



COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

NOSE LANDING GEAR CUSTOMER END ITEM

PART NUMBER

**001A6200-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7,
-8, -9**

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PAGE DATE: Jul 01/2009

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**COMPONENT MAINTENANCE MANUAL**

Revision No. 15
Jul 01/2009

To: All holders of NOSE LANDING GEAR CUSTOMER END ITEM 32-21-16.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

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

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

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

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TRANSMITTAL LETTER

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Location of Change

32-21-16

ASSEMBLY

Description of Change

Changed the data in the Consumable Materials list.

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HIGHLIGHTS

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

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		PRR 38117	JUL 01/98
		PRR 35385-10	JUL 01/98
		PRR 38140	JUL 01/98
		PRR 38138	JUL 01/98
		PRR 38391	JUL 01/00
		PRR 38275-66	NOV 01/04



COMPONENT MAINTENANCE MANUAL

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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Number	Date	Date	Initials

Revision		Filed	
Number	Date	Date	Initials

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Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

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REVISION RECORD

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

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

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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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NOSE LANDING GEAR CUSTOMER END ITEM - DESCRIPTION AND OPERATION

1. Description

- A. The nose landing gear customer end item includes the nose gear component assembly, valve and actuator assembly, the summing mechanism, taxi light installation, sensor installation, wire bundle harness installation, and wire bundle bracket installation.

2. Operation

- A. The nose landing gear holds up and steers the airplane during taxi, takeoff, and landing.

3. Leading Particulars (Approximate)

- A. Length – 35 inches
- B. Width – 30 inches
- C. Height – 44 inches
- D. Weight – 300 pounds

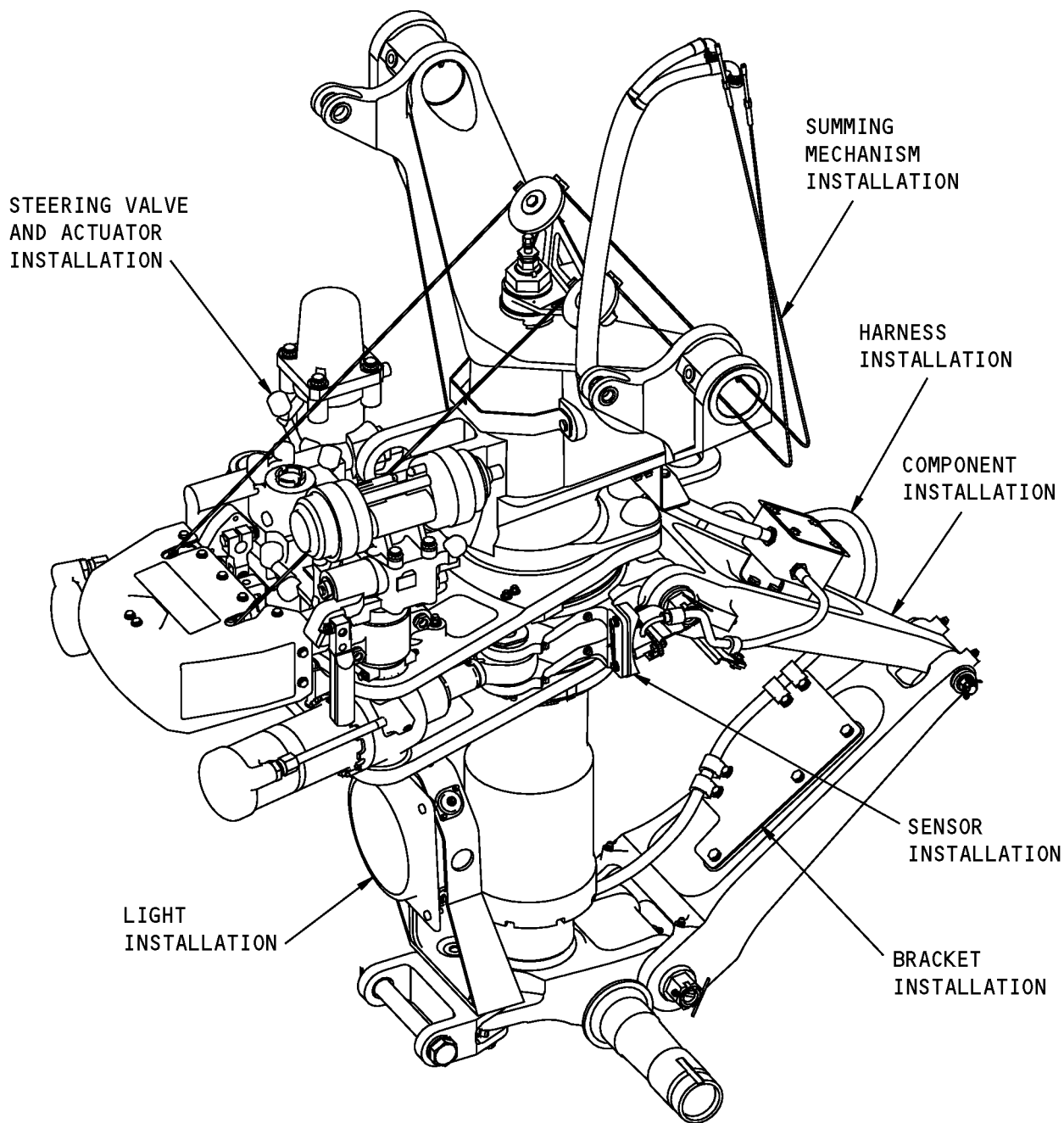
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DESCRIPTION AND OPERATION

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Nose Landing Gear Customer End Item
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 tells how to disassemble the nose landing gear customer end item unit.
- B. Disassemble this unit only sufficiently to find defects, to do the necessary repairs, and to put the unit back into serviceable condition.
- C. Refer to IPL Figure 1 for item numbers.

2. Disassembly

A. Procedure

- (1) Use standard industry practices and these steps.
- (2) Remove the summing mechanism and cover installation components (188) as shown in DISASSEMBLY, Figure 301.
 - (a) Remove screws (191), washers (194), and cover assembly (197A) from mechanism assembly (266).
 - (b) Remove bolts (209, 221), bushings (212, 224), washers (215, 227), nuts (218, 230) and link assembly (233), as shown in view B-B.
 - (c) Do not disassemble link assembly (233) unless replacement of ends (239, 245) or repair of coupling (248) is necessary.
 - (d) Remove bolts (449), washers (452, 455), nuts (458), pulleys (461) and guards (464) from bracket (446), as shown in view H-H.
 - (e) Do not remove bracket (446) unless repair or replacement is necessary.
 - (f) Remove screws (404), washers (407), nuts (410), and cable guards (413A, 416A), as shown in view E-E.
 - (g) Remove cotter pins (418) and cable (419) from the mechanism assembly (266) and nose gear component (5), as shown in View A.
 - (h) Remove bolts (251), washers (254), nuts (257) and mechanism assembly (266) from valve and actuator assembly (8), as shown in view A-A.
 - (i) Disassemble mechanism assembly (266), as shown in DISASSEMBLY, Figure 302.
 - 1) Remove bolts (269), washers (272), bushings (275), nuts (278), and pulleys (281) from bracket assemblies (296).
 - 2) Remove bolts (284), washers (287), bushings (290), nuts (293), and bracket assemblies (296) from crank assembly (353).
 - 3) Remove bolts (311), washers (314), and bracket (317) from crank assembly (353).
 - 4) Remove bolt (320), washer (323), bushings (326, 332), nut (335), and bracket assembly (338) from crank assembly (353).
 - (j) Remove bolts (386), washers (389), and bracket assembly (392) from valve and actuator assembly (8), as shown in view F-F.
- (3) Remove bolts (422), washers (425), nuts (428), and standoff (431), as shown in DISASSEMBLY, Figure 301, view I-I.
- (4) Remove bolts (434), washers (437), nuts (440), and brace (443) from bracket (446).
- (5) Remove bolts (11), washers (14), nuts (17), and clamps (20) from valve assembly (173), as shown in DISASSEMBLY, Figure 303, view F-F.

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DISASSEMBLY

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- (6) Remove cotter pins (23), nuts (35), washers (29), bushings (32), pins (26), actuator assemblies (38, 41), as shown in DISASSEMBLY, Figure 303, view G-G.
- (7) Remove bolts (155), washers (158, 161), and nuts (164) from nose gear component (5) and valve assembly (173), as shown in DISASSEMBLY, Figure 303, view C-C.
- (8) Remove the lockwire from bolts (167), as shown in DISASSEMBLY, Figure 303, view B-B.
- (9) Remove bolts (167), washers (170), valve assembly (173), and standoffs (185), as shown in DISASSEMBLY, Figure 303, view D-D.
- (10) Remove wire bundle harness support (527), as shown in DISASSEMBLY, Figure 304.
 - (a) Remove screws (530, 542), washers (533, 545), nuts (536, 548), and clamps (539, 551) from conduit assemblies (628, 631), as shown in View A.
 - (b) Remove screws (554), washers (557), nuts (560), and clamps (563) from conduit assembly (625), as shown in View C.
 - (c) Remove screws (566), washers (569), and cover (572) from box assembly (297).
 - (d) Remove the lockwire and nuts (575, 580), then disconnect conduit assemblies (625 thru 634) from box assembly (297).
 - (e) Remove screws (583), washers (586), nuts (589), and clamps (592) from bracket (760) and conduit assembly (634), as shown in View E.
 - (f) Remove the lockwire, screws (601), washers (595, 604), nuts (598, 607), and clamps (610) from light assembly (473) and clamp (772). Disconnect conduit assembly (634) from light assembly (473).
 - (g) Remove the lockwire, then disconnect conduit assembly (622) from conduit assembly (619).
 - (h) Remove the lockwire from conduit assemblies (619, 625), as shown in View E.
 - (i) Disconnect conduit assembly (625) from conduit assembly (619), as shown in the main view on Sheet 1.
 - (j) Remove nuts (613), washers (616), and conduit assembly (619) from nose gear component (5), as shown in View B.
 - (k) Disconnect conduit assemblies (628, 631) from sensors (518), as shown in View C.
- (11) Remove light assembly (473) and shim (470), as shown in DISASSEMBLY, Figure 305.
- (12) Remove sensor installation (476), as shown in DISASSEMBLY, Figure 306.
 - (a) Remove the lockwire, screws (479), washers (482), shims (483), and targets (485), as shown in view B-B.
 - (b) Remove screws (488), washers (491), nuts (494), and brackets (497, 500), as shown in view B-B.
 - (c) Remove screws (503), washers (506), nuts (509), and brackets (512, 515).
 - (d) Remove sensors (518) from the brackets (512, 515). Do not remove markers (521, 524) from the brackets unless necessary for replacement.
- (13) Remove bracket installation (646) (DISASSEMBLY, Figure 307).
 - (a) Remove screws (673), washers (676), nuts (679) and hose guide (697) from bracket assembly (661).
 - (b) Remove bolts (649), washers (652, 655), nuts (658), and bracket assembly (661).

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- (c) Remove bolts (685), washers (688, 691), nuts (694), and box assembly (697) as shown in View A.
- (d) Remove bolts (724), washers (727, 730), nuts (733), and bracket assembly (736), as shown in View C.
- (e) Remove bolts (748), washers (751, 754), nuts (757), and bracket (760), as shown in View B.
- (f) Remove bolt (763), block (766), clip (769), clamp (772), as shown in View D. Do not remove tape (775) unless necessary for repair or replacement.

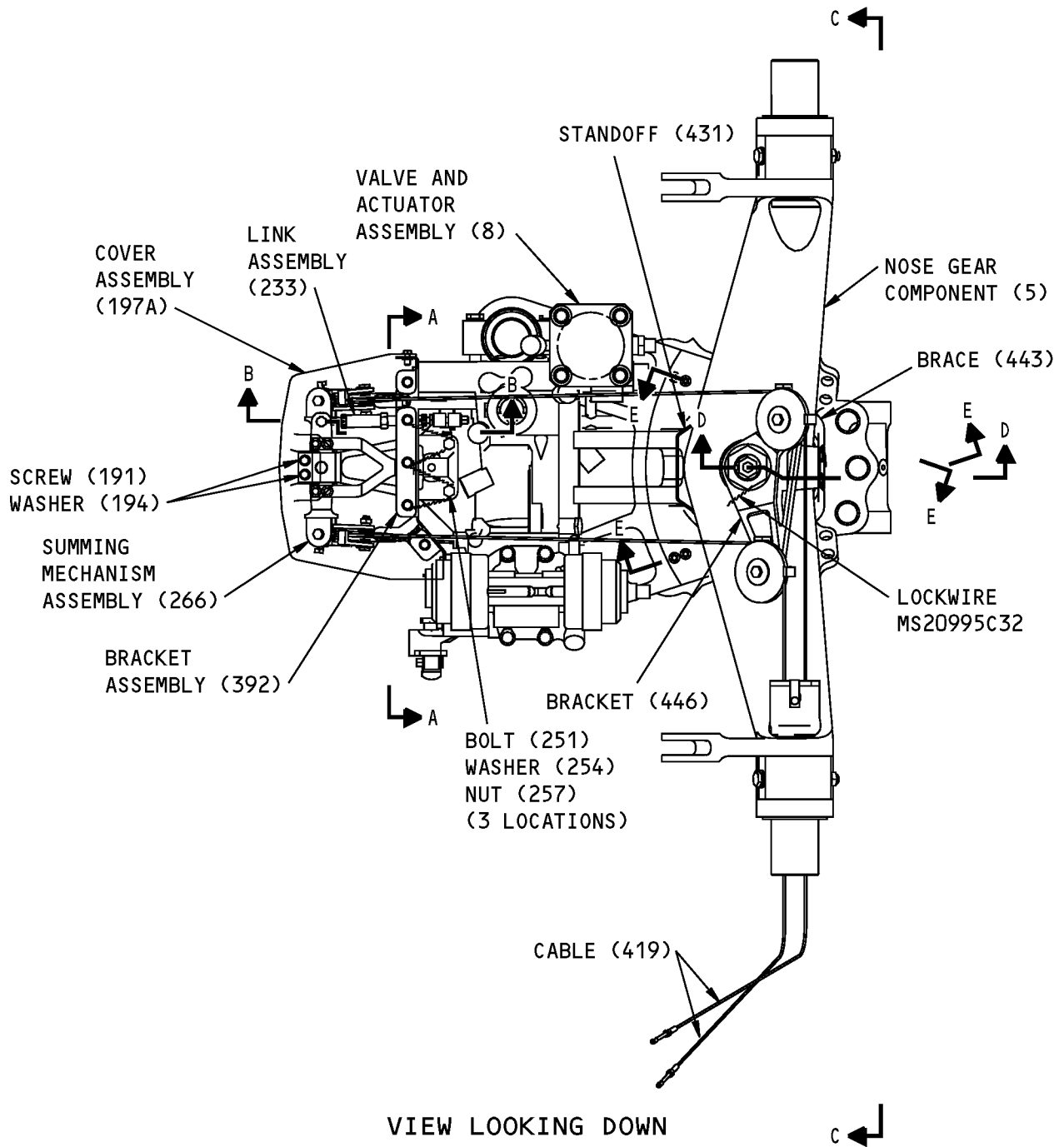
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Summing Mechanism Removal
Figure 301 (Sheet 1 of 4)

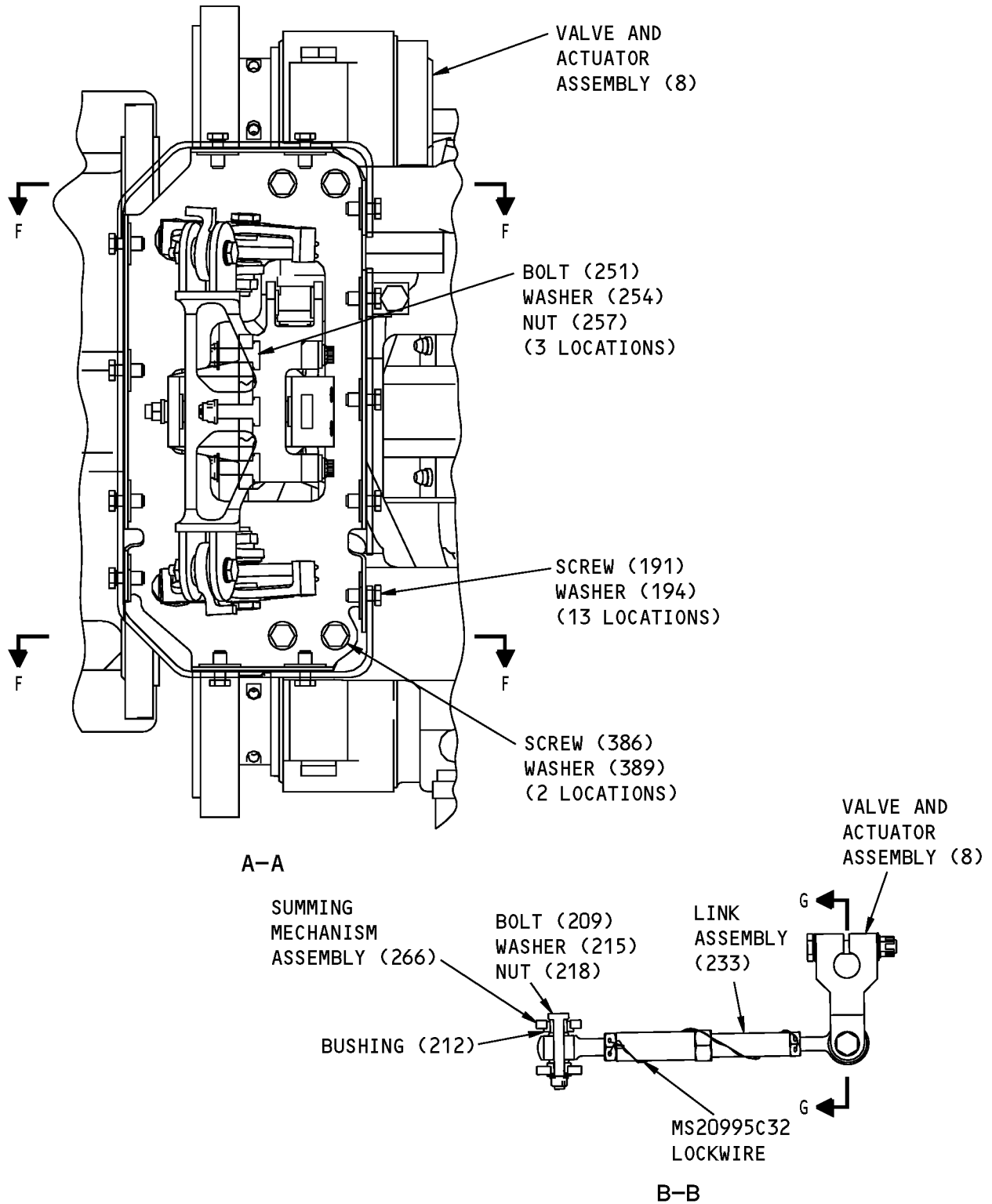
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Summing Mechanism Removal
Figure 301 (Sheet 2 of 4)

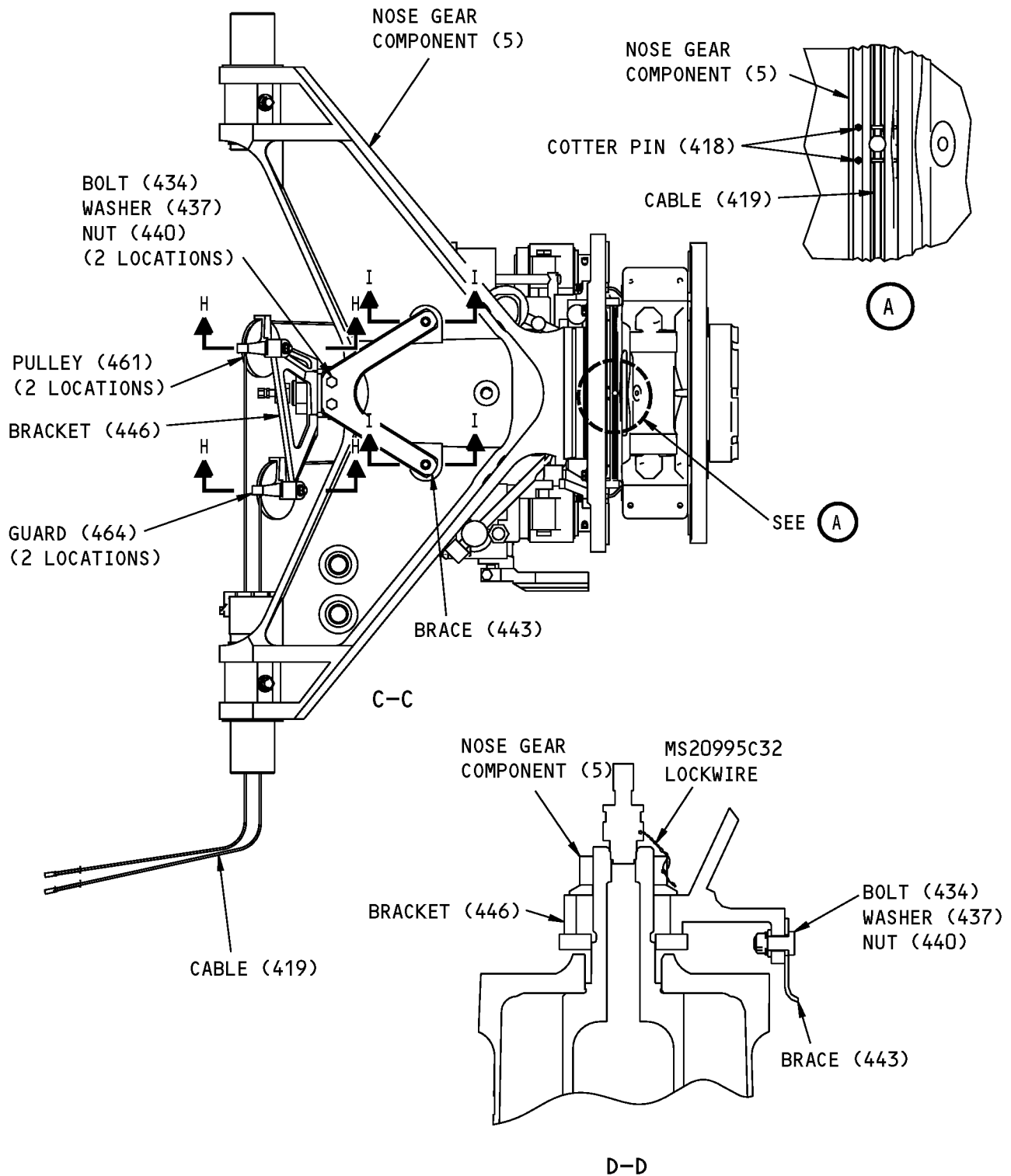
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Summing Mechanism Removal
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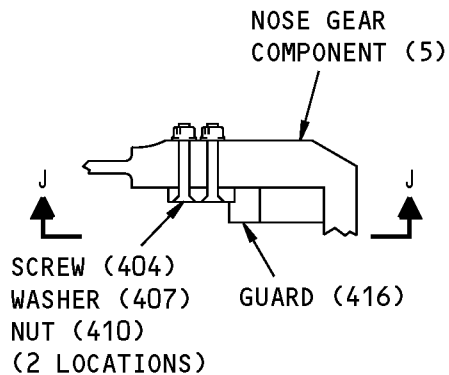
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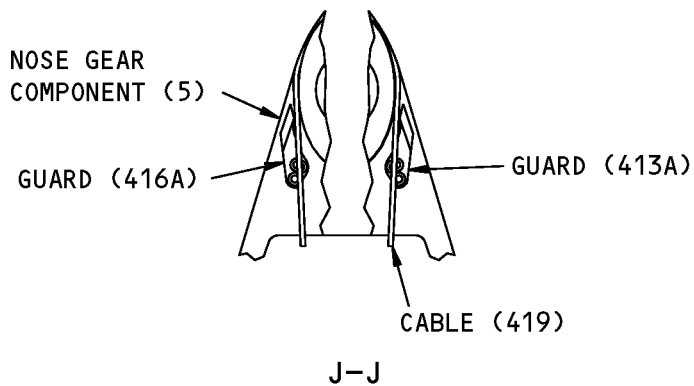
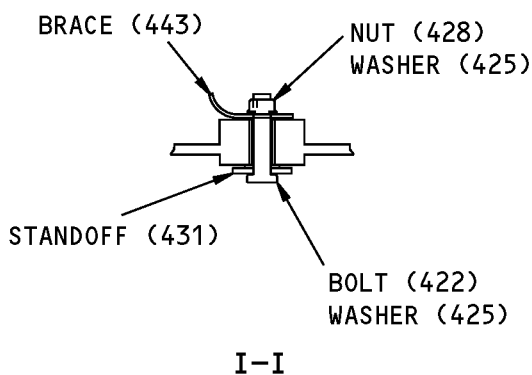
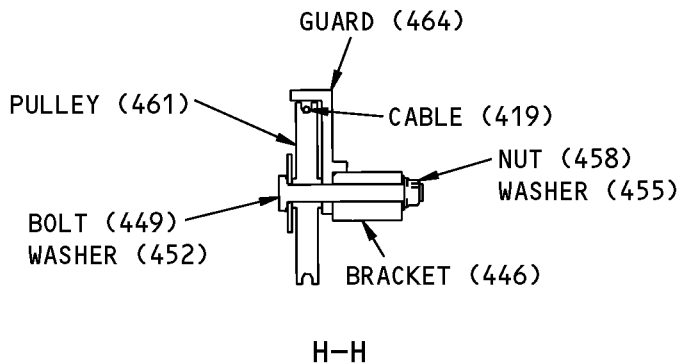
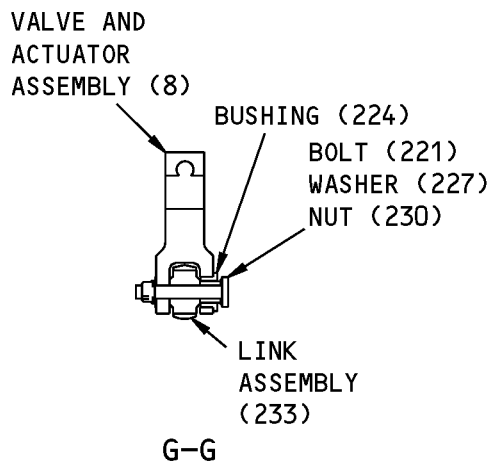
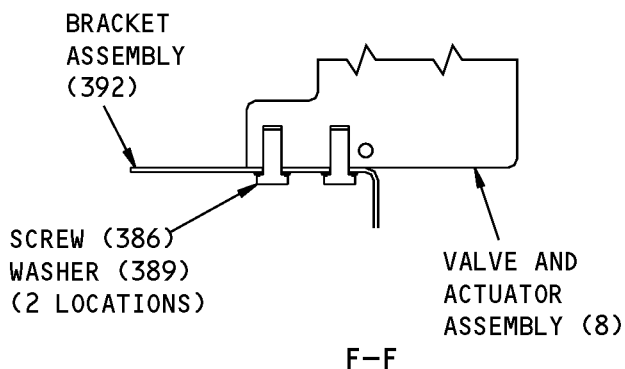
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E-E



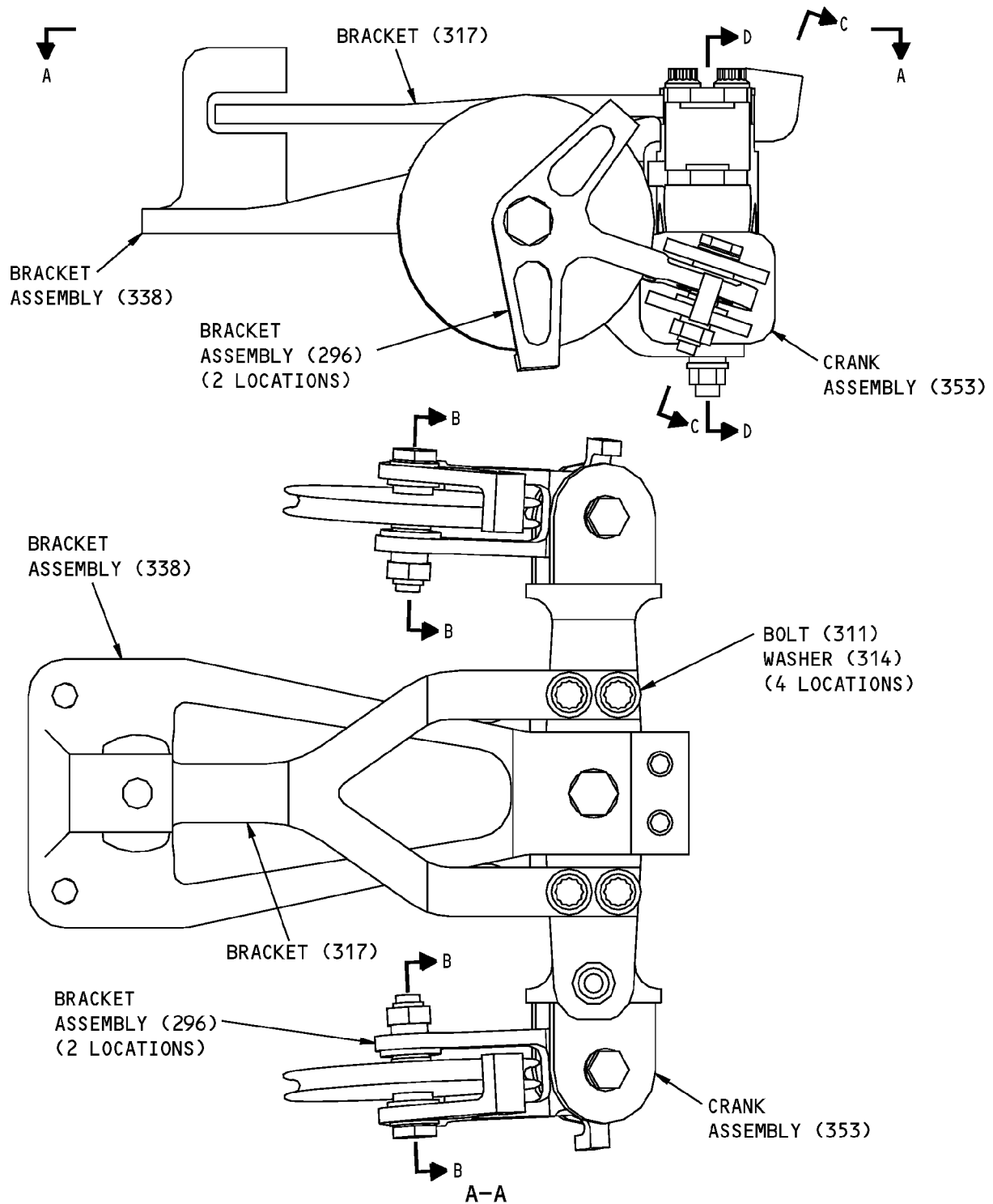
ITEM NUMBERS REFER TO IPL FIG. 1

Summing Mechanism Removal
Figure 301 (Sheet 4 of 4)

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Summing Mechanism Disassembly
Figure 302 (Sheet 1 of 2)

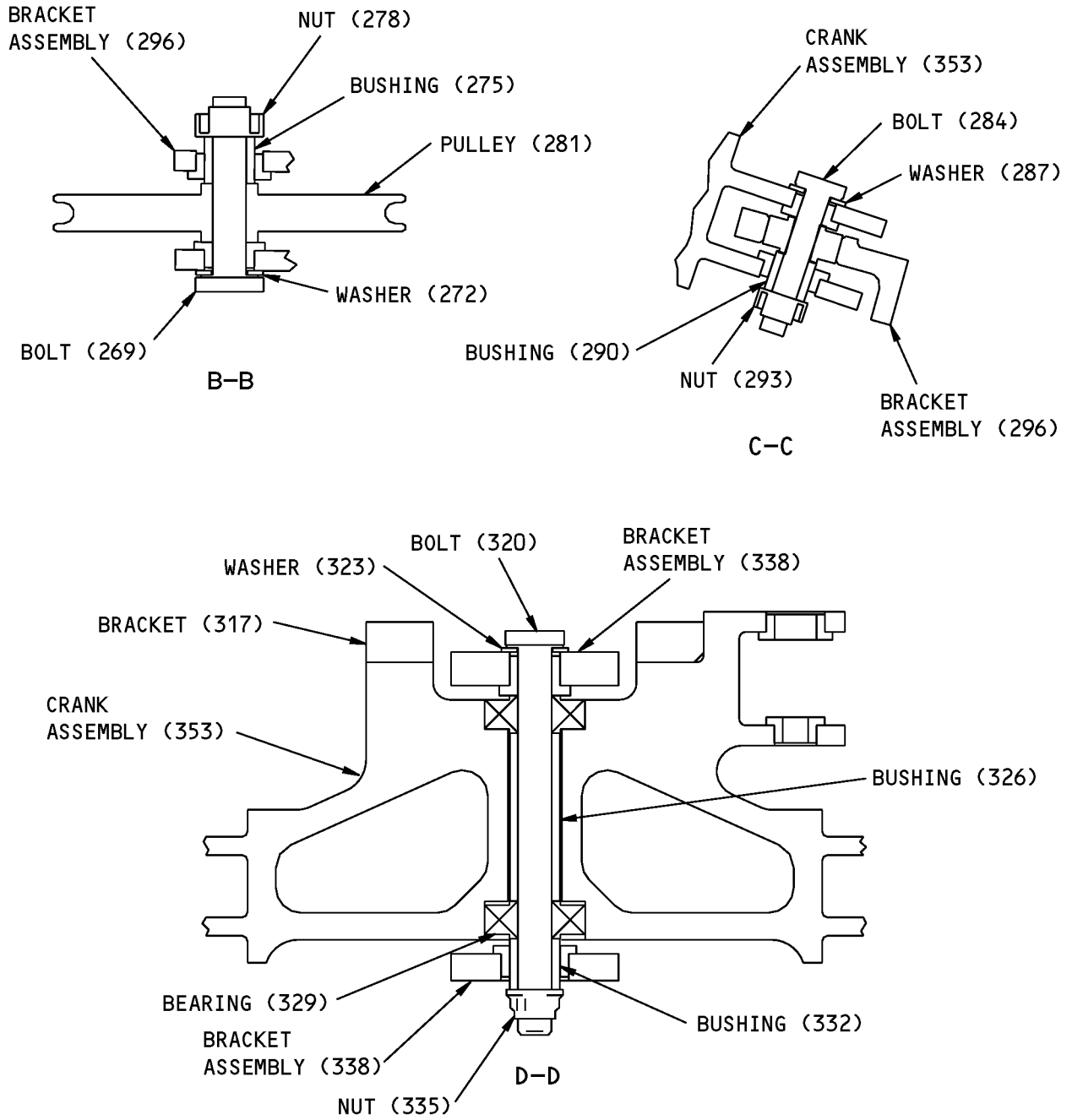
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ITEM NUMBERS REFER TO IPL FIG. 1

Summing Mechanism Disassembly
Figure 302 (Sheet 2 of 2)

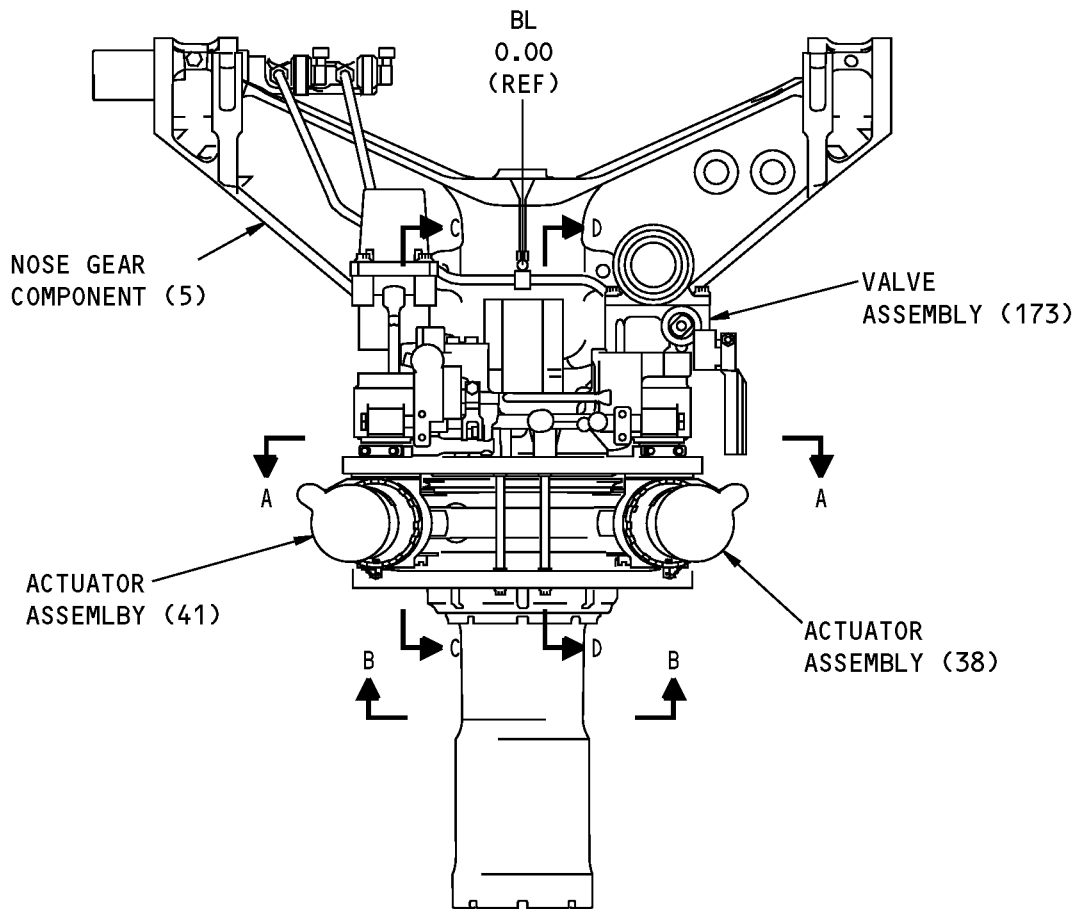
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VIEW LOOKING AFT

Valve and Actuator Assembly Removal
Figure 303 (Sheet 1 of 4)

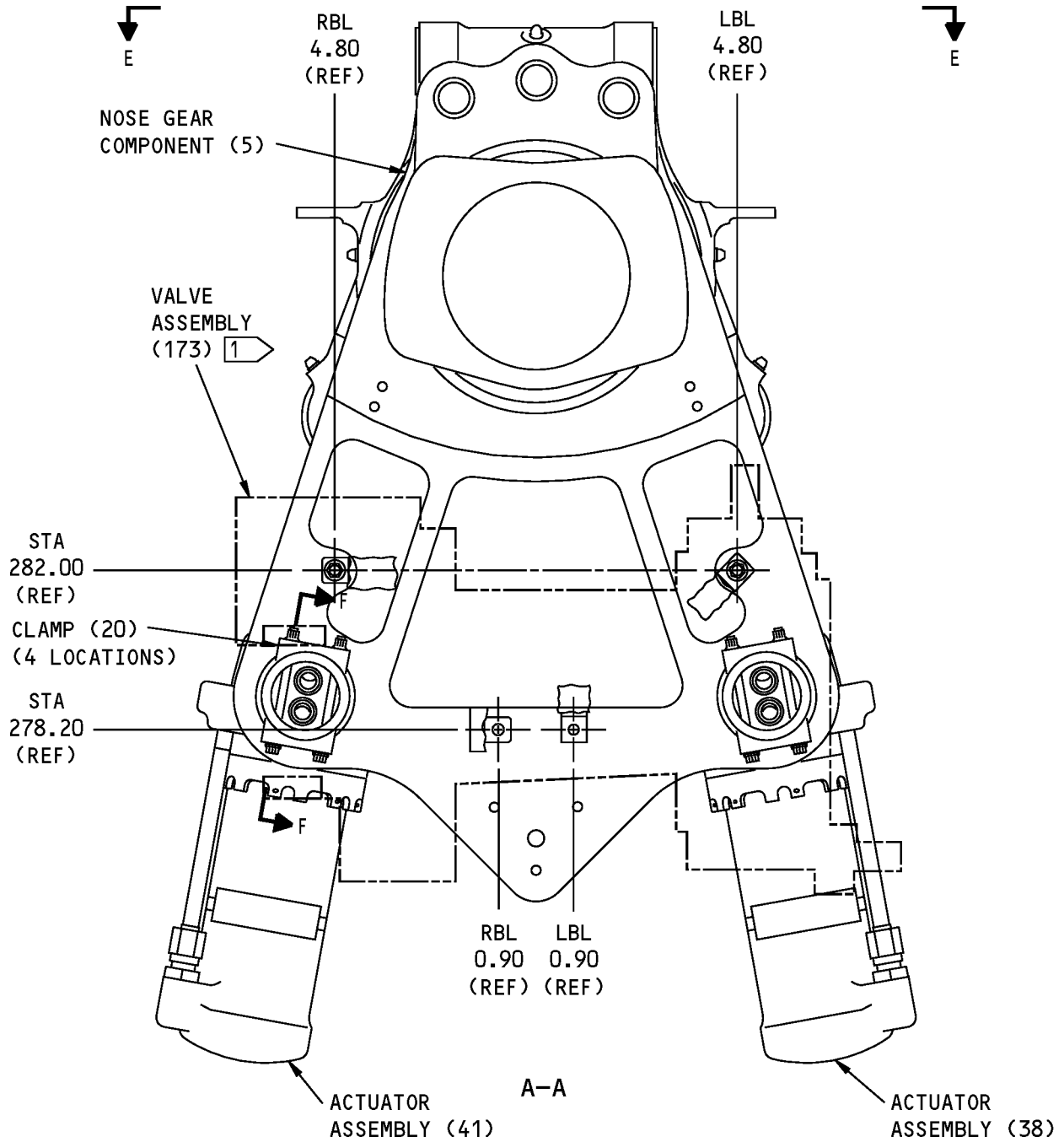
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Valve and Actuator Assembly Removal
Figure 303 (Sheet 2 of 4)

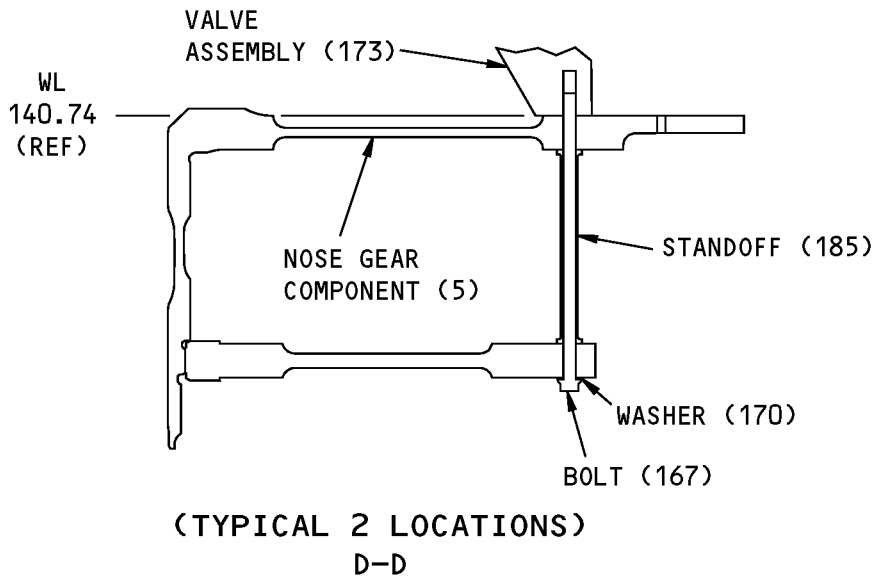
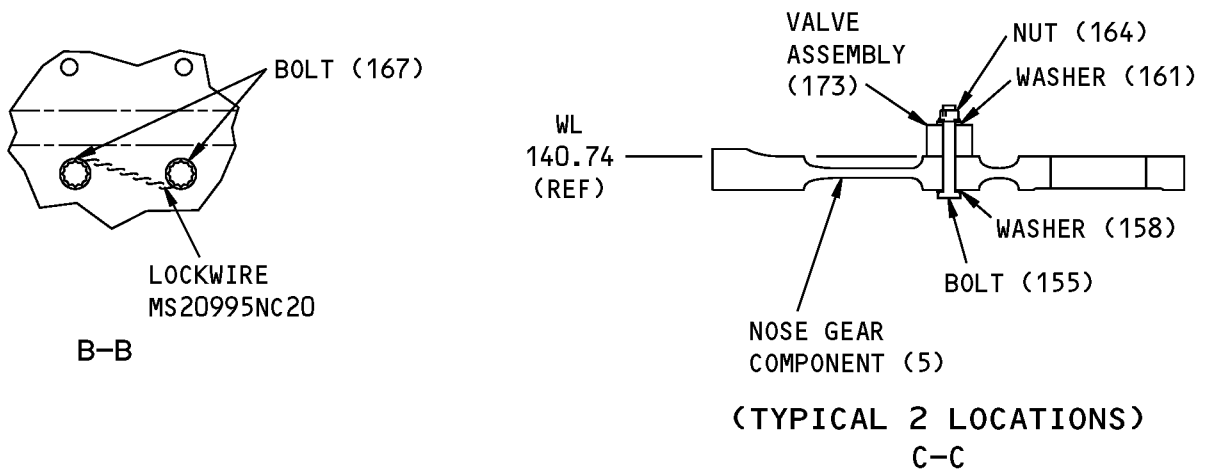
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Valve and Actuator Assembly Removal
Figure 303 (Sheet 3 of 4)

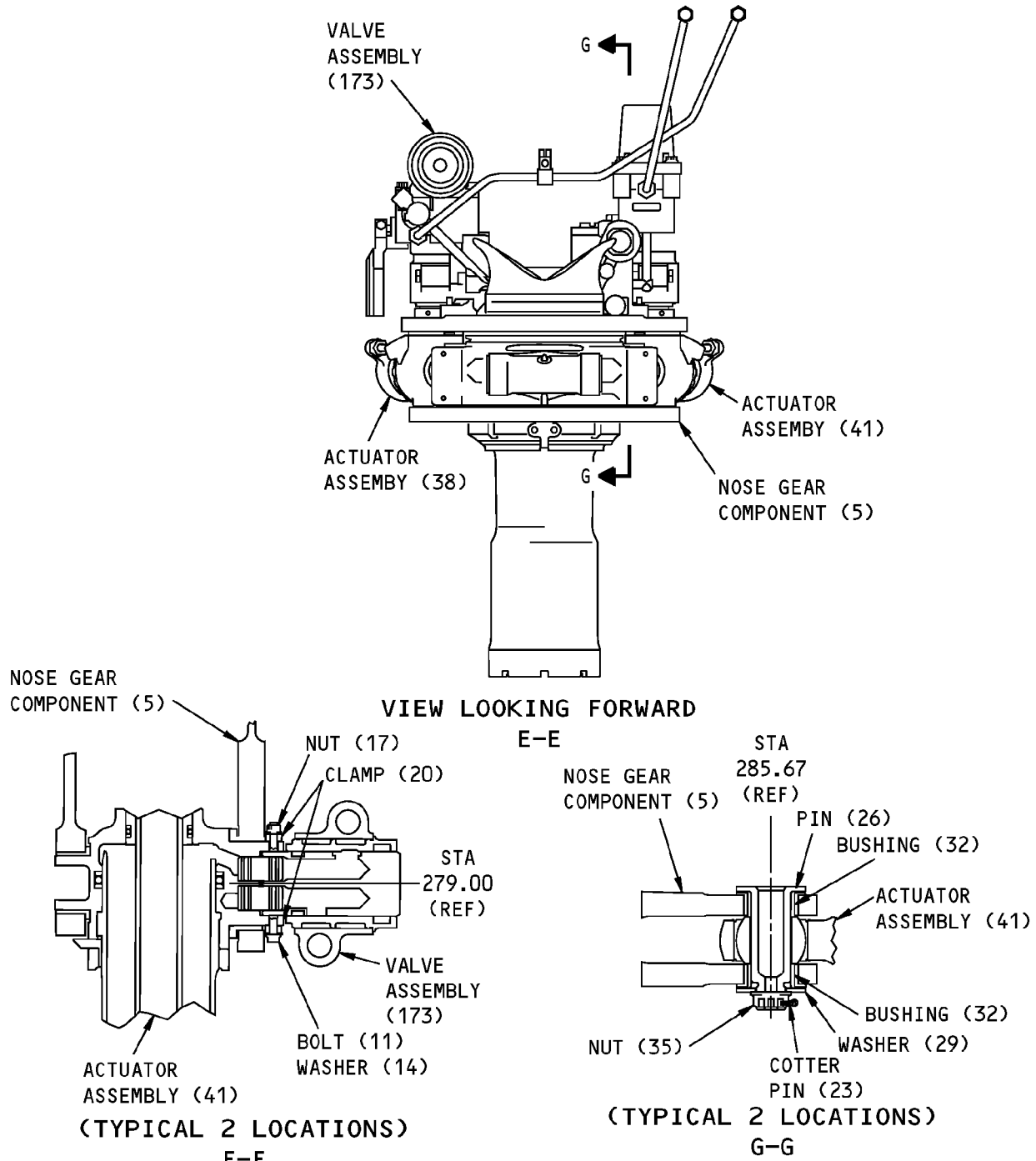
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1 VALVE ASSEMBLY IS SHOWN AS AN OUTLINE

ITEM NUMBERS REFER TO IPL FIG. 1

Valve and Actuator Assembly Removal
Figure 303 (Sheet 4 of 4)

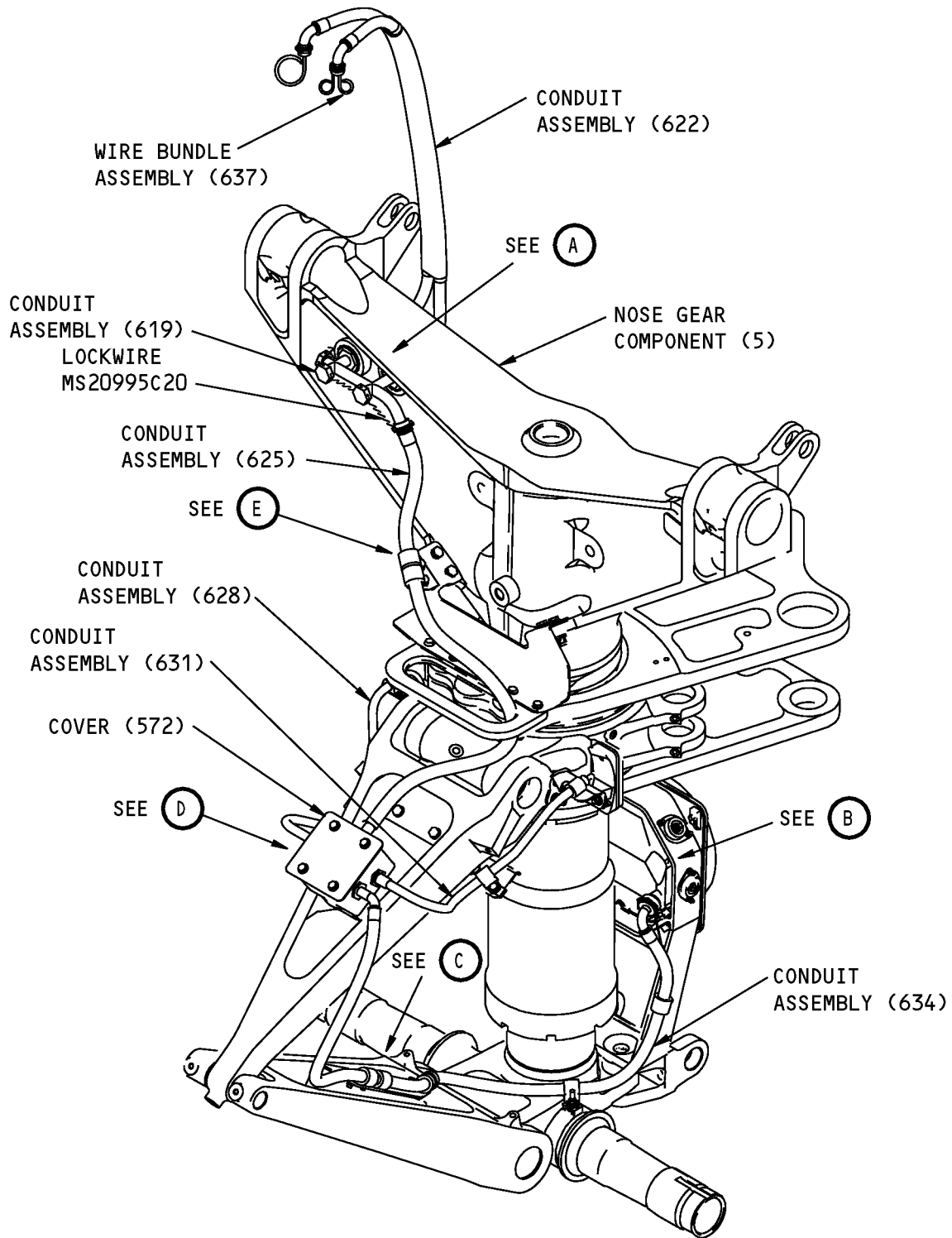
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Wire Bundle Harness Support Removal
Figure 304 (Sheet 1 of 4)

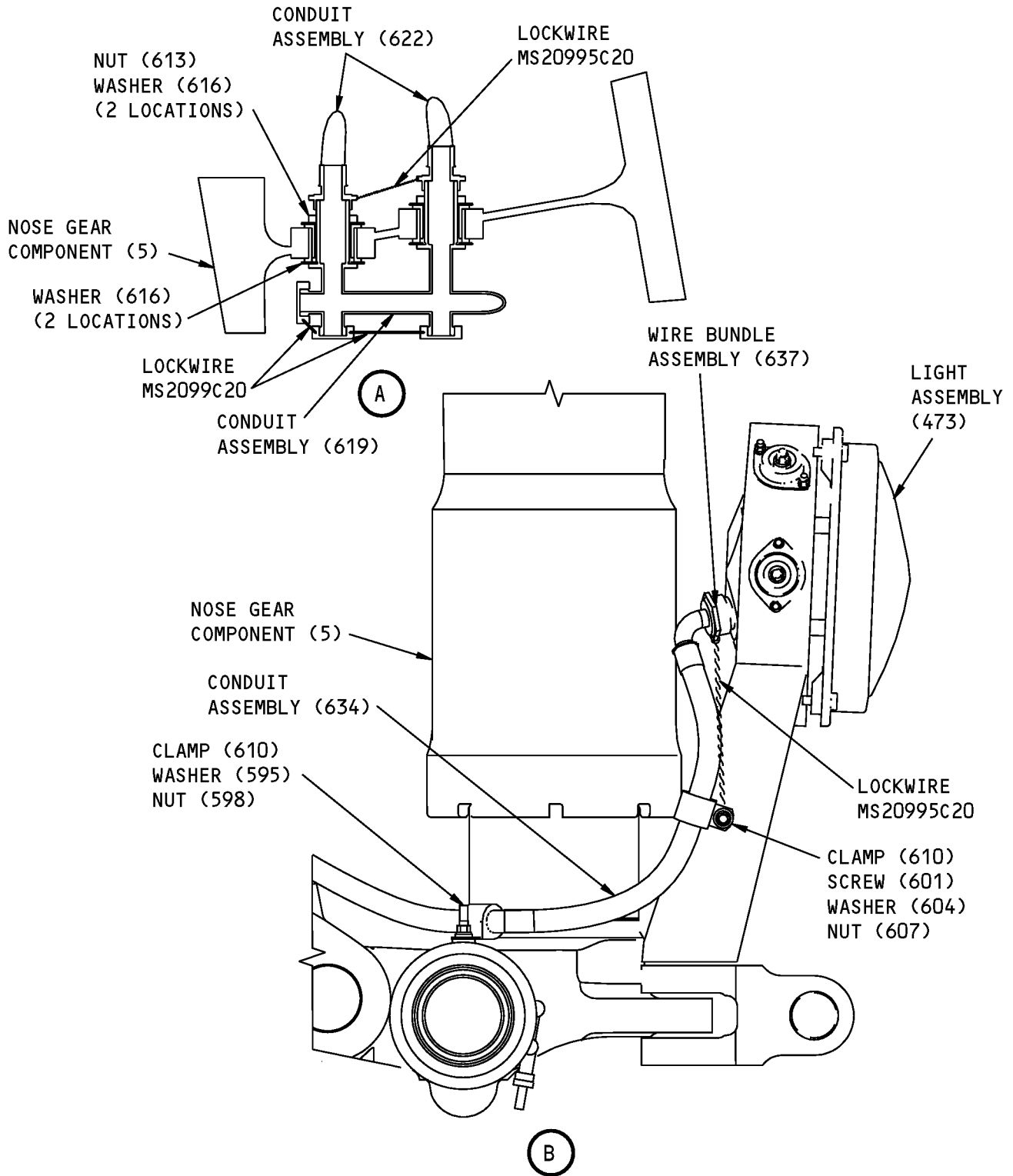
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Wire Bundle Harness Support Removal
Figure 304 (Sheet 2 of 4)

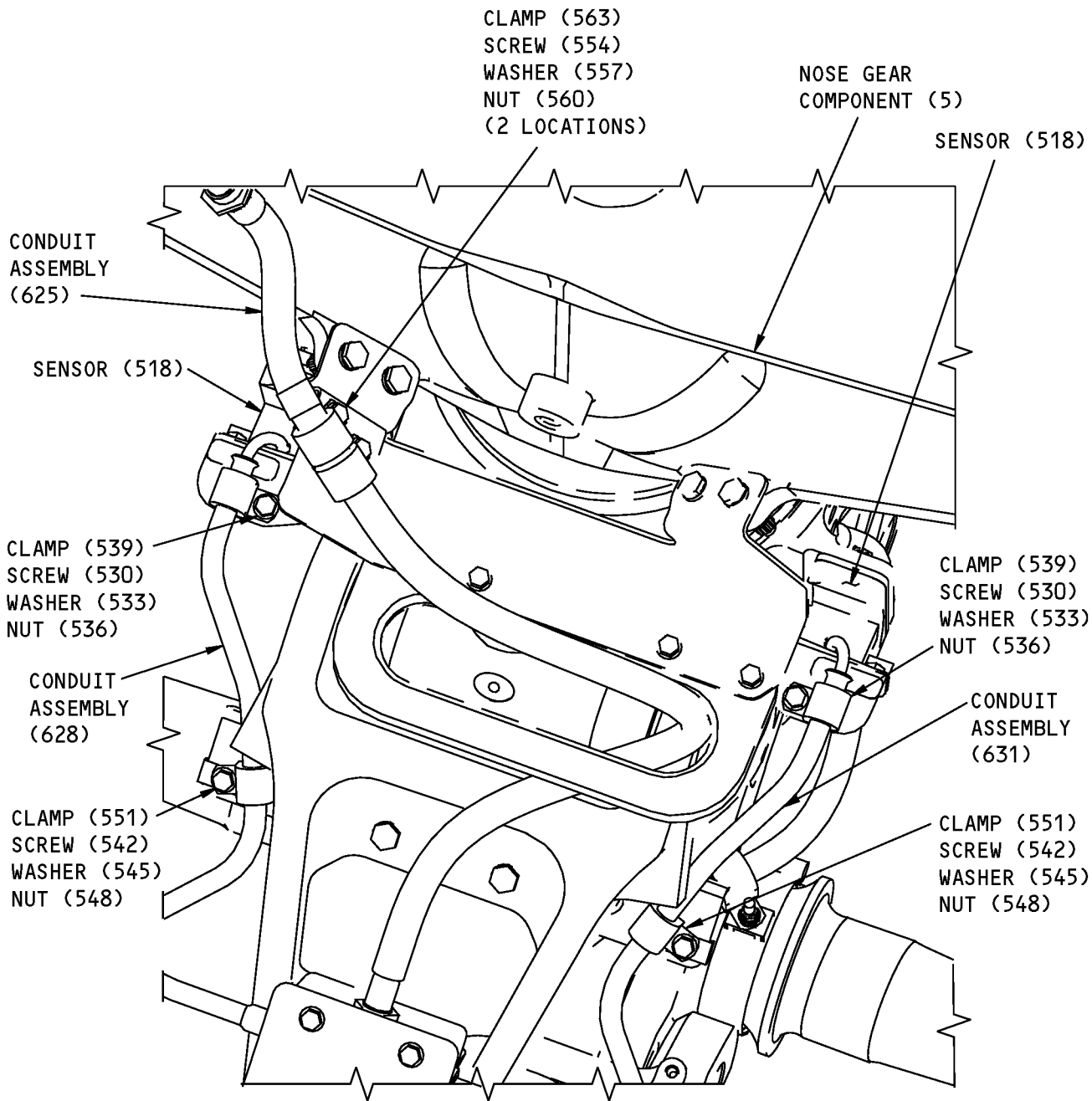
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C

Wire Bundle Harness Support Removal
Figure 304 (Sheet 3 of 4)

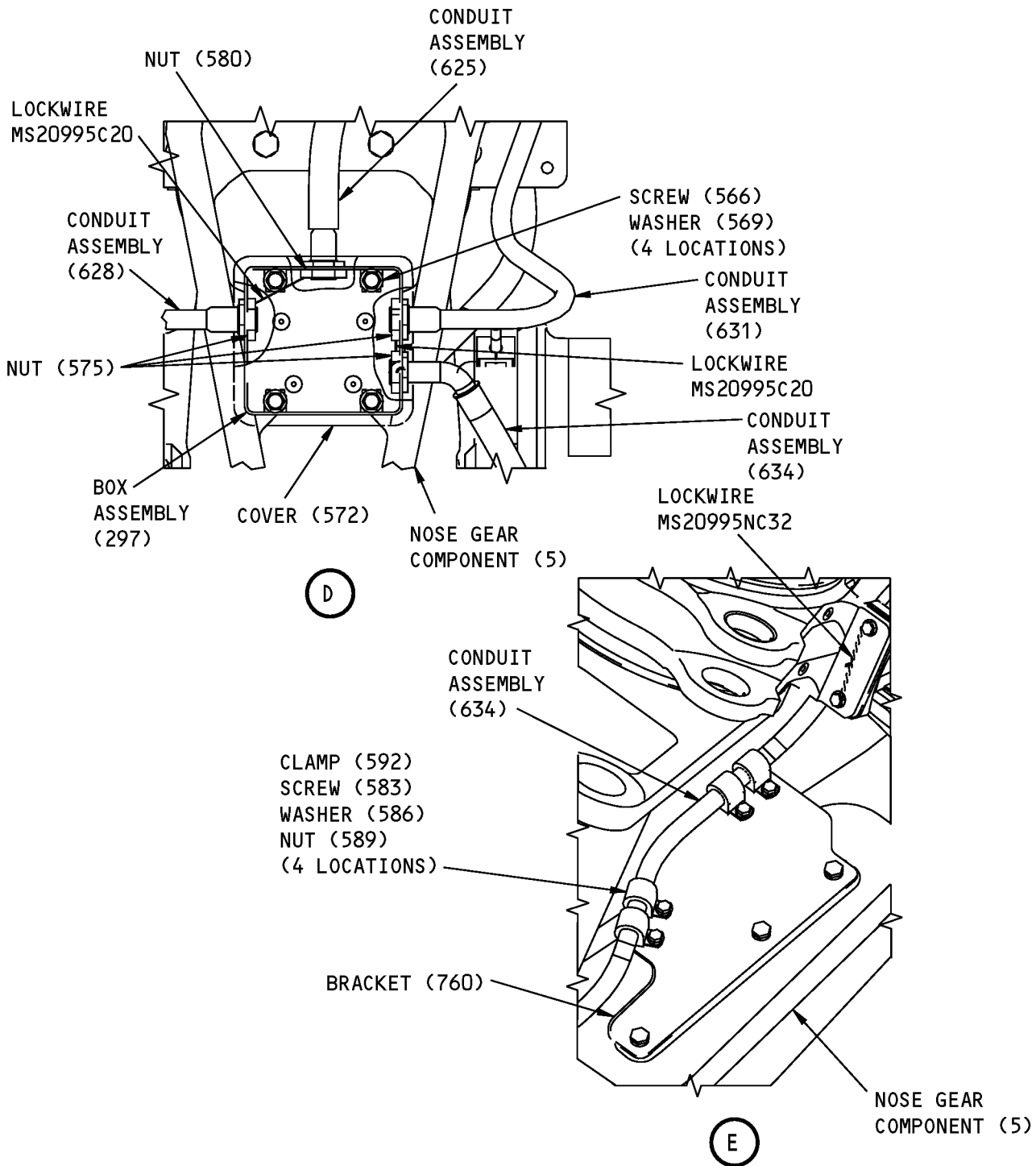
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ITEM NUMBERS REFER TO IPL FIG. 1

Wire Bundle Harness Support Removal
Figure 304 (Sheet 4 of 4)

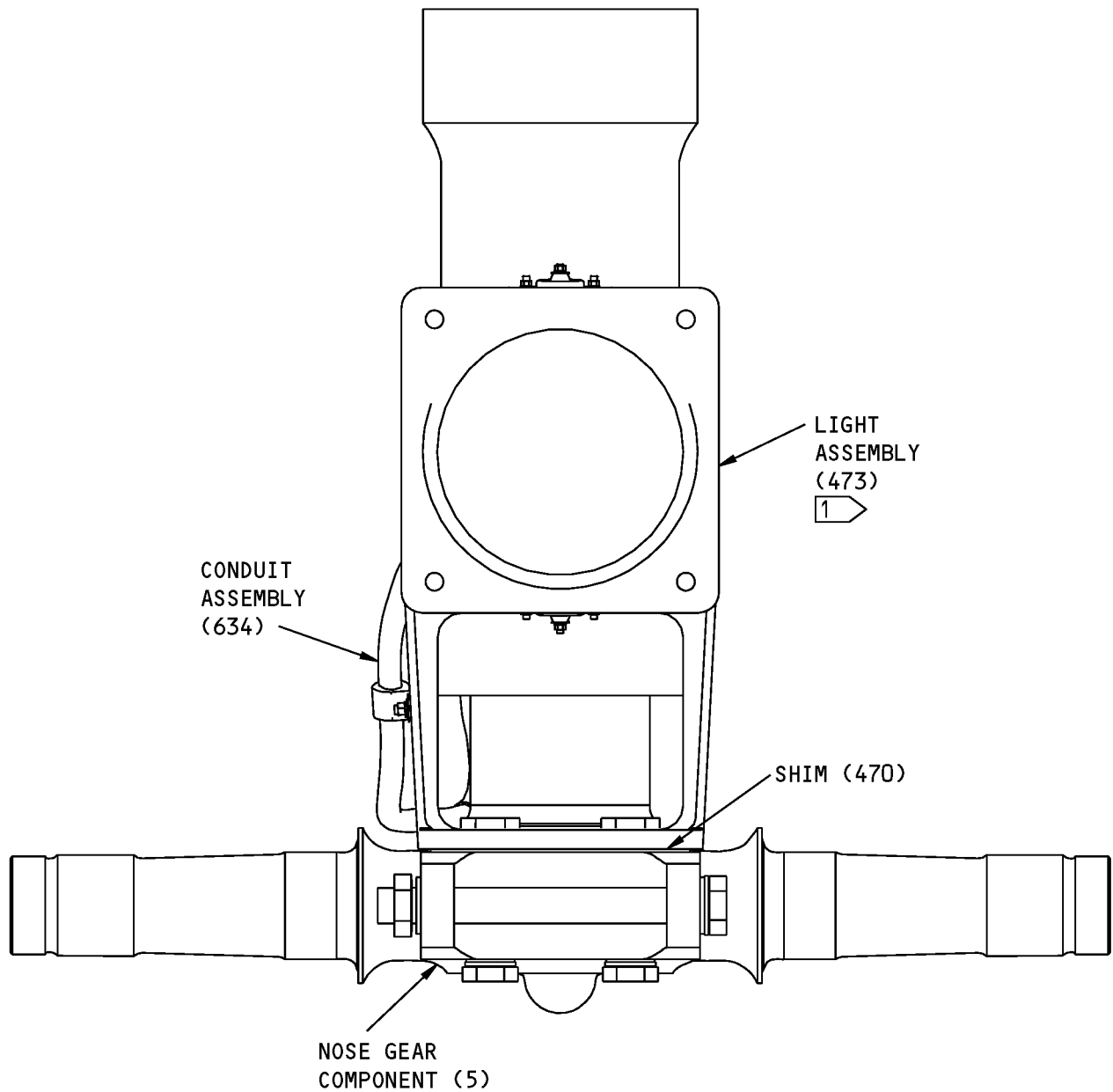
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1 REFER TO CMM 32-21-12 FOR LIGHT ASSEMBLY HARDWARE.

Light Assembly Removal
Figure 305

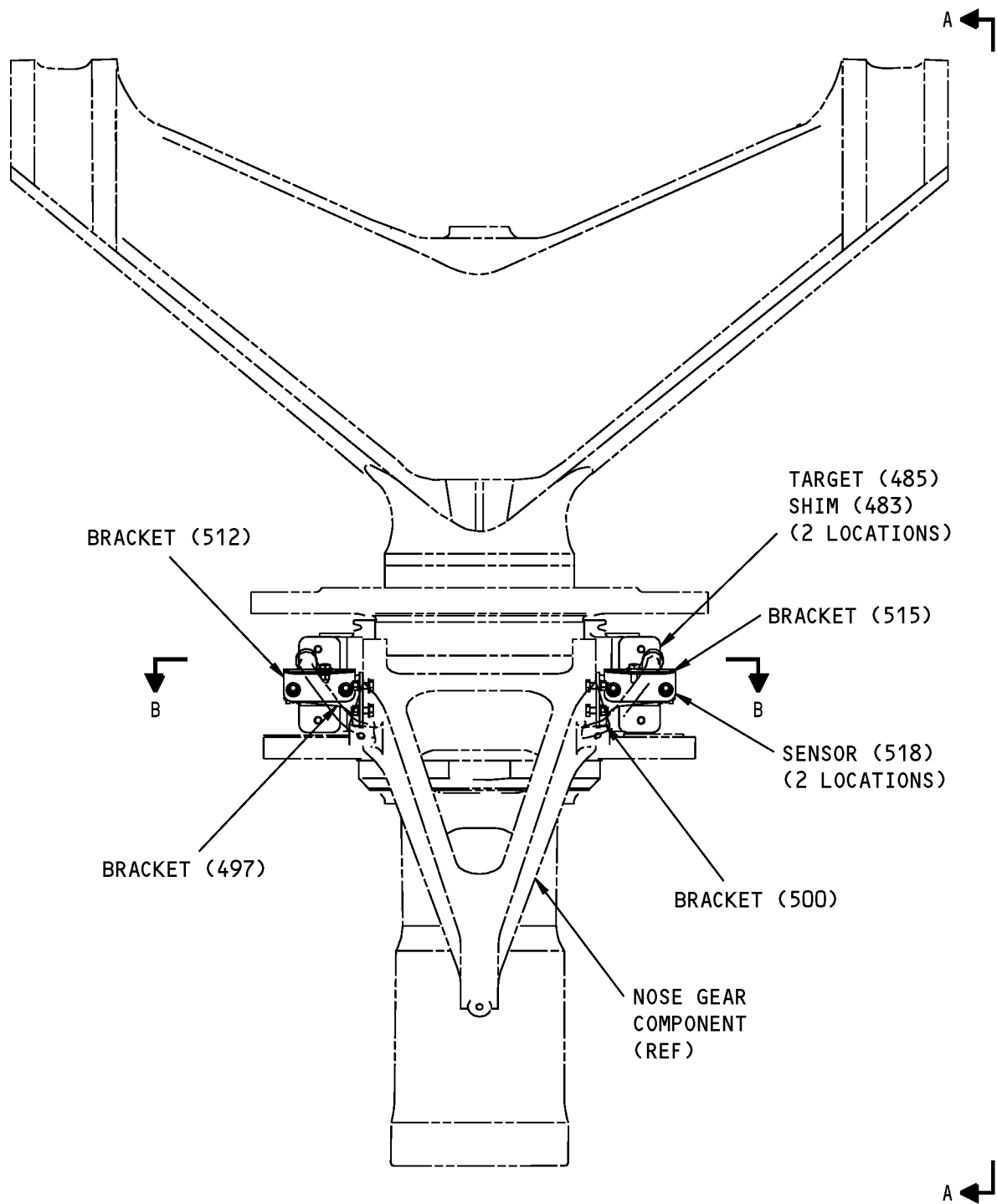
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Primary and Secondary Sensor Removal
Figure 306 (Sheet 1 of 4)

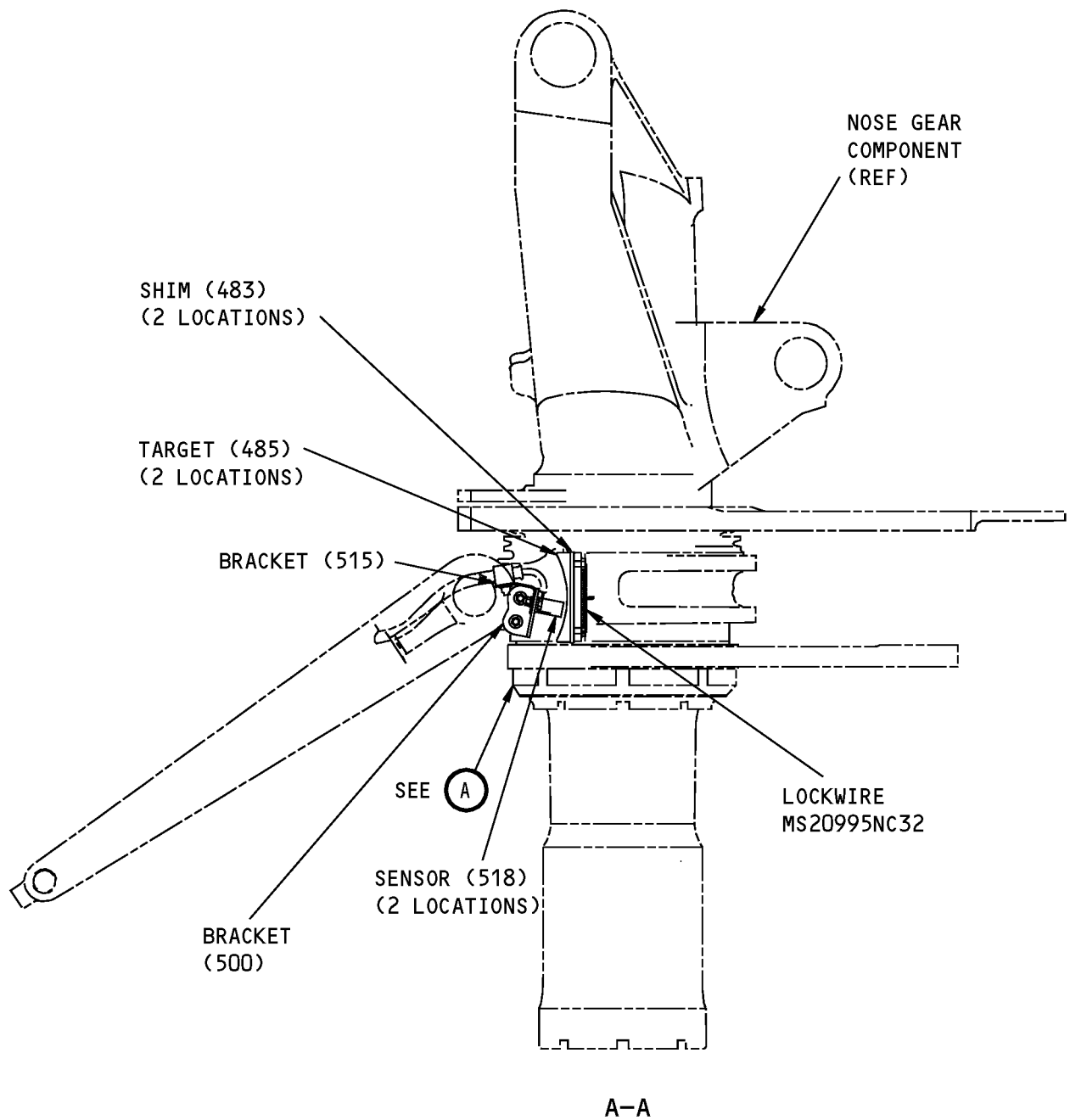
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Primary and Secondary Sensor Removal
Figure 306 (Sheet 2 of 4)

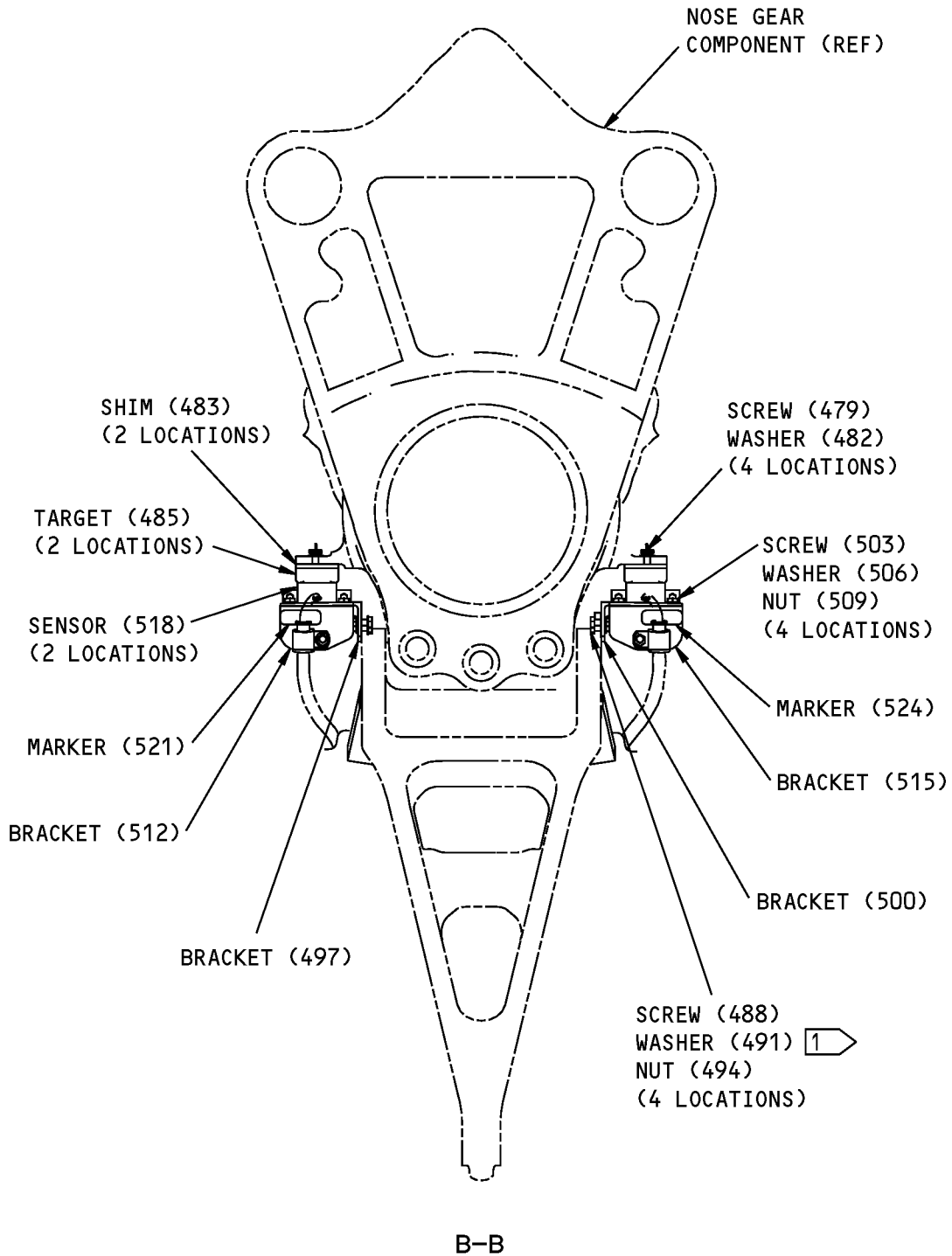
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Primary and Secondary Sensor Removal
Figure 306 (Sheet 3 of 4)

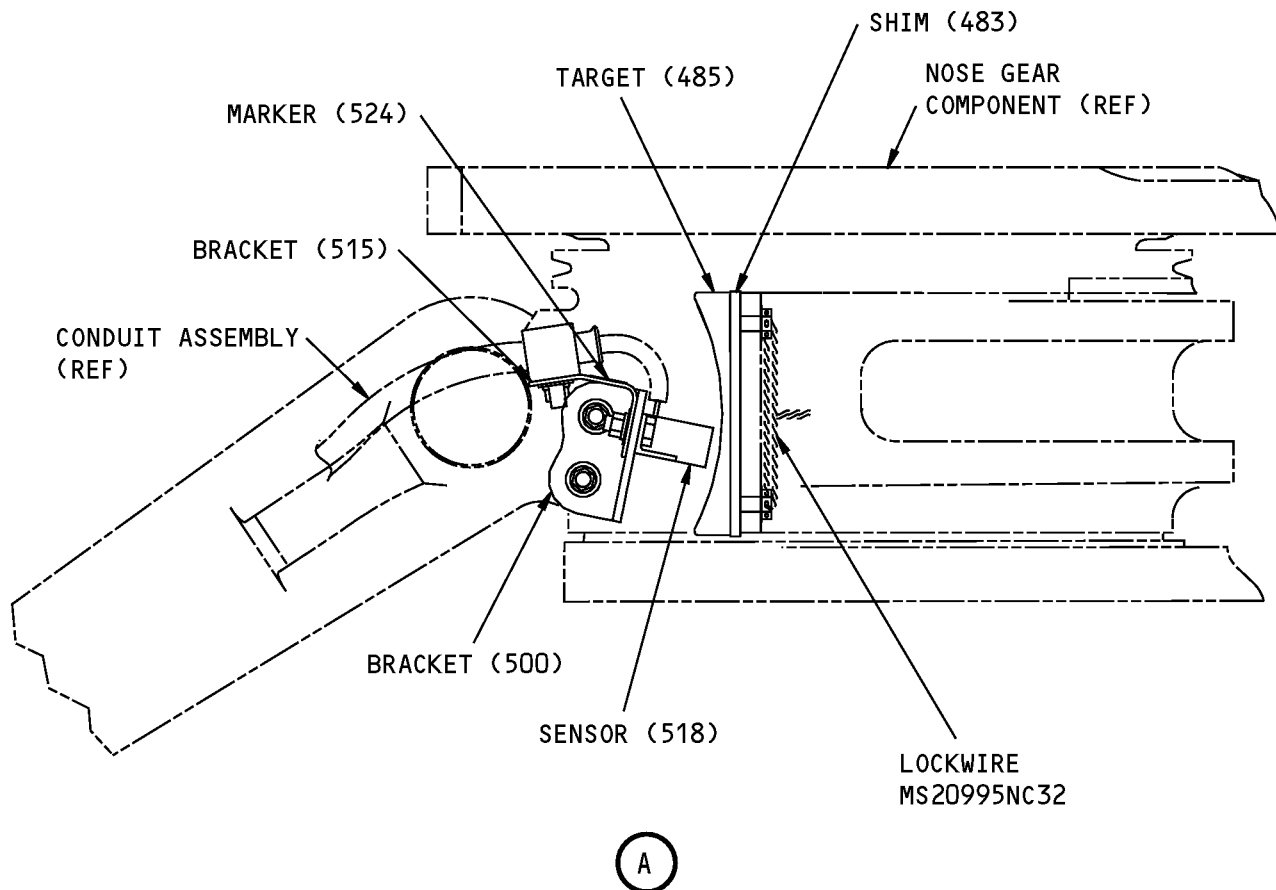
32-21-16


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 QUANTITY OF 2 IS REQUIRED

ITEM NUMBERS REFER TO IPL FIG. 1

Primary and Secondary Sensor Removal
Figure 306 (Sheet 4 of 4)

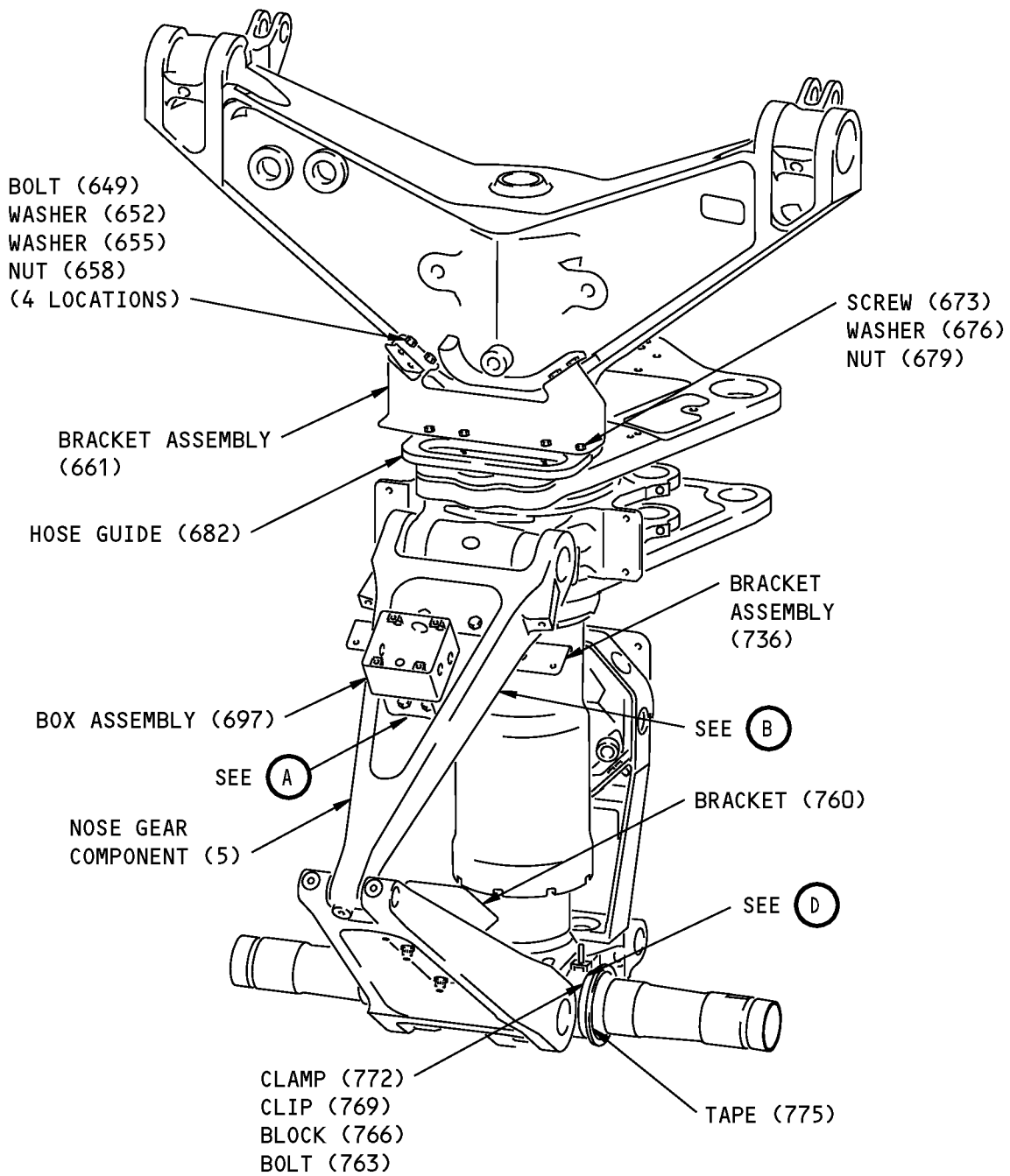
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Wire Bundle Support Bracket Installation Removal
 Figure 307 (Sheet 1 of 4)

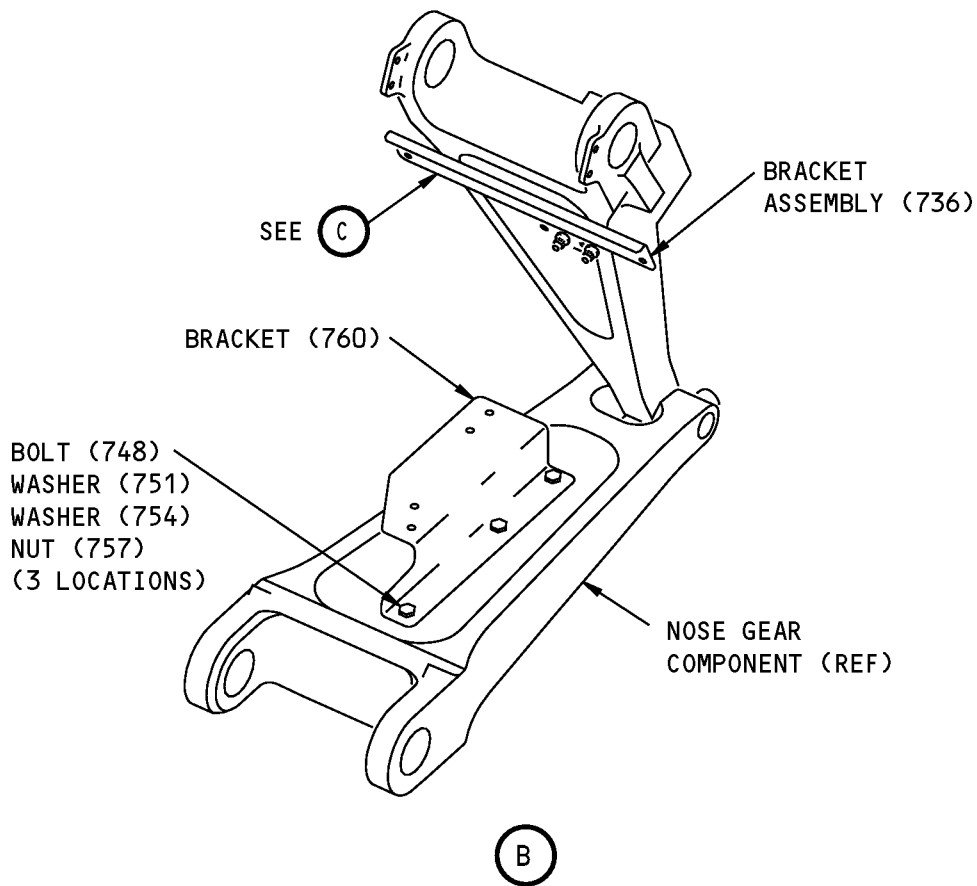
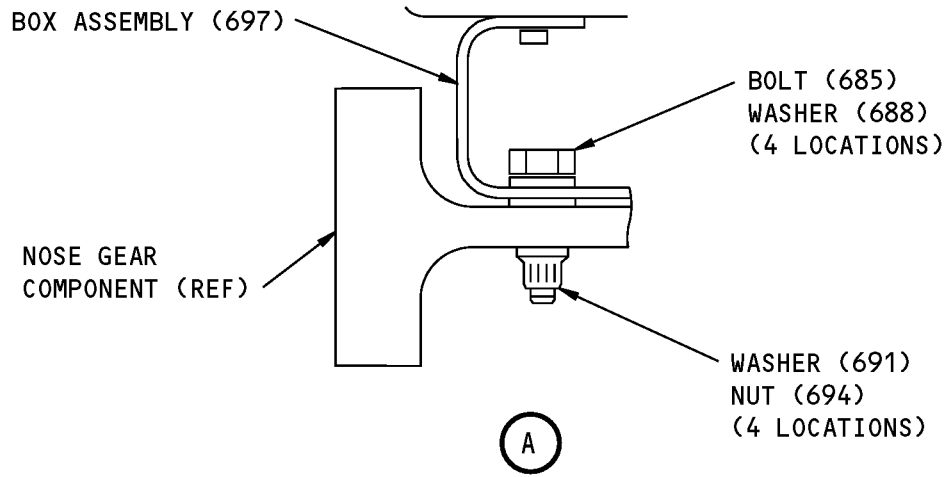
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Wire Bundle Support Bracket Installation Removal
Figure 307 (Sheet 2 of 4)

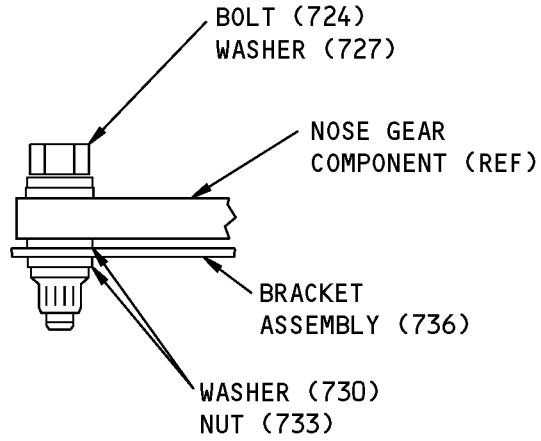
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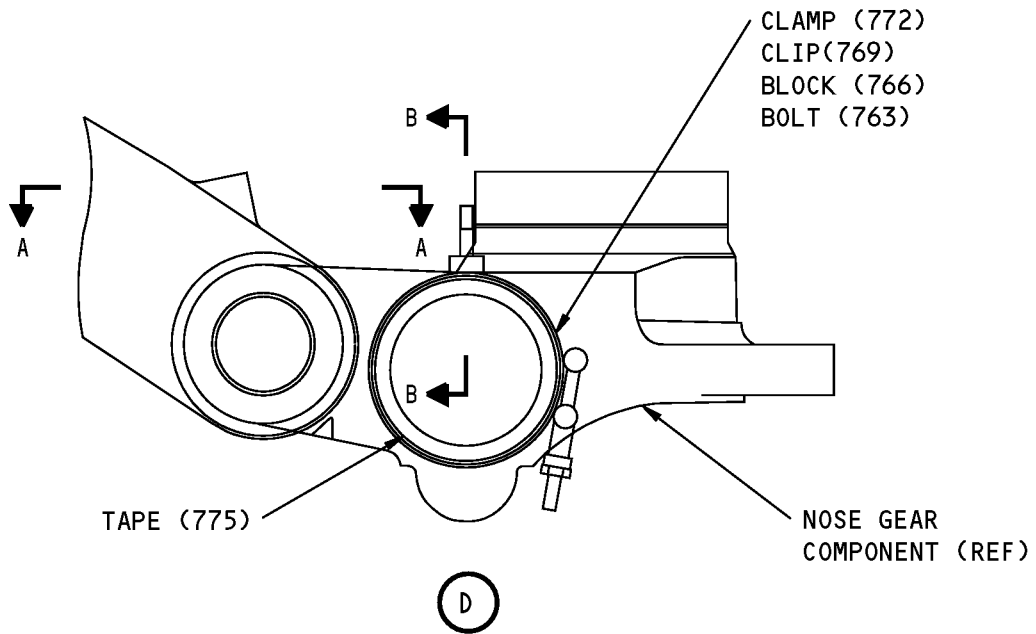
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(2 LOCATIONS)

C



Wire Bundle Support Bracket Installation Removal
Figure 307 (Sheet 3 of 4)

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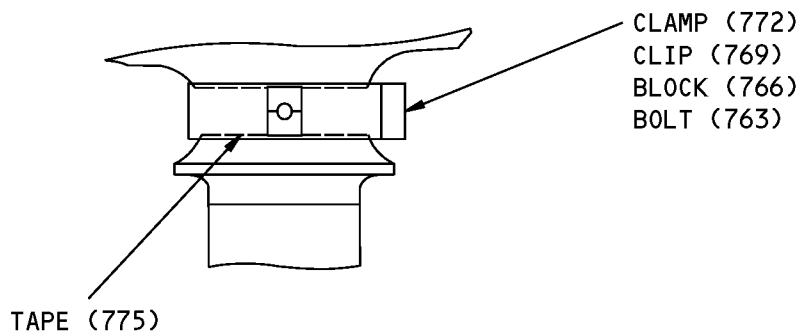
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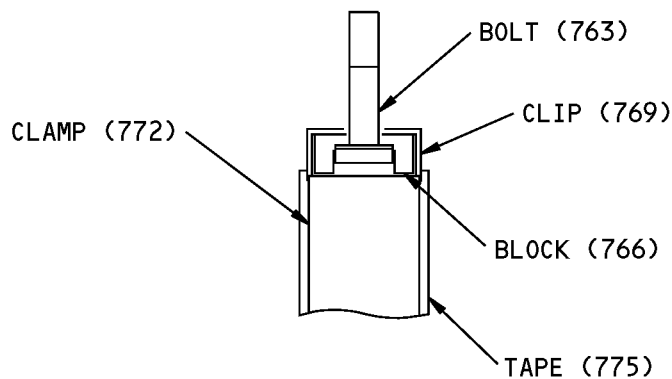
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A-A



B-B

ITEM NUMBERS REFER TO IPL FIG. 1

Wire Bundle Support Bracket Installation Removal
Figure 307 (Sheet 4 of 4)

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DISASSEMBLY

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COMPONENT MAINTENANCE MANUAL

CLEANING

1. General

- A. This procedure has the data necessary to clean the nose landing gear customer end item component assembly.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Cleaning

A. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedure

- (1) Clean all parts by standard industry procedures and the instructions in SOPM 20-30-03.

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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 specified parts.
- B. Refer to FITS AND CLEARANCES, Figure 801 for design dimensions 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 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 defects or if you think there are defects on the parts.
- (2) Do a magnetic particle check (SOPM 20-20-01) of these parts:
 - (a) Washer (29)
 - (b) Bushing (32)
- (3) Do a penetrant check (SOPM 20-20-02) of these parts:
 - (a) Standoff (185)
 - (b) Coupling (248, 248A)
 - (c) Bracket (308, 350, 446)
 - (d) Crank (374)

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CHECK

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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.

Table 601:

PART NUMBER	NAME	REPAIR
—	REFINISH OF OTHER PARTS	1-1
162A1411-1	STEERING PIN	2-1
275A5301-3	SUMMING MECHANISM	3-1
275A5302-1	CRANK ASSEMBLY	4-1
275A5302-2	CRANK	4-2
275A5303-5	BRACKET ASSEMBLY	5-1
275A5303-4	BRACKET	5-2
275A5304-1	BRACKET	6-1
275A5305-1	BRACKET ASSEMBLY	7-1
275A5305-2	BRACKET	7-2
275A5310-3	COVER ASSEMBLY	8-1
275A5311-3	BRACKET ASSEMBLY	9-1
275A5315-2	LINK ASSEMBLY	10-1
275A5320-2	BRACKET	11-1

2. Dimensioning Symbols

- A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in SOPM 20-00-00.

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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 tells how to refinish the parts which are not in the other repairs.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Refinish of Other Parts

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
C00700	Coating - Exterior Protective Enamel, Gray Gloss Enamel	BMS10-60, Type I, BAC 707
C50058	Cadmium Plate	QQ-P-416, Type II, Class 2

- B. References

Reference	Title
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

- C. Procedure

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

- D. Procedure

NOTE: For general cleaning procedures, refer to SOPM 20-30-03. For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finishe codes, refer to SOPM 20-41-01.

- (1) Refinish Details:

Table 601: Refinish Details

IPL FIG. 1 ITEM	MATERIAL	FINISH
Clamp (20)	Plastic	Apply no finish (F-25.01).
Washer (28)	Plastic	Apply no finish (F-25.01).

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REPAIR 1-1

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Table 601: Refinish Details (Continued)

IPL FIG. 1 ITEM	MATERIAL	FINISH
Washer (29)	15-5PH CRES 180-200 ksi	Passivate (F-17.25).
Bushing (32)	15-5PH CRES 180-200 ksi	Passivate (F-17.25).
Standoff (185)	Ti alloy	Apply no finish (F-25.01).
Cover (206)	Plastic	Apply no finish (F-25.01).
Bracket (401)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00175 (F-19.47). Apply coating, C00033 (F-19.39.707).
Cable guards (413, 416)	Nylon plastic	Apply no finish (F-25.01).
Standoff (431)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00175 (F-19.47). Apply coating, C00033 (F-19.39.707).
Brace (443)	15-5PH CRES 180-200 ksi	cadmium plating, C50058 and apply primer, C00259 (F-16.01). Apply coating, C00700(F-14.9813, which replaces SRF-14.9813).
Guard (464)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00175 (F-19.47). Apply coating, C00033 (F-19.39.707).
Target (485)	15-5PH CRES 125-145 ksi	cadmium plating, C50058 and apply primer, C00259 (F-16.01).
Brackets (497, 500, 512, 515)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00259 (F-20.02). Apply coating, C00700 (F-14.9813, which replaces SRF-14.9813).
Cover (572)	301 CRES	Passivate (F-17.25).
Brackets (667, 670, 698, 742, 745, 760)	Al alloy	Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply primer, C00175 (F-19.47). Apply coating, C00033 (F-19.39.707).
Hose Guide (682)	Nylon plastic	Apply no finish (F-25.01).
Transition Box (709)	302, 304, 305 or 347 CRES	Passivate (F-17.25).
Hose Guide (712)	Nylon plastic	Passivate (F-17.25).
Brackets (715, 721)	CRES	Passivate (F-17.25).

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REPAIR 1-1
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STEERING PIN - REPAIR 2-1

162A1411-1

1. General

- A. This procedure has the data necessary to repair and refinish the steering pin (26).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) of the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.
- D. General repair details:

Table 601: General Repair Details

(1) Material:	4340M Steel
(1) Heat Treat:	275-300 ksi
(1) Shot Peen:	All repaired surfaces, but not holes or threads
	Intensity 0.008-0.013A2
	Overspray is permitted

2. Steering Pin Repair

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III
C50001	Compound - Corrosion Preventive, Petroleum Hot Application (Hard Film)	MIL-C-11796, Class I

- B. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-42-03	HARD CHROME PLATING
SOPM 20-44-04	APPLICATION OF URETHANE COMPATIBLE PRIMER
SOPM 20-60-02	FINISHING MATERIALS

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

NOTE: For shot peening, refer to SOPM 20-10-03. For stripping of protective finishes, refer to SOPM 20-30-02. For finishing materials, refer to SOPM 20-60-02. For hard chrome plating, refer to SOPM 20-42-03. For application of Urethane compatible primer, refer to SOPM 20-44-04. For repair of high-strength steel landing gear parts, refer to 32-00-05.

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REPAIR 2-1

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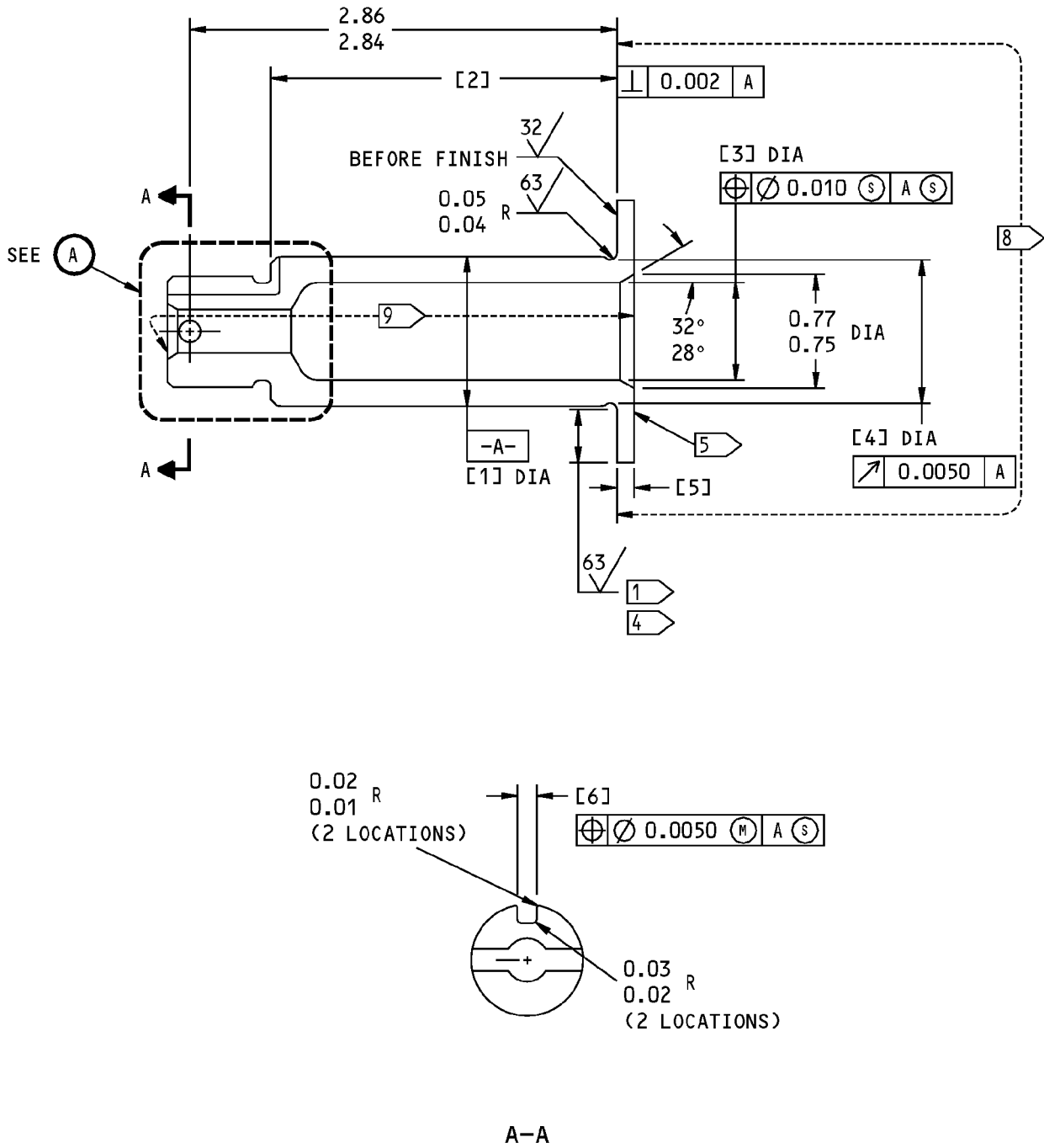
- (1) Machine as required, within repair limits, to remove defects.
- (2) Shot peen as indicated.
- (3) Build up with chrome plate and grind to design dimensions and finish.
- (4) Refinish other surfaces as indicated using primer, C00175, coating, C00033 and compound, C50001

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REPAIR 2-1
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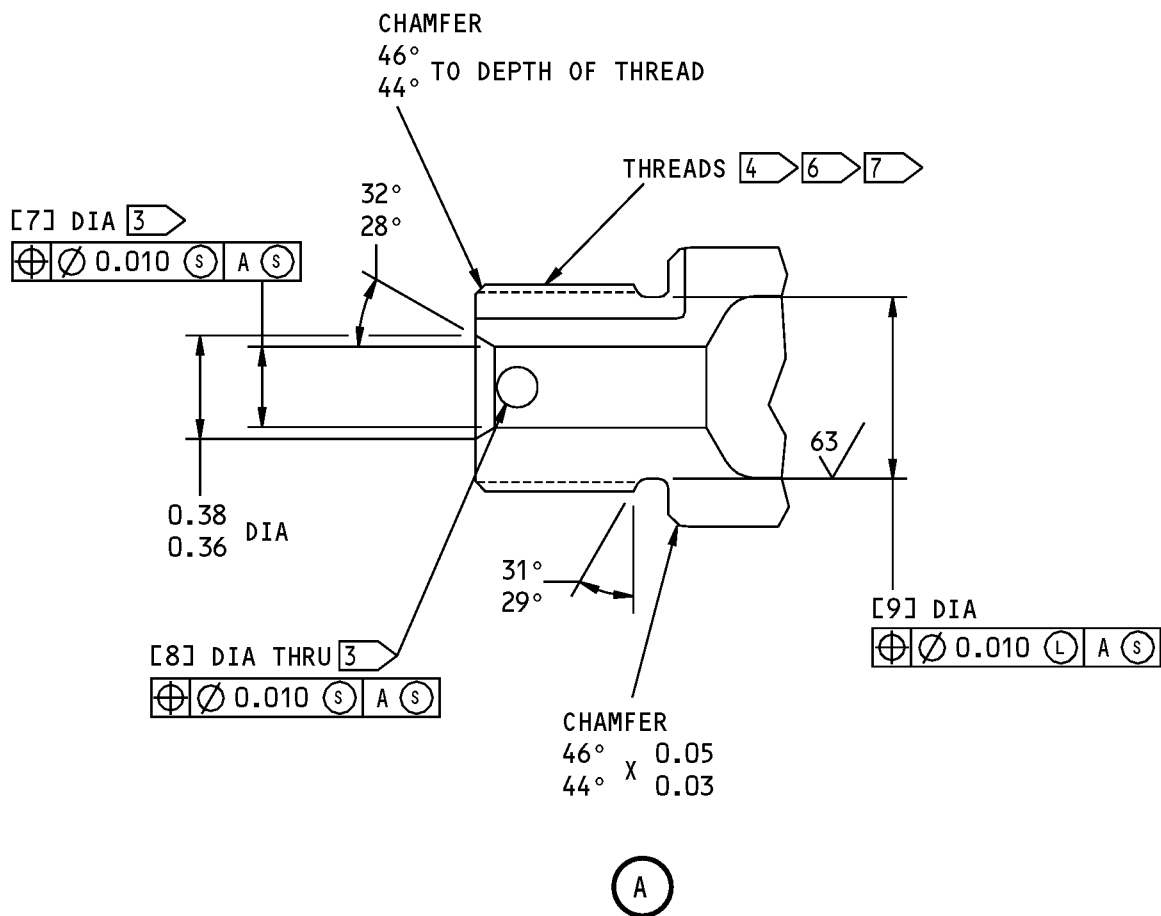


162A1411-1 Steering Pin Repair
Figure 601 (Sheet 1 of 3)

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REPAIR 2-1
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REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
DESIGN DIMENSION	0.999 0.998 [10]	2.32 2.30	0.66 0.64	0.96 0.95	0.12 0.11	0.130 0.125	0.30 0.28	0.151 0.141	0.66 0.65
REPAIR LIMIT	0.978 [11]	---	---	---	---	---	---	---	---

162A1411-1 Steering Pin Repair
Figure 601 (Sheet 2 of 3)

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REPAIR 2-1
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- | | |
|--|---|
| <p>1 CHROME PLATE (F-15.34) 0.001-0.002
MINIMUM THICK. DO NOT GRIND</p> <p>2 CHROME PLATE (F-15.34) 0.003 INCH
MINIMUM THICKNESS. PUT A 0.08
MAX RUNOUT AT EDGES AND RELIEFS</p> <p>3 SHOT PEEN IS NOT NECESSARY ON THIS
SURFACE. OVERSPRAY IS PERMITTED</p> <p>4 WIPE THE CHROME WITH PRIMER
(F-19.451)</p> <p>5 PART NUMBER AND SERIAL NUMBER
LOCATION</p> <p>6 CHROME PLATE (F-15.32)</p> <p>7 DO NOT SHOT PEEN THE THREADS</p> <p>8 CADMIUM-TITANIUM PLATE (F-15.01).
APPLY BMS 10-79, TYPE 3 PRIMER
(F-19.47), AND BMS 10-60 TYPE 2
ENAMEL (F-19-39.707)</p> <p>9 CADMIUM-TITANIUM PLATE (F-15.01).
APPLY BMS 10-79, TYPE 3 PRIMER
(F-19.66), AND MIL-C-11796, CLASS 1
CORROSION PREVENTITIVE COMPOUND
(F-19.03)</p> <p>10 AFTER PLATING</p> <p>11 LIMIT FOR CHROME PLATE BUILDUP
(SOPM 20-42-03) AND GRIND TO DESIGN
DIMENSIONS AND FINISH (SOPM 20-10-04)</p> | <p>125/ ALL MACHINED SURFACES UNLESS
SHOWN DIFFERENTLY</p> <p>BREAK ALL SHARP EDGES</p> <p>ITEM NUMBERS REFER TO IPL FIG. 1</p> <p>ALL DIMENSIONS ARE IN INCHES</p> <p>ALL DIMENSIONS APPLY BEFORE PLATING
UNLESS SHOWN DIFFERENTLY</p> <p>DIMENSIONS AND SURFACE FINISHES APPLY
BEFORE SHOT PEENING UNLESS SHOWN
DIFFERENTLY</p> |
|--|---|

162A1411-1 Steering Pin Repair
Figure 601 (Sheet 3 of 3)

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REPAIR 2-1
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COMPONENT MAINTENANCE MANUAL

SUMMING MECHANISM ASSEMBLY - REPAIR 3-1

275A5301-3

1. General

- A. This procedure has the data necessary to repair the summing mechanism assembly (266).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Bearing Replacement and Bushing

A. References

Reference	Title
SOPM 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT

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

NOTE: For bolt and nut installation, refer to SOPM 20-50-01. For bearing and bushing replacement, refer to SOPM 20-50-03.

- (1) Remove bolt (320), washer (323), bushings (326, 332), nut (335), and bracket assembly (338) from crank assembly (353).
- (2) Remove bearing (329) and bushing (332) from the crank assembly (353). The upper bearing (359) is part of the crank assembly (REPAIR 4-1).
- (3) Install bushing (332) and a replacement bearing (329) into the crank assembly (353).

3. Pulley Replacement

A. References

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

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

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

- (1) Remove bolt(s) (269), washer(s) (272), the bushing(s) (275), nut(s) (278), and pulley (281) from the bracket assembly (296).
- (2) Install a replacement pulley (281) onto bracket assembly (296) with bolt(s) (269), washer(s) (272), bushing(s) (275), and nut(s) (278).
- (3) Tighten bolt(s) (269) 50-70 pound-inches above the run-on torque as identified by flagnote 1.

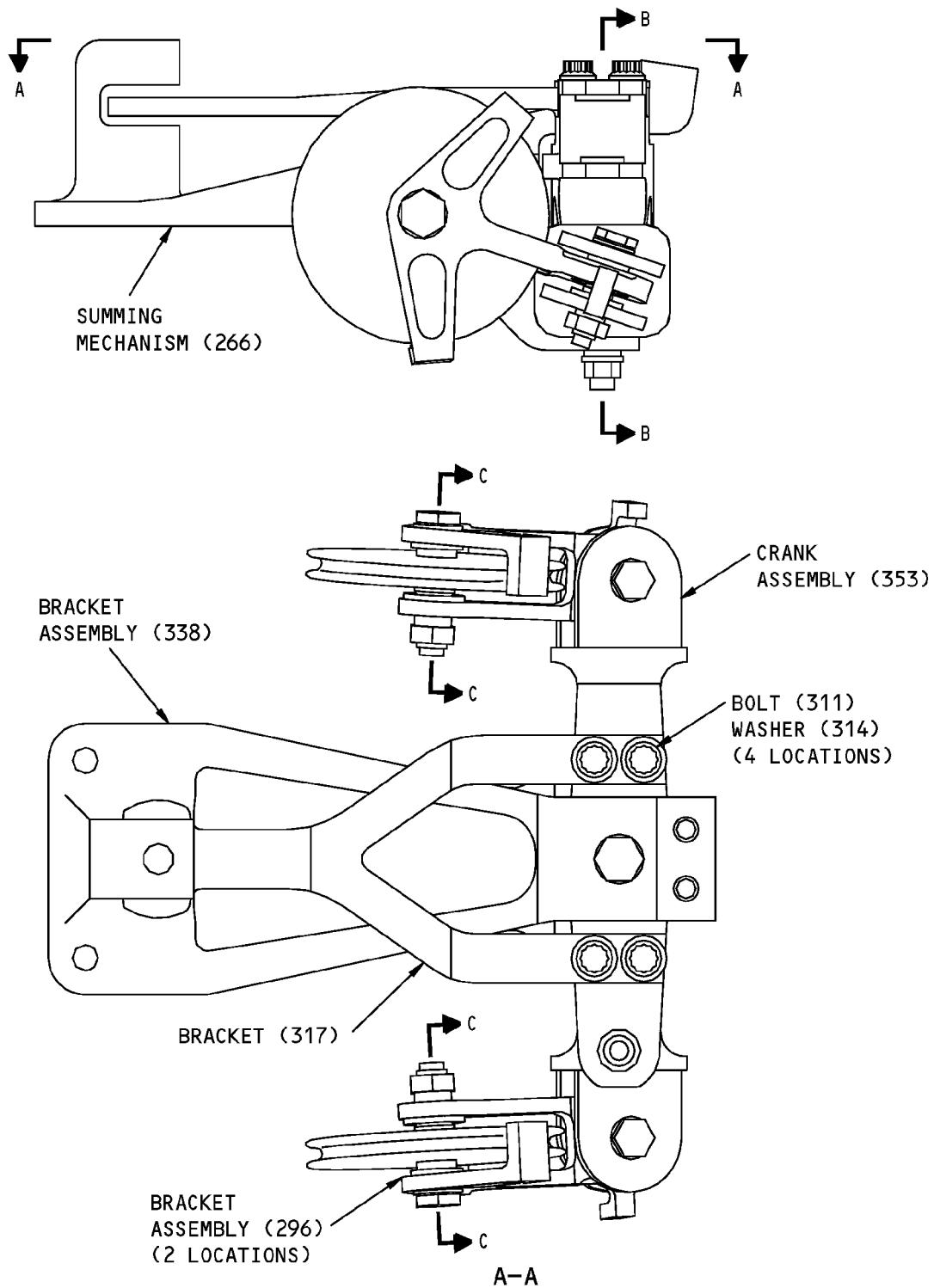
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REPAIR 3-1

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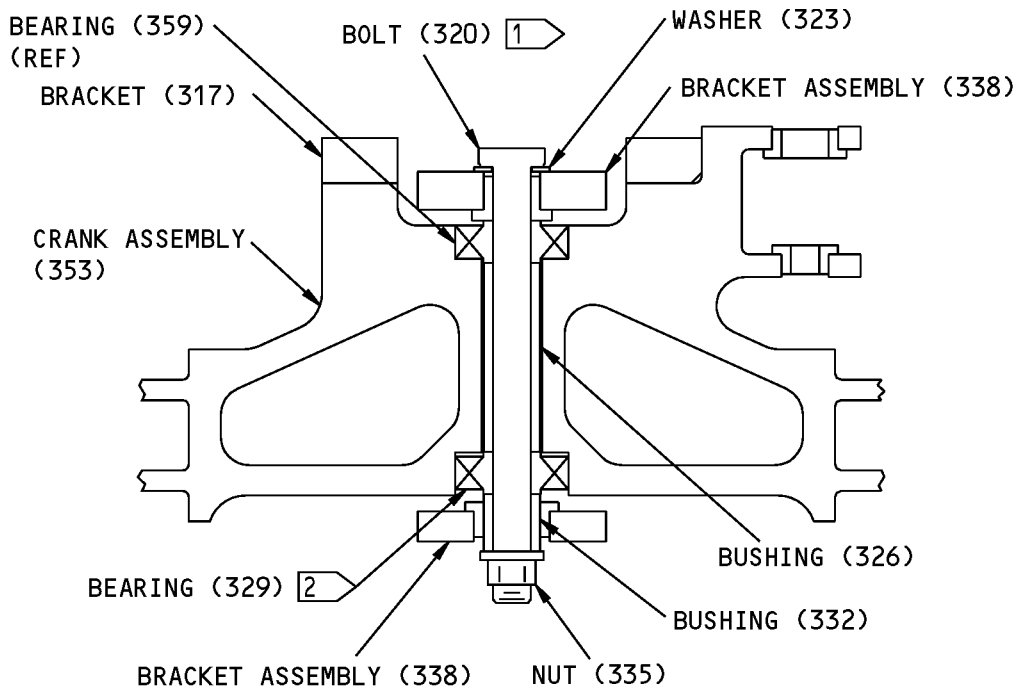


275A5301-3 Summing Mechanism Assembly Repair
Figure 601 (Sheet 1 of 2)

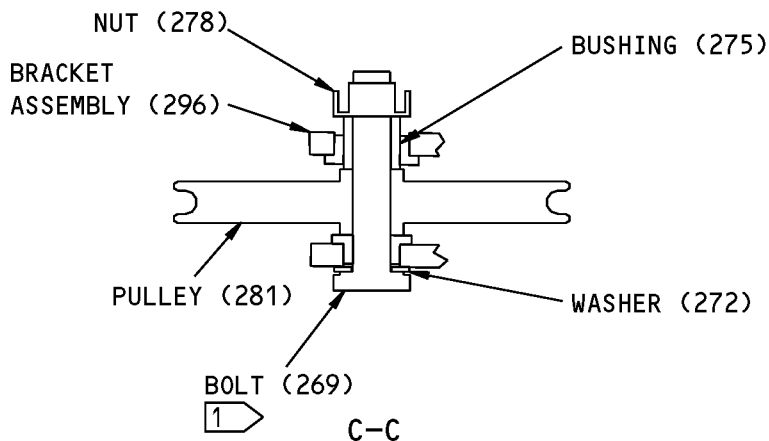
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REPAIR 3-1
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B-B



C-C

1 TIGHTEN THIS BOLT 50-70 POUND-INCHES ABOVE THE RUN-ON TORQUE

ITEM NUMBERS REFER TO IPL FIG. 1

2 INSTALL THIS BEARING BY SHRINK-FIT PROCEDURE AS SHOWN IN SOPM 20-50-03

275A5301-3 Summing Mechanism Assembly Repair
Figure 601 (Sheet 2 of 2)

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REPAIR 3-1
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CRANK ASSEMBLY - REPAIR 4-1

275A5302-1

1. General

- A. This procedure has the data necessary to repair the crank assembly (353).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Bearing Replacement

- A. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT

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

NOTE: For bearing and bushing replacement, refer to SOPM 20-50-03.

- (1) Remove the old bearing (359) from the crank (374).
- (2) Install a replacement bearing (359) and roller swage it in position.

3. Bushing Replacement

- A. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT

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

NOTE: For bearing and bushing replacement, refer to SOPM 20-50-03.

- (1) Remove the old bushing(s) (362, 365, 368, or 371) from the crank (374).
- (2) Install replacement bushing(s) (362, 365, 368, or 371) by the shrink-fit method.

4. Insert Replacement

- A. Procedure

- (1) Remove the bad insert(s) (356) from the crank (374), as shown in REPAIR 4-1, Figure 601.
- (2) Install replacement insert(s) (356) into the crank (374), as shown in REPAIR 4-1, Figure 601.

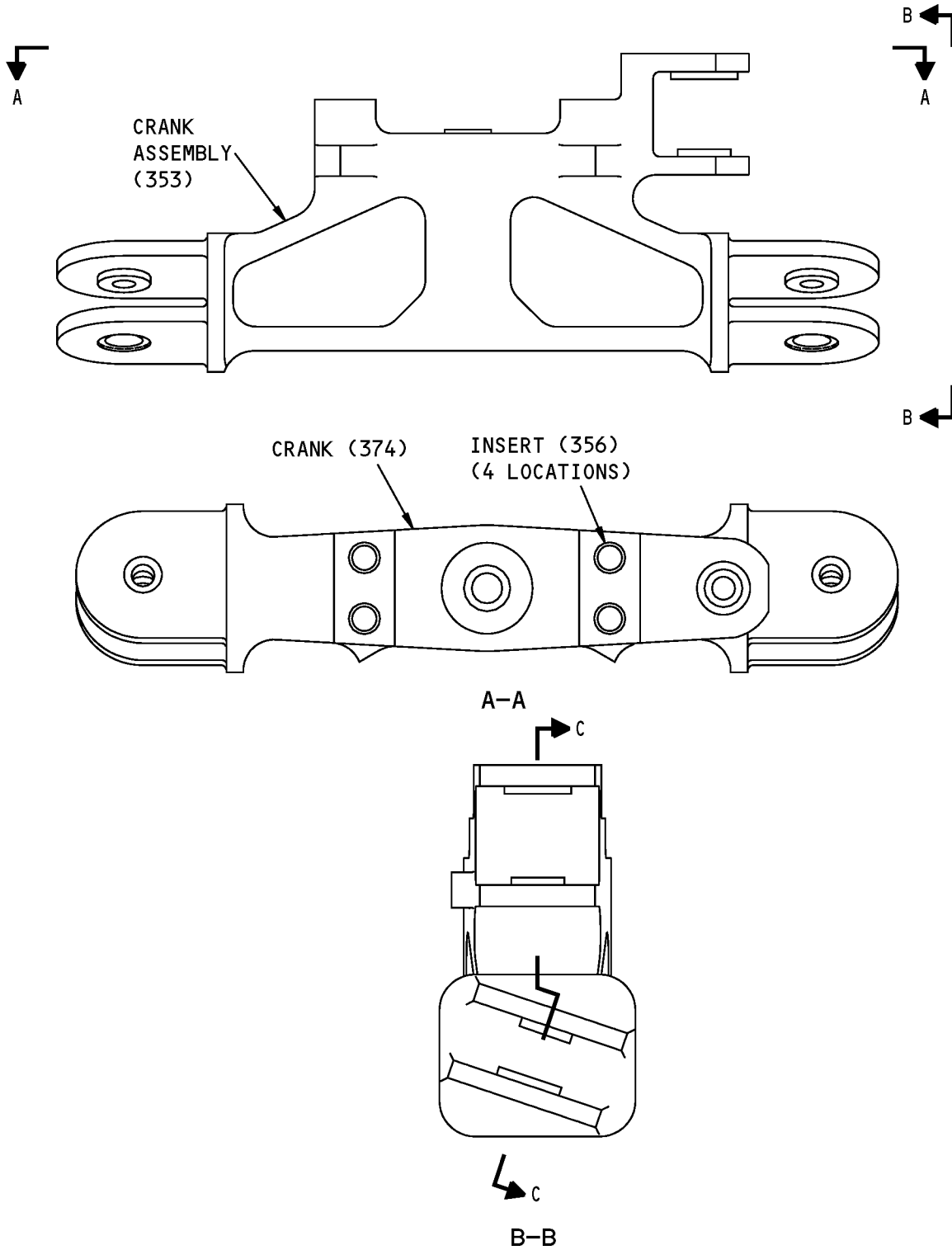
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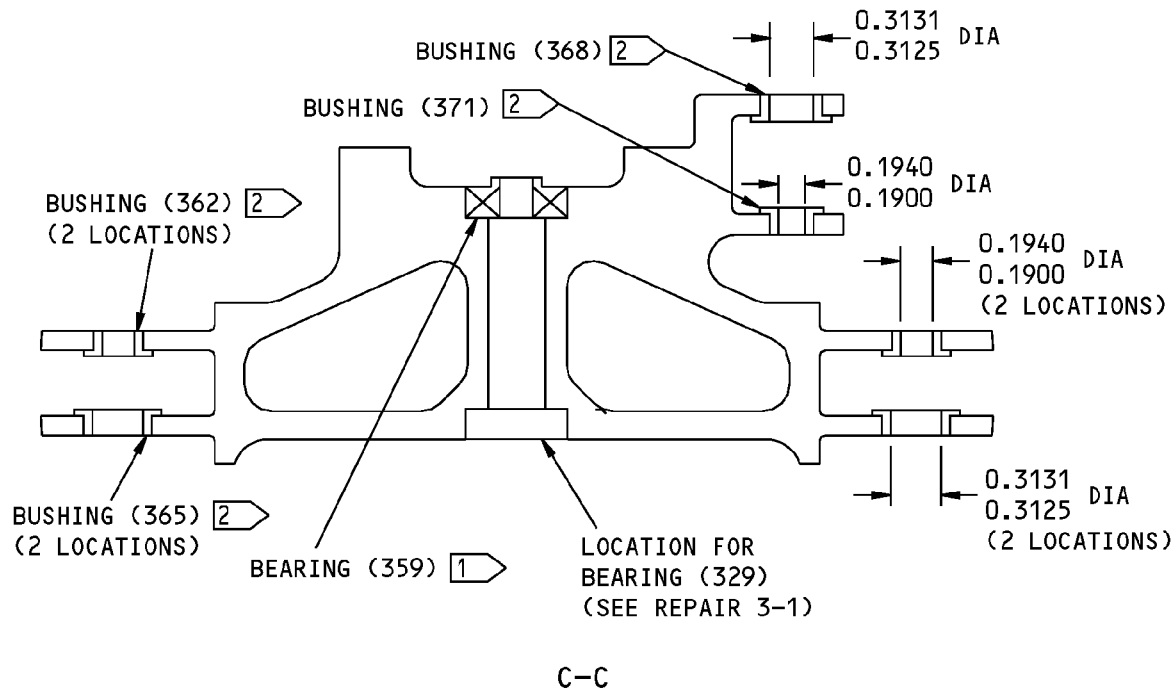


275A5302-1 Crank Assembly Repair
Figure 601 (Sheet 1 of 2)

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REPAIR 4-1
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1 INSTALL BEARING BY SHRINK-FIT PROCEDURE AS SHOWN IN SOPM 20-50-03

2 INSTALL BUSHING BY SHRINK-FIT PROCEDURE AS SHOWN IN SOPM 20-50-03

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

275A5302-1 Crank Assembly Repair
Figure 601 (Sheet 2 of 2)

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REPAIR 4-1

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CRANK - REPAIR 4-2

275A5302-2

1. General

- A. This procedure has the data necessary to refinish the crank (374).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.
- D. General repair details:
 - (1) Material: Aluminum alloy

2. Crank Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

- B. References

Reference	Title
SOPM 20-43-01	CHROMIC ACID ANODIZING

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

NOTE: For chromic acid anodizing, refer to SOPM 20-43-01.

- (1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31).
- (2) Apply primer, C00259 (F-20.03) all over the part unless shown by flagnote 1.

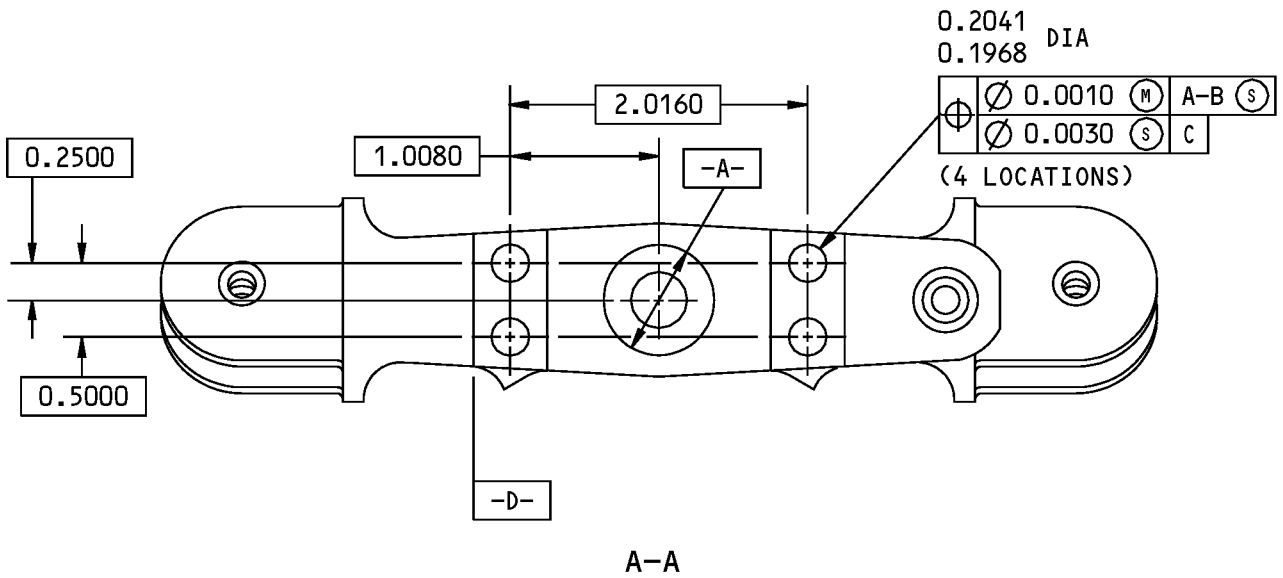
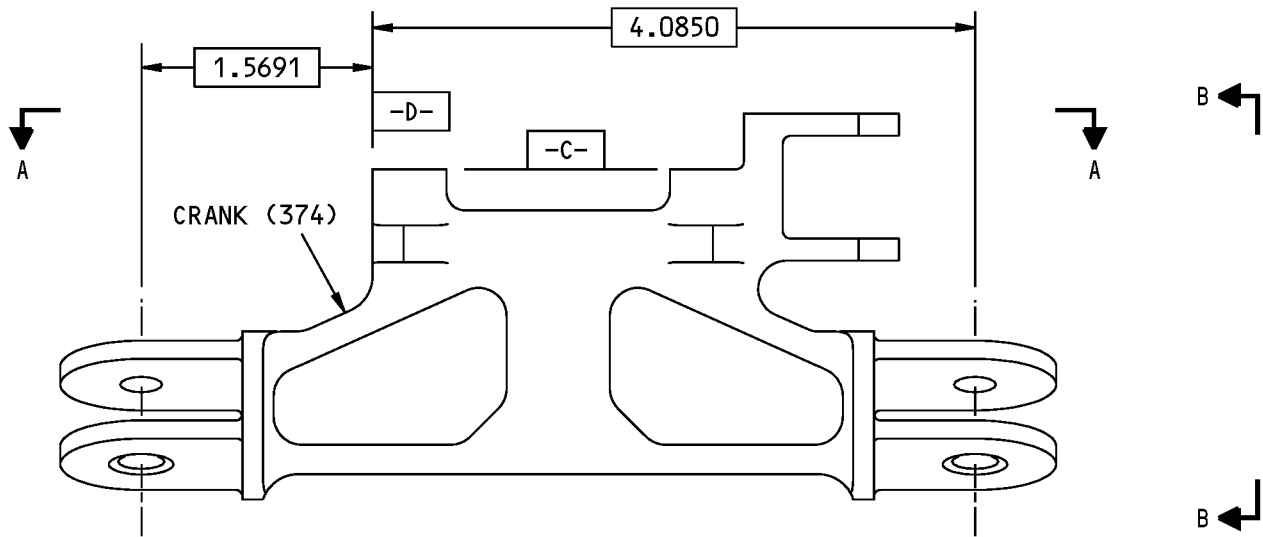
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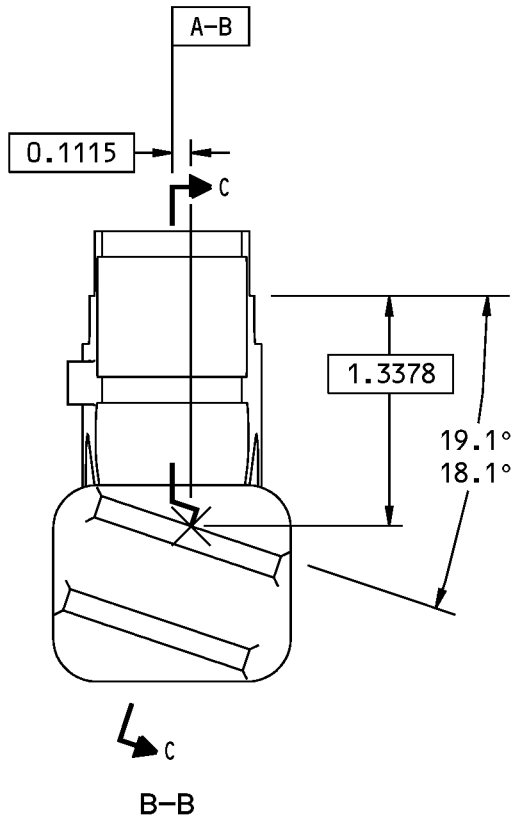


275A5302-2 Crank Repair
Figure 601 (Sheet 1 of 3)

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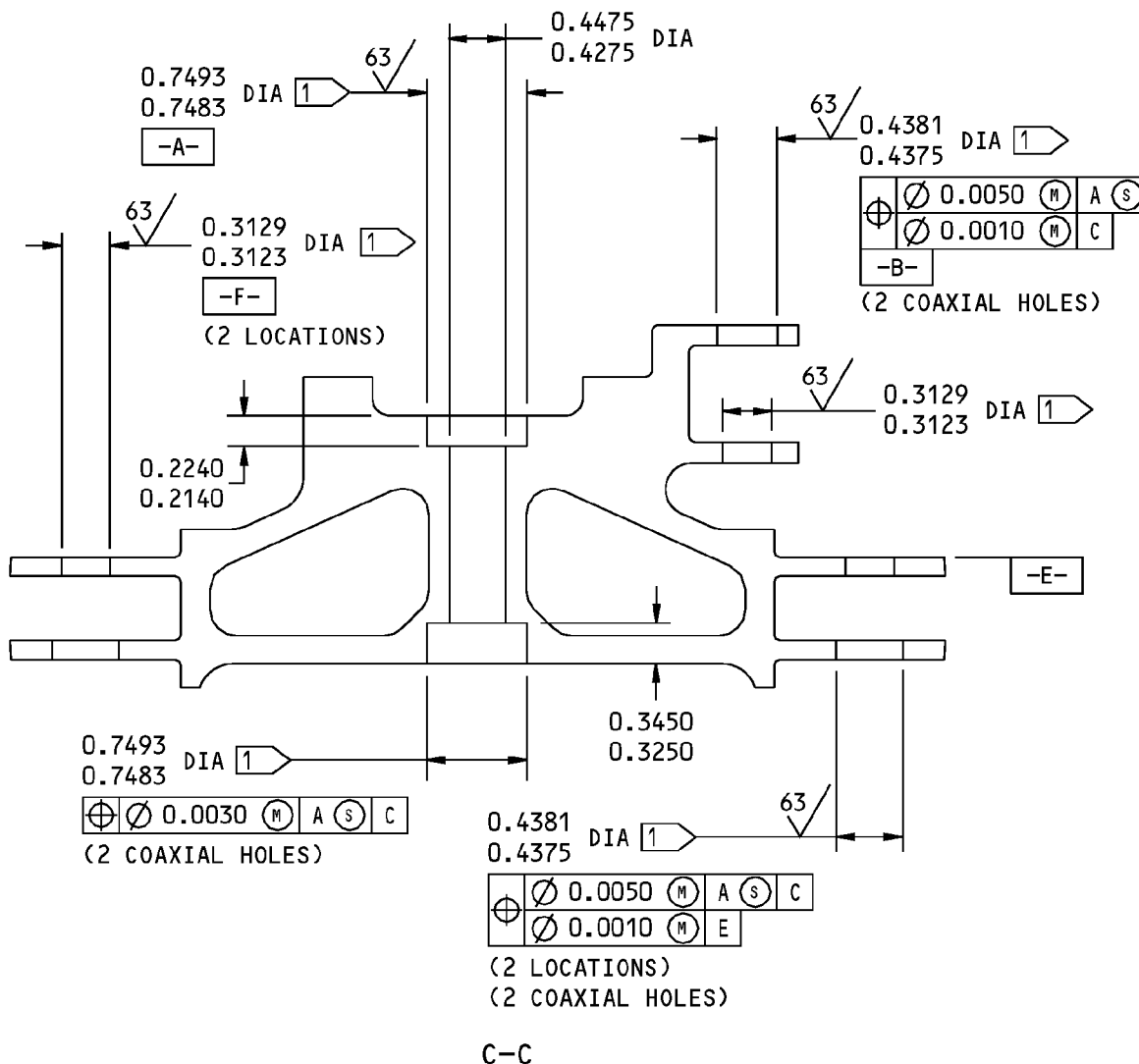


275A5302-2 Crank Repair
Figure 601 (Sheet 2 of 3)

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REPAIR 4-2
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COMPONENT MAINTENANCE MANUAL



1 DO NOT PUT PRIMER ON THIS SURFACE

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

275A5302-2 Crank Repair
Figure 601 (Sheet 3 of 3)

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REPAIR 4-2

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COMPONENT MAINTENANCE MANUAL

BRACKET ASSEMBLY - REPAIR 5-1

275A5303-5

1. General

- A. This procedure has the data necessary to repair the bracket assembly (296).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Bearing Replacement

A. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT

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

NOTE: For bearing and bushing replacement, refer to SOPM 20-50-03.

- (1) Remove the old bearing (299) from the bracket (308).
- (2) If you find defects on the bracket, refer to REPAIR 5-2 for repair instructions.
- (3) Install a replacement bearing (299) into the bracket (308) by the roller or anvil swage procedure as shown in SOPM 20-50-03.

3. Bushing Replacement

A. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT

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

NOTE: For bearing and bushing replacement, refer to SOPM 20-50-03.

- (1) Remove the bushing(s) (302 or 305) from the bracket (308).
- (2) If you find defects on the bracket, refer to REPAIR 5-2 for repair instructions.
- (3) Install replacement bushing(s) (302 or 305) into the bracket (308) by the shrink-fit procedure as shown in SOPM 20-50-03.

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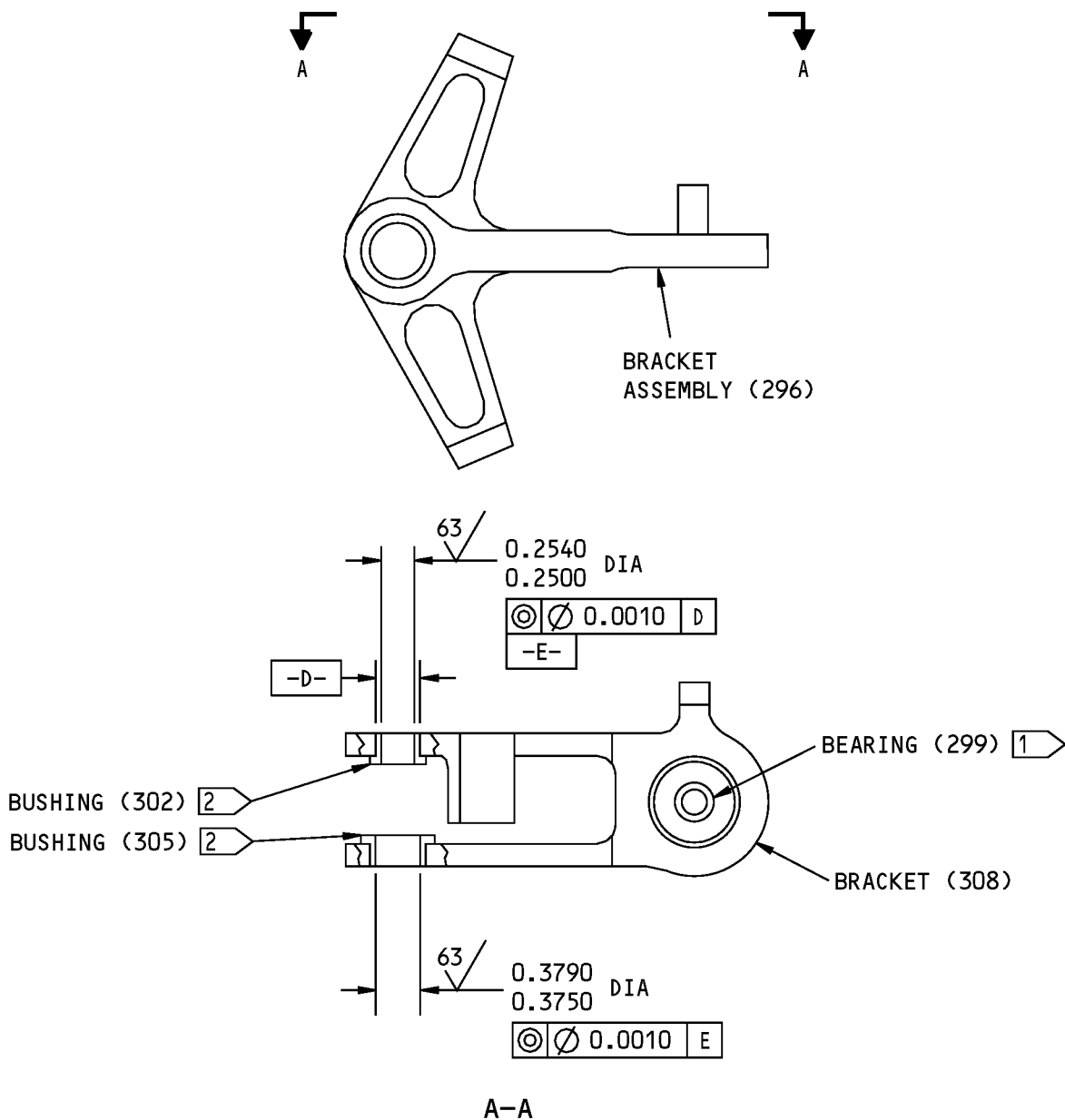
REPAIR 5-1

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- 1 INSTALL THIS BEARING BY ROLLER OR ANVIL SWAGE PROCEDURE AS SHOWN IN SOPM 20-50-03
- 2 INSTALL THIS BUSHING BY SHRINK-FIT PROCEDURE AS SHOWN IN SOPM 20-50-03

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

275A5303-5 Bracket Assembly Repair
Figure 601

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REPAIR 5-1
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COMPONENT MAINTENANCE MANUAL

BRACKET - REPAIR 5-2

275A5303-4

1. General

- A. This procedure has the data necessary to refinish the bracket (308).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.
- D. General Repair details:
 - (1) Material: Aluminum alloy

2. Bracket 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 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-17.31).
- (2) Apply primer, C00259 (F-20.03) all over the part unless shown by flagnote 1.

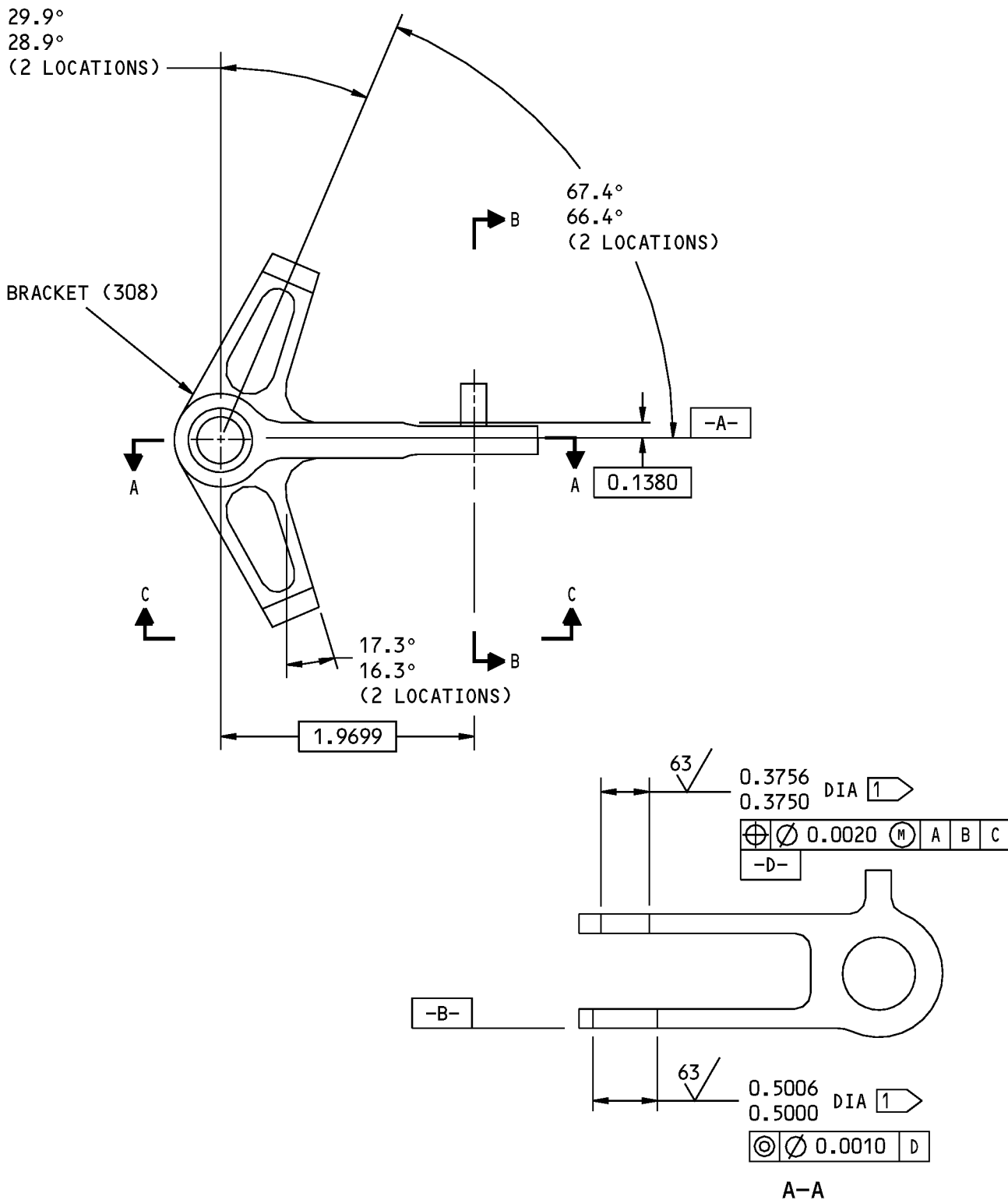
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REPAIR 5-2

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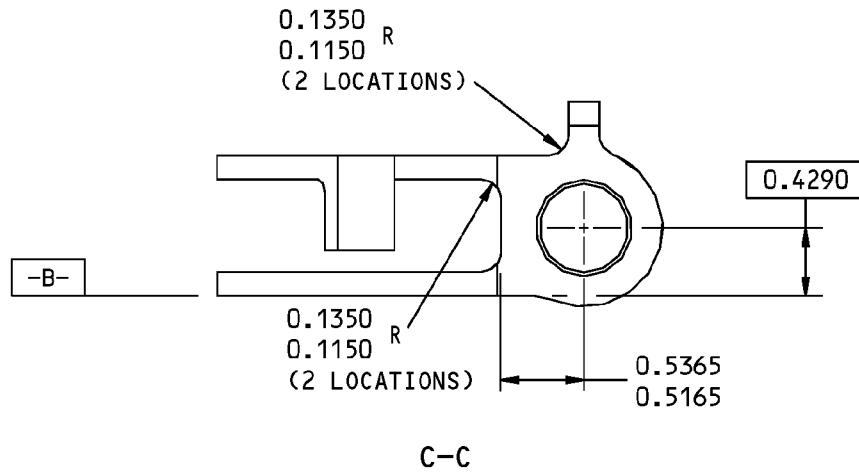
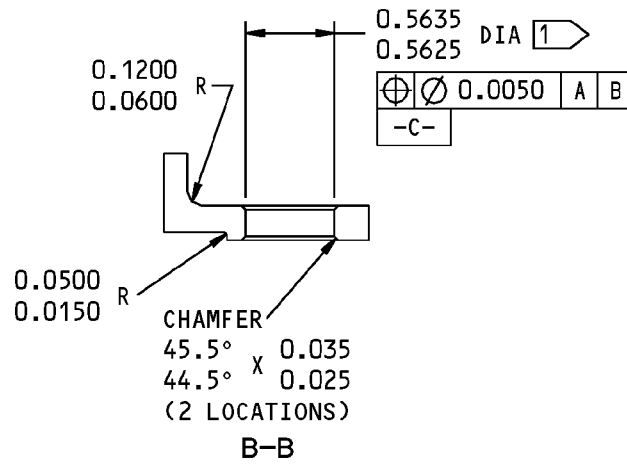
275A5303-4 Bracket Repair
Figure 601 (Sheet 1 of 2)

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REPAIR 5-2
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COMPONENT MAINTENANCE MANUAL



1 DO NOT PUT PRIMER IN THIS HOLE

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

275A5303-4 Bracket Repair
Figure 601 (Sheet 2 of 2)

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REPAIR 5-2

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COMPONENT MAINTENANCE MANUAL

BRACKET - REPAIR 6-1

275A5304-1

1. General

- A. This procedure has the data necessary to refinish the bracket (317).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.
- D. General repair details:
 - (1) Material: Aluminum alloy

2. Bracket Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

- 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 6-1, Figure 601)

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

- (1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31) all over.
- (2) Apply primer, C00175 (F-19.47) all over unless shown by flagnote 2.
- (3) Apply enamel coating, C00033 (F-19.39-707) all over unless shown by flagnote 2.

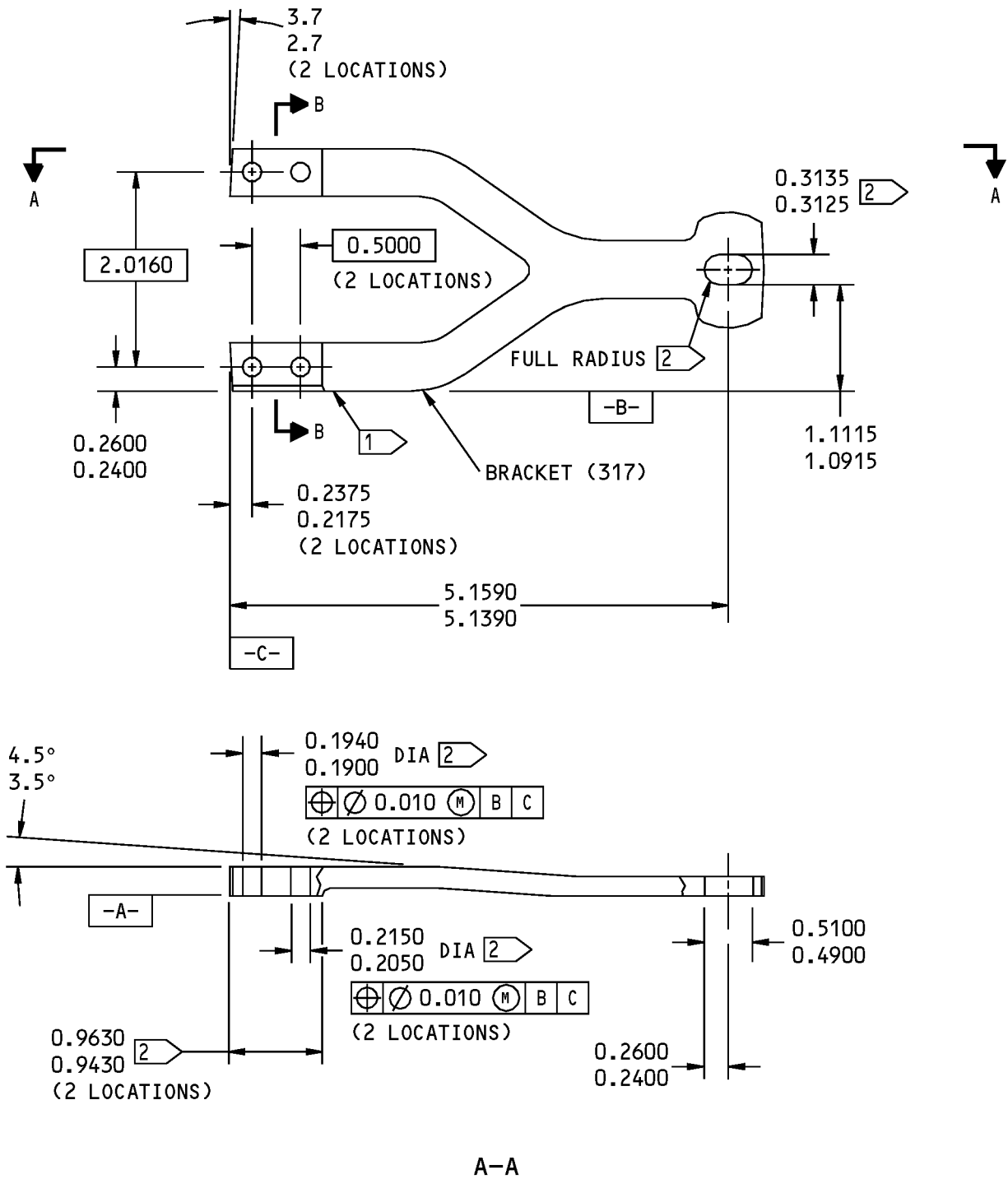
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REPAIR 6-1

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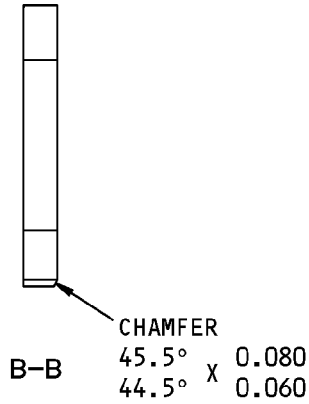
275A5304-1 Bracket Repair
Figure 601 (Sheet 1 of 2)

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REPAIR 6-1
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COMPONENT MAINTENANCE MANUAL



- 1 BLEND IF NECESSARY
- 2 DO NOT PUT FINISH HERE

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

275A5304-1 Bracket Repair
Figure 601 (Sheet 2 of 2)

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REPAIR 6-1

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COMPONENT MAINTENANCE MANUAL

BRACKET ASSEMBLY - REPAIR 7-1

275A5305-1

1. General

- A. This procedure has the data necessary to repair the bracket assembly (338).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Insert Replacement

- A. Procedure
 - (1) Remove the old insert(s) (341) from the bracket (350).
 - (2) Install replacement insert(s) (341) into the bracket (350).

3. Bushing Replacement

- A. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT

- B. Procedure (REPAIR 7-1, Figure 601)

NOTE: For bearing and bushing replacement, refer to SOPM 20-50-03.

- (1) Remove the old bushing(s) (344, 347) from the bracket (350).
- (2) If you find defects on the bracket, refer to REPAIR 7-2 for repair instructions.
- (3) Install replacement bushing(s) (344, 347) into the bracket (350) by the shrink-fit procedure as shown in SOPM 20-50-03.

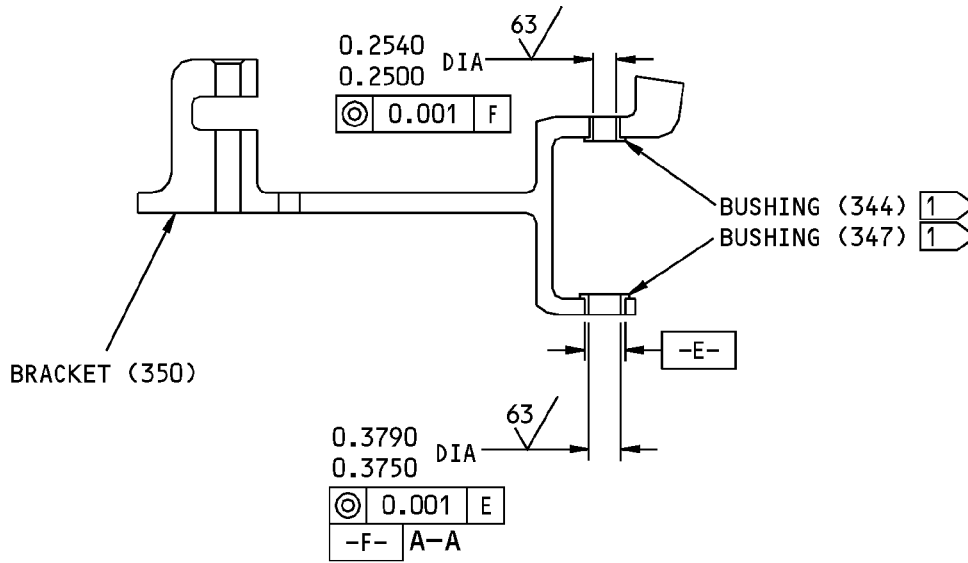
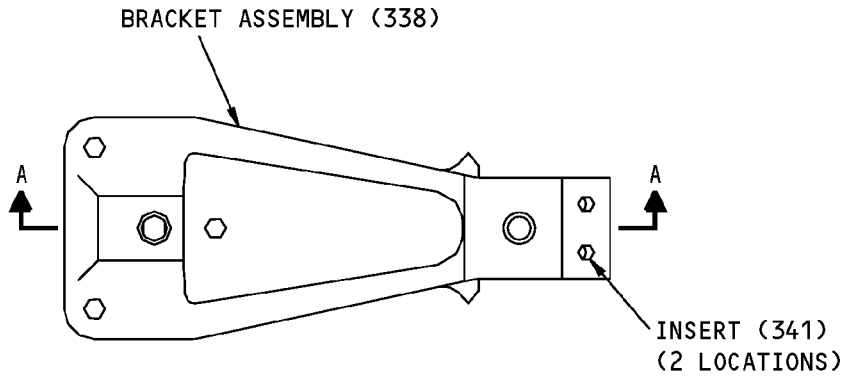
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REPAIR 7-1

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COMPONENT MAINTENANCE MANUAL



1 INSTALL THIS BUSHING BY SHRINK-FIT PROCEDURE AS SHOWN IN SOPM 20-50-03

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

ITEM NUMBERS REFER TO IPL FIG. 1

275A5305-1 Bracket Assembly Repair
Figure 601

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REPAIR 7-1
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COMPONENT MAINTENANCE MANUAL

BRACKET - REPAIR 7-2

275A5305-2

1. General

- A. This procedure has the data necessary to refinish the bracket (353).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.
- D. General repair details:
 - (1) Material: Aluminum alloy

2. Bracket Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00319	Primer - Urethane Compatible, Corrosion Resistant	BMS10-79, Type II

- 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 7-2, Figure 601)

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

- (1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31) all over.
- (2) Apply primer, C00319 (F-19.47) all over but not on the areas shown by flagnote 1.
- (3) Apply enamel coating, C00033 (F-19.39-707) all over but not on the areas shown by flagnote 1.

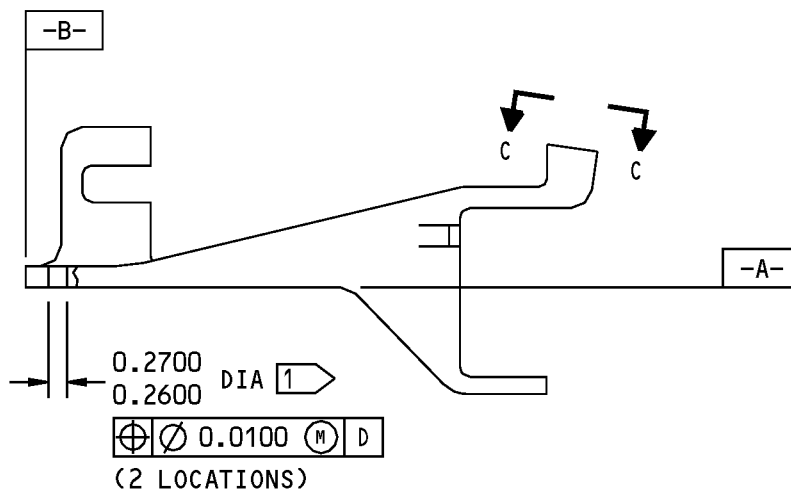
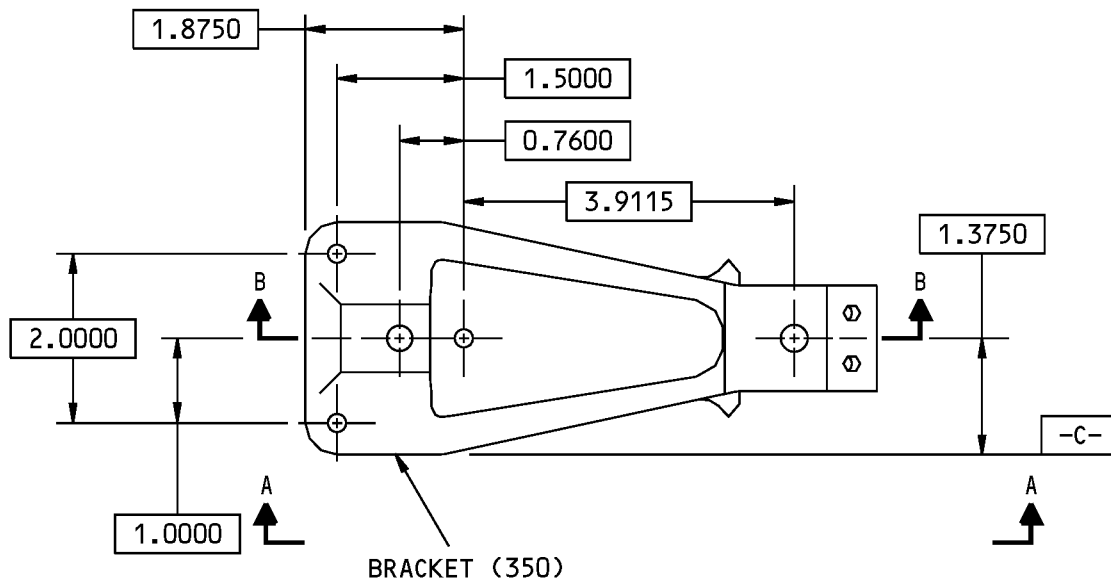
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REPAIR 7-2

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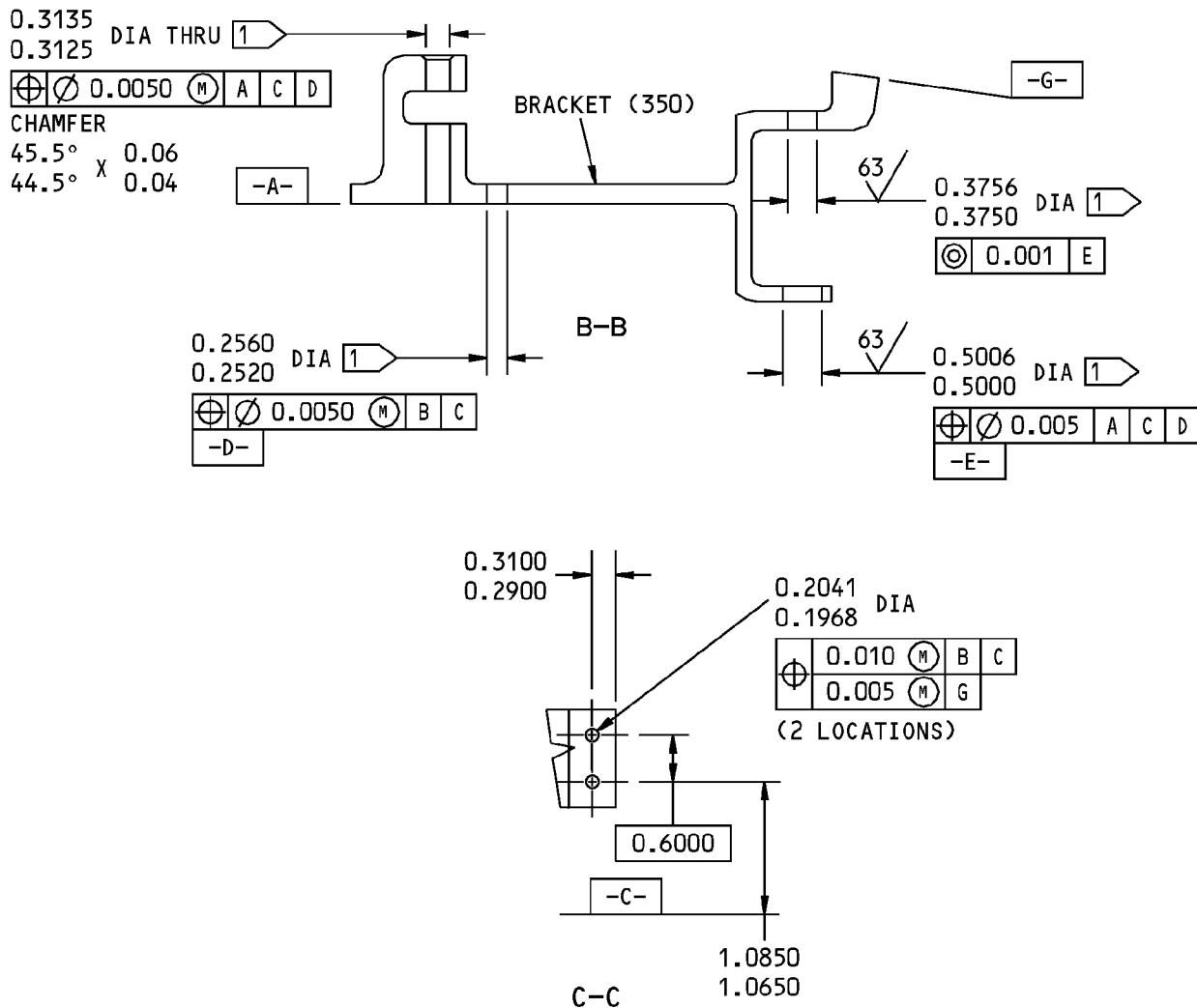
A-A

275A5305-2 Bracket Repair
Figure 601 (Sheet 1 of 2)

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REPAIR 7-2
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COMPONENT MAINTENANCE MANUAL



1 DO NOT PUT FINISH IN THIS SURFACE

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

275A5305-2 Bracket Repair
Figure 601 (Sheet 2 of 2)

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REPAIR 7-2

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COVER ASSEMBLY - REPAIR 8-1

275A5310-6

1. General

- A. This procedure tells how to replace markers on the cover assembly (197B).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Marker Replacement

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00551	Sealant - Fuel Tank	BAC5010, Type 44 (BMS5-44, BMS5-45)
B00571	Coating - Clear Hydraulic Fluid Resistant Topcoat	BAC5710, Type 41

- B. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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

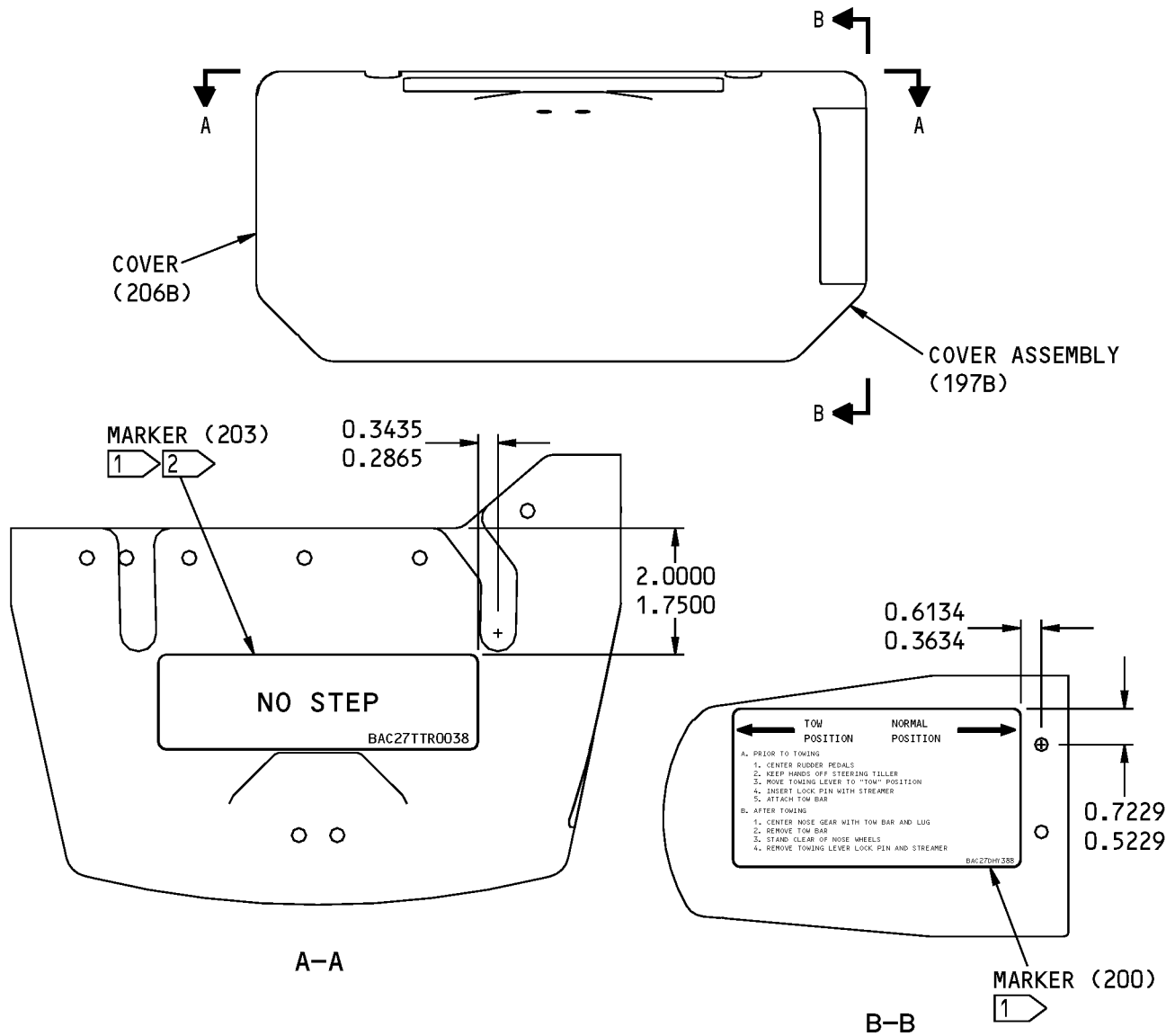
NOTE: For general cleaning procedure, refer to SOPM 20-30-03. For finishing materials, refer to SOPM 20-60-02. For miscellaneous materials, refer to SOPM 20-60-04.

- (1) Remove the defective marker(s) (200, 203) from the cover (206B).
- (2) Clean the coating surfaces of the replacement marker(s) (200, 203) and the cover (206B) (SOPM 20-30-03).
- (3) Install the replacement marker(s) (200, 203) on the cover (206B) with sealant, A00551 and seal the edges of the marker(s) (200, 203) with coating, B00571 (F-21.34).

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REPAIR 8-1
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1 INSTALL MARKER WITH TYPE 44 ADHESIVE (SOPM 20-50-12) AND SEAL THE EDGES WITH TYPE 41 COATING (F-21.34). ADHESIVE AND COATING ARE NOT PERMITTED IN BOLT HOLES AND CABLE SLOTS

2 MAKE SURE THAT MARKER DOES NOT MAKE CONTACT WITH THE SLOTS

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

275A5310-6 Cover Assembly Repair
Figure 601

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REPAIR 8-1
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BRACKET ASSEMBLY - REPAIR 9-1

275A5311-3

1. General

- A. This procedure tells how to replace parts on the bracket assembly (392).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Nutplate Replacement

- A. Procedure (REPAIR 9-1, Figure 601)
 - (1) Drill out rivets (395) and remove the damaged nutplate (398) from the bracket (401).
 - (2) Install a replacement nutplate (398) with rivets (395) on bracket (401).

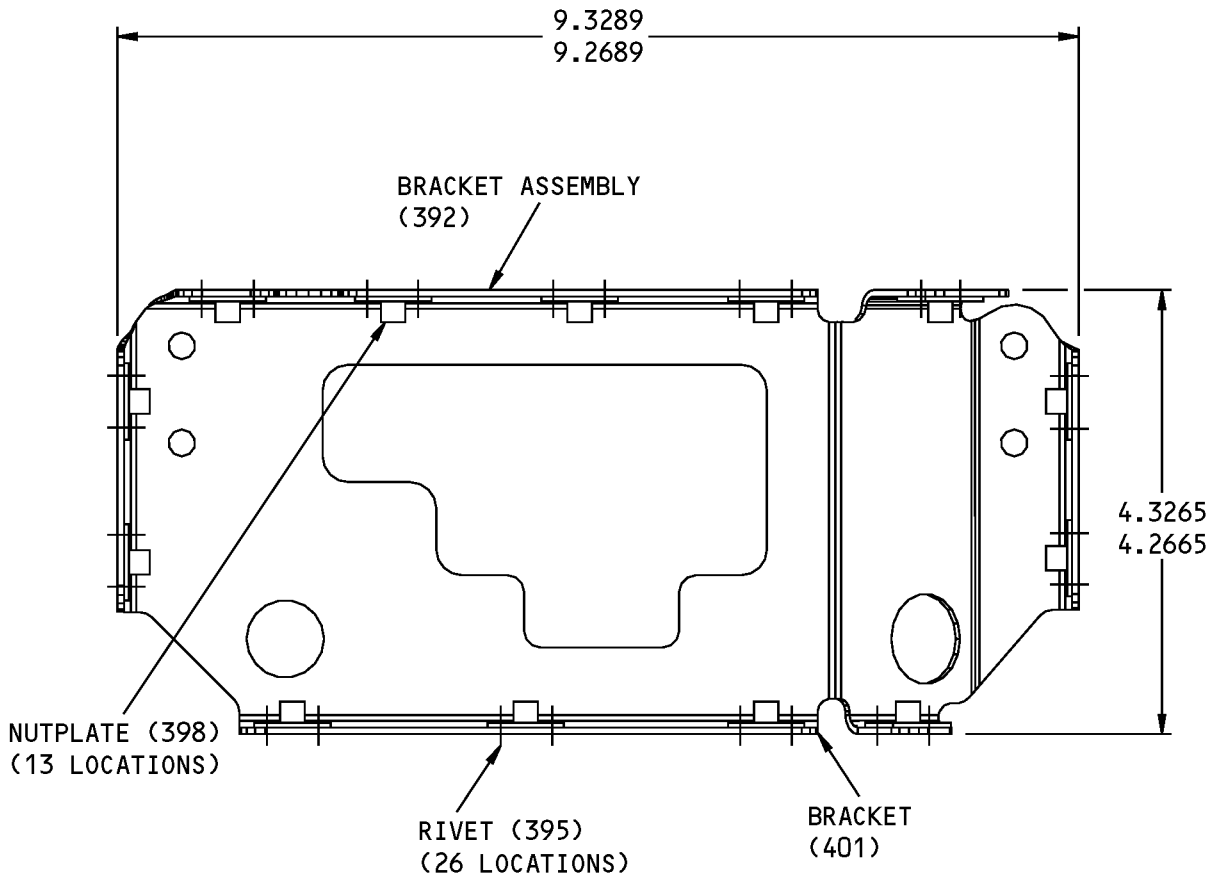
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REPAIR 9-1

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

275A5311-3 Bracket Assembly Repair
Figure 601

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REPAIR 9-1
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LINK ASSEMBLY - REPAIR 10-1

275A5315-2

1. General

- A. This procedure has the data necessary to repair the link assembly (233).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. End Replacement

A. References

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

B. Procedure (REPAIR 10-1, Figure 601)

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

- (1) Remove the end(s) (239, 245) and the nut(s) (236, 242) from the coupling (248).
- (2) Install replacement end(s) (239, 245) and nut(s) (236, 242) into the coupling (248). Hand-tighten the nuts (see flagnote 1).

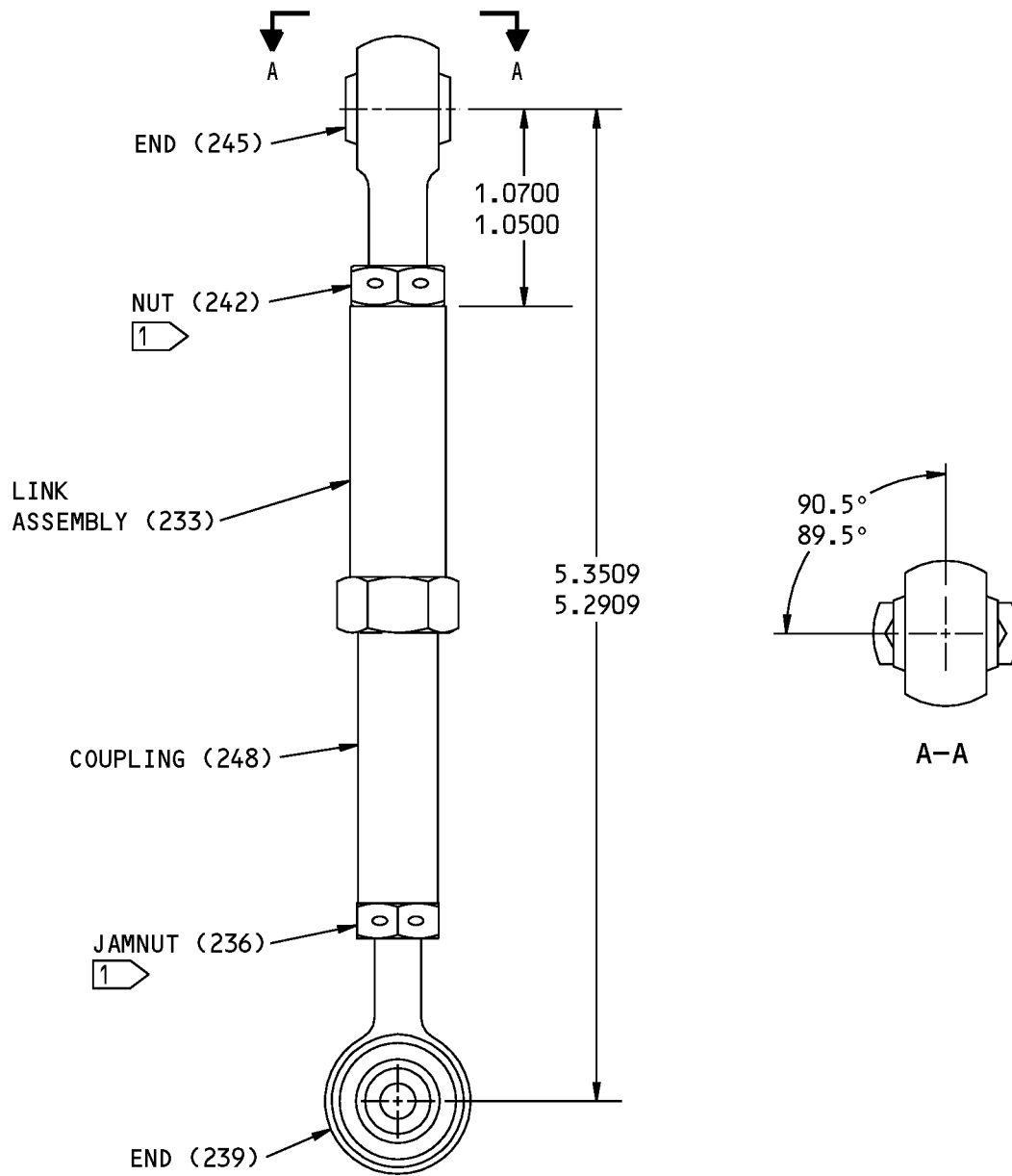
32-21-16

REPAIR 10-1

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1 TIGHTEN THIS NUT HAND TIGHT. THIS NUT WILL BE TIGHTENED TO FINAL TORQUE WHEN INSTALLED ON THE AIRPLANE

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

275A5315-2 Link Assembly Repair
Figure 601

32-21-16

REPAIR 10-1
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COMPONENT MAINTENANCE MANUAL

BRACKET - REPAIR 11-1

275A5320-2

1. General

- A. This procedure tells how to repair and refinish the bracket (446).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.
- D. General repair details:
 - (1) Material: Aluminum alloy

2. Bracket Repair

- 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 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-43-03	CHEMICAL CONVERSION COATINGS FOR ALUMINUM
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT

- C. Procedure REPAIR 11-1, Figure 601

- (1) Machine as necessary, within repair limits, to remove defects.
- (2) Penetrant examine (SOPM 20-20-02) the hole.
- (3) Chemical treat (SOPM 20-43-03) the machined surfaces.
- (4) Make a repair sleeve (REPAIR 11-1, Figure 602) to adjust for the material removed.
- (5) Install the repair sleeve by the shrink fit method (SOPM 20-50-03) with sealant, A00247 as the installation finish.
- (6) Machine the sleeve bore to design dimensions and finish.
- (7) Chemical treat (SOPM 20-43-03) the sleeve bore as necessary.
- (8) Refinish other bracket surfaces as necessary.

3. Bracket Refinish

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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REPAIR 11-1
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Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

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 11-1, Figure 601)

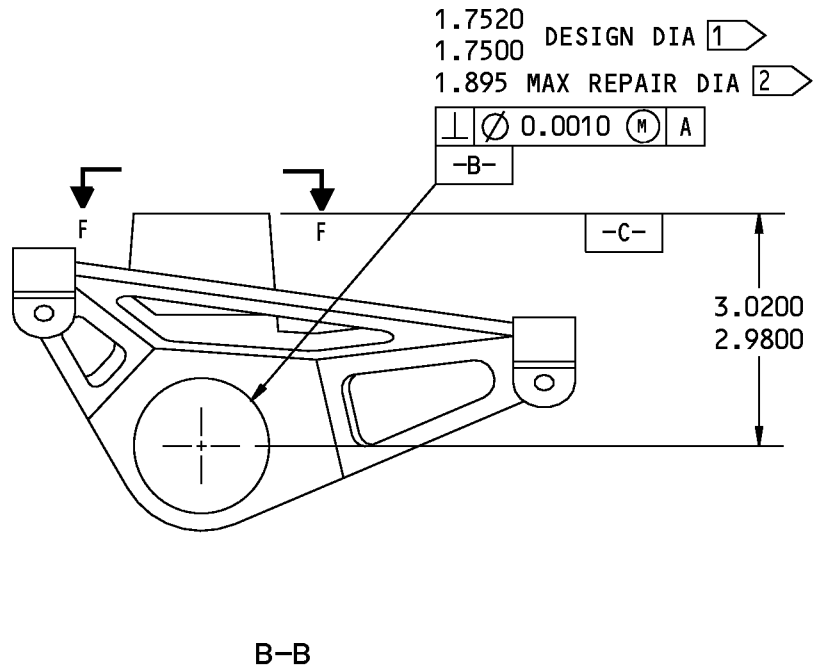
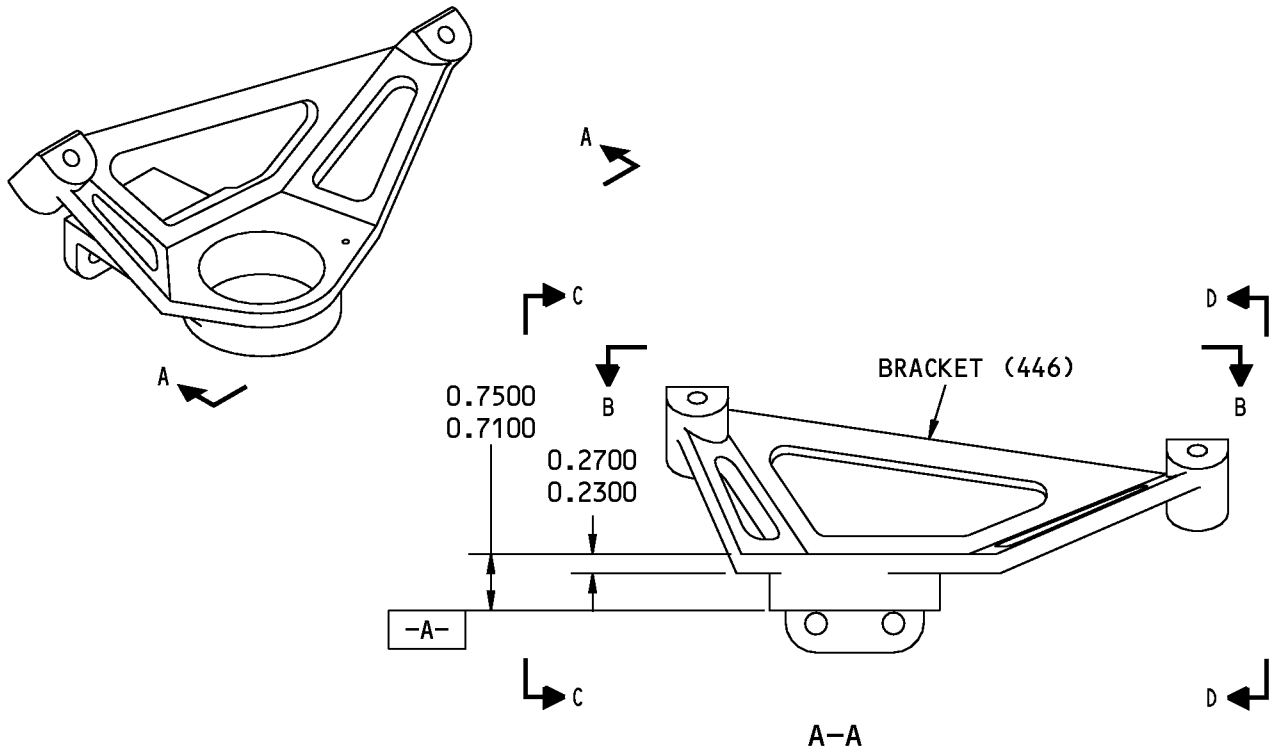
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31) but not on surfaces shown by flagnote 1.
- (2) Apply primer, C00175 (F-19.47) but not on surfaces shown by flagnote 1.
- (3) Apply enamel coating, C00033 (F-19.39.707) but not on surfaces shown by flagnote 1.

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REPAIR 11-1
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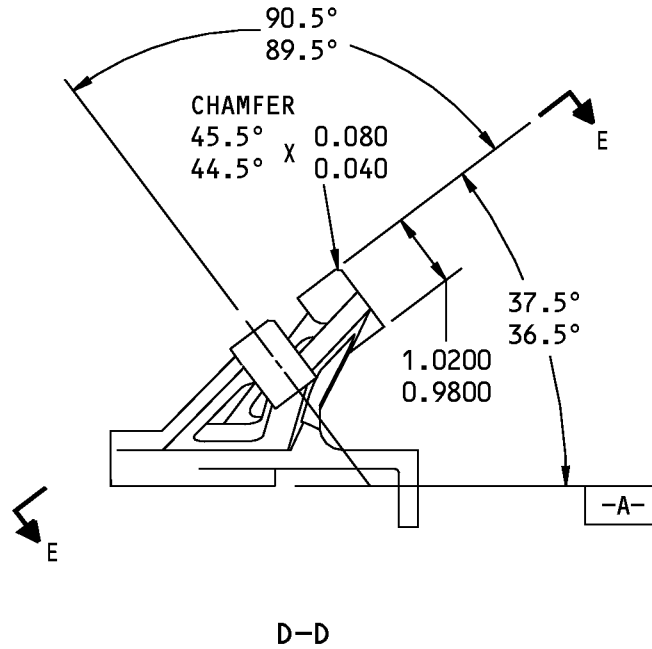
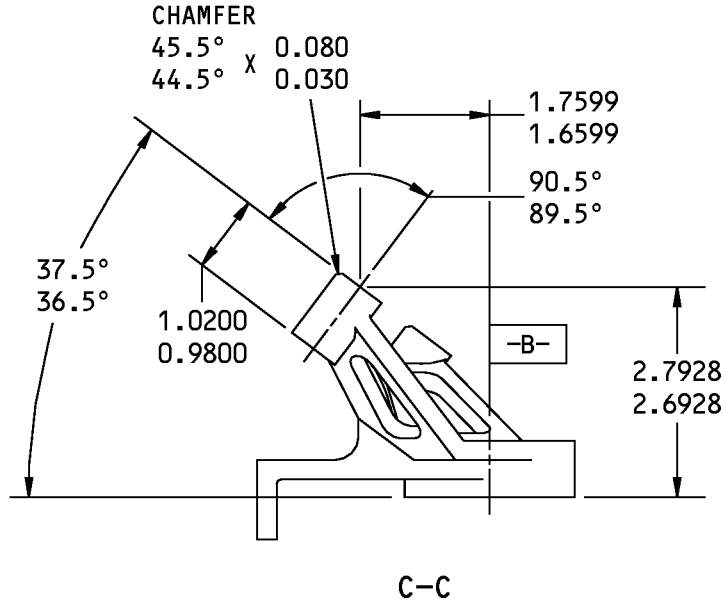


275A5320-2 Bracket Repair and Refinish
Figure 601 (Sheet 1 of 3)

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REPAIR 11-1
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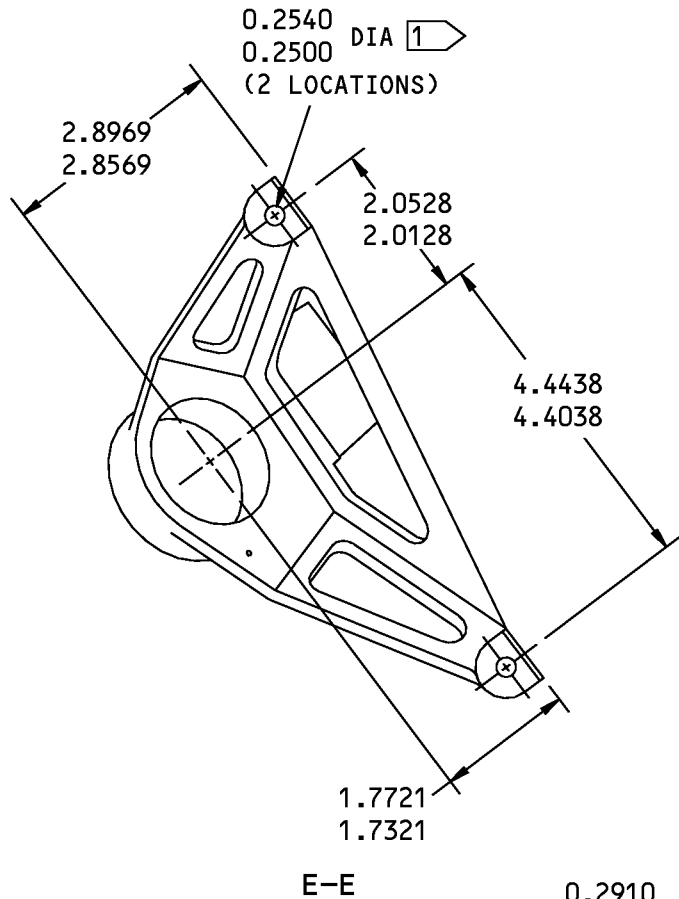


275A5320-2 Bracket Repair and Refinish
 Figure 601 (Sheet 2 of 3)

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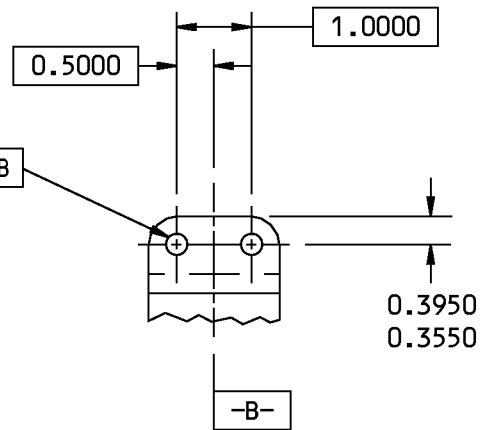
REPAIR 11-1
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E-E

0.2910
0.2790 DIA 1
⊕ ∅ 0.0060 (M) B
(2 LOCATIONS)



F-F

- 1 NO PRIMER OR ENAMEL
- 2 LIMIT FOR INSTALLATION OF REPAIR BUSHING

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

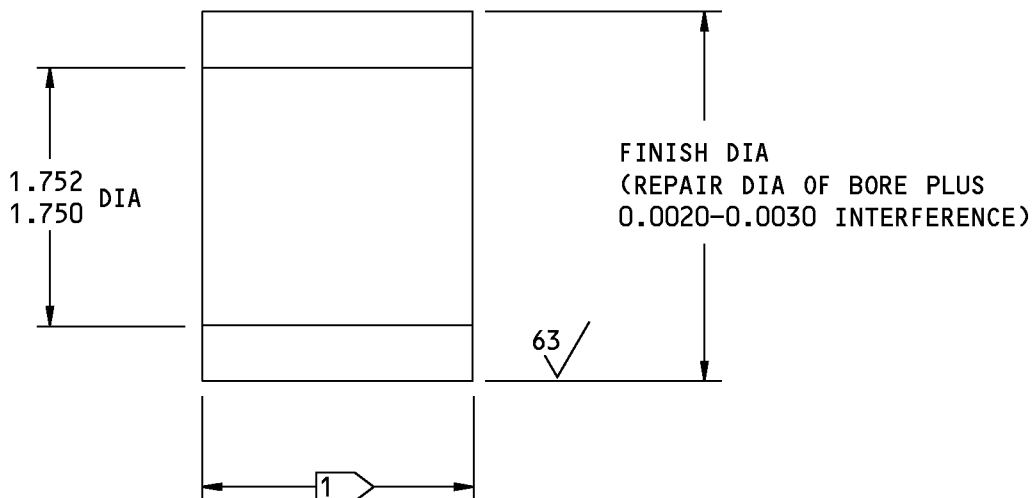
275A5320-2 Bracket Repair and Refinish
Figure 601 (Sheet 3 of 3)

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FINISH:

CHEMICAL TREAT (SOPM 20-43-03)
(OPTIONAL ON INSIDE DIAMETER)

1 LUG THICKNESS +0.000/-0.005

125 MACHINE FINISH
BREAK ALL SHARP EDGES

MATERIAL: 7050-T7451
AL ALLOY (AMS 4050)
(OPT: 7075-T6 OR
6061-T6 AL ALLOY)

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION -B- FIG. 601

1309212 S0000227442_V2

Repair Sleeve Details
Figure 602

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ASSEMBLY

1. General

- A. This procedure tells how to assemble the nose gear customer end item.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142
C50056	Compound - Nondrying Resin Mix Corrosion Inhibiting Material	BMS 3-27
D00153	Fluid - Hydraulic, Erosion Arresting, Fire Resistant	BMS3-11 Type IV (interchangeable & intermixable with Type V)
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995~C32
G02166	Lockwire - Nickel-Copper Alloy (Monel)(0.020 inch Diameter)	NASM20995N~C20
G50136	Paste - Corrosion Inhibiting, Non-drying	BMS 3-38
G50225	Lockwire - Corrosion Resistant Steel, 0.020 inch diameter	NASM20995~C20
G50347	Lockwire - Nickel-copper, 0.032 inch diameter	NASM20995N~C32

B. References

Reference	Title
CMM 32-21-12	NOSE LANDING GEAR COMPONENT ASSEMBLY
CMM 32-51-52	NOSE LANDING GEAR STEERING ACTUATOR ASSEMBLY
SOPM 20-41-05	APPLICATION OF CORROSION INHIBITING COMPOUNDS
SOPM 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES
SOPM 20-50-19	GENERAL SEALING
SOPM 20-60-03	LUBRICANTS

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ASSEMBLY

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C. Procedure

NOTE: For nose gear component assembly, refer to CMM 32-21-12. For actuator assembly, refer to CMM 32-51-52. For bolt and nut installation, refer to SOPM 20-50-01. For installation of safetying devices, refer to SOPM 20-50-02. For lubricants, refer to SOPM 20-60-03.

- (1) Use standard industry practices and these steps.
- (2) For assembly of the nose gear component assembly, refer to CMM 32-21-12.
- (3) For assembly of the actuator assembly, refer to CMM 32-51-52.

WARNING: BMS 3-27 CORROSION INHIBITING COMPOUND CONTAINS SOLVENTS, CHROMATES, AND A SMALL AMOUNT OF BOUND ASBESTOS. CONSULT THE APPLICABLE SAFETY STANDARDS FOR APPROVED HANDLING PROCEDURES.

CAUTION: BMS 3-27 COMPOUND IS USED ONLY IN STATIC JOINTS WHERE GREASE CANNOT BE APPLIED. BMS 3-27 COMPOUND IN DYNAMIC JOINTS WILL NOT LET THEM MOVE FREELY.

- (4) Install wire bundle bracket installation (646) on nose gear component (5) as follows:

NOTE: Apply a layer of compound, C50056 to bolt shanks, threads and washer faces (SOPM 20-41-05). Wipe away unwanted compound.

- (a) Apply two layers of tape (775) on the nose gear component surface as identified by flagnote 1 in ASSEMBLY, Figure 701, section A-A.
 - (b) Install clamp (772), clip (769), block (766), and bolt (763) over tape (775) as shown in ASSEMBLY, Figure 701, section B-B.
 - (c) Install bracket (760) on nose gear component (5) with bolts (748), washers (751, 754), and nuts (757) as shown in ASSEMBLY, Figure 701, View B.
 - (d) Install bracket assembly (736) on nose gear component (5) with bolts (724), washers (727, 730), and nuts (733) as shown in ASSEMBLY, Figure 701, View C.
 - (e) Install box assembly (697) on the nose gear component (5) with bolts (685), washers (688, 691), and nuts (694) as shown in ASSEMBLY, Figure 701, View A.
 - (f) Install bracket assembly (661) on nose gear component (5) with bolts (649), washers (652, 655), and nuts (658) as shown in ASSEMBLY, Figure 701.
 - (g) Install hose guide (697) on bracket assembly (661) with screws (673), washers (676), and nuts (679).
- (5) Install sensor installation (476) on nose gear component (5) as follows:
 - (a) Install markers (521, 524) and sensors (518) on brackets (512, 515) as shown in ASSEMBLY, Figure 702, section B-B.
 - (b) Install brackets (512, 515) on nose gear component (5) with screws (503), washers (506) and nuts (509).
 - (c) Install brackets (497, 500) on nose gear component (5) with screws (488), washers (491) and nuts (494).

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- (d) Install targets (485) on nose gear component (5) with shims (483), washers (482), and screws (479).

NOTE: Make sure screws (479) are flush with the concave surface of target (485) between 0.01 inch above to minus 0.06 inch below the surface of the target. Remove shim laminations as necessary to adjust the closest point between sensors (518) and targets (485) when the nose gear component is 2.5 inches from the fully compressed position.

- (e) Lockwire screws (479) with lockwire, G50347 by the single-twist procedure (SOPM 20-50-02) .
- (6) Install light assembly (473) on nose gear component (5) with shim (470). Refer to CMM 32-21-12 for light assembly (473) hardware as shown in ASSEMBLY, Figure 703. Install wire bundle harness support (527) on nose gear component (5) as follows:
- (a) Attach conduit assemblies (628, 631) to sensors (518) as shown in ASSEMBLY, Figure 704, View C.
 - (b) Install conduit assembly (619) on nose gear component (5) with washers (616) and nuts (613) as shown in ASSEMBLY, Figure 704, View A. Tighten nuts (613) to 40-50 pound-inches.
 - (c) Connect conduit assembly (625) to conduit assembly (619) as shown in ASSEMBLY, Figure 704.
 - (d) Connect conduit assembly (622) to conduit assembly (619). Lockwire conduit assembly (622) with lockwire, G50225 by the single-twist procedure (SOPM 20-50-02).
 - (e) Install clamps (610) on conduit assembly (634). Install the clamp on light assembly (473) and clamp (772), screw (601), washers (595, 604), and nuts (598, 607) as shown in ASSEMBLY, Figure 704, View C.
 - (f) Attach clamps (592) on conduit assembly (634). Install clamps (592) onto bracket (760) with screws (583), washers (586), and nuts (589) as shown in ASSEMBLY, Figure 704, View E.
 - (g) Connect conduit assemblies (625 thru 634) to box assembly (697) with nuts (575, 580) as shown in ASSEMBLY, Figure 704, bubble D. Tighten nuts (575, 580) to 40-50 pound-inches.
 - (h) Lockwire nuts (575, 580) inside box assembly (297) with lockwire, G50225 by the single-twist procedure (SOPM 20-50-02).
 - (i) Route wire bundle assembly (637) through conduit assembly (634), box assembly (697), conduit (625), and the right fitting of conduit assembly (622) as shown in ASSEMBLY, Figure 704.
 - (j) Route wire bundle (W8032) from number 1 sensor (518) through conduit assembly (631), box assembly (697), conduit assembly (625), and into the right fitting of conduit assembly (622).
 - (k) Route wire bundle (W7032) from number 2 sensor (518) through conduit assembly (628), box assembly (697), conduit assembly (625), and into the left fitting of conduit assembly (622).
 - (l) Neatly coil the free lengths of the wire bundle assemblies, and attach them to the landing gear unit, to prevent damage during shipping or storage.
 - (m) Lockwire conduit assemblies (619, 625) with lockwire, G02166 by the single-twist procedure (SOPM 20-50-02) and as shown in ASSEMBLY, Figure 704, View A.

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- (n) Attach conduit assembly (634) to light assembly (473). Lockwire conduit assembly (634) to screw (601) with lockwire, G50225 by the single-twist procedure (SOPM 20-50-02) and as shown in ASSEMBLY, Figure 704, View B.
 - (o) Install cover (572) on box assembly (697) with screws (566) and washers (569) as shown in ASSEMBLY, Figure 704, View D.
 - (p) Put clamps (563) on conduit assembly (625). Install clamps (563) on bracket assembly (661) with screws (554), washers (557), and nuts (560) as shown in ASSEMBLY, Figure 704, View C.
 - (q) Put clamps (539, 551) on conduit assemblies (628, 631). Install clamps (539, 551) on nose gear component (5) with screws (530, 542), washers (533, 545), and nuts (536, 548).
 - (r) Apply sealant, A00247 or sealant, A02315 to the fasteners above waterline 141 as identified by flagnote 5 in ASSEMBLY, Figure 704, View F.
- (7) Apply BMS 3-11 hydraulic fluid, D00153 to the transfer tube in valve assembly (173) identified by flagnote 2 in ASSEMBLY, Figure 705, section F-F.
 - (8) Install actuator assemblies (38, 41) on nose gear component (5) with pins (26), bushings (32), washers (28, 29), and nuts (35) as shown in ASSEMBLY, Figure 705.

WARNING: BMS 3-27 CORROSION INHIBITING COMPOUND CONTAINS SOLVENTS, CHROMATES, AND A SMALL AMOUNT OF BOUND ASBESTOS. CONSULT THE APPLICABLE SAFETY STANDARDS FOR APPROVED HANDLING PROCEDURES.

CAUTION: BMS 3-27 COMPOUND IS USED ONLY IN STATIC JOINTS WHERE GREASE CANNOT BE APPLIED. BMS 3-27 COMPOUND IN DYNAMIC JOINTS WILL NOT LET THEM MOVE FREELY.

- (9) Tighten nuts (35) to 50-58 pound-feet as identified by flagnote 3. Install cotter pins (23) on pins (26). Make sure that the cotter pin tails do not extend closer than 0.10 inch from the steering plate on top of the nose gear component.
- (10) Apply BMS 3-27 corrosion preventive compound, C50056, or BMS 3-38 corrosion inhibiting non-drying paste, G50136 by the method 2 procedure (SOPM 20-50-19) on the faying surfaces of valve assembly (173) and nose gear component (5) as identified by flagnote 6 in ASSEMBLY, Figure 705, section C-C and D-D.
- (11) Apply a thin layer of BMS 3-27 compound, C50056 or BMS 3-38 corrosion inhibiting non-drying paste, G50136 to bolt shanks, threads, and washer faces as identified by flagnote 7 in ASSEMBLY, Figure 705. Wipe off unwanted compound.
- (12) Install valve assembly (173) on the nose gear component with bolts (155, 167), washers (158, 161, 170), nuts (164), and standoffs (185) as shown in ASSEMBLY, Figure 705, sections C-C and D-D.
- (13) Lockwire bolts (167) with lockwire, G02166 by the single-twist procedure (SOPM 20-50-02) and identified by flagnote in ASSEMBLY, Figure 705, section B-B.
- (14) Install clamps (20) on valve assembly (173) with bolts (11), washers (14), and nuts (17) as shown in ASSEMBLY, Figure 705, section F-F.
- (15) Install brace (443) on bracket (446) with bolts (434), washers (437), and nuts (440) as shown in ASSEMBLY, Figure 706, section D-D.

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- (16) If necessary, tighten the nut that holds bracket (446) to 85-100 pound-feet as identified by flagnote 1 in ASSEMBLY, Figure 706. This is nut (280) in CMM 32-21-12, which is part of the gear component (5).
- (17) Lockwire this nose gear component (5) nut with lockwire, G01048 by the single-twist procedure (SOPM 20-50-02) to the valve identified by flagnote 5 in ASSEMBLY, Figure 706
- (18) Install the summing mechanism and cover installation components (188) as follows:
 - (a) Install brace (443) and standoffs (431) on nose gear component (5) with bolts (422), washers (425), and nuts (428) as shown in ASSEMBLY, Figure 706, section I-I.
 - (b) If necessary, assemble mechanism assembly (266) as follows:
 - 1) Install bracket assembly (338) on crank assembly (355) with bolts (320), washer (323), bushings (326, 332), the nuts (335) as shown in ASSEMBLY, Figure 707, section D-D.
 - 2) Tighten bolt (320) to 50-75 pound-inches above run-on torque as identified by flagnote 1 in ASSEMBLY, Figure 707.
 - 3) Install bracket (317) on crank assembly (353) with bolts (311) and washers (314) as shown in ASSEMBLY, Figure 707, section A-A.
 - 4) Install bracket assemblies (296) on crank assembly (353) with bolts (284), washers (287), bushings (290), and nuts (293) as shown in ASSEMBLY, Figure 707, section C-C.
 - 5) Tighten bolts (284) to 20-25 pound-inches above run-on torque as identified by flagnote 2 in ASSEMBLY, Figure 707.
 - 6) Install pulleys (281) on bracket assemblies (296) with bolts (269), washers (272), bushings (275), and nuts (278) as shown in ASSEMBLY, Figure 707, section B-B.
 - 7) Do not tighten bolt (269) at this time. This nut will be tightened to the final torque of 50-75 pound-inches after installation of the cables (419) as identified by flagnote 2 in ASSEMBLY, Figure 707.
 - (c) Install mechanism assembly (266) on valve and actuator assembly (8) with bolts (251), washers (254), and nuts (257) as shown in ASSEMBLY, Figure 706.
 - (d) Install cable (419) on nose gear component (5) with pins (418) as shown in ASSEMBLY, Figure 706, View A.
 - (e) Install cable guards (416, 419) on nose gear component (5) with screws (404), washers (407), and nut (410). Keep a 0.10 inch gap between guards (413A, 416A) and the nose gear component (5) steering collar as identified by flagnote 2 in ASSEMBLY, Figure 706, section E-E.
 - (f) Tighten nuts (410) to 20-25 pound-inches as identified by flagnote 3 in ASSEMBLY, Figure 706.
 - (g) Put cable (419) through cable guards (413A, 416A), and the pulleys of mechanism assembly (266).
 - (h) Install cable (419), pulleys (461), and cable guards (464) on bracket (446) with bolts (449), washers (452, 455), and nuts (458) as shown in ASSEMBLY, Figure 706, section H-H.
 - (i) Put cable (419) through nose gear component (5) as identified by flagnote 4 in ASSEMBLY, Figure 706.
 - (j) Install link assembly (233) on valve and actuator assembly (8) and mechanism assembly (266) with bolts (209A, 221), bushings (212, 224), washers (215, 227), and nuts (218, 230) as shown in ASSEMBLY, Figure 706, section B-B and G-G.

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- (k) Lockwire link assembly (233) with lockwire, G01048 by the double-twist procedure (SOPM 20-50-02). Make sure that the tail end of the lockwire is on the aft end of the link assembly (ASSEMBLY, Figure 706, section B-B).
- (l) Install cover assembly (197A) on mechanism (266) with screws (191) and washers (194).
- (m) If necessary, lockwire screws (191) to bolt (251) with lockwire, G50225 by the single-twist procedure (SOPM 20-50-02).

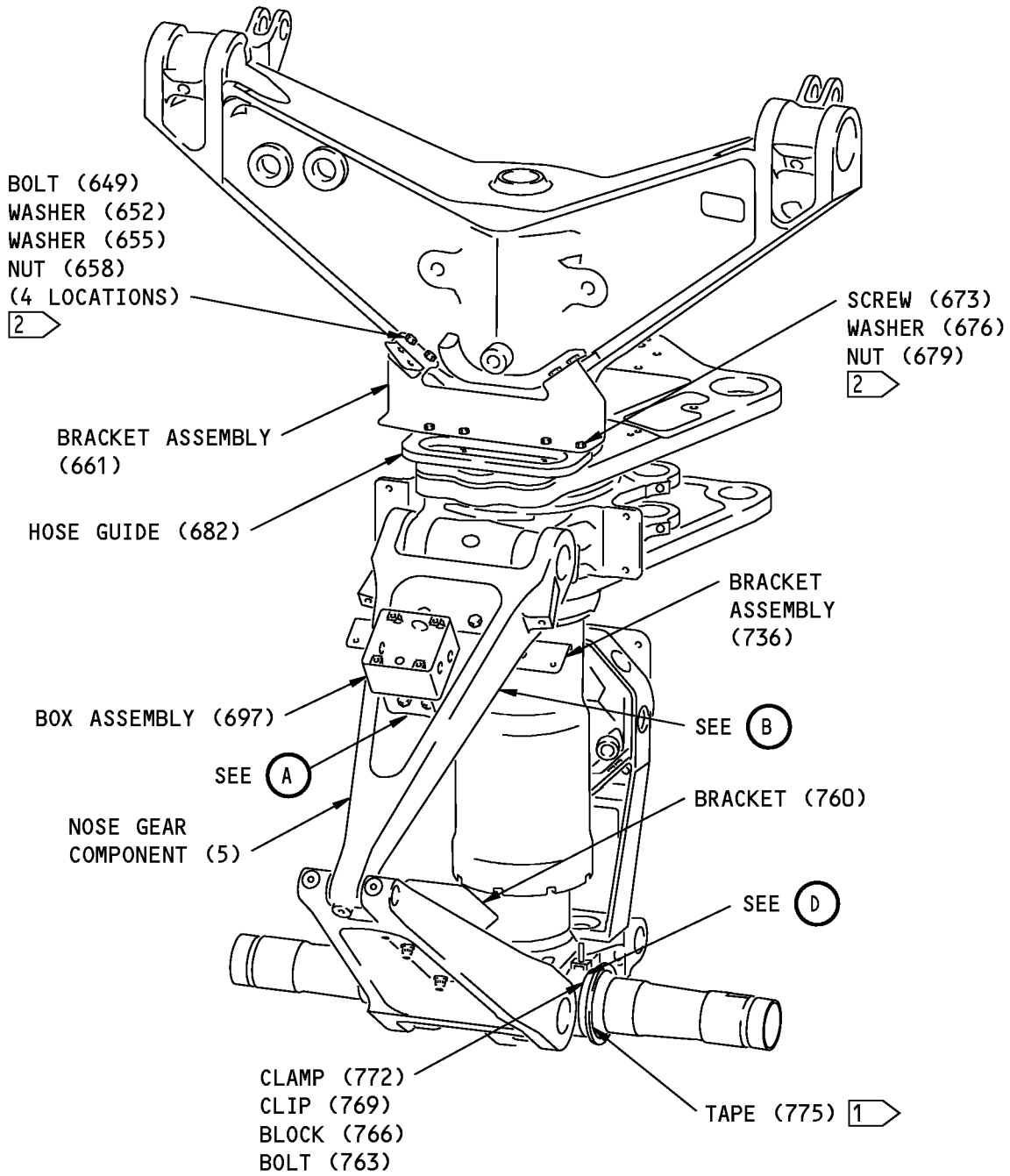
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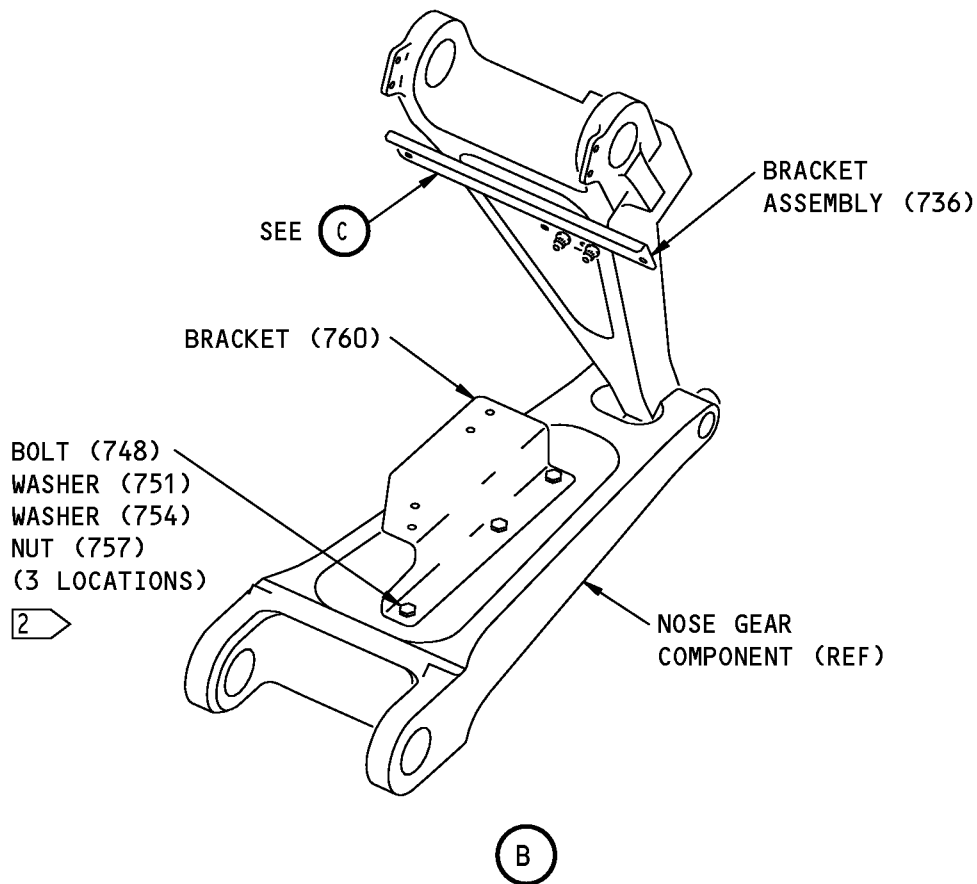
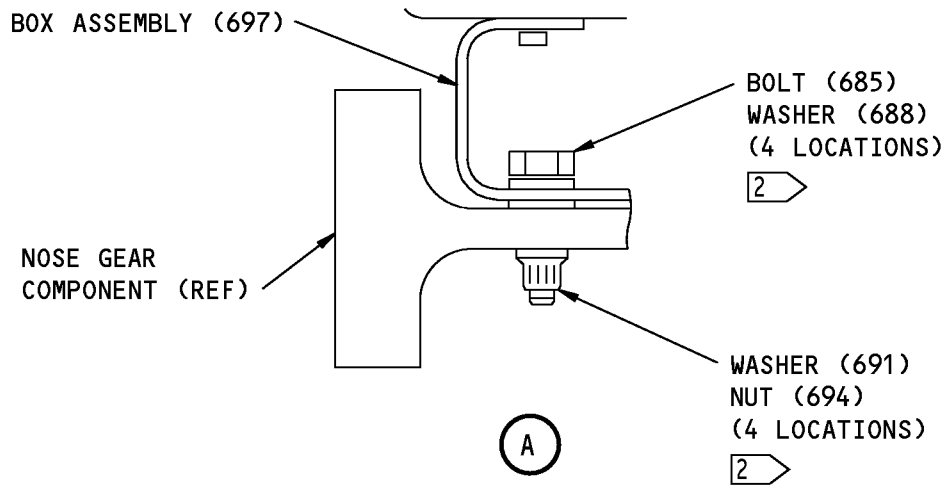


Wire Bundle Support Bracket Installation
 Figure 701 (Sheet 1 of 4)

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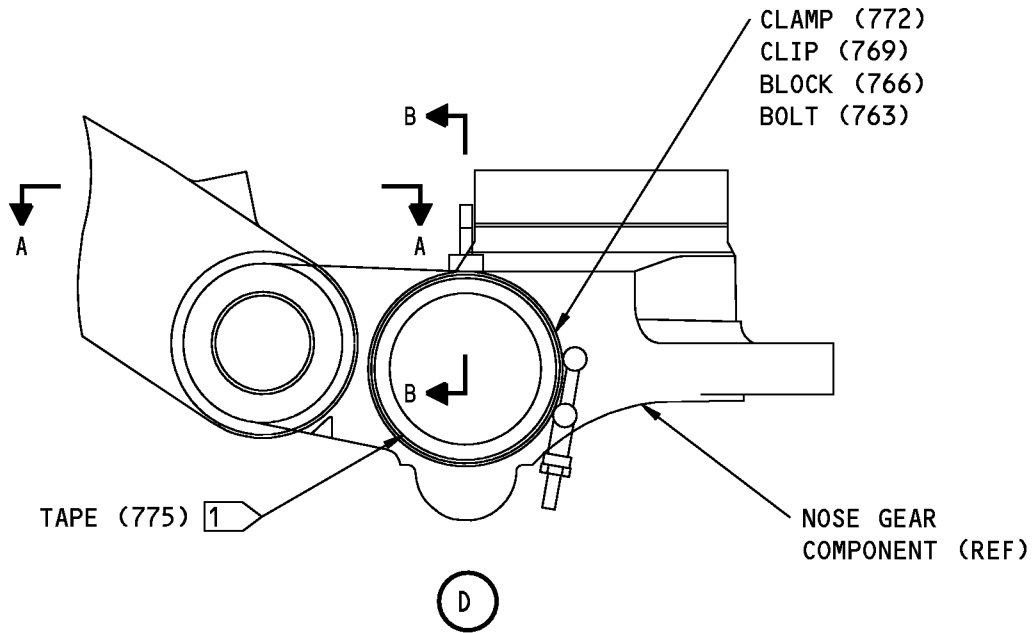
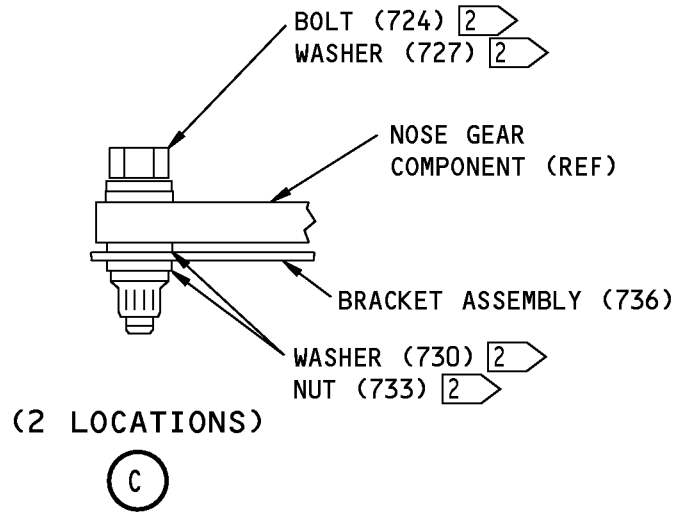
Wire Bundle Support Bracket Installation
Figure 701 (Sheet 2 of 4)

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Wire Bundle Support Bracket Installation
Figure 701 (Sheet 3 of 4)

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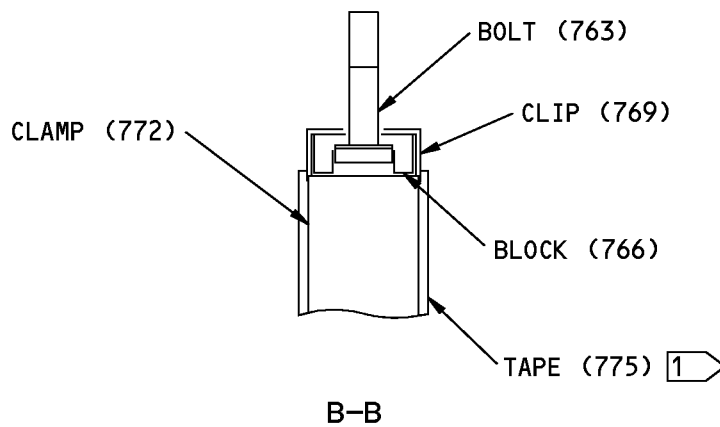
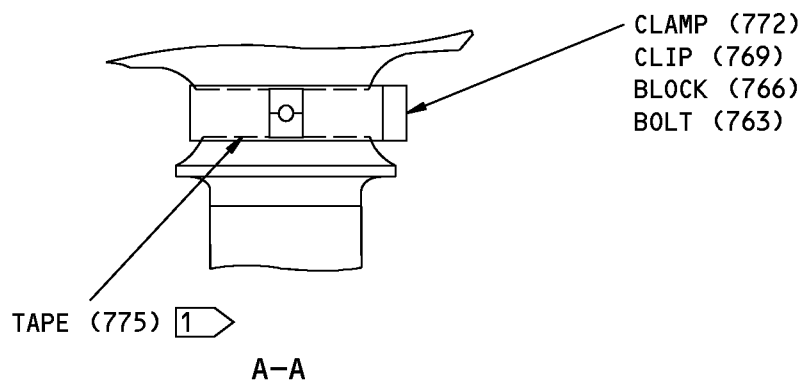
ASSEMBLY

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1 APPLY TWO LAYERS OF TAPE HERE

ITEM NUMBERS REFER TO IPL FIG. 1

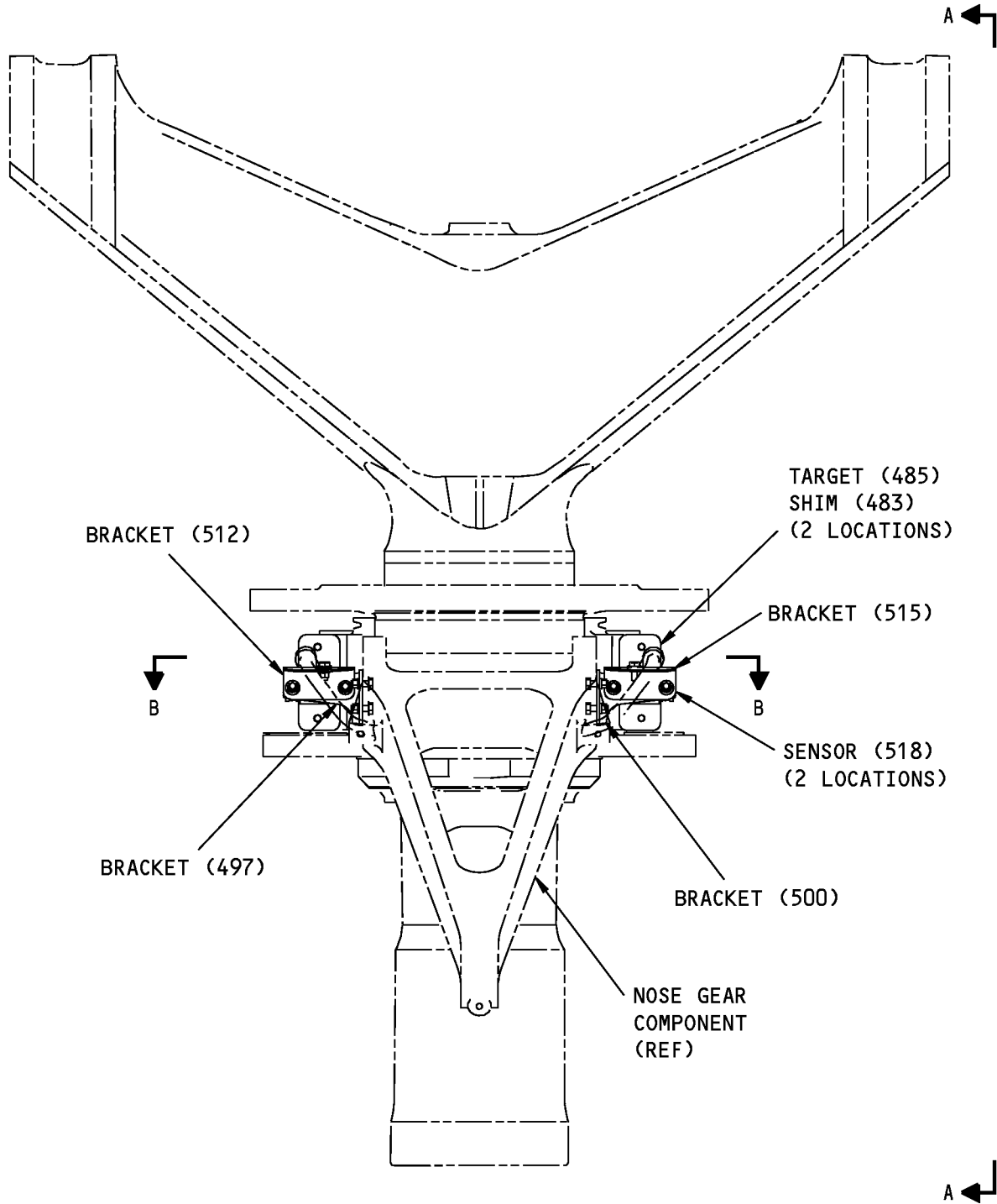
2 APPLY A LIGHT LAYER OF BMS 3-27 COMPOUND TO BOLT SHANK, THREADS AND WASHER FACES AS SHOWN IN SOPM 20-41-05. WIPE OFF UNWANTED COMPOUNDS

Wire Bundle Support Bracket Installation
Figure 701 (Sheet 4 of 4)

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Primary and Secondary Sensor Installation
Figure 702 (Sheet 1 of 4)

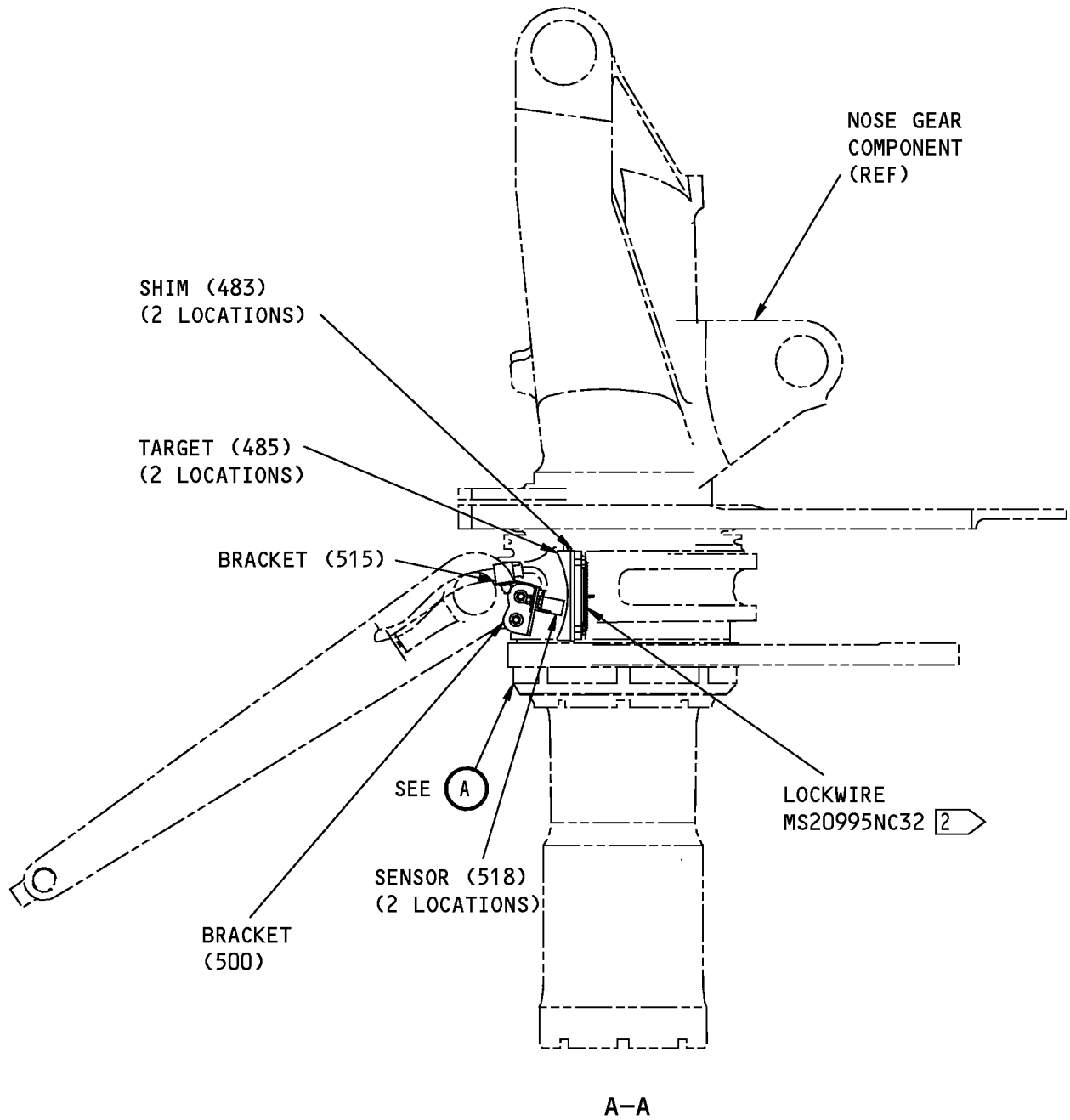
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Primary and Secondary Sensor Installation
Figure 702 (Sheet 2 of 4)

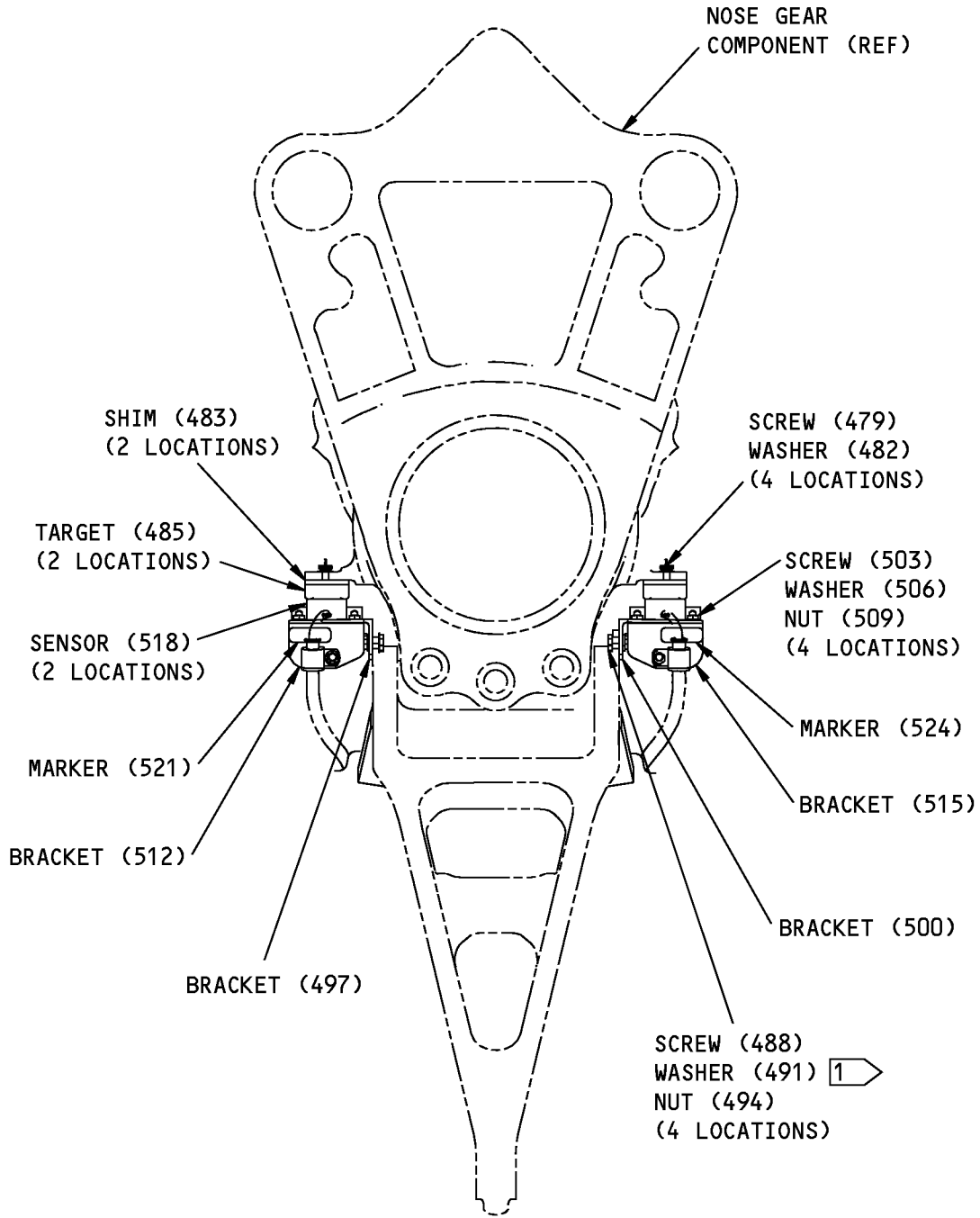
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B-B

Primary and Secondary Sensor Installation
Figure 702 (Sheet 3 of 4)

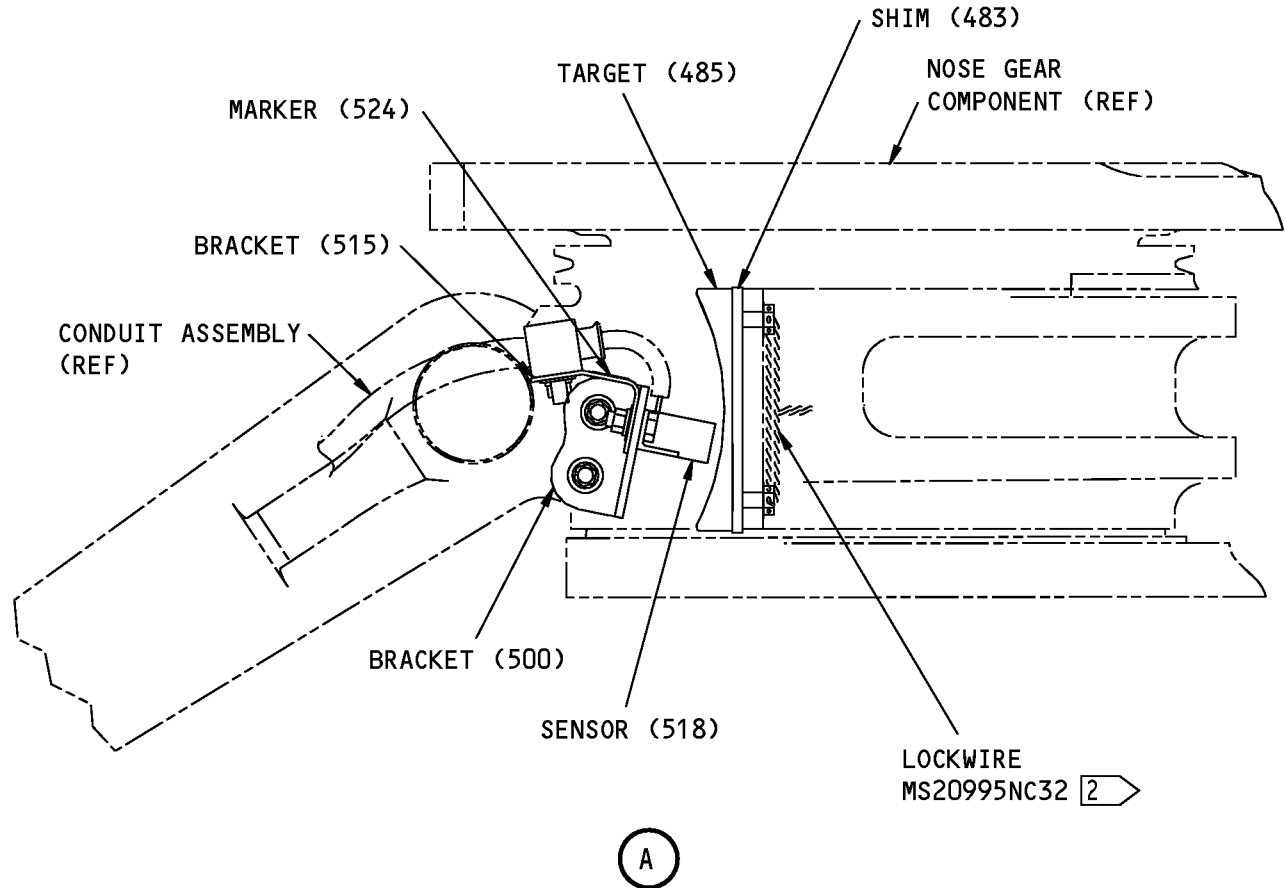
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1 QUANTITY OF 2 IS REQUIRED

ITEM NUMBERS REFER TO IPL FIG. 1

2 INSTALL THIS LOCKWIRE BY SINGLE
TWIST PROCEDURE AS SHOWN IN
SOPM 20-50-02

Primary and Secondary Sensor Installation
Figure 702 (Sheet 4 of 4)

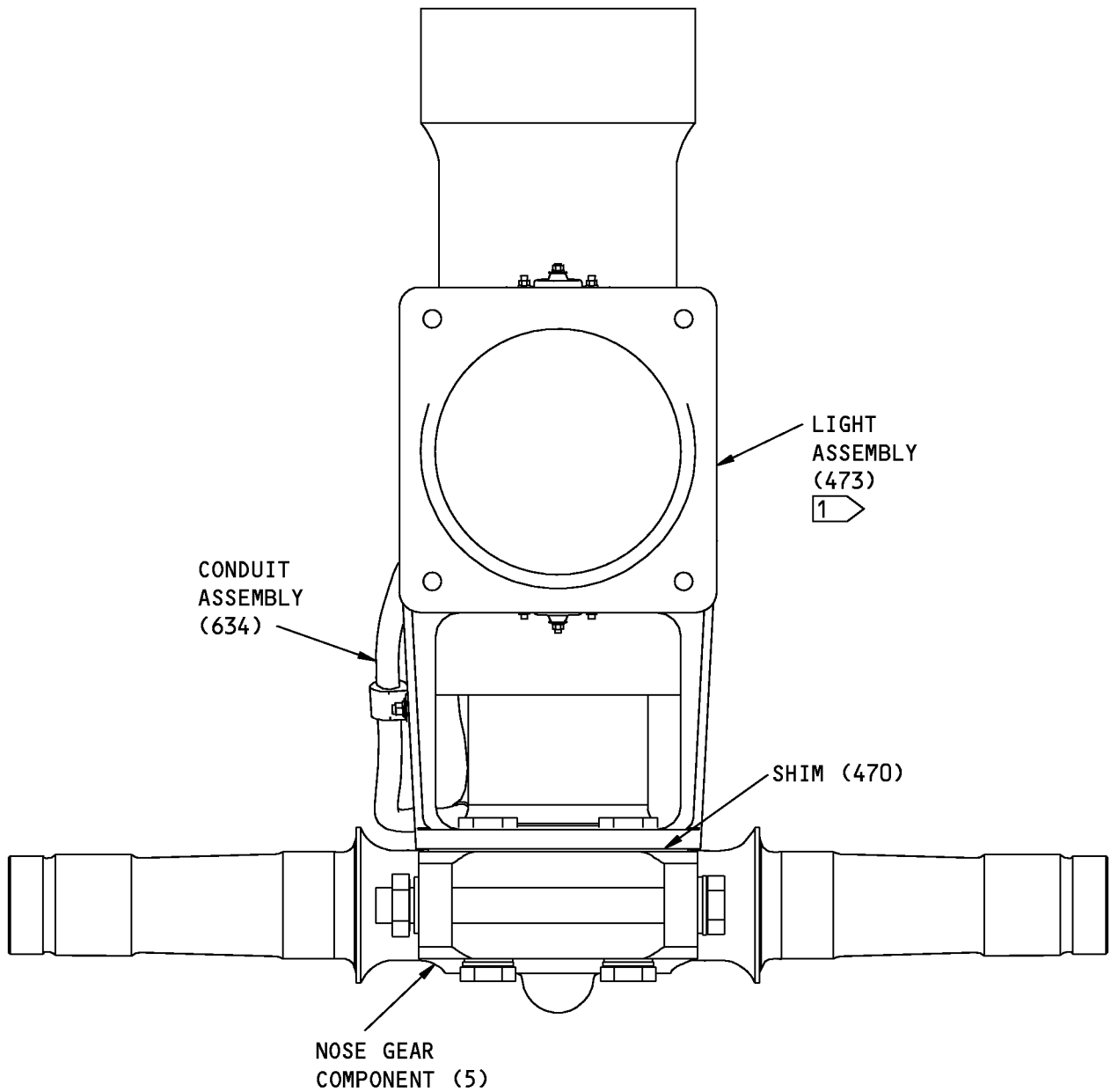
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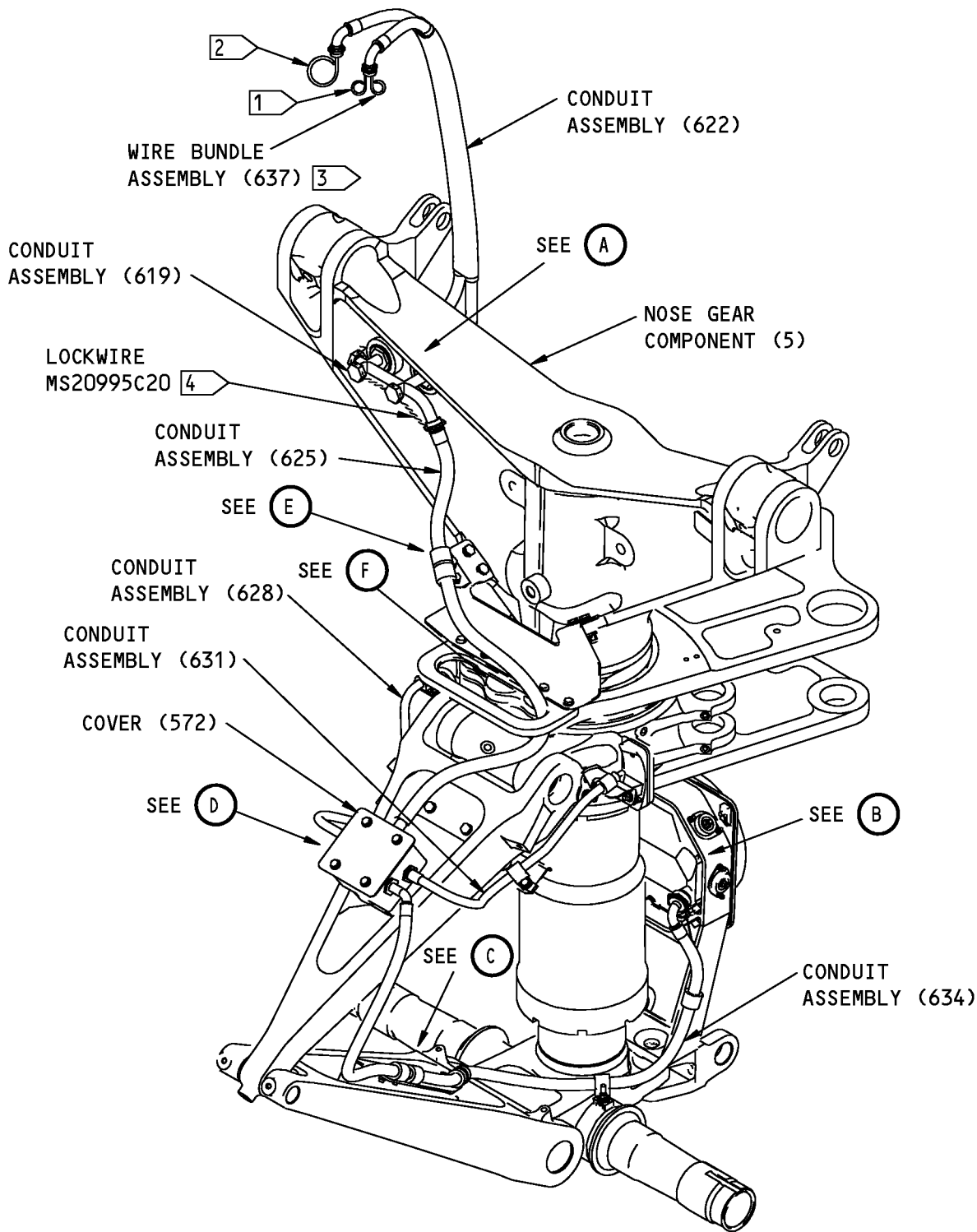
1 REFER TO CMM 32-21-12 FOR LIGHT ASSEMBLY HARDWARE.

Light Assembly Installation
Figure 703

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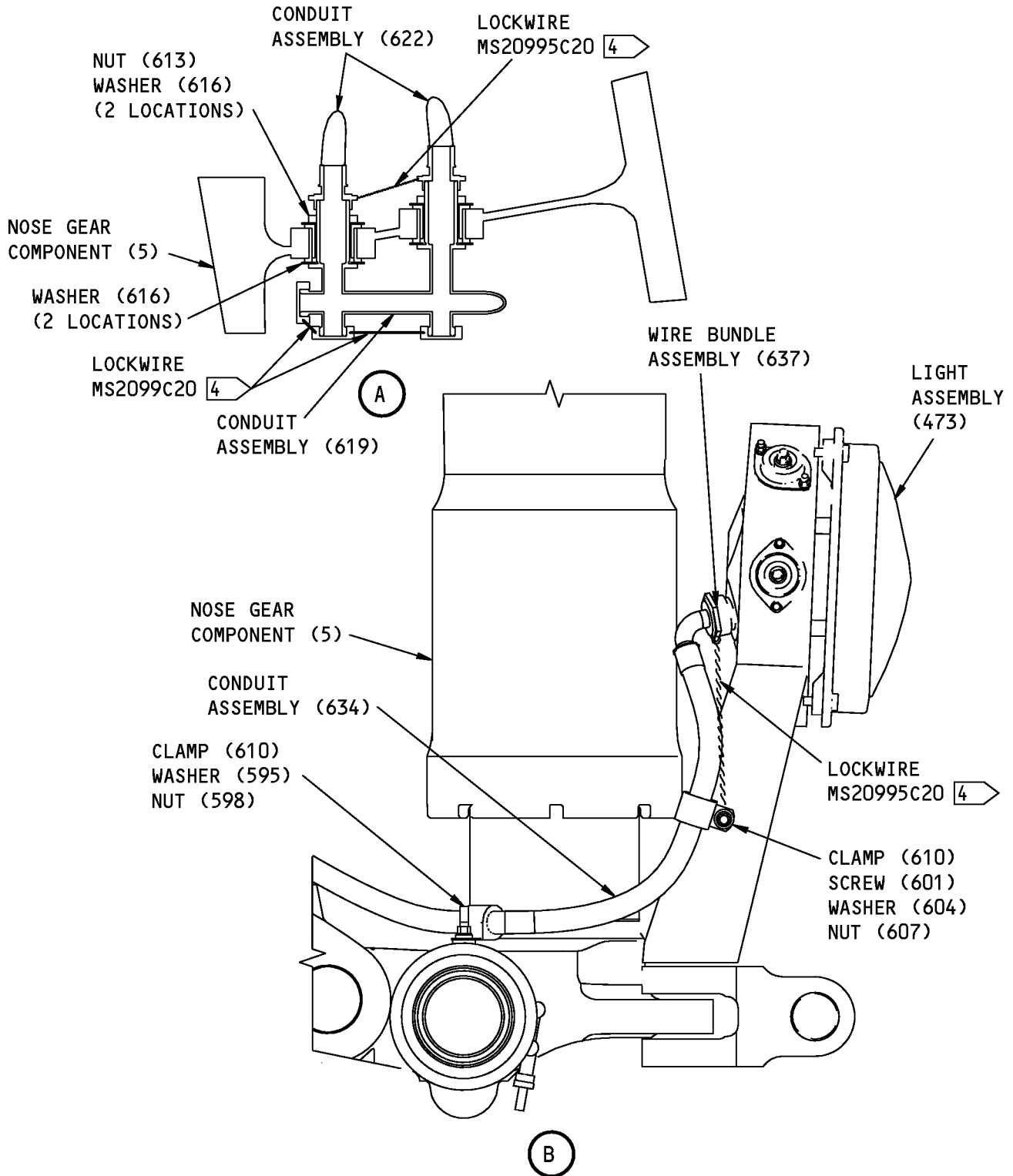


Wire Bundle Harness Support Installation
Figure 704 (Sheet 1 of 5)

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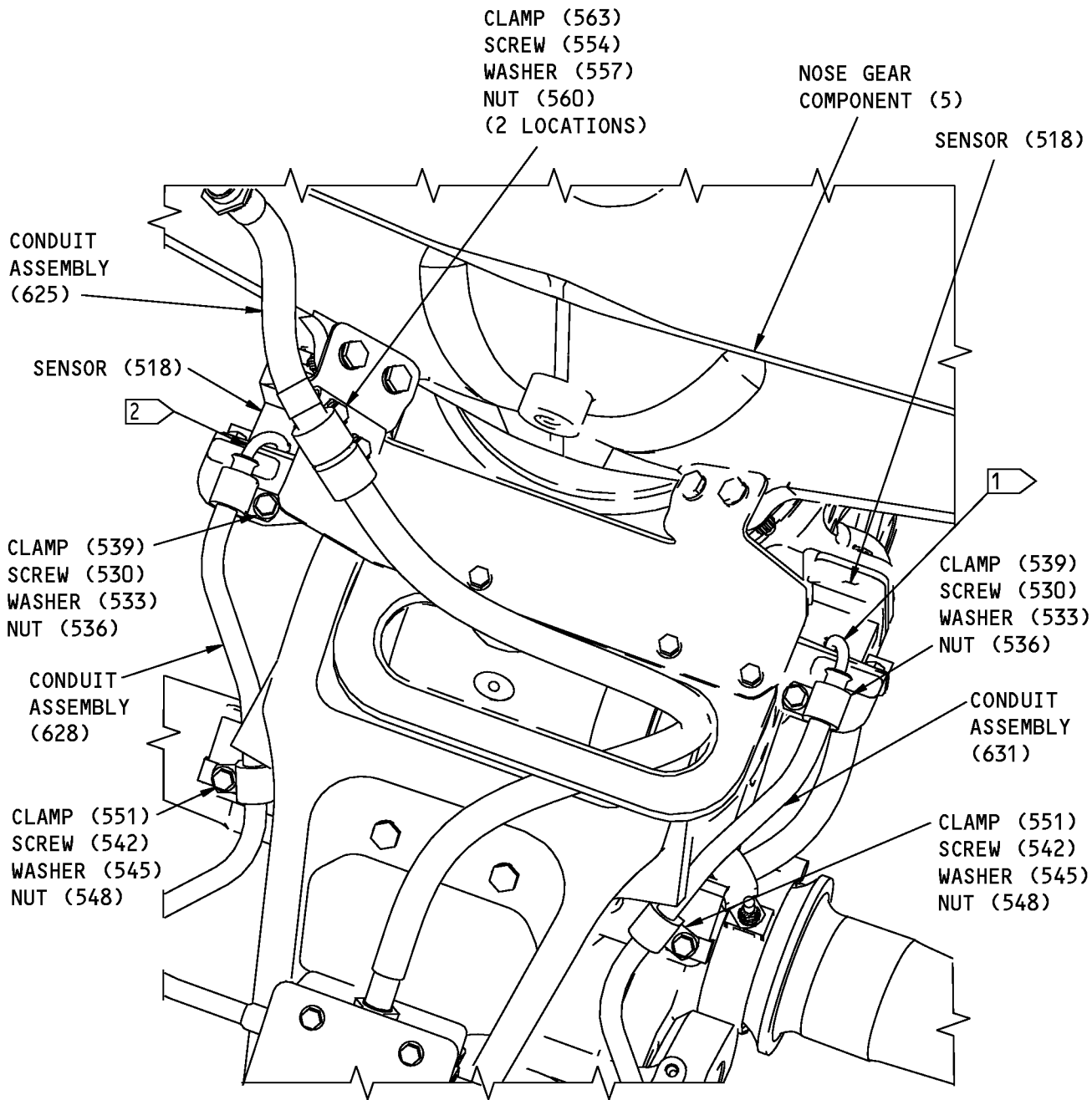


Wire Bundle Harness Support Installation
Figure 704 (Sheet 2 of 5)

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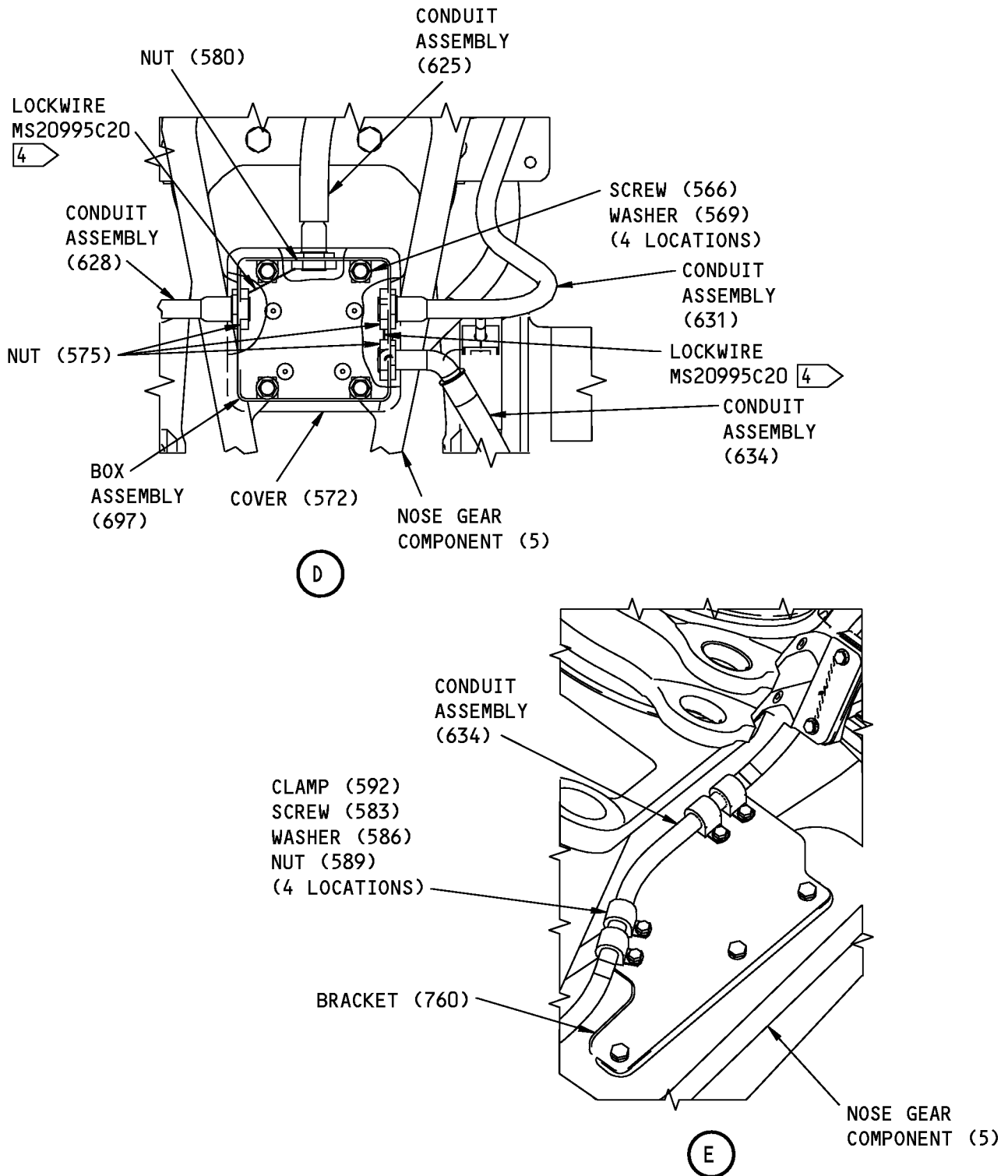
C

Wire Bundle Harness Support Installation
Figure 704 (Sheet 3 of 5)

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Wire Bundle Harness Support Installation
Figure 704 (Sheet 4 of 5)

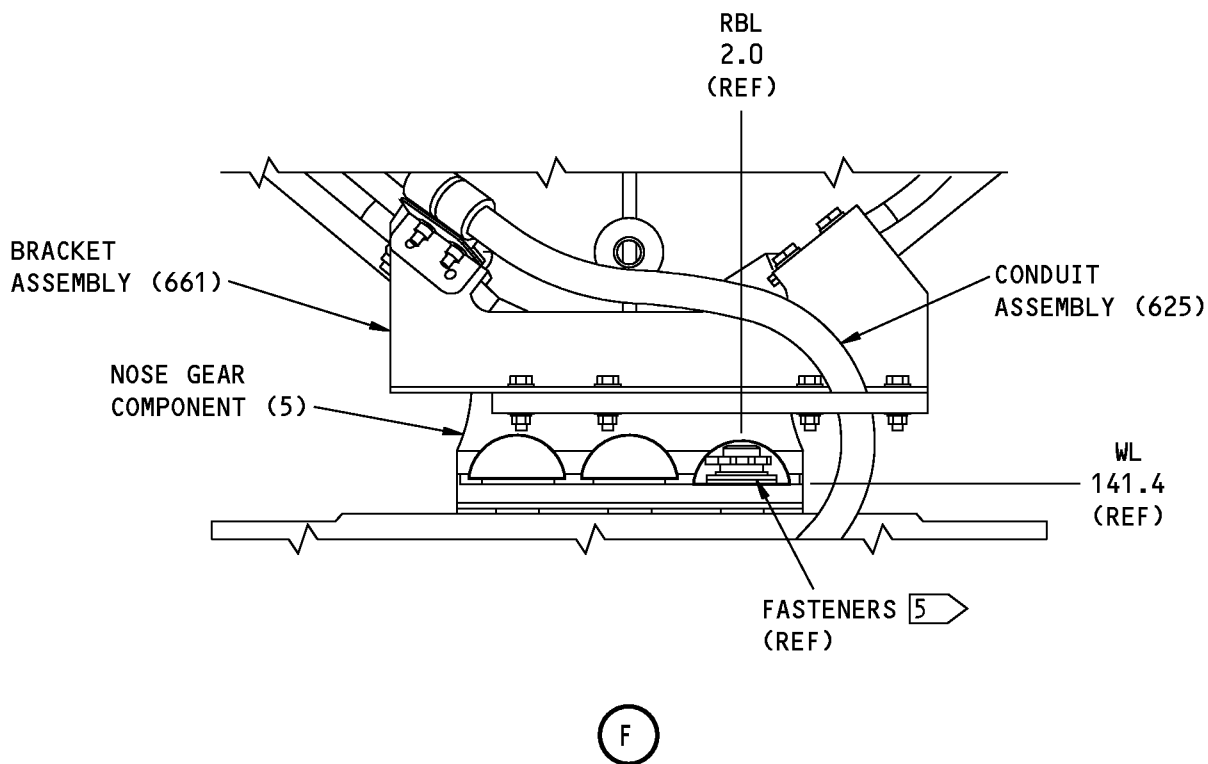
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ASSEMBLY

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- 1 WIRE BUNDLE W8032 FROM PRIMARY SENSOR
- 2 WIRE BUNDLE W7032 FROM SECONDARY SENSOR
- 3 WIRE BUNDLE W8144 FROM NOSE GEAR TAXI LIGHT ASSEMBLY
- 4 INSTALL THIS LOCKWIRE BY SINGLE TWIST PROCEDURE AS SHOWN IN SOPM 20-50-02
- 5 APPLY BMS 5-142 OR BMS 5-95 SEALANT TO THIS FASTENER TO PREVENT DAMAGE TO THE CONDUIT ASSEMBLY DURING NOSE GEAR COMPONENT STEERING

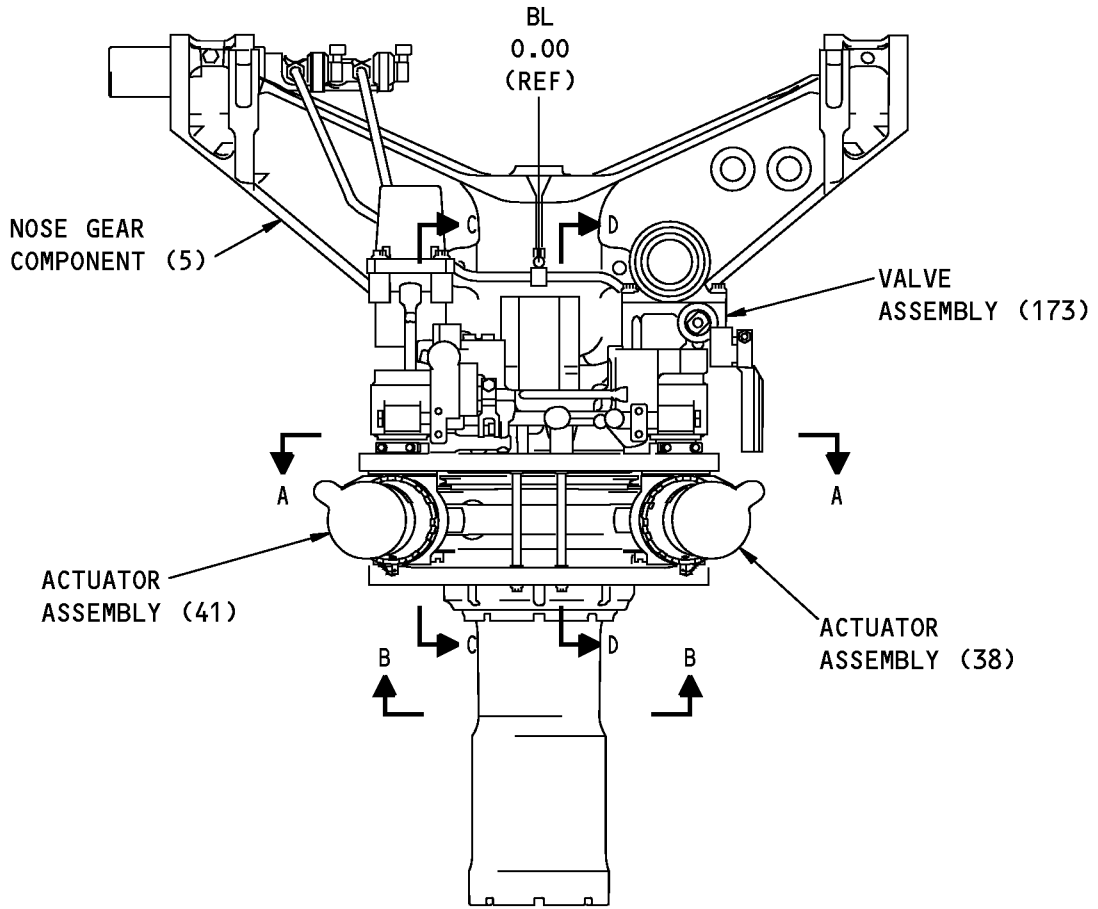
ITEM NUMBERS REFER TO IPL FIG. 1

Wire Bundle Harness Support Installation
Figure 704 (Sheet 5 of 5)

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ASSEMBLY
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VIEW LOOKING AFT

Valve and Actuator Assembly Installation
Figure 705 (Sheet 1 of 5)

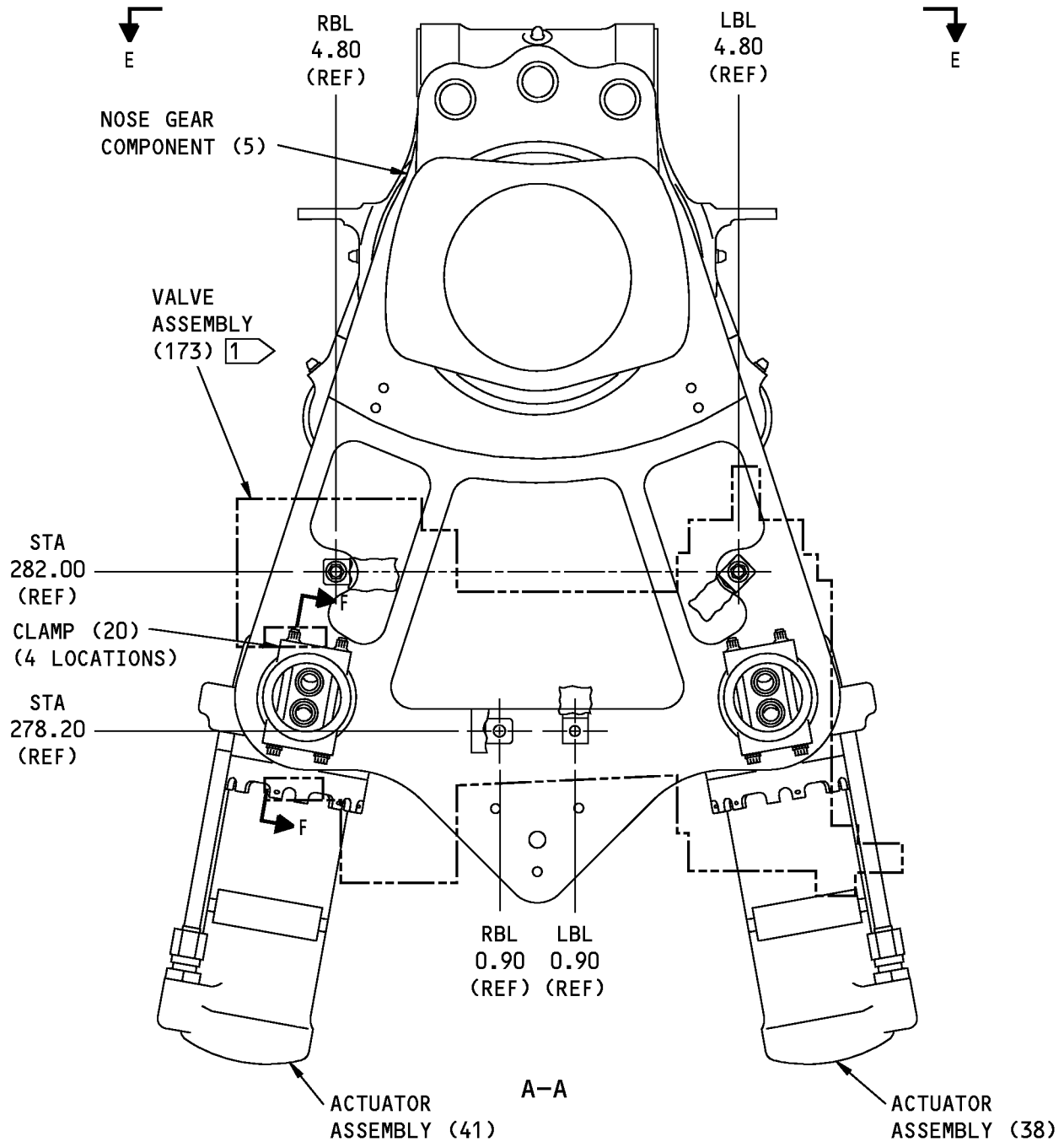
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ASSEMBLY

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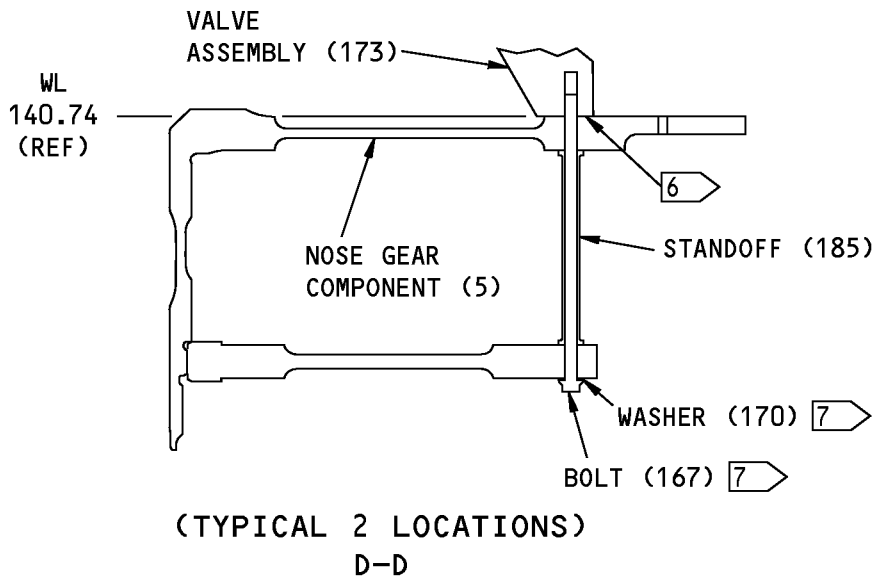
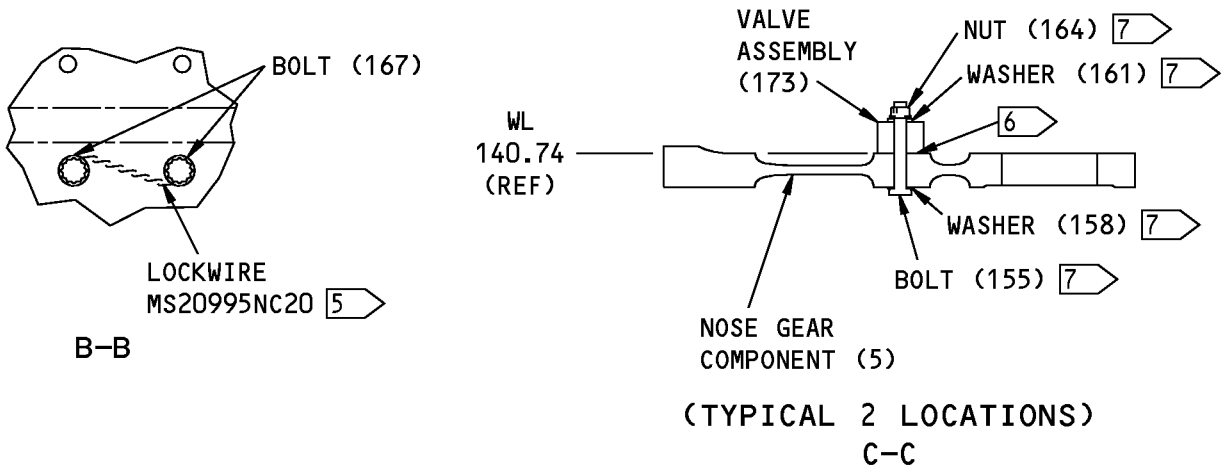


Valve and Actuator Assembly Installation
Figure 705 (Sheet 2 of 5)

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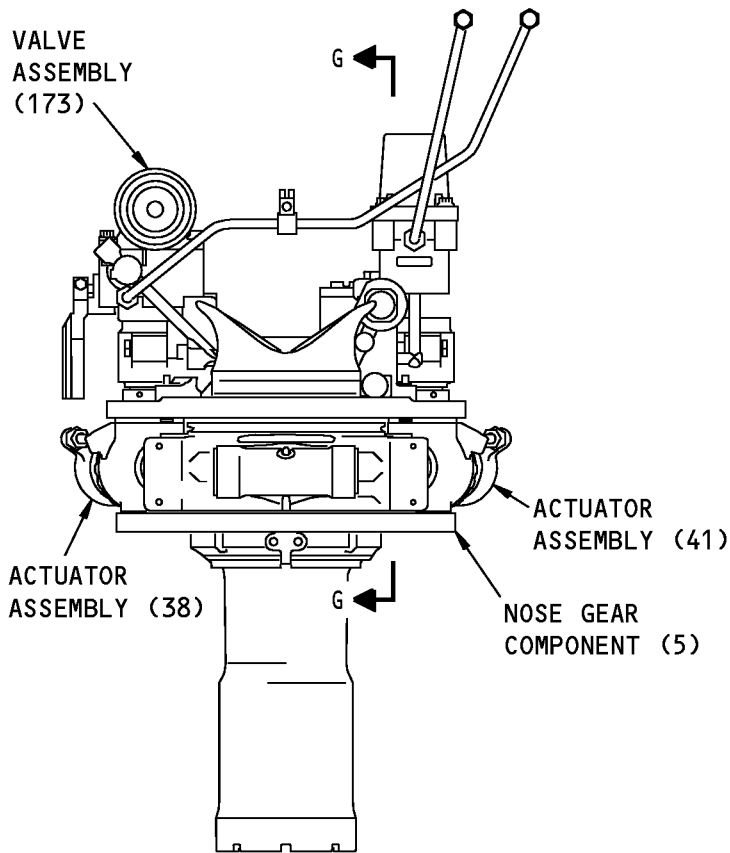


Valve and Actuator Assembly Installation
Figure 705 (Sheet 3 of 5)

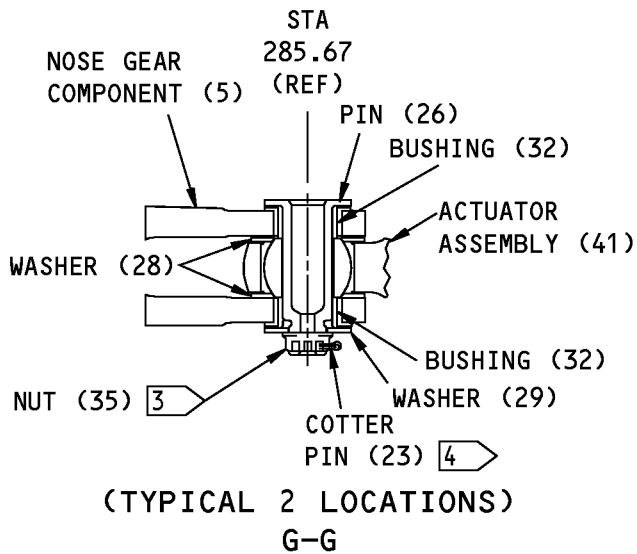
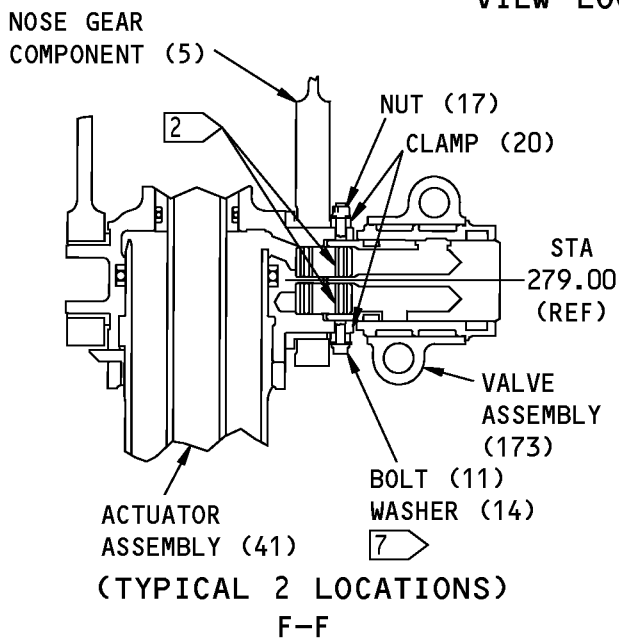
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VIEW LOOKING FORWARD
E-E



Valve and Actuator Assembly Installation
Figure 705 (Sheet 4 of 5)

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COMPONENT MAINTENANCE MANUAL

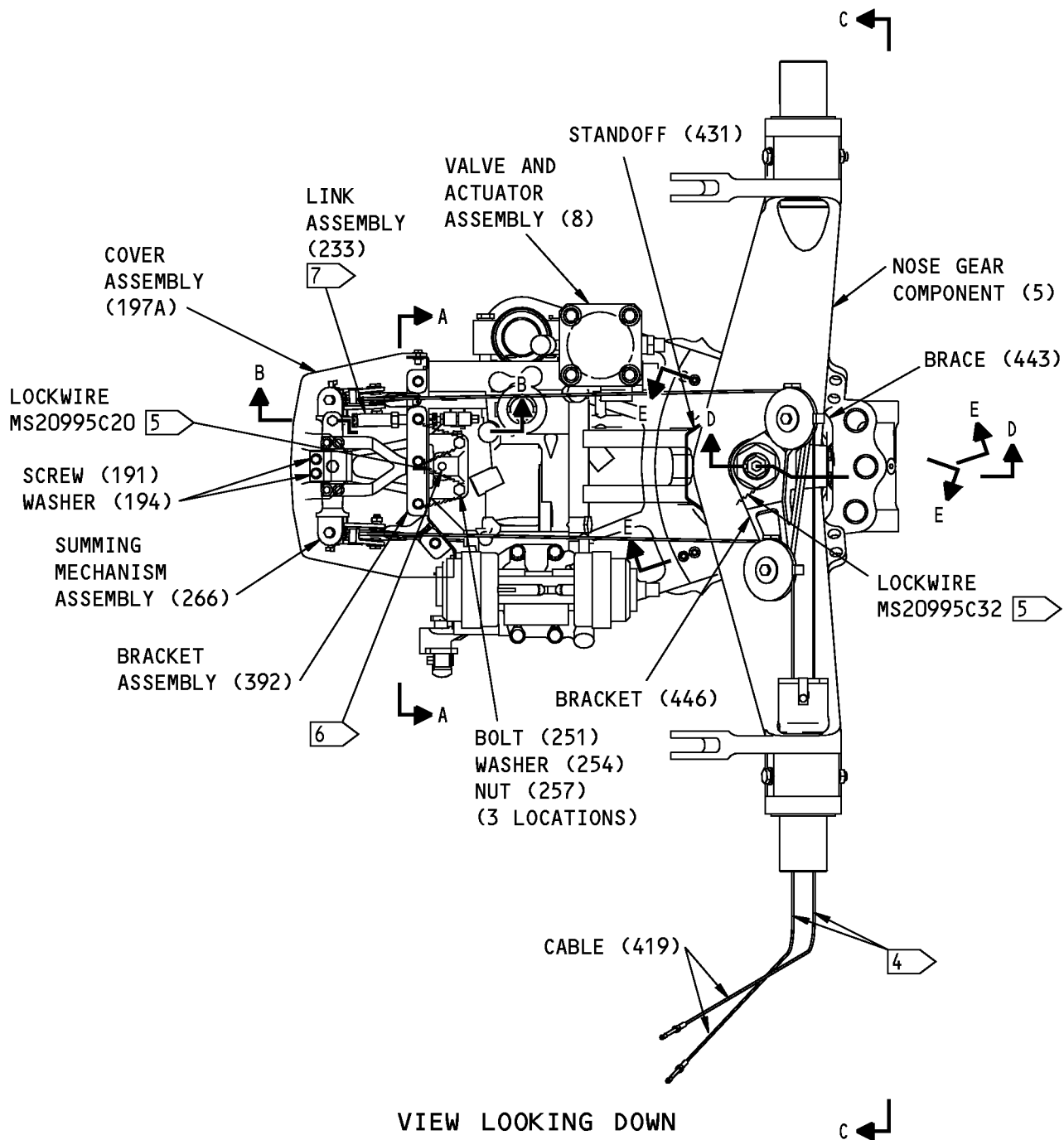
- ITEM NUMBERS REFER TO IPL FIG. 1
- 1 VALVE ASSEMBLY IS SHOWN AS AN OUTLINE
 - 2 LUBRICATE THE TRANSFER TUBES IN THE ACTUATOR WITH BMS 3-11 HYDRAULIC FLUID OR MCS 352 ASSEMBLY LUBE
 - 3 TIGHTEN THIS NUT TO 50-58 POUND-FEET. BACK OFF TO ALIGN THE CASTELLATION WITH THE NEAREST HOLE IN THE PIN
 - 4 INSTALL THE COTTER PIN (SOPM 20-50-02). MAKE SURE THAT TAILS ARE NOT CLOSER THAN 0.10 INCHES FROM THE TOP OF THE STEERING PLATE
 - 5 INSTALL THIS LOCKWIRE BY THE DOUBLE TWIST PROCEDURE (SOPM 20-50-02)
 - 6 APPLY BMS 3-27 OR BMS 3-38 COMPOUND TO MATING SURFACES OF THE VALVE ASSEMBLY AT ALL 4 MOUNTING FEET
 - 7 INSTALL THESE FASTENERS WITH BMS 3-27 OR BMS 3-38 (SOPM 20-50-19)

Valve and Actuator Assembly Installation
Figure 705 (Sheet 5 of 5)

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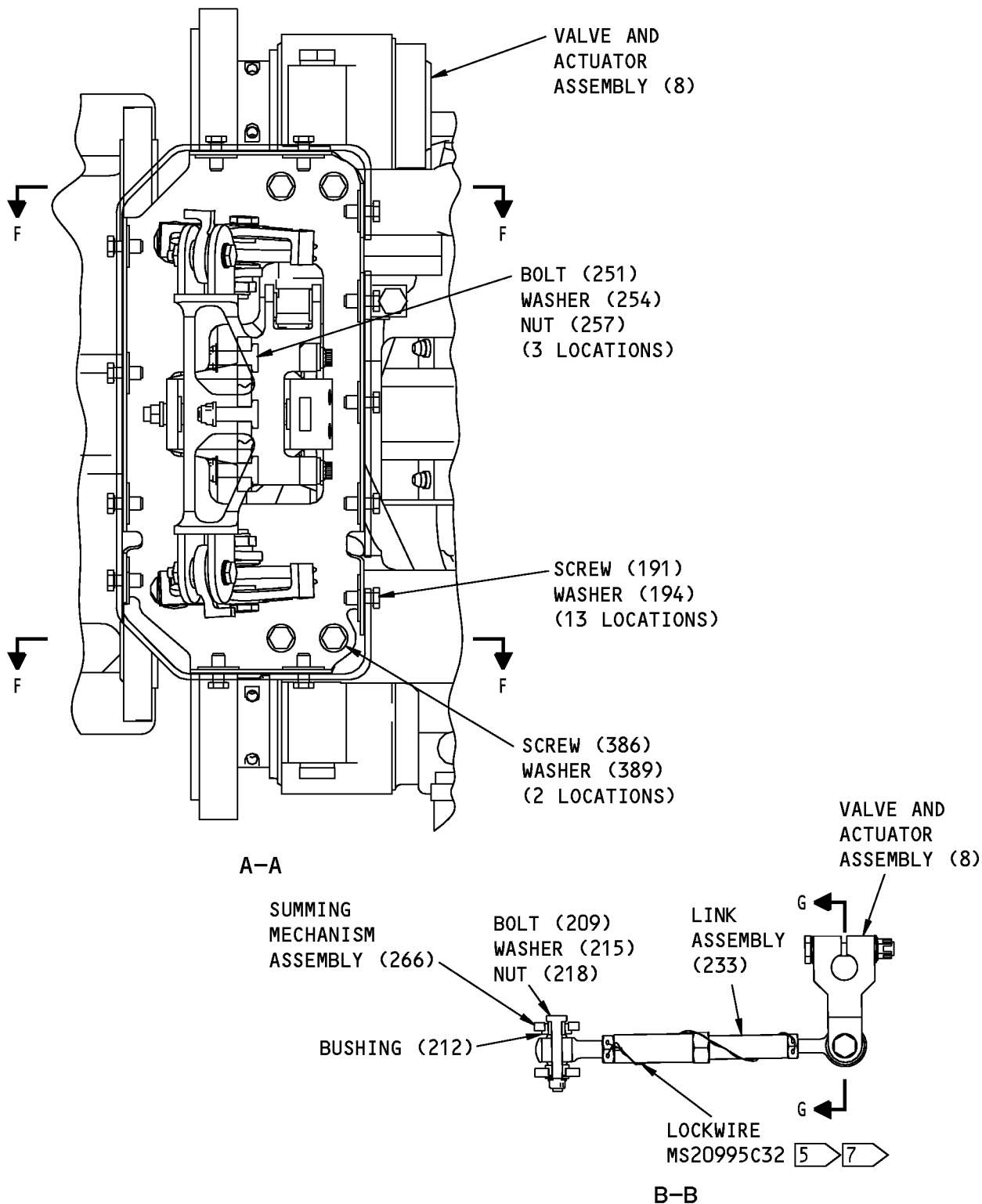


Summing Mechanism Installation
Figure 706 (Sheet 1 of 5)

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COMPONENT MAINTENANCE MANUAL

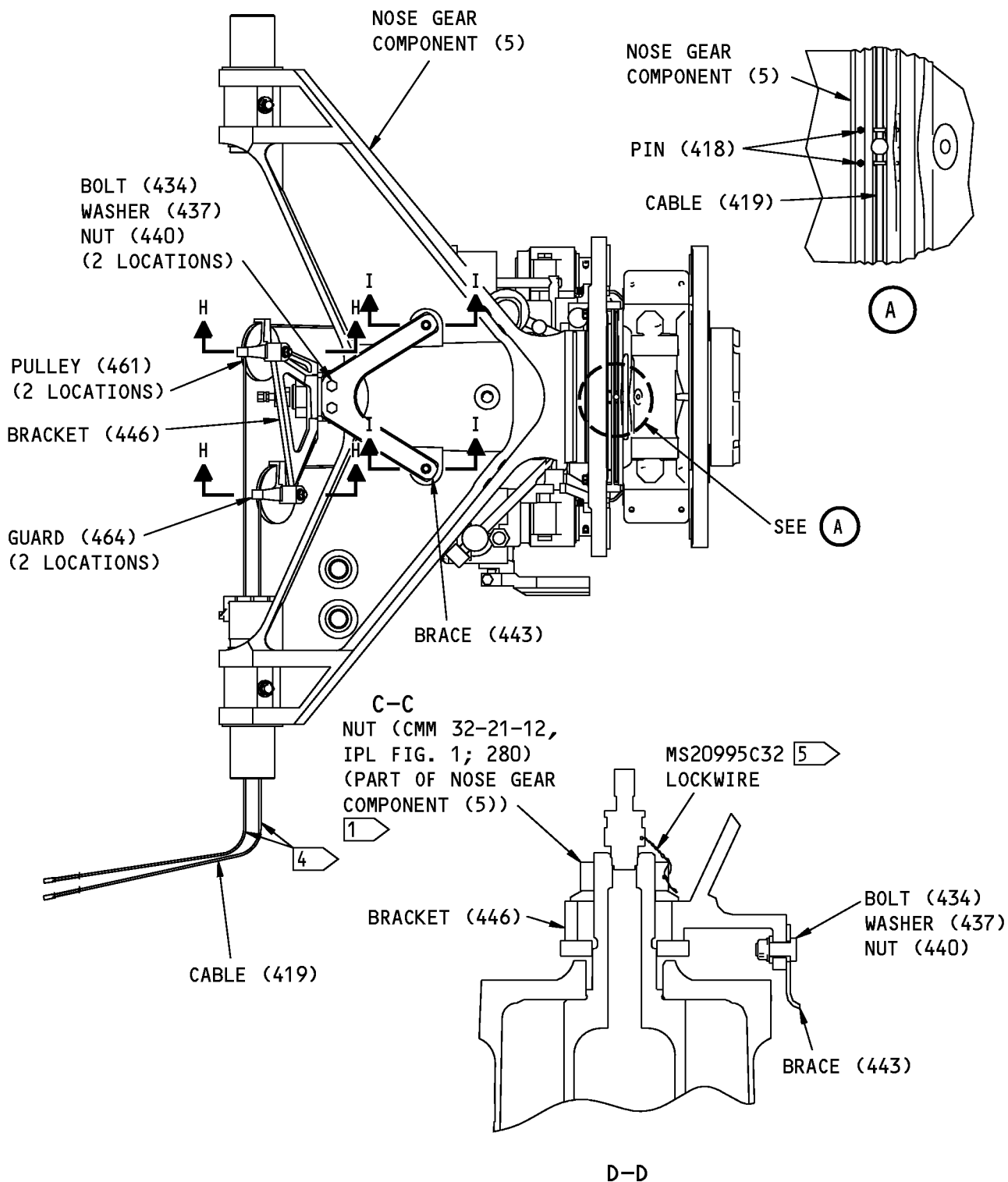


Summing Mechanism Installation
Figure 706 (Sheet 2 of 5)

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COMPONENT MAINTENANCE MANUAL

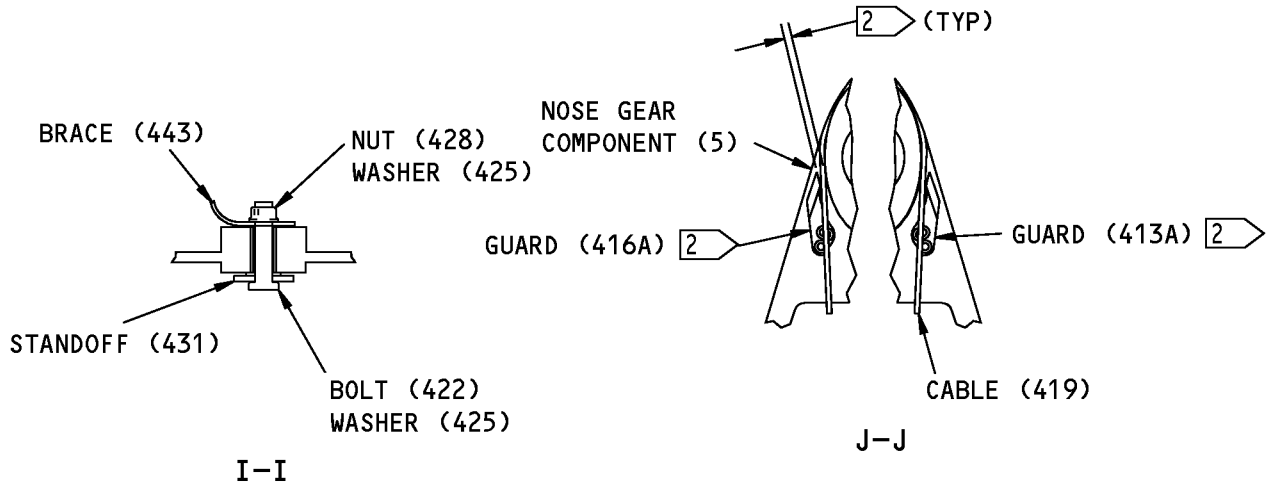
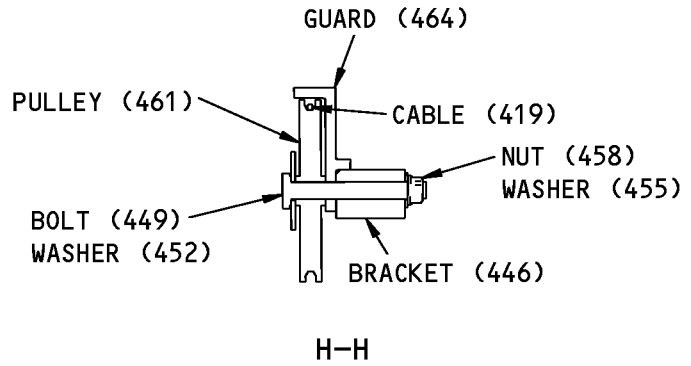
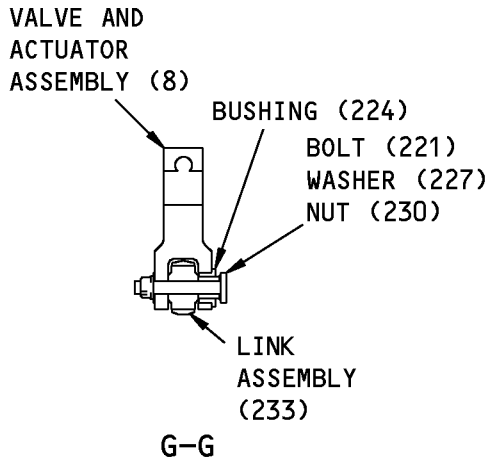
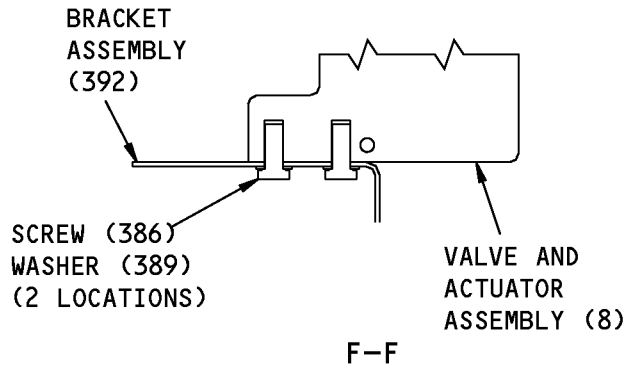
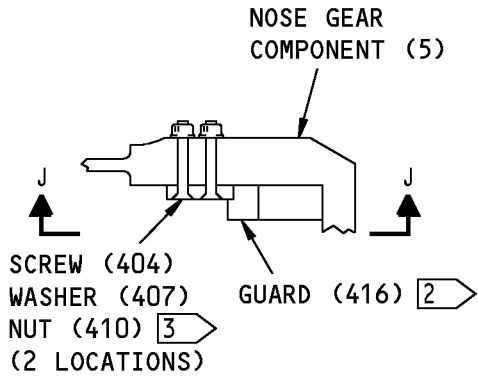


Summing Mechanism Installation
Figure 706 (Sheet 3 of 5)

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COMPONENT MAINTENANCE MANUAL



Summing Mechanism Installation
Figure 706 (Sheet 4 of 5)

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**COMPONENT MAINTENANCE MANUAL**

- 1 TIGHTEN THIS NUT TO 85-100 POUND- FEET AFTER YOU INSTALL THE BRACKET
- 2 INSTALL THE GUARD WITH A 0.010 INCH GAP FROM THE STEERING COLLAR
- 3 TIGHTEN THIS NUT TO 20-25 POUND- INCHES
- 4 AFTER THE CABLES ARE INSTALLED AND TIGHT, MAKE SURE THAT THE TERMINAL ENDS ARE WITHIN 1 INCH OF EACH OTHER
- 5 INSTALL THIS LOCKWIRE BY DOUBLE TWIST PROCEDURE AS SHOWN IN SOPM 20-50-02
- 6 RIG PIN NO. 4 IS INSTALLED HERE AT RIGGING OPERATION
- 7 MAKE SURE THAT THE TAIL END OF THE LOCKWIRE IS ON THE AFT END OF THE LINK ASSEMBLY

ITEM NUMBERS REFER TO IPL FIG. 1

Summing Mechanism Installation
Figure 706 (Sheet 5 of 5)

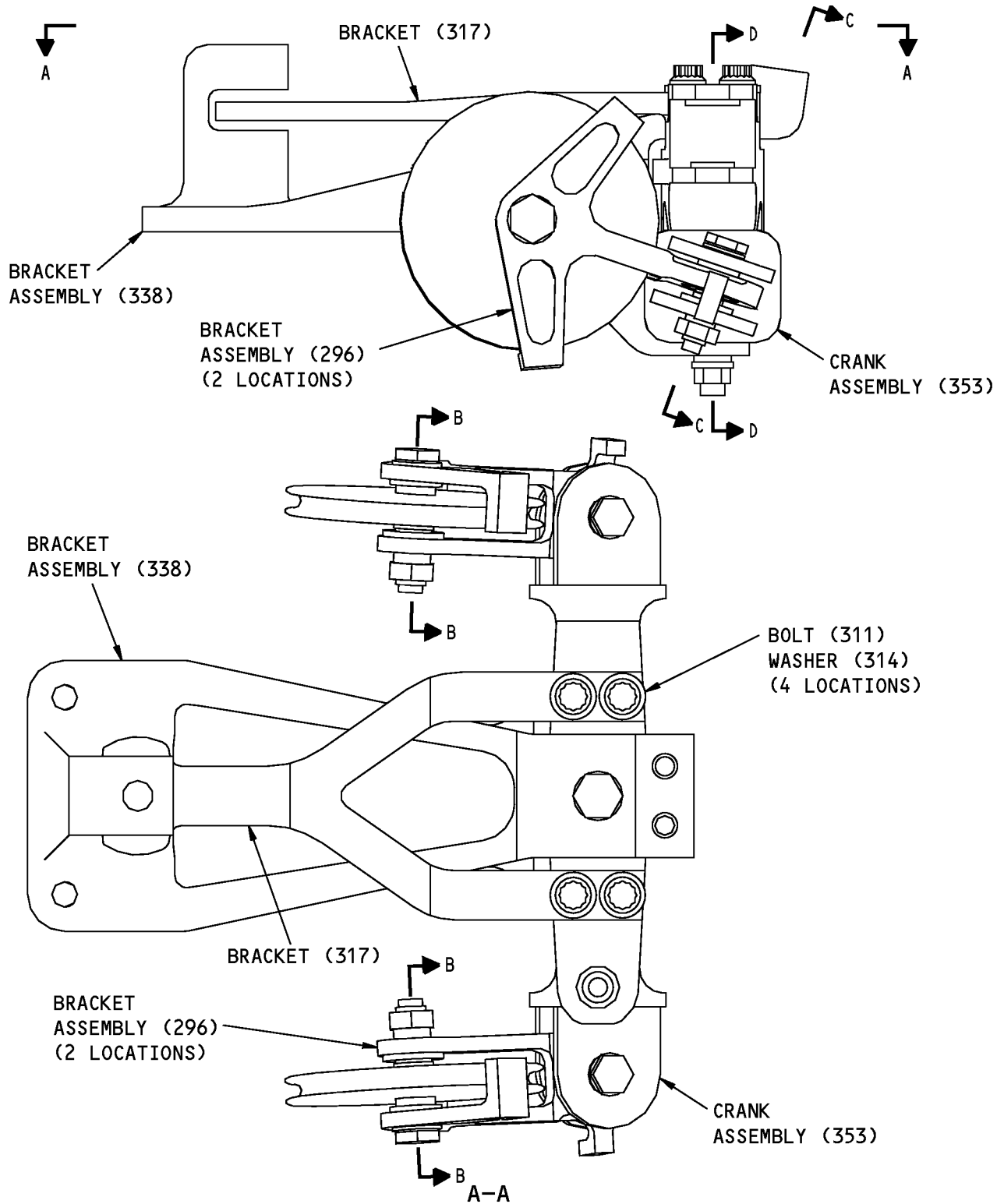
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COMPONENT MAINTENANCE MANUAL



Summing Mechanism Assembly
Figure 707 (Sheet 1 of 2)

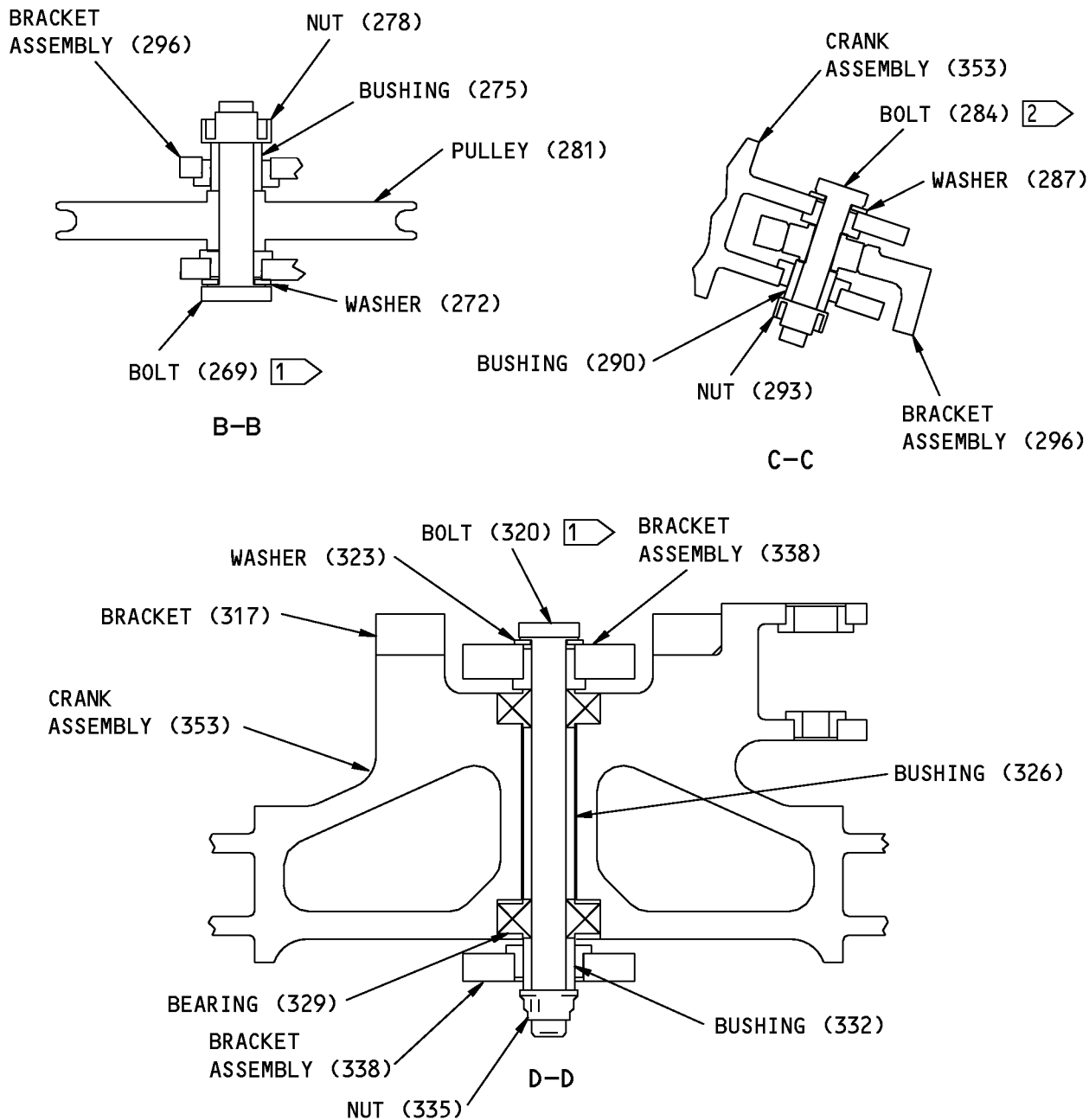
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- 1 TIGHTEN THIS BOLT TO 50-75 POUND-INCHES ABOVE THE RUN-ON TORQUE
- 2 TIGHTEN THIS BOLT TO 20-25 POUND-INCHES ABOVE THE RUN-ON TORQUE

ITEM NUMBERS REFER TO IPL FIG. 1

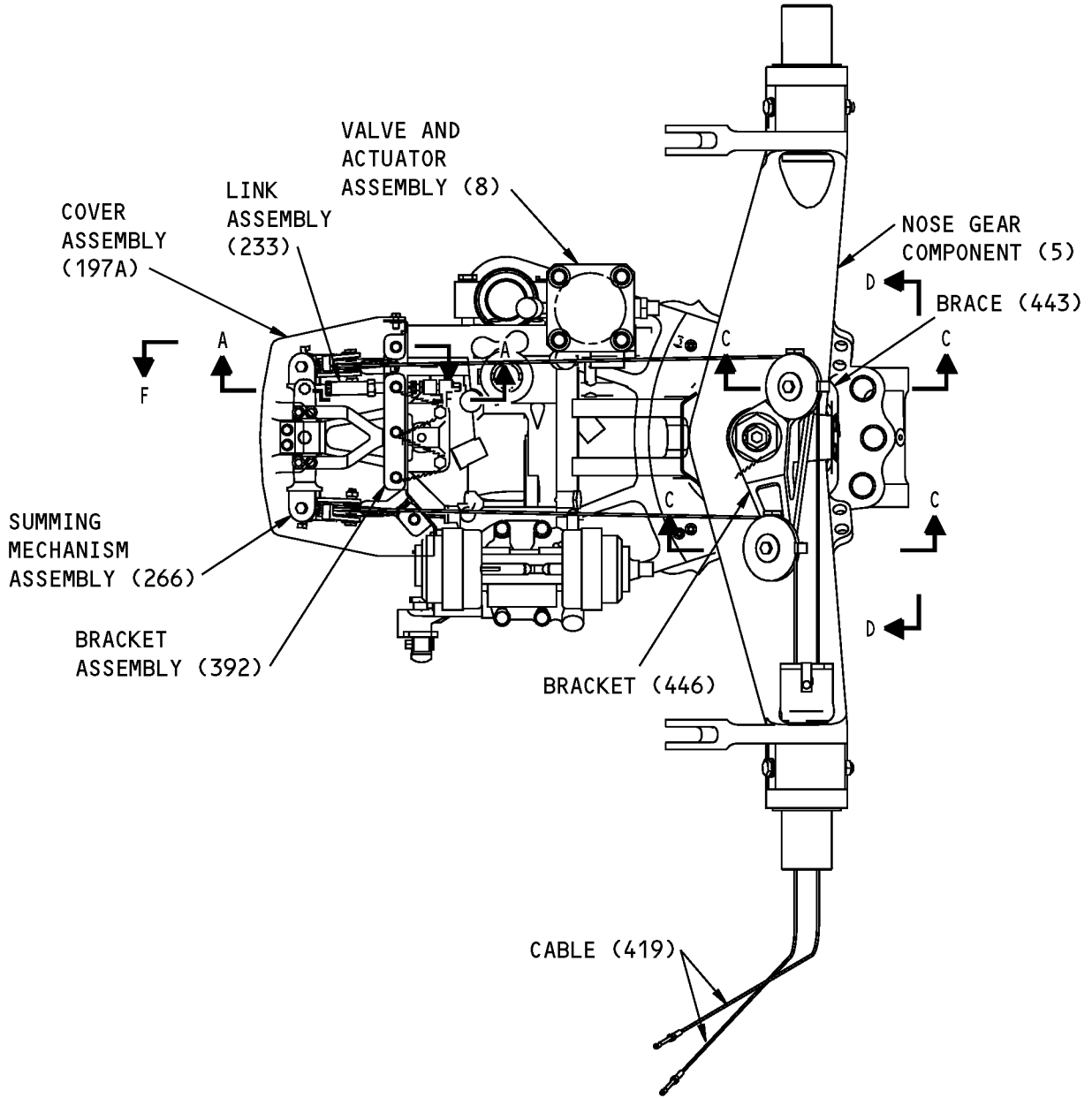
Summing Mechanism Assembly
Figure 707 (Sheet 2 of 2)

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ASSEMBLY
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COMPONENT MAINTENANCE MANUAL

FITS AND CLEARANCES



VIEW LOOKING DOWN

Fits and Clearances
Figure 801 (Sheet 1 of 7)

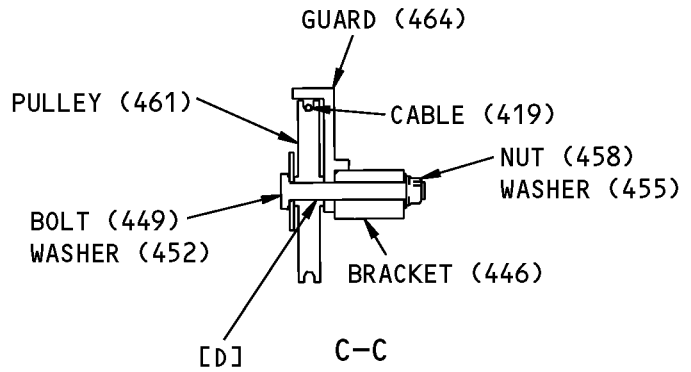
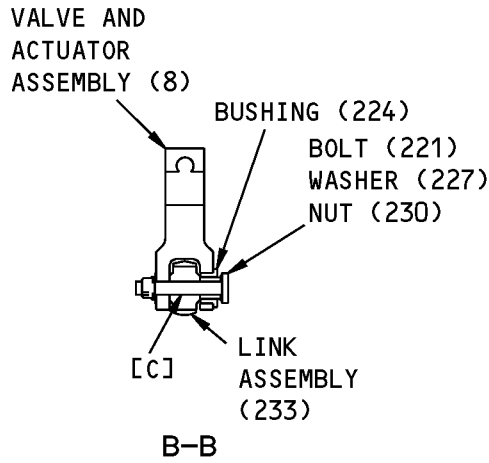
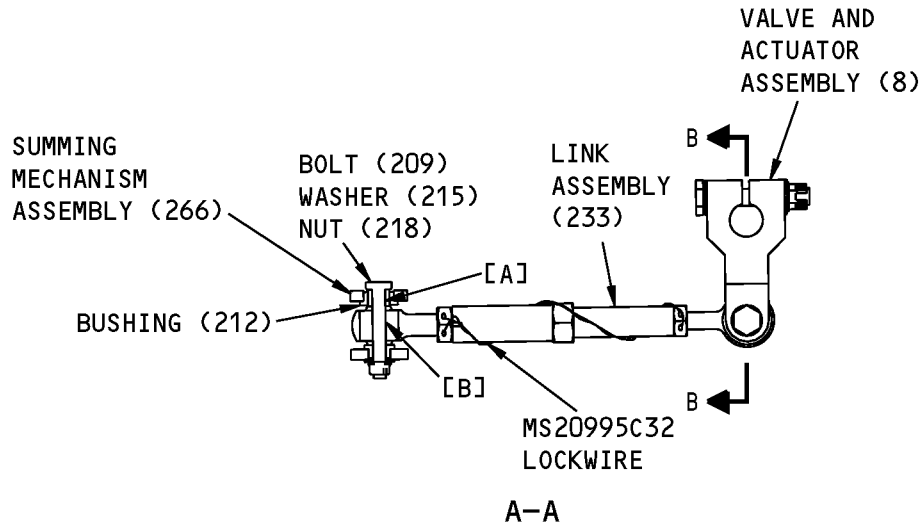
32-21-16

FITS AND CLEARANCES

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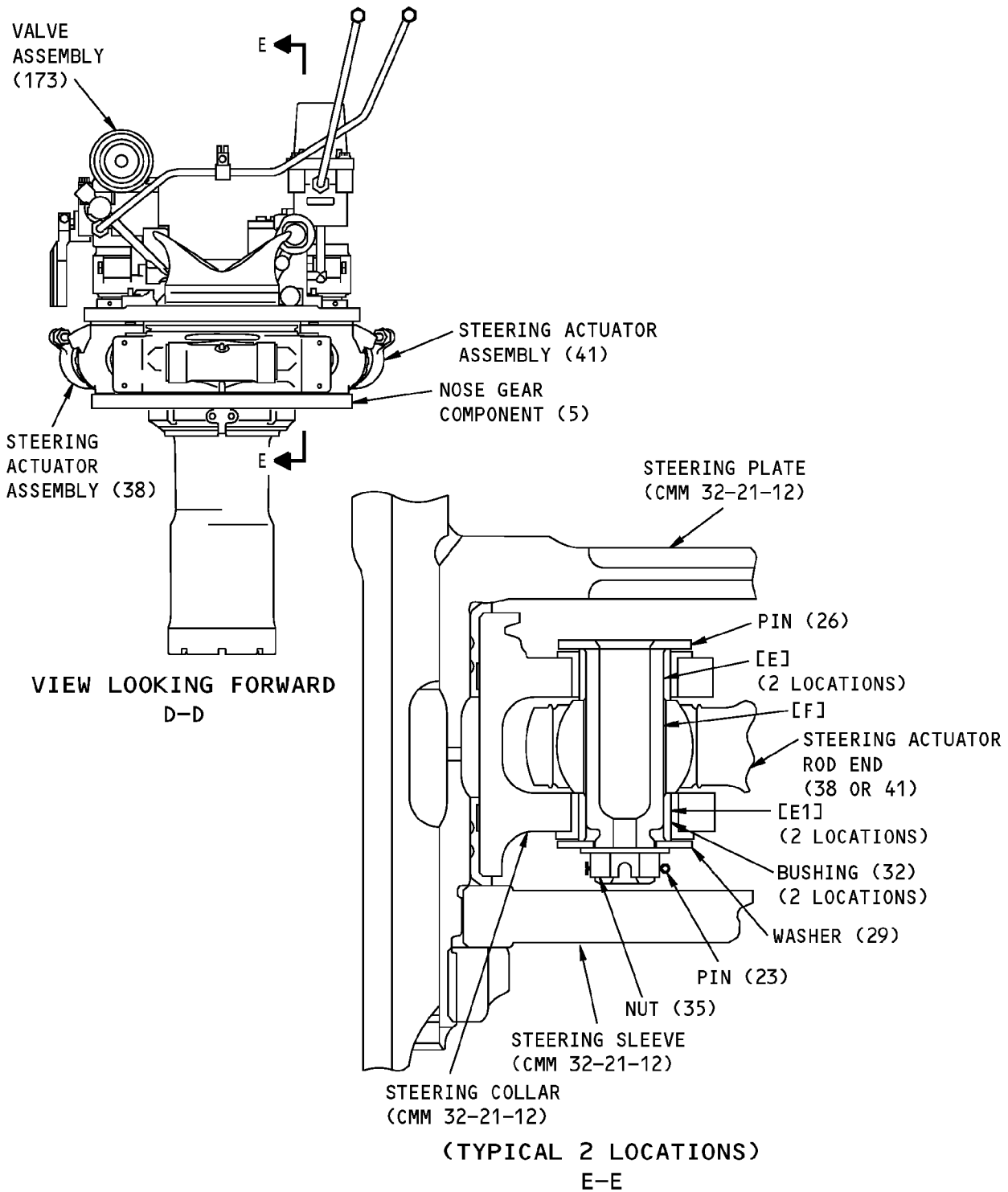
COMPONENT MAINTENANCE MANUAL



ITEM NUMBERS REFER TO IPL FIG. 1

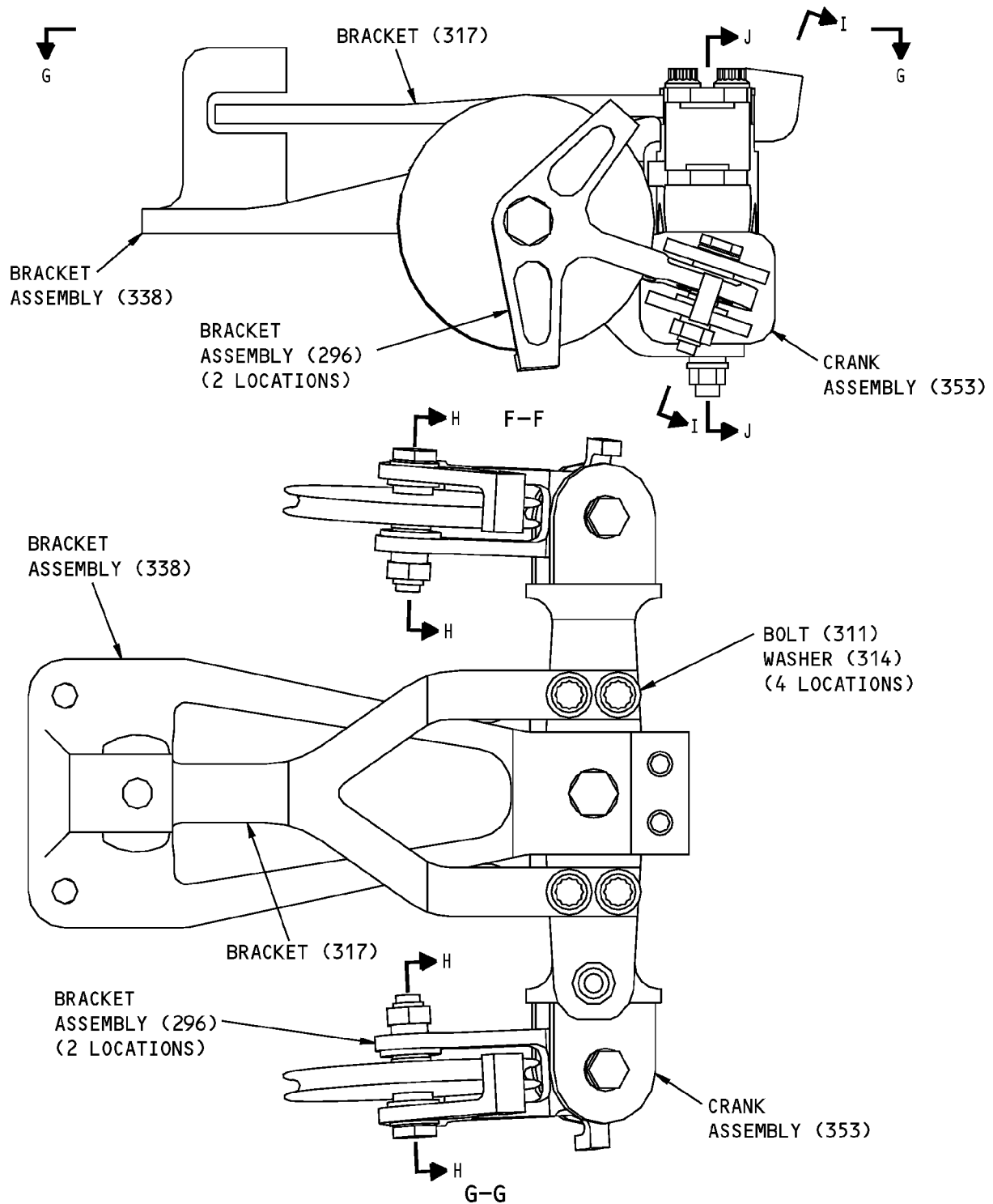
Fits and Clearances
Figure 801 (Sheet 2 of 7)

COMPONENT MAINTENANCE MANUAL



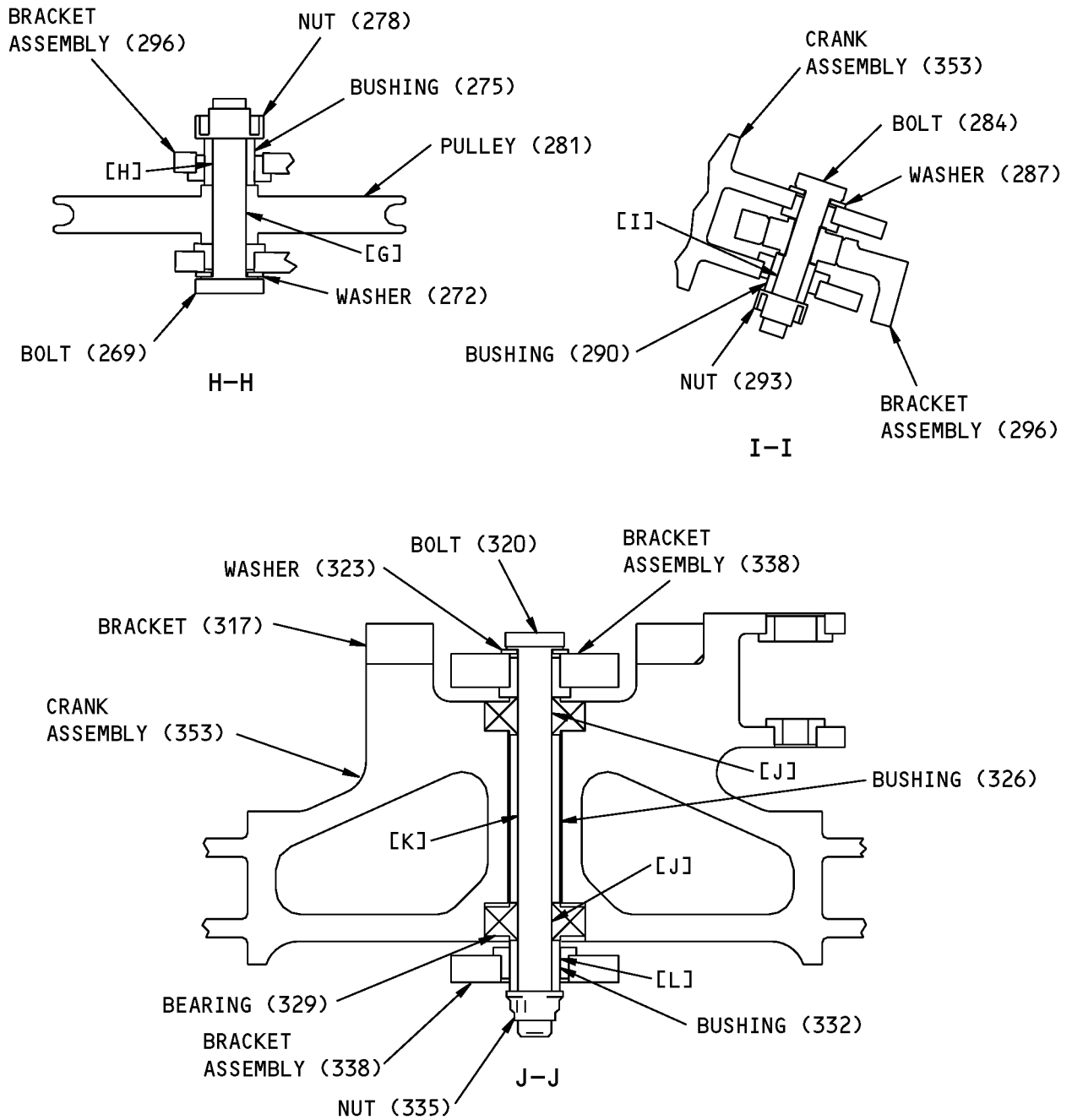
Fits and Clearances
Figure 801 (Sheet 3 of 7)

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Fits and Clearances
Figure 801 (Sheet 4 of 7)

COMPONENT MAINTENANCE MANUAL



Fits and Clearances
Figure 801 (Sheet 5 of 7)

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FITS AND CLEARANCES

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COMPONENT MAINTENANCE MANUAL

REF LETTER	REFERENCE	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	IPL ITEM NO. FIG. 1	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[A]	ID 212	0.1900	0.1905	0.0005	0.0020			
	OD 209	0.1885	0.1895					
[B]	ID 233	0.1895	0.1900	0.0000	0.0015			
	OD 209	0.1885	0.1895					
[C]	ID 233	0.1895	0.1900	0.0000	0.0015			
	OD 221	0.1885	0.1895					
[D]	ID 461	0.2495	0.2500	0.0000	0.0010			
	OD 449	0.2490	0.2495					
[E]	ID 32	0.9995	1.0005	0.0005	0.0025		1.0030	0.0040
	OD 26	0.9980	0.9990			0.9965		
[E1]	ID 1	1.1875	1.1886	0.0005	0.0026		1.1920	0.0050
	OD 32	1.1860	1.1870			1.1836		
[F]	ID 41	1.0000	1.0010	0.0010	0.0030		1.0020	0.0040
	OD 26	0.9980	0.9990			0.9970		
[G]	ID 281	0.2495	0.2500	0.0000	0.0005			
	OD 269	0.2490	0.2495					
[H]	ID 275	0.2500	0.2505	0.0005	0.0015			
	OD 269	0.2490	0.2495					

Fits and Clearances
Figure 801 (Sheet 6 of 7)

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FITS AND CLEARANCES
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COMPONENT MAINTENANCE MANUAL

REF LETTER	REFERENCE	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	IPL ITEM NO. FIG. 1	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[I]	ID 290	0.1900	0.1905	0.0005	0.0015			
	OD 284	0.1895	0.1895					
[J]	ID 329	0.2497	0.2500	0.0002	0.0010			
	OD 320	0.2490	0.2495					
[K]	ID 326	0.2500	0.2505	0.0005	0.0015			
	OD 320	0.2490	0.2495					
[L]	ID 338	0.3750	0.3790	0.0005	0.0025			
	OD 332	0.3740	0.3745					

* ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

1 BUSHING (235) IN STEERING COLLAR
(CMM 32-21-12)

Fits and Clearances
Figure 801 (Sheet 7 of 7)

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FITS AND CLEARANCES
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REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
1	35	Nut		50-58
1	269	Bolt	50-75	
1	280	Nut		85-100
1	284	Bolt	20-25	
1	320	Bolt	50-75	
1	410	Nut	20-25	
1	575	Nut	40-50	
1	580	Nut	40-50	
1	613	Nut	40-50	

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

1 CMM 32-21-12, IPL FIG. 1

Torque Table
Figure 802

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COMPONENT MAINTENANCE MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

(NOT APPLICABLE)

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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
00779	TYCO ELECTRONICS CORP 2800 FULLING MILL ROAD PO BOX 3608 MIDDLETOWN, PENNSYLVANIA 17057 FORMERLY AMP INC; FORMERLY V04618 FORMERLY GENICOM COMP V01526
05593	ICORE INTERNATIONAL INC 3780 FLIGHTLINE DR SANTA ROSA, CALIFORNIA 95403 FORMERLY IN SANTA CLARA AND SUNNYVALE, CALIFORNIA
08524	Replaced: [V08524] DEUTSCH FASTENER CORP SEE CODE V97928 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 Referenced in FORMERLY line below [17419] DEUTSCH COMPANY THE WELLS FARGO BANK BLDG 2444 WILSHIRE BLVD #600 SANTA MONICA, CALIFORNIA 90403 FORMERLY DEUTSCH FASTENER CORP V08524 FORMERLY IN LOS ANGELES
08748	CRANE ELDEC CORP 16700 13TH AVE WEST LYNNWOOD, WASHINGTON 98036 FORMERLY VB0043; FORMERLY ELECTRO DEVELOPMENT CORP; FORMERLY ELDEC CORP.

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Code	Name
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
14242	VOSS INDUSTRIES INC 2168 WEST 25TH STREET CLEVELAND, OHIO 44113-4115
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
18076	UMPCO, INCORPORATED 7100 LAMPSON AVENUE GARDEN GROVE, CALIFORNIA 92841-3914 FORMERLY IN CITY OF INDUSTRY, CALIFORNIA
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
22175	J & M PRODUCTS INC. 1647 TRUMAN STREET SAN FERNANDO, CALIFORNIA 91340 FORMERLY IN ANAHUM CALIFORNIA AND BURBANK

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Code	Name
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
26066	MINNESOTA MINING & MFG CO INDUSTRIAL TAPE DIVISION 3M CENTER ST. PAUL, MINNESOTA 55144-1000
29965	ARVAN INCORPORATED 14083 SOUTH NORMANDIE AVENUE PO BOX 1326 GARDENA, CALIFORNIA 90249 FORMERLY TANSEY AIRCRAFT IN EL MONTE, CA.
40920	MPB MINIATURE PRECISION BEARING DIV PRECISION PARK PO BOX 547 KEENE, NEW HAMPSHIRE 03431 FORMERLY MPB CORP AND MINIATURE BRG DIV MPB CORP
50632	KAMATICS CORP SUB OF KAMAN CORP 1335 BLUE HILLS ROAD BLOOMFIELD, CONNECTICUT 06002-1304
52828	REPUBLIC FASTENER MFG CORP 1300 RANCHO CONEJO BLVD NEWBURY PARK, CALIFORNIA 91320-1405 FORMERLY IN SYLMAR, CALIFORNIA
56878	SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV 301 HIGHLAND AVE JENKINTOWN, PENNSYLVANIA 19046 FORMERLY STANDARD PRESSED STEEL FORMERLY IN SALT LAKE, UTAH

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Code	Name
60119	MONADNOCK CO THE 18301 ARENTH AVENUE ROWLAND HEIGHTS, CALIFORNIA 91748-1288 FORMERLY UNITED CARR FASTENER CORP VB0051 VB0056 VB0076 FORMERLY TRW ELECTRONIC COMPONENTS CINCH-MONADNOCK DIV FORMERLY CINCH-MONADNOCK DIV OF TRW INC V76530 FORMERLY IN CITY OF INDUSTRY, CALIFORNIA
62554	SIMMONDS MECAERO FASTENERS INC 1734 SEQUOIA AVENUE ORANGE, CALIFORNIA 92668
72914	HONEYWELL/GRIMES AEROSPACE 550 STATE RT 55 URBANA, OHIO 43078 FORMERLY AERO-FLOW V70128; MIDLAND-ROSS JANITROL AERO DIV; FORMERLY FL AEROSP CORP V89513; ALLIEDSIGNAL/GRIMES AEROSP FORMERLY GRIMES AEROSPACE V00672 AND HONEYWELL V60187
72962	HARVARD INDUSTRIES INC 3 WERNER WAY SUITE 210 LEBANON, NEW JERSEY 08833 FORMERLY ESNA V7A079 FORMERLY ELASTIC STOP NUT IN UNION, NJ
80539	SPS TECHNOLOGIES INC DIV AERPSPACE - 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
83086	NEW HAMPSHIRE BALL BEARING, INC HITECH DIVISION 172 JAFFREY ROAD PETERBOROUGH, NEW HAMPSHIRE 03458
83930	ADEL WIGGINS GROUP 5000 TRIGGS STREET LOS ANGELES, CALIFORNIA 90022-4833 FORMERLY ADEL PROD DIV OF DELAVAL TURBINE CALIF INC; FORMERLY EXACTO IND V72285; FORMERLY DELAVAL ADEL FSTN DIV FORMERLY TRANSAMERICA DELAVAL ADEL FTNRS DIV; FORMERLY IMO DELAVAL IN HUNTINGTON, WV

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Code	Name
84971	TA MFG CO TA DIV 28065 W FRANKLIN PKY PO BOX 931 VALENCIA, CALIFORNIA 91380-9031 FORMERLY IN LA, CALIF; SUB OF CRITON CORP, GLENDALE, CALIF
8W928	EATON AEROQUIP INC CLAMP PRODUCTS DIV RT 2 BOX 361 MEADOWBROOK RD EASTANOLLEE, GEORGIA 30538-0361 FORMERLY AEROQUIP CORP IN TOCCOA, GEORGIA
92003	PARKER-HANNIFIN CORPORATION 14300 ALTON PKWY IRVINE, CALIFORNIA 92618 FORMERLY PARKER AIRCRAFT V02689; FORMERLY SCHULZ TOOL & MFG V82267; FORMERLY PARKER-BERTEA AEROSPACE GROUP
92215	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3010 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5102 FORMERLY VOI-SHAN IN CULVER CITY, CALIF
94581	NATIONAL UTILITIES CORP/NUCO 1700 HICKORY DRIVE PO BOX 14639 FORT WORTH, TEXAS 76117-6020 FORMERLY IN MONROVIA, CALIFORNIA; FORMERLY V2D588
F6101	AERAZUR/DIV EQUIPEMENTS AERONAUTIQUES SA 58 BD GALLIENI 92137 ISSY LES MOULINEAUX, CEDEX, FRANCE
K8455	RHP BEARINGS PLC RHP AEROSPACE OLDENDS LANE STONEHOUSE GL10 3RM UK

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COMPONENT MAINTENANCE MANUAL

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
001A6200-1		1	1A	RF
001A6200-10		1	1K	RF
001A6200-11		1	1L	RF
001A6200-12		1	1M	RF
001A6200-13		1	1N	RF
001A6200-14		1	1P	RF
001A6200-15		1	1Q	RF
001A6200-2		1	1B	RF
001A6200-3		1	1C	RF
001A6200-4		1	1D	RF
001A6200-5		1	1E	RF
001A6200-6		1	1F	RF
001A6200-7		1	1G	RF
001A6200-8		1	1H	RF
001A6200-9		1	1J	RF
1-899-29		1	518	2
10-61226-29		1	518	2
102F9201M3		1	398	13
102LH9073-3		1	17	4
102LH9075-3W		1	293	2
102LH9075-4W		1	278	2
130069		1	548	2
130069G		1	537	2
		1	548A	2
162A1100-4		1	5	1
162A1100-5		1	5A	1
162A1100-7		1	5B	1
162A1100-8		1	5C	1
162A1100-9		1	5D	1
162A1407-1		1	29	2
162A1411-1		1	26	2
162A1419-1		1	32	4
275A1100-2		1	8	1
275A1100-4		1	8A	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
275A1100-5		1	8B	1
275A1100-6		1	8C	1
275A1100-7		1	8D	1
275A1101-3		1	38	1
275A1101-4		1	41	1
275A1101-5		1	38A	1
275A1101-6		1	41A	1
275A1101-7		1	38B	1
275A1101-8		1	41B	1
275A1109-1		1	20	4
275A1110-1		1	185	2
275A1113-1		1	28	4
275A1120-3		1	173	1
275A1120-4		1	173A	1
275A1120-5		1	173B	1
275A5300-3		1	188	1
275A5300-5		1	188B	1
275A5301-3		1	266	1
275A5301-4		1	310A	1
275A5301-5		1	310B	1
275A5301-6		1	310	1
275A5302-1		1	353	1
275A5302-2		1	374	1
275A5303-4		1	308	1
275A5303-5		1	296	2
275A5304-1		1	317	1
275A5305-1		1	338	1
275A5305-2		1	350	1
275A5310-1		1	206	1
275A5310-3		1	197	1
275A5310-5		1	206B	1
275A5310-6		1	197B	1
275A5311-3		1	392	1
275A5311-4		1	401	1
275A5315-2		1	233	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
275A5316-1		1	248A	1
275A5316-2		1	248	1
275A5320-2		1	446	1
275A5321-1		1	431	1
275A5325-1		1	413	1
275A5325-2		1	416	1
275A5325-3		1	413A	1
275A5325-4		1	416A	1
284A0101-1		1	467	1
284A0101-2		1	467A	1
284A0301-1		1	476	1
284A0301-3		1	476A	1
284A3101-1		1	470A	1
284A3301-1		1	497	1
284A3301-10		1	500A	1
284A3301-2		1	500	1
284A3301-3		1	512	1
284A3301-4		1	515	1
284A3301-5		1	483	AR
284A3301-8		1	512A	1
284A3301-9		1	497A	1
284A4301-1		1	485	2
287A6203-3		1	527	1
287A6203-5		1	527A	1
287A6203-6		1	527B	1
287A6203-7		1	527C	1
287A6205-2		1	646	1
287A6205-3		1	646A	1
287A6212-11		1	622	1
287A6212-15		1	619	1
287A6212-19		1	628	1
287A6212-20		1	631	1
287A6212-21		1	625	1
		1	625A	1
287A6212-22		1	634	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
287A6212-23		1	628A	1
287A6212-24		1	631A	1
287A6212-25		1	622A	1
287A6212-26		1	625B	1
		1	625C	1
287A6213-4		1	637	1
287A6215-1		1	736	1
287A6215-10		1	698	1
287A6215-5		1	661	1
287A6215-6		1	697	1
287A6215-7		1	697A	1
287A6215-8		1	736A	1
287A6225-11		1	742	1
287A6225-12		1	745	1
287A6225-18		1	721A	1
287A6225-19		1	667	1
287A6225-20		1	670	1
287A6225-21		1	760	1
287A6225-22		1	712	1
287A6225-23		1	709	1
287A6225-24		1	682	1
287A6225-25		1	715	1
287A6225-26		1	742A	1
287A6225-28		1	713	1
287A6225-29		1	573	1
287A6225-31		1	716	1
287A6225-32		1	670A	1
287A6225-8		1	572	1
300-100-0029		1	575A	3
300-100-0031		1	613A	2
300-100-0032		1	580A	1
3140AB025E		1	772	1
3140AB025E5		1	772	1
322338		1	640	2
383900-1005		1	182	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
383900-1007		1	182A	1
383900-1011		1	182B	1
50-0199-13		1	473	1
50-0199-15		1	473A	1
509S11		1	563B	2
509SS11		1	563C	2
509SS6		1	539A	2
		1	551A	2
61-32155C3JH1902L917		1	419	1
65-54231-1		1	464	2
69-72804-1		1	443	1
69-77297-2		1	245A	1
69233CB3D		1	17	4
8412		1	775	AR
A11330-6-3		1	548	2
A4972-6-02		1	548	2
ABR3M5013WGL		1	239B	1
ABR3M5013WGP		1	239	1
ABR3M5014WGL		1	245B	1
ABR3M5014WGP		1	245	1
ACMKP4AA3908		1	329A	1
ACMKP4AFS428		1	329A	1
ACMKP4AP510LY19		1	329	1
		1	359	1
AMCS24EG7A		1	329A	1
AN970-4		1	452	2
APM219-4		1	281	2
		1	461	2
BAC27DEX6217		1	521	1
BAC27DEX6218		1	524	1
BAC27DHY388		1	200	1
BAC27TTR0038		1	203	1
BACB10FS4		1	329	1
		1	359	1
BACB10FS4R		1	329A	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB19F10S		1	766	1
BACB28AK03-024		1	212	1
BACB28AK03-030		1	224	1
		1	290	2
BACB28AK04-035		1	275	2
BACB28AK04-038		1	332A	1
BACB28AK04-125		1	326	1
BACB28AP04P013		1	302	1
BACB28AP04P022		1	344	1
BACB28AT05B011C		1	365	2
BACB28AT05B013C		1	368	1
BACB28AT06B013C		1	305	1
BACB28AT06B017C		1	347	1
BACB28W3C011		1	362	2
BACB28W3C013		1	371	1
BACB30LE3K39		1	11	4
BACB30LE4HK84		1	167	2
BACB30LJ4-40		1	320	1
BACB30LJ4SU15		1	269A	2
BACB30LJ4U15		1	269	2
BACB30LM3SU12		1	284	2
BACB30MR3K5		1	311	1
BACB30NM3K14		1	221	1
BACB30NM3K15		1	209	1
BACB30NM3K16		1	209A	1
BACB30NM3K8		1	763	1
BACB30NM4K11		1	649	4
BACB30NM4K16		1	422	2
BACB30NM4K21		1	155	2
BACB30NM4K25		1	449	2
BACB30NM4K4		1	434	2
BACB30NM4K5		1	435	2
BACB30NM4K8		1	685	4
BACB30NM4K9		1	251	3
		1	724	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	748	3
BACB30NN3K16		1	404A	4
BACC10FY025SE		1	772	1
BACC10GE11		1	563B	2
BACC10GE11C		1	563C	2
BACC10GE6C		1	539A	2
		1	551A	2
BACC15AN10		1	769	1
BACN10FX16		1	548	2
BACN10FX16G		1	537	2
		1	548A	2
BACN10HY3AM		1	17	4
BACN10JC3CD		1	293	2
BACN10JC4CD		1	278	2
BACN10JN3CD		1	398	13
BACN10KJ3CM		1	703	4
		1	704	3
BACN10YR3CD		1	218	1
		1	230	1
		1	410	4
		1	494	4
		1	509	4
		1	560	2
		1	589	4
		1	607	1
		1	679	4
BACN10YR3CM		1	536	2
		1	598	1
BACN10YR4CD		1	164	2
		1	257	3
		1	335	1
		1	428	2
		1	440	2
		1	458	2
BACN11N112CD		1	35	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACP18BC01A06P		1	418	2
BACP18BC04A12P		1	23A	2
BACP30F4		1	281	2
		1	461	2
BACR15BA3D		1	395	26
BACR15BB4DC		1	664A	2
BACR15BB5D		1	739	6
BACR15DR3A		1	700	8
		1	701	6
BACS12GU3K10D		1	479	4
BACS12GU3K13		1	673	4
BACS12GU3K7		1	530	2
		1	566	4
		1	567	3
		1	583	4
BACS12GU3K8		1	503	4
		1	542	2
BACS12GU3K9		1	488	4
		1	554	2
BACS12GU3K9D		1	601	1
BACS12GU4K10		1	386A	4
BACW10BN3AC		1	314	1
BACW10BN4AP		1	161	2
BACW10BP3ACU		1	14A	4
BACW10BP3APU		1	595	1
BACW10BP4ACU		1	727	2
BACW10BP4CD		1	652	4
		1	688	4
		1	751	3
BACW10BP4DP		1	655	4
		1	655A	4
		1	691	4
		1	691A	4
		1	730	4
		1	730A	4

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	754	3
		1	754A	3
BACW10BP8APU		1	577	1
BACW10DS4U		1	158	2
		1	170	2
BACW10P417CG		1	655B	4
		1	691B	4
		1	730B	4
		1	754B	3
BC1083-025SE		1	772	1
BCREF12712		1	419	1
BMP30F4		1	281	2
		1	461	2
BRFM20C3D		1	398	13
BRH10C3D		1	293	2
BRH10C4D		1	278	2
H51650-3BAC		1	293	2
H51650-4BAC		1	278	2
H52732-3CD		1	218	1
		1	230	1
		1	410	4
		1	494	4
		1	509	4
		1	560	2
		1	589	4
		1	607	1
		1	679	4
H52732-3CM		1	536	2
		1	598	1
H52732-4CD		1	164	2
		1	257	3
		1	335	1
		1	428	2
		1	440	2
		1	458	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
HW29874-3		1	17	4
JM44LC13WH11R		1	563C	2
JM44LC13WH6R		1	539A	2
		1	551A	2
JM44LC13WS11R		1	563B	2
KR3CNGB11		1	299	1
M39029-1-102		1	643	2
MF51637-3		1	398	13
MF53050-3CD		1	398	13
MF6001-3		1	703	4
		1	704	3
MS14101-3PK		1	299A	1
MS20615-5MP		1	706	4
MS21209F1-20P		1	341	2
		1	356	4
MS21902-6T		1	176	2
MS24665-374		1	23	2
NAS1149C0332R		1	569	4
		1	570	3
		1	586	4
NAS1149C1232R		1	616	4
NAS1149D0316J		1	482	4
		1	491	8
		1	506	4
NAS1149D0332J		1	533	2
		1	545	2
		1	557	2
		1	604	2
		1	676	8
NAS1149D0432J		1	254	3
		1	389	4
		1	425	4
		1	436	2
		1	437	2
		1	455	2

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
NAS1149E0332P		1	194	15
		1	215	1
		1	227	1
		1	287	2
		1	314A	1
		1	407	4
		1	14	4
NAS1149E0332R		1	14	4
NAS1149E0432P		1	272	2
		1	323	1
NAS1198-4		1	707	6
NAS1198-4-4		1	718	8
NAS1351C3LB12P		1	311B	1
NAS1351N3-12P		1	311A	1
NAS1612-6		1	179	2
NAS1612-6A		1	179A	2
NAS1623V17		1	404	4
NAS1801-3-8		1	503A	4
NAS1801-3-9		1	488A	4
NAS1801-3D10		1	479A	4
NAS1802-3-8		1	191	15
NAS1802-4-10P		1	386	4
NAS1805-4L		1	658	4
		1	694	4
		1	733	2
		1	757	3
		1	599	1
NAS43DD3-20FC		1	599	1
NAS509-4		1	236	1
NAS509-5		1	242	1
NE103338-025		1	772	1
NS202486-02		1	293	2
NS202486-048		1	278	2
NS202487-02		1	398	13
PACMKP4AA3908		1	329	1
		1	329A	1
		1	359	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
PACMKP4AFS428		1	329	1
		1	359	1
PLH53CD		1	218	1
		1	230	1
		1	410	4
		1	494	4
		1	509	4
		1	560	2
		1	589	4
		1	607	1
		1	679	4
		PLH53CM		1	536	2
1	598			1
PLH54CD		1	164	2
		1	257	3
		1	335	1
		1	428	2
		1	440	2
		1	458	2
		1	281	2
R30F4		1	461	2
REP3MS4-6FS428		1	239A	1
RM52LHA4972-6-0		1	548	2
S275A210-3		1	182	1
S369WH11		1	563B	2
S369WHSS11		1	563C	2
S369WHSS6		1	539A	2
		1	551A	2
SF3NU02		1	575	3
SF3NU03		1	580	1
SF3NU22		1	613	2
SMS20219-4		1	281	2
		1	461	2
SSMK4RAP		1	329A	1
SSMKP4AP		1	329	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
SSMKP4ASD705		1	359	1
		1	329	1
T6C1032JCD		1	359	1
		1	293	2
T6C428JCD		1	278	2
		1	539	2
TA027067		1	551	2
		1	592	4
TA027068		1	610	2
		1	563	2
TA027069		1	563A	2
		1	563C	2
TA027070		1	539A	2
		1	551A	2
TA12C32WH11		1	563B	2
		1	17	4
TA12C32WH6		1	17	4
		1		
TA12C32WS11		1		
		1		
TLN1001CWD33		1		
		1		

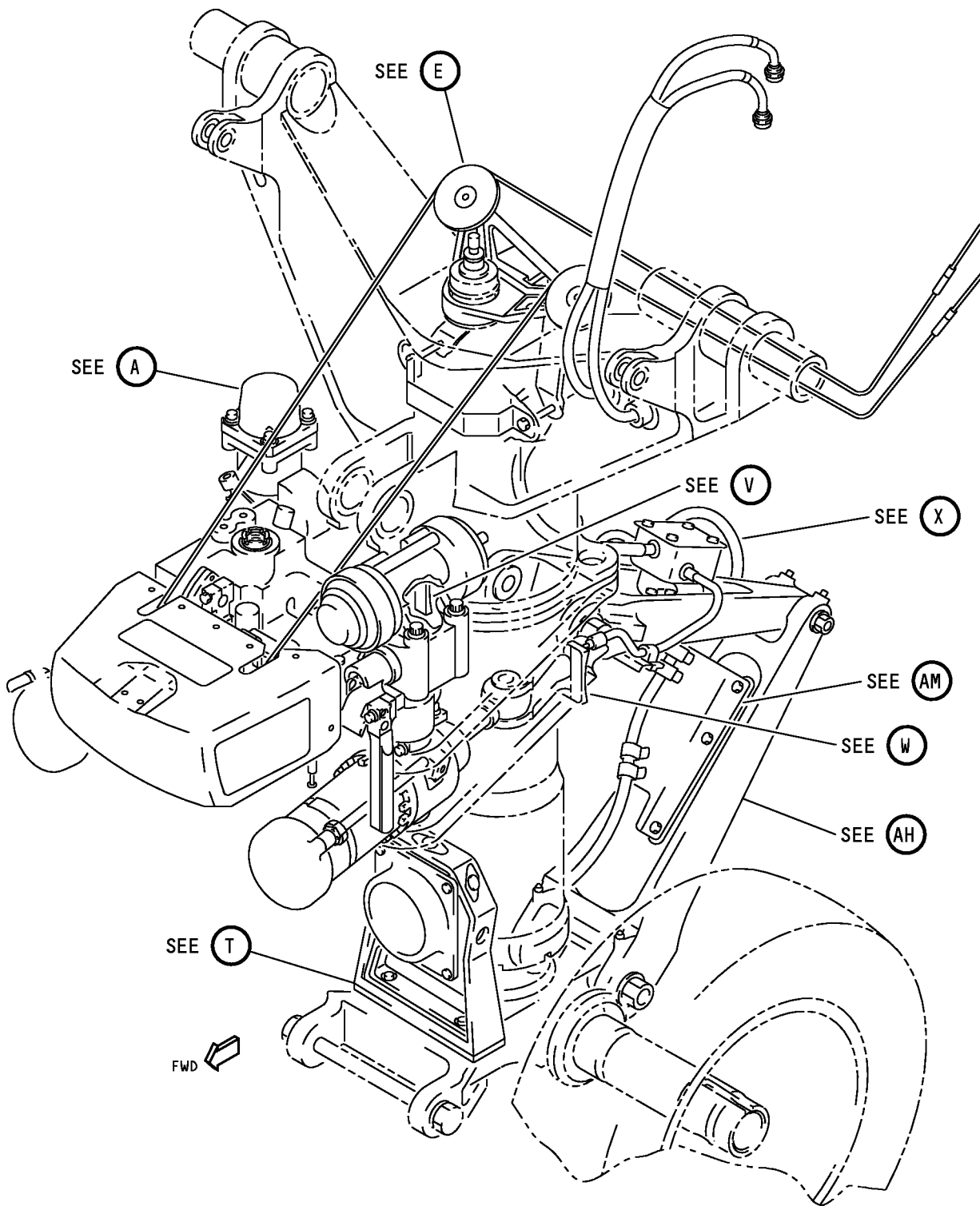
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G97279 S0004998106_V4

Nose Gear Component End Item
IPL Figure 1 (Sheet 1 of 20)

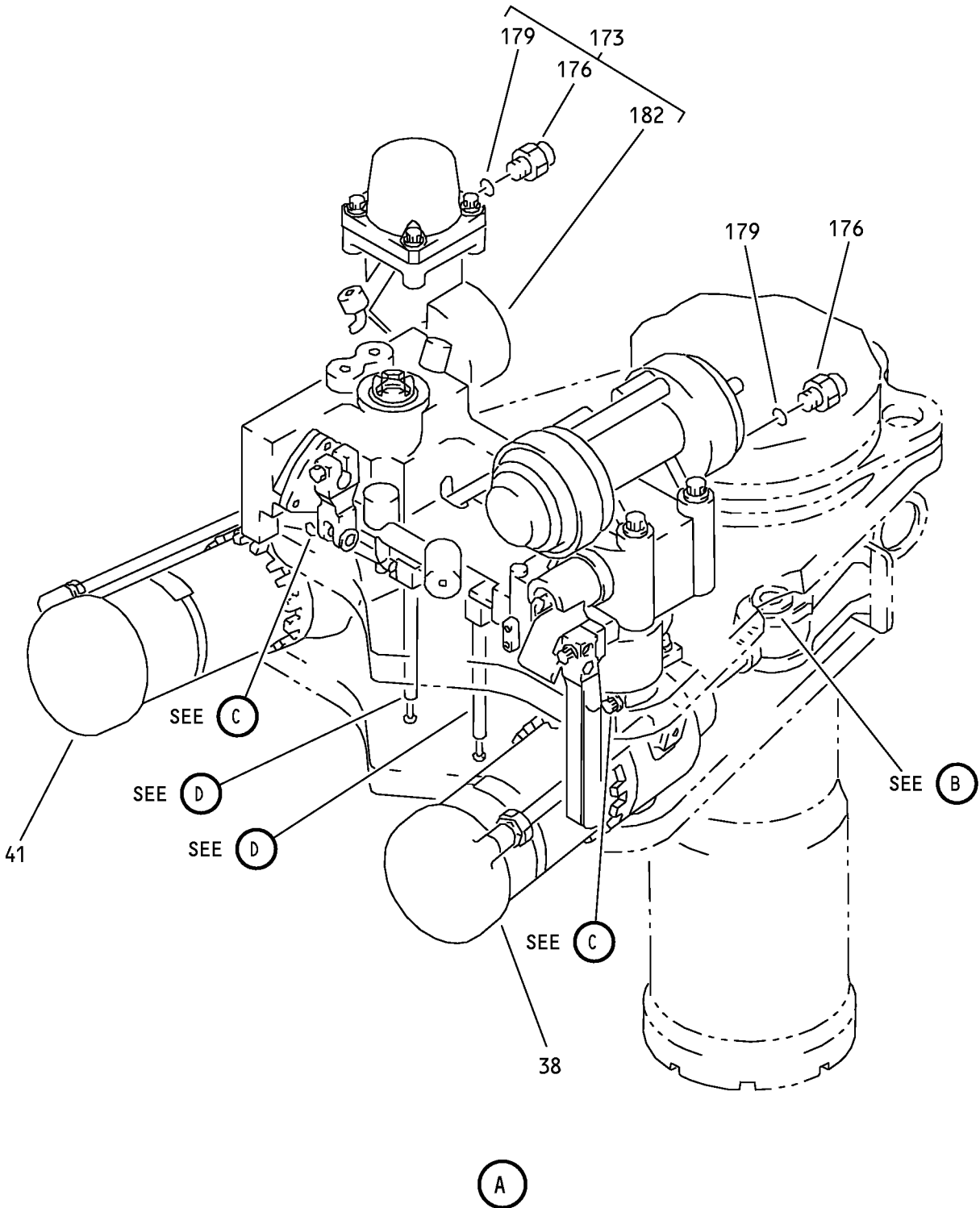
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Nose Gear Component End Item
IPL Figure 1 (Sheet 2 of 20)

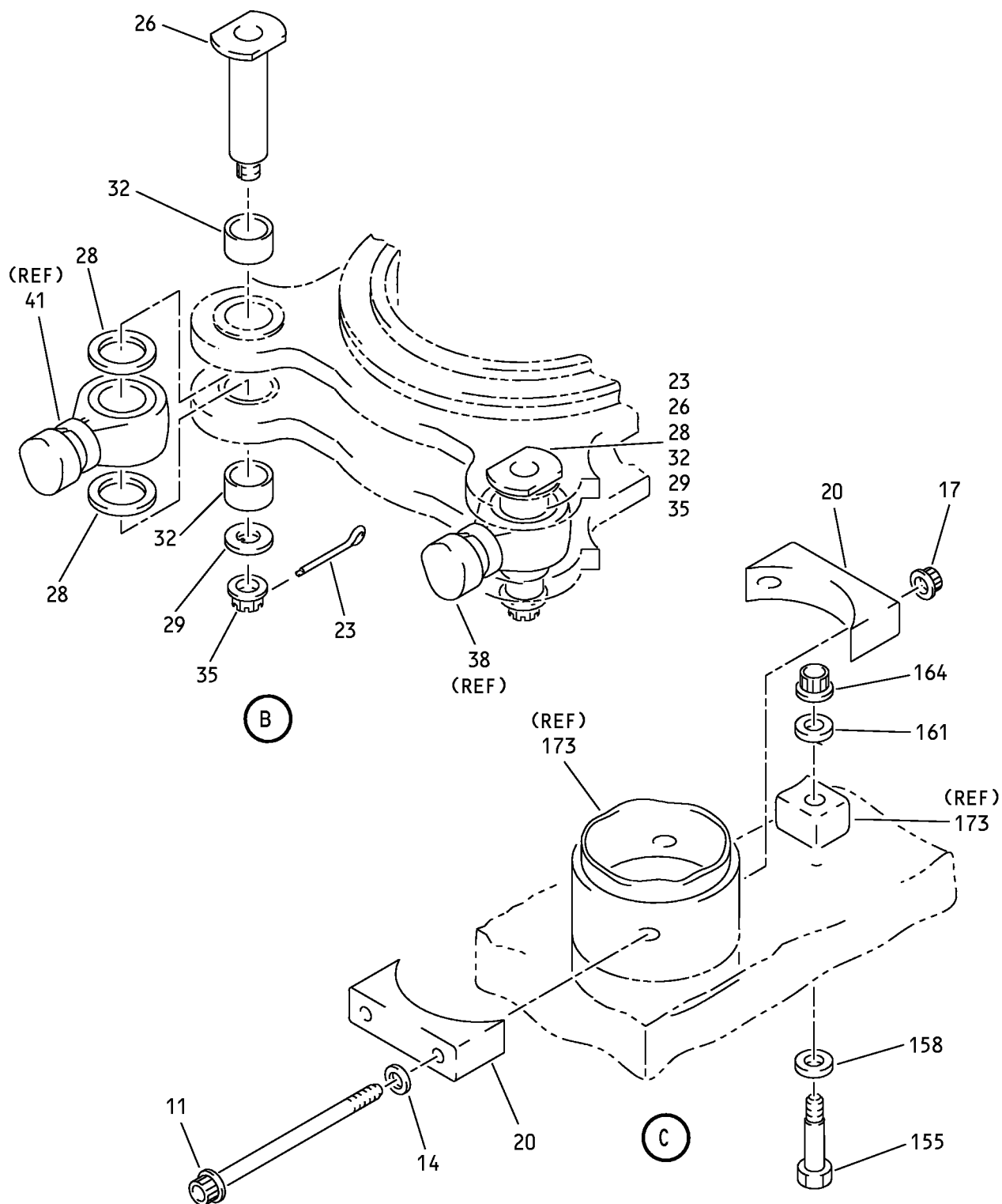
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Nose Gear Component End Item
IPL Figure 1 (Sheet 3 of 20)

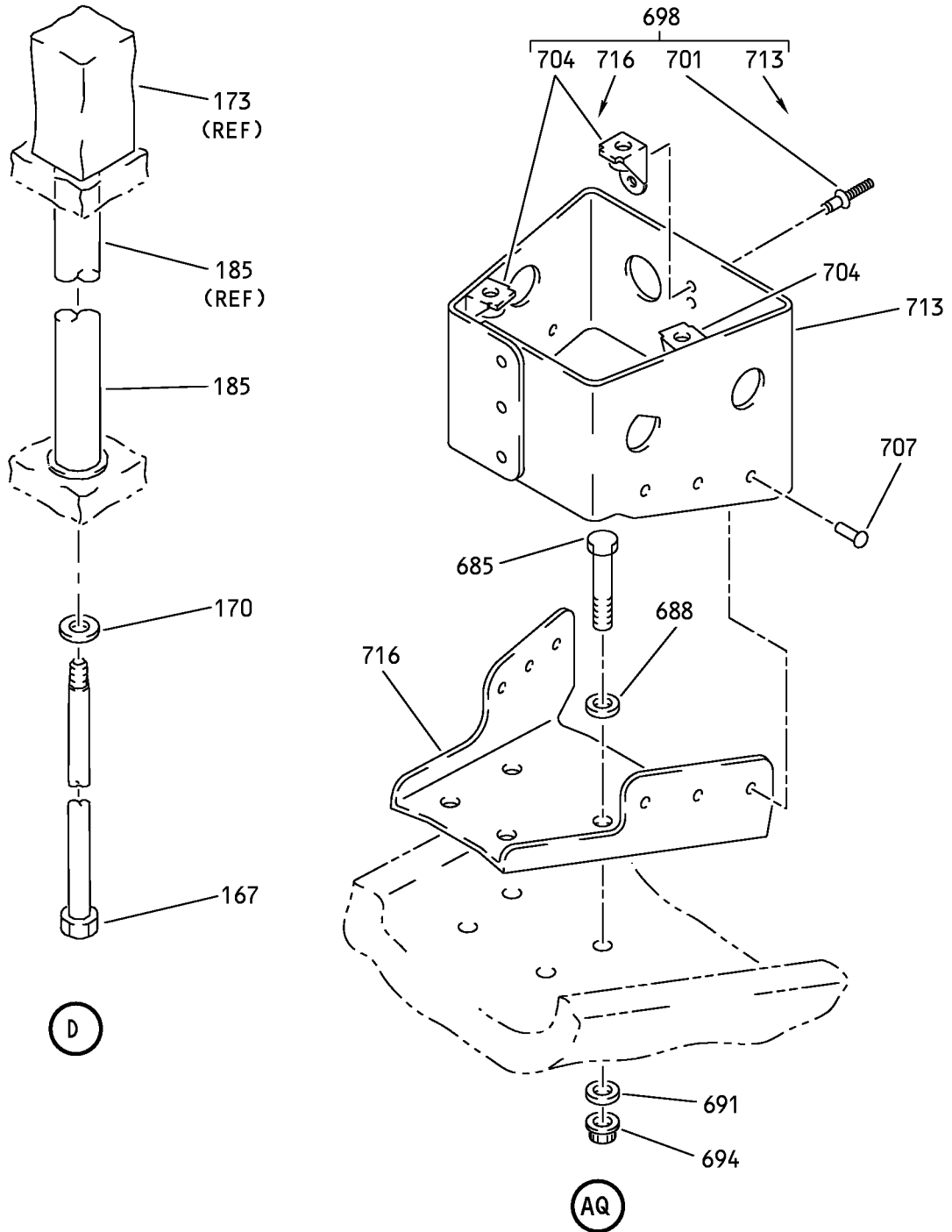
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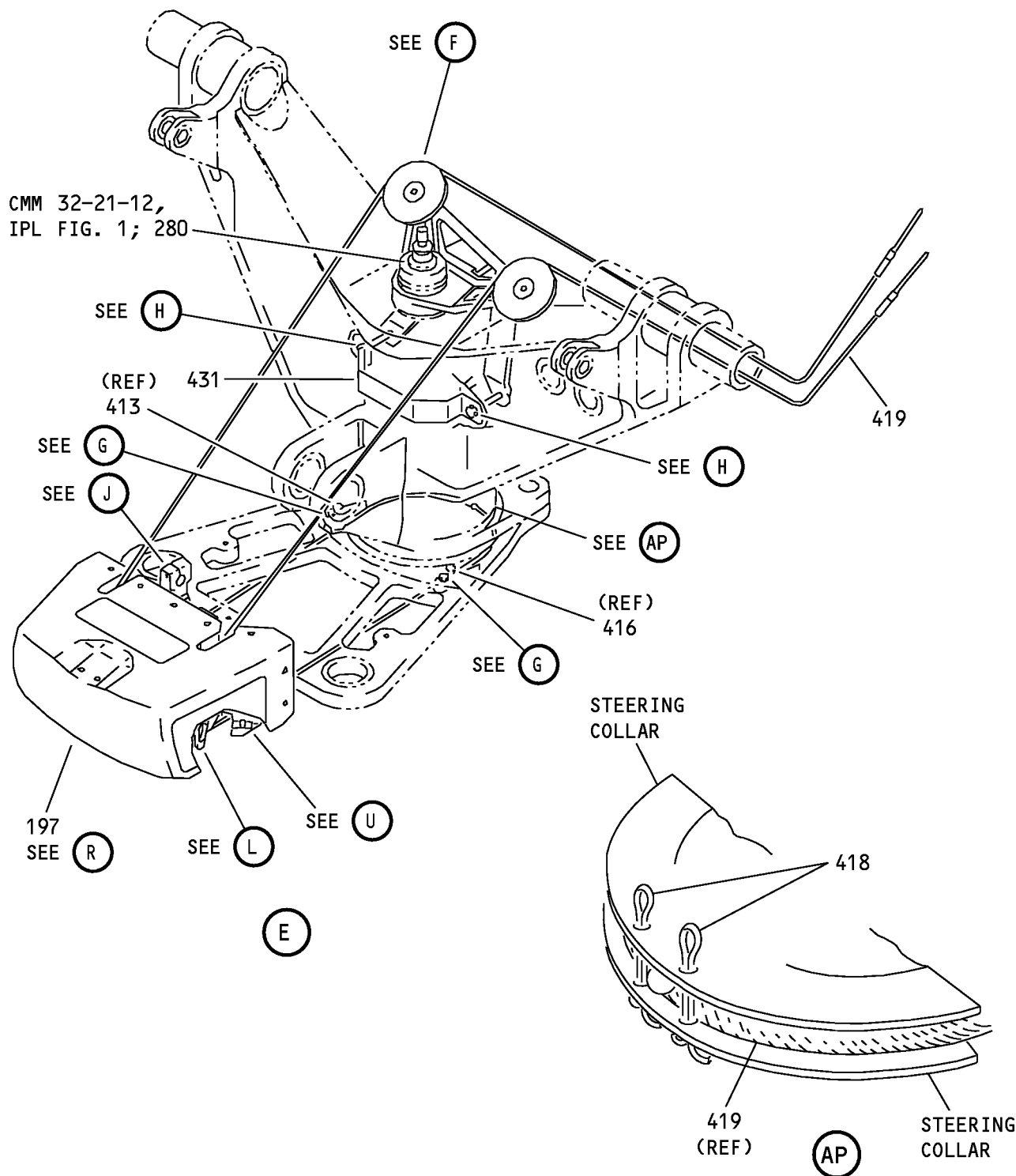
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Nose Gear Component End Item
IPL Figure 1 (Sheet 4 of 20)

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G97354 S0004998110_V4

Nose Gear Component End Item
IPL Figure 1 (Sheet 5 of 20)

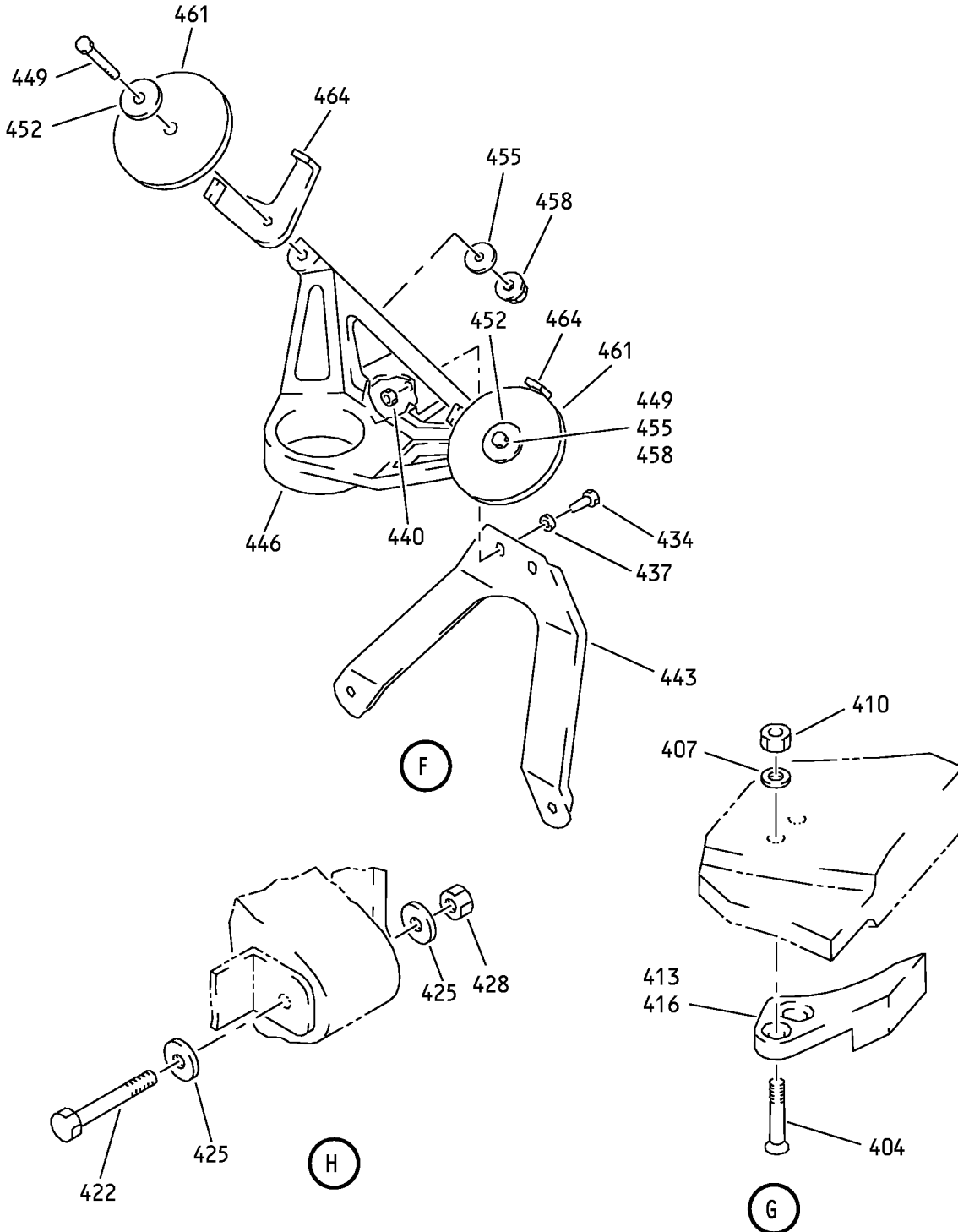
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Nose Gear Component End Item
IPL Figure 1 (Sheet 6 of 20)

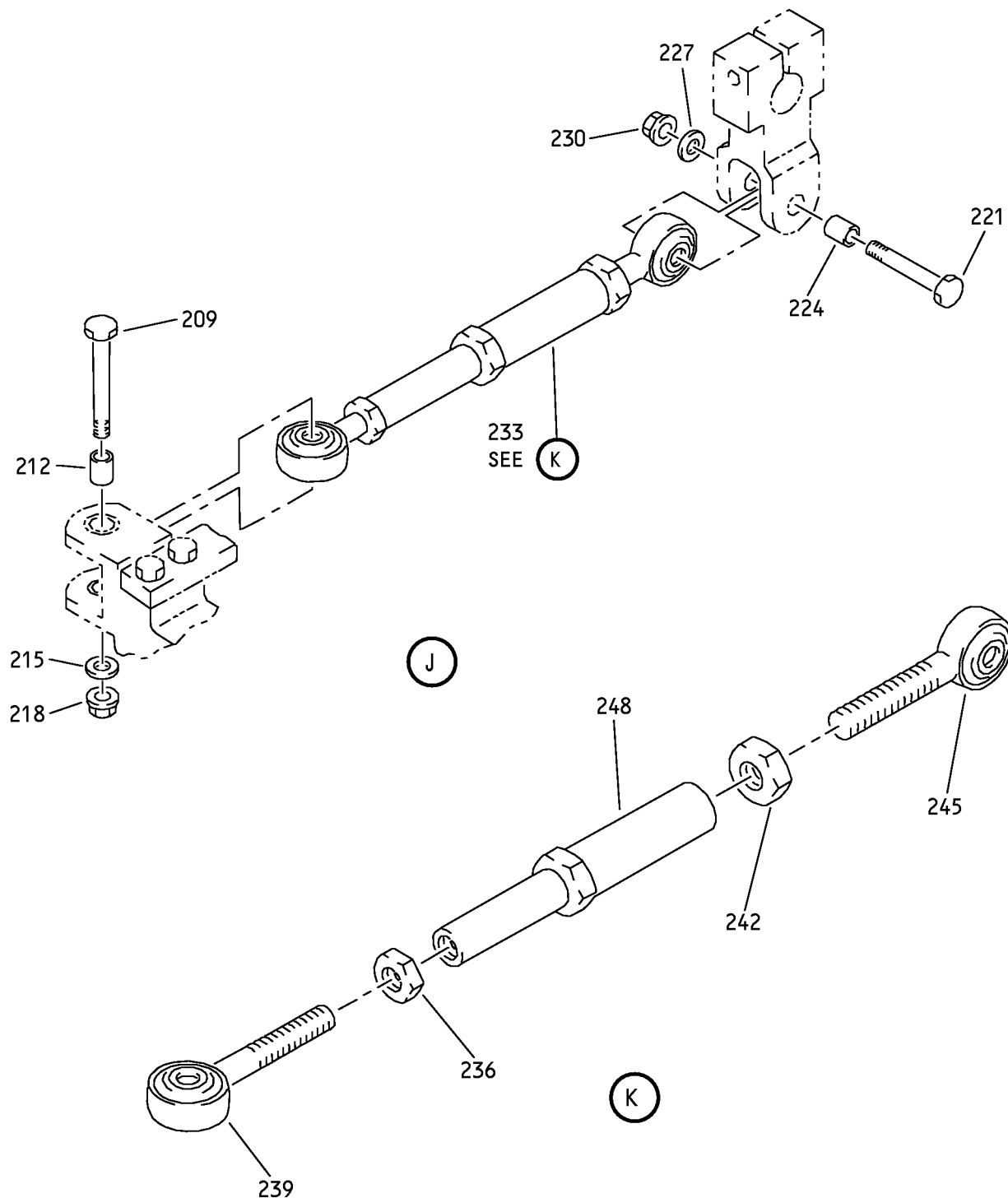
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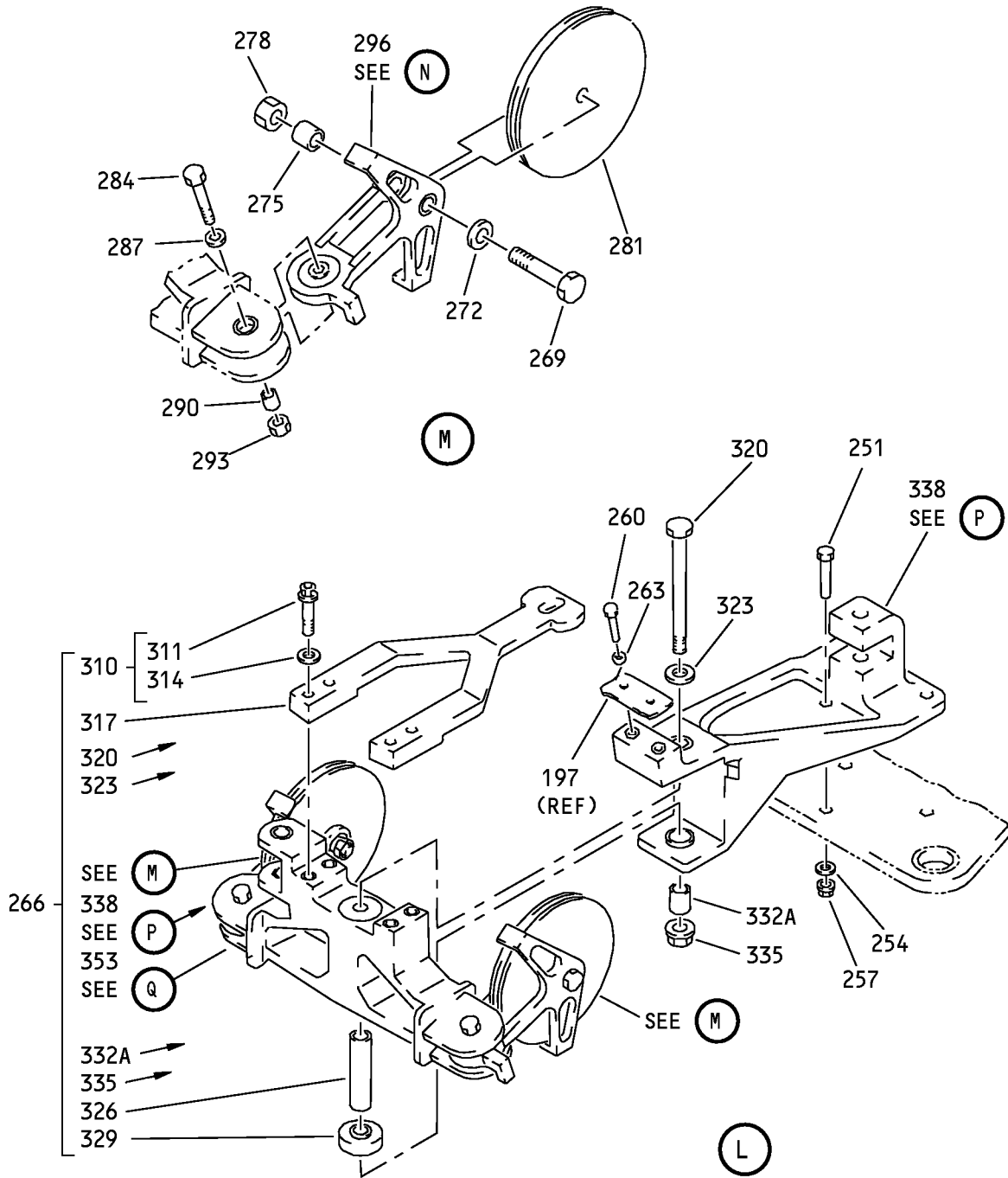
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Nose Gear Component End Item
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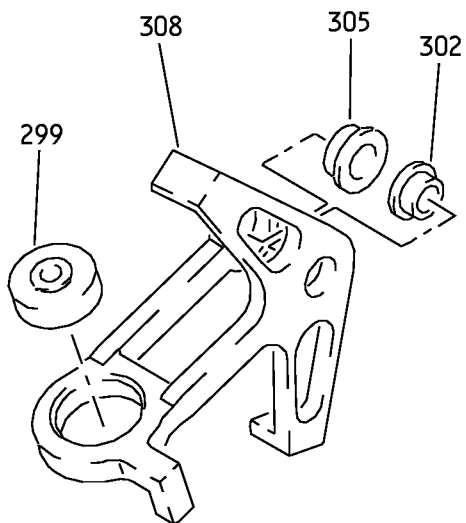


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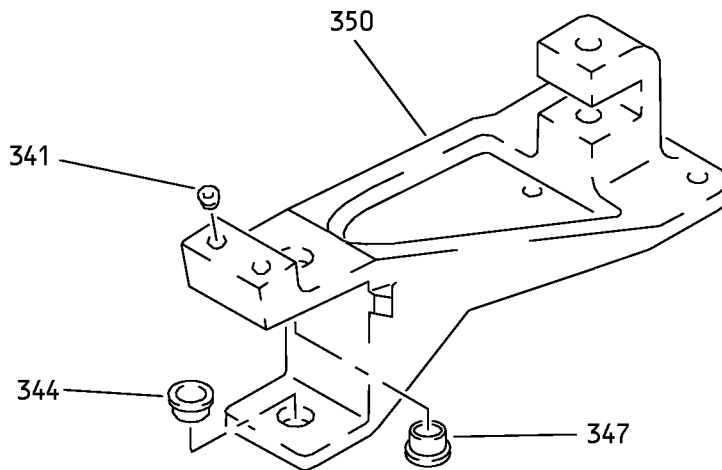
Nose Gear Component End Item
IPL Figure 1 (Sheet 8 of 20)

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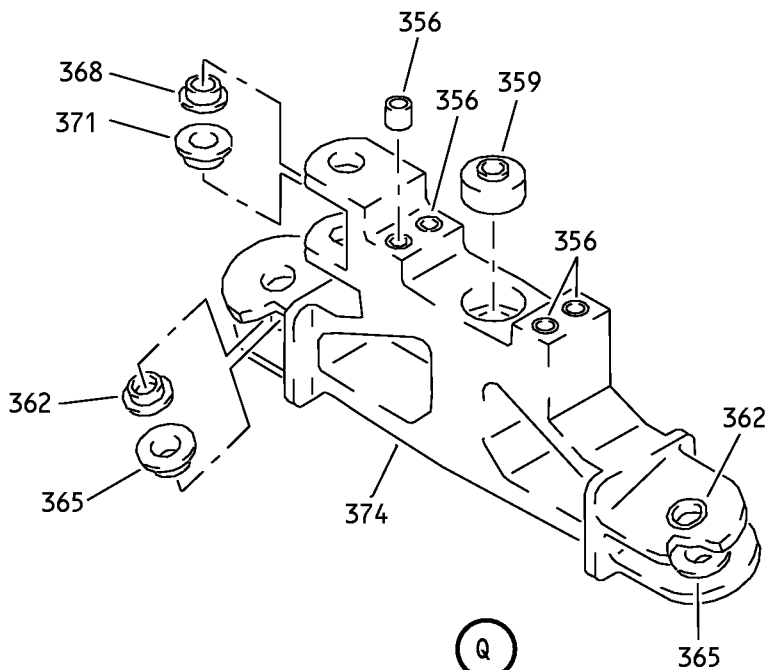
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Nose Gear Component End Item
IPL Figure 1 (Sheet 9 of 20)

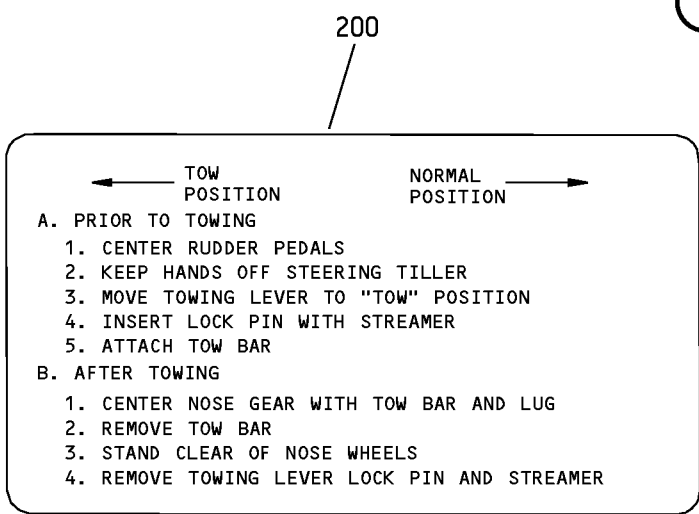
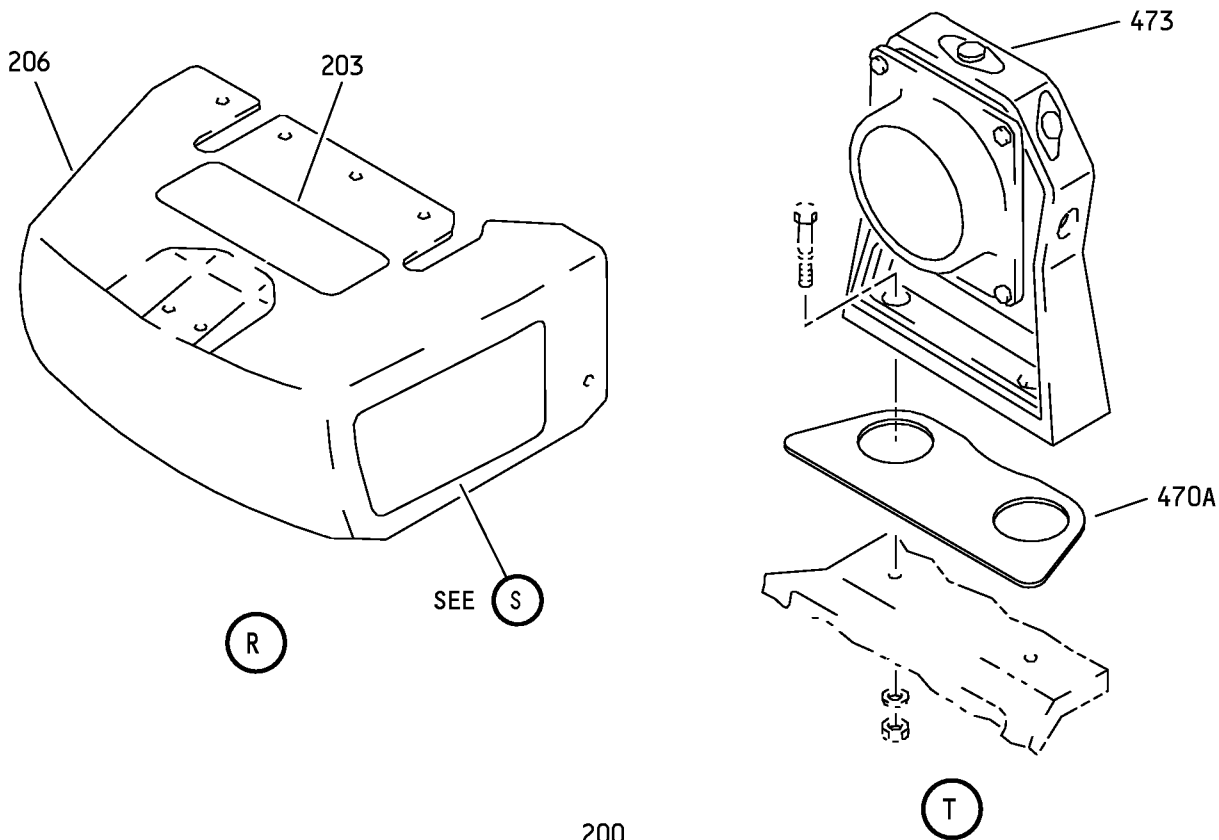
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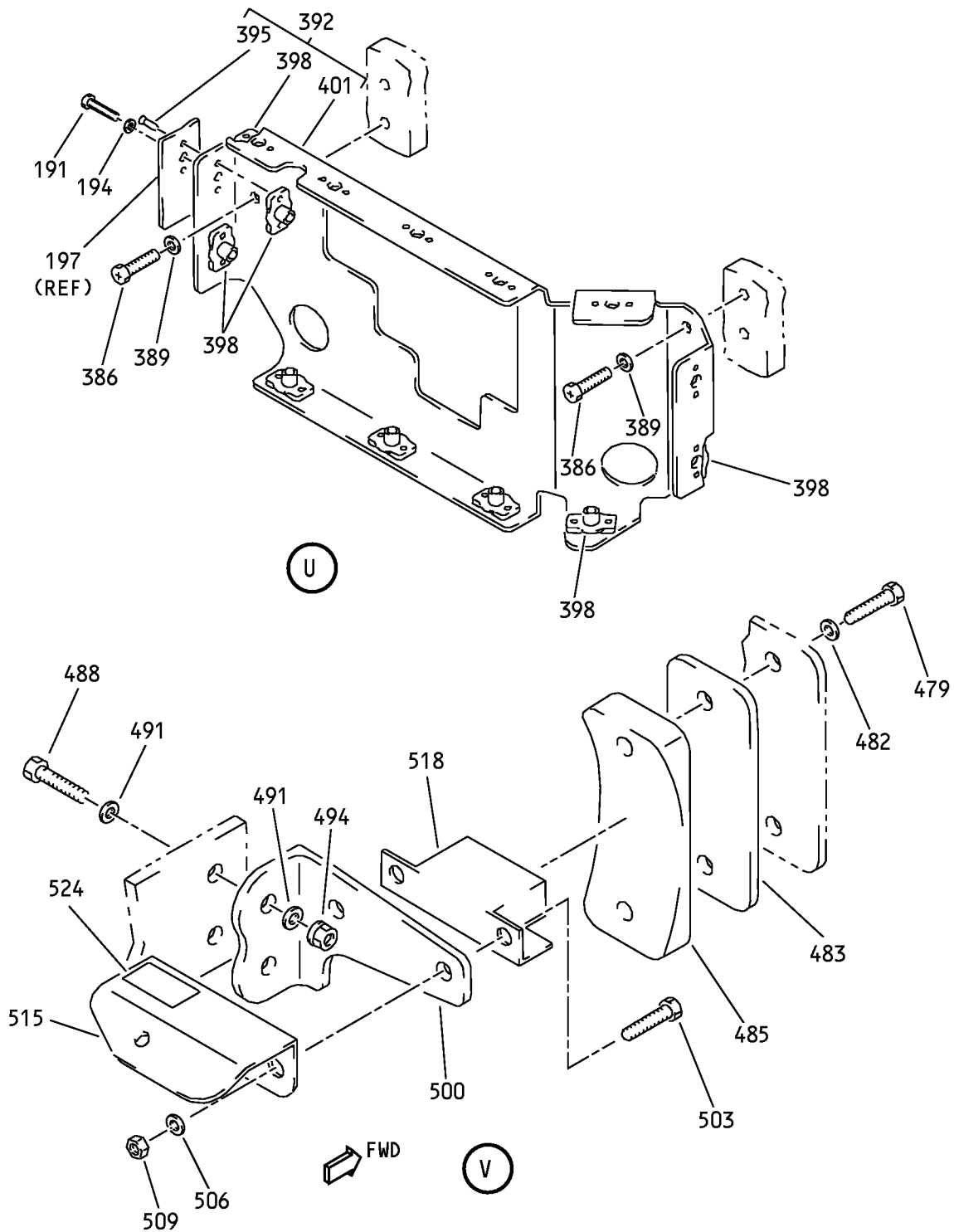
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Nose Gear Component End Item
IPL Figure 1 (Sheet 10 of 20)

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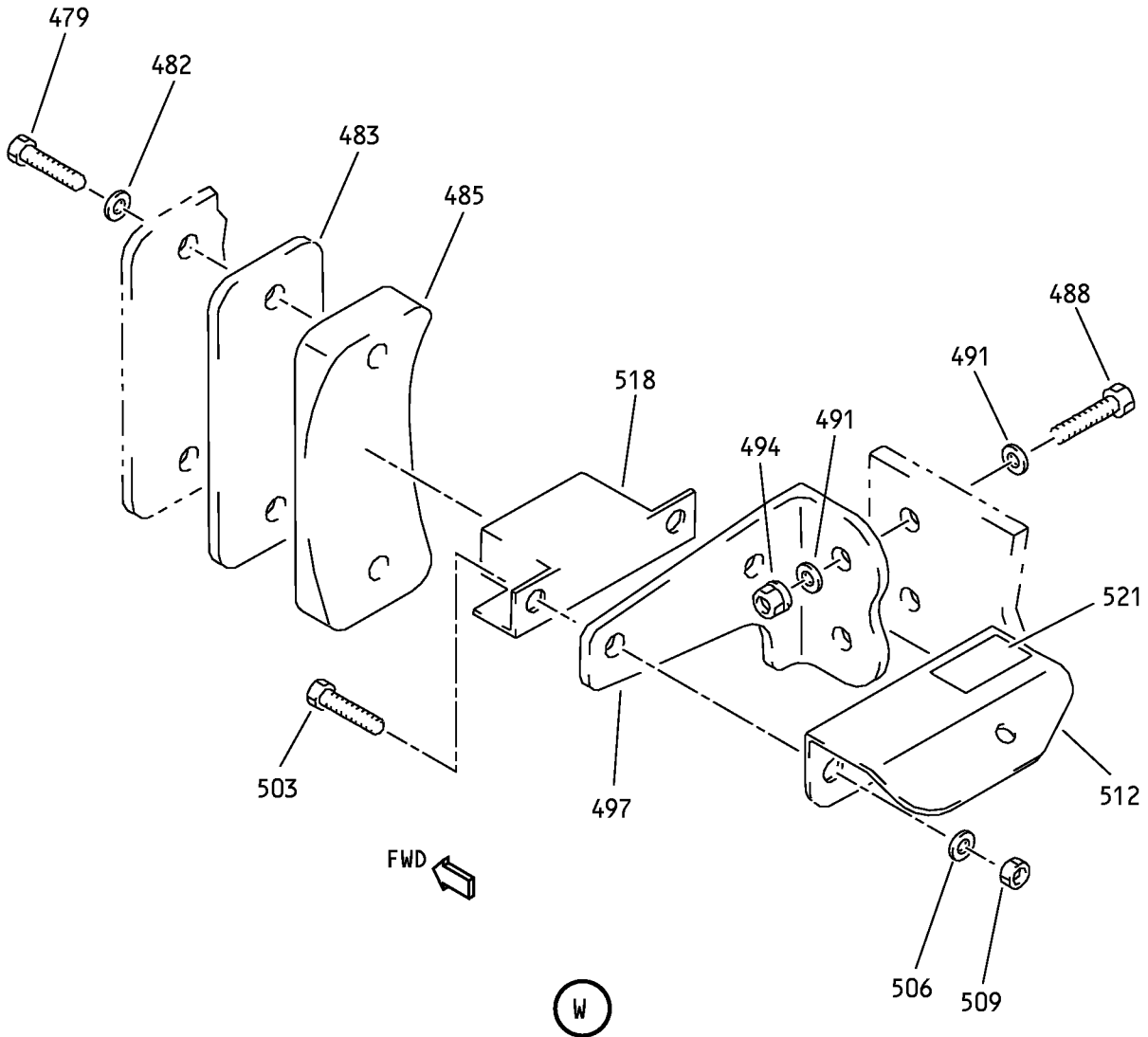


G97528 S0004998116_V3

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IPL Figure 1 (Sheet 11 of 20)

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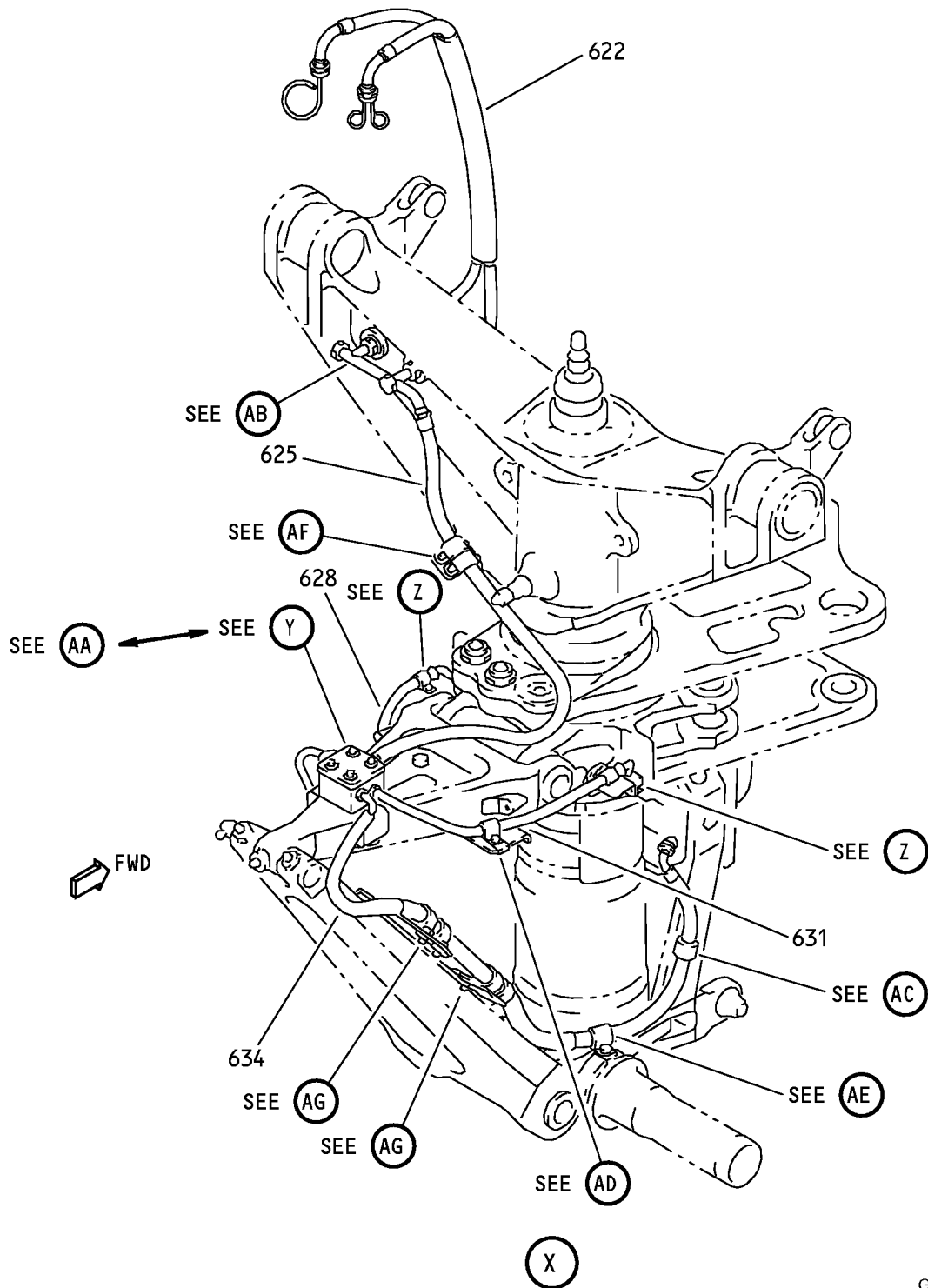


G97545 S0004998117_V3

Nose Gear Component End Item
IPL Figure 1 (Sheet 12 of 20)

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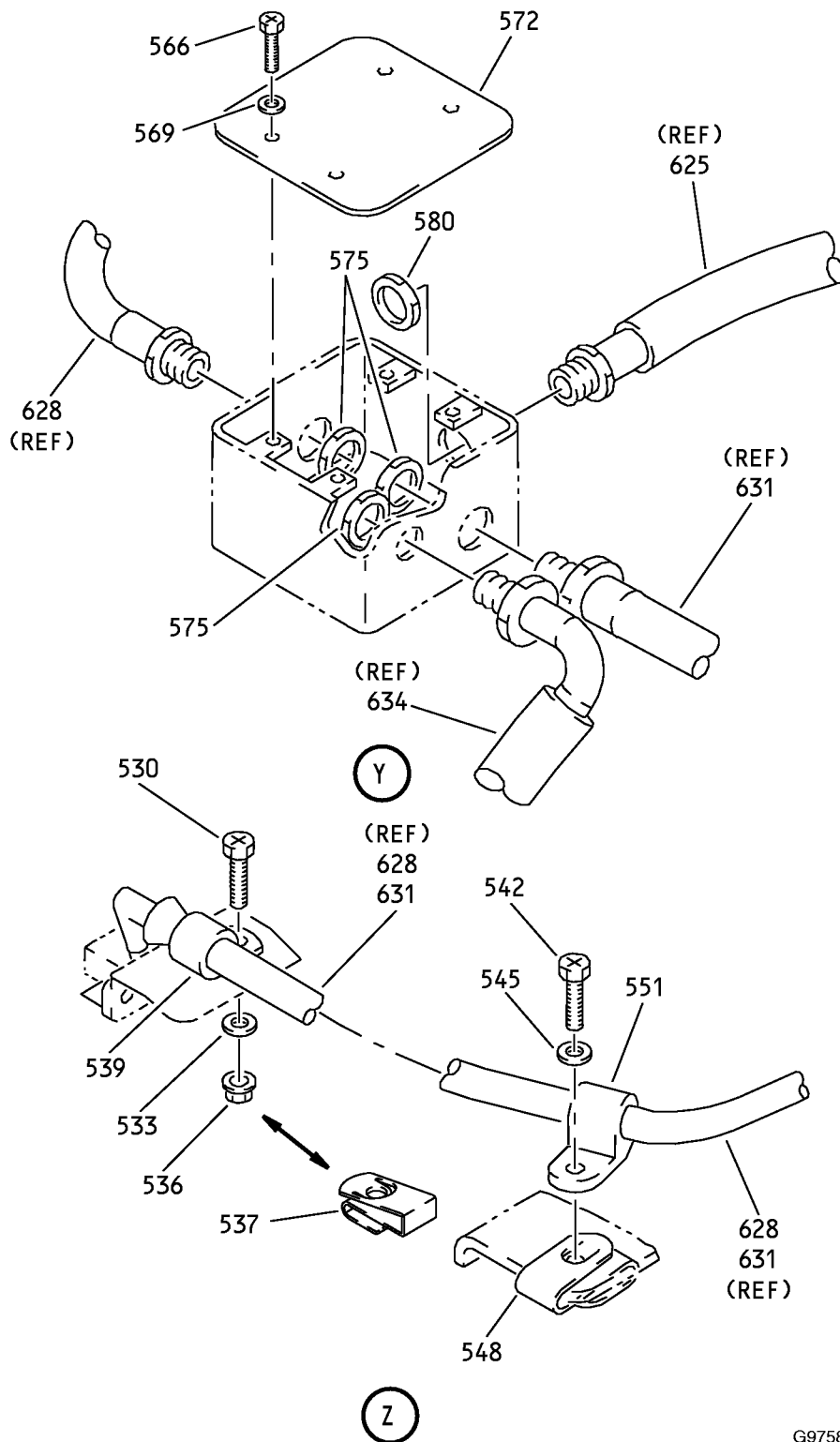


G97556 S0004998118_V3

Nose Gear Component End Item
IPL Figure 1 (Sheet 13 of 20)

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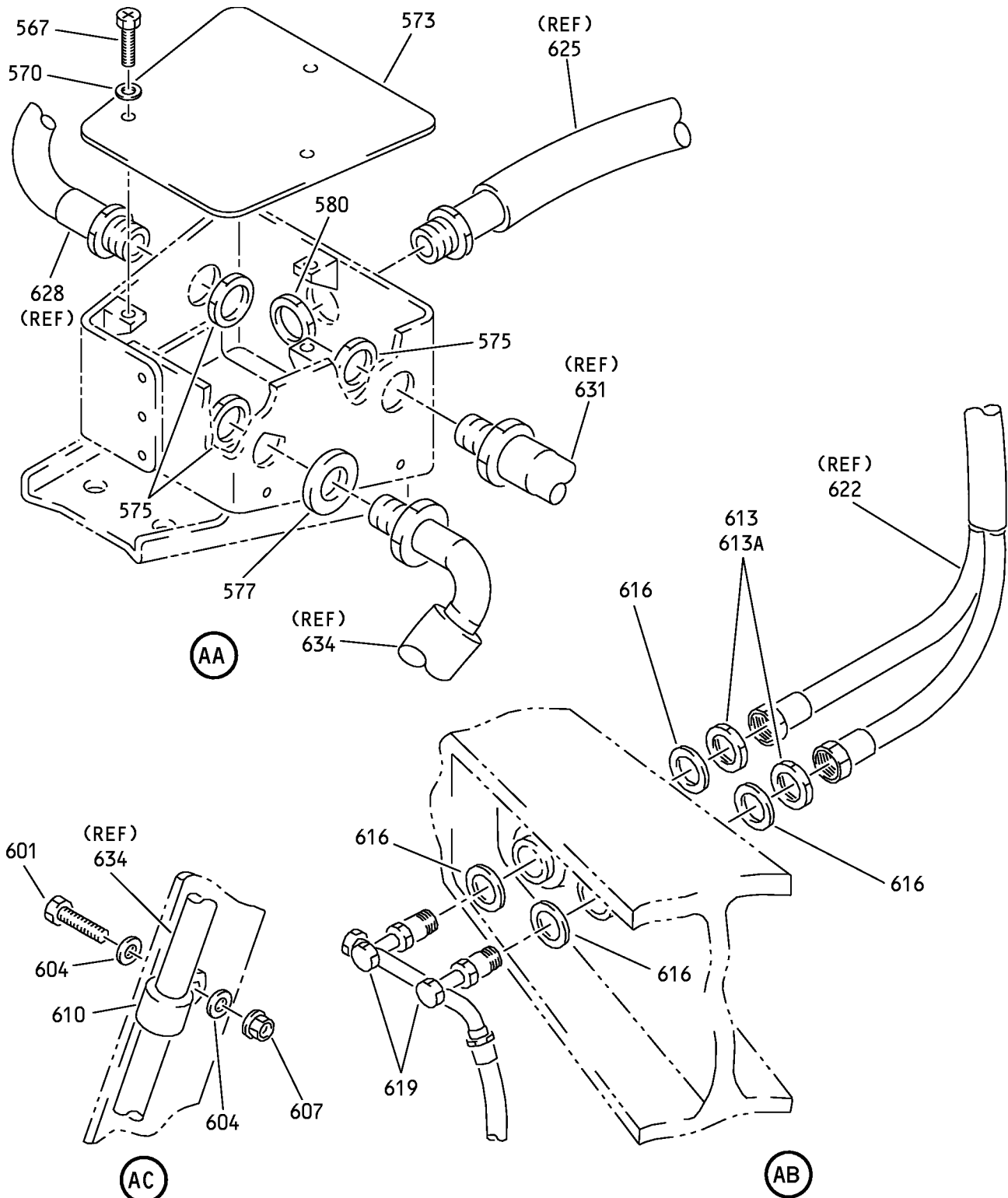


G97587 S0004998119_V3

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IPL Figure 1 (Sheet 15 of 20)

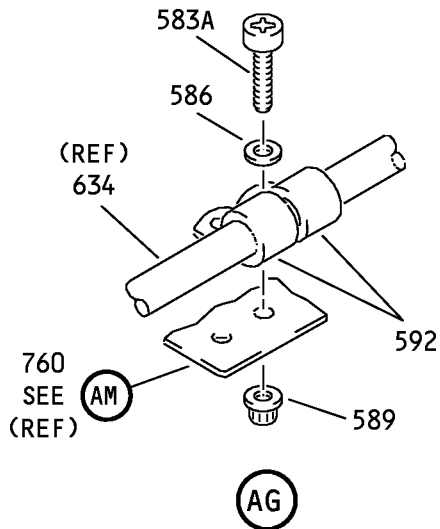
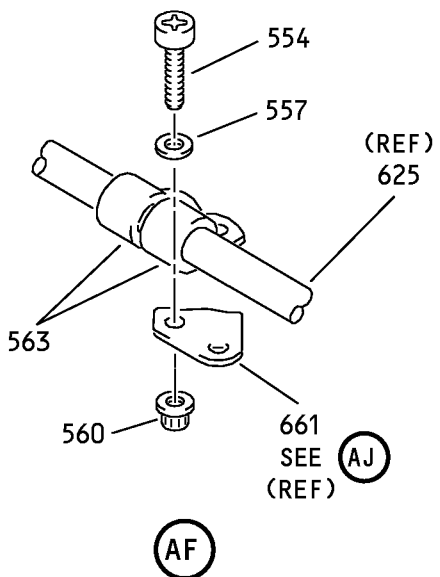
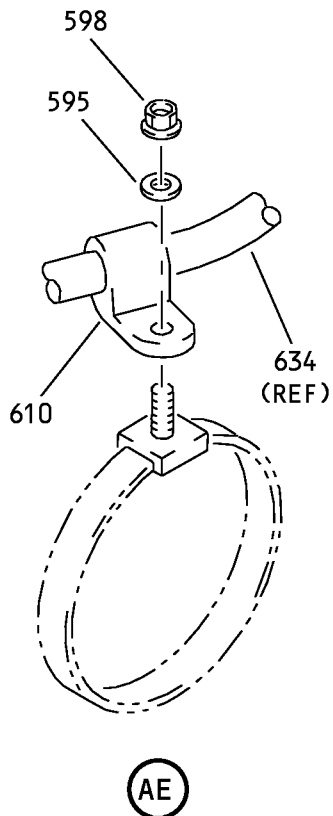
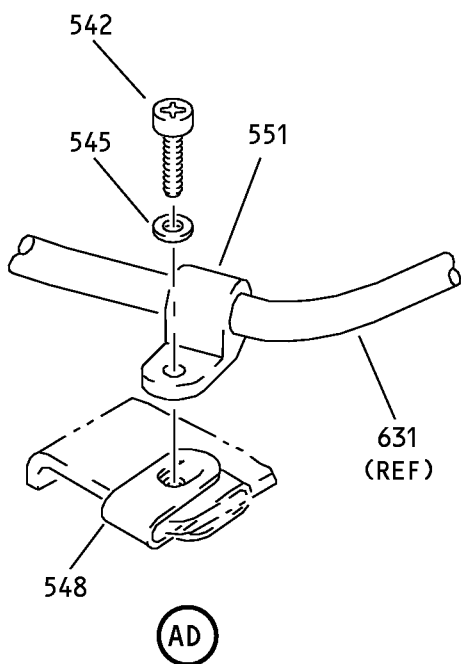
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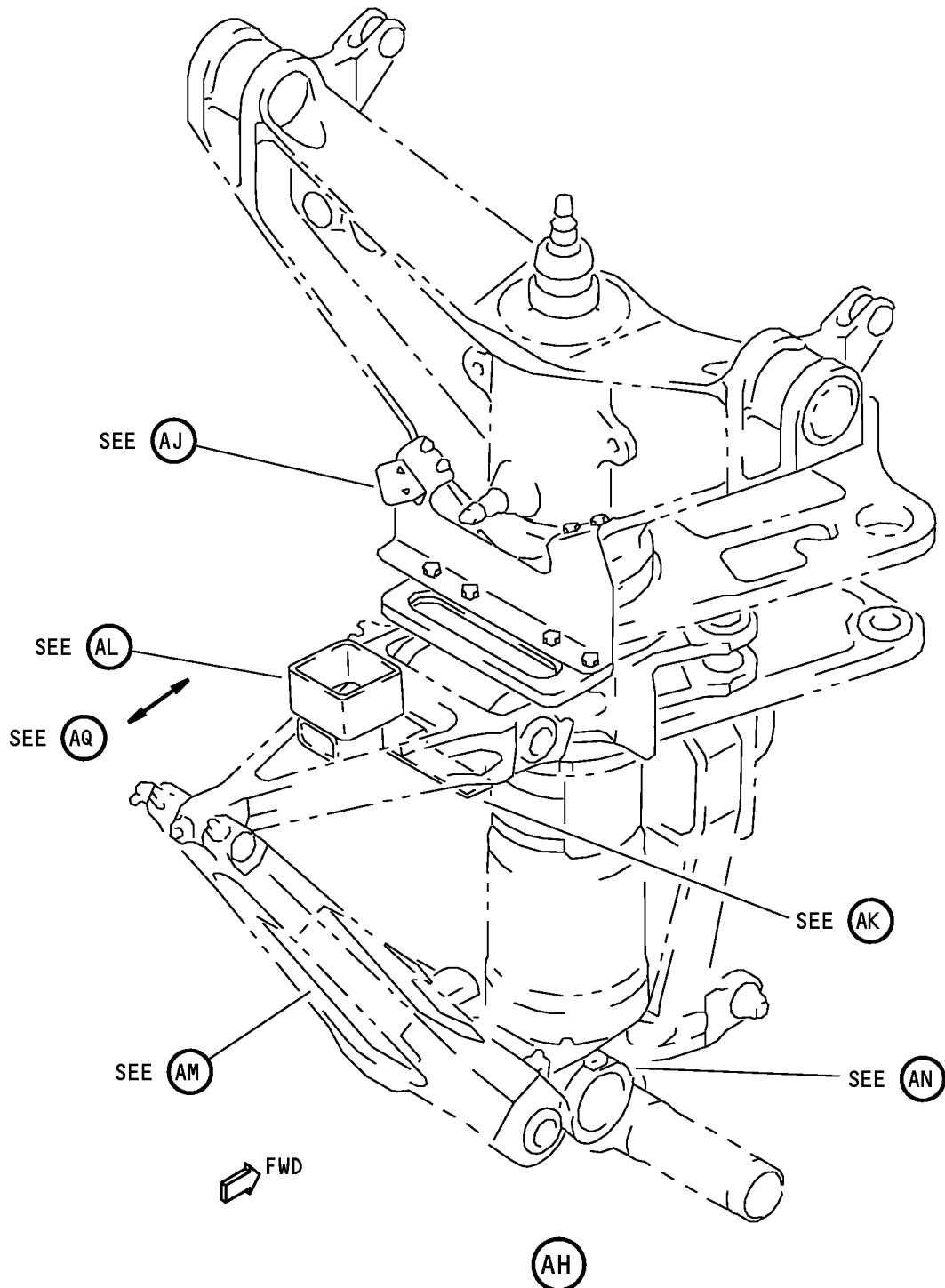
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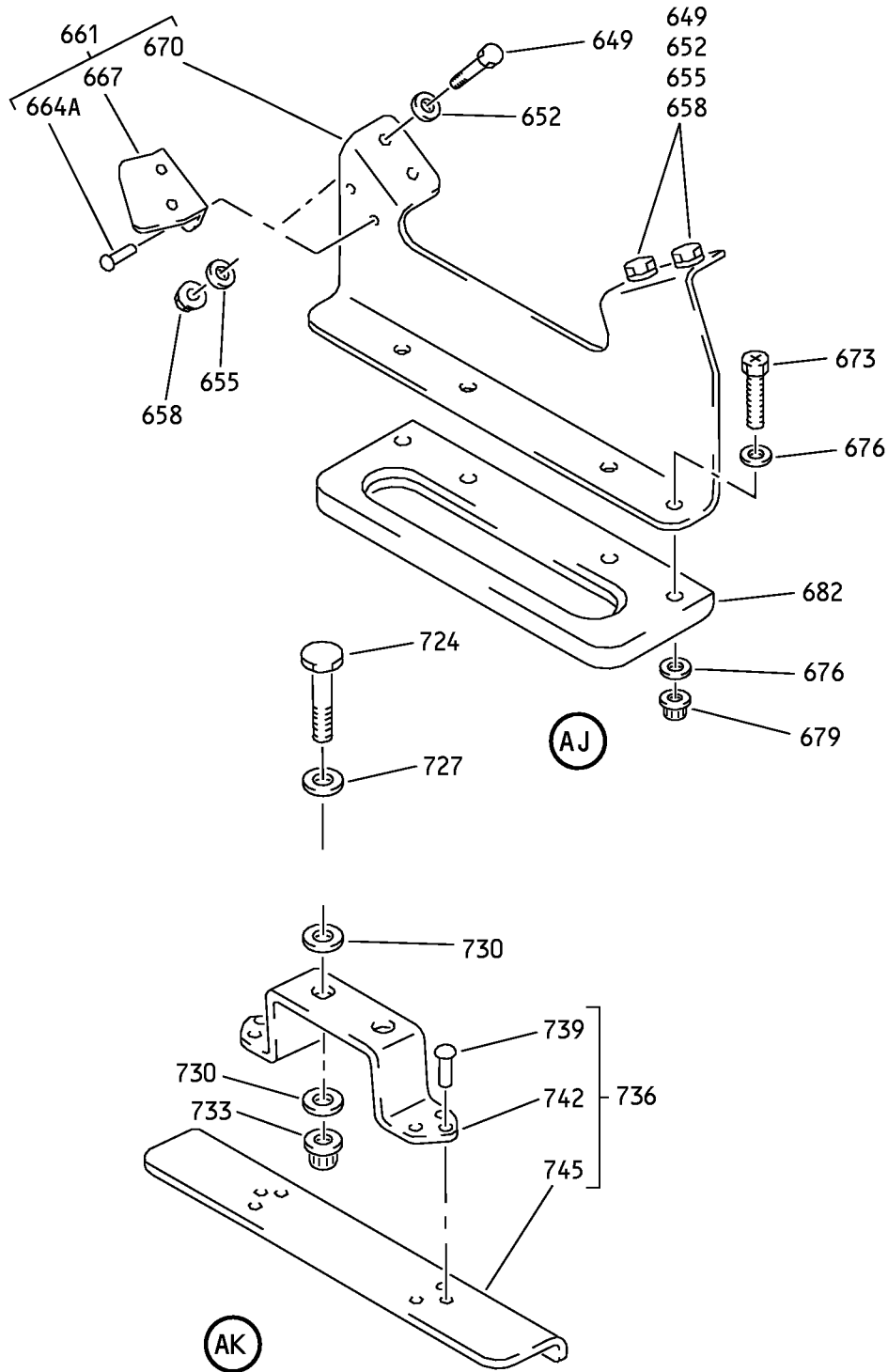
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G97666 S0004998122_V3

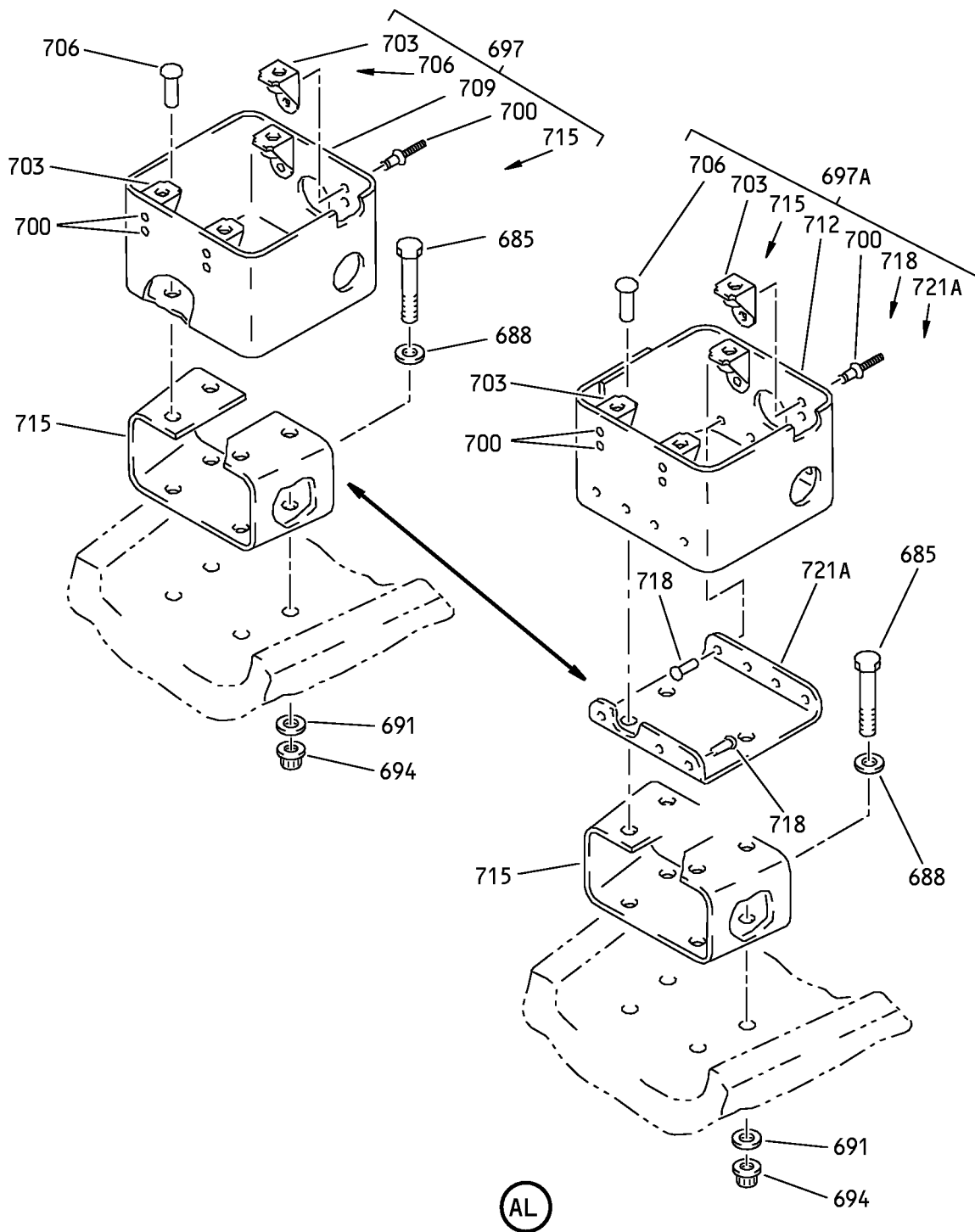
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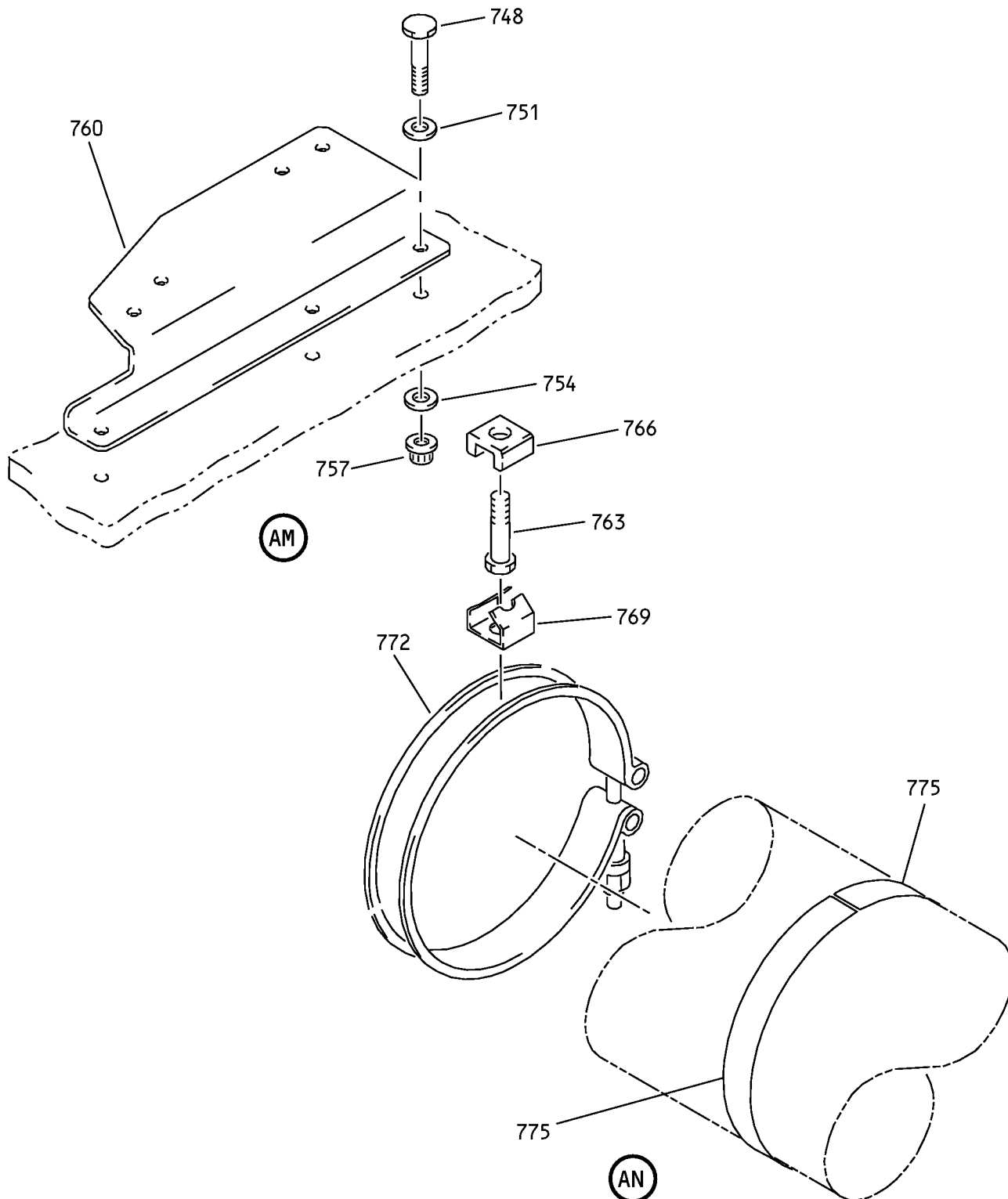
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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1A	001A6200-1									A	RF
-1B	001A6200-2									B	RF
-1C	001A6200-3									C	RF
-1D	001A6200-4									D	RF
-1E	001A6200-5									E	RF
-1F	001A6200-6									F	RF
-1G	001A6200-7									G	RF
-1H	001A6200-8									H	RF
-1J	001A6200-9									J	RF
-1K	001A6200-10									K	RF
-1L	001A6200-11									L	RF
-1M	001A6200-12									M	RF
-1N	001A6200-13									N	RF
-1P	001A6200-14									P	RF
-1Q	001A6200-15									Q	RF
-5	162A1100-4									A-C	1
-5A	162A1100-5									D, E	1
-5B	162A1100-7									F, G	1
-5C	162A1100-8									H, J	1
-5D	162A1100-9									K-Q	1
-8	275A1100-2									A	1
-8A	275A1100-4									B-E	1
-8B	275A1100-5									F, G	1
-8C	275A1100-6									H-N	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-											
-8D	275A1100-7									P, Q	1
11	BACB30LE3K39										4
14	NAS1149E0332R									A	4
-14A	BACW10BP3ACU									B-Q	4
17	HW29874-3										4
20	275A1109-1										4
23	MS24665-374									A	2
-23A	BACP18BC04A12P									B-Q	2
-25A	BACP18BC04A12P										
26	162A1411-1										2
28	275A1113-1									F-Q	4
29	162A1407-1										2
32	162A1419-1										4
35	BACN11N112CD										2
38	275A1101-3									A-E	1
-38A	275A1101-5									F, G	1
-38B	275A1101-7									H-Q	1
41	275A1101-4									A-E	1
-41A	275A1101-6									F, G	1
-41B	275A1101-8									H-Q	1
44	275A1107-1										
47	275A1111-1										

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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-											
50	275A1102-1										
53	S34760-331H99N										
-53A	BCREF12314										
56	S3157-331-99C										
-56A	5979P33100-042D										
59	NAS1611-336										
62	BACR12BM336										
65	275A1105-1										
68	S32925-712H99										
-68A	2270-712-66-21										
71	S30855-217H99N										
-71A	BCREF12313										
74	S33157-217-99C										
-74A	5979R21700-042D										
77	NAS1611-221										
80	C11236-221B										
83	275A1112-1										
86	275A1106-3										
89	KSC135216B										
92	275A1106-4										
95	275A1103-1										
98	NAS1611-111										
101	C11236-111B										
104	275A1108-1										
107	275A1104-1										
110	275A1104-3										
113	PLGA3437020										
116	PLGA3436020										
119	275A1104-2										
122	275A1104-4										
125	NAS1612-06										

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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-													
128	MS21902-6T										DELETED		
131	BACN10YE6N										DELETED		
134	273A2122-5										DELETED		
137	DB0S13BX06H										DELETED		
140	273A2122-6										DELETED		
143	NAS1611-110										DELETED		
146	C11236-110B										DELETED		
149	273T0050-6										DELETED		
152	273A2508-4										DELETED		
155	BACB30NM4K21										. . BOLT	2	
158	BACW10DS4U										. . WASHER	2	
161	BACW10BN4AP										. . WASHER	2	
164	H52732-4CD										. . NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	2	
167	BACB30LE4HK84										. . BOLT	2	
170	BACW10DS4U										. . WASHER	2	
173	275A1120-3										. . VALVE ASSY	A	1
-173A	275A1120-4										. . VALVE ASSY	B-N	1
-173B	275A1120-5										. . VALVE ASSY	P, Q	1
176	MS21902-6T										. . . UNION		2
179	NAS1612-6										. . . PACKING	A	2
-179A	NAS1612-6A										. . . PACKING	B-Q	2
182	383900-1005										. . . VALVE ASSY-STEERING (V92003) (SPEC S275A210-3)	A	1
-182A	383900-1007										. . . VALVE ASSY-STEERING (V92003)	B-N	1
-182B	383900-1011										. . . VALVE ASSY-STEERING (V92003)	P, Q	1
185	275A1110-1										. . STANDOFF		2
-188	275A5300-3										. SUMMING INSTL	A	1
-188A	275A5300-4										DELETED		

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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-											
-188B	275A5300-5		.	.	SUMMING	INSTL				B-Q	1
191	NAS1802-3-8		.	.	SCREW						15
194	NAS1149E0332P		.	.	WASHER						15
197	275A5310-3		.	.	COVER	ASSY				A	1
197A	275A5310-4				DELETED						
-197B	275A5310-6		.	.	COVER	ASSY				B-Q	1
200	BAC27DHY388		.	.	.	MARKER					1
203	BAC27TTR0038		.	.	.	MARKER					1
206	275A5310-1		.	.	COVER					A	1
206A	275A5310-2				DELETED						
-206B	275A5310-5		.	.	COVER					B-Q	1
209	BACB30NM3K15		.	.	BOLT					A	1
-209A	BACB30NM3K16		.	.	BOLT					B-Q	1
212	BACB28AK03-024		.	.	BUSHING						1
215	NAS1149E0332P		.	.	WASHER						1
218	H52732-3CD		.	.	NUT						1
					(V15653)						
					(SPEC BACN10YR3CD)						
					(OPT PLH53CD (V62554))						
221	BACB30NM3K14		.	.	BOLT						1
224	BACB28AK03-030		.	.	BUSHING						1
227	NAS1149E0332P		.	.	WASHER						1
230	H52732-3CD		.	.	NUT						1
					(V15653)						
					(SPEC BACN10YR3CD)						
					(OPT PLH53CD (V62554))						
233	275A5315-2		.	.	LINK	ASSY					1
236	NAS509-4		.	.	.	NUT-JAM					1
239	ABR3M5013WGP		.	.	.	END-ROD					1
					(V83086)						
					(OPT ITEM 239A, 239B)						
-239A	REP3MS4-6FS428		.	.	.	END-ROD					1
					(V21335)						
					(OPT ITEM 239, 239B)						

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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-											
-239B	ABR3M5013WGL							. . . END-ROD (V21335) (OPT ITEM 239, 239A)			1
242	NAS509-5							. . . NUT			1
245	ABR3M5014WGP							. . . END-ROD (V83086) (OPT ITEM 245A, 245B)			1
-245A	69-77297-2							. . . END-ROD (OPT ITEM 245, 245B)			1
-245B	ABR3M5014WGL							. . . END-ROD (V83086) (OPT ITEM 245, 245A)			1
248	275A5316-2							. . . COUPLING (OPT ITEM 248A)			1
-248A	275A5316-1							. . . COUPLING (OPT ITEM 248)			1
251	BACB30NM4K9							. . BOLT			3
254	NAS1149D0432J							. . WASHER			3
257	H52732-4CD							. . NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))			3
260	NAS1802-3-8							DELETED			
263	NAS1149E0332P							DELETED			
266	275A5301-3							. . MECHANISM ASSY			1
269	BACB30LJ4U15							. . . BOLT (OPT ITEM 269A)			2
-269A	BACB30LJ4SU15							. . . BOLT (OPT ITEM 269)			2
272	NAS1149E0432P							. . . WASHER			2
275	BACB28AK04-035							. . . BUSHING			2
278	BRH10C4D							. . . NUT (V52828) (SPEC BACN10JC4CD) (OPT T6C428JCD (V11815)) (OPT NS202486-048 (V80539)) (OPT 102LH9075-4W (V72962)) (OPT H51650-4BAC (V15653))			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-											
281	APM219-4		. . .	PULLEY							2
				(V29965)							
				(SPEC BACP30F4)							
				(OPT R30F4 (V25337))							
				(OPT BMP30F4 (V22277))							
				(OPT SMS20219-4 (V29965))							
284	BACB30LM3SU12		. . .	BOLT							2
287	NAS1149E0332P		. . .	WASHER							2
290	BACB28AK03-030		. . .	BUSHING							2
293	BRH10C3D		. . .	NUT							2
				(V52828)							
				(SPEC BACN10JC3CD)							
				(OPT T6C1032JCD (V11815))							
				(OPT NS202486-02 (V80539))							
				(OPT 102LH9075-3W (V72962))							
				(OPT H51650-3BAC (V15653))							
296	275A5303-5		. . .	BRACKET ASSY							2
299	KR3CNGB11		. . . .	BEARING							1
				(V50632)							
				(OPT ITEM 299A)							
-299A	MS14101-3PK		. . . .	BEARING							1
				(OPT ITEM 299)							
302	BACB28AP04P013		. . . .	BUSHING							1
305	BACB28AT06B013C		. . . .	BUSHING							1
308	275A5303-4		. . . .	BRACKET							1
310	275A5301-6		. . .	KIT ASSY-SUBSTITUTE							1
				(OPT ITEM 310A, 310B)							
-310A	275A5301-4		. . .	KIT ASSY-SUBSTITUTE							1
				(OPT ITEM 310, 310B)							
-310B	275A5301-5		. . .	KIT ASSY-SUBSTITUTE							1
				(OPT ITEM 310, 310A)							
311	BACB30MR3K5		. . . .	BOLT							1
				(USED ON ITEM 310)							
-311A	NAS1351N3-12P		. . . .	SCREW							1
				(USED ON ITEM 310A)							
-311B	NAS1351C3LB12P		SCREW							1
				(USED ON ITEM 310B)							
314	BACW10BN3AC		WASHER							1
				(USED ON ITEM 310)							

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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-											
-314A	NAS1149E0332P								.... WASHER (USED ON ITEMS 310A,310B)		1
317	275A5304-1								... BRACKET		1
320	BACB30LJ4-40								... BOLT		1
323	NAS1149E0432P								... WASHER		1
326	BACB28AK04-125								... BUSHING		1
329	SSMKP4ASD705								... BEARING (V83086) (SPEC BACB10FS4) (OPT PACMKP4AA3908 (V21335)) (OPT ACMKP4AP510LY19 (V40920)) (OPT PACMKP4AFS428 (V21335)) (OPT SSMKP4AP (V21760)) (OPT ITEM 329A)		1
-329A	ACMKP4AFS428								... BEARING (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT ACMKP4AA3908 (V21335)) (OPT AMCS24EG7A (VK8455)) (OPT SSMK4RAP (V21760)) (OPT ITEM 329)		1
332	BACB28AK04038								DELETED		
332A	BACB28AK04-038								... BUSHING		1
335	H52732-4CD								... NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		1
338	275A5305-1								... BRACKET ASSY		1
341	MS21209F1-20P								.... INSERT		2
344	BACB28AP04P022								.... BUSHING		1
347	BACB28AT06B017C								.... BUSHING		1
350	275A5305-2							 BRACKET		1
353	275A5302-1								... CRANK ASSY		1
356	MS21209F1-20P							 INSERT		4

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
359	SSMKP4ASD705		. . . .	BEARING (V83086) (SPEC BACB10FS4) (OPT PACMKP4AA3908 (V21335)) (OPT ACMKP4AP510LY19 (V40920)) (OPT PACMKP4AFS428 (V21335)) (OPT SSMKP4AP (V21760))							1
362	BACB28W3C011		. . . .	BUSHING							2
365	BACB28AT05B011C		. . . .	BUSHING							2
368	BACB28AT05B013C		. . . .	BUSHING							1
371	BACB28W3C013		. . . .	BUSHING							1
374	275A5302-2		. . . .	CRANK							1
377	BACB30NM4K9			DELETED							
380	NAS1149D0432J			DELETED							
383	H52732-4CD			DELETED							
386	NAS1802-4-10P		. .	SCREW (OPT ITEM 386A)							4
-386A	BACS12GU4K10		. .	SCREW (OPT ITEM 386)							4
389	NAS1149D0432J		. .	WASHER							4
392	275A5311-3		. .	BRACKET ASSY							1
395	BACR15BA3D		. . .	RIVET (SIZE DETERMINED ON INST)							26
398	BRFM20C3D		. . .	NUTPLATE (V52828) (SPEC BACN10JN3CD) (OPT 102F9201M3 (V72962)) (OPT NS202487-02 (V80539)) (OPT MF51637-3 (V15653)) (OPT MF53050-3CD (V15653))							13
401	275A5311-4		. . .	BRACKET							1
404	NAS1623V17		. .	SCREW (OPT ITEM 404A)							4
-404A	BACB30NN3K16		. .	BOLT (OPT ITEM 404)							4
407	NAS1149E0332P		. .	WASHER							4

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE	USAGE CODE	UNITS PER ASSY
1-					
410	H52732-3CD		. . NUT (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))		4
413	275A5325-1		. . GUARD-CABLE	A	1
-413A	275A5325-3		. . GUARD-CABLE	B-N	1
416	275A5325-2		. . GUARD-CABLE	A	1
-416A	275A5325-4		. . GUARD-CABLE	B-N	1
418	BACP18BC01A06P		. . PIN		2
419	BCREF12712		. . CABLE (61-32155C3JH1902L917)		1
422	BACB30NM4K16		. . BOLT		2
425	NAS1149D0432J		. . WASHER		4
428	H52732-4CD		. . NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
431	275A5321-1		. . STANDOFF-HOSE		1
434	BACB30NM4K4		. . BOLT	A	2
435	BACB30NM4K5		. . BOLT	B-Q	2
436	NAS1149D0432J		. . WASHER	B-Q	2
437	NAS1149D0432J		. . WASHER		2
440	H52732-4CD		. . NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
443	69-72804-1		. . BRACE		1
446	275A5320-2		. . BRACKET		1
449	BACB30NM4K25		. . BOLT		2
452	AN970-4		. . WASHER		2
455	NAS1149D0432J		. . WASHER		2
458	H52732-4CD		. . NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		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-											
494	H52732-3CD		.	.	NUT						4
					(V15653)						
					(SPEC BACN10YR3CD)						
					(OPT PLH53CD (V62554))						
497	284A3301-1		.	.	BRACKET				A		1
-497A	284A3301-9		.	.	BRACKET				B-Q		1
500	284A3301-2		.	.	BRACKET				A		1
-500A	284A3301-10		.	.	BRACKET				B-Q		1
503	BACS12GU3K8		.	.	SCREW						4
					(OPT ITEM 503A)						
-503A	NAS1801-3-8		.	.	SCREW						4
					(OPT ITEM 503)						
506	NAS1149D0316J		.	.	WASHER						4
509	H52732-3CD		.	.	NUT						4
					(V15653)						
					(SPEC BACN10YR3CD)						
					(OPT PLH53CD (V62554))						
512	284A3301-3		.	.	BRACKET				A		1
-512A	284A3301-8		.	.	BRACKET				B-Q		1
515	284A3301-4		.	.	BRACKET						1
518	1-899-29		.	.	SENSOR						2
					(V08748)						
					(SPEC 10-61226-29)						
521	BAC27DEX6217		.	.	MARKER-ALUMINUM FOIL- S1014						1
					A/G SENSOR						
524	BAC27DEX6218		.	.	MARKER-ALUMINUM FOIL- S1015						1
					A/G SENSOR						
-527	287A6203-3		.	.	SUPPORT INSTL-WIRE BUNDLE				A		1
					HARNESS						
-527A	287A6203-5		.	.	SUPPORT INSTL-WIRE BUNDLE				B-G		1
					HARNESS						
-527B	287A6203-6		.	.	SUPPORT INSTL-WIRE BUNDLE				H-L		1
					HARNESS						
-527C	287A6203-7		.	.	SUPPORT INSTL-WIRE BUNDLE				M-Q		1
					HARNESS						
530	BACS12GU3K7		.	.	SCREW						2
533	NAS1149D0332J		.	.	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-											
536	H52732-3CM		.	.	NUT					A	2
					(V15653)						
					(SPEC BACN10YR3CM)						
					(OPT PLH53CM (V62554))						
537	130069G		.	.	NUT					A	2
					(V60119)						
					(SPEC BACN10FX16G)						
539	TA027067		.	.	CLAMP						2
					(V84971)						
					(OPT ITEM 539A)						
-539A	JM44LC13WH6R		.	.	CLAMP						2
					(V22175)						
					(SPEC BACC10GE6C)						
					(OPT S369WHSS6 (V18076))						
					(OPT TA12C32WH6 (V84971))						
					(OPT 509SS6 (V83930))						
					(OPT ITEM 539)						
542	BACS12GU3K8		.	.	SCREW						2
545	NAS1149D0332J		.	.	WASHER						2
548	A4972-6-02		.	.	NUT				A		2
					(V72962)						
					(SPEC BACN10FX16)						
					(OPT RM52LHA4972-6-0 (V72962))						
					(OPT A11330-6-3 (V72962))						
					(OPT 130069 (V60119))						
-548A	130069G		.	.	NUT				B-Q		2
					(V60119)						
					(SPEC BACN10FX16G)						
551	TA027067		.	.	CLAMP						2
					(V84971)						
					(OPT ITEM 551A)						
-551A	JM44LC13WH6R		.	.	CLAMP						2
					(V22175)						
					(SPEC BACC10GE6C)						
					(OPT S369WHSS6 (V18076))						
					(OPT TA12C32WH6 (V84971))						
					(OPT 509SS6 (V83930))						
					(OPT ITEM 551)						
554	BACS12GU3K9		.	.	SCREW						2
557	NAS1149D0332J		.	.	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-											
560	H52732-3CD		. .	NUT							2
				(V15653)							
				(SPEC BACN10YR3CD)							
				(OPT PLH53CD (V62554))							
563	TA027069		. .	CLAMP					A		2
				(V84971)							
-563A	TA027070		. .	CLAMP					B-Q		2
				(V84971)							
				(OPT ITEM 563B, 563C)							
-563B	JM44LC13WS11R		. .	CLAMP					B-Q		2
				(V22175)							
				(SPEC BACC10GE11)							
				(OPT S369WH11 (V18076))							
				(OPT TA12C32WS11 (V84971))							
				(OPT 509S11 (V83930))							
				(OPT ITEM 563A, 563C)							
-563C	JM44LC13WH11R		. .	CLAMP					B-Q		2
				(V22175)							
				(SPEC BACC10GE11C)							
				(OPT S369WHSS11 (V18076))							
				(OPT TA12C32WH11 (V84971))							
				(OPT 509SS11 (V83930))							
				(OPT ITEM 563A, 563B)							
566	BACS12GU3K7		. .	SCREW					A		4
567	BACS12GU3K7		. .	SCREW					B-Q		3
569	NAS1149C0332R		. .	WASHER					A		4
570	NAS1149C0332R		. .	WASHER					B-Q		3
572	287A6225-8		. .	COVER					A		1
573	287A6225-29		. .	COVER					B-Q		1
575	SF3NU02		. .	NUT							3
				(VF6101)							
				(OPT ITEM 575A)							
-575A	300-100-0029		. .	NUT							3
				(V05593)							
				(OPT ITEM 575)							
577	BACW10BP8APU		. .	WASHER					B-Q		1
580	SF3NU03		. .	NUT							1
				(VF6101)							
				(OPT ITEM 580A)							

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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-											
-580A	300-100-0032		. .								1
583	BACS12GU3K7		. .								4
586	NAS1149C0332R		. .								4
589	H52732-3CD		. .								4
592	TA027068		. .								4
595	BACW10BP3APU		. .								1
598	H52732-3CM		. .								1
599	NAS43DD3-20FC		. .						B-Q		1
601	BACS12GU3K9D		. .								1
604	NAS1149D0332J		. .								2
607	H52732-3CD		. .								1
610	TA027068		. .								2
613	SF3NU22		. .								2
613A	300-100-0031		. .								2
616	NAS1149C1232R		. .								4
619	287A6212-15		. .								1
622	287A6212-11		. .						A		1
-622A	287A6212-25		. .						B-Q		1
625	287A6212-21		. .						A, H-L		1
-625A	287A6212-21		. .						B-G		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-											
-625B	287A6212-26		.	.	CONDUIT ASSY (OPT ITEM 625A)					B-G	1
-625C	287A6212-26		.	.	CONDUIT ASSY					H-Q	1
628	287A6212-19		.	.	CONDUIT ASSY					A	1
-628A	287A6212-23		.	.	CONDUIT ASSY					B-Q	1
631	287A6212-20		.	.	CONDUIT ASSY					A	1
-631A	287A6212-24		.	.	CONDUIT ASSY					B-Q	1
634	287A6212-22		.	.	CONDUIT ASSY						1
-637	287A6213-4		.	.	WIRE BUNDLE ASSY						1
-640	322338		.	.	LUG (V00779)						2
-643	M39029-1-102		.	.	CONTACT						2
-646	287A6205-2		.		BRACKET INSTL-WIRE BUNDLE SPRT					A	1
-646A	287A6205-3		.		BRACKET INSTL-WIRE BUNDLE SPRT					B-Q	1
649	BACB30NM4K11		.	.	BOLT						4
652	BACW10BP4CD		.	.	WASHER						4
655	BACW10BP4DP		.	.	WASHER					A	4
-655A	BACW10BP4DP		.	.	WASHER (OPT ITEM 655B)					B-Q	4
-655B	BACW10P417CG		.	.	WASHER (OPT ITEM 655A)					B-Q	4
658	NAS1805-4L		.	.	NUT						4
661	287A6215-5		.	.	BRACKET ASSY						1
664	BACR15BB4D				DELETED						
664A	BACR15BB4DC		.	.	RIVET (SIZE DETERMINED ON INST)						2
667	287A6225-19		.	.	BRACKET						1
670	287A6225-20		.	.	BRACKET					A	1
-670A	287A6225-32		.	.	BRACKET					B-Q	1
673	BACS12GU3K13		.	.	SCREW						4
676	NAS1149D0332J		.	.	WASHER						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		
1-											
679	H52732-3CD		. .	NUT							4
				(V15653)							
				(SPEC BACN10YR3CD)							
				(OPT PLH53CD (V62554))							
682	287A6225-24		. .	GUIDE-HOSE							1
685	BACB30NM4K8		. .	BOLT							4
688	BACW10BP4CD		. .	WASHER							4
691	BACW10BP4DP		. .	WASHER					A		4
-691A	BACW10BP4DP		. .	WASHER					B-Q		4
				(OPT ITEM 691B)							
-691B	BACW10P417CG		. .	WASHER					B-Q		4
				(OPT ITEM 691A)							
694	NAS1805-4L		. .	NUT							4
697	287A6215-6		. .	BOX ASSY					A		1
				(OPT ITEM 697A)							
-697A	287A6215-7		. .	BOX ASSY					A		1
				(OPT ITEM 697)							
698	287A6215-10		. .	BOX ASSY					B-Q		1
700	BACR15DR3A		. . .	RIVET					A		8
				(SIZE DETERMINED ON INST)							
701	BACR15DR3A		. . .	RIVET					B-Q		6
				(SIZE DETERMINED ON INST)							
703	MF6001-3		. . .	NUTPLATE					A		4
				(V15653)							
				(SPEC BACN10KJ3CM)							
704	MF6001-3		. . .	NUTPLATE					B-Q		3
				(V15653)							
				(SPEC BACN10KJ3CM)							
706	MS20615-5MP		. . .	RIVET					A		4
707	NAS1198-4		. . .	RIVET					B-Q		6
				(SIZE DETERMINED ON INST)							
709	287A6225-23		. . .	BOX-TRANSITION					A		1
				(USED ON ITEM 697)							
712	287A6225-22		. . .	BRACKET					A		1
				(USED ON ITEM 697A)							
713	287A6225-28		. . .	BRACKET					B-Q		1
715	287A6225-25		. . .	BRACKET					A		1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE	USAGE CODE	UNITS PER ASSY
1-					
716	287A6225-31		. . . BRACKET	B-Q	1
718	NAS1198-4-4		. . . RIVET (USED ON ITEM 697A)	A	8
721	287A6215-18		DELETED		
721A	287A6225-18		. . . BRACKET (USED ON ITEM 697A)	A	1
724	BACB30NM4K9		. . BOLT		2
727	BACW10BP4ACU		. . WASHER		2
730	BACW10BP4DP		. . WASHER	A	4
-730A	BACW10BP4DP		. . WASHER (OPT ITEM 730B)	B-Q	4
-730B	BACW10P417CG		. . WASHER (OPT ITEM 730A)	B-Q	4
733	NAS1805-4L		. . NUT		2
736	287A6215-1		. . BRACKET ASSY	A	1
-736A	287A6215-8		. . BRACKET ASSY	B-Q	1
739	BACR15BB5D		. . . RIVET (SIZE DETERMINED ON INST)		6
742	287A6225-11		. . . BRACKET	A	1
-742A	287A6225-26		. . . BRACKET	B-Q	1
745	287A6225-12		. . . BRACKET		1
748	BACB30NM4K9		. . BOLT		3
751	BACW10BP4CD		. . WASHER		3
754	BACW10BP4DP		. . WASHER	A	3
-754A	BACW10BP4DP		. . WASHER (OPT ITEM 754B)	B-Q	3
-754B	BACW10P417CG		. . WASHER (OPT ITEM 754A)	B-Q	3
757	NAS1805-4L		. . NUT		3
760	287A6225-21		. . BRACKET		1
763	BACB30NM3K8		. . BOLT		1
766	BACB19F10S		. . BLOCK		1
769	BACC15AN10		. . CLIP		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- 772	3140AB025E5										1
775	8412										AR

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