



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

## **MAIN LANDING GEAR DOOR INSTALLATION COMPONENTS**

### **PART NUMBER**

**65-63415-1, -2, -7, -8, 69-42376-1, -3, 69-42380-1,  
69-42388-1, 69-42394-3, -5, 69-58822-1, -3, -4**

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## COMPONENT MAINTENANCE MANUAL

Revision No. 7  
Jul 01/2009

To: All holders of MAIN LANDING GEAR DOOR INSTALLATION COMPONENTS 32-16-25.

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.

### ATTENTION

IF YOU RECEIVE PRINTED REVISIONS, PLEASE VERIFY THAT YOU HAVE RECEIVED AND FILED THE PREVIOUS REVISION. BOEING MUST BE NOTIFIED WITHIN 30 DAYS IF YOU HAVE NOT RECEIVED THE PREVIOUS REVISION. REQUESTS FOR REVISIONS OTHER THAN THE PREVIOUS REVISION WILL REQUIRE A COMPLETE MANUAL REPRINT SUBJECT TO REPRINT CHARGES SHOWN IN THE DATA AND SERVICES CATALOG.

65-63415, 69-42376, 69-42380, 69-42388, 69-42394, 69-58822



## COMPONENT MAINTENANCE MANUAL

Location of Change

Description of Change

NO HIGHLIGHTS

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HIGHLIGHTS

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O 1	Jul 01/2009	604	BLANK	1007	Mar 01/2006
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102	BLANK	701	Mar 01/2006		
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302	BLANK	801	Mar 01/2006		
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402	BLANK	901	Mar 01/2006		
32-16-25 CHECK		902	BLANK		
501	Mar 01/2006	32-16-25 ILLUSTRATED PARTS LIST			
502	BLANK	1001	Nov 01/2008		

A = Added, R = Revised, D = Deleted, O = Overflow

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## COMPONENT MAINTENANCE MANUAL

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

Temporary Revision		Inserted		Removed		Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials



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Temporary Revision		Inserted		Removed		Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials



## 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

### TESTING AND FAULT ISOLATION

**(NOT APPLICABLE)**

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TESTING AND FAULT ISOLATION

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## COMPONENT MAINTENANCE MANUAL

### DISASSEMBLY

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DISASSEMBLY

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## COMPONENT MAINTENANCE MANUAL

### CLEANING

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CLEANING

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CHECK

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CHECK

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## COMPONENT MAINTENANCE MANUAL

### REPAIR

#### 1. Content

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

#### 2. Standard Practices

- A. Refer to the following standard practices, as applicable, for the details of procedures in each repair.
- SOPM 20-20-01 Magnetic Particle Inspection
  - SOPM 20-20-02 Penetrant Methods of Inspection
  - SOPM 20-30-02 Stripping of Protective Finishes
  - SOPM 20-30-03 General Cleaning Procedures
  - SOPM 20-41-01 Decoding Table for Boeing Finish Codes
  - SOPM 20-50-02 Installation of Safetying Devices
  - SOPM 20-50-03 Bearing and Bushing Replacement
  - SOPM 20-60-02 Finishing Materials
  - SOPM 20-60-04 Miscellaneous Materials

#### 3. Materials

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

- A. Primer – primer, C00259 BMS 10-11, type 1
- B. Enamel – coating, C00260 BMS 10-11, type 2 color 707 gray gloss
- C. Enamel – coating, C00700 BMS 10-60, color 707 gray gloss
- D. Corrosion Preventive Compound – compound, C00528 MIL-C-11796, class 3
- E. Sealant – sealant, A00247 BMS 5-95

#### 4. 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	$\oplus$	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
$\square$	FLATNESS	$\varnothing$	DIAMETER
$\perp$	PERPENDICULARITY (OR SQUARENESS)	$s \varnothing$	SPHERICAL DIAMETER
//	PARALLELISM	R	RADIUS
$\bigcirc$	ROUNDNESS	SR	SPHERICAL RADIUS
$\bigcirc$	CYLINDRICITY	( )	REFERENCE
$\frown$	PROFILE OF A LINE	BASIC (BSC) OR	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
$\triangle$	PROFILE OF A SURFACE	<b>DIM</b>	
$\odot$	CONCENTRICITY	<b>-A-</b>	DATUM
$\equiv$	SYMMETRY	$\textcircled{M}$	MAXIMUM MATERIAL CONDITION (MMC)
$\sphericalangle$	ANGULARITY	$\textcircled{L}$	LEAST MATERIAL CONDITION (LMC)
$\nearrow$	RUNOUT	$\textcircled{S}$	REGARDLESS OF FEATURE SIZE (RFS)
$\nearrow$	TOTAL RUNOUT	$\textcircled{P}$	PROJECTED TOLERANCE ZONE
$\sqsubset$	COUNTERBORE OR SPOTFACE	FIM	FULL INDICATOR MOVEMENT
$\sphericalangle$	COUNTERSINK	TIR	TOTAL INDICATOR READING

### EXAMPLES

$\boxed{-0.002}$	STRAIGHT WITHIN 0.002	$\boxed{\textcircled{\oplus} \varnothing 0.0005 \text{ C}}$	CONCENTRIC TO C WITHIN 0.0005 DIAMETER
$\boxed{\perp 0.002 \text{ B}}$	PERPENDICULAR TO B WITHIN 0.002	$\boxed{\equiv 0.010 \text{ A}}$	SYMMETRICAL WITH A WITHIN 0.010
$\boxed{\parallel 0.002 \text{ A}}$	PARALLEL TO A WITHIN 0.002	$\boxed{\sphericalangle 0.005 \text{ A}}$	ANGULAR TOLERANCE 0.005 WITH A
$\boxed{\bigcirc 0.002}$	ROUND WITHIN 0.002	$\boxed{\oplus \varnothing 0.002 \textcircled{S} \text{ B}}$	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
$\boxed{\bigcirc 0.010}$	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER	$\boxed{\perp \varnothing 0.010 \textcircled{M} \text{ A}}$ $\boxed{0.510 \textcircled{P}}$	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
$\boxed{\frown 0.006 \text{ A}}$	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM PLANE A	$\boxed{2.000}$	THEORETICALLY EXACT DIMENSION IS 2.000
$\boxed{\triangle 0.020 \text{ A}}$	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE	OR 2.000 BSC	
<b>NOTE:</b> DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME		$\boxed{0.020 \text{ A}}$ $\boxed{\text{A} 0.020}$	

True Position Dimensioning Symbols  
Figure 601

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REPAIR - GENERAL

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## COMPONENT MAINTENANCE MANUAL

### FITTING ASSEMBLY, OUTBOARD DOOR ACTUATION - REPAIR 1-1

65-63415-1, -2, -7, -8

#### 1. General

- A. This procedure tells how to refinish the outboard door actuation fitting assembly.
- B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
- C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.
- D. Refer to IPL Figure 1 for item numbers.

#### 2. Check

- A. Penetrant examine fittings (35, 40).

#### 3. Repair

- A. Bushing Replacement (REPAIR 1-1, Figure 601)
  - (1) Remove the old bushings.
  - (2) If you find defects on the fitting, refer to REPAIR 1-1, Paragraph 3.B. for repair instructions.
  - (3) Install replacement bushings by the shrink-fit method. On fittings 65-63415-7, -8, install them with sealant, A00247.
  - (4) Make a check of the dimensions and machine them as necessary.
  - (5) On fittings 65-63415-7, -8, seal the bushing flanges per REPAIR 6-1, REPAIR 1-1, Figure 601.
- B. Fittings (REPAIR 1-1, Figure 601)
  - (1) Repair is only replacement of the original finish. Refer to REPAIR 3-1, Paragraph 3.B. for details.

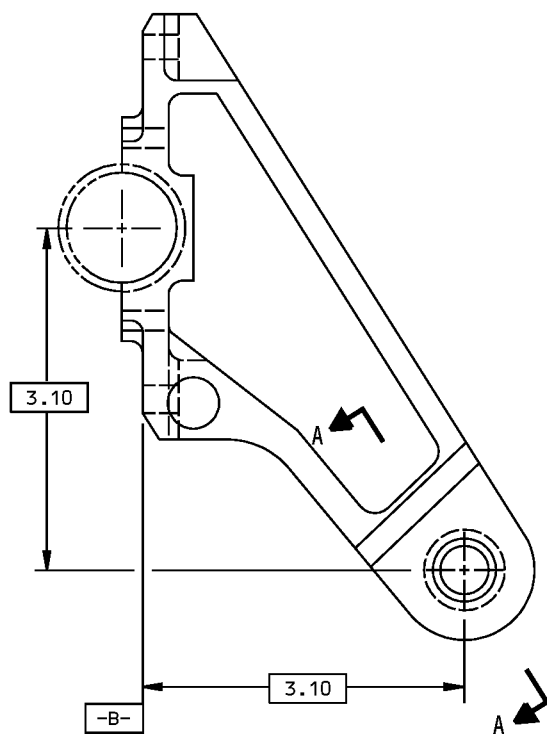
# 32-16-25

REPAIR 1-1

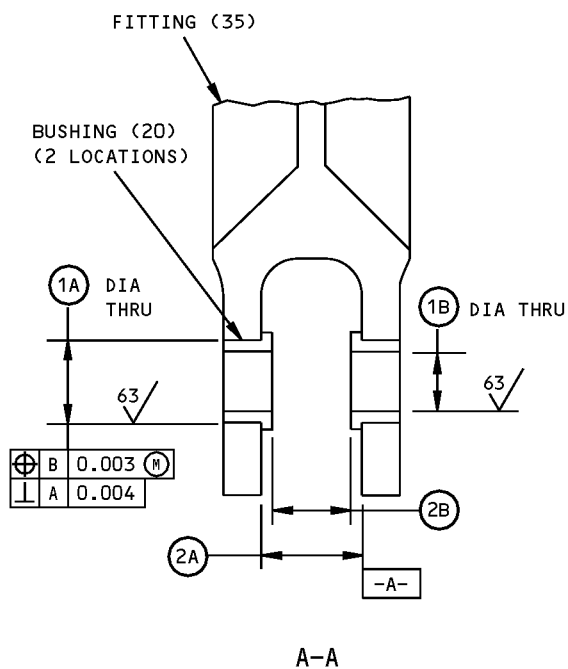
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65-63415-1 (SHOWN)  
65-63415-2 (OPPOSITE)



	1A	1B	2A	2B
DESIGN DIM	0.5628 0.5622	0.4380 0.4370	0.690 0.680	0.570 0.562
REPAIR LIMIT	--	--	--	--

REFINISH

FITTINGS (35,40) -- CHROMIC ACID ANODIZE (F-17.19) AND APPLY PRIMER BMS 10-11, TYPE 1 (F-20.02) ALL OVER. APPLY ENAMEL BMS 10-60 (SRF-14.9813) ALL OVER EXCEPT IN BORES FOR BUSHINGS.

REPAIR

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

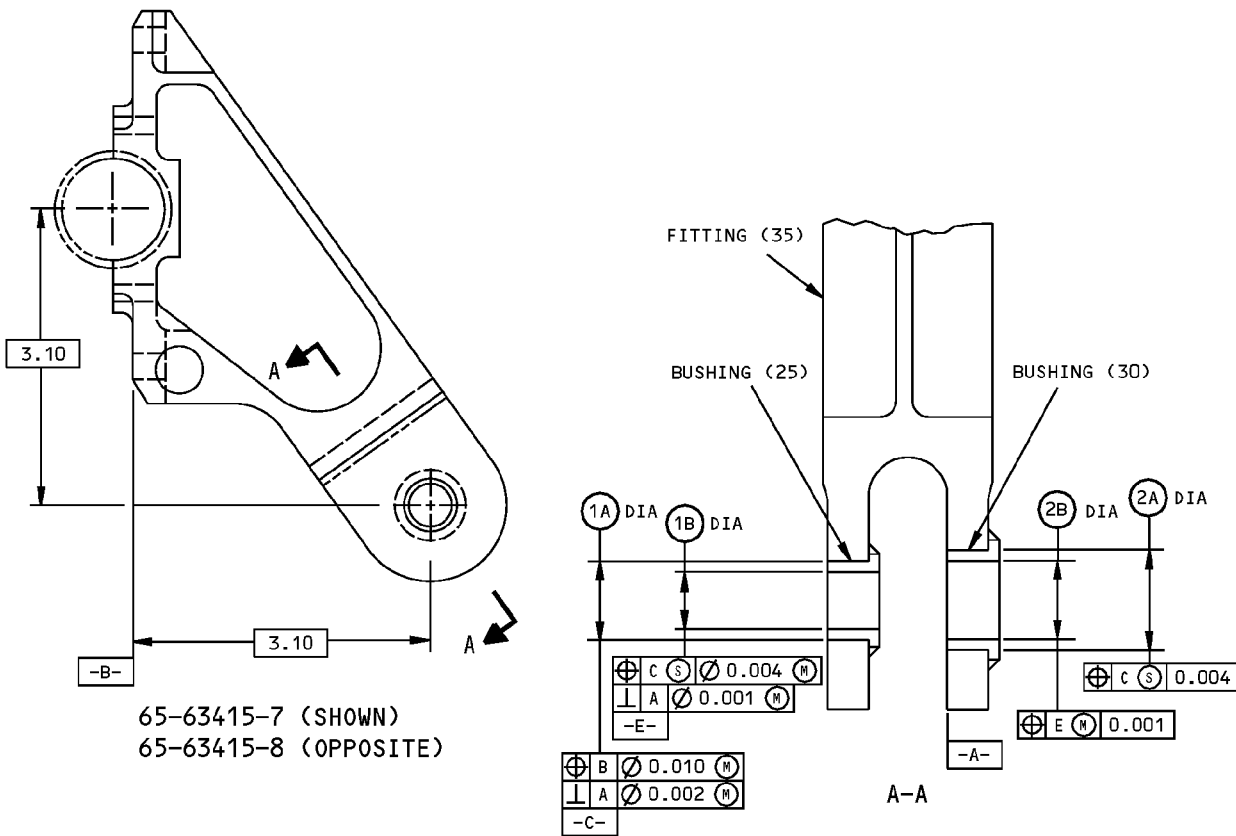
65-63415-1,-2

Fitting Assembly Repair and Refinish  
Figure 601 (Sheet 1 of 2)

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REPAIR 1-1  
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65-63415-7 (SHOWN)  
65-63415-8 (OPPOSITE)

	1A	1B	2A	2B
DESIGN DIM	0.5631 0.5625	0.4382 0.4375	0.7507 0.7500	0.6252 0.6245
REPAIR LIMIT	--	--	--	--

REFINISH

FITTINGS (35,40) -- CHROMIC ACID ANODIZE (F-17.19) AND APPLY PRIMER BMS 10-11, TYPE 1 (F-20.02) ALL OVER. APPLY ENAMEL BMS 10-60 (SRF-14.9813) ALL OVER EXCEPT IN BORES FOR BUSHINGS.

REPAIR

125/ MACHINE FINISH EXCEPT AS NOTED

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

65-63415-7,-8

Fitting Assembly Repair and Refinish  
Figure 601 (Sheet 2 of 2)

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REPAIR 1-1

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## COMPONENT MAINTENANCE MANUAL

### ROD ASSEMBLY, INNER DOOR ACTUATION - REPAIR 2-1

69-42380-1

#### 1. General

- A. This procedure tells how to refinish the inner door actuation rod assembly.
- B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
- C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.
- D. Refer to IPL Figure 2 for item numbers.

#### 2. Check

- A. Magnetic particle examine tube (20).

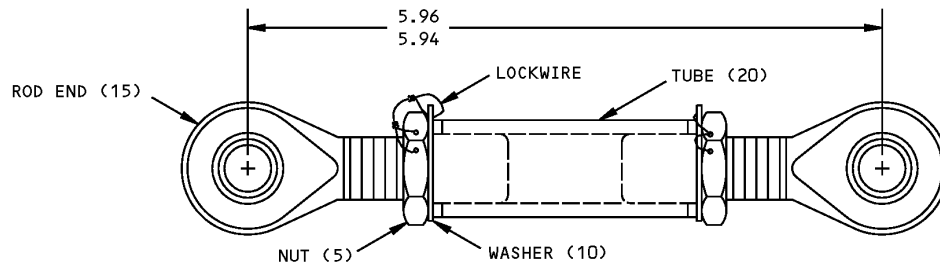
#### 3. Repair

- A. Parts Replacement (REPAIR 2-1, Figure 601)

- (1) Replace the parts as shown.
- (2) After you complete the assembly, apply compound, C00528 to the threaded areas of the rod ends.

- B. Refinish

- (1) Tube (20) – Cadmium plate (F-15.06) all over, except do the phosphate coat per F-14.14. Apply primer, C00259 (F-20.02) and enamel coating, C00700 (F-14.9813, which replaces SRF-14.9813) on the external surfaces. Material: 4130 steel, 160-180 ksi.



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

69-42380-1

Rod Assembly Parts Replacement  
Figure 601

# 32-16-25

REPAIR 2-1

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## COMPONENT MAINTENANCE MANUAL

### ROD ASSEMBLY, OUTER DOOR - REPAIR 3-1

69-42388-1

#### 1. General

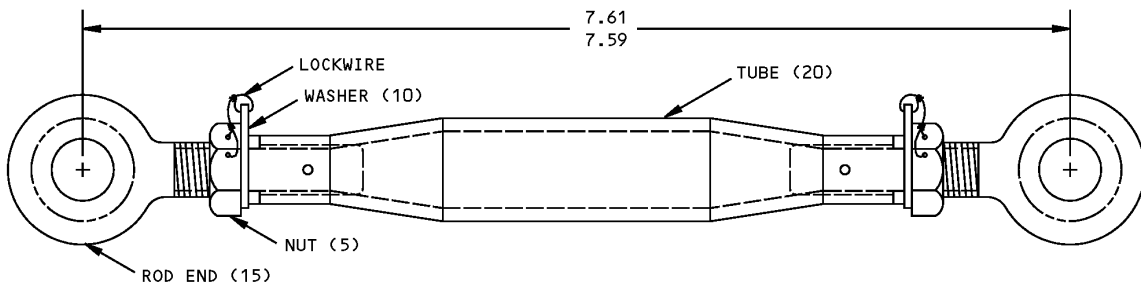
- A. This procedure tells how to repair the outer door rod assembly.
- B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
- C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.
- D. Refer to IPL Figure 3 for item numbers.

#### 2. Check

- A. Magnetic particle examine steel tube (20).
- B. Penetrant examine CRES tube (20A).

#### 3. Repair

- A. Parts Replacement (REPAIR 3-1, Figure 601)
  - (1) Replace the parts as shown.
- B. Refinish
  - (1) Tube (20) – Cadmium plate and apply primer, C00259 (SRF-1.611). Material: 4130 steel, 160-180 ksi.
  - (2) Tube (20A) – Passivate (F-8.07). Material: AISI 304 CRES.



ALL DIMENSIONS ARE IN INCHES  
ITEM NUMBERS REFER TO IPL FIG. 3

69-42388-1

Rod Assembly Parts Replacement  
Figure 601

# 32-16-25

REPAIR 3-1

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## COMPONENT MAINTENANCE MANUAL

### LINK ASSEMBLY, CENTER DOOR - REPAIR 4-1

69-42394-3, -5

#### 1. General

- A. This procedure tells how to repair the center door link assembly.
- B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
- C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.
- D. Refer to IPL Figure 4 for item numbers.

#### 2. Check

- A. Penetrant examine link (15).

#### 3. Repair

- A. Bushing Replacement (REPAIR 4-1, Figure 601)
  - (1) Remove the old bushings.
  - (2) If you find defects on the link, refer to REPAIR 4-1, Paragraph 3.B. for repair instructions.
  - (3) Install replacement bushings by the shrink-fit method, with wet sealant, A00247.
  - (4) Make a check of the dimensions and machine them as necessary.
- B. Link (REPAIR 4-1, Figure 601)
  - (1) Repair is only replacement of the original finish. Refer to REPAIR 3-1, Paragraph 3.B. for details.

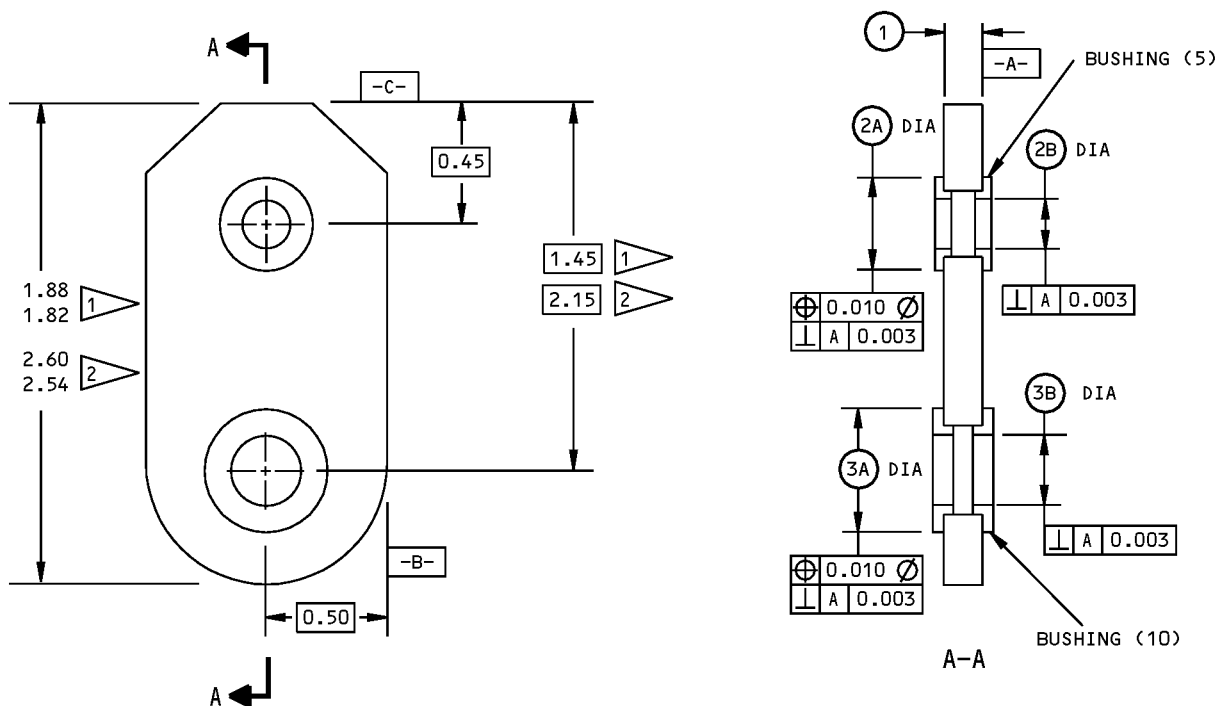
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REPAIR 4-1

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	1	2A	2B	3A	3B
DESIGN DIM	0.150 0.145	0.3754 0.3748	0.2505 0.2495	0.5003 0.4997	0.3755 0.3745
REPAIR LIMIT	--	--	--	--	--

**REFINISH**

LINK (15) -- CHROMIC ACID ANODIZE AND APPLY PRIMER BMS 10-11, TYPE 1 (F-18.13) AND ENAMEL BMS 10-60 (SRF-14.9813), EXCEPT NO PRIMER OR ENAMEL IN HOLES.

- 1 69-42394-3
- 2 69-42394-5

**REPAIR**

125/ MACHINE FINISH

MATERIAL: LINK -- AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 4

69-42394-3,-5 Link Assembly Repair and Refinish  
Figure 601

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REPAIR 4-1

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## COMPONENT MAINTENANCE MANUAL

### ROD ASSEMBLY, RETAINING - REPAIR 5-1

69-58822-1, -3, -4

#### 1. General

- A. This procedure tells how to repair the retaining rod assembly.
- B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
- C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.
- D. Refer to IPL Figure 5 for item numbers.

#### 2. Check

- A. Penetrant examine rod end (10).

#### 3. Repair

- A. Parts Replacement (REPAIR 5-1, Figure 601)
  - (1) Replace the parts as shown. Be sure to use wet primer, C00259 when you install rod end (10).
  - (2) If the replacement parts do not have holes for the rivets, drill holes in them with the holes in the mating parts as a guide.
  - (3) If you find defects on rod end (10) or rod (35), refer to REPAIR 5-1, Paragraph 3.B., REPAIR 5-1, Paragraph 3.C. for repair instructions.
- B. Rod End (10) (REPAIR 5-1, Figure 602)
  - (1) Repair is only replacement of the original finish. Refer to REPAIR 3-1, Paragraph 3.B. for details.
- C. Rod (35) (REPAIR 5-1, Figure 603)
  - (1) Repair only replacement of the original finish. Refer to REPAIR 3-1, Paragraph 3.B. for details.

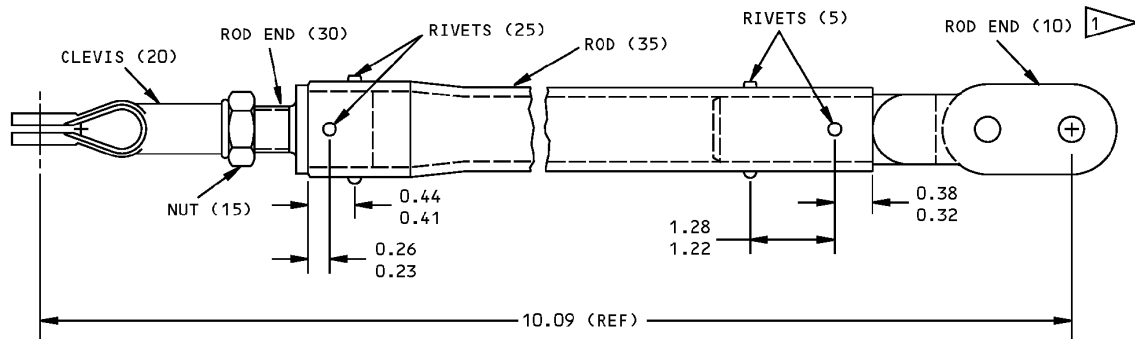
# 32-16-25

REPAIR 5-1

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### COMPONENT MAINTENANCE MANUAL



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

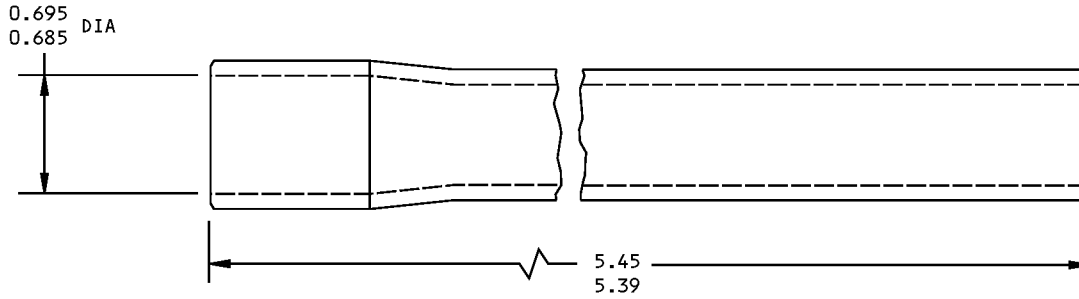
ALL DIMENSIONS ARE IN INCHES.  
ITEM NUMBERS REFER TO IPL FIG. 5.

69-58822-1,-3,-4 Rod Assembly Parts Replacement  
Figure 601

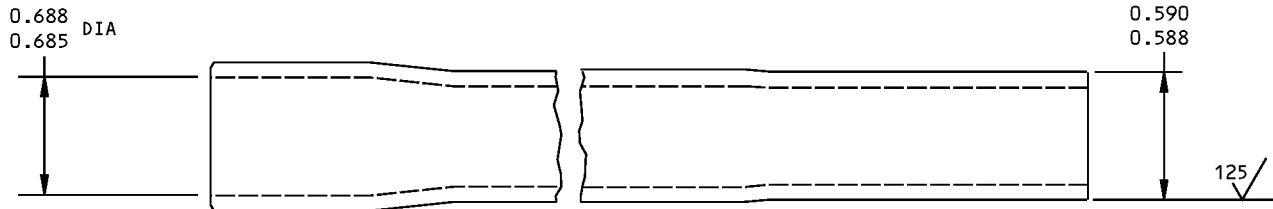
# 32-16-25

REPAIR 5-1  
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### COMPONENT MAINTENANCE MANUAL



69-58822-2



69-78688-1

#### REFINISH

69-58822-2: CHROMIC ACID ANODIZE AND APPLY PRIMER, BMS 10-11, TYPE 1 (F-18.13) AND ENAMEL BMS 10-11, TYPE 2 (F-21.02).

69-78688-1: CHROMIC ACID ANODIZE (F-17.19) AND APPLY ONE COAT BMS 10-11, TYPE 1 PRIMER (F-20.02) AND ONE COAT BMS 10-11, TYPE 2 ENAMEL, COLOR 707 GRAY GLOSS (F-21.02), EXCEPT AS NOTED.

#### REPAIR

125 / MACHINE FINISH

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 5

Rod Repair and Refinish  
Figure 602

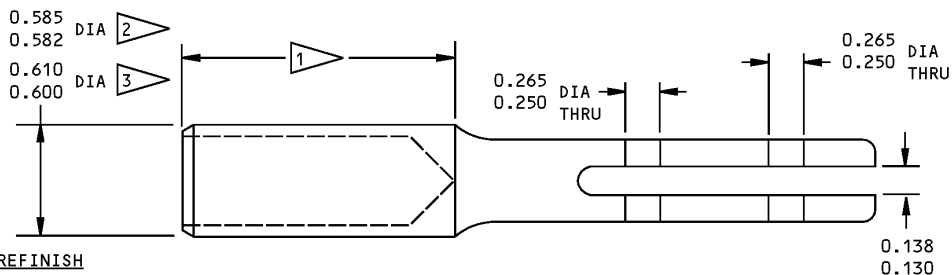
# 32-16-25

REPAIR 5-1

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COMPONENT MAINTENANCE MANUAL



REFINISH

69-58823-2: CHEMICAL TREAT AND APPLY PRIMER, BMS 10-11, TYPE 1 (SRF-2.901) EXCEPT AS NOTED.

69-58823-6: CHROMIC ACID ANODIZE AND APPLY PRIMER, BMS 10-11, TYPE 1 (F-18.13). APPLY ENAMEL BMS 10-11, TYPE 2 (F-21.02) EXCEPT AS NOTED.

69-58823-10: CHROMIC ACID ANODIZE (F-17.19) AND APPLY ONE COAT OF BMS 10-11, TYPE 1 PRIMER. APPLY ONE COAT OF BMS 10-11, TYPE 2 ENAMEL, COLOR 707 GRAY GLOSS (F-21.02) EXCEPT AS NOTED.

REPAIR

(SAME AS REFINISH)

125/ MACHINE FINISH

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

- NO PRIMER OR ENAMEL
- 69-58823-10
- 69-58823-2,-6

69-58823-2,-6,-10 Attachment Rod End Repair and Refinish  
Figure 603



## COMPONENT MAINTENANCE MANUAL

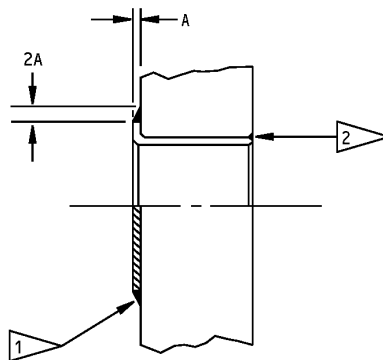
### BUSHING SEALING - REPAIR 6-1

#### 1. General

- A. This procedure tells how to seal the bushings.
- B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
- C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.

#### 2. Bushing Sealing

- A. Before you apply the sealant, A00247, make sure you applied all of the paint. This includes the coating, C00700.
- B. Solvent clean the area to be sealed and the adjacent areas (SOPM 20-30-03).
- C. Apply a fillet of sealant, A00247 as shown in the applicable figure, or per SOPM 20-50-19.
- D. Apply enamel coating, C00700 (F-14.9813, which replaces SRF-14.9813) on the sealant, A00247 and the areas around the sealant, A00247. Do not paint the faces of the bushing flange.



1 MAKE THE FILLET GO TO THE TOP OF THE BUSHING FLANGE EDGE AND SHAPE IT AS SHOWN. DO NOT APPLY SEALANT TO THE BUSHING FACE.

2 FILL ALL OF THE CAVITY AROUND THE BUSHING. MAKE SURE THE SEALANT IS SMOOTH WITH THE SURFACE.

Bushing Sealing Details  
Figure 601

# 32-16-25

REPAIR 6-1

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## COMPONENT MAINTENANCE MANUAL

### LINK ASSEMBLY - OUTER DOOR 7-1

69-42376-1, -3

#### 1. General

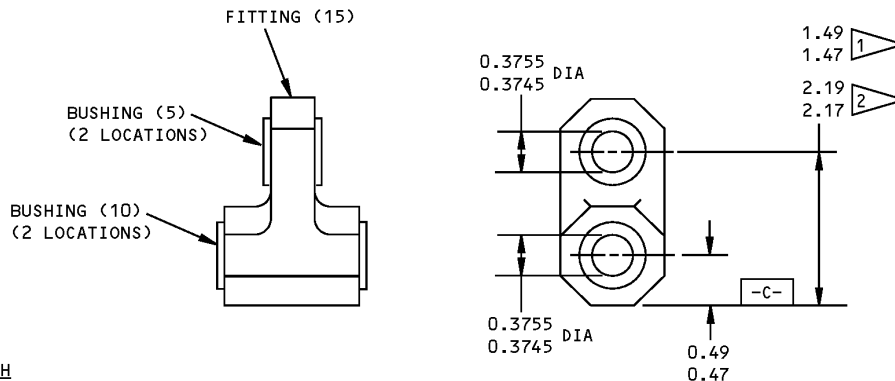
- A. This procedure tells how to repair the outer door link assembly.
- B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
- C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.
- D. Refer to IPL Figure 6 for item numbers.

#### 2. Check

- A. Penetrant examine link (15).

#### 3. Repair

- A. Bushing Replacement (REPAIR 7-1, Figure 601)
  - (1) Remove the old bushings (5, 10).
  - (2) If you find defects on the link, refer to REPAIR 7-1, Paragraph 3.B. for repair instructions.
  - (3) Install replacement bushings by the shrink-fit method (SOPM 20-50-03).
- B. Link (REPAIR 7-1, Figure 601)
  - (1) Repair is only replacement of the original finish. Refer to REPAIR 3-1, Paragraph 3.B. for details.



#### REFINISH

LINK (15)--CHEMICAL TREAT OR CHROMIC ACID ANODIZE AND APPLY ONE COAT BMS 10-11, TYPE 1 PRIMER (SRF 2.30)

- 1 69-42376-1
- 2 69-42376-3

69-42376-1, -3

Link Assembly Repair  
Figure 601

# 32-16-25

REPAIR 7-1

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65-63415, 69-42376, 69-42380, 69-42388, 69-42394, 69-58822



## COMPONENT MAINTENANCE MANUAL

### ASSEMBLY

**(NOT APPLICABLE)**

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ASSEMBLY

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65-63415, 69-42376, 69-42380, 69-42388, 69-42394, 69-58822



## COMPONENT MAINTENANCE MANUAL

### FITS AND CLEARANCES

**(NOT APPLICABLE)**

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FITS AND CLEARANCES

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65-63415, 69-42376, 69-42380, 69-42388, 69-42394, 69-58822



**COMPONENT MAINTENANCE MANUAL**

**SPECIAL TOOLS, FIXTURES, AND EQUIPMENT**

**(NOT APPLICABLE)**

**32-16-25**

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

<b>Code</b>	<b>Name</b>
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
15860	NEW HAMPSHIRE BALL BEARINGS, INC ASTRO DIVISION 155 LEXINGTON AVENUE LACONIA, NEW HAMPSHIRE 03246-2937 FORMERLY ASTRO BEARING CORP, LOS ANGELES, CALIF.
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
50294	NEW HAMPSHIRE BALL BEARINGS, INC PRECISION DIVISION 9700 INDEPENDENCE AVENUE CHATSWORTH, CALIFORNIA 91311 FORMERLY NIPPON MINATURE BEARING CORP V23589 AND NMB AMERICA INC AND NMB INC
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

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## COMPONENT MAINTENANCE MANUAL

<b>Code</b>	<b>Name</b>
77896	REXNORD INC BEARING OPERATION 2400 CURTIS STREET DOWNERS GROVE, ILLINOIS 60515-4005 FORMERLY SHAEFER BEARING DIV REX CHAINBELT FORMERLY REX CHAINBELT INC BEARING DIV.
81376	SMITH ACQUISITION COMPANY 2240 BUENA VISTA BALDWIN PARK, CALIFORNIA 91706
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

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COMPONENT MAINTENANCE MANUAL

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
10-60779-179		3	15	2
10-60779-180		2	15	2
177171		3	15	2
177180		2	15	2
65-63415-1		1	1	RF
65-63415-10		1	40B	1
65-63415-2		1	5	RF
65-63415-3		1	35	1
65-63415-4		1	40	1
65-63415-5		1	35A	1
65-63415-6		1	40A	1
65-63415-7		1	1A	RF
65-63415-8		1	5A	RF
65-63415-9		1	35B	1
69-37867-42		1	20	2
69-42376-1		6	1	RF
69-42376-2		6	15	1
69-42376-3		6	1A	RF
69-42376-4		6	15A	1
69-42380-1		2	1	RF
69-42380-2		2	20	1
69-42388-1		3	1	RF
69-42388-2		3	20	1
69-42388-3		3	20A	1
69-42394-3		4	1	RF
69-42394-4		4	15	1
69-42394-5		4	1A	RF
69-42394-6		4	15A	1
69-58822-1		5	1	RF
69-58822-2		5	35	1
69-58822-3		5	1A	RF
69-58822-4		5	1B	RF
69-58823-10		5	10B	1
69-58823-2		5	10	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
69-58823-6		5	10A	1
69-78688-1		5	35A	1
AN490HT14		5	30	1
ARYT7E101		2	15	2
ARYT7W105		3	15	2
BACB28AP07P029		1	25	1
BACB28AT10B030C		1	30	1
BACB28W4B006		4	5	2
BACB28W6B006		4	10	2
BACB28W6B019		6	5	2
BACB28W6B026		6	10	2
BACN10CP4L		1	10	2
BACN10HC4		1	10A	2
BACR10V4		1	15	2
BACR15BB5D11		5	5A	2
BACR15BB5D13		5	25A	2
BACR31A14		5	30A	1
DREM7-071		3	15	2
DREM7-120		2	15	2
KBDE7-13		3	15	2
KBDE7-14		2	15	2
MS20470D5		5	25	2
MS20470D6		5	5	2
MSSKR77-18BACH		3	15	2
MSSKR78-28BAC		2	15	2
NAS1423-6		5	15A	1
NAS170-6		5	20	1
NAS509-6		5	15	1
NAS509-7		3	5	2
NAS509-8		2	5	2
NAS513-7		3	10	2
NAS513-8		2	10	2
NHNE7-206		2	15	2
NHNE7-207		3	15	2
TFM107J		3	15	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
WREMS14ATC16		2	15	2
YTM190		2	15	2

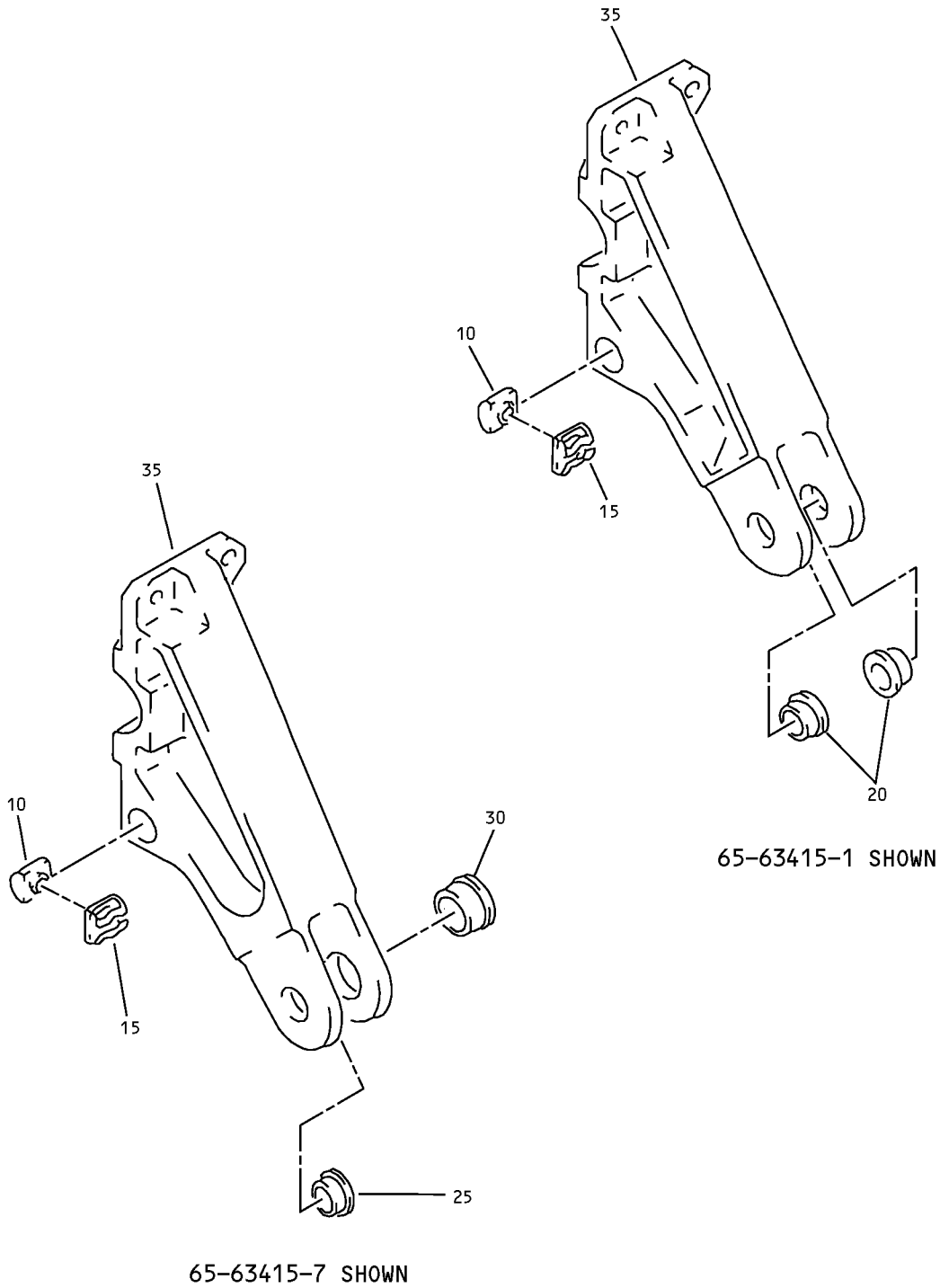
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Outboard Door Actuation Fitting Assembly  
IPL Figure 1

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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-											
-1	65-63415-1									A	RF
-1A	65-63415-7									C	RF
-5	65-63415-2									B	RF
-5A	65-63415-8									D	RF
10	BACN10CP4L									A, B	2
-10A	BACN10HC4									C, D	2
15	BACR10V4										2
20	69-37867-42									A, B	2
25	BACB28AP07P029									C, D	1
30	BACB28AT10B030C									C, D	1
35	65-63415-3									A	1
											(OPT ITEM 35A)
-35A	65-63415-5									A	1
-35B	65-63415-9									C	1
40	65-63415-4									B	1
											(OPT ITEM 40A)
-40A	65-63415-6									B	1
-40B	65-63415-10									D	1

-Item not Illustrated

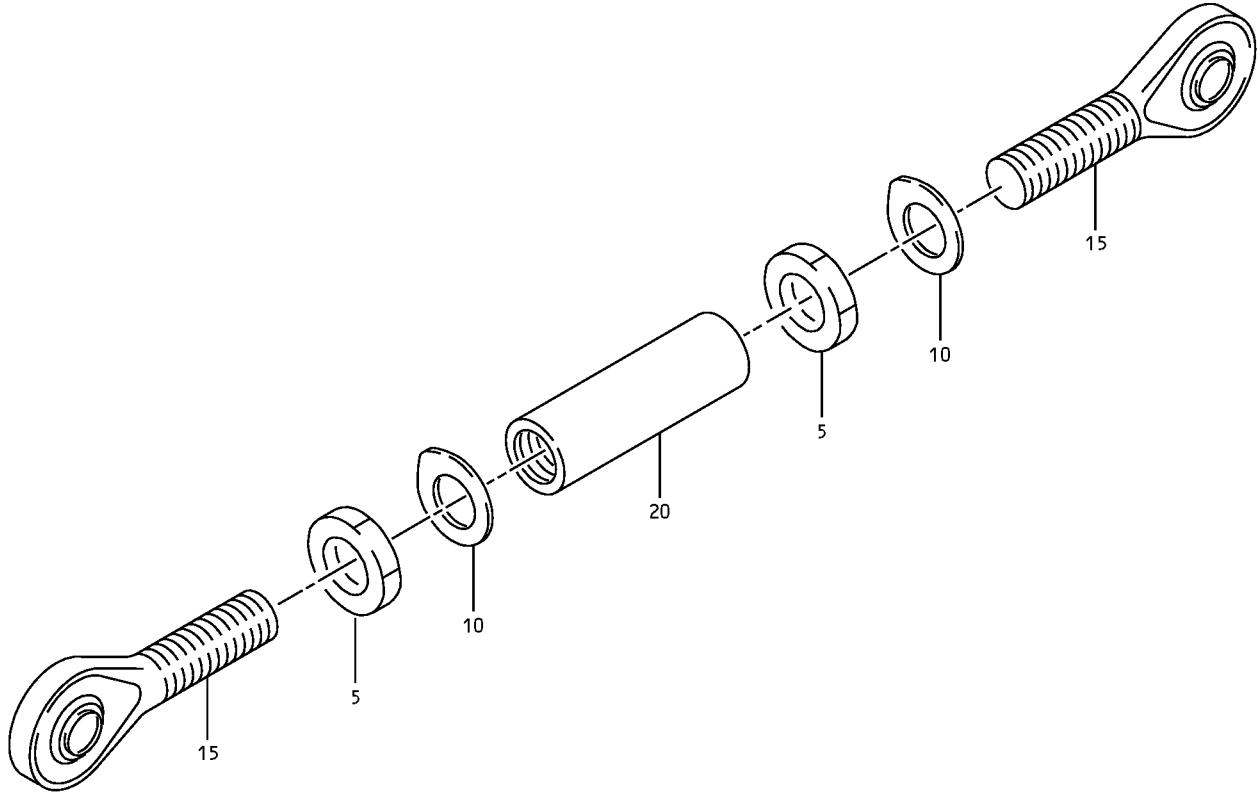
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Inner Door Actuation Rod Assembly  
IPL Figure 2

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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-											
-1	69-42380-1										RF
5	NAS509-8										2
10	NAS513-8										2
15	ARYT7E101										2
20	69-42380-2										1

-Item not Illustrated

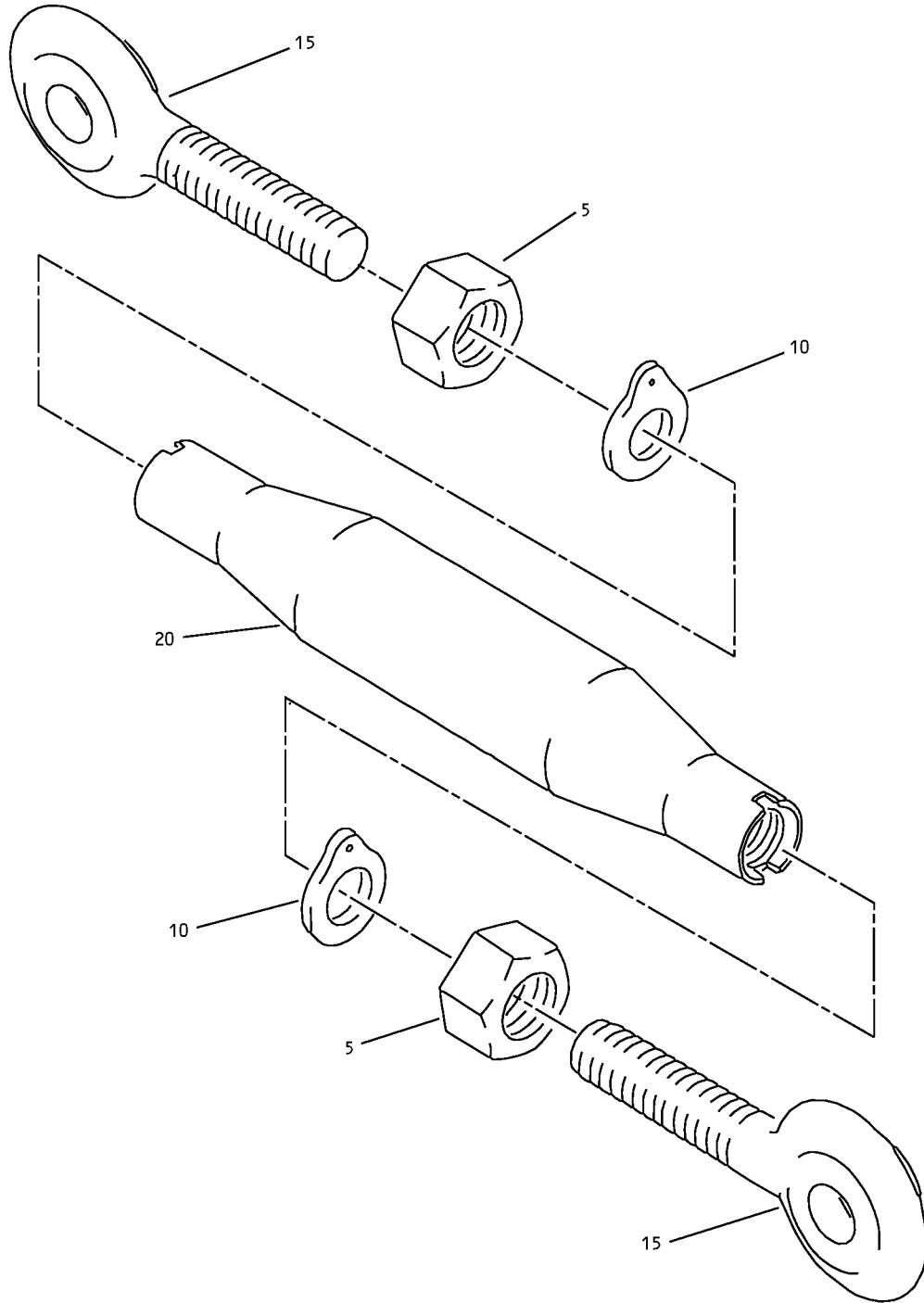
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Outer Door Rod Assembly  
IPL Figure 3

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
3-											
-1	69-42388-1										RF
5	NAS509-7										2
10	NAS513-7										2
15	ARYT7W105										2
20	69-42388-2										1
-20A	69-42388-3										1

-Item not Illustrated

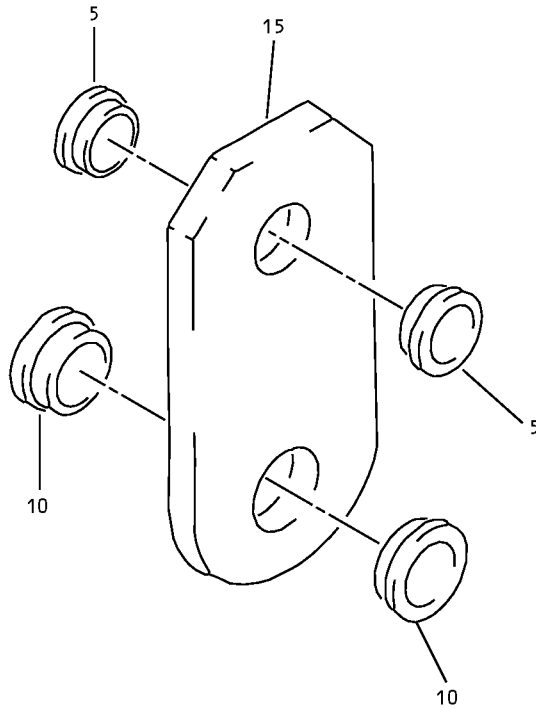
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Center Door Link Assembly  
IPL Figure 4

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
4-											
-1	69-42394-3									A	RF
-1A	69-42394-5									B	RF
5	BACB28W4B006										2
10	BACB28W6B006										2
15	69-42394-4									A	1
-15A	69-42394-6									B	1

-Item not Illustrated

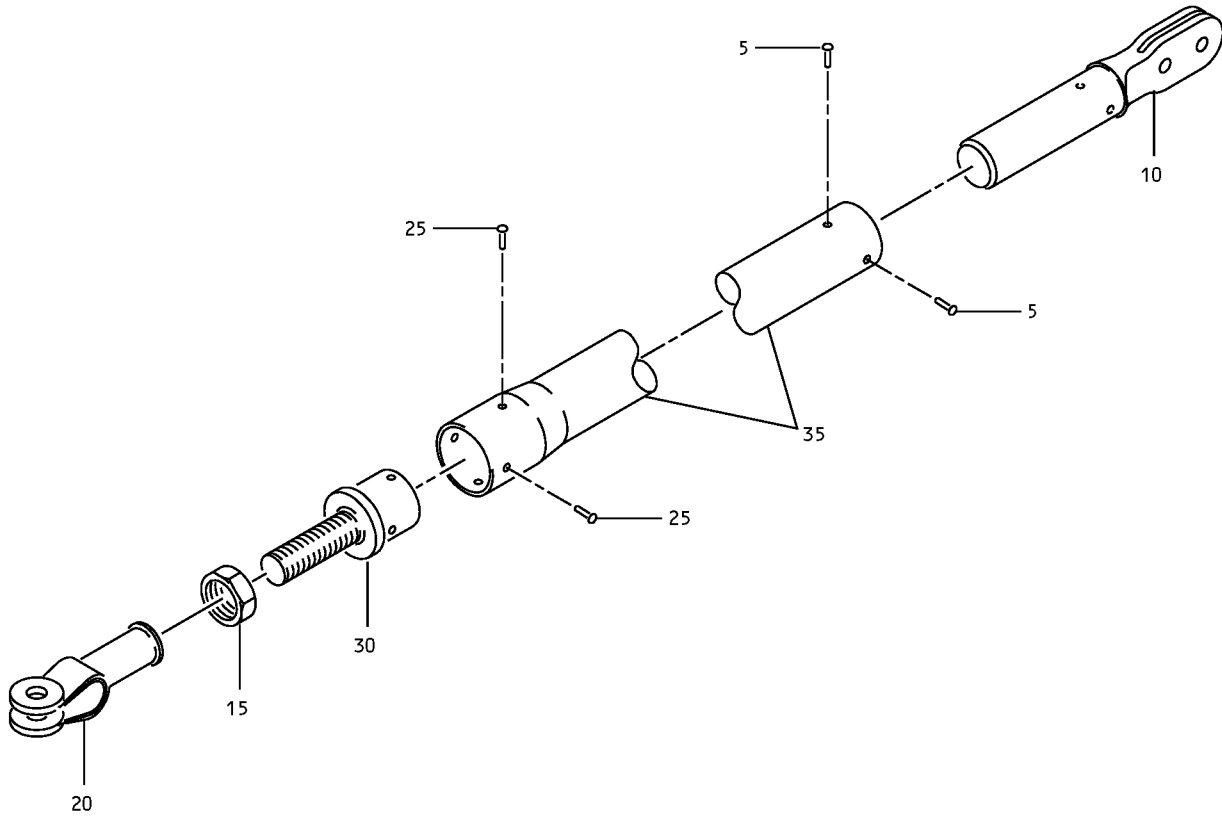
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Retaining Rod Assembly  
IPL Figure 5

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
5-											
-1	69-58822-1									A	RF
-1A	69-58822-3									B	RF
-1B	69-58822-4									C	RF
5	MS20470D6									A, B	2
-5A	BACR15BB5D11									C	2
10	69-58823-2									A	1
-10A	69-58823-6									B	1
-10B	69-58823-10									C	1
15	NAS509-6									A	1
-15A	NAS1423-6									B, C	1
20	NAS170-6										1
25	MS20470D5									A, B	2
-25A	BACR15BB5D13									C	2
30	AN490HT14									A, B	1
-30A	BACR31A14									C	1
35	69-58822-2									A, B	1
-35A	69-78688-1									C	1

-Item not Illustrated

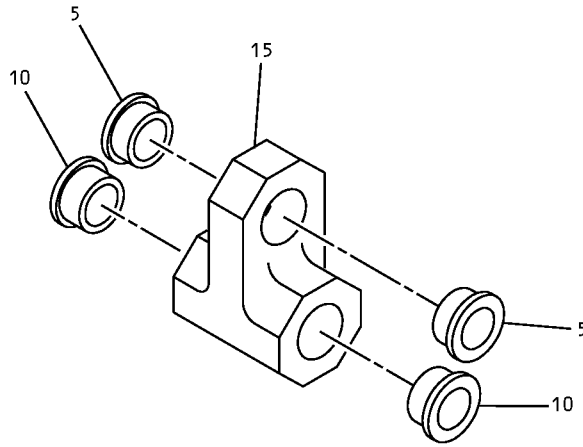
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# COMPONENT MAINTENANCE MANUAL



Link Assembly - Center Door, Aft  
IPL Figure 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		
6-											
-1	69-42376-1									A	RF
-1A	69-42376-3									B	RF
5	BACB28W6B019										2
10	BACB28W6B026										2
15	69-42376-2									A	1
-15A	69-42376-4									B	1

-Item not Illustrated

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