



# **COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST**

## **FORWARD CARGO DOOR ASSEMBLY**

### **PART NUMBER**

**143A6110-10, -11, -12, -13, -14, -15, -16, -17, -18,  
-19, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29,  
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**COMPONENT MAINTENANCE MANUAL**

Revision No. 9  
Jul 01/2009

To: All holders of FORWARD CARGO DOOR ASSEMBLY 52-31-15.

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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Location of Change

Description of Change

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		PRR 38295-12	NOV 01/00
		PRR 38385-12	NOV 01/00





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All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

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## COMPONENT MAINTENANCE MANUAL

### 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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## COMPONENT MAINTENANCE MANUAL

### FORWARD CARGO DOOR ASSEMBLY - DESCRIPTION AND OPERATION

#### 1. Description

A. The forward cargo door assembly (DESCRIPTION AND OPERATION, Figure 1) provides access to the airplane forward 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 forward 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 – 35.0 inches
- D. Weight – 104.0 pounds

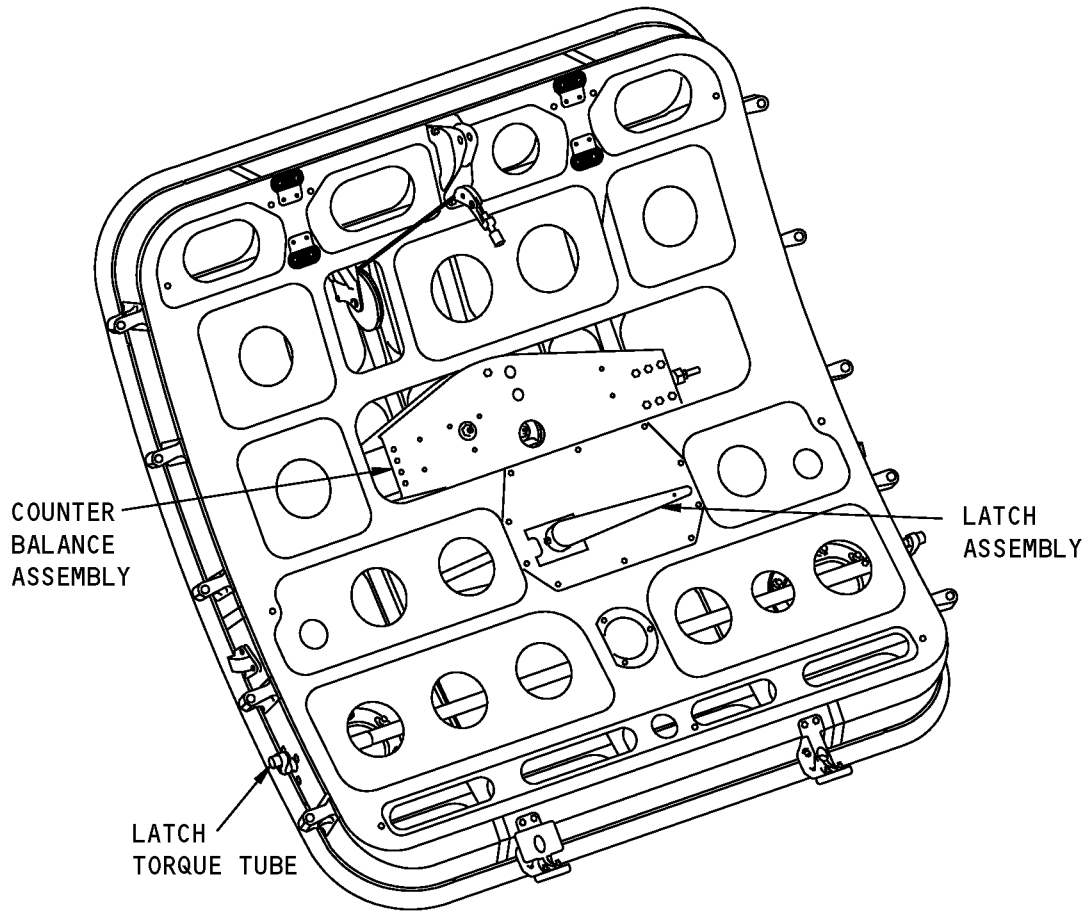
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Forward Cargo Door Assembly  
Figure 1

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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 forward 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 thru IPL Figure 4 for item numbers.

#### 2. Disassembly

##### A. Tools/Equipment

**NOTE:** Equivalent substitutes may be used.

Reference	Description
SPL-10750	Repair Fixture - Fwd Cargo Door (Part #: C52002-32, Supplier: 81205)
SPL-10752	Spring - Loading Control Equipment (Part #: C52004-1, Supplier: 81205) (Opt Part #: C52001-1, 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-10750.
- (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, 80, 85) is bonded to the door structure. Do not remove the filler assembly (50, 55, 80, 85) unless repair or part replacement is necessary.
- (5) Remove the snubber fitting assembly (190) from the door structure as follows:
  - (a) Remove the bolts (170, 175), washers (180, 181, 183), nuts (185), and snubber fitting assembly (190).
- (6) Remove the screws (370), washers (375), and access cover (390) from the door structure.

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- (7) Disconnect and remove the spring (310) from the door structure and the spring attach plate (360).
  - (8) Remove the spring attach plate (360) and disconnect the rod assembly (355) from the flush latch assembly (365) as follows:
    - (a) Remove the cotter pins (325), bolts (330, 335), washers (340, 345) and nuts (350).
    - (b) Remove the spring attach plate (360) and the flush latch assembly (365).
  - (9) Remove the cover (315) with the latch assembly (320) from the door structure as follows:
    - (a) Remove the screws (255), washers (260), and cover (315) with the latch assembly (320).
 

**NOTE:** Latch assembly (320) is riveted onto the cover (315). Do not remove the latch assembly (320) from the cover (315) unless replacement is necessary.
  - (10) Remove the rod assembly (355) from the latch torque tube assembly (IPL Figure 2, 190) as follows:
    - (a) Remove the cotter pins (325), bolts (330), washers (340, 345) and nuts (350).
    - (b) Remove the rod assembly (355) from the latch torque tube assembly (IPL Figure 2, 190).
  - (11) Disconnect the cable assembly (415) from the counterbalance assembly (470A) as follows:
    - (a) Remove the screw (395), washer (400) and cable retainer (405).
    - (b) Disconnect the cable assembly (415) from the counterbalance assembly (470A).
  - (12) Remove the counterbalance assembly (470A) from the door structure as follows:
    - (a) Remove the bolts (455, 460), washers (465), and counterbalance assembly (470A) from the attach bracket assemblies (485, 505).
  - (13) Remove the cable assembly (415) from the door structure as follows:
    - (a) Remove the bolt (430), washer (435), nut (440) and bushings (445) from the pulley (450).
    - (b) Remove the pulley (450) and the cable assembly (415).
    - (c) Remove the cable assembly (415) from the cable sheave (410).
  - (14) Remove the bolts (475), collars (480), attach bracket assembly (485, 505), and support bracket assembly (525) from the door structure.
  - (15) Remove the forward fitting assembly (605) and aft fitting assembly (610) from the door structure as follows:
    - (a) Remove the bolts (545, 560), washers (565), nuts (570, 580) and forward fitting assembly (605).
    - (b) Remove the bolts (545, 560), washers (565), nuts (570, 580) and aft fitting assembly (610).
- 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 (190) from the door structure as follows:
    - (a) Partially disassemble the latch torque tube assembly (190) to remove the roller arm fittings (IPL Figure 3, 40) and arm fitting (60) from the tube (65). Refer to DISASSEMBLY, Paragraph 2.F. for the latch torque tube assembly disassembly procedures.
    - (b) Remove the tube (65) and washers (IPL Figure 2, 185) from the door structure.
  - (3) Remove the bearing housing assemblies (IPL Figure 2, 165) and housing assembly (115) from the door structure as follows:

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- (a) Remove the bolts (150), washers (155), nuts (160), and bearing housing assemblies (165).
- (b) Remove bolts (100), washers (105), nuts (110) and housing assembly (115).
- (4) Remove the attach spring angle (315) from the door structure as follows:
  - (a) Remove the bolts (300, 305), collars (310), attach spring angle (315) and filler (320).
- (5) Remove the guide plates (80, 85) from the door structure as follows:
  - (a) Remove the bolts (65), washers (70), and guide plates (80, 85).
- (6) Remove the seal (490) and seal retainers (450 thru 485) from the door structure as follows:
  - (a) Remove the seal (490) from the seal retainers (450 thru 485).

**NOTE:** Seal retainers (450 thru 485) are riveted onto the door structure. Do not remove the seal retainers (450 thru 485) unless repair or part replacement is necessary.

- (7) Remove the marker (495) and the plate (500) from the door structure as follows:
  - (a) Remove the marker (495) and the plate (500).

**NOTE:** The marker (495) and the plate (500) are bonded onto the door structure. Do not remove the marker (495) and the plate (500) unless repair or replacement is necessary.

### F. Procedure for IPL Figure 3

- (1) Remove the bolts (45), washers (50), nuts (55) and arm fitting (60) from the tube (65).
- (2) Remove the cotter pins (5), nuts (10), washers (15) and roller bearing (20A) from the roller arm fitting (40).
- (3) Remove the bolts (25), washers (30), nuts (35) and roller arm fittings (40) from the tube (65).
- (4) Remove the washers (IPL Figure 2, 180) and the tube (IPL Figure 3, 65) from the door assembly.

### G. Procedure for IPL Figure 4

- (1) Disassemble the counterbalance assembly (IPL Figure 4, 1B) 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.

- (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).

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- 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 (225A) 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 that secures the gimbal fitting (290) onto the adjuster (280) (SOPM 20-50-02).
  - 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).
  - 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).

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(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 forward 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 2, IPL Figure 3 and 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; 125, 170) (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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## COMPONENT MAINTENANCE MANUAL

### 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 thru 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:
  - (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 (155)
      - b) Attach Fitting (205)
      - c) Support Fitting (240)
      - d) Stop Fitting (640, 645, 650)
    - 2) IPL Figure 2
      - a) Housing (175)
      - b) Bracket (285, 290)
      - c) Beam (405 thru 425A)
      - d) Panel (40)
      - e) Doubler (37)
    - 3) IPL Figure 3
      - a) Arm (60)
      - b) Tube (65)

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CHECK

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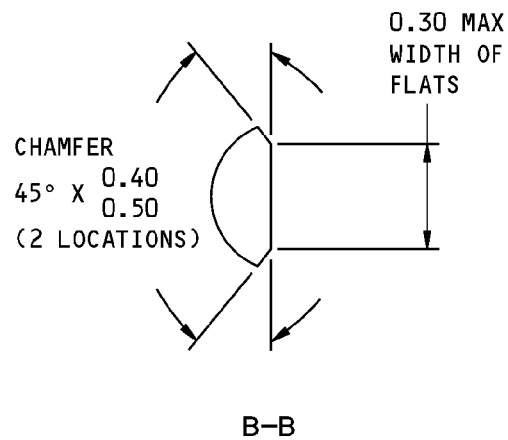
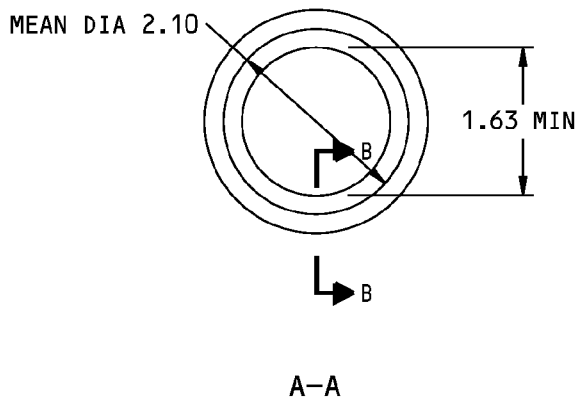
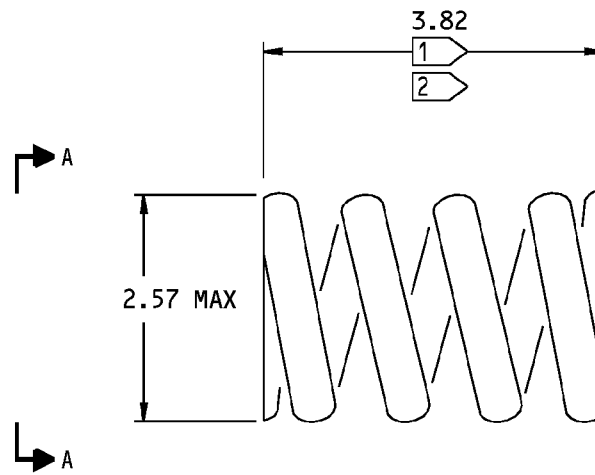
- 4) IPL Figure 4
  - a) Drum (65)
  - b) Housing (85, 90)
  - c) Crank (245)
  - d) Housing (315)
- (2) Do a load check on the springs (IPL Figure 4, 345) as follows:
  - (a) Compress the spring (345) to 2.50 inches length as shown in CHECK, Figure 501.
  - (b) Make sure that the load on the spring (345) is 860-940 pounds.
- (3) Do a load check on 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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TYPICAL, BOTH ENDS OF SPRING (345)

- 1 FREE LENGTH TOTAL NUMBER OF COILS IS 5.36
- 2 THE LOAD MUST BE BETWEEN 860-940 POUNDS AT 2.50 INCH LENGTH

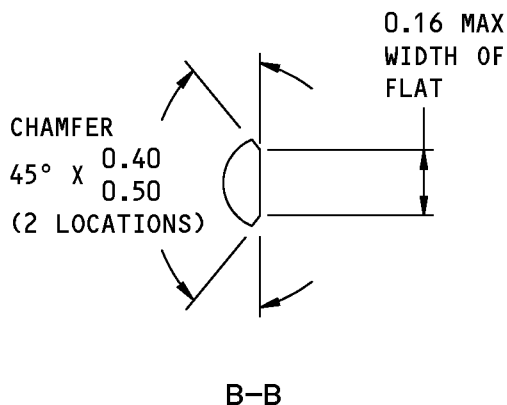
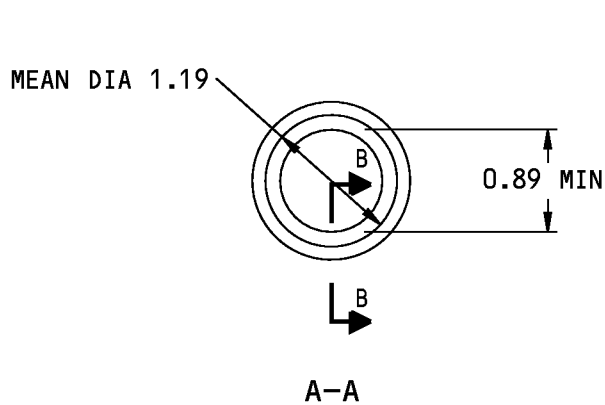
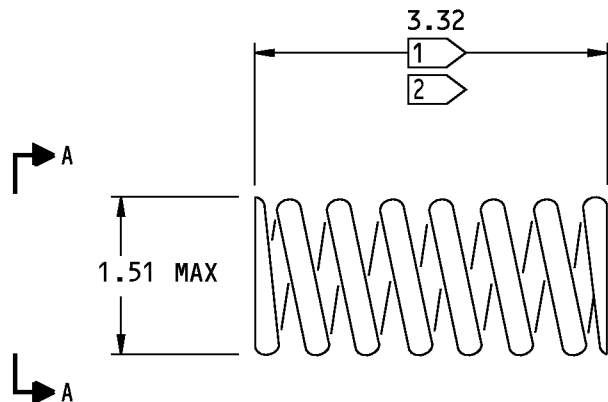
ITEM NUMBERS REFER TO IPL FIG. 4  
ALL DIMENSIONS ARE IN INCHES

140N2966-1 Outer Spring Check  
Figure 501

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TYPICAL, BOTH ENDS OF SPRING (340)

- 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

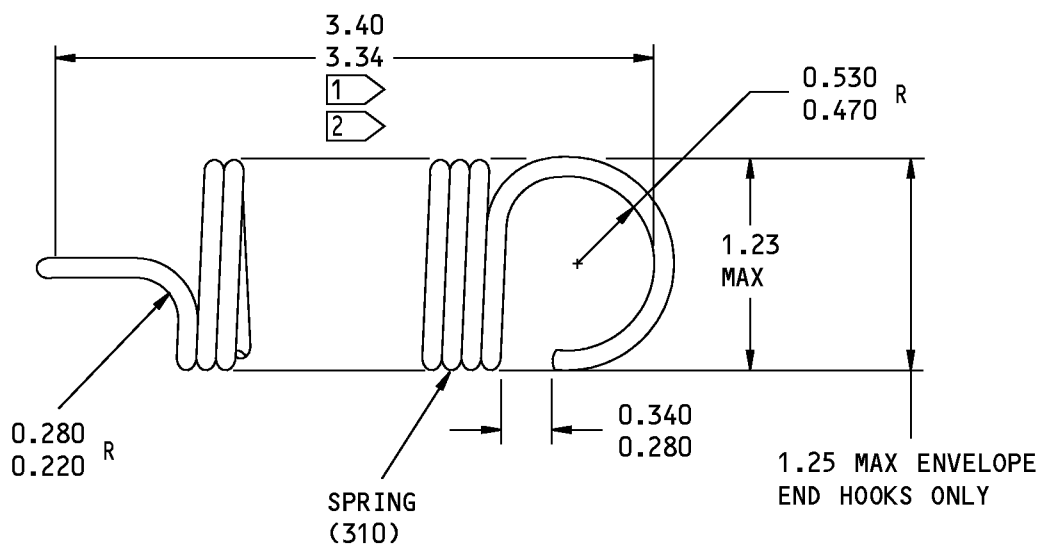
G82629 S00041001277\_V2

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

G82881 S00041001278\_V2

69-76131-2 Spring Check  
Figure 503

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## COMPONENT MAINTENANCE MANUAL

### REPAIR

#### 1. General

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

**Table 601:**

<b>PART NUMBER</b>	<b>NAME</b>	<b>REPAIR</b>
—	REFINISH OF OTHER PARTS	1-1
143A6134	FITTING ASSEMBLY	2-1, 2-2
143A6137	BRACKET ASSEMBLY	3-1, 3-2
143A6128	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
143A6126	BEARING HOUSING ASSY	9-1, 9-2
143A6120	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	∅	DIAMETER
▭	FLATNESS	S ∅	SPHERICAL DIAMETER
⊥	PERPENDICULARITY (OR SQUARENESS)	R	RADIUS
//	PARALLELISM	SR	SPHERICAL RADIUS
○	ROUNDNESS	( )	REFERENCE
⊘	CYLINDRICITY	BASIC	A THEORETICALLY EXACT DIMENSION USED
⌒	PROFILE OF A LINE	(BSC)	TO DESCRIBE SIZE, SHAPE OR LOCATION OF
⌓	PROFILE OF A SURFACE	OR	A FEATURE. FROM THIS FEATURE PERMISSIBLE
◎	CONCENTRICITY	DIM	VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR
≡	SYMMETRY		NOTES.
∠	ANGULARITY	-A-	DATUM
↗	RUNOUT	Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
↗↗	TOTAL RUNOUT	Ⓛ	LEAST MATERIAL CONDITION (LMC)
⊔	COUNTERBORE OR SPOTFACE	Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
∇	COUNTERSINK	Ⓟ	PROJECTED TOLERANCE ZONE
⊕	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)	FIM	FULL INDICATOR MOVEMENT

### EXAMPLES

$\boxed{\text{—}} \boxed{0.002}$	STRAIGHT WITHIN 0.002	$\boxed{\text{◎}} \boxed{\text{∅}} \boxed{0.0005} \boxed{\text{C}}$	CONCENTRIC TO DATUM C WITHIN 0.0005 DIAMETER
$\boxed{\text{⊥}} \boxed{0.002} \boxed{\text{B}}$	PERPENDICULAR TO DATUM B WITHIN 0.002	$\boxed{\text{≡}} \boxed{0.010} \boxed{\text{A}}$	SYMMETRICAL WITH DATUM A WITHIN 0.010
$\boxed{\text{//}} \boxed{0.002} \boxed{\text{A}}$	PARALLEL TO DATUM A WITHIN 0.002	$\boxed{\text{∠}} \boxed{0.005} \boxed{\text{A}}$	ANGULAR TOLERANCE 0.005 WITH DATUM A
$\boxed{\text{○}} \boxed{0.002}$	ROUND WITHIN 0.002	$\boxed{\text{⊕}} \boxed{\text{∅}} \boxed{0.002} \boxed{\text{Ⓢ}} \boxed{\text{B}}$	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
$\boxed{\text{⊘}} \boxed{0.010}$	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER	$\boxed{\text{⊥}} \boxed{\text{∅}} \boxed{0.010} \boxed{\text{Ⓜ}} \boxed{\text{A}}$	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
$\boxed{\text{⌒}} \boxed{0.006} \boxed{\text{A}}$	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM A	$\boxed{0.510} \boxed{\text{Ⓟ}}$	THEORETICALLY EXACT DIMENSION IS 2.000
$\boxed{\text{⌓}} \boxed{0.020} \boxed{\text{A}}$	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.020 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE		OR 2.000 BSC

True Position Dimensioning Symbols  
Figure 601

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REPAIR - GENERAL

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## COMPONENT MAINTENANCE MANUAL

### 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 thru 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
C00260	Coating - Chemical And Solvent Resistant Finish, Epoxy Resin Enamel	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 20-60-02	FINISHING MATERIALS
SOPM 20-60-03	LUBRICANTS

##### C. Procedure

**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. For lubricants, refer to SOPM 20-60-03.

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

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REPAIR 1-1

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## COMPONENT MAINTENANCE MANUAL

**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 (240)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply (F-20.03).
Access Cover (315, 390)	Al alloy	Chemical treat (F-17.07) all surfaces with coating, C00064. Apply primer, C00259 (F-20.03).
Attach Plate (360)	301 CRES	Cadmium plate (F-15.06). Apply primer, C00259 (F-20.02) to all surfaces.
Cable Retainer (405)	Al alloy	Chemical treat (F-17.07) all surfaces with coating, C00064. Apply primer, C00259 (F-20.03).
Cable Sheave (410)	15-5PH CRES, 180- 200 ksi	Passivate (F-17.25).
Counterbalance Assembly (470A)	Al alloy	Chemical treat and apply primer, C00259 and enamel coating, C00260 (F-21.12).
Stop Support Fitting (650)	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 (80, 85)	Polyamide 6/6	No finish (F-25.01).
Pulley Bracket (285, 290)	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 (315)	301 CRES	Cadmium plate (F-15.05). Apply primer, C00259 (F-20.02).
Beam (405 thru 425A)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.03).
Seal Retainer (450 thru 485)	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 (60)	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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REPAIR 1-1

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## COMPONENT MAINTENANCE MANUAL

**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), but not in holes.
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).
Pin (285, 365, 370)	15-5PH CRES, 150- 170 ksi	Apply lubricant, D00113 (F-19.20).
Gimbal Fitting (290)	Al-Ni- Bronze	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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REPAIR 1-1

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## COMPONENT MAINTENANCE MANUAL

### FITTING ASSEMBLY - REPAIR 2-1

143A6134-1

#### 1. General

- A. This procedure has the data necessary to repair and refinish the fitting assembly (190).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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

**NOTE:** For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bushing (195, 200) from the fitting (205).
- (2) Install the new bushings (195, 200) onto the fitting (205) with sealant, A00247, as specified in SOPM 20-50-03.

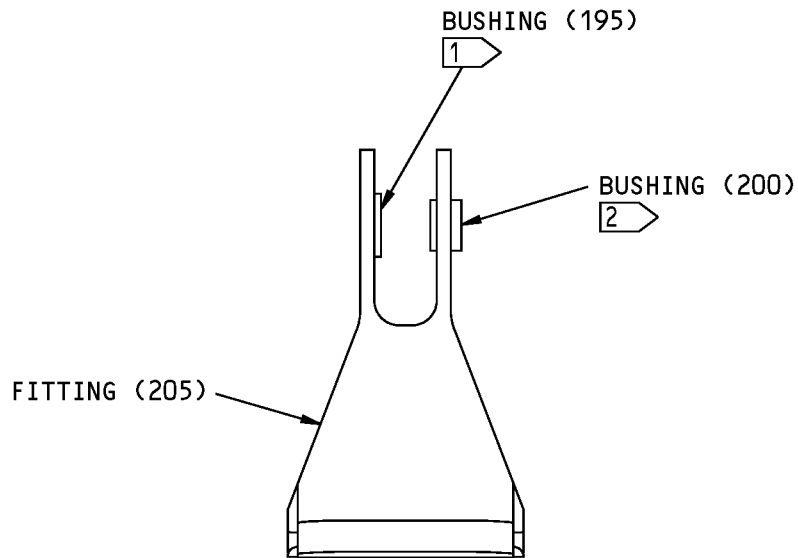
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1 INSTALL THIS BUSHING WITH  
BMS 5-95 AS SPECIFIED IN  
SOPM 20-50-03. FILLET SEAL  
THE ENDS

ITEM NUMBERS REFER TO IPL FIG. 1

2 INSTALL THIS BUSHING AS SPECIFIED  
IN SOPM 20-50-03

143A6134-1 Fitting Assembly Repair  
Figure 601

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REPAIR 2-1

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## COMPONENT MAINTENANCE MANUAL

### FITTING - REPAIR 2-2

143A6134-2

#### 1. General

- A. This procedure has the data necessary to repair and refinish the fitting (205).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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) Prepare the surface.
- (2) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35).
- (3) Apply primer, C00259 (F-20.03) to all surfaces but not the holes for the bushings.

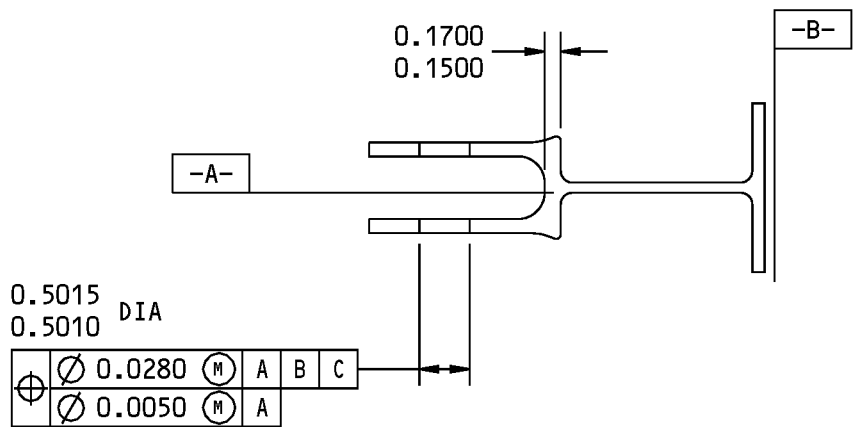
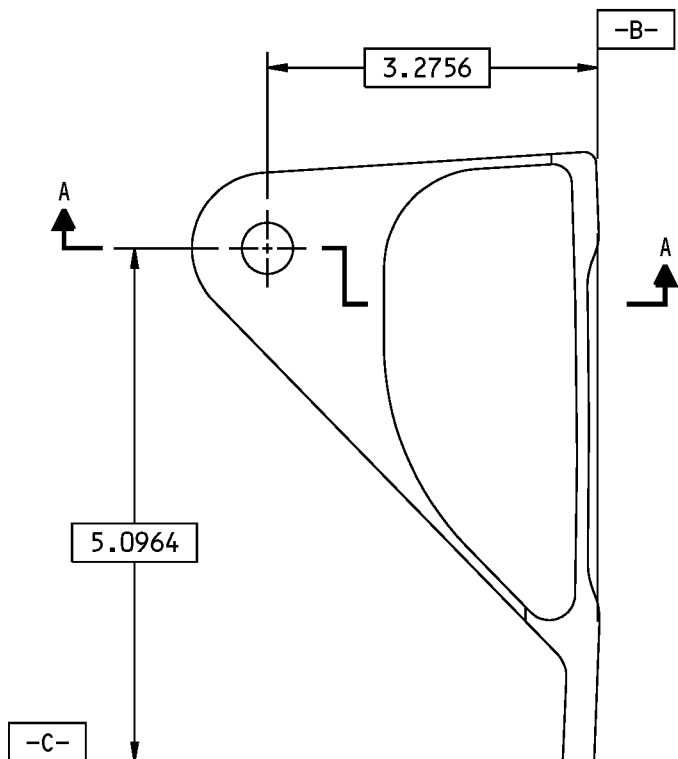
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A-A

125/ ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

143A6134-2 Fitting Repair  
Figure 601

**52-31-15**

REPAIR 2-2

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## COMPONENT MAINTENANCE MANUAL

### BRACKET ASSEMBLY - REPAIR 3-1

143A6137-1, -2, -3

#### 1. General

- A. This procedure has the data necessary to repair the bracket assembly (485, 505, 525).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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. Procedure (REPAIR 3-1, Figure 601)
  - (1) Remove the rivets (490, 510) and the nutplate(s) (495, 515) from the bracket(s) (500, 520).
  - (2) Install the new nutplate(s) (495, 515) onto the bracket(s) (500, 520) with the rivets (490, 510).

#### 3. Stop Pad Replacement

- A. Procedure (REPAIR 3-1, Figure 601)
  - (1) Remove the rivets (530) and the stop pad (535) from the angle (540).
  - (2) Install the new stop pad (535) onto the angle (540) with rivets (530).

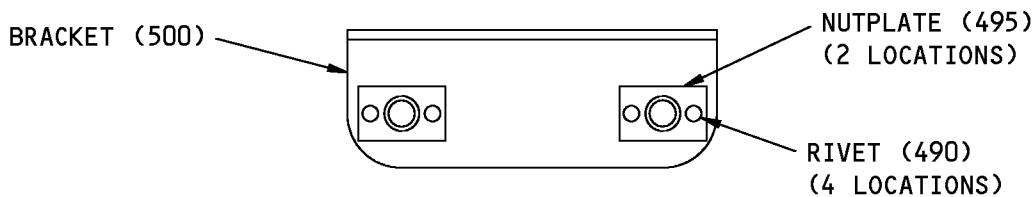
# 52-31-15

REPAIR 3-1

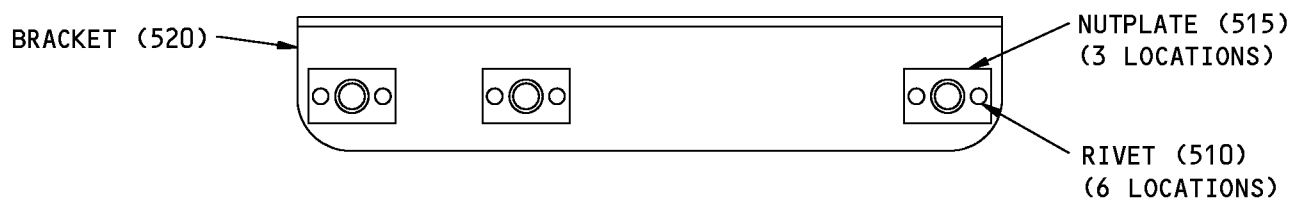
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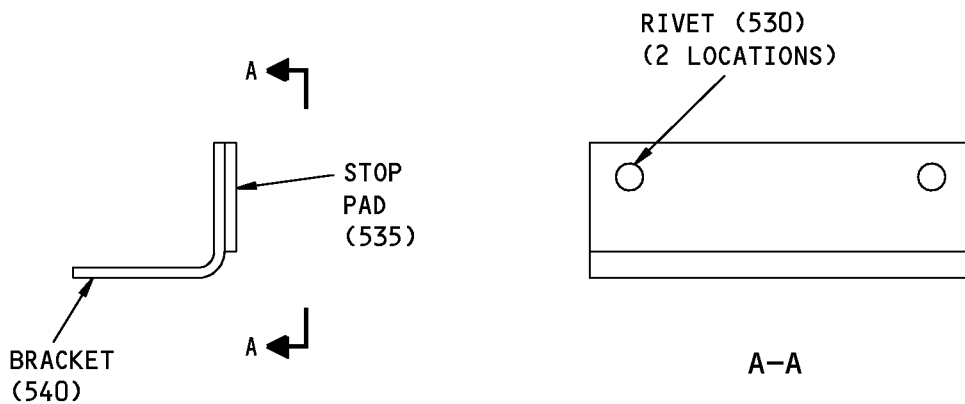
### COMPONENT MAINTENANCE MANUAL



143A6137-1



143A6137-2



143A6137-3

ITEM NUMBERS REFER TO IPL FIG. 1

G76814-S00041001293\_V2

143A6137-1,-2,-3 Bracket Assembly Repair  
Figure 601

# 52-31-15

REPAIR 3-1  
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## COMPONENT MAINTENANCE MANUAL

### BRACKET - REPAIR 3-2

143A6137-4, -5, -6

#### 1. General

- A. This procedure has the data necessary to refinish the bracket (500, 520, 540).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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 3-2, 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) Chemical treat (F-17.07).
- (2) Apply primer, C00259 (F-20.03).

# 52-31-15

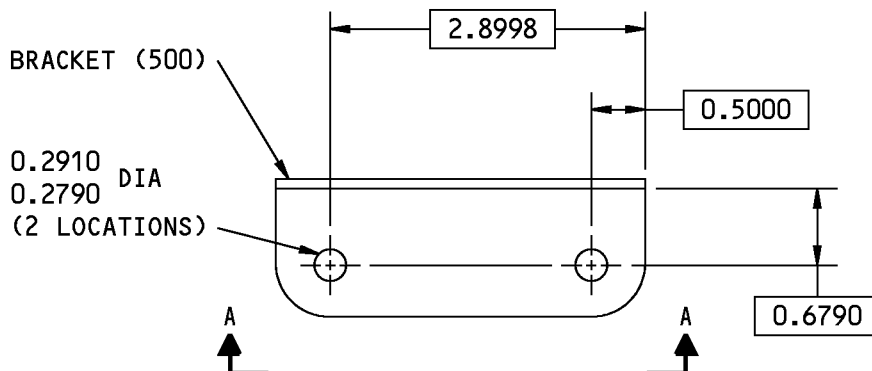
REPAIR 3-2

Page 601

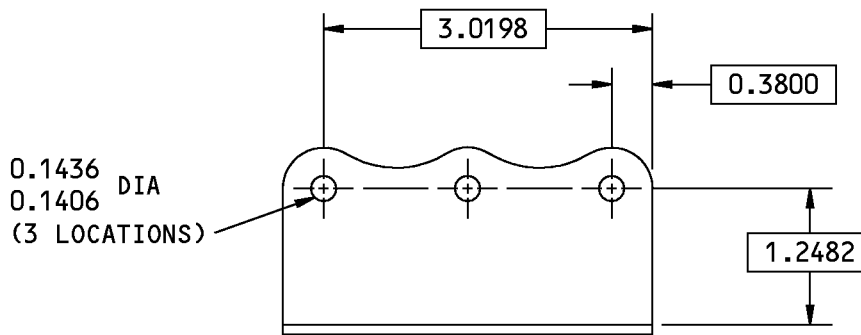
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COMPONENT MAINTENANCE MANUAL



143A6137-4



A-A

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

G76853 S00041001295\_V2

143A6137-4,-5,-6 Bracket Repair  
Figure 601 (Sheet 1 of 3)

**52-31-15**

REPAIR 3-2

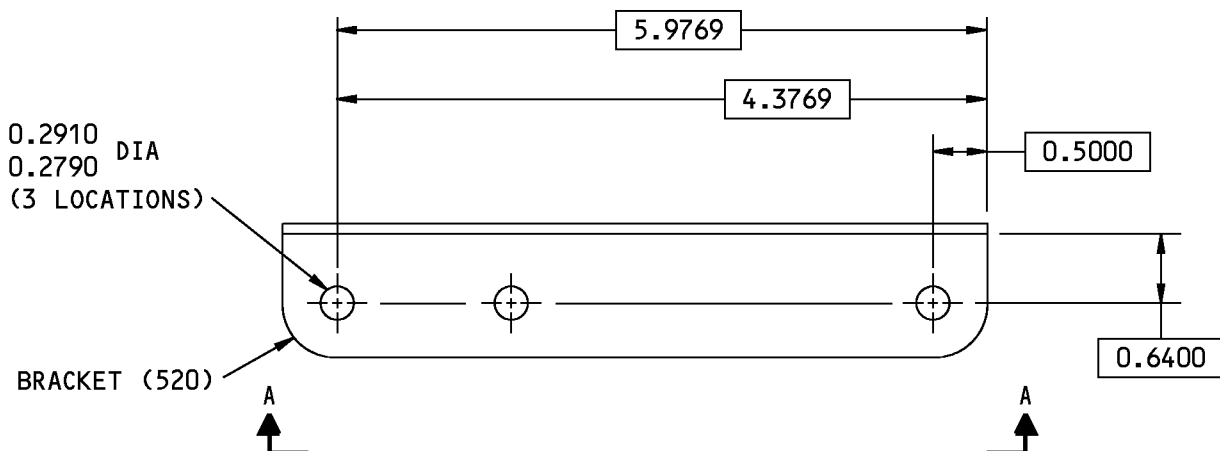
Page 602

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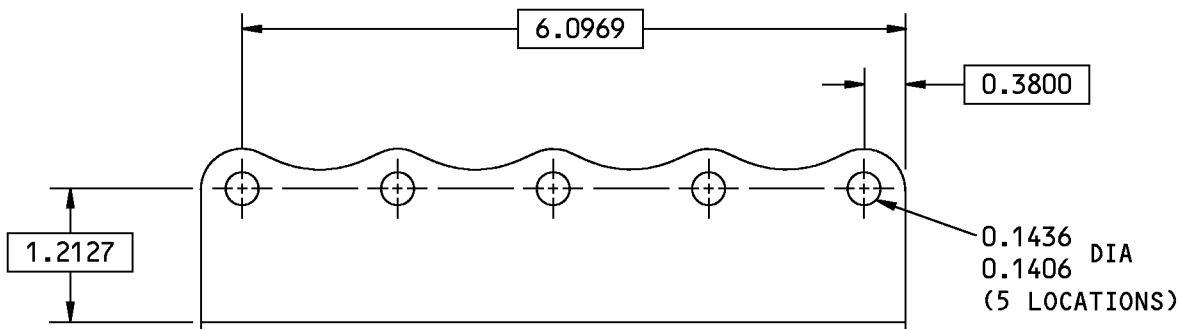




COMPONENT MAINTENANCE MANUAL



143A6137-5



A-A

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

G81837 S00041001296\_V2

143A6137-4,-5,-6 Bracket Repair  
Figure 601 (Sheet 2 of 3)

**52-31-15**

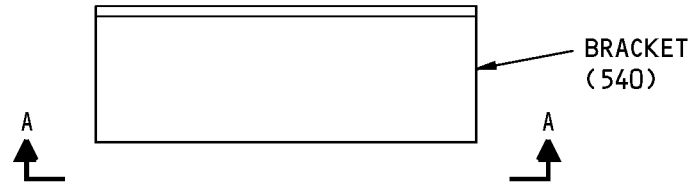
REPAIR 3-2

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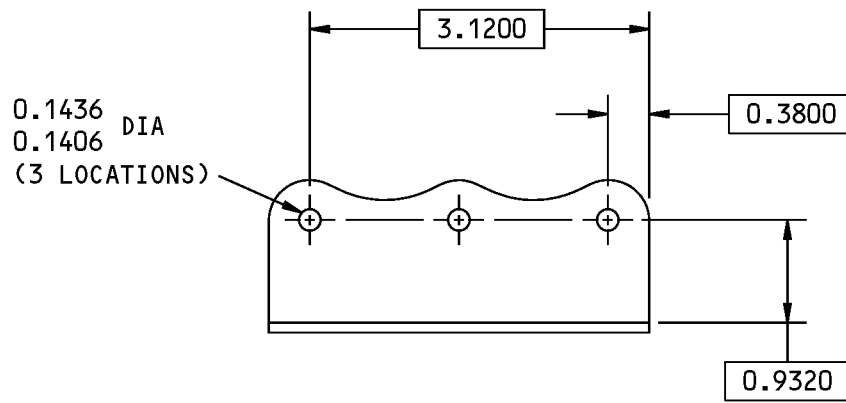
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COMPONENT MAINTENANCE MANUAL



143A6137-6



A-A

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

143A6137-4,-5,-6 Bracket Repair  
Figure 601 (Sheet 3 of 3)

**52-31-15**

REPAIR 3-2

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## COMPONENT MAINTENANCE MANUAL

### STOP FITTING ASSEMBLY - REPAIR 4-1

143A6128-5, -6

#### 1. General

- A. This procedure has the data necessary to repair the stop fitting assembly (605, 610).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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. Procedure (REPAIR 4-1, Figure 601 and REPAIR 4-1, Figure 602)
  - (1) Remove the bolts (620), washers (625), nuts (630), and rub block(s) (635) from the stop fitting(s) (640, 645).
  - (2) Install the new rub block(s) (635) onto the stop fitting(s) (640, 645) with bolts (620), washers (625) and nuts (630).

#### 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 20-50-03	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 miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bushing(s) (615) from the stop fitting(s) (640, 645).
- (2) Install and swage the bushing(s) (615) into the stop fitting(s) (640, 645) with sealant, A00247, as specified in SOPM 20-50-03.
- (3) Fillet seal the bushing flange(s) with sealant, A00247 as specified in SOPM 20-50-03.

# 52-31-15

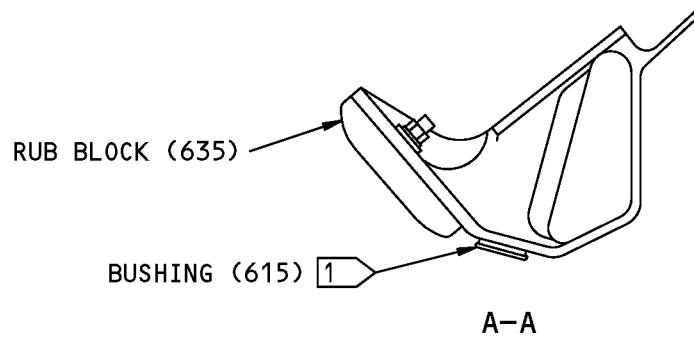
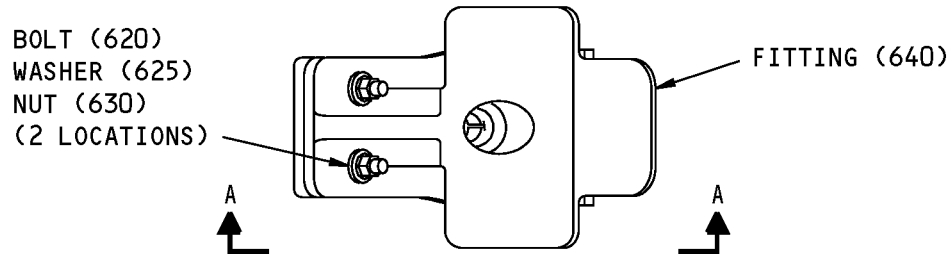
REPAIR 4-1

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## COMPONENT MAINTENANCE MANUAL



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

ITEM NUMBERS REFER TO IPL FIG. 1

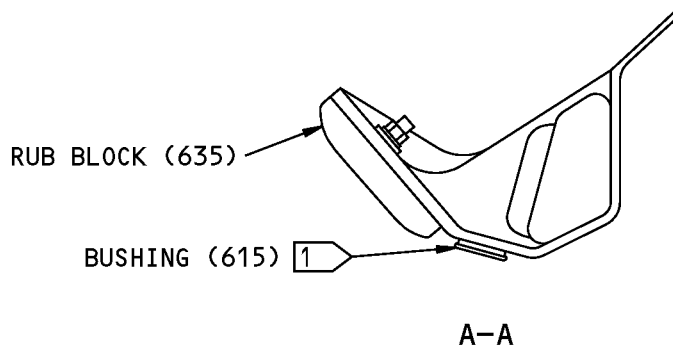
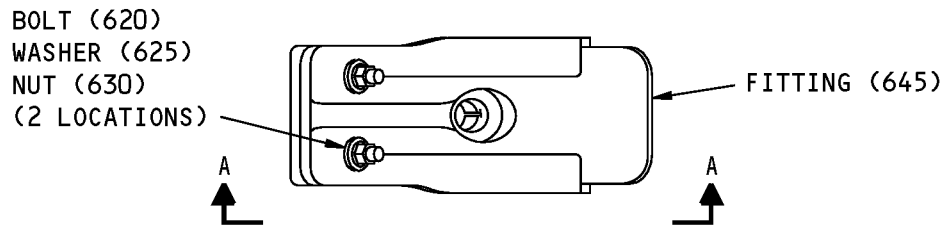
143A6128-5 Stop Fitting Assembly Repair  
Figure 601

# 52-31-15

REPAIR 4-1  
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## COMPONENT MAINTENANCE MANUAL



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

ITEM NUMBERS REFER TO IPL FIG. 1

143A6128-6 Stop Fitting Assembly Repair  
Figure 602

# 52-31-15

REPAIR 4-1  
Page 603  
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## COMPONENT MAINTENANCE MANUAL

### STOP FITTING - REPAIR 4-2

143A6128-7, -8

#### 1. General

- A. This procedure has the data necessary to refinish the stop fitting (640, 645).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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
    - (a) Intensity 0.004-0.007A
    - (b) Coverage 1.0
    - (c) Overspray is permitted

#### 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 4-2, Figure 601 and REPAIR 4-2, Figure 602)

**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 hole for the bushing.

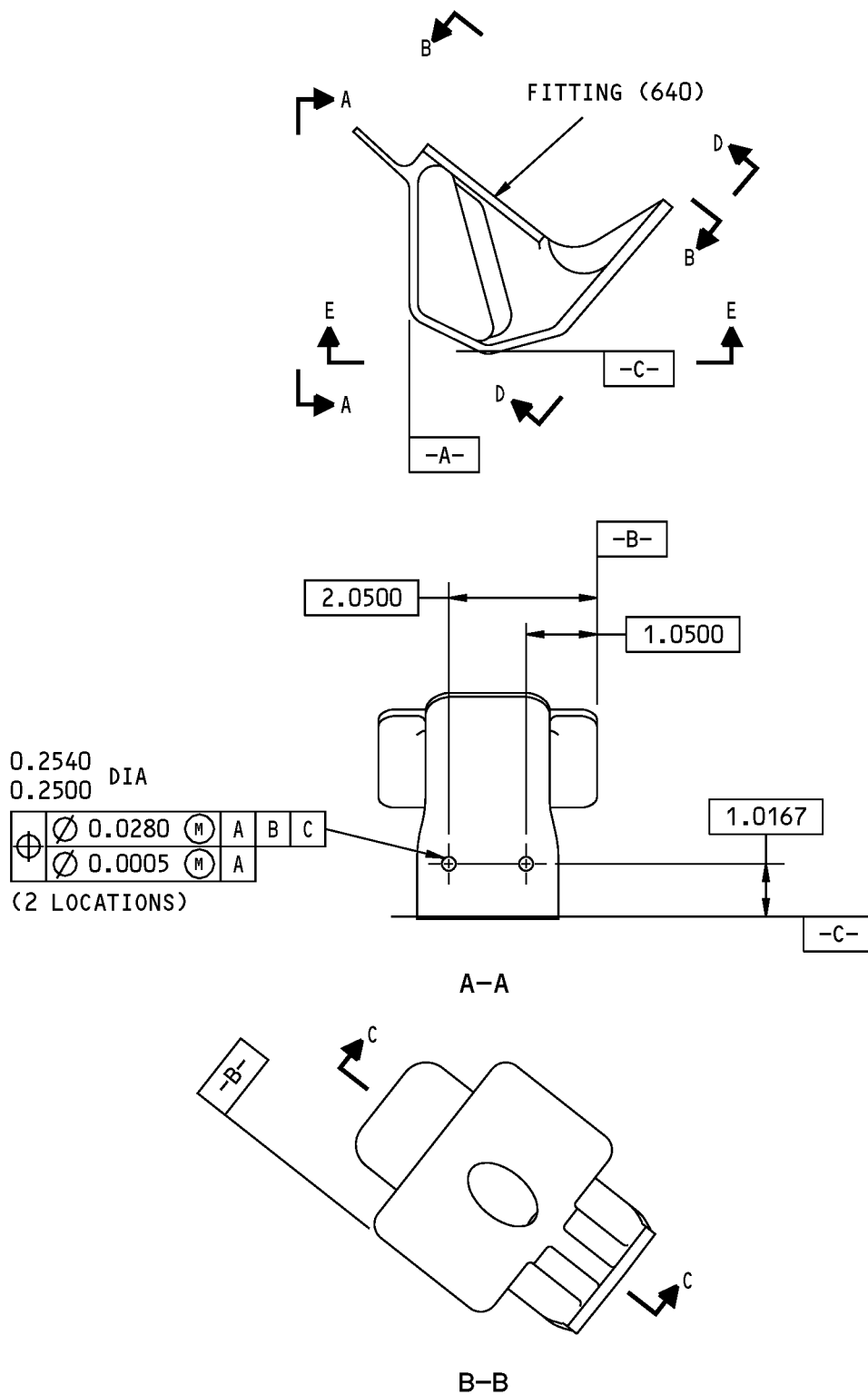
# 52-31-15

REPAIR 4-2

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COMPONENT MAINTENANCE MANUAL



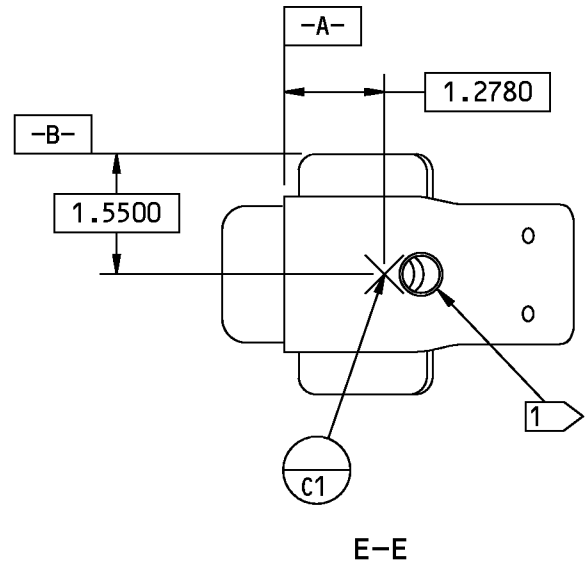
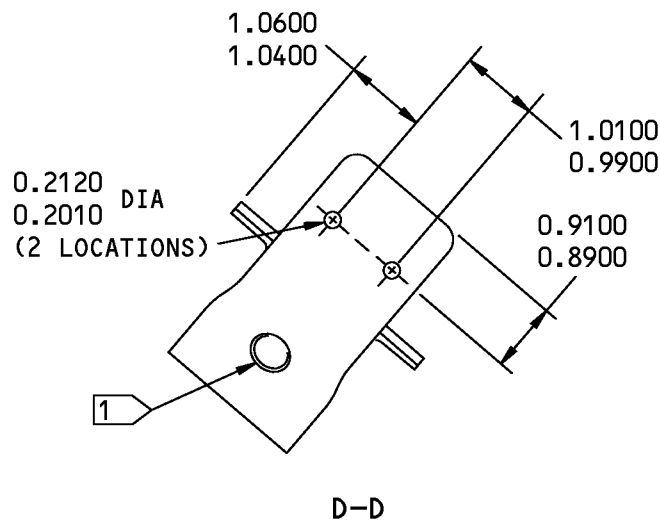
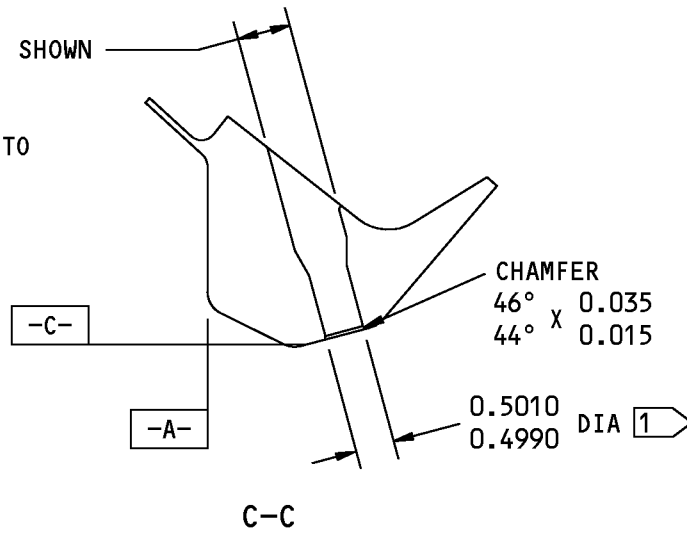
143A6128-7 Stop Fitting Repair  
Figure 601 (Sheet 1 of 2)

**52-31-15**

REPAIR 4-2  
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COMPONENT MAINTENANCE MANUAL

COUNTERBORE  
 0.6975  
 0.6775 DIA TO DEPTH SHOWN  
 COUNTERSINK  
 31° INCLUDED ANGLE TO  
 29° DEPTH SHOWN



1 DO NOT APPLY BMS 10-11 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

G77821 S00041001304\_V2

143A6128-7 Stop Fitting Repair  
 Figure 601 (Sheet 2 of 2)

**52-31-15**

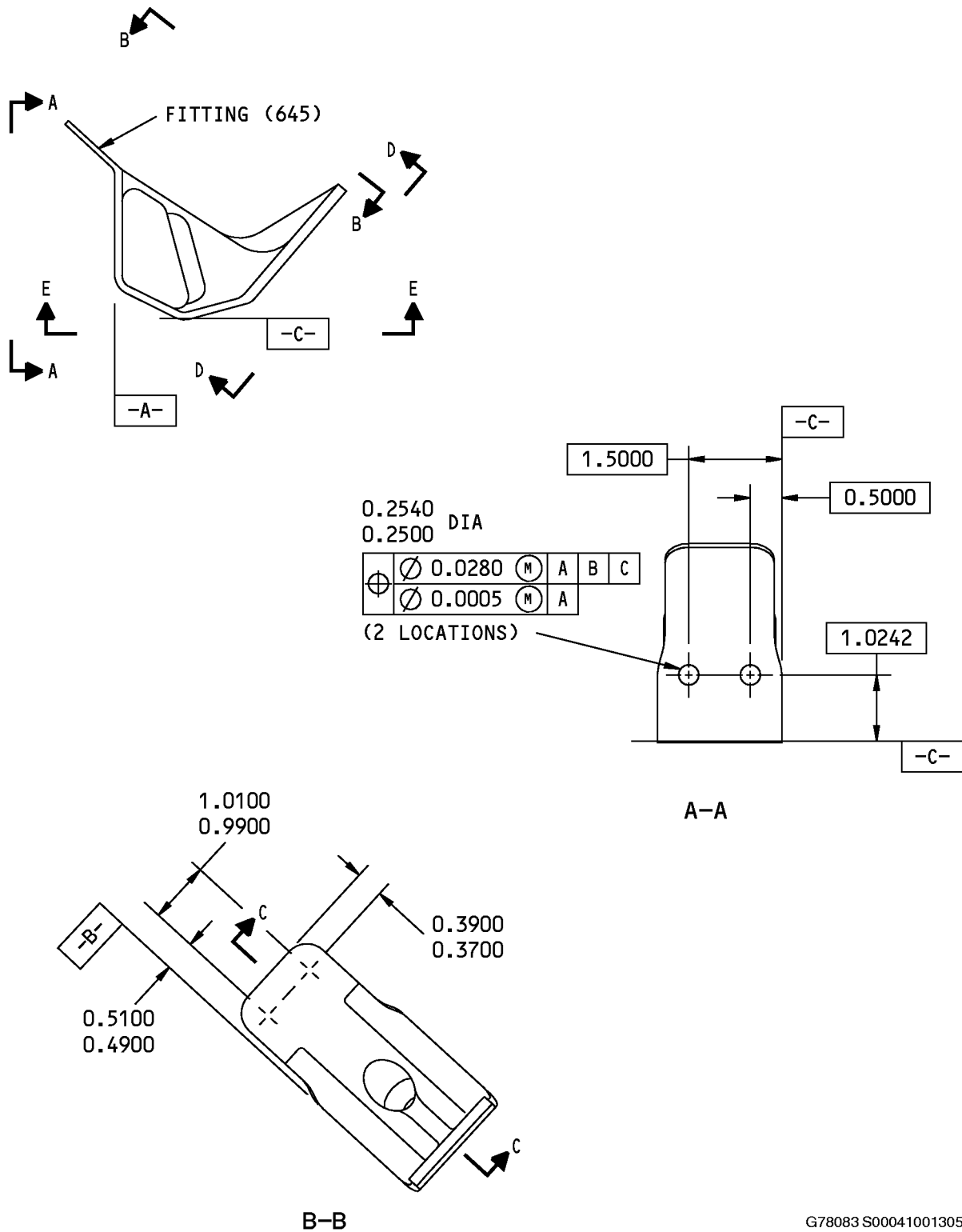
REPAIR 4-2

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G78083 S00041001305\_V2

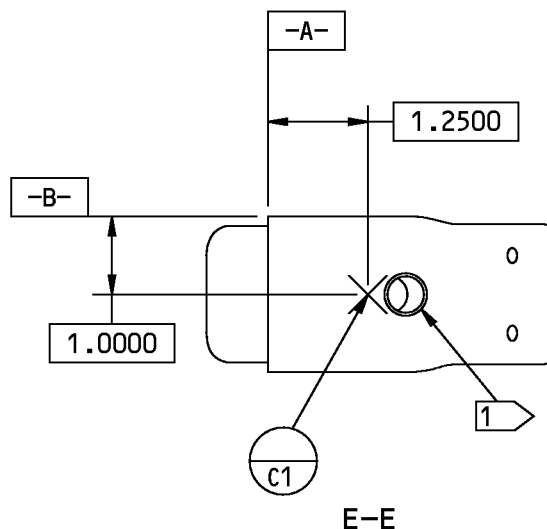
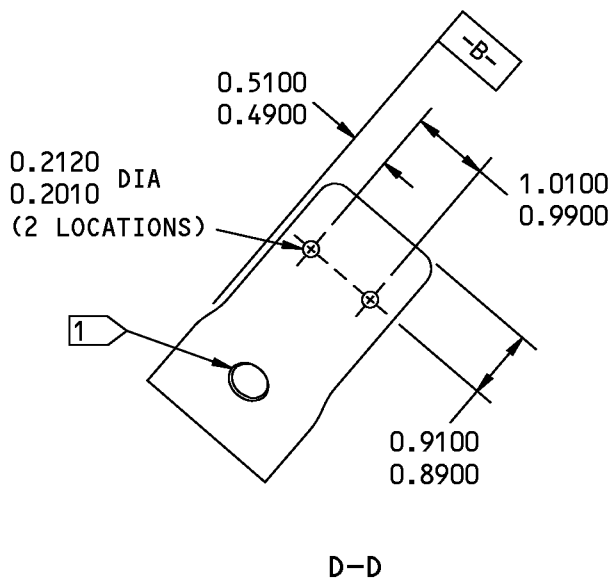
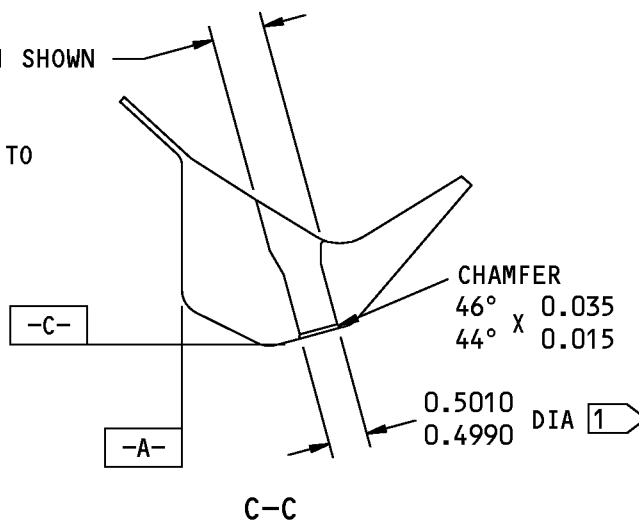
143A6128-8 Stop Fitting Repair  
Figure 602 (Sheet 1 of 2)

**52-31-15**

REPAIR 4-2  
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COMPONENT MAINTENANCE MANUAL

COUNTERBORE  
 0.6975  
 0.6775 DIA TO DEPTH SHOWN  
 COUNTERSINK  
 31° INCLUDED ANGLE TO  
 29° DEPTH SHOWN



1 DO NOT APPLY BMS 10-11 PRIMER TO 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

G78186 S00041001306\_V2

143A6128-8 Stop Fitting Repair  
 Figure 602 (Sheet 2 of 2)

**52-31-15**

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 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. Procedure (REPAIR 5-1, Figure 601)
  - (1) Remove the rivets (25) and the nutplate(s) (30A) from the panel (40).
  - (2) Install the new nutplate(s) (30A) 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 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-12	APPLICATION OF ADHESIVES
SOPM 20-60-02	FINISHING MATERIALS

- C. Procedure (REPAIR 5-1, 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) Remove the gasket (35) from the panel (40).
- (2) Clean the bonding surface.
- (3) Align the holes in the gasket (35) with the holes in the panel (40) (see 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.

# 52-31-15

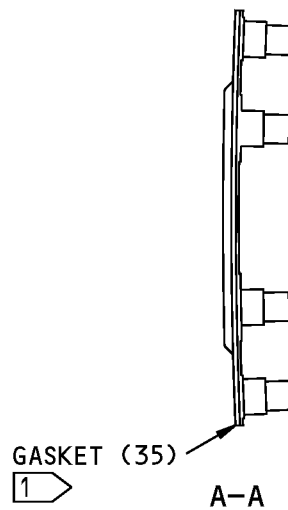
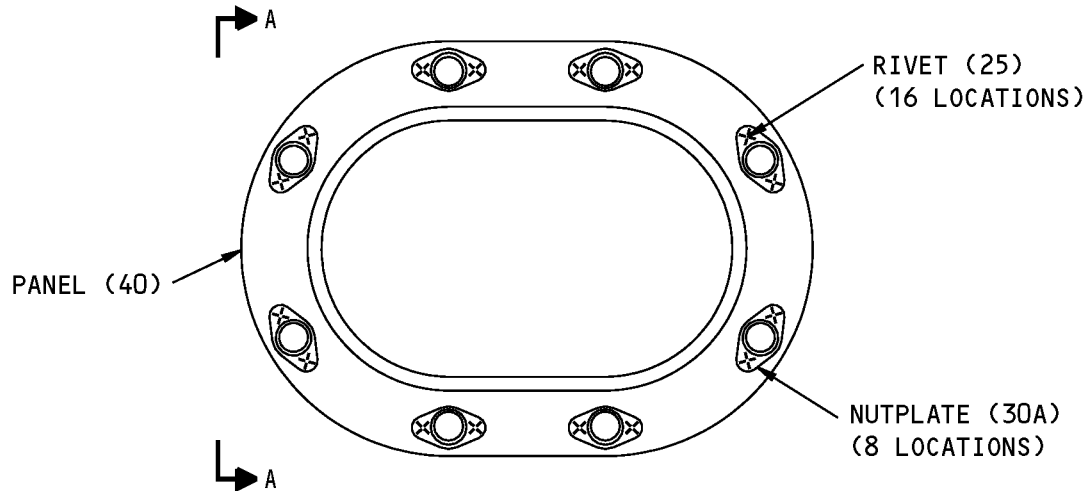
REPAIR 5-1

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## COMPONENT MAINTENANCE MANUAL



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 INTO THE PANEL WITH TYPE 68 ADHESIVE AS SPECIFIED IN SOPM 20-50-12

ITEM NUMBERS REFER TO IPL FIG. 2

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

# 52-31-15

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 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. 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 5-2, 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) Chemical treat (F-17.07).
- (2) Apply primer, C00259 (F-20.03).

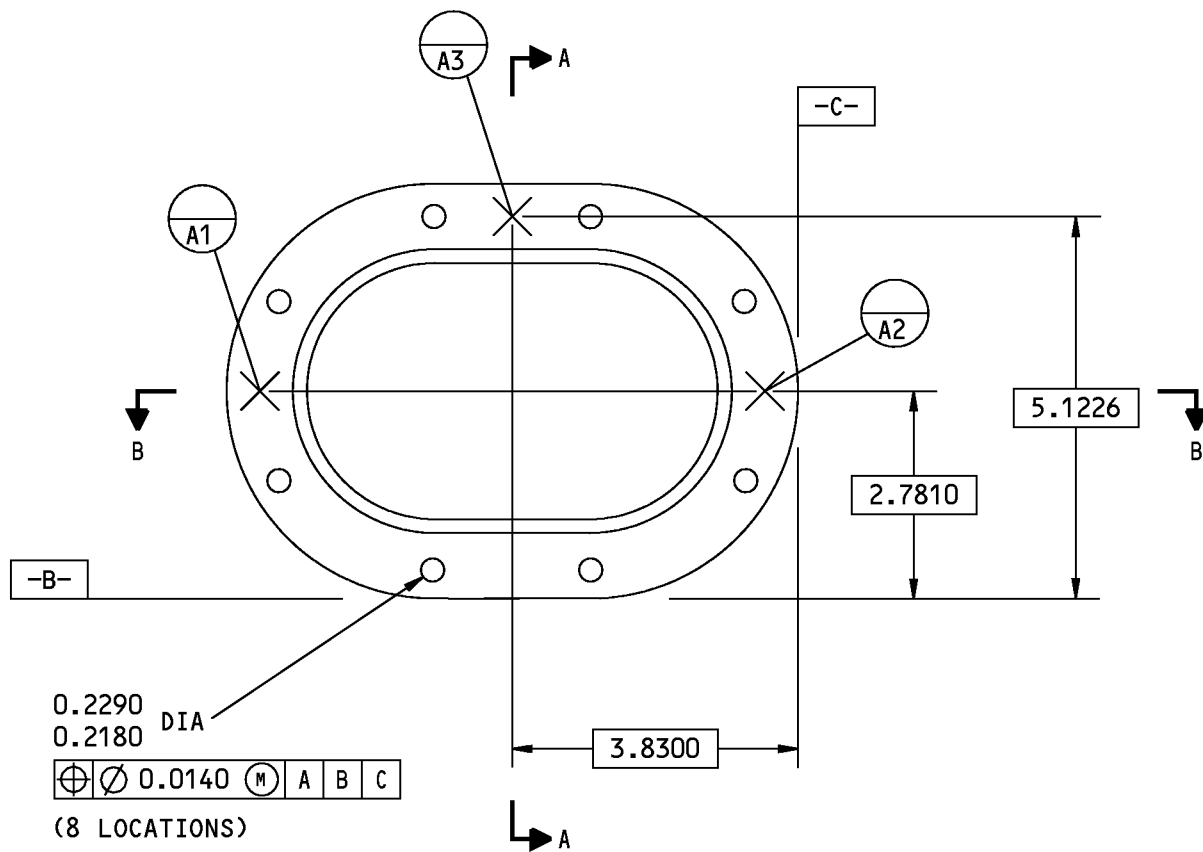
# 52-31-15

REPAIR 5-2

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COMPONENT MAINTENANCE MANUAL



149A6135-2 SHOWN  
149A6135-7 ALMOST THE SAME

G76766 S00041001310\_V2

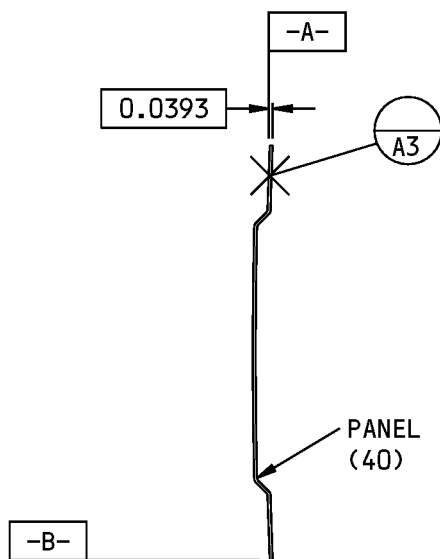
149A6135-2,-7 Access Panel Repair  
Figure 601 (Sheet 1 of 2)

**52-31-15**

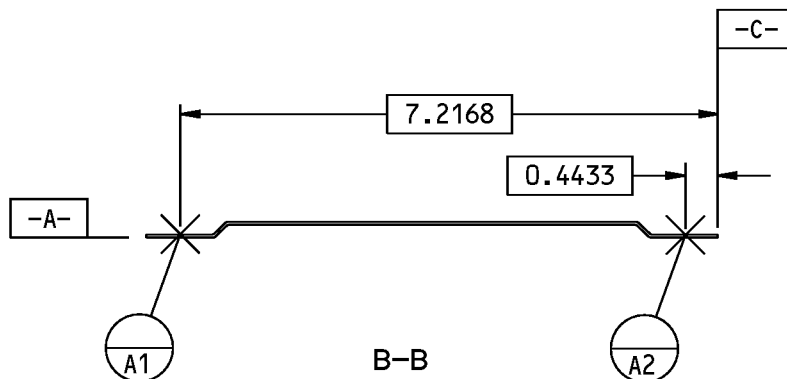
REPAIR 5-2  
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COMPONENT MAINTENANCE MANUAL



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)

**52-31-15**

REPAIR 5-2

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## COMPONENT MAINTENANCE MANUAL

### ARM FITTING - REPAIR 6-1

149A6138-1

#### 1. General

- A. This procedure has the data necessary to refinish the arm fitting (40).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer 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, 200-220 ksi

#### 2. Refinish

- A. Consumable Materials

**NOTE:** Equivalent substitutes may be used.

Reference	Description	Specification
D50092	Lubricant - Solid Film	BMS 3-8, Type 6, Class 1, 3 or 4

- B. References

Reference	Title
SOPM 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS
SOPM 20-60-03	LUBRICANTS

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

**NOTE:** For lubricants, refer to SOPM 20-60-03.

- (1) Apply solid film lubricant, D50092 (F-19.10), as specified in SOPM 20-50-08, to the surfaces identified by flagnote 1.

# 52-31-15

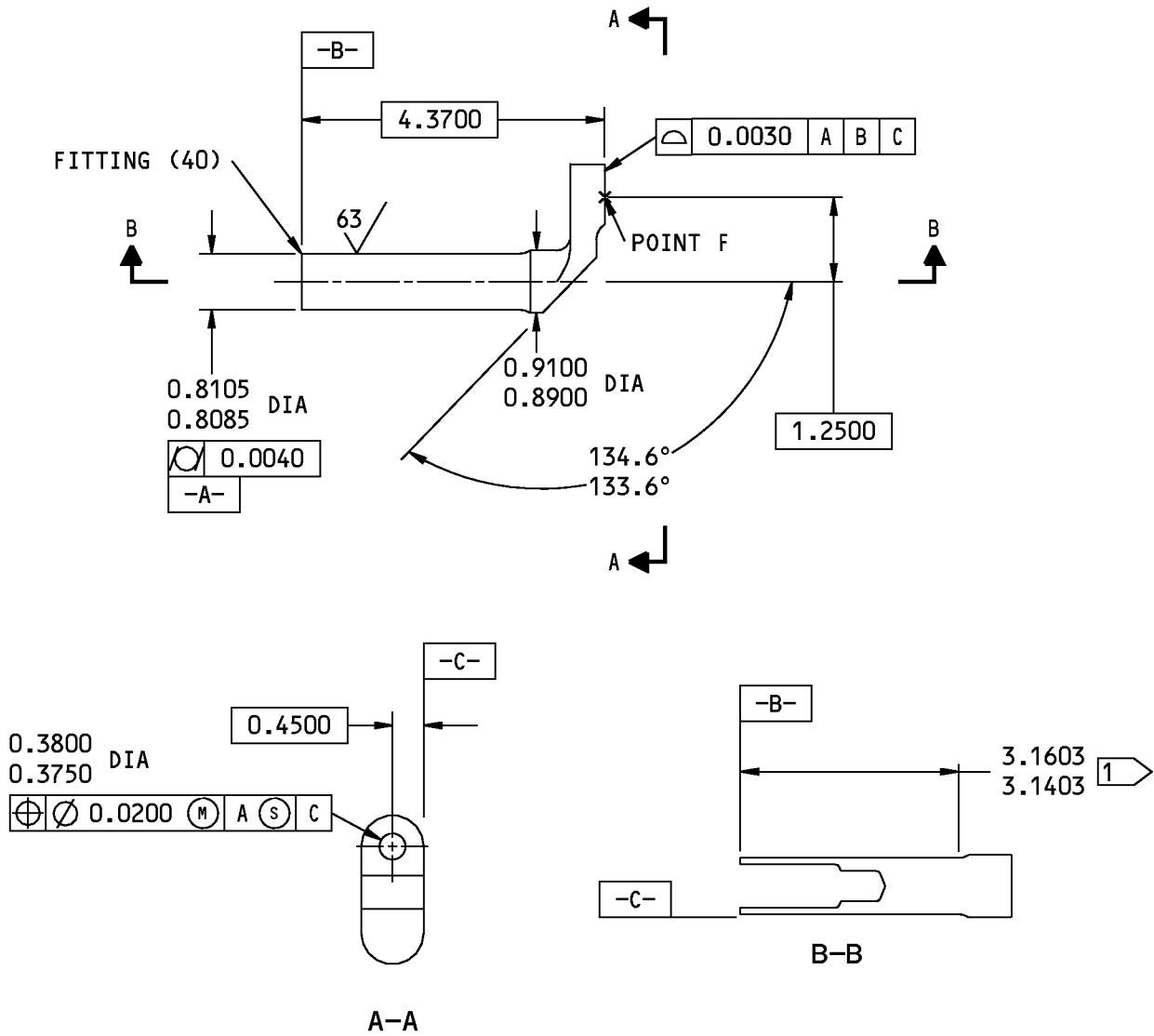
REPAIR 6-1

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COMPONENT MAINTENANCE MANUAL



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

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 3

ALL DIMENSIONS ARE IN INCHES

G77094 S00041001314\_V2

149A6138-1 Arm Fitting Repair  
Figure 601

**52-31-15**

REPAIR 6-1

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## COMPONENT MAINTENANCE MANUAL

### TUBE - REPAIR 7-1

149A6131-1

#### 1. General

- A. This procedure has the data necessary to refinish the tube (65).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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, 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

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

# 52-31-15

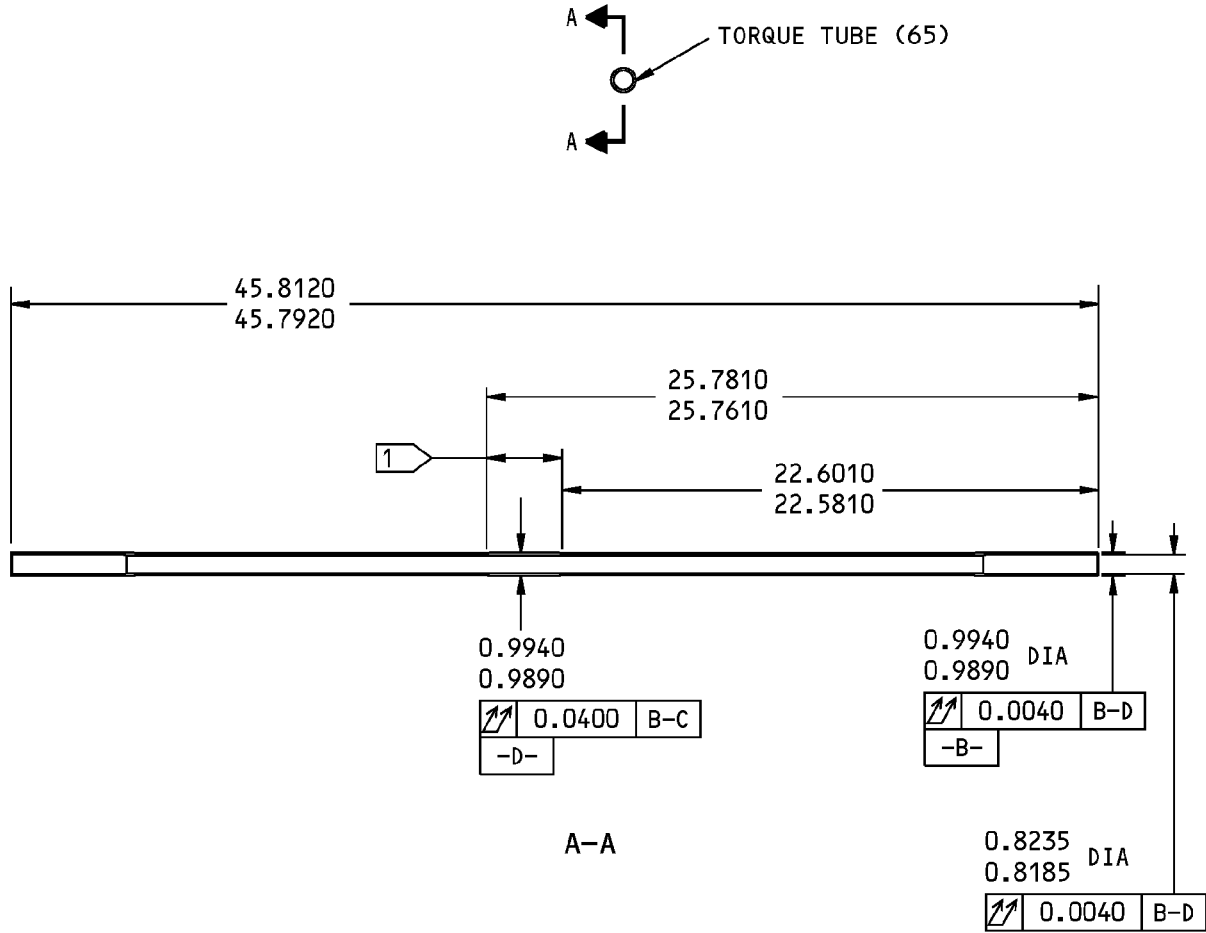
REPAIR 7-1

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COMPONENT MAINTENANCE MANUAL



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

149A6131-1 Torque Tube Repair  
Figure 601

**52-31-15**

REPAIR 7-1

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## COMPONENT MAINTENANCE MANUAL

### HOUSING ASSEMBLY - REPAIR 8-1

65-2306-11

#### 1. General

- A. This procedure has the data necessary to repair the housing assembly (115).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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

**NOTE:** For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bearing (125) from the housing (130) as specified in SOPM 20-50-03.
- (2) Install the new bearing (125) with wet sealant, A00247 into the housing (130) 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 20-60-04	MISCELLANEOUS MATERIALS

- C. Procedure

**NOTE:** For miscellaneous materials, refer to SOPM 20-60-04.

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- (1) Remove the fitting (120) from the housing (130).
- (2) Install the new fitting (120) with wet sealant, A00247 into the housing (130).

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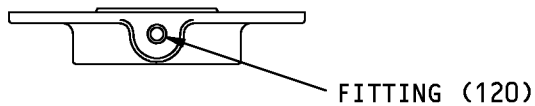
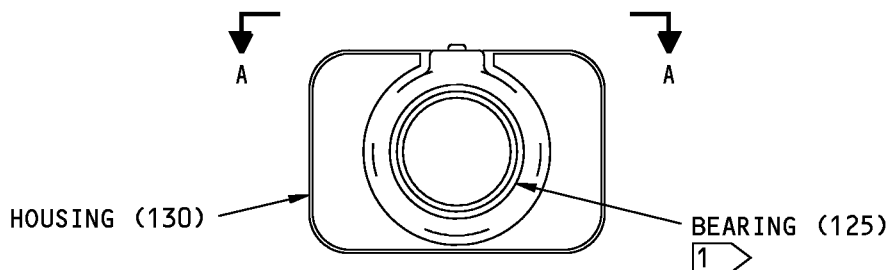
REPAIR 8-1

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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

G76980 S00041001319\_V2

65-2306-11 Housing Assembly Repair  
Figure 601

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## COMPONENT MAINTENANCE MANUAL

### HOUSING - REPAIR 8-2

65-2306-12

#### 1. General

- A. This procedure has the data necessary to refinish the housing (130).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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. 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 8-2, 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 in the holes identified by flagnote 1.

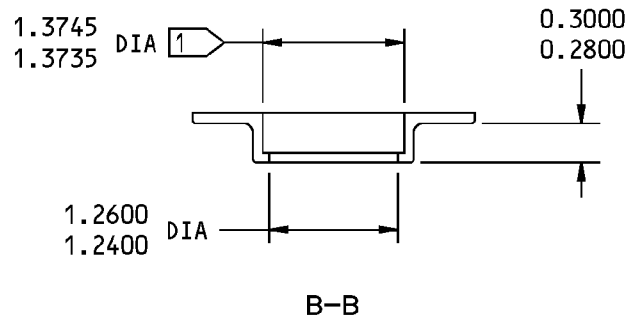
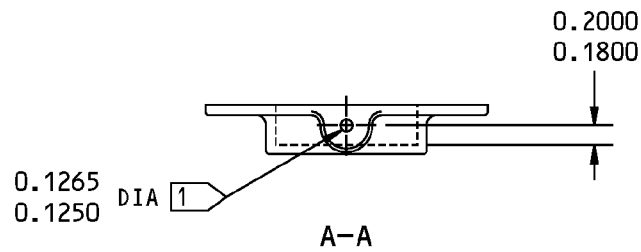
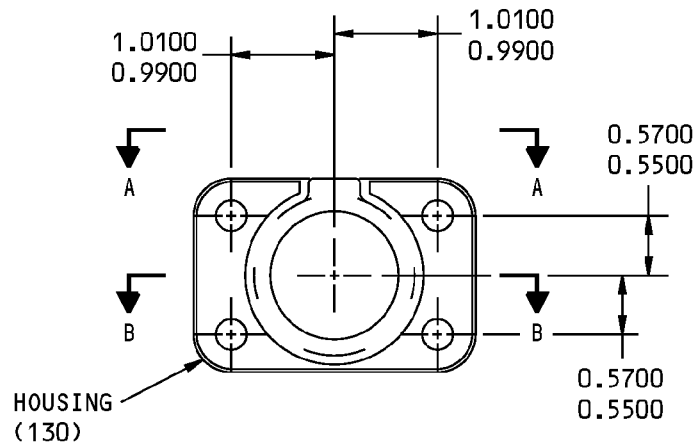
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1 DO NOT PUT PRIMER IN THIS HOLE

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

65-2306-12 Housing Repair  
Figure 601

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## COMPONENT MAINTENANCE MANUAL

### BEARING HOUSING ASSEMBLY - REPAIR 9-1

143A6126-1

#### 1. General

- A. This procedure has the data necessary to repair the bearing housing assembly (165).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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

**NOTE:** For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the bearing (170) from the bearing housing (175).
- (2) Install the new bearing (170) with sealant, A00247 into the bearing housing (175) as specified in SOPM 20-50-03.

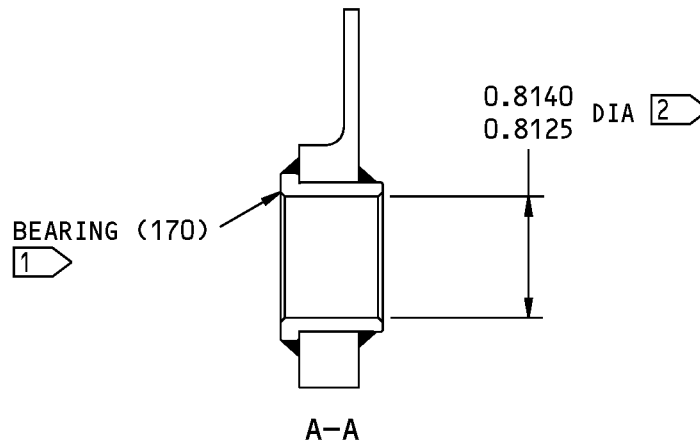
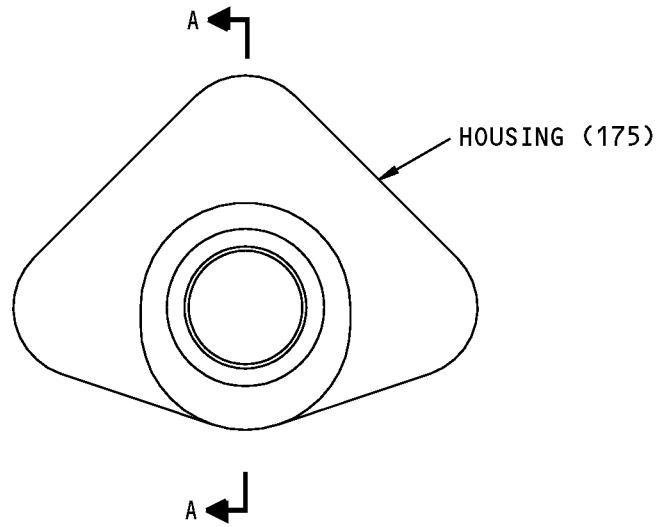
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1 INSTALL THIS BEARING WITH WET BMS 5-95 SEALANT AS SPECIFIED IN SOPM 20-50-03. FILLET SEAL EACH END

2 AFTER PRESS FIT

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

143A6126-1 Bearing Housing Assembly Repair  
Figure 601

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## COMPONENT MAINTENANCE MANUAL

### HOUSING - REPAIR 9-2

143A6126-2

#### 1. General

- A. This procedure has the data necessary to refinish the bearing housing (175).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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. 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 9-2, 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 in the hole for the bearing.

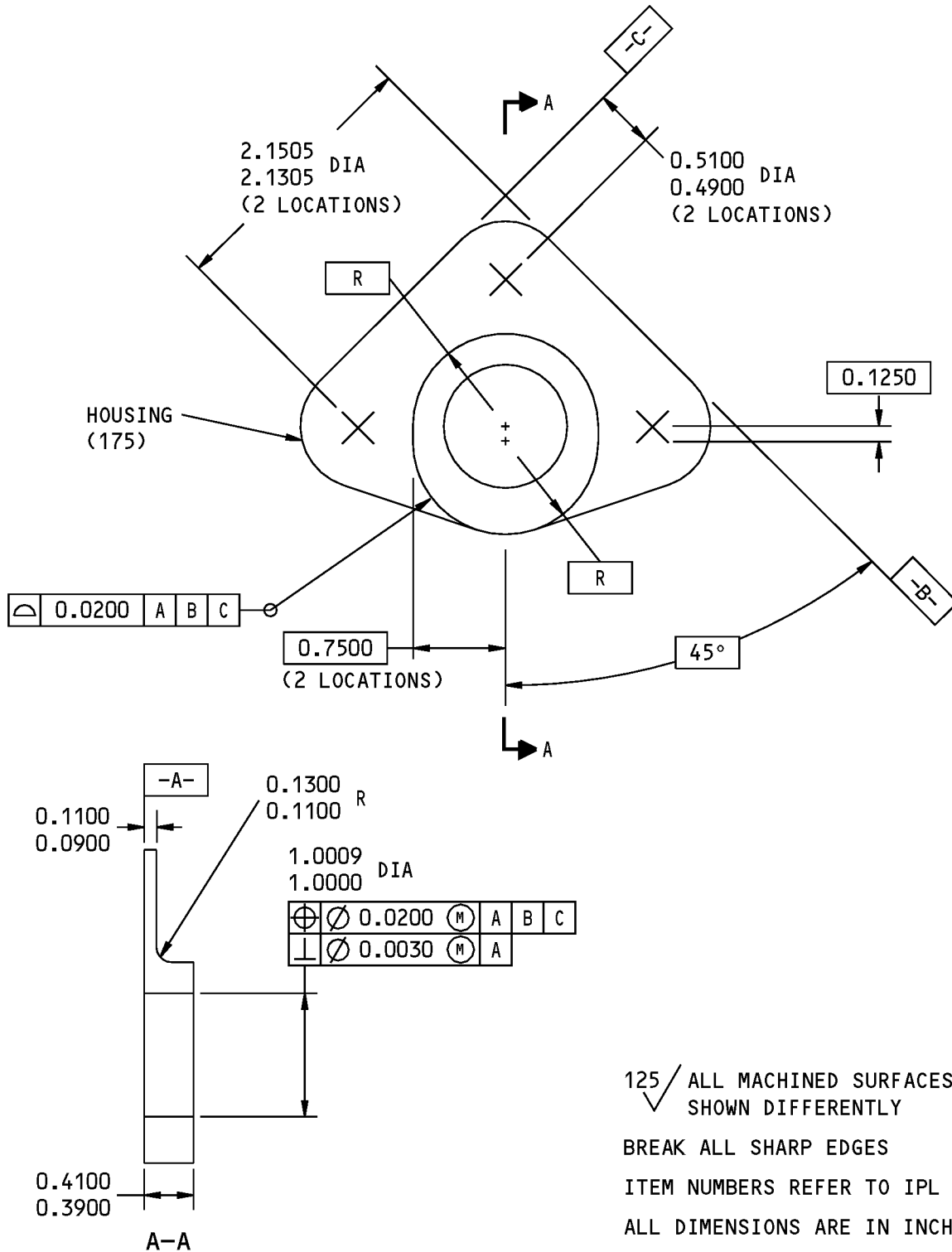
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143A6126-2 Housing Repair  
Figure 601

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## COMPONENT MAINTENANCE MANUAL

### STOP ASSEMBLY - REPAIR 10-1

143A6120-1, -2, -3, -4

#### 1. General

- A. This procedure has the data necessary to repair the stop assembly (340, 345, 380, 385).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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. 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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

- C. Procedure (REPAIR 10-1, Figure 601 and REPAIR 10-1, Figure 602)

**NOTE:** For miscellaneous materials, refer to SOPM 20-60-04.

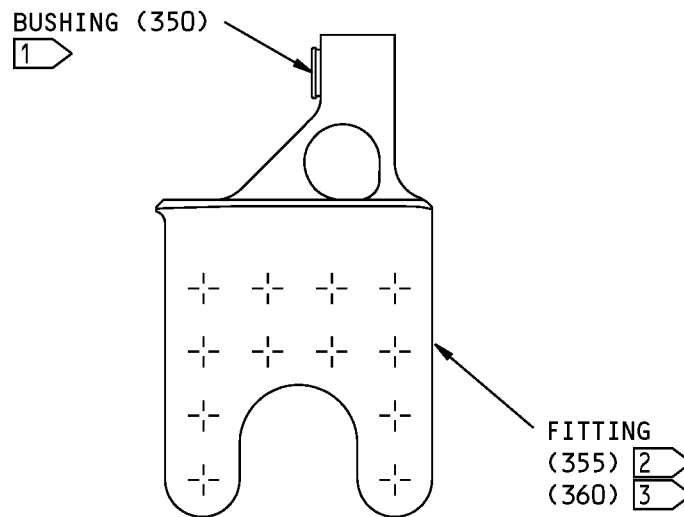
- (1) Remove the bushing(s) (350, 390) from the stop fitting(s) (355, 360, 395, 400).
- (2) Install and swage the new bushing(s) (350) into the stop fitting(s) (355, 360) with wet sealant, A00247 as specified in SOPM 20-50-03 and REPAIR 10-1, Figure 601.
- (3) Install and swage the new bushing(s) (390) into the stop fitting(s) (395, 400) with wet sealant, A00247 as specified in SOPM 20-50-03 and REPAIR 10-1, Figure 602.

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## COMPONENT MAINTENANCE MANUAL



143A6120-1 SHOWN  
143A6120-2 OPPOSITE

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 BMS 5-95 SEALANT

ITEM NUMBERS REFER TO IPL FIG. 2

2 FOR 143A6120-1

3 FOR 143A6120-2

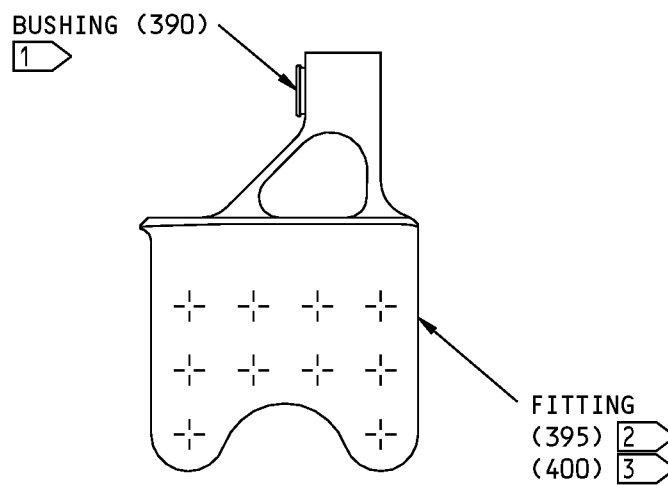
143A6120-1,-2 Stop Assembly Repair  
Figure 601

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REPAIR 10-1  
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## COMPONENT MAINTENANCE MANUAL



143A6120-3 SHOWN  
143A6120-4 OPPOSITE

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

2 FOR 143A6120-3

3 FOR 143A6120-4

ITEM NUMBERS REFER TO IPL FIG. 2

143A6120-3,-4 Fitting Assembly Repair  
Figure 602

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REPAIR 10-1  
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## COMPONENT MAINTENANCE MANUAL

### STOP FITTING - REPAIR 10-2

143A6120-5, -6, -7, -8

#### 1. General

- A. This procedure has the data necessary to refinish the stop fitting (355, 360, 395, 400).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to 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
    - (a) Intensity 0.005A-0.010A
    - (b) Coverage 1.0
    - (c) Overspray is permitted

#### 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 10-2, 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.

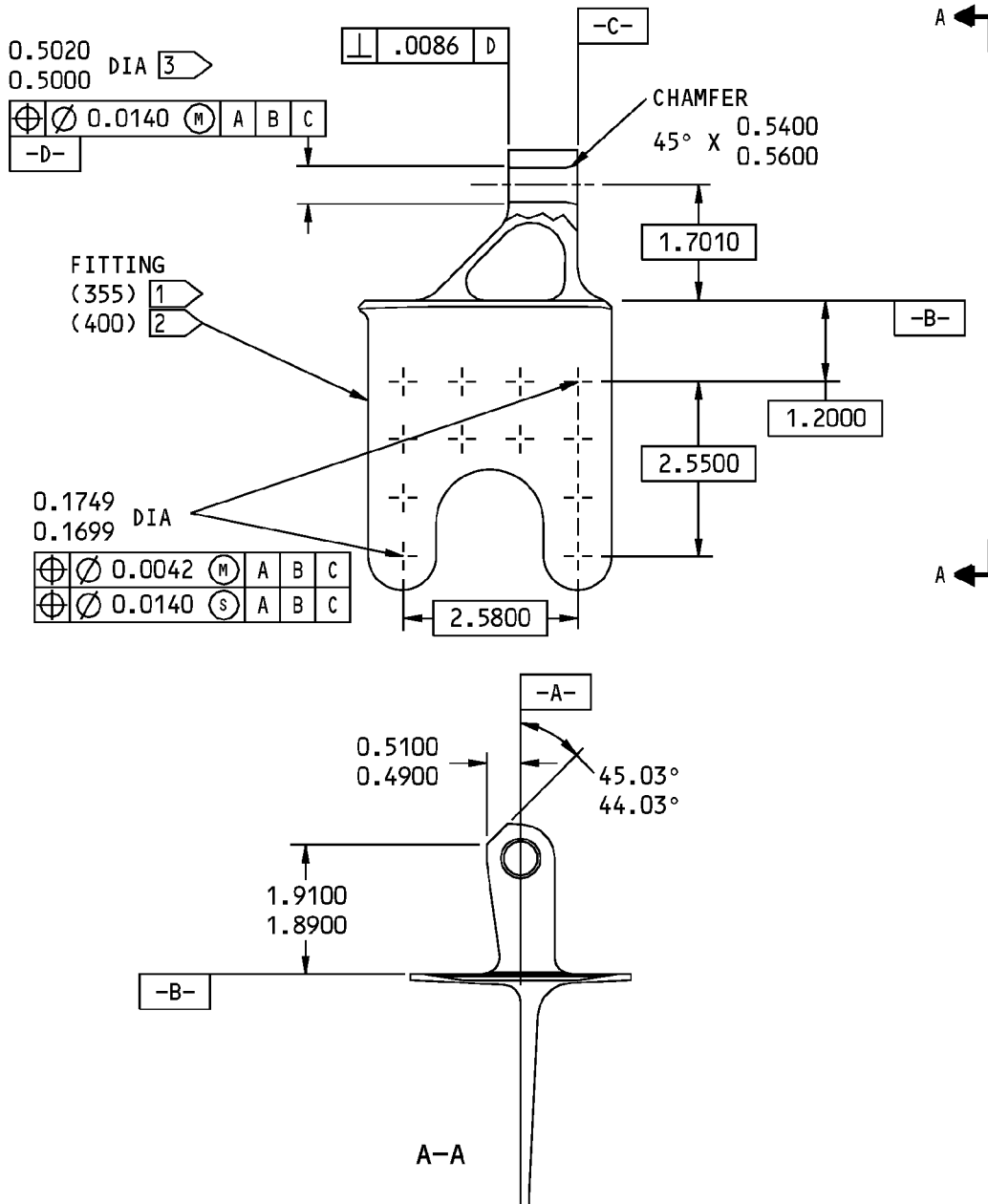
- (1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35).
- (2) Apply primer, C00259 (F-20.03) to all surfaces but not in the hole for the bushing, as identified by flagnote 3.

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- 1 FOR 143A6120-5.
- 2 FOR 143A6120-6.
- 3 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

143A6120-5,-6 Fitting Repair  
Figure 601

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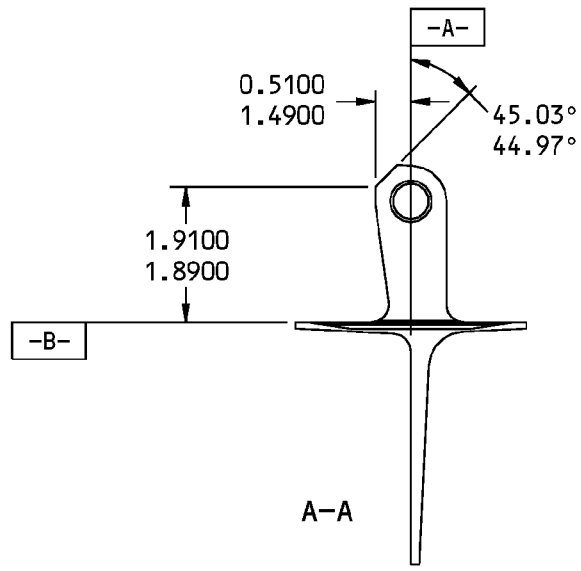
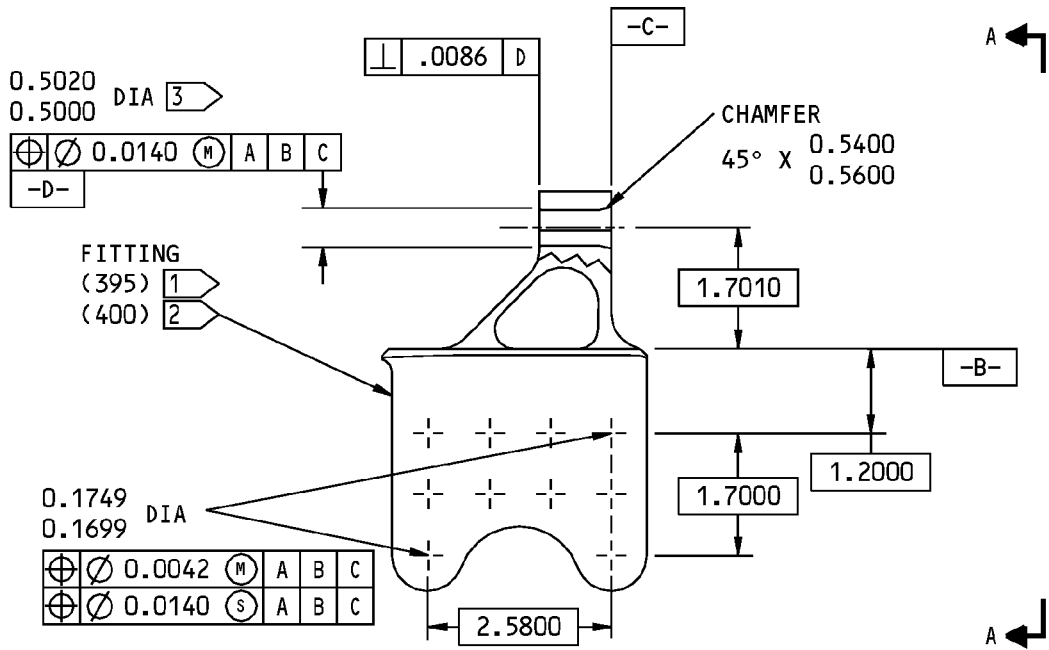
REPAIR 10-2

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- 1 FOR 143A6120-7.
- 2 FOR 143A6120-8.
- 3 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

143A6120-7,-8 Fitting Repair  
 Figure 602

**52-31-15**

REPAIR 10-2  
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## COMPONENT MAINTENANCE MANUAL

### 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 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 20-50-22	HOW TO INSTALL THREADED INSERTS

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

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

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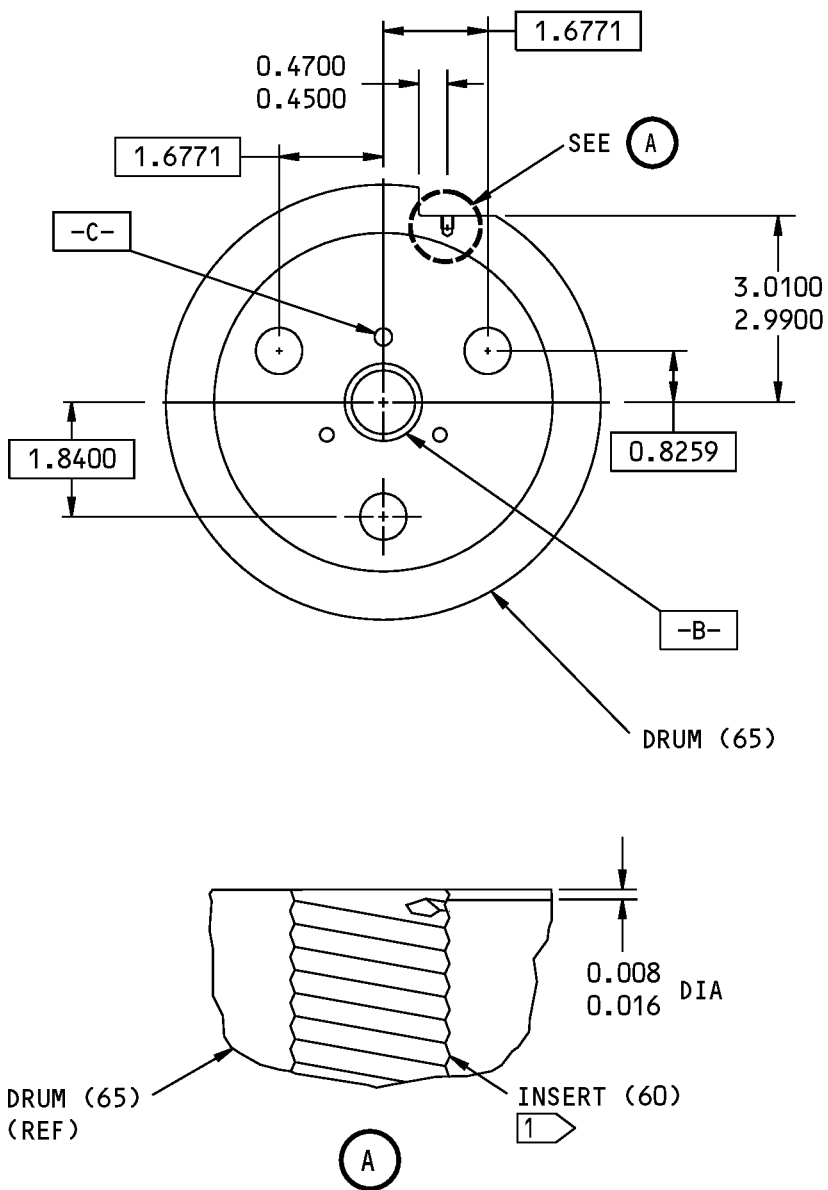
REPAIR 11-1

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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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## COMPONENT MAINTENANCE MANUAL

### 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 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. 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 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) but not in the hole shown in REPAIR 11-2, Figure 601.

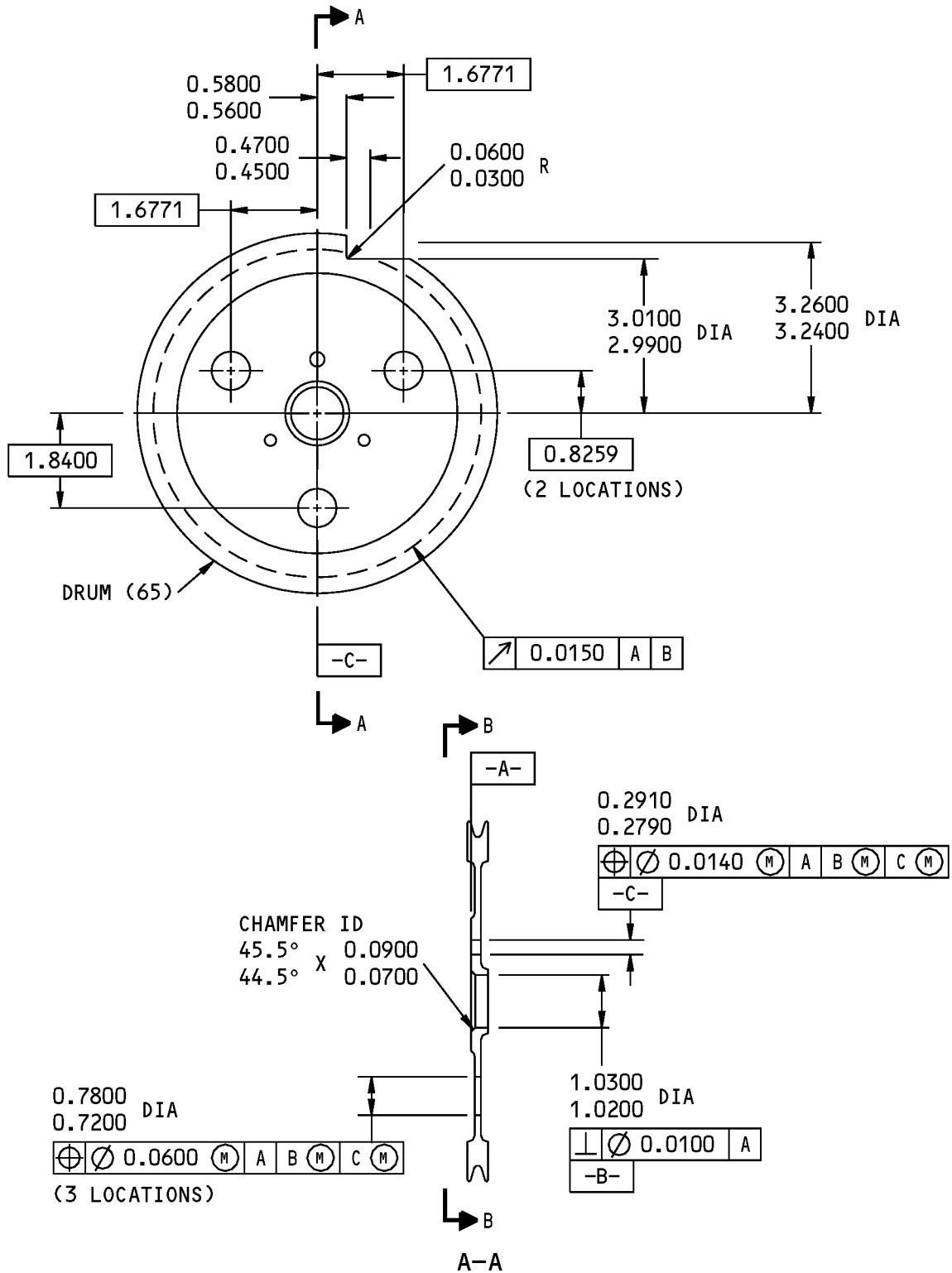
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65C33690-5 Drum Repair  
Figure 601 (Sheet 1 of 2)

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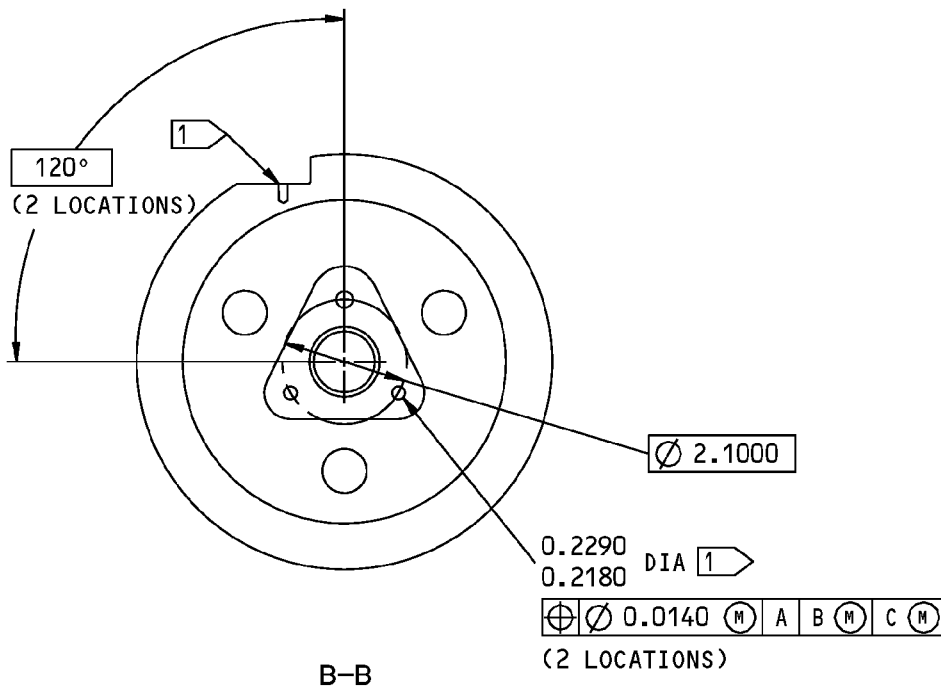
REPAIR 11-2

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1 NO 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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## COMPONENT MAINTENANCE MANUAL

### 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 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
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 20-60-02	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. For lubricants, refer to SOPM 20-60-03.

- (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 lubricant, D00113 (F-19.10) to the spline and thread surfaces identified by flagnote 2. Overspray is permitted.

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REPAIR 12-1

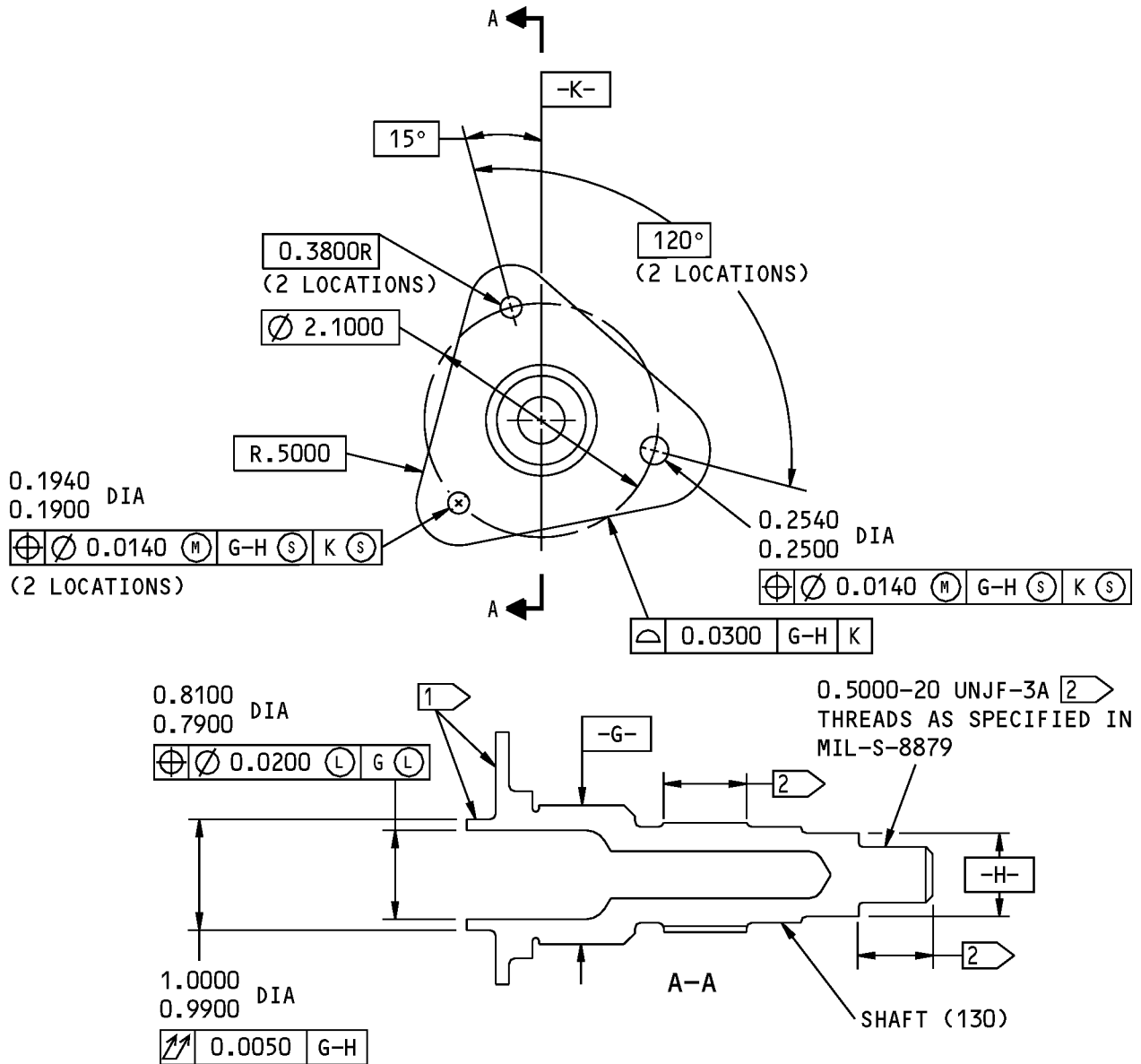
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- 1 APPLY CADMIUM PLATE (F-15.06) AND BMS 10-11, TYPE 1 PRIMER (F-20.02)
- 2 APPLY BMS 3-8 SOLID FILM LUBRICANT (F-19.10)

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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## COMPONENT MAINTENANCE MANUAL

### 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 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 20-60-04	MISCELLANEOUS MATERIALS

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

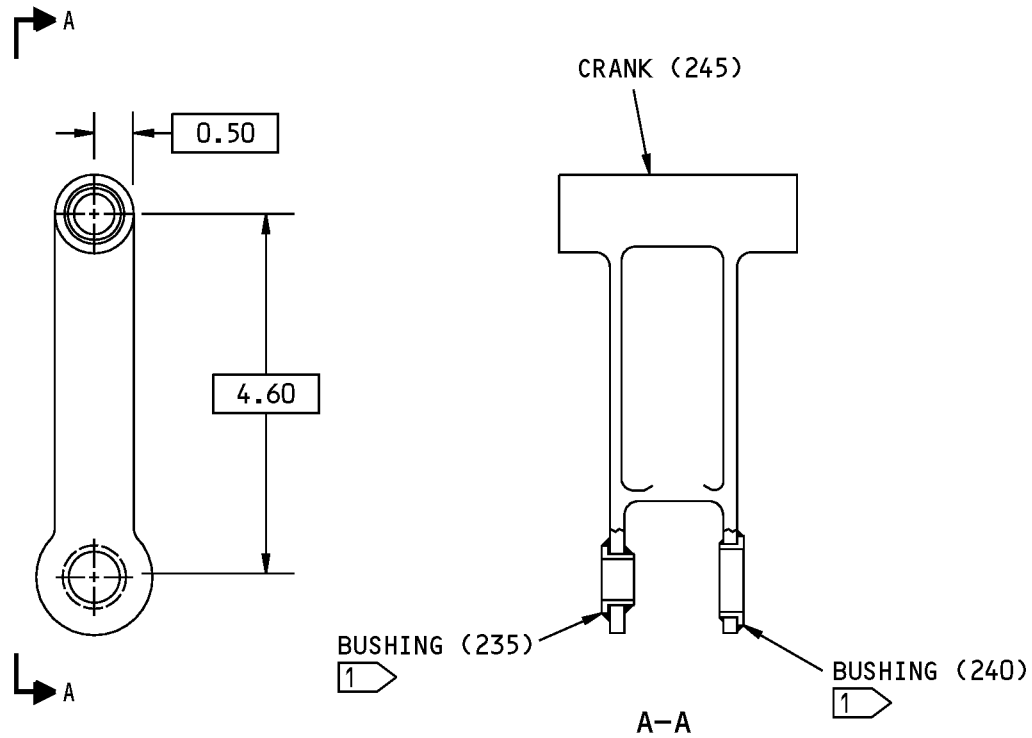
**NOTE:** For miscellaneous materials, refer to SOPM 20-60-04.

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

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## COMPONENT MAINTENANCE MANUAL



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

65C33689-2 Idler Crank Assembly Repair  
Figure 601

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REPAIR 13-1  
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## COMPONENT MAINTENANCE MANUAL

### 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 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. 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 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). Do not put primer in the holes for the bushings, as identified by flagnote 1.

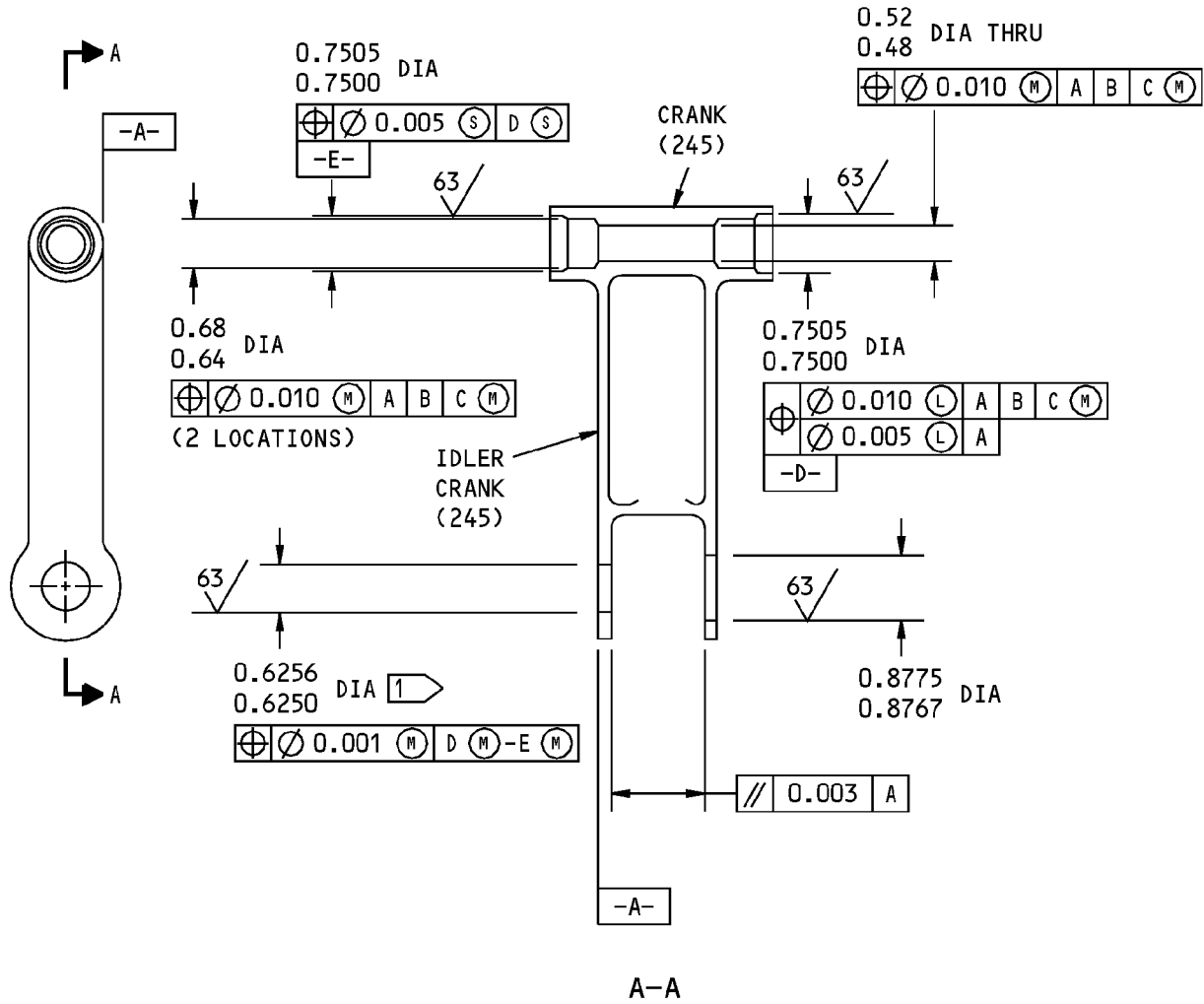
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REPAIR 13-2

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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

65C33689-5 Idler Crank Repair  
Figure 601

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REPAIR 13-2

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## COMPONENT MAINTENANCE MANUAL

### 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 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. Procedure (REPAIR 14-1, Figure 601)
  - (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 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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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

**NOTE:** 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.

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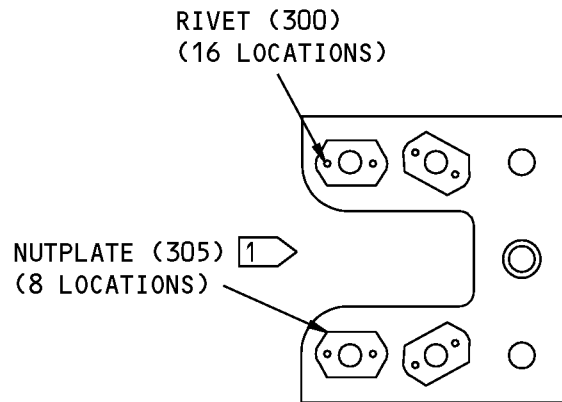
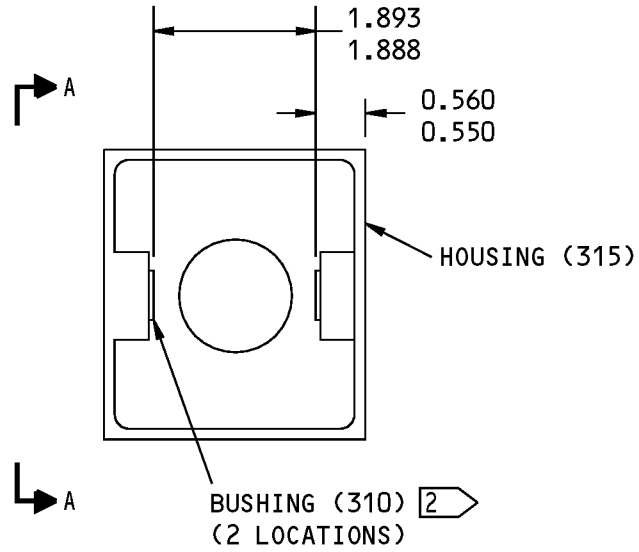
REPAIR 14-1

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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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## COMPONENT MAINTENANCE MANUAL

### 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 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. 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 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). Do not put primer, C00259 in the holes for the bushings, as identified by flagnote 1.

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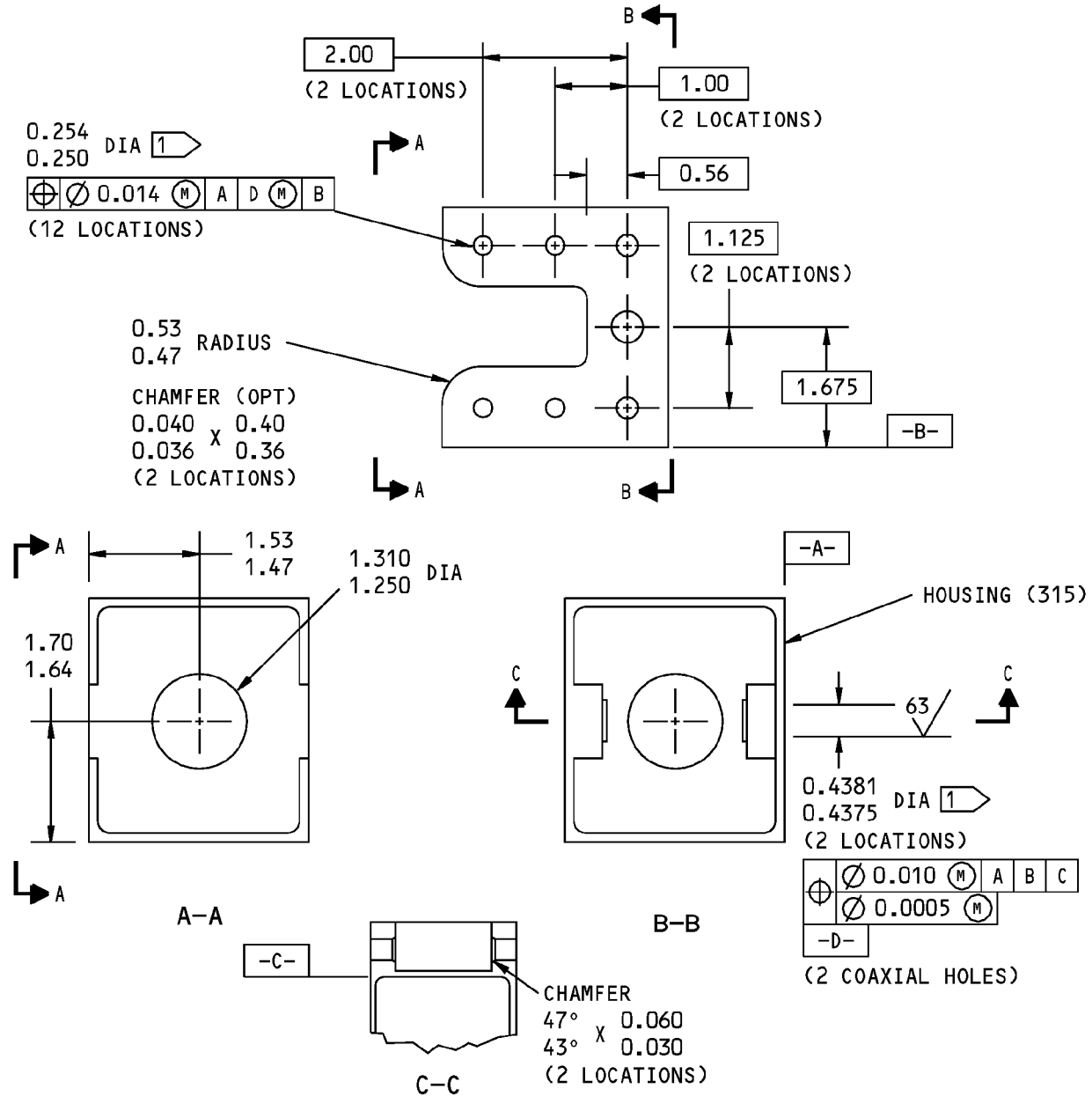
REPAIR 14-2

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COMPONENT MAINTENANCE MANUAL



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

**52-31-15**

REPAIR 14-2

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## COMPONENT MAINTENANCE MANUAL

### 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 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. 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 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). Do not put primer, C00259 in the holes for the bushings, as identified by flagnote 1.

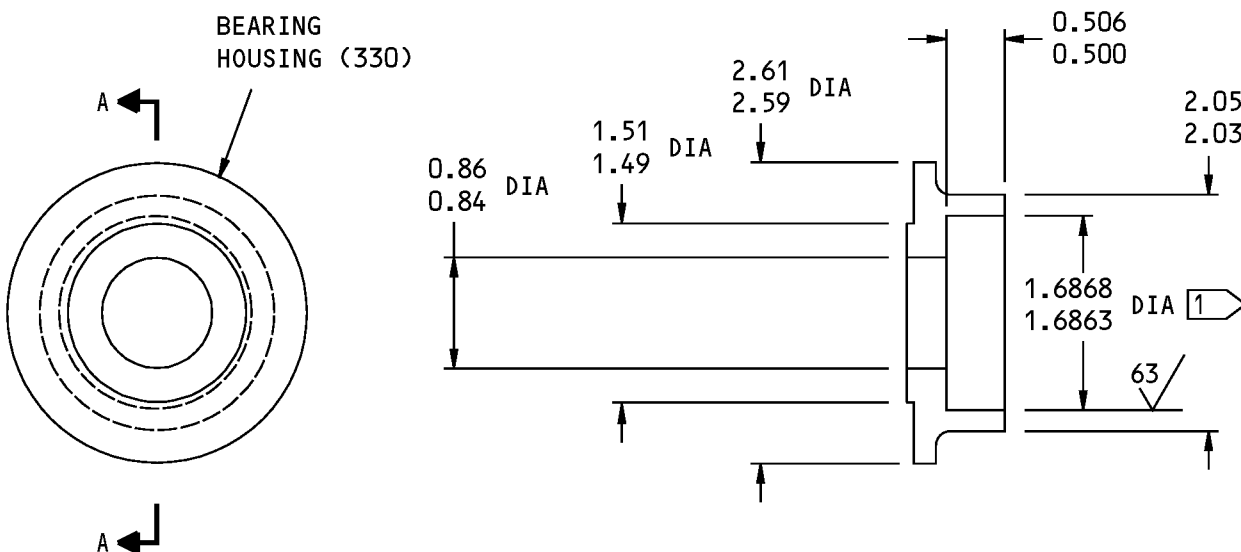
# 52-31-15

REPAIR 15-1

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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. 4

ALL DIMENSIONS ARE IN INCHES

65C33810-2 Bearing Housing Repair  
Figure 601

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REPAIR 15-1

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## COMPONENT MAINTENANCE MANUAL

### 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 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
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I

- B. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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

**NOTE:** 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 primer, C00259 as specified in SOPM 20-50-03.

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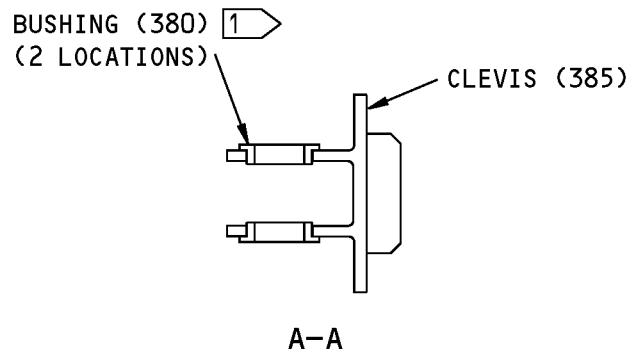
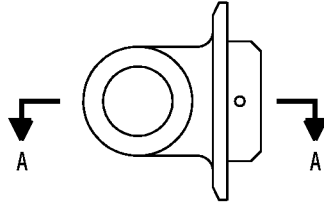
REPAIR 16-1

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1 INSTALL THIS BUSHING WITH WET  
BMS5-95 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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REPAIR 16-1  
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## COMPONENT MAINTENANCE MANUAL

### ASSEMBLY

#### 1. General

- A. This procedure has the data necessary to assemble the forward cargo door assembly.
- B. Assemble this component sufficient 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 thru IPL Figure 4 for item numbers.

#### 2. Assembly

##### A. Tools/Equipment

**NOTE:** Equivalent substitutes may be used.

Reference	Description
SPL-10750	Repair Fixture - Fwd Cargo Door (Part #: C52002-32, Supplier: 81205)
SPL-10752	Spring - Loading Control Equipment (Part #: C52004-1, Supplier: 81205) (Opt Part #: C52001-1, Supplier: 81205)

##### B. 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
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)
D00113	Lubricant - Liquid Dispersed Solid Film Lubricant	BMS3-8, BAC 5811, TYPE VIII
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995~ C32

##### C. References

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

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## COMPONENT MAINTENANCE MANUAL

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

### D. Procedure

**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. For lubricants, refer to SOPM 20-60-03. For miscellaneous materials, refer to SOPM 20-60-04.

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

### 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 lubricant, D00113 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) and the centering bushing (320) into the bearing housing (330) and the pin (370).
- 6) Use the loading control equipment spring, SPL-10752 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:

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- 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).
- 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 secure the adjuster (280) with the gimbal fitting (290) as specified in SOPM 20-50-02.
- 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 loading control equipment spring, SPL-10752.
- (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.

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### F. Procedure for IPL Figure 2

- (1) Install the marker (495) and plate (500) onto the door structure as follows:
  - (a) Apply adhesive, A00119 onto the back of the marker (495) and plate (500) as specified in SOPM 20-50-05.
  - (b) Install the marker (495) and the plate (500) onto the door structure as specified in SOPM 20-50-05.
  - (c) Apply coating, B00571 onto the marker (495) and plate (500) as specified in SOPM 20-50-05.
- (2) Install the seal (490) and the seal retainers (450 thru 485) onto the door structure as follows:
  - (a) Install the seal (490) onto the seal retainers (450 thru 485) 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 (490) can be installed onto the retainers (450 thru 485) with liquid soap lubricant as specified in SOPM 20-50-07 or diluted 50/50 water and alcohol, B00130.
  - (b) If necessary, apply sealant, A00247 fay surface seal between the seal retainers (450 thru 485) and the door structure.
  - (c) Install the seal retainers (450 thru 485) onto the door structure with rivets (440, 445).
- (3) Install the guide plates (80, 85) onto the door structure as follows:
  - (a) Apply wet sealant, A00247 onto the bolts (65) as specified in SOPM 20-50-19.
  - (b) Install the guide plates (80, 85) onto the door structure with bolts (65) and washers (70).
- (4) Install the attach spring angle (315) onto door structure as follows:
  - (a) Apply wet sealant, A00247 onto the bolts (300, 305) as specified in SOPM 20-50-19. Apply sealant, A00247 fay surface sealant on each side of the filler (320), the attach spring angle (315) and the door structure.
  - (b) Install the attach spring angle (315) and the filler (320) onto the door structure with the bolt (300, 305) and collars (310).
- (5) Install the bearing housing assemblies (IPL Figure 2, 165) and housing assembly (115) onto the door structure as follows:
  - (a) Apply wet sealant, A00247 onto the bolts (100, 150) as specified in SOPM 20-50-19.
  - (b) Install the bearing housing assemblies (165) onto the door structure with bolts (150), washers (155) and nuts (160).
  - (c) Install the housing assembly (115) onto the door structure with bolts (100), washers (105) and nuts (110).
- (6) Install the latch torque tube assembly (190) onto the door structure as follows:
  - (a) Partially disassemble the latch torque tube assembly (190) to remove the roller arm fittings (IPL Figure 3, 40) and arm fitting (60) from tube (65). Refer to ASSEMBLY, Paragraph 2.H. for the latch torque tube assembly procedures.
  - (b) Slide the tube (65) into the forward and aft bearing housings (IPL Figure 2, 165) and the housing assembly (115).
  - (c) Install an equal amount of washers (185) as necessary at each end of the tube (IPL Figure 3, 65) to keep a maximum of 0.15 inch total end play.

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- (d) Assemble the latch torque tube assembly (190) onto the door structure. Make sure that the marker (IPL Figure 3, 70) on the tube is oriented towards the outer skin of the door and points upward.
  - (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 (605) and the aft fitting assembly (610) onto the door structure as follows:
    - (a) Apply wet sealant, A00247 onto the threads of the bolts (545, 560) as specified in SOPM 20-50-19.
    - (b) Install the aft fitting assembly (610) onto the door structure with bolts (545, 560), washers (565) and nuts (570, 580).
    - (c) Install the forward fitting assembly (605) onto the door structure with bolts (545, 560), washers (565) and nuts (570, 580).
  - (2) Apply wet sealant, A00247 onto the threads of the bolts (475) as specified in SOPM 20-50-19.
  - (3) Install the support bracket assembly (525) and the attach bracket assembly (485, 505) into the door structure with bolts (475) and collars (480).
  - (4) Install the cable assembly (415) into the door structure as follows:
    - (a) Connect the cable assembly (415) with the cable sheave (410).
    - (b) Install the cable assembly (415) onto the pulley (450).
    - (c) Apply wet sealant, A00247 onto the threads of the bolt (430) as specified in SOPM 20-50-19.
    - (d) Install the pulley (450) with the cable assembly (415) onto the door structure with the bolt (430), washer (435), bushings (445) and nut (440).
  - (5) Install the counterbalance assembly (470A) into the door structure as follows:
    - (a) Apply sealant, A00247 onto the threads of the bolts (455, 460) as specified in SOPM 20-50-19.
    - (b) Install the counterbalance assembly (470A) onto the attach bracket assemblies (485, 505) with the bolts (455, 460) and washers (465).
  - (6) Connect the cable assembly (415) with the counterbalance assembly (470A) as follows:
    - (a) Connect the cable assembly (415) with the counterbalance assembly (470A).
    - (b) Install the cable retainer (405) onto the counterbalance assembly (470A) with the screw (395) and washer (400).
  - (7) Install the rod assembly (355) onto the latch torque tube assembly (IPL Figure 2, 190) as follows:
    - (a) Position the rod assembly (355) onto the latch torque tube assembly (IPL Figure 2, 190).
    - (b) Install the bolt (IPL Figure 1, 290), washers (295, 300), nuts (305) and cotter pins (275) to secure the rod assembly (355) onto the latch torque tube assembly (IPL Figure 2, 190). Install the cotter pins (275) as specified in SOPM 20-50-02.

**NOTE:** Install equal amounts of washers (300) on each side of the rod assembly (355) to keep 0.15-inch of total end play. You can have one washer (300) more than the other side as needed for tolerances.

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- (8) Install the cover (315) with the latch assembly (320) onto the door structure as follows:
- Apply sealant, A00247 fay surface sealant between the latch assembly (320) and the outer skin of the door structure as specified in SOPM 20-50-19.
  - Install the cover (315) with the latch assembly (320) onto the door structure with screws (255) and washers (260).
- (9) Install the spring attach plate (360) and connect the rod assembly (355) with the flush latch assembly (365) and the latch assembly (320) as follows:
- Install the spring attach plate (360) onto the flush latch assembly (365) with bolt (335), washers (345), nut (350) and cotter pin (325). Install the cotter pin (325) as specified in SOPM 20-50-02.
  - Connect the rod assembly (355) onto the spring attach plate (360) and the flush latch assembly (365) with bolt (330), washers (340, 341, 342, 343), nut (350) and cotter pin (325). Install cotter pin (325) as specified in SOPM 20-50-02.
- NOTE:** Install a maximum of 2 washers (342) to maintain a maximum gap of 0.010 inches after installation.
- For installation of a new rod assembly (355), do as follows:
    - After the angle of the rod assembly (355) has been established, drill a 0.0700-0.0780 inch hole through the pilot hole in the rod assembly (355).
    - Install a cotter pin (368) in the hole of the rod assembly (355).
- (10) Install and connect the spring (310) onto the door structure and the spring attach plate (360).
- (11) Install the access cover (390) onto the door structure with screws (370) and washers (375).
- (12) Install the snubber fitting assembly (190) onto the door structure as follows:
- Apply wet sealant, A00247 onto the threads of the bolts (170, 175) as specified in SOPM 20-50-19.
  - Install the snubber fitting assembly (190) onto the door structure with bolts (170, 175), washers (180, 181, 183) and nuts (185).
- (13) Install serrated plates (35, 40) onto the door structure as follows:
- Position the serrated plates (35, 40) and shims (45) onto door structure.
  - Align the serrations on the serrated plates (35, 40) to within 89.75-90.25 degrees of each other.
  - Apply wet sealant, A00247 onto the threads of the bolts (20) as specified in SOPM 20-50-19.
  - 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 (5) onto the door structure.

### H. Procedure for IPL Figure 3

- (1) Assemble the latch torque tube assembly (1A) as follows:
- Install the arm fitting (60) onto the tube (65) with bolts (45), washers (50) and nuts (55).
  - Install the roller arm fittings (40, 45) onto the tube (65) with bolts (25), washers (30) and nuts (35).

**NOTE:** Install the bolts (25), washers (30) and nuts (35) finger tight at this time. The fasteners will be tightened when the door is installed on the airplane.

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ASSEMBLY

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## COMPONENT MAINTENANCE MANUAL

- (c) Install the roller bearing (20A) at each roller arm fitting (40) as follows:
  - 1) Install the roller bearings (20A) onto the roller arm fittings (40) with washers (15) and nuts (10). Tighten the nuts (10) to 95-160 pound-inch.
  - 2) Add the washers (15) as necessary at 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 cargo door repair fixture, SPL-10750.

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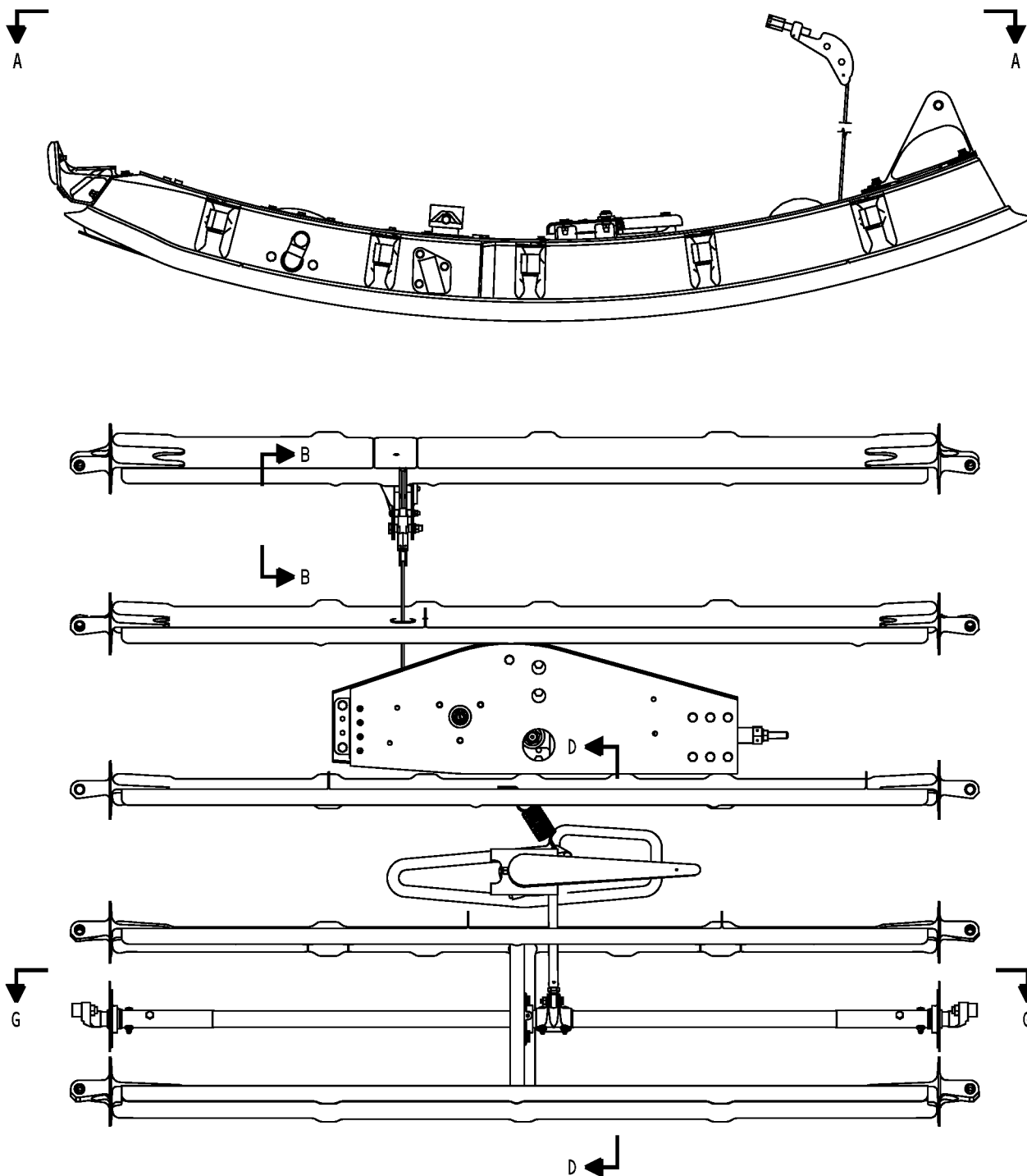
ASSEMBLY

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# COMPONENT MAINTENANCE MANUAL

## FITS AND CLEARANCES

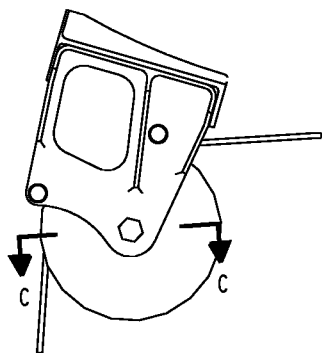


**NOTE:** SOME PARTS ARE NOT SHOWN FOR A CLEARER VIEW.

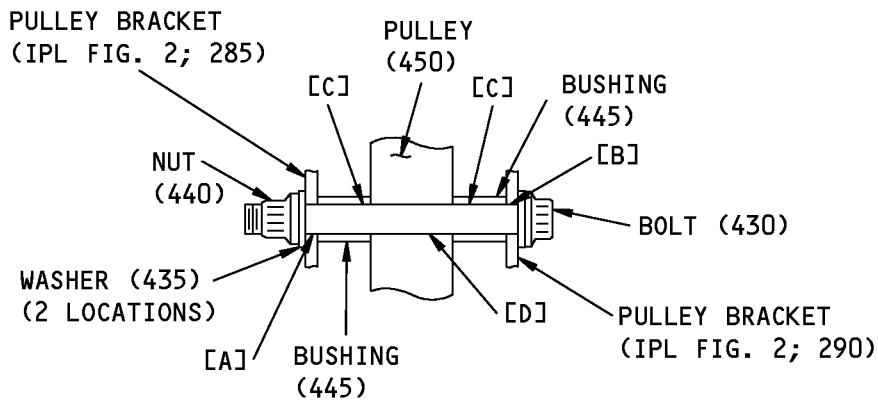
A-A

Fits and Clearances  
Figure 801 (Sheet 1 of 5)

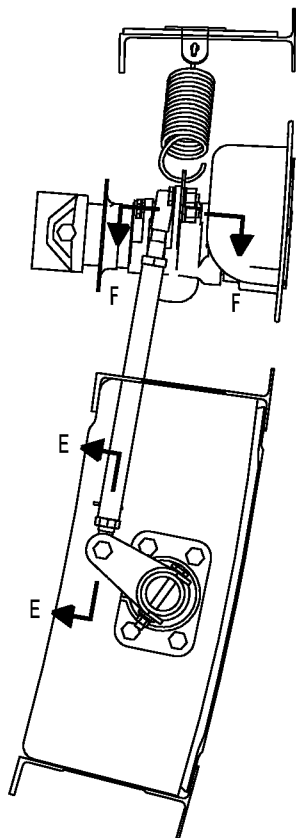
COMPONENT MAINTENANCE MANUAL



B-B



C-C

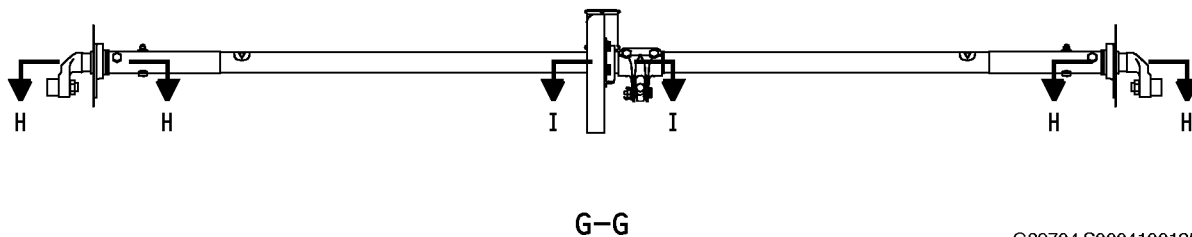
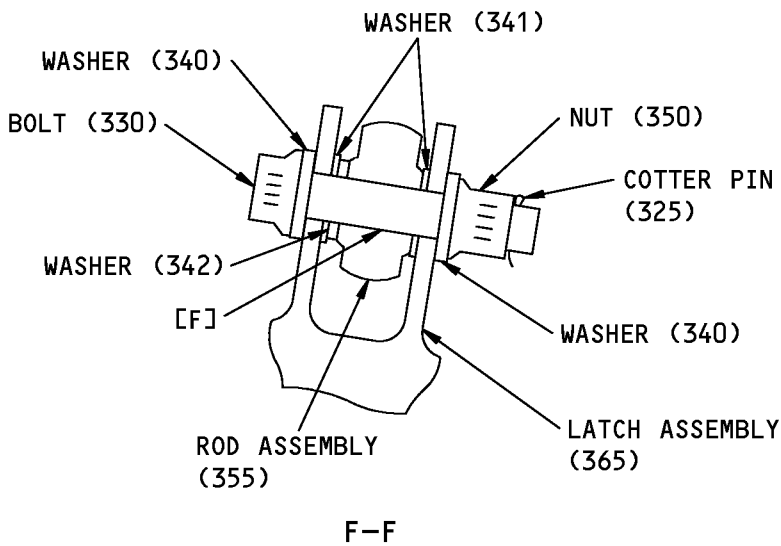
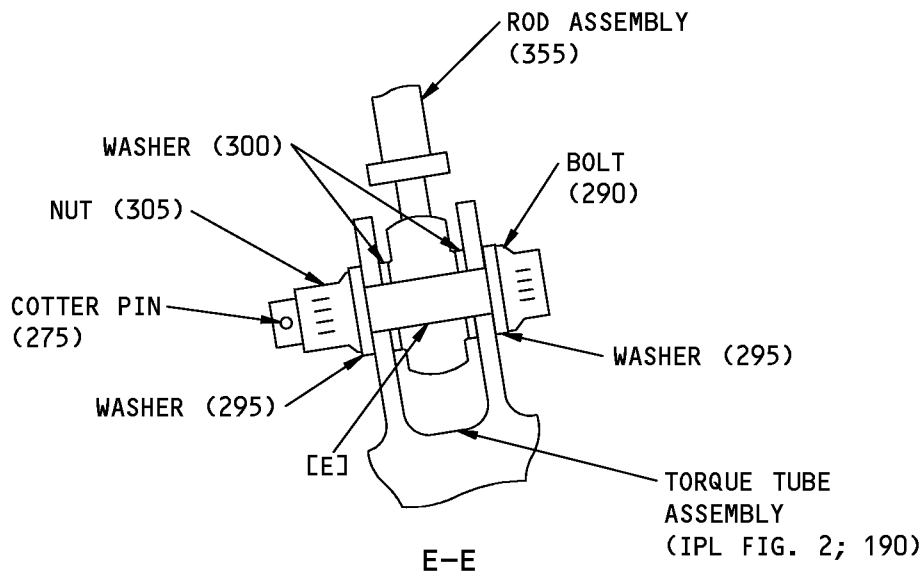


D-D

G89700 S00041001356\_V3

Fits and Clearances  
Figure 801 (Sheet 2 of 5)

COMPONENT MAINTENANCE MANUAL

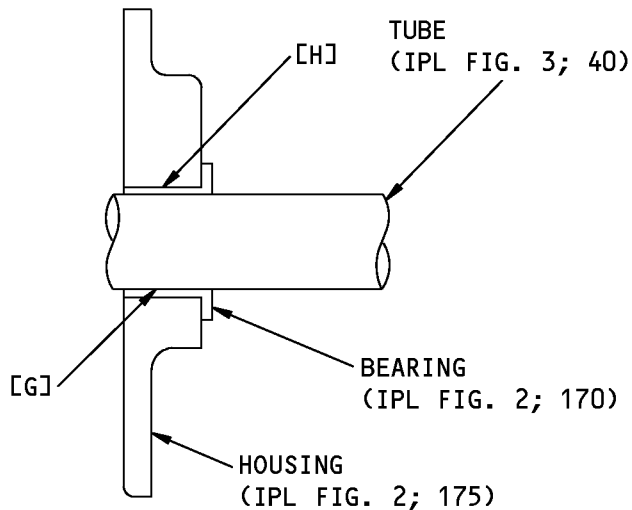


Fits and Clearances  
Figure 801 (Sheet 3 of 5)

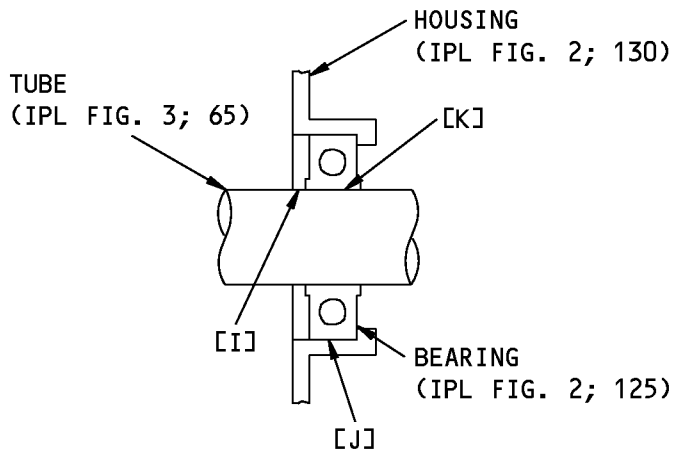
G89704 S00041001357\_V3



COMPONENT MAINTENANCE MANUAL



H-H



I-I

ITEM NUMBER REFER TO IPL FIG. 1  
UNLESS SHOWN DIFFERENTLY

G89708 S00041001358\_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 285	0.3120	0.3160	0.0000	0.0050			
	1	OD 430	0.3110	0.3120					
[B]	2	ID 290	0.3120	0.3160	0.0000	0.0050			
	1	OD 430	0.3110	0.3120					
[C]	1	ID 445	0.3125	0.3130	0.0005	0.0020			
	1	OD 430	0.3110	0.3120					
[D]	1	ID 450	0.3120	0.3125	0.0000	0.0015			
	1	OD 430	0.3110	0.3120					
[E]	1	ID 355	0.1897	0.1900	0.0002	0.0015			
	1	OD 290	0.1885	0.1895					
[F]	1	ID 355	0.1897	0.1900	0.0002	0.0015			
	1	OD 330	0.1885	0.1895					
[G]	2	ID 170	0.8125	0.8140	0.0020	0.0055			
	3	OD 40	0.8085	0.8105					
[H]	2	ID 175	1.0005	1.0009	-0.0018	-0.0004			
	2	OD 170	1.0013	1.0023					
[I]	2	ID 130	1.2400	1.2600	0.2460	0.2710			
	3	OD 65	0.9890	0.9940					
[J]	2	ID 130	1.3735	1.3745	-0.0015	0.0000			
	2	OD 125	1.3745	1.3750					
[K]	2	ID 125	0.9995	1.0015	0.0055	0.0125			
	3	OD 65	0.9890	0.9940					

\* ALL DIMENSIONS ARE IN INCHES

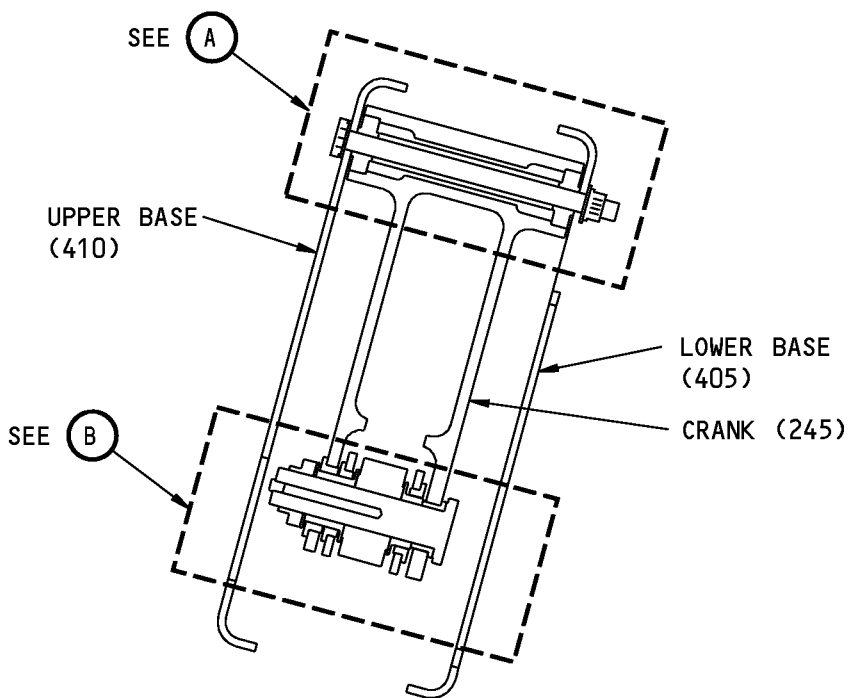
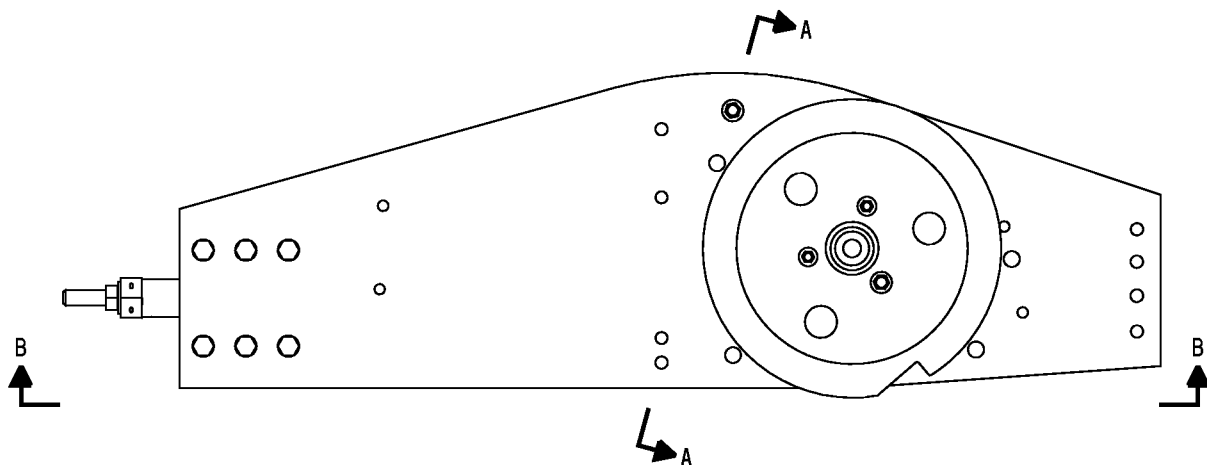
NEGATIVE VALUES SHOW INTERFERENCE FIT

G88252 S00041001359\_V2

Fits and Clearances  
Figure 801 (Sheet 5 of 5)

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FITS AND CLEARANCES  
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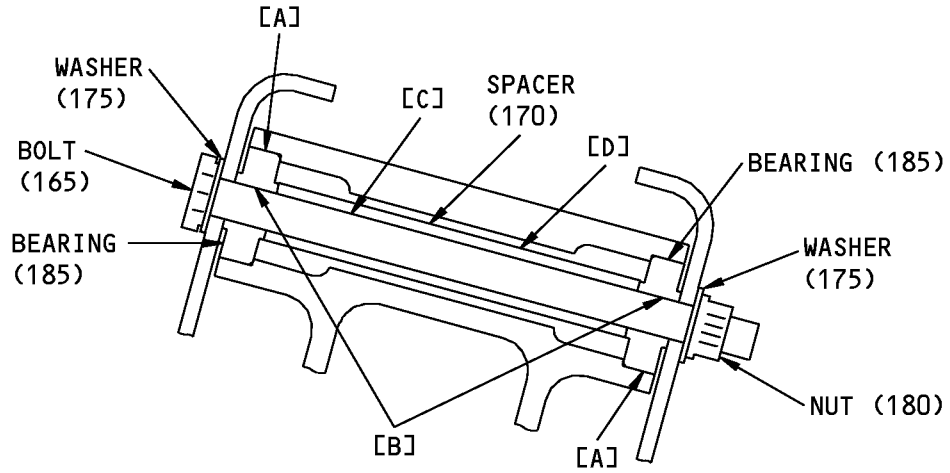


A-A

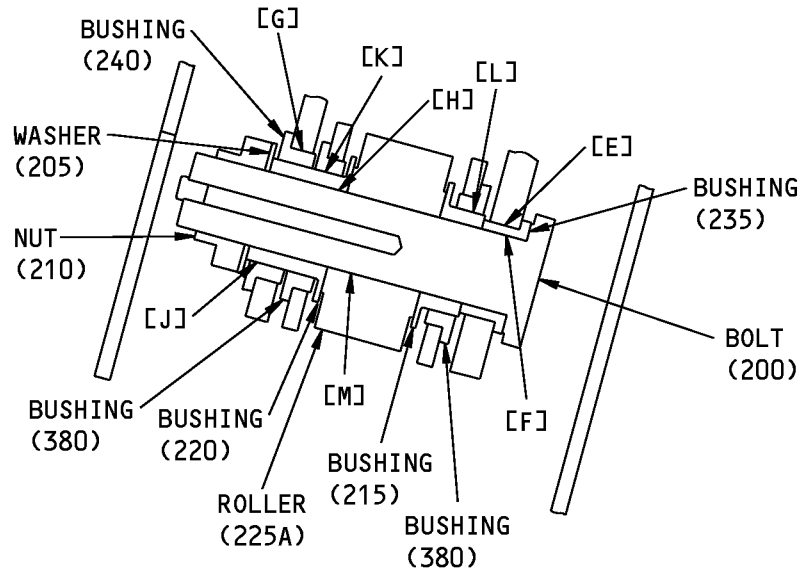
G86824 S00041001360\_V3

Fits and Clearances  
Figure 802 (Sheet 1 of 5)

COMPONENT MAINTENANCE MANUAL



A

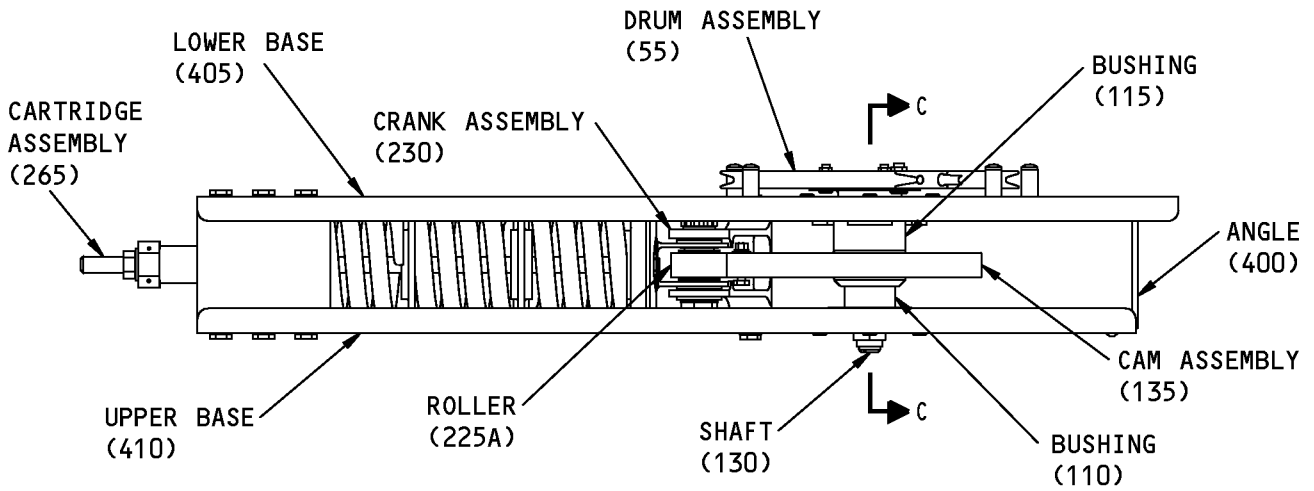


B

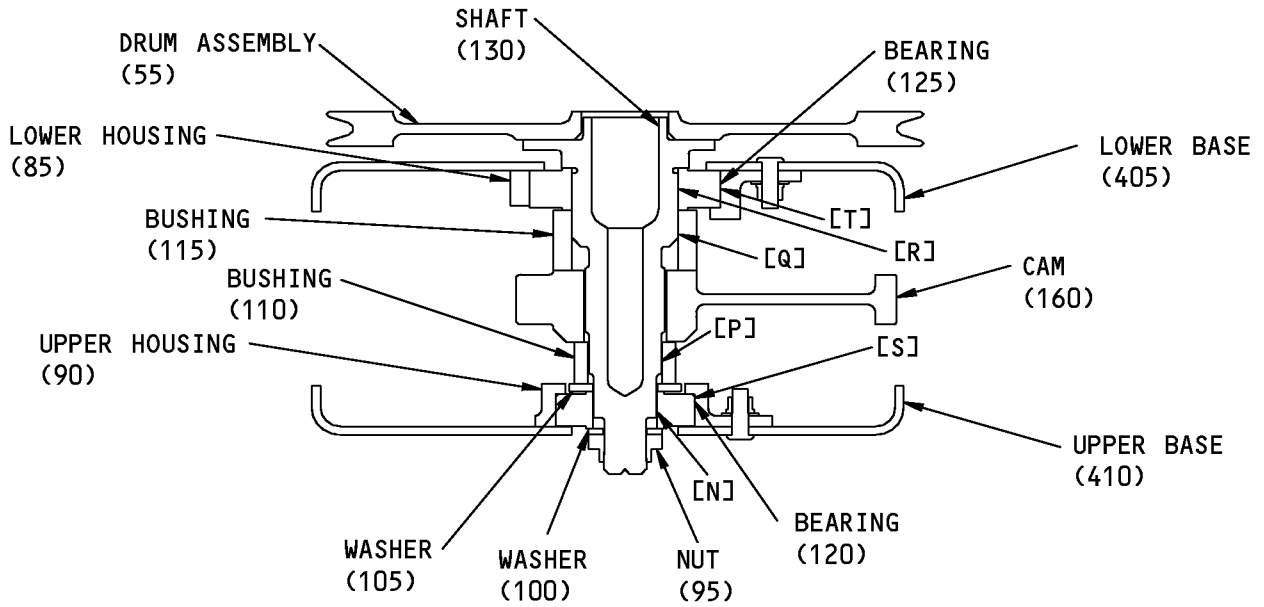
G95563 S00041001361\_V3

Fits and Clearances  
Figure 802 (Sheet 2 of 5)

COMPONENT MAINTENANCE MANUAL



B-B



C-C

ITEM NUMBERS REFER TO IPL FIG.4

G86826 S00041001362\_V2

Fits and Clearances  
Figure 802 (Sheet 3 of 5)




## 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	DESIGN DIMENSION				SERVICE WEAR LIMIT		
	FIG. 4, MATING ITEM NO.	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	175-225	

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

G88257 S00041001365\_V2

Torque Table  
Figure 803

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FITS AND CLEARANCES  
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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-10750	Repair Fixture - Fwd Cargo Door	C52002-32	81205
SPL-10752	Spring - Loading Control Equipment	C52004-1	81205
		Opt: C52001-1	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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## COMPONENT MAINTENANCE MANUAL

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
0HDW7	HUCK MFG CO 3724 EAST COLUMBIA STREET TUCSON, ARIZONA 85714
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

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## COMPONENT MAINTENANCE MANUAL

Code	Name
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
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.

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## COMPONENT MAINTENANCE MANUAL

Code	Name
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
50744	KIRKHILL-TA CO/SFS DIV 300 E CYPRESS STREET BREA, CALIFORNIA 92821-4007 FORMERLY SFS IND; FORMERLY BURKE RUBBER SFS DIV
52828	REPUBLIC FASTENER MFG CORP 1300 RANCHO CONEJO BLVD NEWBURY PARK, CALIFORNIA 91320-1405 FORMERLY IN SYLMAR, CALIFORNIA
53551	ALLFAST FASTENING SYSTEMS INC 15200 EAST DON JULIAN ROAD PO BOX 3166 CITY OF INDUSTRY, CALIFORNIA 91745-1001 FORMERLY V0736B FORMERLY ALLFAST INC V5K545
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
5M902	ALCOA GLOBAL FASTENERS INC, DIV OF VOI-SHAN PRODUCTS 3000 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5103 FORMERLY FAIRCHILD INC INC FAIRCHILD AEROSPACE FASTENERS DIV

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## COMPONENT MAINTENANCE MANUAL

Code	Name
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
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

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## COMPONENT MAINTENANCE MANUAL

Code	Name
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
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
S0352	NIPPON MINIATURE BEARING CO LTD TOKYO, JAPAN

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### NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
102F9201-3		1	270	10
		1	385	3
		2	75	6
		2	435	3
102F9201M4		1	495	2
		1	515	3
		4	305	8
102LH9031-4		1	185	4
102LH90314		1	185	4
102LH9074-8		4	95	1
		4	210	1
113N1007-27		4	310	2
140N2966-1		4	345	3
140N2967-1		4	340	3
143A6110-10		1	1K	RF
		2	1K	RF
143A6110-11		1	1L	RF
		2	1L	RF
143A6110-12		1	1M	RF
		2	1M	RF
143A6110-13		1	1N	RF
		2	1N	RF
143A6110-14		1	1P	RF
		2	1P	RF
143A6110-15		1	1Q	RF
		2	1Q	RF
143A6110-16		1	1R	RF
		2	1R	RF
143A6110-17		1	1S	RF
		2	1S	RF
143A6110-18		1	1T	RF
		2	1T	RF
143A6110-19		1	1U	RF
		2	1U	RF

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
143A6110-20		1	1V	RF
		2	1V	RF
143A6110-21		1	1W	RF
		2	1W	RF
143A6110-22		1	1X	RF
		2	1X	RF
143A6110-23		1	1Y	RF
		2	1Y	RF
143A6110-24		1	1Z	RF
		2	1Z	RF
143A6110-25		1	2E	RF
		2	2E	RF
143A6110-26		1	2	RF
		2	2	RF
143A6110-27		1	2A	RF
		2	2A	RF
143A6110-28		1	2B	RF
		2	2B	RF
143A6110-29		1	2C	RF
		2	2C	RF
143A6110-30		1	2D	RF
		2	2D	RF
143A6110-31		1	2F	RF
		2	2F	RF
143A6110-33		1	2H	RF
		2	2H	RF
143A6110-34		1	2J	RF
		2	2J	RF
143A6110-35		1	2K	RF
		2	2K	RF
143A6110-36		1	2L	RF
		2	2L	RF
143A6110-5		1	1E	RF
		2	1E	RF
143A6110-6		1	1F	RF

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	1F	RF
143A6110-7		1	1G	RF
		2	1G	RF
143A6110-8		1	1H	RF
		2	1H	RF
143A6110-9		1	1J	RF
		2	1J	RF
143A6116-1		2	180	2
143A6117-1		2	250	1
143A6117-10		2	270A	1
143A6117-11		2	255A	1
143A6117-3		2	260	1
143A6117-4		2	265	1
143A6117-5		2	270	1
143A6117-6		2	255	1
143A6117-7		2	250A	1
143A6117-8		2	260A	1
143A6117-9		2	265A	1
143A6118-1		2	405	1
143A6118-10		2	425A	1
143A6118-11		2	410A	1
143A6118-3		2	415	1
143A6118-4		2	420	1
143A6118-5		2	425	1
143A6118-6		2	410	1
143A6118-7		2	405A	1
143A6118-8		2	415A	1
143A6118-9		2	420A	1
143A6119-1		2	315	1
143A6120-1		2	340	1
143A6120-2		2	345	1
143A6120-3		2	380	1
143A6120-4		2	385	1
143A6120-5		2	355	1
143A6120-6		2	360	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
143A6120-7		2	395	1
143A6120-8		2	400	1
143A6126-1		2	165	2
143A6126-2		2	175	1
143A6128-5		1	605	1
143A6128-6		1	610	1
143A6128-7		1	640	1
143A6128-8		1	645	1
143A6130-1		1	650	2
143A6131-1		2	450	1
143A6131-2		2	455	1
143A6131-3		2	460	1
143A6131-4		2	465	1
143A6131-5		2	470	1
143A6131-6		2	475	1
143A6131-7		2	480	1
143A6131-8		2	485	1
143A6132-2		1	690	2
143A6132-4		1	690A	2
143A6133-1		1	695	2
143A6134-1		1	190	1
143A6134-2		1	205	1
143A6134-3		1	240	1
143A6135-1		1	155	2
143A6135-10		1	85A	2
143A6135-11		1	50A	2
143A6135-12		1	55A	2
143A6135-13		1	80A	2
143A6135-14		1	105A	1
143A6135-15		1	70A	1
143A6135-16		1	75A	1
143A6135-17		1	100A	1
143A6135-2		1	85	2
143A6135-3		1	50	2
143A6135-4		1	55	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
143A6135-5		1	80	2
143A6135-6		1	105	1
143A6135-7		1	70	1
143A6135-8		1	75	1
143A6135-9		1	100	1
143A6136-1		2	285	1
143A6136-2		2	290	1
143A6137-1		1	485	1
143A6137-2		1	505	1
143A6137-3		1	525	1
143A6137-4		1	500	1
143A6137-5		1	520	1
143A6137-6		1	540	1
143A6139-1		1	315	1
149A6130-1		2	190	1
		3	1A	RF
149A6131-1		3	65	1
149A6132-1		2	80	1
149A6132-2		2	85	1
149A6133-1		2	90	2
149A6134-1		1	320	1
149A6134-3		1	360	1
149A6134-4		1	320A	1
		1	320C	1
149A6134-6		1	320B	1
		1	320D	1
149A6135-1		2	20	2
149A6135-2		2	40	1
149A6135-3		2	45	2
149A6135-4		2	50	2
149A6135-5		2	20A	2
149A6135-6		2	37	1
149A6135-7		2	40A	1
149A6135-8		2	50A	2
149A6135-9		2	20B	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
149A6138-1		3	40	2
149A6140-1		1	635	1
149A6301-1		1	415	1
149A6301-2		1	425	1
149A6302-1		1	405	1
3SLCC6		2	240	80
		2	240	80
3SLCC8		2	335	24
		2	335	24
		2	375	20
		2	375	20
55001		2	125	1
60B00178-661		4	225A	1
65-1797-3		3	60	1
65-2306-11		2	115	1
65-2306-12		2	130	1
65-47961-5		2	35	1
65C27727-1		1	420	1
65C27728-5		1	410	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
65C33683-4		4	370	1
65C33684-13		1	470A	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

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
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	615	1
		2	350	1
		2	390	1
678324CD		1	185	4
67832CD4		1	185	4
67832CD428		1	185	4
69-37417-6		1	40	2
69-37417-7		1	35	2
69-41867-2		1	685	2
69-42523-5		1	45	4
69-45425-1		2	170	1
69-76131-2		1	310	1
69-77663-2		1	535	1
69-77843-2		1	390	1
69235-820CD		4	95	1
		4	210	1
81669V6K3		2	215	60

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
81669V6K4		2	220	20
81669V8K5		2	325	8
		2	365	12
81669V8K6		2	330	16
		2	370	8
88D10204-173		2	490	1
ABW16-101		2	125	1
ACMKP12AP510Y198		4	120	1
ACMKP20AP510Y198		4	125	1
ACMKP4AP510LY19		4	185	2
ACMKP8P510LY198		4	325	1
ADTR4013		3	20A	2
AF3252-4-5B		1	675	2
AF3253-4-5B		1	675	2
AF3253-4-6B		1	670	2
AN315-6R		4	270	1
APM220-3		1	450	1
ASSB16-19		2	125	1
ATF8SY		4	225A	1
BAC27DBY191		2	495	1
BAC27DBY193		4	415A	1
BACB10A397GCM2		2	125	1
BACB10FS12		4	120	1
BACB10FS20		4	125	1
BACB10FS4		4	185	2
BACB10FT8		4	325	1
BACB28AK05-019		1	445	2
BACB28AK14-049		4	110	1
BACB28AK20-070		4	115	1
BACB28X11M012		4	380	2
BACB28X11M017		4	240	1
BACB28X6M013		1	195	1
BACB28X8M024		4	235	1
BACB28Y6M030		1	200	1
BACB30NM3DK13		1	290	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB30NM3DK16		1	330	1
BACB30NM3DK18		1	330A	1
BACB30NM3DK4		1	335	1
BACB30NM3K16		3	25	4
BACB30NM3K20		3	45	2
BACB30NM3K4		2	100	4
BACB30NM3K5		1	545	4
BACB30NM4K4		1	460	3
		4	250	12
BACB30NM4K5		2	150	6
BACB30NM4K52		4	165	1
BACB30NM4K6		1	455	2
BACB30NM5K20		1	430	1
BACB30NT3K12		4	5	4
BACB30NT3K20		1	700	2
BACB30NT3K6		1	620	2
BACB30NT3K8		2	65	6
BACB30NX6K4		2	275	6
		2	305A	2
BACB30NX6K5		2	300A	2
BACB30NX8K5		1	560	4
BACB30US4K11		1	170	2
BACB30US4K14		1	175	2
BACB30VF3K4		2	5	16
BACB30VF3K7		1	20	8
BACB30VN6K3		2	215	60
BACB30VN6K4		2	220	20
BACB30VN8K5		2	325	8
		2	365	12
BACB30VN8K6		2	330	16
		2	370	8
BACB30VT6K3		1	130	4
		1	215	6
		1	475	11
		1	555	8

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB30VT6K4		1	125	4
		2	305	2
		2	305B	2
		4	70	6
BACB30VT6K5		1	120	4
		2	300	2
		4	30	2
BACB30VT6K6		2	235	2
BACB30VT8K5		4	25	1
BACB30VU6K3		1	115	4
		1	210	6
		1	550	8
		2	225	46
BACB30VU6K4		1	110	8
		2	230	2
BACB30YP6K3		1	115A	4
		1	210A	6
		1	550A	8
		2	225A	48
BACB30YP6K4		1	110A	8
		2	230A	2
BACC30BH6		2	280	6
		2	310A	4
BACC30BK6		2	240	80
BACC30BK8		2	335	24
		2	375	20
		1	135	24
BACC30BL6		1	220	12
		1	480	11
		1	575	16
		2	245	50
		2	310	4
BACF3F005J010NN		2	95	4
BACF3H11RF036AN		2	320	1
BACM10L10-1GC		3	70	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACN10HR4CD		1	185	4
BACN10JC8CD		4	95	1
		4	210	1
BACN10JD103CD		1	305	1
BACN10JD106ASU		3	10	2
BACN10JD3CD		1	350	2
BACN10JN4CD		1	495	2
		1	515	3
		4	305	8
BACN10JR3CFD		1	270	10
		1	385	3
		2	75	6
		2	435	3
BACN10JZ3A2CDMU		2	30A	8
BACN10YR3CD		1	15	11
		1	570	4
		1	630	2
		1	715	2
		2	110	4
		3	55	2
		4	20	4
		4	50	2
		4	80	6
BACN10YR3CM		3	35	4
		4	155	1
BACN10YR4CD		2	160	6
		4	45	1
		4	180	1
		4	260	4
BACN10YR5CD		1	440	1
BACN10YT4CD		1	580	4
BACP18BC02A06P		1	275	1
		1	325	2
BACP18BC02C06P		1	368	1
BACP18BC03A10P		3	5	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACP30F8		1	450	1
BACR15BA3AD		1	25	16
		1	265	20
		1	380	6
		2	25	16
		2	55	8
		2	60	4
		2	430	6
BACR15BA3D		1	60	2
		4	300	16
BACR15BA3D3		1	490	4
		1	510	6
BACR15BA4D		1	90	2
BACR15BA5AD4		1	530	2
BACR15FR4E5R		1	675	2
BACR15FR4E6R		1	670	2
BACR15FT5D		1	280	8
		2	135	8
BACR15FT6D		1	150	16
		1	235	8
		1	600	8
		4	390	4
BACR15GE3CW4		1	25A	16
		2	60A	4
BACR15GE3CW6		2	55A	8
BACR15GF5D		1	145	24
		1	230	10
		1	285	39
		1	595	28
		2	15	20
		2	140	6
		2	200	344
BACR15GF6D		1	140	8
		1	225	6
		2	10	16

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	195	129
		4	395	2
BACR15GK4E2		2	440	45
BACR15GK4E3		2	145	2
		2	445	6
BACR15GK6E4		1	585	12
		2	205	212
BACR15GK6E5		1	590	4
		2	210	9
BACR24N2AL81		1	355	1
BACS12GU3K14		4	140	1
BACS12GU3K8		1	370	3
BACS12GU3K9		1	255	10
BACS12HJ06K5		1	395A	1
BACS40R007F015F		1	655	AR
BACS40R009F015F		1	665	AR
BACS40R009F023F		1	160	AR
BACS40R010F024F		1	245	AR
BACS40R015F022F		1	660	AR
BACS40R023F048F		1	165	AR
BACS40R024F047F		1	250	AR
BACW10BN4AC		1	181	4
BACW10P278AL		2	185	AR
BH003024CD		1	185	4
BH00303CM4		1	185	4
BLN16385GC		2	125	1
BMN10HR4CD		1	185	4
BMN4122CPD8-8		4	95	1
		4	210	1
BMN5024CW34		1	185	4
BMN5024CWD3-4		1	185	4
BMN5024CWD34		1	185	4
BMP30F8		1	450	1
BRF200C3D		1	270	10
		1	385	3

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	75	6
		2	435	3
BRFM20C4D		1	495	2
		1	515	3
		4	305	8
CR3253-4-5		1	675	2
CR3253-4-6		1	670	2
CR34XC222		3	20A	2
CR59064CD		1	185	4
CR60304		1	185	4
CR8AFC		4	225A	1
FBL10140C3		1	30	8
FBL10140C4		1	65	1
FBL10140C5		1	95	1
H414-29		1	365	1
H414K3885		1	365A	1
H414K3899		1	365B	1
H51560		1	185	4
H51560-4		1	185	4
H51650-8BAC		4	95	1
		4	210	1
H52732-3CD		1	15	11
		1	570	4
		1	630	2
		1	715	2
		2	110	4
		3	55	2
		4	20	4
		4	50	2
		4	80	6
H52732-3CM		3	35	4
		4	155	1
H52732-4CD		2	160	6
		4	45	1
		4	180	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		4	260	4
H52732-5CD		1	440	1
H964CD		1	185	4
HGL16-102		2	125	1
HL1012AZ6-4		2	275	6
		2	275	6
		2	275	6
		2	275	6
		2	275	6
		2	275	6
		2	275	6
		2	275	6
		2	275	6
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
HL1012AZ6-5		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
HL1012AZ8-5		1	560	4
		1	560	4
		1	560	4
		1	560	4
		1	560	4
		1	560	4
		1	560	4

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
HL1087-6		1	560	4
		2	280	6
		2	280	6
		2	280	6
		2	280	6
		2	310A	4
		2	310A	4
		2	310A	4
		2	310A	4
HL12VAZ6-4		2	275	6
		2	275	6
		2	275	6
		2	275	6
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
		2	305A	2
HL12VAZ6-5		2	300A	2
		2	300A	2
		2	300A	2
		2	300A	2
HL12VAZ8-5		1	560	4
		1	560	4
		1	560	4
		1	560	4
HR3253-4-6		1	670	2
HST10AG6-3		1	130	4
		1	130	4
		1	130	4
		1	130	4
		1	215	6
		1	215	6
		1	215	6
		1	215	6
		1	475	11

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COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
HST10AG6-4		1	475	11
		1	475	11
		1	475	11
		1	555	8
		1	555	8
		1	555	8
		1	555	8
		1	125	4
		1	125	4
		1	125	4
		1	125	4
		2	305	2
		2	305	2
		2	305	2
		2	305	2
		2	305B	2
		2	305B	2
		2	305B	2
		2	305B	2
	HST10AG6-5		4	70
		4	70	6
		4	70	6
		4	70	6
		1	120	4
		1	120	4
		1	120	4
		1	120	4
		2	300	2
		2	300	2
		2	300	2
		2	300	2
		4	30	2
		4	30	2
		4	30	2
		4	30	2

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
HST10AG6-6		2	235	2
		2	235	2
		2	235	2
		2	235	2
HST10AG8-5		4	25	1
		4	25	1
		4	25	1
		4	25	1
HST11AG6-3		1	115	4
		1	115	4
		1	115	4
		1	115	4
		1	210	6
		1	210	6
		1	210	6
		1	210	6
		1	550	8
		1	550	8
		1	550	8
		1	550	8
		2	225	46
2	225	46		
2	225	46		
2	225	46		
HST11AG6-4		1	110	8
		1	110	8
		1	110	8
		1	110	8
		2	230	2
		2	230	2
		2	230	2
		2	230	2
HST79-6		1	135	24
		1	135	24
		1	135	24

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	220	12
		1	220	12
		1	220	12
		1	480	11
		1	480	11
		1	480	11
		1	575	16
		1	575	16
		1	575	16
		2	245	50
		2	245	50
		2	245	50
		2	310	4
		2	310	4
		2	310	4
HST79CY6		1	135	24
		1	220	12
		1	480	11
		1	575	16
		2	245	50
		2	310	4
K51602-3BAC		1	270	10
		1	385	3
		2	75	6
		2	435	3
KRP189606VTZ		3	20A	2
KSSB16-5		2	125	1
L802-6K4		2	275	6
		2	305A	2
L802-6K5		2	300A	2
L802-8K5		1	560	4
LGPL2SPV6-3AC		2	215	60
		2	215	60
		2	215	60
LGPL2SPV6-4AC		2	220	20

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	220	20
		2	220	20
LGPL2SPV8-5AC		2	325	8
		2	325	8
		2	325	8
		2	365	12
		2	365	12
		2	365	12
LGPL2SPV8-6AC		2	330	16
		2	330	16
		2	330	16
		2	370	8
		2	370	8
		2	370	8
MF51637-4		1	495	2
		1	515	3
		4	305	8
MS21209C0615P		4	60	1
MS27253F1		2	500	1
MS27980-17N		1	5	11
NAS1149C0332R		4	150	1
NAS1149C0363R		3	30	4
		4	145	1
NAS1149C0616R		3	15	2
NAS1149C0763R		4	275	1
NAS1149C0832R		4	205	1
NAS1149C0863R		4	100	1
NAS1149C1290R		4	105	1
NAS1149D0316J		1	260	10
		1	300	AR
		1	342	AR
		1	375	3
		3	50	2
NAS1149D0332J		1	10	11
		1	343A	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	345	2
		1	705	4
		4	15	4
		4	40	2
		4	75	6
NAS1149D0363J		1	295	2
		1	340	1
		1	341	2
		1	343	1
		1	565	8
		1	625	2
		2	70	6
		2	105	8
NAS1149D0416J		1	465	5
		4	35	1
		4	255	16
NAS1149D0432J		4	175	2
NAS1149D0463J		1	180	8
		1	183	4
		2	155	12
NAS1149D0532J		1	435	2
NAS1149DN432J		1	680	2
NAS1149DN632J		1	400	1
NAS42DD6-40FC		4	10	4
NAS42DD6-64FC		1	710	2
NAS43DD4-156FC		4	170	1
NAS463XDD10		2	95A	4
NAS516-1A		2	120	1
		4	195	1
NAS557-18B		2	295	1
NAS8201A5		1	395	1
NB12BGCM2		2	125	1
NB16BM2		2	125	1
NC16-4		2	125	1
NS202476-02		1	270	10

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	385	3
		2	75	6
		2	435	3
NS202487-048		1	495	2
		1	515	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	11
		1	570	4
		1	630	2
		1	715	2
		2	110	4
		3	55	2
		4	20	4
		4	50	2
		4	80	6
PLH53CM		3	35	4
		4	155	1
PLH54CD		2	160	6
		4	45	1
		4	180	1
		4	260	4
PLH55CD		1	440	1
R30F8		1	450	1
RMLH224CD		1	185	4
S140T263-173		2	490	1
S149A613-1		3	20A	2
SF15-120-173		2	490	1

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
SL7108C4		1	185	4
SMS20220-3		1	450	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	270	10
		1	385	3
		2	75	6
		2	435	3
T8124S4S		1	495	2
		1	515	3
		4	305	8
T8301C428CD		1	495	2
		1	515	3
		4	305	8
VAL280094CD		1	185	4
VCU0005D4		1	185	4
WC10K6-3		1	130	4
		1	215	6
		1	475	11
		1	555	8
WC10K6-5		1	120	4
		2	300	2
		4	30	2
WC10K6-6		2	235	2
WC10K8-5		4	25	1
YR1516XC1		4	225A	1

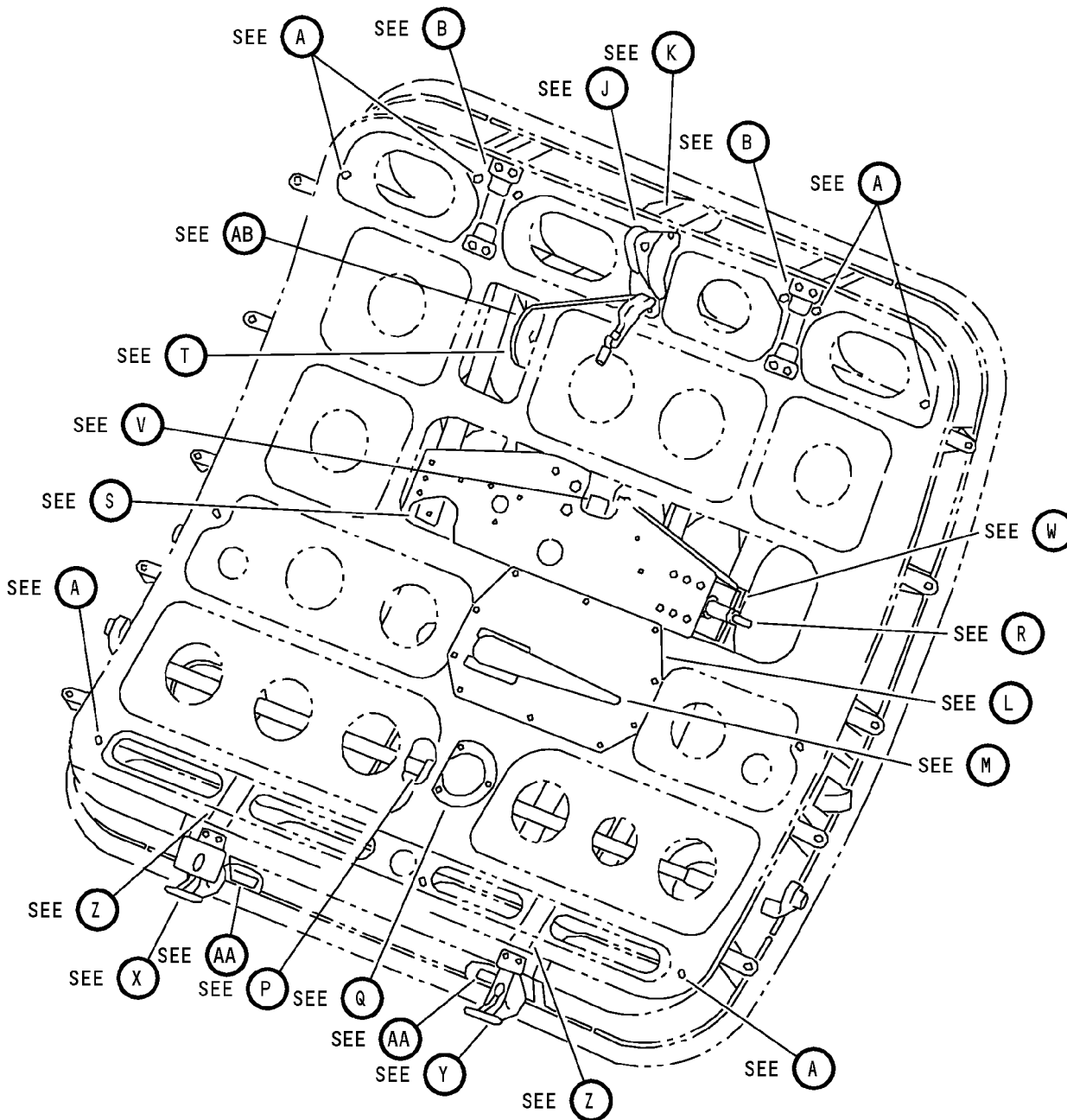
# 52-31-15

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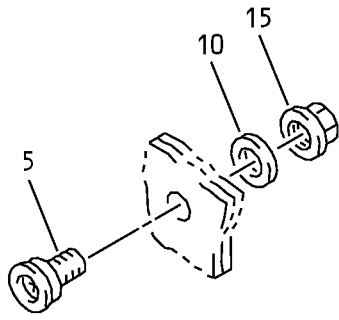
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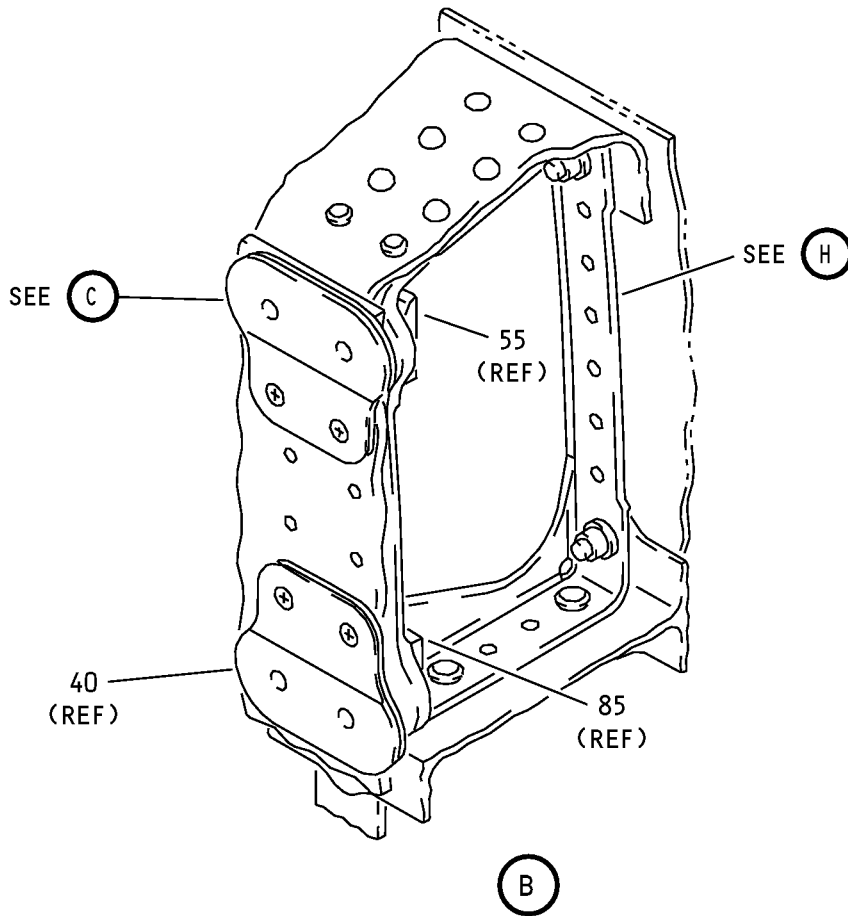


Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 1 of 19)

COMPONENT MAINTENANCE MANUAL



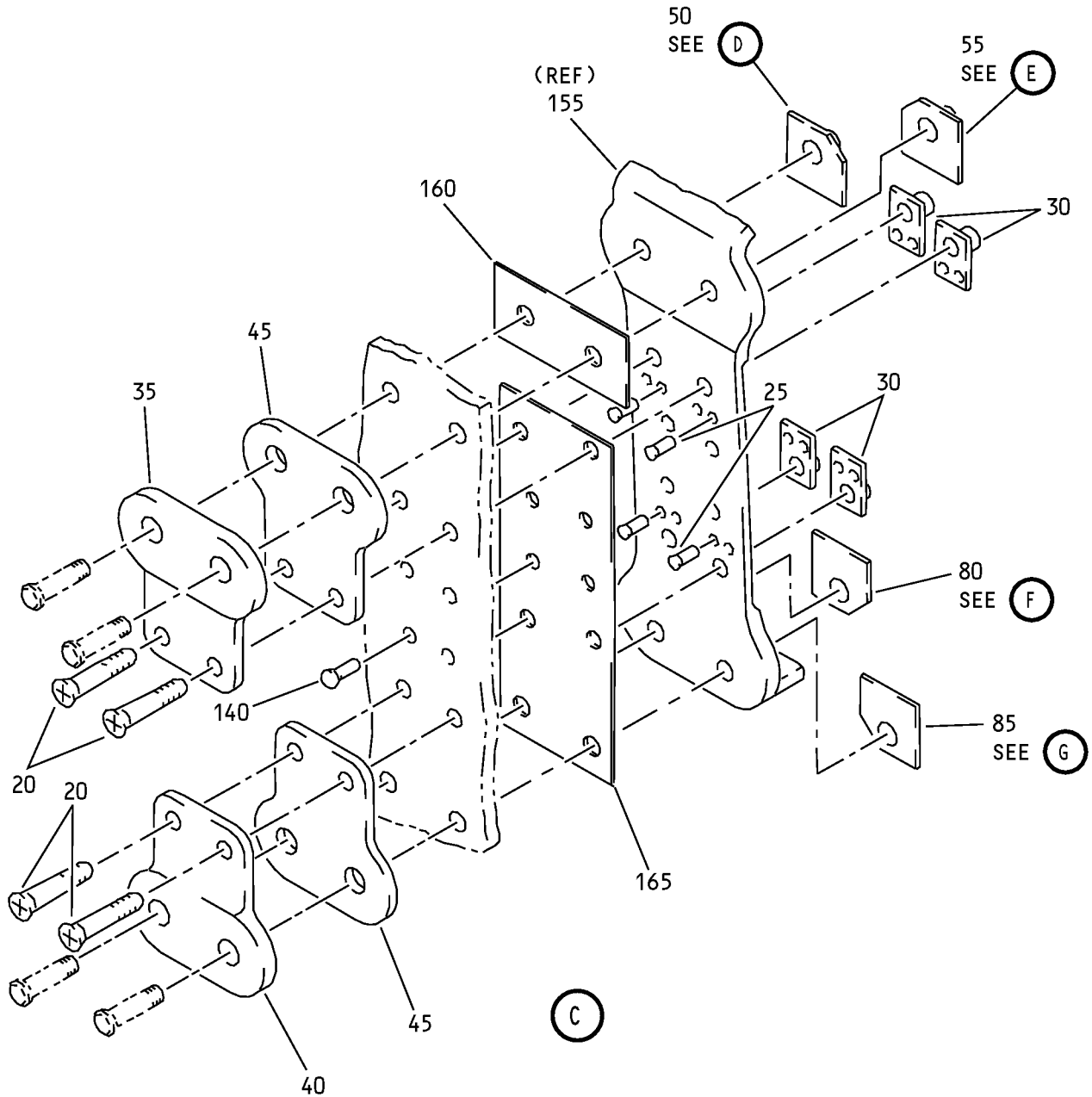
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Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 2 of 19)



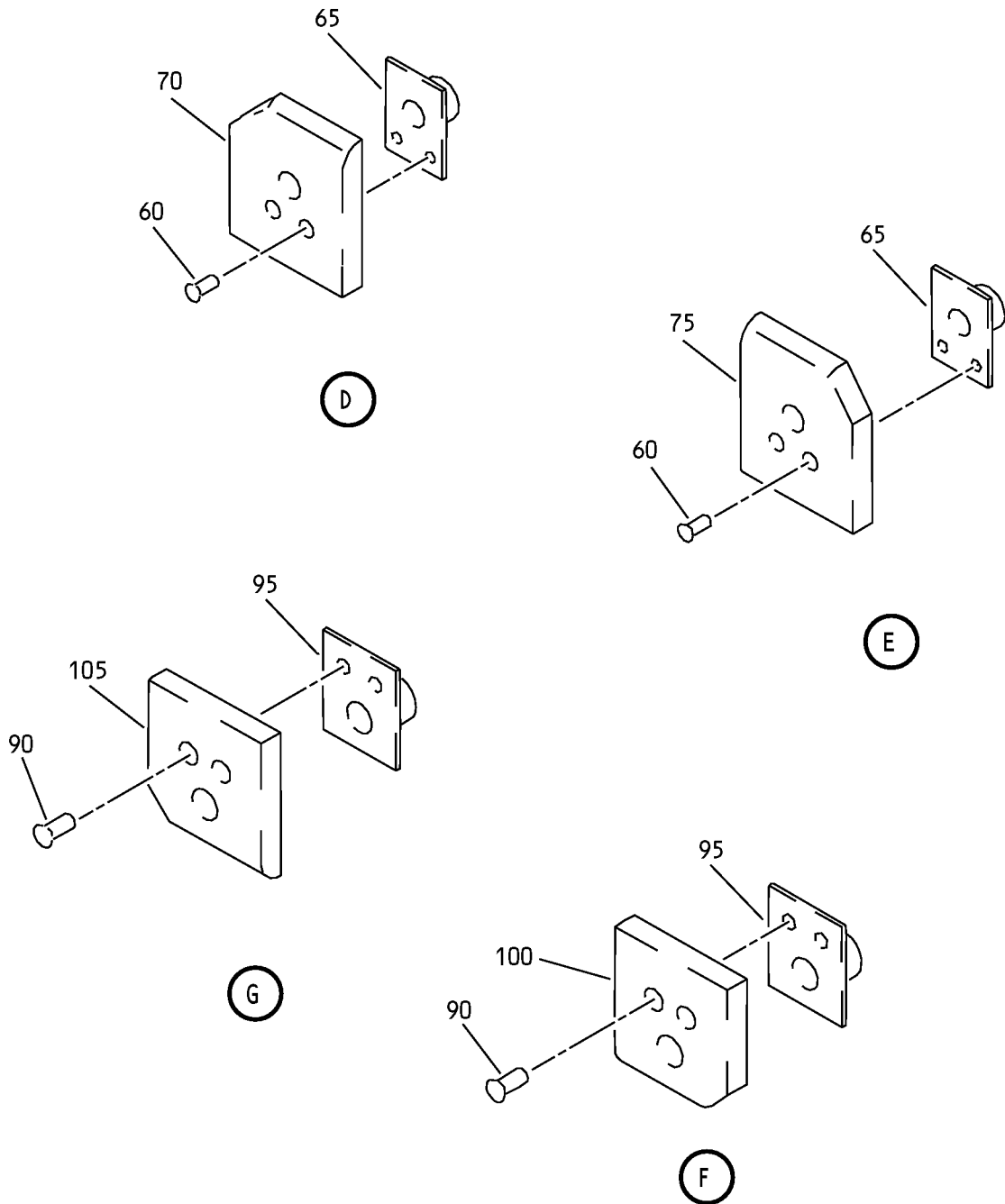
COMPONENT MAINTENANCE MANUAL



Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 3 of 19)

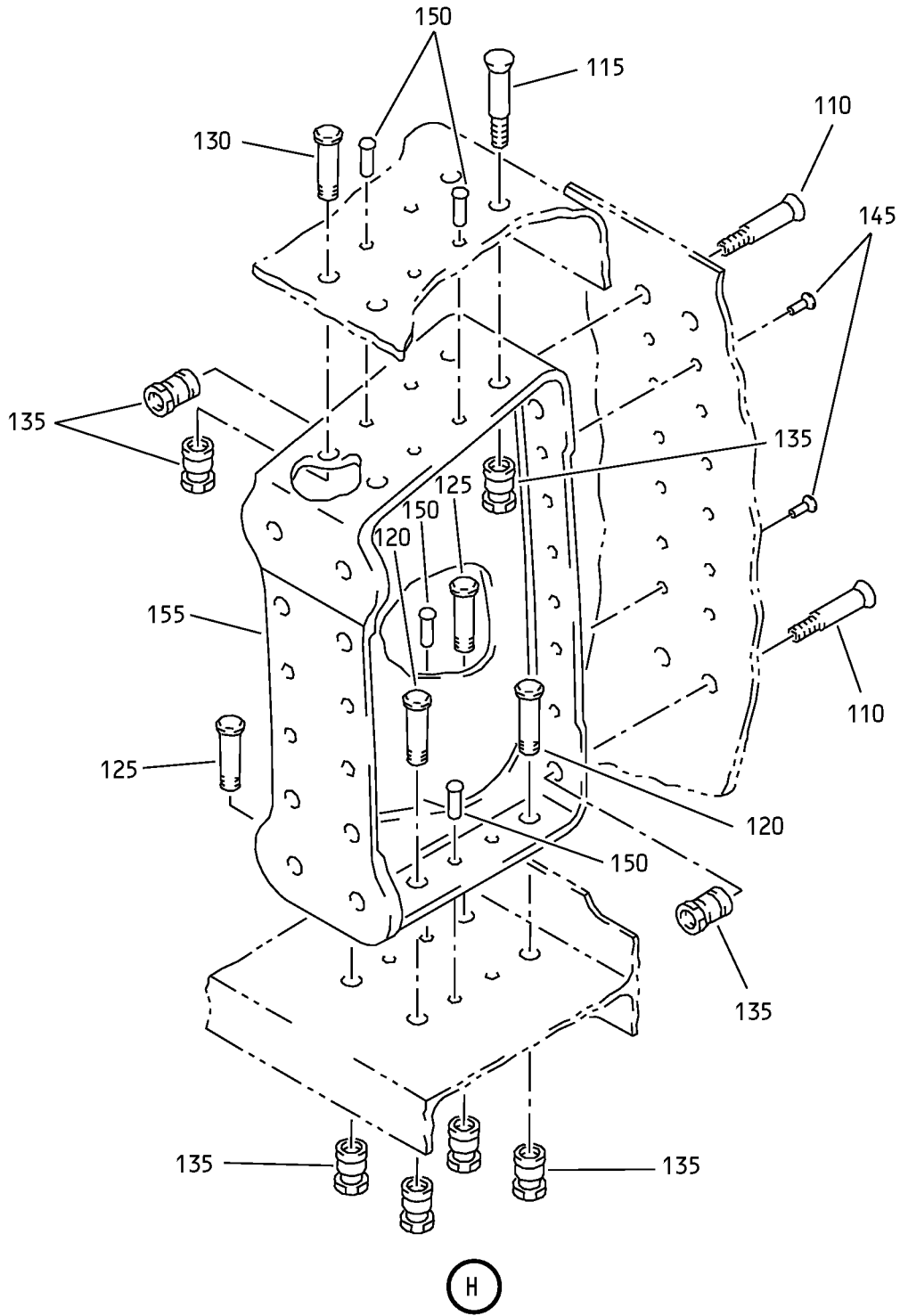
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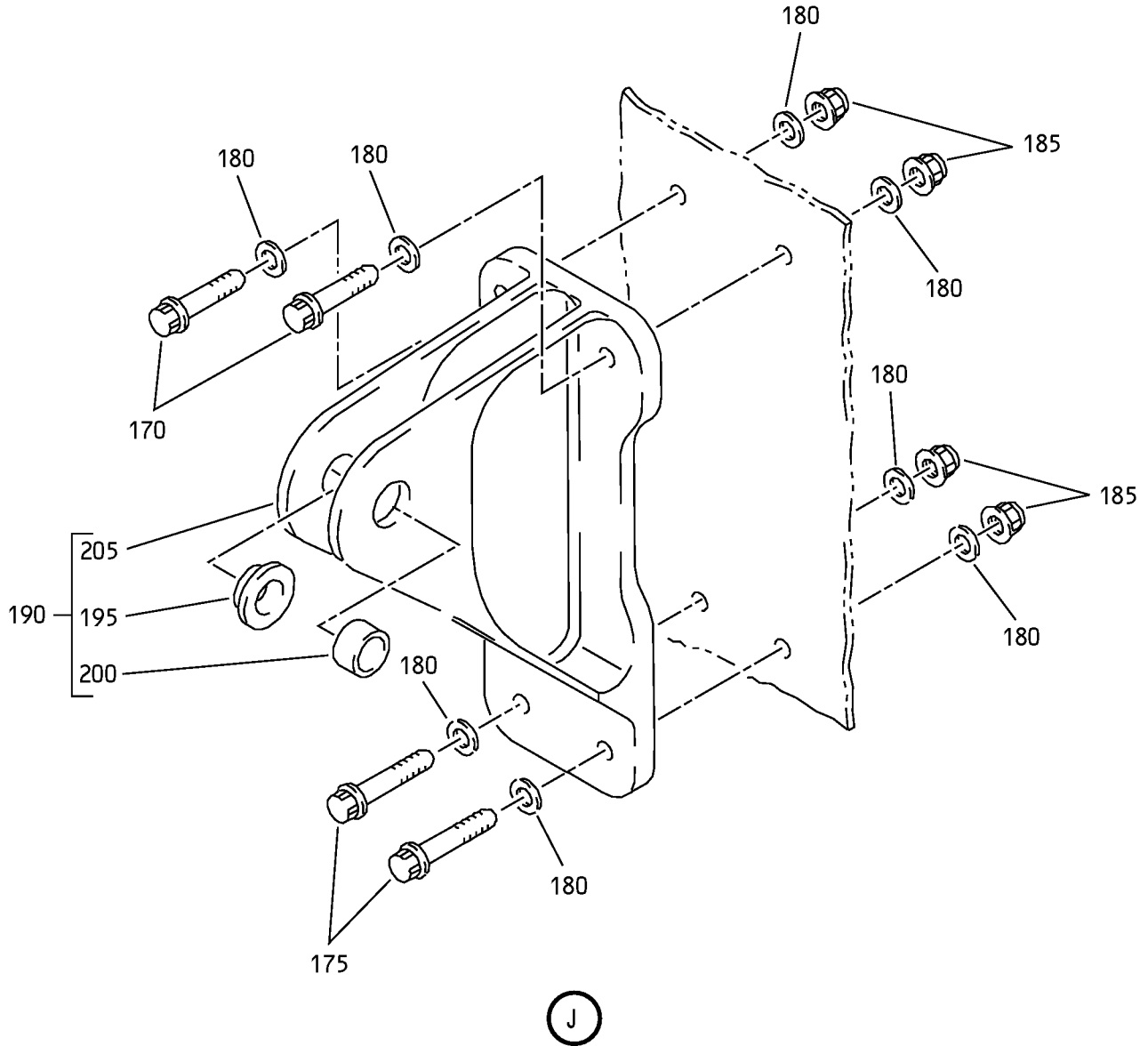
Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 4 of 19)

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Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 5 of 19)

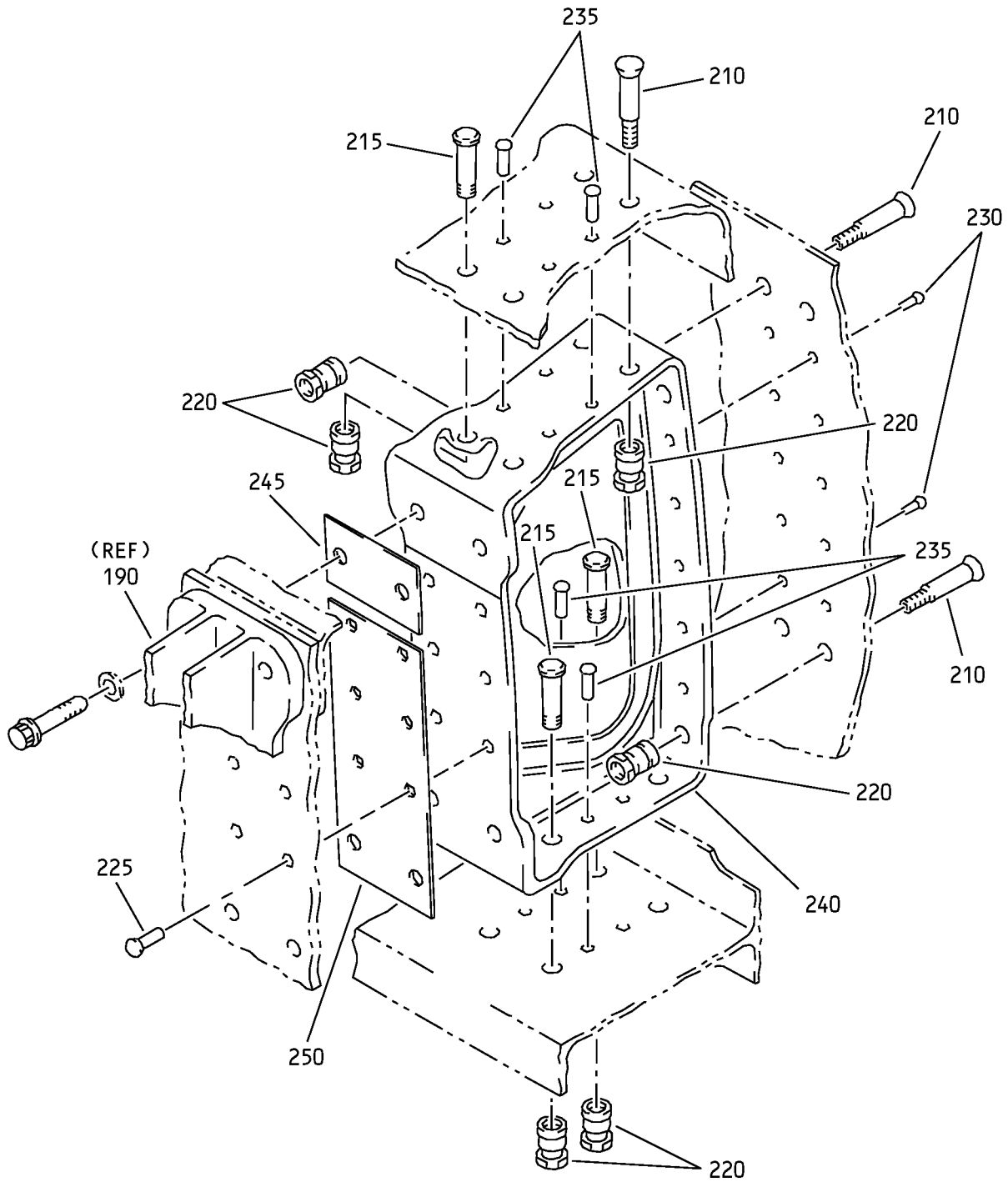
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Forward Cargo Door Assembly  
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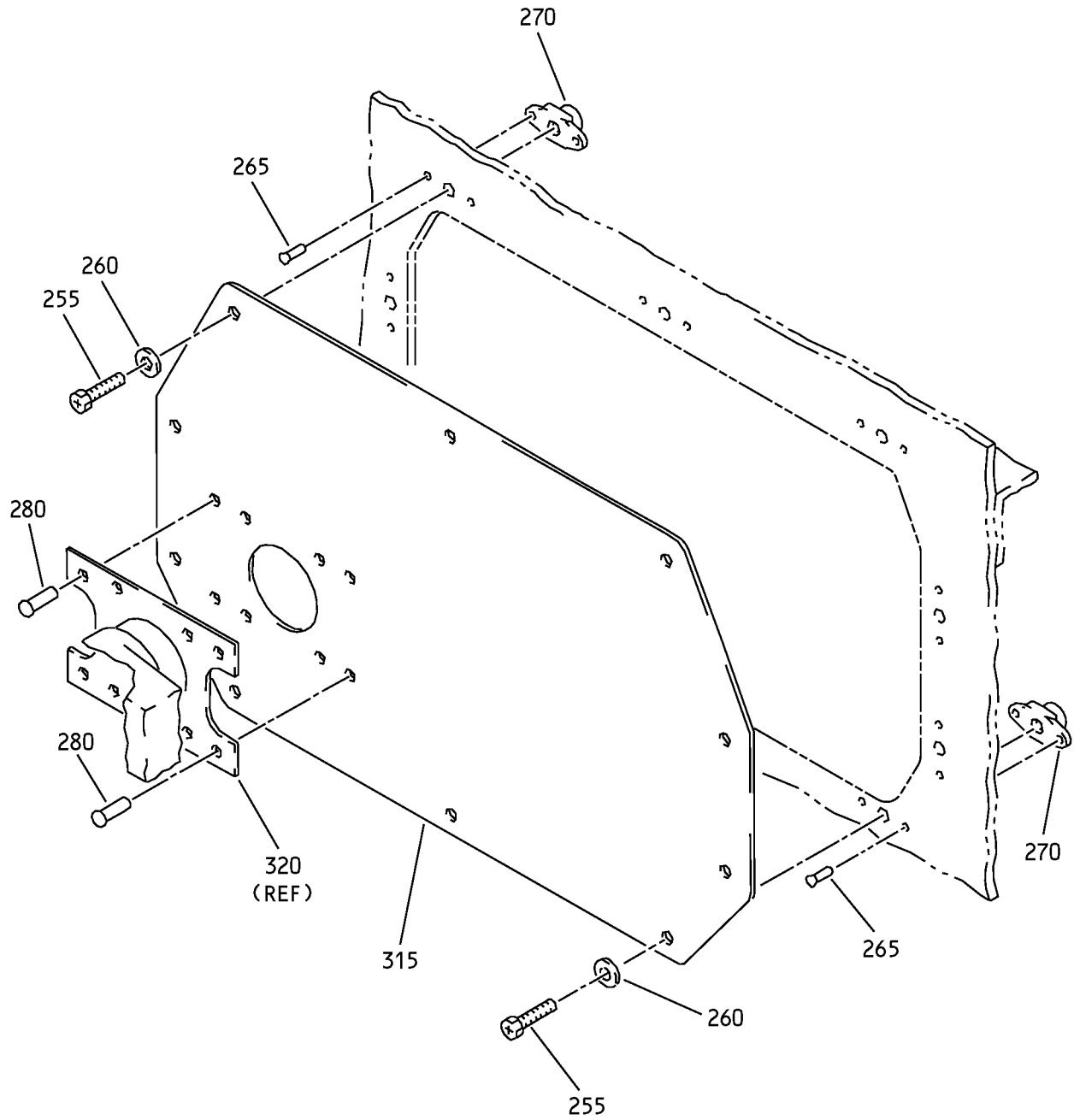


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Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 7 of 19)

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Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 8 of 19)

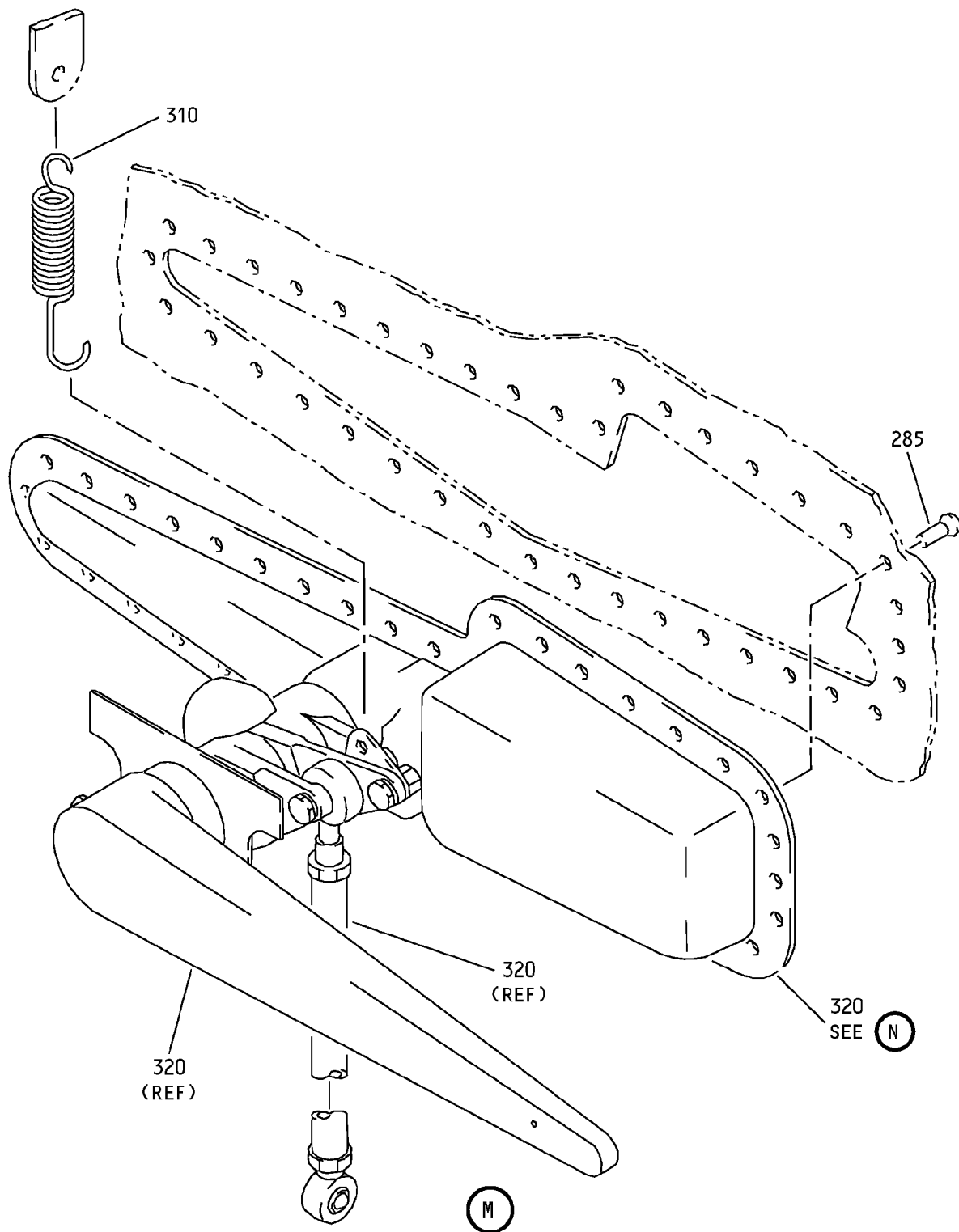
**52-31-15**

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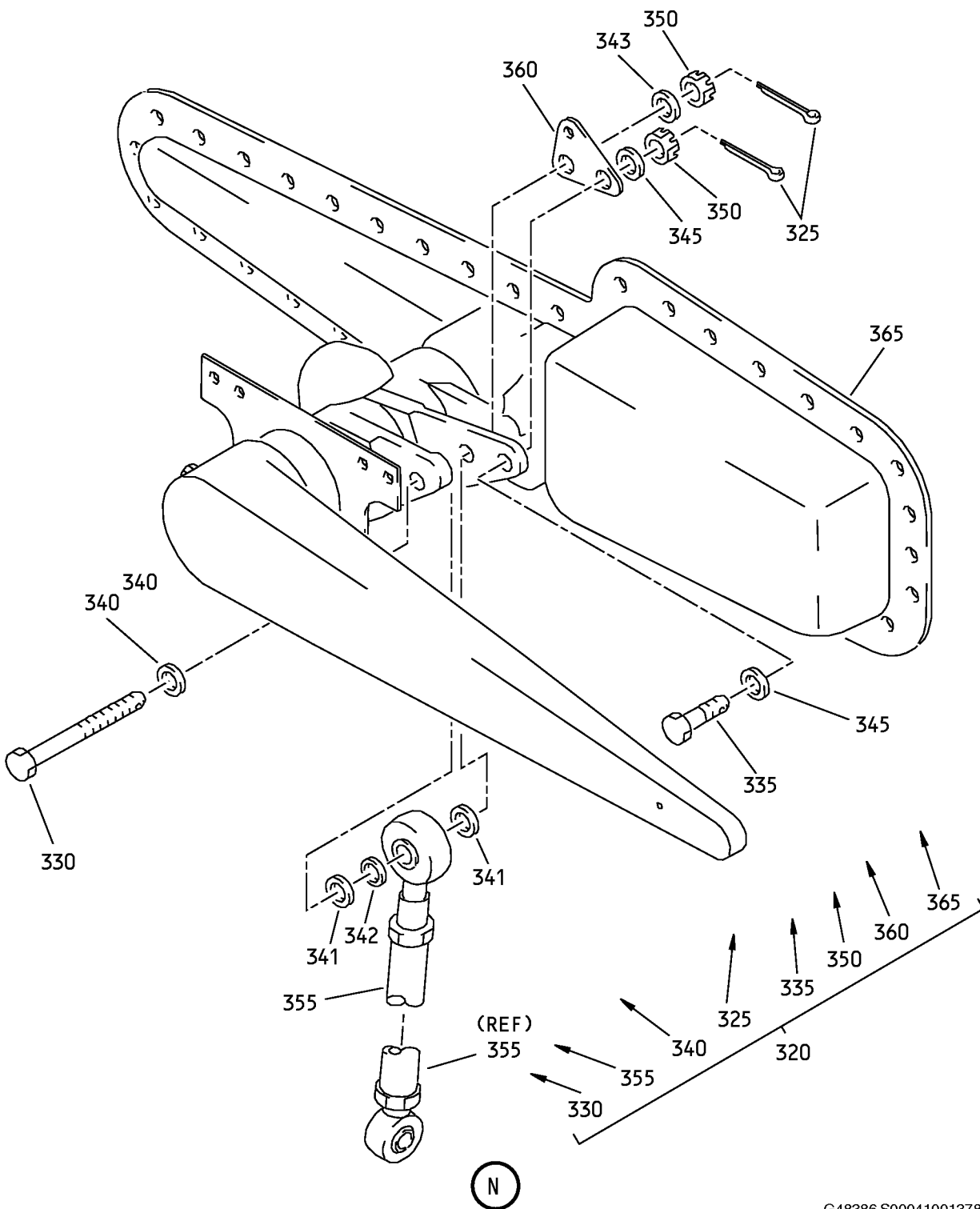
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Forward Cargo Door Assembly  
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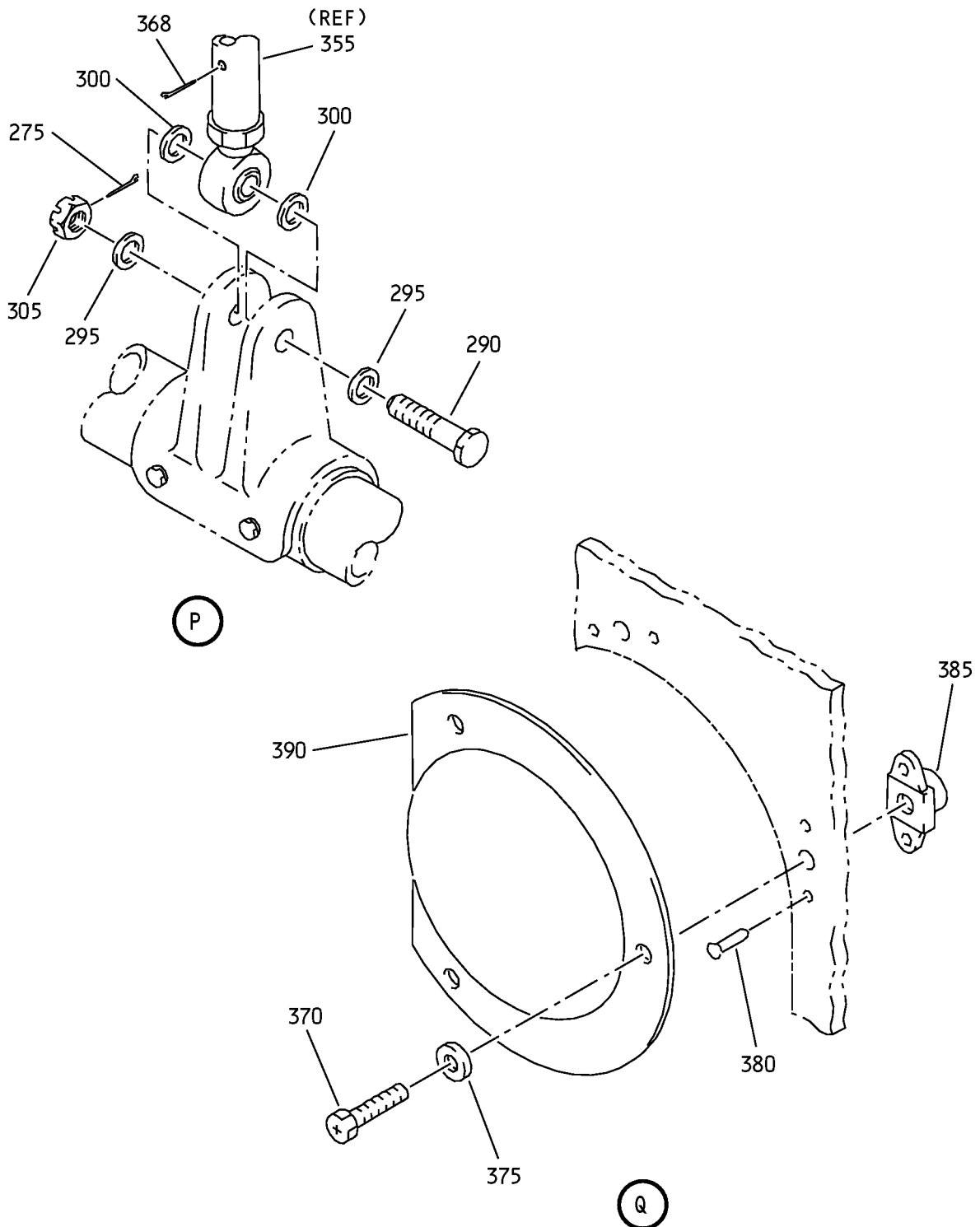
G48386 S00041001378\_V2

Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 10 of 19)

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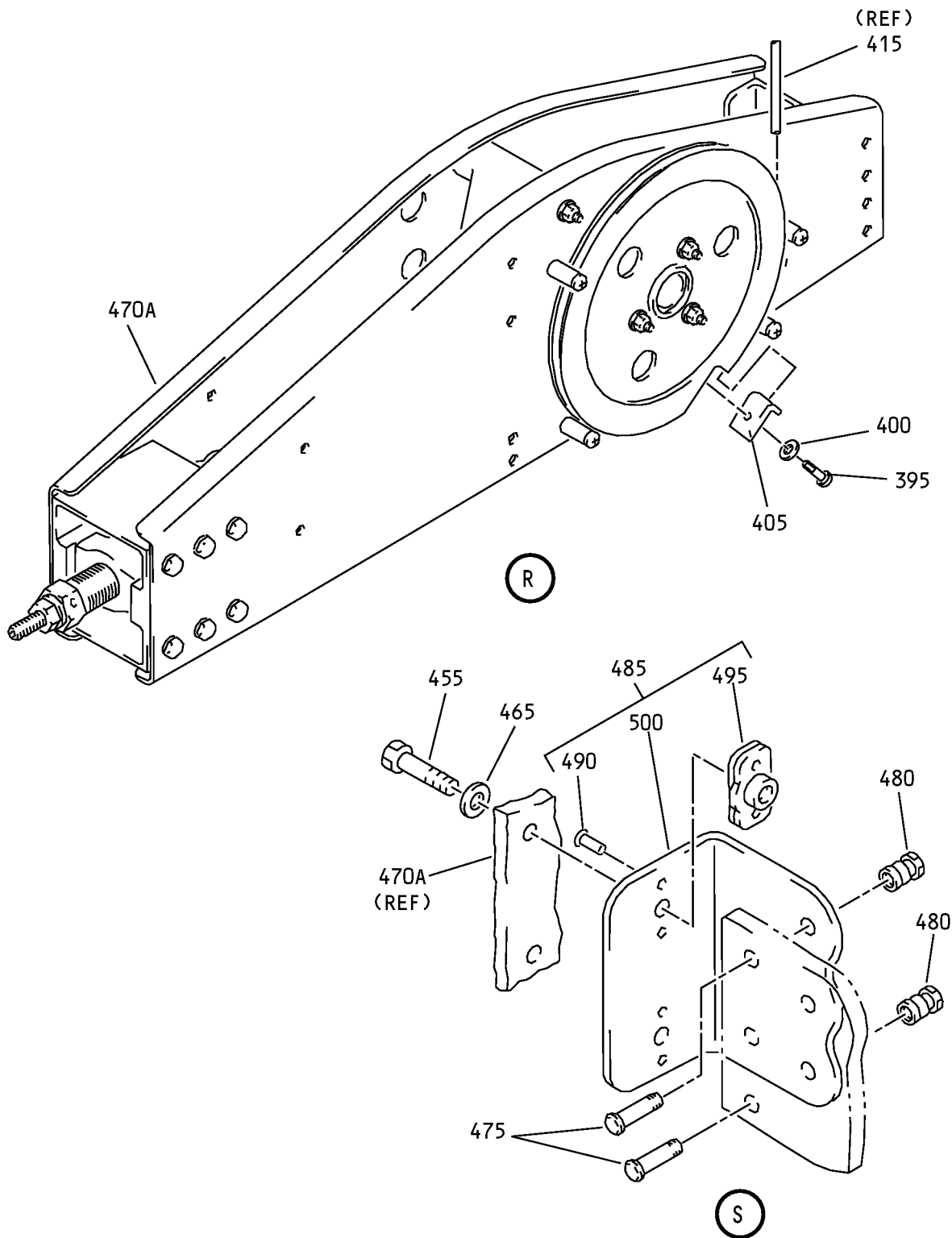


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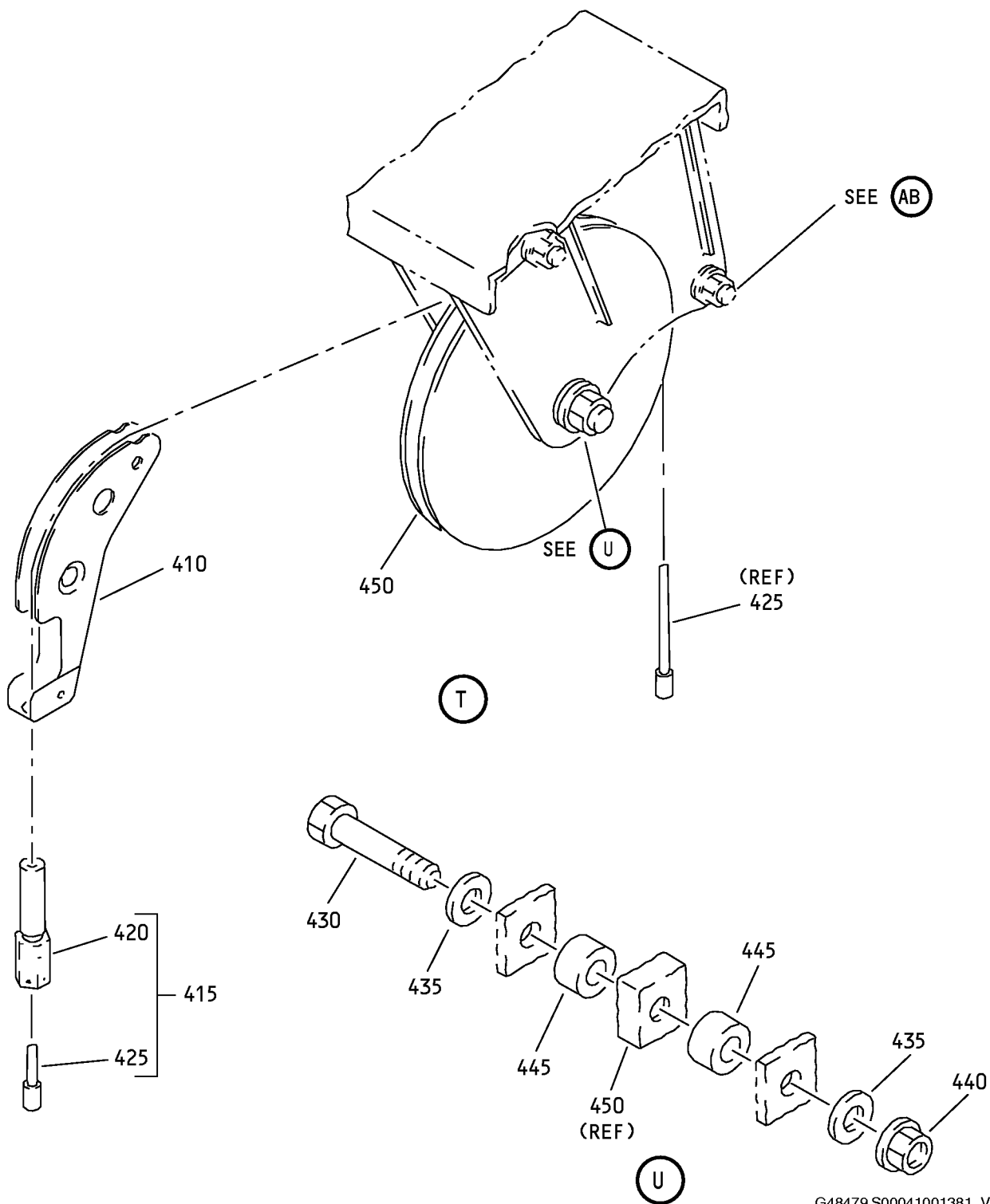
Forward Cargo Door Assembly  
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Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 12 of 19)

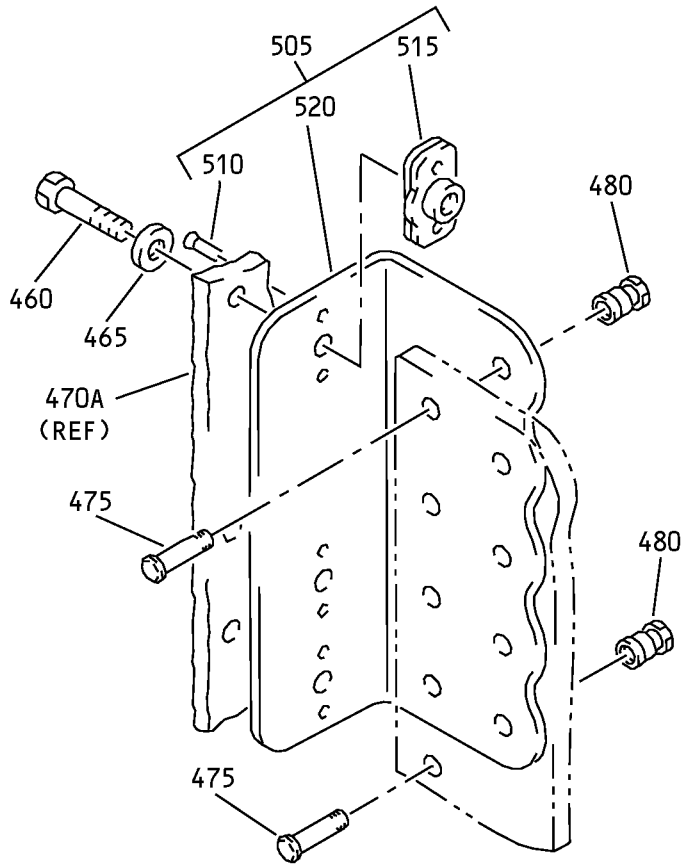
COMPONENT MAINTENANCE MANUAL



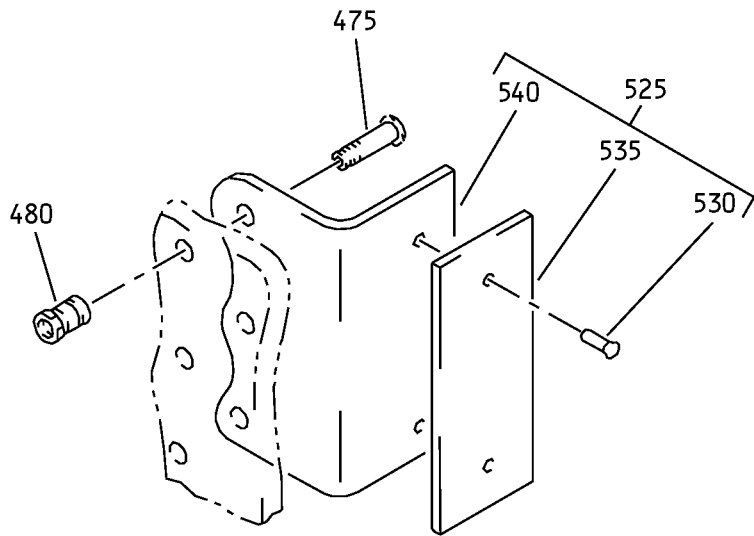
G48479 S00041001381\_V2

Forward Cargo Door Assembly  
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V



W

Forward Cargo Door Assembly  
IPL Figure 1 (Sheet 14 of 19)

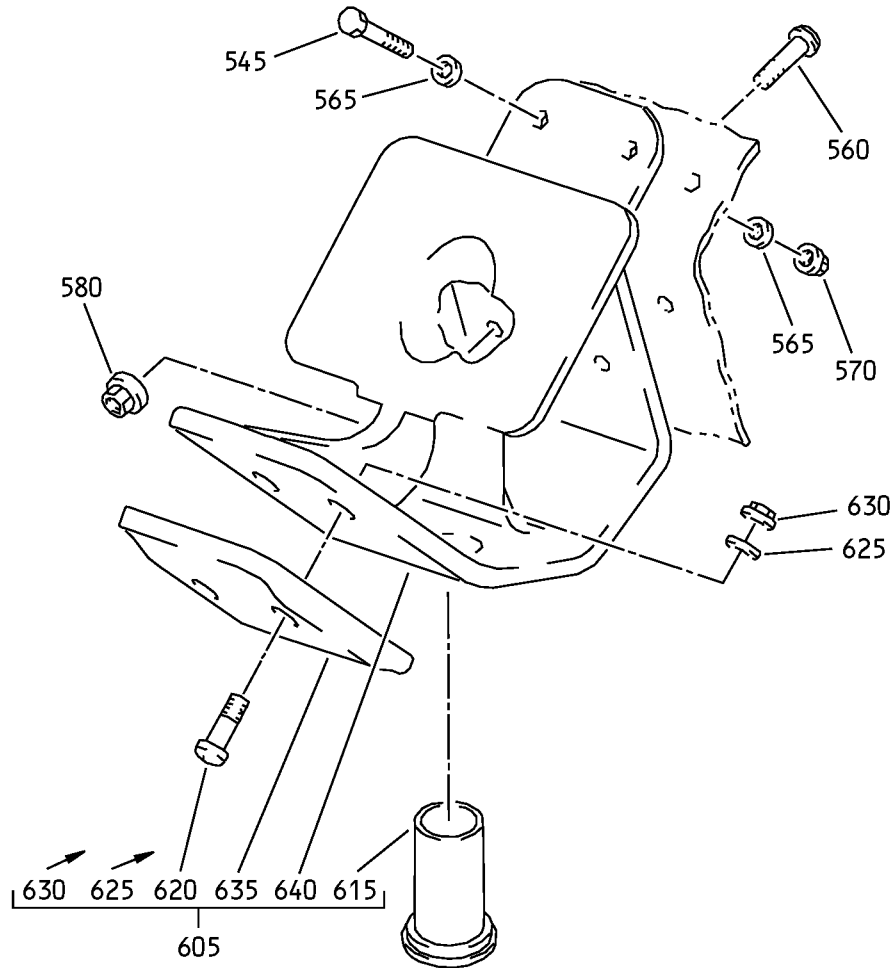
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IPL Figure 1 (Sheet 15 of 19)

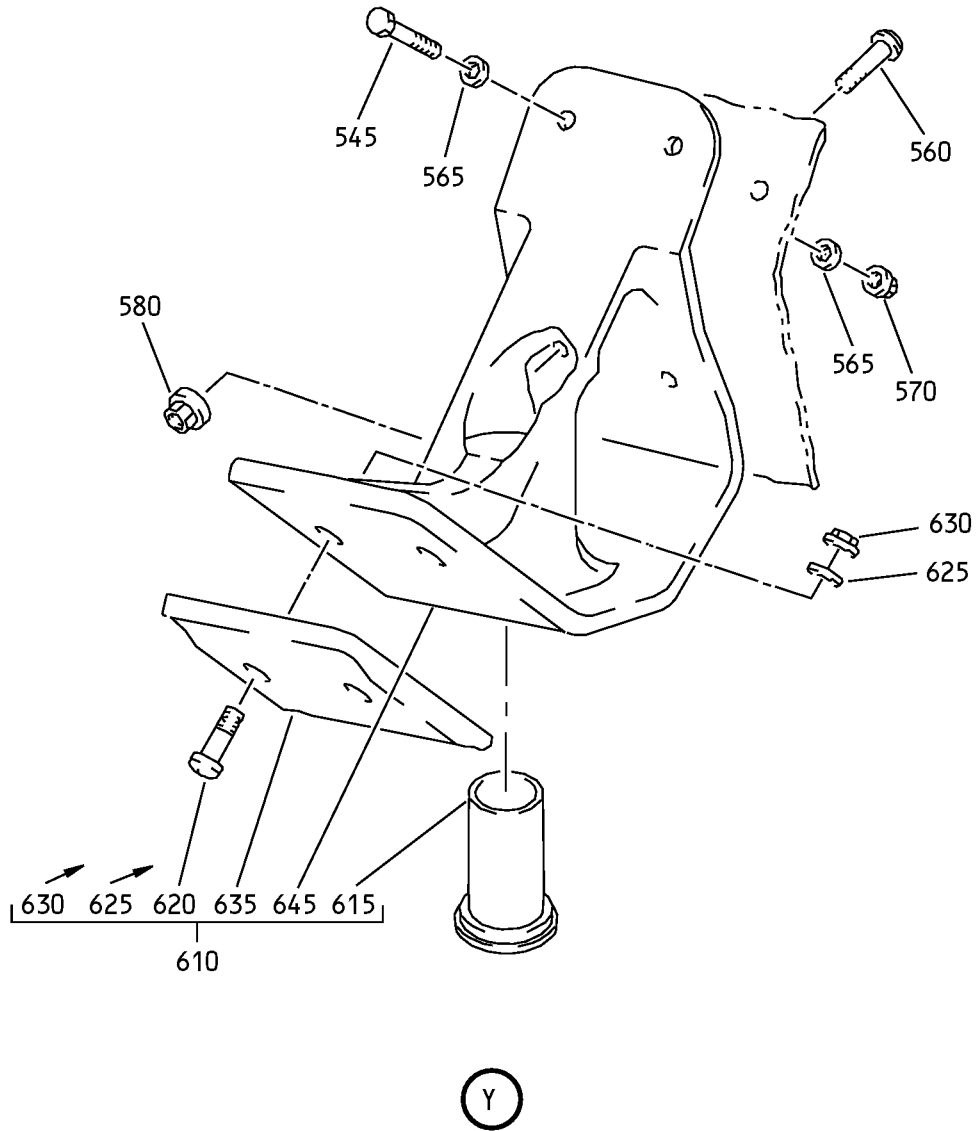
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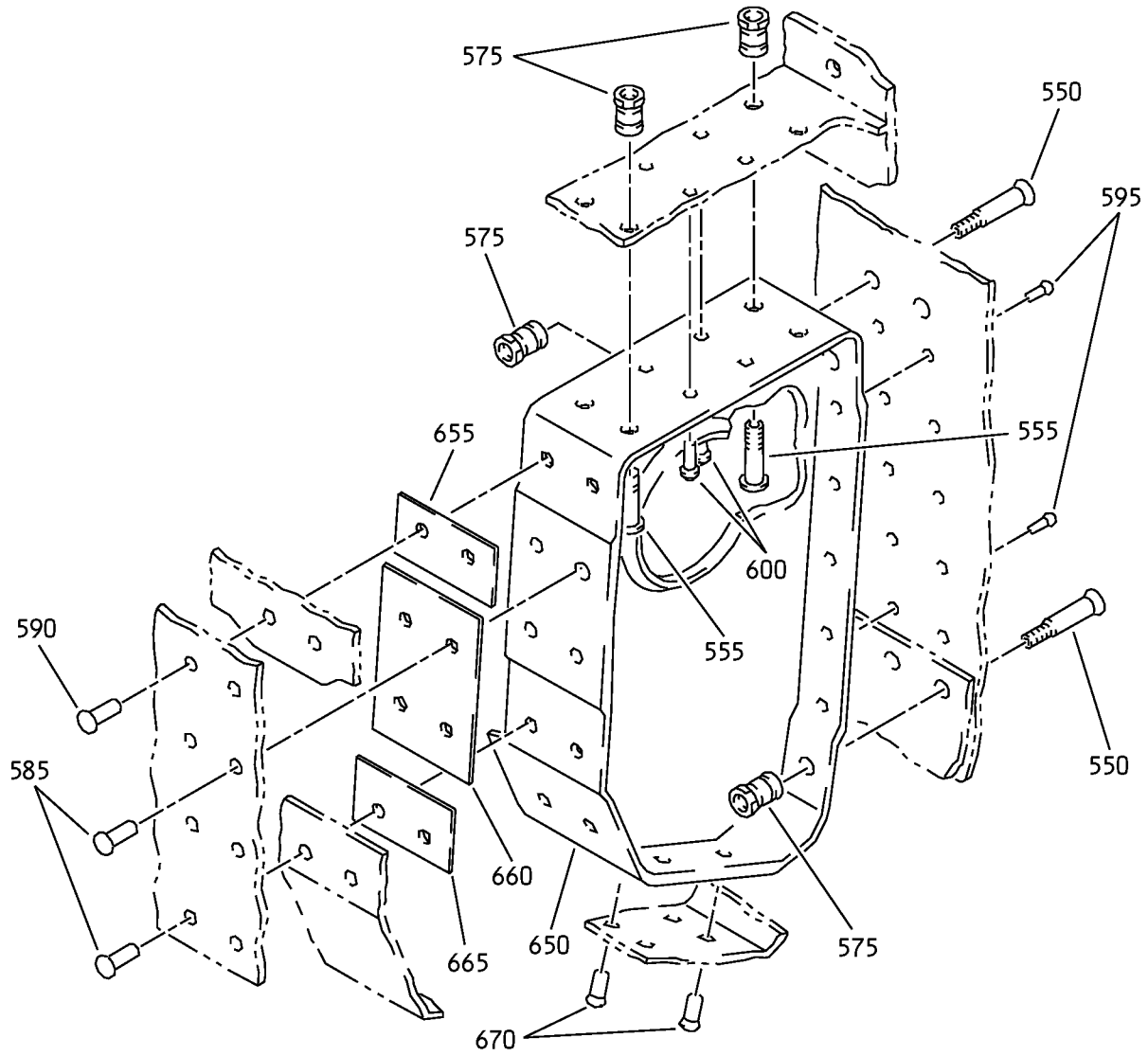
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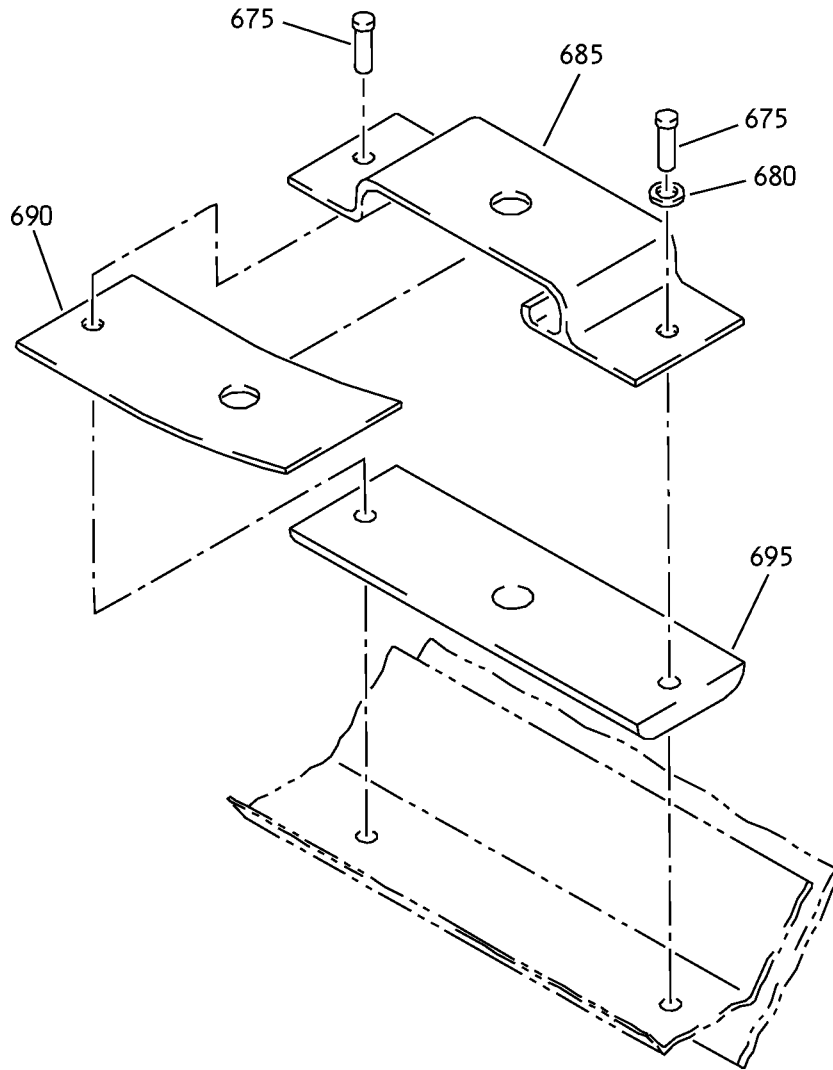


Z

Forward Cargo Door Assembly  
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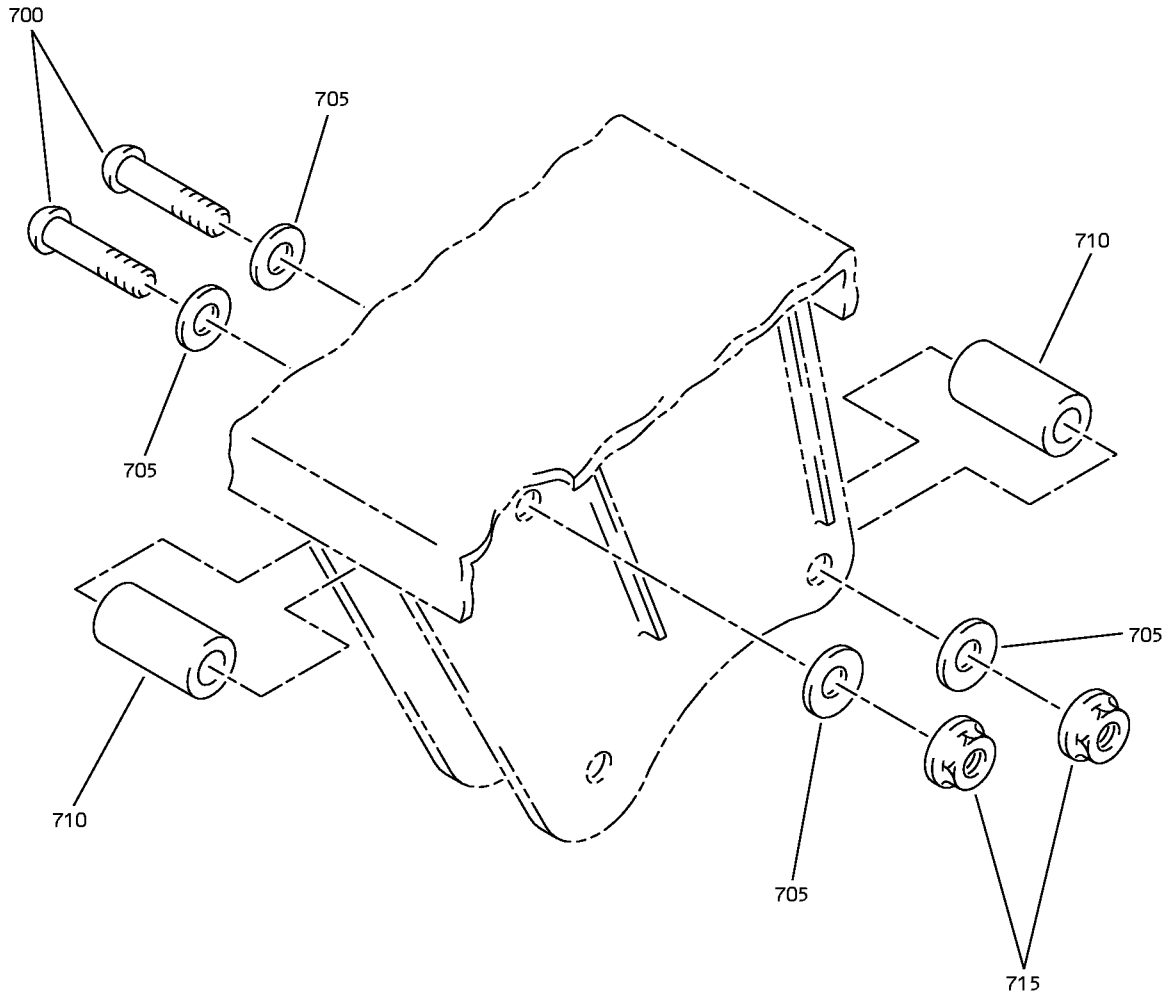
AA

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AB

G85984 S00041001387\_V2

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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	143A6110-1										
-1B	143A6110-2										
-1C	143A6110-3										
-1D	143A6110-4										
-1E	143A6110-5									E	RF
-1F	143A6110-6									F	RF
-1G	143A6110-7									G	RF
-1H	143A6110-8									H	RF
-1J	143A6110-9									A	RF
-1K	143A6110-10									C	RF
-1L	143A6110-11									B	RF
-1M	143A6110-12									D	RF
-1N	143A6110-13									J	RF
-1P	143A6110-14									K	RF
-1Q	143A6110-15									L	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	143A6110-16									M	RF
-1S	143A6110-17									N	RF
-1T	143A6110-18									P	RF
-1U	143A6110-19									Q	RF
-1V	143A6110-20									R	RF
-1W	143A6110-21									S	RF
-1X	143A6110-22									T	RF
-1Y	143A6110-23									U	RF
-1Z	143A6110-24									V	RF
-2	143A6110-26									W	RF
-2A	143A6110-27									X	RF
-2B	143A6110-28									Y	RF
-2C	143A6110-29									Z	RF

-Item not Illustrated

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-2D	143A6110-30									AA	RF
-2E	143A6110-25									AB	RF
-2F	143A6110-31									AC	RF
-2G	143A6110-32										
-2H	143A6110-33									AE	RF
-2J	143A6110-34									AF	RF
-2K	143A6110-35									AG	RF
-2L	143A6110-36									AH	RF
5	MS27980-17N										11
10	NAS1149D0332J										11
15	H52732-3CD										11
20	BACB30VF3K7										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

-Item not Illustrated

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY			
			1	2	3	4	5	6	7					
1-														
50	143A6135-3		.	F	I	L	L	A	S	S	A	M	2	
-50A	143A6135-11		.	F	I	L	L	A	S	S	A	N-AC, AE-AH	2	
55	143A6135-4		.	F	I	L	L	A	S	S	A	M	2	
-55A	143A6135-12		.	F	I	L	L	A	S	S	A	N-AC, AE-AH	2	
60	BACR15BA3D		.	.	R	I	V	E	T				2	
65	FBL10140C4		.	.	N	U	T	P	L	A	T	E	1	
-65A	FBL10140C5													
70	143A6135-7		.	.	F	I	L	L	A	S	S	A	M	1
-70A	143A6135-15		.	.	F	I	L	L	A	S	S	A	N-AC, AE-AH	1
75	143A6135-8		.	.	F	I	L	L	A	S	S	A	M	1
-75A	143A6135-16		.	.	F	I	L	L	A	S	S	A	N-AC, AE-AH	1
80	143A6135-5		.	F	I	L	L	A	S	S	A	M	2	
-80A	143A6135-13		.	F	I	L	L	A	S	S	A	N-AC, AE-AH	2	
85	143A6135-2		.	F	I	L	L	A	S	S	A	M	2	
-85A	143A6135-10		.	F	I	L	L	A	S	S	A	N-AC, AE-AH	2	
90	BACR15BA4D		.	.	R	I	V	E	T				2	
95	FBL10140C5		.	.	N	U	T	P	L	A	T	E	1	
100	143A6135-9		.	.	F	I	L	L	A	S	S	A	M	1
-100A	143A6135-17		.	.	F	I	L	L	A	S	S	A	N-AC, AE-AH	1
105	143A6135-6		.	.	F	I	L	L	A	S	S	A	M	1
-105A	143A6135-14		.	.	F	I	L	L	A	S	S	A	N-AC, AE-AH	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-											
110	HST11AG6-4		.	BOLT						A-AC	8
				(V06725)							
				(SPEC BACB30VU6K4)							
				(OPT HST11AG6-4 (V73197))							
				(OPT HST11AG6-4 (V56878))							
				(OPT HST11AG6-4 (V0PTK6))							
-110A	BACB30YP6K4		.	BOLT						AE-AH	8
115	HST11AG6-3		.	BOLT						A-AC	4
				(V06725)							
				(SPEC BACB30VU6K3)							
				(OPT HST11AG6-3 (V73197))							
				(OPT HST11AG6-3 (V56878))							
				(OPT HST11AG6-3 (V0PTK6))							
-115A	BACB30YP6K3		.	BOLT						AE-AH	4
120	HST10AG6-5		.	BOLT							4
				(V0PTK6)							
				(SPEC BACB30VT6K5)							
				(OPT HST10AG6-5 (V06725))							
				(OPT HST10AG6-5 (V56878))							
				(OPT HST10AG6-5 (V73197))							
				(OPT WC10K6-5 (V60516))							
125	HST10AG6-4		.	BOLT							4
				(V06725)							
				(SPEC BACB30VT6K4)							
				(OPT HST10AG6-4 (V73197))							
				(OPT HST10AG6-4 (V56878))							
				(OPT HST10AG6-4 (V0PTK6))							
130	HST10AG6-3		.	BOLT							4
				(V0PTK6)							
				(SPEC BACB30VT6K3)							
				(OPT HST10AG6-3 (V06725))							
				(OPT HST10AG6-3 (V56878))							
				(OPT HST10AG6-3 (V73197))							
				(OPT WC10K6-3 (V60516))							
135	HST79CY6		.	COLLAR							24
				(V73197)							
				(SPEC BACC30BL6)							
				(OPT HST79-6 (V56878))							
				(OPT HST79-6 (V92215))							
				(OPT HST79-6 (V5M902))							
140	BACR15GF6D		.	RIVET							8
				(SIZE DETERMINED ON INST)							

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
145	BACR15GF5D		.	RIVET							24
				(SIZE DETERMINED ON INST)							
150	BACR15FT6D		.	RIVET							16
				(SIZE DETERMINED ON INST)							
155	143A6135-1		.	FITTING-HINGE ARM SPRT							2
160	BACS40R009F023F		.	SHIM							AR
165	BACS40R023F048F		.	SHIM							AR
170	BACB30US4K11		.	BOLT							2
175	BACB30US4K14		.	BOLT							2
180	NAS1149D0463J		.	WASHER					A-H		8
181	BACW10BN4AC		.	WASHER					J-AC, AD-AH		4
183	NAS1149D0463J		.	WASHER					J-AC, AD-AH		4
185	H51560-4		.	NUT							4
				(V15653)							
				(SPEC BACN10HR4CD)							
				(OPT 67832CD428 (V56878))							
				(OPT BMN5024CWD3-4 (V97928))							
				(OPT 102LH9031-4 (V72962))							
				(OPT BH00303CM4 (V27238))							
				(OPT BMN5024CW34 (V97928))							
				(OPT CR60304 (V62554))							
				(OPT H51560 (V15653))							
				(OPT SL7108C4 (V11815))							
				(OPT VCU0005D4 (V06710))							
				(OPT 102LH90314 (V72962))							
				(OPT 67832CD4 (V56878))							
				(OPT BH003024CD (V27238))							
				(OPT BMN10HR4CD (V97928))							
				(OPT CR59064CD (V62554))							
				(OPT H964CD (V15653))							
				(OPT RMLH224CD (V72962))							
				(OPT VAL280094CD (V06710))							
				(OPT 678324CD (V56878))							
				(OPT BMN5024CWD34 (V97928))							
190	143A6134-1		.	FITTING ASSY-DOOR SNUBBER							1
195	BACB28X6M013		..	BUSHING							1
200	BACB28Y6M030		..	BUSHING							1
205	143A6134-2		..	FITTING-ATTACH							1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE	USAGE CODE	UNITS PER ASSY
1-					
210	HST11AG6-3		. BOLT (V06725) (SPEC BACB30VU6K3) (OPT HST11AG6-3 (V73197)) (OPT HST11AG6-3 (V56878)) (OPT HST11AG6-3 (V0PTK6))	A-AC	6
-210A	BACB30YP6K3		. BOLT	AE-AH	6
215	HST10AG6-3		. BOLT (V0PTK6) (SPEC BACB30VT6K3) (OPT HST10AG6-3 (V06725)) (OPT HST10AG6-3 (V56878)) (OPT HST10AG6-3 (V73197)) (OPT WC10K6-3 (V60516))		6
220	HST79CY6		. COLLAR (V73197) (SPEC BACC30BL6) (OPT HST79-6 (V56878)) (OPT HST79-6 (V92215)) (OPT HST79-6 (V5M902))		12
225	BACR15GF6D		. RIVET (SIZE DETERMINED ON INST)		6
230	BACR15GF5D		. RIVET (SIZE DETERMINED ON INST)		10
235	BACR15FT6D		. RIVET (SIZE DETERMINED ON INST)		8
240	143A6134-3		. FITTING-SPRT		1
245	BACS40R010F024F		. SHIM		AR
250	BACS40R024F047F		. SHIM		AR
255	BACS12GU3K9		. SCREW		10
260	NAS1149D0316J		. WASHER		10
265	BACR15BA3AD		. RIVET (SIZE DETERMINED ON INST)		20
270	BRF200C3D		. NUTPLATE (V52828) (SPEC BACN10JR3CFD) (OPT K51602-3BAC (V15653)) (OPT NS202476-02 (V80539)) (OPT 102F9201-3 (V72962)) (OPT T8092C1032CD (V11815))		10

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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-											
275	BACP18BC02A06P		.								1
280	BACR15FT5D		.								8
285	BACR15GF5D		.								39
290	BACB30NM3DK13		.								1
295	NAS1149D0363J		.								2
300	NAS1149D0316J		.								AR
305	BACN10JD103CD		.								1
310	69-76131-2		.								1
315	143A6139-1		.								1
320	149A6134-1		.						A-H		1
-320A	149A6134-4		.						J-R		1
-320B	149A6134-6		.						W-AC, AE-AH		1
-320C	149A6134-4		.						S-V		1
-320D	149A6134-6		.						S-V		1
325	BACP18BC02A06P		.	.							2
330	BACB30NM3DK16		.	.					A-H		1
-330A	BACB30NM3DK18		.	.					J-AC, AE-AH		1
335	BACB30NM3DK4		.	.							1
340	NAS1149D0363J		.	.							1
341	NAS1149D0363J		.	.					J-AC, AE-AH		2
342	NAS1149D0316J		.	.					J-AC, AE-AH		AR
343	NAS1149D0363J		.	.					A-V		1
-343A	NAS1149D0332J		.	.					W-AC, AE-AH		1
345	NAS1149D0332J		.	.							2
350	BACN10JD3CD		.	.							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-											
355	BACR24N2AL81		.	.							1
360	149A6134-3		.	.							1
365	H414-29		.	.					A-H		1
-365A	H414K3885		.	.					J-V		1
-365B	H414K3899		.	.					S-AC, AE-AH		1
368	BACP18BC02C06P		.								1
370	BACS12GU3K8		.								3
375	NAS1149D0316J		.								3
380	BACR15BA3AD		.								6
385	BRF200C3D		.								3
390	69-77843-2		.								1
395	NAS8201A5		.								1
-395A	BACS12HJ06K5		.								1
400	NAS1149DN632J		.								1
405	149A6302-1		.								1
410	65C27728-5		.								1
415	149A6301-1		.								1
420	65C27727-1		.	.							1
425	149A6301-2		.	.							1
430	BACB30NM5K20		.								1
435	NAS1149D0532J		.								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-											
440	H52732-5CD		.	NUT							1
				(V15653)							
				(SPEC BACN10YR5CD)							
				(OPT PLH55CD (V62554))							
445	BACB28AK05-019		.	BUSHING							2
450	APM220-3		.	PULLEY							1
				(V29965)							
				(SPEC BACP30F8)							
				(OPT R30F8 (V25337))							
				(OPT BMP30F8 (V22277))							
				(OPT SMS20220-3 (V29965))							
455	BACB30NM4K6		.	BOLT							2
460	BACB30NM4K4		.	BOLT							3
465	NAS1149D0416J		.	WASHER							5
470	65C33684-12			DELETED							
470A	65C33684-13		.	COUNTERBALANCE ASSY							1
				(FOR DETAILS SEE FIG. 4)							
475	HST10AG6-3		.	BOLT							11
				(V0PTK6)							
				(SPEC BACB30VT6K3)							
				(OPT HST10AG6-3 (V06725))							
				(OPT HST10AG6-3 (V56878))							
				(OPT HST10AG6-3 (V73197))							
				(OPT WC10K6-3 (V60516))							
480	HST79CY6		.	COLLAR							11
				(V73197)							
				(SPEC BACC30BL6)							
				(OPT HST79-6 (V56878))							
				(OPT HST79-6 (V92215))							
				(OPT HST79-6 (V5M902))							
485	143A6137-1		.	BRACKET ASSY-ATTACH							1
490	BACR15BA3D3		.	RIVET							4
495	BRFM20C4D		.	NUTPLATE							2
				(V52828)							
				(SPEC BACN10JN4CD)							
				(OPT T8301C428CD (V11815))							
				(OPT 102F9201M4 (V72962))							
				(OPT NS202487-048 (V80539))							
				(OPT MF51637-4 (V15653))							
				(OPT T8124S4S (V11815))							
500	143A6137-4		.	BRACKET							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-											
505	143A6137-2		.								1
510	BACR15BA3D3		.	.							6
515	BRFM20C4D		.	.							3
520	143A6137-5		.	.							1
525	143A6137-3		.								1
530	BACR15BA5AD4		.	.							2
535	69-77663-2		.	.							1
540	143A6137-6		.	.							1
545	BACB30NM3K5		.								4
550	HST11AG6-3		.							A-AC	8
-550A	BACB30YP6K3		.							AE-AH	8
555	HST10AG6-3		.								8

-Item not Illustrated



## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
560	HL1012AZ8-5		.	BOLT							4
				(V0PTK6)							
				(SPEC BACB30NX8K5)							
				(OPT HL12VAZ8-5 (V73197))							
				(OPT HL12VAZ8-5 (V92215))							
				(OPT HL12VAZ8-5 (V97928))							
				(OPT L802-8K5 (V06725))							
				(OPT HL12VAZ8-5 (V56878))							
				(OPT HL1012AZ8-5 (V06725))							
				(OPT HL1012AZ8-5 (V06950))							
				(OPT HL1012AZ8-5 (V17446))							
				(OPT HL1012AZ8-5 (V56878))							
				(OPT HL1012AZ8-5 (V60516))							
				(OPT HL1012AZ8-5 (V73197))							
				(OPT HL1012AZ8-5 (V97928))							
565	NAS1149D0363J		.	WASHER							8
570	H52732-3CD		.	NUT							4
				(V15653)							
				(SPEC BACN10YR3CD)							
				(OPT PLH53CD (V62554))							
575	HST79CY6		.	COLLAR							16
				(V73197)							
				(SPEC BACC30BL6)							
				(OPT HST79-6 (V56878))							
				(OPT HST79-6 (V92215))							
				(OPT HST79-6 (V5M902))							
580	BACN10YT4CD		.	NUT							4
585	BACR15GK6E4		.	RIVET							12
590	BACR15GK6E5		.	RIVET							4
595	BACR15GF5D		.	RIVET							28
				(SIZE DETERMINED ON INST)							
600	BACR15FT6D		.	RIVET							8
				(SIZE DETERMINED ON INST)							
605	143A6128-5		.	FITTING ASSY-FWD							1
610	143A6128-6		.	FITTING ASSY-AFT							1
615	66-12688-11		..	BUSHING-DOOR STOP							1
620	BACB30NT3K6		..	BOLT							2
625	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-											
630	H52732-3CD		.	.	NUT (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))						2
635	149A6140-1		.	.	BLOCK-RUB						1
640	143A6128-7		.	.	FITTING-STOP (USED ON ITEM 605)						1
645	143A6128-8		.	.	FITTING-STOP (USED ON ITEM 610)						1
650	143A6130-1		.		FITTING-STOP SPRT						2
655	BACS40R007F015F		.		SHIM						AR
660	BACS40R015F022F		.		SHIM						AR
665	BACS40R009F015F		.		SHIM						AR
670	AF3253-4-6B		.		RIVET (V53551) (SPEC BACR15FR4E6R) (OPT CR3253-4-6 (V11815)) (OPT HR3253-4-6 (V0HDW7))						2
675	AF3253-4-5B		.		RIVET (V53551) (SPEC BACR15FR4E5R) (OPT CR3253-4-5 (V11815)) (OPT AF3252-4-5B (V53551))						2
680	NAS1149DN432J		.		WASHER						2
685	69-41867-2		.		RETAINER-SEAL						2
690	143A6132-2		.		SEAL-WATER DRAIN				A-AC		2
-690A	143A6132-4		.		SEAL-WATER DRAIN				AE-AH		2
695	143A6133-1		.		FILLER-RADIUS						2
700	BACB30NT3K20		.		BOLT						2
705	NAS1149D0332J		.		WASHER						4
710	NAS42DD6-64FC		.		SPACER						2
715	PLH53CD		.		NUT (V62554) (SPEC BACN10YR3CD) (OPT H52732-3CD (V15653))						2

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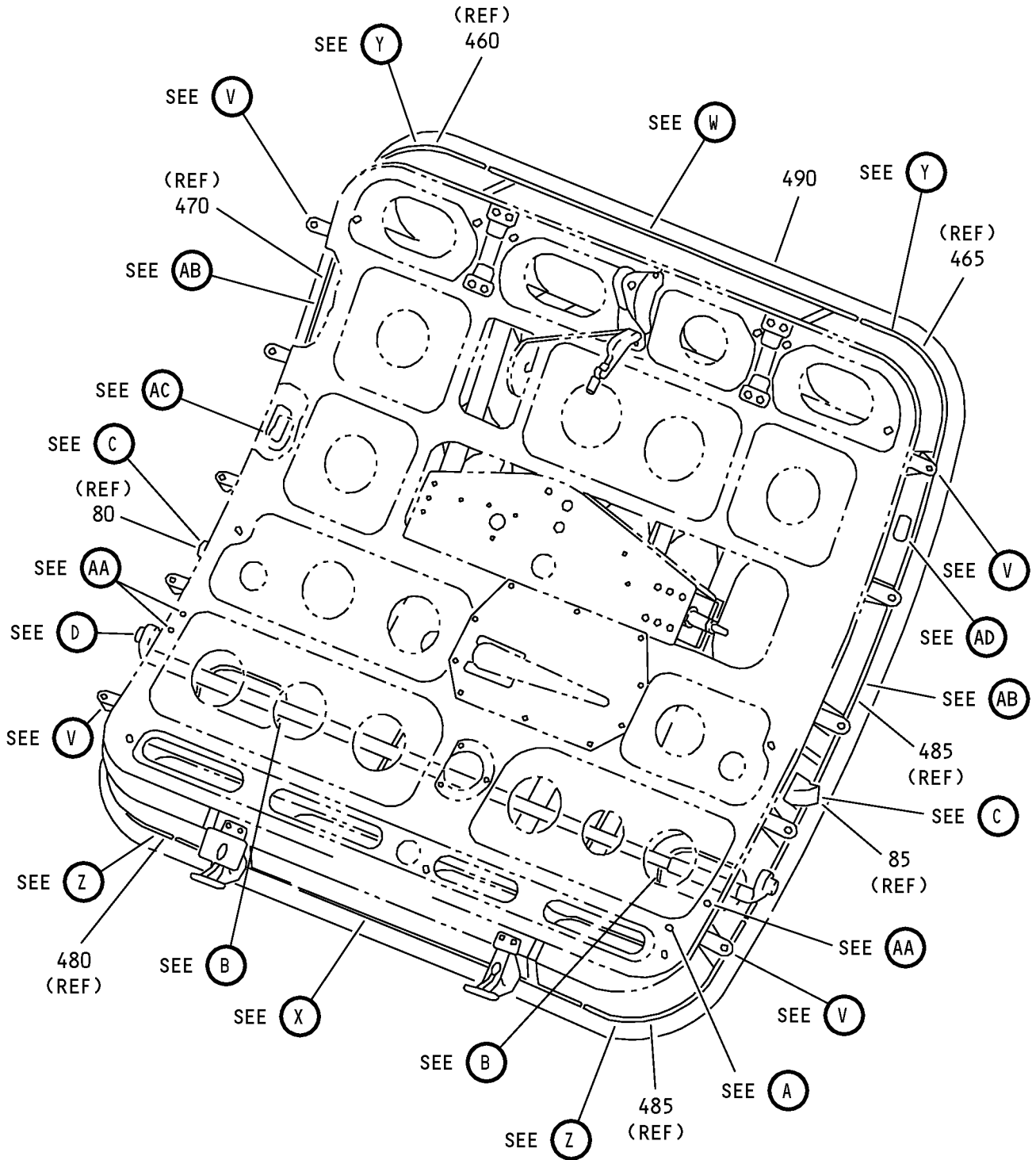
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Forward Cargo Door Assembly  
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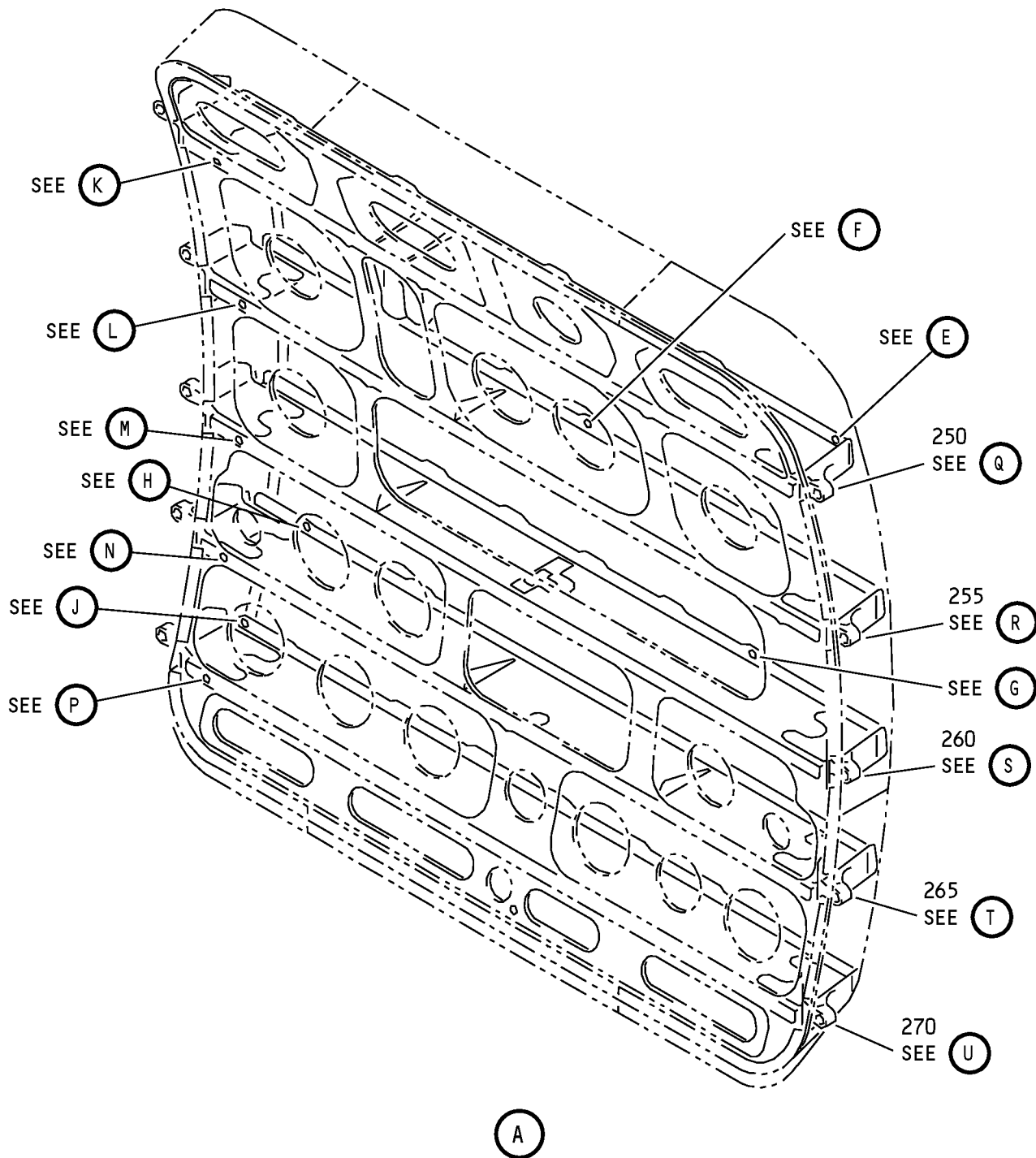
**52-31-15**

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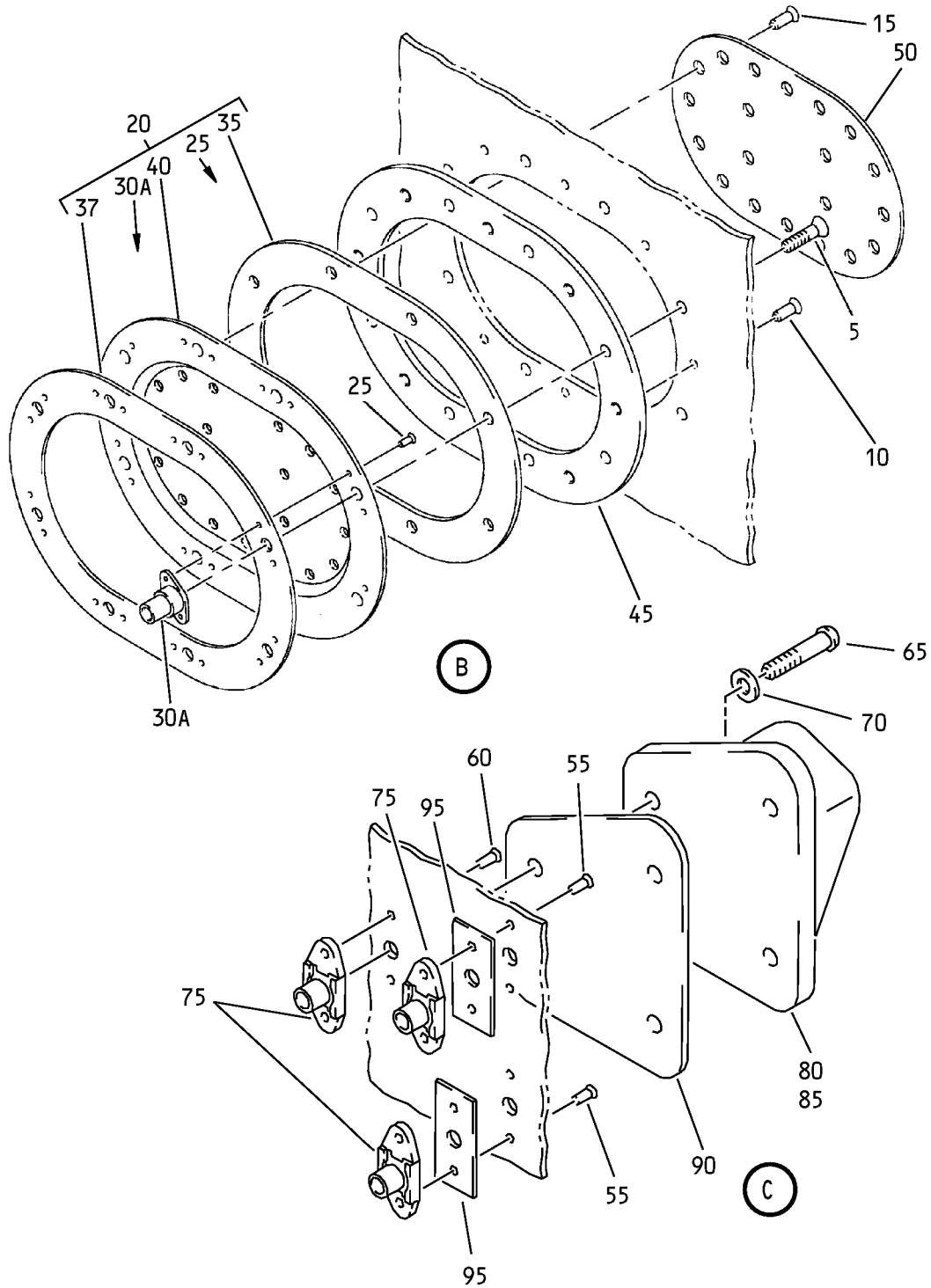
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 2 of 24)



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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 3 of 24)

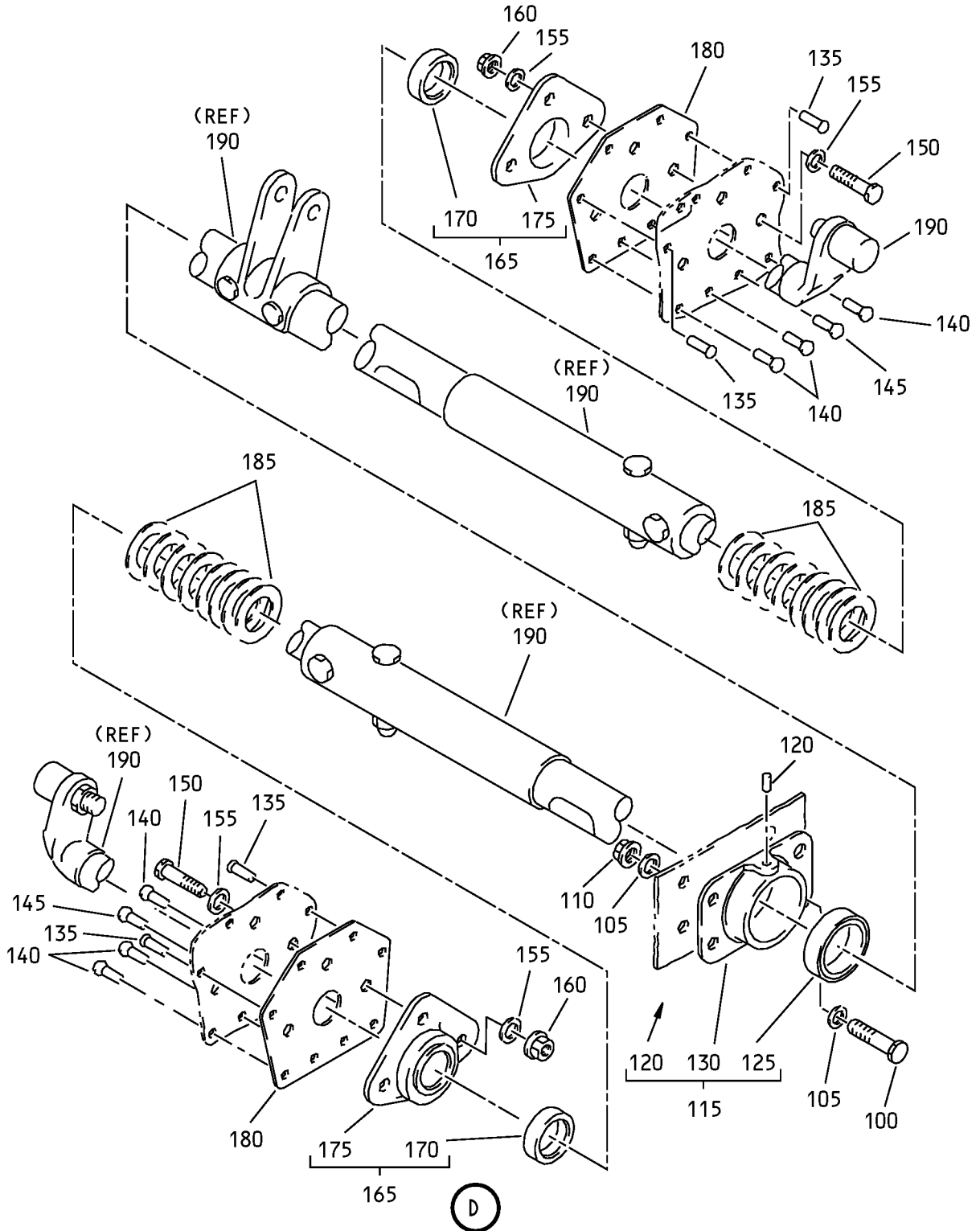
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 4 of 24)

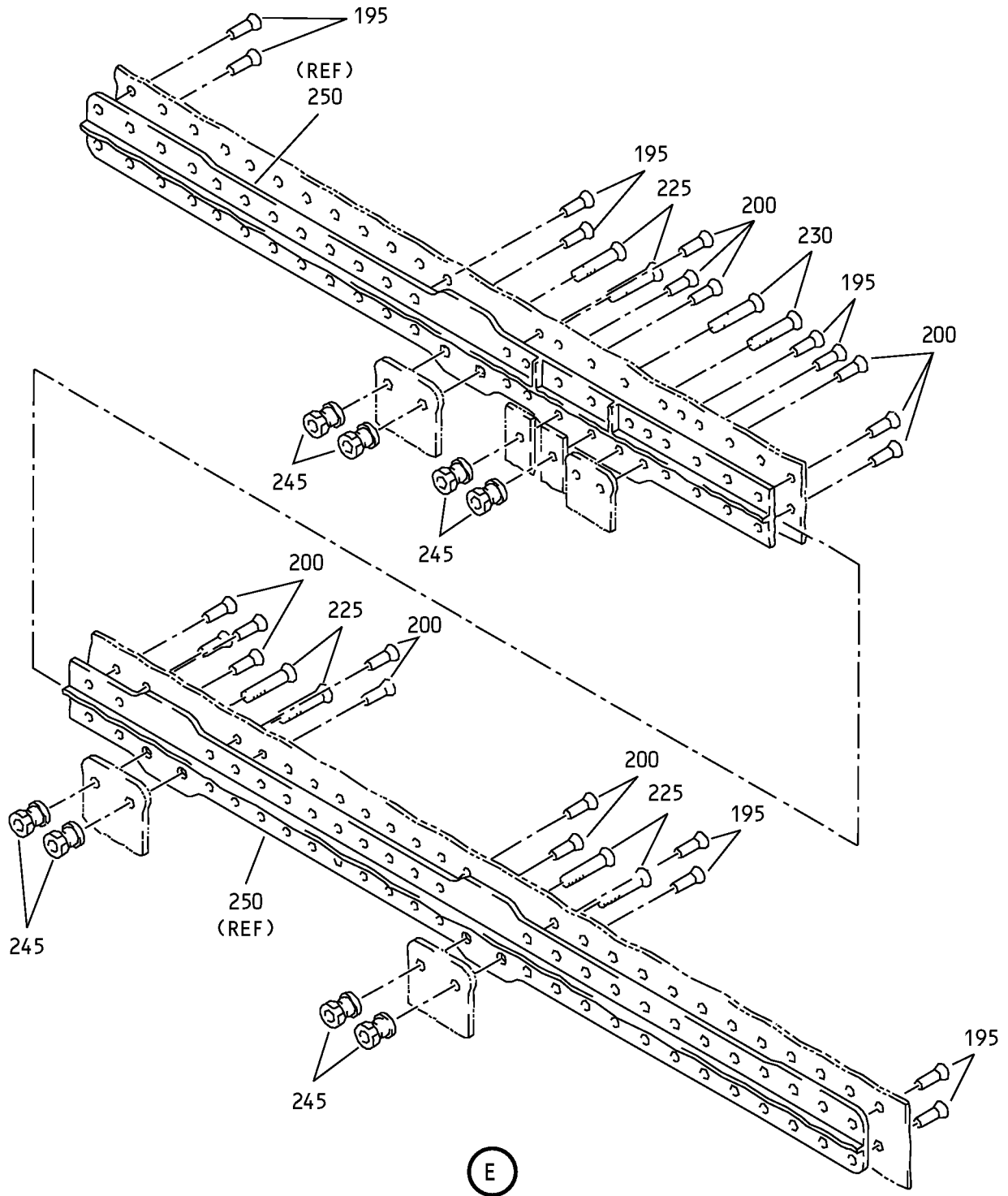
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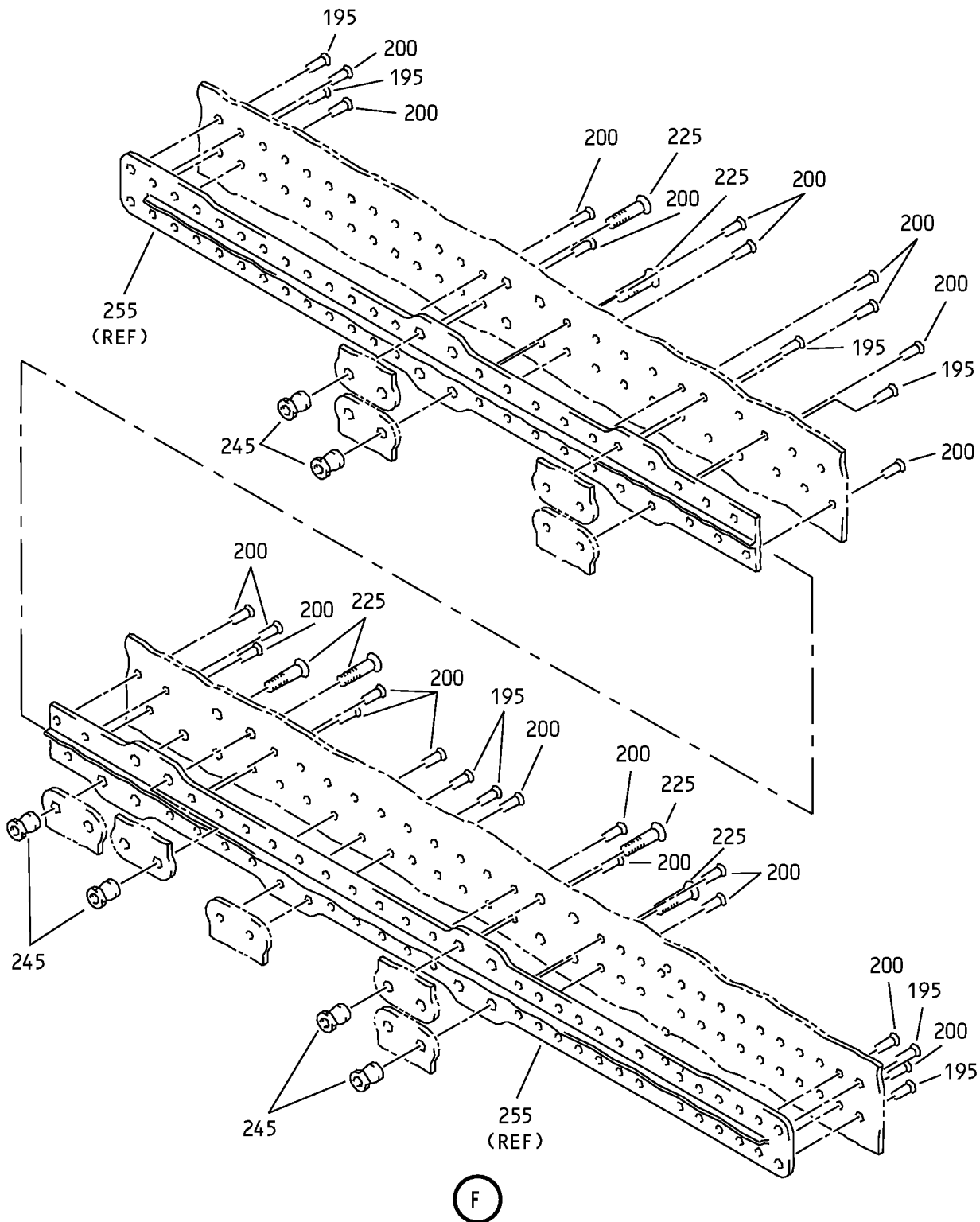
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 5 of 24)

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F

Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 6 of 24)

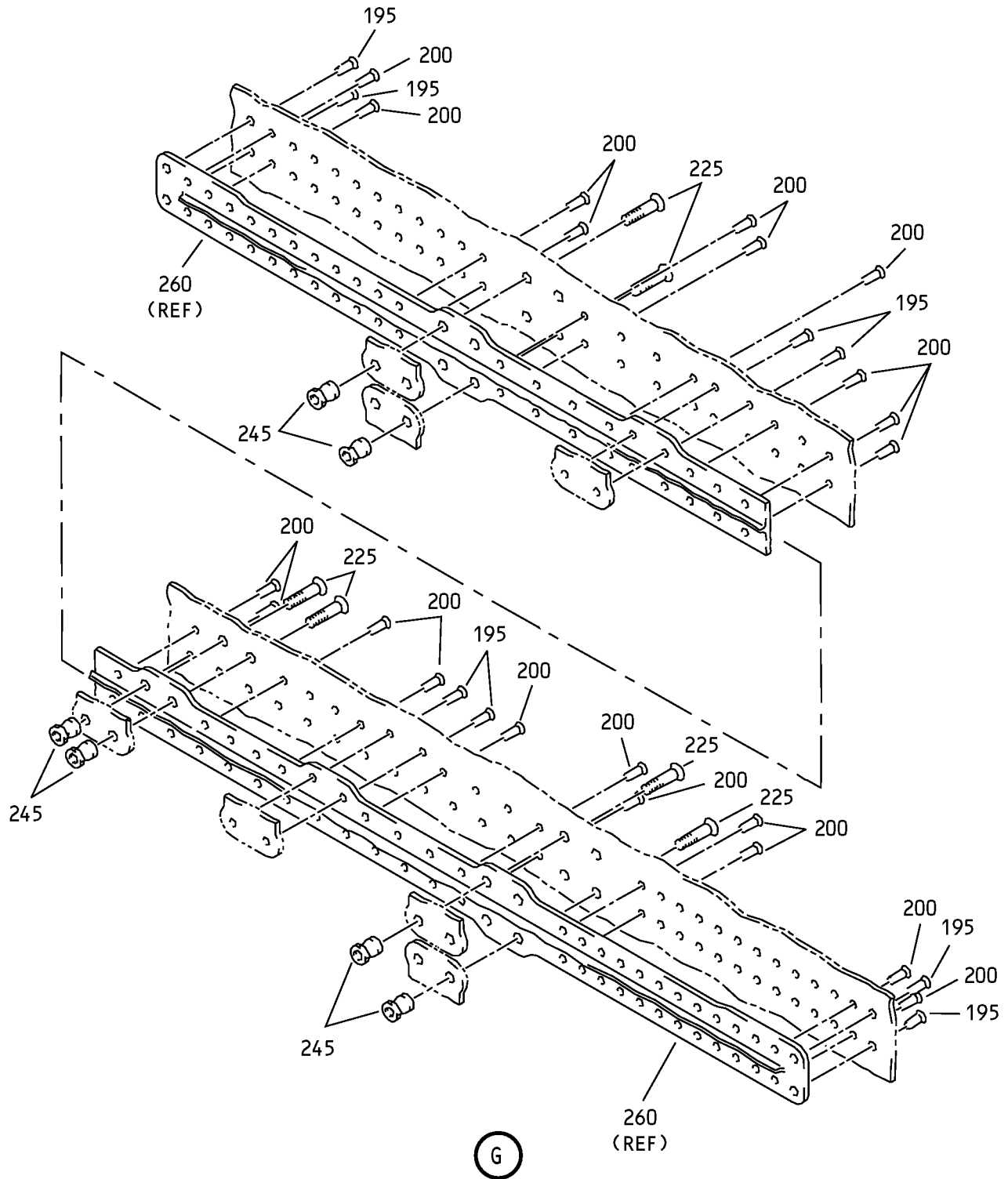
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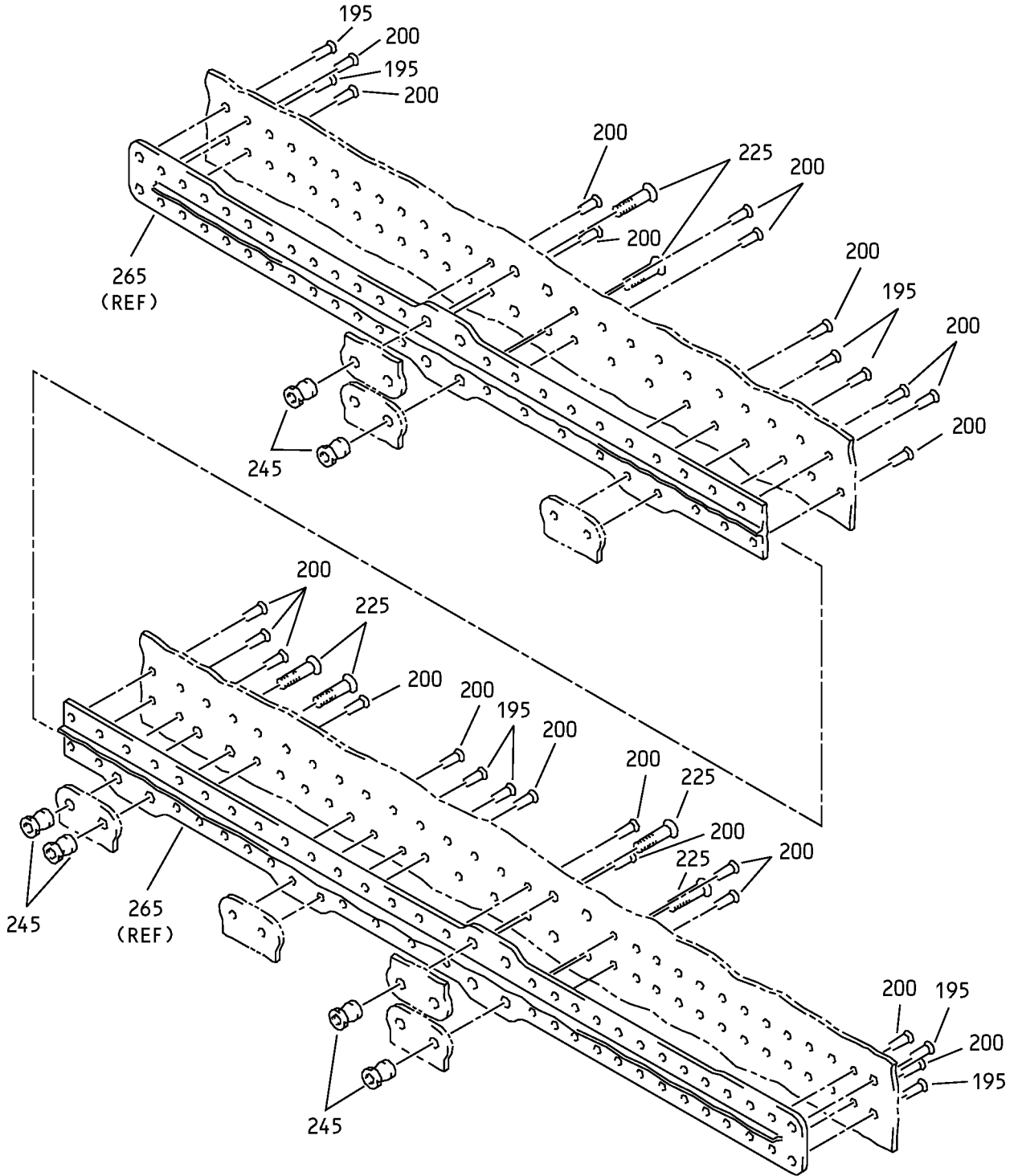
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 7 of 24)

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H

Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 8 of 24)

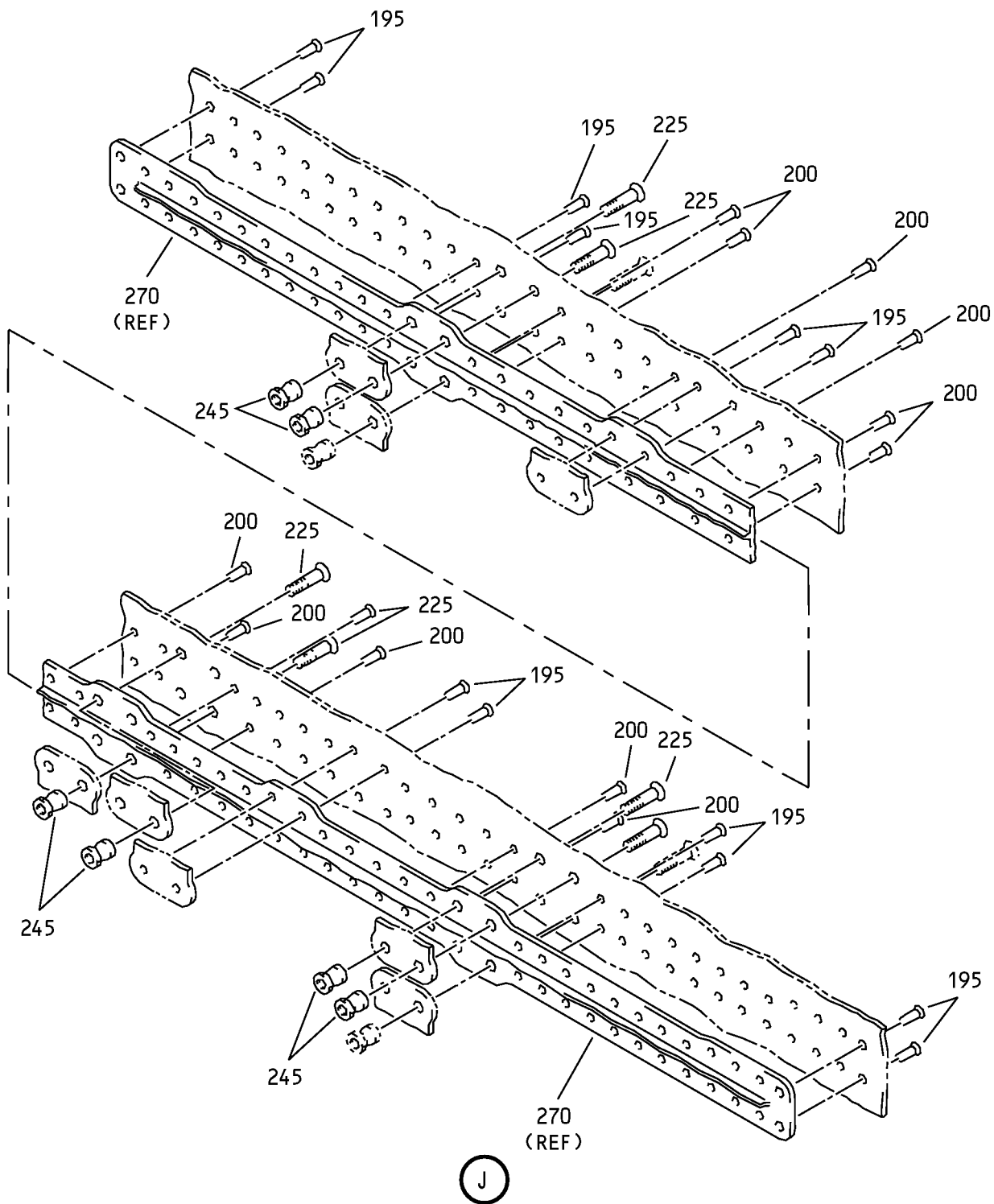
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 9 of 24)

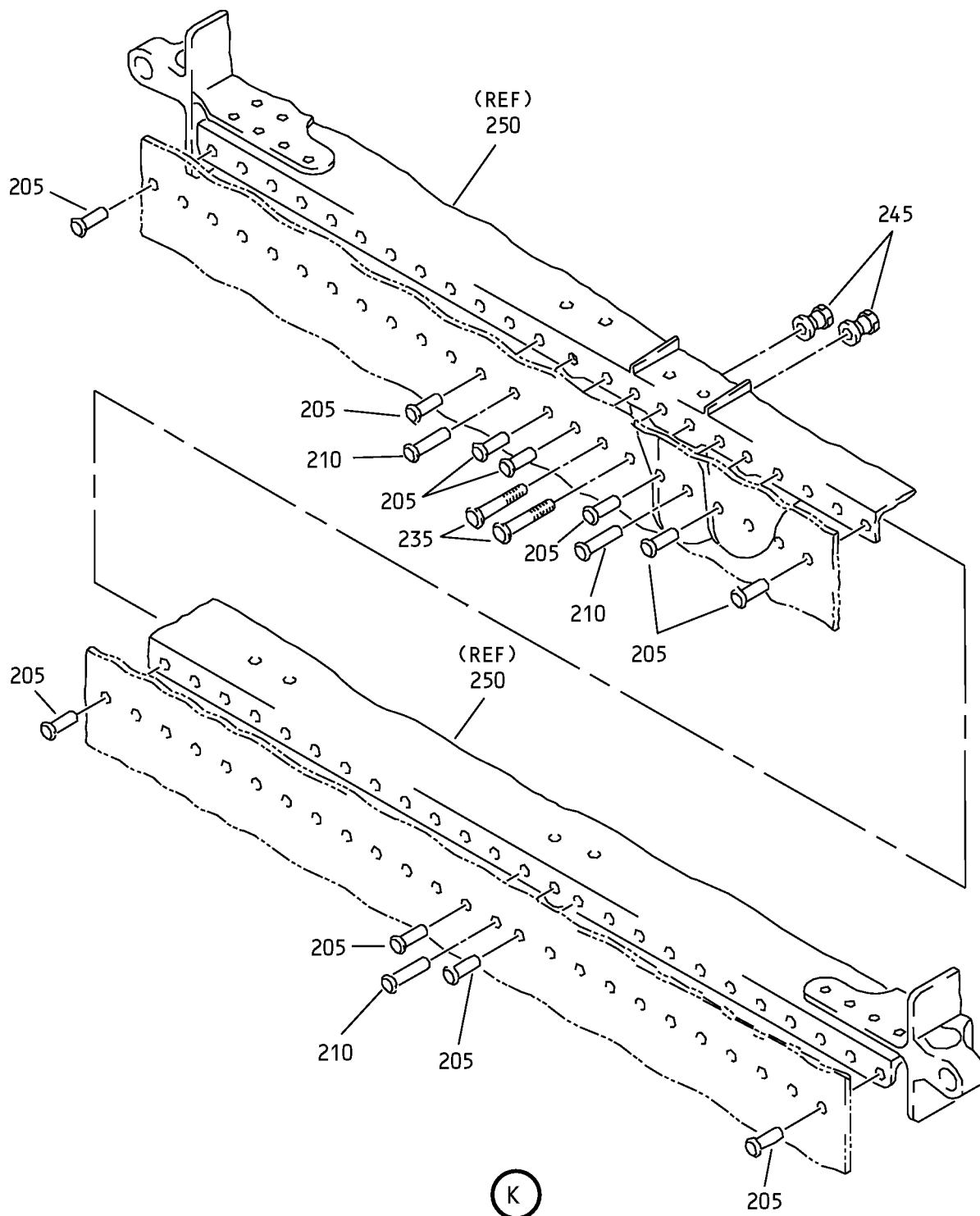
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 10 of 24)

**52-31-15**

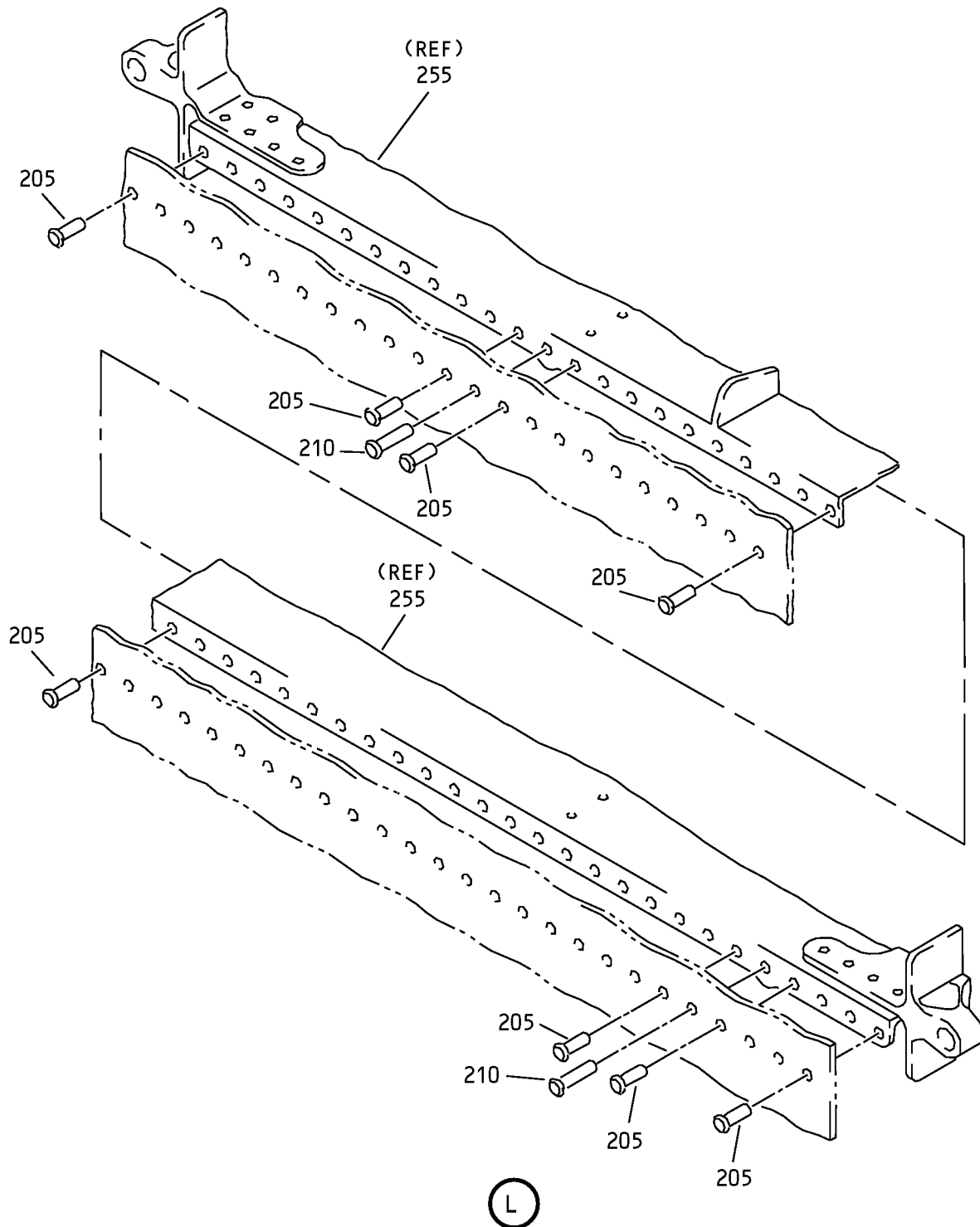
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 11 of 24)

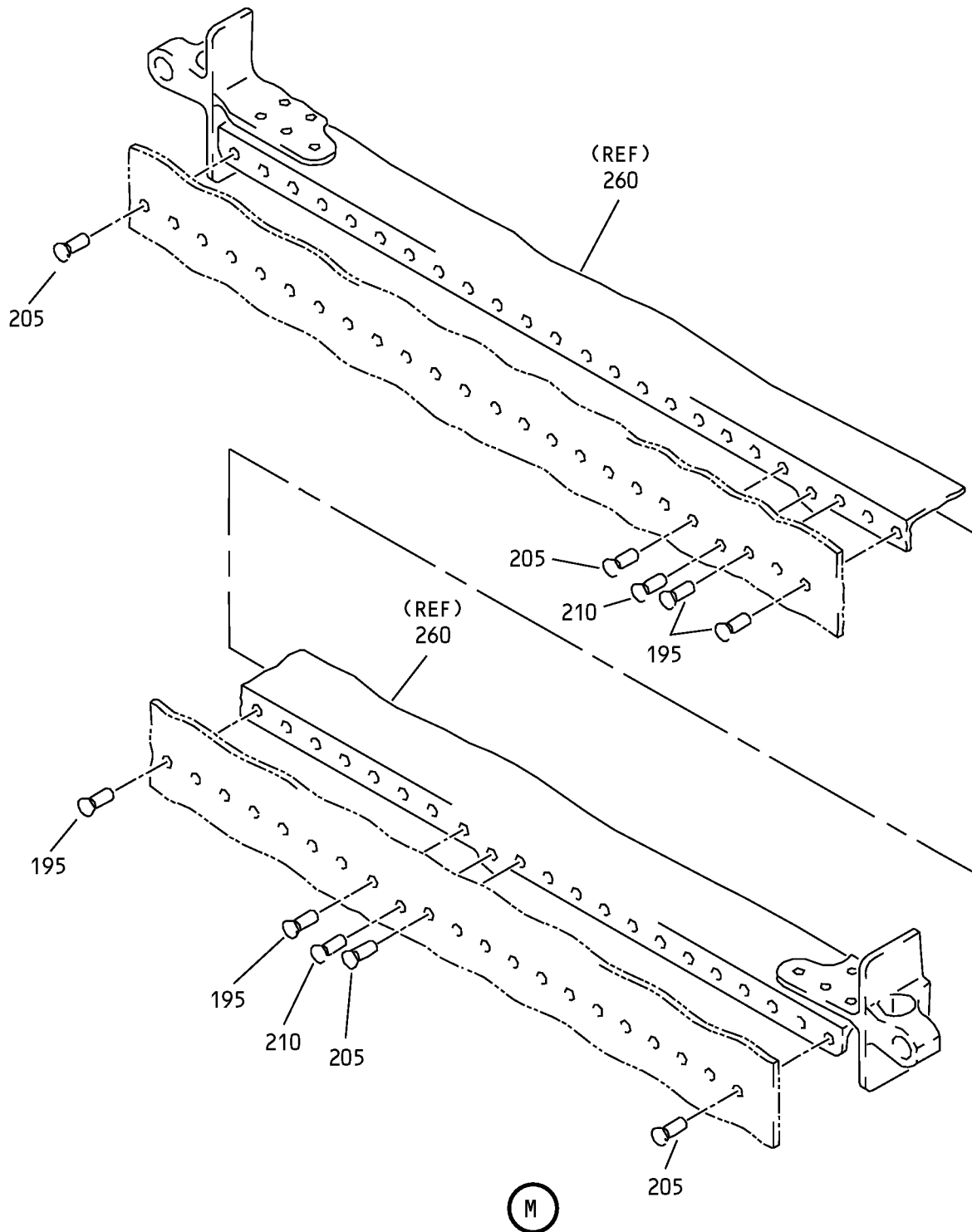
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 12 of 24)

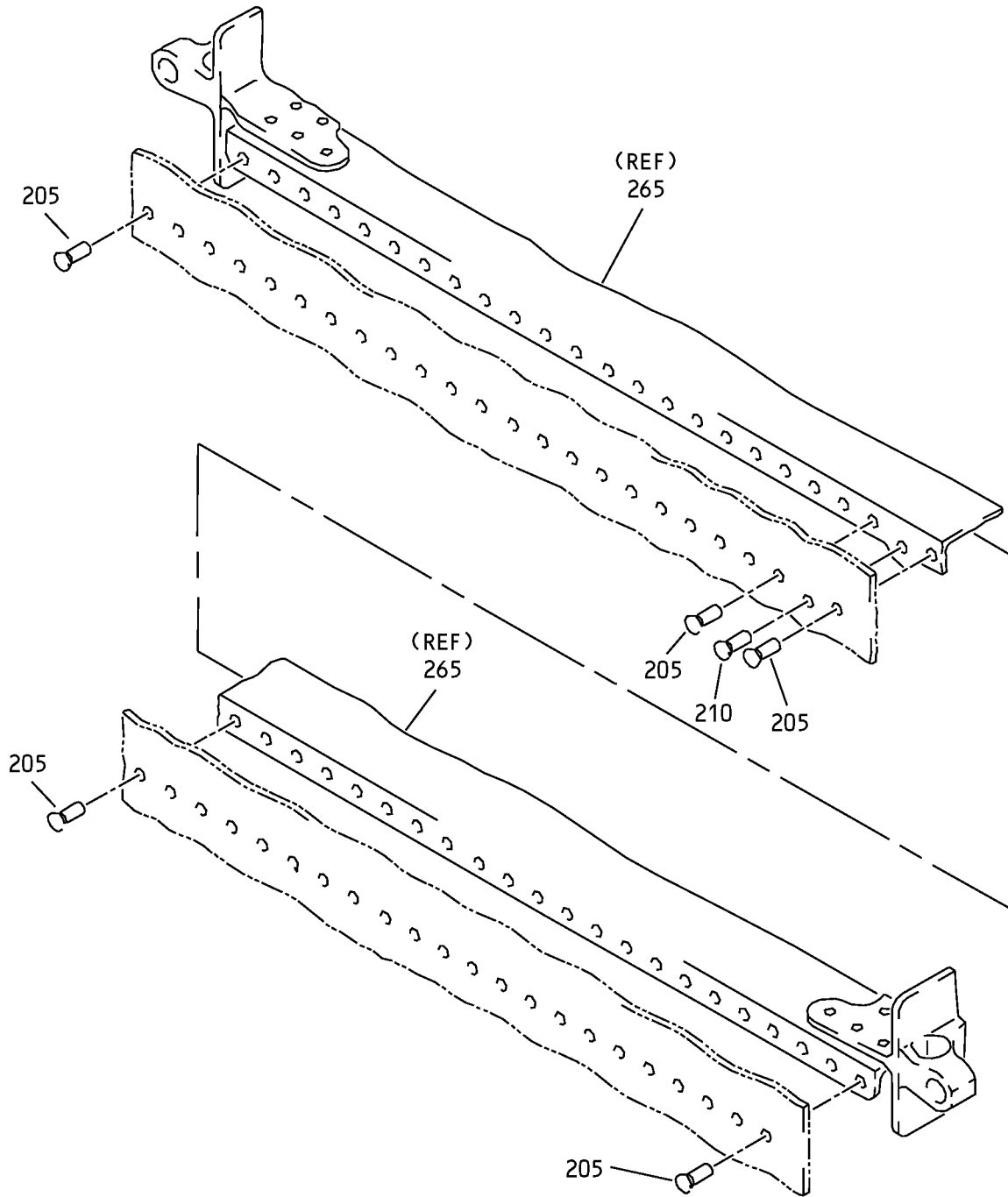
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 13 of 24)

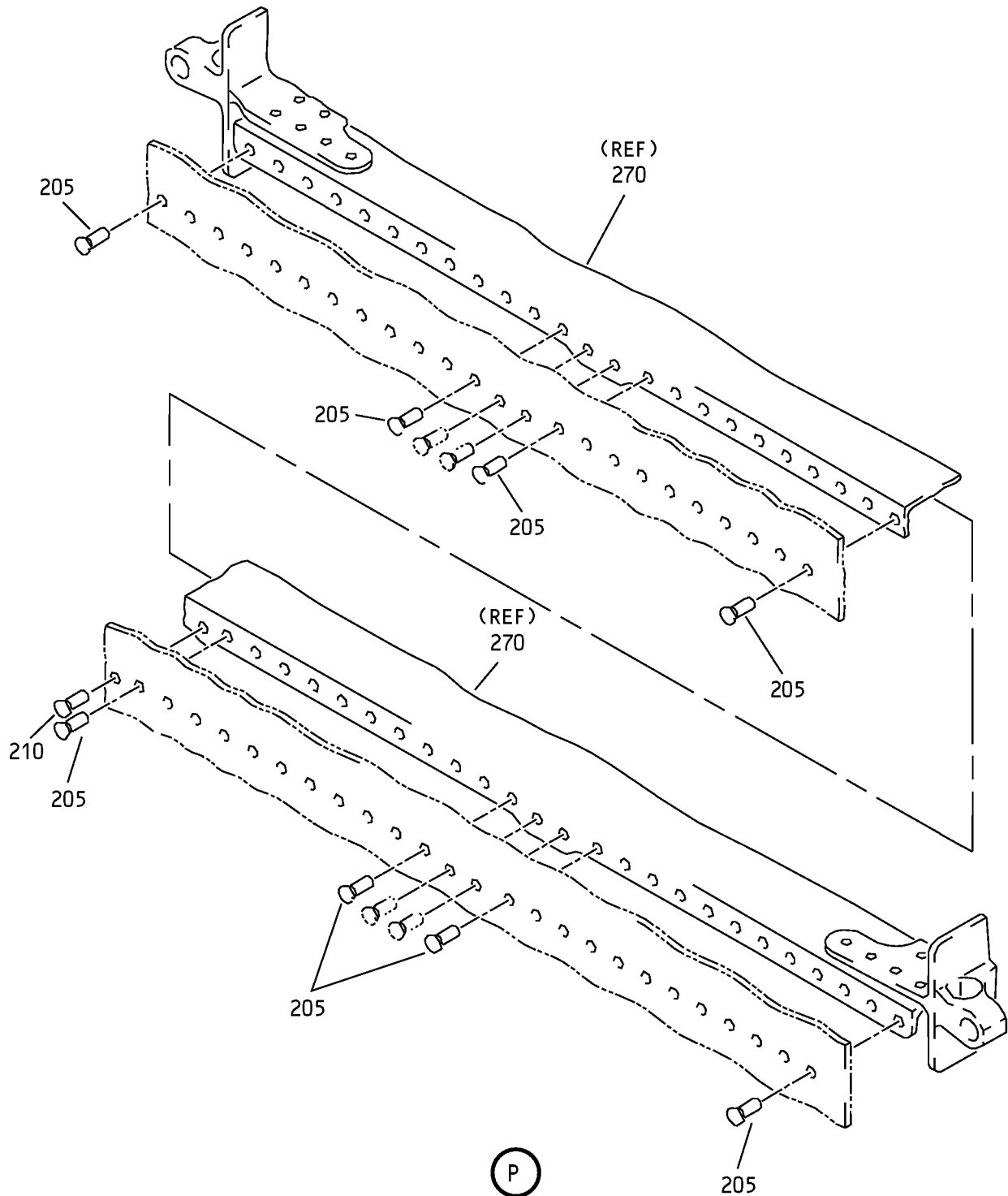
**52-31-15**

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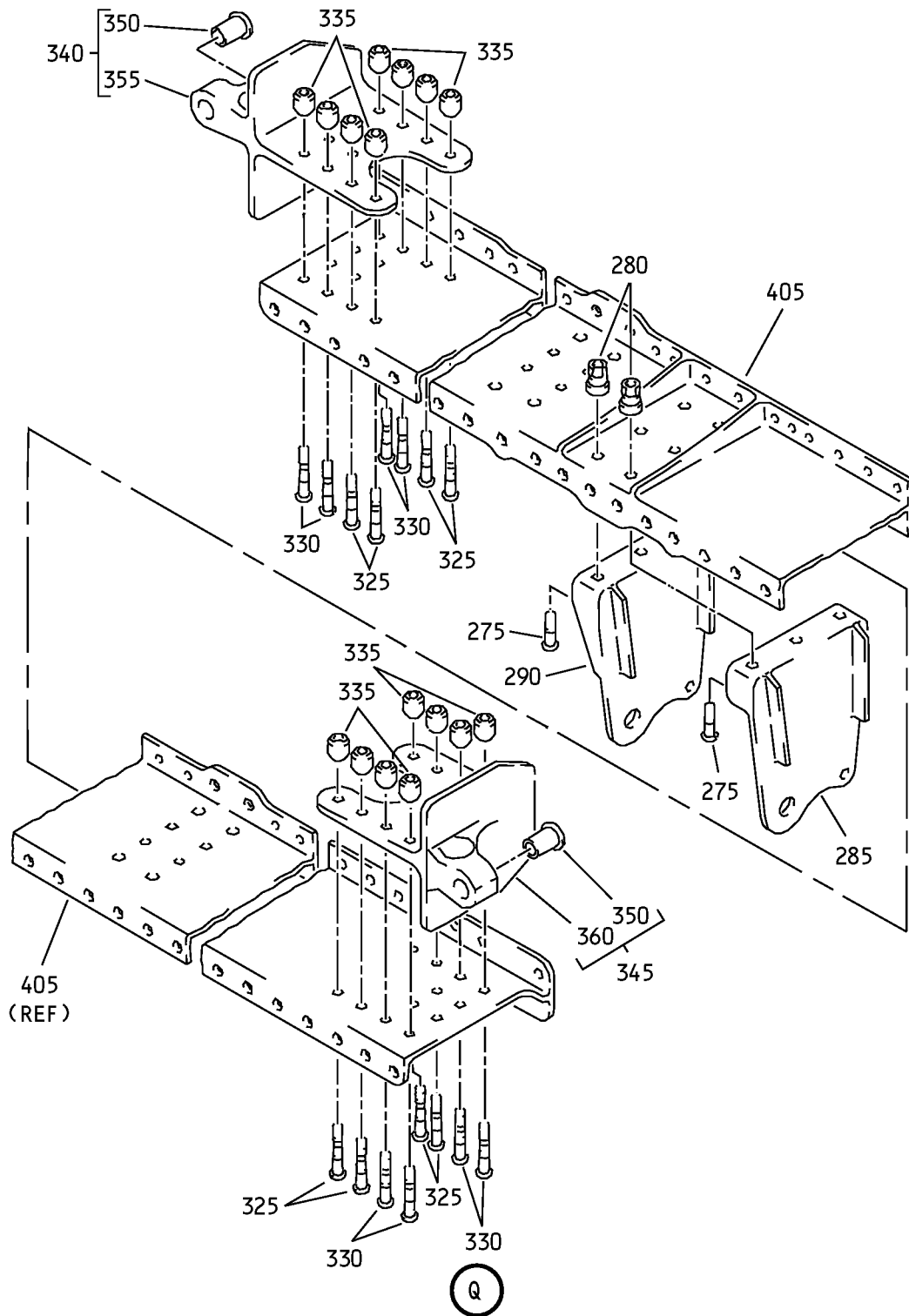
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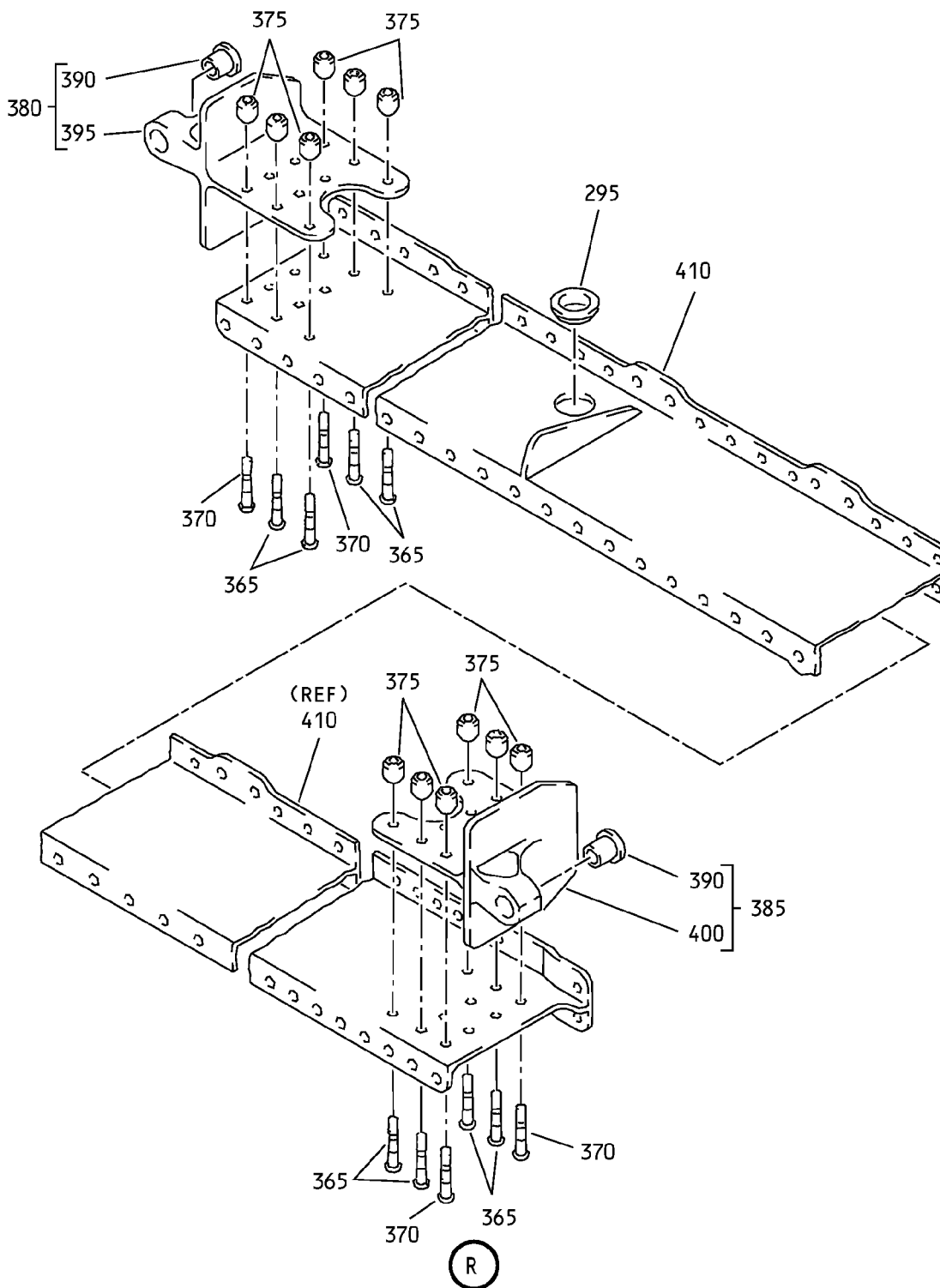
Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 14 of 24)

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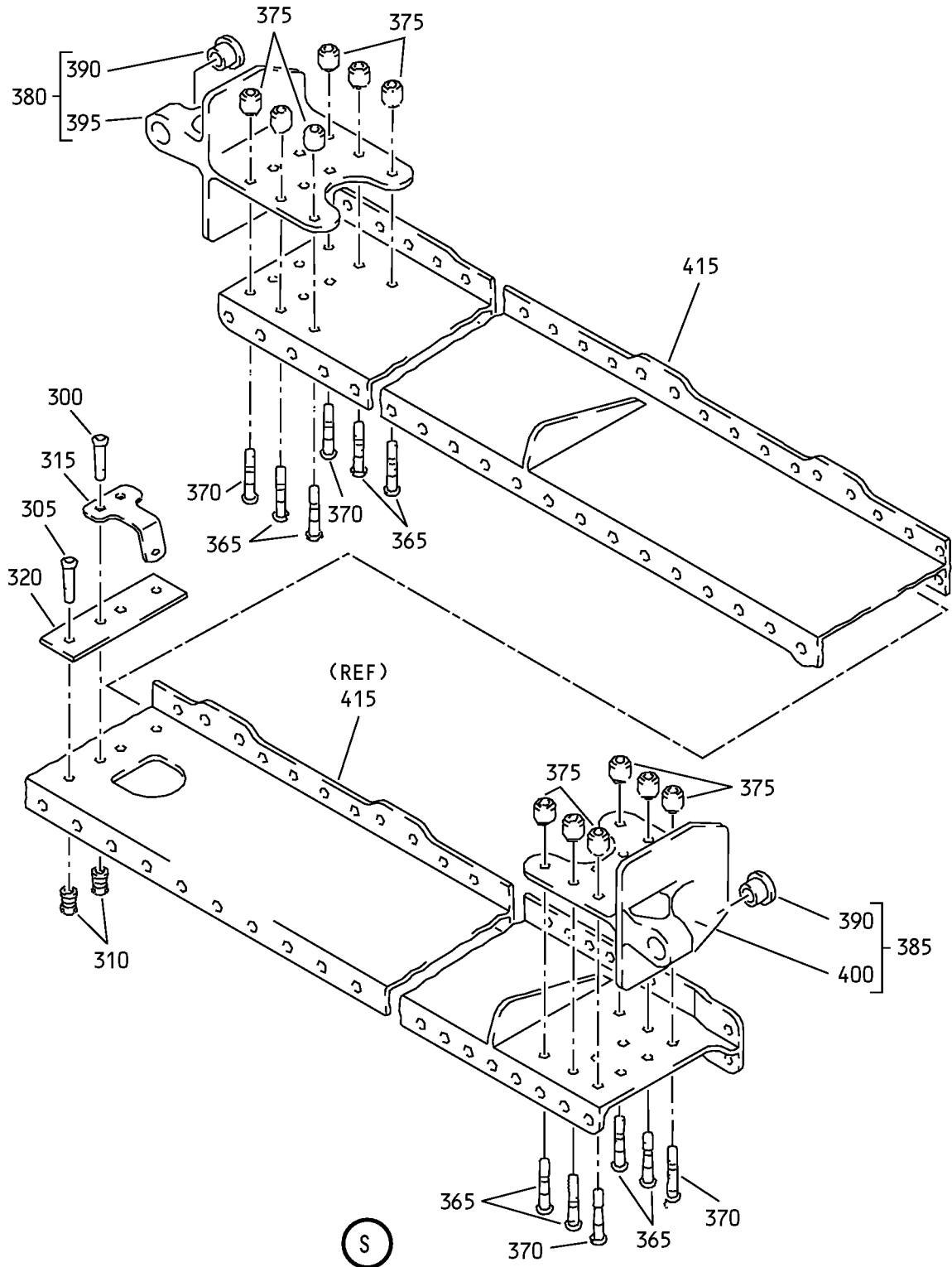
Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 15 of 24)

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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 16 of 24)

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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 17 of 24)

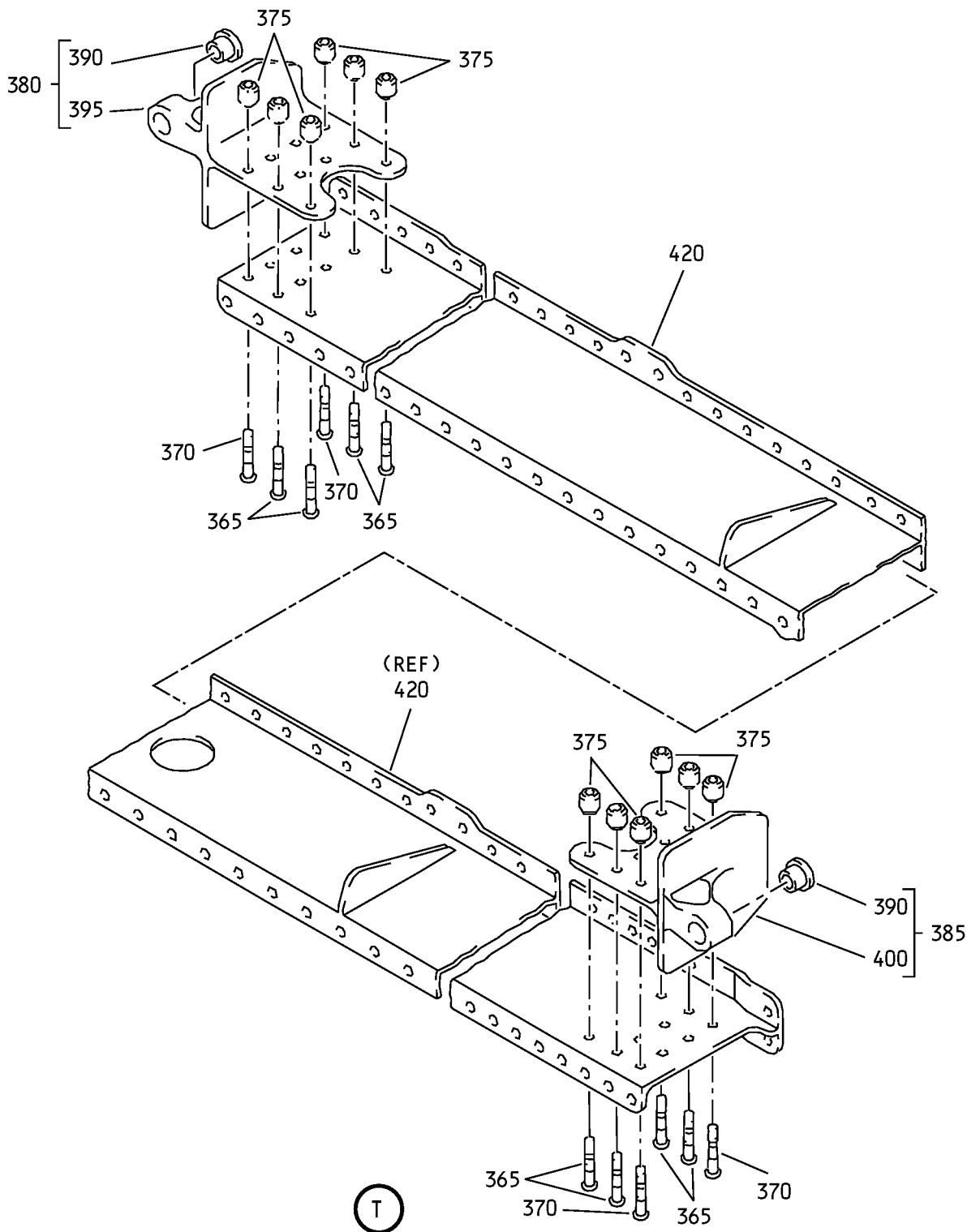
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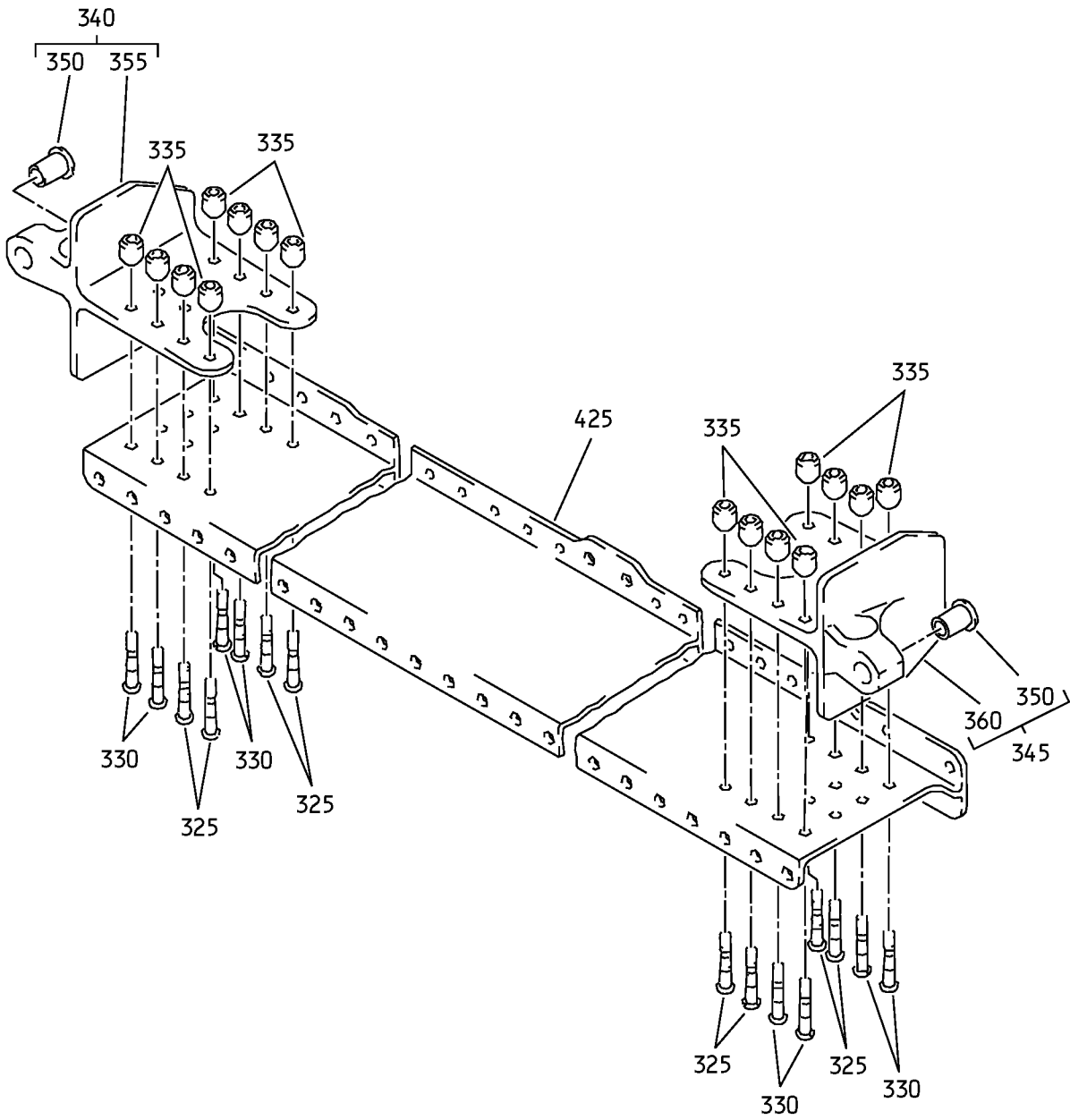
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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 18 of 24)



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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 19 of 24)

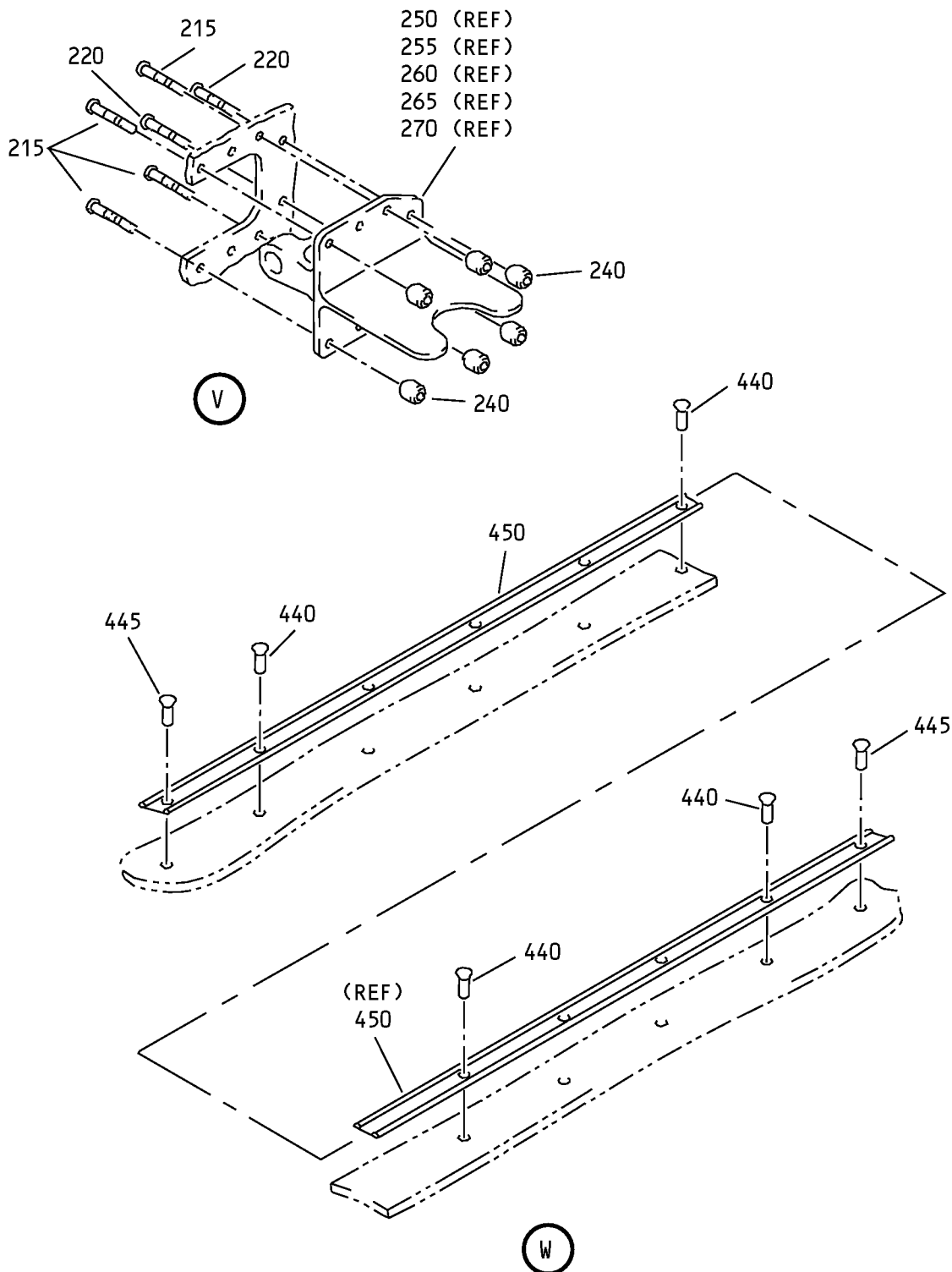
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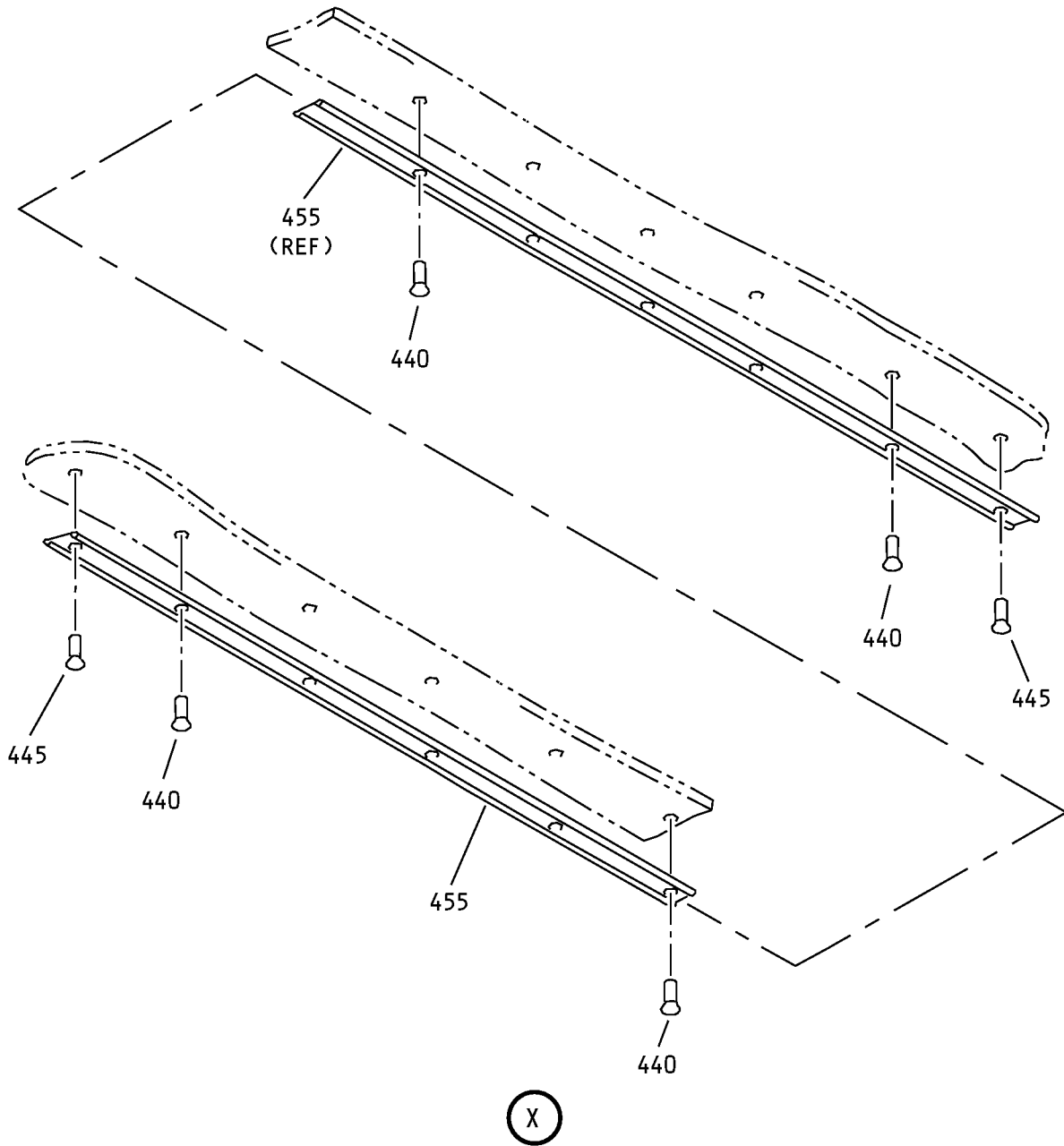
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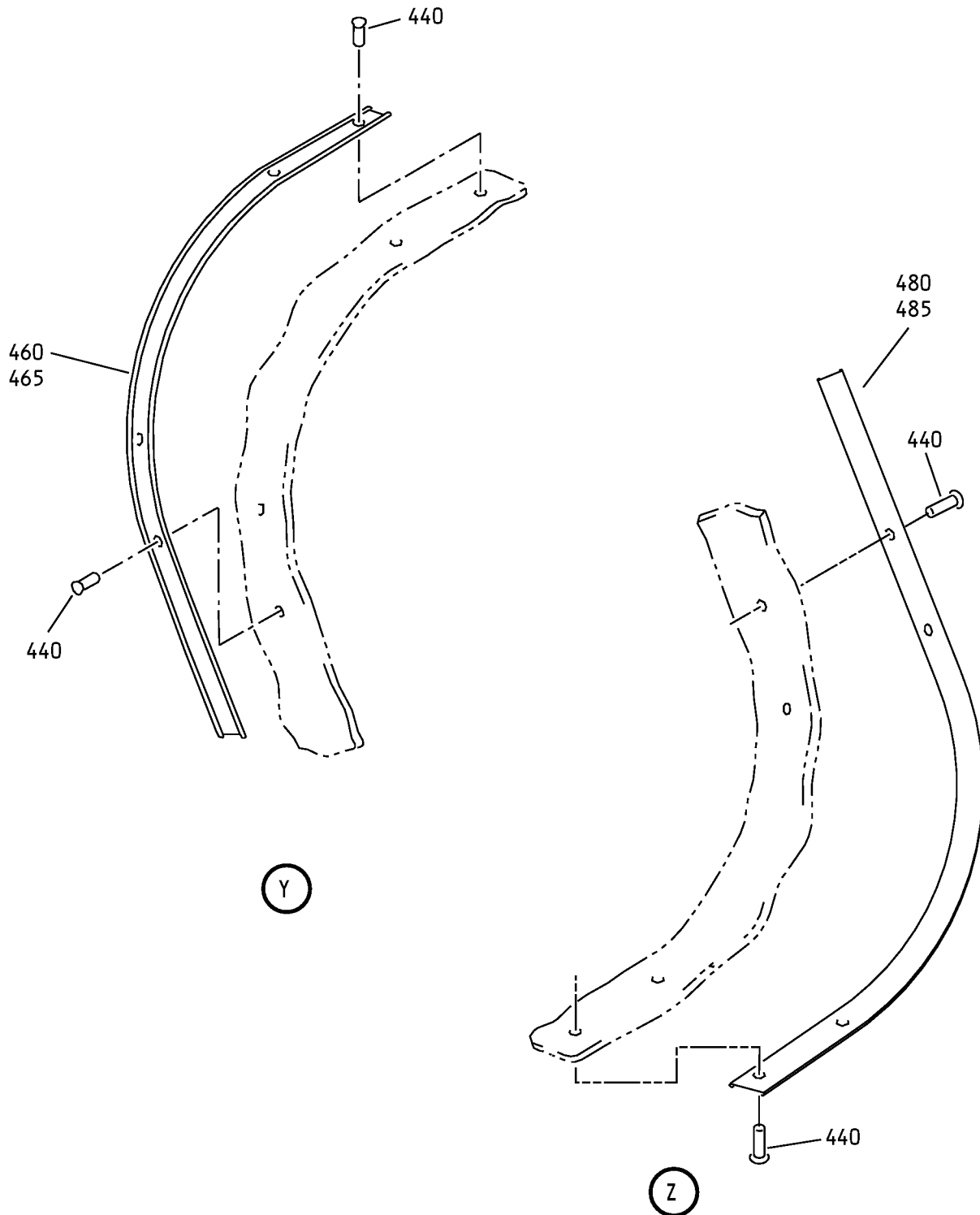
Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 20 of 24)

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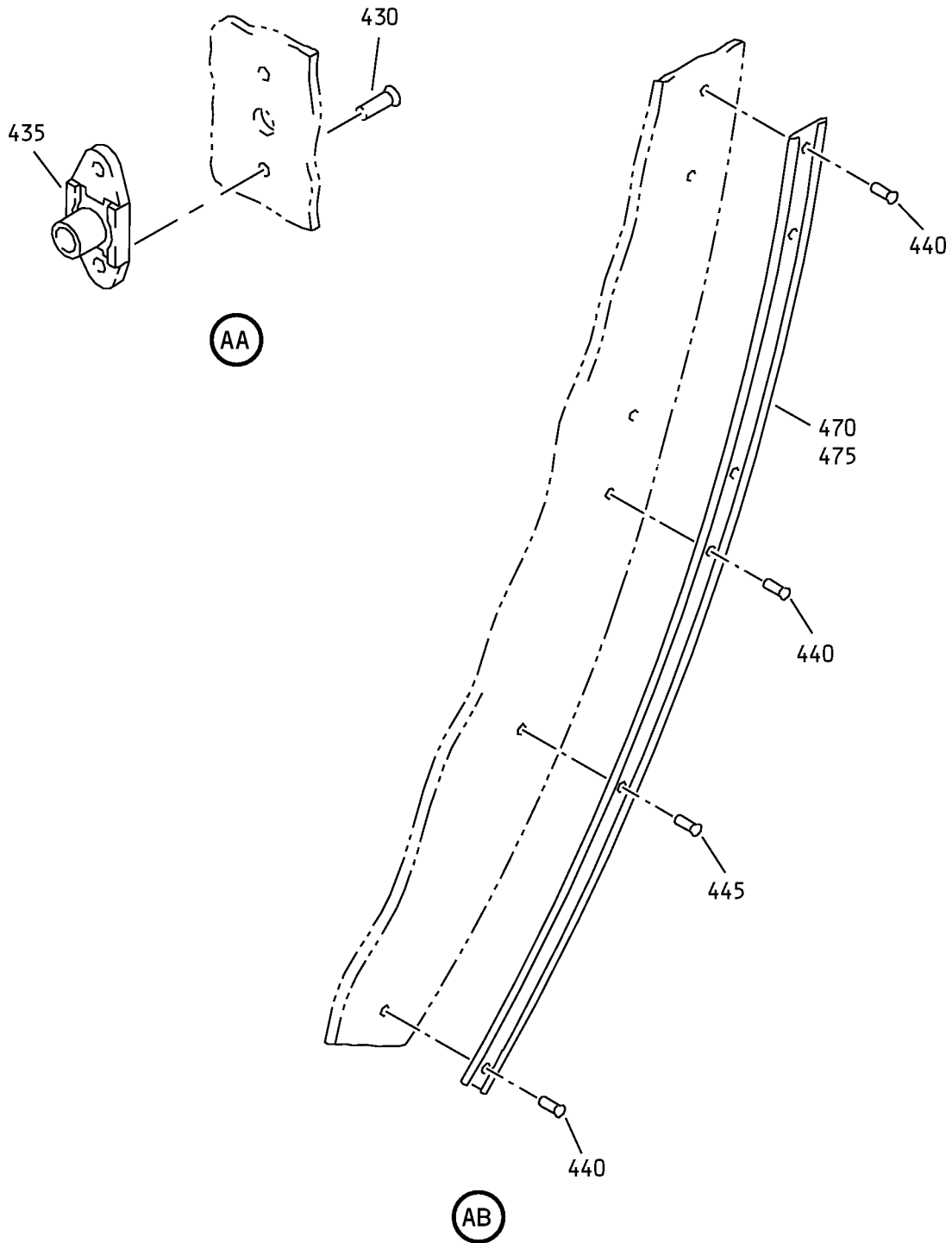
Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 21 of 24)

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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 22 of 24)

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Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 23 of 24)



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**DOOR CYCLE LOG**

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

(AC)

500

○ AIRCRAFT MOD. MFR CODE PART NO. CONT. NO. SERIAL NO. CONT. <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/> CUST. INSP. <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/> INSP.
<b>MODIFICATION INCORPORATED</b>

(AD)

Forward Cargo Door Assembly  
IPL Figure 2 (Sheet 24 of 24)



## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
-1A	143A6110-1										
-1B	143A6110-2										
-1C	143A6110-3										
-1D	143A6110-4										
-1E	143A6110-5									E	RF
-1F	143A6110-6									F	RF
-1G	143A6110-7									G	RF
-1H	143A6110-8									H	RF
-1J	143A6110-9									A	RF
-1K	143A6110-10									C	RF
-1L	143A6110-11									B	RF
-1M	143A6110-12									D	RF
-1N	143A6110-13									J	RF
-1P	143A6110-14									K	RF
-1Q	143A6110-15									L	RF

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY	
			1	2	3	4	5	6	7			
2-												
-1R	143A6110-16										M	RF
-1S	143A6110-17										N	RF
-1T	143A6110-18										P	RF
-1U	143A6110-19										Q	RF
-1V	143A6110-20										R	RF
-1W	143A6110-21										S	RF
-1X	143A6110-22										T	RF
-1Y	143A6110-23										U	RF
-1Z	143A6110-24										V	RF
-2	143A6110-26										W	RF
-2A	143A6110-27										X	RF
-2B	143A6110-28										Y	RF
-2C	143A6110-29										Z	RF

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
-2D	143A6110-30									AA	RF
-2E	143A6110-25									AB	RF
-2F	143A6110-31									AC	RF
-2G	143A6110-32										
-2H	143A6110-33									AE	RF
-2J	143A6110-34									AF	RF
-2K	143A6110-35									AG	RF
-2L	143A6110-36									AH	RF
5	BACB30VF3K4										16
10	BACR15GF6D										16
15	BACR15GF5D										20
20	149A6135-1									E-H	2
-20A	149A6135-5									A-D, J-X, AB	2
-20B	149A6135-9									Y-AA, AC, AE- AH	2
25	BACR15BA3AD										16
-30	F51643-3BAC										
30A	BACN10JZ3A2CD~ MU										8

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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-											
35	65-47961-5		.	.	GASKET (MAKE FROM SH RUBBER PER BMS1.23B 1/16IN 5.8IN 7.8IN LG)						1
37	149A6135-6		.	.	DOUBLER				A-D, J- AC, AE- AH		1
40	149A6135-2		.	.	PANEL				E-H		1
-40A	149A6135-7		.	.	PANEL				A-D, J- AC, AE- AH		1
45	149A6135-3		.		DOUBLER						2
50	149A6135-4		.		SKIN-ACCESS PNL				A, C, E- K, N, P, S, T, W, Y, Z, AB, AE, AF		2
-50A	149A6135-8		.		SKIN-ACCESS PNL				B, D, L, M, Q, R, U, V, X, AA, AC, AG, AH		2
55	BACR15BA3AD		.		RIVET (SIZE DETERMINED ON INST) (OPT ITEM 55A)						8
-55A	BACR15GE3CW6		.		RIVET (OPT ITEM 55)						8
60	BACR15BA3AD		.		RIVET (SIZE DETERMINED ON INST) (OPT ITEM 60A)						4
-60A	BACR15GE3CW4		.		RIVET (OPT ITEM 60)						4
65	BACB30NT3K8		.		BOLT						6
70	NAS1149D0363J		.		WASHER						6
75	BRF200C3D		.		NUTPLATE (V52828) (SPEC BACN10JR3CFD) (OPT K51602-3BAC (V15653)) (OPT NS202476-02 (V80539)) (OPT 102F9201-3 (V72962)) (OPT T8092C1032CD (V11815))						6

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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-											
80	149A6132-1		.							1	
85	149A6132-2		.							1	
90	149A6133-1		.							2	
95	BACF3F005J010NN		.						A-M	4	
-95A	NAS463XDD10		.						N-AC, AE-AH	4	
100	BACB30NM3K4		.							4	
105	NAS1149D0363J		.							8	
110	H52732-3CD		.							4	
						(V15653)					
						(SPEC BACN10YR3CD)					
						(OPT PLH53CD (V62554))					
115	65-2306-11		.							1	
120	NAS516-1A		.							1	
125	ASSB16-19		.							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))					
130	65-2306-12		.							1	
135	BACR15FT5D		.							8	
						(SIZE DETERMINED ON INST)					
140	BACR15GF5D		.							6	
						(SIZE DETERMINED ON INST)					
145	BACR15GK4E3		.							2	
150	BACB30NM4K5		.							6	
155	NAS1149D0463J		.							12	
160	H52732-4CD		.							6	
						(V15653)					
						(SPEC BACN10YR4CD)					
						(OPT PLH54CD (V62554))					
165	143A6126-1		.							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-											
170	69-45425-1		.	.	BEARING						1
175	143A6126-2		.	.	HOUSING						1
180	143A6116-1		.		DOUBLER-FRAME						2
185	BACW10P278AL		.		WASHER						AR
190	149A6130-1		.		TUBE ASSY-LATCH TORQUE (FOR DETAILS SEE FIG. 3)						1
195	BACR15GF6D		.		RIVET (SIZE DETERMINED ON INST)						129
200	BACR15GF5D		.		RIVET (SIZE DETERMINED ON INST)						344
205	BACR15GK6E4		.		RIVET						212
210	BACR15GK6E5		.		RIVET						9
215	LGPL2SPV6-3AC		.		BOLT (V17446) (SPEC BACB30VN6K3) (OPT LGPL2SPV6-3AC (V92215)) (OPT 81669V6K3 (V56878)) (OPT LGPL2SPV6-3AC (V56878))						60
220	LGPL2SPV6-4AC		.		BOLT (V17446) (SPEC BACB30VN6K4) (OPT LGPL2SPV6-4AC (V92215)) (OPT 81669V6K4 (V56878)) (OPT LGPL2SPV6-4AC (V56878))						20
225	HST11AG6-3		.		BOLT (V06725) (SPEC BACB30VU6K3) (OPT HST11AG6-3 (V73197)) (OPT HST11AG6-3 (V56878)) (OPT HST11AG6-3 (V0PTK6))				A-AC		46
-225A	BACB30YP6K3		.		BOLT				AE-AH		48
230	HST11AG6-4		.		BOLT (V06725) (SPEC BACB30VU6K4) (OPT HST11AG6-4 (V73197)) (OPT HST11AG6-4 (V56878)) (OPT HST11AG6-4 (V0PTK6))				A-AC		2
-230A	BACB30YP6K4		.		BOLT				AE-AH		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-											
235	HST10AG6-6		.	BOLT							2
				(V0PTK6)							
				(SPEC BACB30VT6K6)							
				(OPT HST10AG6-6 (V06725))							
				(OPT HST10AG6-6 (V56878))							
				(OPT HST10AG6-6 (V73197))							
				(OPT WC10K6-6 (V60516))							
240	3SLCC6		.	COLLAR							80
				(V17446)							
				(SPEC BACC30BK6)							
				(OPT 3SLCC6 (V92215))							
245	HST79CY6		.	COLLAR							50
				(V73197)							
				(SPEC BACC30BL6)							
				(OPT HST79-6 (V56878))							
				(OPT HST79-6 (V92215))							
				(OPT HST79-6 (V5M902))							
250	143A6117-1		.	BEAM ASSY					E, F		1
-250A	143A6117-7		.	BEAM ASSY					A-D, G- AC, AE- AH		1
255	143A6117-6		.	BEAM ASSY					E, F		1
-255A	143A6117-11		.	BEAM ASSY					A-D, G- AC, AE- AH		1
260	143A6117-3		.	BEAM ASSY					E, F		1
-260A	143A6117-8		.	BEAM ASSY					A-D, G- AC, AE- AH		1
265	143A6117-4		.	BEAM ASSY					E, F		1
-265A	143A6117-9		.	BEAM ASSY					A-D, G- AC, AE- AH		1
270	143A6117-5		.	BEAM ASSY					E, F		1
-270A	143A6117-10		.	BEAM ASSY					A-D, G- AC, AE- AH		1

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2- 275	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 250, 250A)							
280	HL1087-6		. .	COLLAR							6
				(V73197)							
				(SPEC BACC30BH6)							
				(OPT HL1087-6 (V56878))							
				(OPT HL1087-6 (V92215))							
				(OPT HL1087-6 (V9N513))							
				(USED ON ITEMS 250, 250A)							
285	143A6136-1		. .	BRACKET-PULLEY							1
				(USED ON ITEMS 250, 250A)							
290	143A6136-2		. .	BRACKET-PULLEY							1
				(USED ON ITEMS 250, 250A)							
295	NAS557-18B		. .	GROMMET							1
				(USED ON ITEMS 255, 255A)							
300	HST10AG6-5		. .	BOLT					E, F		2
				(V0PTK6)							
				(SPEC BACB30VT6K5)							
				(OPT HST10AG6-5 (V06725))							
				(OPT HST10AG6-5 (V56878))							
				(OPT HST10AG6-5 (V73197))							
				(OPT WC10K6-5 (V60516))							
				(USED ON ITEM 260)							

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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- -300A	HL1012AZ6-5		.	.							A-D, G- AC, AE- AH	2
305	HST10AG6-4		.	.							E, F	2
-305A	HL1012AZ6-4		.	.							A-D, G- AC, AE- AH	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- -305B	HST10AG6-4		.	.						A-D, G- AC, AE- AH	2
310	HST79CY6		.	.						E, F	4
-310A	HL1087-6		.	.						A-D, G- AC, AE- AH	4
315	143A6119-1		.	.							1
320	BACF3H11RF036AN		.	.							1
325	LGPL2SPV8-5AC		.	.							8
330	LGPL2SPV8-6AC		.	.							16

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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-											
335	3SLCC8										
340	143A6120-1										
345	143A6120-2										
350	66-12688-11										
355	143A6120-5										
360	143A6120-6										
365	LGPL2SPV8-5AC										
370	LGPL2SPV8-6AC										
375	3SLCC8										
380	143A6120-3										

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2- 385	143A6120-4		.	.	STOP ASSY (USED ON ITEMS 255, 255A, 260, 260A, 265, 265A)						1
390	66-12688-11		.	.	BUSHING						1
395	143A6120-7		.	.	FITTING-STOP (USED ON ITEM 380)						1
400	143A6120-8		.	.	FITTING-STOP (USED ON ITEM 385)						1
405	143A6118-1		.	.	BEAM (USED ON ITEM 250)				E, F		1
-405A	143A6118-7		.	.	BEAM (USED ON ITEM 250A)				A-D, G- AC, AE- AH		1
410	143A6118-6		.	.	BEAM (USED ON ITEM 255)				E, F		1
-410A	143A6118-11		.	.	BEAM (USED ON ITEM 255A)				A-D, G- AC, AE- AH		1
415	143A6118-3		.	.	BEAM (USED ON ITEM 260)				E, F		1
-415A	143A6118-8		.	.	BEAM (USED ON ITEM 260A)				A-D, G- AC, AE- AH		1
420	143A6118-4		.	.	BEAM (USED ON ITEM 265)				E, F		1
-420A	143A6118-9		.	.	BEAM (USED ON ITEM 265A)				A-D, G- AC, AE- AH		1
425	143A6118-5		.	.	BEAM (USED ON ITEM 270)				E, F		1
-425A	143A6118-10		.	.	BEAM (USED ON ITEM 270A)				A-D, G- AC, AE- AH		1
430	BACR15BA3AD		.		RIVET (SIZE DETERMINED ON INST)						6

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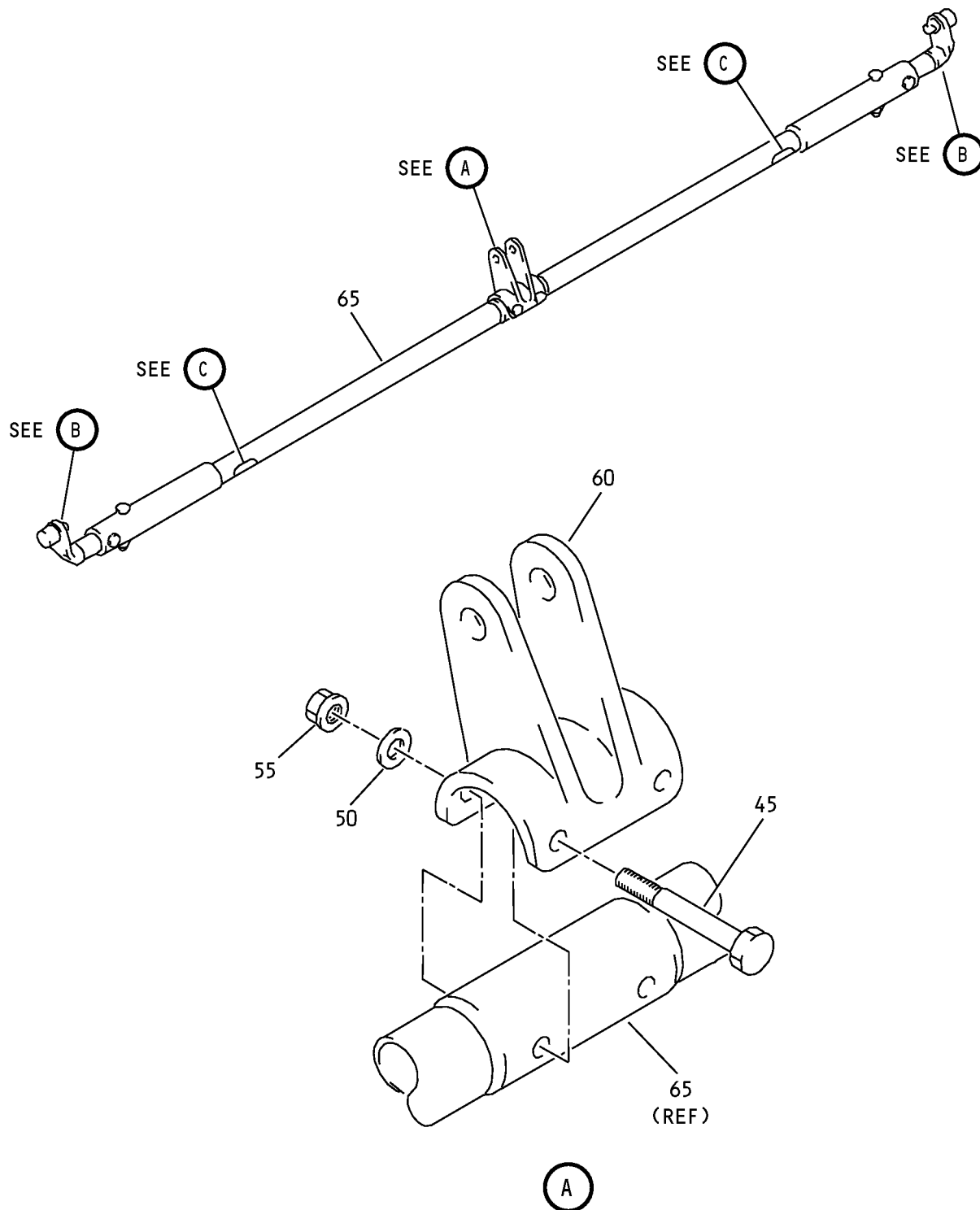
## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2- 435	BRF200C3D		.	NUTPLATE (V52828) (SPEC BACN10JR3CFD) (OPT K51602-3BAC (V15653)) (OPT NS202476-02 (V80539)) (OPT 102F9201-3 (V72962)) (OPT T8092C1032CD (V11815))							3
440	BACR15GK4E2		.	RIVET							45
445	BACR15GK4E3		.	RIVET							6
450	143A6131-1		.	RETAINER-SEAL							1
455	143A6131-2		.	RETAINER-SEAL							1
460	143A6131-3		.	RETAINER-SEAL							1
465	143A6131-4		.	RETAINER-SEAL							1
470	143A6131-5		.	RETAINER-SEAL							1
475	143A6131-6		.	RETAINER-SEAL							1
480	143A6131-7		.	RETAINER-SEAL							1
485	143A6131-8		.	RETAINER-SEAL							1
490	88D10204-173		.	SEAL (V60980) (SPEC S140T263-173) (OPT SF15-120-173 (V50744))							1
495	BAC27DBY191		.	MARKER-ALUMINUM FOIL							1
500	MS27253F1		.	PLATE-IDENT							1

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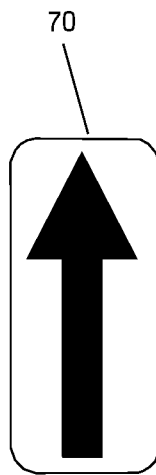
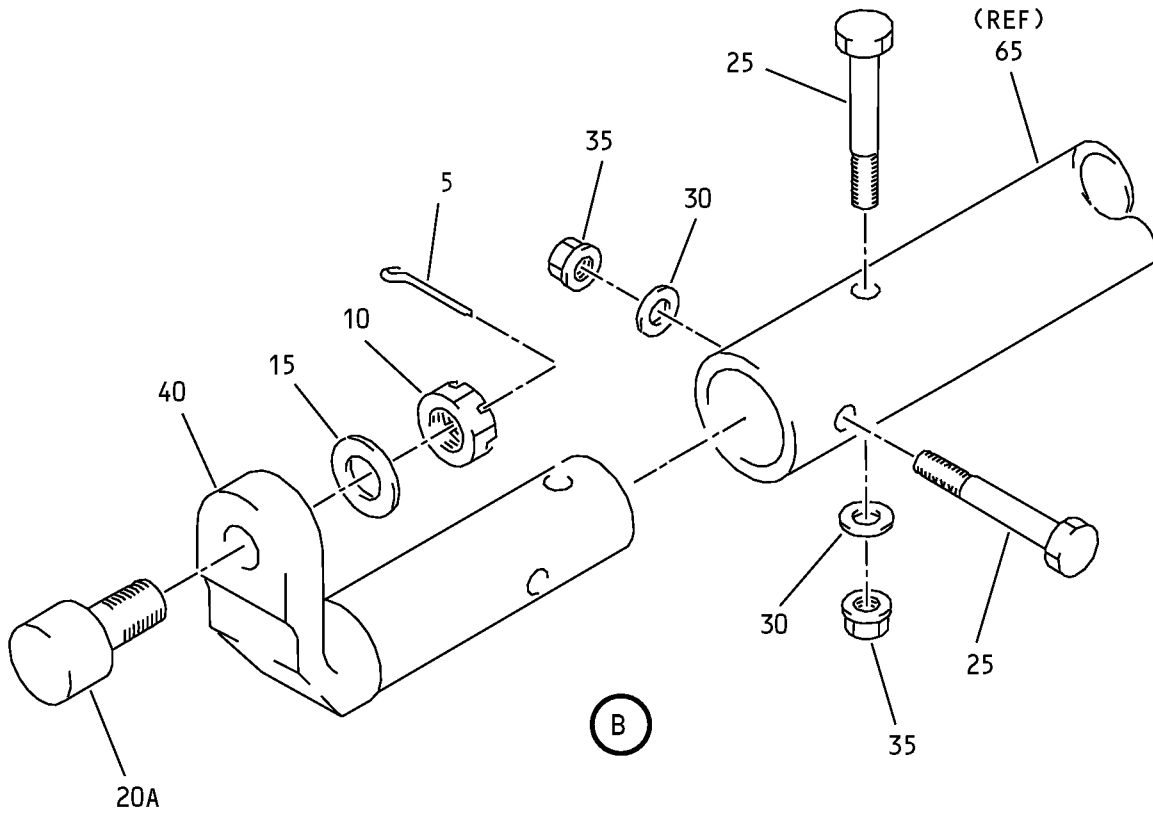
COMPONENT MAINTENANCE MANUAL



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

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COMPONENT MAINTENANCE MANUAL



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



## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
3-											
-1A	149A6130-1										RF
5	BACP18BC03A10P										2
10	BACN10JD106ASU										2
15	NAS1149C0616R										2
20	CR34XC222										
20A	KRP189606VTZ										2
25	BACB30NM3K16										4
30	NAS1149C0363R										4
35	H52732-3CM										4
40	149A6138-1										2
45	BACB30NM3K20										2
50	NAS1149D0316J										2
55	H52732-3CD										2
60	65-1797-3										1
65	149A6131-1										1
70	BACM10L10-1GC										2

-Item not Illustrated

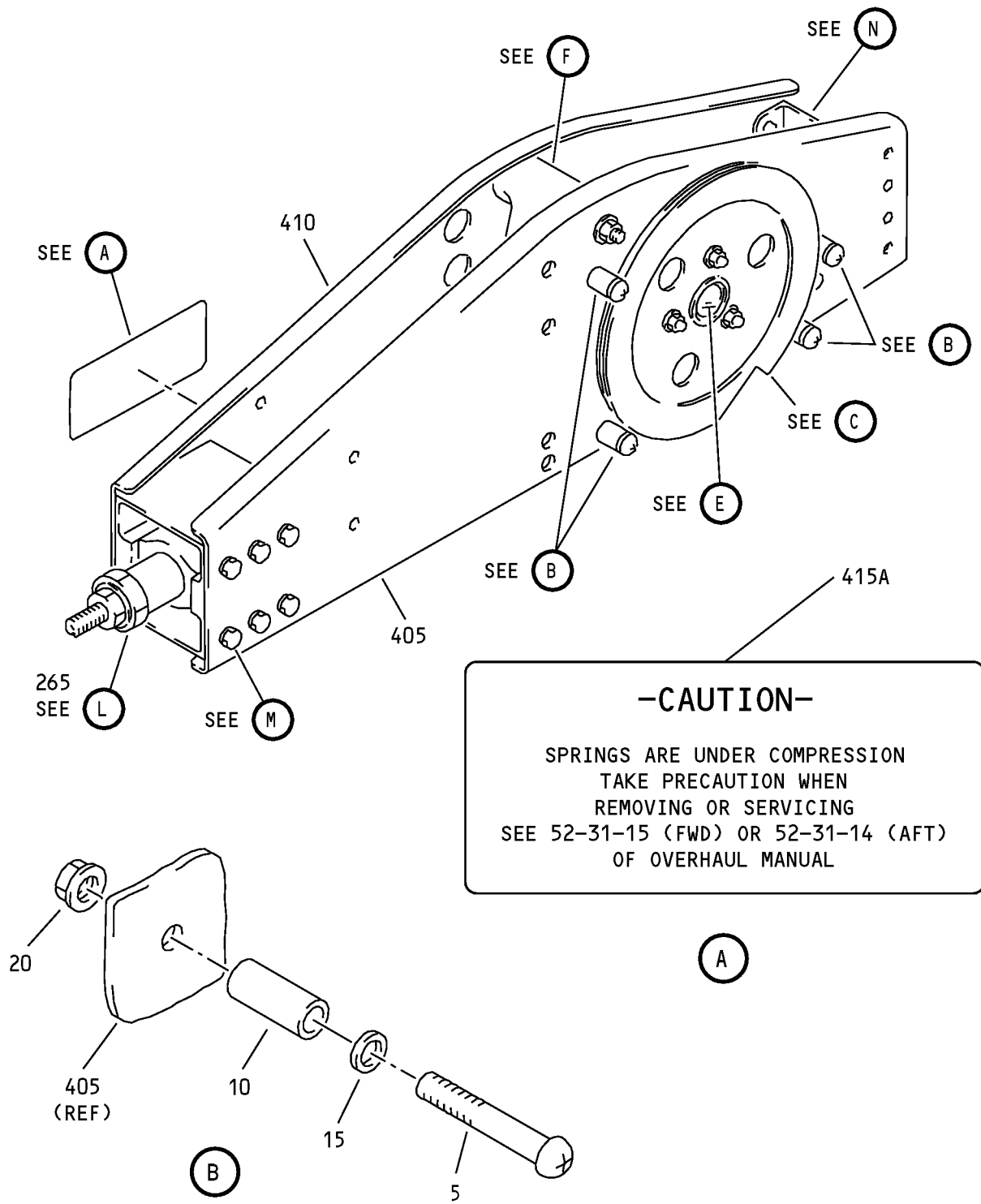
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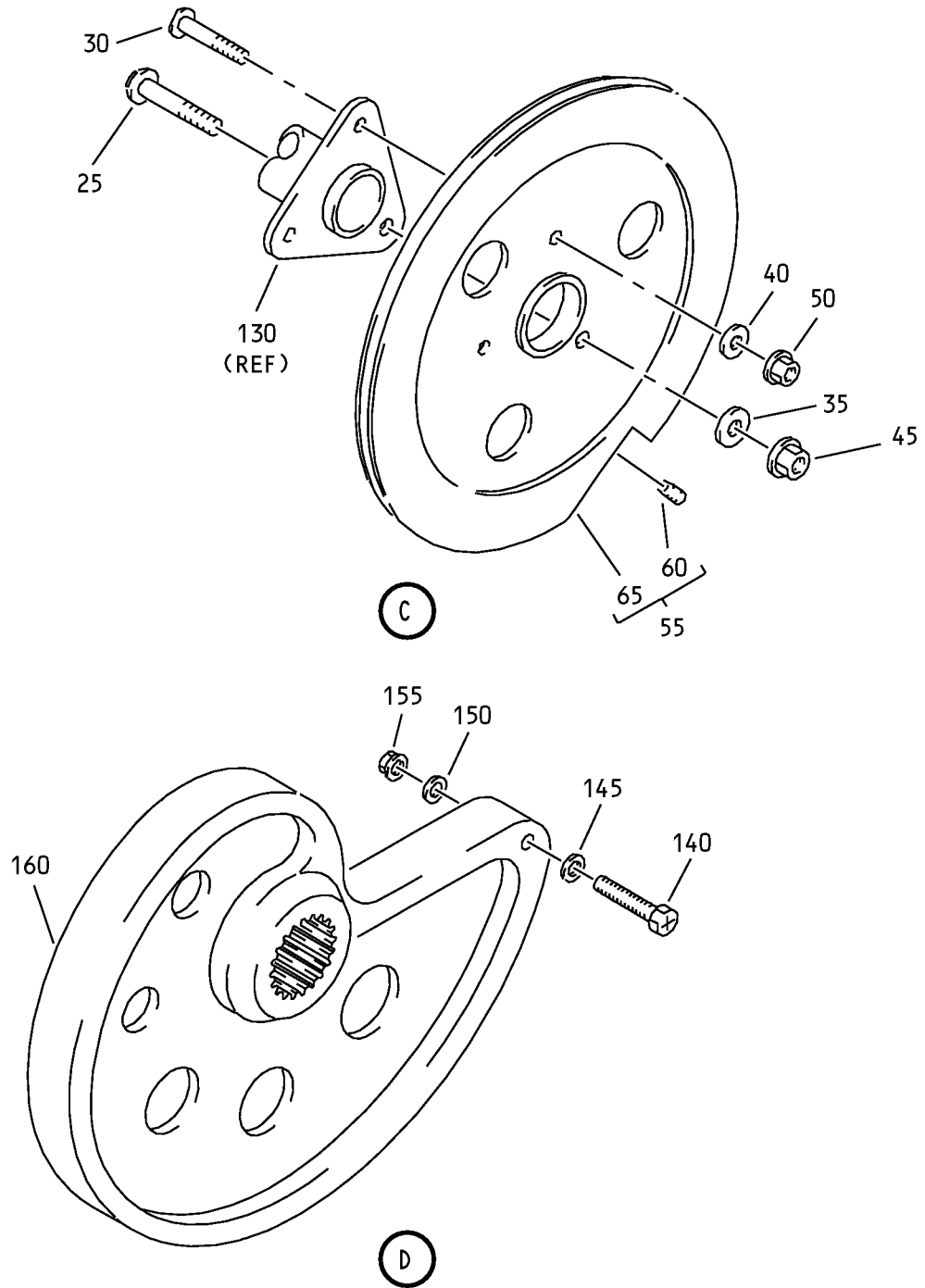
**-CAUTION-**

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

Counterbalance Assembly  
 IPL Figure 4 (Sheet 1 of 7)

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Counterbalance Assembly  
IPL Figure 4 (Sheet 2 of 7)

**52-31-15**

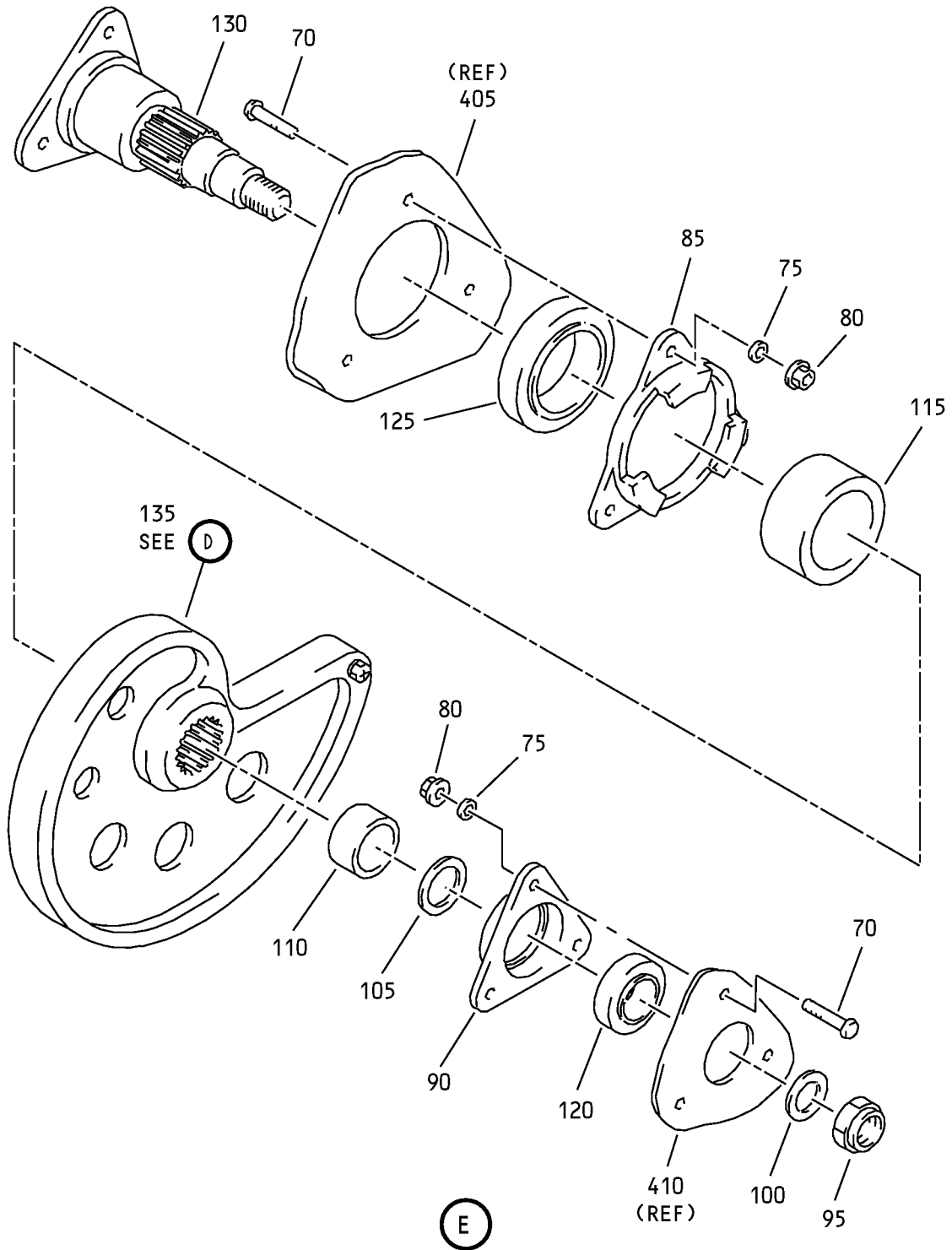
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Counterbalance Assembly  
IPL Figure 4 (Sheet 3 of 7)

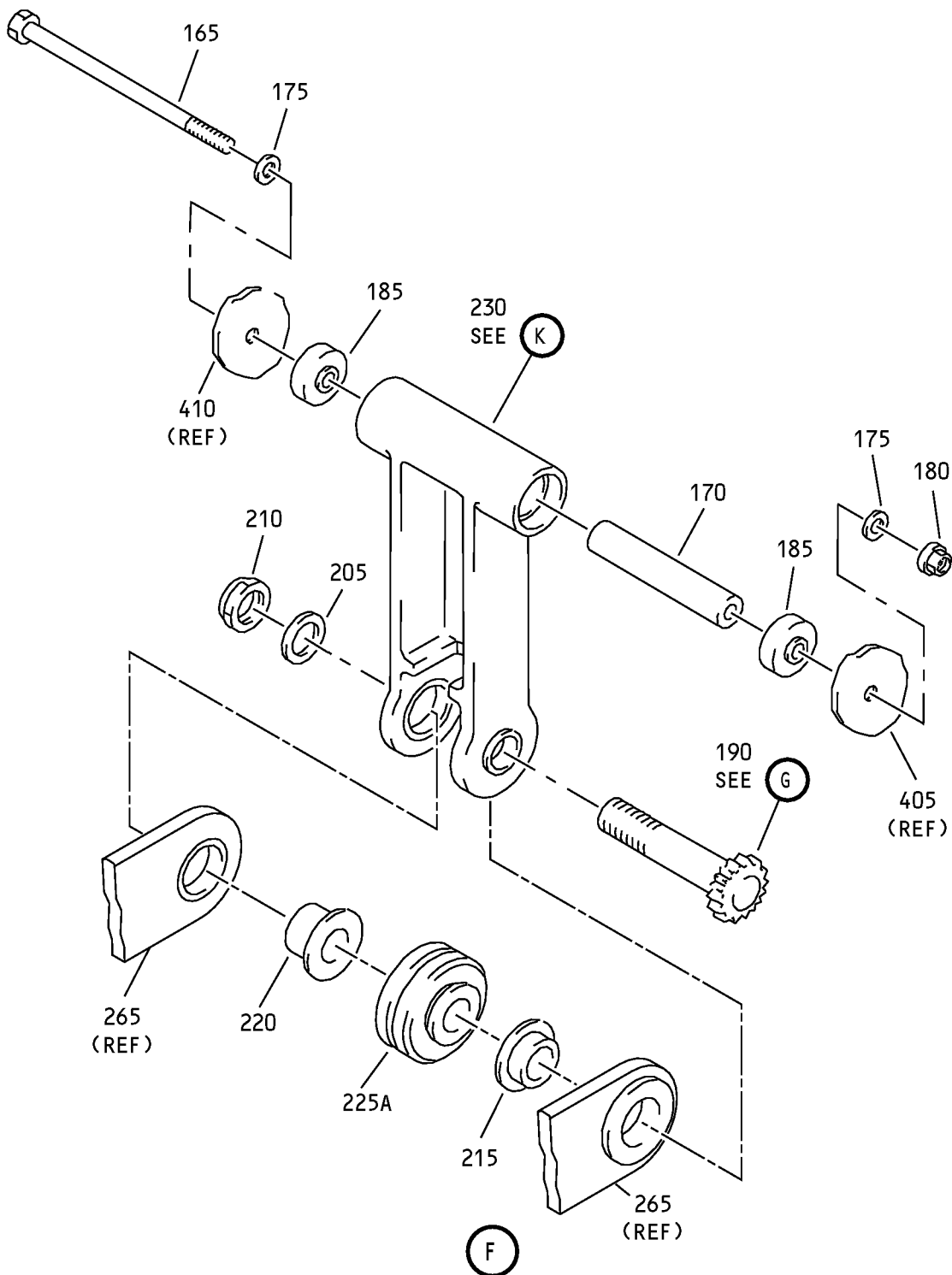
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Counterbalance Assembly  
IPL Figure 4 (Sheet 4 of 7)

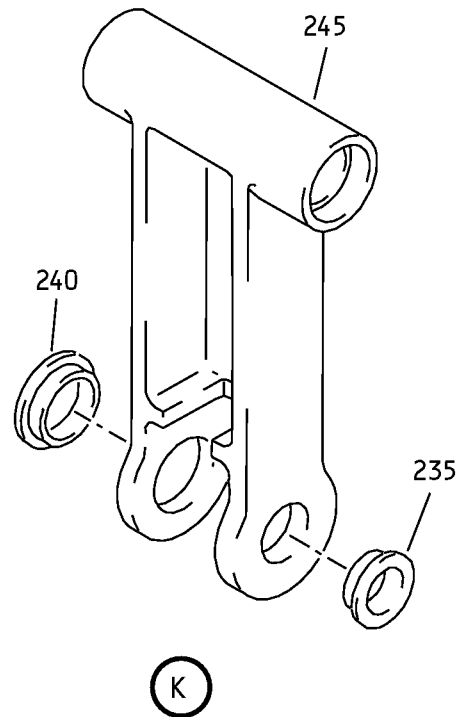
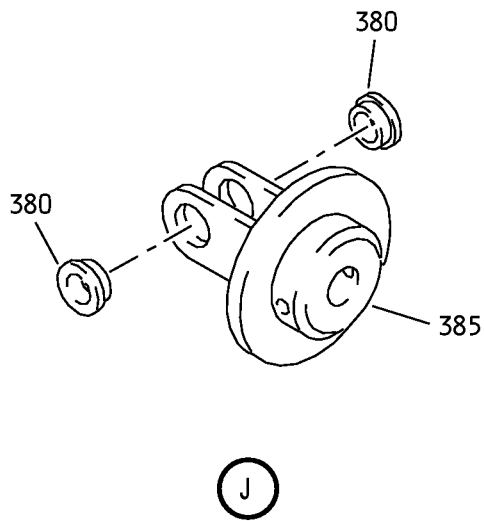
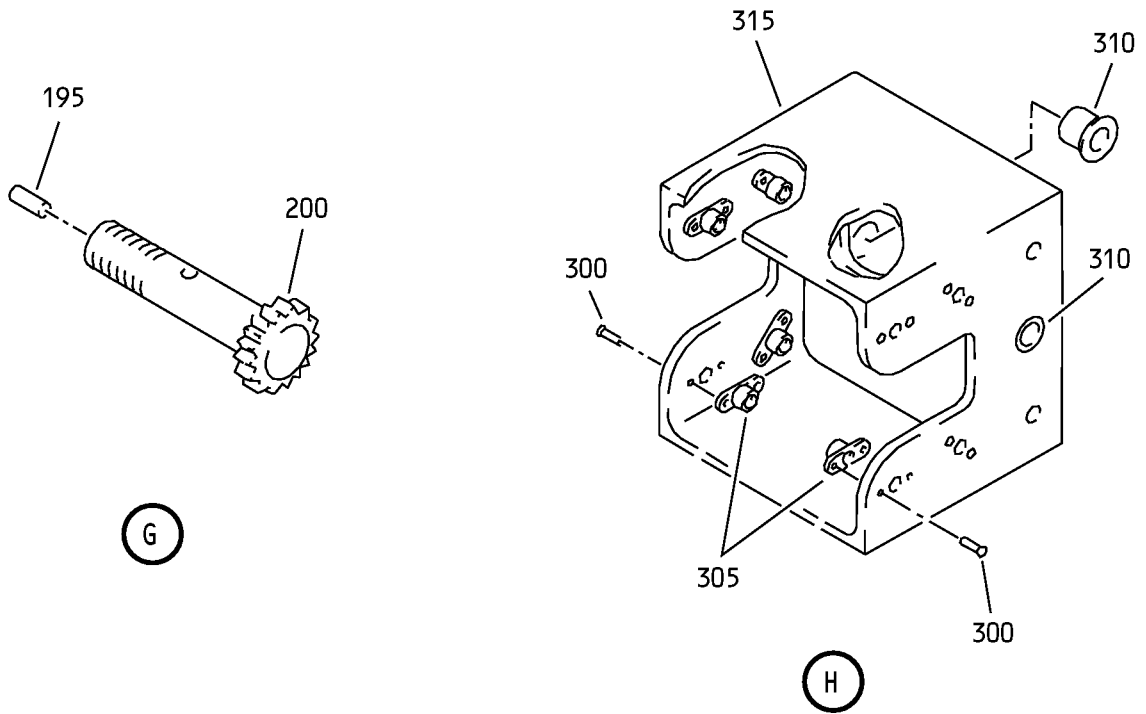
**52-31-15**

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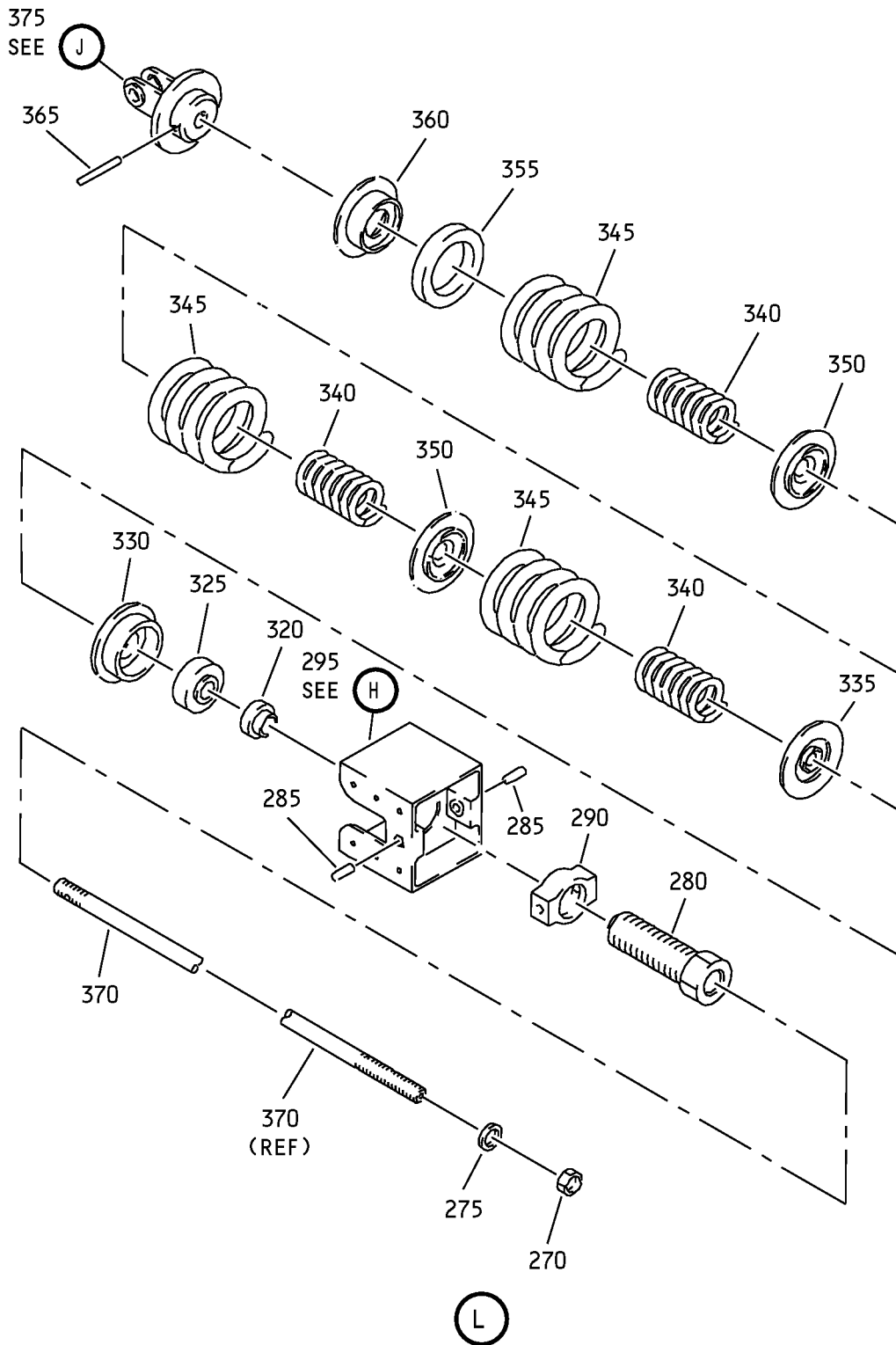
COMPONENT MAINTENANCE MANUAL



Counterbalance Assembly  
IPL Figure 4 (Sheet 5 of 7)

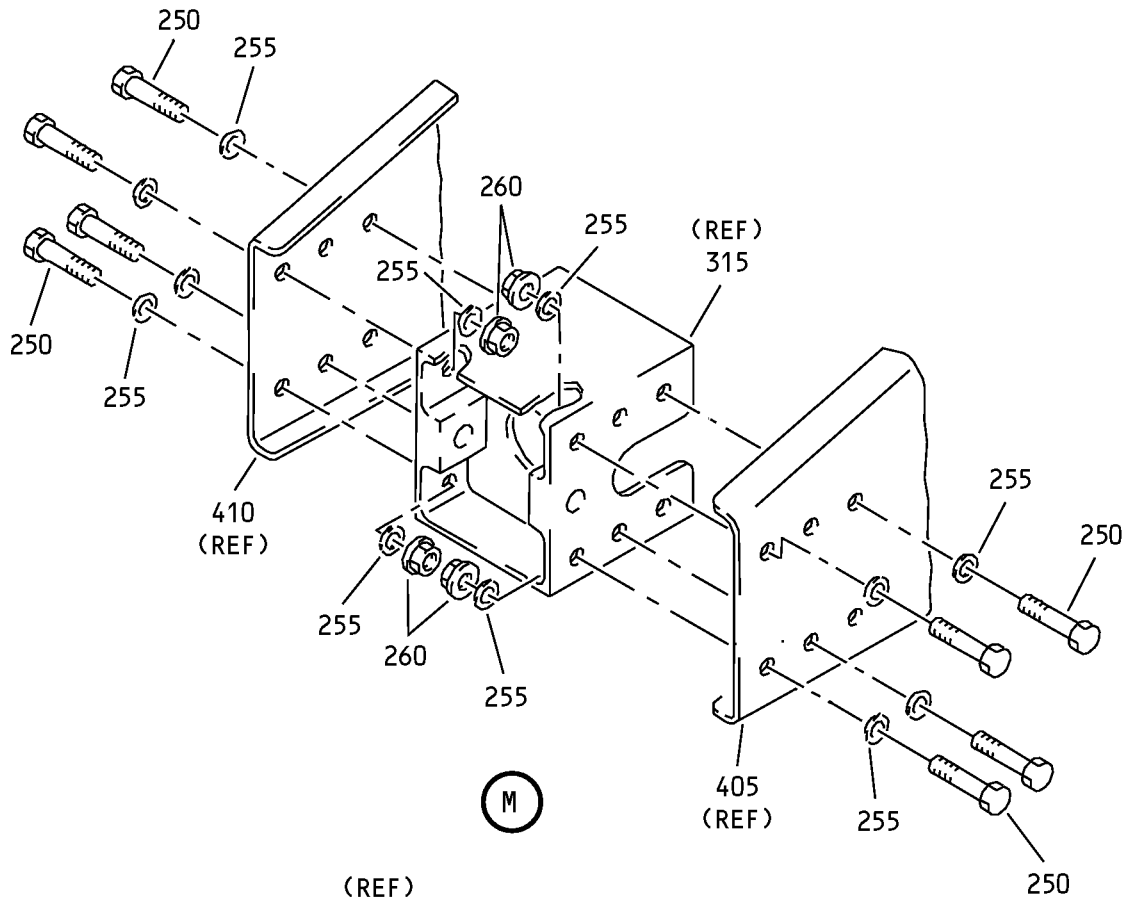
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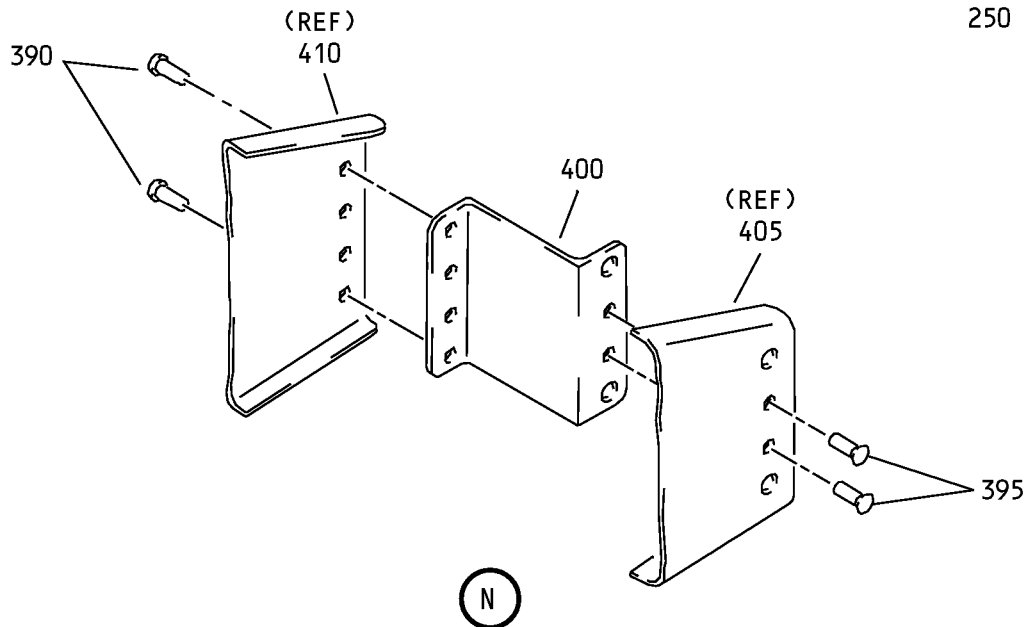


Counterbalance Assembly  
IPL Figure 4 (Sheet 6 of 7)

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Counterbalance Assembly  
IPL Figure 4 (Sheet 7 of 7)

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## COMPONENT MAINTENANCE MANUAL

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	H52732-3CD										4
25	HST10AG8-5										1
30	HST10AG6-5										2
35	NAS1149D0416J										1
40	NAS1149D0332J										2
45	H52732-4CD										1
50	H52732-3CD										2
55	65C33690-4										1
60	MS21209C0615P										1
65	65C33690-5										1

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## COMPONENT MAINTENANCE MANUAL

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))							
75	NAS1149D0332J		.	WASHER							6
80	H52732-3CD		.	NUT							6
				(V15653)							
				(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 ACMKP12AP510Y198 (V40920))							
				(OPT PACMKP12AA3908 (V21335))							
				(OPT SSMKP12AP (V21760))							
125	PACMKP20AFS428		.	BEARING							1
				(V21335)							
				(SPEC BACB10FS20)							
				(OPT SSMKP20ASD705 (V83086))							
				(OPT ACMKP20AP510Y198 (V40920))							
				(OPT PACMKP20AA3908 (V21335))							
				(OPT SSMKP20AP (V21760))							
130	65C33692-3		.	SHAFT							1
135	65C33691-9		.	CAM ASSY							1
140	BACS12GU3K14		..	SCREW							1

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## COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
4-											
145	NAS1149C0363R		.	.	WASHER						1
150	NAS1149C0332R		.	.	WASHER						1
155	H52732-3CM		.	.	NUT						1
					(V15653)						
					(SPEC BACN10YR3CM)						
					(OPT PLH53CM (V62554))						
160	65C33691-10		.	.	CAM						1
165	BACB30NM4K52		.		BOLT						1
170	NAS43DD4-156FC		.		SPACER						1
175	NAS1149D0432J		.		WASHER						2
180	H52732-4CD		.		NUT						1
					(V15653)						
					(SPEC BACN10YR4CD)						
					(OPT PLH54CD (V62554))						
185	SSMKP4ASD705		.		BEARING						2
					(V83086)						
					(SPEC BACB10FS4)						
					(OPT PACMKP4AA3908 (V21335))						
					(OPT ACMKP4AP510LY19 (V40920))						
					(OPT PACMKP4AFS428 (V21335))						
190	65C33811-3		.		BOLT ASSY						1
195	NAS516-1A		.	.	FITTING						1
200	65C33811-4		.	.	BOLT						1
205	NAS1149C0832R		.		WASHER						1
210	H51650-8BAC		.		NUT						1
					(V15653)						
					(SPEC BACN10JC8CD)						
					(OPT 102LH9074-8 (V72962))						
					(OPT 69235-820CD (V92215))						
					(OPT BMN4122CPD8-8 (V97928))						
215	65C27737-4		.		BUSHING-BRG RTNR						1
220	65C27737-3		.		BUSHING-BRG RTNR						1
-225	CR8AFC				DELETED						
225A	YR1516XC1		.		ROLLER						1
					(V07484)						
					(SPEC 60B00178-661)						
					(OPT ATF8SY (V60380))						
					(OPT CR8AFC (V92563))						

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**COMPONENT MAINTENANCE MANUAL**

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE	USAGE CODE	UNITS PER ASSY
4-					
230	65C33689-4		. CRANK ASSY-IDLER		1
235	BACB28X8M024		. . BUSHING		1
240	BACB28X11M017		. . BUSHING		1
245	65C33689-5		. . CRANK		1
250	BACB30NM4K4		. BOLT		12
255	NAS1149D0416J		. WASHER		16
260	H52732-4CD		. NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		4
265	65C33696-5		. CARTRIDGE ASSY-SPR		1
270	AN315-6R		. . NUT		1
275	NAS1149C0763R		. . WASHER		1
280	65C33686-3		. . ADJUSTER		1
285	65C33683-2		. . PIN		2
290	65C33812-1		. . FITTING-GIMBAL		1
295	65C33688-6		. . HOUSING ASSY-ADJUSTER		1
300	BACR15BA3D		. . . RIVET (SIZE DETERMINED ON INST)		16
305	BRFM20C4D		. . . NUTPLATE (V52828) (SPEC BACN10JN4CD) (OPT T8301C428CD (V11815)) (OPT 102F9201M4 (V72962)) (OPT NS202487-048 (V80539)) (OPT MF51637-4 (V15653)) (OPT T8124S4S (V11815))		8
310	113N1007-27		. . . BUSHING		2
315	65C33688-7		. . . HOUSING		1
320	65C27743-2		. . BUSHING-CENTERING		1
325	PACMKP8FS428		. . BEARING (V21335) (SPEC BACB10FT8) (OPT SSMKP8P510LY86 (V83086)) (OPT ACMKP8P510LY198 (V40920)) (OPT SSMKP8SD705 (V83086)) (OPT PACMKP8A3908 (V21335))		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-											
330	65C33810-2		.	.							1
335	65C33687-2		.	.							1
340	140N2967-1		.	.							3
345	140N2966-1		.	.							3
350	65C33687-1		.	.							2
355	65C33687-4		.	.							1
360	65C33687-3		.	.							1
365	65C33683-3		.	.							1
370	65C33683-4		.	.							1
375	65C33685-3		.	.							1
380	BACB28X11M012		.	.	.						2
385	65C33685-2		.	.	.						1
390	BACR15FT6D		.								4
395	BACR15GF6D		.								2
400	65C33681-7		.								1
405	65C33693-13		.								1
410	65C33693-14		.								1
-415	BAC27DBY0184										
415A	BAC27DBY193		.								1

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