



COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST AFT CARGO DOOR ASSEMBLY

PART NUMBER

**146A6110-11, -12, -13, -14, -15, -16, -17, -18, -19,
-20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -30,
-31, -32, -33, -34, -35, -4, -5, -6, -7, -8**

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PUBLISHED BY BOEING COMMERCIAL AIRPLANES GROUP, SEATTLE, WASHINGTON, USA
A DIVISION OF THE BOEING COMPANY
PAGE DATE: Jul 01/2009

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**COMPONENT MAINTENANCE MANUAL**

Revision No. 12
Jul 01/2009

To: All holders of AFT CARGO DOOR ASSEMBLY 52-31-14.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

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

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

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

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TRANSMITTAL LETTER

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<u>Location of Change</u>	<u>Description of Change</u>
52-31-14 FRONTMATTER	<p>Changed the part number information on the title page.</p> <p>Changed the data in the TEMPORARY REVISION AND SERVICE BULLETIN RECORD list.</p> <p>Added PRR 38275-142.</p>
DISASSEMBLY	<p>Added clarifications.</p> <p>Added the Tools/Equipment list.</p> <p>Changed the data in the Consumable Materials list.</p> <p>Changed the data in the References list.</p>
REPAIR 2-2	<p>Added clarifications.</p>
REPAIR 6-1	<p>Added clarifications.</p> <p>Changed the data in the Consumable Materials list.</p> <p>Changed consumable from "lubricant, D50081" to "lubricant, D00113"</p>
REPAIR 12-1	<p>Added clarifications.</p> <p>Changed the data in the Consumable Materials list.</p> <p>Changed consumable from "lubricant, D50081" to "solid film lubricant, D50081"</p>
REPAIR 13-1 ASSEMBLY	<p>Added clarifications.</p> <p>Changed the data in the Consumable Materials list.</p> <p>Changed consumable from "lubricant, D50081" to "solid film lubricant, D50081"</p>
ILLUSTRATED PARTS LIST	<p>Changed the data in the Vendor Codes list.</p> <p>Changed the data in the NUMERICAL INDEX list.</p> <p>Added Aft Cargo Door Assembly 146A6110-31.</p> <p>Added new Illustrated Parts List.</p> <p>Added clarifications.</p>

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

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Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials



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INTRODUCTION

1. General

- A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.
- B. This manual is divided into different parts:
 - (1) Title Page
 - (2) Transmittal Letter
 - (3) Highlights
 - (4) List of Effective Pages
 - (5) Table of Contents
 - (6) Temporary Revision & Service Bulletin Record
 - (7) Record of Revisions
 - (8) Record of Temporary Revisions
 - (9) Introduction
 - (10) Procedures & IPL Sections
- C. Components that can be repaired have a different repair number for each specified repair. To find the repair number location of a component, look in the Repair-General procedure at the beginning of the REPAIR section. The Repair-General procedure also has an explanation of the True Position Dimension symbols used.
- D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.
- E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.
- F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.
- G. The tool reference numbers found in the individual procedures and in the Special Tools, Fixtures, and Equipment section are used to identify if a tool is a standard tool (STD-XXXX), a commercial tool (COM-XXXX), or a Special Tool (SPL-XXXX). This reference number is also used to distinguish between tools with similar names in the same procedure. These reference numbers are for use in the documentation only. They are not to be used for ordering tools.

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INTRODUCTION

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AFT CARGO DOOR ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

A. The aft cargo door assembly provides access to the airplane aft cargo compartment. The door assembly is a plug-type that opens inward of the cargo compartment. The door is attached at the upper edge onto the airplane structure with hinges. The door latch mechanism has a latch assembly connected to the latch rollers, the torque tube and the control rod. The door has access panels for inspection and repair of the latching mechanism. There are ten adjustable stop fittings around the door frame.

2. Operation

A. To open the aft cargo door from outside the airplane, you push in the access flap and pull the outer handle from the spring-loaded flush position. When you turn the handle, the torque tube pulls the latch rollers from the latch fittings to let the door be swung in and secured to overhead structure. The stop fittings make the closed door smooth with the fuselage exterior and hold it closed against pressurization loads.

3. Leading Particulars (Approximate)

- A. Length – 48.0 inches
- B. Width – 6.0 inches
- C. Height – 33.0 inches
- D. Weight – 110.0 pounds

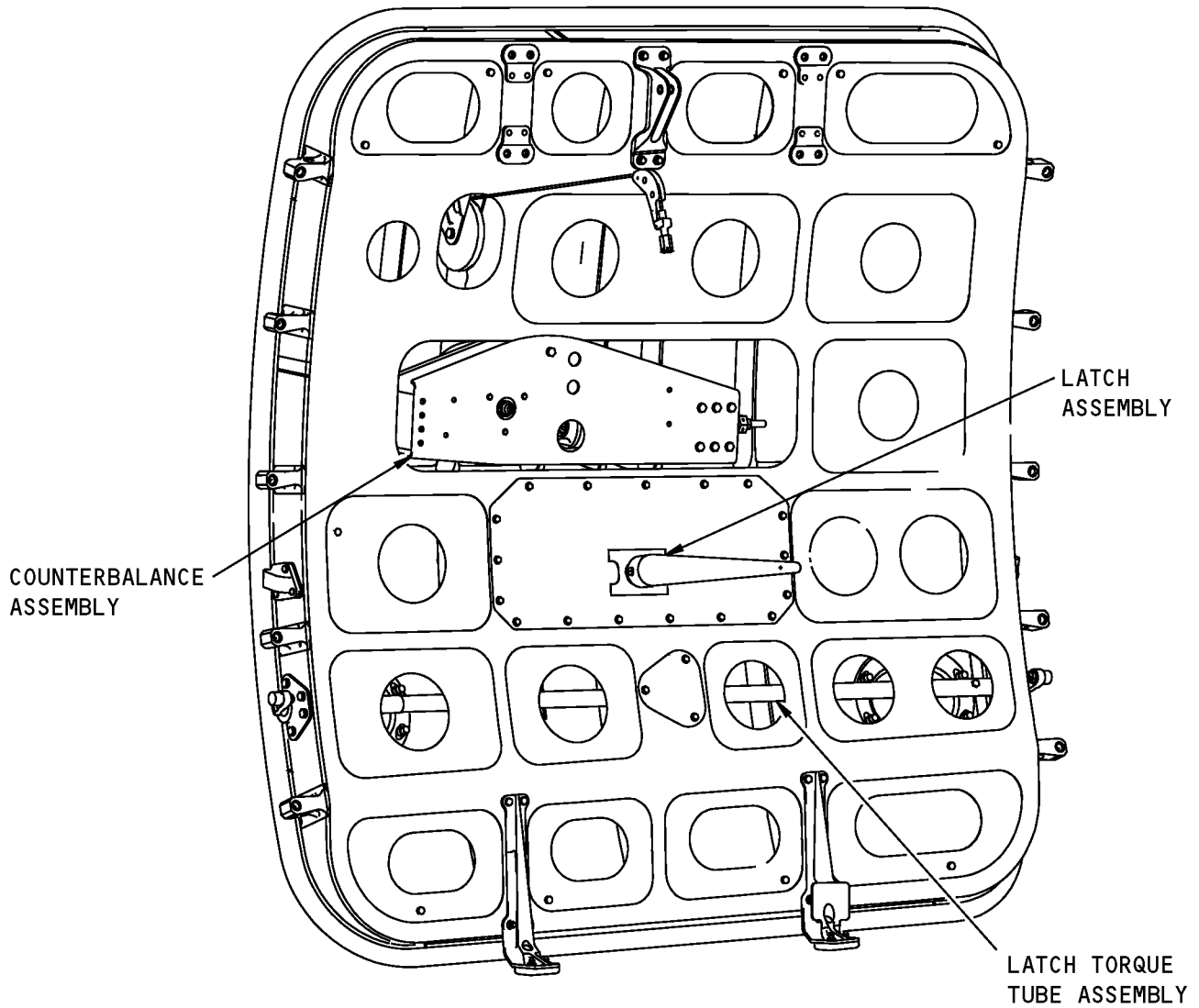
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Aft Cargo Door Assembly
Figure 1

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DESCRIPTION AND OPERATION

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TESTING AND FAULT ISOLATION

(NOT APPLICABLE)

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TESTING AND FAULT ISOLATION

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DISASSEMBLY

1. General

- A. This procedure has the data necessary to disassemble the aft cargo door assembly.
- B. Disassemble this component sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.
- C. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- D. Refer to IPL Figure 1 through IPL Figure 4 for item numbers.

2. Disassembly

A. Tools/Equipment

NOTE: Equivalent substitutes may be used.

Reference	Description
SPL-10752	Spring - Loading Control Equipment (Part #: C52004-1, Supplier: 81205) (Opt Part #: C52001-1, Supplier: 81205)
SPL-11105	Repair Fixture - Aft Cargo Door (Part #: C52002-33, Supplier: 81205)

B. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995~ C32

C. References

Reference	Title
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES

D. Procedure for IPL Figure 1

- (1) Use standard industry procedures and the steps that follow to disassemble this component.
- (2) Install the door assembly onto the cargo door repair fixture, SPL-11105.
- (3) Remove the studs (5), washers (10), and nuts (15) from the door structure.
- (4) If the serrated plates (35, 40) need replacement, remove them from the door structure as follows:
 - (a) Remove the bolts (20), serrated plates (35, 40) and shim (45).

NOTE: Filler assembly (50, 55) is bonded to the door structure. Do not remove the filler assembly (50, 55) unless repair or part replacement is necessary.
- (5) Remove the snubber fitting assembly (160) from the door structure as follows:
 - (a) Remove the bolts (140, 145), washers (150), nut (155), and snubber fitting assembly (160).
- (6) Remove the screws (350), washers (355), and access cover (370) from the door structure.
- (7) Disconnect and remove the spring (280) from the door structure and the spring attach plate (335).

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- (8) Remove the spring attach plate (335) and disconnect the rod assembly (330) from the flush latch assembly (340) as follows:
 - (a) Remove the cotter pins (295), bolts (300, 305), washers (310, 315, 320), and nuts (325).
 - (b) Remove the spring attach plate (335) and the flush latch assembly (340).
- (9) Remove the cover (285) with the latch assembly (290) from the door structure as follows:
 - (a) Remove the screws (225), washers (230), and cover (285) with the latch assembly (290).

NOTE: Latch assembly (290) is riveted onto the cover (285). Do not remove the latch assembly (290) from the cover (285) unless replacement is necessary.
- (10) Remove the rod assembly (330) from the latch torque tube assembly (IPL Figure 2, 205) as follows:
 - (a) Remove the cotter pins (245), bolts (260), washers (265, 270), and nuts (275).
 - (b) Remove the rod assembly (330) from the latch torque tube assembly (IPL Figure 2, 205).
- (11) Disconnect the cable assembly (395) from the counterbalance assembly (450) as follows:
 - (a) Remove the screw (375), washer (380), and cable retainer (385).
 - (b) Disconnect the cable assembly (395) from the counterbalance assembly (450).
- (12) Remove the counterbalance assembly (450) from the door structure as follows:
 - (a) Remove the bolts (435, 440), washers (445) and counterbalance assembly (450) from the attach bracket assemblies (465, 485).
- (13) Remove the cable assembly (395) from the door structure as follows:
 - (a) Remove the bolt (410), washer (415), nut (420), and bushings (425) from the pulley (430).
 - (b) Remove the pulley (430) and the cable assembly (395).
 - (c) Remove the cable assembly (395) from the cable sheave (390).
- (14) Remove the bolts (455), collars (460), attach bracket assembly (465, 485), and support bracket assembly (505) from the door structure.
- (15) Remove the forward fitting assembly (590) and aft fitting assembly (595) from the door structure as follows:
 - (a) Remove the bolts (525, 530), washers (545, 550, 555), nuts (560, 565), and forward fitting assembly (590).
 - (b) Remove the bolts (525, 530), washers (545, 550, 555), nuts (560, 565), and aft fitting assembly (595).

E. Procedure for IPL Figure 2

- (1) Remove the bolts (5) and access panel assembly (20) from the door structure.
- (2) Remove the latch torque tube assembly (205) from the door structure as follows:
 - (a) Partially disassemble the latch torque tube assembly (205) to remove the roller arm fittings (IPL Figure 3, 40, 45) and arm fitting (65) from the tube (70). Refer to DISASSEMBLY, Paragraph 2.F. for the latch torque tube assembly disassembly procedures.
 - (b) Remove the tube (70) and washers (IPL Figure 2, 200) from the door structure.
- (3) Remove the bearing housing assemblies (IPL Figure 2, 165, 170) and housing assembly (105) from the door structure as follows:

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- (a) Remove the bolts (125), washers (135), nuts (140), and bearing housing assemblies (165, 170).
- (b) Remove the bolts (90), washers (95), nuts (100), and housing assembly (105).
- (4) Remove the attach spring angle (340) from the door structure as follows:
 - (a) Remove the bolts (325), collars (330), attach spring angle (340), and filler (335).
- (5) Remove the guide plates (75, 80) from the door structure as follows:
 - (a) Remove the bolts (55), washers (60), and guide plates (75, 80).
- (6) Remove the seal (575) and the seal retainers (535 thru 570) from the door structure as follows:
 - (a) Remove the seal (575) from the seal retainers (535 thru 570).

NOTE: Seal retainer (535 thru 570) are riveted onto the door structure. Do not remove the seal retainers (535 thru 570) unless repair or part replacement is necessary.

- (7) Remove the marker (580) and the plate (585) from the door structure as follows:
 - (a) Remove the marker (580) and the plate (585).

NOTE: The marker (580) and the plate (585) are bonded onto the door structure. Do not remove the marker (580) and the plate (585) unless repair or replacement is necessary.

F. Procedure for IPL Figure 3

- (1) Remove the bolts (50), washers (55), nuts (60), and arm fitting (65) from the tube (70).
- (2) Remove the cotter pins (5), nuts (10), washers (15), and roller bearing (20) from the roller arm fitting (40).
- (3) Remove the bolts (25), washers (30), nuts (35), and roller arm fittings (40) from the tube (70).
- (4) Remove the washers (IPL Figure 2, 200) and the tube (IPL Figure 3, 70) from the door assembly.

G. Procedure for IPL Figure 4

- (1) Disassemble the counterbalance assembly (IPL Figure 4, 1A) as follows:
 - (a) Remove the bolts (5), sleeves (10), washers (15), and nuts (20) from the lower base (405).
 - (b) Remove the drum assembly (55), shaft (130), and cam assembly (135) from the lower and upper bases (405, 410) as follows:
 - 1) Remove the nut (95) and washer (100) from the shaft (130).
 - 2) Pull out the drum assembly (55) and the shaft assembly (130) from the upper and lower bases (405, 410).
 - 3) Remove the washers (105), bushings (110, 115), and cam assembly (135) from the lower and upper bases (405, 410).
 - 4) Remove the bolts (25, 30), washers (35, 40), nuts (45, 50), and drum assembly (55) from the shaft (130).

NOTE: Do not disassemble the drum assembly (55) unless repair or part replacement is necessary.

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- (c) Remove the bearings (120, 125) and housings (85, 90) from the lower and upper bases (405, 410) as follows:
- 1) Remove the bolts (70), washers (75), nuts (80), and lower housing (85) from the lower base (405).
 - 2) Remove the bolts (70), washers (75), nuts (80), and upper housing (90) from the upper base (410).
 - 3) Remove the bearing (120) from the upper housing (90).
 - 4) Remove the bearing (125) from the lower housing (85).
- (d) Disconnect the crank assembly (230) from the cartridge assembly (265) as follows:
- 1) Remove the nut (210), washer (205), bolt assembly (190) and roller (225) from the crank assembly (230) and the cartridge assembly (265).

NOTE: Do not disassemble the bolt assembly (190) unless repair or parts replacement is necessary.
 - 2) Remove the bushings (215, 220) from the cartridge assembly (265) and the crank assembly (230).
- (e) Remove the crank assembly (230) from the lower and the upper bases (405, 410) as follows:
- 1) Remove the bolt (165), washer (175), and nut (180) from the crank assembly (230).
 - 2) Remove the crank assembly (230) with the bearings (185) and the spacer (170) from the lower and upper bases (405, 410).
 - 3) Remove the bearings (185) and spacer (170) from the crank assembly (230).
- (f) Remove the cartridge assembly (265) from the lower and upper bases (405, 410) as follows:
- 1) Remove the bolts (250), washers (255), and nuts (260) from the lower and upper bases (405, 410).

CAUTION: THE CARTRIDGE ASSEMBLY HAS SPRINGS IN COMPRESSION. RELIEVE THE LOAD ON THE SPRINGS BEFORE DISASSEMBLY.
 - 2) Remove the cartridge assembly (265) from the lower and upper bases (405, 410).
- (g) Disassemble the cartridge assembly (265) as follows:
- 1) Use the loading control equipment spring, SPL-10752 to compress the springs (340, 345) to a length of 9.1000-9.2000 inch.
 - 2) Remove the lockwire, G01048 (SOPM 20-50-02) that secures the gimbal fitting (290) onto the adjuster (280).
 - 3) Remove the nut (270), washer (275), and adjuster (280) from the pin (370) and the housing assembly (295).
 - 4) Remove the gimbal fitting (290) from the housing assembly (295) as follows:
 - a) Remove the pins (285) from the housing assembly (295).
 - b) Remove the gimbal fitting (290) from the housing assembly (295).
 - 5) Remove the housing assembly (295) from the pin (370).
 - 6) Remove the centering bushing (320) and the bearing (325) from the pin (370).
 - 7) Remove the bearing housing (330) and the spring guide (335) from the pin (370).

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- 8) Remove the inner and outer springs (340, 345), spring guides (350, 360) and spacer (355) from the pin (370).
- 9) Remove the pin (370) from the clevis assembly (375) as follows:
 - a) Remove the pin (365) and the clevis assembly (375) from the pin (370).
- (h) Remove the support angle (400) from the bases (405, 410) as follows:
 - 1) Remove the rivets (390, 395) and the support angle (400) from the bases (405, 410).

NOTE: Support angle (400) is riveted onto the bases (405, 410). Do not remove the support angle unless replacement is necessary. Marker (415A) is bonded onto the base (410). Do not remove the marker unless replacement is necessary.

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DISASSEMBLY

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CLEANING

1. General

- A. This procedure has the data necessary to clean the aft cargo door assembly.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 through IPL Figure 4 for item numbers.

2. Cleaning

A. References

Reference	Title
SOPM 20-30-01	CLEANING AND RELUBRICATING BEARINGS
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedure

- (1) Clean the bearings (IPL Figure 2; 115, 175) (IPL Figure 3; 20) (IPL Figure 4; 120, 125, 185, 325) as specified in SOPM 20-30-01.
- (2) Use standard industry procedures and refer to SOPM 20-30-03 to clean all other parts.

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CLEANING

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CHECK

1. General

- A. This procedure has the data necessary to find defects in the material of the specified parts.
- B. Refer to FITS AND CLEARANCES for the design dimension and wear limits.
- C. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- D. Refer to IPL Figure 1 through IPL Figure 4 for item numbers.

2. Check

A. References

Reference	Title
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

B. Procedure

(1) Use standard industry procedures to do a visual check of all the parts for defects. Do the penetrant or magnetic particle check if the visual check shows possible damage or if you suspect possible damage on the parts listed below:

(a) Do a magnetic particle check (SOPM 20-20-01) of these parts:

- 1) IPL Figure 4
 - a) Shaft (130)
 - b) Cam (160)
 - c) Adjuster (280)
 - d) Pin (285, 365, 370)
 - e) Clevis (385)

(b) Do a penetrant check (SOPM 20-20-02) of these parts:

- 1) IPL Figure 1
 - a) Fitting (115, 120)
 - b) Attach Fitting (175)
 - c) Support Fitting (210)
 - d) Stop Fitting (625 thru 640)
- 2) IPL Figure 2
 - a) Housing (180, 185)
 - b) Bracket (310, 315)
 - c) Beam (490 thru 510)
- 3) IPL Figure 3
 - a) Arm (65)
 - b) Tube (70)
- 4) IPL Figure 4

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CHECK
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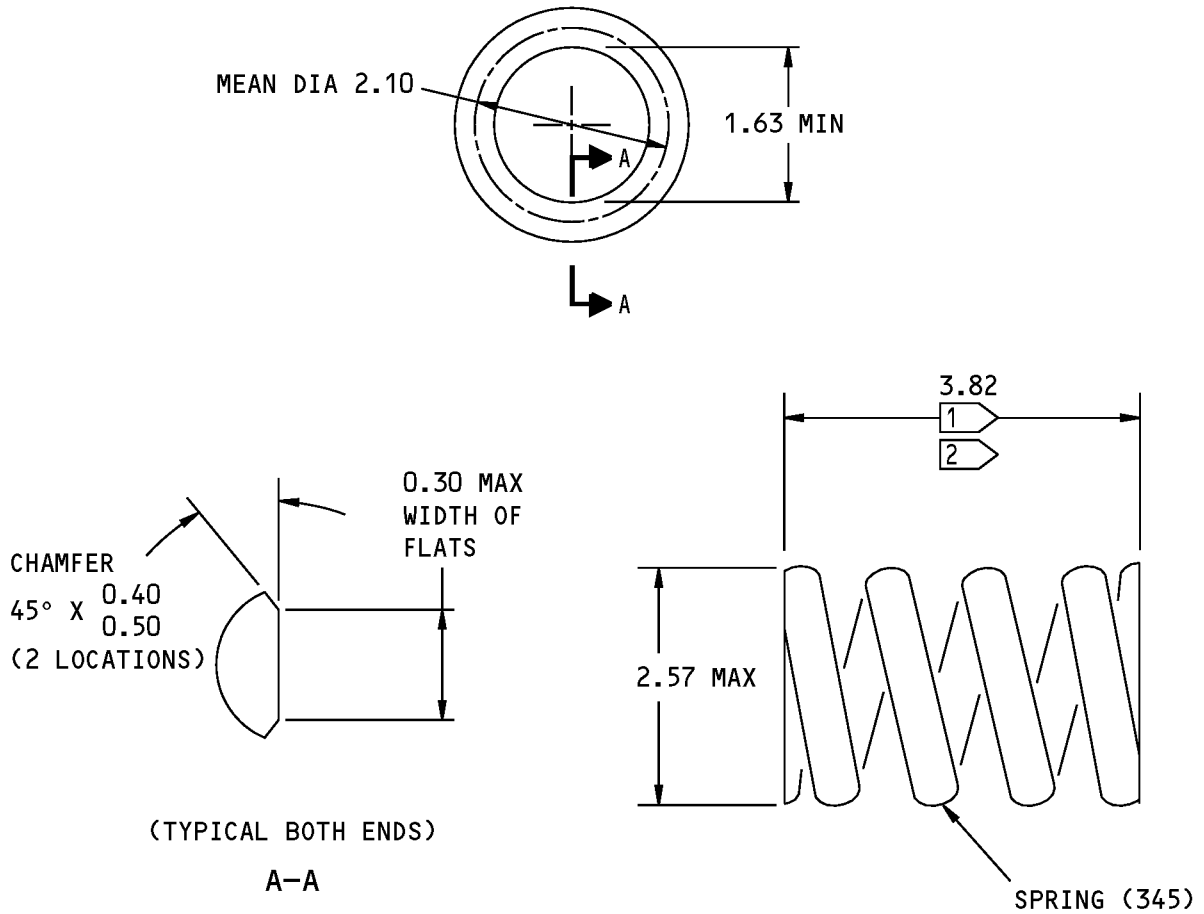
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- a) Drum (65)
 - b) Housing (85, 90)
 - c) Crank (245)
 - d) Housing (315)
- (2) Do a load check on the springs (IPL Figure 4, 345) as follows:
- (a) Compress the spring (345) to 2.50 inches length as shown in CHECK, Figure 501.
 - (b) Make sure that the load on the spring (345) is 860-940 pounds.
- (3) Do a load check of the springs (IPL Figure 4, 340) as follows:
- (a) Compress the spring (340) to 2.20 inches length as shown in CHECK, Figure 502.
 - (b) Make sure that the load on the spring (340) is 495-545 pounds.
- (4) Do a load check on the springs (IPL Figure 1, 280) as follows:
- (a) Compress the spring (280) to 5.60 inches length as shown in CHECK, Figure 503.
 - (b) Make sure that the load on the spring (280) is 26.0-31.6 pounds.

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1 FREE LENGTH TOTAL NUMBER OF COILS IS 5.36

2 THE LOAD MUST BE BETWEEN 860-940 POUNDS AT 2.50 INCH LENGTH

ITEM NUMBERS REFER TO IPL FIG. 4

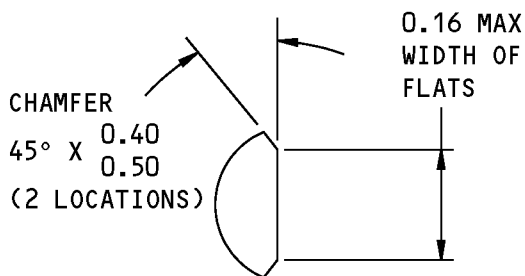
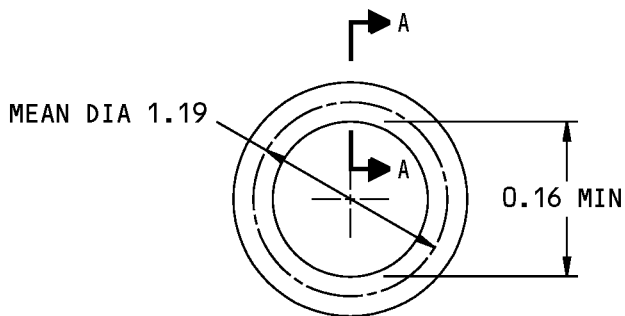
ALL DIMENSIONS ARE IN INCHES

140N2966-1 Outer Spring Check
Figure 501

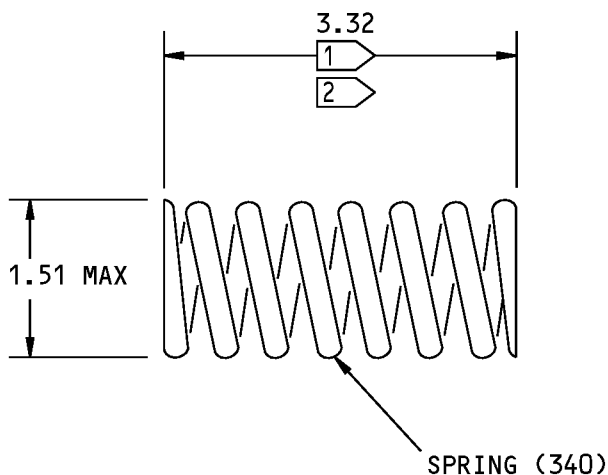
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(TYPICAL BOTH ENDS)
A-A



1 FREE LENGTH TOTAL NUMBER OF COILS IS 7.50

2 THE LOAD MUST BE BETWEEN 495-545 POUNDS AT 2.20 INCH LENGTH

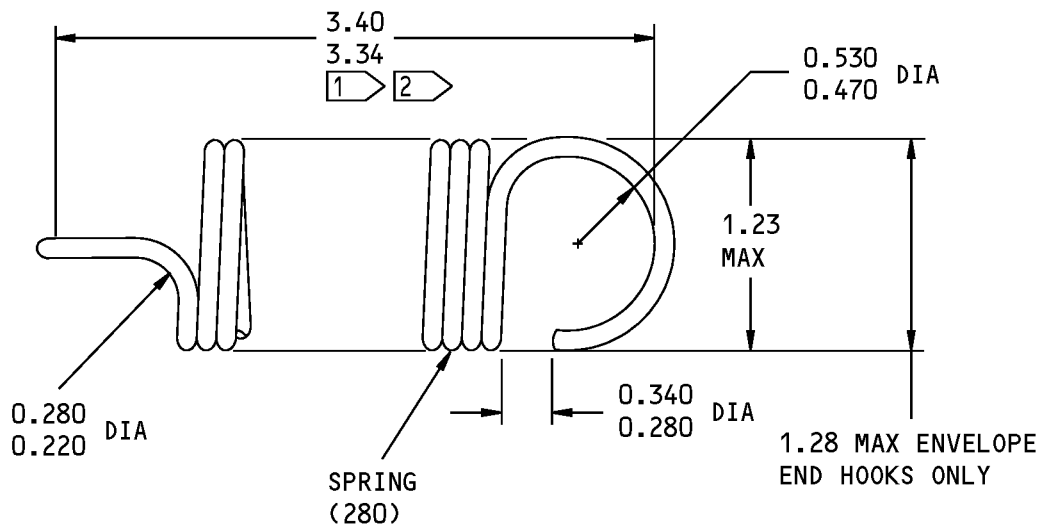
ITEM NUMBERS REFER TO IPL FIG. 4
ALL DIMENSIONS ARE IN INCHES

140N2967-1 Inner Spring Check
Figure 502

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1 FREE LENGTH TOTAL NUMBER OF COILS IS 16.75

2 THE LOAD MUST BE BETWEEN 26.0-31.6 POUNDS AT 5.6 INCH LENGTH

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

69-76131-2 Spring Check
Figure 503

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REPAIR

1. General

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

Table 601:

PART NUMBER	NAME	REPAIR
—	REFINISH OF OTHER PARTS	1-1
146A6132	FITTING ASSEMBLY	2-1, 2-2
146A6135	BRACKET ASSEMBLY	3-1, 3-2
146A6128	STOP FITTING ASSEMBLY	4-1, 4-2
149A6135	ACCESS PANEL ASSY	5-1, 5-2
149A6138	ARM FITTING	6-1
149A6131	TUBE	7-1
65-2306	HOUSING ASSEMBLY	8-1, 8-2
146A6126	BEARING HOUSING ASSY	9-1, 9-2
146A6120	STOP ASSEMBLY	10-1, 10-2
65C33690	DRUM ASSEMBLY	11-1, 11-2
65C33692	SHAFT ASSEMBLY	12-1
65C33689	IDLER CRANK ASSEMBLY	13-1, 13-2
65C33688	ADJUSTER HOUSING ASSEMBLY	14-1, 14-2
65C33810	BEARING HOUSING	15-1
65C33685	CLEVIS ASSEMBLY	16-1

2. Dimensioning Symbols

- A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in REPAIR-GENERAL, Figure 601.

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REPAIR - GENERAL

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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 A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE. FROM THIS FEATURE PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
- (DIM) DIMENSION
- (-A-) DATUM
- (M) MAXIMUM MATERIAL CONDITION (MMC)
- (L) LEAST MATERIAL CONDITION (LMC)
- (S) REGARDLESS OF FEATURE SIZE (RFS)
- (P) PROJECTED TOLERANCE ZONE
- FIM FULL INDICATOR MOVEMENT

EXAMPLES

- 0.002 STRAIGHT WITHIN 0.002
- ⊥ 0.002 B PERPENDICULAR TO DATUM B WITHIN 0.002
- // 0.002 A PARALLEL TO DATUM A WITHIN 0.002
- 0.002 ROUND WITHIN 0.002
- ⊘ 0.010 CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER
- ⌒ 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 A
- ⌓ 0.020 A SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.020 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE

- ◎ ∅ 0.0005 C CONCENTRIC TO DATUM C WITHIN 0.0005 DIAMETER
- ≡ 0.010 A SYMMETRICAL WITH DATUM A WITHIN 0.010
- ∠ 0.005 A ANGULAR TOLERANCE 0.005 WITH DATUM A
- ⊕ ∅ 0.002 (S) B LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
- ⊥ ∅ 0.010 (M) A
0.510 (P) AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010 INCH DIAMETER, PERPENDICULAR TO DATUM A, AND EXTENDING 0.510 INCH ABOVE DATUM A, MAXIMUM MATERIAL CONDITION
- 2.000 THEORETICALLY EXACT DIMENSION IS 2.000
OR
2.000
BSC

True Position Dimensioning Symbols
Figure 601

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REPAIR - GENERAL

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REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

- A. This procedure has the data necessary to refinish the parts which are not given in the specified repairs.
- B. Refer to the Standard Overhaul Practice Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 through IPL Figure 4 for item numbers.

2. Refinish of Other Parts

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00064	Coating - Aluminum Chemical Conversion	BAC5719, Type II, Class A (MIL-C-5541, Class A)
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
C50069	Coating - Enamel, Color 702 Gloss White	BMS10-11, Type II
D00113	Lubricant - Liquid Dispersed Solid Film Lubricant	BMS3-8, BAC 5811, TYPE VIII

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-03	LUBRICANTS

C. General

- (1) Instructions for the repair of the parts identified in REPAIR 1-1, Table 601 are for repair of the initial finish.

D. Procedure

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

- (1) Refer to REPAIR 1-1, Table 601 for refinish details.

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REPAIR 1-1

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Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Serrated Plate (35, 40)	15-5PH CRES 125- 145 ksi	Cadmium plate (F-15.06). Apply primer, C00259 (F-20.02) to all surfaces but not on serrations.
Support Fitting (210)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03).
Access Cover (285, 370)	Al alloy	Chemical treat (F-17.07) all surfaces with coating, C00064. Apply primer, C00259 (F-20.03).
Attach Plate (335)	301 CRES	Cadmium plate (F-15.06). Apply primer, C00259 (F-20.02) to all surfaces.
Cable Retainer (385)	Al alloy	Chemical treat (F-17.07) all surfaces with coating, C00064. Apply primer, C00259 (F-20.03).
Cable Sheave (390)	15-5PH CRES 180- 200 ksi	Passivate (F-17.25).
Counterbalance Assembly (450)	Al alloy	Chemical treat and apply primer, C00259 and enamel coating, C50069 (F-21.12).
Stop Support Fitting (635, 640)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03).
IPL Fig. 2		
Doubler (45)	Al alloy	Chemical treat (F-17.07) all surfaces with coating, C00064. Apply primer, C00259 (F-20.03) to all surfaces.
Access Panel Skin (50)	Al alloy	Chemical treat (F-17.07) inside surfaces with coating, C00064. Apply primer, C00259 (F-20.03) to inside surfaces. No finish (F-25.01) to outside surfaces.
Guide Plate (75, 80)	Polyamide 6/6	No finish (F-25.01).
Pulley Bracket (310, 315)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03) to all surfaces.
Spring Attach Angle (340)	301 CRES	Cadmium plate (F-15.05). Apply primer, C00259 (F-20.02).
Beam (490 thru 510)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03).
Seal Retainer (535 thru 570)	Al alloy	Chemical treat (F-17.07) all surfaces with coating, C00064. Apply primer, C00259 (F-20.03) to all surfaces.
IPL Fig. 3		
Arm Fitting (65)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03) to all surfaces.
IPL Fig. 4		

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Table 601: Refinish Details (Continued)

IPL FIG. & ITEM	MATERIAL	FINISH
Housing (85,90)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35). Apply primer, C00259 (F-20.03).
Cam (160)	13-8PH CRES 215- 235 ksi	Passivate (F-17.25).
Bushing (215,220)	15-5PH CRES 180- 200 ksi	Passivate (F-17.25).
Adjuster (280)	15-5PH CRES 150- 170 ksi	Apply lubricant, D00113 (F-19.10) (SOPM 20-50-08).
Pin (285, 365, 370)	15-5PH CRES 150- 170 ksi	Apply lubricant, D00113 (F-19.20) (SOPM 20-50-08).
Gimbal Fitting (290)	Al-Ni-Br	Cadmium plate (F-15.06).
Spring Guide (335, 350, 360)	Delvin	No finish (F-25.01).
Spacer (355)	Delvin	No finish (F-25.01).
Clevis (385)	15-5PH CRES 150- 170 ksi	Passivate (F-17.25).
Support Angle (400)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03) to all surfaces.
Base (405, 410)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03) to all surfaces.

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FITTING ASSEMBLY - REPAIR 2-1

146A6132-1

1. General

- A. This procedure has the data necessary to repair the fitting assembly (160).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 1 for item numbers.

2. Bushing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedure (REPAIR 2-1, Figure 601)

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bushing (165, 170) from the fitting (175).
- (2) Install the new bushings (165, 170) onto the fitting (175) with sealant, A00247, as specified in SOPM 20-50-03.

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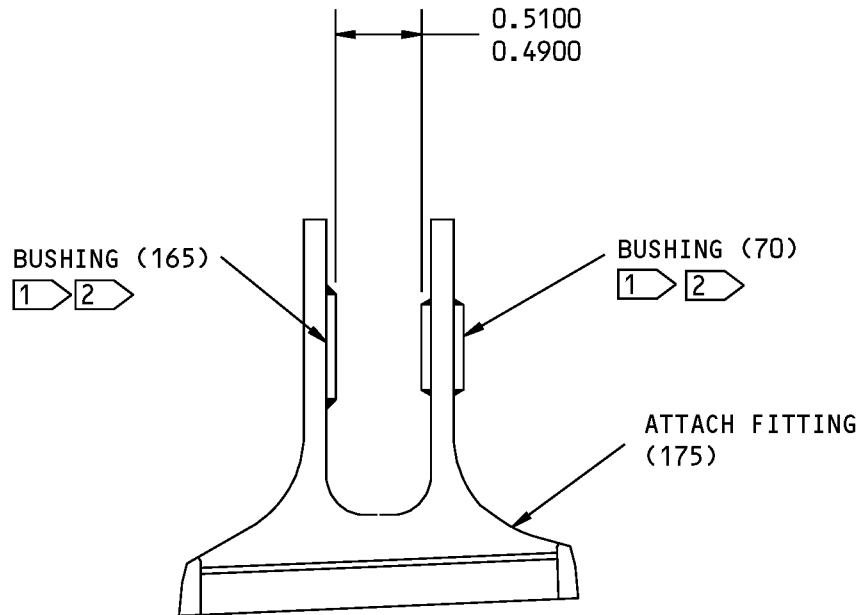
REPAIR 2-1

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1 INSTALL THIS BUSHING WITH WET
BMS 5-95 SEALANT AS SPECIFIED IN
SOPM 20-50-03

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

2 FILLET SEAL THE BUSHING AT EACH
END WITH BMS5-95 SEALANT

146A6132-1 Fitting Assembly Repair
Figure 601

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FITTING - REPAIR 2-2

146A6132-2

1. General

- A. This procedure has the data necessary to repair and refinish the fitting (175).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 1 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

- C. Procedure (REPAIR 2-2, Figure 601)

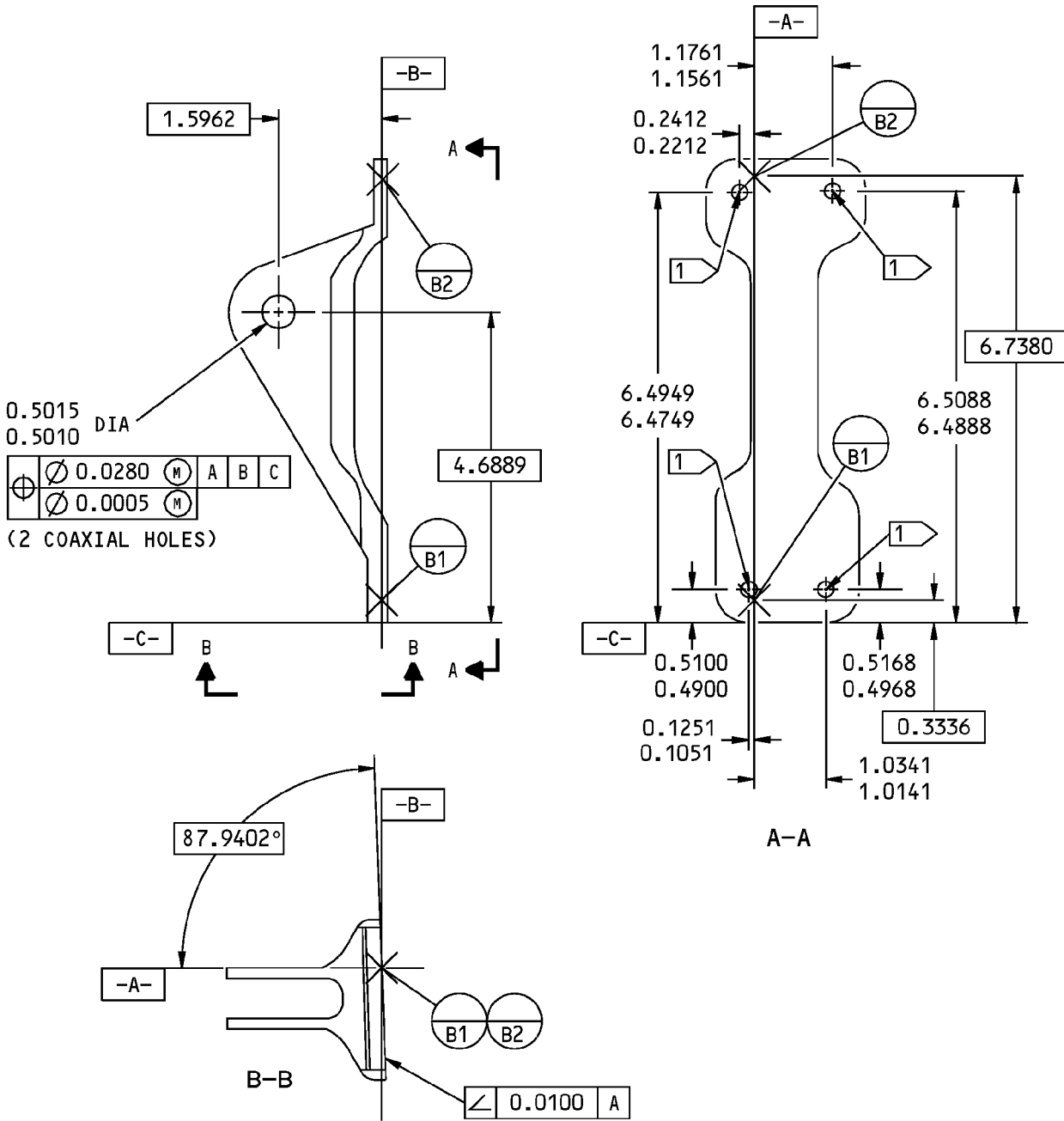
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03) to all surfaces, but not the holes for the bushings.

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1 0.2400-0.2600 INCH DIAMETER
PILOT HOLE LOCATED HERE

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

146A6132-2 Fitting Repair
Figure 601

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REPAIR 2-2
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BRACKET ASSEMBLY - REPAIR 3-1

146A6135-1, -2, -3

1. General

- A. This procedure has the data necessary to repair and refinish the bracket assembly (465, 485, 505).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 1 for item numbers.

2. Nutplate Replacement

- A. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

- B. Procedure (REPAIR 3-1, Figure 601)

NOTE: For disassembly, refer to DISASSEMBLY.

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

- (1) Remove the rivets (470, 490) and the nutplate(s) (475, 495) from the bracket(s) (480, 500).
- (2) Install the new nutplate(s) (475, 495) onto the bracket(s) (480, 500) with the rivets (470, 490).

3. Stop Pad Replacement

- A. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

- B. Procedure (REPAIR 3-1, Figure 601)

NOTE: For disassembly, refer to DISASSEMBLY.

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

- (1) Remove the rivets (510) and the stop pad (515) from the angle (520).
- (2) Install the new stop pad (515) onto the angle (520) with the rivets (510).

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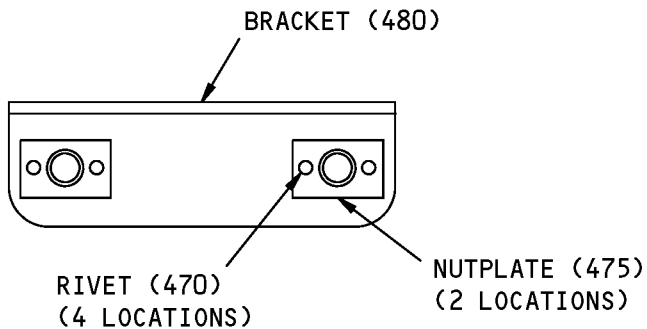
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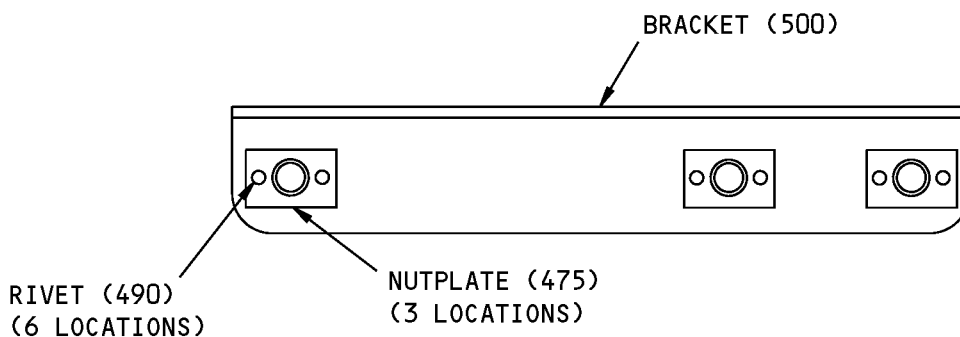
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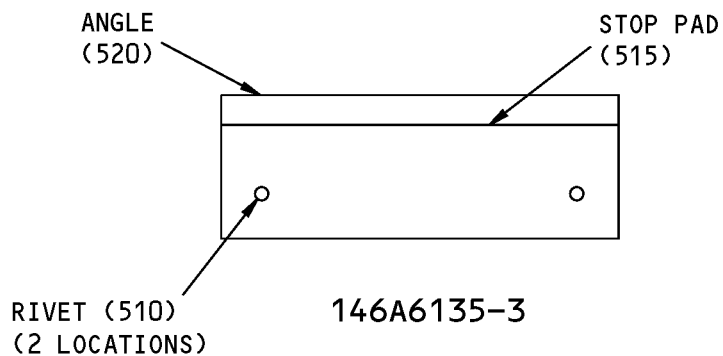
COMPONENT MAINTENANCE MANUAL



146A6135-1



146A6135-2



146A6135-3

ITEM NUMBERS REFER TO IPL FIG. 1

146A6135-1,-2,-3 Bracket Assembly Repair
Figure 601

52-31-14

REPAIR 3-1
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COMPONENT MAINTENANCE MANUAL

BRACKET - REPAIR 3-2

146A6135-4, -5, -6

1. General

- A. This procedure has the data necessary to refinish the bracket (480, 500, 520).
- B. Refer to the Standard Overhaul Practices Manuals (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 1 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Bracket Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00064	Coating - Aluminum Chemical Conversion	BAC5719, Type II, Class A (MIL-C-5541, Class A)
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I

- B. References

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

- C. Procedure (REPAIR 3-2, Figure 601)

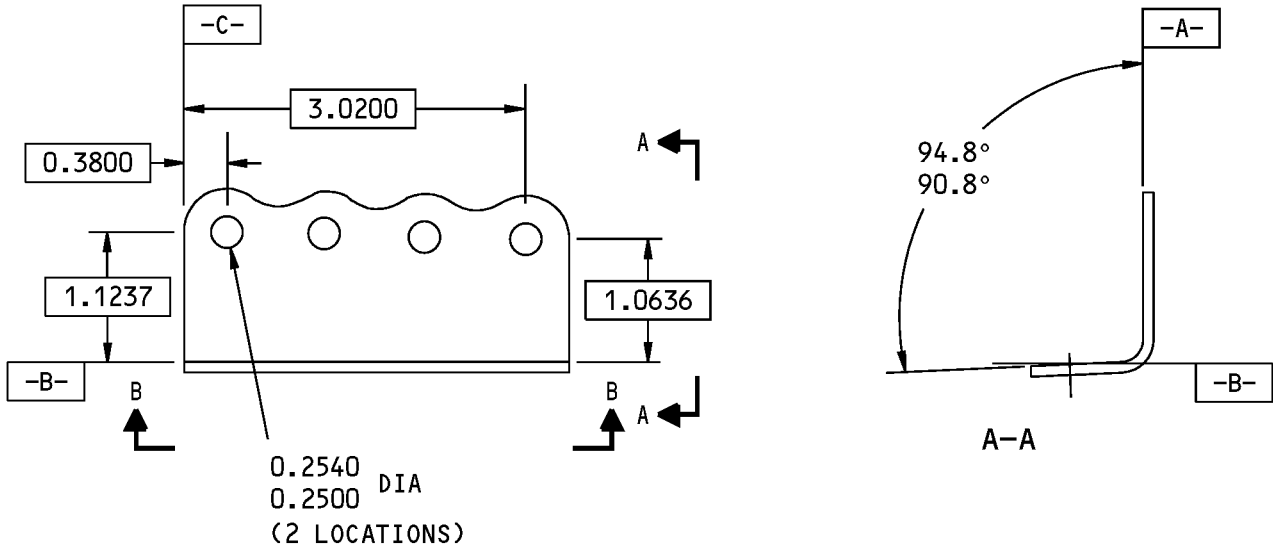
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding of Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Chemical treat coating, C00064 (F-17.07).
- (2) Apply primer, C00259 (F-20.03).

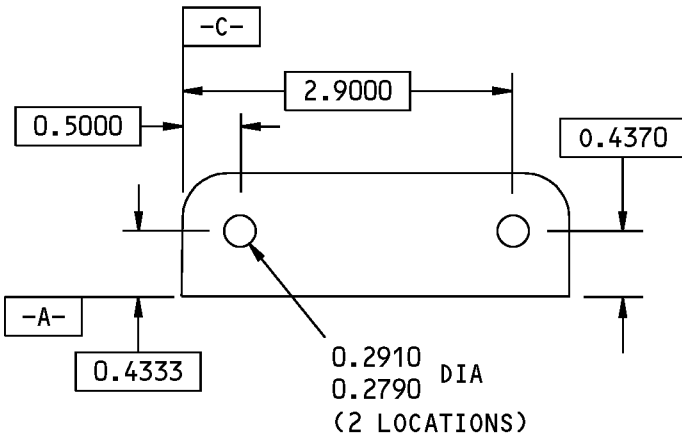
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REPAIR 3-2
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146A6135-4



125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

146A6135-4,-5,-6 Bracket Repair
Figure 601 (Sheet 1 of 3)

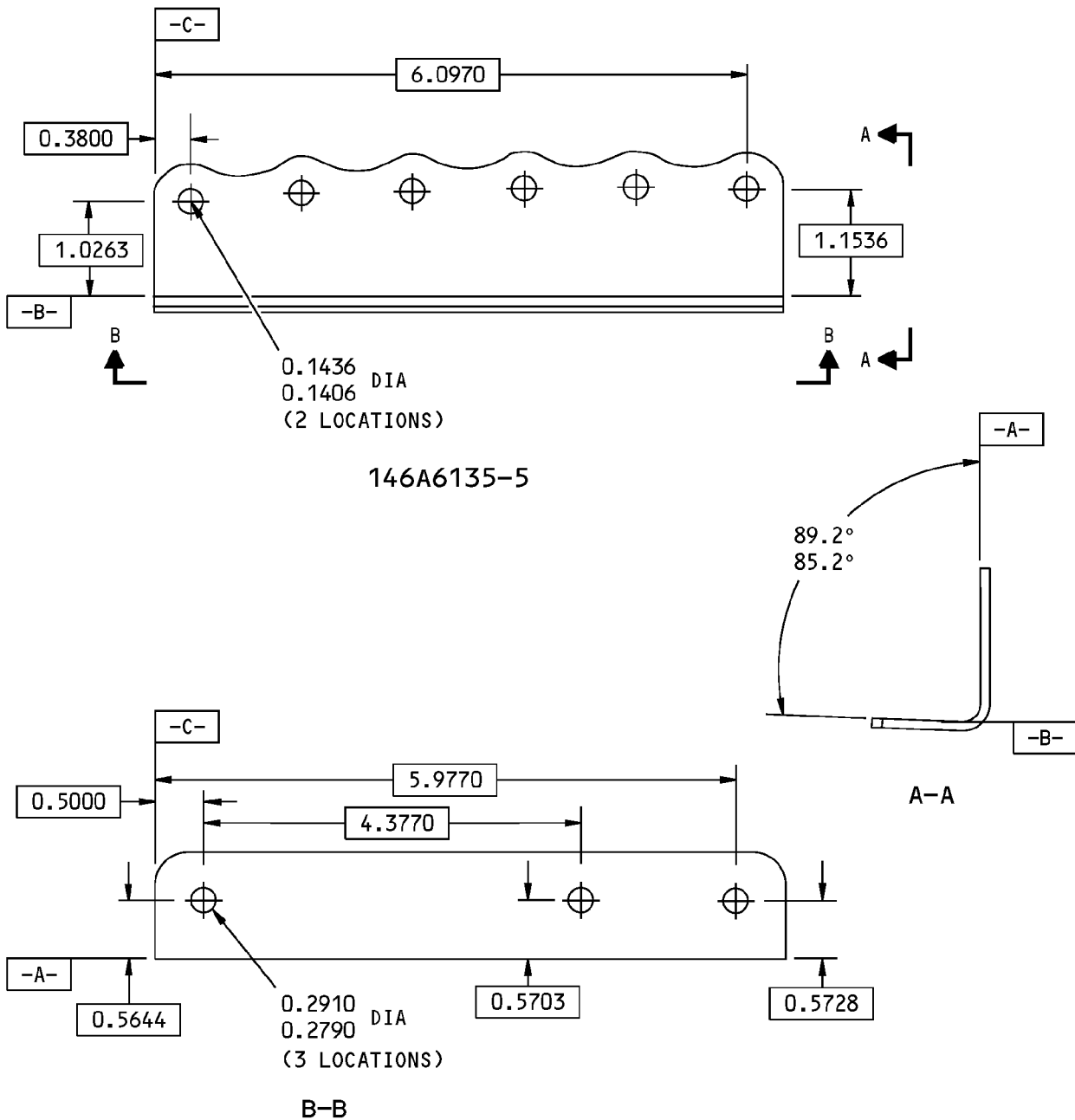
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REPAIR 3-2

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COMPONENT MAINTENANCE MANUAL



125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

146A6135-4,-5,-6 Bracket Repair
Figure 601 (Sheet 2 of 3)

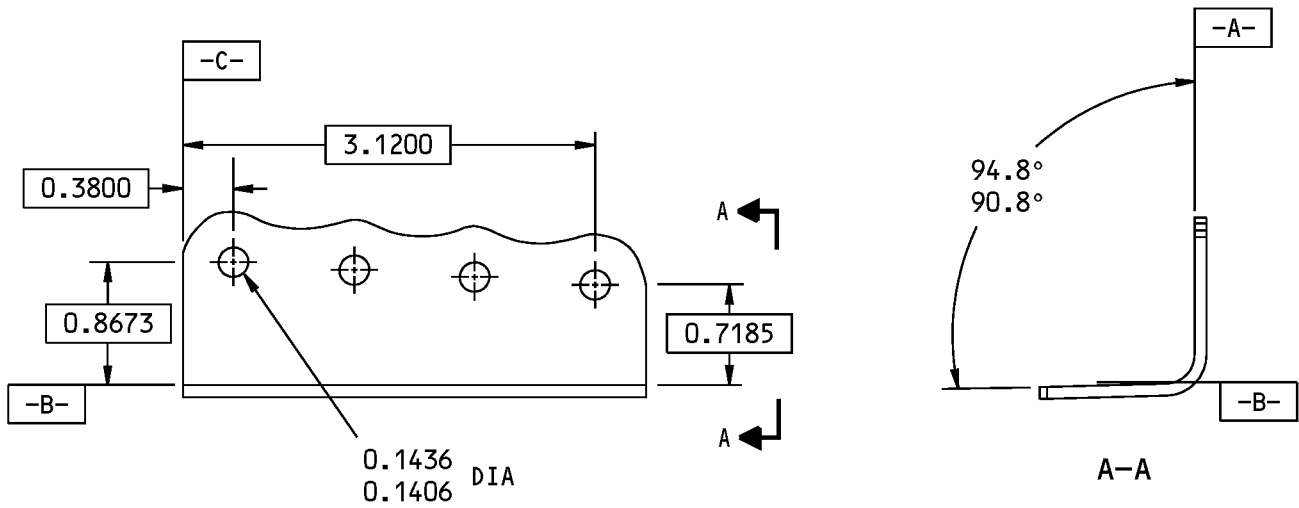
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REPAIR 3-2

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COMPONENT MAINTENANCE MANUAL



146A6135-6

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

146A6135-4,-5,-6 Bracket Repair
Figure 601 (Sheet 3 of 3)

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REPAIR 3-2
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COMPONENT MAINTENANCE MANUAL

FITTING ASSEMBLY - REPAIR 4-1

146A6128-5, -6

1. General

- A. This procedure has the data necessary to repair the fitting assembly (590, 595).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 1 for item numbers.

2. Rub Block Replacement

- A. References

Reference	Title
SOPM 20-50-01	BOLT AND NUT INSTALLATION

- B. Procedure (REPAIR 4-1, Figure 601 and REPAIR 4-1, Figure 602)

NOTE: For bolt and nut installation, refer to SOPM 20-50-01.

- (1) Remove the bolts (605), washer (610), nuts (615), and rub block(s) (620) from the stop fitting(s) (625, 630).
- (2) Install the new rub block(s) (620) onto the stop fitting(s) (625, 630) with bolts (605), washers (610) and nuts (615).

3. Bushing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedure (REPAIR 4-1, Figure 601 and REPAIR 4-1, Figure 602)

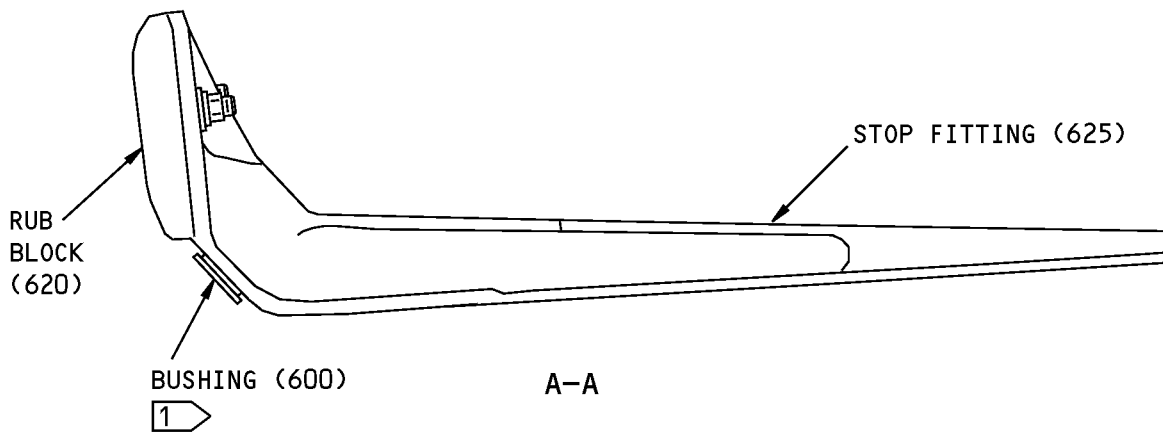
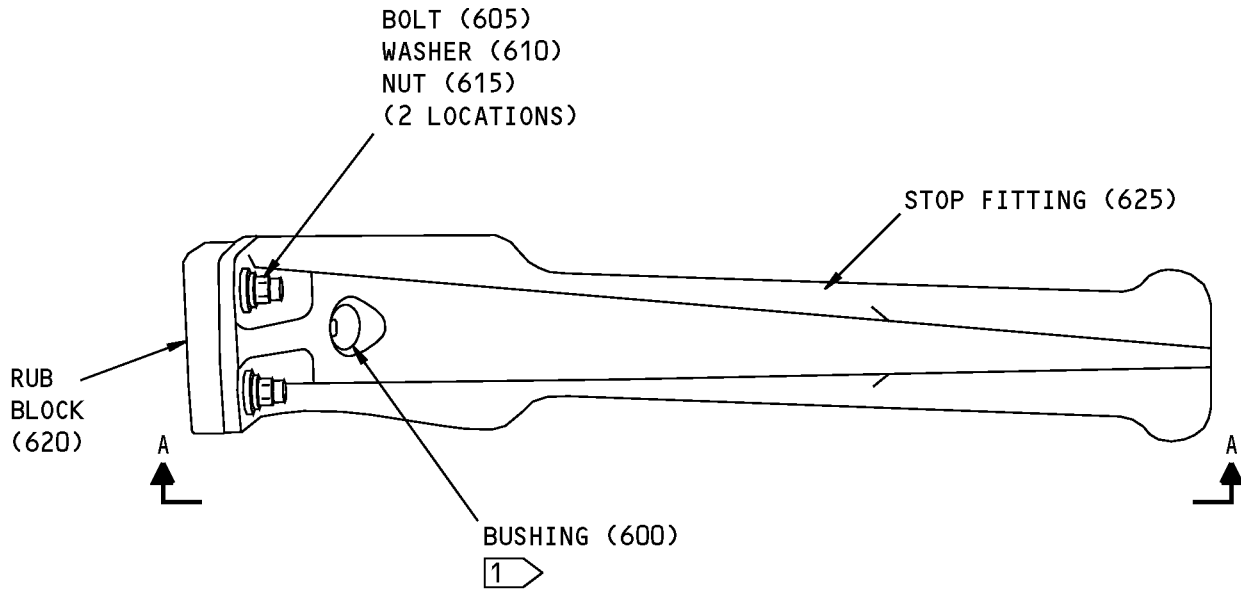
NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01 . For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bushing(s) (600) from the stop fitting(s) (625, 630).
- (2) Install and swage the new bushing(s) (600) into the stop fitting(s) (625, 630) with wet sealant, A00247 as specified in SOPM 20-50-03.
- (3) Fillet seal the bushing flange(s) with sealant, A00247 as shown in SOPM 20-50-03.

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REPAIR 4-1
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COMPONENT MAINTENANCE MANUAL



1 INSTALL AND SWAGE THIS BUSHING WITH WET BMS 5-95 SEALANT. FILLET SEAL THIS BUSHING WITH BMS 5-95 AT EACH END AS SPECIFIED IN SOPM 20-50-03

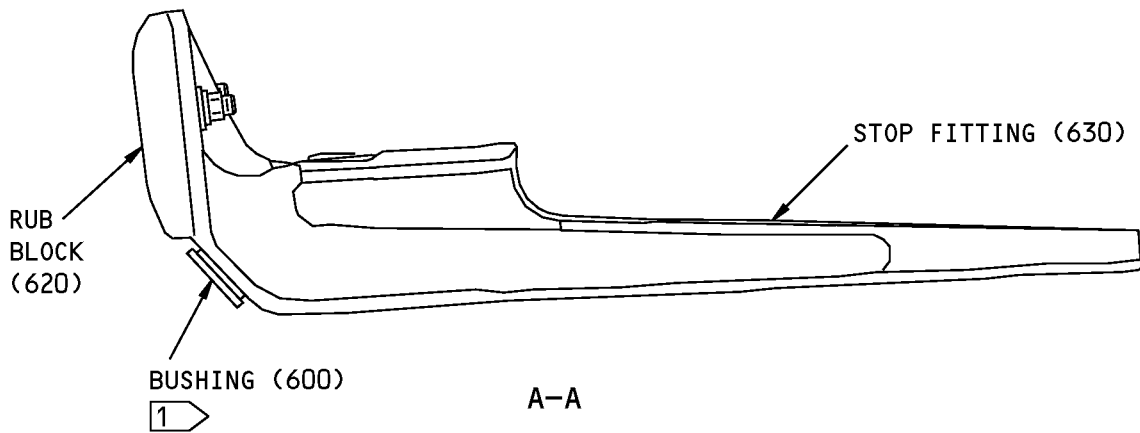
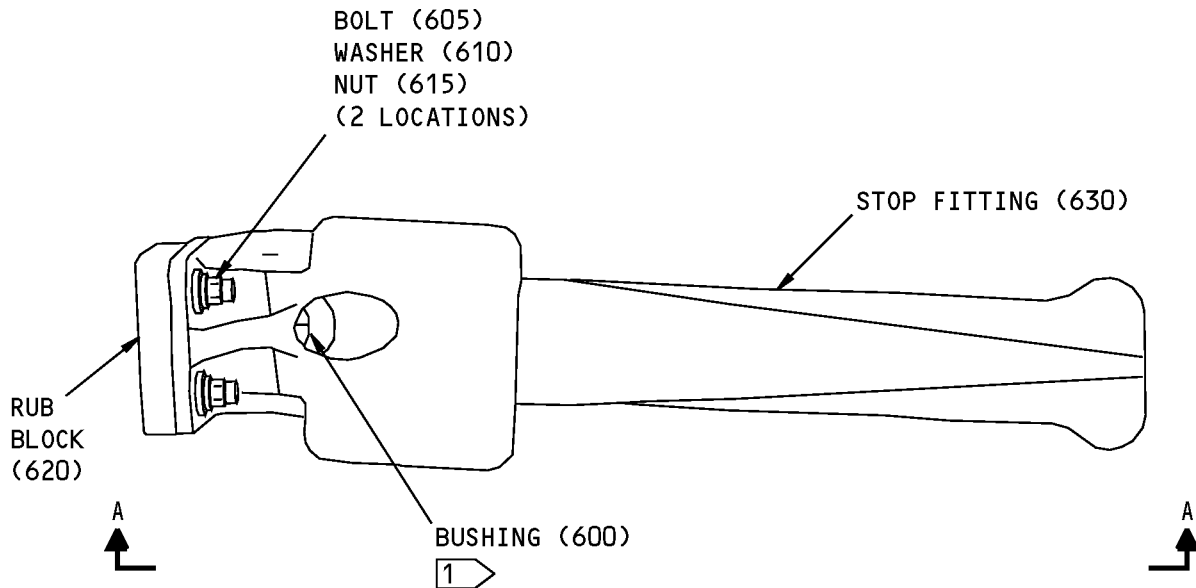
ITEM NUMBERS REFER TO IPL FIG. 1

146A6128-5 Forward Fitting Assembly Repair
 Figure 601

52-31-14

REPAIR 4-1
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COMPONENT MAINTENANCE MANUAL



- 1 INSTALL AND SWAGE THIS BUSHING WITH WET BMS 5-95 SEALANT. FILLET SEAL THIS BUSHING WITH BMS 5-95 AT EACH END AS SPECIFIED IN SOPM 20-50-03

ITEM NUMBERS REFER TO IPL FIG. 1

146A6128-6 Aft Fitting Assembly Repair
Figure 602

52-31-14

REPAIR 4-1
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COMPONENT MAINTENANCE MANUAL

FITTING - REPAIR 4-2

146A6128-7, -8

1. General

- A. This procedure has the data necessary to refinish the fitting (625, 630).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 1 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy
 - (2) Shot peen: All surfaces, but not in the holes (SOPM 20-10-03)
 - (a) Intensity 0.004-0.007A
 - (b) Coverage 1.0
 - (c) Overspray is permitted

2. Fitting Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

- C. Procedure (REPAIR 4-2, Figure 601 and REPAIR 4-2, Figure 602).

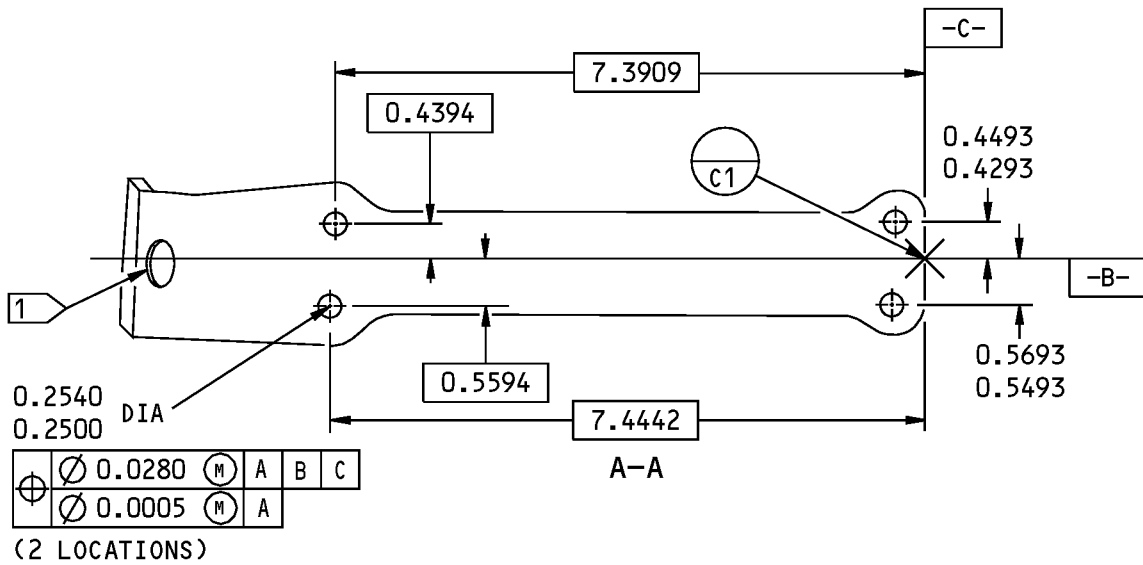
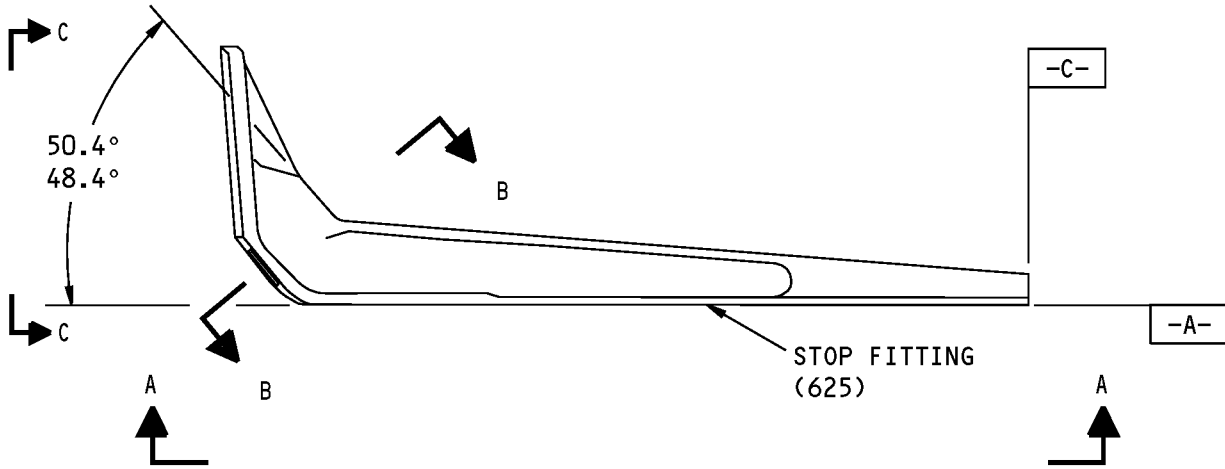
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Boric acid-sulfuric acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03) to all surfaces but not the hole for the bushing.

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REPAIR 4-2
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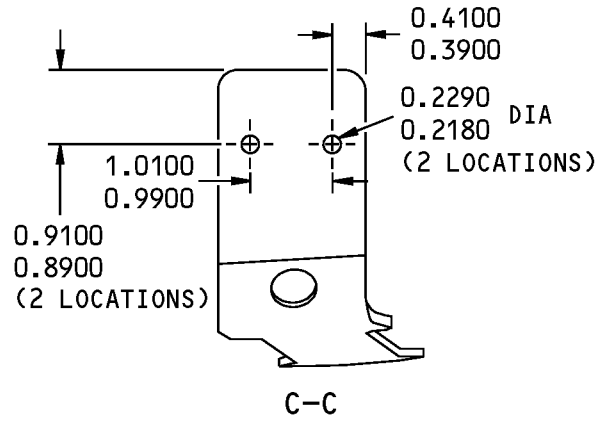
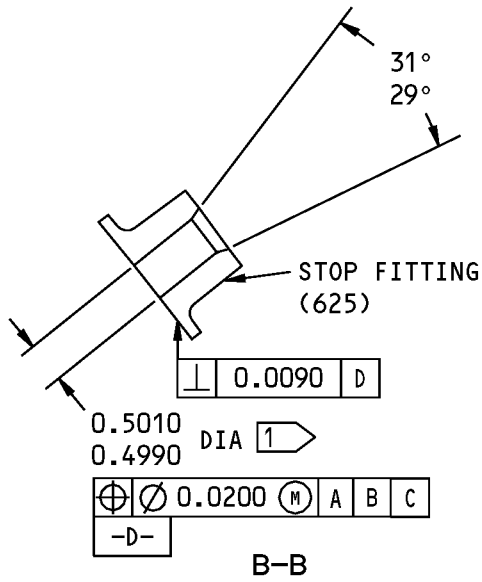


146A6128-7 Forward Fitting Repair
Figure 601 (Sheet 1 of 2)

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REPAIR 4-2
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COMPONENT MAINTENANCE MANUAL



1 DO NOT PUT PRIMER IN THIS HOLE

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

146A6128-7 Forward Fitting Repair
Figure 601 (Sheet 2 of 2)

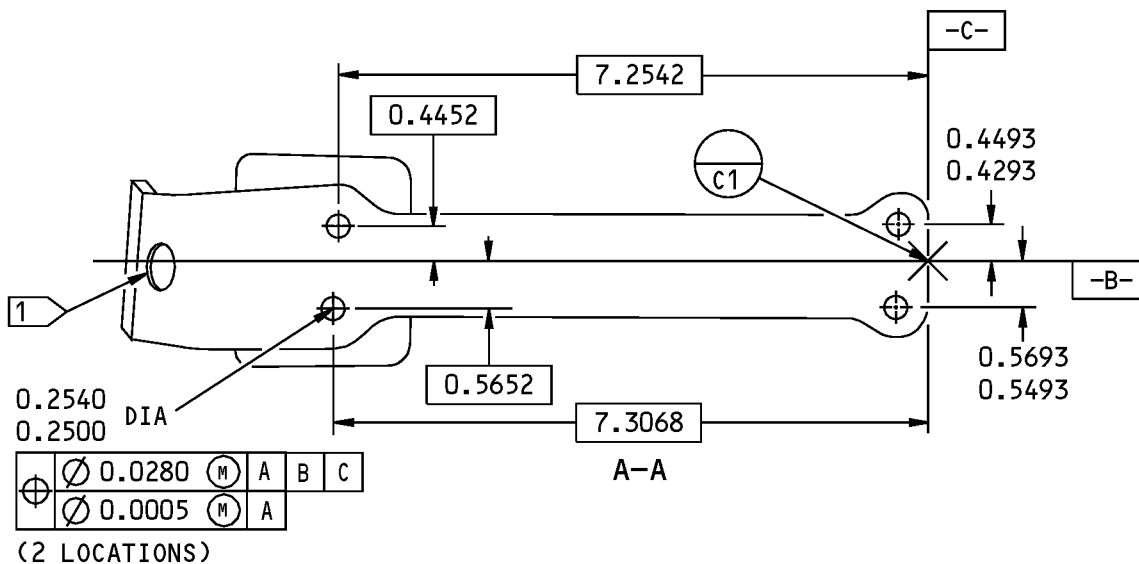
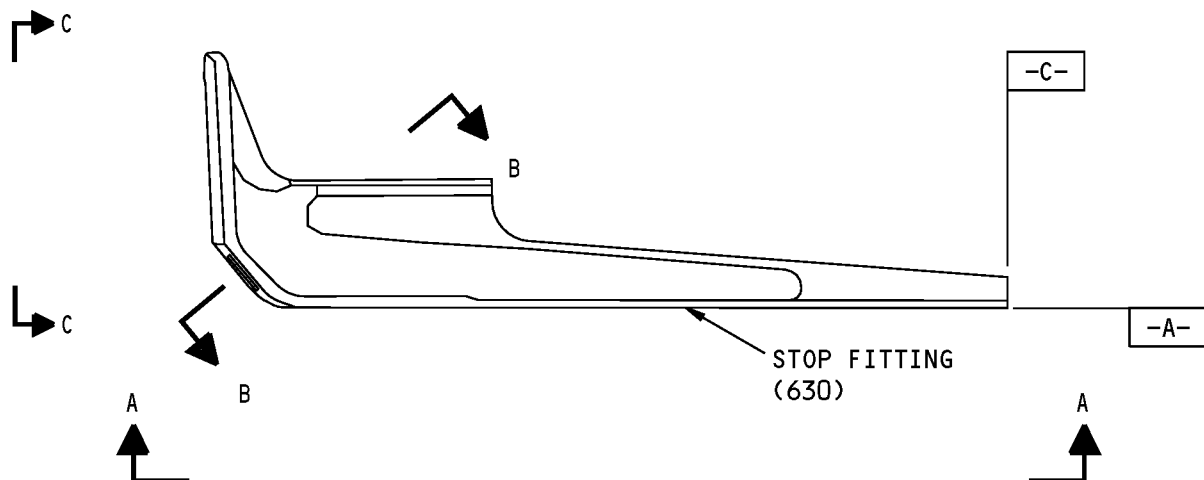
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REPAIR 4-2

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COMPONENT MAINTENANCE MANUAL

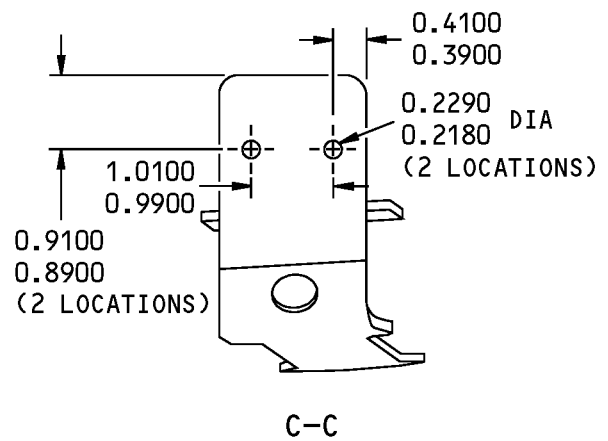
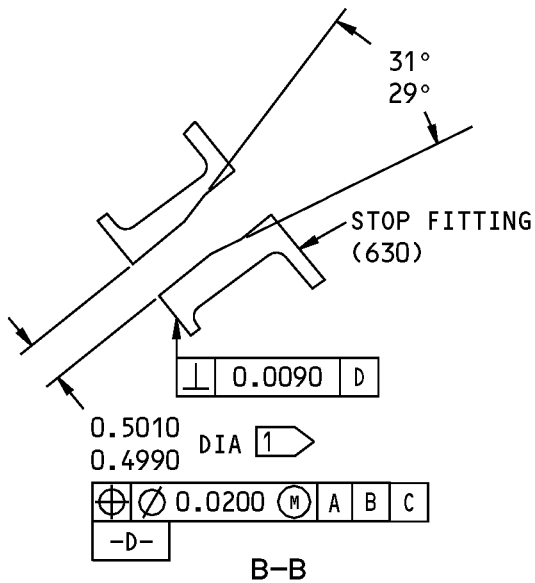


146A6128-8 Aft Fitting Repair
Figure 602 (Sheet 1 of 2)

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REPAIR 4-2
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COMPONENT MAINTENANCE MANUAL



1 DO NOT PUT PRIMER IN THIS HOLE

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

146A6128-8 Aft Fitting Repair
Figure 602 (Sheet 2 of 2)

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REPAIR 4-2

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COMPONENT MAINTENANCE MANUAL

ACCESS PANEL ASSEMBLY - REPAIR 5-1

149A6135-1, -5, -9

1. General

- A. This procedure has the data necessary to repair the access panel assembly (20).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.

2. Nutplate Replacement

- A. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

- B. Procedure (REPAIR 5-1, Figure 601)

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

- (1) Remove the rivets (25) and the nutplate(s) (30) from the panel (40).
- (2) Install the new nutplate(s) (30) onto the panel (40) with the new rivets (25).

3. Gasket Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00335	Adhesive - Silicone Rubber, 2 Part, RTV	BAC5010, Type 68
C00511	Primer - Adhesion	BAC5010, Type 68

- B. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-12	APPLICATION OF ADHESIVES

- C. Procedure (REPAIR 5-1, Figure 601)

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

- (1) Remove the gasket (35) from the panel (40).
- (2) Clean the bonding surface as specified in SOPM 20-30-03.

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REPAIR 5-1

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- (3) Align the holes in the gasket (35) with the holes in the panel (40) (flagnote 1).
- (4) Apply primer, C00511 to the mating surfaces between the panel (40) and the gasket (35), then bond the gasket to the panel with adhesive, A00335 as specified in SOPM 20-50-12 (flagnote 1).

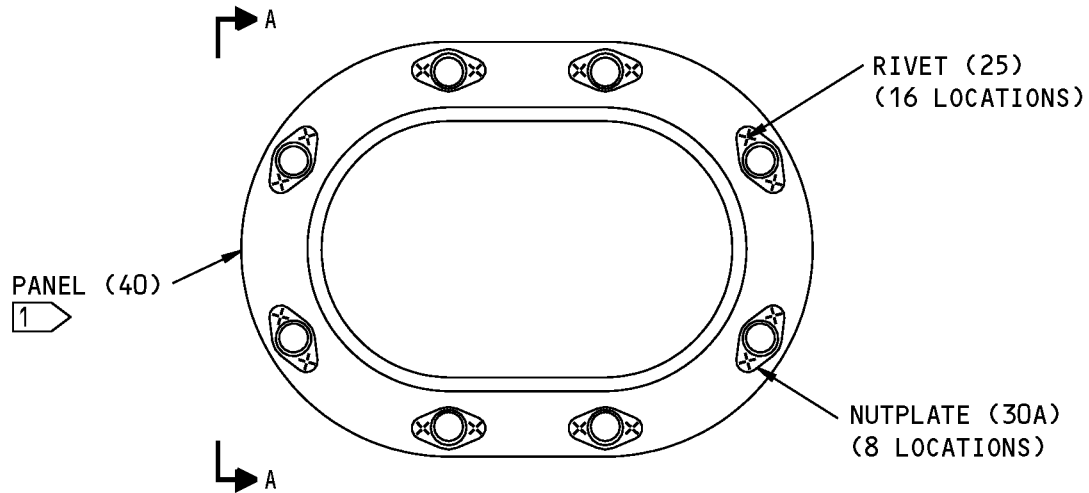
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REPAIR 5-1
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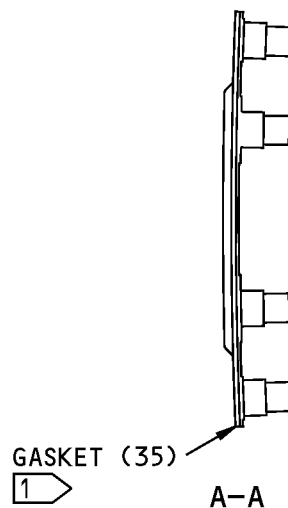
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149A6135-1 SHOWN
149A6135-5,-9 ALMOST THE SAME



- 1 ALIGN THE HOLES IN THE GASKET WITH THE HOLES IN THE PANEL. APPLY ADHESION PRIMER TO THE MATING SURFACES BETWEEN THE PANEL AND GASKET, THEN BOND THE GASKET ON TO THE PANEL WITH TYPE 68 ADHESIVE AS SPECIFIED IN S0PM 20-50-12

ITEM NUMBERS REFER TO IPL FIG. 2

149A6135-1,-5,-9 Access Panel Assembly Repair
Figure 601

52-31-14

REPAIR 5-1
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COMPONENT MAINTENANCE MANUAL

ACCESS PANEL - REPAIR 5-2

149A6135-2, -7

1. General

- A. This procedure has the data necessary to refinish the access panel (40).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Access Panel Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00064	Coating - Aluminum Chemical Conversion	BAC5719, Type II, Class A (MIL-C-5541, Class A)
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I

- B. References

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

- C. Procedure (REPAIR 5-2, Figure 601)

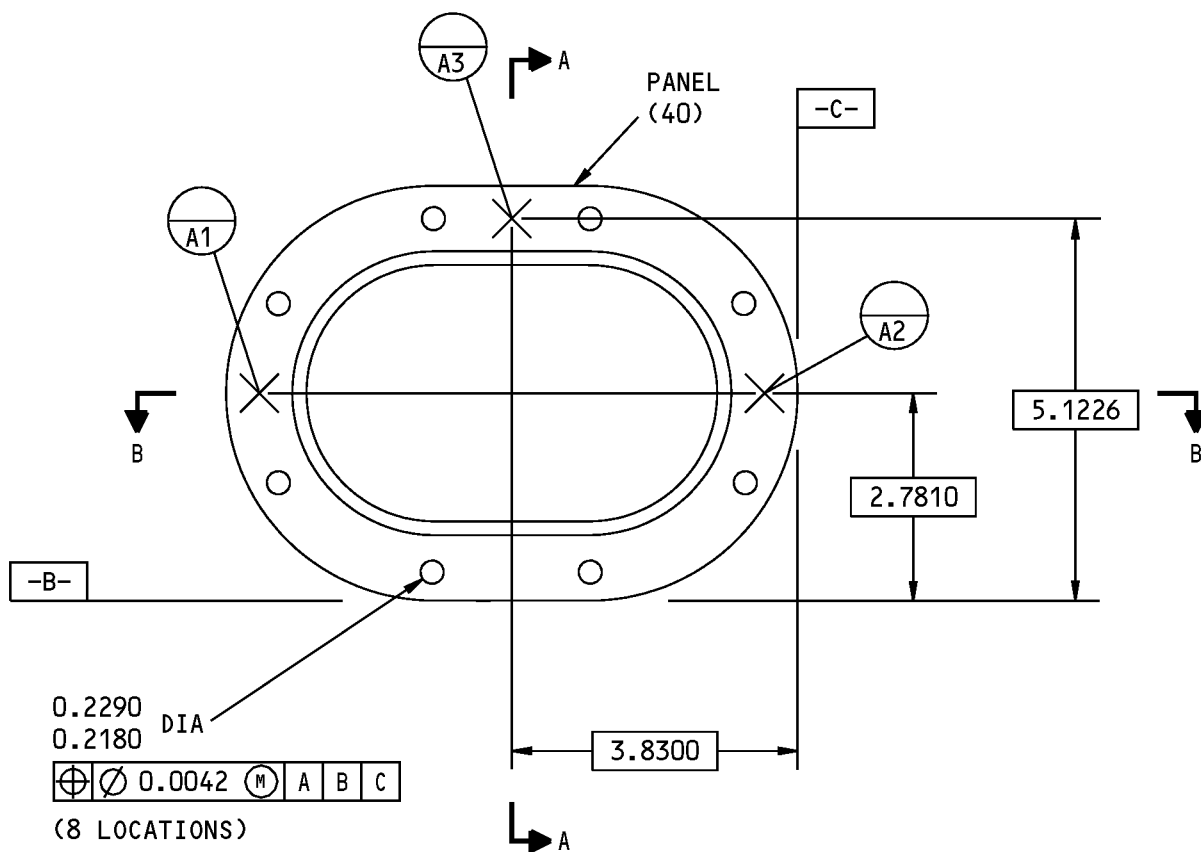
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Chemical treat coating, C00064 (F-17.07).
- (2) Apply primer, C00259 (F-20.03).

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REPAIR 5-2
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149A6135-2 SHOWN
1496135-7 ALMOST THE SAME

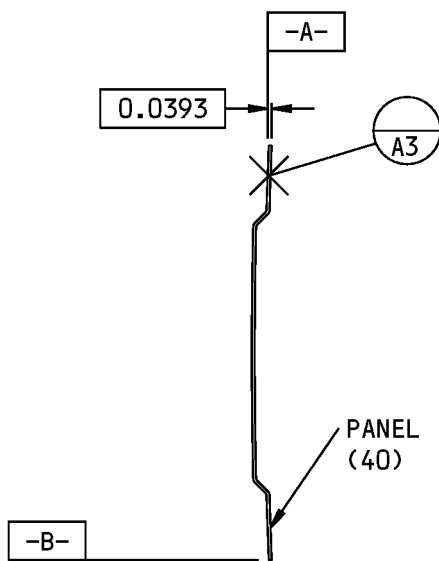
149A6135-2,-7 Access Panel Repair
Figure 601 (Sheet 1 of 2)

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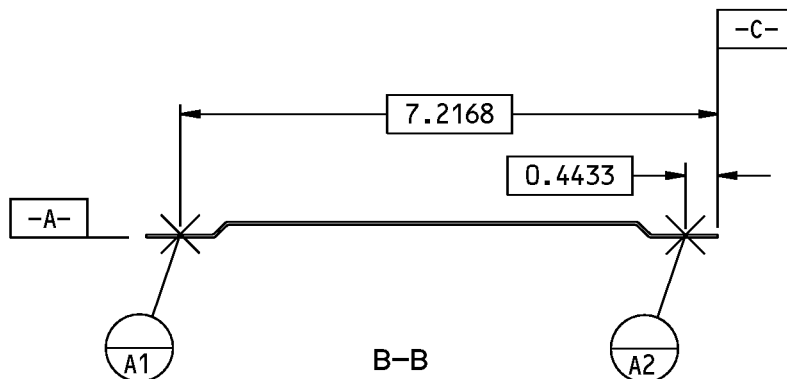
REPAIR 5-2
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A-A



125/√ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

149A6135-2,-7 Access Panel Repair
Figure 601 (Sheet 2 of 2)

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REPAIR 5-2
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COMPONENT MAINTENANCE MANUAL

ARM FITTING - REPAIR 6-1

149A6138-2, -3

1. General

- A. This procedure has the data necessary to refinish the arm fitting (40, 45).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 3 for item numbers.
- E. General repair details:
 - (1) Material: 13-8PH CRES, 215-235 ksi

2. Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00113	Lubricant - Liquid Dispersed Solid Film Lubricant	BMS3-8, BAC 5811, TYPE VIII

- B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS
SOPM 20-60-02	FINISHING MATERIALS

- C. Procedure (REPAIR 6-1, Figure 601)

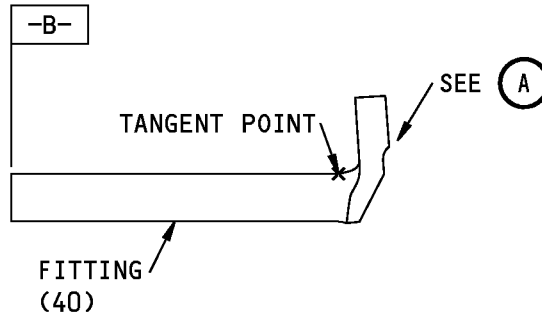
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Apply lubricant, D00113 (F-19.10) to the surfaces identified by flagnote 1 as specified in SOPM 20-50-08.

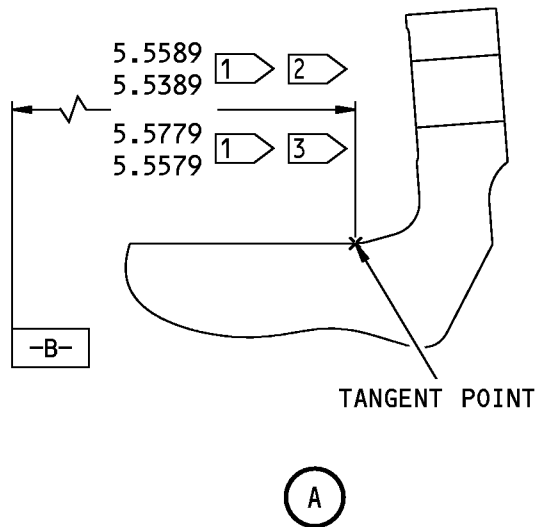
52-31-14

REPAIR 6-1
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COMPONENT MAINTENANCE MANUAL



149A6138-2 SHOWN
149A6138-3 OPPOSITE



- 1 APPLY BMS 3-8 SOLID FILM LUBRICANT (F-19.10) ON THIS SURFACE. OVER SPRAY IS PERMITTED
- 2 FOR 149A6138-2
- 3 FOR 149A6138-3

- 125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY
- BREAK ALL SHARP EDGES
- ITEM NUMBERS REFER TO IPL FIG. 3
- ALL DIMENSIONS ARE IN INCHES

G86132 S00041001150_V2

149A6138-2,-3 Arm Fitting Repair
Figure 601

52-31-14

REPAIR 6-1
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TUBE - REPAIR 7-1

149A6131-2

1. General

- A. This procedure has the data necessary to refinish the tube (70).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 3 for item numbers.
- E. General repair details:
 - (1) Material:
 - 15-5PH CRES
 - (a) 180-200 ksi

2. Tube Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

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

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

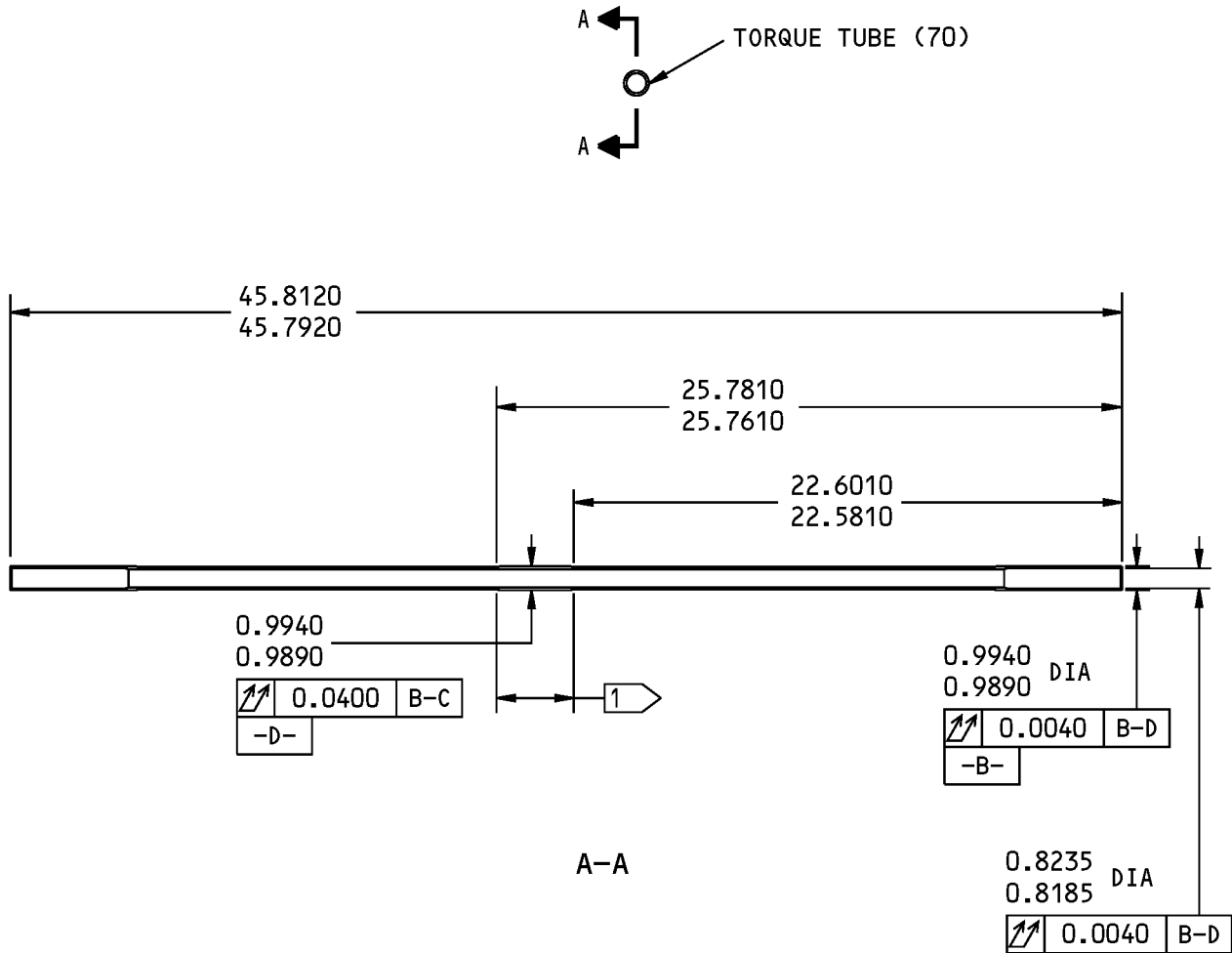
- (1) Passivate (F-17.25).
- (2) Apply primer, C00259 (F-18.12) to the surface shown by flagnote 1 in REPAIR 7-1, Figure 601.

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REPAIR 7-1
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1 PREPARE SURFACES AS SPECIFIED IN SOPM 20-30-03. APPLY A LAYER OF BMS 10-11, TYPE 1 PRIMER (F-18.12) AT THIS OUTER SURFACE ONLY

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY
 BREAK ALL SHARP EDGES
 ITEM NUMBERS REFER TO IPL FIG. 3
 ALL DIMENSIONS ARE IN INCHES

149A6131-2 Torque Tube Repair
 Figure 601

52-31-14

REPAIR 7-1
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HOUSING ASSEMBLY - REPAIR 8-1

65-2306-11

1. General

- A. This procedure has the data necessary to repair the housing assembly (105).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.

2. Bearing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedures (REPAIR 8-1, Figure 601)

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-04.

- (1) Remove the bearing (115) from the housing (120) as specified in SOPM 20-50-03.
- (2) Install the new bearing (115) with wet sealant, A00247 into the housing (120) as specified in SOPM 20-50-03.

3. Fitting Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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C. Procedure

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the fitting (110) from the housing (120).
- (2) Install the new fitting (110) with wet sealant, A00247 into the housing (120).

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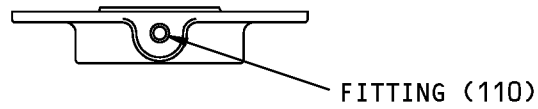
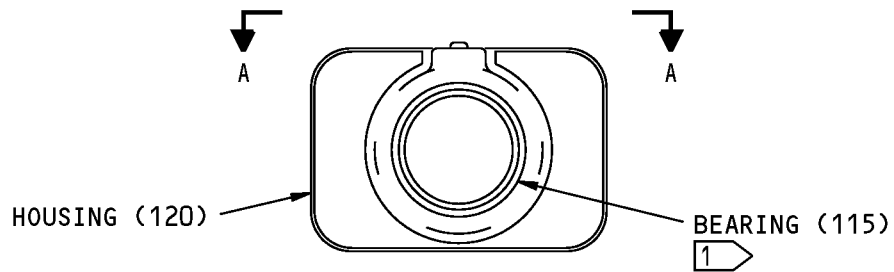
REPAIR 8-1

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A-A

1 INSTALL THIS BEARING WITH WET
BMS 5-95 SEALANT AS SPECIFIED
IN SOPM 20-50-03

ITEM NUMBERS REFER TO IPL FIG. 2

65-2306-11 Housing Assembly Repair
Figure 601

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REPAIR 8-1
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HOUSING - REPAIR 8-2

65-2306-12

1. General

- A. This procedure has the data necessary to refinish the housing (120).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Housing Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

- C. Procedures (REPAIR 8-2, Figure 601)

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

- (1) Boric acid-sulfuric acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03) to all surfaces but the holes identified by flagnote 1.

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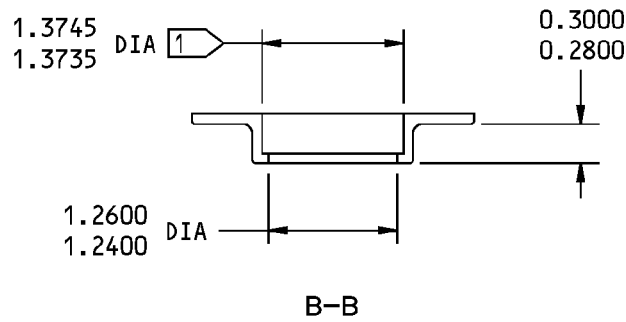
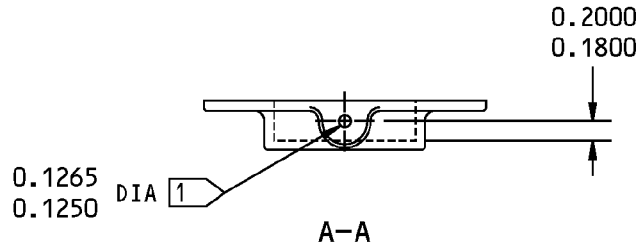
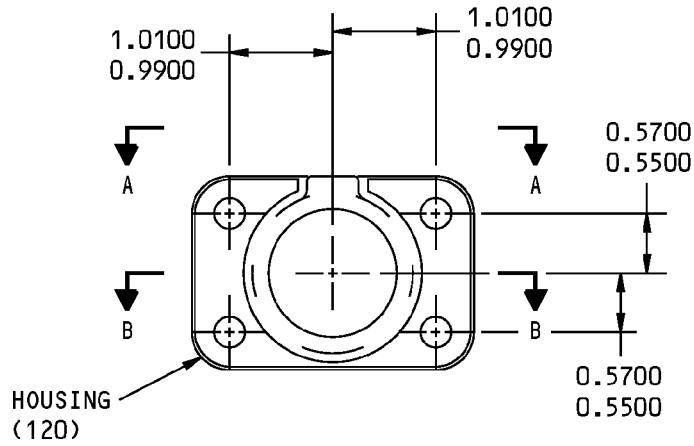
REPAIR 8-2

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1 DO NOT PUT PRIMER IN THIS HOLE

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

65-2306-12 Housing Repair
Figure 601

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REPAIR 8-2

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BEARING HOUSING ASSEMBLY - REPAIR 9-1

146A6126-1, -2

1. General

- A. This procedure has the data necessary to repair the bearing housing assembly (165, 170).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.

2. Bearing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedures (REPAIR 9-1, Figure 601)

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bearing (175) from the bearing housing (180, 185).
- (2) Install the new bearing (175) with wet sealant, A00247 into the bearing housing (180, 185) as specified in SOPM 20-50-03.

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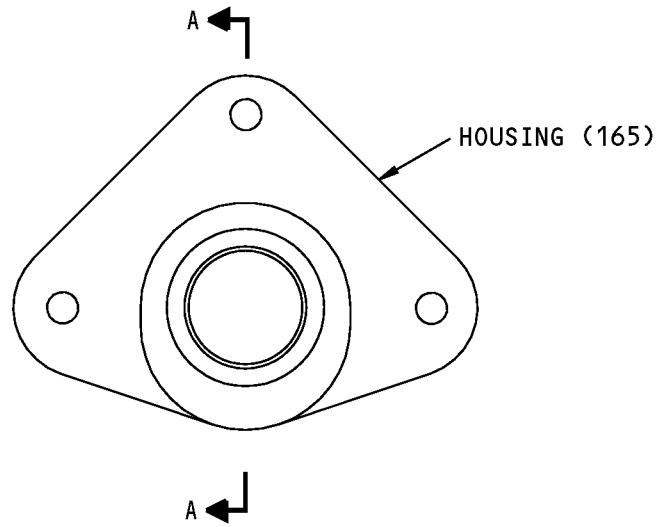
REPAIR 9-1

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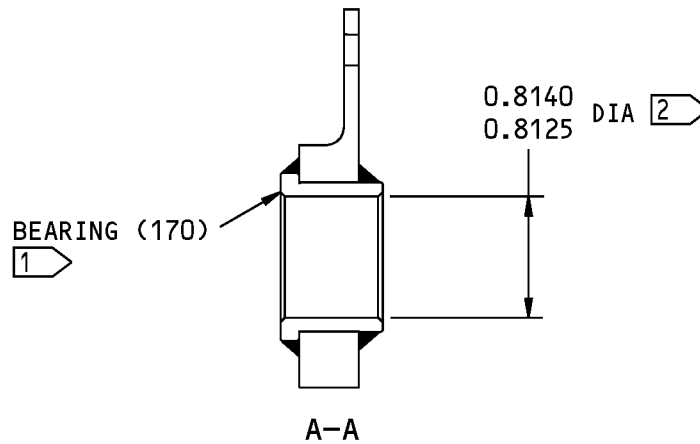
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143A6126-1 SHOWN
 143A6126-2 ALMOST THE SAME



1 INSTALL THIS BEARING WITH WET
 BMS 5-95 SEALANT AS SPECIFIED IN
 SOPM 20-50-03. FILLET SEAL EACH
 END

2 AFTER PRESS FIT

ITEM NUMBERS REFER TO IPL FIG. 2
 ALL DIMENSIONS ARE IN INCHES

143A6126-1,-2 Bearing Housing Assembly Repair
 Figure 601

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REPAIR 9-1
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HOUSING - REPAIR 9-2

146A6126-3, -4

1. General

- A. This procedure has the data necessary to refinish the bearing housing (180, 185).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Bearing Housing Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

B. References

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

C. Procedures (REPAIR 9-2, Figure 601)

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

- (1) Boric acid-sulfuric acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03) to all surfaces but the hole for the bearing.

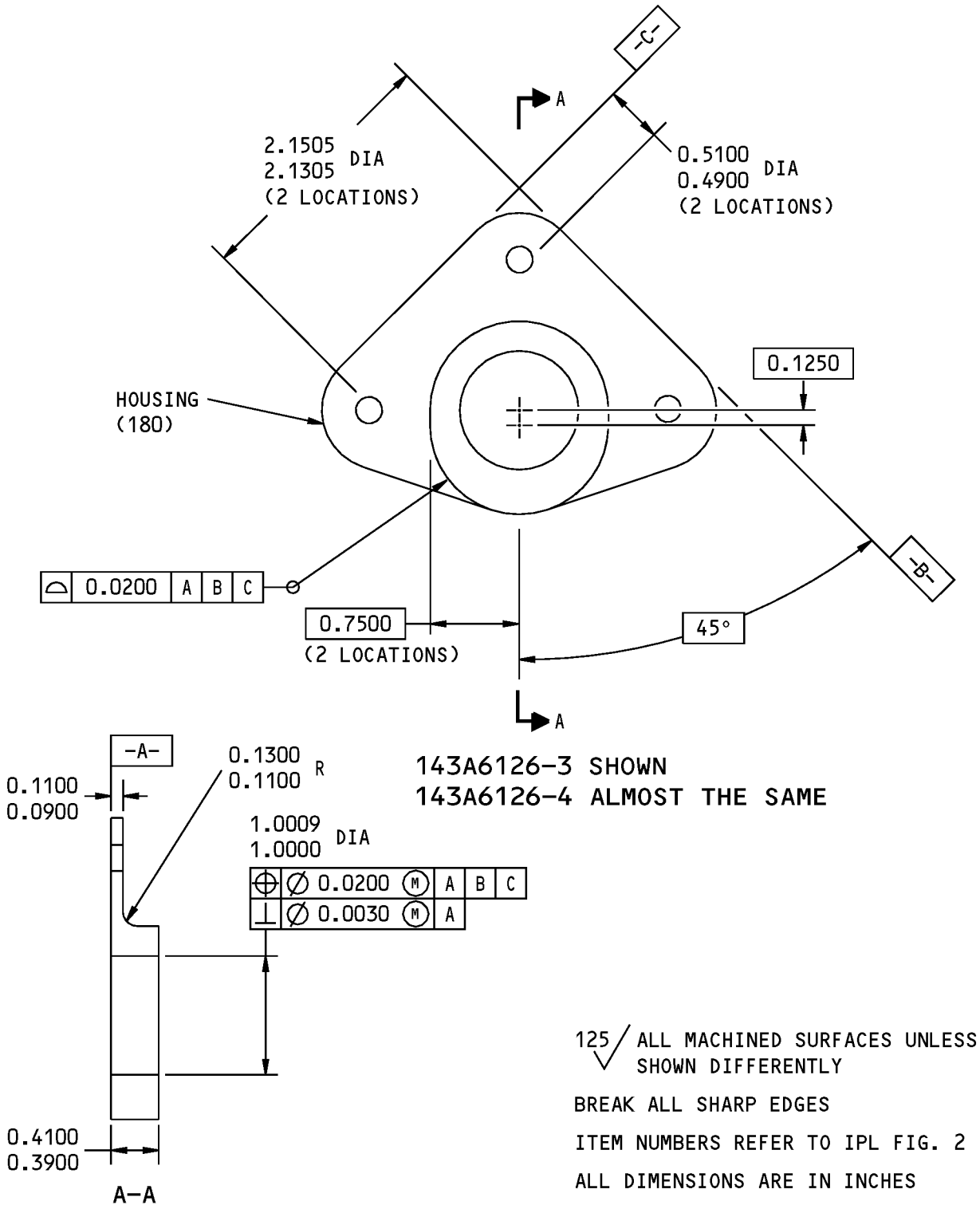
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REPAIR 9-2

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143A6126-3,-4 Housing Repair
Figure 601

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STOP ASSEMBLY - REPAIR 10-1

146A6120-1, -2, -3, -5, -7, -9, -10, -22, -24, -26

1. General

- A. This procedure has the data necessary to repair the stop assembly (365 thru 380, 425 thru 450).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.

2. Bushing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedures (REPAIR 10-1, Figure 601 through REPAIR 10-1, Figure 603)

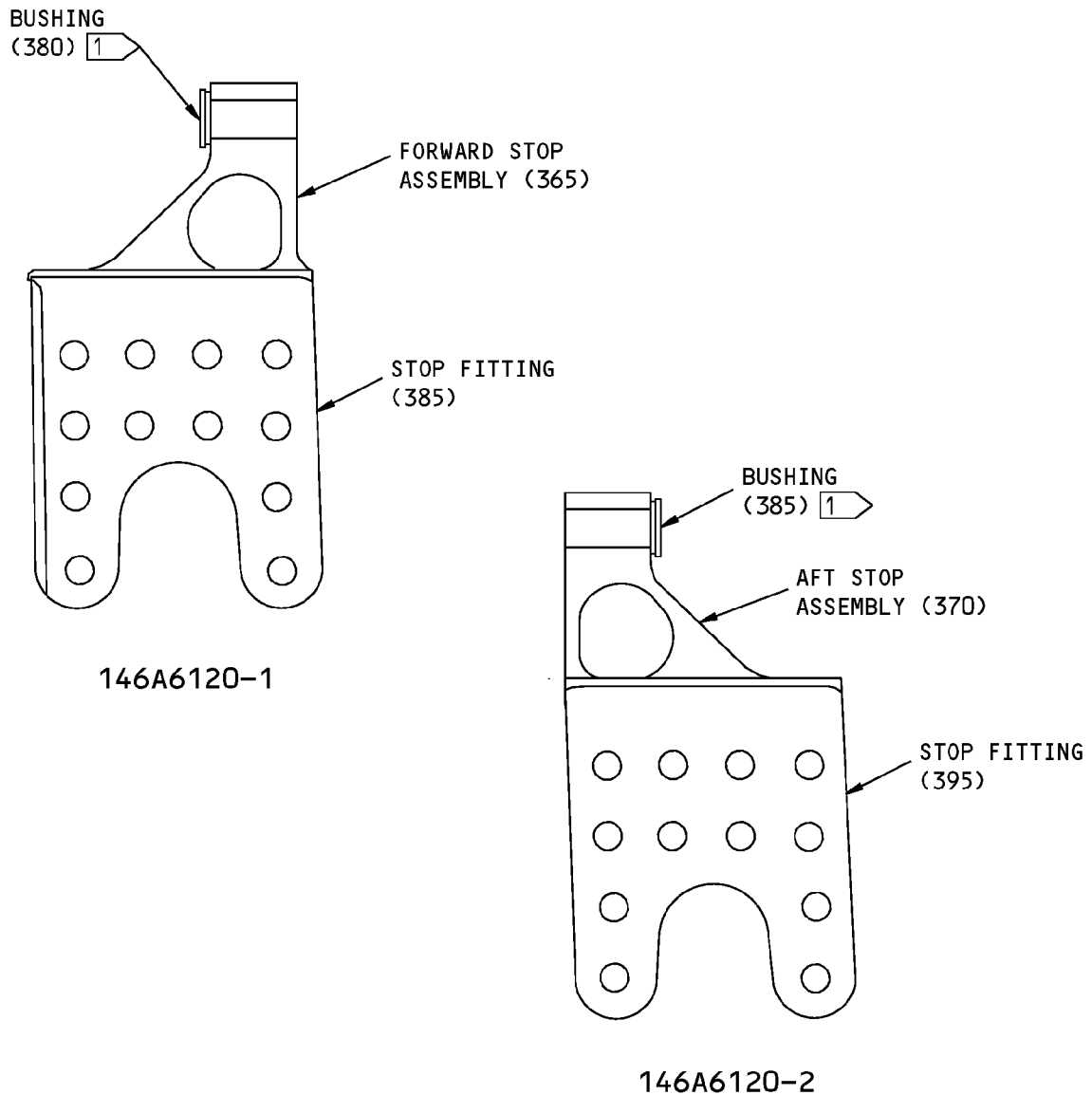
NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bushing(s) (385, 455) from the stop fitting(s) (365 thru 380, 425 thru 450).
- (2) Install and swage the new bushing(s) (385) into the stop fitting(s) (365 thru 380) with wet sealant, A00247 as specified in SOPM 20-50-03 and REPAIR 10-1, Figure 601 and REPAIR 10-1, Figure 602.
- (3) Install and swage the new bushing(s) (455) into the stop fitting(s) (425 thru 450) with wet sealant, A00247 as specified in SOPM 20-50-03 and REPAIR 10-1, Figure 603.

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1 INSTALL AND SWAGE THIS BUSHING WITH WET BMS 5-95 SEALANT AS SPECIFIED IN SOPM 20-50-03. FILLET SEAL EACH BUSHING FLANGE WITH THE SEALANT

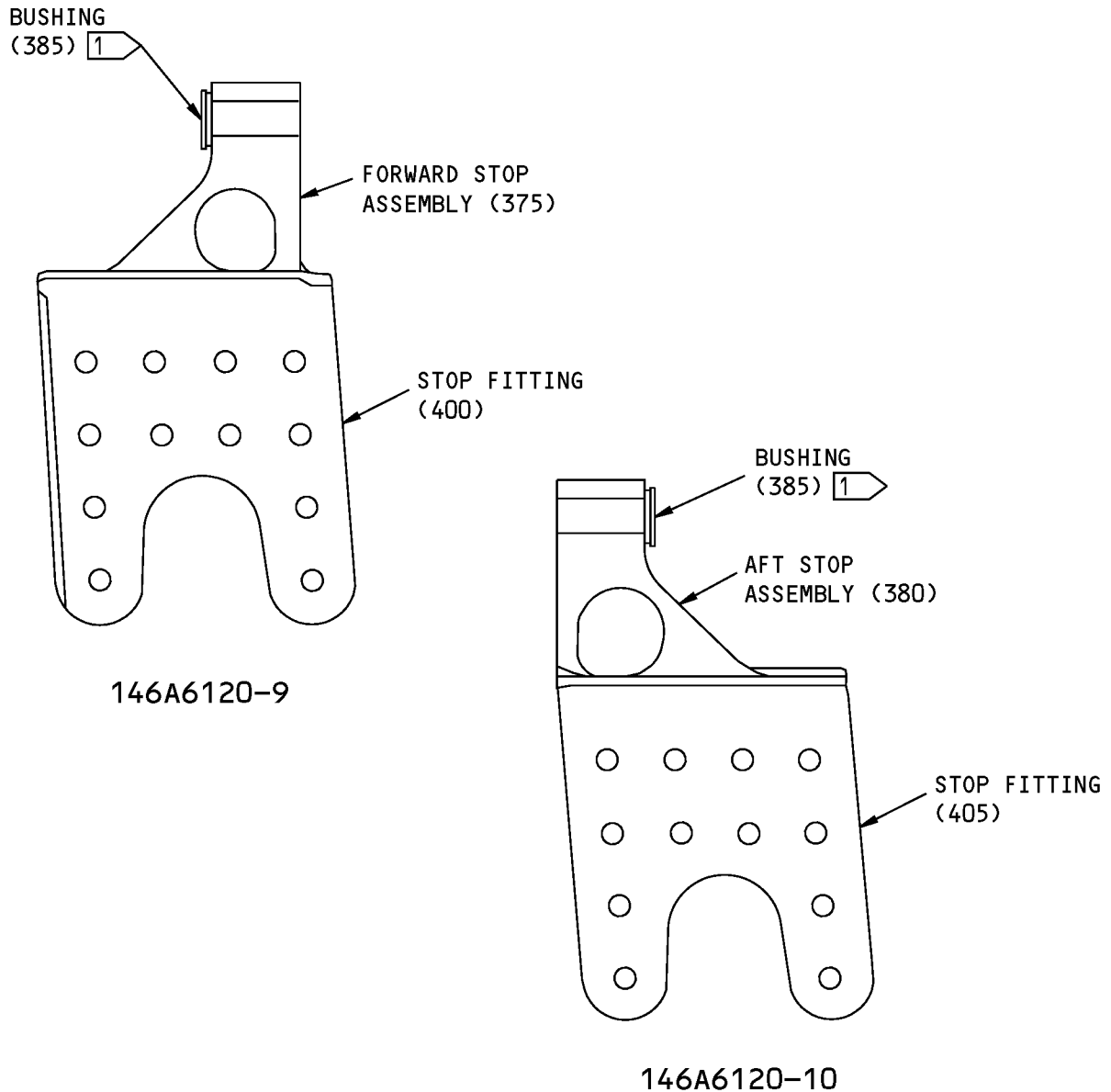
ITEM NUMBERS REFER TO IPL FIG. 2

146A6120-1,-2 Stop Assembly Repair
Figure 601

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REPAIR 10-1
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1 INSTALL AND SWAGE THIS BUSHING WITH WET BMS 5-95 SEALANT AS SPECIFIED IN SOPM 20-50-03. FILLET SEAL EACH BUSHING FLANGE WITH THE SEALANT

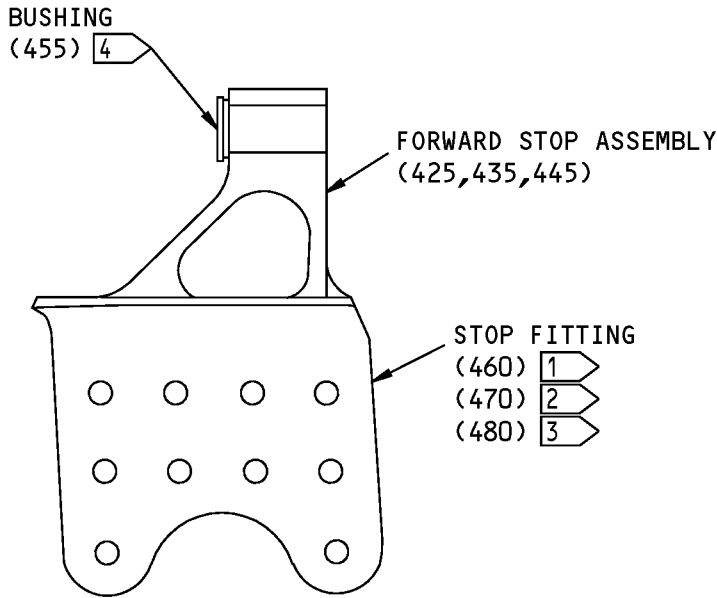
ITEM NUMBERS REFER TO IPL FIG. 2

146A6120-9,-10 Stop Assembly Repair
Figure 602

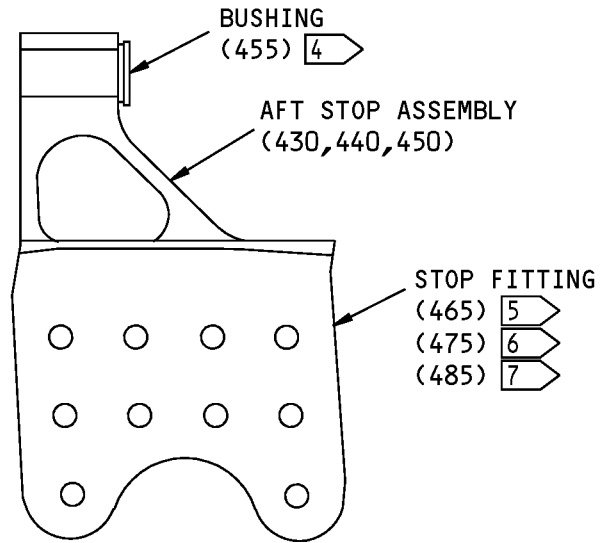
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146A6120-3,-5,-7



146A6120-22,-24,-26

- 1 146A6120-3
- 2 146A6120-5
- 3 146A6120-7
- 4 INSTALL AND SWAGE THIS BUSHING WITH WET BMS 5-95 SEALANT AS SPECIFIED IN SOPM 20-50-03. FILLET SEAL EACH BUSHING FLANGE WITH THE SEALANT
- 5 146A6120-22
- 6 146A6120-24
- 7 146A6120-26

ITEM NUMBERS REFER TO IPL FIG. 2

146A6120-3,-5,-7,-22,-24,-26 Stop Assembly Repair
Figure 603

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FITTING - REPAIR 10-2

146A6120-11, -12, -13, -15, -17, -19, -20, -28, -30, -32

1. General

- A. This procedure has the data necessary to refinish the fitting (390 thru 405, 460 thru 485).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 2 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy
 - (2) Shot peen: All surfaces, but not in holes (SOPM 20-10-03)
 - (a) Intensity 0.005A-0.010A
 - (b) Coverage 1.0
 - (c) Overspray is permitted

2. Fitting Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

- C. Procedures (REPAIR 10-2, Figure 601 through REPAIR 10-2, Figure 603)

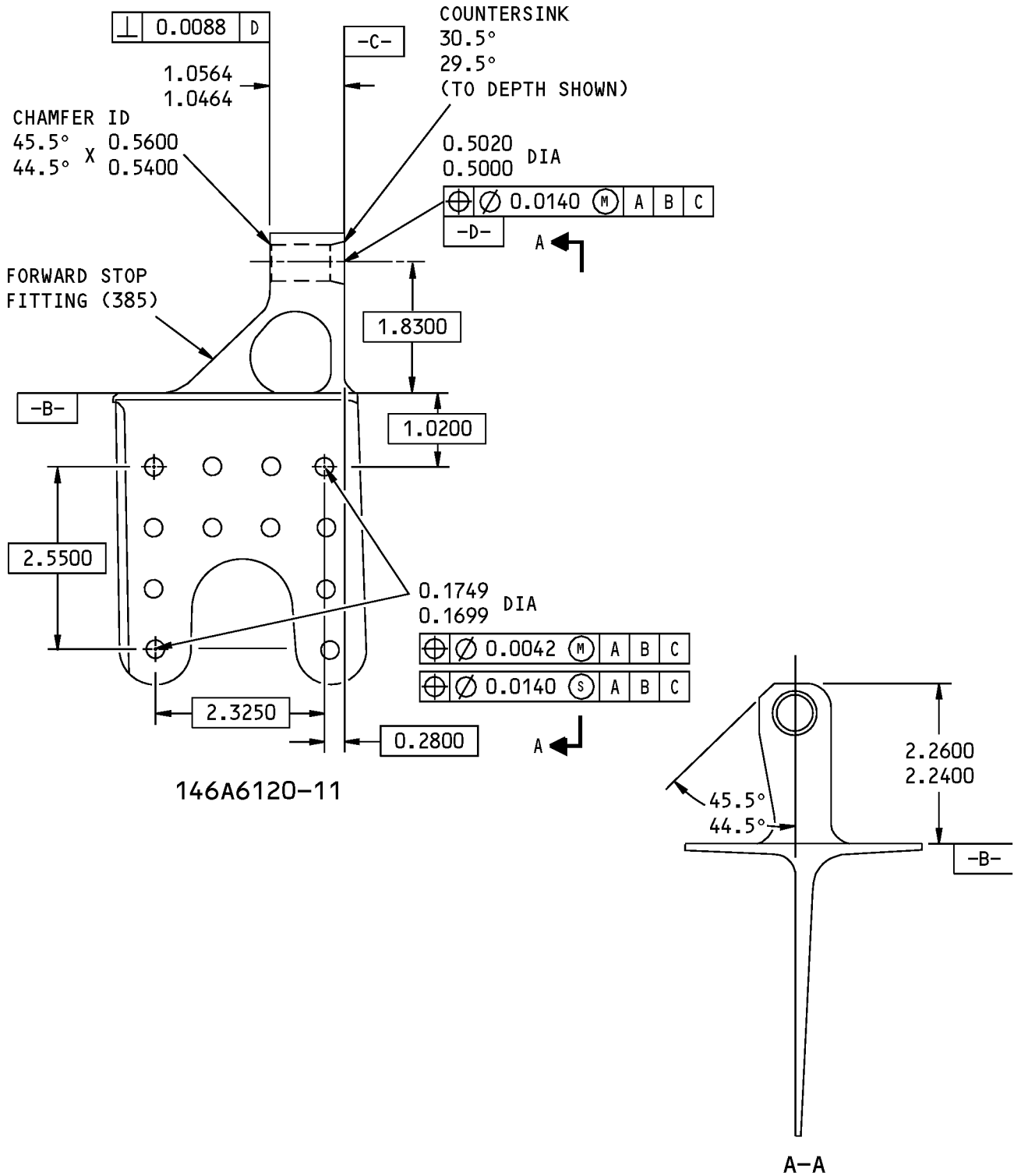
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Boric acid-sulfuric acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03) to all surfaces but the hole for the bushing as specified by flagnote 4.

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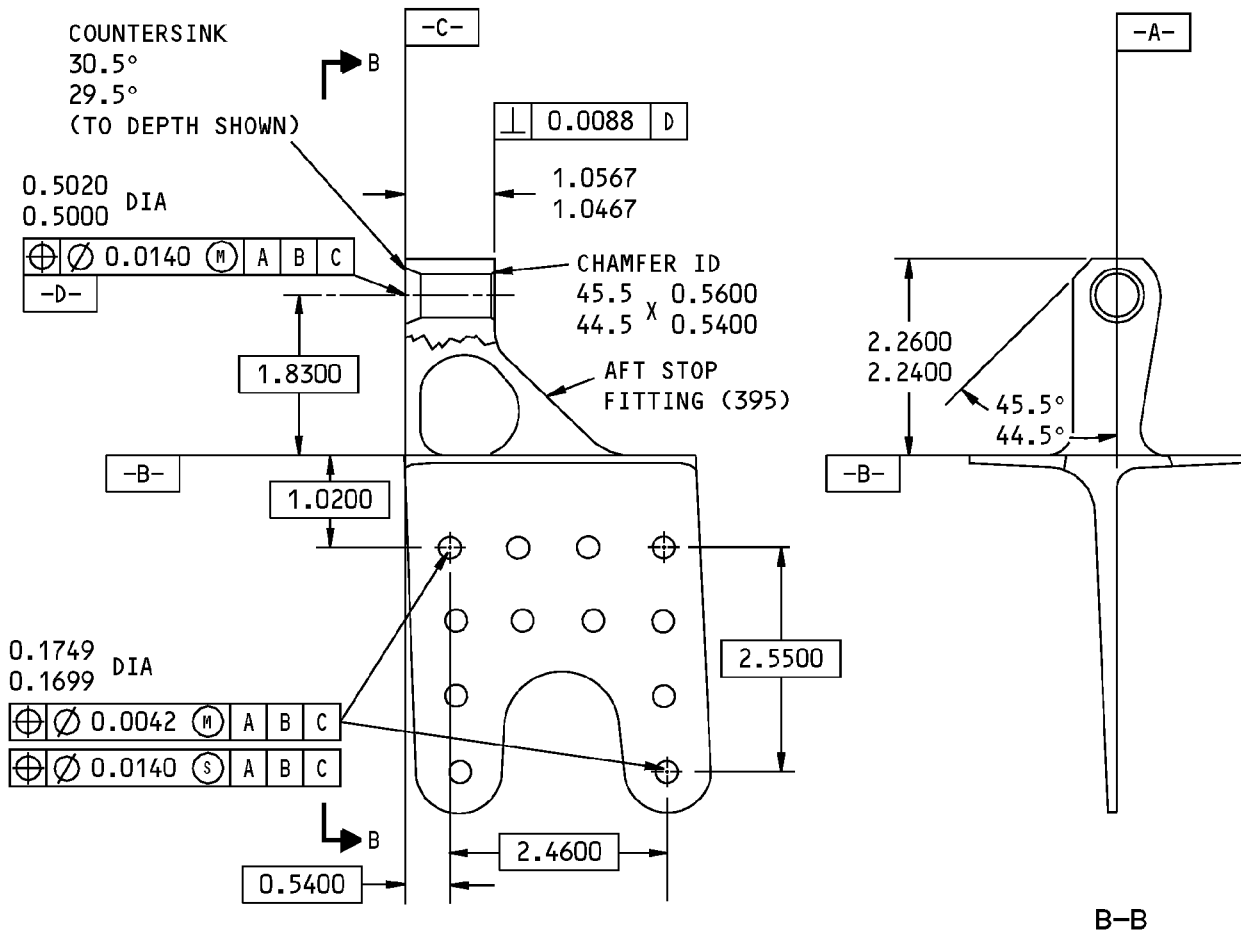


146A6120-11,-12 Stop Fitting Repair
Figure 601 (Sheet 1 of 2)

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146A6120-12

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

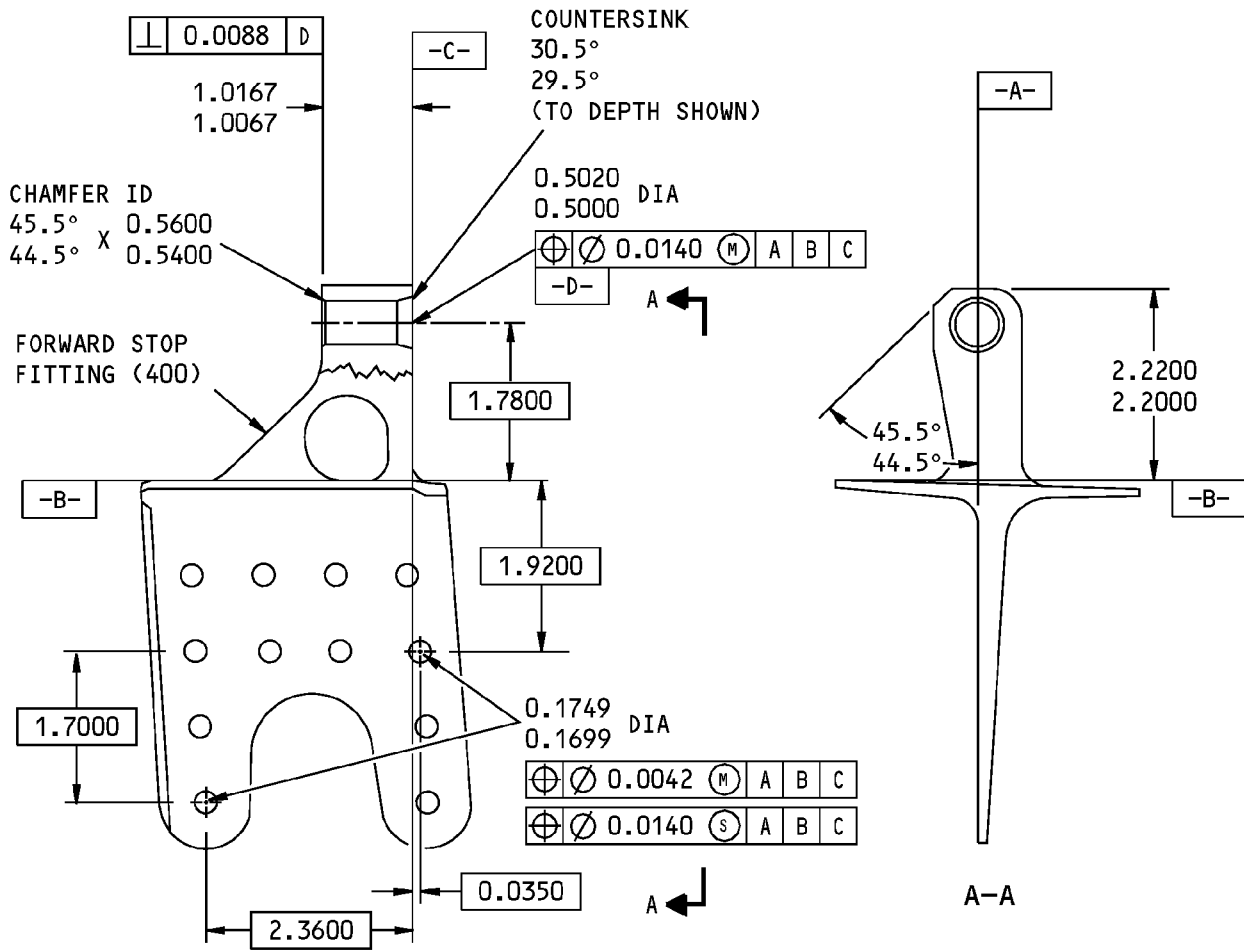
ALL DIMENSIONS ARE IN INCHES

146A6120-11,-12 Stop Fitting Repair
 Figure 601 (Sheet 2 of 2)

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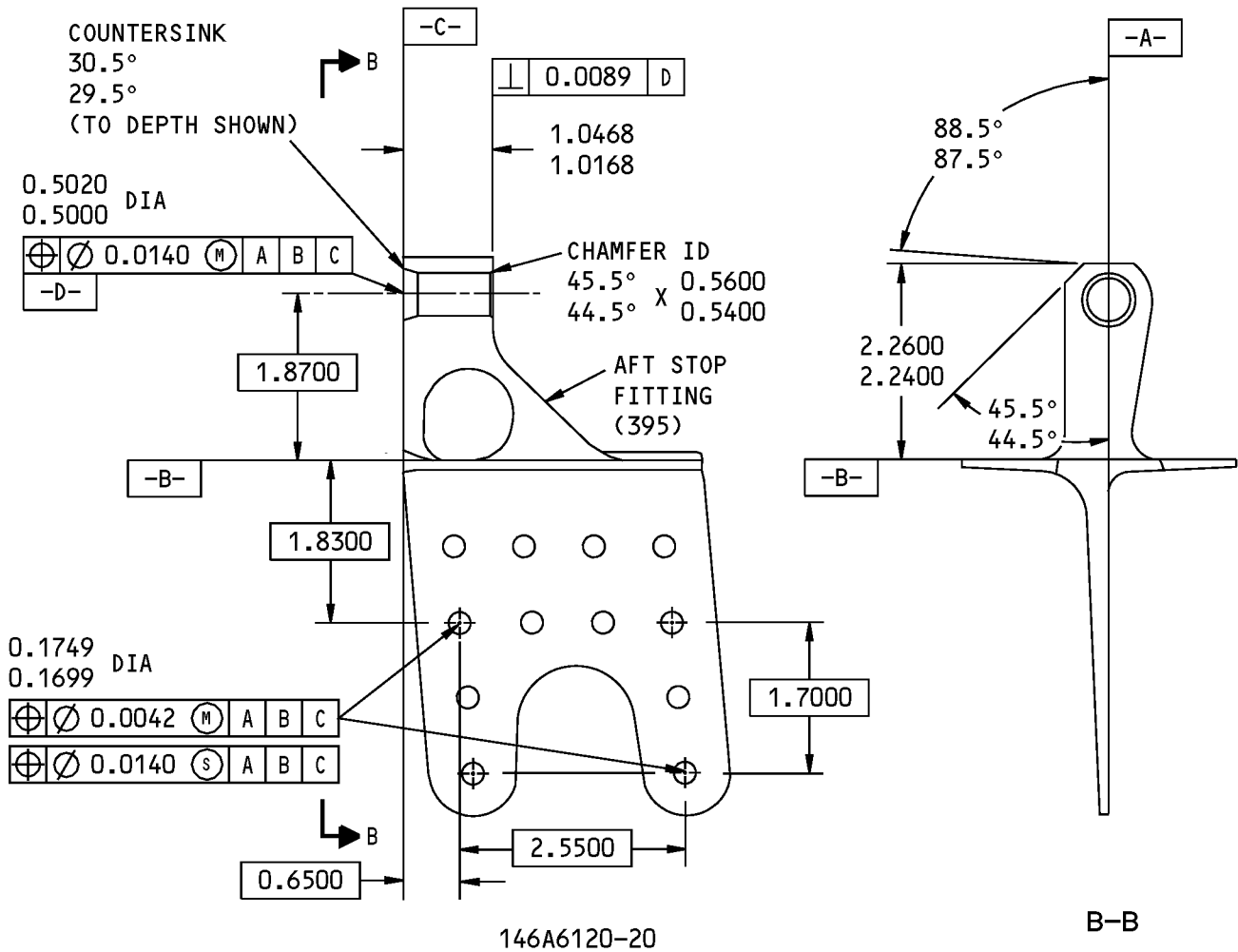
146A6120-19

146A6120-19,-20 Stop Fitting Repair
Figure 602 (Sheet 1 of 2)

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125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

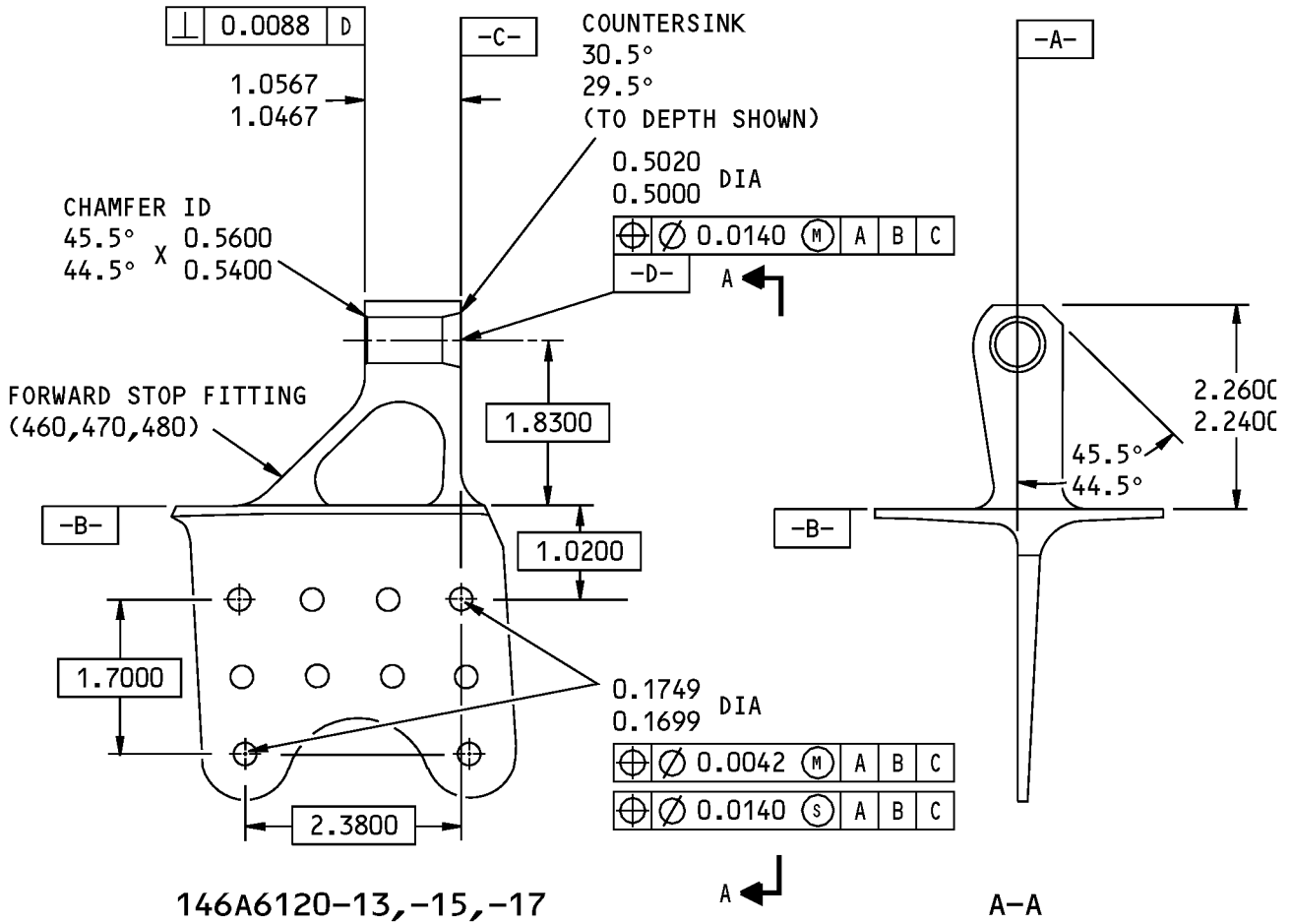
ALL DIMENSIONS ARE IN INCHES

146A6120-19,-20 Stop Fitting Repair
Figure 602 (Sheet 2 of 2)

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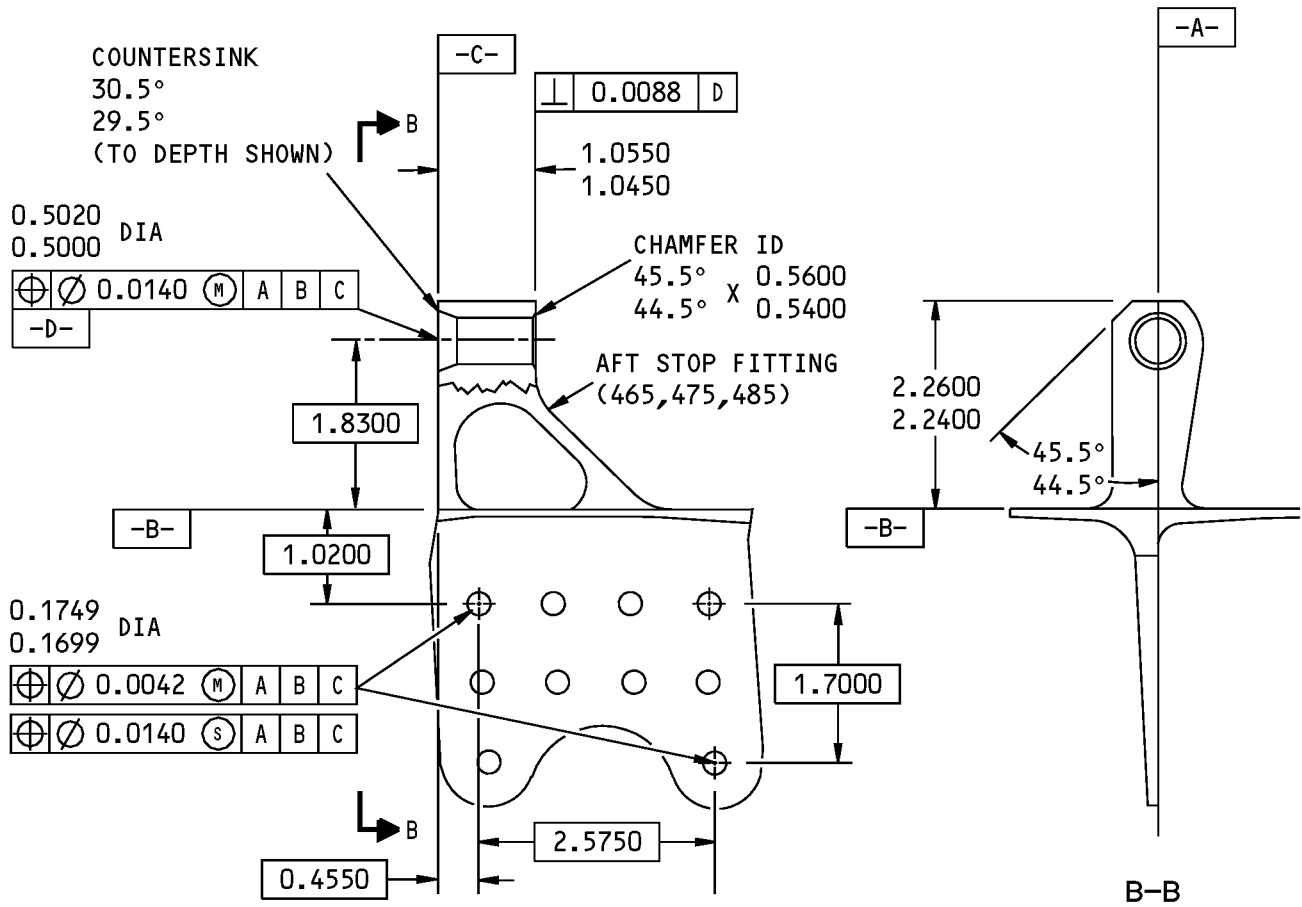


146A6120-13,-15,-17,-28,-30,-32 Stop Fitting Repair
Figure 603 (Sheet 1 of 2)

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146A6120-28,-30,-32

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

146A6120-13,-15,-17,-28,-30,-32 Stop Fitting Repair
Figure 603 (Sheet 2 of 2)

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REPAIR 10-2
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DRUM ASSEMBLY - REPAIR 11-1

65C33690-4

1. General

- A. This procedure has the data necessary to repair the drum assembly (55).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.

2. Insert Replacement

A. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-22	HOW TO INSTALL THREADED INSERTS

B. Procedure (REPAIR 11-1, Figure 601)

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

- (1) Remove and install the insert (60) from the drum (65) as specified in SOPM 20-50-22.

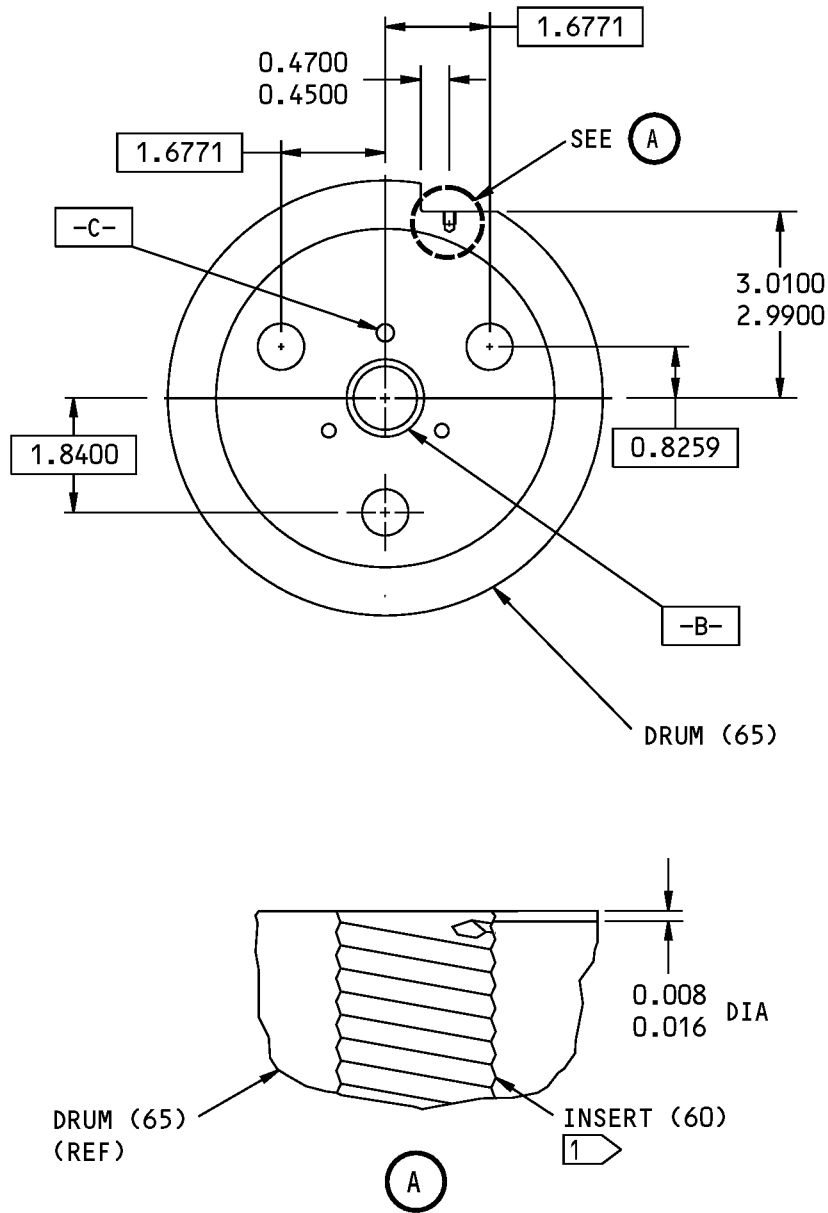
52-31-14

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1 INSTALL THIS INSERT AS SPECIFIED
IN SOPM 20-50-22

ITEM NUMBERS REFER TO IPL FIG. 4
ALL DIMENSIONS ARE IN INCHES

65C33690-4 Drum Assembly Repair
Figure 601

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REPAIR 11-1
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DRUM - REPAIR 11-2

65C33690-5

1. General

- A. This procedure has the data necessary to refinish the drum (65).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Drum Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

- C. Procedure

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

- (1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03) but not in the hole shown in REPAIR 11-2, Figure 601.

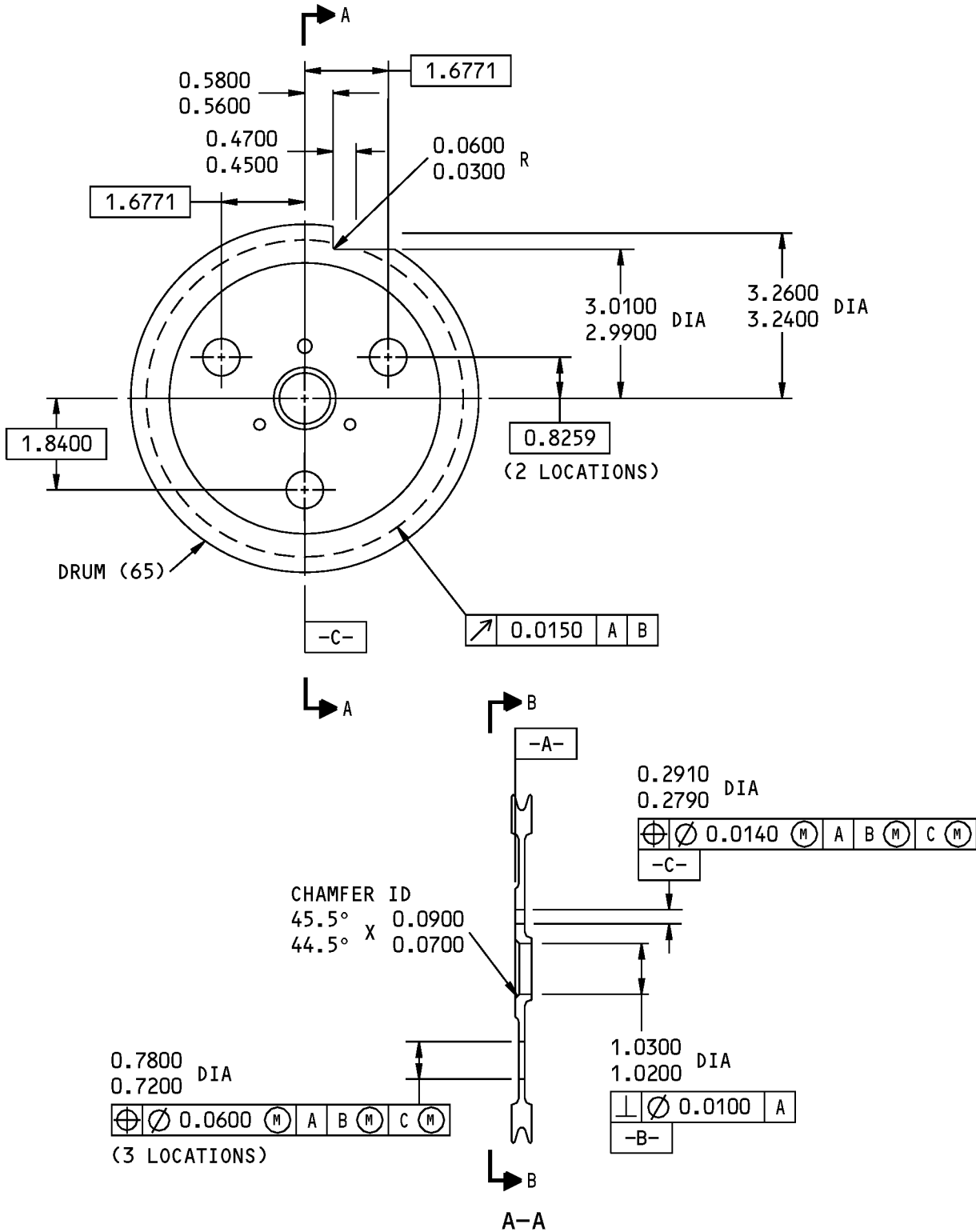
52-31-14

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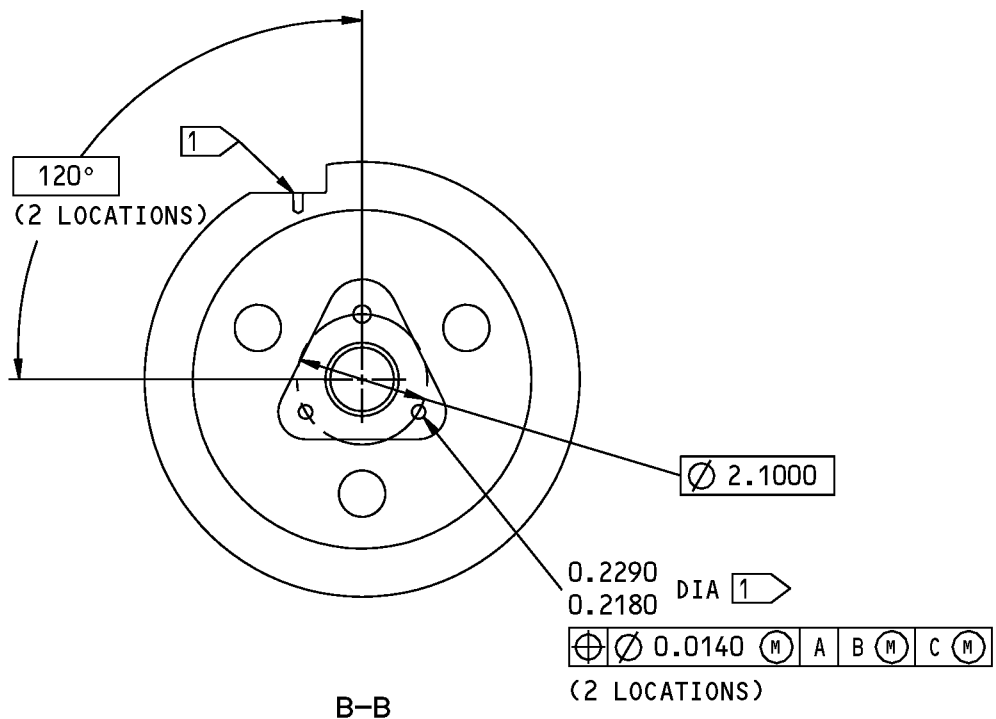
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65C33690-5 Drum Repair
Figure 601 (Sheet 1 of 2)

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1 DO NOT PUT PRIMER IN THIS HOLE

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 4

ALL DIMENSIONS ARE IN INCHES

65C33690-5 Drum Repair
Figure 601 (Sheet 2 of 2)

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REPAIR 11-2

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SHAFT - REPAIR 12-1

65C33692-3

1. General

- A. This procedure has the data necessary to refinish the shaft (130).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.
- E. General repair details:
 - (1) Material: 15-5PH CRES, 180-200 ksi

2. Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
D50081	Lubricant - Solid Film Lubricant, Liquid Dispersed	BMS 3-8

- B. References

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

- C. Procedure (REPAIR 12-1, Figure 601)

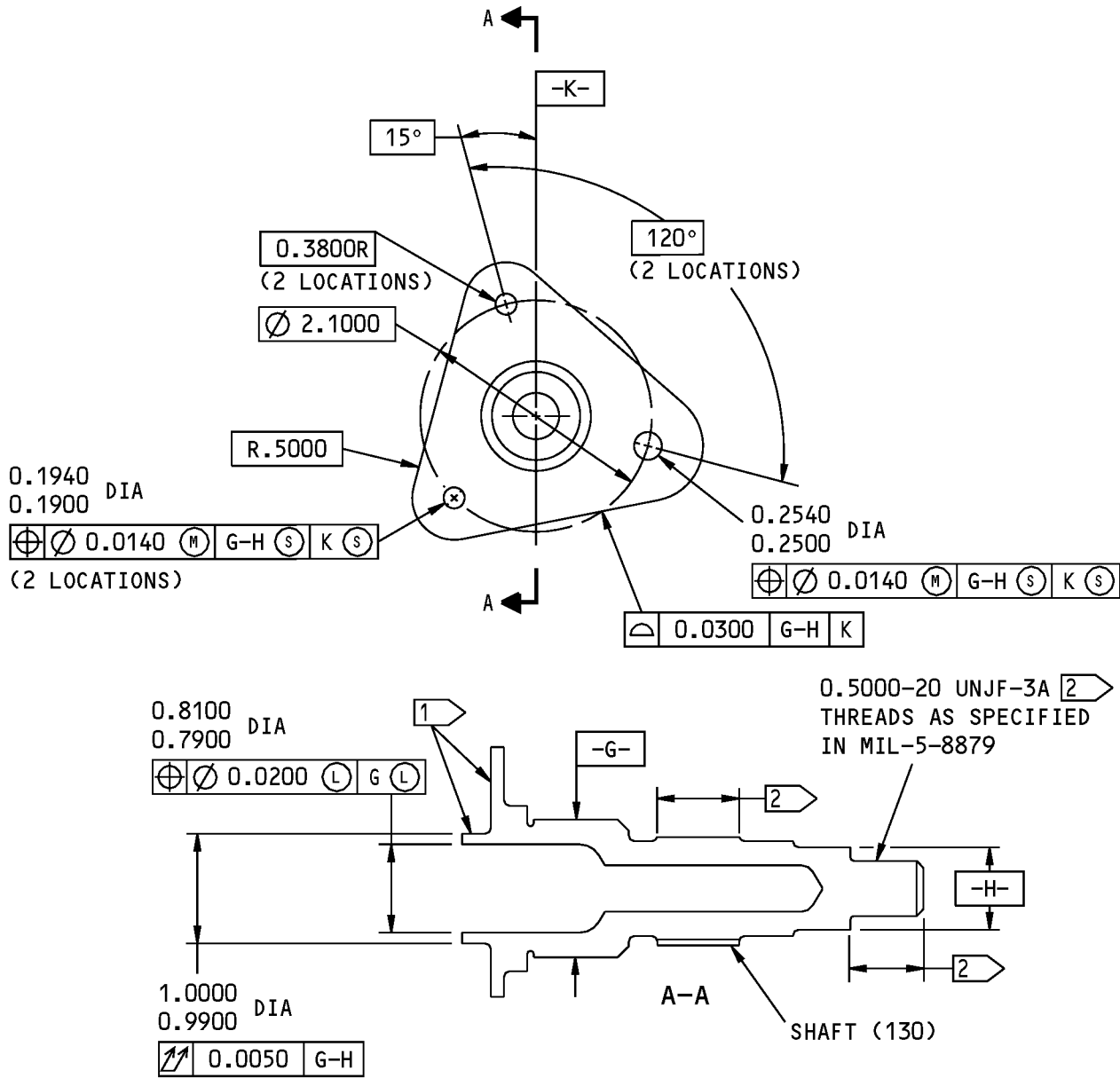
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Passivate (F-17.25).
- (2) Cadmium plate (F-15.06) and apply primer, C00259 (F-20.02) to the surfaces shown in REPAIR 12-1, Figure 601. Overspray is permitted but not on the splines and threads.
- (3) Apply solid film lubricant, D50081 (F-19.10) (SOPM 20-60-03) to the spline and thread surfaces identified by flagnote 2. Overspray is permitted.

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1 APPLY CADMIUM PLATE (F-15.06) AND BMS 10-11, TYPE 1 PRIMER (F-20.02)

2 APPLY BMS 3-8 SOLID FILM LUBRICANT (F-19.10)

BREAK ALL SHARP EDGES
ITEM NUMBERS REFER TO IPL FIG. 4
ALL DIMENSIONS ARE IN INCHES

65C33692-3 Shaft Repair
Figure 601

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IDLER CRANK ASSEMBLY - REPAIR 13-1

65C33689-4

1. General

- A. This procedure has the data necessary to repair the idler crank assembly (230).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.

2. Bushing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedure (REPAIR 13-1, Figure 601)

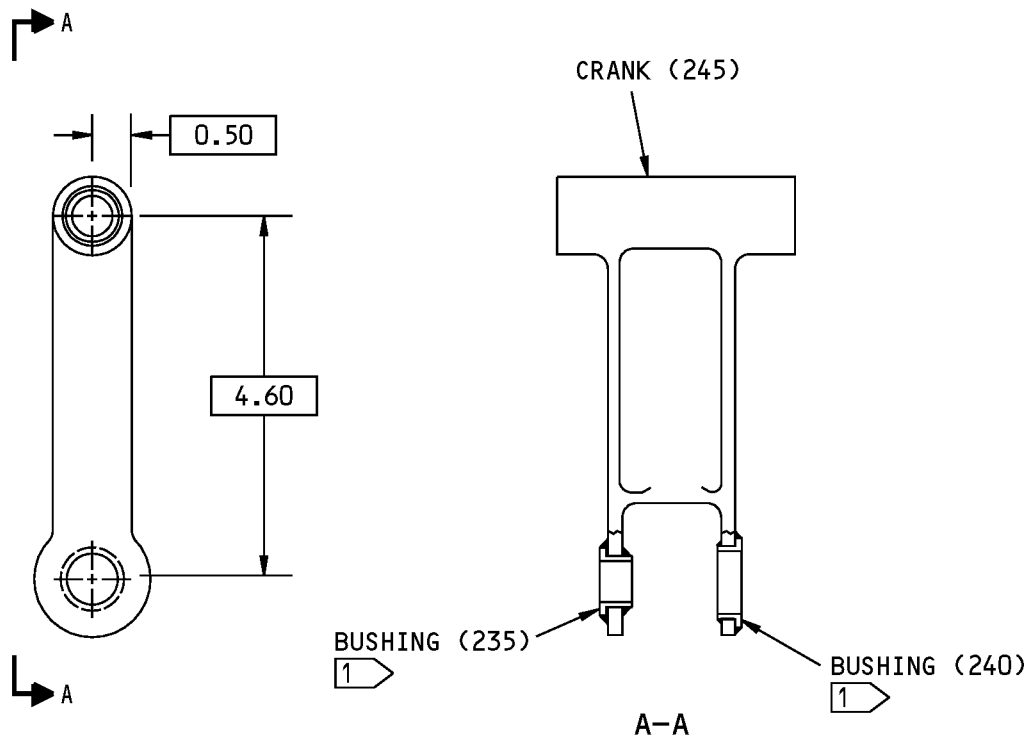
NOTE: For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bushings (235, 240) from the crank (245).
- (2) Install the new bushings (235, 240) into the crank (245) with wet sealant, A00247 as specified in SOPM 20-50-03.
- (3) Fillet seal each end of the bushing (235, 240) with sealant, A00247 as specified in REPAIR 13-1, Figure 601.

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1 INSTALL THIS BUSHING WITH WET BMS 5-95 SEALANT AS SPECIFIED IN SOPM 20-50-03. FILLET SEAL EACH END

ITEM NUMBERS REFER TO IPL FIG. 4
ALL DIMENSIONS ARE IN INCHES

65C33689-4 Idler Crank Assembly Repair
Figure 601

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IDLER CRANK - REPAIR 13-2

65C33689-5

1. General

- A. This procedure has the data necessary to refinish the idler crank (245).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Idler Crank Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

- C. Procedure (REPAIR 13-2, Figure 601)

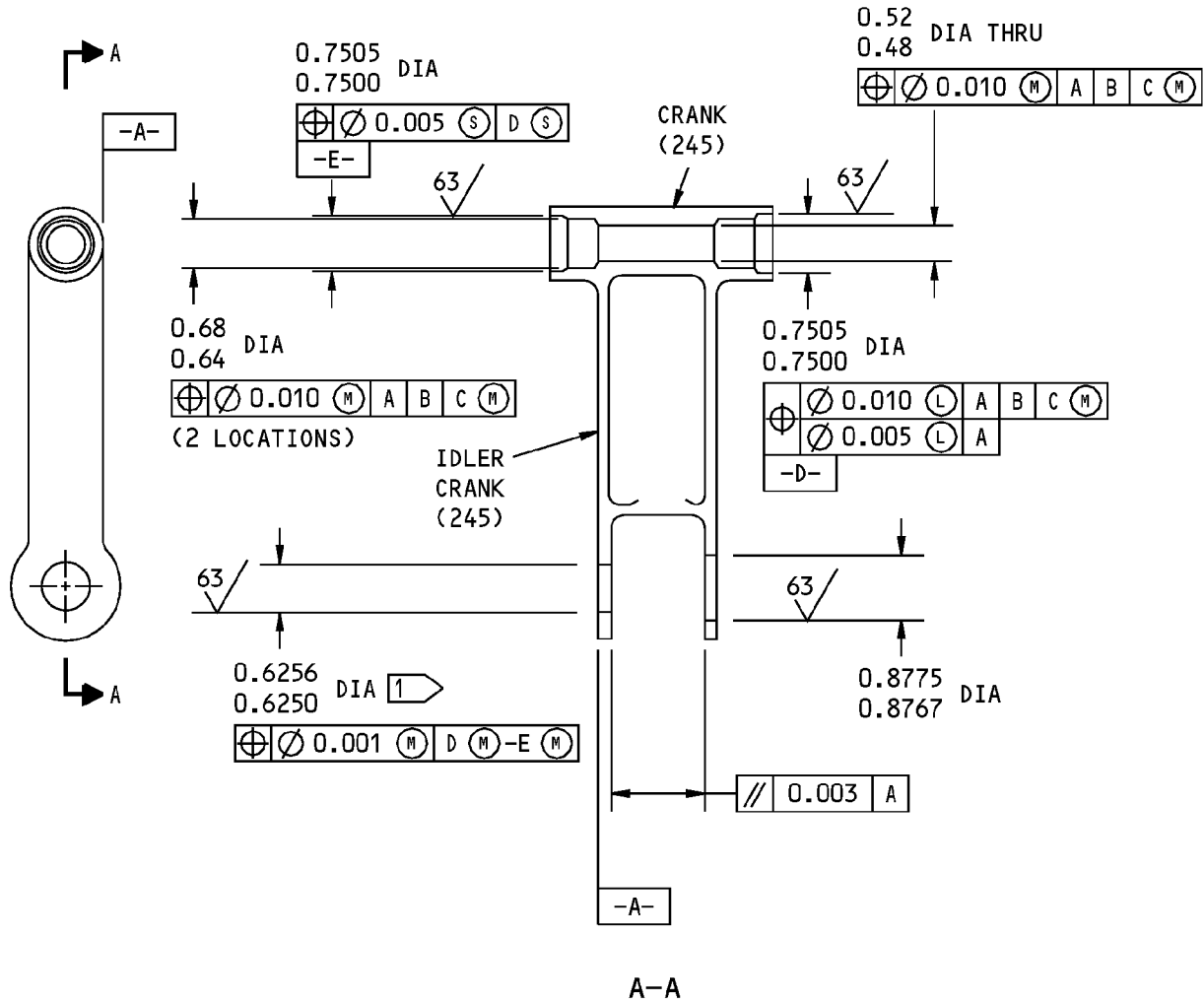
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Boric acid-sulfuric acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03). Do not put primer in the holes for the bushings identified by flagnote 1.

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1 DO NOT PUT PRIMER IN THIS HOLE

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 4

ALL DIMENSIONS ARE IN INCHES

65C33689-5 Idler Crank Repair
Figure 601

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REPAIR 13-2

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ADJUSTER HOUSING ASSEMBLY - REPAIR 14-1

65C33688-6

1. General

- A. This procedure has the data necessary to repair the adjuster housing assembly (295).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.

2. Nutplate Replacement

- A. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

- B. Procedures (REPAIR 14-1, Figure 601)

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

- (1) Remove the rivets (300) and the damaged nutplate(s) (305) from the adjuster housing (315).
- (2) Install the new nutplate(s) (305) onto the adjuster housing (315) with the new rivets (300).

3. Bushing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedure (REPAIR 14-1, Figure 601)

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For miscellaneous materials, refer to SOPM 20-60-04.

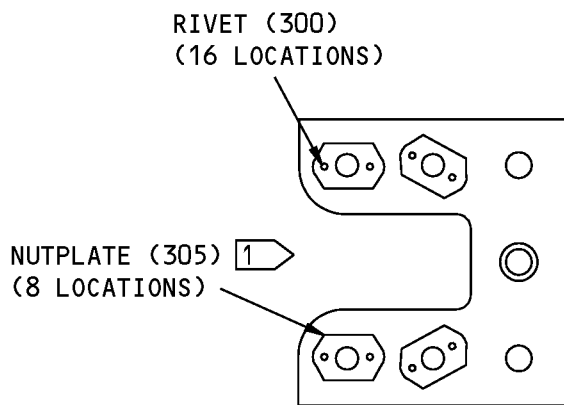
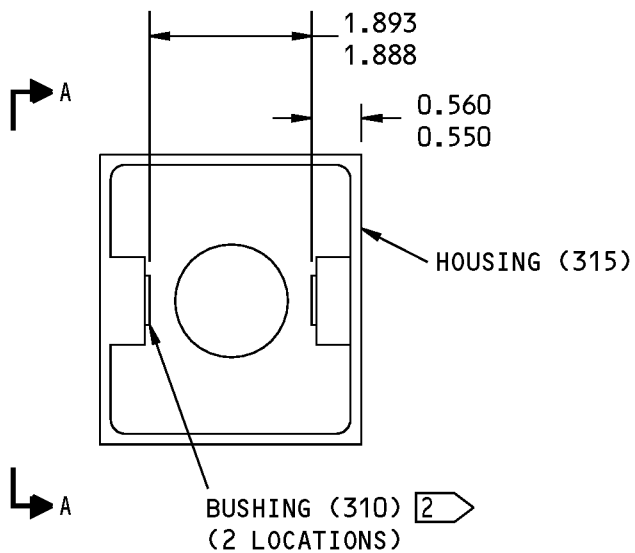
- (1) Remove the bushing (310) from the housing (315).
- (2) Install the new bushing (310) into the housing (315) with wet sealant, A00247 as specified in SOPM 20-50-03 and REPAIR 14-1, Figure 601.

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A-A

[1] KEEP A 0.010 INCH MINIMUM CLEARANCE BETWEEN THE NUTPLATE EDGE AND THE FILLET RADIUS TANGENCIES

[2] INSTALL THIS BUSHING WITH WET BMS 5-95 SEALANT AS SPECIFIED IN SOPM 20-50-03

ITEM NUMBERS REFER TO IPL FIG. 4
ALL DIMENSIONS ARE IN INCHES

65C33688-6 Housing Assembly Repair
Figure 601

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REPAIR 14-1
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ADJUSTER HOUSING - REPAIR 14-2

65C33688-7

1. General

- A. This procedure has the data necessary to refinish the adjuster housing (315).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Adjuster Housing Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

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

- C. Procedure (REPAIR 14-2, Figure 601)

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

- (1) Boric acid-sulfuric acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03). Do not put primer in the holes for the bushings as identified by flagnote 1.

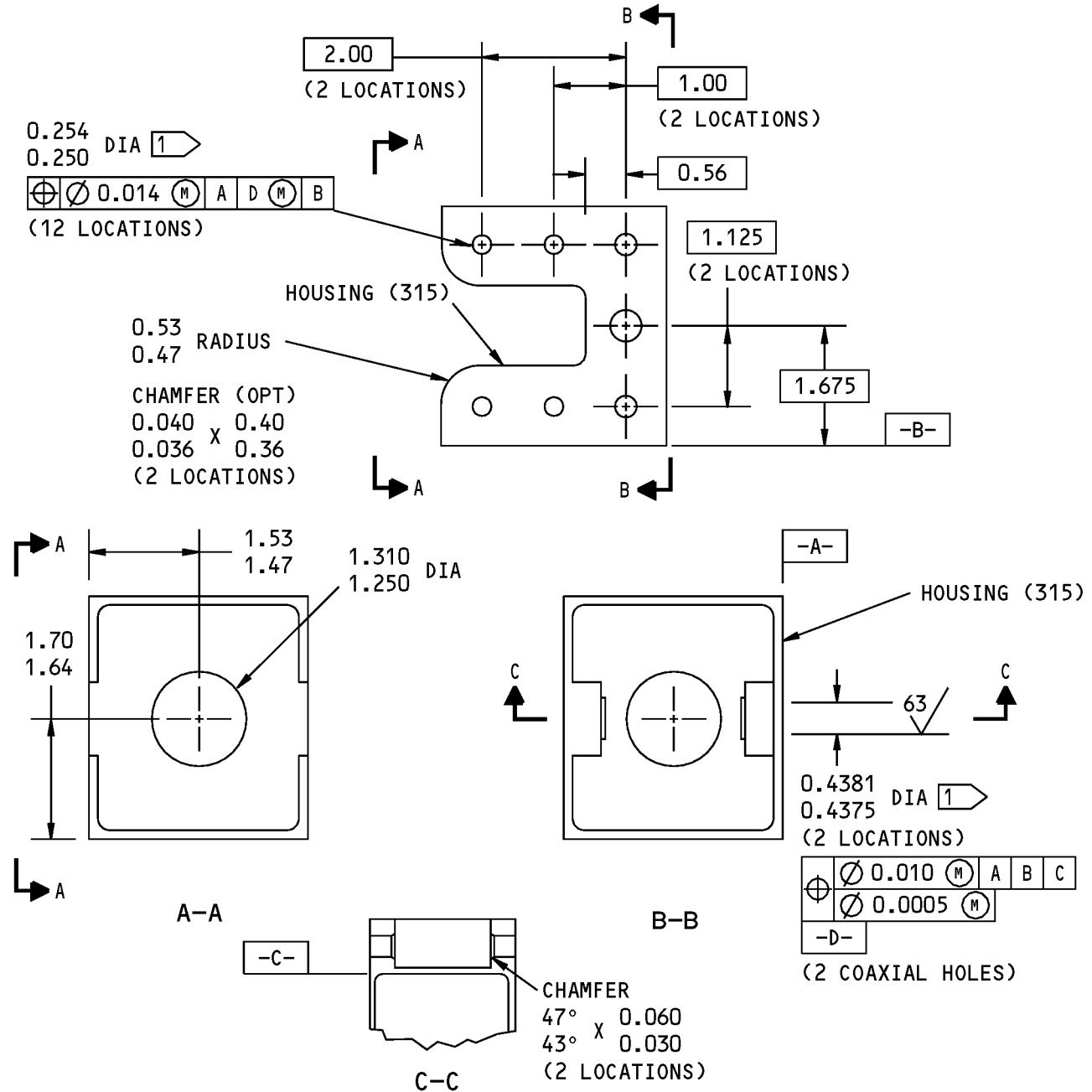
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REPAIR 14-2

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1 DO NOT PUT PRIMER IN THESE HOLES

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 4

ALL DIMENSIONS ARE IN INCHES

65C33688-7 Housing Repair
Figure 601

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REPAIR 14-2

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BEARING HOUSING - REPAIR 15-1

65C33810-2

1. General

- A. This procedure has the data necessary to refinish the bearing housing (330).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.
- E. General repair details:
 - (1) Material: Al alloy

2. Bearing Housing Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

B. References

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

C. Procedure (REPAIR 15-1, Figure 601)

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

- (1) Boric acid-sulfuric acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03). Do not put primer in the holes for the bushings as identified by flagnote 1.

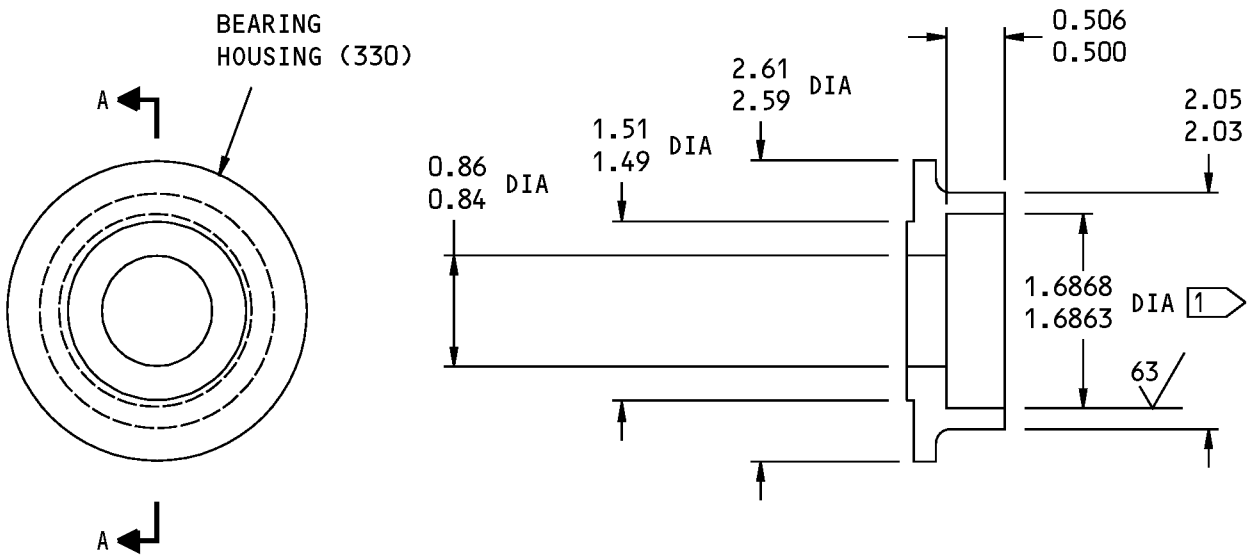
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REPAIR 15-1

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1 DO NOT PUT PRIMER IN THIS HOLE

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 4

ALL DIMENSIONS ARE IN INCHES

65C33810-2 Bearing Housing Repair
Figure 601

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REPAIR 15-1

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CLEVIS ASSEMBLY - REPAIR 16-1

65C33685-3

1. General

- A. This procedure has the data necessary to repair the clevis assembly (375).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 4 for item numbers.

2. Bushing Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

- B. References

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

- C. Procedure (REPAIR 16-1, Figure 601)

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For miscellaneous materials, refer to SOPM 20-60-04.

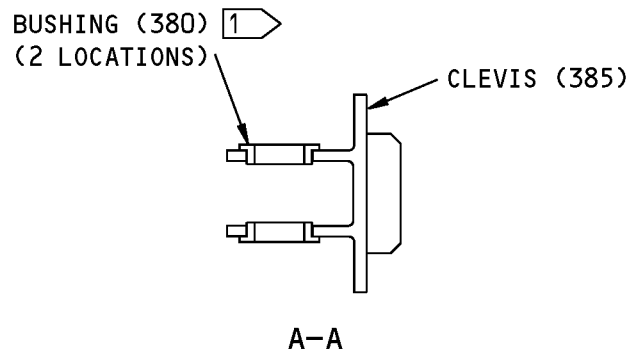
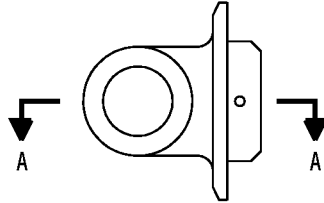
- (1) Remove the bushing(s) (380) from the clevis (385).
- (2) Install the new bushing(s) (380) into the clevis (385) with wet sealant, A00247 as specified in SOPM 20-50-03.

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1 INSTALL THIS BUSHING WITH WET
BMS 5-95 SEALANT AS SPECIFIED
IN SOPM 20-50-03

ITEM NUMBERS REFER TO IPL FIG. 4

65C33685-3 Clevis Assembly Repair
Figure 601

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ASSEMBLY

1. General

- A. This procedure has the data necessary to assemble the aft cargo door assembly.
- B. Assemble this component sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.
- C. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- D. Refer to IPL Figure 1 through IPL Figure 4 for item numbers.

2. Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00119	Adhesive - Synthetic Rubber Cement, Naphtha Soluble	BMS5-55
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
B00052	Soap - Liquid - Turco 1526	BAC5507
B00130	Alcohol - Isopropyl	TT-I-735
B00571	Coating - Clear Hydraulic Fluid Resistant Topcoat	BAC5710, Type 41
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33 supersedes BMS 3-24)	BMS3-24 (Superseded by BMS 3-33)
D50081	Lubricant - Solid Film Lubricant, Liquid Dispersed	BMS 3-8
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995~ C32
G50256	Water, Regular	

B. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-44-01	APPLICATION OF SPECIAL PURPOSE COATINGS AND FINISHES
SOPM 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-50-05	APPLICATION OF ALUMINUM FOIL AND OTHER MARKERS
SOPM 20-50-07	LUBRICATION
SOPM 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS
SOPM 20-50-19	GENERAL SEALING

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Reference	Title
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-03	LUBRICANTS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Special Tools

NOTE: Equivalent alternatives can be used.

- (1) C52001-1 – Holding Fixture, Compressed Spring Cartridge
- (2) C52002-26 – Repair Fixture, Aft Cargo Door

D. Procedure

- (1) Use standard industry procedures and the paragraphs that follow to assemble this component.

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For bolt and nut installation, refer to SOPM 20-50-01. For finishing materials, refer to SOPM 20-60-02. For miscellaneous materials, refer to SOPM 20-60-04.

E. Procedure for (IPL Figure 4)

CAUTION: DO NOT ATTEMPT TO TIGHTEN THE NUT (270). DAMAGE TO THE CARTRIDGE ASSEMBLY (265) WILL OCCUR IF YOU TIGHTEN THE NUT (270) WITHOUT RELIEVING THE TENSION ON THE SPRINGS (340, 345).

- (1) Assemble the counterbalance assembly, as follows:
 - (a) Assemble the cartridge assembly (265) as follows:
 - 1) Apply solid film lubricant, D50081 to threads of pin (370) as specified in SOPM 20-50-08.
 - 2) Install the pin (370) onto the clevis assembly (375) as follows:
 - a) Install the clevis assembly (375) onto the pin (370).
 - b) Secure the clevis assembly (375) to the pin (370) with pins (365).
 - 3) Install the spacer (355), spring guides (350, 360) and the inner and outer springs (340, 345) onto the pin (370).

NOTE: Install the outer springs (345) 120 degrees from each other. Install the inner springs (340) 180 degrees from each other.
 - 4) Install the spring guide (335) and the bearing housing (330) onto the pin (370).

CAUTION: DO NOT REMOVE THE NUT (270) AND WASHER (275) ONCE THE SPRINGS (340, 345) ARE COMPRESSED.
 - 5) Install the bearing (325) (SOPM 20-50-03) and the centering bushing (320) into the bearing housing (330) and the pin (370).
 - 6) Use the Holding Fixture, C52001-1 to compress the springs (340, 345) to a length of 9.1000-9.2000 inch from the edge of the clevis assembly (375) to the edge of the bearing housing (330).
 - 7) Install the gimbal fitting (290) into the housing assembly (295) as follows:
 - a) Position the gimbal fitting (290) in the housing assembly (295).
 - b) Install the pins (285) to secure the gimbal fitting (290) in the housing assembly (295).

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- 8) Install the housing assembly (295) with the gimbal fitting (290) onto the pin (370). Position the housing assembly (295) with the gimbal fitting (290) at 0.4700-0.5300 inches from the edge of the bearing housing (330).

CAUTION: DAMAGE TO THE THREADS OF THE PIN (370) WILL OCCUR IF YOU TRY TO TIGHTEN THE NUT (270).

- 9) Install the adjuster (280) onto the pin (370) and housing assembly (295). Install lockwire, G01048 (SOPM 20-50-02) to secure the adjuster (280) with the gimbal fitting (290).
- 10) Install the washer (275) and the nut (270) onto the pin (370).

NOTE: Do not tighten the nut (270) to adjust the load on the springs (340, 345).

WARNING: DO NOT REMOVE THE NUT (270) AND WASHER (275) ON THE CARTRIDGE ASSEMBLY (265) TO PREVENT POSSIBLE INJURY.

CAUTION: DAMAGE TO THE THREADS OF THE PIN (370) WILL OCCUR IF YOU TIGHTEN THE NUT (270) TO ADJUST THE LOAD ON THE SPRINGS (340, 345).

- (2) Remove the cartridge assembly (265) from the Compressed Spring Cartridge Holding Fixture, C52001-1.
 - (3) Apply wet sealant, A00247 onto the bolts (250, 165) as specified in SOPM 20-50-19.
 - (4) Install the cartridge assembly (265) onto the lower and upper bases (405, 410) with bolts (250), washers (255), and nuts (260).
 - (5) Install the spacer (170), bearings (185), and idler crank assembly (230) onto the lower and upper bases (405, 410) with bolt (165), washers (175), and nut (180). Install bearings (185) as specified in SOPM 20-50-03.
 - (6) Apply grease, D00015 onto the bushings (215, 220) as specified in SOPM 20-60-03.
 - (7) Apply wet sealant, A00247 onto the bolts (70, 190) as specified in SOPM 20-50-19.
 - (8) Connect the spring cartridge assembly (265) onto the idler crank assembly (230) with bushings (215, 220), roller (225A), bolts (190), washers (205), and nuts (210).
 - (9) Tighten the nut (210) to 175-225 pound-inch. Do a check of the roller (225A) for freedom of motion.
 - (10) Install the bearings (120, 125) and lower and upper housings (85, 90) onto the lower and upper bases (405, 410) with bolts (70), washers (75), and nuts (80). Install the bearings (120, 125) as specified in SOPM 20-50-03.
 - (11) Install the shaft (130) and cam assembly (135) onto the lower and upper bases (405, 410) as follows:
 - (a) Install the shaft (130) and the cam assembly (135) with bushings (110, 115), washers (100, 105), and nut (95). Tighten the nut (95) to 290-510 pound-inch.
 - (12) Apply wet sealant, A00247 onto the bolts (25, 30) as specified in SOPM 20-50-19.
 - (13) Install the drum assembly (55) onto the lower base (405) with bolts (25, 30), washers (35, 40), and nuts (45, 50).
 - (14) If necessary, install marker (415A) onto the upper base (410) as specified in SOPM 20-50-05.
- F. Procedure for (IPL Figure 2)
- (1) Install the marker (480) and plate (585) onto the door structure as follows:

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- (a) Apply adhesive, A00119 onto the back of the marker (580) and plate (585) as specified in SOPM 20-50-05.
 - (b) Install the marker (580) and the plate (585) onto the door structure as specified in SOPM 20-50-05.
 - (c) Apply coating, B00571 (SOPM 20-44-01) onto the marker (580) and plate (585) as specified in SOPM 20-50-05.
- (2) Install the seal (575) and the seal retainers (535 thru 570) onto the door structure as follows:
- (a) Install the seal (575) onto the seal retainers (535 thru 570) with the 'TOP' label of the seal on the top side of the door. Make sure that the seal is spread evenly throughout the periphery of the door. The seal (575) can be installed onto the retainers (535 thru 570) with the Turco 1526 soap, B00052 as specified in SOPM 20-50-07 or diluted 50/50 water, G50256 and alcohol, B00130.
 - (b) If necessary, apply sealant, A00247 between the seal retainers (535 thru 570) and the door structure.
 - (c) Install the seal retainers (535 thru 570) onto the door structure with rivets (525, 530).
- (3) Install the guide plates (75, 80) onto the door structure as follows:
- (a) Apply wet sealant, A00247 onto the bolts (55) as specified in SOPM 20-50-19.
 - (b) Install the guide plates (75, 80) onto the door structure with bolts (55) and washers (60).
- (4) Install the attach spring angle (340) onto the door structure as follows:
- (a) Apply wet sealant, A00247 onto the bolts (325) as specified in SOPM 20-50-19. Apply sealant, A00247 on each side of the filler (335), the attach spring angle (340) and the door structure.
 - (b) Install the attach spring angle (340) and the filler (335) onto the door structure with the bolts (325) and collars (330).
- (5) Install the bearing housing assemblies (IPL Figure 2, 165, 170) and housing assembly (105) onto the door structure as follows:
- (a) Apply wet sealant, A00247 onto the bolts (90, 125) as specified in SOPM 20-50-19.
 - (b) Install the bearing housing assemblies (165, 170) onto the door structure with bolts (125), washers (135) and nuts (140).
 - (c) Install the housing assembly (105) onto the door structure with bolts (90), washers (95), and nuts (100).
- (6) Install the latch torque tube assembly (205) onto the door structure as follows:
- (a) Partially disassemble the latch torque tube assembly (205) to remove the roller arm fittings (IPL Figure 3, 40, 45) and the arm fitting (65) from the tube (70). Refer to ASSEMBLY, Paragraph 2.H.(1) for the latch torque tube assembly procedures.
 - (b) Slide the tube (70) into the forward and aft bearing housings (IPL Figure 2, 165, 170) and the housing assembly (105).
 - (c) Install an equal amount of washers (200) as necessary at each end of the tube (IPL Figure 3, 70) to keep maximum of 0.15 inch total end play.
 - (d) Assemble the latch torque tube assembly (205) onto the door structure. make sure that the marker (IPL Figure 3, 75) on the tube is oriented towards the outer skin of the door and points upward.

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- (7) Apply wet sealant, A00247 onto the bolts (5) and rivets (10) as specified in SOPM 20-50-19. Attach the access panel assembly (20) to the door structure with bolts (5) and rivets (10).

G. Procedure for IPL Figure 1

- (1) Install the forward fitting assembly (590) and the aft fitting assembly (595) onto the door structure as follows:
 - (a) Apply wet sealant, A00247 onto the threads of the bolts (525, 530) as specified in SOPM 20-50-19.
 - (b) Install the aft fitting assembly (595) onto the door structure with bolts (525, 530), washers (545, 550, 555), and nuts (560, 565).
 - (c) Install the forward fitting assembly (590) onto the door structure with bolts (525, 530), washers (545, 550, 555), and nuts (560, 565).
- (2) Apply wet sealant, A00247 onto the threads of the bolts (455) as specified in SOPM 20-50-19.
- (3) Install the support bracket assembly (500) and the attach bracket assembly (465, 485) into the door structure with bolts (455) and collars (460).
- (4) Install the cable assembly (395) into the door structure as follows:
 - (a) Connect the cable assembly (395) with the cable sheave (390).
 - (b) Install the cable assembly (395) onto the pulley (430).
 - (c) Apply wet sealant, A00247 onto the threads of the bolt (410) as specified in SOPM 20-50-19.
 - (d) Install the pulley (430) with the cable assembly (395) onto the door structure with bolt (410), washer (415), bushings (425), and nut (420).
- (5) Install the counterbalance assembly (450) into the door structure as follows:
 - (a) Apply sealant, A00247 onto the threads of the bolts (435, 440) as specified in SOPM 20-50-19.
 - (b) Install the counterbalance assembly (450) onto the attach bracket assemblies (465, 485) with the bolts (435, 440) and washers (445).
- (6) Connect the cable assembly (395) with the counterbalance assembly (450) as follows:
 - (a) Connect the cable assembly (395) with the counterbalance assembly (450).
 - (b) Install the cable retainer (385) onto the counterbalance assembly (450) with the screw (375) and washer (380).
- (7) Install the rod assembly (330) onto the latch torque tube assembly (IPL Figure 2, 205) as follows:
 - (a) Position the rod assembly (330) onto the latch torque tube assembly (IPL Figure 2, 205).
 - (b) Install the bolts (IPL Figure 1, 260), washers (265, 270), nuts (275), and cotter pins (245) to secure the rod assembly (330) onto the latch torque tube assembly (IPL Figure 2, 205). Install the cotter pin (245) as specified in SOPM 20-50-02.

NOTE: Install equal amounts of washers (270) on each side of the rod assembly (330) to keep 0.15 inch of total end play. You can have one washer (270) more than the other side as necessary for tolerances.
- (8) Install the cover (285) with the latch assembly (290) onto the door structure as follows:
 - (a) Apply sealant, A00247 between the latch assembly (290) and the outer skin of the door structure as specified in SOPM 20-50-19.

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ASSEMBLY

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- (b) Install the cover (285) with the latch assembly (290) onto the door structure with screws (225) and washers (230).
 - (9) Install the spring attach plate (335) and connect the rod assembly (330) with the flush latch assembly (340) and the latch assembly (290) as follows:
 - (a) Install the spring attach plate (335) onto the flush latch assembly (340) with bolt (305), washers (315), nut (325), and cotter pin (295). Install the cotter pin (295) as specified in SOPM 20-50-02.
 - (b) Connect the rod assembly (330) onto the spring attach plate (335) and the flush latch assembly (340) with bolt (300), washers (310, 320), nut (325), and cotter pin (295). Install the cotter pin (295) as specified in SOPM 20-50-02.

NOTE: Install an equal amount of washers (320) on each side of the rod assembly (330) to keep 0.15 inch of total end play. You can have one washer (320) more than the other side as necessary for tolerances.
 - (c) For installation of a new rod assembly (330), do as follows:
 - 1) After the angle of the rod assembly (330) has been established, drill in a 0.0700-0.0780-inch hole through the pilot hole in the rod assembly (330).
 - 2) Install a cotter pin (295) in the hole of the rod assembly (330).
 - (10) Install and connect the spring (280) onto the door structure and the spring attach plate (335).
 - (11) Install the access cover (370) onto the door structure with screws (350) and washers (355).
 - (12) Install the snubber fitting assembly (160) onto the door structure as follows:
 - (a) Apply wet sealant, A00247 onto the threads of the bolts (140, 145) as specified in SOPM 20-50-19.
 - (b) Install the snubber fitting assembly (160) onto the door structure with bolts (140, 145), washers (150), and nuts (155).
 - (13) Install serrated plates (35, 40) onto the door structure as follows:
 - (a) Position the serrated plates (35, 40) and shims (45) onto the door structure.
 - (b) Align the serrations on the serrated plates (35, 40) to within 89.75-90.25 degrees of each other.
 - (c) Apply wet sealant, A00247 onto the threads of the bolts (20) as specified in SOPM 20-50-19.
 - (d) Install the serrated plates (35, 40) and shim (45) onto the door structure with bolts (20).
 - (14) Install the studs (5), washers (10), and nuts (15) onto the door structure.
- H. Procedure for IPL Figure 3
- (1) Assemble the latch torque tube assembly (1A) as follows:
 - (a) Install the arm fitting (65) onto the tube (70) with bolts (50), washers (55), and nuts (60).
 - (b) Install the roller arm fittings (40, 45) onto the tube (70) with bolts (25), washers (30), and nuts (35).

NOTE: Install the bolts (25), washers (30), and nuts (35) finger tight at this time. Tightening of the fasteners will be done during the door assembly installation on the airplane.
 - (c) Install the roller bearing (20A) at each roller arm fitting (40, 45) as follows:

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ASSEMBLY

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- 1) Install the roller bearings (20A) onto the roller arm fittings (40, 45) with washers (15) and nuts (10). Tighten the nuts (10) to 95-160 inch-pounds.
- 2) Add the washers (15) as necessary to align the castellation on the nuts (10) with the cotter pin holes on the roller bearings (20A).
- 3) Install the cotter pins (5) onto the roller bearings (20A) to secure the nuts (10) as specified in SOPM 20-50-02.

I. Procedure

- (1) Remove the door assembly from the Aft Cargo Door Repair Fixture, C52002-26.

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ASSEMBLY

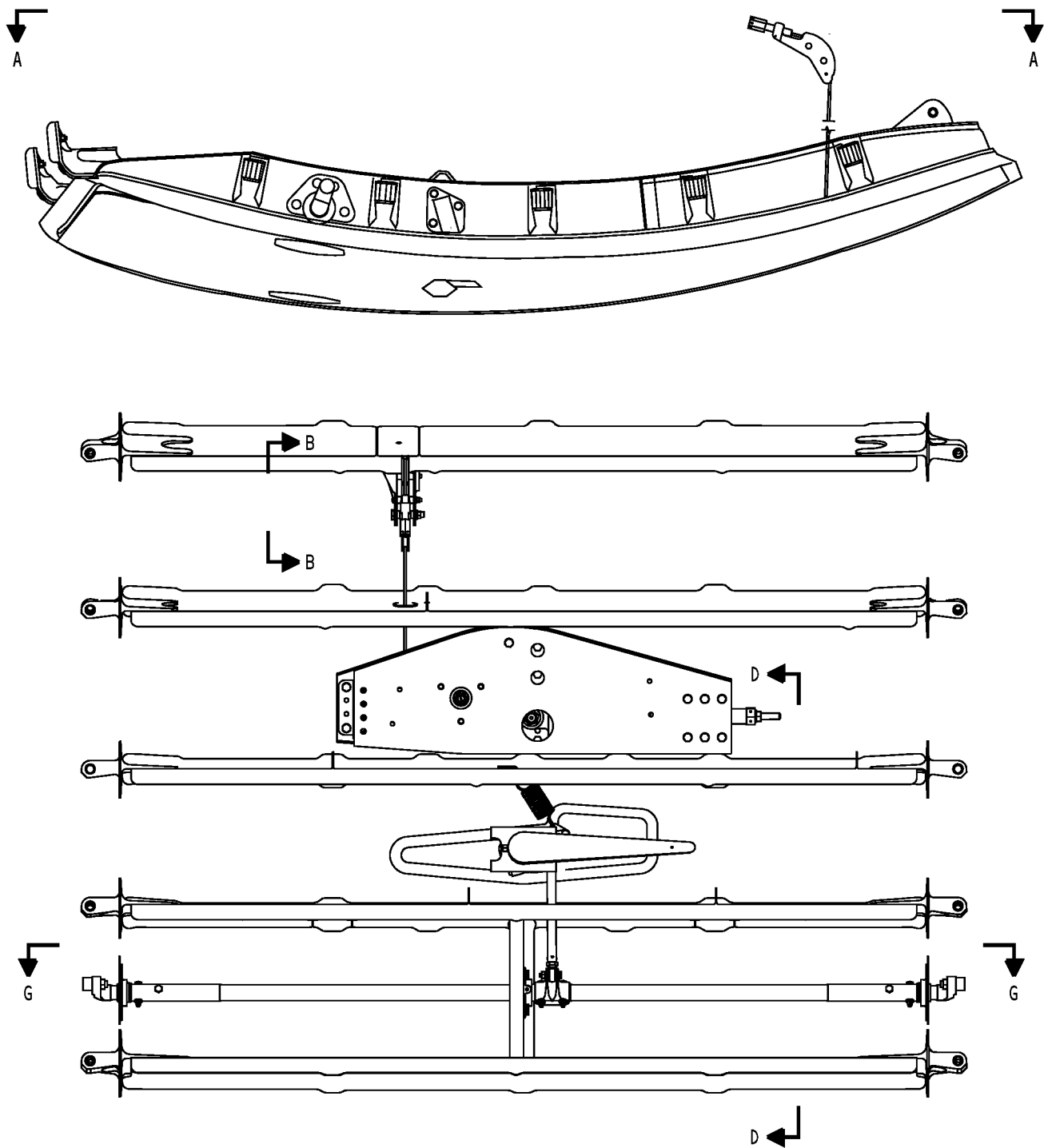
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COMPONENT MAINTENANCE MANUAL

FITS AND CLEARANCES

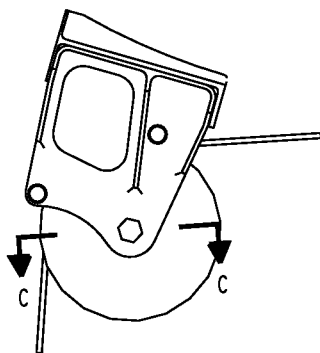


NOTE: SOME PARTS ARE NOT SHOWN FOR A CLEARER VIEW.

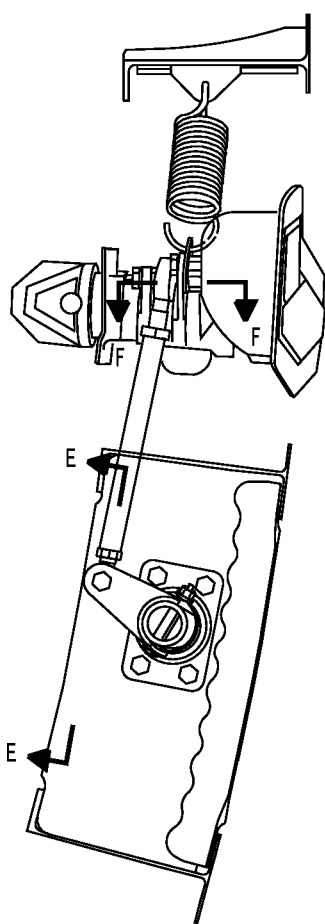
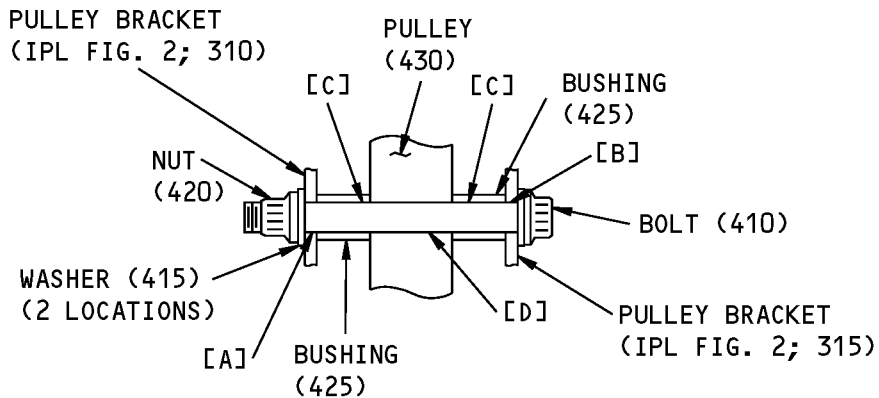
A-A

Fits and Clearances
Figure 801 (Sheet 1 of 5)

COMPONENT MAINTENANCE MANUAL



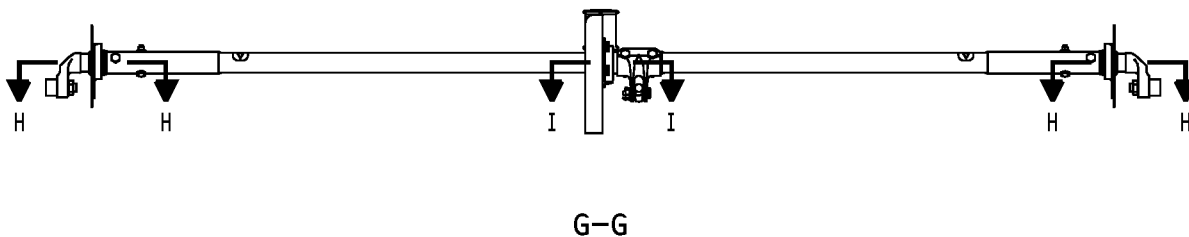
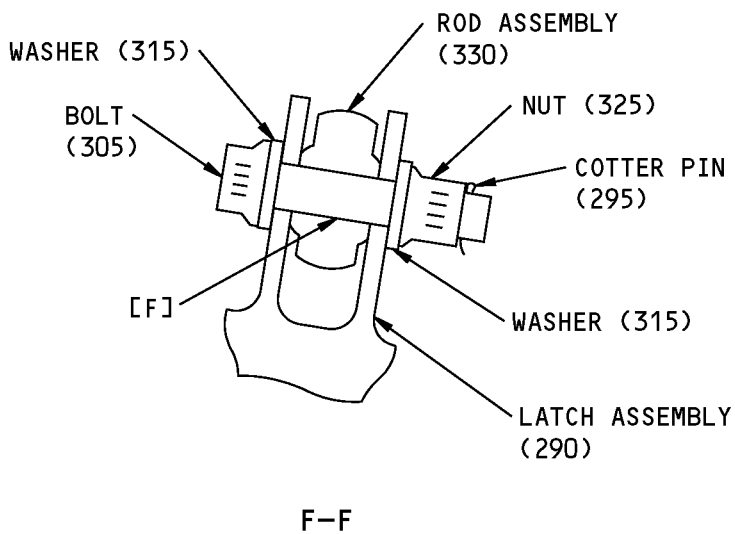
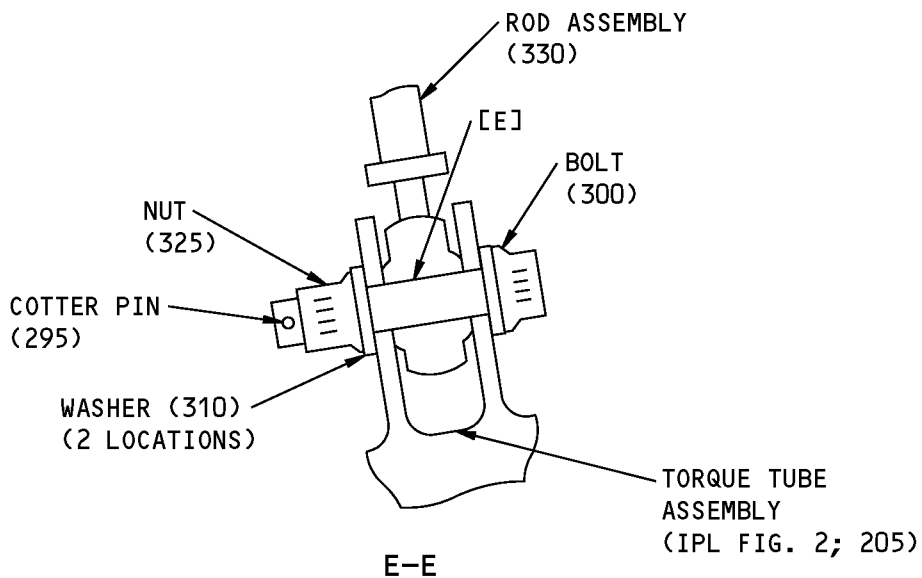
B-B



D-D

Fits and Clearances
Figure 801 (Sheet 2 of 5)

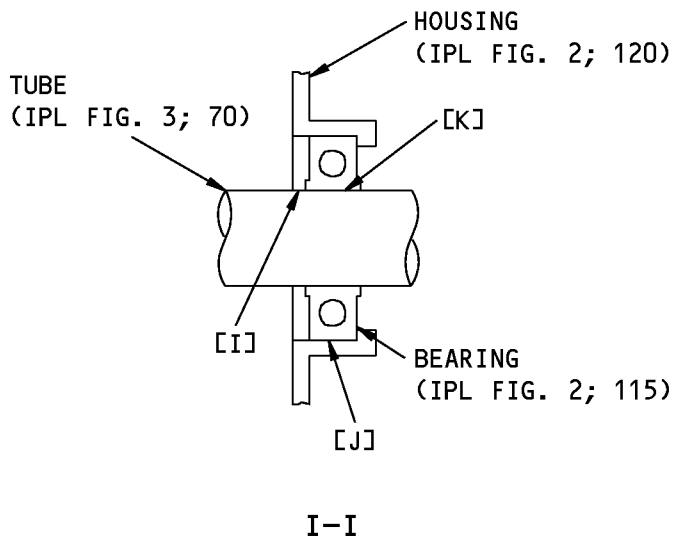
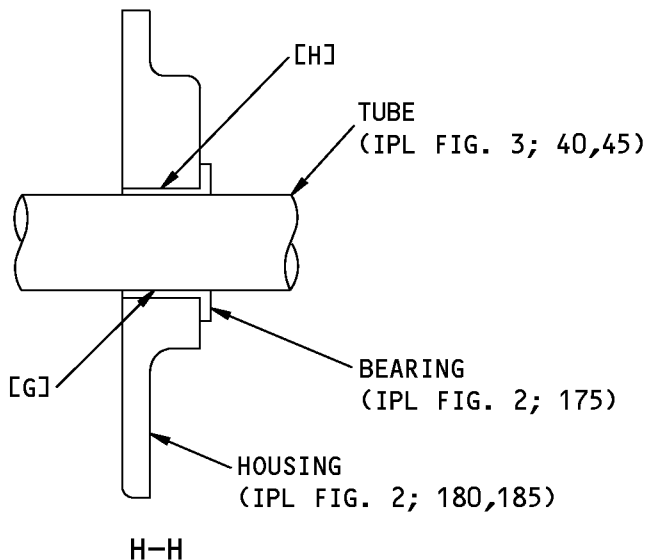
COMPONENT MAINTENANCE MANUAL



Fits and Clearances
Figure 801 (Sheet 3 of 5)



COMPONENT MAINTENANCE MANUAL



ITEM NUMBERS REFER TO IPL FIG. 1
UNLESS SHOWN DIFFERENTLY

L53134 S00041001199_V2

Fits and Clearances
Figure 801 (Sheet 4 of 5)



COMPONENT MAINTENANCE MANUAL

REF LETTER	REF IPL		DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	FIG. NO.	MATING ITEM NO.	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
			MIN	MAX	MIN	MAX	MIN	MAX	
[A]	2	ID 310	0.3120	0.3160	0.0000	0.0050			
	1	OD 410	0.3110	0.3120					
[B]	2	ID 315	0.3120	0.3160	0.0000	0.0050			
	1	OD 410	0.3110	0.3120					
[C]	1	ID 425	0.3125	0.3130	0.0005	0.0020			
	1	OD 410	0.3110	0.3120					
[D]	1	ID 430	0.3120	0.3125	0.0000	0.0015			
	1	OD 410	0.3110	0.3120					
[E]	1	ID 330	0.1897	0.1900	0.0002	0.0015			
	1	OD 300	0.1885	0.1895					
[F]	1	ID 330	0.1897	0.1900	0.0002	0.0015			
	1	OD 305	0.1885	0.1895					
[G]	2	ID 175	0.8125	0.8140	0.0020	0.0055			
	3	OD 40,45	0.8085	0.8105					
[H]	2	ID 180,185	1.0005	1.0009	-0.0018	-0.0004			
	2	OD 175	1.0013	1.0023					
[I]	2	ID 120	1.2400	1.2600	0.2460	0.2710			
	3	OD 70	0.9890	0.9940					
[J]	2	ID 120	1.3735	1.3745	-0.0015	0.0000			
	2	OD 115	1.3745	1.3750					
[K]	2	ID 115	0.9995	1.0015	0.0055	0.0125			
	3	OD 70	0.9890	0.9940					

* ALL DIMENSIONS ARE IN INCHES

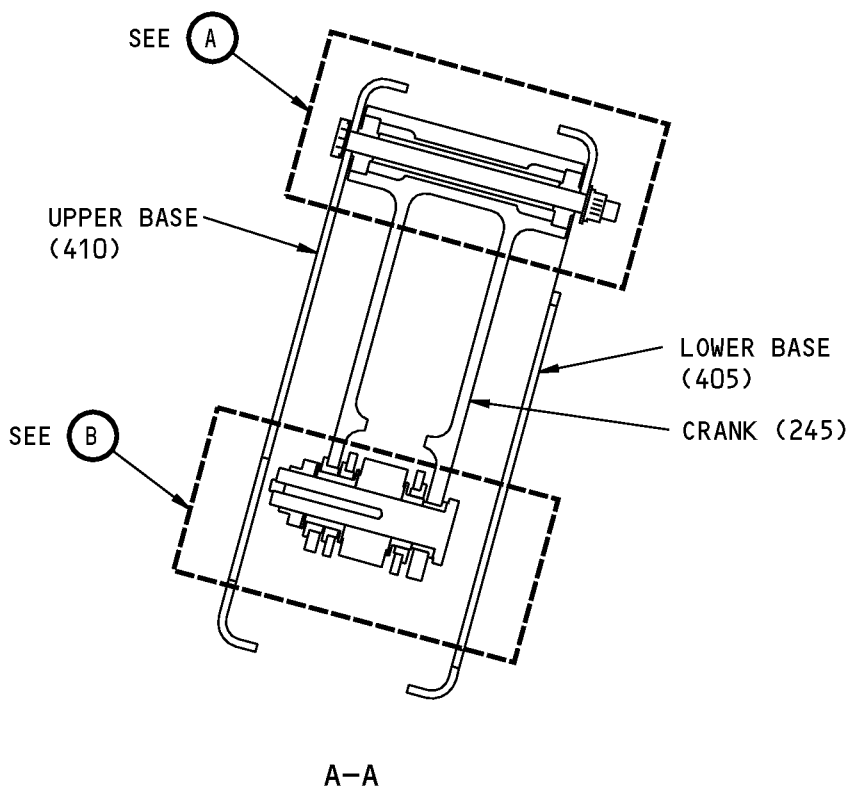
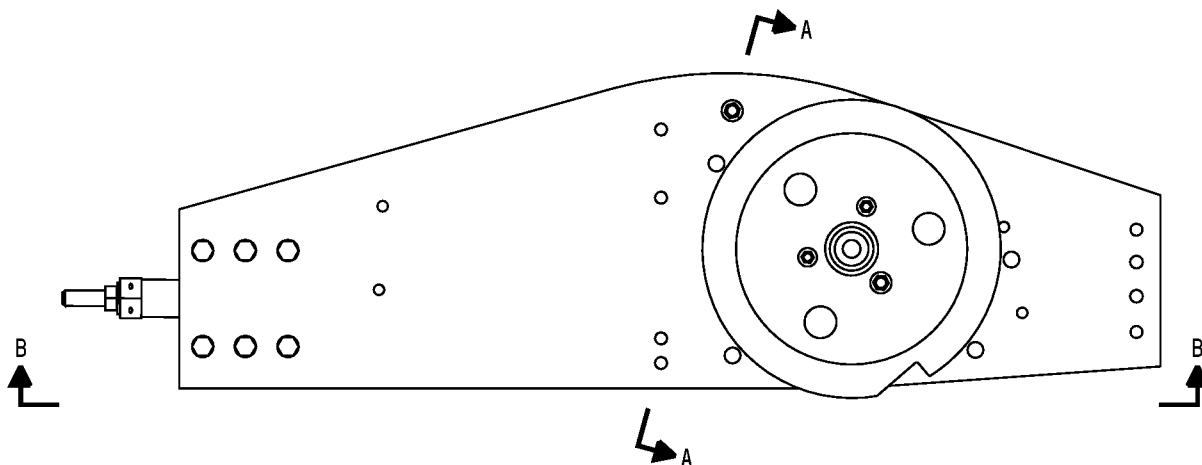
NEGATIVE VALUES SHOW INTERFERENCE FIT

L53136 S00041001200_V3

Fits and Clearances
Figure 801 (Sheet 5 of 5)

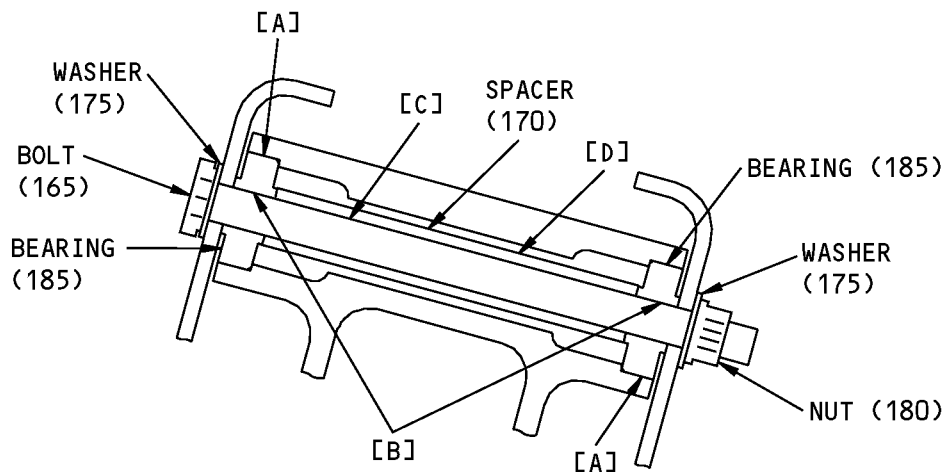
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FITS AND CLEARANCES
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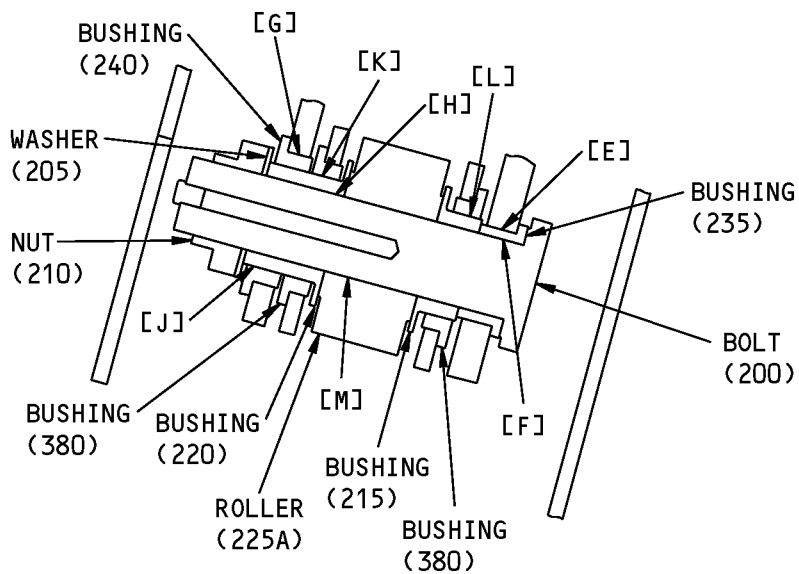


Fits and Clearances
Figure 802 (Sheet 1 of 5)

COMPONENT MAINTENANCE MANUAL



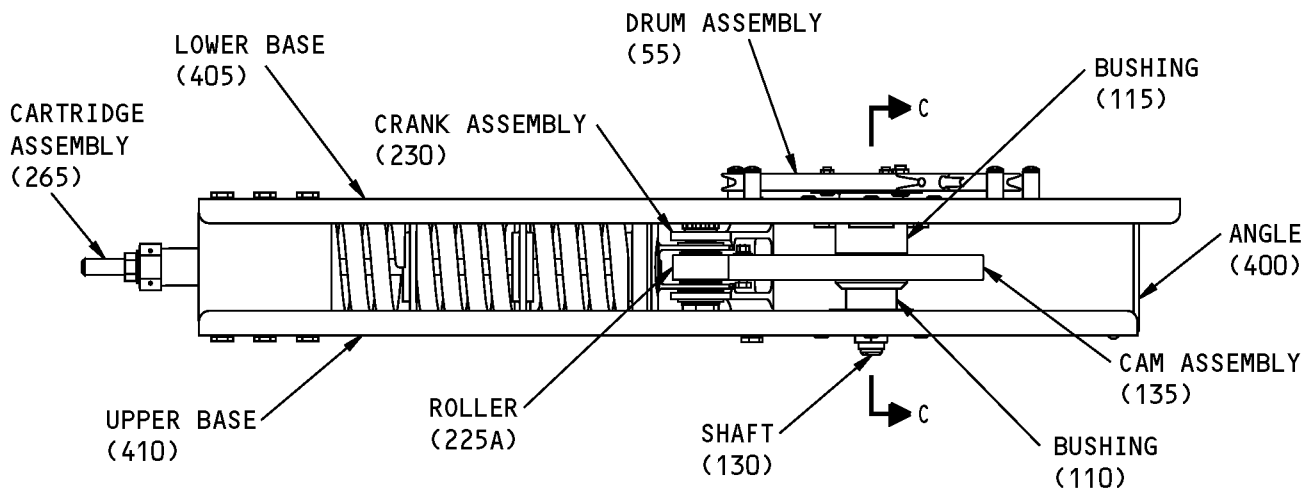
A



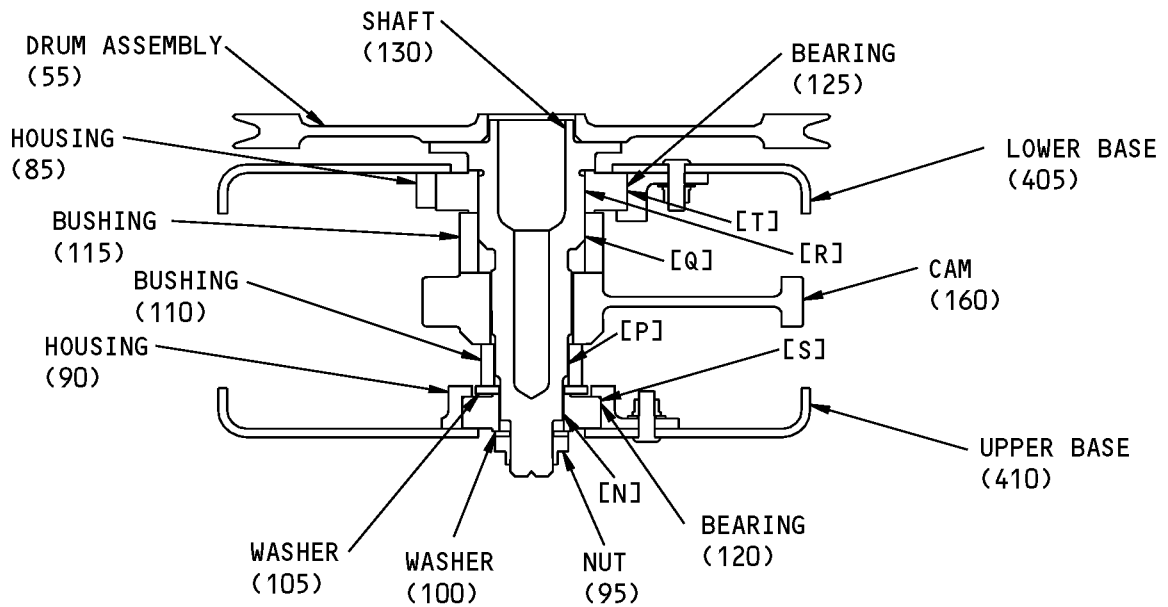
B

Fits and Clearances
Figure 802 (Sheet 2 of 5)

COMPONENT MAINTENANCE MANUAL



B-B



C-C

Fits and Clearances
Figure 802 (Sheet 3 of 5)

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FITS AND CLEARANCES

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
COMPONENT MAINTENANCE MANUAL

REF LETTER	REF IPL	DESIGN DIMENSION				SERVICE WEAR LIMIT		
	FIG. 4, MATING ITEM NO.	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[A]	ID 245	0.7500	0.7505	0.0000	0.0009			
	OD 185	0.7496	0.7500					
[B]	ID 185	0.2497	0.2500	0.0002	0.0015			
	OD 165	0.2485	0.2495					
[C]	ID 170	0.2560	0.2970	0.0065	0.0485			
	OD 165	0.2485	0.2495					
[D]	ID 245	0.4800	0.5200	0.0950	0.1550			
	OD 170	0.3650	0.3850					
[E]	ID 245	0.6250	0.6256	-0.0015	-0.0001			
	OD 235	0.6257	0.6265					
[F]	ID 235	0.5000	0.5015	0.0005	0.0030			
	OD 200	0.4985	0.4995					
[G]	ID 245	0.8767	0.8775	0.0000	0.0018			
	OD 240	0.8757	0.8767					
[H]	ID 220	0.5000	0.5010	0.0005	0.0025			
	OD 200	0.4985	0.4995					
[J]	ID 240	0.6875	0.6890	0.0015	0.0040			
	OD 220	0.6850	0.6860					
[K]	ID 380	0.6875	0.6890	0.0015	0.0040			
	OD 220	0.6850	0.6860					
[L]	ID 380	0.6875	0.6890	0.0015	0.0040			
	OD 215	0.6850	0.6860					


Fits and Clearances
Figure 802 (Sheet 4 of 5)



COMPONENT MAINTENANCE MANUAL

REF LETTER	REF IPL FIG. 4, MATING ITEM NO.	DESIGN DIMENSION				SERVICE WEAR LIMIT		
		DIMENSION		ASSEMBLY CLEARANCE 		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[M]	ID 225A	0.4993	0.5000	-0.0002	0.0015			
	OD 200	0.4985	0.4995					
[N]	ID 120	0.7497	0.7500	0.0007	0.0050			
	OD 130	0.7450	0.7490					
[P]	ID 110	0.8745	0.8750	0.0045	0.0250			
	OD 130	0.8500	0.8700					
[Q]	ID 115	1.2495	1.2500	0.0005	0.0050			
	OD 130	1.2450	1.2490					
[R]	ID 125	1.2497	1.2500	0.0007	0.0050			
	OD 130	1.2450	1.2490					
[S]	ID 90	1.6250	1.6255	0.0000	0.0009			
	OD 120	1.6246	1.6250					
[T]	ID 85	2.2500	2.2505	0.0000	0.0009			
	OD 125	2.2496	2.2500					

* ALL DIMENSIONS ARE IN INCHES

 NEGATIVE VALUES SHOW INTERFERENCE FIT

Fits and Clearances
Figure 802 (Sheet 5 of 5)

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REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
3	10	Nut	95-160	
4	95	Nut	290-510	
4	210	Nut	170-225	

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

L52787 S00041001206_V2

Torque Table
Figure 803

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COMPONENT MAINTENANCE MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

1. General

A. This section lists the special tools, fixtures, and equipment necessary for maintenance.

NOTE: Equivalent substitutes may be used.

Special Tools

Reference	Description	Part Number	Supplier
SPL-10752	Spring - Loading Control Equipment	C52004-1	81205
		Opt: C52001-1	81205
SPL-11105	Repair Fixture - Aft Cargo Door	C52002-33	81205

Tool Supplier Information

CAGE Code	Supplier Name	Supplier Address
81205	THE BOEING COMPANY	17930 INTERNATIONAL BLVD. SOUTH SEATAC, WA 98188-4321 Telephone: 206-662-6650 Facsimile: 206-662-7145

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SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

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COMPONENT MAINTENANCE MANUAL

ILLUSTRATED PARTS LIST

1. Introduction

- A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.
- B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1	2	3	4	5	6	7
.	Assembly					
.	Attaching parts for assembly					
.	.	Detail parts for assembly				
.	.	Subassembly				
.	.	Attaching parts for subassembly				
.	.	.	Detail parts for subassembly			
.	.	.	Sub-subassembly			
.	.	.	Attaching parts for subassembly			
.	.	.	.	Details parts for sub-subassembly		
						Detail Installation Parts (Included only if installation parts may be sent to the shop as part of assembly)

- C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.
- D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.
- E. Color-coded parts are identified with a single digit alpha following the dash number or with "SP" suffix. If the "SP" suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.
- F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a "~" at the end of the line and will be continued on the next line. The "~" denotes that the part number continues on the next line.
- G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.
- (1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.
- (2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.
- H. Interchangeable Parts

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ILLUSTRATED PARTS LIST

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COMPONENT MAINTENANCE MANUAL

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

VENDOR CODES

Code	Name
02758	NETWORKS ELECTRONIC CORP U S BEARING DIV 9750 DE SOTO AVENUE CHATSWORTH, CALIFORNIA 91311-4409 FORMERLY U S BEARING DIV NETWORKS ELEC CORP
06710	LAMSON AND SESSIONS CO THE VALLEY-TODECO 12975 BRADLEY AVENUE SYLMAR, CALIFORNIA 91342-3830 FORMERLY VALLEY BOLT CORP VB0097 IN NORTH HOLLYWOOD, CA
06725	AIR INDUSTRIES CORPORATION 12570 KNOTT STREET GARDEN GROVE, CALIFORNIA 92641-3932 FORMERLY AIR INDUSTRIES OF CALIF IN GARDENA, CALIF.
06950	SCREWCORP VSI AEROSPACE PRODUCTS DIV FAIRCHILD IND DIV 13001 EAST TEMPLE AVENUE PO BOX 730 CITY OF INDUSTRY, CALIFORNIA 91746-1417 FORMERLY VB0096 AND VSI CORP SCREWCORP DIV FORMERLY IN CULVER CITY, CALIFORNIA SCREW CORP SEE V.S.I. CORP SCREWCORP DIVISION
07484	ACCURATE BUSHING CO INC 443 NORTH AVENUE GARWOOD, NEW JERSEY 07027-1014 FORMERLY V83132 SMITH BRG DIV OF ACCURATE BUSHING CO

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ILLUSTRATED PARTS LIST

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Code	Name
09455	RBC TRANSPORT DYNAMICS CORP 3131 W SEGERSTROM AVE SANTA ANA, CALIFORNIA 92704-5872 FORMERLY TRANSPORT DYNAMICS AEROSPACE DIV; FABROID DIV TRANSPORT DYNAMICS V17571 & LEAR SEIGLER INC TRANSPORT DIV V98076; FORMERLY BFM TRANSPORT DYNAMICS
0PTK6	SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV 5195 W 4700 SALT LAKE CITY, UTAH 94118 SEE V56878 SPS TECHNOLOGIES INC
11815	CHERRY AEROSPACE FASTENERS DIV OF TEXTRON 1224 EAST WARNER AVENUE PO BOX 2157 SANTA ANA, CALIFORNIA 92707-0157 FORMERLY IN LOS ANGELES, CALIF , FORMERLY CHERRY FASTENERS TOWNSEND DIV OF TEXTRON INC V71087
15653	ALCOA GLOBAL FASTENERS INC DIV KAYNAR PRODUCTS 800 S STATE COLLEGE BLVD FULLERTON, CALIFORNIA 92831-3001 FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH FORMERLY FAIRCHILD FASTENERS KAYNAR DIV
15860	NEW HAMPSHIRE BALL BEARINGS, INC ASTRO DIVISION 155 LEXINGTON AVENUE LACONIA, NEW HAMPSHIRE 03246-2937 FORMERLY ASTRO BEARING CORP, LOS ANGELES, CALIF.
17446	HUCK INTL INC AEROSPACE FASTENER DIV 900 WATSON CENTER ROAD CARSON, CALIFORNIA 90745-4201 FORMERLY V32134 REXNORD INC; FORMERLY V97928 HUCK INTL
21335	TIMKEN US CORPORATION DIV FAFNIR 336 MECHANIC STREET LEBANON, NH 03766-0267 FORMERLY FAFNIR BRG AND TEXTRON INC FAFNIR DIV IN NEW BRITAIN, CONNECTICUT ; FORMERLY TORRINGTON CO THE SPECIAL PRODUCTS DIV SUB OF THE INGERSOLL-RAND CO V8D210 FORMERLY TORRINGTON CO FAFNIR BEARING DIV IN TORRINGTON, CT

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ILLUSTRATED PARTS LIST

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COMPONENT MAINTENANCE MANUAL

Code	Name
21760	SCHATZ BEARING CORP 10 FAIRVIEW AVENUE PO BOX 1191 POUGHKEEPSIE, NEW YORK 12601-1312 FORMERLY FEDERAL BRG CO AND SCHATZ MFG CO V53268 FORMERLY SCHATZ MFG CO
22277	BELL-MEMPHIS INC 1650 CHANNEL AVENUE MEMPHIS, TENNESSEE 38113-0187 FORMERLY BELL,R.E. MFG CO V11097
25337	RALMARK CO 83 EAST LUZERNE AVENUE LARKSVILLE, PENNSYLVANIA 18704-1026
27238	BRISTOL INDUSTRIES 630 EAST LAMBERT ROAD PO BOX 630 BREA, CALIFORNIA 92621-4119
29372	ALCOA GLOBAL FASTENERS INC DBA ALCOA FASTENERS SYSTEMS DIV 3000 WEST LOMITA BLVD TORRANCE CALIFORNIA 90505-5103 FORMERLY CALFAX INC V11907; NEWTON INSERT CO V98004;REXNORD INC SPECIALTY FASTERNER DIV AND DELRON CO V82831; REXNORD INC TRIDAIR IND; FORMERLY FAIRCHAIDL IND INC
29965	ARVAN INCORPORATED 14083 SOUTH NORMANDIE AVENUE PO BOX 1326 GARDENA, CALIFORNIA 90249 FORMERLY TANSEY AIRCRAFT IN EL MONTE, CA.
40920	MPB MINIATURE PRECISION BEARING DIV PRECISION PARK PO BOX 547 KEENE, NEW HAMPSHIRE 03431 FORMERLY MPB CORP AND MINIATURE BRG DIV MPB CORP
50632	KAMATICS CORP SUB OF KAMAN CORP 1335 BLUE HILLS ROAD BLOOMFIELD, CONNECTICUT 06002-1304

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COMPONENT MAINTENANCE MANUAL

Code	Name
50711	THE BRINKMANN CORPORATION DBA BRINKMANN LIGHTING PRODUCTS 1204 W 27TH ST KANSAS CITY, MO 64108-8355
52828	REPUBLIC FASTENER MFG CORP 1300 RANCHO CONEJO BLVD NEWBURY PARK, CALIFORNIA 91320-1405 FORMERLY IN SYLMAR, CALIFORNIA
56644	AURORA BEARING CO 970 SOUTH LAKE STREET AURORA, ILLINOIS 60506-5929
56878	SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV 301 HIGHLAND AVE JENKINTOWN, PENNSYLVANIA 19046 FORMERLY STANDARD PRESSED STEEL FORMERLY IN SALT LAKE, UTAH
60380	TORRINGTON CO BEARINGS DIV SUBSIDIARY OF INGERSOLL-RAND CORP 59 FIELD STREET PO BOX 1008 TORRINGTON, CONNECTICUT 06790-1008 FORMERLY TORRINGTON BEARING COMPANY
60516	WEST COAST AEROSPACE INC 812 MIRAFLORES STREET SAN PEDRO, CALIFORNIA 90731-1439
60980	MEGGITT-OREGON INC DBA MEGGITT SILICONE PROD DIV MSP 2010 LAFAYETTE AVE P.O. BOX 887 MCMINNVILLE, OREGON 97128 FORMERLY ELASTOMERIC SILICON PRODUCTS
62554	SIMMONDS MECAERO FASTENERS INC 1734 SEQUOIA AVENUE ORANGE, CALIFORNIA 92668

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COMPONENT MAINTENANCE MANUAL

Code	Name
72962	HARVARD INDUSTRIES INC 3 WERNER WAY SUITE 210 LEBANON, NEW JERSEY 08833 FORMERLY ESNA V7A079 FORMERLY ELASTIC STOP NUT IN UNION, NJ
73134	ROLLER BEARING COMPANY OF AMER DBA HEIM BEARINGS DIV 60 ROUND HILL RD FAIRFIELD, CONNECTICUT 06430-0000 FORMERLY INCOM INTL HEIM DIV; HEIM UNIVERSAL CORP INCOM; FORMERLY HEIM DIV INCOM INTL; IMO IND HEIM BEARINGS DIV
73197	HI-SHEAR TECHNOLOGY CORP 2600 SKYPARK DRIVE TORRANCE, CALIFORNIA 90509
80539	SPS TECHNOLOGIES INC DIV AERPSOACE - SANTA ANA 2701 SOUTH HARBOR BOULEVARD SANTA ANA, CALIFORNIA 92704-5803 FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539 AND STANDARD PRESSED STEEL WESTERN DIV V17279
81376	SMITH ACQUISITION COMPANY 2240 BUENA VISTA BALDWIN PARK, CALIFORNIA 91706
83014	HARTWELL CORPORATION 900 SOUTH RICHFIELD ROAD PLACENTIA, CALIFORNIA 92670-6732 FORMERLY V0532B IN LOS ANGELES, CALIFORNIA
83086	NEW HAMPSHIRE BALL BEARING, INC HITECH DIVISION 172 JAFFREY ROAD PETERBOROUGH, NEW HAMPSHIRE 03458
92215	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3010 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5102 FORMERLY VOI-SHAN IN CULVER CITY, CALIF

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Code	Name
92563	MCGILL MFG CO INC BEARINGS DIV 909 LAFAYETTE STREET VALPARAISO, INDIANA 46383-4210
97613	SARGENT CONTROLS & AEROSPACE/KAHR BEARING DIV 5675 W BURLINGAME RD TUCSON, ARIZONA 85743 FORMERLY AETNA STEEL PROD KAHR BEARING DIV V96579 FORMERLY SARGENT IND KAHR BEARING DIV, BURBANK, CALIFORNIA
97928	Replaced: [V97928] SEE V17446 HUCK INTL by Code: Name and Address below 17446: HUCK INTL INC AEROSPACE FASTENER DIV 900 WATSON CENTER ROAD CARSON, CALIFORNIA 90745-4201 FORMERLY V32134 REXNORD INC; FORMERLY V97928 HUCK INTL
9N513	VOI SHAN/CHATSWORTH DIV OF VSI CORP SUB OF FAIRCHILD IND CHATSWORTH, CALIFORNIA 91311-5013 COMPANY NO LONGER WISHES TO BE CONSIDERED FOR FED CONTRCTG
F0224	SIMMONDS SA FAIRCHILD FASTENERS ST COSME ST COSME EN VAIRAIS F-72580, FRANCE
S0352	NIPPON MINIATURE BEARING CO LTD TOKYO, JAPAN

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NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
102CH9031-4		1	155	4
102F9201-3		1	240	17
		1	365	3
		2	70	6
		2	520	3
102F9201M4		1	475	2
		1	495	3
		4	305	8
102LH90314		1	155	4
102LH9074-8		4	95	1
		4	210	1
113N1007-27		4	310	2
140N2966-1		4	345	3
140N2967-1		4	340	3
146A6110-11		1	1J	RF
		2	1J	RF
146A6110-12		1	1K	RF
		2	1K	RF
146A6110-13		1	1L	RF
		2	1L	RF
146A6110-14		1	1M	RF
		2	1M	RF
146A6110-15		1	1N	RF
		2	1N	RF
146A6110-16		1	1P	RF
		2	1P	RF
146A6110-17		1	1Q	RF
		2	1Q	RF
146A6110-18		1	1S	RF
		2	1S	RF
146A6110-19		1	1R	RF
		2	1R	RF
146A6110-20		1	1T	RF
		2	1T	RF

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
146A6110-21		1	1U	RF
		2	1U	RF
146A6110-22		1	1V	RF
		2	1V	RF
146A6110-23		1	1W	RF
		2	1W	RF
146A6110-24		1	1X	RF
		2	1X	RF
146A6110-25		1	1Y	RF
		2	1Y	RF
146A6110-26		1	1Z	RF
		2	1Z	RF
146A6110-27		1	2	RF
		2	2	RF
146A6110-28		1	2A	RF
		2	2A	RF
146A6110-29		1	2B	RF
		2	2B	RF
146A6110-30		1	2C	RF
		2	2C	RF
146A6110-31		1	2D	RF
		2	2D	RF
146A6110-32		1	2E	RF
		2	2E	RF
146A6110-33		1	2F	RF
		2	2F	RF
146A6110-34		1	2G	RF
		2	2G	RF
146A6110-35		1	2H	RF
		2	2H	RF
146A6110-4		1	1D	RF
		2	1D	RF
146A6110-5		1	1E	RF
		2	1E	RF
146A6110-6		1	1F	RF

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	1F	RF
146A6110-7		1	1G	RF
		2	1G	RF
146A6110-8		1	1H	RF
		2	1H	RF
146A6111-1		1	345	1
146A6116-1		2	190A	1
146A6116-2		2	195A	1
146A6116-3		2	190	1
146A6116-4		2	195	1
146A6117-1		2	275A	1
146A6117-10		2	275B	1
146A6117-5		2	295	1
146A6117-6		2	280	1
146A6117-7		2	285	1
146A6117-8		2	290	1
146A6117-9		2	275	1
146A6118-13		2	510	1
146A6118-14		2	490A	1
146A6118-3		2	500	1
146A6118-4		2	505	1
146A6118-6		2	490	1
146A6118-7		2	495	1
146A6119-1		2	340	1
146A6120-1		2	365	1
146A6120-10		2	380	1
146A6120-11		2	390	1
146A6120-12		2	395	1
146A6120-13		2	460	1
146A6120-15		2	470	1
146A6120-17		2	480	1
146A6120-19		2	400	1
146A6120-2		2	370	1
146A6120-20		2	405	1
146A6120-22		2	430	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
146A6120-24		2	440	1
146A6120-26		2	450	1
146A6120-28		2	465	1
146A6120-3		2	425	1
146A6120-30		2	475	1
146A6120-32		2	485	1
146A6120-5		2	435	1
146A6120-7		2	445	1
146A6120-9		2	375	1
146A6126-1		2	165	1
146A6126-2		2	170	1
146A6126-3		2	180	1
146A6126-4		2	185	1
146A6128-5		1	590	1
146A6128-6		1	595	1
146A6128-7		1	625	1
146A6128-8		1	630	1
146A6130-1		1	635	1
		1	635B	1
146A6130-2		1	640	1
		1	640B	1
146A6130-3		1	635A	1
		1	635C	1
146A6130-4		1	640A	1
		1	640C	1
146A6131-1		2	545	1
146A6131-2		2	535	1
146A6131-3		2	550	1
146A6131-4		2	560	1
146A6131-5		2	570	1
146A6131-6		2	540	1
146A6131-7		2	565	1
146A6131-8		2	555	1
146A6132-1		1	160	1
146A6132-2		1	175	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
146A6132-3		1	210	1
146A6133-10		1	70A	1
146A6133-11		1	75A	1
146A6133-2		1	120	1
146A6133-3		1	55	4
146A6133-4		1	50	4
146A6133-5		1	75	1
146A6133-6		1	70	1
146A6133-7		1	115	1
146A6133-8		1	50A	4
146A6133-9		1	55A	4
146A6134-1		2	310	1
146A6134-2		2	315A	1
146A6134-3		2	315	1
146A6135-1		1	465	1
146A6135-2		1	485	1
146A6135-3		1	505	1
146A6135-4		1	480	1
146A6135-5		1	500	1
146A6135-6		1	520	1
146A6137-2		1	370	1
146A6137-3		1	285	1
149A6130-3		2	205	1
		3	1A	RF
149A6131-2		3	70	1
149A6132-1		2	75	1
149A6132-2		2	80	1
149A6133-1		2	85	4
149A6134-2		1	290	1
		1	290B	1
149A6134-3		1	335	1
149A6134-5		1	290A	1
		1	290C	1
149A6134-7		1	290D	1
149A6135-1		2	20	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
149A6135-2		2	40	1
149A6135-3		2	45	2
149A6135-4		2	50	2
149A6135-5		2	20A	2
149A6135-6		2	42	1
149A6135-7		2	40A	1
149A6135-8		2	50A	2
149A6135-9		2	20B	2
149A6138-2		3	45	1
149A6138-3		3	40	1
149A6140-1		1	620	1
149A6301-3		1	395	1
149A6301-4		1	405	1
149A6302-1		1	385	1
3SLCC6		2	265	80
		2	265	80
3SLCC8		2	360	24
		2	360	24
		2	420	20
		2	420	20
55001		2	115	1
60B00178-661		4	225	1
		4	225A	1
65-1797-3		3	65	1
65-2306-11		2	105	1
65-2306-12		2	120	1
65-47961-5		2	35	1
65C27727-1		1	400	1
65C27728-5		1	390	1
65C27737-3		4	220	1
65C27737-4		4	215	1
65C27743-2		4	320	1
65C33681-7		4	400	1
65C33683-2		4	285	2
65C33683-3		4	365	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
65C33683-4		4	370	1
65C33684-13		1	450A	1
		4	1B	RF
65C33685-2		4	385	1
65C33685-3		4	375	1
65C33686-3		4	280	1
65C33687-1		4	350	2
65C33687-2		4	335	1
65C33687-3		4	360	1
65C33687-4		4	355	1
65C33688-6		4	295	1
65C33688-7		4	315	1
65C33689-4		4	230	1
65C33689-5		4	245	1
65C33690-4		4	55	1
65C33690-5		4	65	1
65C33691-10		4	160	1
65C33691-9		4	135	1
65C33692-3		4	130	1
65C33693-13		4	405	1
65C33693-14		4	410	1
65C33694-2		4	90	1
65C33695-3		4	85	1
65C33696-5		4	265	1
65C33810-2		4	330	1
65C33811-3		4	190	1
65C33811-4		4	200	1
65C33812-1		4	290	1
66-12688-11		1	600	1
		2	385	1
		2	455	1
678324CD		1	155	4
67832CD4		1	155	4
67832CD428		1	155	4
		1	155	4

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
69-37417-6		1	40	2
69-37417-7		1	35	2
69-42523-5		1	45	4
69-45425-1		2	175	1
69-76131-2		1	280	1
69-77663-2		1	515	1
69235-820CD		4	95	1
		4	210	1
81669V6K3		2	235	60
81669V6K4		2	240	20
81669V8K5		2	355	8
		2	415	12
81669V8K6		2	350	16
		2	410	8
88D10204-174		2	575	1
ABW16-101		2	115	1
ACMKP12AP510Y19		4	120	1
ACMKP20AP510Y19		4	125	1
ACMKP4AP510LY19		4	185	2
ACMKP8P510LY198		4	325	1
ADTR4013		3	20A	2
		3	20B	2
AN315-6R		4	270	1
APM220-3		1	430	1
ASSB16-19		2	115	1
ATF8SY		4	225	1
		4	225A	1
BAC27DBY191		2	580	1
BAC27DBY193		4	415A	1
BACB10A397GCM2		2	115	1
BACB10FS12		4	120	1
BACB10FS20		4	125	1
BACB10FS4		4	185	2
BACB10FT8		4	325	1
BACB28AK05-019		1	425	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB28AK14-049		4	110	1
BACB28AK20-070		4	115	1
BACB28X11M012		4	380	2
BACB28X11M017		4	240	1
BACB28X6M012		1	165	1
BACB28X8M024		4	235	1
BACB28Y6M025		1	170	1
BACB30MR4K11		1	145	2
BACB30MR4K9		1	140	2
BACB30NM3DK13		1	260	1
BACB30NM3DK18		1	300	1
BACB30NM3DK4		1	305	1
BACB30NM3K16		3	25	4
BACB30NM3K20		3	50	2
BACB30NM3K4		2	90	4
BACB30NM3K6		1	525	4
BACB30NM4K4		1	440	3
		4	250	12
BACB30NM4K52		4	165	1
BACB30NM4K6		1	435	2
		2	125	8
BACB30NM4K9		1	530	4
BACB30NM5K20		1	410	1
BACB30NT3K12		4	5	4
BACB30NT3K6		1	605	2
BACB30NT3K9		2	55	6
BACB30NX6K4		2	300	6
BACB30NX6K5		2	325	4
BACB30VF3K4		2	5	16
BACB30VF3K9		1	20	8
BACB30VN6K3		2	235	60
BACB30VN6K4		2	240	20
BACB30VN8K5		2	355	8
		2	415	12
BACB30VN8K6		2	350	16

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB30VT6K3		2	410	8
		1	185	4
		1	455	14
		1	540	8
		2	130	2
BACB30VT6K4		1	90	4
		4	70	6
BACB30VT6K5		1	85	4
		4	30	2
BACB30VT6K6		2	260	2
BACB30VT8K5		4	25	1
BACB30VU6K3		2	255	4
BACB30VU6K4		1	180	4
		1	535	8
		2	245	42
BACB30VU6K5		1	80	8
		2	250	2
BACC30BH6		2	305	6
		2	330	4
BACC30BK6		2	265	80
BACC30BK8		2	360	24
		2	420	20
BACC30BL6		1	95	16
		1	190	8
		1	460	14
		1	570	16
		2	145	2
BACF3F006J006NN		2	270	50
		2	345	2
BACF3H10RH036HN		2	335	1
BACM10L10-1GC		3	75	2
BACN10HR4CD		1	155	4
BACN10JC8CD		4	95	1
		4	210	1
BACN10JD103CD		1	275	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACN10JD106ASU		3	10	2
BACN10JD3CD		1	325	2
BACN10JN4CD		1	475	2
		1	495	3
		4	305	8
BACN10JR3CFD		1	240	17
		1	365	3
		2	70	6
		2	520	3
BACN10JZ3A2CDMU		2	30A	8
BACN10YR3CD		1	15	12
		1	560	4
		1	615	2
		2	100	4
		3	60	2
		4	20	4
		4	50	2
		4	80	6
BACN10YR3CM		3	35	4
		4	155	1
BACN10YR4CD		1	565	4
		2	140	8
		4	45	1
		4	180	1
		4	260	4
BACN10YR5CD		1	420	1
BACP18BC02A06P		1	245	1
		1	295	2
BACP18BC03A10P		3	5	2
BACP30F8		1	430	1
BACP30F8C		1	430A	1
BACR15BA3AD		1	25	16
		1	235	34
		1	360	6
		2	25	16

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	65	12
		2	515	6
BACR15BA3D		1	60	2
		1	470	4
		1	490	6
		4	300	16
BACR15BA4AD		2	27	8
BACR15BA5AD		1	510	2
BACR15FT5D		1	250	8
BACR15FT6D		1	110	12
		1	205	6
		1	585	8
		2	150	4
		4	390	4
BACR15GE3CW2		2	65A	12
BACR15GE3CW4		1	25A	16
BACR15GF5D		1	105	24
		1	200	14
		1	255	39
		1	580	24
		2	15	40
		2	215	336
BACR15GF6D		1	100	12
		1	195	12
		1	575	26
		2	10	16
		2	155	9
		2	210	151
		4	395	2
BACR15GK4E2		2	525	46
BACR15GK4E3		2	160	1
BACR15GK4E4		2	530	3
BACR15GK6E4		2	220	215
BACR15GK6E5		2	225	6
BACR15GK6E6		2	230	3

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACR24N2AL69		1	330	1
BACS12GU3K14		4	140	1
BACS12GU3K8		1	350	3
BACS12GU3K9		1	225	17
BACS40R008F020F		1	650	AR
BACS40R009F023F		1	125	AR
BACS40R010F024F		1	215	AR
BACS40R018F066F		1	645	AR
BACS40R022F056F		1	220	AR
BACS40R023F053F		1	135	AR
BACS40R023F054F		1	130	AR
█ BACW10P278AL		2	200	AR
BH00303CM4		1	155	4
█ BLN16385GC		2	115	1
BMN4122CPD8-8		4	95	1
		4	210	1
█ BMN5024CWD3-4		1	155	4
█ BMN5024CWD34		1	155	4
BMP30F8		1	430	1
BRF200C3D		1	240	17
		1	365	3
		2	70	6
		2	520	3
BRFM20C4D		1	475	2
		1	495	3
		4	305	8
CR34XC222		3	20A	2
		3	20C	2
█ CR6030-4		1	155	4
CR8AFC		4	225	1
		4	225A	1
FBL10140C3		1	30	8
█ FBL10140C4		1	65	1
H414-31		1	340	1
H414-53		1	340A	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
H414-69		1	340B	1
H51650-8BAC		4	95	1
		4	210	1
H964CD		1	155	4
HGL16-102		2	115	1
HL1012AZ6-4		2	300	6
		2	300	6
		2	300	6
		2	300	6
		2	300	6
		2	300	6
		2	300	6
		2	300	6
HL1012AZ6-5		2	325	4
		2	325	4
		2	325	4
		2	325	4
		2	325	4
		2	325	4
		2	325	4
		2	325	4
		2	325	4
HL1087-6		2	305	6
		2	305	6
		2	305	6
		2	305	6
		2	330	4
		2	330	4
		2	330	4
		2	330	4
HL12VAZ6-4		2	300	6
		2	300	6
		2	300	6
		2	300	6
HL12VAZ6-5		2	325	4
		2	325	4

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
HST10AG6-3		2	325	4
		2	325	4
		1	185	4
		1	185	4
		1	185	4
		1	185	4
		1	455	14
		1	455	14
		1	455	14
		1	455	14
		1	540	8
		1	540	8
		1	540	8
		1	540	8
HST10AG6-4		2	130	2
		2	130	2
		2	130	2
		2	130	2
		1	90	4
		1	90	4
		1	90	4
		1	90	4
		4	70	6
		4	70	6
HST10AG6-5		4	70	6
		4	70	6
		1	85	4
		1	85	4
		1	85	4
		1	85	4
		4	30	2
		4	30	2
HST10AG6-6		4	30	2
		4	30	2
		4	30	2
		2	260	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
HST10AG8-5		2	260	2
		2	260	2
		2	260	2
		4	25	1
		4	25	1
		4	25	1
HST11AG6-3		4	25	1
		2	255	4
		2	255	4
		2	255	4
HST11AG6-4		2	255	4
		1	180	4
		1	180	4
		1	180	4
		1	180	4
		1	535	8
		1	535	8
		1	535	8
		1	535	8
		2	245	42
		2	245	42
		2	245	42
HST11AG6-5		2	245	42
		1	80	8
		1	80	8
		1	80	8
		1	80	8
		2	250	2
		2	250	2
		2	250	2
K51602-3BAC		2	250	2
		1	240	17
		1	365	3
		2	70	6
		2	520	3

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
KRP189606VTZ		3	20A	2
KSSB16-5		2	115	1
L802-6K4		2	300	6
L802-6K5		2	325	4
LGPL2SPV6-3AC		2	235	60
		2	235	60
		2	235	60
LGPL2SPV6-4AC		2	240	20
		2	240	20
		2	240	20
LGPL2SPV8-5AC		2	355	8
		2	355	8
		2	355	8
		2	415	12
		2	415	12
		2	415	12
LGPL2SPV8-6AC		2	350	16
		2	350	16
		2	350	16
		2	410	8
		2	410	8
		2	410	8
MF51637-4		1	475	2
		1	495	3
		4	305	8
MF53050-4CD		1	475	2
		1	495	3
		4	305	8
MS21209C0615P		4	60	1
MS27253F1		2	585	1
MS27980-17N		1	5	12
NAS1149C0332R		4	150	1
NAS1149C0363R		3	30	4
		4	145	1
NAS1149C0616R		3	15	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
NAS1149C0763R		4	275	1
NAS1149C0832R		4	205	1
NAS1149C0863R		4	100	1
NAS1149C1290R		4	105	1
NAS1149D0316J		1	230	17
		1	270	AR
		1	320	AR
		1	355	3
		3	55	2
NAS1149D0332J		1	10	12
		1	315	2
		1	550	4
		2	60	6
		4	15	4
		4	40	2
		4	75	6
NAS1149D0363J		1	265	2
		1	310	4
		1	545	4
		1	610	2
		2	95	8
NAS1149D0416J		1	445	5
		4	35	1
		4	255	16
NAS1149D0432J		1	555	8
		4	175	2
NAS1149D0463J		1	150	8
		2	135	16
NAS1149D0532J		1	415	2
NAS1149DN632J		1	380	1
NAS42DD6-40FC		4	10	4
NAS43DD4-156FC		4	170	1
NAS516-1A		2	110	1
		4	195	1
NAS557-18B		2	320	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
NAS8201A5		1	375	1
NB12BGCM2		2	115	1
NB16BM2		2	115	1
NC16-4		2	115	1
NHTR4002		3	20C	2
NS202476-02		1	240	17
		1	365	3
		2	70	6
		2	520	3
NS202487-048		1	475	2
		1	495	3
		4	305	8
PACMKP12AA3908		4	120	1
PACMKP12AFS428		4	120	1
PACMKP20AA3908		4	125	1
PACMKP20AFS428		4	125	1
PACMKP4AA3908		4	185	2
PACMKP4AFS428		4	185	2
PACMKP8A3908		4	325	1
PACMKP8FS428		4	325	1
PLH53CD		1	15	12
		1	15	12
		1	560	4
		1	560	4
		1	615	2
		1	615	2
		2	100	4
		2	100	4
		3	60	2
		3	60	2
		4	20	4
		4	20	4
	4	50	2	
	4	50	2	
	4	80	6	

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
PLH53CM		4	80	6
		3	35	4
		3	35	4
		4	155	1
		4	155	1
PLH54CD		1	565	4
		1	565	4
		2	140	8
		2	140	8
		4	45	1
		4	45	1
		4	180	1
		4	180	1
		4	260	4
		4	260	4
PLH55CD		1	420	1
		1	420	1
R30F8		1	430	1
RMLH224CD		1	155	4
S140T263-174		2	575	1
S149A613-1		3	20A	2
SF15-120-174		2	575	1
SL7108C4		1	155	4
SL7108C428		1	155	4
SMS20220-3		1	430	1
SSMKP12AP		4	120	1
SSMKP12ASD705		4	120	1
SSMKP20AP		4	125	1
SSMKP20ASD705		4	125	1
SSMKP4ASD705		4	185	2
SSMKP8P510LY86		4	325	1
SSMKP8SD705		4	325	1
T8092C1032CD		1	240	17
		1	365	3
		2	70	6

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
T8301C428CD		2	520	3
		1	475	2
		1	495	3
		4	305	8
VAL280094CD		1	155	4
VCU0005D4		1	155	4
WC10K6-3		1	185	4
		1	455	14
		1	540	8
		2	130	2
WC10K6-4		1	90	4
		4	70	6
WC10K6-5		1	85	4
		4	30	2
WC10K6-6		2	260	2
WC10K8-5		4	25	1
YR1516XC1		4	225A	1
YR1516XCXC1		4	225	1

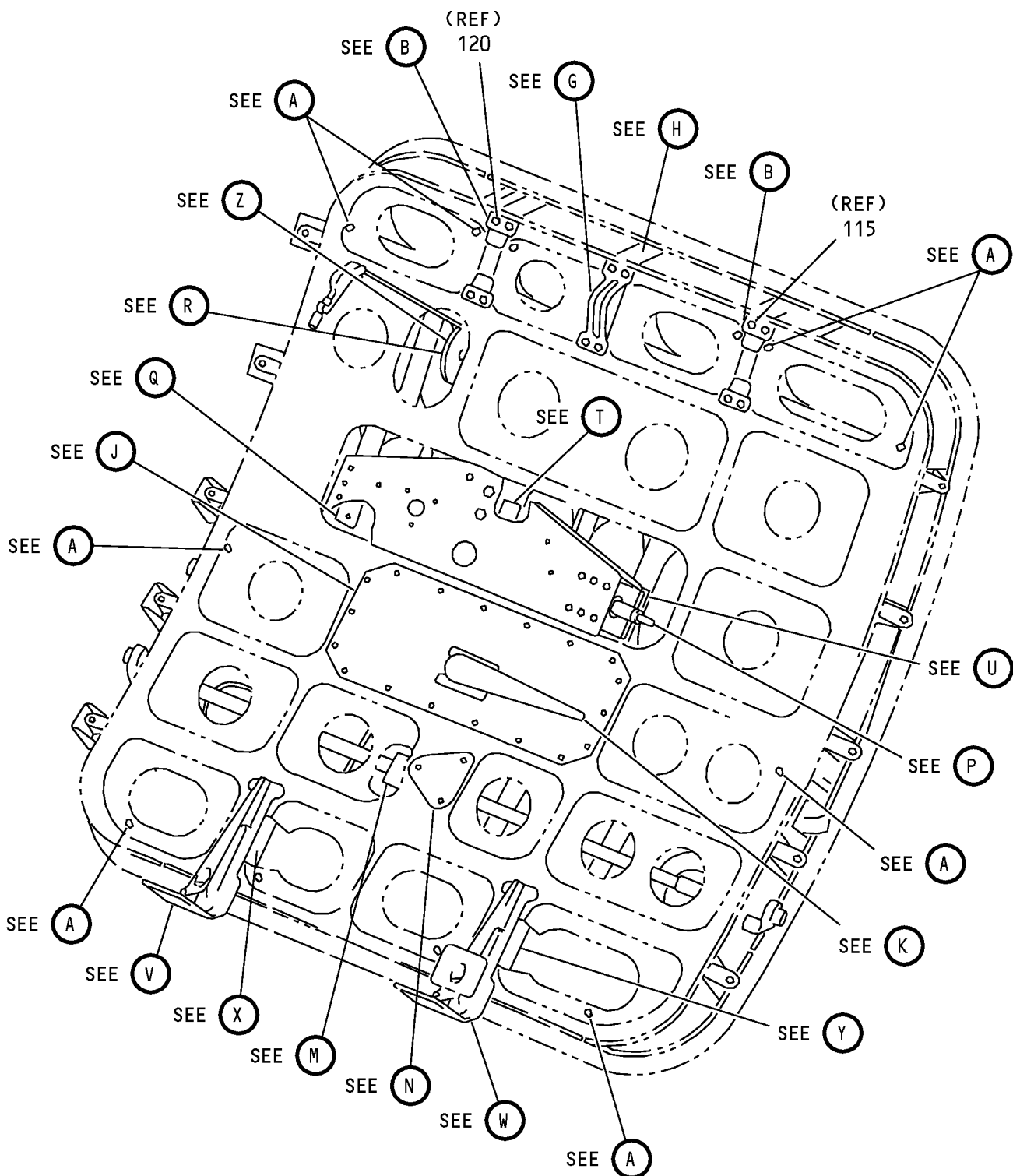
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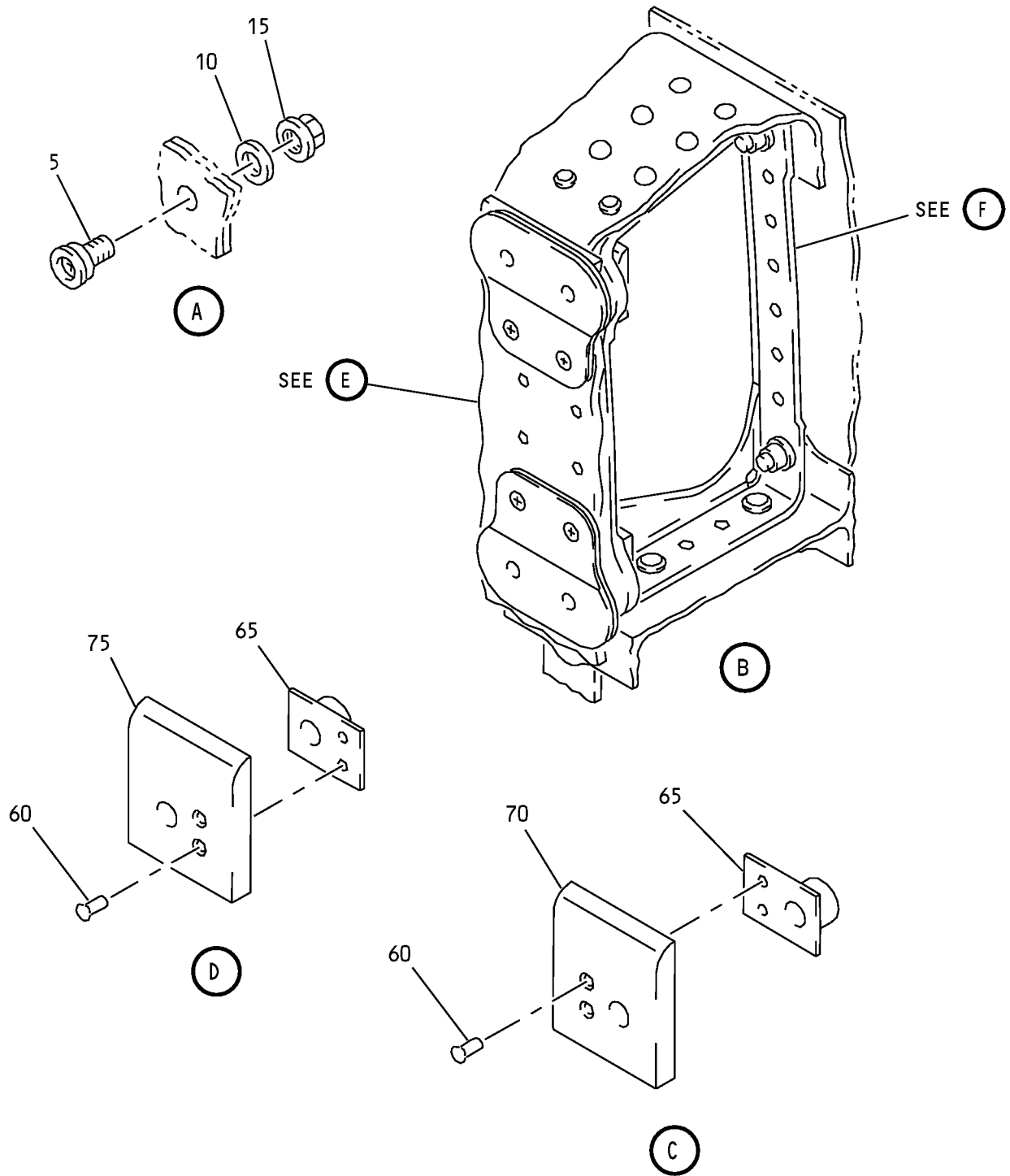
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Aft Cargo Door Assembly
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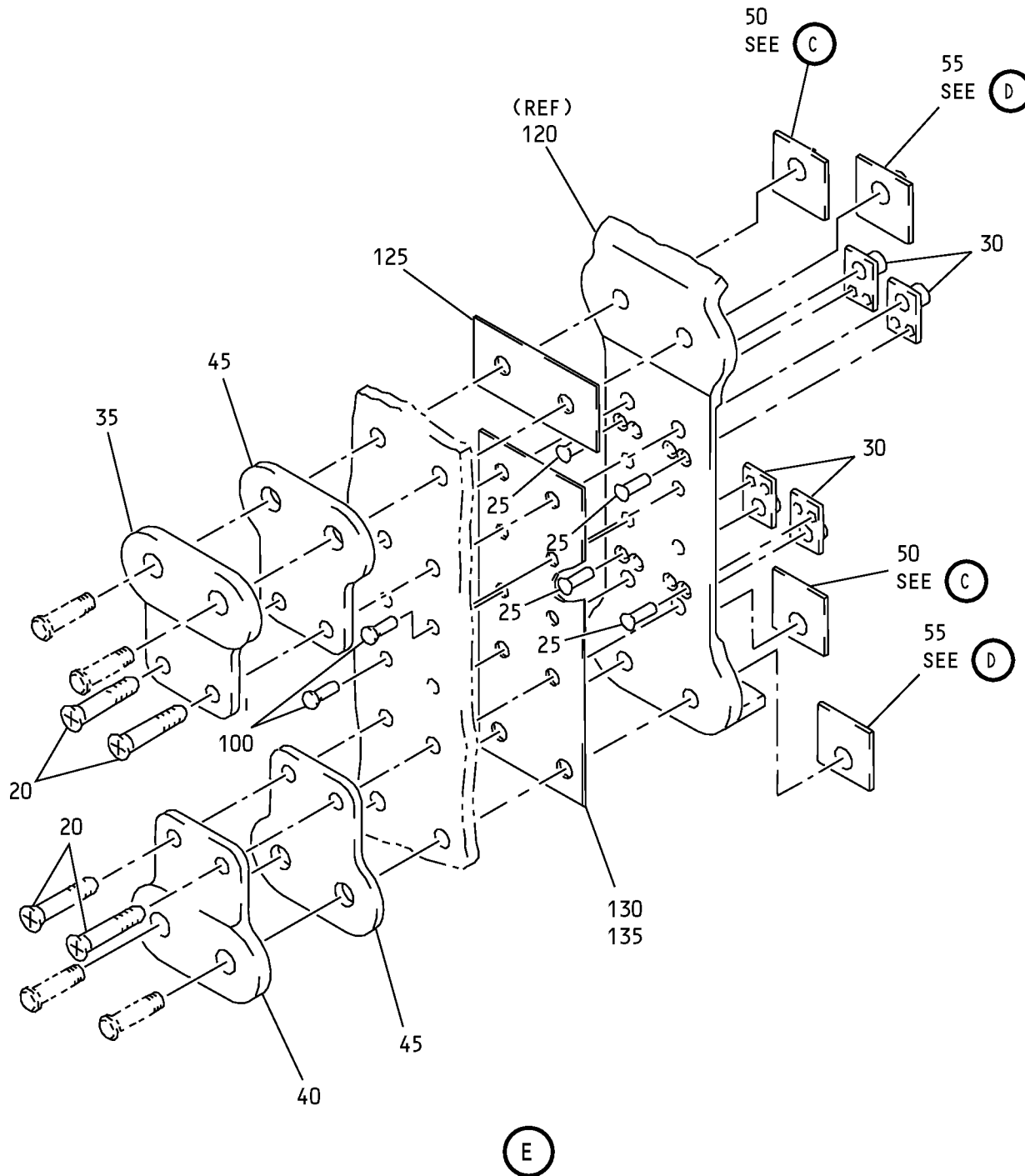
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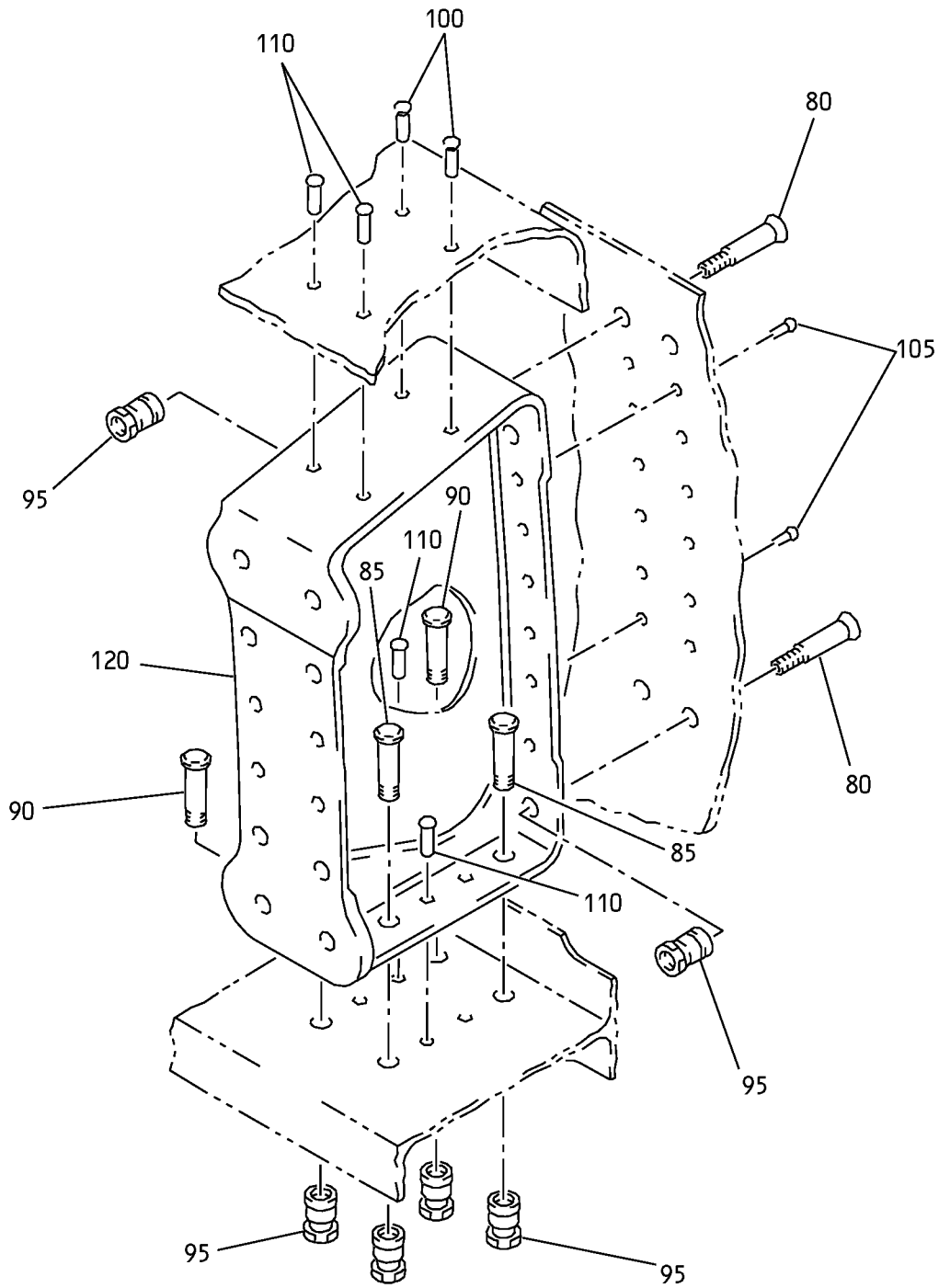
Aft Cargo Door Assembly
IPL Figure 1 (Sheet 2 of 18)

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Aft Cargo Door Assembly
IPL Figure 1 (Sheet 3 of 18)

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F

Aft Cargo Door Assembly
IPL Figure 1 (Sheet 4 of 18)

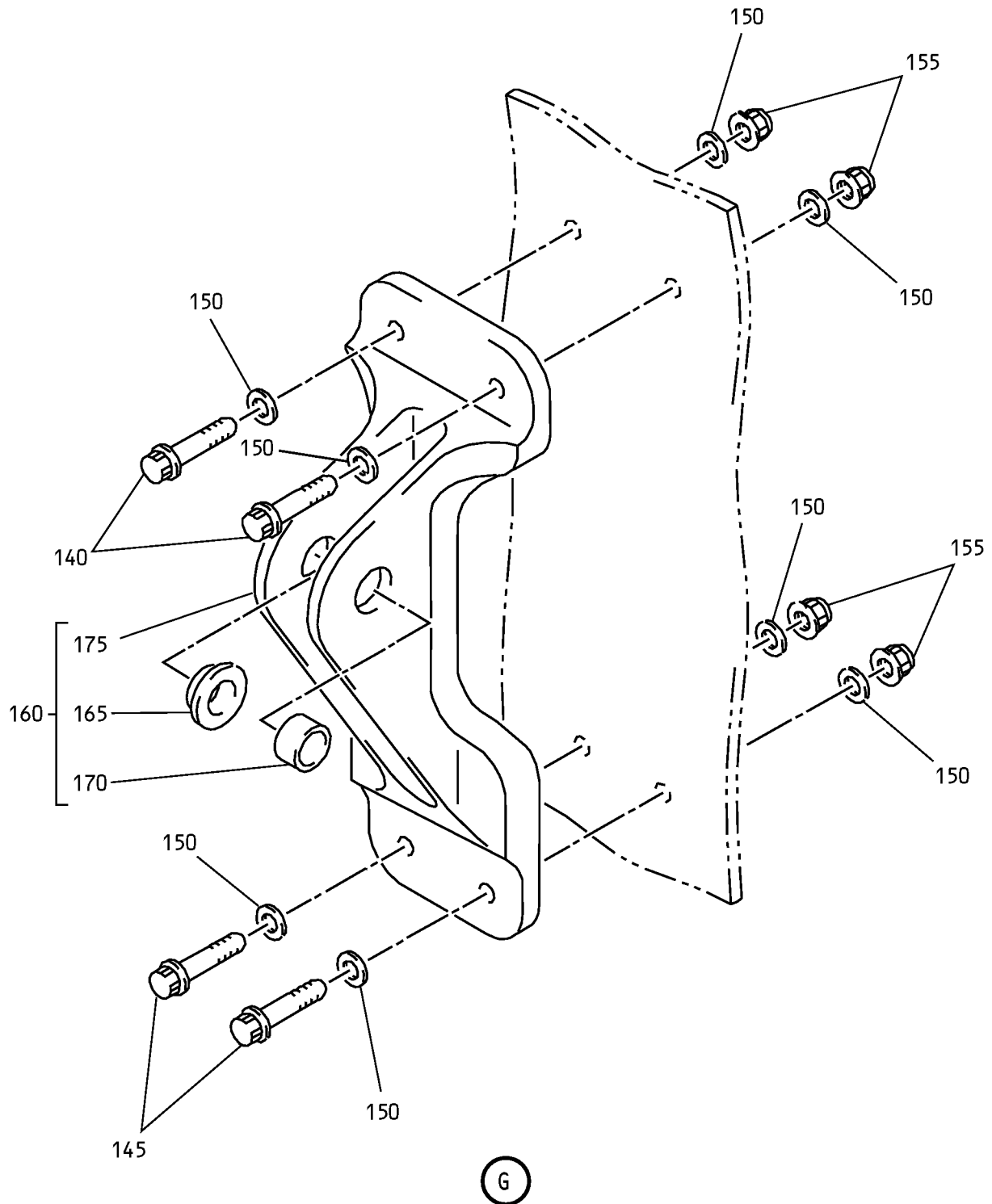
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Aft Cargo Door Assembly
IPL Figure 1 (Sheet 5 of 18)

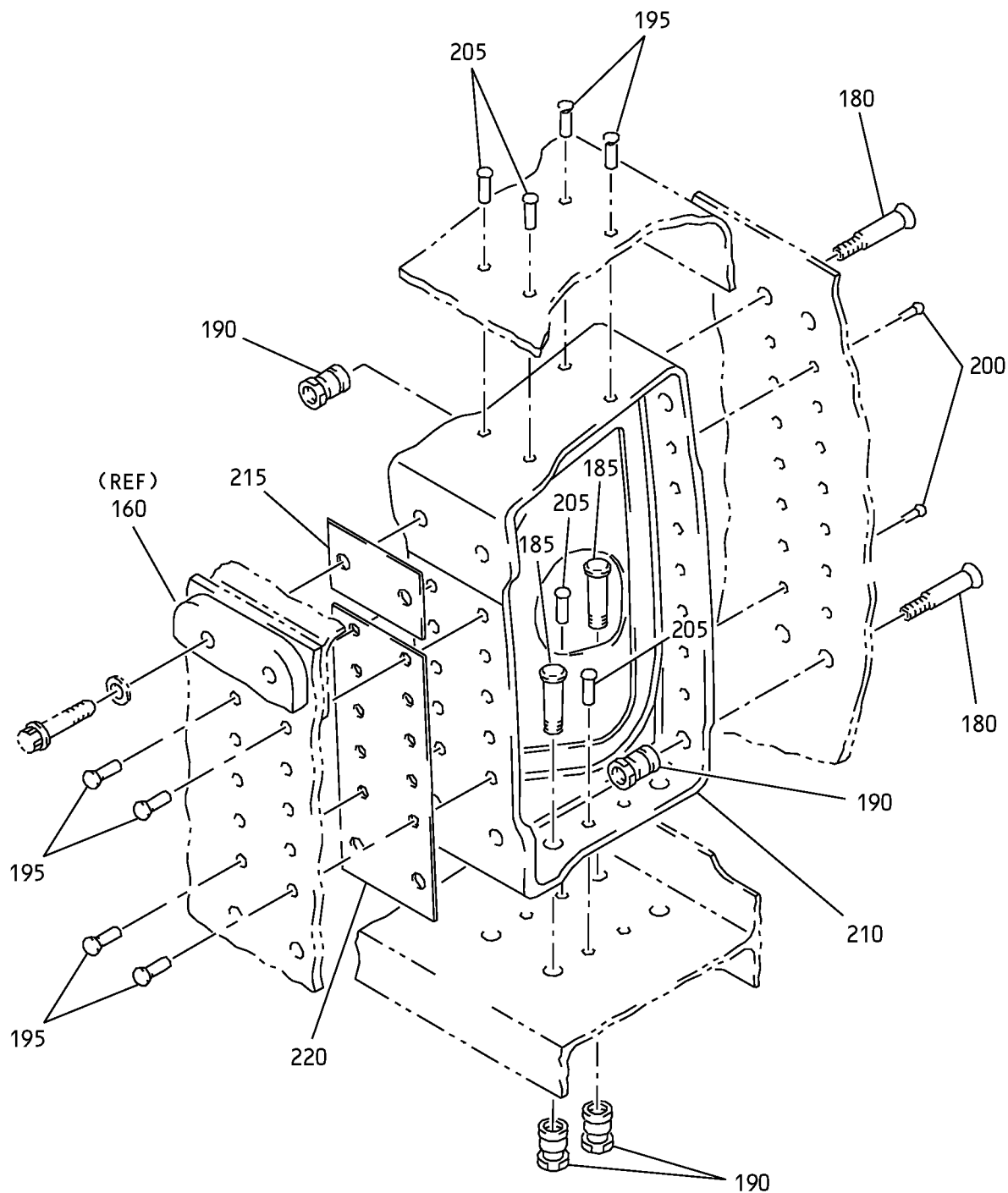
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(H)

Aft Cargo Door Assembly
IPL Figure 1 (Sheet 6 of 18)

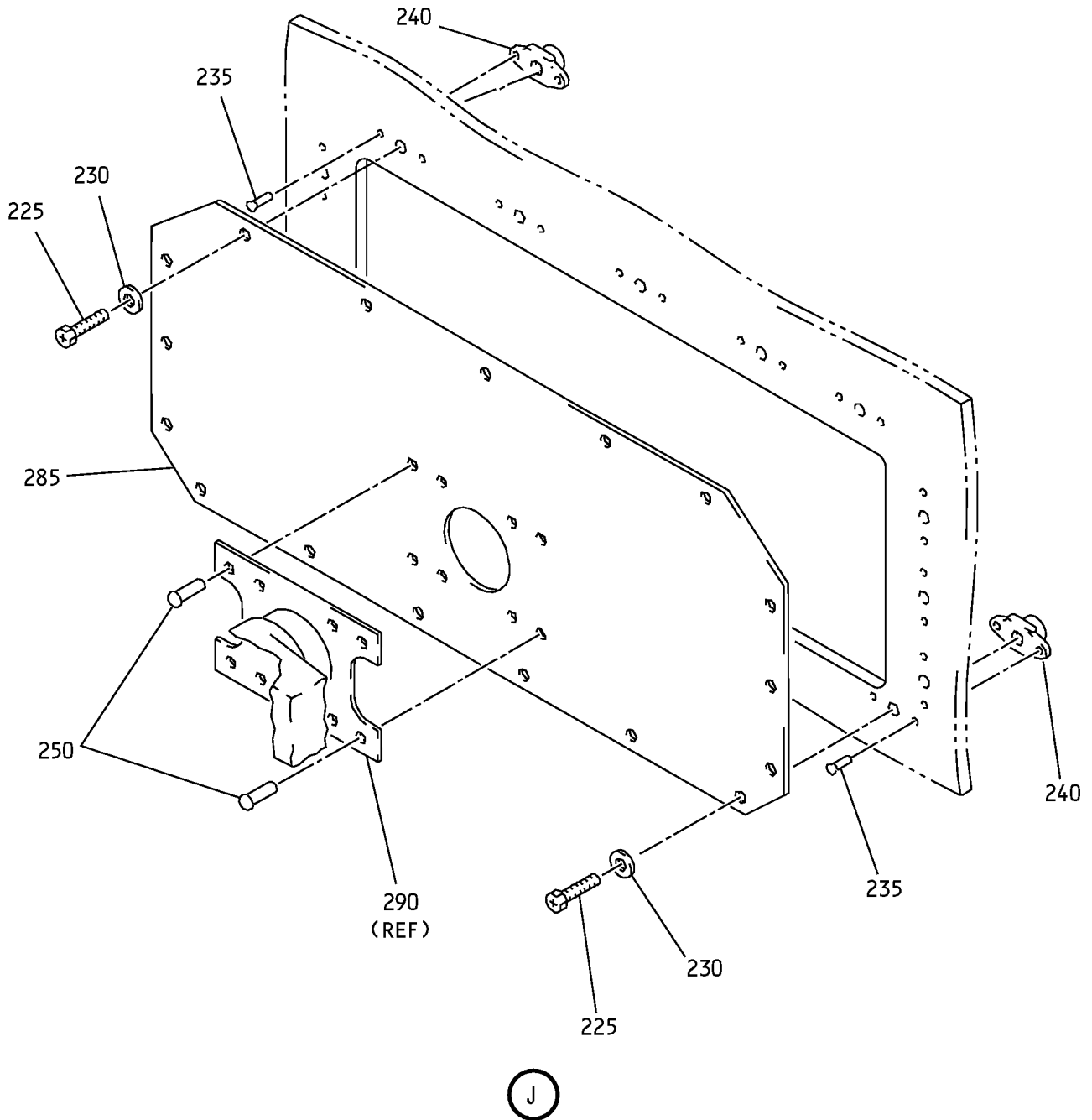
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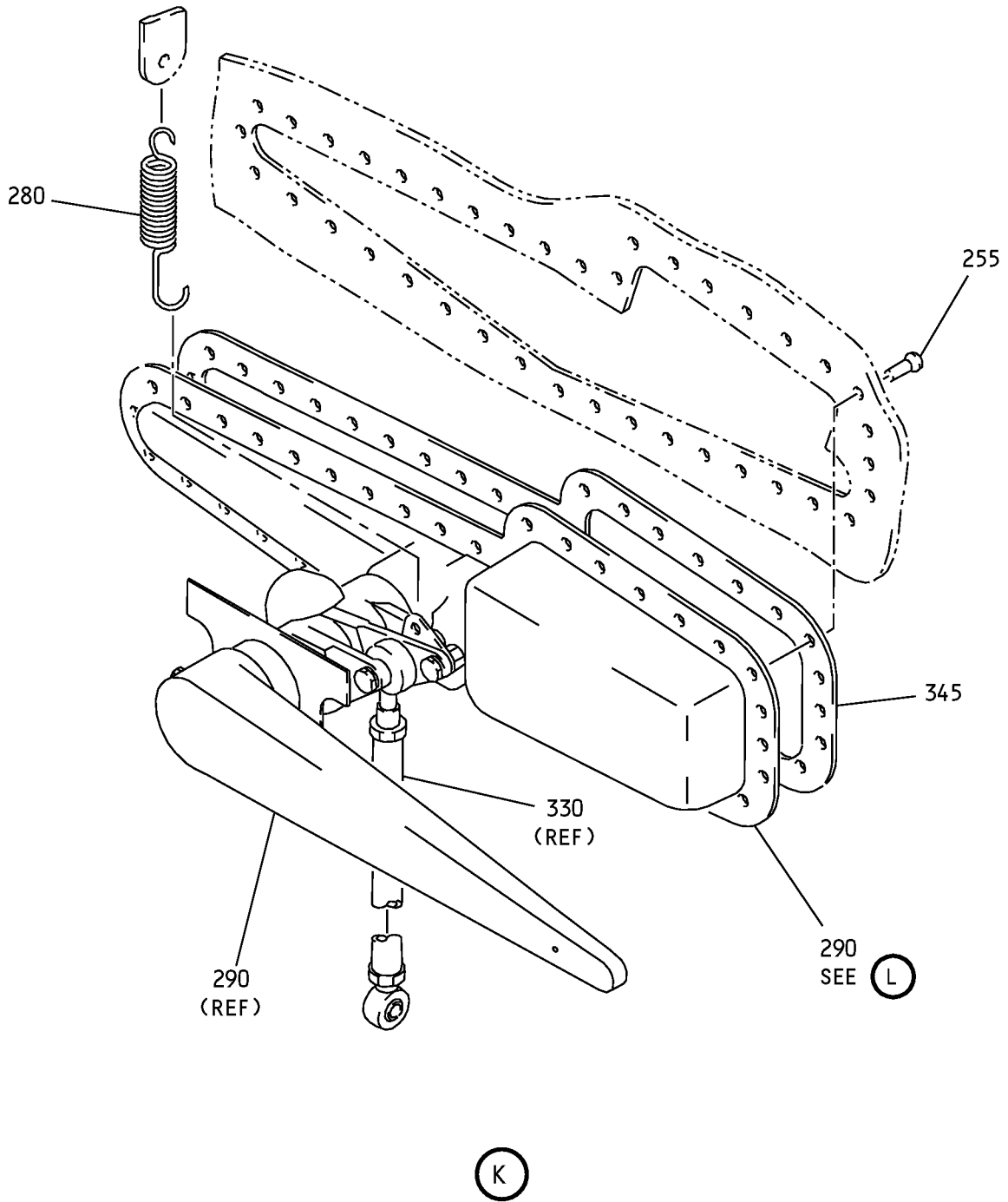
COMPONENT MAINTENANCE MANUAL



Aft Cargo Door Assembly
IPL Figure 1 (Sheet 7 of 18)

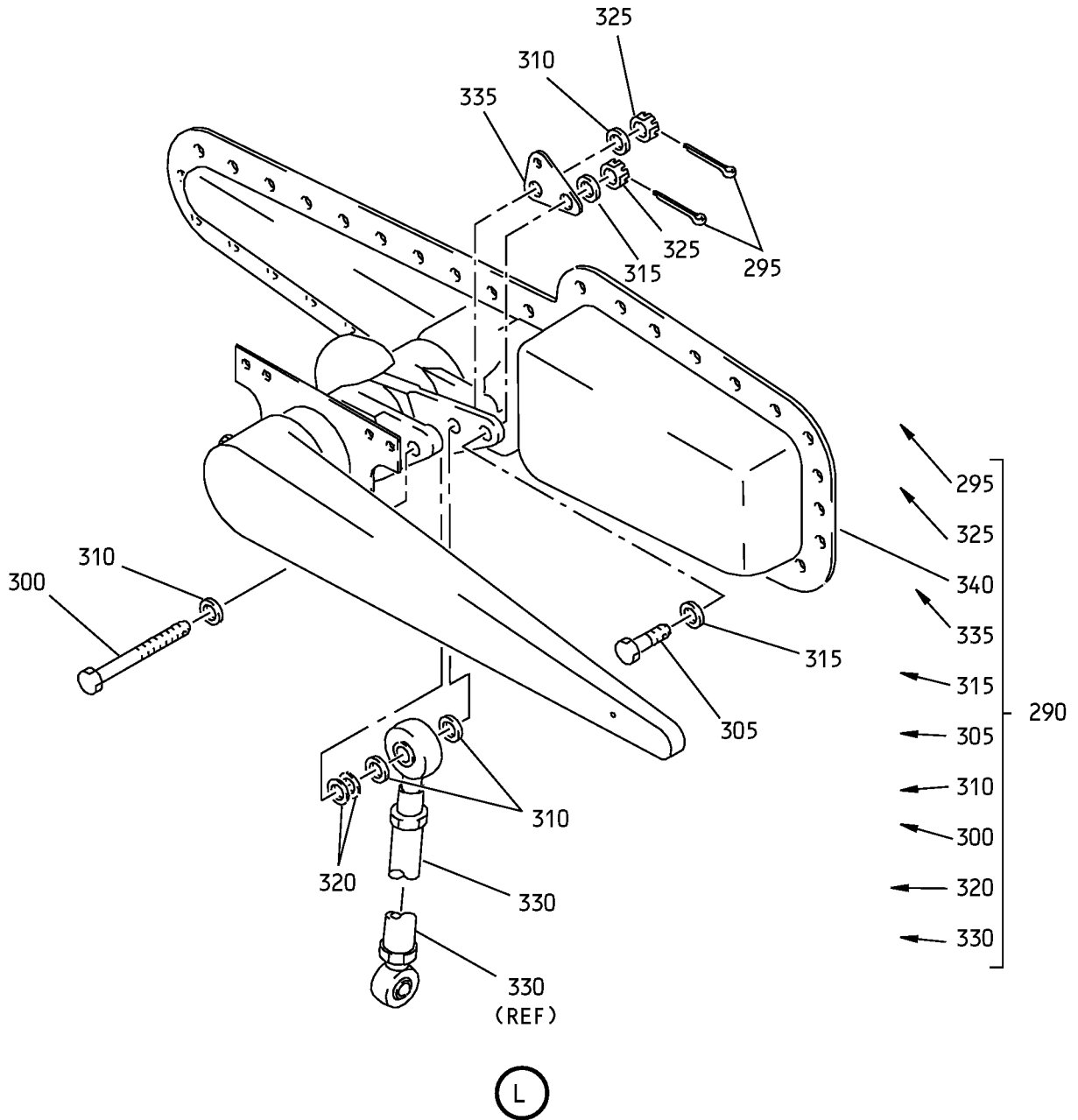
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Aft Cargo Door Assembly
IPL Figure 1 (Sheet 8 of 18)

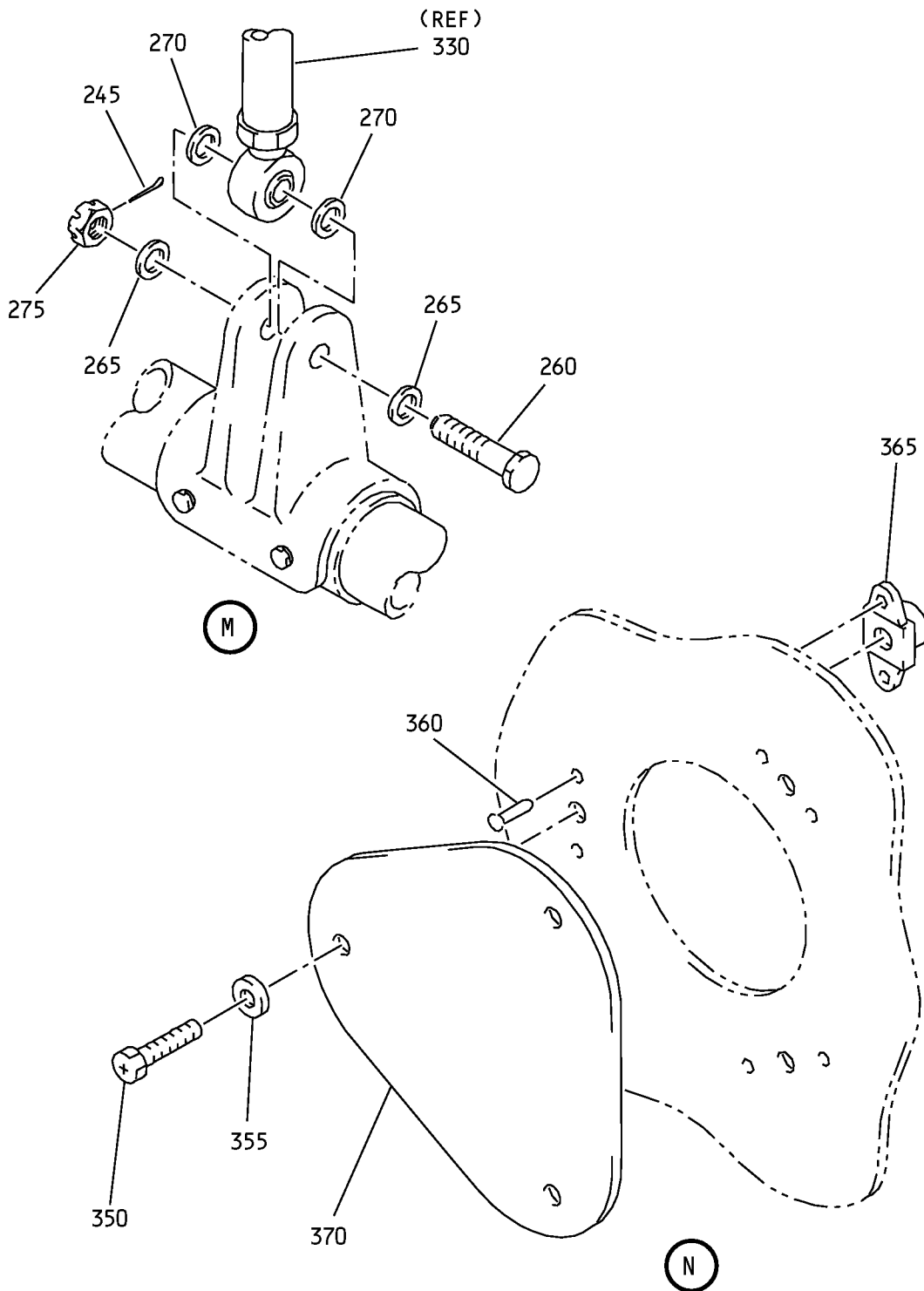
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Aft Cargo Door Assembly
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Aft Cargo Door Assembly
IPL Figure 1 (Sheet 10 of 18)

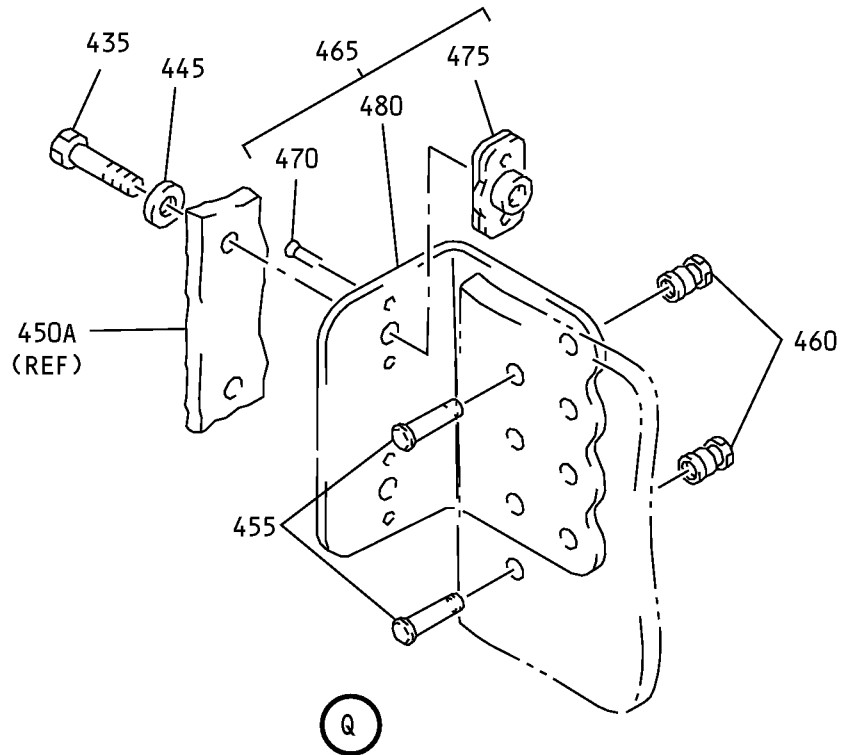
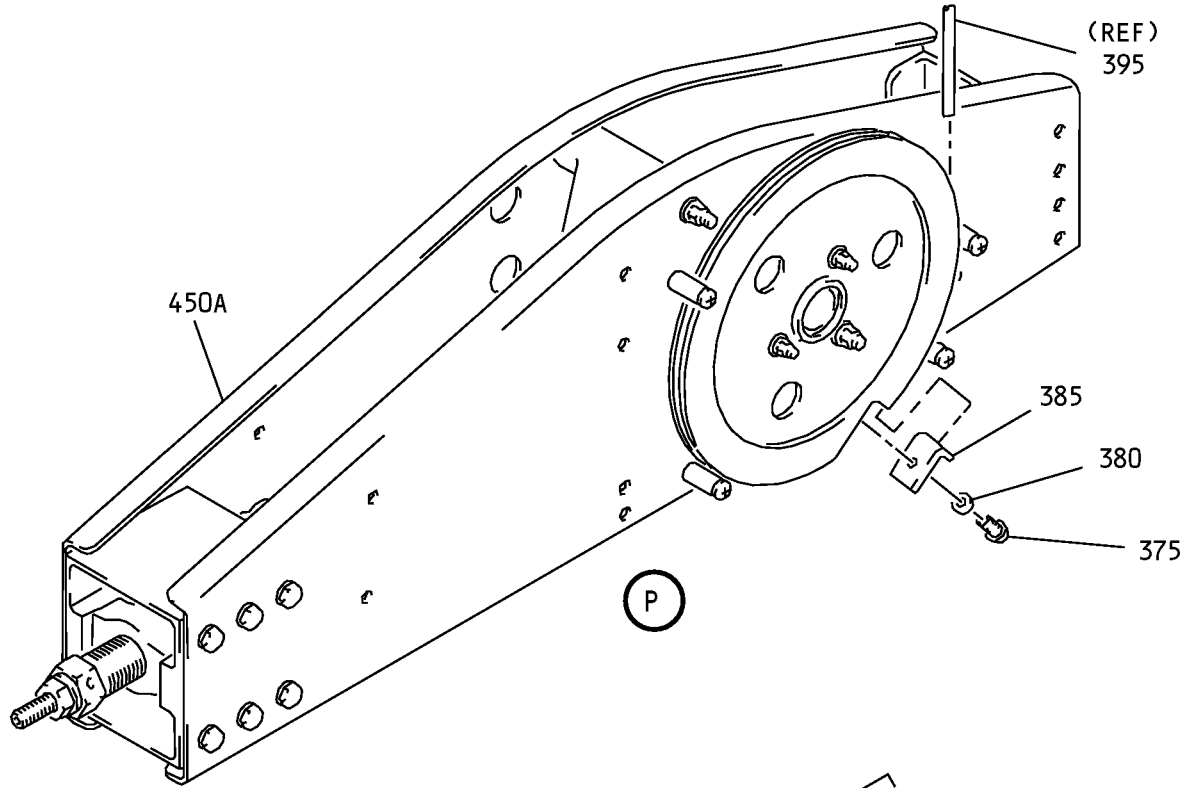
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Aft Cargo Door Assembly
IPL Figure 1 (Sheet 11 of 18)

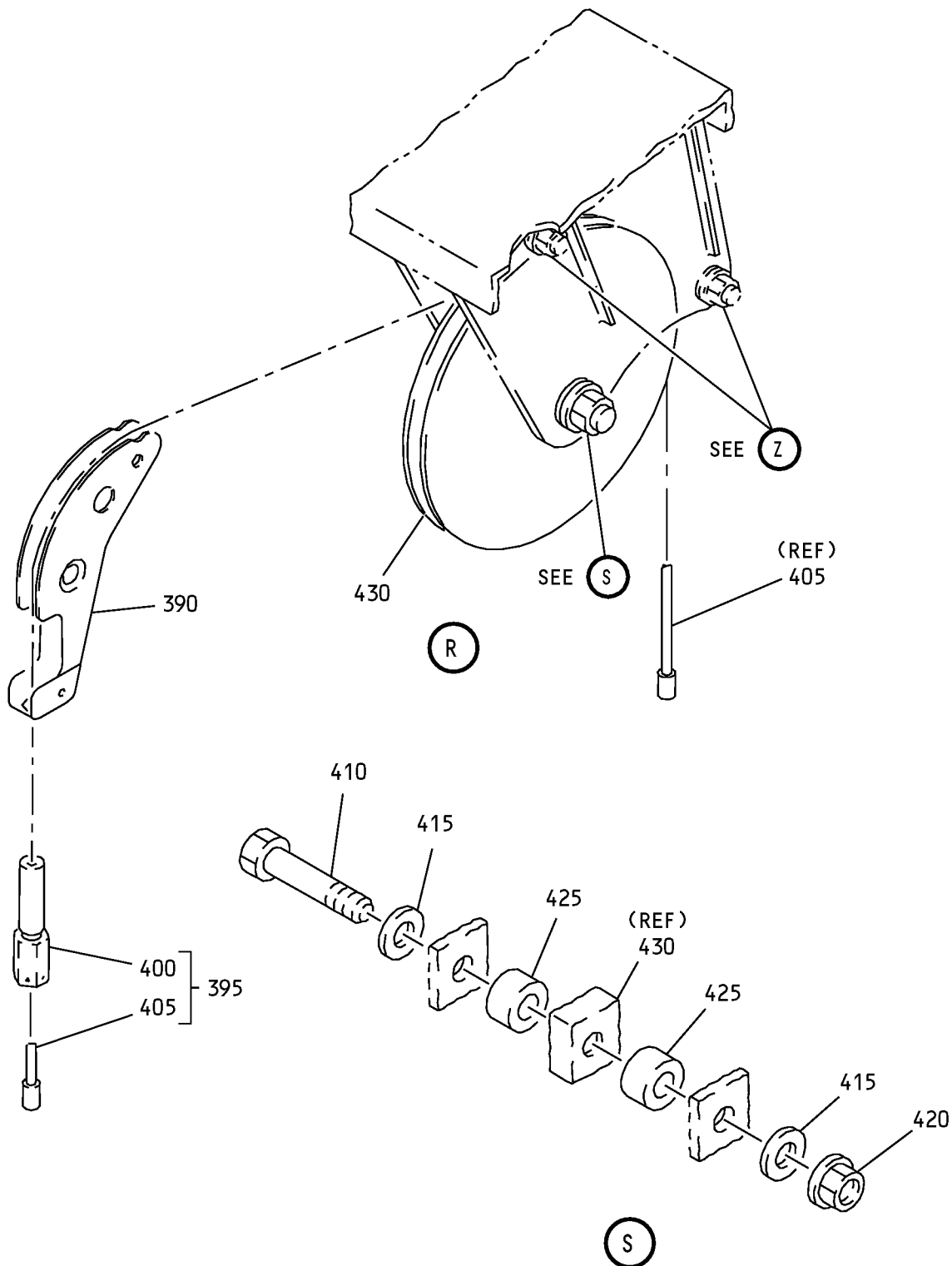
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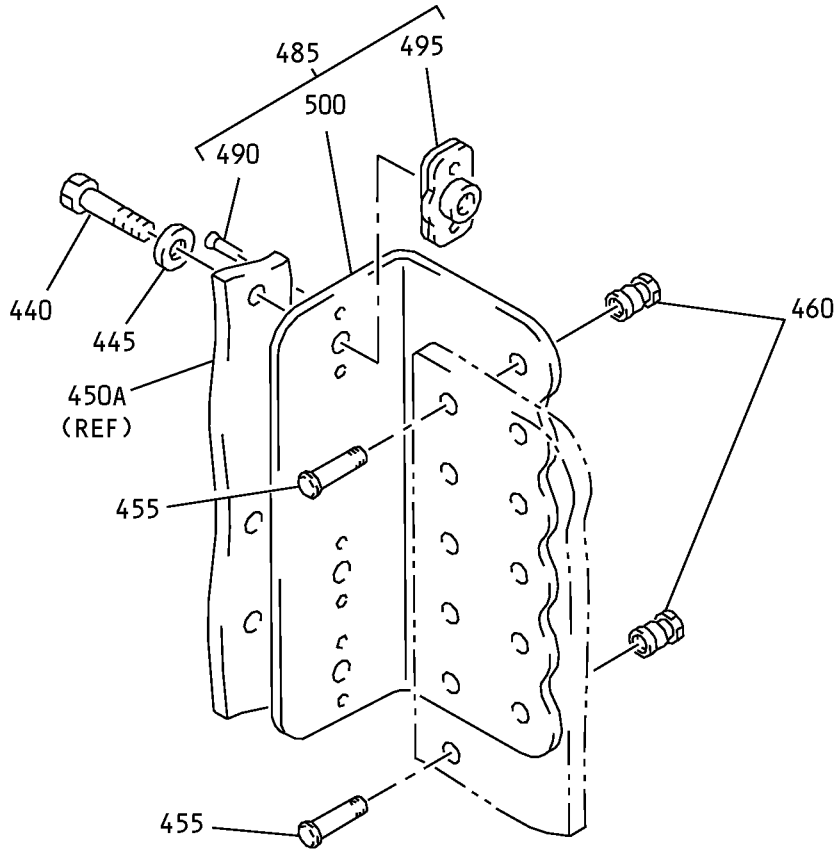
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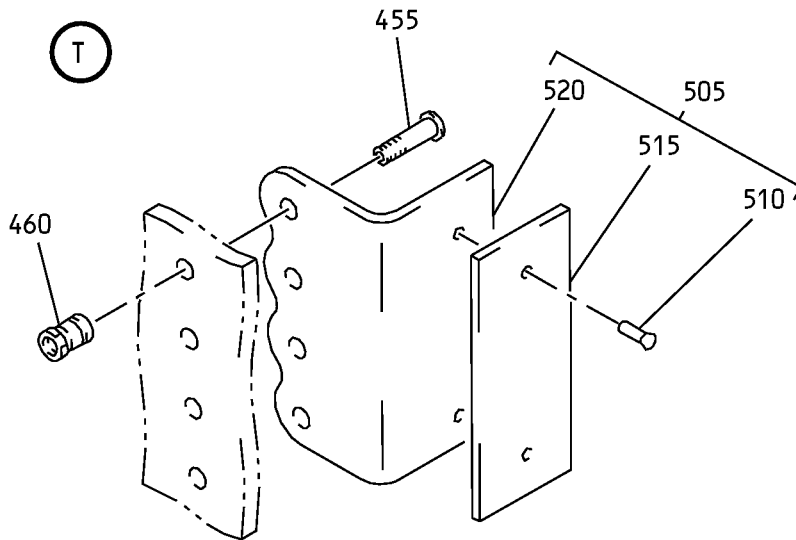


Aft Cargo Door Assembly
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(T)



(U)

Aft Cargo Door Assembly
IPL Figure 1 (Sheet 13 of 18)

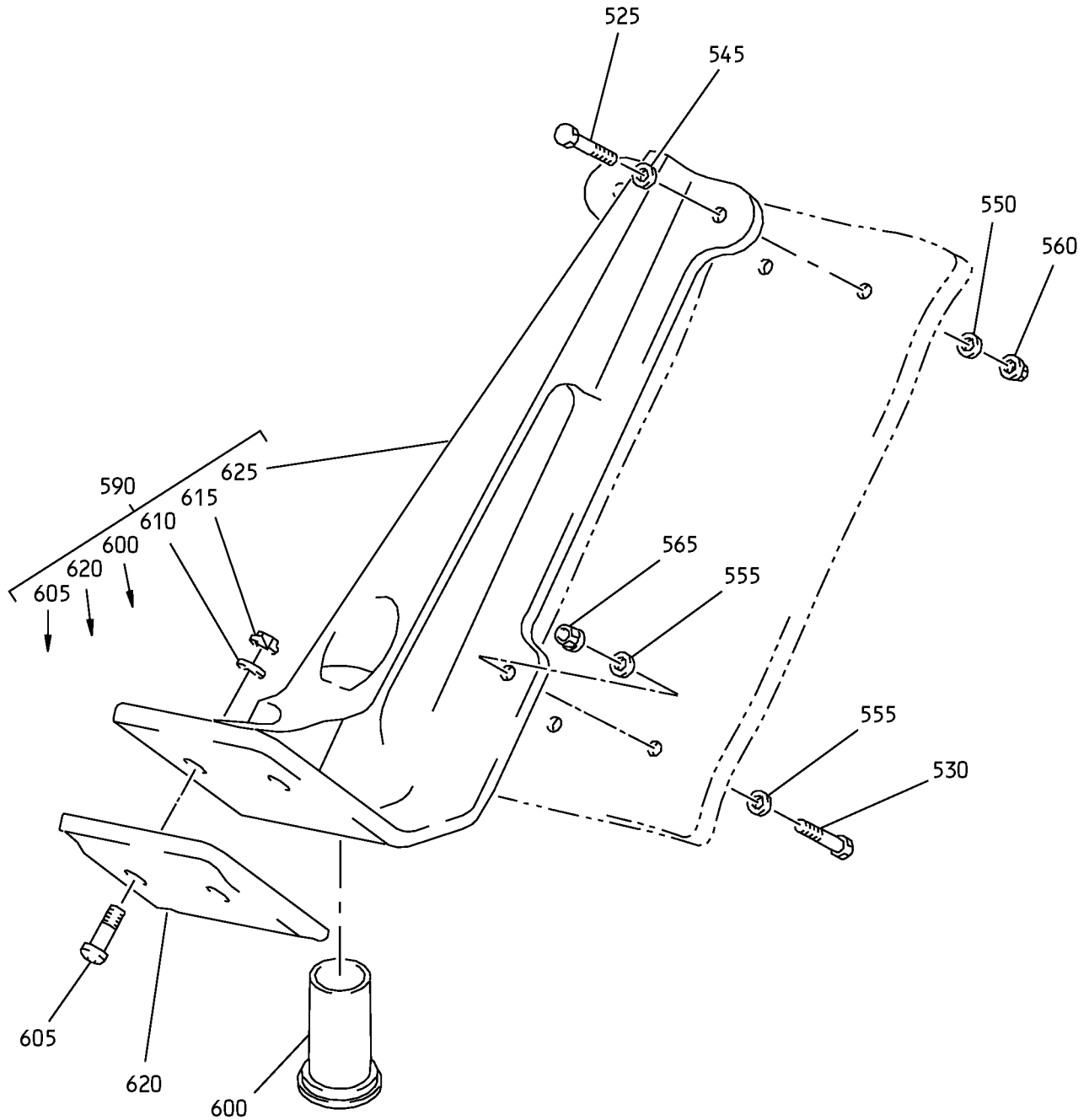
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V

Aft Cargo Door Assembly
IPL Figure 1 (Sheet 14 of 18)

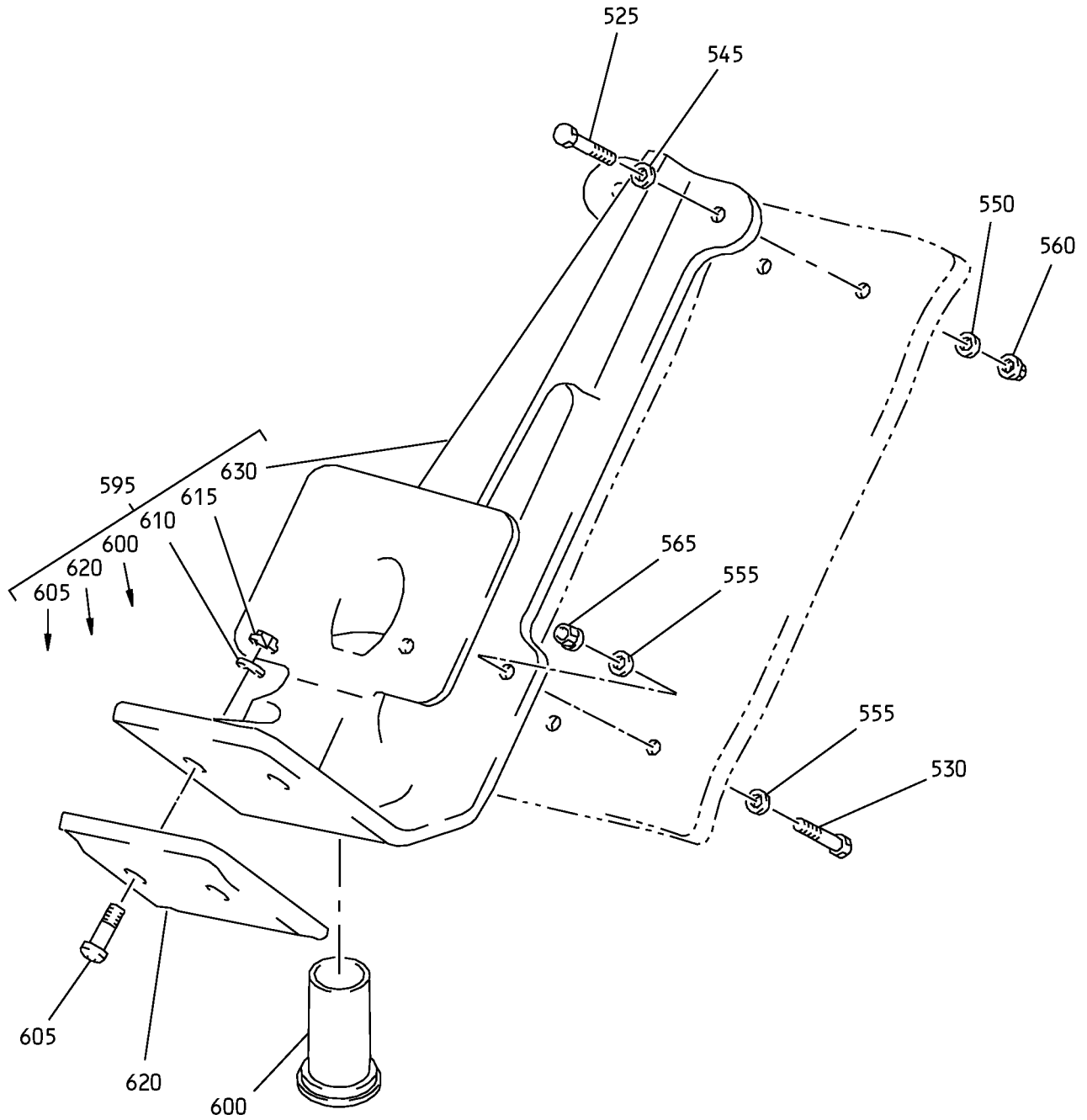
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Aft Cargo Door Assembly
IPL Figure 1 (Sheet 15 of 18)

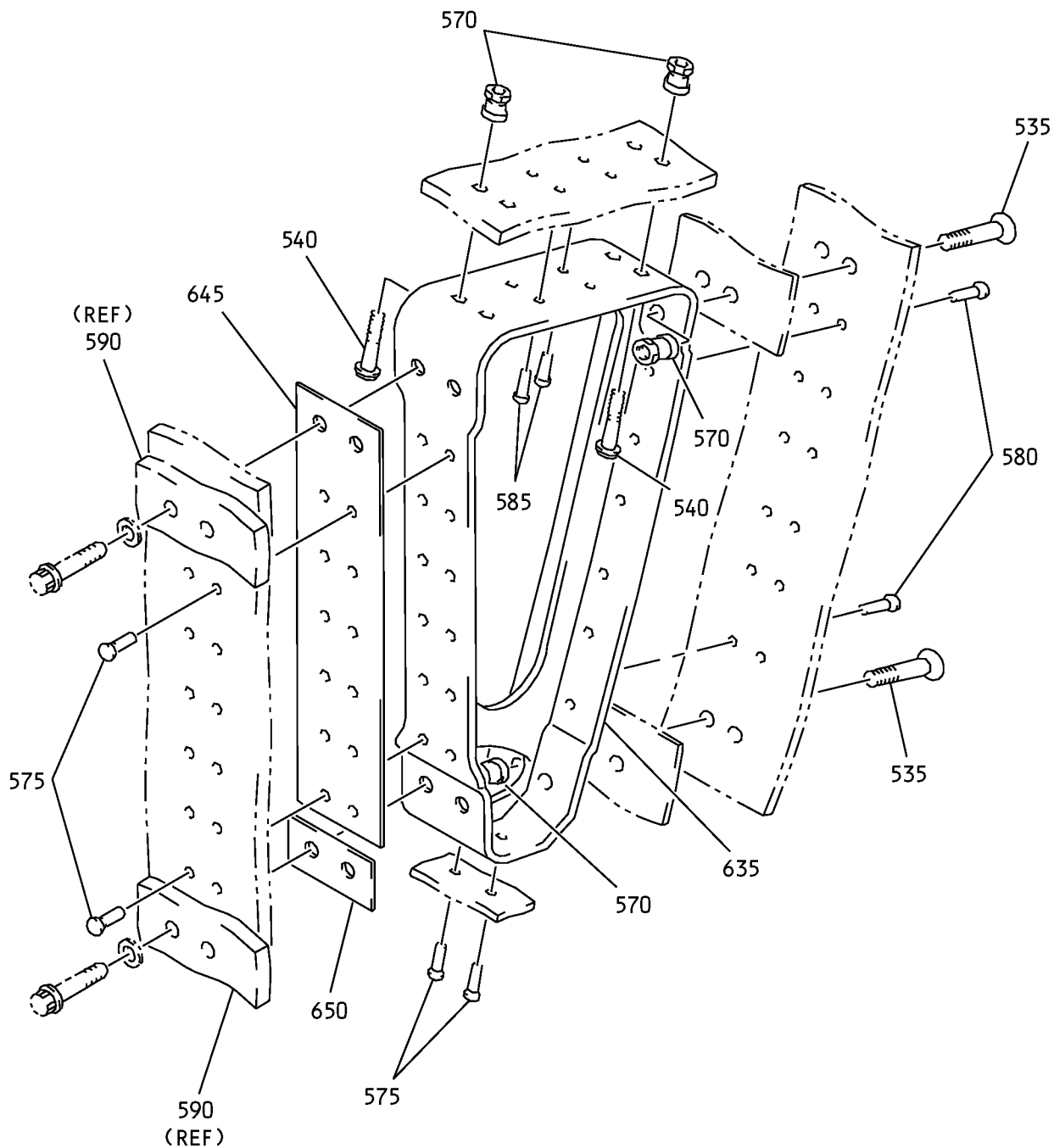
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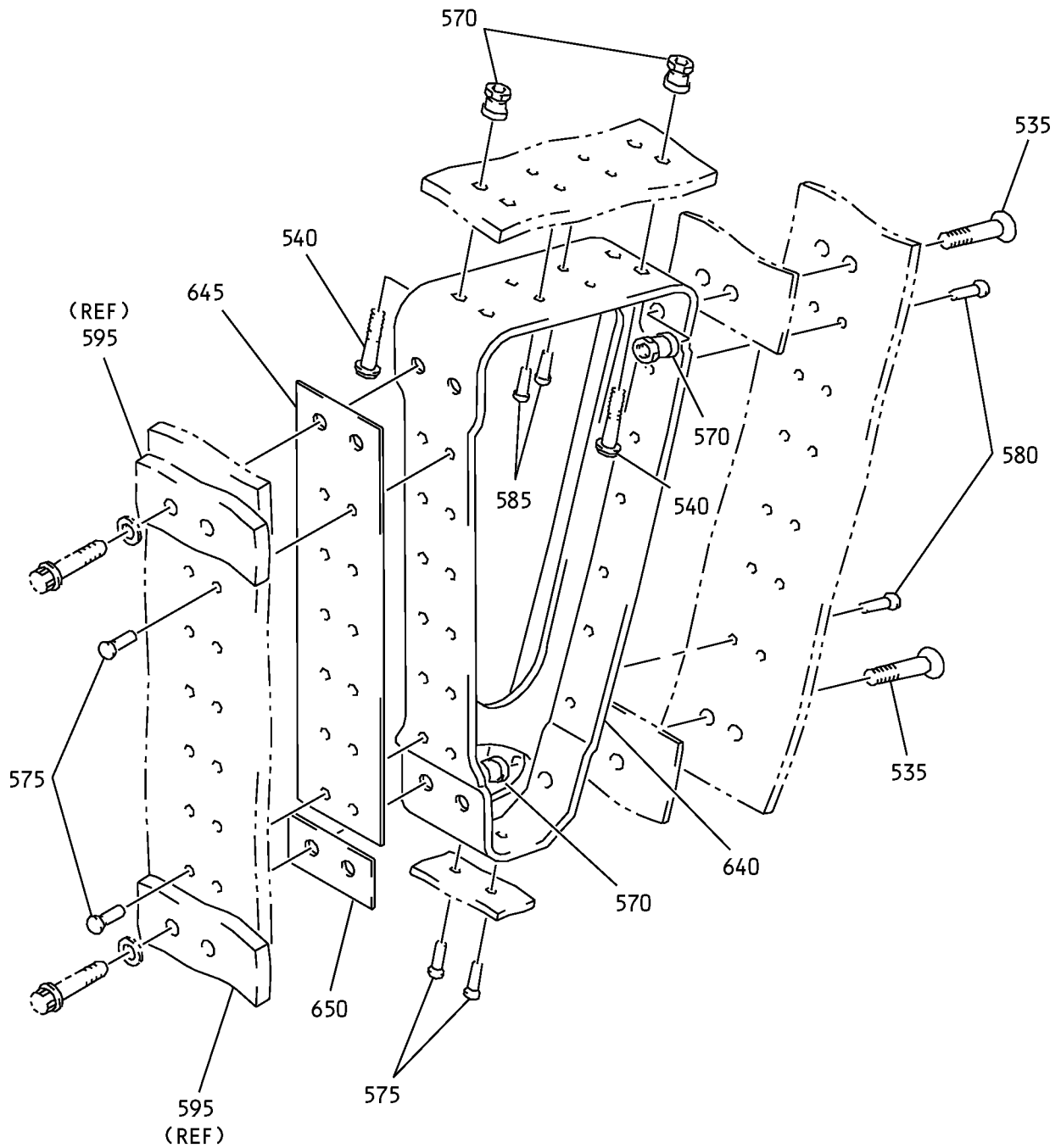
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X

Aft Cargo Door Assembly
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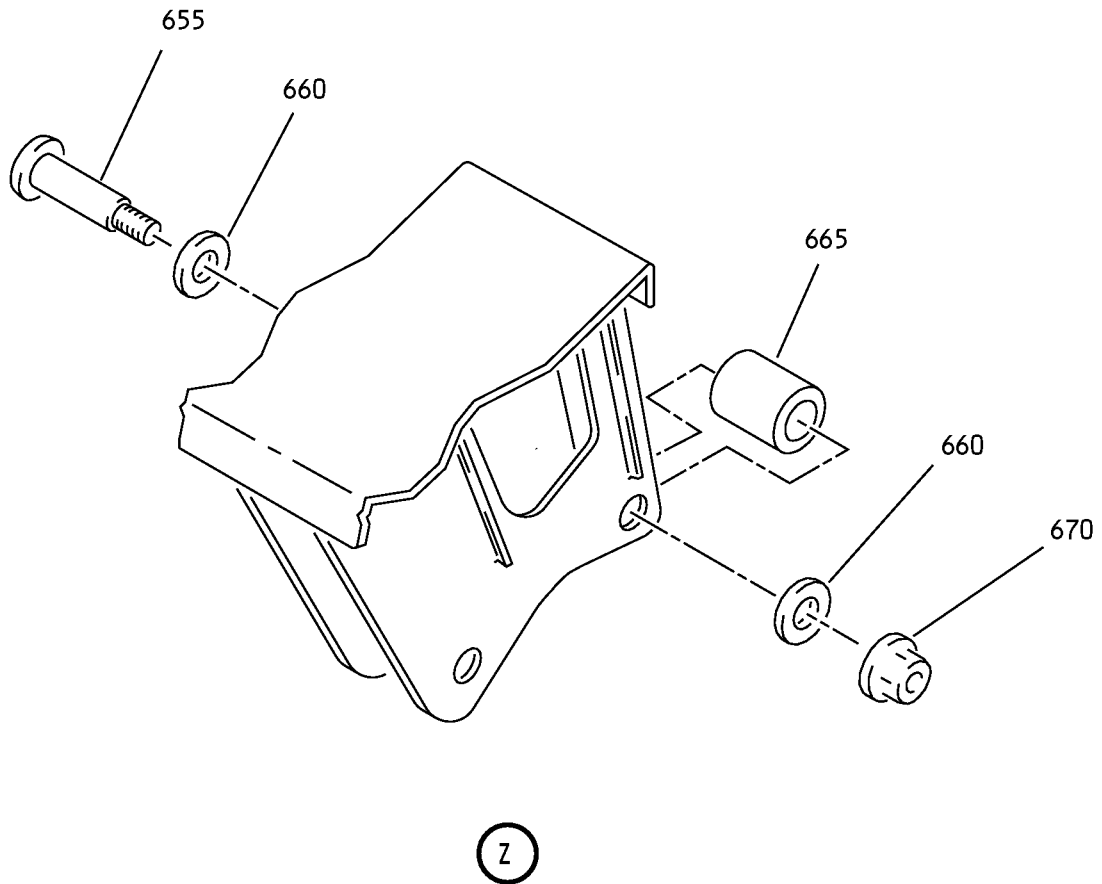


Y

Aft Cargo Door Assembly
IPL Figure 1 (Sheet 17 of 18)

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Aft Cargo Door Assembly
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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1A	146A6110-1										
-1B	146A6110-2										
-1C	146A6110-3										
-1D	146A6110-4								D	RF	
-1E	146A6110-5								E	RF	
-1F	146A6110-6								F	RF	
-1G	146A6110-7								G	RF	
-1H	146A6110-8								H	RF	
-1J	146A6110-11								A	RF	
-1K	146A6110-12								B	RF	
-1L	146A6110-13								C	RF	
-1M	146A6110-14								J	RF	
-1N	146A6110-15								K	RF	
-1P	146A6110-16								L	RF	
-1Q	146A6110-17								M	RF	

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1R	146A6110-19									N	RF
-1S	146A6110-18									P	RF
-1T	146A6110-20									Q	RF
-1U	146A6110-21									R	RF
-1V	146A6110-22									S	RF
-1W	146A6110-23									T	RF
-1X	146A6110-24									U	RF
-1Y	146A6110-25									V	RF
-1Z	146A6110-26									W	RF
-2	146A6110-27									X	RF
-2A	146A6110-28									Y	RF
-2B	146A6110-29									Z	RF
-2C	146A6110-30									AA	RF

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-2D	146A6110-31									AB	RF
-2E	146A6110-32									AC	RF
-2F	146A6110-33									AD	RF
-2G	146A6110-34									AE	RF
-2H	146A6110-35									AF	RF
5	MS27980-17N										12
10	NAS1149D0332J										12
15	PLH53CD										12
20	BACB30VF3K9										8
25	BACR15BA3AD										16
-25A	BACR15GE3CW4										16
30	FBL10140C3										8
35	69-37417-7										2
40	69-37417-6										2
45	69-42523-5										4
50	146A6133-4									A-Q	4
-50A	146A6133-8									R-U	4
55	146A6133-3									A-Q	4
-55A	146A6133-9									R-U	4
60	BACR15BA3D										2

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
65	FBL10140C4		.	.	NUTPLATE (V29372)					A-U	1
-65A	FBL10140C5				DELETED						
70	146A6133-6		.	.	FILLER (USED ON ITEM 50)					A-Q	1
-70A	146A6133-10		.	.	FILLER (USED ON ITEM 50A)					R-U	1
75	146A6133-5		.	.	FILLER (USED ON ITEM 55)					A-Q	1
-75A	146A6133-11		.	.	FILLER (USED ON ITEM 55A)					R-U	1
80	HST11AG6-5		.		BOLT (V06725) (SPEC BACB30VU6K5) (OPT HST11AG6-5 (V73197)) (OPT HST11AG6-5 (V56878)) (OPT HST11AG6-5 (V0PTK6))						8
85	HST10AG6-5		.		BOLT (V0PTK6) (SPEC BACB30VT6K5) (OPT HST10AG6-5 (V06725)) (OPT HST10AG6-5 (V56878)) (OPT HST10AG6-5 (V73197)) (OPT WC10K6-5 (V60516))						4
90	HST10AG6-4		.		BOLT (V06725) (SPEC BACB30VT6K4) (OPT HST10AG6-4 (V73197)) (OPT HST10AG6-4 (V56878)) (OPT HST10AG6-4 (V0PTK6)) (OPT WC10K6-4 (V60516))						4
95	BACC30BL6		.		COLLAR						16
100	BACR15GF6D		.		RIVET (SIZE DETERMINED ON INST)						12
105	BACR15GF5D		.		RIVET (SIZE DETERMINED ON INST)						24
110	BACR15FT6D		.		RIVET (SIZE DETERMINED ON INST)						12
115	146A6133-7		.		FITTING-HINGE SPRT						1
120	146A6133-2		.		FITTING-HINGE SPRT						1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE	USAGE CODE	UNITS PER ASSY
1-					
185	HST10AG6-3		. BOLT (V0PTK6) (SPEC BACB30VT6K3) (OPT HST10AG6-3 (V06725)) (OPT HST10AG6-3 (V56878)) (OPT HST10AG6-3 (V73197)) (OPT WC10K6-3 (V60516))		4
190	BACC30BL6		. COLLAR		8
195	BACR15GF6D		. RIVET (SIZE DETERMINED ON INST)		12
200	BACR15GF5D		. RIVET (SIZE DETERMINED ON INST)		14
205	BACR15FT6D		. RIVET (SIZE DETERMINED ON INST)		6
210	146A6132-3		. FITTING-SPRT		1
215	BACS40R010F024F		. SHIM		AR
220	BACS40R022F056F		. SHIM		AR
225	BACS12GU3K9		. SCREW		17
230	NAS1149D0316J		. WASHER		17
235	BACR15BA3AD		. RIVET (SIZE DETERMINED ON INST)		34
240	BRF200C3D		. NUTPLATE (V52828) (SPEC BACN10JR3CFD) (OPT K51602-3BAC (V15653)) (OPT NS202476-02 (V80539)) (OPT 102F9201-3 (V72962)) (OPT T8092C1032CD (V11815))		17
245	BACP18BC02A06P		. PIN-COTTER		1
250	BACR15FT5D		. RIVET (SIZE DETERMINED ON INST)		8
255	BACR15GF5D		. RIVET (SIZE DETERMINED ON INST)		39
260	BACB30NM3DK13		. BOLT		1
265	NAS1149D0363J		. WASHER		2
270	NAS1149D0316J		. WASHER		AR
275	BACN10JD103CD		. NUT		1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
280	69-76131-2		.								1
285	146A6137-3		.								1
290	149A6134-2		.							A-Q, X, AA	1
290A	149A6134-5		.							V, W, Y, Z, AB	1
-290B	149A6134-2		.							R-U	1
-290C	149A6134-5		.							R-U	1
-290D	149A6134-7		.							AC-AF	1
295	BACP18BC02A06P		.	.							2
300	BACB30NM3DK18		.	.							1
305	BACB30NM3DK4		.	.							1
310	NAS1149D0363J		.	.							4
315	NAS1149D0332J		.	.							2
320	NAS1149D0316J		.	.							AR
325	BACN10JD3CD		.	.							2
330	BACR24N2AL69		.	.							1
335	149A6134-3		.	.							1
340	H414-31		.	.						A-U, X, AA	1
-340A	H414-53		.	.						R-W, Y, Z, AB	1
-340B	H414-69		.	.						AC-AF	1
345	146A6111-1		.							A-F, H- AB	1
350	BACS12GU3K8		.								3
355	NAS1149D0316J		.								3
360	BACR15BA3AD		.								6
			.								(SIZE DETERMINED ON INST)

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
365	BRF200C3D		.	NUTPLATE							3
				(V52828)							
				(SPEC BACN10JR3CFD)							
				(OPT K51602-3BAC (V15653))							
				(OPT NS202476-02 (V80539))							
				(OPT 102F9201-3 (V72962))							
				(OPT T8092C1032CD (V11815))							
370	146A6137-2		.	COVER-ACCESS							1
375	NAS8201A5		.	SCREW							1
380	NAS1149DN632J		.	WASHER							1
385	149A6302-1		.	RETAINER-CABLE							1
390	65C27728-5		.	SHEAVE-CABLE							1
395	149A6301-3		.	CABLE ASSY							1
400	65C27727-1		.	SCREW-ADJUSTMENT							1
405	149A6301-4		.	CABLE							1
410	BACB30NM5K20		.	BOLT							1
415	NAS1149D0532J		.	WASHER							2
420	PLH55CD		.	NUT							1
				(VF0224)							
				(SPEC BACN10YR5CD)							
				(OPT PLH55CD (V62554))							
425	BACB28AK05-019		.	BUSHING							2
430	APM220-3		.	PULLEY					A-AB		1
				(V29965)							
				(SPEC BACP30F8)							
				(OPT R30F8 (V25337))							
				(OPT BMP30F8 (V22277))							
				(OPT SMS20220-3 (V29965))							
-430A	BACP30F8C		.	PULLEY					AC-AF		1
435	BACB30NM4K6		.	BOLT							2
440	BACB30NM4K4		.	BOLT							3
445	NAS1149D0416J		.	WASHER							5
450	65C33684-12			DELETED							
450A	65C33684-13		.	COUNTERBALANCE ASSY							1
				(FOR DETAILS SEE FIG. 4)							

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
455	HST10AG6-3		.	BOLT							14
				(V0PTK6)							
				(SPEC BACB30VT6K3)							
				(OPT HST10AG6-3 (V06725))							
				(OPT HST10AG6-3 (V56878))							
				(OPT HST10AG6-3 (V73197))							
				(OPT WC10K6-3 (V60516))							
460	BACC30BL6		.	COLLAR							14
465	146A6135-1		.	BRACKET ASSY-ATTACH							1
470	BACR15BA3D		..	RIVET							4
				(SIZE DETERMINED ON INST)							
475	BRFM20C4D		..	NUTPLATE							2
				(V52828)							
				(SPEC BACN10JN4CD)							
				(OPT T8301C428CD (V11815))							
				(OPT 102F9201M4 (V72962))							
				(OPT NS202487-048 (V80539))							
				(OPT MF51637-4 (V15653))							
				(OPT MF53050-4CD (V15653))							
480	146A6135-4		..	BRACKET							1
485	146A6135-2		.	BRACKET ASSY-ATTACH							1
490	BACR15BA3D		..	RIVET							6
				(SIZE DETERMINED ON INST)							
495	BRFM20C4D		..	NUTPLATE							3
				(V52828)							
				(SPEC BACN10JN4CD)							
				(OPT T8301C428CD (V11815))							
				(OPT 102F9201M4 (V72962))							
				(OPT NS202487-048 (V80539))							
				(OPT MF51637-4 (V15653))							
				(OPT MF53050-4CD (V15653))							
500	146A6135-5		..	BRACKET							1
505	146A6135-3		.	BRACKET ASSY-SPRT							1
510	BACR15BA5AD		..	RIVET							2
				(SIZE DETERMINED ON INST)							
515	69-77663-2		..	PAD-STOP							1
520	146A6135-6		..	ANGLE							1
525	BACB30NM3K6		.	BOLT							4
530	BACB30NM4K9		.	BOLT							4

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
535	HST11AG6-4		.	BOLT							8
				(V06725)							
				(SPEC BACB30VU6K4)							
				(OPT HST11AG6-4 (V73197))							
				(OPT HST11AG6-4 (V0PTK6))							
				(OPT HST11AG6-4 (V56878))							
540	HST10AG6-3		.	BOLT							8
				(V0PTK6)							
				(SPEC BACB30VT6K3)							
				(OPT HST10AG6-3 (V06725))							
				(OPT HST10AG6-3 (V56878))							
				(OPT HST10AG6-3 (V73197))							
				(OPT WC10K6-3 (V60516))							
545	NAS1149D0363J		.	WASHER							4
550	NAS1149D0332J		.	WASHER							4
555	NAS1149D0432J		.	WASHER							8
560	PLH53CD		.	NUT							4
				(VF0224)							
				(SPEC BACN10YR3CD)							
				(OPT PLH53CD (V62554))							
565	PLH54CD		.	NUT							4
				(VF0224)							
				(SPEC BACN10YR4CD)							
				(OPT PLH54CD (V62554))							
570	BACC30BL6		.	COLLAR							16
575	BACR15GF6D		.	RIVET							26
				(SIZE DETERMINED ON INST)							
580	BACR15GF5D		.	RIVET							24
				(SIZE DETERMINED ON INST)							
585	BACR15FT6D		.	RIVET							8
				(SIZE DETERMINED ON INST)							
590	146A6128-5		.	FITTING ASSY-FWD							1
595	146A6128-6		.	FITTING ASSY-AFT							1
600	66-12688-11		.	BUSHING-DOOR STOP							1
605	BACB30NT3K6		.	BOLT							2
610	NAS1149D0363J		.	WASHER							2

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
615	PLH53CD		.	.	NUT (VF0224) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))						2
620	149A6140-1		.	.	BLOCK-RUB						1
625	146A6128-7		.	.	FITTING-STOP (USED ON ITEM 590)						1
630	146A6128-8		.	.	FITTING-STOP (USED ON ITEM 595)						1
635	146A6130-1		.		FITTING-STOP SPRT				F-H		1
-635A	146A6130-3		.		FITTING-STOP SPRT				C-E, J- AF		1
-635B	146A6130-1		.		FITTING-STOP SPRT (OPT ITEM 635C)				A, B		1
-635C	146A6130-3		.		FITTING-STOP SPRT (OPT ITEM 635B)				A, B		1
640	146A6130-2		.		FITTING-STOP SPRT				F-H		1
-640A	146A6130-4		.		FITTING-STOP SPRT				C-E, J- AF		1
-640B	146A6130-2		.		FITTING-STOP SPRT (OPT ITEM 640C)				A, B		1
-640C	146A6130-4		.		FITTING-STOP SPRT (OPT ITEM 640B)				A, B		1
645	BACS40R018F066F		.		SHIM						AR
650	BACS40R008F020F		.		SHIM						AR

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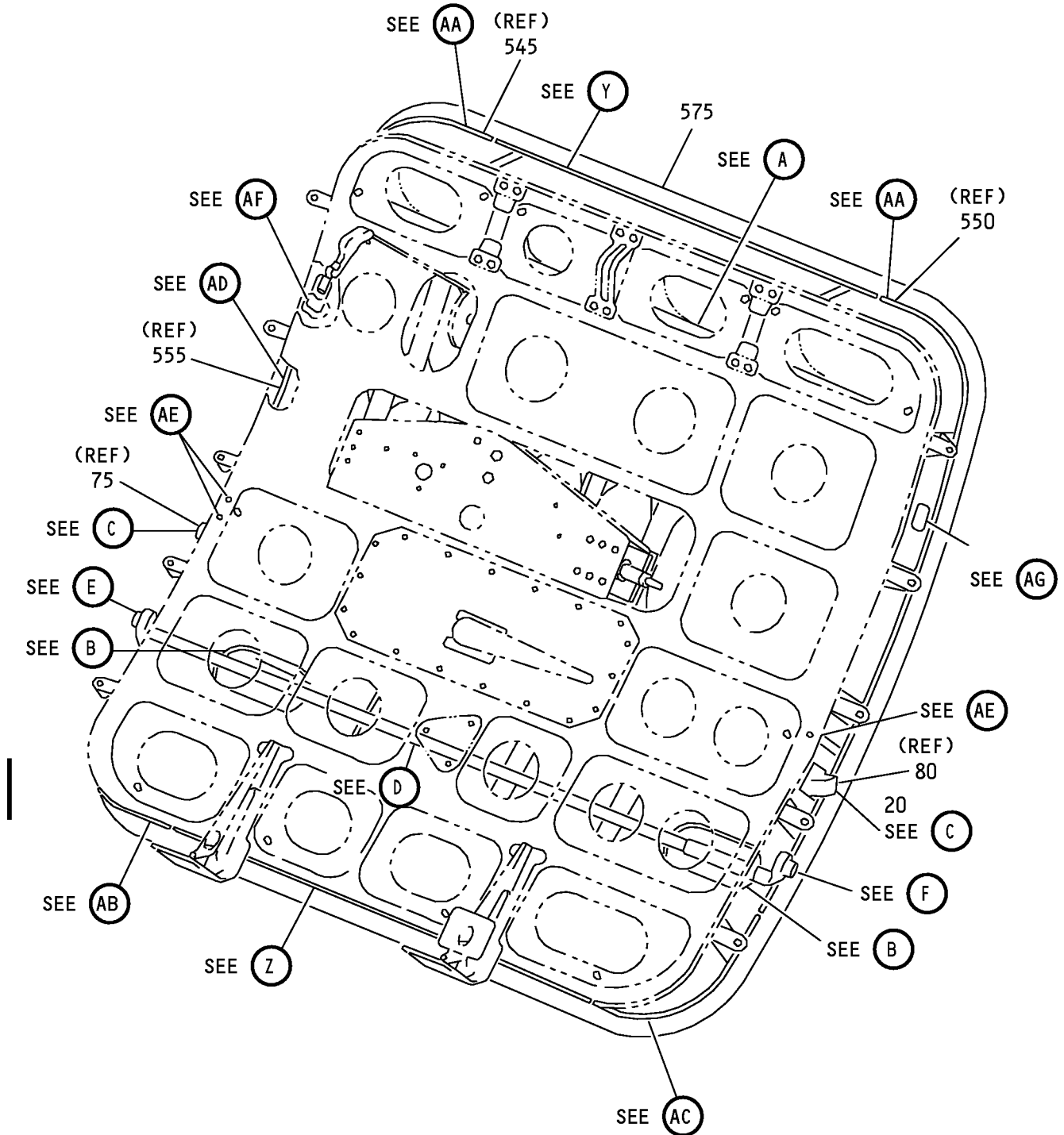
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G80126 S00041001230_V2

Aft Cargo Door Assembly
IPL Figure 2 (Sheet 1 of 23)

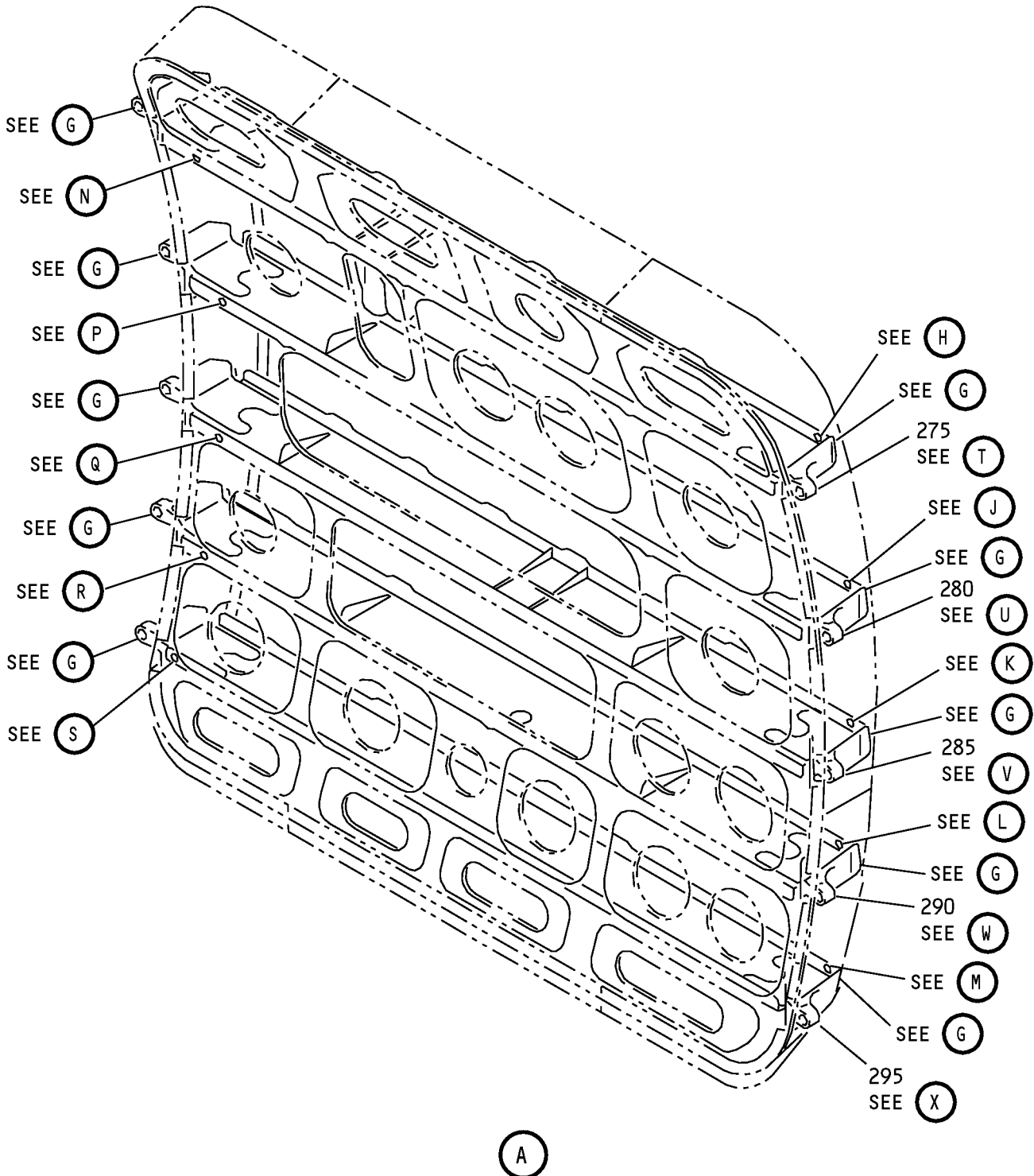
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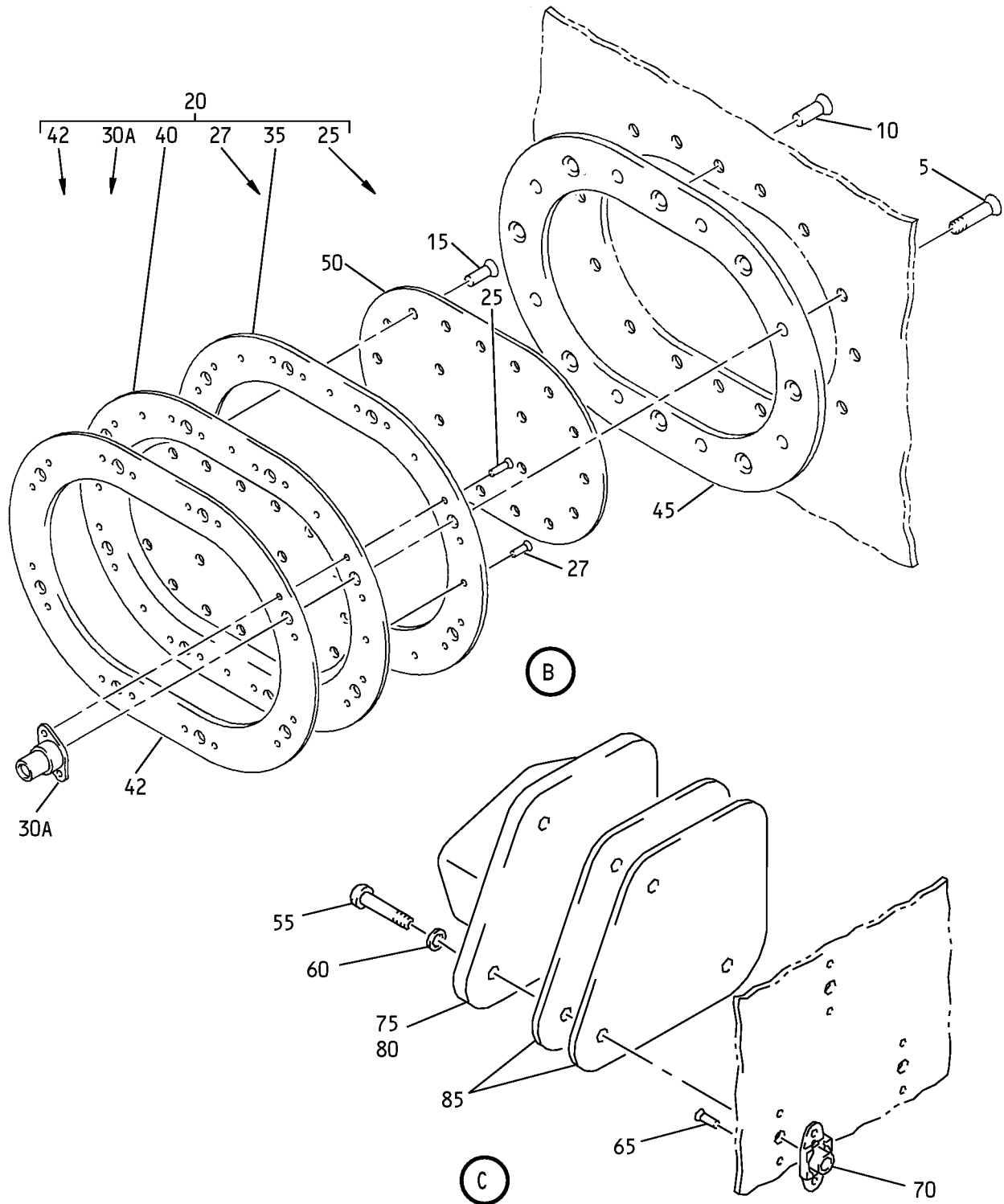
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 2 of 23)

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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 3 of 23)

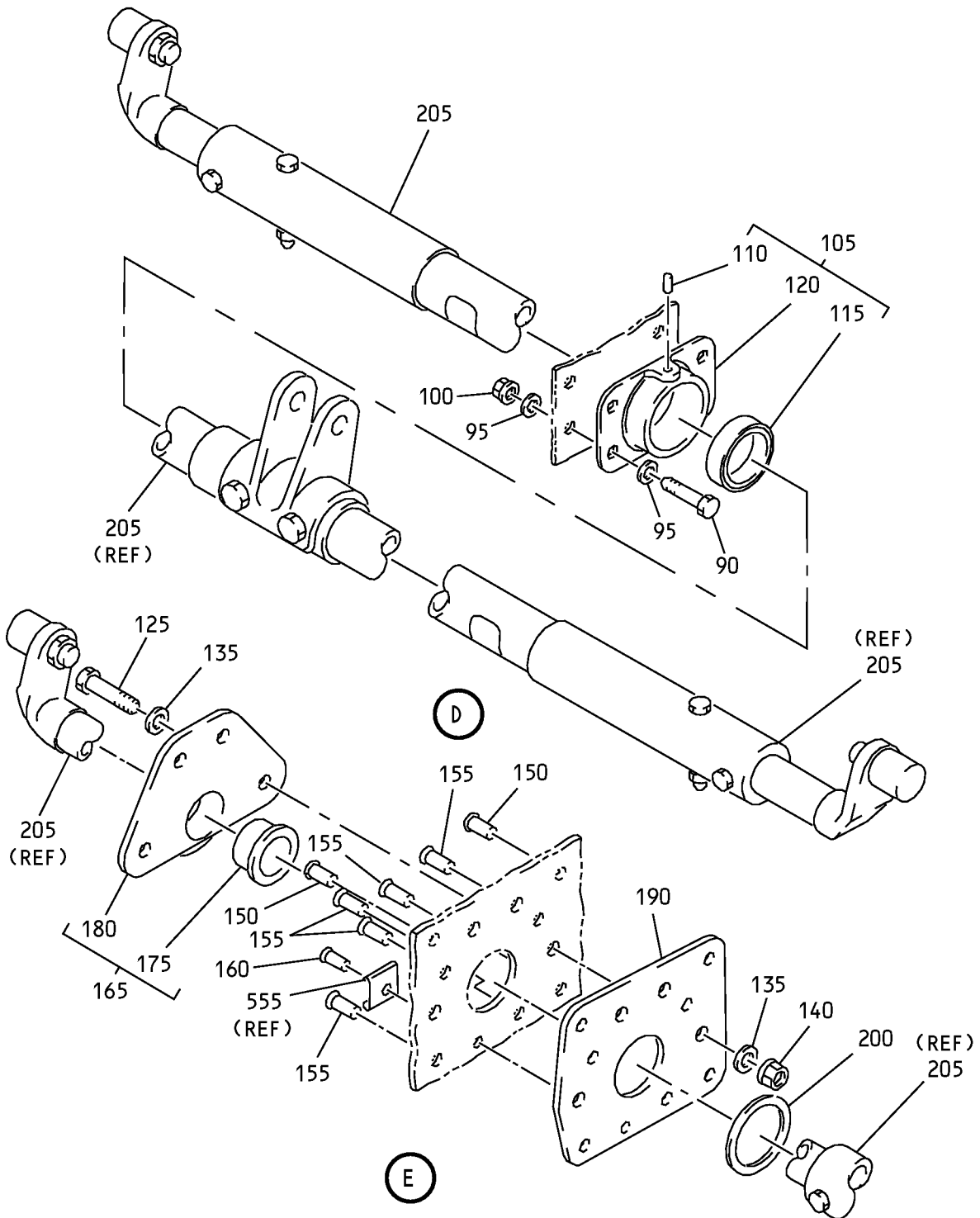
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 4 of 23)

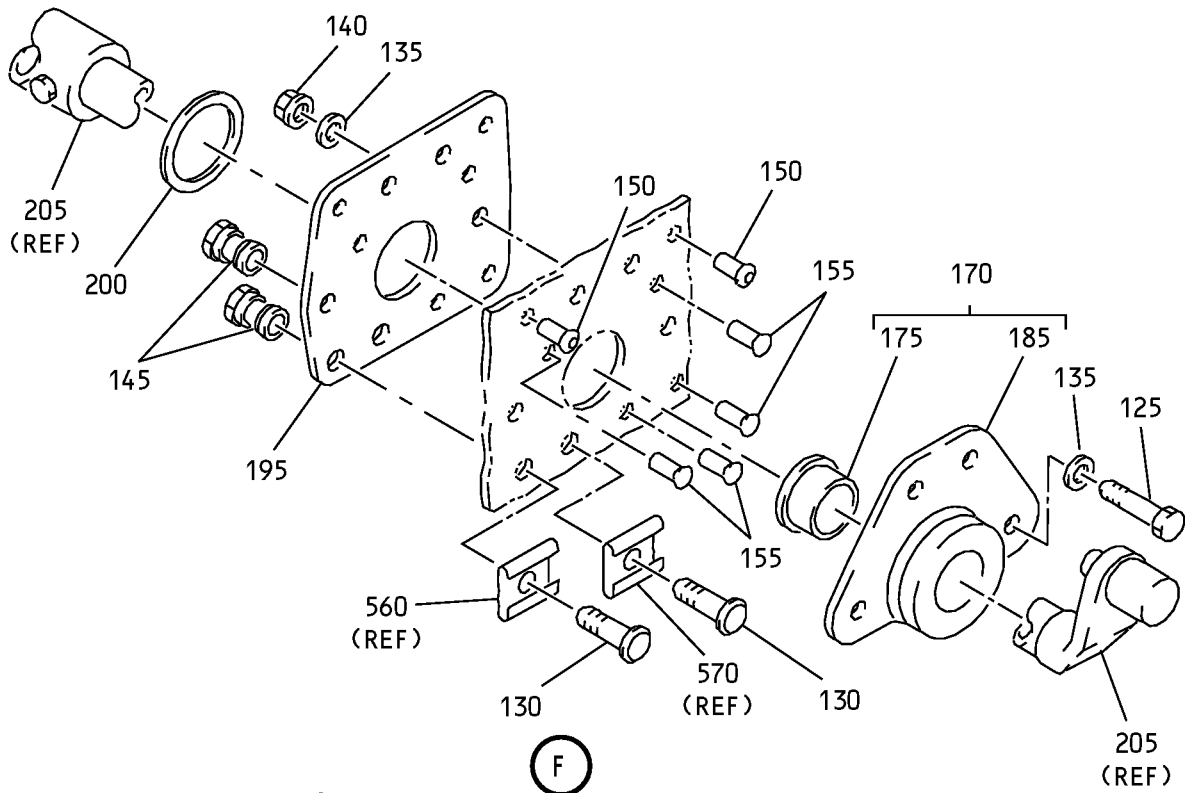
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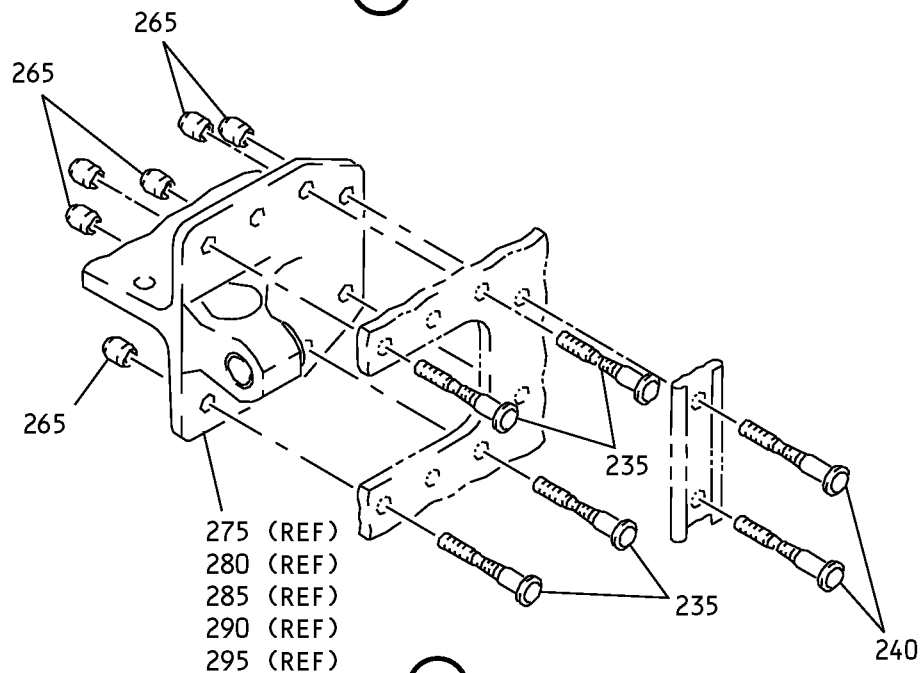
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F



G

Aft Cargo Door Assembly
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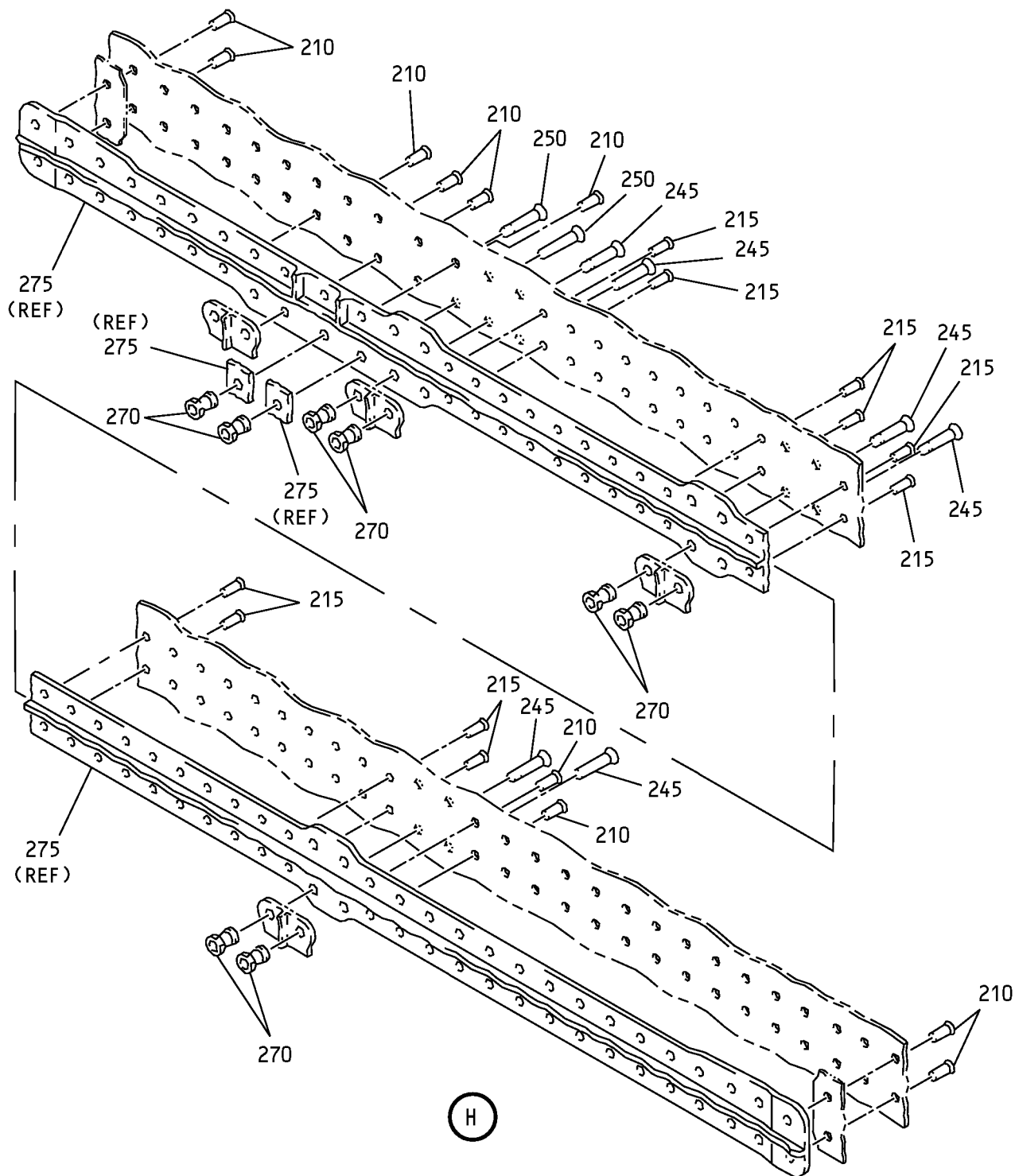
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H

Aft Cargo Door Assembly
IPL Figure 2 (Sheet 6 of 23)

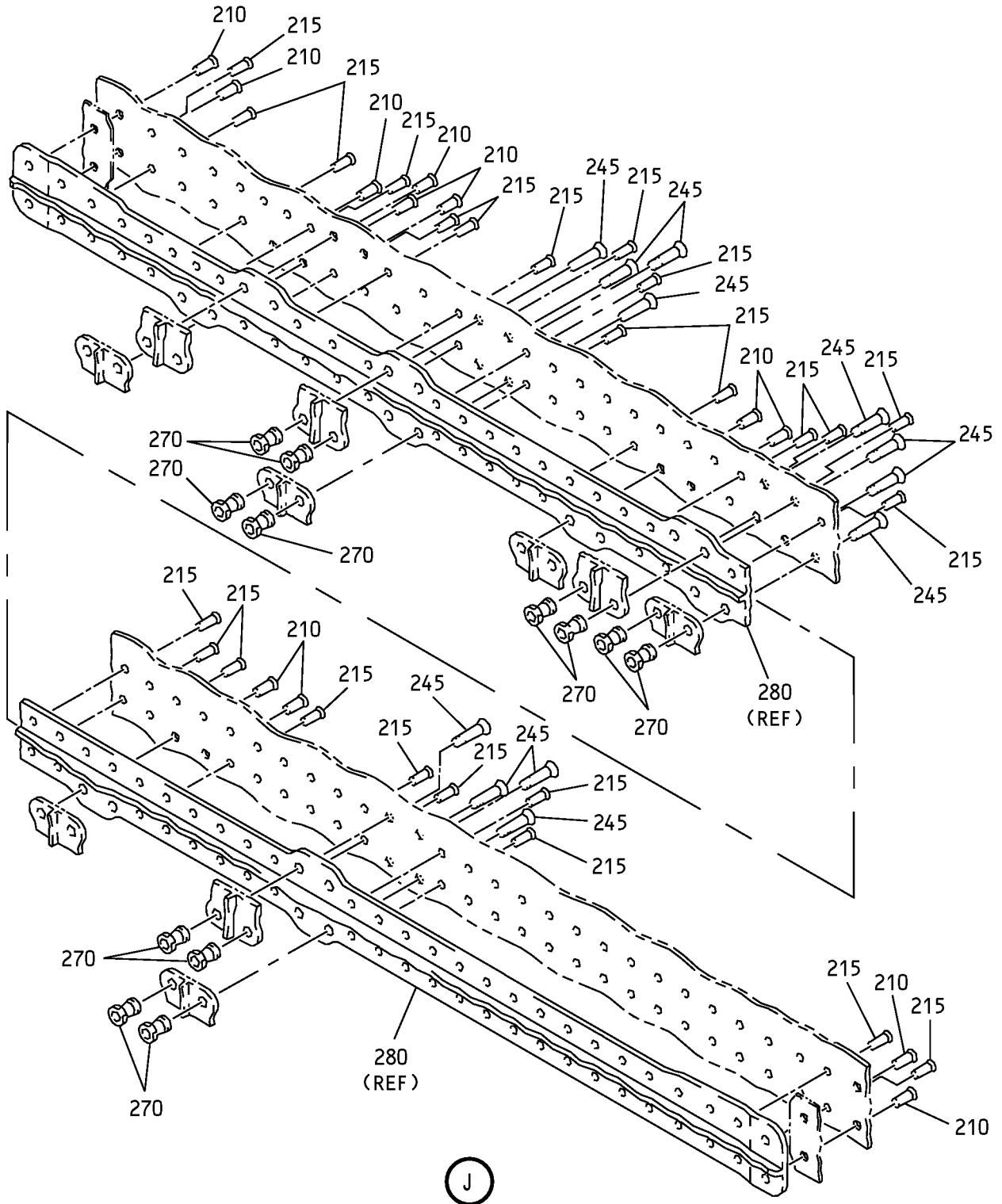
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 7 of 23)

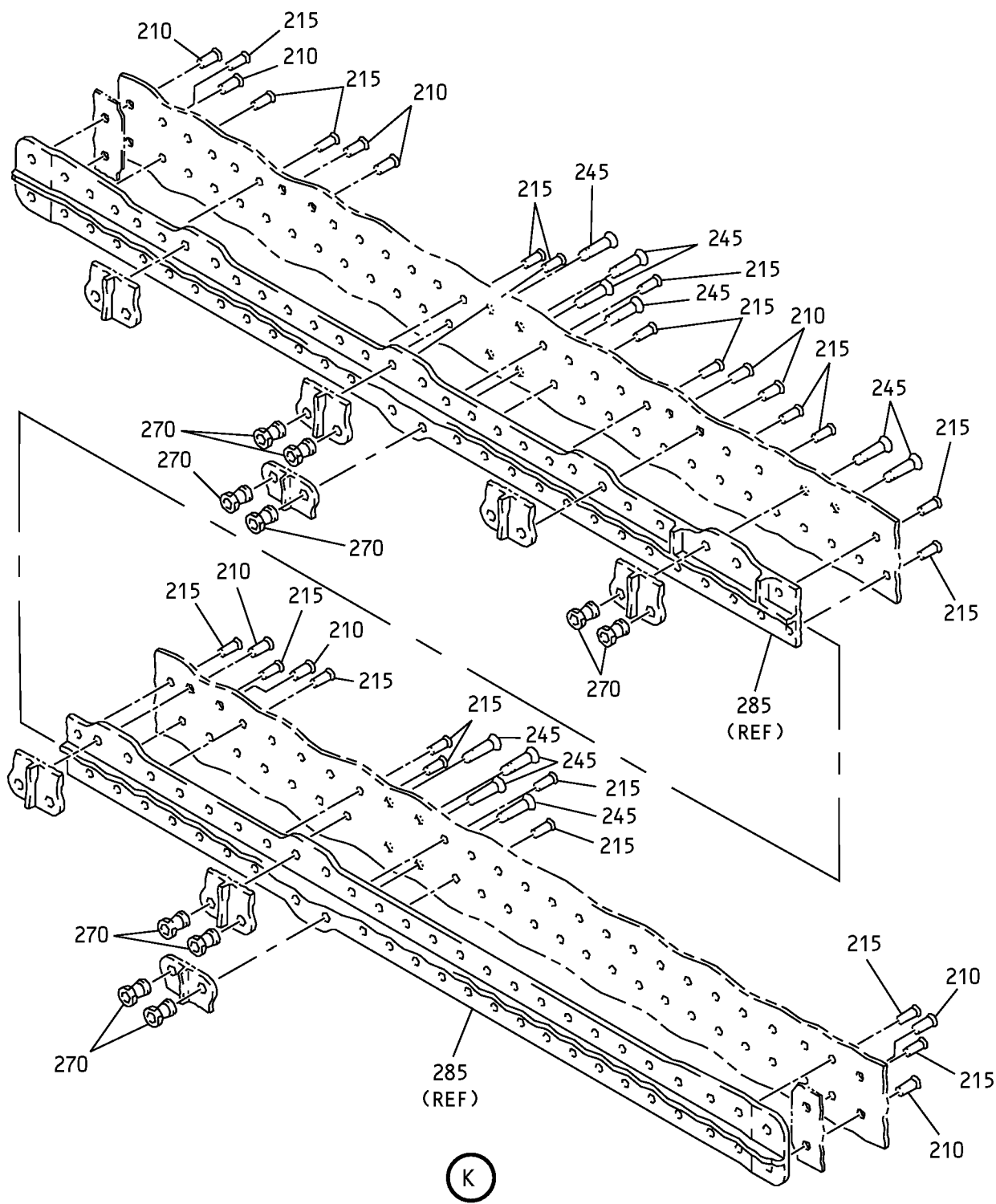
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 8 of 23)

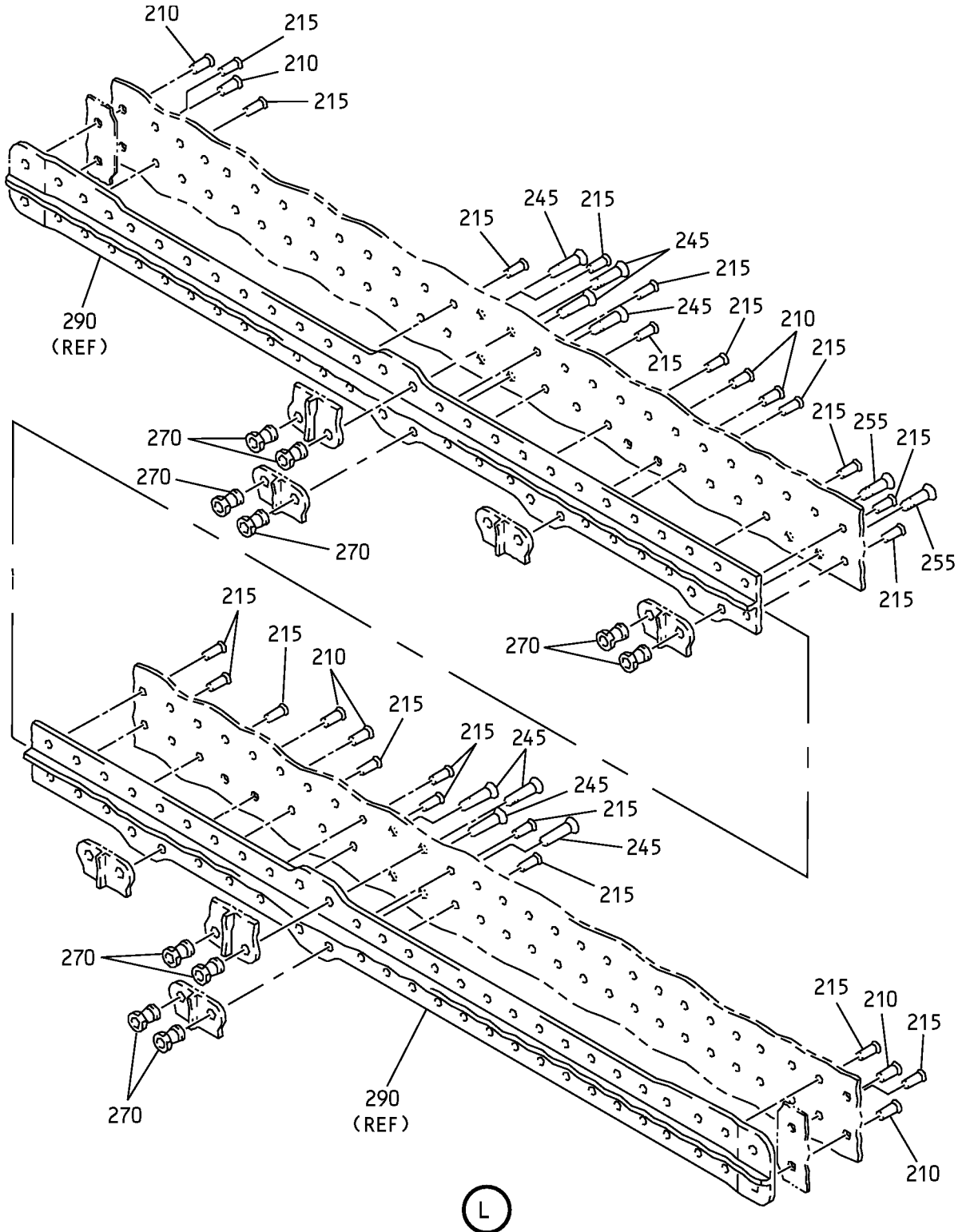
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 9 of 23)

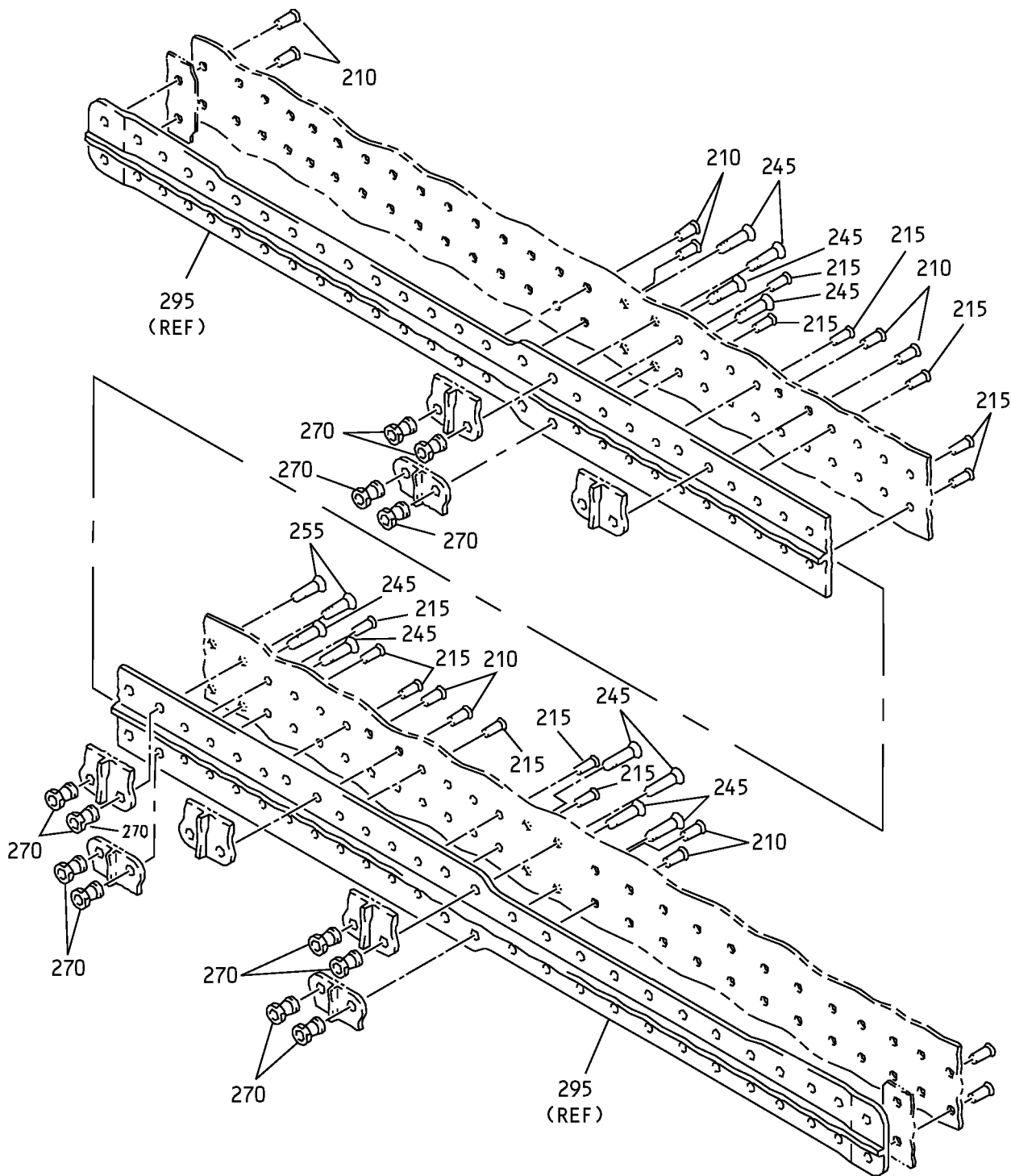
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 10 of 23)

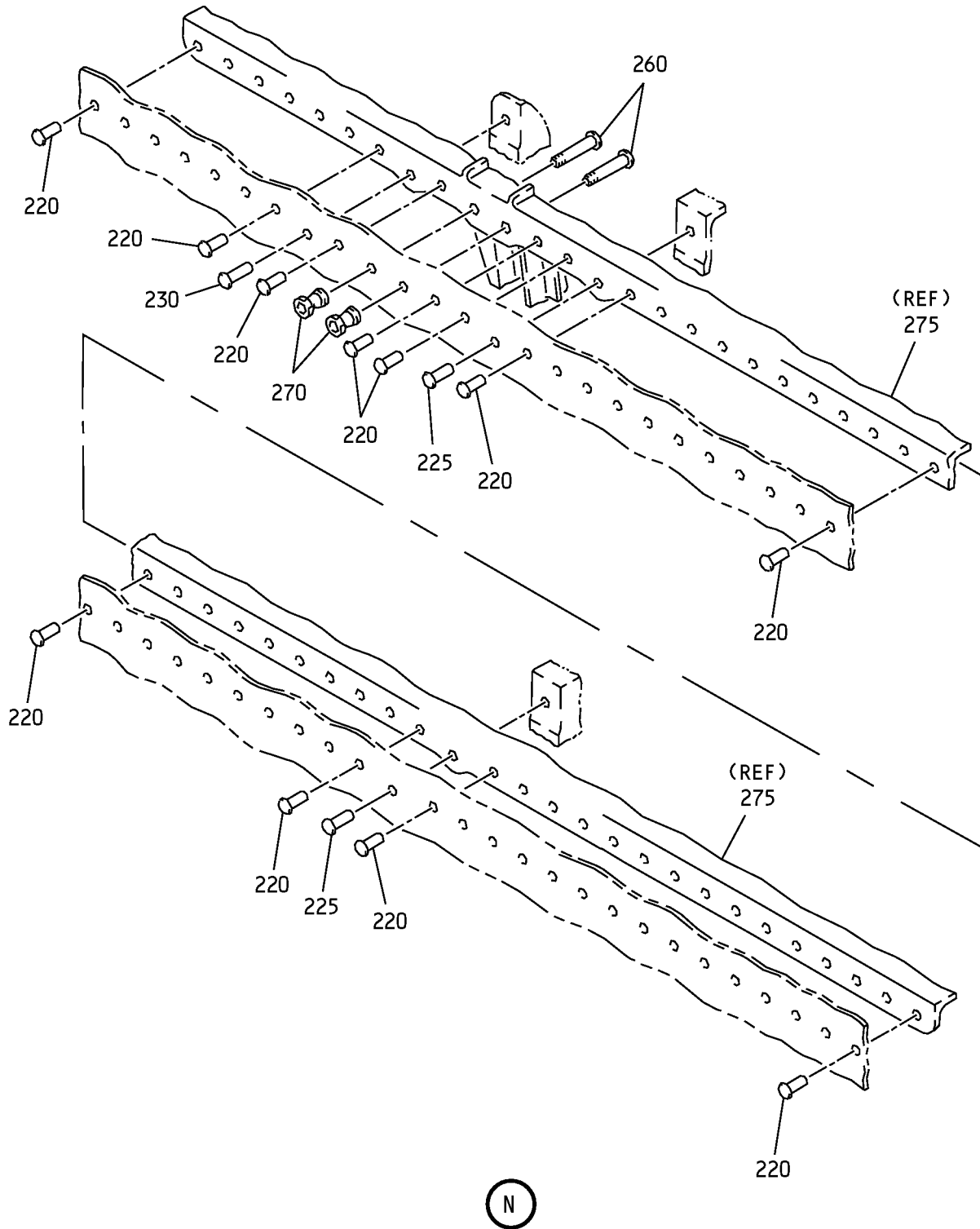
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 11 of 23)

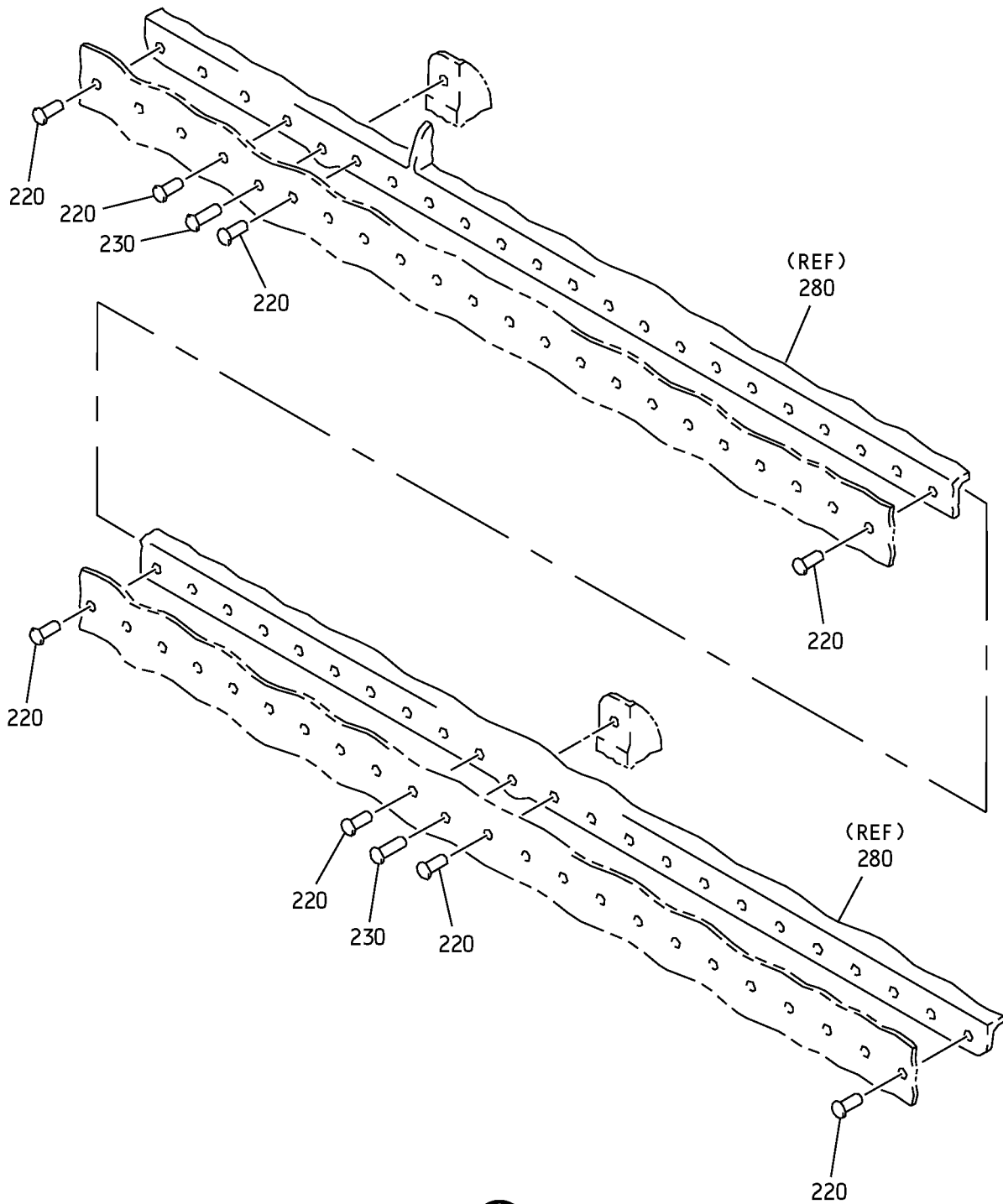
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P

Aft Cargo Door Assembly
IPL Figure 2 (Sheet 12 of 23)

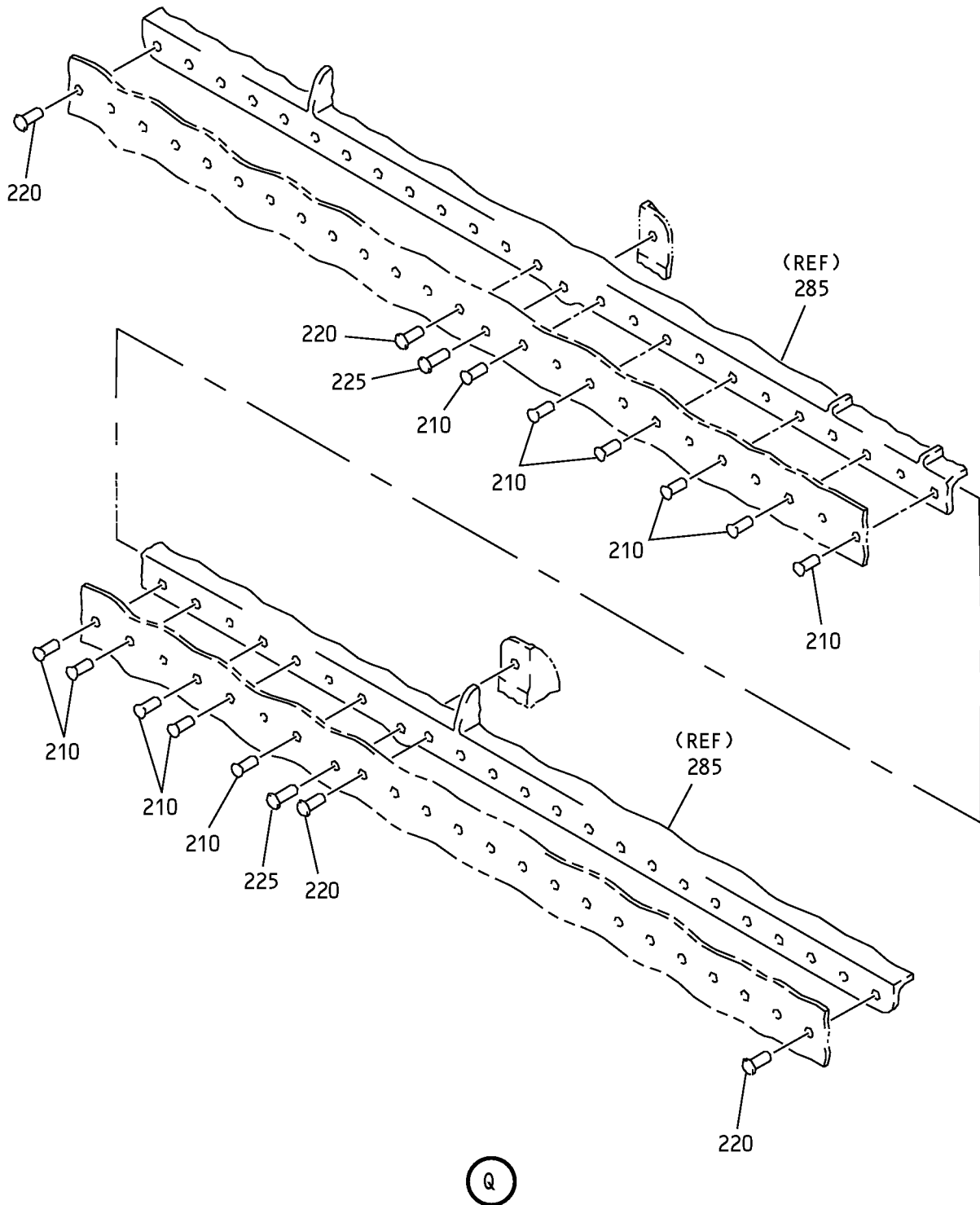
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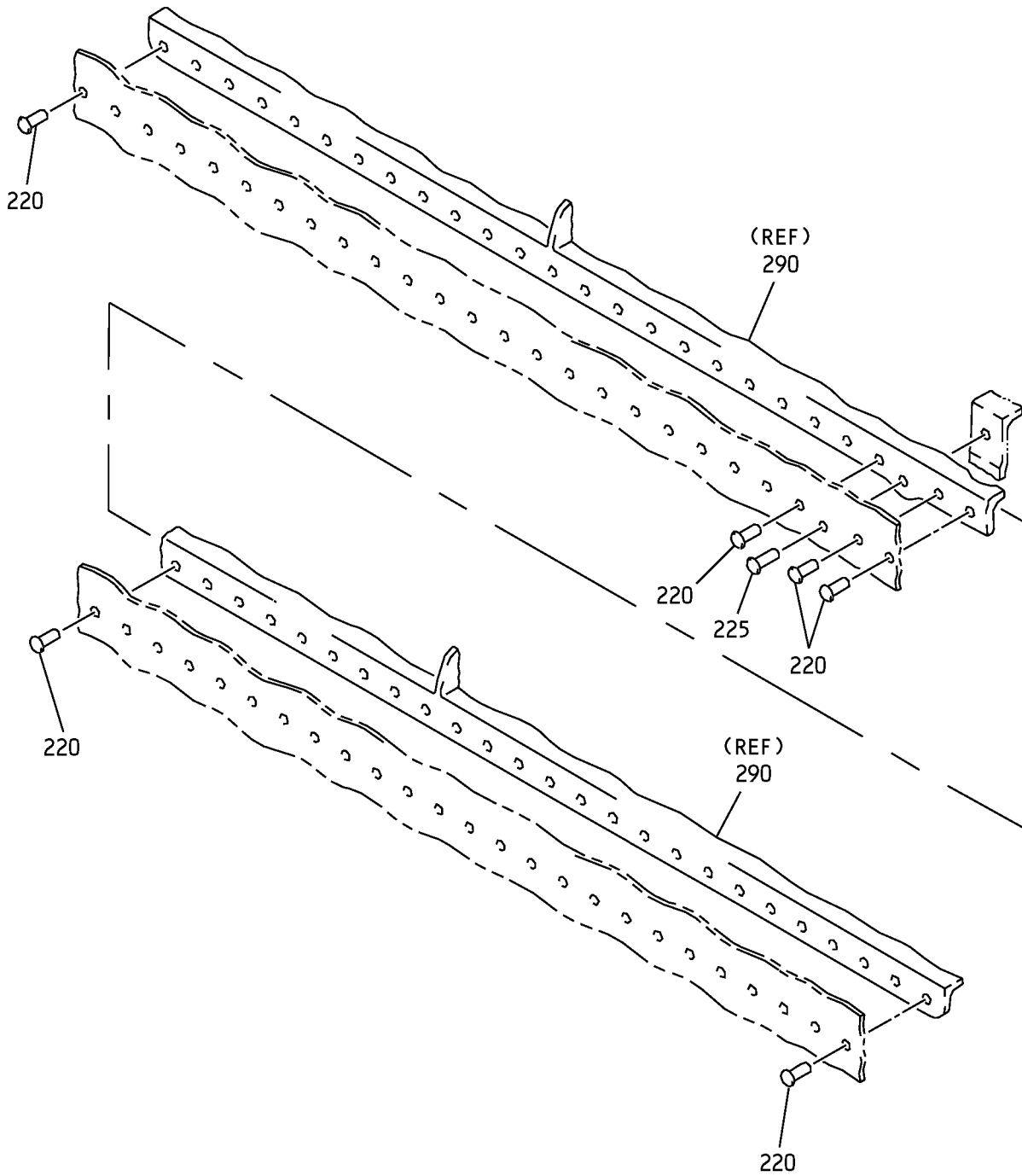
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 13 of 23)

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(R)

Aft Cargo Door Assembly
IPL Figure 2 (Sheet 14 of 23)

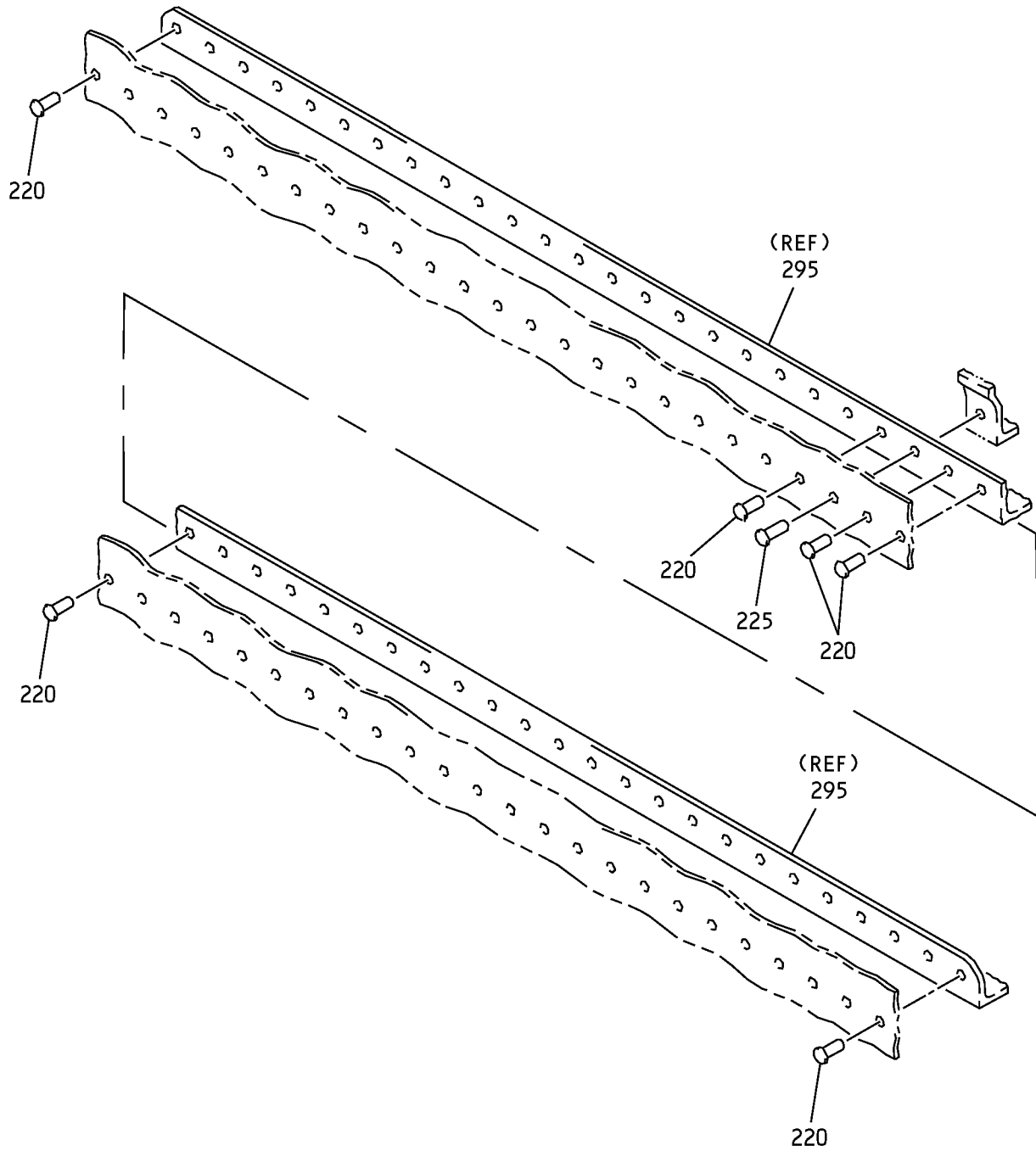
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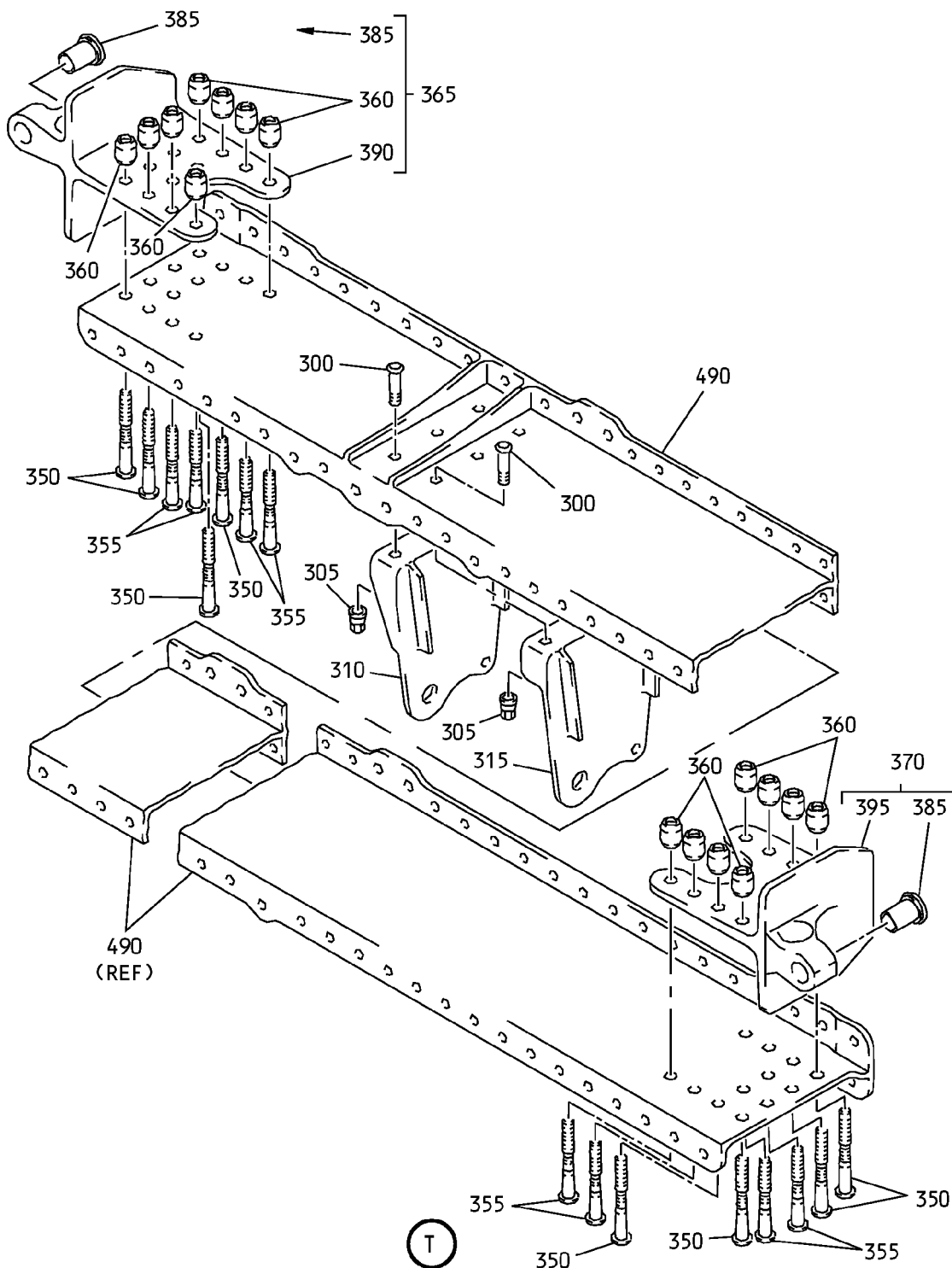
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S

Aft Cargo Door Assembly
IPL Figure 2 (Sheet 15 of 23)

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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 16 of 23)

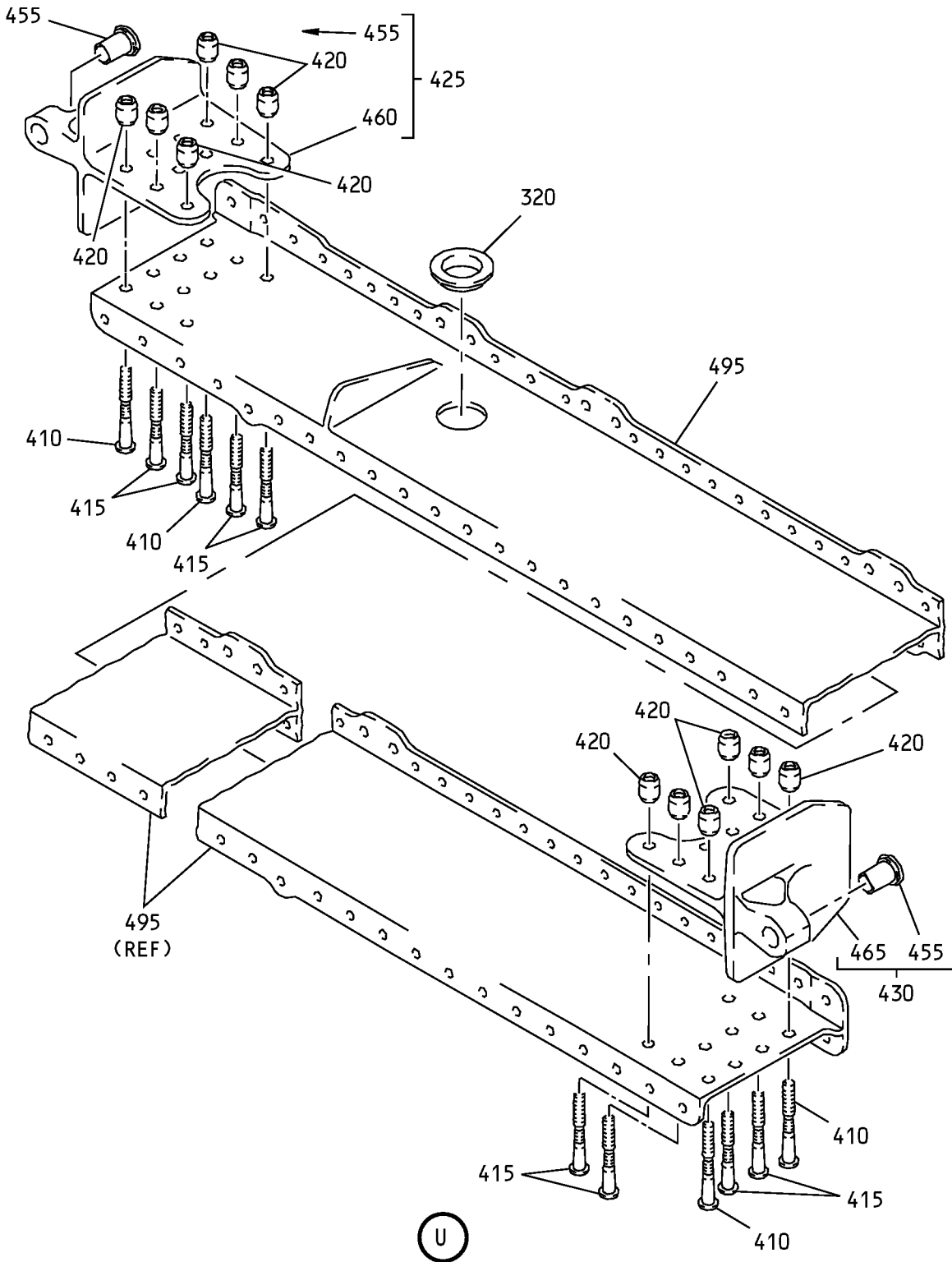
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 17 of 23)

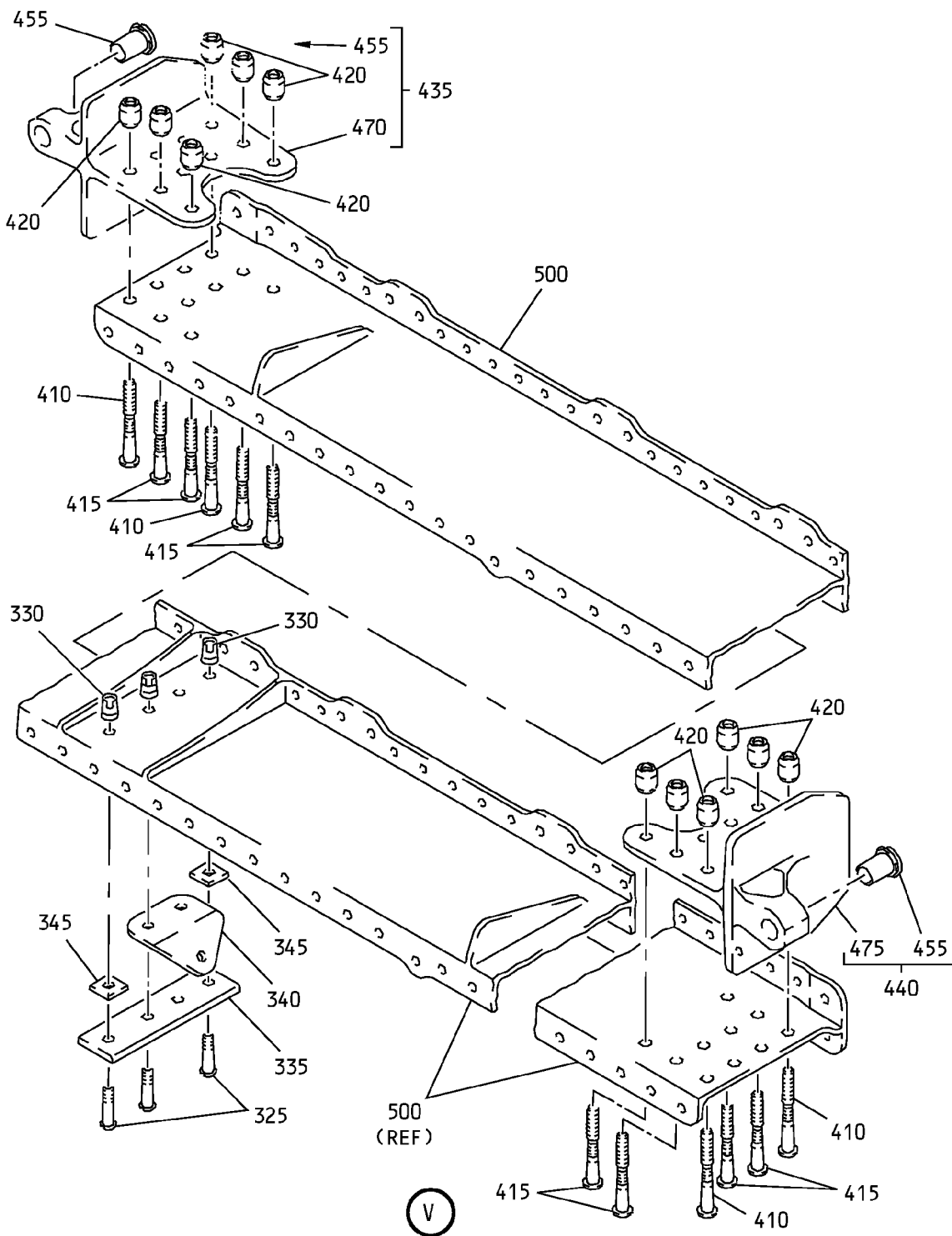
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Aft Cargo Door Assembly
IPL Figure 2 (Sheet 18 of 23)

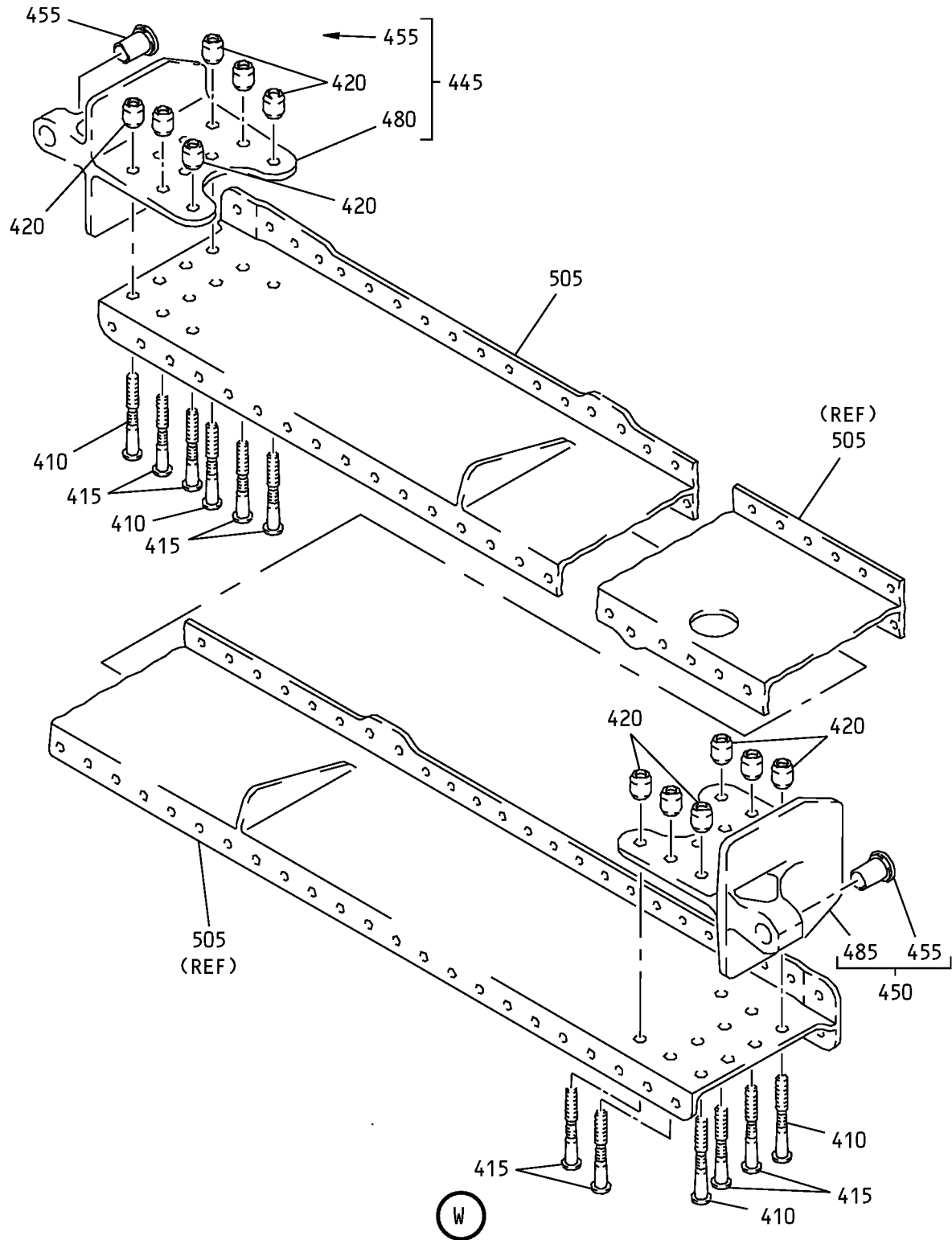
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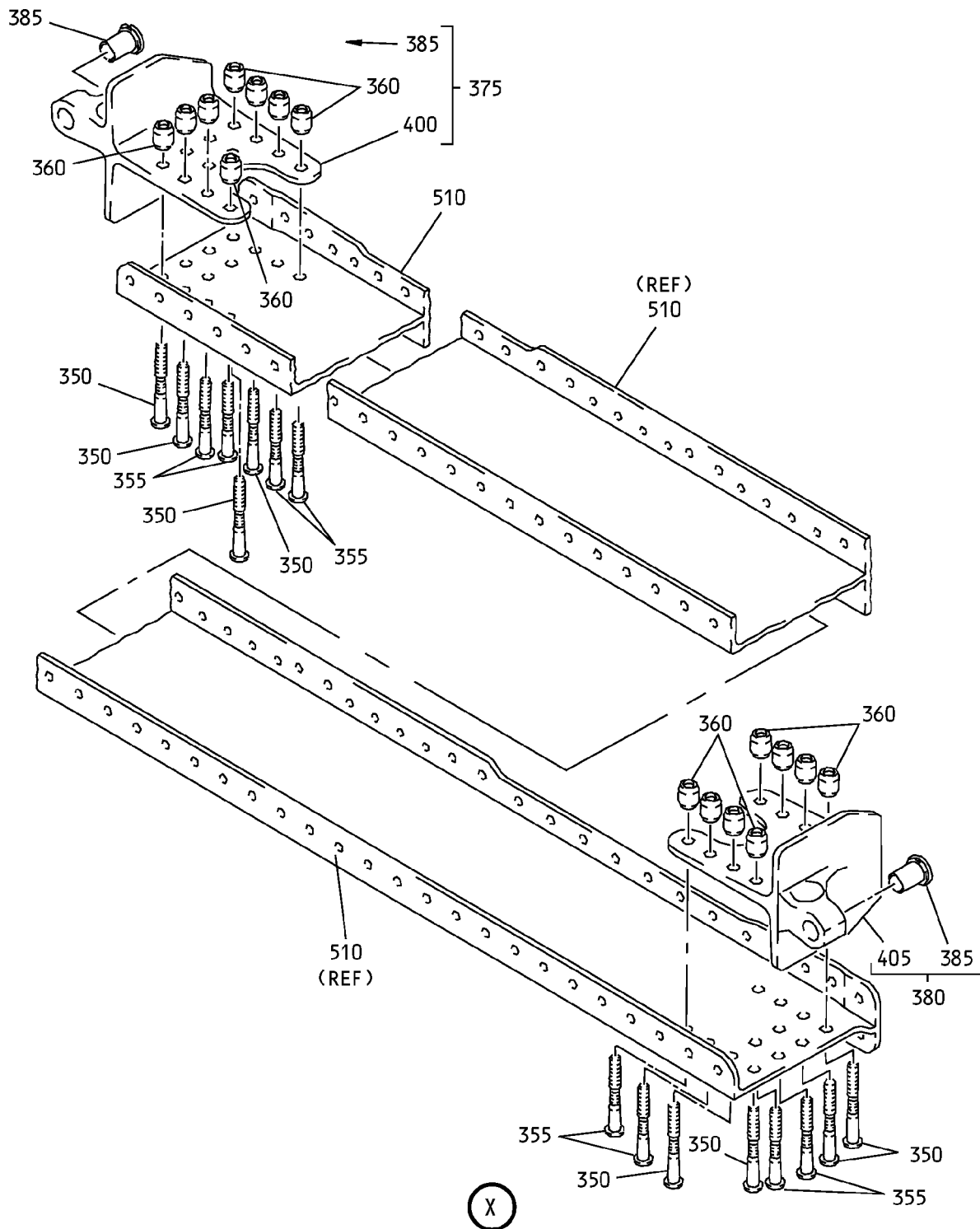
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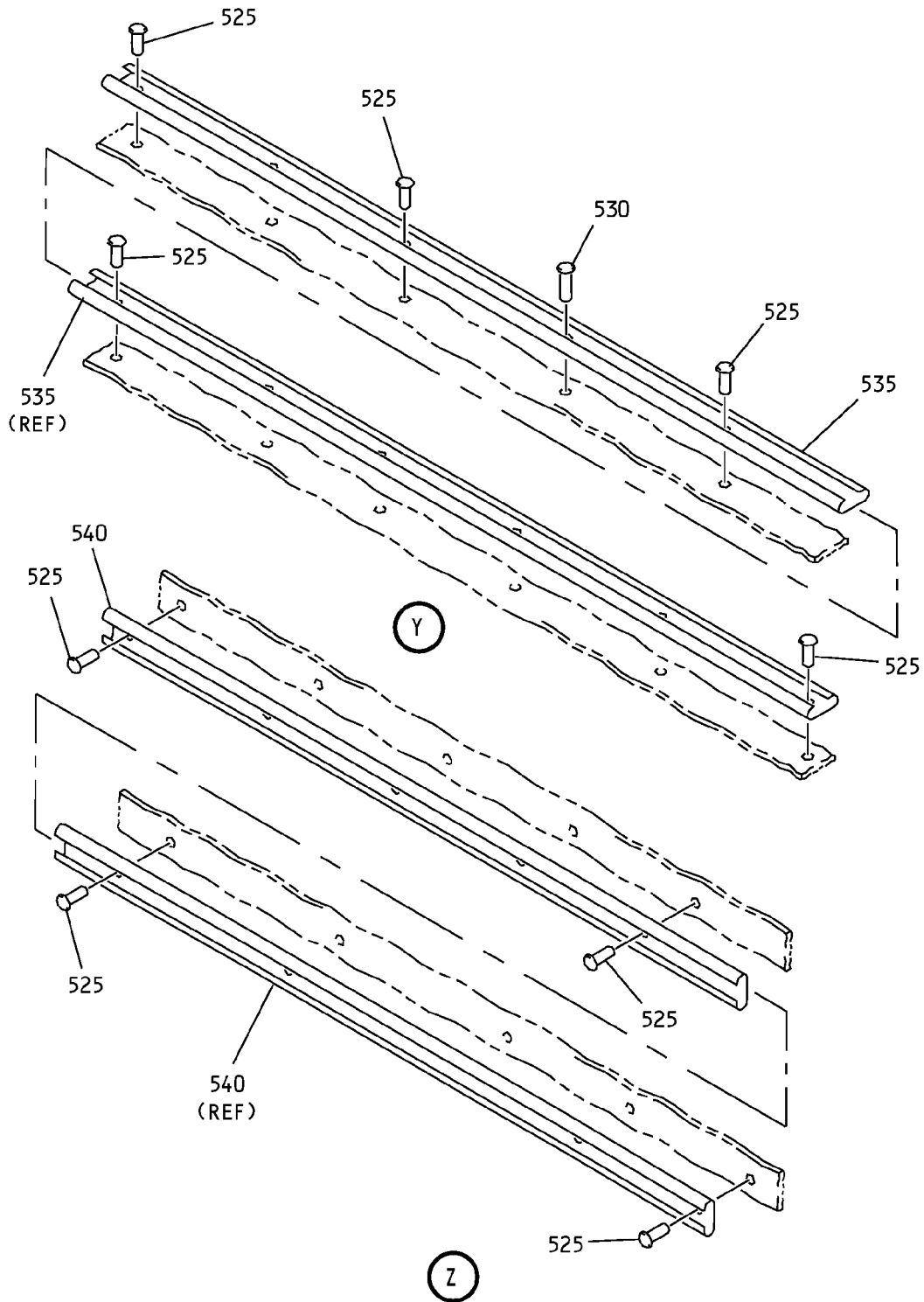
Aft Cargo Door Assembly
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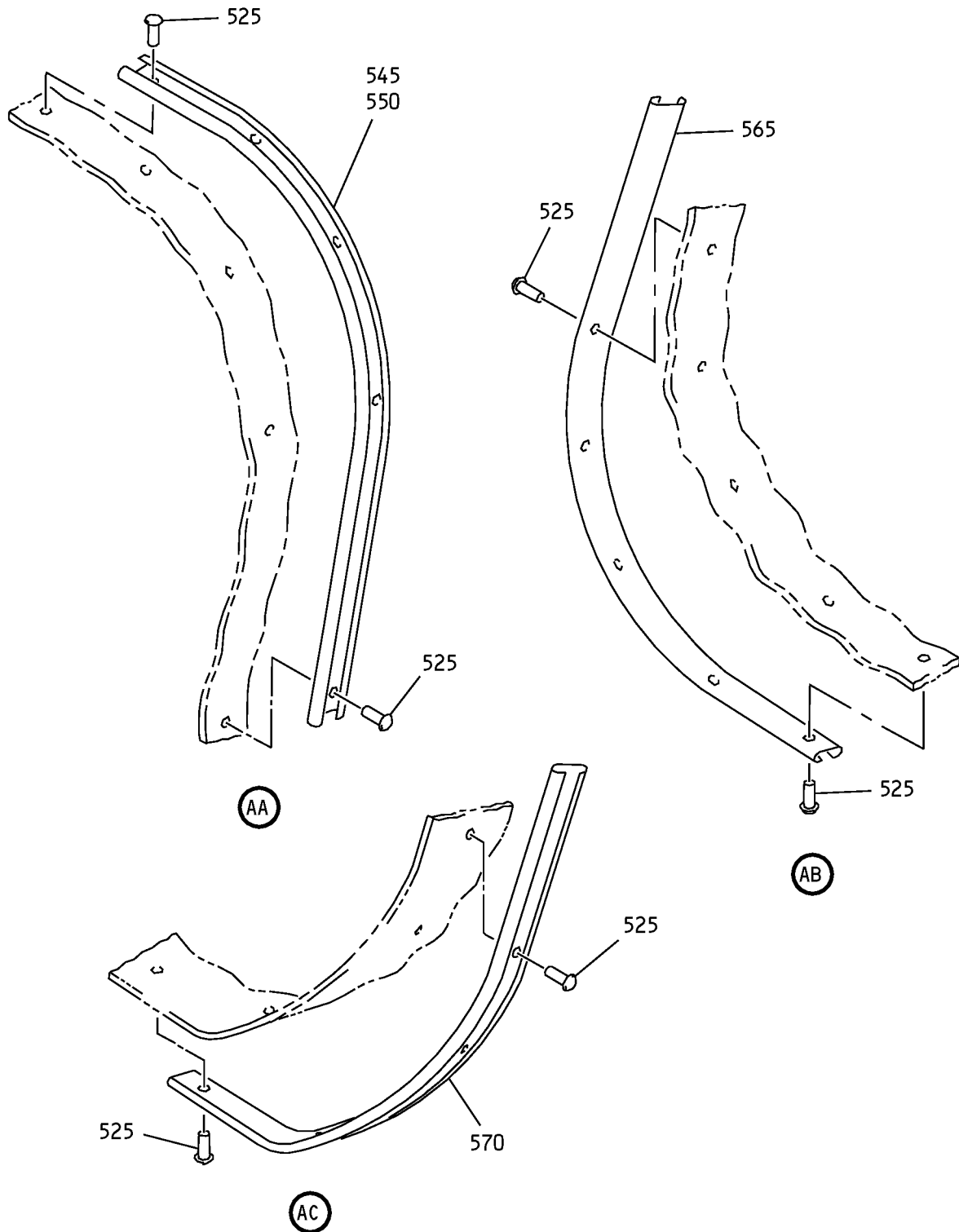
Aft Cargo Door Assembly
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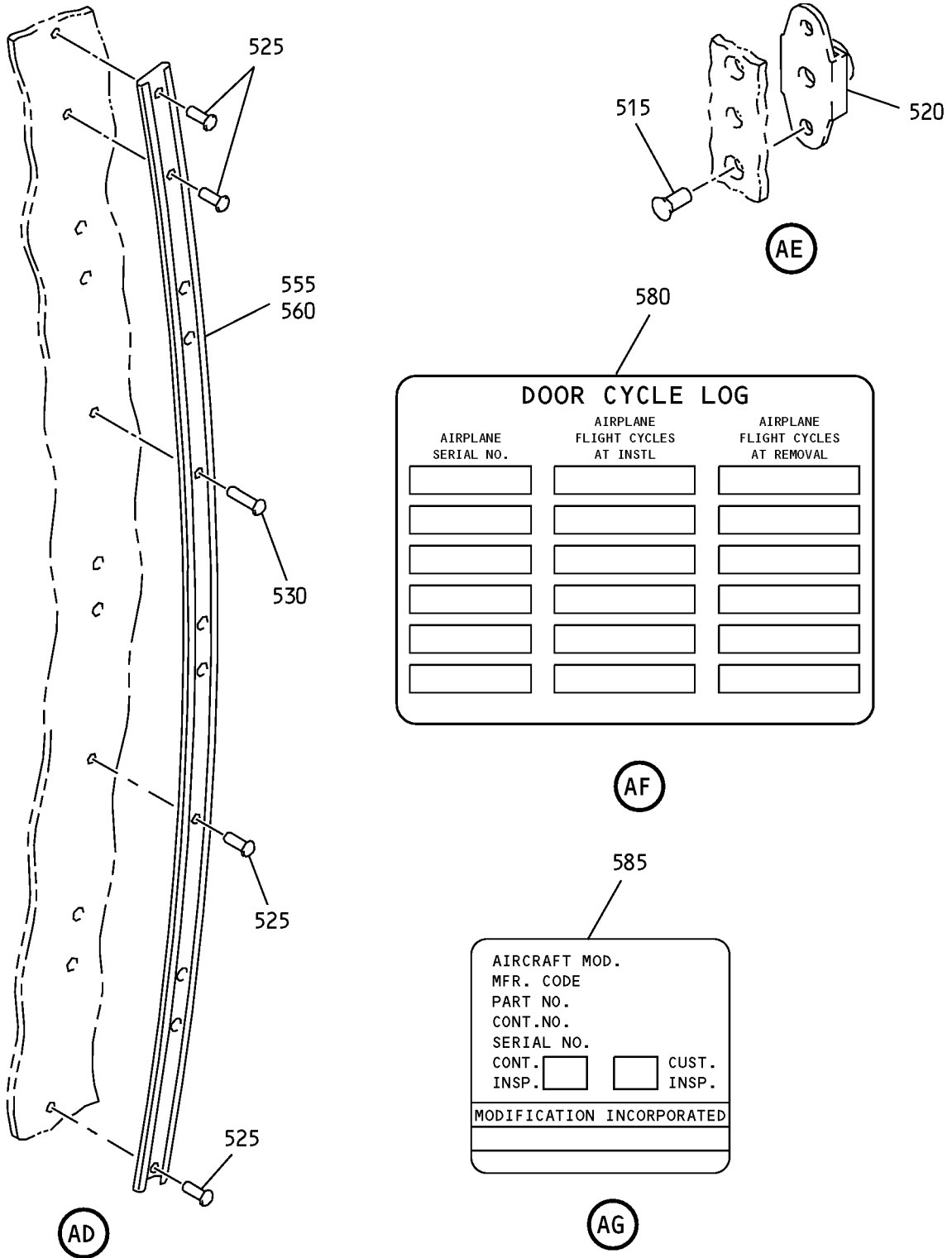
Aft Cargo Door Assembly
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Aft Cargo Door Assembly
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DOOR CYCLE LOG

AIRPLANE SERIAL NO.	AIRPLANE FLIGHT CYCLES AT INSTL	AIRPLANE FLIGHT CYCLES AT REMOVAL

585

AIRCRAFT MOD.	
MFR. CODE	
PART NO.	
CONT. NO.	
SERIAL NO.	
CONT. INSP.	<input type="checkbox"/>
CUST. INSP.	<input type="checkbox"/>
MODIFICATION INCORPORATED	

Aft Cargo Door Assembly
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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
-1A	146A6110-1										
-1B	146A6110-2										
-1C	146A6110-3										
-1D	146A6110-4								D	RF	
-1E	146A6110-5								E	RF	
-1F	146A6110-6								F	RF	
-1G	146A6110-7								G	RF	
-1H	146A6110-8								H	RF	
-1J	146A6110-11								A	RF	
-1K	146A6110-12								B	RF	
-1L	146A6110-13								C	RF	
-1M	146A6110-14								J	RF	
-1N	146A6110-15								K	RF	
-1P	146A6110-16								L	RF	
-1Q	146A6110-17								M	RF	

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
-1R	146A6110-19									N	RF
-1S	146A6110-18									P	RF
-1T	146A6110-20									Q	RF
-1U	146A6110-21									R	RF
-1V	146A6110-22									S	RF
-1W	146A6110-23									T	RF
-1X	146A6110-24									U	RF
-1Y	146A6110-25									V	RF
-1Z	146A6110-26									W	RF
-2	146A6110-27									X	RF
-2A	146A6110-28									Y	RF
-2B	146A6110-29									Z	RF
-2C	146A6110-30									AA	RF

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
-2D	146A6110-31									AB	RF
-2E	146A6110-32									AC	RF
-2F	146A6110-33									AD	RF
-2G	146A6110-34									AE	RF
-2H	146A6110-35									AF	RF
5	BACB30VF3K4										16
10	BACR15GF6D										16
15	BACR15GF5D										40
20	149A6135-1									A, B, D-H	2
-20A	149A6135-5									C, J-X	2
-20B	149A6135-9									Y-AF	2
25	BACR15BA3AD										16
27	BACR15BA4AD									C, J-U	8
30	F51643-3BAC										
30A	BACN10JZ3A2CD~ MU										8
35	65-47961-5										1
40	149A6135-2									A, B, D-H	1
-40A	149A6135-7									C, J-AF	1
42	149A6135-6									C, J-AF	1
45	149A6135-3										2

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
50	149A6135-4		.							A-J, M, P, R, S, V, W, Y, Z, AC, AD	2
-50A	149A6135-8		.							K, L, N, Q, T, U, X, AA, AB, AE, AF	2
55	BACB30NT3K9		.								6
60	NAS1149D0332J		.								6
65	BACR15BA3AD		.								12
-65A	BACR15GE3CW2		.								12
70	BRF200C3D		.								6
75	149A6132-1		.								1
80	149A6132-2		.								1
85	149A6133-1		.								4
90	BACB30NM3K4		.								4
95	NAS1149D0363J		.								8
100	PLH53CD		.								4
105	65-2306-11		.								1
110	NAS516-1A		.	.							1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
115	ASSB16-19		. . BEARING								1
			(V15860)								
			(SPEC BACB10A397GCM2)								
			(OPT BLN16385GC (V81376))								
			(OPT KSSB16-5 (V97613))								
			(OPT NB16BM2 (V73134))								
			(OPT 55001 (V09455))								
			(OPT ABW16-101 (VS0352))								
			(OPT HGL16-102 (V02758))								
			(OPT NB12BGCM2 (V73134))								
			(OPT NC16-4 (V56644))								
120	65-2306-12		. . HOUSING								1
125	BACB30NM4K6		. BOLT								8
130	HST10AG6-3		. BOLT								2
			(V0PTK6)								
			(SPEC BACB30VT6K3)								
			(OPT HST10AG6-3 (V06725))								
			(OPT HST10AG6-3 (V56878))								
			(OPT HST10AG6-3 (V73197))								
			(OPT WC10K6-3 (V60516))								
135	NAS1149D0463J		. WASHER								16
140	PLH54CD		. NUT								8
			(VF0224)								
			(SPEC BACN10YR4CD)								
			(OPT PLH54CD (V62554))								
145	BACC30BL6		. COLLAR								2
150	BACR15FT6D		. RIVET								4
			(SIZE DETERMINED ON INST)								
155	BACR15GF6D		. RIVET								9
			(SIZE DETERMINED ON INST)								
160	BACR15GK4E3		. RIVET								1
165	146A6126-1		. HOUSING ASSY-BRG, FWD								1
170	146A6126-2		. HOUSING ASSY-BRG, AFT								1
175	69-45425-1		. . BEARING								1
180	146A6126-3		. . HOUSING								1
			(USED ON ITEM 165)								
185	146A6126-4		. . HOUSING								1
			(USED ON ITEM 170)								
190	146A6116-3		. DOUBLER-FRAME						A-F, H- AF		1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
-190A	146A6116-1		.							G	1
195	146A6116-4		.							A-F, H- AF	1
-195A	146A6116-2		.							G	1
200	BACW10P278AL		.								AR
205	149A6130-3		.								1
210	BACR15GF6D		.								151
215	BACR15GF5D		.								336
220	BACR15GK6E4		.								215
225	BACR15GK6E5		.								6
230	BACR15GK6E6		.								3
235	LGPL2SPV6-3AC		.								60
240	LGPL2SPV6-4AC		.								20
245	HST11AG6-4		.								42
250	HST11AG6-5		.								2

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
255	HST11AG6-3		.	BOLT							4
				(V06725)							
				(SPEC BACB30VU6K3)							
				(OPT HST11AG6-3 (V73197))							
				(OPT HST11AG6-3 (V56878))							
				(OPT HST11AG6-3 (V0PTK6))							
260	HST10AG6-6		.	BOLT							2
				(V0PTK6)							
				(SPEC BACB30VT6K6)							
				(OPT HST10AG6-6 (V06725))							
				(OPT HST10AG6-6 (V56878))							
				(OPT HST10AG6-6 (V73197))							
				(OPT WC10K6-6 (V60516))							
265	3SLCC6		.	COLLAR							80
				(V17446)							
				(SPEC BACC30BK6)							
				(OPT 3SLCC6 (V92215))							
270	BACC30BL6		.	COLLAR							50
275	146A6117-9		.	BEAM ASSY					A-F, H-L		1
-275A	146A6117-1		.	BEAM ASSY					G		1
-275B	146A6117-10		.	BEAM ASSY					M-AF		1
280	146A6117-6		.	BEAM ASSY							1
285	146A6117-7		.	BEAM ASSY							1
290	146A6117-8		.	BEAM ASSY							1
295	146A6117-5		.	BEAM ASSY							1
300	HL1012AZ6-4		.	BOLT							6
				(V97928)							
				(SPEC BACB30NX6K4)							
				(OPT HL12VAZ6-4 (V73197))							
				(OPT HL12VAZ6-4 (V92215))							
				(OPT HL12VAZ6-4 (V97928))							
				(OPT L802-6K4 (V06725))							
				(OPT HL12VAZ6-4 (V56878))							
				(OPT HL1012AZ6-4 (V0PTK6))							
				(OPT HL1012AZ6-4 (V06725))							
				(OPT HL1012AZ6-4 (V06950))							
				(OPT HL1012AZ6-4 (V17446))							
				(OPT HL1012AZ6-4 (V56878))							
				(OPT HL1012AZ6-4 (V60516))							
				(OPT HL1012AZ6-4 (V73197))							
				(USED ON ITEMS 275, 275A, 275B)							

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY		
			1	2	3	4	5	6	7				
2- 305	HL1087-6		. .									6	
			. .										1
			. .							A-F, H- AF			1
			. .							G			1
			. .										1
			. .										4
			. .										4
			. .										1
			. .										1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
345	BACF3F006J006NN								. . FILLER (USED ON ITEM 285)		2
350	LGPL2SPV8-6AC								. . BOLT (V17446) (SPEC BACB30VN8K6) (OPT LGPL2SPV8-6AC (V92215)) (OPT 81669V8K6 (V56878)) (OPT LGPL2SPV8-6AC (V56878)) (USED ON ITEMS 275, 275A, 275B, 295)		16
355	LGPL2SPV8-5AC								. . BOLT (V17446) (SPEC BACB30VN8K5) (OPT LGPL2SPV8-5AC (V92215)) (OPT 81669V8K5 (V56878)) (OPT LGPL2SPV8-5AC (V56878)) (USED ON ITEMS 275, 275A, 275B, 295)		8
360	3SLCC8								. . COLLAR (V17446) (SPEC BACC30BK8) (OPT 3SLCC8 (V92215)) (USED ON ITEMS 275, 275A, 275B, 295)		24
365	146A6120-1								. . STOP ASSY-FWD (USED ON ITEMS 275, 275A, 275B)		1
370	146A6120-2								. . STOP ASSY-AFT (USED ON ITEMS 275, 275A, 275B)		1
375	146A6120-9								. . STOP ASSY-FWD (USED ON ITEM 295)		1
380	146A6120-10								. . STOP ASSY-AFT (USED ON ITEM 295)		1
385	66-12688-11								. . . BUSHING		1
390	146A6120-11								. . . FITTING-STOP (USED ON ITEM 365)		1
395	146A6120-12								. . . FITTING-STOP (USED ON ITEM 370)		1
400	146A6120-19								. . . FITTING-STOP (USED ON ITEM 375)		1
405	146A6120-20								. . . FITTING-STOP (USED ON ITEM 380)		1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2- 410	LGPL2SPV8-6AC		. .	BOLT							8
				(V17446)							
				(SPEC BACB30VN8K6)							
				(OPT LGPL2SPV8-6AC (V92215))							
				(OPT 81669V8K6 (V56878))							
				(OPT LGPL2SPV8-6AC (V56878))							
				(USED ON ITEMS 280, 285, 290)							
415	LGPL2SPV8-5AC		. .	BOLT							12
				(V17446)							
				(SPEC BACB30VN8K5)							
				(OPT LGPL2SPV8-5AC (V92215))							
				(OPT 81669V8K5 (V56878))							
				(OPT LGPL2SPV8-5AC (V56878))							
				(USED ON ITEMS 280, 285, 290)							
420	3SLCC8		. .	COLLAR							20
				(V17446)							
				(SPEC BACC30BK8)							
				(OPT 3SLCC8 (V92215))							
				(USED ON ITEMS 280, 285, 290)							
425	146A6120-3		. .	STOP ASSY-FWD							1
				(USED ON ITEM 280)							
430	146A6120-22		. .	STOP ASSY-AFT							1
				(USED ON ITEM 280)							
435	146A6120-5		. .	STOP ASSY-FWD							1
				(USED ON ITEM 285)							
440	146A6120-24		. .	STOP ASSY-AFT							1
				(USED ON ITEM 285)							
445	146A6120-7		. .	STOP ASSY-FWD							1
				(USED ON ITEM 290)							
450	146A6120-26		. .	STOP ASSY-AFT							1
				(USED ON ITEM 290)							
455	66-12688-11		. . .	BUSHING							1
460	146A6120-13		. . .	FITTING-STOP							1
				(USED ON ITEM 425)							
465	146A6120-28		. . .	FITTING-STOP							1
				(USED ON ITEM 430)							
470	146A6120-15		. . .	FITTING-STOP							1
				(USED ON ITEM 435)							
475	146A6120-30		. . .	FITTING-STOP							1
				(USED ON ITEM 440)							

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
480	146A6120-17							. . . FITTING-STOP (USED ON ITEM 445)			1
485	146A6120-32							. . . FITTING-STOP (USED ON ITEM 450)			1
490	146A6118-6							. . BEAM (USED ON ITEMS 275, 275A)	A-L		1
I -490A	146A6118-14							. . BEAM (USED ON ITEM 275B)	M-AF		1
495	146A6118-7							. . BEAM (USED ON ITEM 280)			1
500	146A6118-3							. . BEAM (USED ON ITEM 285)			1
505	146A6118-4							. . BEAM (USED ON ITEM 290)			1
510	146A6118-13							. . BEAM (USED ON ITEM 295)			1
515	BACR15BA3AD							. RIVET (SIZE DETERMINED ON INST)			6
520	BRF200C3D							. NUTPLATE (V52828) (SPEC BACN10JR3CFD) (OPT K51602-3BAC (V15653)) (OPT NS202476-02 (V80539)) (OPT 102F9201-3 (V72962)) (OPT T8092C1032CD (V11815))			3
525	BACR15GK4E2							. RIVET			46
530	BACR15GK4E4							. RIVET			3
535	146A6131-2							. RETAINER-SEAL			1
540	146A6131-6							. RETAINER-SEAL			1
545	146A6131-1							. RETAINER-SEAL			1
550	146A6131-3							. RETAINER-SEAL			1
555	146A6131-8							. RETAINER-SEAL			1
560	146A6131-4							. RETAINER-SEAL			1
565	146A6131-7							. RETAINER-SEAL			1
570	146A6131-5							. RETAINER-SEAL			1

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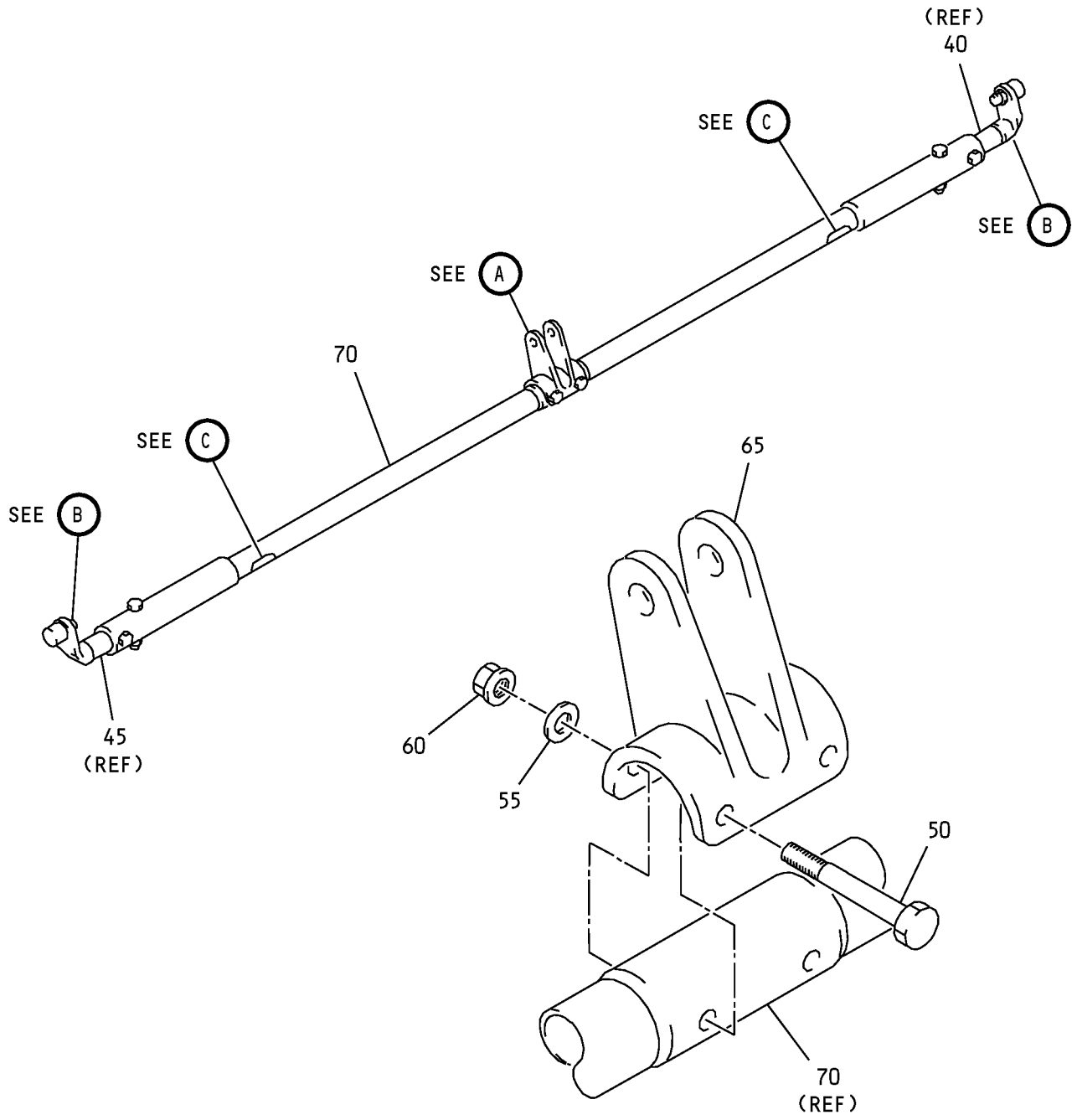


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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2- 575	88D10204-174		.	SEAL (V60980) (SPEC S140T263-174) (OPT SF15-120-174 (V50711))							1
580	BAC27DBY191		.	MARKER-ALUMINUM FOIL							1
585	MS27253F1		.	PLATE-IDENT							1

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A

Aft Cargo Door Assembly
IPL Figure 3 (Sheet 1 of 2)

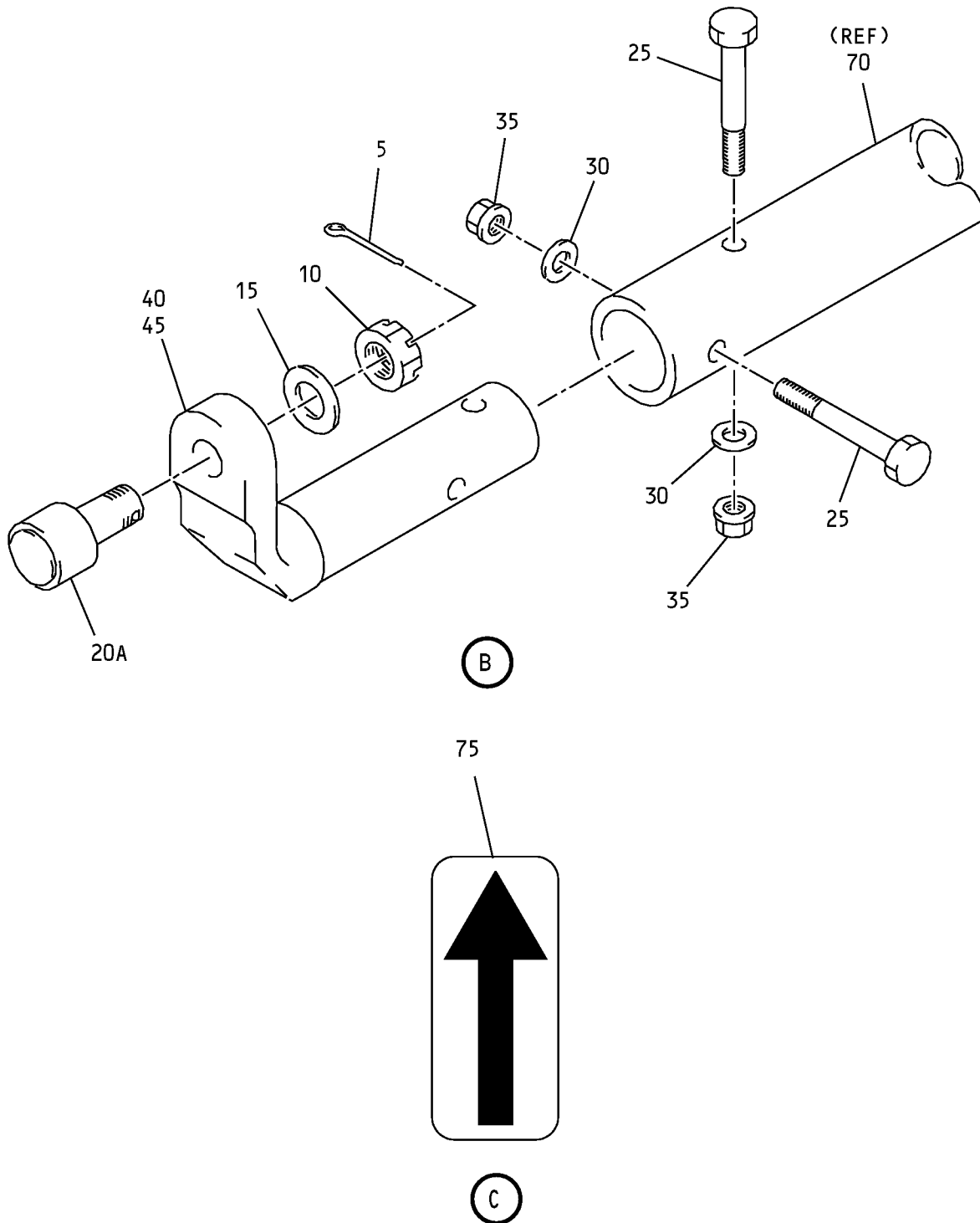
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Aft Cargo Door Assembly
IPL Figure 3 (Sheet 2 of 2)



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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
3-											
-1A	149A6130-3										RF
5	BACP18BC03A10P										2
10	BACN10JD106ASU										2
15	NAS1149C0616R										2
20	CR34XC222										
20A	KRP189606VTZ										2
-20B	ADTR4013										2
-20C	NHTR4002										2
25	BACB30NM3K16										4
30	NAS1149C0363R										4
35	PLH53CM										4
40	149A6138-3										1
45	149A6138-2										1
50	BACB30NM3K20										2
55	NAS1149D0316J										2
60	PLH53CD										2
65	65-1797-3										1
70	149A6131-2										1
75	BACM10L10-1GC										2

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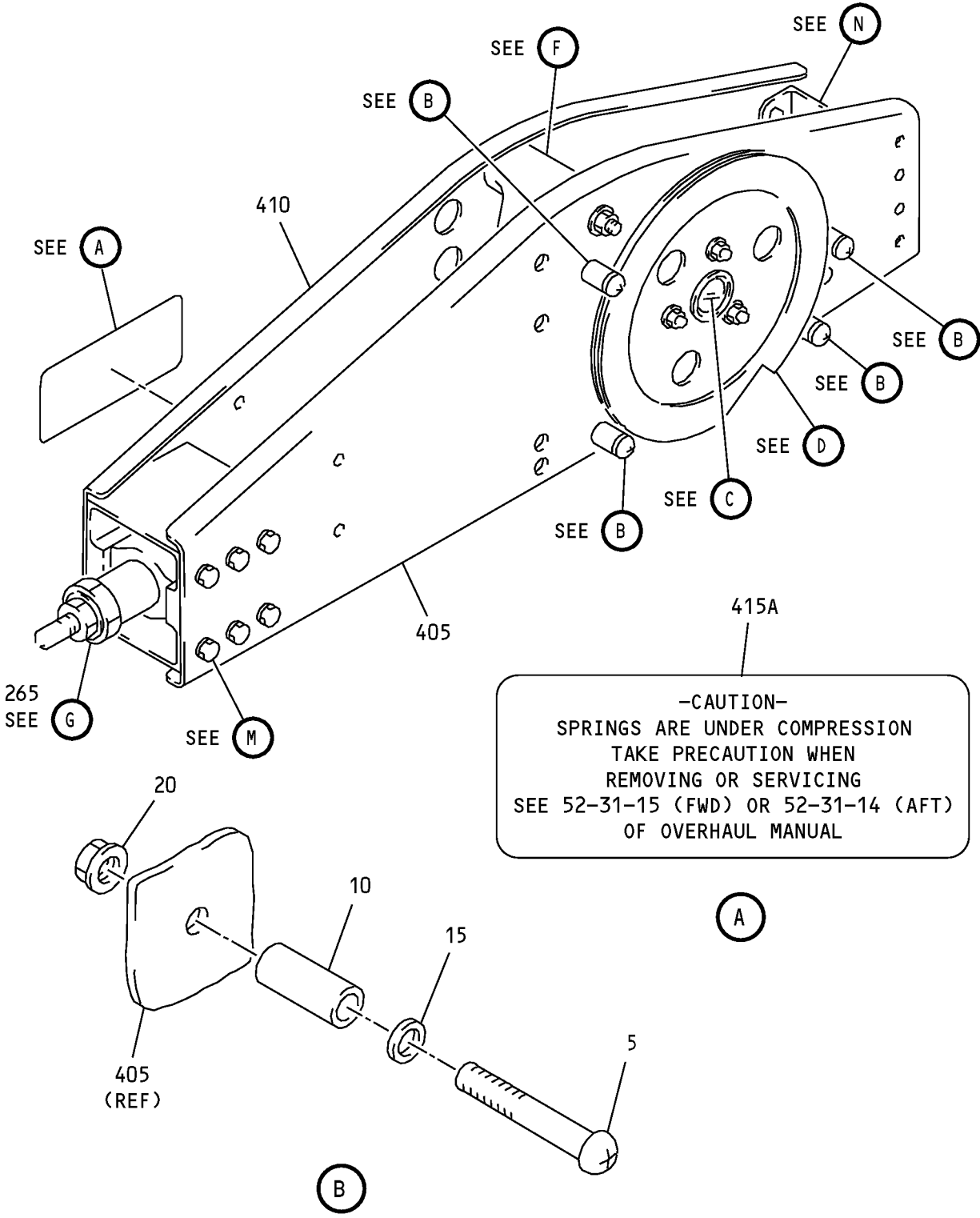
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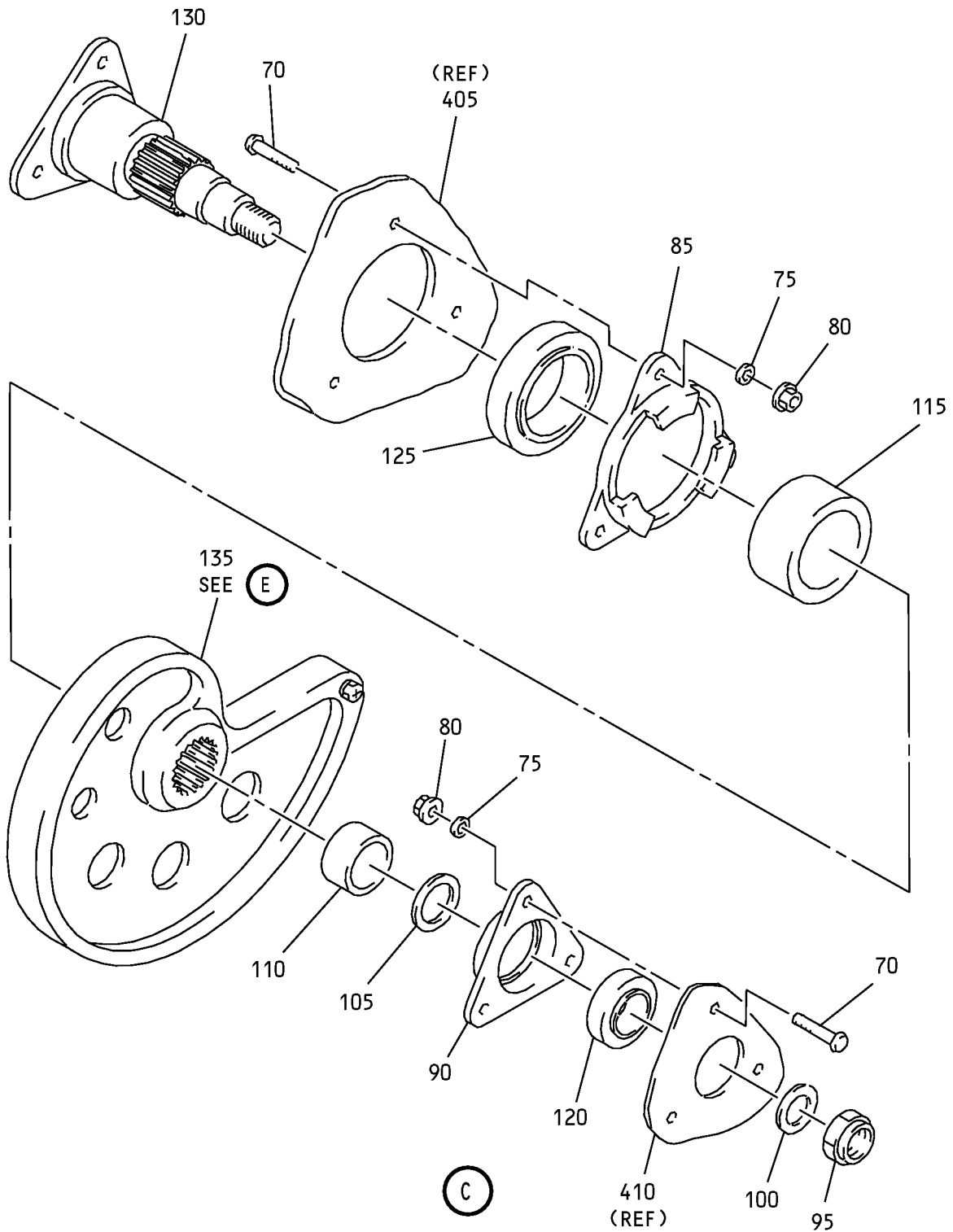
-CAUTION-
 SPRINGS ARE UNDER COMPRESSION
 TAKE PRECAUTION WHEN
 REMOVING OR SERVICING
 SEE 52-31-15 (FWD) OR 52-31-14 (AFT)
 OF OVERHAUL MANUAL

Counter Balance Assembly
 IPL Figure 4 (Sheet 1 of 7)

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Counter Balance Assembly
IPL Figure 4 (Sheet 2 of 7)

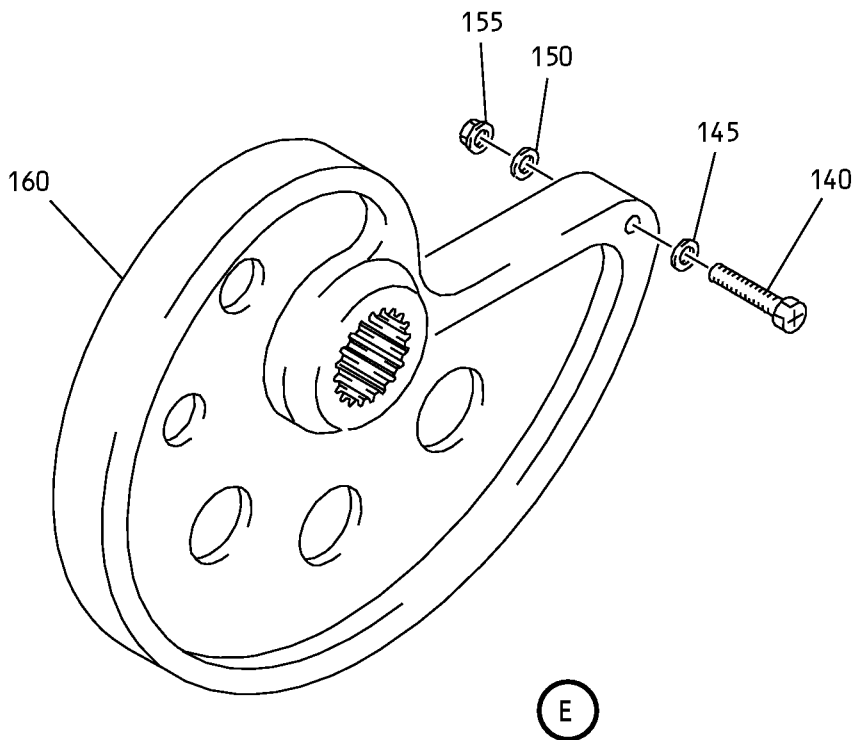
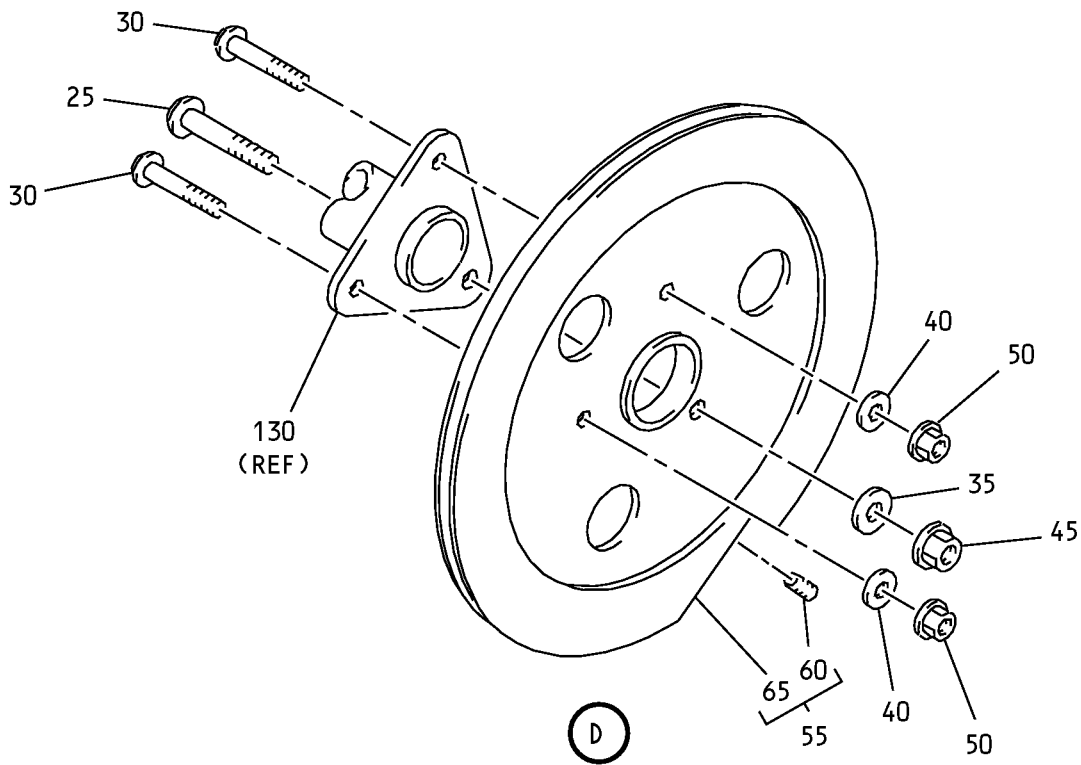
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Counter Balance Assembly
IPL Figure 4 (Sheet 3 of 7)

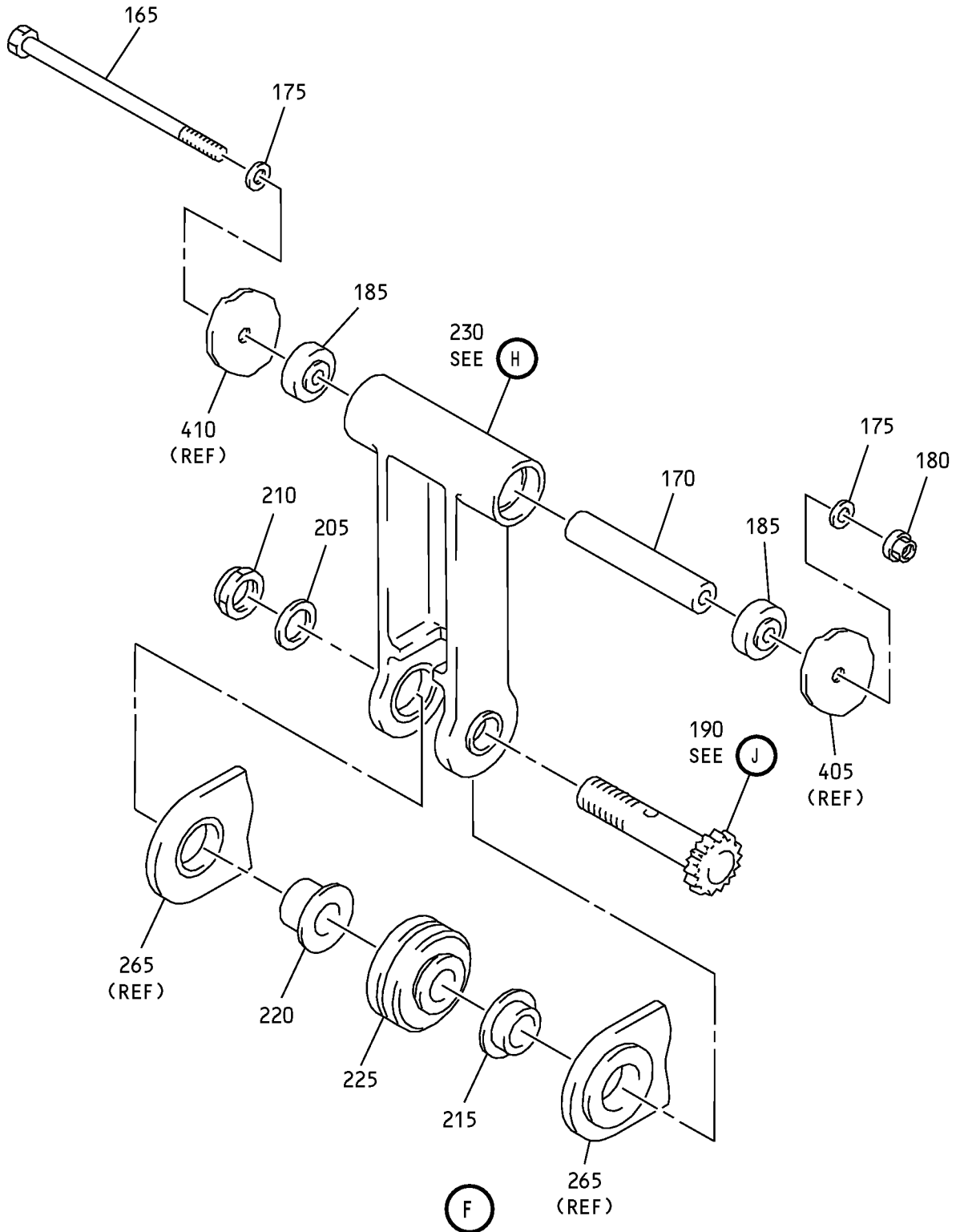
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Counter Balance Assembly
IPL Figure 4 (Sheet 4 of 7)

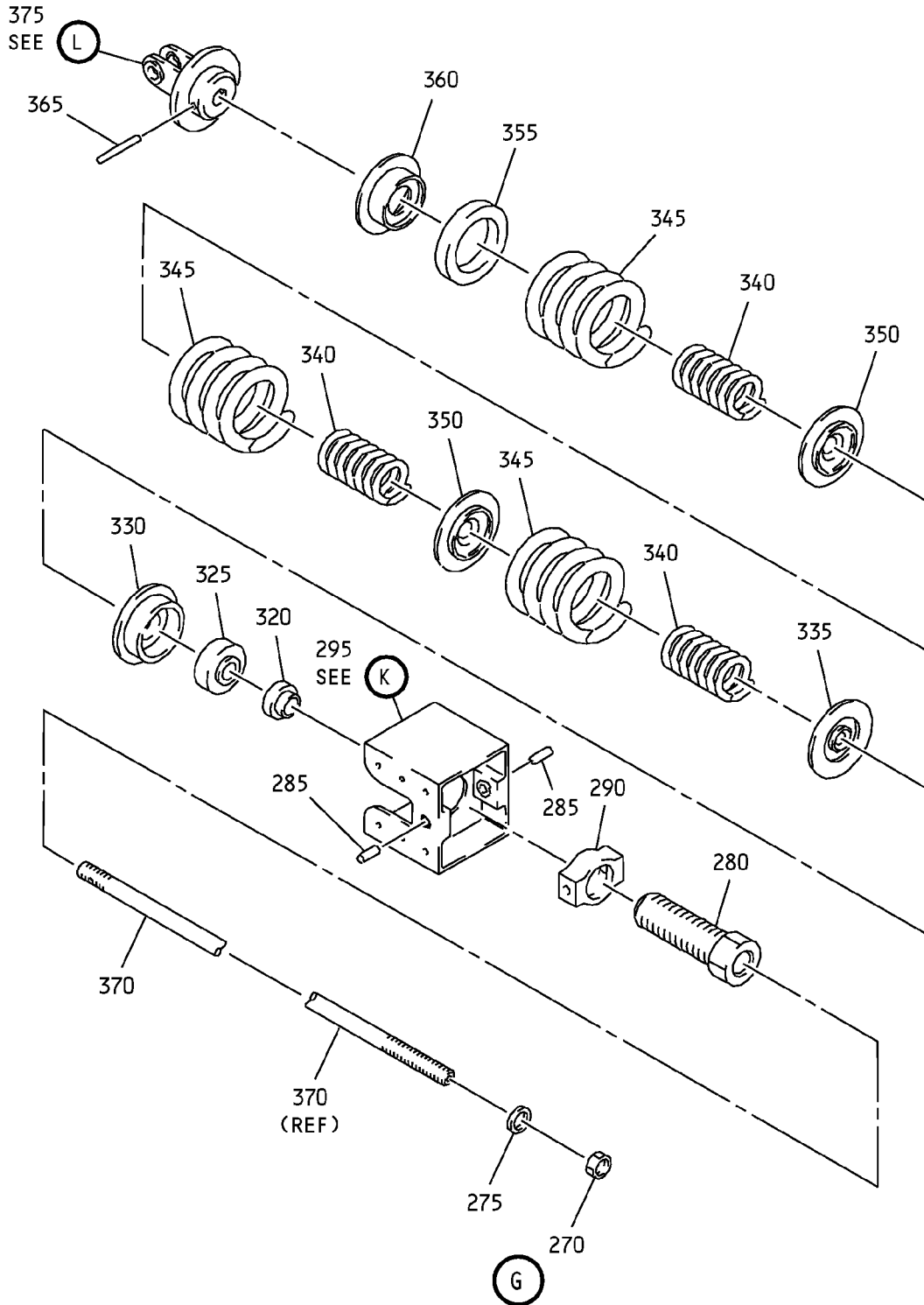
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Counter Balance Assembly
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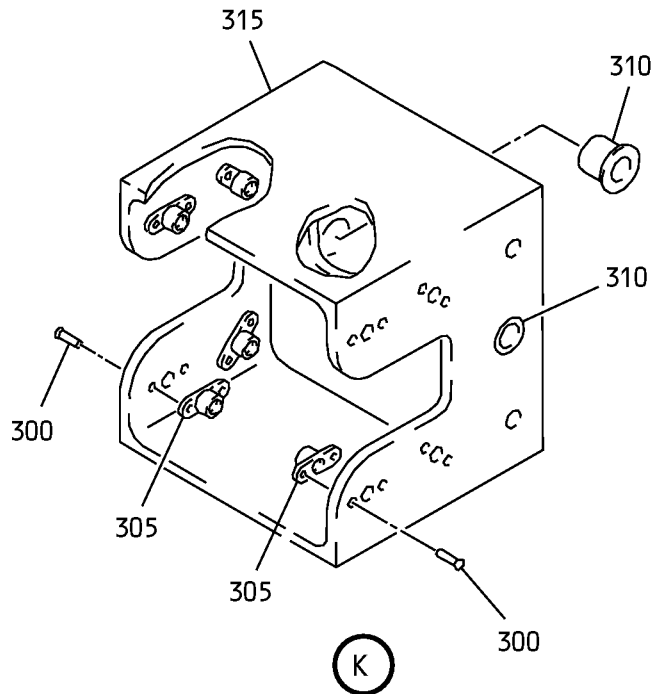
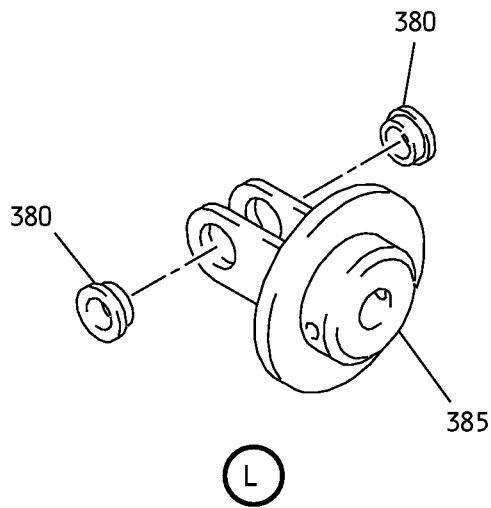
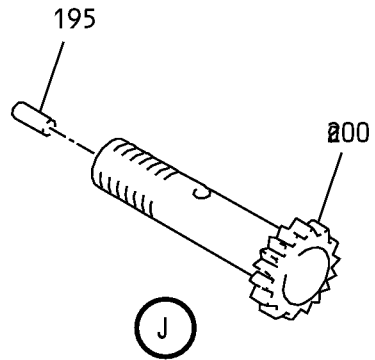
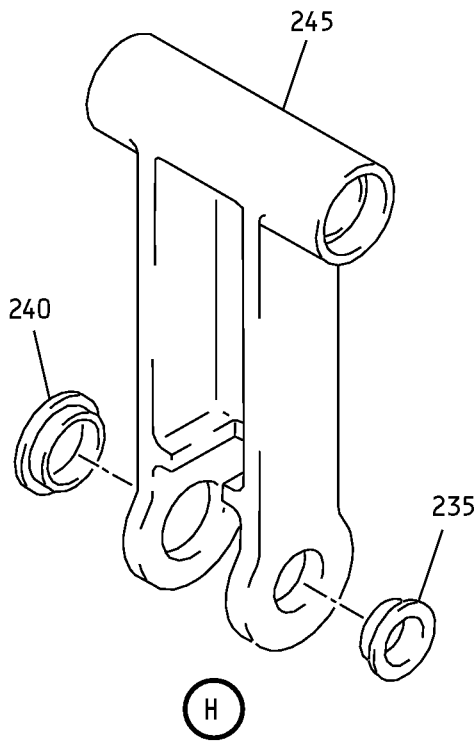
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Counter Balance Assembly
IPL Figure 4 (Sheet 6 of 7)

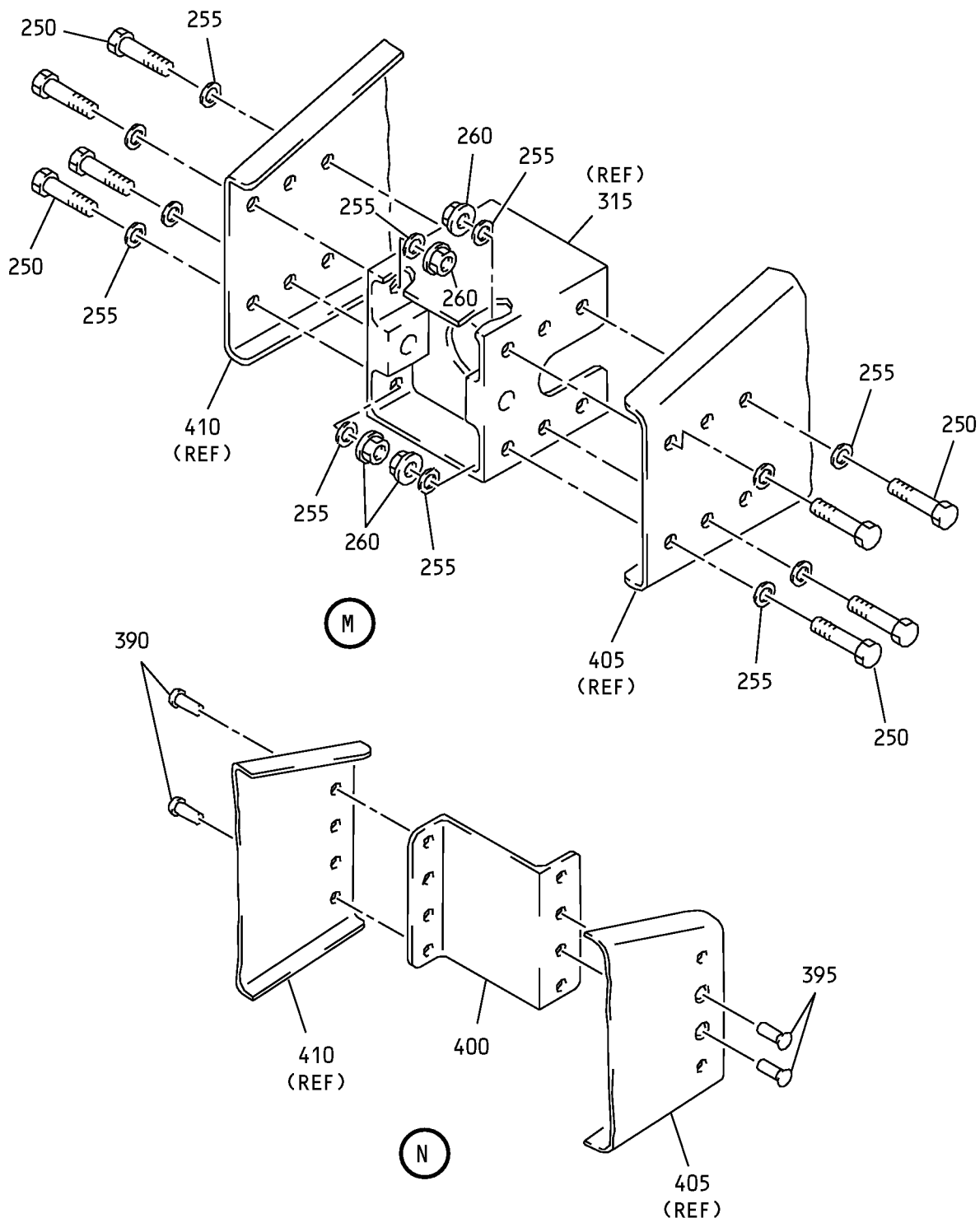
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Counter Balance Assembly
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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
4-											
-1A	65C33684-12										
-1B	65C33684-13										RF
5	BACB30NT3K12										4
10	NAS42DD6-40FC										4
15	NAS1149D0332J										4
20	PLH53CD										4
25	HST10AG8-5										1
30	HST10AG6-5										2
35	NAS1149D0416J										1
40	NAS1149D0332J										2
45	PLH54CD										1
50	PLH53CD										2
55	65C33690-4										1
60	MS21209C0615P										1
65	65C33690-5										1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
4-											
70	HST10AG6-4		.	BOLT							6
				(V06725)							
				(SPEC BACB30VT6K4)							
				(OPT HST10AG6-4 (V73197))							
				(OPT HST10AG6-4 (V56878))							
				(OPT HST10AG6-4 (V0PTK6))							
				(OPT WC10K6-4 (V60516))							
75	NAS1149D0332J		.	WASHER							6
80	PLH53CD		.	NUT							6
				(VF0224)							
				(SPEC BACN10YR3CD)							
				(OPT PLH53CD (V62554))							
85	65C33695-3		.	HOUSING-LWR							1
90	65C33694-2		.	HOUSING-UPR							1
95	H51650-8BAC		.	NUT							1
				(V15653)							
				(SPEC BACN10JC8CD)							
				(OPT 102LH9074-8 (V72962))							
				(OPT 69235-820CD (V92215))							
				(OPT BMN4122CPD8-8 (V97928))							
100	NAS1149C0863R		.	WASHER							1
105	NAS1149C1290R		.	WASHER							1
110	BACB28AK14-049		.	BUSHING							1
115	BACB28AK20-070		.	BUSHING							1
120	PACMKP12AFS428		.	BEARING							1
				(V21335)							
				(SPEC BACB10FS12)							
				(OPT SSMKP12ASD705 (V83086))							
				(OPT ACMKP12AP510Y19 (V40920))							
				(OPT PACMKP12AA3908 (V21335))							
				(OPT SSMKP12AP (V21760))							
125	PACMKP20AFS428		.	BEARING							1
				(V21335)							
				(SPEC BACB10FS20)							
				(OPT SSMKP20ASD705 (V83086))							
				(OPT ACMKP20AP510Y19 (V40920))							
				(OPT PACMKP20AA3908 (V21335))							
				(OPT SSMKP20AP (V21760))							
130	65C33692-3		.	SHAFT							1
135	65C33691-9		.	CAM ASSY							1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
4-											
140	BACS12GU3K14		.	.							1
145	NAS1149C0363R		.	.							1
150	NAS1149C0332R		.	.							1
155	PLH53CM		.	.							1
160	65C33691-10		.	.							1
165	BACB30NM4K52		.								1
170	NAS43DD4-156FC		.								1
175	NAS1149D0432J		.								2
180	PLH54CD		.								1
185	SSMKP4ASD705		.								2
190	65C33811-3		.								1
195	NAS516-1A		.	.							1
200	65C33811-4		.	.							1
205	NAS1149C0832R		.								1
210	H51650-8BAC		.								1
215	65C27737-4		.								1
220	65C27737-3		.								1
225	CR8AFC		.								1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY	
			1	2	3	4	5	6	7			
4- -225A	YR1516XC1		.									1
230	65C33689-4		.									1
235	BACB28X8M024		.	.								1
240	BACB28X11M017		.	.								1
245	65C33689-5		.	.								1
250	BACB30NM4K4		.									12
255	NAS1149D0416J		.									16
260	PLH54CD		.									4
265	65C33696-5		.									1
270	AN315-6R		.	.								1
275	NAS1149C0763R		.	.								1
280	65C33686-3		.	.								1
285	65C33683-2		.	.								2
290	65C33812-1		.	.								1
295	65C33688-6		.	.								1
300	BACR15BA3D		.	.	.							16
305	BRFM20C4D		.	.	.							8
310	113N1007-27		.	.	.							2
315	65C33688-7		.	.	.							1
320	65C27743-2		.	.								1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
4-											
325	PACMKP8FS428		.	.	BEARING (V21335) (SPEC BACB10FT8) (OPT SSMKP8P510LY86 (V83086)) (OPT ACMKP8P510LY198 (V40920)) (OPT SSMKP8SD705 (V83086)) (OPT PACMKP8A3908 (V21335))						1
330	65C33810-2		.	.	HOUSING-BRG						1
335	65C33687-2		.	.	GUIDE-SPR						1
340	140N2967-1		.	.	SPRING-CPRSN, INNER						3
345	140N2966-1		.	.	SPRING-CPRSN, OUTER						3
350	65C33687-1		.	.	GUIDE-SPR						2
355	65C33687-4		.	.	SPACER						1
360	65C33687-3		.	.	GUIDE-SPR						1
365	65C33683-3		.	.	PIN						1
370	65C33683-4		.	.	PIN						1
375	65C33685-3		.	.	CLEVIS ASSY						1
380	BACB28X11M012		.	.	BUSHING						2
385	65C33685-2		.	.	CLEVIS						1
390	BACR15FT6D		.		RIVET (SIZE DETERMINED ON INST)						4
395	BACR15GF6D		.		RIVET (SIZE DETERMINED ON INST)						2
400	65C33681-7		.		ANGLE-SPRT						1
405	65C33693-13		.		BASE-LWR						1
410	65C33693-14		.		BASE-UPR						1
-415	BAC27DBY0184				DELETED						
415A	BAC27DBY193		.		MARKER-ALUMINUM FOIL						1

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