

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF LANDING GEAR BRAKE MODULE ASSEMBLY
COMPONENT MAINTENANCE MANUAL 32-41-02

REVISION NO. 5 DATED MAR 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 on the Record of Revision Sheet.

CHAPTER/SECTION
AND PAGE NO.

DESCRIPTION OF CHANGE

TITLE PAGE

Added 257T2231-17 thru -20.

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LANDING GEAR BRAKE MODULE ASSEMBLY

PART NUMBERS 257T2231-7,-8,-9,-10,-13 THRU -20

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

242327

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REVISION RECORD

01

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BOEING
 COMPONENT
 MAINTENANCE MANUAL
TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR B11452 PRR B11452-2 PRR B11452-3 PRR B11452-5 PRR B11452-8 PRR B12697 PRR C12359	JAN 10/87 JAN 10/87 JAN 10/87 JAN 10/87 JAN 01/90 SEP 01/96 JUN 01/96

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TR & SB RECORD

01.1

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Assembly.	701
Fits and Clearances	801
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Illustrated Parts List.	1001
* [1] Special instructions not required. Use standard industry practices and information contained in 20-30-03.	

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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.

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 -- Apr 21/87
Assembly -- Apr 21/87

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INTRODUCTION

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LANDING GEAR BRAKE MODULE ASSEMBLY

DESCRIPTION AND OPERATION

1. The landing gear brake module assembly consists of cranks, quadrants, rod, valve, and support. The valve, controlled through the mechanical linkage from the brake pedal, consists of force command valves to meter brake pressure and a de-spin actuator to stop the wheels on gear retraction.

2. Leading Particulars (Approximate)

Height -- 16 inches

Width -- 14 inches

Depth -- 7 inches

Weight -- 30 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. Refer to IPL Fig. 1 and 2 for item numbers.

1. Parts Replacement

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

A. Packings (Fig. 1, 20, 25, 45, 50, 65, 70), (Fig. 2, 20, 25, 45, 50, 95, 100)

B. Rings (Fig. 1, 30, 55, 75), (Fig. 2, 30, 55, 105)

2. Disassembly

A. Remove bolts (Fig. 1, 140), (Fig. 2, 170), washers (Fig. 1, 145), (Fig. 2, 175), nuts (Fig. 1, 150), (Fig. 2, 180) and rod (Fig. 1, 165), (Fig. 2, 195). Refer to CMM 27-00-11 for overhaul of rod (Fig. 1, 165), (Fig. 2, 195).

B. Remove bolt (Fig. 1, 80), (Fig. 2, 110), washer (Fig. 1, 85), (Fig. 2, 115), nut (Fig. 1, 90), (Fig. 2, 120) and crank (Fig. 1, 155 or 160), (Fig. 2, 185 or 190).

C. Remove bolt (Fig. 1, 115), (Fig. 2, 145), washer (Fig. 1, 120), (Fig. 2, 150), nut (Fig. 1, 125), (Fig. 2, 155) and quadrant (Fig. 1, 170 or 175), (Fig. 2, 200 or 205) from support (Fig. 1, 230 or 235), (Fig. 2, 250 or 255).

D. Remove bearing (Fig. 1, 130), (Fig. 2, 160) and bushing from (Fig. 1, 135), (Fig. 2, 165).

E. Remove bolts (Fig. 1, 100), (Fig. 2, 130), washers (Fig. 1, 105), (Fig. 2, 135), nuts (Fig. 1, 110), (Fig. 2, 140) and valve (Fig. 1, 95B), (Fig. 2, 125) from support. Refer to the applicable vendor's instructions for overhaul of valve (Fig. 1, 95B), (Fig. 2, 125).

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DISASSEMBLY

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CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.
2. Refer to Fits and Clearances for design dimensions and wear limits.
3. Penetrant check cranks (Fig. 1, 155, 160, 190), (Fig. 2, 185, 190, 220); quadrants (Fig. 1, 220, 225), (Fig. 2, 250, 255); fittings (Fig. 1, 245, 255) (Fig. 2, 265, 275) per 20-20-02.

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CHECK

01.1

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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>
257T2232	QUADRANT	1-1
257T2233	QUADRANT	2-1, 2-2
257T2234	INPUT CRANK	3-1
257T2235	VALVE CRANK	4-1
257T2238	SUPPORT	5-1
257T2241	FITTING	6-1
- - -	MISCELLANEOUS PARTS REFINISH	7-1

2. Standard Practices

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

20-30-02	Stripping of Protective Finishes
20-41-01	Decoding Table for Boeing Finish Codes
20-43-01	Chromic Acid Anodizing
20-50-03	Bearing Installation and Retention
20-60-02	Finishing Materials
32-00-05	Repair of High Strength Steel Landing Gear Parts

3. Materials

NOTE: Equivalent substitutes can be used.

- A. Primer -- BMS 10-11, type 1 (Ref 20-60-02)
- B. Enamel -- BMS 10-11, type 2, white gloss color 702 (Ref 20-60-02)

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REPAIR-GENERAL

01.1

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4. Dimensioning Symbols

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

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REPAIR-GENERAL

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BOEING

COMPONENT MAINTENANCE MANUAL

- 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

<p>— 0.002 STRAIGHT WITHIN 0.002</p> <p>⊥ 0.002 B PERPENDICULAR TO B WITHIN 0.002</p> <p>// 0.002 A PARALLEL TO A WITHIN 0.002</p> <p>○ 0.002 ROUND WITHIN 0.002</p> <p>⊘ 0.010 CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER</p> <p>⌒ 0.006 A 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</p> <p>▭ 0.020 A SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE</p>	<p>◎ ∅ 0.0005 C CONCENTRIC TO C WITHIN 0.0005 DIAMETER</p> <p>≡ 0.010 A SYMMETRICAL WITH A WITHIN 0.010</p> <p>∠ 0.005 A ANGULAR TOLERANCE 0.005 WITH A</p> <p>⊕ ∅ 0.002 Ⓢ B LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE</p> <p>⊥ ∅ 0.010 Ⓜ A 0.510 Ⓟ AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION</p> <p>2.000 THEORETICALLY EXACT DIMENSION IS 2.000 OR 2.000 BSC</p> <p>0.020 A A 0.020</p>
<p>NOTE: DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME</p>	

True Position Dimensioning Symbols
Figure 601

32-41-02

REPAIR-GENERAL

01.1

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QUADRANT ASSEMBLY – REPAIR 1-1

257T2232-3, -4

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. Refer to IPL Fig. 1 for item numbers. For repair of surfaces which may require only restoration of original finish, refer to Refinish instructions, par. 2.

1. Parts Replacement (Fig. 601)

- A. Remove bolts (180, 210), collars (185, 215). Separate crank (190,220) from quadrant (195 or 200, 225 or 230).
- B. Replace or repair parts as required. Refer to REPAIR 2-1 and 3-1 as applicable.
- C. If quadrant (195 or 200, 225 or 230) is replaced, drill and spotface holes in replacement quadrant as indicated, using existing holes in crank as a guide, with relative positions of crank and quadrant as shown.
- D. Assemble crank (190, 220) and quadrant (195 or 200, 225 or 230) with wet primer and install bolts (180, 210), collars (185, 215).

2. Refinish

- A. Refer to REPAIR 2-1 and 3-1, as applicable.
- B. After assembly is complete, touch up finish per F-21.12.

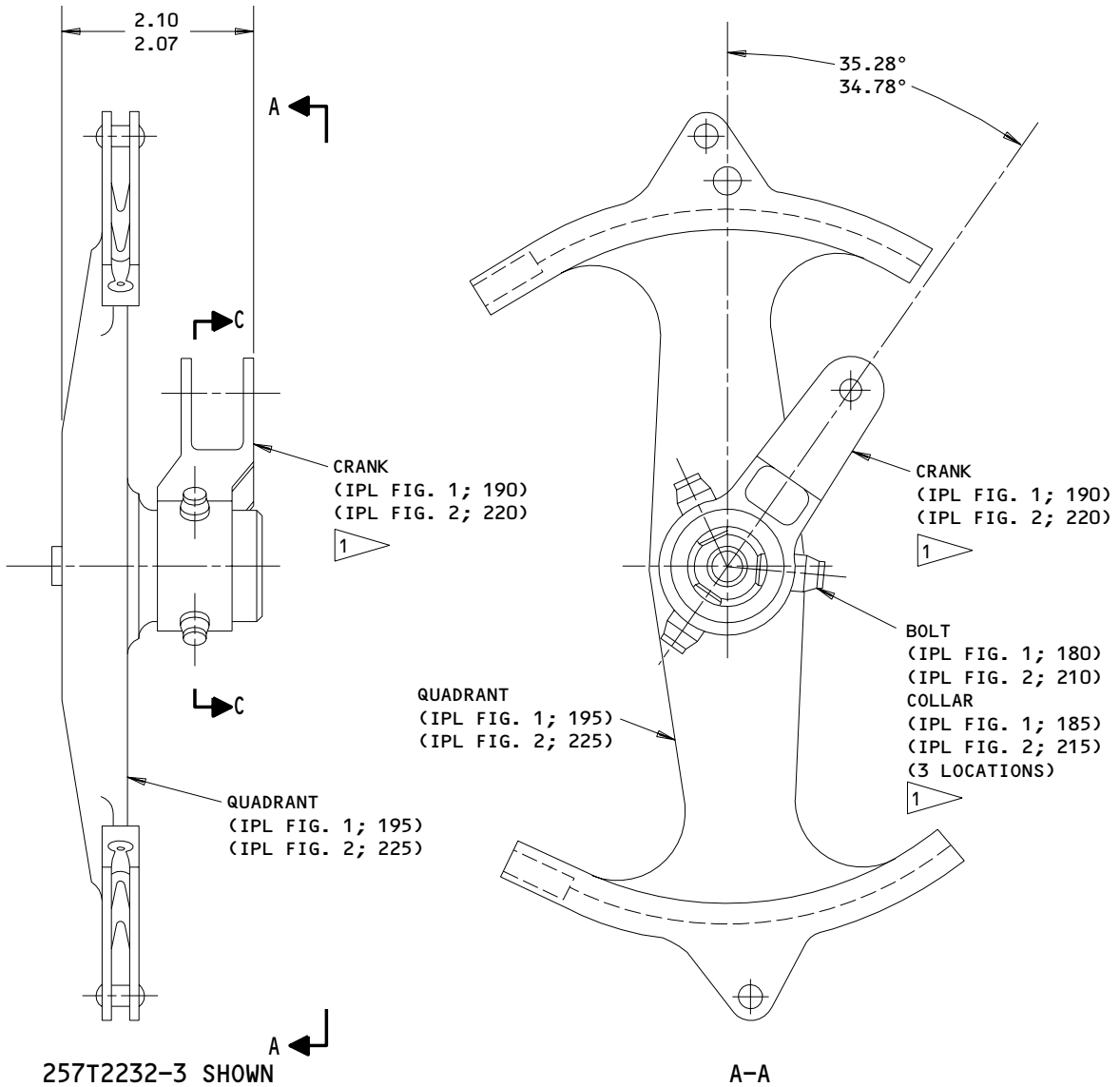
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REPAIR 1-1

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257T2232-3,-4
 Quadrant Assembly Details
 Figure 601 (Sheet 1)

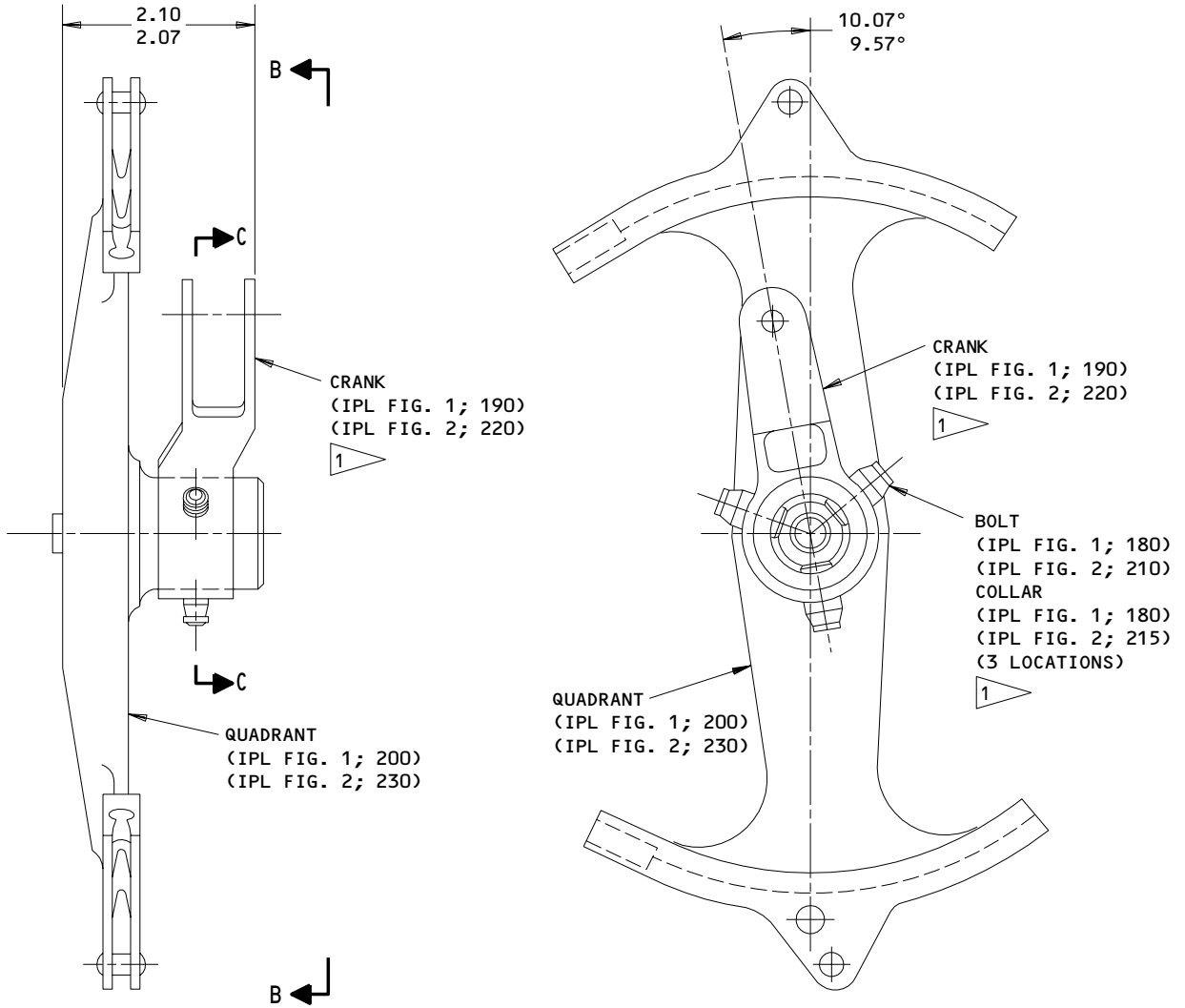
32-41-02

REPAIR 1-1

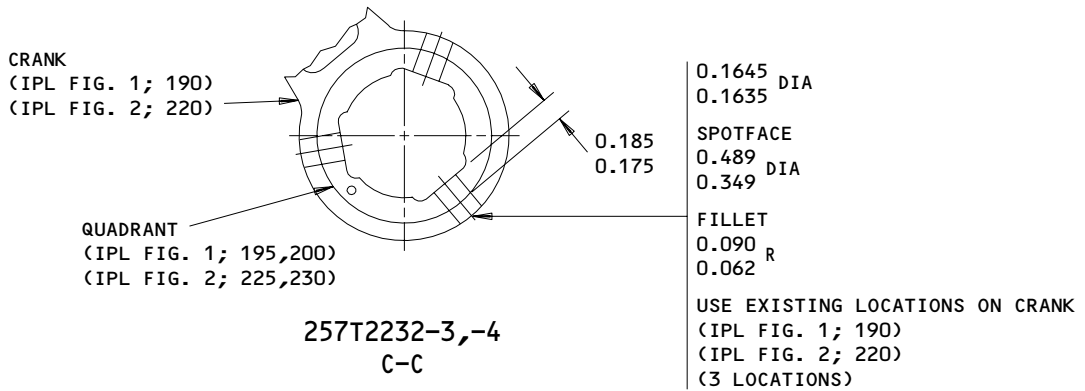
01.1

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257T2232-4 SHOWN



1 ASSEMBLE WITH WET PRIMER BMS 10-11, TYPE 1
 ON MATING SURFACES

257T2232-3,-4
 Quadrant Assembly Details
 Figure 601 (Sheet 2)

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REPAIR 1-1

01.1

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QUADRANT ASSEMBLY – REPAIR 2-1

257T2233-7, -8

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. Refer to IPL Fig. 1 and 2 for item numbers. For repair of surfaces which may require only restoration of original finish, refer to Refinish instructions, REPAIR 2-2.

1. Parts Replacement (Fig. 601)

A. Rivets (210, 240), spacers (215, 245)

- (1) Remove existing rivets and spacers.
- (2) Install replacement spacers with new rivets as shown.

B. Bearing (205, 235)

- (1) Remove existing bearing.
- (2) Install replacement bearing with wet primer, BMS 10-11 type 1 on mating surfaces.
- (3) Roller swage housing (quadrant) material over bearing.

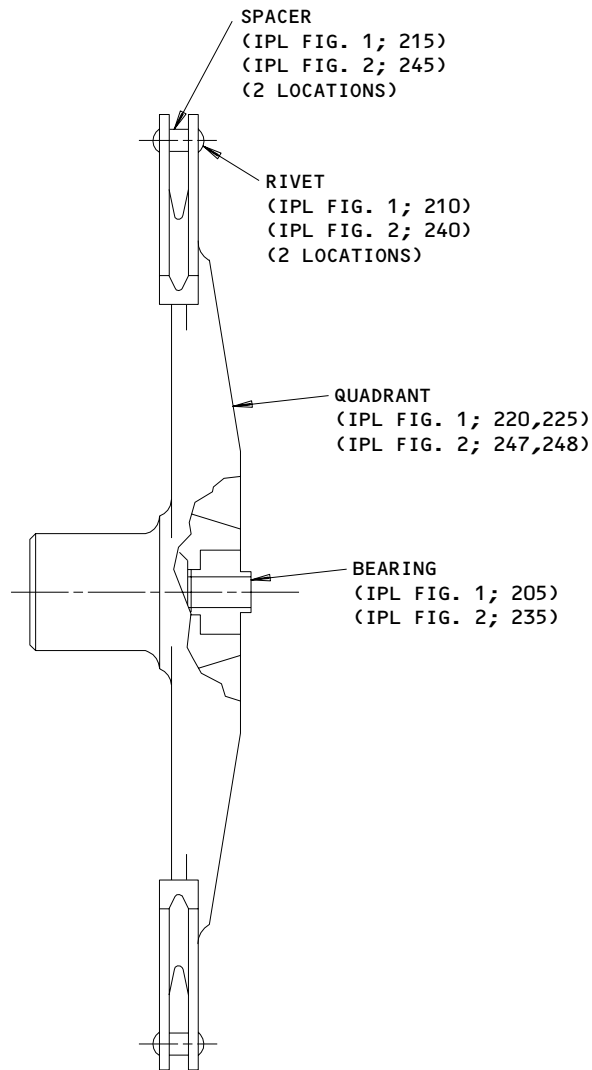
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REPAIR 2-1

01.1

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257T2233-7,-8
Quadrant Assembly Parts Replacement
Figure 601

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REPAIR 2-1

01.1

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QUADRANT - REPAIR 2-2

257T2233-9, -10

1. Coating Repair

- A. Repair consists of restoration of original finish. Refer to Refinish instructions, Fig. 601 and to REPAIR-GEN for list of applicable standard practices.

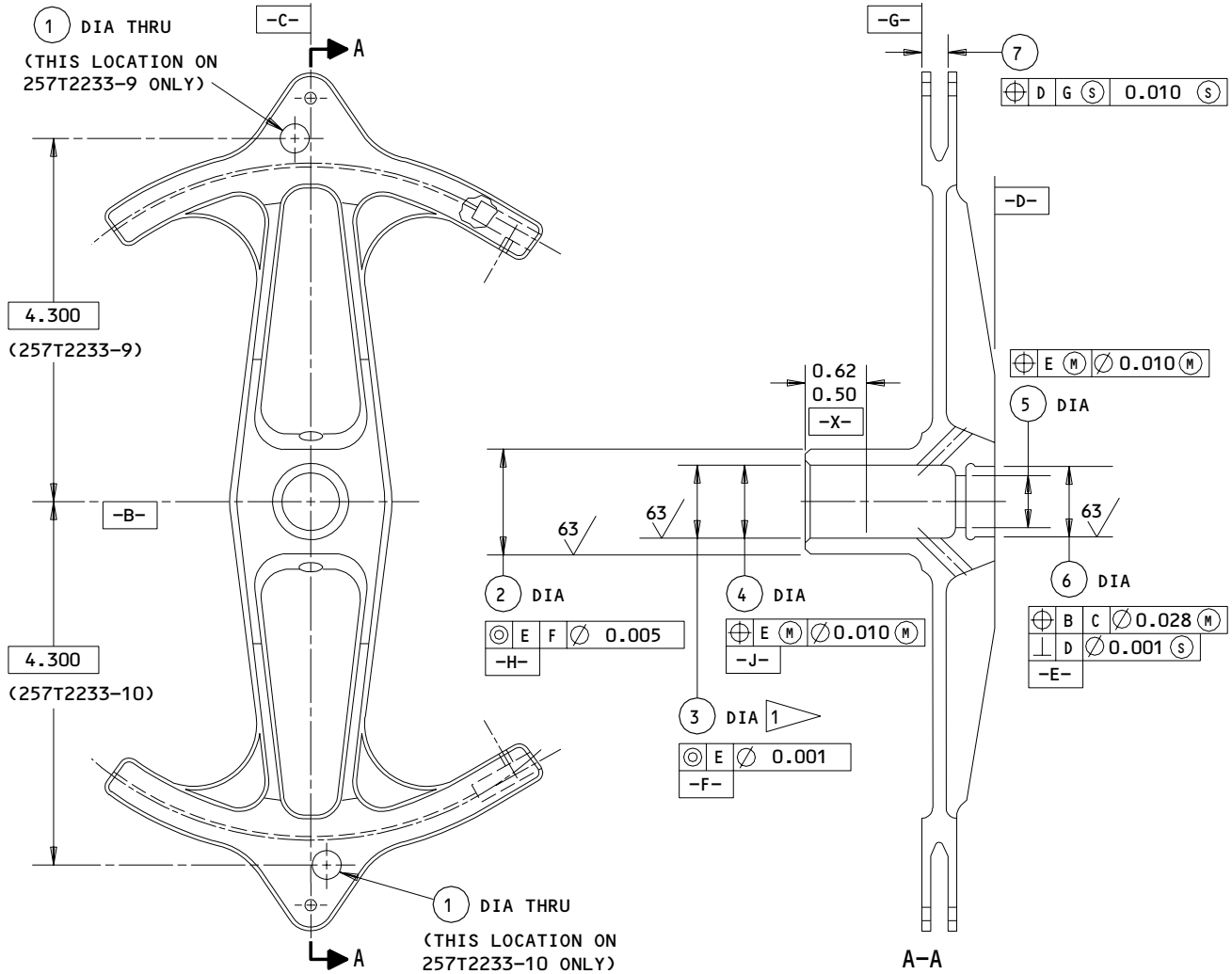
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REPAIR 2-2

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	1	2	3	4	5	6	7
DESIGN DIM	0.327 0.323	1.2497 1.2491	0.8757 0.8753	0.875 0.865	0.69 0.67	0.8757 0.8753	0.235 0.225
REPAIR LIMIT	---	---	---	---	---	---	---

REFINISH

CHROMIC ACID ANODIZE AND APPLY PRIMER, BMS 10-11, TYPE 1 (F-18.13) FOLLOWED BY ENAMEL, BMS 10-11, TYPE 2, COLOR 702 WHITE (F-21.03), EXCEPT OMIT PRIMER & ENAMEL ON DIAS -E-, -F-, -H-, -J-

1 REQUIREMENTS APPLY OVER DIM -X-

REPAIR

(SAME AS REFINISH)

125 MACHINE FINISH EXCEPT AS NOTED

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

257T2233-9,-10
 Quadrant Repair and Refinish
 Figure 601

32-41-02

REPAIR 2-2

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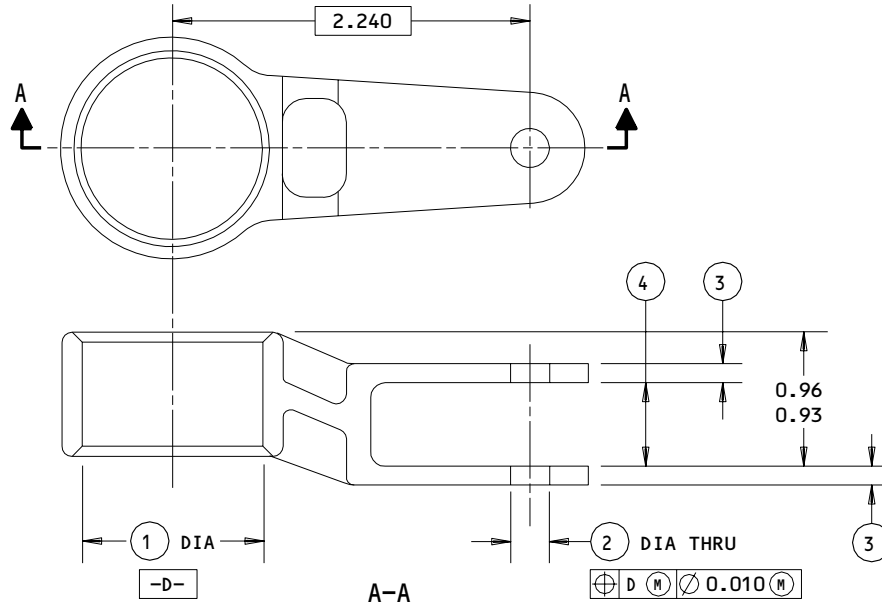
01

INPUT CRANK - REPAIR 3-1

257T2234-1

1. Coating Repair

A. Repair consists of restoration of original finish. Refer to Refinish instructions, Fig. 601 and to REPAIR-GEN for list of applicable standard practices.



	1	2	3	4
DESIGN DIM	1.2506 1.2500	0.2505 0.2495	0.12 0.10	0.598 0.593
REPAIR LIMIT	---	---	---	---

REFINISH

CHROMIC ACID ANODIZE AND APPLY PRIMER, BMS 10-11, TYPE 1 (F-18.13) FOLLOWED BY ENAMEL, BMS 10-11, TYPE 2 (F-21.03), EXCEPT OMIT PRIMER & ENAMEL IN HOLES.

REPAIR

(SAME AS REFINISH)

125/ MACHINE FINISH

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

257T2234-1
 Input Crank Repair and Refinish
 Figure 601

242332

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REPAIR 3-1

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VALVE CRANK - REPAIR 4-1

257T2235-1,-2,-4,-5

1. Coating Repair

- A. Repair consists of restoration of original finish. Refer to Refinish instructions, Fig. 601 and to REPAIR-GEN for list of applicable standard practices.

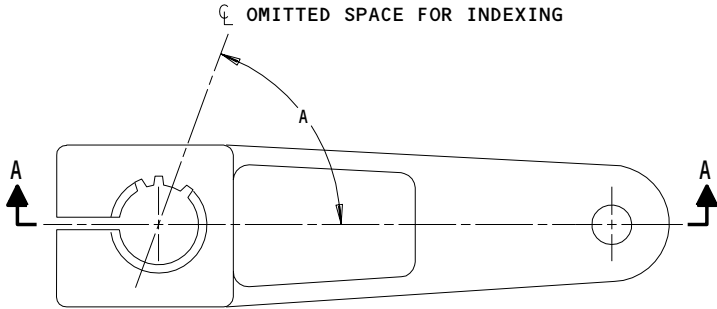
32-41-02

REPAIR 4-1

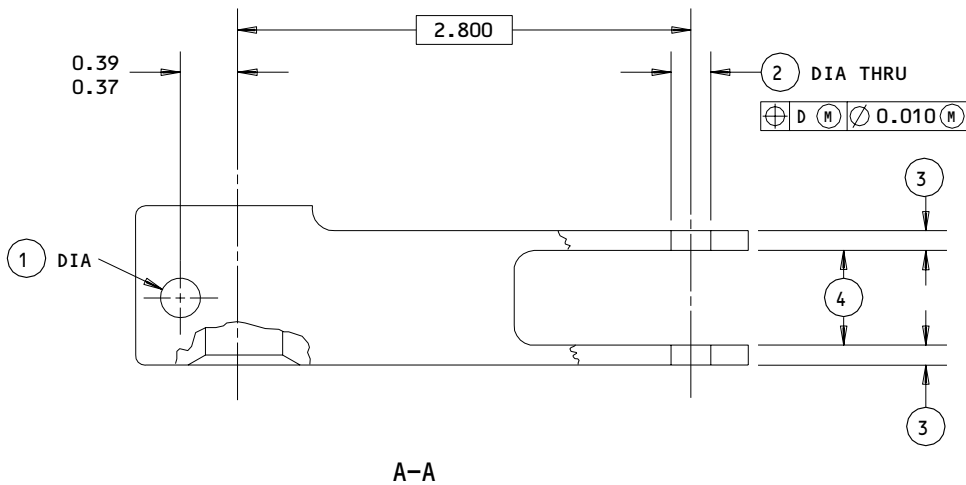
01

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257T2235	A DIM
-1	77.20°
-2	122.06°
-4	122.06°
-5	77.20°



	1	2	3	4
DESIGN DIM	0.276 0.272	0.2505 0.2495	0.12 0.10	0.598 0.593
REPAIR LIMIT	---	---	---	---

REFINISH

CHROMIC ACID ANODIZE AND APPLY PRIMER,
 BMS 10-11, TYPE 1 (F-18.13) FOLLOWED BY
 ENAMEL, BMS 10-11, TYPE 2 (F-21.03), EXCEPT
 OMIT PRIMER & ENAMEL ON SPLINES AND IN HOLES.

REPAIR

(SAME AS REFINISH)

125/ MACHINE FINISH

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

257T2235-1,-2,-4,-5
 Valve Crank Repair and Refinish
 Figure 601

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REPAIR 4-1

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SUPPORT ASSEMBLY - REPAIR 5-1

257T2238-1, -2, -3, -4, -5, -6

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. Refer to IPL Fig. 1 and 2 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions, par. 2.

1. Parts Replacement (Fig. 601)

- A. Remove rivets as necessary to free parts requiring replacement.
- B. Replace parts as necessary.
- C. Install new rivets.

2. Refinish

- A. Refer to REPAIR 6-1 for repair of fitting (245, 255).
- B. Refer to REPAIR 7-1 for refinish of fitting (255, 275), clips, angles, fillers, channels, and brackets.
- C. After support assembly is complete, touch up finish per F-21.12.

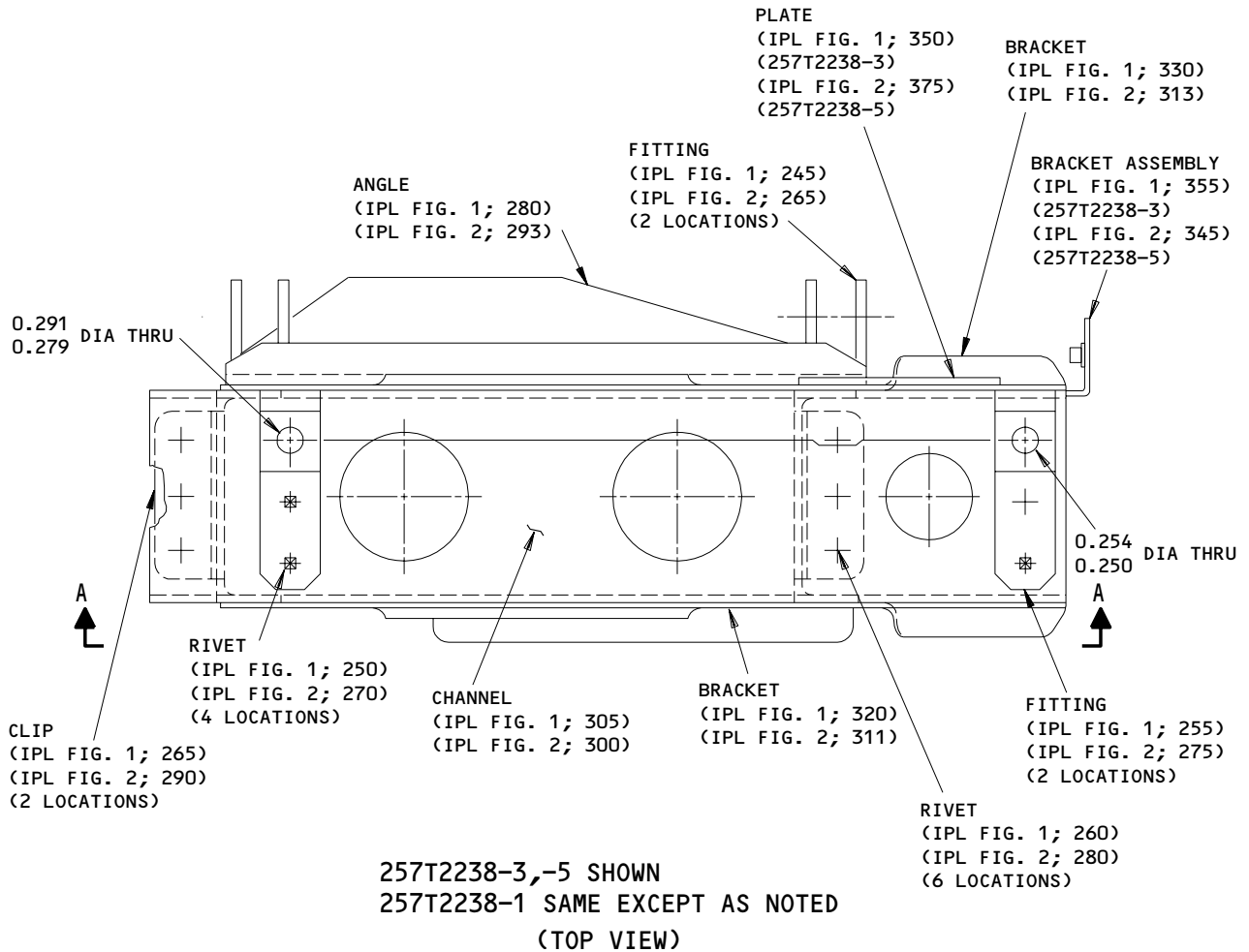
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257T2238-3,-5 SHOWN
 257T2238-4 OPP TO -3 AND AS NOTED
 257T2238-6 OPP TO -5 AND AS NOTED
 257T2238-1 SAME AS -3 EXCEPT AS NOTED
 257T2238-2 OPP TO -1 AND AS NOTED

Support Parts Replacement
 Figure 601 (Sheet 1)

32-41-02

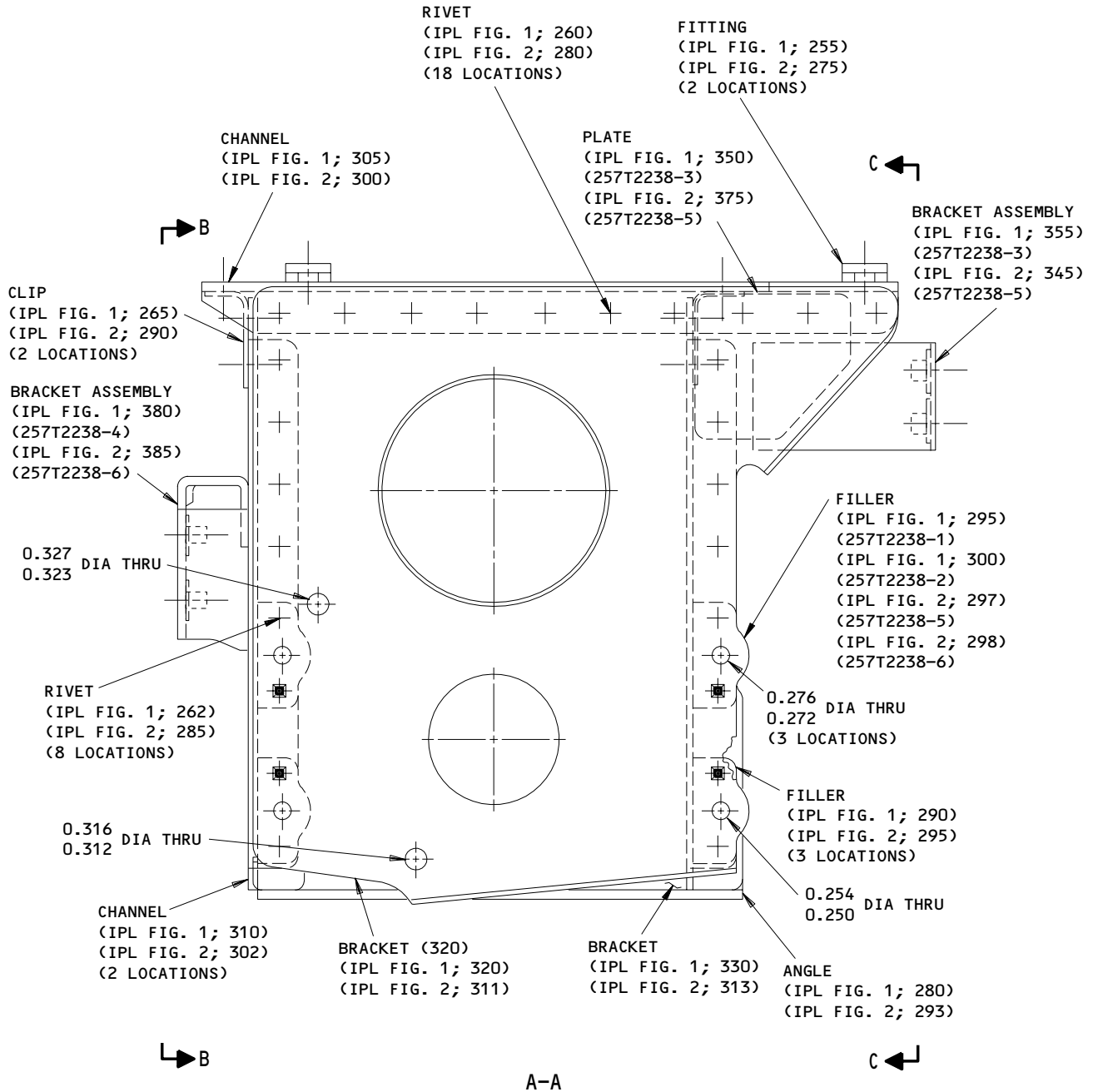
REPAIR 5-1

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257T2238-3,-5 SHOWN
 257T2238-4 OPP TO -3 AND AS NOTED
 257T2238-6 OPP TO -5 AND AS NOTED
 257T2238-1 SAME AS -3 EXCEPT AS NOTED
 257T2238-2 OPP TO -1 AND AS NOTED

Support Parts Replacement
 Figure 601 (Sheet 2)

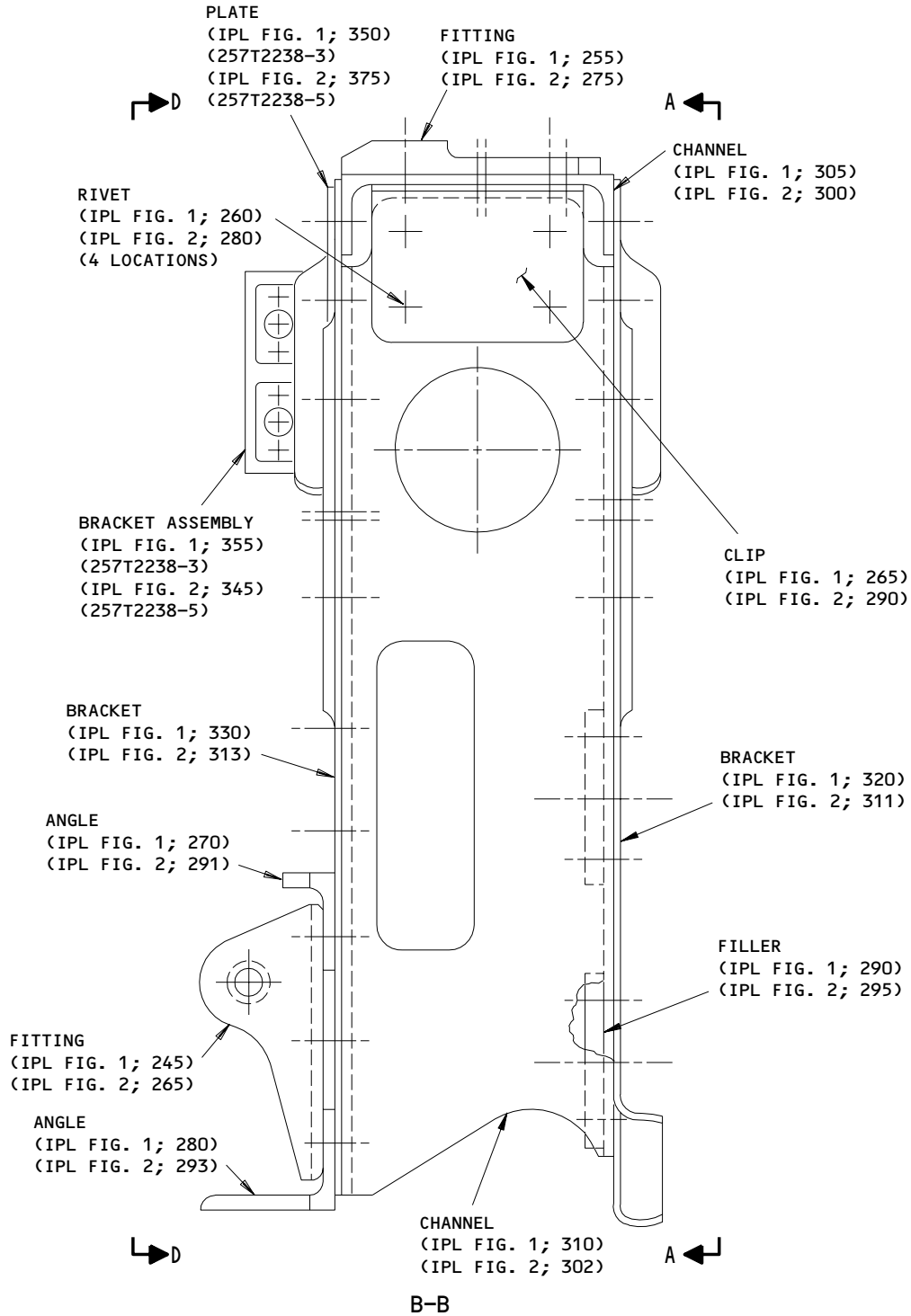
32-41-02

REPAIR 5-1

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**COMPONENT
MAINTENANCE MANUAL**


257T2238-3,-5 SHOWN
 257T2238-1 SAME EXCEPT AS NOTED

Support Parts Replacement
 Figure 601 (Sheet 3)

32-41-02

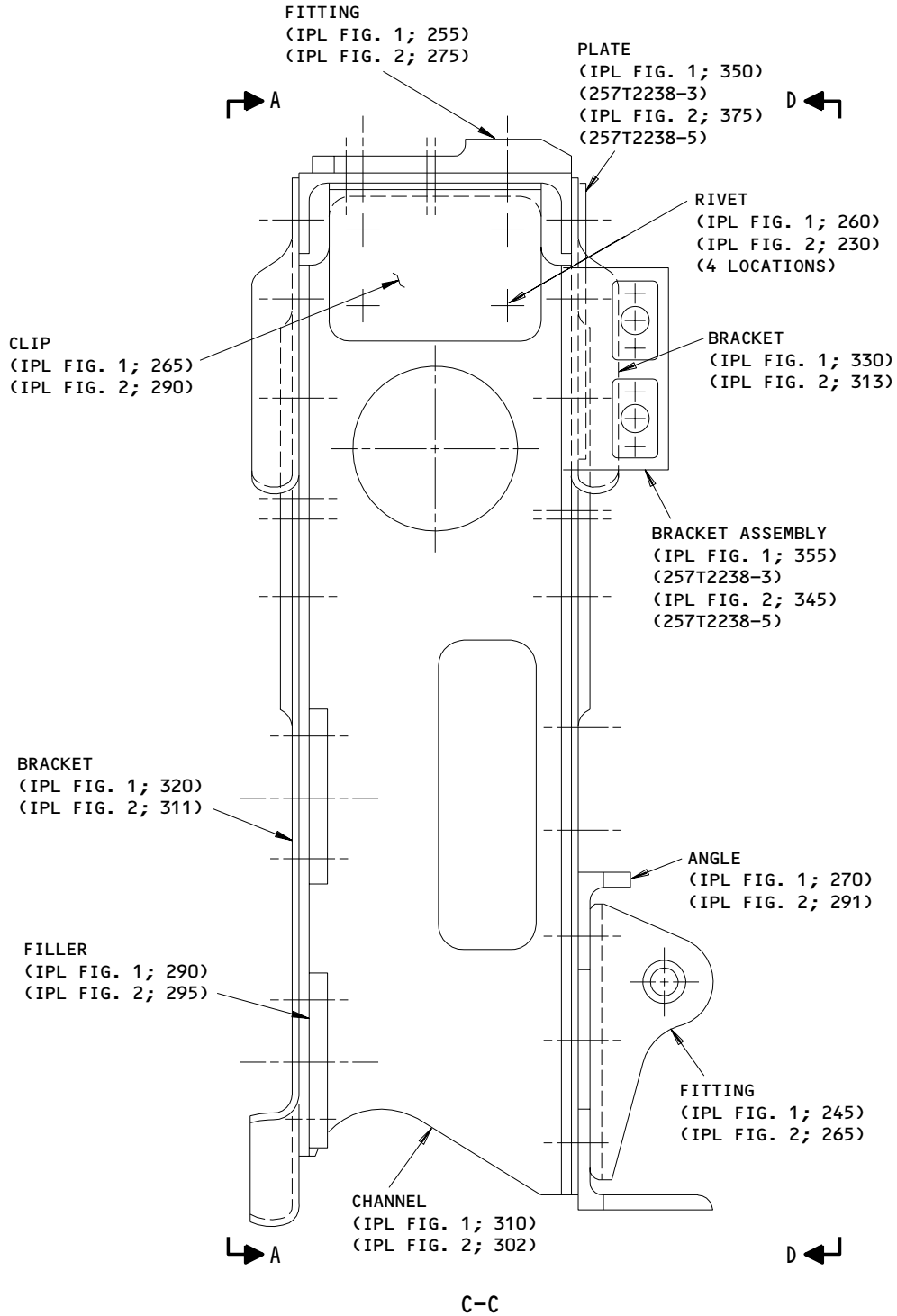
REPAIR 5-1

01.1

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BOEING COMPONENT MAINTENANCE MANUAL



257T2238-3,-5 SHOWN
 257T2238-1 SAME EXCEPT AS NOTED

Support Parts Replacement
 Figure 601 (Sheet 4)

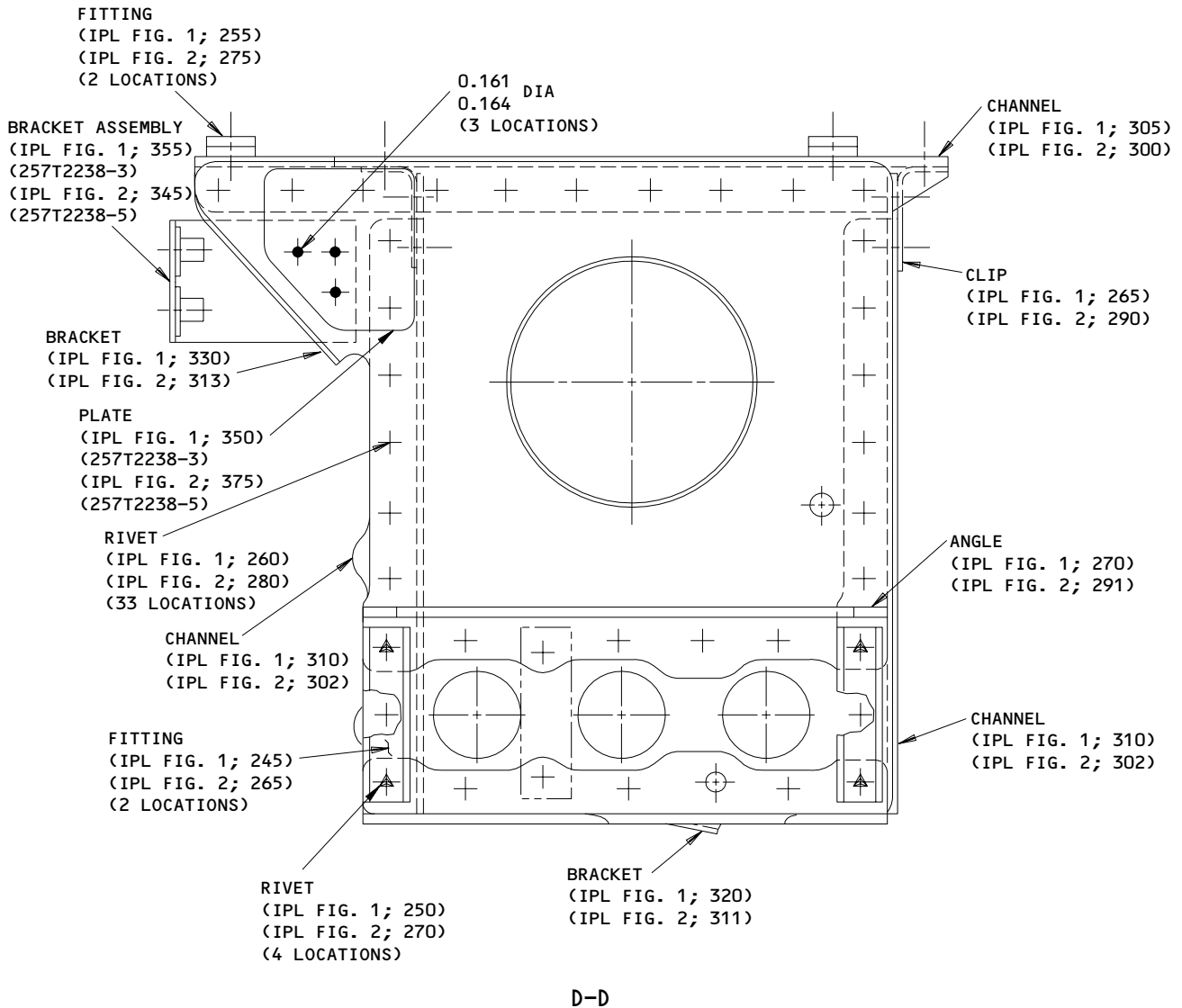
32-41-02

REPAIR 5-1

01.1

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257T2238-3,-5 SHOWN
 257T2238-1 SAME EXCEPT AS NOTED

Support Parts Replacement
 Figure 601 (Sheet 5)

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REPAIR 5-1

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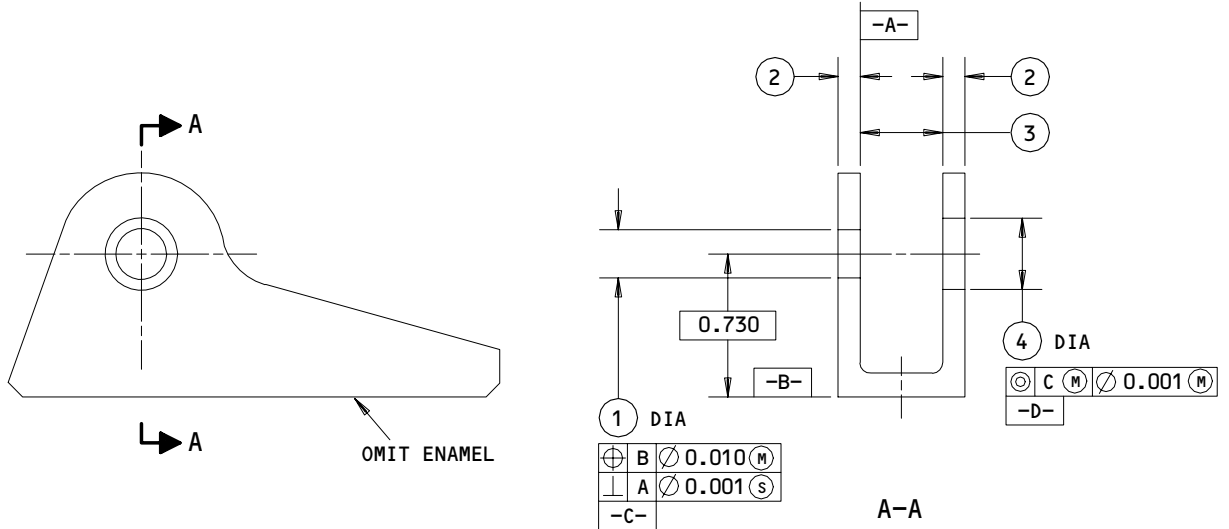
01.1

FITTING - REPAIR 6-1

257T2241-1

1. Coating Repair

A. Repair consists of restoration of original finish. Refer to Refinish instructions, Fig. 601 and to REPAIR-GEN for list of applicable standard practices.



	1	2	3	4
DESIGN DIM	0.254 0.250	0.12 0.10	0.47 0.45	0.3755 0.3745
REPAIR LIMIT	---	---	---	---

REFINISH

CHROMIC ACID ANODIZE AND APPLY PRIMER, BMS 10-11, TYPE 1 (F-18.13) FOLLOWED BY ENAMEL, BMS 10-11, TYPE 2, COLOR 702 WHITE (F-21.03), EXCEPT OMIT PRIMER & ENAMEL FROM DIAS -C-, -D-, AND OMIT ENAMEL FROM SURFACE INDICATED

REPAIR

(SAME AS REFINISH)
 125/ MACHINE FINISH
 MATERIAL: AL ALLOY
 ALL DIMENSIONS ARE IN INCHES

257T2241-1
 Fitting Repair and Refinish
 Figure 601

32-41-02

REPAIR 6-1

01

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MISCELLANEOUS PARTS REFINISH – REPAIR 7-1

1. Repair of parts listed in Fig. 601 consists of restoration of the original finish. Refer to REPAIR-GEN for list of applicable standard practices.

IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Fitting (255), angles (270,275, 280,285), channels (305,310,315)	Al alloy	Chromic acid anodize and apply primer, BMS 10-11, type 1 (F-18.13) followed by enamel, BMS 10-11, type 2, gloss white color 702 (F-21.03), except omit enamel from faying surface of fitting (255).
Clips (265), fillers (290,295, 300), brackets (320,325,330,335)	Al alloy	Chemical treat and apply primer, BMS 10-11, type 1 (F-18.06) followed by enamel, BMS 10-11, type 2, gloss white color 702 (F-21.03).
<u>Fig. 2</u>		
Fitting (275), angles (291,292, 293,294), channels (300,302,304)	Al alloy	Chromic acid anodize and apply primer, BMS 10-11, type 1 (F-18.13) followed by enamel, BMS 10-11, type 2, gloss white color 702 (F-21.03), except omit enamel from faying surface of fitting (275).
Clips (290), fillers (295,297, 298), brackets (311,312,313,314)	Al alloy	Chemical treat and apply primer, BMS 10-11, type 1 (F-18.06) followed by enamel, BMS 10-11, type 2, gloss white color 702 (F-21.03).

Refinish Details
Figure 601

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REPAIR 7-1

01.1

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ASSEMBLY1. Material

NOTE: Equivalent substitutes may be used.

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

B. Hydraulic Fluid -- BMS 3-11 (Ref 20-60-03)

C. Assembly Lube -- MCS 352 (Ref 20-60-03)

2. Lubrication

A. Lightly lubricate packings and backup rings at assembly with hydraulic fluid or assembly lube.

3. Assembly (IPL Fig. 1) (Fig. 701)

A. Install adapters (10, 35, 60), fitting (15), unions (40) with packings (20, 25, 45, 50, 65, 70) and rings (30, 55, 75) on valve (95B).

B. Mount valve (95B) on support (230 or 235) with bolts (100), washers (105), nuts (110).

C. Install bushing (135) and bearing (130) in quadrant (170 or 175).

D. Connect rod (165) to crank (190) and secure with bolt (140), washer (145), nut (150).

E. Position quadrant-rod linkage as shown; then install in support with bolt (115), washer (120), nut (125).

F. Install crank (155 or 160) on valve (95B), mating double tooth on crank with omitted tooth on valve. Fasten with bolt (80), washer (85), nut (90B).

G. Connect rod (165) to crank (155 or 160) and secure with remaining bolt (140), washer (145), nut (150).

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ASSEMBLY

01.1

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4. Assembly (IPL Fig. 2) (Fig. 702)

- A. Install adapters (10, 40, 60), fitting (15), unions (35) with packings (20, 25, 45, 50, 65, 70) and rings (30, 55, 75) on valve (125).
- B. Mount valve (125) on support (250 or 255) with bolts (130), washers (105), nuts (110).
- C. Install bushing (165) and bearing (160) in quadrant (200 or 205).
- D. Connect rod (195) to crank (220) and secure with bolt (170), washer (175), nut (180).
- E. Position quadrant-rod linkage as shown; then install in support with bolt (145), washer (150), nut (155).
- F. Install crank (185 or 190) on valve (125), mating double tooth on crank with omitted tooth on valve. Fasten with bolt (110), washer (115), nut (125).
- G. Connect rod (195) to crank (185 or 190) and secure with remaining bolt (170), washer (175), nut (180).

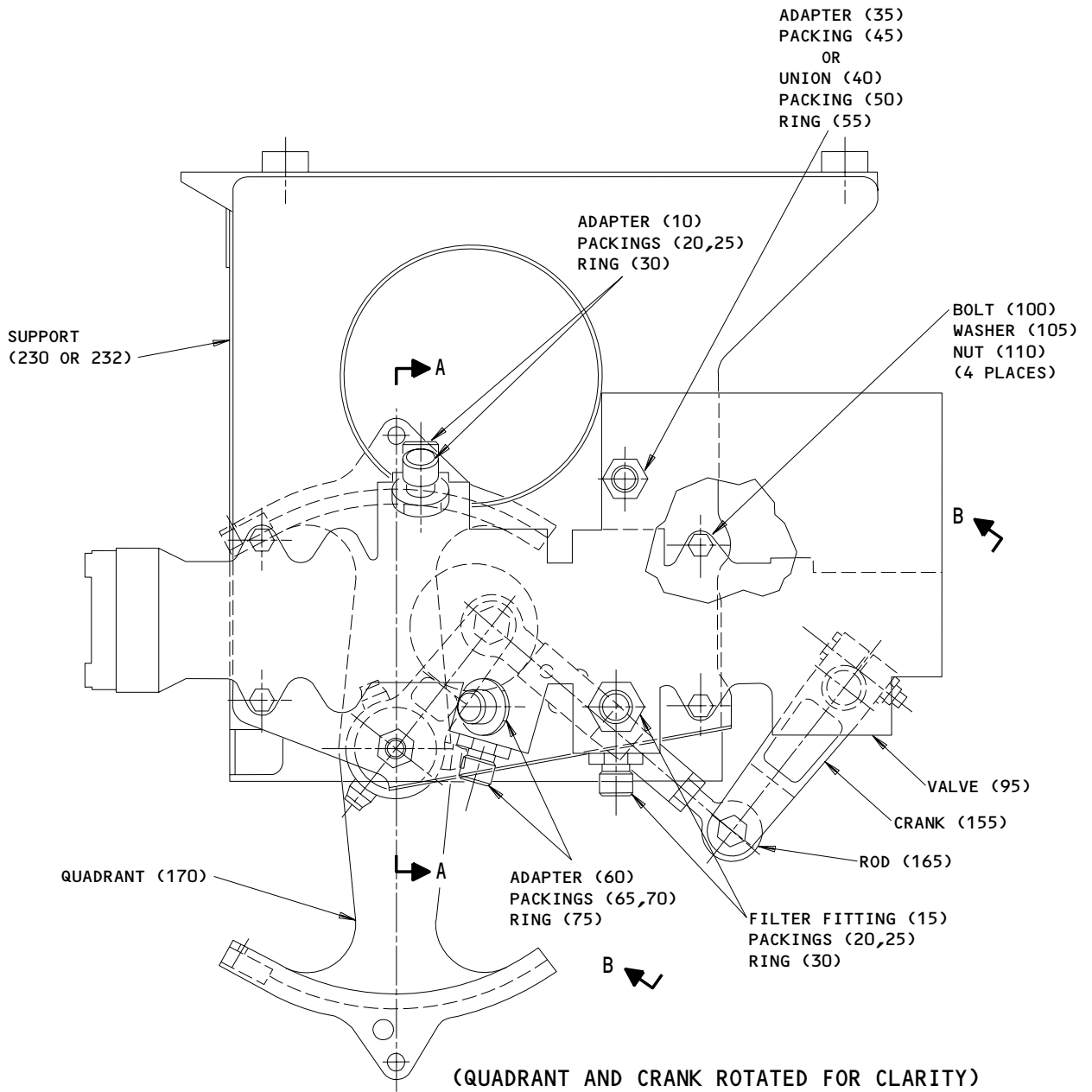
32-41-02

ASSEMBLY

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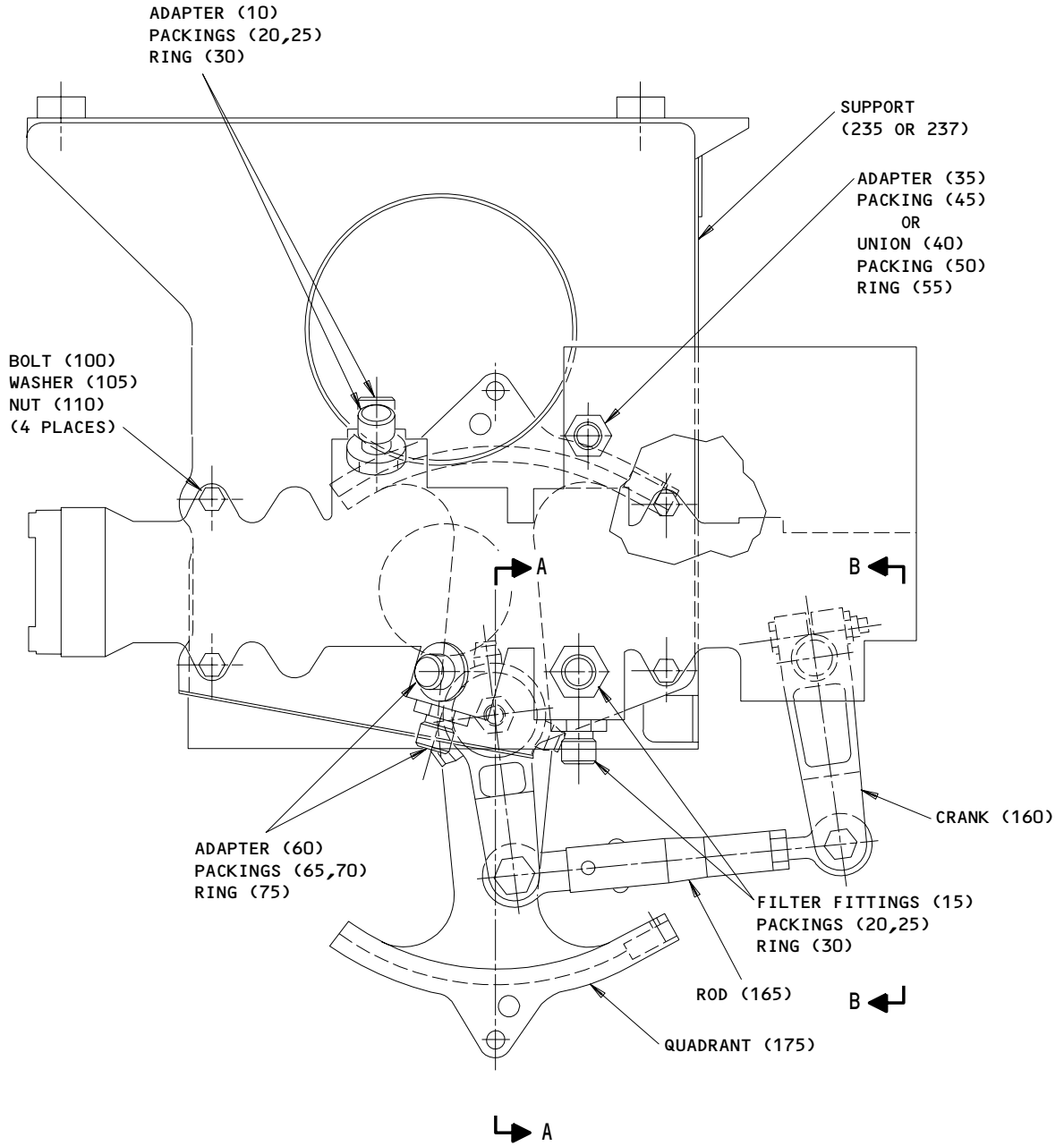
257T2231-7

Assembly Details
 Figure 701 (Sheet 1)

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ASSEMBLY
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01.101



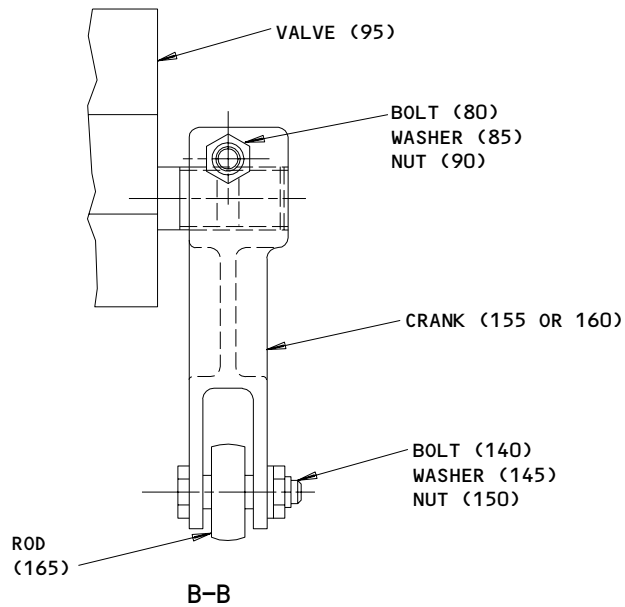
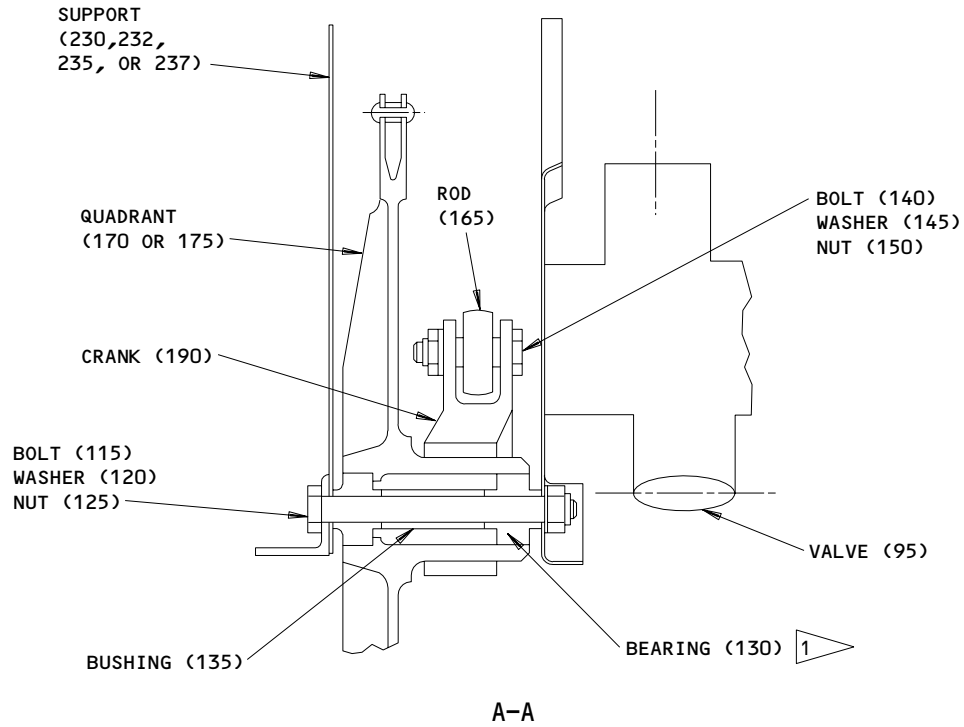
257T2231-8

Assembly Details
 Figure 701 (Sheet 2)

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ASSEMBLY
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01.101



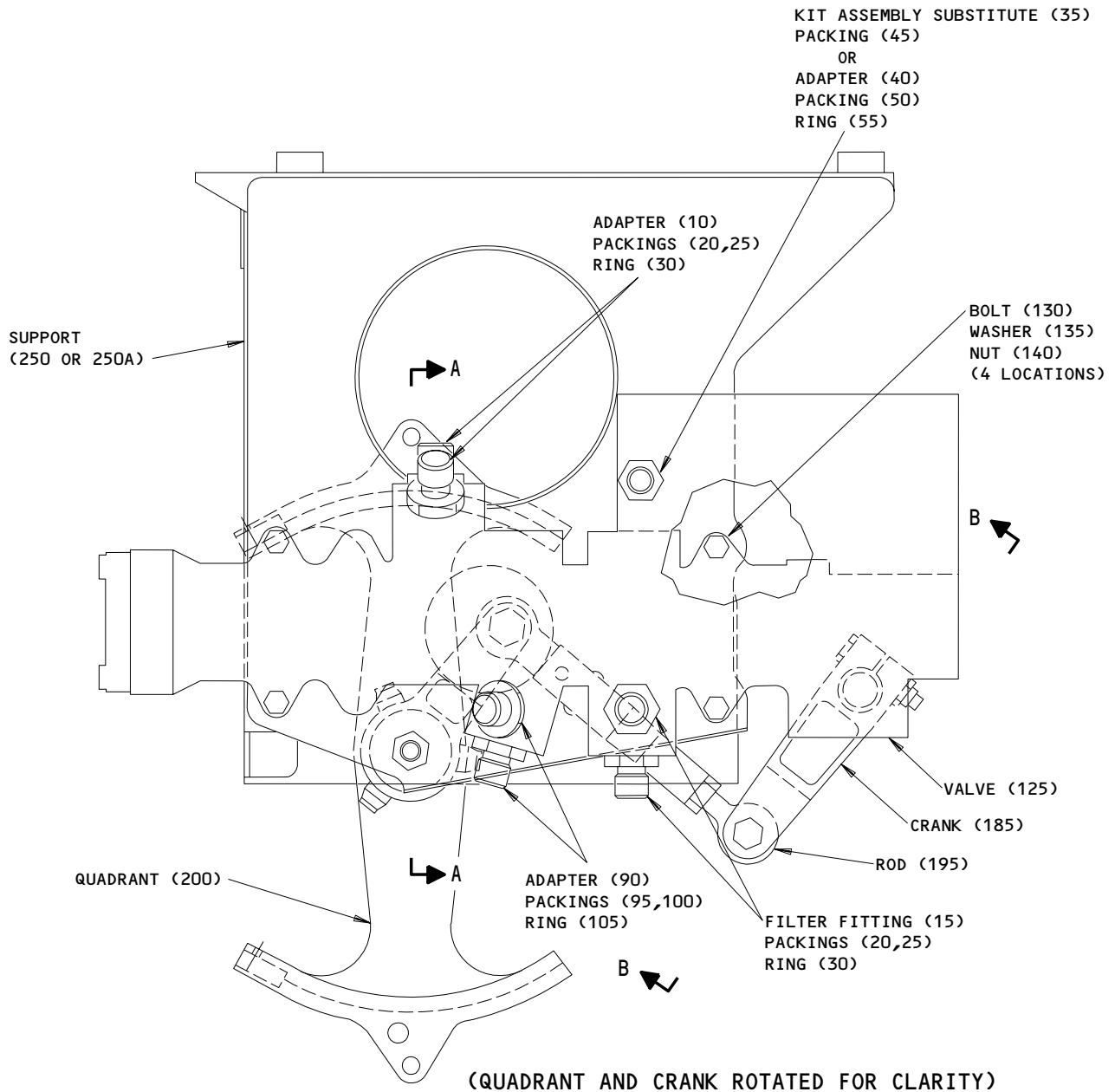
1 INSTALL WITH WET PRIMER, BMS 10-11, TYPE 1

Assembly Details
 Figure 701 (Sheet 3)

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ASSEMBLY
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01.101



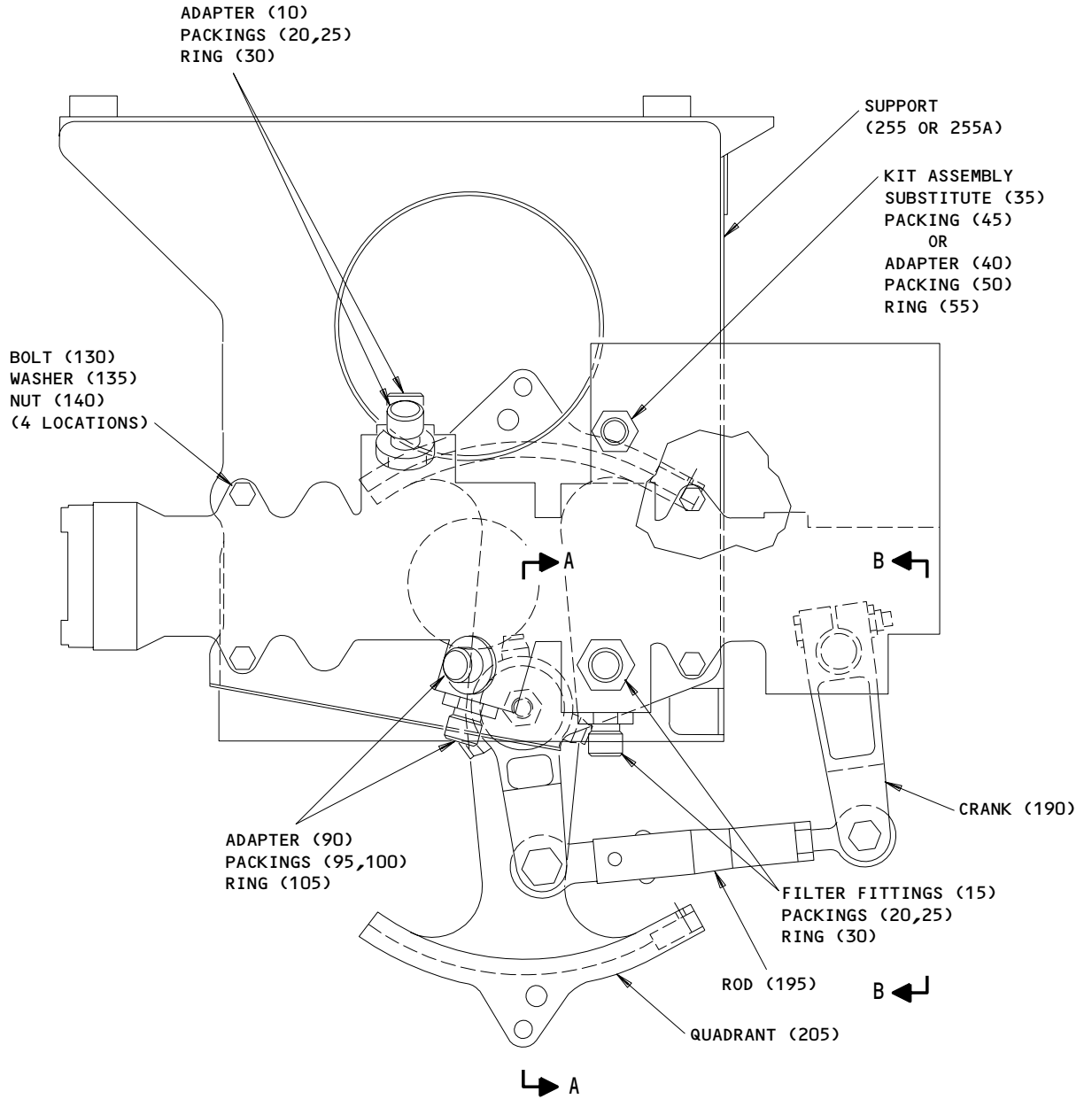
257T2231-15 SHOWN

257T2231-15,-16
 Assembly Details
 Figure 702 (Sheet 1)

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ASSEMBLY
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01.1



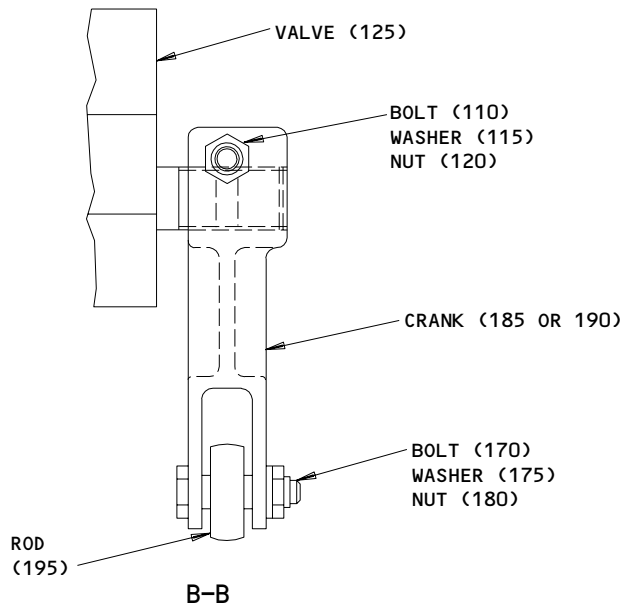
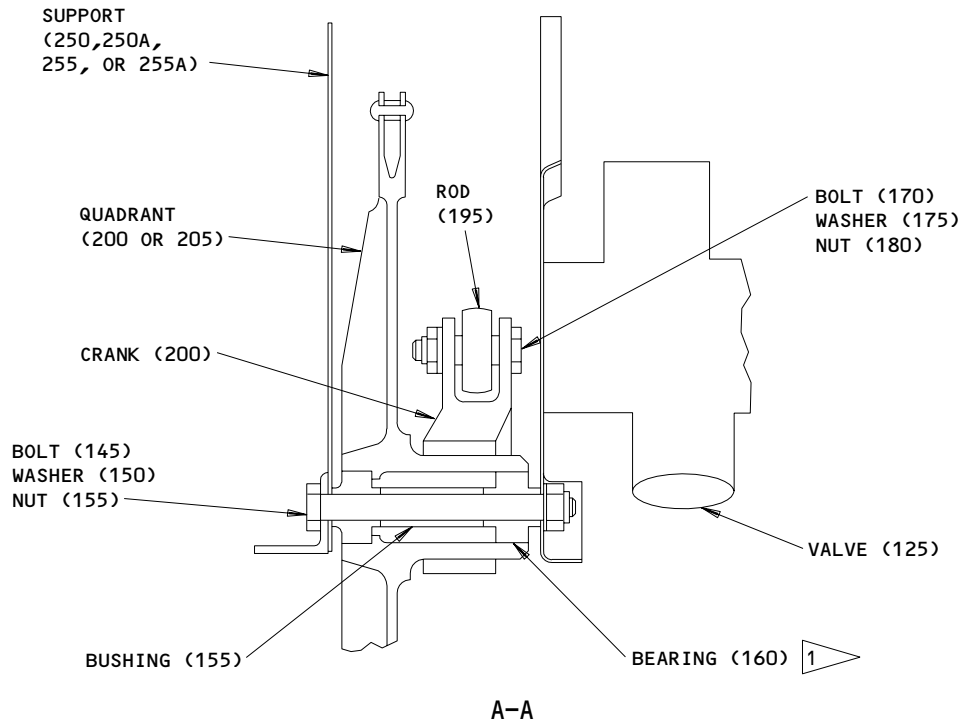
257T2231-16 SHOWN

257T2231-15,-16
 Assembly Details
 Figure 702 (Sheet 2)

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ASSEMBLY
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01.1



1 INSTALL WITH WET PRIMER, BMS 10-11, TYPE 1

ITEM NUMBERS REFER TO IPL FIG. 2

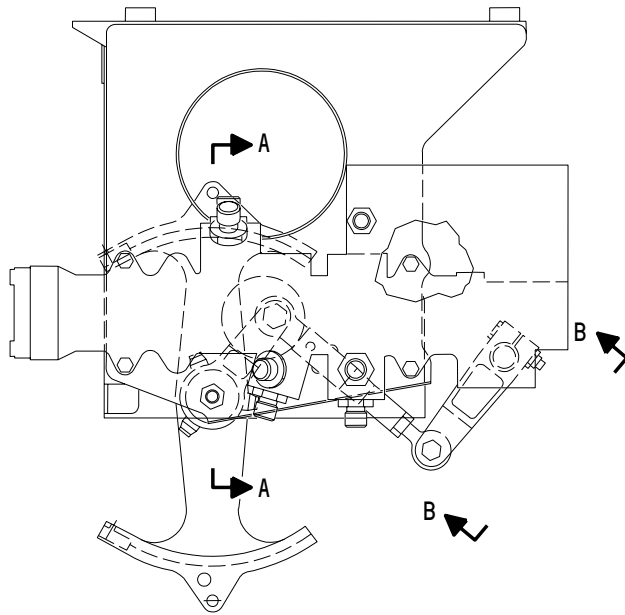
257T2231-15,-16
 Assembly Details
 Figure 702 (Sheet 3)

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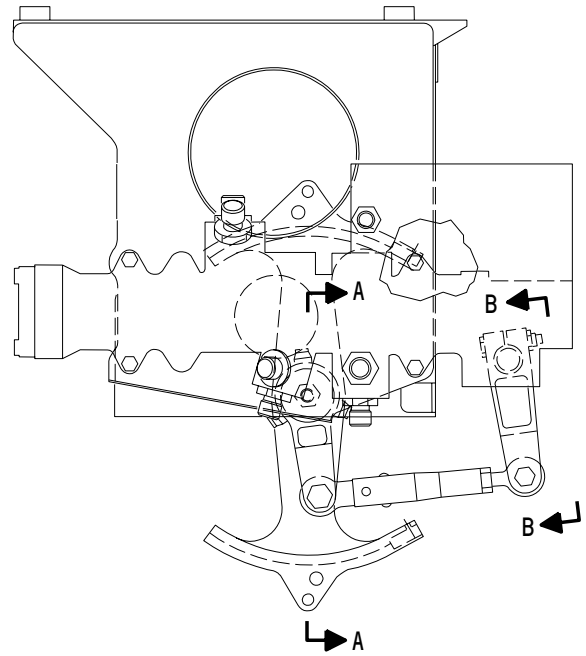
ASSEMBLY
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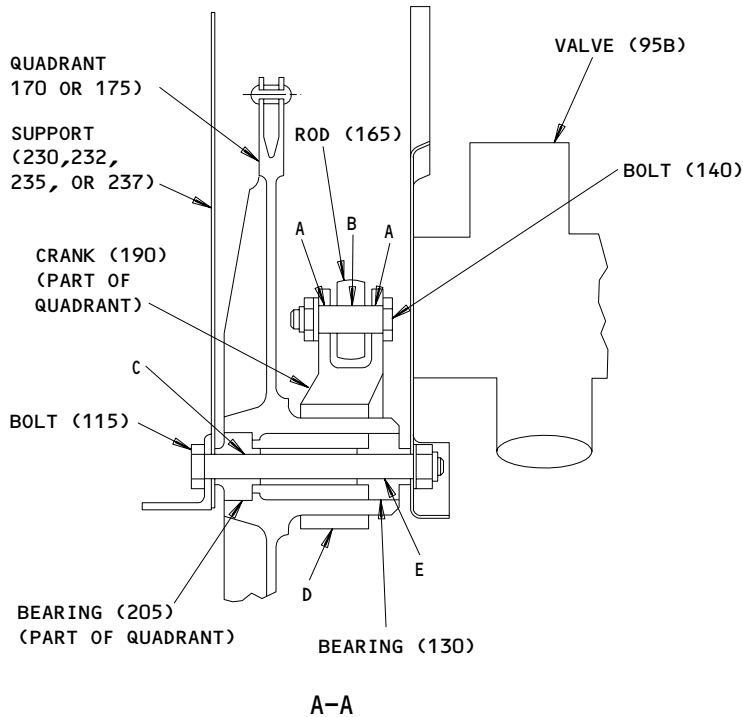
FITS AND CLEARANCES



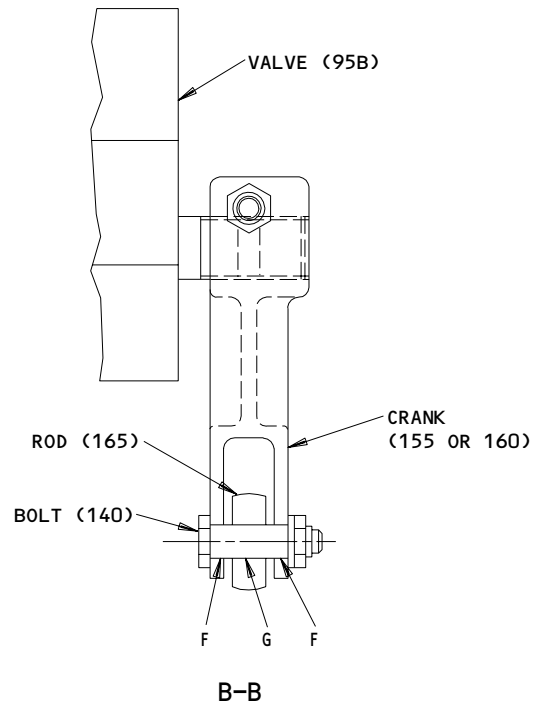
257T2231-7



257T2231-8



A-A





B-B


ITEM NUMBERS REFER TO IPL FIG. 1

Fits and Clearances
 Figure 801 (Sheet 1)

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FITS AND CLEARANCES
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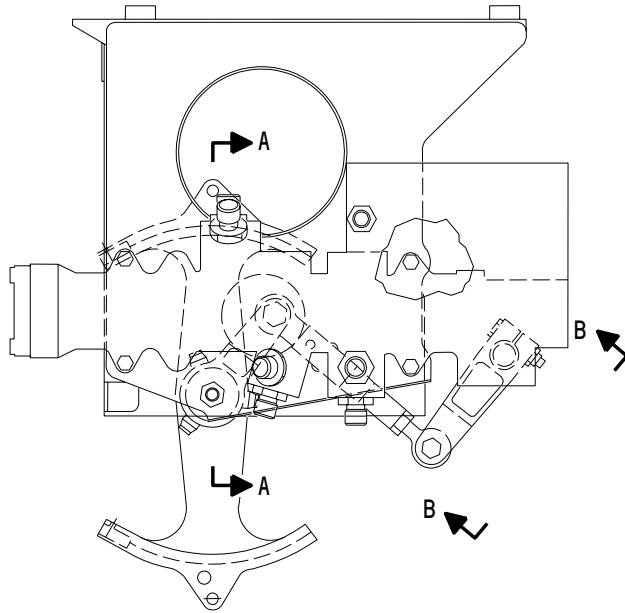
Ref Letter Fig.801	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 190	0.2495	0.2505	0.0000	0.0020			
	OD 140	0.2485	0.2495					
B	ID 165 	0.2497	0.2500	0.0002	0.0015			
	OD 140	0.2485	0.2495					
C	ID 205	0.3120	0.3125	0.0000	0.0015			
	OD 115	0.3110	0.3120					
D	ID 190	1.2500	1.2506	0.0003	0.0015			
	OD 195,200	1.2491	1.2497					
E	ID 130	0.3120	0.3125	0.0000	0.0015			
	OD 115	0.3110	0.3120					
F	ID 155,160	0.2495	0.2505	0.0000	0.0020			
	OD 140	0.2485	0.2495					
G	ID 165 	0.2497	0.2500	0.0002	0.0015			
	OD 140	0.2485	0.2495					

 REFER TO CMM 27-00-11

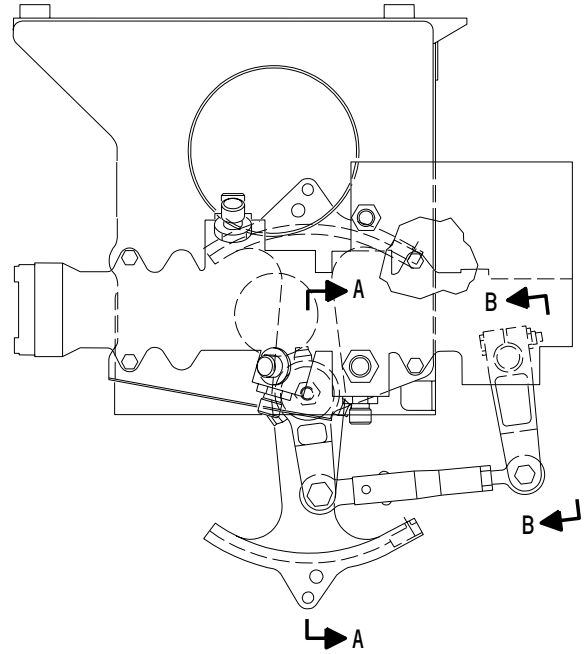
 Fits and Clearances
 Figure 801 (Sheet 2)

32-41-02

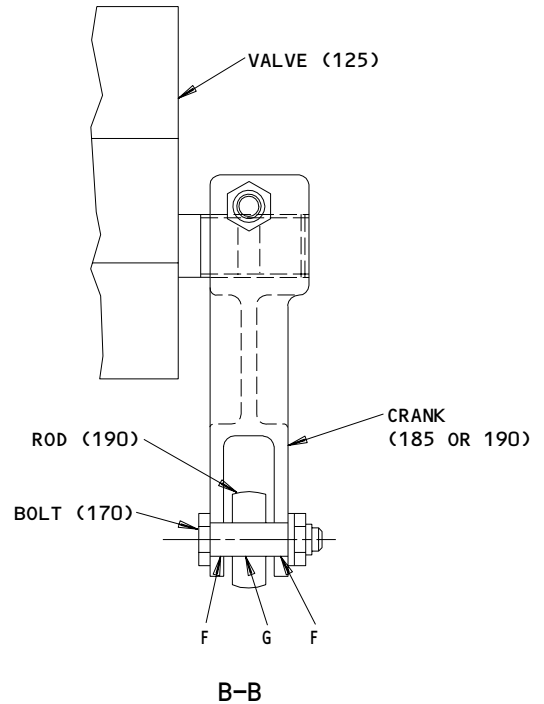
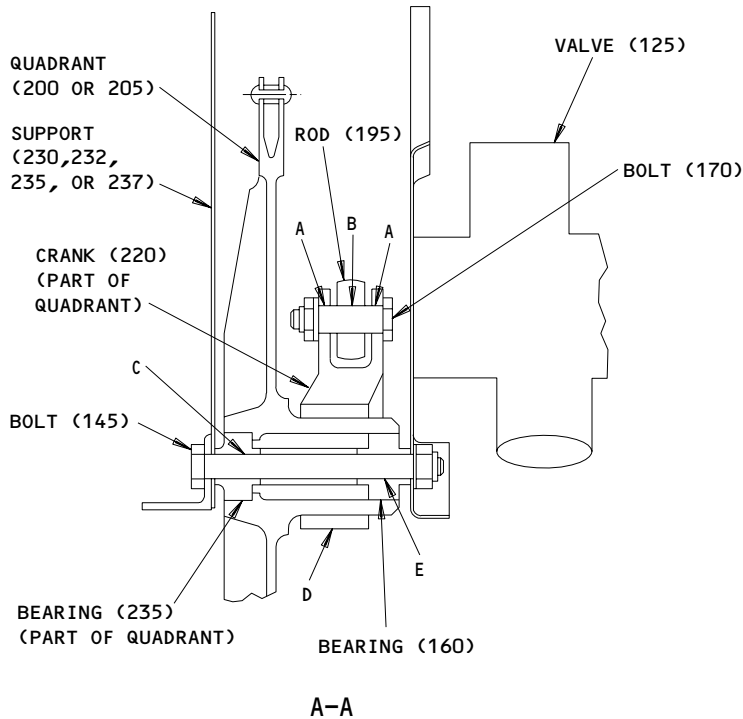
 FITS AND CLEARANCES
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257T2231-15



257T2231-16






ITEM NUMBERS REFER TO IPL FIG. 2

Fits and Clearances
 Figure 802 (Sheet 1)

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FITS AND CLEARANCES
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Ref Letter Fig.802	Mating Item No. IPL Fig.2	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 220	0.2495	0.2505	0.0000	0.0020			
	OD 170	0.2485	0.2495					
B	ID 195 	0.2497	0.2500	0.0002	0.0015			
	OD 170	0.2485	0.2495					
C	ID 235	0.3120	0.3125	0.0000	0.0015			
	OD 145	0.3110	0.3120					
D	ID 220	1.2500	1.2506	0.0003	0.0015			
	OD 225,230	1.2491	1.2497					
E	ID 160	0.3120	0.3125	0.0000	0.0015			
	OD 145	0.3110	0.3120					
F	ID 185,190	0.2495	0.2505	0.0000	0.0020			
	OD 170	0.2485	0.2495					
G	ID 195 	0.2497	0.2500	0.0002	0.0015			
	OD 170	0.2485	0.2495					

 REFER TO CMM 27-00-11

Fits and Clearances
Figure 802 (Sheet 2)

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FITS AND CLEARANCES
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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

01673 AIRDROME PARTS CO
3251 AIRPORT WAY PO BOX 1867
LONG BEACH, CALIFORNIA 90801

02107 FLOUROCARBON CO OHIO DIV
DOVER, OHIO 44622
CANCELLED NO REPLACEMENT

06725 AIR INDUSTRIES CORPORATION
12570 KNOTT STREET
GARDEN GROVE, CALIFORNIA 92641-3932

07128 TETRAFLUOR INC
2051 EAST MAPLE AVENUE
EL SEGUNDO, CALIFORNIA 90245-5009

08524 DEUTSCH FASTENER CORP SEE CODE V97928

10989 MECTRON INDUSTRIES INCORPORATED SUB OF PALL CORP
330 TURNBULL CANYON ROAD PO BOX 3391
CITY OF INDUSTRY, CALIFORNIA 91745-0391

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

14798 DEUTSCH CO METAL COMPONENTS DIV
14800 SOUTH FIGUEROA STREET
GARDENA, CALIFORNIA 90248-1719

15653 KAYNAR TECHNOLOGY KAYNAR 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

21760 SCHATZ MANUFACTURING CO
FAIRVIEW AVENUE PO BOX 1191
POUGHKEEPSIE, NEW YORK 12601

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ILLUSTRATED PARTS LIST
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VENDORS

26303	GREENE TWEED IND INC ADVANTEC DIV 7101 PATTERSON DRIVE PO BOX 5037 GARDEN GROVE, CALIFORNIA 92645-5037
26879	CORONADO MFG INC 11069 PENROSE AVENUE SUN VALLEY, CALIFORNIA 90352-2722
30974	AEROFIT PRODUCTS INC 8531 WHITAKER STREET BUENA PARK, CALIFORNIA 90621-3129
38443	MRC BEARINGS 402 CHANDLER STREET JAMESTOWN, NEW YORK 14701-3802
#3 43991	FAG BEARING INCORPORATED 118 HAMILTON AVENUE STAMFORD, CONNECTICUT 06904
5M902	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3016 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5103
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
72962	HARVARD INDUSTRIES INC 3 WERNER WAY SUITE 210 LEBANON, NEW JERSEY 08833
73197	HI-SHEAR TECHNOLOGY CORP 2600 SKYPARK DRIVE TORRANCE, CALIFORNIA 90509

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VENDORS

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

94878 RAYBESTOS-MANHATTAN INC PACIFIC COAST DIV
FULLERTON, CALIFORNIA 92631
BUSINESS DISCONTINUED

97820 BUSAK AND SHAMBAN INC BEARING DIV
711 MITCHELL ROAD PO BOX 665
NEWBURY PARK, CALIFORNIA 91320-2214

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

99643 VICKERS INC FLUID CONTROL AND ACTUATION DIV
4690 COLORADO BLVD P.O. BOX 39787
LOS ANGELES, CALIFORNIA 90039-1106

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ILLUSTRATED PARTS LIST
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BOEING
 COMPONENT
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
AFP233-4-4T		1	35	1
		2	40	1
AN960JD416		1	85	1
		1	105	4
		1	145	2
AN960JD516		1	120	1
AP1005-04T		1	35	1
		2	40	1
BACA14AZ4AT		1	35	1
		2	40	1
BACA14AZ6A10T		1	10	2
		2	10	2
BACA14AZ6A8T		1	60	2
		2	90	2
BACB10BG3S		1	130	1
		1	205	1
		2	160	1
		2	235	1
BACB28AK05-125		1	135	1
		2	165	1
BACB30FM5A5		1	180	3
		2	210	3
BACB30NR5K43		1	115	1
		2	145	1
BACB30NX5K3		1	340	3
		2	365	3
BACC30AB5S		1	185	3
		2	215	3
BACC30X5		1	345	3
		2	370	3
BACF3F008M008NN		2	320	1
BACN10JN3		1	365	2
		1	390	2
		2	355	1
		2	395	2
BACN10KB3F		2	335	2
BACR12BM008		1	55	1
		2	55	1
BACR12BM111		1	75	2
		2	105	2
BACR12BM113		1	30	4
		2	30	4
BACR15BA3AD		1	360	4
		1	385	4
		2	330	4

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 ILLUSTRATED PARTS LIST
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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACR15BA3AD		2	390	4
BACR15BA3AS		2	350	4
BACR15BB4AD		1	210	2
		2	240	2
BACR15CE5KE		1	262	8
		2	285	8
BACR15CE6KE		1	250	4
		2	270	4
BACR15FT5KE		1	260	65
		1	375	5
		2	280	65
		2	315	3
		2	380	5
BACR15FT6KE		1	240	4
		2	260	4
BACS40R007B099F		1	337A	1
		2	305	1
BACS40R008A082F		1	338	2
		2	310	2
BACU24K4		1	40	1
		2	85	1
BRFM20A3		1	365	2
		1	390	2
		2	355	1
		2	395	2
BRF100A3		2	335	2
CE305E		1	130	1
		1	205	1
C11236-008B		1	55	1
		2	55	1
C11236-111B		1	75	2
		2	105	2
C11236-113B		1	30	4
		2	30	4
DBOA14AZ4T		1	35	1
		2	40	1
F2000-3		2	335	2
HL1187-5		1	345	3
		2	370	3
HL12-3		1	340	3
		2	365	3
HL12VAZ5-3		1	340	3
		2	365	3
HL440UC5-5		1	180	3
		2	210	3
HL86PB5		1	345	3
		2	370	3

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BOEING
 COMPONENT
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
HL87-5		1	345	3
		2	370	3
HL97DU5		1	185	3
		2	215	3
LLP5K		1	130	1
		1	205	1
LLP5K		2	160	1
		2	235	1
		2	340	3
L802-5K3		1	340	3
		2	365	3
MF1000-3BAC		1	365	2
		1	390	2
		2	355	1
		2	395	2
MF53049-3		1	365	2
		1	390	2
		2	355	1
		2	395	2
MS21042L4		1	90	1
		1	110	4
		1	150	2
		2	120	1
		2	140	4
		2	180	2
MS21042L5		1	125	1
		2	155	1
MS21902-4T		2	70	1
NAS1149D0463J		2	115	1
		2	135	4
		2	175	2
		2	150	1
NAS1149D0563J		2	150	1
NAS1611-008		1	50	1
		2	50	1
NAS1611-111		1	70	2
		2	100	2
NAS1611-113		1	25	4
		2	25	4
NAS1612-10		1	20	4
		2	20	4
NAS1612-4		1	45	1
		2	45	1
		2	65	1
		2	80	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS1612-8		1	65	2
		2	95	2
NAS42DD4-15		1	215	2
		2	245	2
NAS6604-11		1	100	4
NAS6604-11		2	130	4
NAS6604-13		1	140	2
		2	170	2
NAS6604-15		1	80	1
		2	110	1
NAS6605-43		1	115A	1
		2	145A	1
NS103185-02		2	335	2
NS103218-02		1	365	2
		1	390	2
		2	355	1
		2	395	2
P5K		1	130	1
		1	205	1
		2	160	1
		2	235	1
P5KE6531		1	130	1
		1	205	1
		2	160	1
		2	235	1
P5KFS428		1	130	1
		1	205	1
		2	160	1
		2	235	1
P5KG20		1	130	1
		1	205	1
		2	160	1
		2	235	1
P5KSD610		2	160	1
		2	235	1
P5KTT		1	130	1
		1	205	1
		2	160	1
		2	235	1
P5KT1C1-01		1	130	1
		1	205	1
		2	160	1
		2	235	1
RMF9201M3		1	365	2
		1	390	2
		2	355	1
		2	395	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
RMF9207-3		2	335	2
RMR12BM008		1	55	1
		2	55	1
RMR12BM111		1	75	2
		2	105	2
RMR12BM113		1	30	4
		2	30	4
STF800-008		1	55	1
		2	55	1
STF800-111		1	75	2
		2	105	2
STF800-113		1	30	4
		2	30	4
S274T402-20		2	125	1
S274T402-3		1	95B	1
S274T402-4		1	95C	1
S274T402-5		1	95E	1
S30294-008-1		1	55	1
		2	55	1
S30294-111-1		1	75	2
		2	105	2
S30294-113-1		1	30	4
		2	30	4
TF450-008A		1	55	1
		2	55	1
TF450-111A		1	75	2
		2	105	2
TF450-113A		1	30	4
		2	30	4
T8114S1032S		2	335	2
T8124S3S		2	355	1
		2	395	2
VN151A1-02		2	335	2
VN252A02		1	365	2
		1	390	2
		2	355	1
		2	395	2
WC130-5-5		1	180	3
		2	210	3
2100-008		1	55	1
		2	55	1
2100-111		1	75	2
		2	105	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
2100-113		1	30	4
		2	30	4
251T0100-235		1	165	1
251T0100-235		2	195	1
251T0100-245		2	195A	1
257T2231-10		1	5B	RF
257T2231-11		1	1D	RF
257T2231-12		1	5D	RF
257T2231-13		1	1E	RF
257T2231-14		1	5E	RF
257T2231-15		1	1F	RF
		2	1	RF
257T2231-16		1	5F	RF
		2	5	RF
257T2231-17		1	1G	RF
		2	1A	RF
257T2231-18		1	5G	RF
		2	5A	RF
257T2231-19		1	1H	RF
		2	1B	RF
257T2231-20		1	5H	RF
		2	5B	RF
257T2231-21		2	60	1
257T2231-22		2	35	1
257T2231-23		2	75	1
257T2231-7		1	1A	RF
257T2231-8		1	5A	RF
257T2231-9		1	1B	RF
257T2232-3		1	170	1
		2	200	1
257T2232-4		1	175	1
		2	205	1
257T2233-10		1	225	1
257T2233-7		1	195	1
		2	225	1
257T2233-8		1	200	1
		2	230	1
257T2233-9		1	220	1
257T2234-1		1	190	1
		2	220	1
257T2234-3		1	190A	1
		2	220A	1
257T2235-1		1	155	1
		2	185	1
257T2235-2		1	160	1
		2	190	1
257T2235-4		1	160A	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
257T2235-4		2	190A	1
257T2235-5		1	155A	1
		2	185A	1
257T2238-1		1	230	1
257T2238-2		1	235	1
257T2238-3		1	232	1
		2	250A	1
257T2238-4		1	237	1
		2	255A	1
257T2238-5		2	250	1
257T2238-6		2	255	1
257T2239-1		1	310	2
		2	247	1
		2	302	2
257T2239-2		1	315	2
		2	248	1
		2	304	2
257T2239-3		1	270	1
		2	291	1
257T2239-4		1	275	1
		2	292	1
257T2239-5		1	280	1
		2	293	1
257T2239-6		1	285	1
		2	294	1
257T2239-7		1	305	1
		2	300	1
257T2239-8		1	290	3
		1	300	1
		2	295	3
		2	297	1
257T2239-9		1	295	1
		2	298	1
257T2240-1		1	320	1
		2	311	1
257T2240-2		1	325	1
		2	312	1
257T2240-3		1	330	1
		2	313	1
257T2240-4		1	335	1
		2	314	1
257T2240-5		1	265	2
		2	290	2

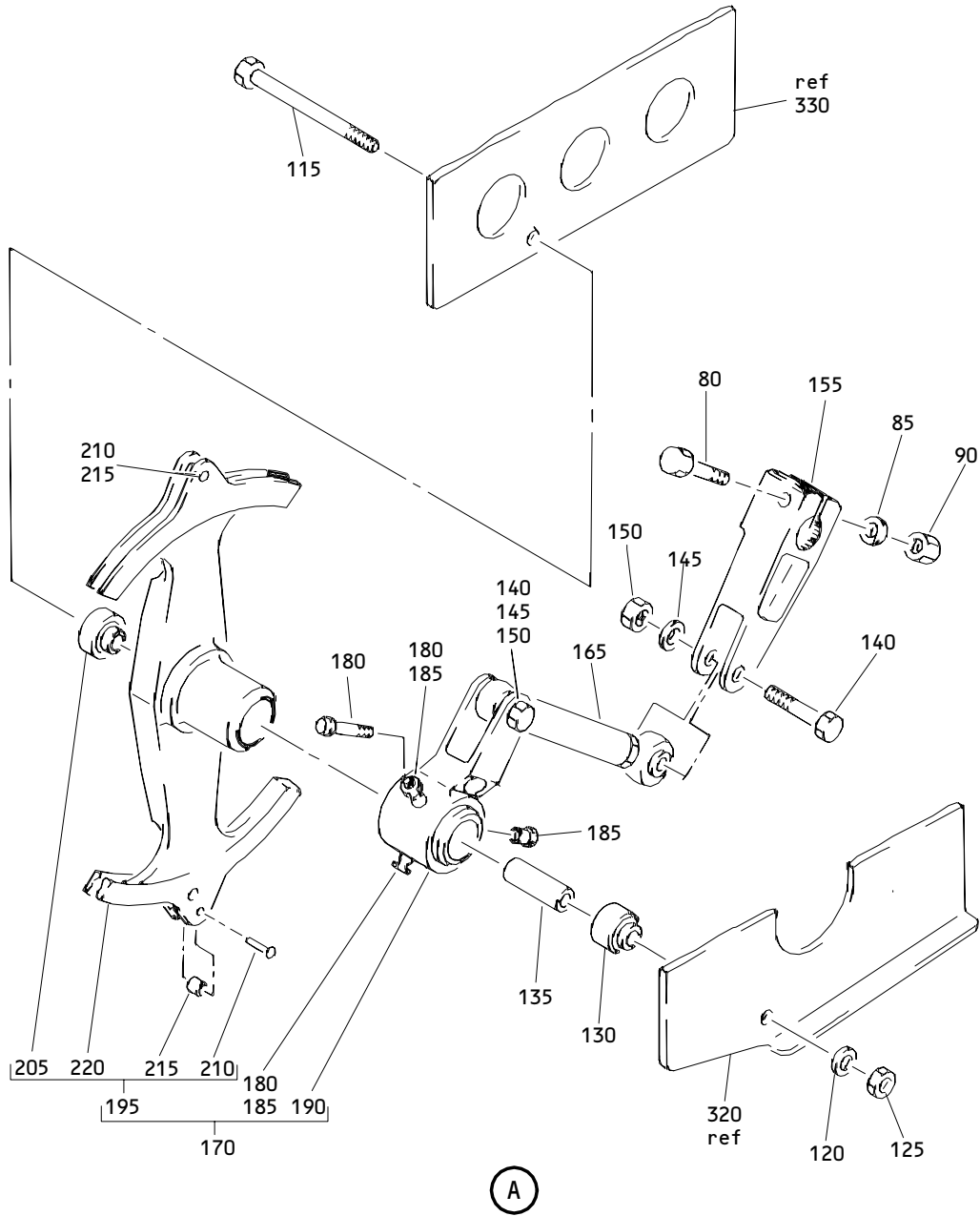
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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
257T2241-1		1	245	2
		2	265	2
257T2242-1		1	255	2
		2	275	2
272T0140-1		2	325	1
272T0140-2		2	340	1
272T0217-1		1	355	1
		2	345	1
272T0217-2		1	380	1
		2	345A	1
		2	385	1
272T0217-3		1	370	1
		2	360	1
272T0217-4		1	395	1
		2	360A	1
		2	400	1
272T0217-5		1	350	1
		2	375	1
28028		1	15	2
		2	15	2
67067-5A5		1	180	3
		2	210	3
70507-2		1	95B	1
71404-1		2	125	1

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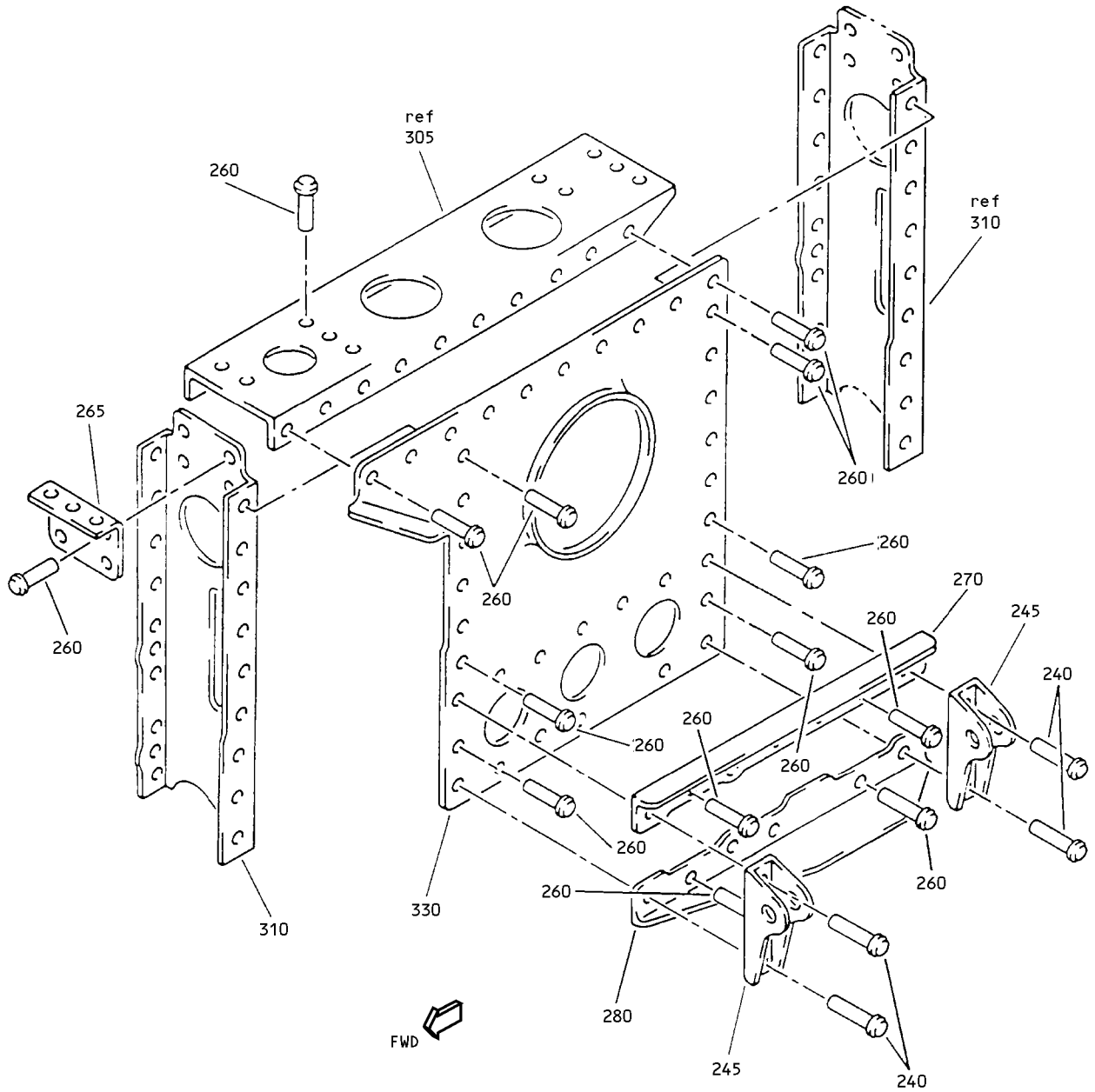
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Landing Gear Brake Module Assembly
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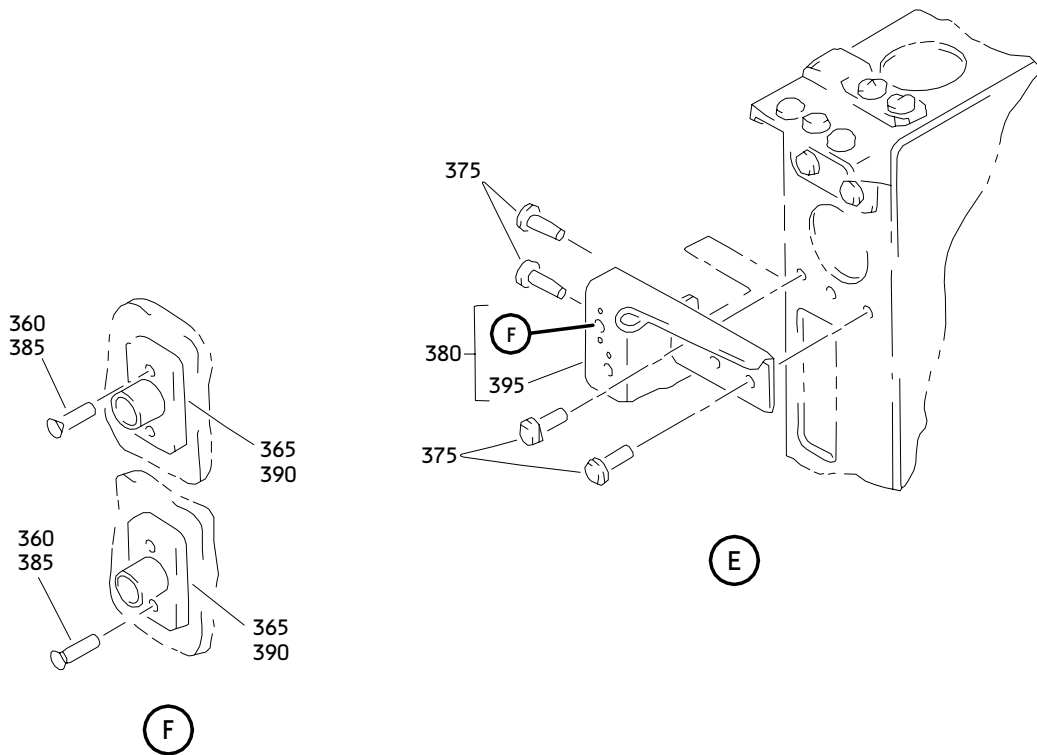
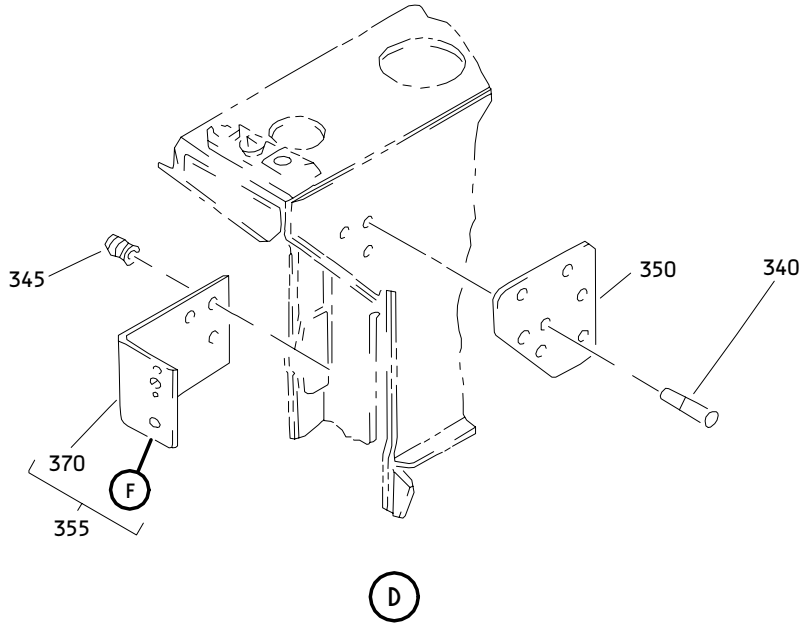
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Landing Gear Brake Module Assembly
 Figure 1 (Sheet 5)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1	257T2231-5		DELETED		
R -1A	257T2231-7		MODULE ASSY-LG BRAKE L SIDE	A	RF
R -1B	257T2231-9		MODULE ASSY-LG BRAKE L SIDE	C	RF
-1C	257T2231-12		DELETED		
R -1D	257T2231-11		MODULE ASSY-LG BRAKE L SIDE	E	RF
R -1E	257T2231-13		MODULE ASSY-LG BRAKE L SIDE	G	RF
R -1F	257T2231-15		MODULE ASSY-LG BRAKE L SIDE (FOR DETAILS SEE FIG. 2)	J	RF
R -1G	257T2231-17		MODULE ASSY-LG BRAKE L SIDE (FOR DETAILS SEE FIG. 2)	L	RF
R -1H	257T2231-19		MODULE ASSY-LG BRAKE L SIDE (FOR DETAILS SEE FIG. 2)	N	RF
-5	257T2231-6		DELETED		
R -5A	257T2231-8		MODULE ASSY-LG BRAKE R SIDE	B	RF
R -5B	257T2231-10		MODULE ASSY-LG BRAKE R SIDE	D	RF
-5C	257T2231-11		DELETED		
R -5D	257T2231-12		MODULE ASSY-LG BRAKE R SIDE	F	RF
R -5E	257T2231-14		MODULE ASSY-LG BRAKE R SIDE	H	RF
R -5F	257T2231-16		MODULE ASSY-LG BRAKE R SIDE (FOR DETAILS SEE FIG. 2)	K	RF
R -5G	257T2231-18		MODULE ASSY-LG BRAKE R SIDE (FOR DETAILS SEE FIG. 2)	M	RF
R -5H	257T2231-20		MODULE ASSY-LG BRAKE R SIDE (FOR DETAILS SEE FIG. 2)	P	RF
R 10	BACA14AZ6A10T		.ADAPTER	A-H	2
R 15	28028		.FITTING-FILTER (V10989)	A-H	2
20	NAS1612-10		.PACKING	A-H	4
25	NAS1611-113		.PACKING	A-H	4

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-30	C11236-113B		.RING- (V26879) (SPEC BACR12BM113) (OPT RMR12BM113 (V94878)) (OPT STF800-113 (V02107)) (OPT S30294-113-1 (V97820)) (OPT TF450-113A (V07128)) (OPT 2100-113 (V26303))	A-H	4
35	AFP233-4-4T		.ADAPTER- (V30974) (SPEC BACA14AZ4AT) (OPT AP1005-04T (V01673)) (OPT DBOA14AZ4T (V14798)) (ITEM 40 PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55) (ITEM 40A PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55)	A-H	1
40	BACU24K4		.UNION- (ITEM 40 PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55)	A-H	1
-40A	MS21902-4T		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-45	NAS1612-4		.PACKING- (ITEM 40 PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55) (ITEM 40A PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55)	A-H	1
50	NAS1611-008		.PACKING- (ITEM 40 PLUS ITEM 45, OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55) (ITEM 40A PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55)	A-H	1
55	C11236-008B		.RING- (V26879) (SPEC BACR12BM008) (OPT RMR12BM008 (V94878)) (OPT STF800-008 (V02107)) (OPT S30294-008-1 (V97820)) (OPT TF450-008A (V07128)) (OPT 2100-008 (V26303)) (ITEM 40 PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55) (ITEM 40A PLUS ITEM 45 OPT TO ITEM 35, ITEM 45, ITEM 50 AND ITEM 55)	A-H	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-60	BACA14AZ6A8T		.ADAPTER	A-H	2
65	NAS1612-8		.PACKING	A-H	2
70	NAS1611-111		.PACKING	A-H	2
75	C11236-111B		.RING- (V26879) (SPEC BACR12BM111) (OPT RMR12BM111 (V94878)) (OPT STF800-111 (V02107)) (OPT S30294-111-1 (V97820)) (OPT TF450-111A (V07128)) (OPT 2100-111 (V26303))	A-H	2
80	NAS6604-15		.BOLT	A-H	1
85	AN960JD416		.WASHER	A-H	1
-85A	NAS1149D0463J		DELETED		
90	MS21042L4		.NUT	A-H	1
95	S274T402-2		DELETED		
95A	S274T402-3		DELETED		
R 95B	70507-2		.VALVE ASSY- (V99643) (SPEC S274T402-3)	A,B	1
R -95C	S274T402-4		.VALVE ASSY	E,F	1
R -95D	70507-2		.VALVE ASSY- (V99643) (SPEC S274T402-3) (OPT ITEM 95E)	C,D	1
R -95E	71404		.VALVE ASSY- (V99643) (SPEC S274T402-5) (OPT ITEM 95D)	C,D	1
R -95F	71404		.VALVE ASSY- (V99643) (SPEC S274T402-5)	G,H	1
-95G	S274T402-20		DELETED		
-95H	71404-1		DELETED		
			ATTACHING PARTS		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
100	NAS6604-11		.BOLT	A-H	4
105	AN960JD416		.WASHER	A-H	4
-105A	NAS1149D0463J		DELETED		
110	MS21042L4		.NUT	A-H	4
			-----*-----		
115	BACB30NR5K43		.BOLT- (OPT ITEM 115A)	A-H	1
-115A	NAS6605-43		.BOLT- (OPT ITEM 115)	A-H	1
120	AN960JD516		.WASHER	A-H	1
-120A	NAS1149D0563J		DELETED		
125	MS21042L5		.NUT	A-H	1
130	P5KFS428		.BEARING- (V21335) (SPEC BACB10BG3S) (OPT P5K (V38443)) (OPT P5KE6531 (V21335)) (OPT P5KTT (V43991)) (OPT P5KT1C1-01 (V21760)) (OPT P5KG20 (V38443)) (OPT LLP5K (V38443)) (OPT CE305E (VK8455))	A-H	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
135	BACB28AK05-125		.BUSHING	A-H	1
140	NAS6604-13		.BOLT	A-H	2
145	AN960JD416		.WASHER	A-H	2
-145A	NAS1149D0463J		DELETED		
150	MS21042L4		.NUT	A-H	2
155	257T2235-1		.CRANK- (OPT ITEM 155A)	A,C,F	1
-155A	257T2235-5		.CRANK- (OPT ITEM 155)	A,C,F	1
-160	257T2235-2		.CRANK- (OPT ITEM 160A)	B,D,E	1
-160A	257T2235-4		.CRANK- (OPT ITEM 160)	B,D,E	1
165	251T0100-235		.ROD ASSY- (REF CMM 27-00-11)	A-H	1
-165A	251T0100-245		DELETED		
170	257T2232-3		.QUADRANT ASSY	A,C,F	1
-175	257T2232-4		.QUADRANT ASSY	B,D,E	1
180	HL440UC5-5		..BOLT- (V56878) (SPEC BACB30FM5A5) (OPT HL440UC5-5 (V73197)) (OPT HL440UC5-5 (V92215)) (OPT HL440UC5-5 (V97928)) (OPT HL440UC5-5 (V80539)) (OPT WC130-5-5 (V60516)) (OPT 67067-5A5 (V56878)) (OPT HL440UC5-5 (V60516)) (OPT HL440UC5-5 (V08524))	A-H	3

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-185	HL97DU5		..COLLAR- (V73197) (SPEC BACC30AB5S) (OPT HL97DU5 (V92215)) (OPT HL97DU5 (V56878))	A-H	3
190	257T2234-1		..CRANK- (OPT ITEM 190A)	A-H	1
-190A	257T2234-3		..CRANK- (OPT ITEM 190)	A-H	1
195	257T2233-7		..QUADRANT ASSY	A,C,F	1
-200	257T2233-8		..QUADRANT ASSY	B,D,E	1
205	P5KFS428		...BEARING- (V21335) (SPEC BACB10BG3S) (OPT P5K (V38443)) (OPT P5KE6531 (V21335)) (OPT P5KTT (V43991)) (OPT P5KT1C1-01 (V21760)) (OPT P5KG20 (V38443)) (OPT LLP5K (V38443)) (OPT CE305E (VK8455))	A-H	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- 210	BACR15BB4AD		...RIVET- (SIZE DETERMINE ON INST)	A-H	2
215	NAS42DD4-15		...SPACER	A-H	2
220	257T2233-9		...QUADRANT	A,C,F	1
-225	257T2233-10		...QUADRANT	B,D,E	1
230	257T2238-1		.SUPPORT ASSY	A	1
R 232	257T2238-3		.SUPPORT ASSY	C,F	1
-232A	257T2238-5		DELETED		
-235	257T2238-2		.SUPPORT ASSY	B	1
R 237	257T2238-4		.SUPPORT ASSY	D,E	1
-237A	257T2238-6		DELETED		
240	BACR15FT6KE		..RIVET- (SIZE DETERMINE ON INST)	A-H	4
245	257T2241-1		..FITTING	A-H	2
250	BACR15CE6KE		..RIVET- (SIZE DETERMINE ON INST)	A-H	4
255	257T2242-1		..FITTING	A-H	2
260	BACR15FT5KE		..RIVET- (SIZE DETERMINE ON INST)	A-H	65
262	BACR15CE5KE		..RIVET- (SIZE DETERMINE ON INST)	A-H	8
265	257T2240-5		..CLIP	A-H	2
270	257T2239-3		..ANGLE	A,C,F	1
-275	257T2239-4		..ANGLE	B,D,E	1
280	257T2239-5		..ANGLE	A,C,F	1
-285	257T2239-6		..ANGLE	B,D,E	1
290	257T2239-8		..FILLER	A-H	3
295	257T2239-9		..FILLER	A,C,F	1
-300	257T2239-8		..FILLER	B,D,E	1
305	257T2239-7		..CHANNEL	A-H	1
310	257T2239-1		..CHANNEL	A,C,F	2
-315	257T2239-2		..CHANNEL	B,D,E	2
320	257T2240-1		..BRACKET	A,C,F	1
-325	257T2240-2		..BRACKET	B,D,E	1
330	257T2240-3		..BRACKET	A,C,F	1
-335	257T2240-4		..BRACKET	B,D,E	1
337	BACS40R007B090F		DELETED		
R 337A	BACS40R007B099F		..SHIM	A-H	1
R 338	BACS40R008A082F		..SHIM	A-H	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-340	HL12VAZ5-3		..BOLT- (V56878) (SPEC BACB30NX5K3) (OPT HL12VAZ5-3 (V73197)) (OPT HL12VAZ5-3 (V92215)) (OPT HL12VAZ5-3 (V97928)) (OPT L802-5K3 (V06725)) (OPT HL12-3 (V06725)) (OPT HL12VAZ5-3 (V97928))	C,F	3
R 345	HL1187-5		..COLLAR- (V73197) (SPEC BACC30X5) (OPT HL87-5 (V73197)) (OPT HL87-5 (V92215)) (OPT HL86PB5 (V73197)) (OPT HL86PB5 (V56878)) (OPT HL86PB5 (V92215)) (OPT HL1187-5 (V56878)) (OPT HL1187-5 (V92215)) (OPT HL87-5 (V56878)) (OPT HL1187-5 (V5M902))	C,F	3

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
R 350	272T0217-5		..PLATE	C,F	1
R 355	272T0217-1		..BRACKET ASSY	C,F	1
R 360	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)	C,F	4
R 365	BRFM20A3		...NUTPLATE- (V52828) (SPEC BACN10JN3) (OPT MF1000-3BAC (V15653)) (OPT NS103218-02 (V80539)) (OPT RMF9201M3 (V72962)) (OPT VN252A02 (V92215)) (OPT MF1000-3BAC (V15653)) (OPT MF53049-3 (V15653))	C,F	2
R 370	272T0217-3		...BRACKET	C,F	1
R 375	BACR15FT5KE		..RIVET- (SIZE DETERMINE ON INST)	D,E	5
R 380	272T0217-2		..BRACKET ASSY	D,E	1
R 385	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)	D,E	4
R 390	BRFM20A3		...NUTPLATE- (V52828) (SPEC BACN10JN3) (OPT MF1000-3BAC (V15653)) (OPT NS103218-02 (V80539)) (OPT RMF9201M3 (V72962)) (OPT VN252A02 (V92215)) (OPT MF1000-3BAC (V15653)) (OPT MF53049-3 (V15653))	D,E	2
R 395	272T0217-4		...BRACKET	D,E	1
400	BACR15FT5KE		DELETED		
405	BACF3F008M008NN		DELETED		
410	272T0140-1		DELETED		
415	BACR15BA3AD		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
			1234567		
01- 420 425	BRF100A3 272T0140-2		DELETED DELETED		

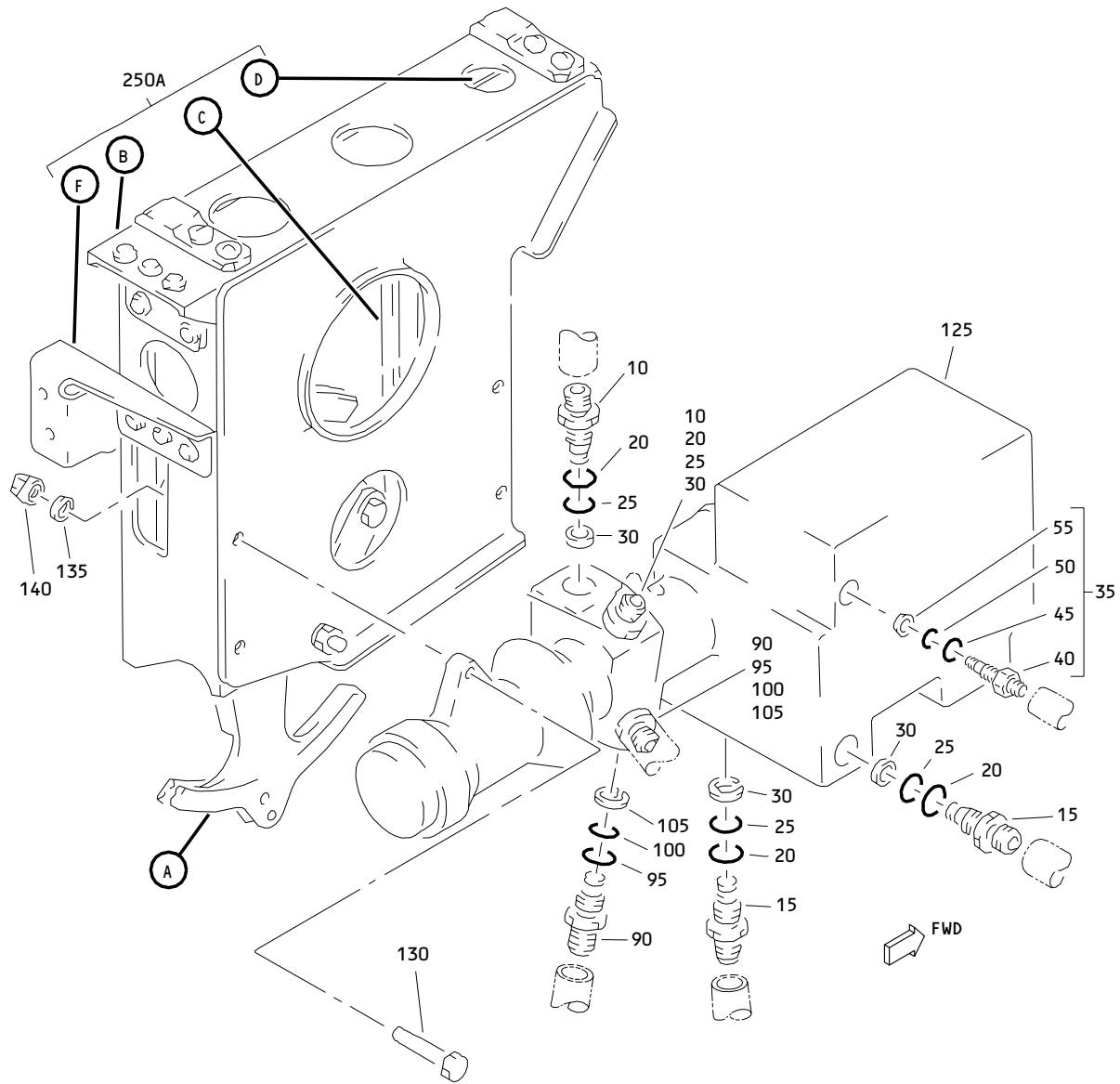
- Item Not Illustrated

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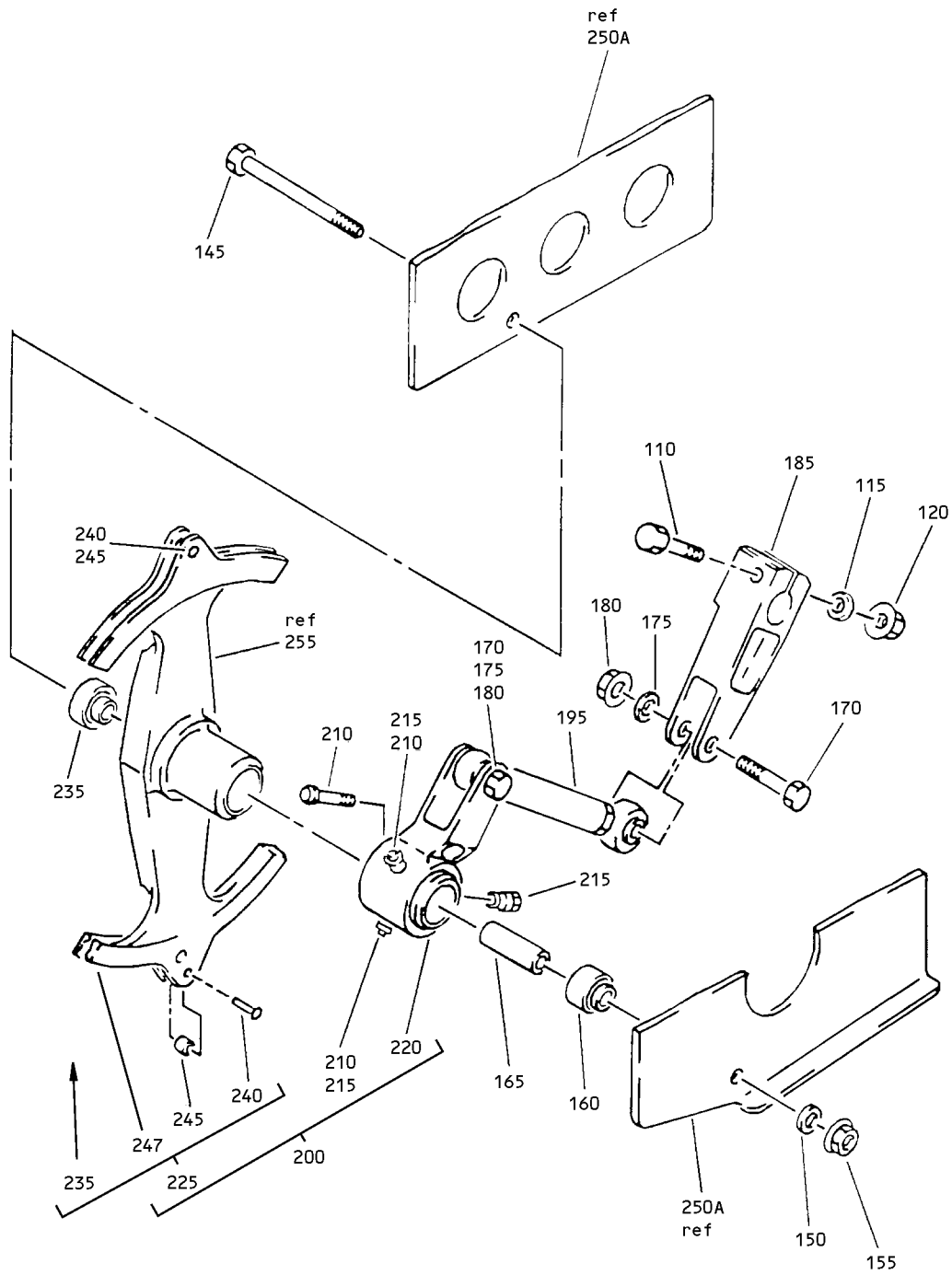
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Landing Gear Brake Module Assembly
 Figure 2 (Sheet 1)

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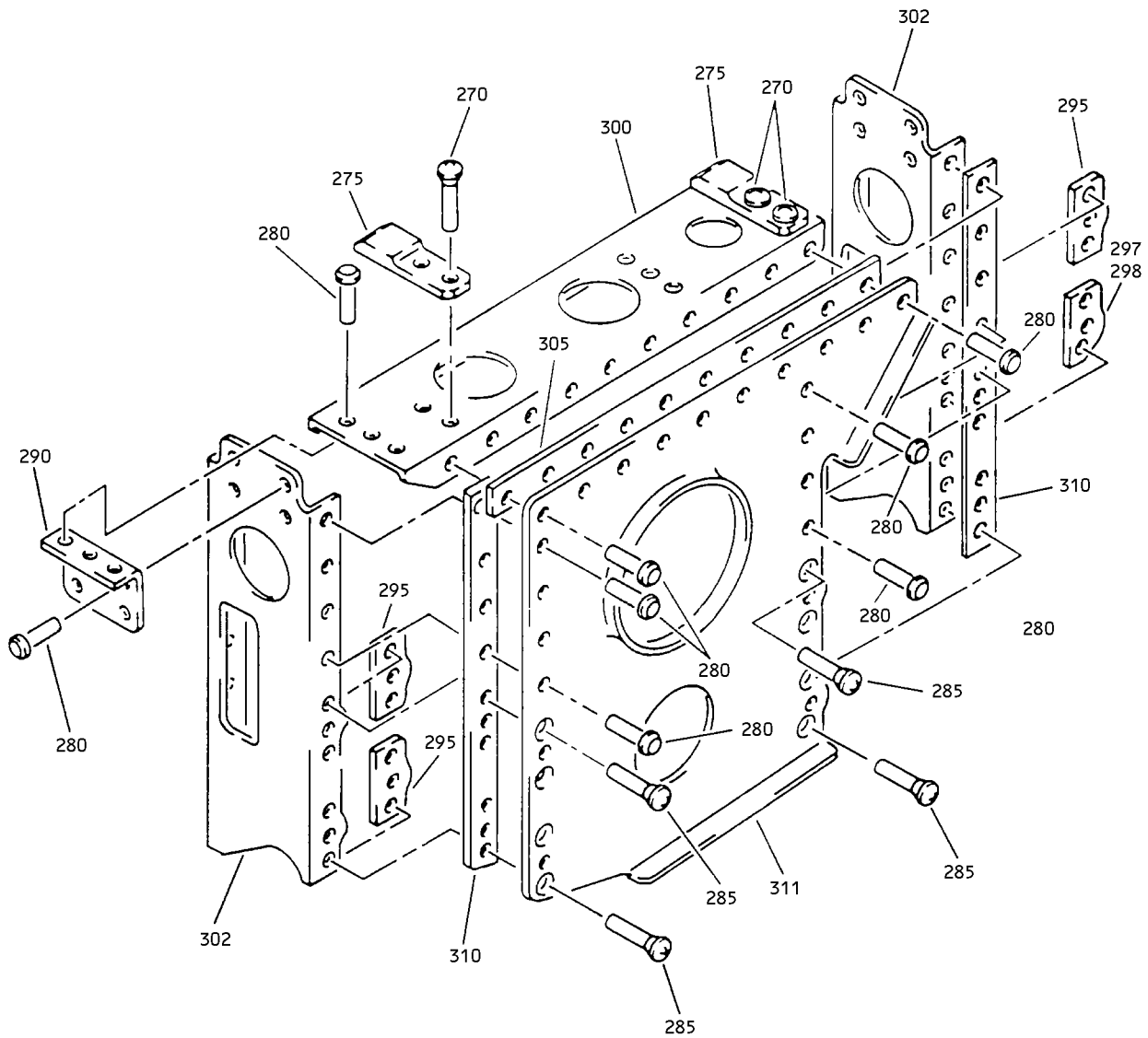
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Landing Gear Brake Module Assembly
Figure 2 (Sheet 2)

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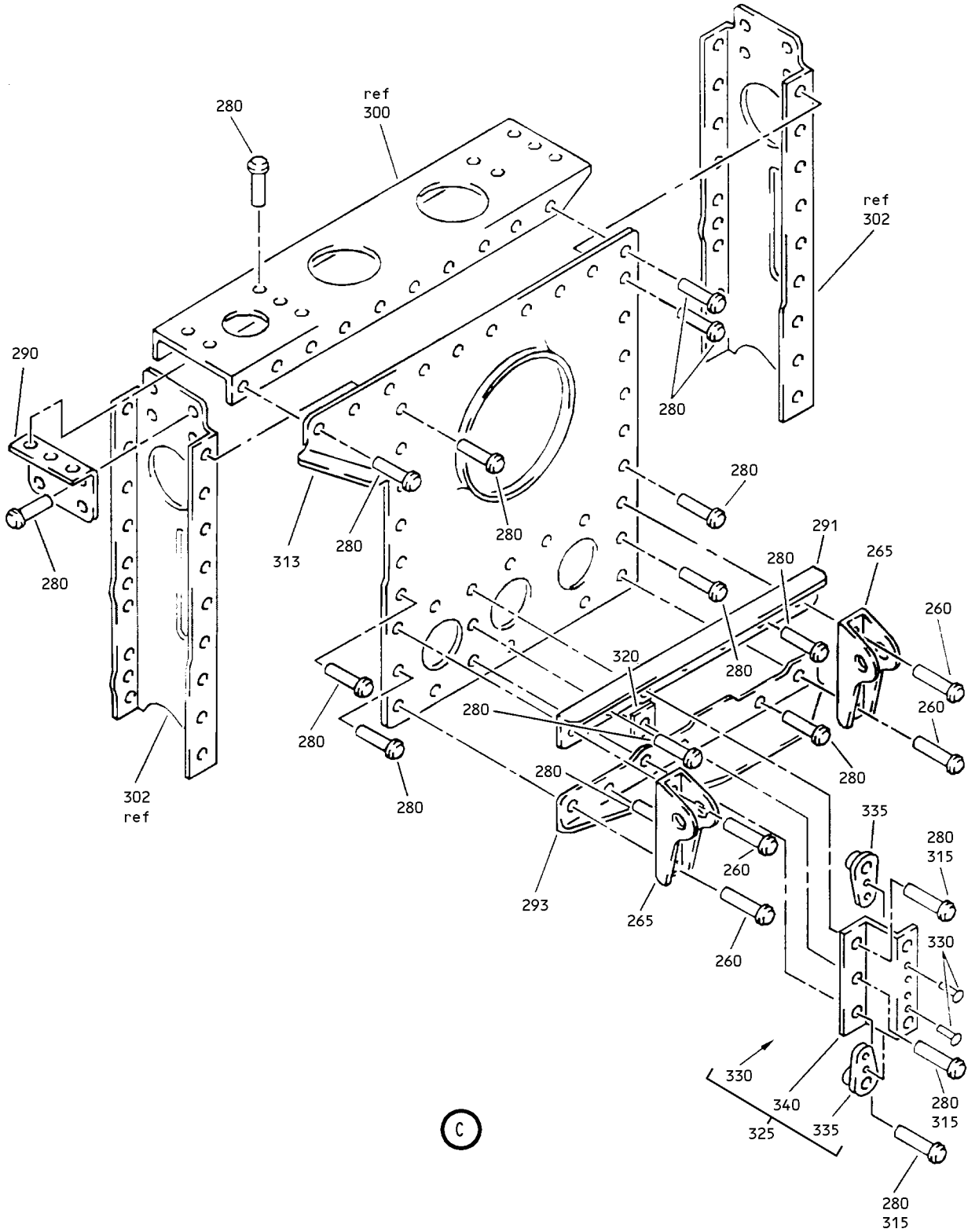


(B)

Landing Gear Brake Module Assembly
Figure 2 (Sheet 3)

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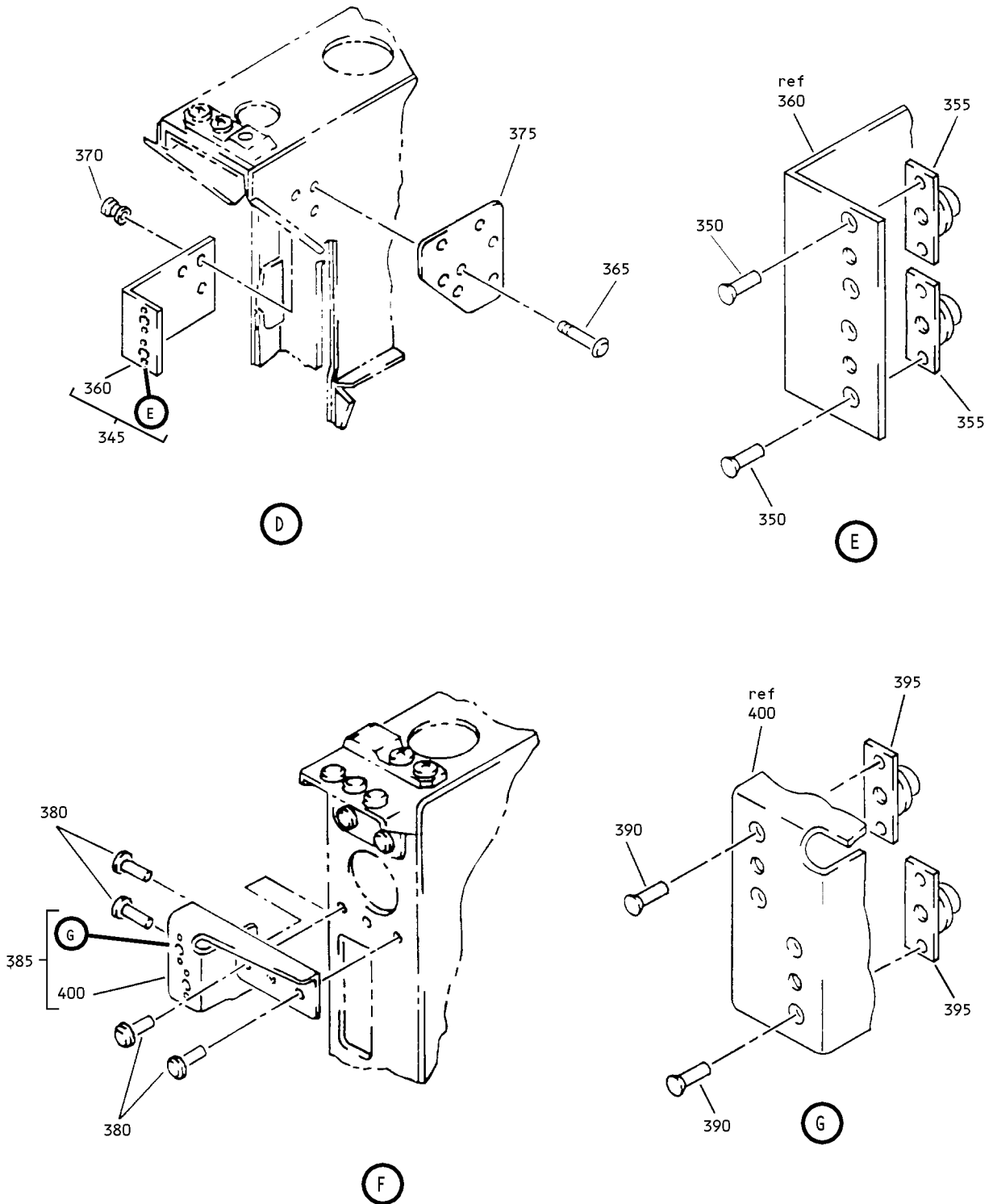
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Landing Gear Brake Module Assembly
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Landing Gear Brake Module Assembly
 Figure 2 (Sheet 5)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-					
R -1	257T2231-15		MODULE ASSY-LG BRAKE L SIDE	J	RF
R -1A	257T2231-17		MODULE ASSY-LG BRAKE L SIDE	L	RF
R -1B	257T2231-19		MODULE ASSY-LG BRAKE L SIDE	N	RF
R -5	257T2231-16		MODULE ASSY-LG BRAKE R SIDE	K	RF
R -5A	257T2231-18		MODULE ASSY-LG BRAKE R SIDE	M	RF
R -5B	257T2231-20		MODULE ASSY-LG BRAKE R SIDE	P	RF
R 10	BACA14AZ6A10T		.ADAPTER	J-P	2
R 15	28028		.FITTING-FILTER (V10989)	J-P	2
R 20	NAS1612-10		.PACKING	J-P	4
R 25	NAS1611-113		.PACKING	J-P	4
R 30	C11236-113B		.RING- (V26879) (SPEC BACR12BM113) (OPT RMR12BM113 (V94878)) (OPT STF800-113 (V02107)) (OPT S30294-113-1 (V97820)) (OPT TF450-113A (V07128)) (OPT 2100-113 (V26303))	J-P	4
R 35	257T2231-22		.KIT ASSY-SUBSTITUTE (OPT ITEM 40)	J,K, N-P	1
R -35A	257T2231-22		.KIT ASSY-SUBSTITUTE (OPT ITEM 40)	L,M	1
R 40	AFP233-4-4T		..ADAPTER- (V30974) (SPEC BACA14AZ4AT) (OPT AP1005-04T (V01673)) (OPT DBOA14AZ4T (V14798))	J-P	1
R 45	NAS1612-4		..PACKING	J-P	1
R 50	NAS1611-008		..PACKING	J-P	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-55	C11236-008B		..RING- (V26879) (SPEC BACR12BM008) (OPT RMR12BM008 (V94878)) (OPT STF800-008 (V02107)) (OPT S30294-008-1 (V97820)) (OPT TF450-008A (V07128)) (OPT 2100-008 (V26303))	J-P	1
R -60	257T2231-21		.KIT ASSY-SUBSTITUTE (OPT ITEM 35)	J,K, N-P	1
R -65	NAS1612-4		..PACKING	J,K, N-P	1
R -70	MS21902-4T		..UNION	J,K, N-P	1
R -75	257T2231-23		.KIT ASSY-SUBSTITUTE (OPT ITEM 35A)	L,M	1
R -80	NAS1612-4		..PACKING	L,M	1
R -85	BACU24K4		..UNION	L,M	1
R 90	BACA14AZ6A8T		.ADAPTER	J-P	2
R 95	NAS1612-8		.PACKING	J-P	2
R 100	NAS1611-111		.PACKING	J-P	2
R 105	C11236-111B		.RING- (V26879) (SPEC BACR12BM111) (OPT RMR12BM111 (V94878)) (OPT STF800-111 (V02107)) (OPT S30294-111-1 (V97820)) (OPT TF450-111A (V07128)) (OPT 2100-111 (V26303))	J-P	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
R 110	NAS6604-15		.BOLT	J-P	1
R 115	NAS1149D0463J		.WASHER	J-P	1
R 120	MS21042L4		.NUT	J-P	1
R 125	71404-1		.VALVE ASSY- (V99643) (SPEC S274T402-20) ATTACHING PARTS	J-P	1
R 130	NAS6604-11		.BOLT	J-P	4
R 135	NAS1149D0463J		.WASHER	J-P	4
R 140	MS21042L4		.NUT	J-P	4
			-----*-----		
R 145	BACB30NR5K43		.BOLT- (OPT ITEM 145A)	J-P	1
R -145A	NAS6605-43		.BOLT- (OPT ITEM 145)	J-P	1
R 150	NAS1149D0563J		.WASHER	J-P	1
R 155	MS21042L5		.NUT	J-P	1
R 160	P5KFS428		.BEARING- (V21335) (SPEC BACB10BG3S) (OPT P5K (V38443)) (OPT P5KE6531 (V21335)) (OPT P5KTT (V43991)) (OPT P5KT1C1-01 (V21760)) (OPT P5KG20 (V38443)) (OPT LLP5K (V38443)) (OPT P5KSD610 (V83086))	J-P	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-					
R 165	BACB28AK05-125		.BUSHING	J-P	1
R 170	NAS6604-13		.BOLT	J-P	2
R 175	NAS1149D0463J		.WASHER	J,K, N-P	2
R 180	MS21042L4		.NUT	J-P	2
R 185	257T2235-1		.CRANK- (OPT ITEM 185A)	J,L,N	1
R -185A	257T2235-5		.CRANK- (OPT ITEM 185)	J,L,N	1
R -190	257T2235-2		.CRANK- (OPT ITEM 190A)	K,M,P	1
R -190A	257T2235-4		.CRANK- (OPT ITEM 190)	K,M,P	1
R 195	251T0100-235		.ROD ASSY- (REF CMM 27-00-11)	L,M	1
R -195A	251T0100-245		.ROD ASSY- (REF CMM 27-00-11)	J,K, N-P	1
R 200	257T2232-3		.QUADRANT ASSY	J,L,N	1
R -205	257T2232-4		.QUADRANT ASSY	K,M,P	1
R 210	HL440UC5-5		..BOLT- (V56878) (SPEC BACB30FM5A5) (OPT HL440UC5-5 (V73197)) (OPT HL440UC5-5 (V92215)) (OPT HL440UC5-5 (V97928)) (OPT HL440UC5-5 (V80539)) (OPT WC130-5-5 (V60516)) (OPT 67067-5A5 (V56878)) (OPT HL440UC5-5 (V60516)) (OPT HL440UC5-5 (V08524))	J-P	3

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-215	HL97DU5		..COLLAR- (V73197) (SPEC BACC30AB5S) (OPT HL97DU5 (V56878)) (OPT HL97DU5 (V5M902))	J-P	3
R 220	257T2234-1		..CRANK- (OPT ITEM 220A)	J-P	1
R -220A	257T2234-3		..CRANK- (OPT ITEM 220)	J-P	1
R 225	257T2233-7		..QUADRANT ASSY	J,L,N	1
R -230	257T2233-8		..QUADRANT ASSY	K,M,P	1
R 235	P5KFS428		...BEARING- (V21335) (SPEC BACB10BG3S) (OPT P5K (V38443)) (OPT P5KE6531 (V21335)) (OPT P5KTT (V43991)) (OPT P5KT1C1-01 (V21760)) (OPT P5KG20 (V38443)) (OPT LLP5K (V38443)) (OPT P5KSD610 (V83086))	J-P	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-240	BACR15BB4AD		...RIVET- (SIZE DETERMINE ON INST)	J-P	2
R 245	NAS42DD4-15		...SPACER	J-P	2
247	257T2239-1		..QUADRANT		1
248	257T2239-2		..QUADRANT		1
R -250	257T2238-5		.SUPPORT ASSY	N	1
R 250A	257T2238-3		.SUPPORT ASSY	J,L	1
R -255	257T2238-6		.SUPPORT ASSY	P	1
R -255A	257T2238-4		.SUPPORT ASSY	K,M	1
R 260	BACR15FT6KE		..RIVET- (SIZE DETERMINE ON INST)	J-P	4
R 265	257T2241-1		..FITTING	J-P	2
R 270	BACR15CE6KE		..RIVET- (SIZE DETERMINE ON INST)	J-P	4
R 275	257T2242-1		..FITTING	J-P	2
R 280	BACR15FT5KE		..RIVET- (SIZE DETERMINE ON INST)	J-P	65
R 285	BACR15CE5KE		..RIVET- (SIZE DETERMINE ON INST)	J-P	8
R 290	257T2240-5		..CLIP	J-P	2
R 291	257T2239-3		..ANGLE	J,L,N	1
R 292	257T2239-4		..ANGLE	K,M,P	1
R 293	257T2239-5		..ANGLE	J,L,N	1
R 294	257T2239-6		..ANGLE	K,M,P	1
R 295	257T2239-8		..FILLER	J-P	3
R 297	257T2239-8		..FILLER		1
R 298	257T2239-9		..FILLER		1
R 300	257T2239-7		..CHANNEL	J-P	1
R 302	257T2239-1		..CHANNEL	J,L,N	2
R 304	257T2239-2		..CHANNEL	K,M,P	2
R 305	BACS40R007B099F		..SHIM	J-P	1
R 310	BACS40R008A082F		..SHIM	J-P	2
R 311	257T2240-1		..BRACKET	J,L,N	1
R 312	257T2240-2		..BRACKET	K,M,P	1
R 313	257T2240-3		..BRACKET	J,L,N	1
R 314	257T2240-4		..BRACKET	K,M,P	1
R 315	BACR15FT5KE		..RIVET- (SIZE DETERMINE ON INST)	N	3
R 320	BACF3F008M008NN		..FILLER	N	1
R 325	272T0140-1		..BRACKET ASSY	N	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-330	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)	N	4
R 335	BRF100A3		...NUTPLATE- (V52828) (SPEC BACN10KB3F) (OPT NS103185-02 (V80539)) (OPT RMF9207-3 (V72962)) (OPT T8114S1032S (V11815)) (OPT VN151A1-02 (V92215)) (OPT F2000-3 (V15653))	N	2
R 340	272T0140-2		...BRACKET	N	1
R 345	272T0217-1		..BRACKET ASSY	J,L	1
R -345A	272T0217-2		..BRACKET ASSY	K,M	1
R 350	BACR15BA3AS		...RIVET- (SIZE DETERMINE ON INST)	J,K,L	4
R 355	BRFM20A3		...NUTPLATE- (V52828) (SPEC BACN10JN3) (OPT MF1000-3BAC (V15653)) (OPT NS103218-02 (V80539)) (OPT RMF9201M3 (V72962)) (OPT VN252A02 (V92215)) (OPT MF53049-3 (V15653)) (OPT T8124S3S (V11815))	J,M J,K,L M	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-360	272T0217-3		...BRACKET	J,L	1
R -360A	272T0217-4		...BRACKET	K,M	1
R 365	HL12VAZ5-3		..BOLT- (V56878) (SPEC BACB30NX5K3) (OPT HL12VAZ5-3 (V73197)) (OPT HL12VAZ5-3 (V92215)) (OPT HL12VAZ5-3 (V97928)) (OPT L802-5K3 (V06725)) (OPT HL12-3 (V06725)) (OPT HL12VAZ5-3 (V97928))	J,L	3
R 370	HL1187-5		..COLLAR- (V73197) (SPEC BACC30X5) (OPT HL87-5 (V92215)) (OPT HL86PB5 (V73197)) (OPT HL86PB5 (V92215)) (OPT HL87-5 (V73197)) (OPT HL86PB5 (V56878)) (OPT HL1187-5 (V56878)) (OPT HL1187-5 (V92215)) (OPT HL87-5 (V56878)) (OPT HL1187-5 (V5M902))	J,L	3
R 375	272T0217-5		..PLATE	J,L	1
R 380	BACR15FT5KE		..RIVET- (SIZE DETERMINE ON INST)	K,M	5
R 385	272T0217-2		..BRACKET ASSY	K,M	1
R 390	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)	K,M	4

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 02-395	BRFM20A3		...NUTPLATE- (V52828) (SPEC BACN10JN3) (OPT MF1000-3BAC (V15653)) (OPT NS103218-02 (V80539)) (OPT RMF9201M3 (V72962)) (OPT VN252A02 (V92215)) (OPT MF53049-3 (V15653)) (OPT T8124S3S (V11815))	K,M	2
R 400	272T0217-4		...BRACKET	K,M	1

- Item Not Illustrated

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