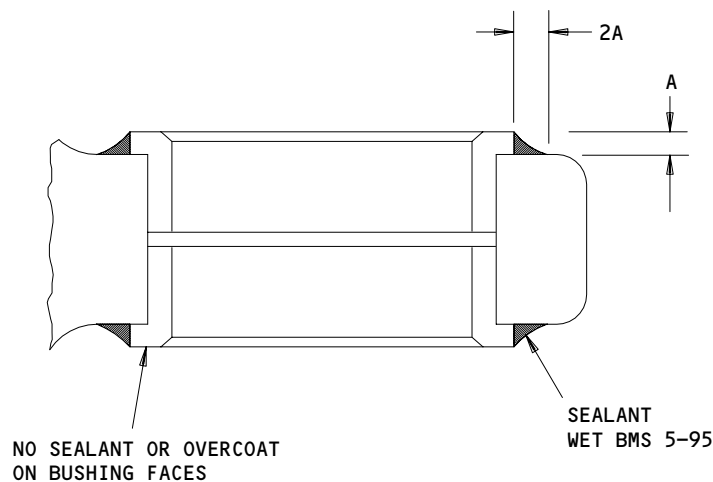
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BUSHING SEALANT APPLICATION – REPAIR 8-1

1. Bushing Sealant Application

A. Seal all flanged bushings after installation per Fig. 601.



1. CLEAN AREAS OF SEALANT APPLICATION WITH SOLVENT.
2. APPLY FILLET OF SEALANT TO EDGES OF BUSHINGS AS SHOWN.

Bushing Sealant
Figure 601

7957

27-11-28

REPAIR 8-1

01

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CAM - REPAIR 9-1

251T1629-1, -2

1. Plating Repair

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.

2. Hole Repair (Fig. 601)

A. Install oversize bolt to replace bolt (315).

NOTE: Installation of oversize bolt requires machining of both quadrant (380, 385) and cam (310, 312).

- (1) Machine holes to repair dimensions shown to remove defects.
- (2) Machine applicable holes in quadrant (380, 385) to repair dimensions shown in REPAIR 2-1 to permit installation of the oversize bolt.
- (3) Attach the required oversize bolts, BACB30LU3-20X, to cam (310, 312) with a tag stating "Hole has been machined oversize. Use attached bolt in place of bolt BACB30LU3-20."

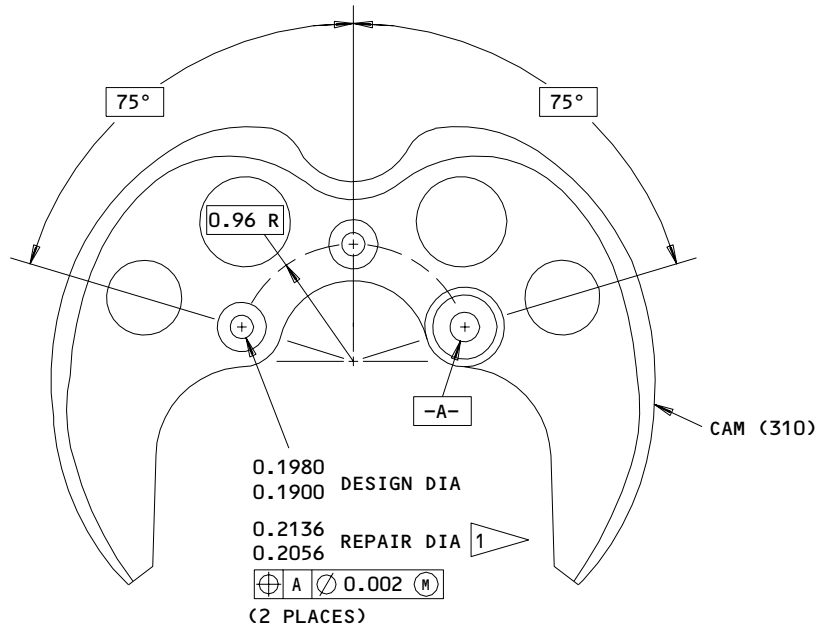
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REPAIR 9-1

01.1

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251T1629-1 SHOWN
 251T1629-2 OPP

REFINISH

PASSIVATE (F-17.09) ALL OVER

1 REPAIR DIMENSION FOR INSTALLATION OF
 OVERSIZE BOLT

REPAIR

REF 1

125 ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008 R

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

ALL DIMENSIONS ARE IN INCHES

251T1629-1,-2
 Cam Repair
 Figure 601

27-11-28

REPAIR 9-1

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01.1

PLATE - REPAIR 10-1

251T1631-1, -2
251T1640-1, -2

1. Plating Repair

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.

2. Hole Repair (Fig. 601)

A. Install oversize bushing to replace bushing (265).

NOTE: Installation of oversize bushing requires machining of plates (290, 295) and pivot (270).

- (1) Machine holes to repair dimension shown to remove defects.
- (2) Machine applicable hole in pivot (270) to repair dimension shown in REPAIR 11-1 to permit installation of the oversize bushing.
- (3) Manufacture oversize bushing per Fig. 602.
- (4) Attach bushing to plates (290, 295) with tag stating "Hole has been machined oversize. Use attached bushing in place of bushing BACB28Y3C052."

B. Install oversize bolt to replace bolt (275).

NOTE: Installation of oversize bolt requires machining of plates (290, 295) and washer (300).

- (1) Machine holes to repair dimensions shown to remove defects.
- (2) Machine hole in washer (300) to repair dimension shown in REPAIR 11-1 to permit installation of the oversize bolt.
- (3) Attach the oversize bolt, BACB30FQ6A7U, to plates (290, 295) with a tag stating "Hole has been machined oversize. Use attached bolt in place of bolt BACB30FN6A7U."

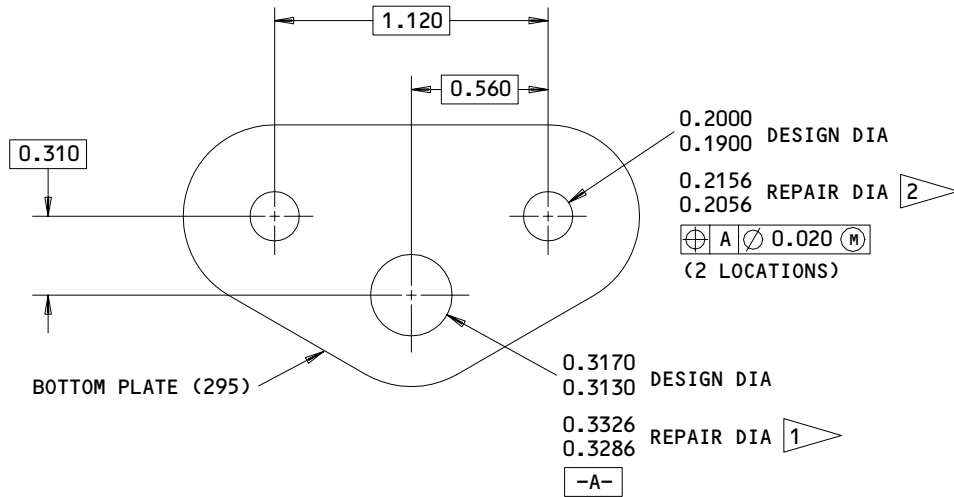
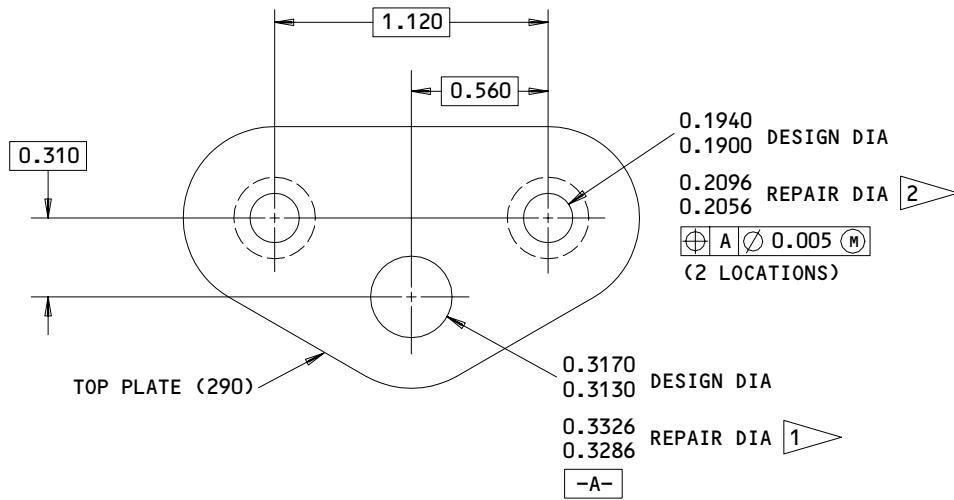
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REPAIR 10-1

01.1

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REFINISH

PLATE (290,295) -- PASSIVATE (F-17.09) ALL OVER AND APPLY TWO COATS OF BMS 10-11, TYPE 1, PRIMER (F-20.03).

- 1 REPAIR DIMENSION FOR INSTALLATION OF OVERSIZE BUSHING
- 2 REPAIR DIMENSION FOR INSTALLATION OF OVERSIZE BOLT

REPAIR

REF 1 2

125/ ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008 R

MATERIAL: CRES

ALL DIMENSIONS ARE IN INCHES

251T1631-1,-2
 251T1640-1,-2
 Plate Repair
 Figure 601

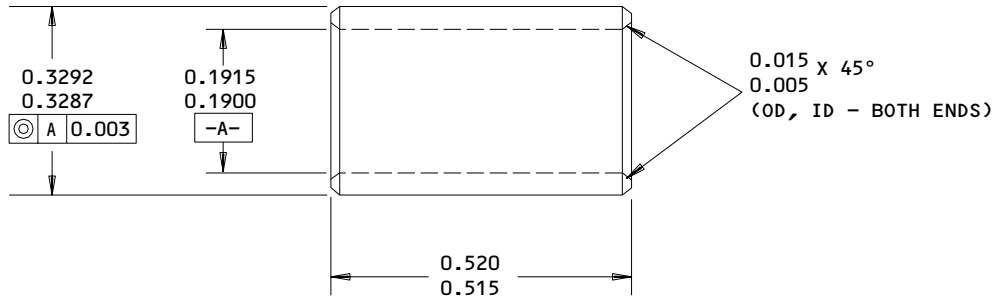
27-11-28

REPAIR 10-1

01.1

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32/ ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ±0.5 DEG

MATERIAL: CRES

FINISH: CHROME PLATE

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

Oversize Bushing Details
Figure 602

292969

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REPAIR 10-1

01.1

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PIVOT, SPACER, WASHER – REPAIR 11-1

251T1626-2
 251T1632-1
 251T1639-1, -2
 251T1641-2, -3

1. Plating Repair

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.

2. Hole Repair (Fig. 601)

A. Pivot (270) -- Install oversize bushing to replace bushing (265).

NOTE: Installation of oversize bushing requires machining of plates (290, 295) and pivot (270).

- (1) Machine pivot (270) to repair dimension shown to remove defects.
- (2) Machine applicable holes in plates (290,295) to repair dimensions shown in REPAIR 10-1 to permit installation of the oversize bushing.
- (3) Manufacture oversize bushing. Refer to REPAIR 10-1, Fig. 602.
- (4) Attach bushing to pivot (270) with tag stating "Hole has been machined oversize. Use attached bushing in place of bushing BACB28Y3C052."

B. Washer (300) -- Install oversize bolt to replace bolt (275).

NOTE: Installation of oversize bolt requires machining of plates (290, 295) and washer (300).

- (1) Refer to Hole Repair, REPAIR 10-1.

C. Spacers (135, 140) -- Install oversize bolt to replace bolt (120).

NOTE: Installation of oversize bolt requires machining of crank (180B, 185B and spacers (135, 140).

- (1) Refer to Hole Repair, REPAIR 7-1.

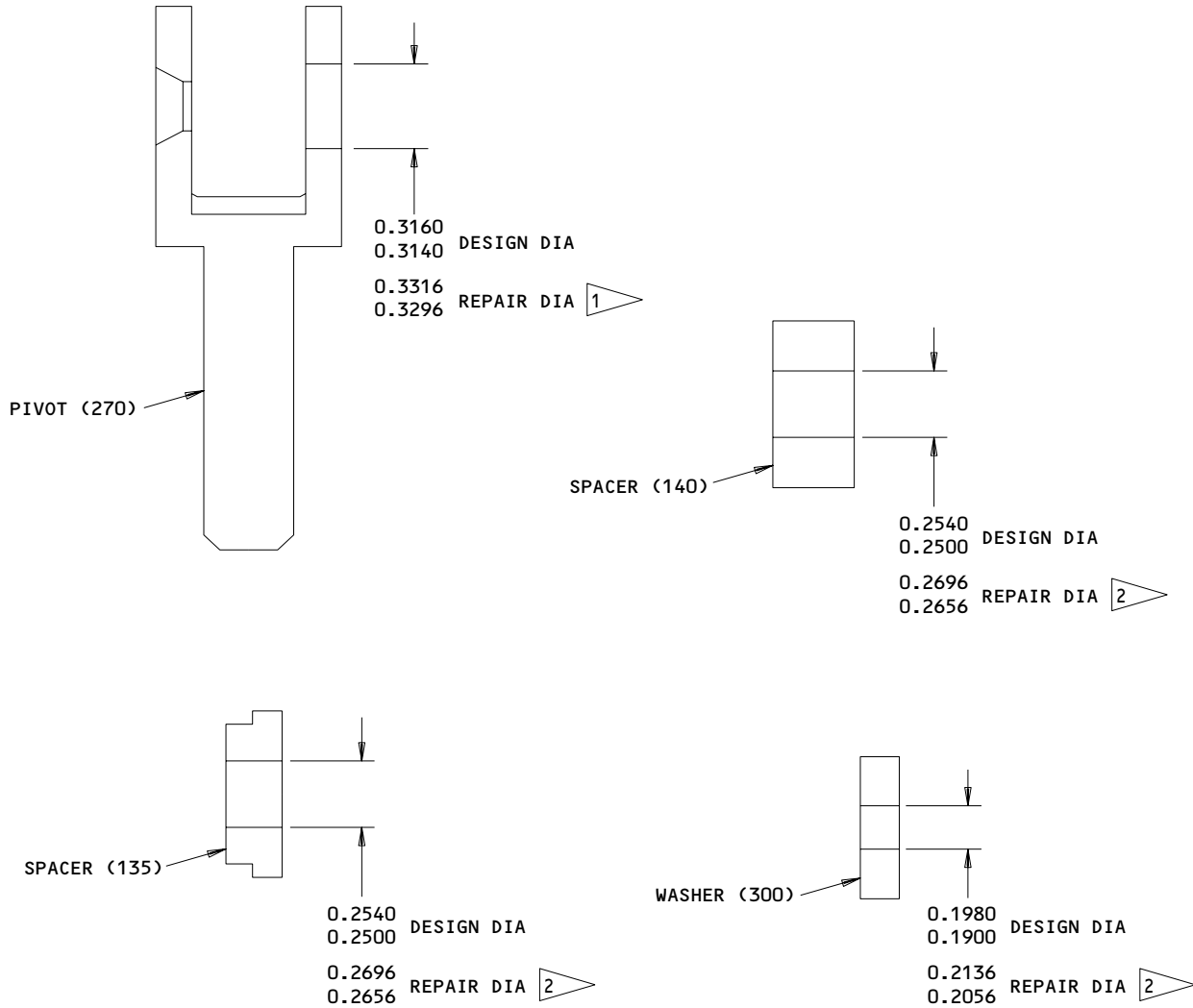
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REPAIR 11-1

01.1

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REFINISH

PIVOT (270) -- PASSIVATE (F-17.09) ALL OVER.
 SPACER (135), SPACER (140), WASHER (300) --
 CHROMIC ACID ANODIZE AND APPLY TWO COATS OF
 BMS 10-11, TYPE 1, PRIMER (F-18.13 AND
 F-20.02)

- 1 REPAIR DIMENSION FOR INSTALLATION OF
 OVERSIZE BUSHING
- 2 REPAIR DIMENSION FOR INSTALLATION OF
 OVERSIZE BOLT

REPAIR

REF 1 2
 125/ ALL MACHINED SURFACES UNLESS SHOWN
 DIFFERENTLY
 BREAK SHARP EDGES 0.008 R
 MATERIAL: PIVOT (270) - 15-5PH CRES
 (150-170 KSI)
 SPACERS (135,140)
 WASHER (300) - AL ALLOY
 ALL DIMENSIONS ARE IN INCHES

251T1626-2;251T1632-1 251T1639-1,-2; 251T1641-2,-3
 Pivot, Spacer, Washer Repair
 Figure 601

27-11-28

REPAIR 11-1
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01.1

ASSEMBLY1. Materials

A. Grease -- BMS 3-24 (Ref 20-50-03)

2. Assembly (IPL Fig. 1, Fig. 701, 702)

A. Apply grease to shank and threads of bolts or screws, faces of washers and spacers, threads of nuts and I.D. and O.D. of bushing (45 thru 60B, 190 thru 200A, 210, 315 thru 360).

B. Install parts (45 thru 60B) on support assembly (65A or 67A). Attach bearing (205A) to lever assembly (215 or 220) using parts (190 thru 200A, 210). Attach cam (310 or 312) to quadrant assembly (365 or 370) using parts (315 thru 340A). Install parts (345A thru 360) on quadrant assembly (365 or 370). Install bearing (115) in crank assembly (165B or 170B) and bearing (160) in lever assembly (215 or 220) with grease (Ref 20-50-03).

C. Apply grease to shank and threads of bolts, faces of washers, threads of nuts and O.D. and I.D. of bushing (120 thru 130, 250 thru 265, 275 thru 285B). Also thoroughly coat spring hooks (305) with grease.

D. Secure one end of springs (305) to crank assembly (165B or 170B) using parts (120 thru 140). Secure remaining free ends of springs (305) to top and bottom plates, parts (290, 295) using parts (275 thru 285B, 300).

E. Attach pivot (270) to top and bottom plates using parts (250 thru 265).

F. Apply grease to shank and threads of bolt (145). Secure lever assembly (215 or 220) to crank assembly (165B or 170B) using bolt (145) and collar (155). Secure clip (163) to lever assembly with rivets (162).

G. Apply grease to shank and threads of bolts, faces of washers, threads of nuts and I.D. and O.D. of bushing (10A thru 20B, 90). Slide crank assembly (165B or 170B) over quadrant assembly (365 or 370). Install bolt (10A) through washer (15A), support (25), quadrant assembly (365 or 370), and spacer (110A). Install retainer assembly (95) over spacer (110A) and bolt (10A) and into quadrant assembly (365 or 370). Install bolt (10A) through bushing (90) and support assembly (65A) with nut (20B). Tighten nut (20B) to 90-110 pound-inches.

27-11-28ASSEMBLY
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WARNING: USE EXTREME CARE WHEN INSTALLING PIVOT (270). SPRINGS (305) ARE HEAVILY LOADED.

H. Attach pivot (270) to lever assembly (215 or 220) according to Fig. 701.

3. Storage

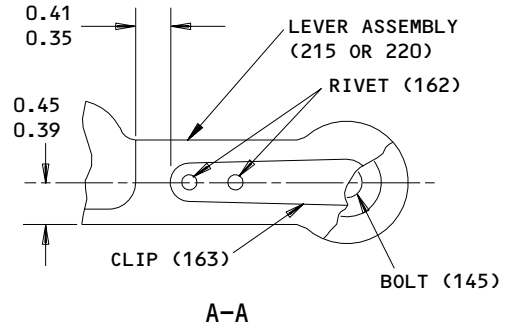
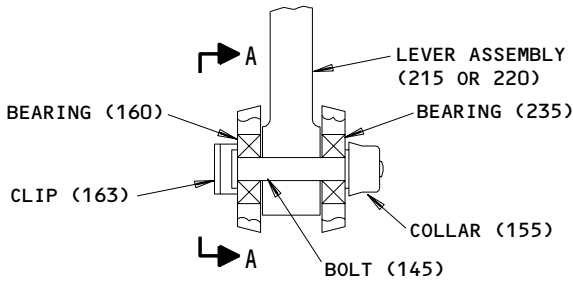
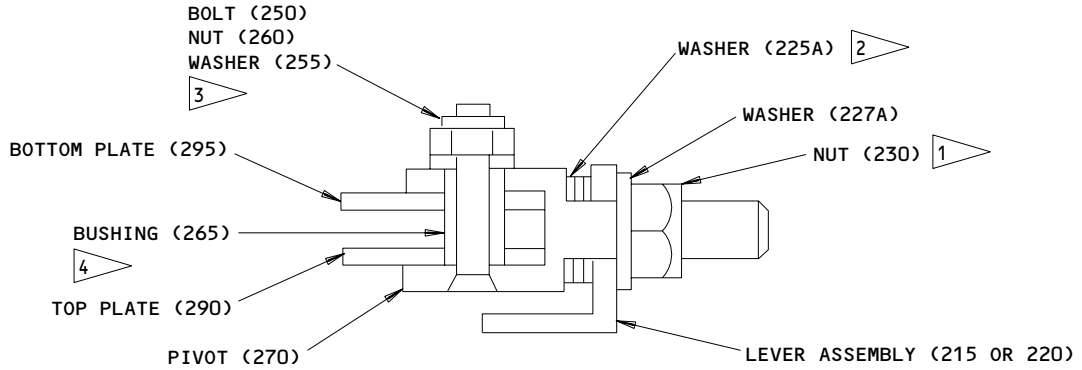
A. Prepare and store component in accordance with standard industry practices.

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ASSEMBLY
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01

BOEING
COMPONENT
MAINTENANCE MANUAL



- 1 ADJUST NUT (230) TO ACHIEVE A DETENT BREAK-OUT TORQUE OF 280-322 POUNDS-INCH FOR -5,-7,-9,-11 ASSEMBLY AND 212-244 POUNDS-INCH FOR -6,-8,-10,-12 ASSEMBLY. THE DETENT BREAKOUT TORQUE IS MEASURED ON THE CRANK (180B) WITH THE QUADRANT ASSEMBLY (365) AND THE CAM (310) SECURED. BREAKOUT OCCURS WHEN A 0.002 TO 0.004 INCH SHIM CAN BE INSTALLED BETWEEN THE CAM (310 OR 312) AND THE ROLLER (205A) ON THE UNLOADED SIDE. MEASURE GAP BETWEEN LEVER ASSEMBLY (215 OR 220) AND PIVOT (270) AND FILL WITH WASHERS (225A) AS SHOWN. INSTALL LOCKNUT (230) TO SECURE ADJUSTMENT AS SHOWN.
- 2 INSTALL WASHERS (225A) AS REQUIRED ACCORDING TO
- 3 INSTALL WITH BMS 3-24 GREASE (F-19.16) ON ALL SURFACES 1
- 4 INSTALL WITH BMS 3-24 GREASE

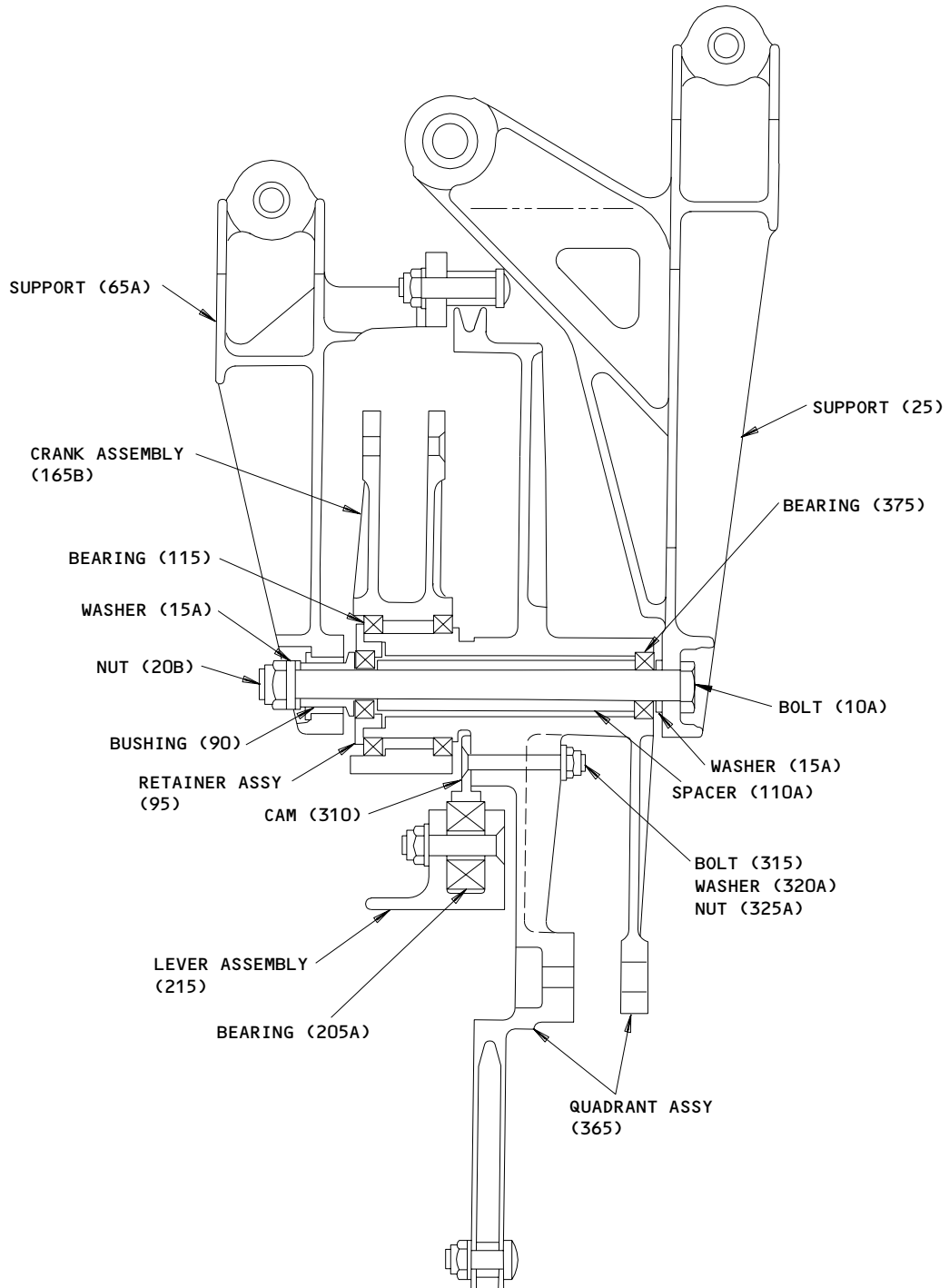
ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

Assembly Details
 Figure 701

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01.1



Assembly Details
 Figure 702

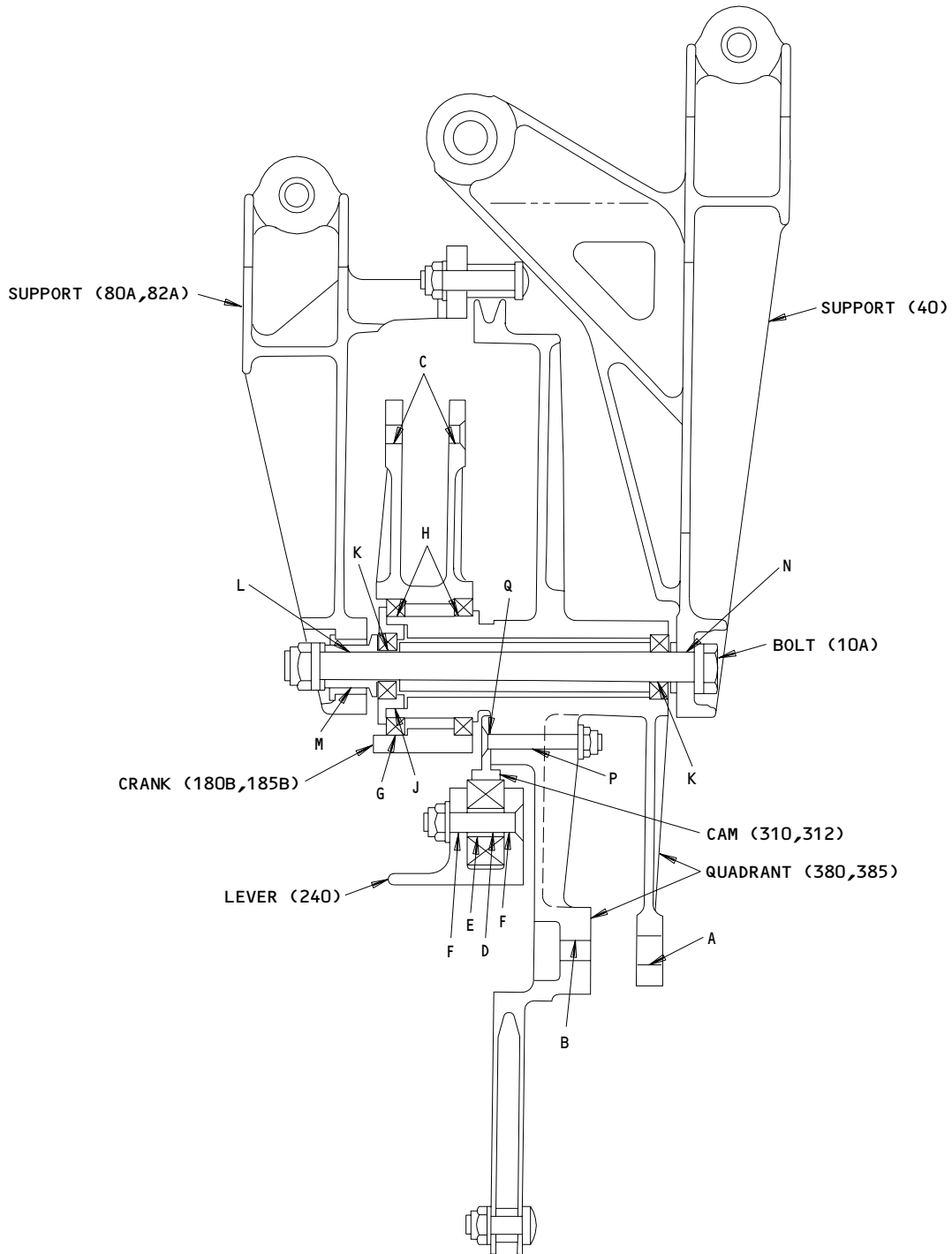
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ASSEMBLY
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01.1

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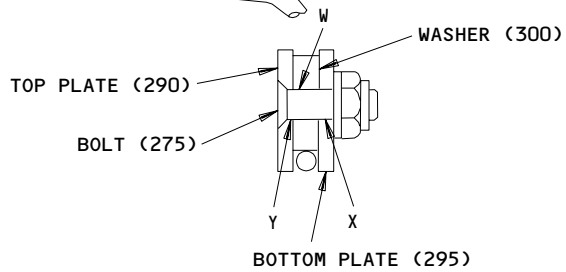
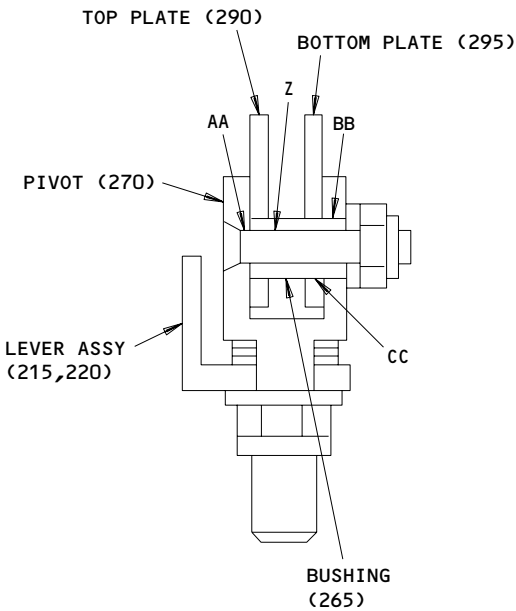
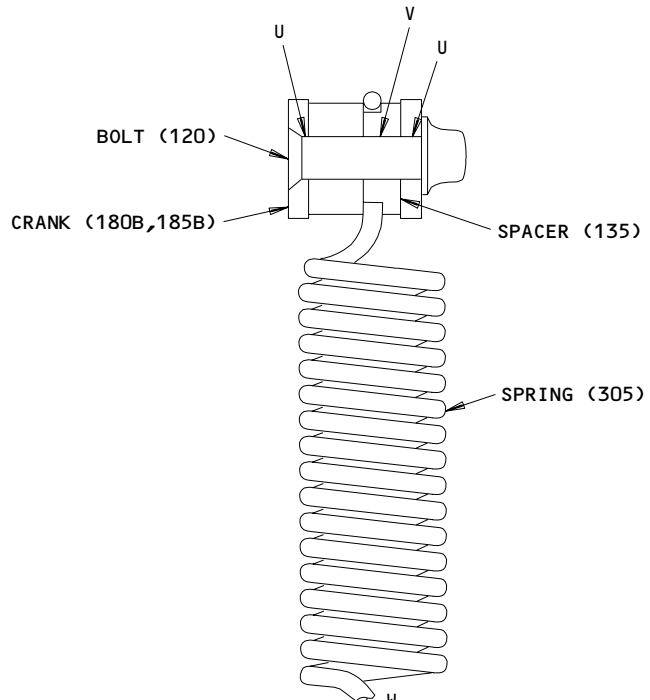
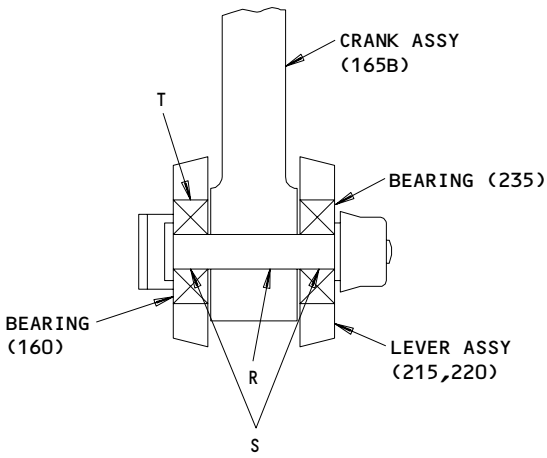
FITS AND CLEARANCES



Fits and Clearances
Figure 801 (Sheet 1)

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FITS AND CLEARANCES
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Fits and Clearances
 Figure 801 (Sheet 2)

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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	
A	ID 380,385	0.3745	0.3755	0.0000	0.0015	0.3720	0.3780	0.0035
	OD *[2]	0.3740	0.3745					
B	ID 380,385	0.2495	0.2505	0.0000	0.0020	0.2465	0.2535	0.0040
	OD *[3]	0.2485	0.2495					
C	ID 180B,185B	0.2495	0.2505	0.0000	0.0020	0.2465	0.2535	0.0040
	OD *[4]	0.2485	0.2495					
D	ID 210	0.2500	0.2505	0.0005	0.0020	0.2465	0.2535	0.0040
	OD 190	0.2485	0.2495					
E	ID 205A	0.3743	0.3750	-0.0002 *[1]	0.0010	0.3720	0.3775	0.0030
	OD 210	0.3740	0.3745					
F	ID 240	0.2495	0.2505	0.0000	0.0020	0.2465	0.2535	0.0040
	OD 190	0.2485	0.2495					
G	ID 180B,185B	1.7500	1.7505	0.0000	0.0015	1.7470	1.7535	0.0035
	OD 115	1.7490	1.7500					
H	ID 115,175	1.3118	1.3125	-0.0002 *[1]	0.0010	1.3095	1.3150	0.0030
	OD 380,385	1.3115	1.3120					
J	ID 180B,185B	1.0805	1.0815	0.0000	0.0020	1.0780	1.0840	0.0035
	OD 105	1.0795	1.0805					
K	ID 100,375	0.3747	0.3750	0.0002	0.0015	0.3715	0.3780	0.0035
	OD 10A	0.3735	0.3745					
L	ID 90	0.3750	0.3756	0.0005	0.0021	0.3721	0.3780	0.0035
	OD 10A	0.3735	0.3745					
M	ID 75	0.5610	0.5640	-0.0005 *[1]	0.0030	0.5600	0.5655	0.0040
	OD 90	0.5610	0.5615					
N	ID 40,42	0.3750	0.3770	0.0005	0.0035	0.3715	0.3800	0.0055
	OD 10A	0.3735	0.3745					
P	ID 380,385	0.1915	0.1935	0.0020	0.0050	0.1865	0.1965	0.0070
	OD 315	0.1885	0.1895					

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	
Q	ID 310,312	0.1900	0.1980	0.0005	0.0095	0.1865	0.2010	0.0115
	OD 315	0.1885	0.1895					
R	ID 180B,185B	0.2495	0.2505	0.0000	0.0025	0.2460	0.2540	0.0045
	OD 145	0.2480	0.2495					
S	ID 160,235	0.2497	0.2500	0.0002	0.0020	0.2460	0.2535	0.0040
	OD 145	0.2480	0.2495					
T	ID 240,245	0.7500	0.7505	0.0000	0.0009	0.7476	0.7529	0.0029
	OD 160	0.7496	0.7500					
U	ID 180B,185B	0.2500	0.2540	0.0005	0.0060	0.2460	0.2575	0.0080
	OD 120	0.2480	0.2495					
V	ID 135	0.2500	0.2540	0.0005	0.0060	0.2460	0.2575	0.0080
	OD 120	0.2480	0.2495					
W	ID 300	0.1900	0.1980	0.0005	0.0095	0.1865	0.2010	0.0115
	OD 275	0.1885	0.1895					
X	ID 295	0.1900	0.2000	0.0005	0.0115	0.1865	0.2030	0.0135
	OD 275	0.1885	0.1895					
Y	ID 290	0.1900	0.1940	0.0005	0.0055	0.1865	0.1970	0.0075
	OD 275	0.1885	0.1895					
Z	ID 265	0.1900	0.1915	0.0005	0.0030	0.1865	0.1945	0.0050
	OD 250	0.1885	0.1895					
AA	ID 270	0.1900	0.1940	0.0005	0.0055	0.1865	0.1970	0.0075
	OD 250	0.1885	0.1895					
BB	ID 270	0.3140	0.3160	0.0004	0.0029	0.3111	0.3185	0.0049
	OD 265	0.3131	0.3136					
CC	ID 295	0.3130	0.3170	-0.0006	0.0039	0.3072	0.3195	0.0059
	OD 265	0.3131	0.3136	*[1]				

ALL DIMENSIONS ARE IN INCHES

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

*[2] INSTALLATION BUSHING BACB28AK04-038

*[3] INSTALLATION BOLT BACB30NF4-23

*[4] INSTALLATION BOLT BACB30FN8-15

Fits and Clearances
Figure 801 (Sheet 4)

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FITS AND CLEARANCES
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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
20B	NUT	90-110	

Torque Table
Figure 802

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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

08524 DEUTSCH FASTENER CORP SEE CODE V97928

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

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

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

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

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

30163 VALENTEC DAYRON INC
333 MAGUIRE BLVD PO BOX 140394
ORLANDO, FLORIDA 32814-0394

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

50632 KAMATICS CORP SUB OF KAMAN CORP
1335 BLUE HILLS ROAD
BLOOMFIELD, CONNECTICUT 06002-1304

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VENDORS

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

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

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

72962 HARVARD INDUSTRIES INC
3 WERNER WAY SUITE 210
LEBANON, NEW JERSEY 08833

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

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

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

92215 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
3010 W 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
ACMKP4AA3908		1	160A	1
		1	235A	1
ACMKP6AA3908		1	100A	1
		1	375A	1
ACMKP6AP26LY1XZ		1	100B	1
		1	375B	1
ACMKP6AP26LY198		1	100A	1
		1	375A	1
BACB10AP4		1	160	1
		1	235	1
BACB10AP6		1	100	1
		1	375	1
BACB10CF21PP		1	115	1
		1	175	1
BACB10ET06J		1	205B	1
BACB10FS04R		1	160C	1
BACB10FS4R		1	160A	1
		1	235A	1
BACB10FS6R		1	100A	1
		1	375A	1
BACB28AK04-049		1	210	1
BACB28X5M033		1	30	1
		1	70	1
BACB28X7M031		1	35	1
BACB28X9M041		1	75	1
BACB28Y3C052		1	265	1
BACB30FN6-11		1	250	1
BACB30FN6A11		1	250A	1
BACB30FN6A7U		1	275	2
BACB30GW8-20		1	145	1
BACB30GY8-15		1	120	2
BACB30LU3-20		1	315	2
BACB30LU4-16		1	190	1
BACB30LU4-20		1	330	1
BACB30NF6-79		1	10A	1
BACB30NN3K20		1	315A	2
BACB30NN4K16		1	190A	1
BACB30NN4K20		1	330A	1
BACB30VN8K20		1	145A	1
BACB30XT8K15		1	120A	2
BACC30BK8		1	130A	2
BACC30BK8		1	155A	1
BACC30K8		1	130	2
		1	155	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACN10JC3		1	260	1
BACN10JC3CD		1	325A	2
BACN10JC4		1	360	1
BACN10JC4CD		1	200A	1
		1	340A	1
		1	360A	1
BACN10JC5		1	230	1
BACN10YR3CD		1	260B	1
		1	285B	2
		1	325B	2
BACN10YR4CD		1	60B	1
		1	340B	1
BACN10YR6CD		1	20B	1
BACR15BB3B		1	162	2
BRH10A3		1	260	1
B542-2TS		1	115	1
		1	175	1
B542DD		1	115	1
		1	175	1
B542DDFS428		1	115	1
		1	175	1
B542SSG27		1	115	1
		1	175	1
HL19PB6-11		1	250	1
HL41-6-7		1	275	2
HL41PY6-11		1	250A	1
HL441N6-11		1	250A	1
HL441UC6-11		1	250A	1
H10-3BAC		1	260	1
H52732-3CD		1	260B	1
		1	285B	2
		1	325B	2
H52732-4CD		1	60B	1
		1	340B	1
H52732-6CD		1	20B	1
KRP173406FT		1	205A	1
LGPL2SPV8-20AC		1	145A	1
LLMKP4A		1	160	1
		1	235	1
LLMKP6A		1	100	1
		1	375	1
MCS24E		1	160	1
		1	235	1
MCS26E		1	100	1
		1	375	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MKP4A		1	160	1
		1	235	1
MKP4AFS428		1	160	1
		1	235	1
MKP4AG20		1	160	1
		1	235	1
MKP4ALY196		1	160	1
		1	235	1
MKP4ASD610		1	160	1
		1	235	1
MKP4A2TS		1	160	1
		1	235	1
MKP4E6531		1	160	1
		1	235	1
MKP6A		1	100	1
		1	375	1
MKP6AFS428		1	100	1
		1	375	1
MKP6AG20		1	100	1
		1	375	1
MKP6ALY196		1	100	1
		1	375	1
MKP6ATT		1	100	1
		1	375	1
MKP6A2TS		1	100	1
		1	375	1
MKP6E6531		1	100	1
		1	375	1
NAS1149D0363J		1	255A	1
		1	280A	2
		1	320A	2
NAS1149D0463J		1	50A	1
		1	125A	2
		1	195A	1
		1	335A	1
		1	350A	1
NAS1149D0516		1	227A	1
NAS1149D0516J		1	225A	1
NAS1149D0663J		1	15A	2
NAS1805-4L		1	200B	1
NAS42DD12-204FC		1	110A	1
NAS42DD8-18FC		1	355A	1
NAS42DD8-40FC		1	55A	1
NAS623-4-15		1	45	1
NAS623-4-7		1	345A	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NS202101-02		1	260	1
PACMKP4AA3908		1	160A	1
		1	235A	1
PLH53CD		1	260B	1
		1	285B	2
		1	325B	2
PLH54CD		1	60B	1
		1	340B	1
PLH56CD		1	20B	1
RMLH9075-3W		1	260	1
SALPYT8-20		1	145	1
SAL100YT8-15		1	120	2
SMC6EG7A		1	100A	1
		1	375A	1
SSMKP4SD706		1	160A	1
		1	235A	1
SSMKP6ASD706		1	100A	1
		1	375A	1
T342E		1	115	1
		1	175	1
T6S1032J		1	260	1
WC376-7		1	275	2
2DCC8		1	130	2
		1	155	1
251T1602-10		1	5C	RF
251T1602-11		1	1D	RF
251T1602-12		1	5D	RF
251T1602-13		1	1E	RF
251T1602-14		1	5E	RF
251T1602-5		1	1A	RF
251T1602-6		1	5A	RF
251T1602-7		1	1B	RF
251T1602-8		1	5B	RF
251T1602-9		1	1C	RF
251T1610-1		1	25	1
251T1610-2		1	40	1
251T1610-4		1	25A	1
251T1610-5		1	40A	1
251T1610-6		1	25B	1
251T1610-7		1	40B	1
251T1611-1		1	365	1
251T1611-10		1	370A	1
251T1611-2		1	370	1
251T1611-3		1	380	1
251T1611-4		1	385	1
251T1611-7		1	380A	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
251T1611-8		1	385A	1
251T1611-9		1	365A	1
251T1612-10		1	80B	1
251T1612-11		1	65C	1
251T1612-12		1	80C	1
251T1612-7		1	65A	1
251T1612-8		1	80A	1
251T1612-9		1	65B	1
251T1618-11		1	165B	1
251T1618-12		1	170B	1
251T1618-13		1	180B	1
251T1618-14		1	185B	1
251T1618-15		1	165C	1
251T1618-16		1	170C	1
251T1618-17		1	180C	1
251T1618-18		1	185C	1
251T1619-1		1	215	1
251T1619-10		1	245A	1
251T1619-2		1	220	1
251T1619-3		1	240	1
251T1619-4		1	245	1
251T1619-7		1	215A	1
251T1619-8		1	220A	1
251T1619-9		1	240A	1
251T1620-4		1	27	1
251T1620-5		1	42	1
251T1620-6		1	27A	1
251T1620-7		1	42A	1
251T1620-8		1	27B	1
251T1620-9		1	42B	1
251T1621-10		1	67C	1
251T1621-11		1	82C	1
251T1621-6		1	67A	1
251T1621-7		1	82A	1
251T1621-8		1	67B	1
251T1621-9		1	82B	1
251T1626-2		1	140	2
251T1628-1		1	95	1
251T1628-2		1	105	1
251T1628-3		1	95A	1
251T1629-1		1	310	1
251T1629-2		1	312	1
251T1631-1		1	290	1
251T1631-2		1	290A	1
251T1632-1		1	135	2

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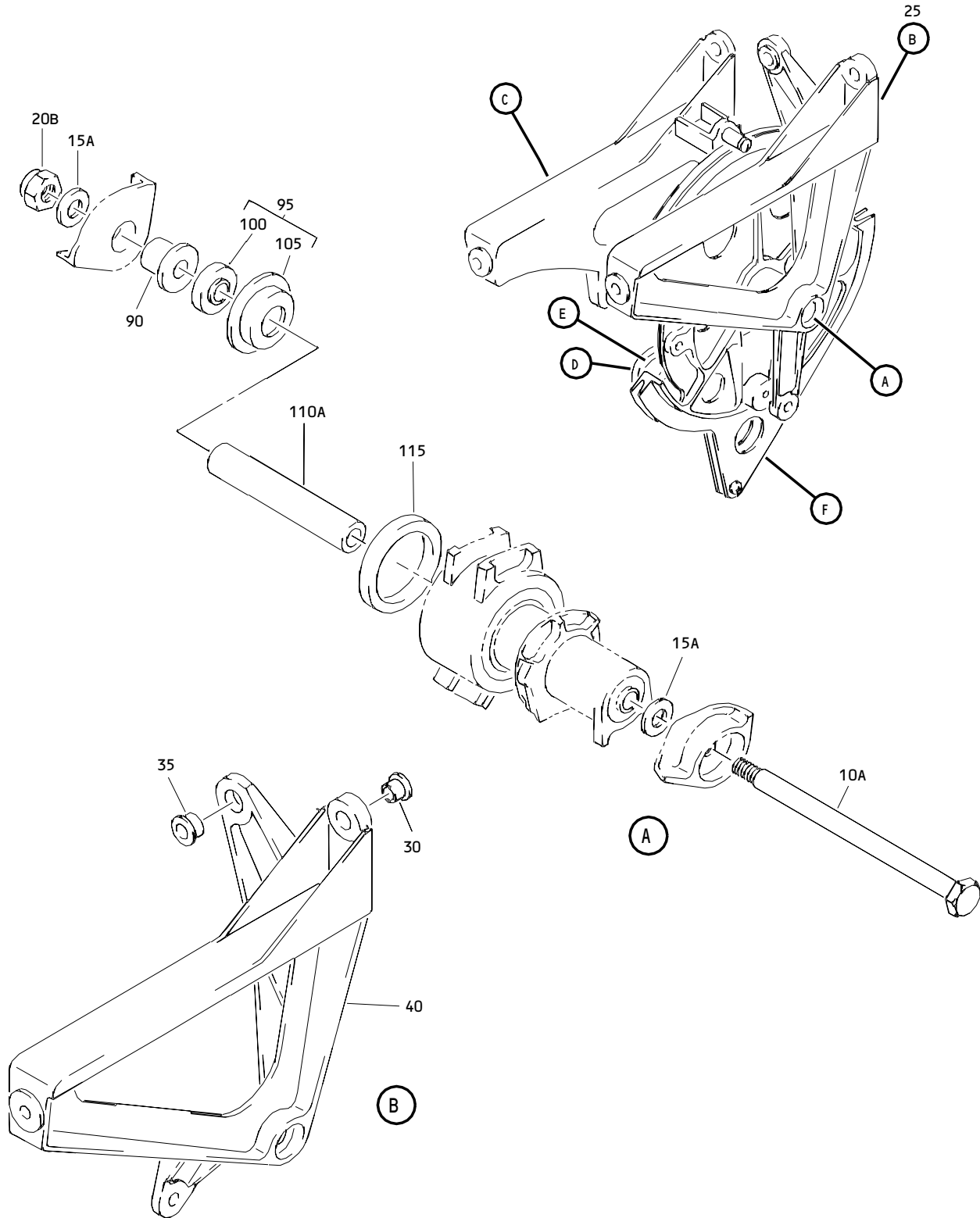
 ILLUSTRATED PARTS LIST
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BOEING
 COMPONENT
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
251T1635-1		1	305	2
251T1635-2		1	305A	2
251T1637-1		1	163	1
251T1639-1		1	270	1
251T1639-2		1	270A	1
251T1640-1		1	295	1
251T1640-2		1	295A	1
251T1641-2		1	300	2
251T1641-3		1	300A	2
251T3742-13		1	90	1
3SLCC8		1	130A	2
		1	155A	1
62547-6-11		1	250	1
67068-6A7U		1	275	2
81669V8K20		1	145A	1
96-02		1	260	1

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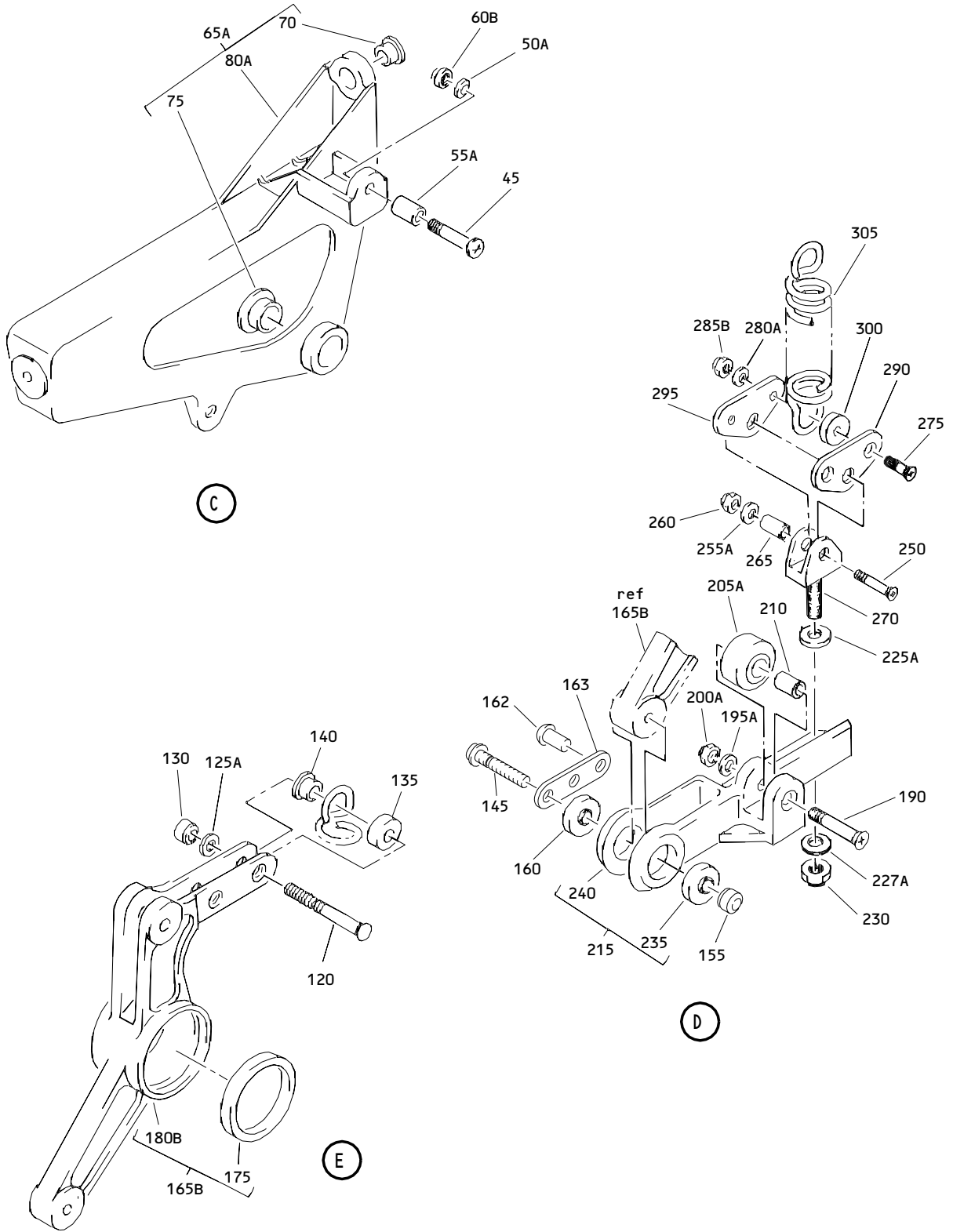
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Inboard Aileron Control and Droop Mechanism Quadrant Assembly
 Figure 1 (Sheet 1)

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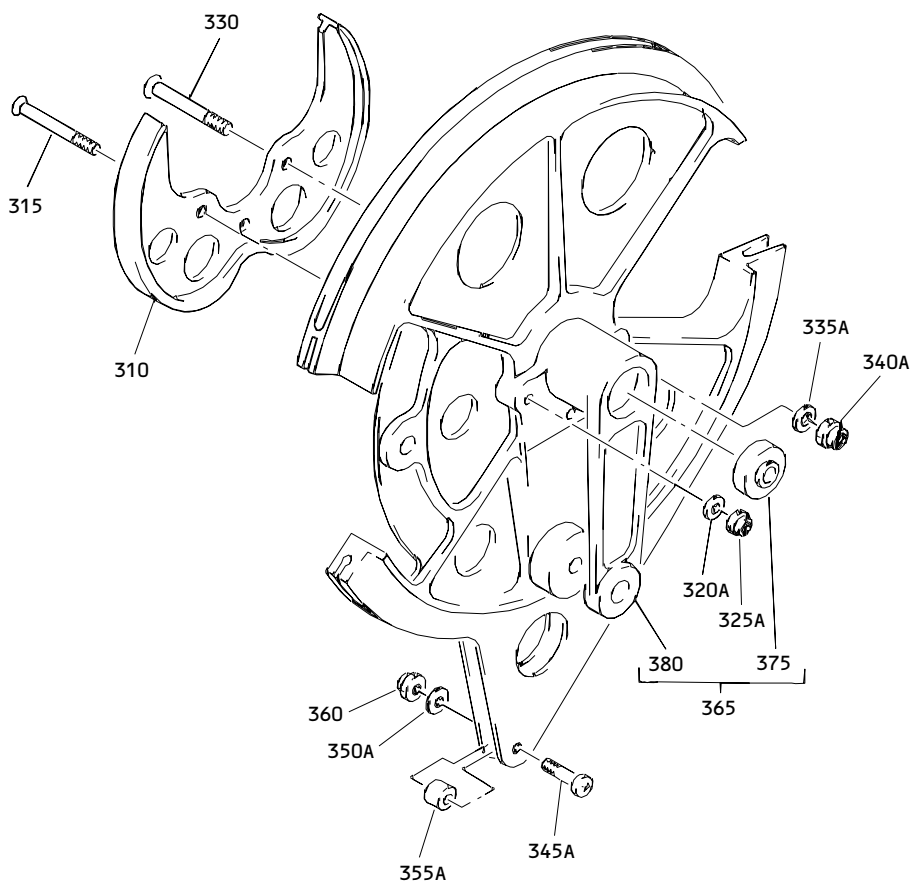
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Inboard Aileron Control and Droop Mechanism Quadrant Assembly
Figure 1 (Sheet 2)

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Inboard Aileron Control and Droop Mechanism Quadrant Assembly
Figure 1 (Sheet 3)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -1A	251T1602-5		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (LH)	A	RF
-1B	251T1602-7		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (LH)	C	RF
-1C	251T1602-9		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (LH)	E	RF
R -1D	251T1602-11		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (LH)	G	RF
R -1E	251T1602-13		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (LH)	J	RF
-5A	251T1602-6		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (RH)	B	RF
-5B	251T1602-8		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (RH)	D	RF
-5C	251T1602-10		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (RH)	F	RF
R -5D	251T1602-12		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (RH)	H	RF
R -5E	251T1602-14		QUADRANT ASSY-INBD AIL. CONT AND DROOP MECH (RH)	K	RF
10A	BACB30NF6-79		.BOLT		1
15	AN960PD616		DELETED		
15A	NAS1149D0663J		.WASHER		2
20	BACN10JC6		DELETED		
-20A	BACN10JC6CD		DELETED		
R 20B	H52732-6CD		.NUT- (V15653) (SPEC BACN10YR6CD) (OPT PLH56CD (V62554))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
25	251T1610-1		. SUPPORT ASSY	A	1
-25A	251T1610-4		. SUPPORT ASSY	C,E,G	1
R -25B	251T1610-6		. SUPPORT ASSY	J	1
-27	251T1620-4		. SUPPORT ASSY	B	1
-27A	251T1620-6		. SUPPORT ASSY	D,F,H	1
R -27B	251T1620-8		. SUPPORT ASSY	K	1
30	BACB28X5M033		.. BUSHING		1
35	BACB28X7M031		.. BUSHING		1
40	251T1610-2		.. SUPPORT	A	1
-40A	251T1610-5		.. SUPPORT	C,E,G	1
R -40B	251T1610-7		.. SUPPORT	J	1
-42	251T1620-5		.. SUPPORT	B	1
-42A	251T1620-7		.. SUPPORT	D,F,H	1
R -42B	251T1620-9		.. SUPPORT	K	1
45	NAS623-4-15		. SCREW		1
50	AN960PD416		DELETED		
50A	NAS1149D0463J		. WASHER		1
55	NAS42DD8-40		DELETED		
R -55A	NAS42DD8-40FC		. SPACER		1
60	A6194-8Z3		DELETED		
-60A	BACN10J4CD		DELETED		
R 60B	H52732-4CD		. NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		1
R 65A	251T1612-7		. SUPPORT ASSY-L	A	1
-65B	251T1612-9		. SUPPORT ASSY	C,E,G	1
R -65C	251T1612-11		. SUPPORT ASSY	J	1
R -67A	251T1621-6		. SUPPORT ASSY-R	B	1
-67B	251T1621-8		. SUPPORT ASSY	D,F,H	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-					
-67C	251T1621-10		.SUPPORT ASSY	K	1
70	BACB28X5M033		..BUSHING		1
75	BACB28X9M041		..BUSHING		1
80A	251T1612-8		..SUPPORT	A	1
-80B	251T1612-10		..SUPPORT	C,E,G	1
R -80C	251T1612-12		..SUPPORT	J	1
-82A	251T1621-7		..SUPPORT	B	1
-82B	251T1621-9		..SUPPORT	D,F,H	1
R -82C	251T1621-11		..SUPPORT	K	1
90	251T3742-13		.BUSHING		1
95	251T1628-1		.RETAINER ASSY	A-D	1
-95A	251T1628-3		.RETAINER ASSY	E-K	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-100	MKP6A		..BEARING- (V38443) (SPEC BACB10AP6) (OPT LLMKP6A (V38443)) (OPT MKP6AFS428 (V21335)) (OPT MKP6ATT (V43991)) (OPT MKP6A2TS (V43991)) (OPT MKP6E6531 (V21335)) (OPT MKP6AG20 (V38443)) (OPT MKP6ALY196 (V40920)) (OPT MKP6A (V38443)) (OPT MCS26E (VK8455)) (REPLD BY ITEM 100A)	A-D	1
-100A	SMC6EG7A		..BEARING- (VK8455) (SPEC BACB10FS6R) (OPT ACMKP6AA3908 (V21335)) (OPT SSMKP6ASD706 (V83086)) (OPT ACMKP6AP26LY198 (V40920)) (REPLS ITEM 100)	A-D	1
R -100B	SMC6EG7A		..BEARING- (VK8455) (SPEC BACB10FS6R) (OPT ACMKP6AA3908 (V21335)) (OPT SSMKP6ASD706 (V83086)) (OPT ACMKP6AP26LY1XZ (V40920))	E-K	1
105	251T1628-2		..RETAINER		1
110	NAS42DD12-204		DELETED		
R 110A	NAS42DD12-204FC		.SPACER		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-115	B542DD		.BEARING- (V38443) (SPEC BACB10CF21PP) (OPT B542-2TS (V43991)) (OPT B542DDFS428 (V21335)) (OPT B542SSG27 (V30163)) (OPT T342E (VK8455))		1
120	SAL100YT8-15		.BOLT- (V11815) (SPEC BACB30GY8-15) (OPT SAL100YT8-15 (V17446))	A-H	2
R -120A	BACB30XT8K15		.BOLT	J,K	2
125	AN960PD416		DELETED		
125A	NAS1149D0463J		.WASHER		2
130	2DCC8		.COLLAR- (V11815) (SPEC BACC30K8) (OPT 2DCC8 (V17446))	A-H	2
R -130A	3SLCC8		.COLLAR- (V17446) (SPEC BACC30BK8) (OPT 3SLCC8 (V92215))	J,K	2
135	251T1632-1		.SPACER		2
140	251T1626-2		.SPACER		2
145	SALPYT8-20		.BOLT- (V11815) (SPEC BACB30GW8-20) (OPT SALPYT8-20 (V29666)) (OPT SALPYT8-20 (V17446))	A-H	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-145A	LGPL2SPV8-20AC		.BOLT- (V17446) (SPEC BACB30VN8K20) (OPT LGPL2SPV8-20AC (V92215)) (OPT 81669V8K20 (V56878)) (OPT LGPL2SPV8-20AC (V56878))	J,K	1
155	2DCC8		.COLLAR- (V11815) (SPEC BACC30K8) (OPT 2DCC8 (V17446))	A-H	1
R -155A	3SLCC8		.COLLAR- (V17446) (SPEC BACC30BK8) (OPT 3SLCC8 (V92215))	J,K	1
R 160	MKP4ASD610		.BEARING- (V83086) (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)) (OPT MCS24E (VK8455)) (REPLD BY ITEM 160A)	A-D	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01- -160A	ACMKP4AA3908		.BEARING- (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086)) (REPLS ITEM 160)	A-D	1
R -160B	BACB10AP04J		DELETED		
R -160C	BACB10FS04R		.BEARING	E-K	1
162	BACR15BB3B		.RIVET- (SIZE DETERMINE ON INST)		2
163	251T1637-1		.CLIP		1
R 165B	251T1618-11		.CRANK ASSY-W.S.444 (OPT ITEM 165C)	A,C,E ,G,J	1
-165C	251T1618-15		.CRANK ASSY- (OPT ITEM 165B)	A,C,E ,G,J	1
-170B	251T1618-12		.CRANK ASSY- (OPT ITEM 170C)	B,D,F ,H,K	1
-170C	251T1618-16		.CRANK ASSY- (OPT ITEM 170B)	B,D,F ,H,K	1
175	B542DD		..BEARING- (V38443) (SPEC BACB10CF21PP) (OPT B542-2TS (V43991)) (OPT B542DDFS428 (V21335)) (OPT B542SSG27 (V30163)) (OPT T342E (VK8455))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-180B	251T1618-13		..CRANK- (USED ON ITEM 165B)	A,C,E ,G,J	1
-180C	251T1618-17		..CRANK- (USED ON ITEM 165C)	A,C,E ,G,J	1
-185B	251T1618-14		..CRANK- (USED ON ITEM 170B)	B,D,F ,H,K	1
-185C	251T1618-18		..CRANK- (USED ON ITEM 170C)	B,D,F ,H,K	1
R 190	BACB30LU4-16		.BOLT	A-F	1
R -190A	BACB30NN4K16		.BOLT	G-K	1
195	AN960PD416		DELETED		
195A	NAS1149D0463J		.WASHER		1
200	BACN10JC4		DELETED		
R 200A	BACN10JC4CD		.NUT	A-F	1
R -200B	NAS1805-4L		.NUT	G-K	1
205	ATF6		DELETED		
R 205A	KRP173406FT		.BEARING- (V50632)	G-K	1
R -205B	BACB10ET06J		.BEARING	A-F	1
210	BACB28AK04-049		.BUSHING	A-F	1
R 215	251T1619-1		.LEVER ASSY-W.S.444 (OPT ITEM 215A)	A,C,E ,G,J	1
-215A	251T1619-7		.LEVER ASSY- (OPT ITEM 215)	A,C,E ,G,J	1
-220	251T1619-2		.LEVER ASSY- (OPT ITEM 220A)	B,D,F ,H,K	1
-220A	251T1619-8		.LEVER ASSY- (OPT ITEM 220)	B,D,F ,H,K	1
225	AN960PD516L		DELETED		
225A	NAS1149D0516J		.WASHER		AR
227	AN960PD516		DELETED		
227A	NAS1149D0516		.WASHER		1
230	BACN10JC5		.NUT		1
			-----*-----		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-235	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)) (OPT MCS24E (VK8455)) (REPLD BY ITEM 235A)	A-K	1
R -235A	ACMKP4AA3908		..BEARING- (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086)) (REPLS ITEM 235)	A-K	1
240	251T1619-3		..LEVER- (USED ON ITEM 215)	A,C,E ,G,J	1
-240A	251T1619-9		..LEVER- (USED ON ITEM 215A)	A,C,E ,G,J	1
-245	251T1619-4		..LEVER- (USED ON ITEM 220)	B,D,F ,H,K	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -245A	251T1619-10		..LEVER- (USED ON ITEM 220A)	B,D,F	1
250	HL19PB6-11		.BOLT- (V56878) (SPEC BACB30FN6-11) (OPT HL19PB6-11 (V73197)) (OPT HL19PB6-11 (V92215)) (OPT HL19PB6-11 (V97928)) (OPT 62547-6-11 (V56878)) (OPT HL19PB6-11 (V80539)) (OPT HL19PB6-11 (V97928))	H,K A-H	1
R -250A	HL441UC6-11		.BOLT- (V56878) (SPEC BACB30FN6A11) (OPT HL441UC6-11 (V73197)) (OPT HL441UC6-11 (V92215)) (OPT HL41PY6-11 (V80539)) (OPT HL441N6-11 (V80539)) (OPT HL441UC6-11 (V80539)) (OPT 67068-6A11 (V56878)) (OPT HL441UC6-11 (V08524)) (OPT HL441UC6-11 (V97928))	J,K	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
255	AN960PD10		DELETED		
255A	NAS1149D0363J		.WASHER		1
260	H10-3BAC		.NUT-	A-H	1
			(V15653)		
			(SPEC BACN10JC3)		
			(OPT NS202101-02		
			(V80539))		
			(OPT RMLH9075-3W		
			(V72962))		
			(OPT T6S1032J		
			(V71087))		
			(OPT VN303A02		
			(V92215))		
			(OPT 96-02		
			(V80539))		
			(OPT BRH10A3		
			(V52828))		
R -260A	BACN10JC3CD		DELETED		
-260B	H52732-3CD		.NUT-	J,K	1
			(V15653)		
			(SPEC BACN10YR3CD)		
			(OPT PLH53CD		
			(V62554))		
265	BACB28Y3C052		.BUSHING		1
270	251T1639-1		.PIVOT	A,B	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -270A	251T1639-2		.PIVOT- (OPT ITEM 270B)	C-K	1
-270B	251T1639-1		.PIVOT- (OPT ITEM 270A)	C-K	1
275	HL41-6-7		.BOLT- (V56878) (SPEC BACB30FN6A7U) (OPT HL41-6-7 (V73197)) (OPT HL41-6-7 (V92215)) (OPT HL41-6-7 (V97928)) (OPT 67068-6A7U (V56878)) (OPT HL41-6-7 (V80539)) (OPT WC376-7 (V60516)) (OPT HL41-6-7 (V60516)) (OPT HL41-6-7 (V08524))		2
280	AN960PD10		DELETED		
280A	NAS1149D0363J		.WASHER		2
285	H10-3BAC		DELETED		
-285A	BACN10JC3CD		DELETED		
R 285B	H52732-3CD		.NUT- (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))		2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
290	251T1631-1		.PLATE-TOP	A,B	1
-290A	251T1631-2		.PLATE-TOP (OPT ITEM 290B)	C-K	1
-290B	251T1631-1		.PLATE-TOP (OPT ITEM 290A)	C-K	1
295	251T1640-1		.PLATE-BOTTOM	A,B	1
-295A	251T1640-2		.PLATE-BOTTOM (OPT ITEM 295B)	C-K	1
-295B	251T1640-1		.PLATE-BOTTOM (OPT ITEM 295A)	C-K	1
300	251T1641-2		.WASHER	A,B	2
-300A	251T1641-3		.WASHER- (OPT ITEM 300B)	C-K	2
-300B	251T1641-2		.WASHER- (OPT ITEM 300A)	C-K	2
305	251T1635-1		.SPRING	A-F	2
R -305A	251T1635-2		.SPRING	G-K	2
310	251T1629-1		.CAM	A,C,E ,G,J	1
-312	251T1629-2		.CAM	B,D,F ,H,K	1
			ATTACHING PARTS		
315	BACB30LU3-20		.SCREW	A-H	2
R -315A	BACB30NN3K20		.BOLT	J,K	2
320	AN960PD10		DELETED		
320A	NAS1149D0363J		.WASHER		2
325	H10-3BAC		DELETED		
R 325A	BACN10JC3CD		.NUT	A-H	2
R -325B	H52732-3CD		.NUT- (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554)) -----*	J,K	2
330	BACB30LU4-20		.BOLT	A-H	1
R -330A	BACB30NN4K20		.BOLT	J,K	1
335	AN960PD416		DELETED		
335A	NAS1149D0463J		.WASHER		1
340	BACN10JC4		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
R 340A	BACN10JC4CD		.NUT	A-H	1
R -340B	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	J,K	1
345A	NAS623-4-7		.SCREW		1
350	AN96OPD416		DELETED		
350A	NAS1149D0463J		.WASHER		1
355	NAS42DD8-18		DELETED		
R 355A	NAS42DD8-18FC		.SPACER		1
360	BACN10JC4		.NUT	A-H	1
R -360A	BACN10JC4CD		.NUT	J,K	1
365	251T1611-1		.QUADRANT ASSY	A,C	1
-365A	251T1611-9		.QUADRANT ASSY	E,G,J	1
-370	251T1611-2		.QUADRANT ASSY	B,D	1
-370A	251T1611-10		.QUADRANT ASSY	F,H,K	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-375	MKP6A		..BEARING- (V38443) (SPEC BACB10AP6) (OPT LLMKP6A (V38443)) (OPT MKP6AFS428 (V21335)) (OPT MKP6ATT (V43991)) (OPT MKP6A2TS (V43991)) (OPT MKP6E6531 (V21335)) (OPT MKP6AG20 (V38443)) (OPT MKP6ALY196 (V40920)) (OPT MKP6A (V38443)) (OPT MCS26E (VK8455)) (REPLD BY ITEM 375A)	A-D	1
-375A	SMC6EG7A		..BEARING- (VK8455) (SPEC BACB10FS6R) (OPT ACMKP6AA3908 (V21335)) (OPT SSMKP6ASD706 (V83086)) (OPT ACMKP6AP26LY198 (V40920)) (REPLS ITEM 375)	A-D	1
R -375B	SMC6EG7A		..BEARING- (VK8455) (SPEC BACB10FS6R) (OPT ACMKP6AA3908 (V21335)) (OPT SSMKP6ASD706 (V83086)) (OPT ACMKP6AP26LY1XZ (V40920))	E-K	1
380	251T1611-3		..QUADRANT- (OPT ITEM 380A)	A,C,E ,G,J	1
-380A	251T1611-7		..QUADRANT- (OPT ITEM 380)	A,C,E ,G,J	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
			1234567		
01- -385	251T1611-4		..QUADRANT- (OPT ITEM 385A)	B,D,F ,H,K	1
-385A	251T1611-8		..QUADRANT- (OPT ITEM 385)	B,D,F ,H,K	1

- Item Not Illustrated

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