

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF TRAILING EDGE FLAP DRIVE POWER DRIVE UNIT ASSEMBLY
COMPONENT MAINTENANCE MANUAL 27-51-14

REVISION NO. 19 DATED JUL 01/02

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION

AND PAGE NO.

1042

DESCRIPTION OF CHANGE

Added the 732-18550-13 control valve module as an option on the 256T3110-16, -17 power drive unit assemblies.

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HIGHLIGHTS

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TRAILING EDGE FLAP DRIVE
POWER DRIVE UNIT ASSEMBLY

PART NUMBERS 256T3110-2 THRU -13,
-16,-17
015T0850-1 THRU -9

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

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TITLE PAGE

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REVISION RECORD

- Retain this record in front of manual. On receipt of revision, insert revised pages in the manual, and enter revision number, date inserted and initial.

REVISION NUMBER	REVISION DATE	DATE FILED	BY	REVISION NUMBER	REVISION DATE	DATE FILED	BY


BOEING
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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
27-0040		PRR B10112 PRR B10298 PRR B10269 PRR VDC-T0216 PRR VDC-T0263 PRR B11246 PRR 11528 PRR B11618 PRR B12040	OCT 10/81 OCT 10/81 OCT 10/81 APR 10/83 OCT 10/83 JAN 10/85 JUL 10/85 OCT 10/86 OCT 01/87 JUL 01/92
27-0096		PRR B12174	JUL 01/93 SEP 01/95 NOV 01/00
27-0096R2			

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TR & SB RECORD

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* [1] Special instructions not required. Use standard industry practices.

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INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions ranging from simple checks and replacement to complete shop-type repair.

This manual is divided into separate sections:

- | | |
|--|------------------------------|
| 1. Title Page | 4. List of Effective Pages |
| 2. Record of Revisions | 5. Table of Contents |
| 3. Temporary Revision &
Service Bulletin Record | 6. Introduction |
| | 7. Procedures & IPL Sections |

Refer to the Table of Contents for the page location of applicable sections. An asterisked flagnote *[] in place of the page number indicates that no special instructions are provided since the function can be performed using standard industry practices.

The beginning of the REPAIR section includes a list of the separate repairs, a list of applicable standard Boeing practices, and an explanation of the True Position Dimensioning symbols used.

An explanation of the use of the Illustrated Parts List is provided in the Introduction to that section.

All weights and measurements used in the manual are in English units, unless otherwise stated. When metric equivalents are given they will be in parentheses following the English units.

Design changes, optional parts, configuration differences and Service Bulletin modifications create alternate part numbers. These are identified in the Illustrated Parts List (IPL) by adding an alphabetical character to the basic item number. The resulting item number is called an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless otherwise indicated.

Verification:

Testing/TS	AUG 30/82
Disassembly	AUG 30/82
Assembly	AUG 30/82

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TRAILING EDGE FLAP DRIVE POWER DRIVE UNIT ASSEMBLY

DESCRIPTION AND OPERATION

1. Description

A. The trailing edge flap drive power drive unit assembly consists of a power control unit, a control valve module, a gearbox, a hydraulic motor and an electric motor. All components are bolted together to form the complete power drive unit.

2. Operation

A. The power drive unit is hydraulically operated and provides mechanical transfer of force to operate the flaps.

B. The cockpit flap control lever actuates the pilot input arm on the control unit, which shifts a valve in the control valve module. The control valve module provides two-directional control during normal operation. The hydraulic motor, operating through the gearbox, turns the output shaft. The gearbox also drives a follow-up cam which shuts off the system drive when the selected flap position is reached.

C. When the alternate drive system is engaged, a motor-operated valve in the module allows hydraulic fluid bypass and prevents hydraulic motor operation. The electric motor operates and performs the same function as the hydraulic motor.

3. Leading Particulars (Approximate)

Length -- 16 inches

Width -- 16 inches

Height -- 26 inches

Weight -- 90 pounds

Operating Medium -- Hydraulic Fluid, BMS 3-11 (Control valve module and hydraulic motor)

-- 115 volt AC, 400 Hz (Electric motor)

Operating Pressure -- 3000 psi

Output Shaft Speed -- 644 rpm

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DESCRIPTION & OPERATION

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TESTING AND TROUBLE SHOOTING1. Test Equipment

NOTE: Equivalent substitutes may be used.

A. Mechanical Equipment

- (1) Fixture assembly A27079-90 (replaces A27079-79), used with support assembly A27079-7 to support power drive unit (PDU) at three (3) mounting lugs provided (Fig. 101). *[1]
- (2) Torque-measurement device, capable of dynamically measuring output shaft torque from 0-1700 pound-inches. *[1]
- (3) Gauge assembly A27079-85, consisting of a pilot input arm (PIA) actuating device, and a PIA position indicator (Fig. 102). *[1]
- (4) Tachometer to measure output shaft speed of 50-660 rpm with accuracy of ± 5 rpm. *[1]

*[1] Part of Test Equipment A27079-89 (replaces A27079-78) and A27079-96.

B. Hydraulic Equipment

- (1) Hydraulic test bench capable of delivering 25 gal./min (gpm) at 3000 psi, plus hoses and fittings required for hookup to the test unit.
- (2) Flowmeter capable of measuring a flow rate of 4 to 25 gpm with accuracy of ± 1 gpm.

C. Electrical Equipment (Fig. 103)

- (1) AC power supply, 115V, 3 phase, 400 ± 5 Hz, capable of maintaining a minimum terminal voltage of 104V.
- (2) DC power supply, 28V (22.0-29.5V allowable range), 12A.
- (3) Readout equipment A27081-1, used with Test Equipment A27079-78 to read shaft output torque.
- (4) Control equipment A27081-2, consisting of circuit breakers and switching devices (Fig. 103).
- (5) Electronic digital counter, used with Test Equipment A27079-78 to read output shaft speed and revolutions.

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D. Materials

- (1) Hydraulic fluid, BMS 3-11, filtered continuously through a 5 micron nominal/15 micron absolute filter.
- (2) Assembly lube, MCS352 Skydrol.

2. Preparation for Test

- A. Mount PDU in test fixture A27079-90 and support assembly A27079-7, per Fig. 101.
- B. Check that test unit has been rigged in the "Flaps Retracted" position (see ASSEMBLY).

NOTE: "Test Zero" position corresponds to "Flaps Retracted" position of the pilot input arm (PIA).

- C. Remove protective caps from control module pressure and return ports. Lightly lubricate backup rings and packings with MCS352 Skydrol assembly lube or BMS 3-11 hydraulic fluid before attaching hoses and fittings required for hookup to test bench. Ensure that PDU hydraulic control module (95, IPL Fig. 1; 135, IPL Fig. 2) and hydraulic drive motor (190) are filled with BMS 3-11 hydraulic fluid prior to testing.
- D. Connect control equipment A27081-2 and provide hydraulic power requirements as shown in Fig. 101 and Fig. 103.
- E. Install gauge assembly A27079-85 to actuate PIA.
- F. Connect readout equipment A27081-1 to test fixture A27079-90. Connect digital counter to readout equipment.

3. Test

- A. Check control valve null.
 - (1) With output shaft free to rotate, set hydraulic test stand at 2900-3100 psi to provide 21.5-25.0 gpm to the PDU. Supply 28 VDC to control valve module NORMAL circuit as shown in Fig. 103.
 - (2) Ensure that the PIA is in the "Flaps Retracted - Test Zero" position as shown in Fig. 101. Remove plugs (135, IPL Fig. 1; 175, IPL Fig. 2) and insert 0.250-inch dia input cam and follow-up cam rig pin.

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- (3) If pins do not insert easily, adjust rod assembly (75, IPL Fig. 1; 115, IPL Fig. 2). Back off locking device at both ends. Slowly adjust rod length (by rotating rod body) until rig pins can be fully inserted. Ensure that rig pins can be easily removed and reinserted without binding. After final adjustment secure locking devices.
 - (4) Remove rig pins and reinstall plugs.
- B. Check normal hydraulic operation (Fig. 104, 105)
- NOTE:** This portion of test is conducted with unit in unloaded condition. Allow output shaft to stop revolving at each detent position before proceeding to the next detent position.
- (1) Move PIA actuating arm to the following successive detent positions: 1, 5, 15, 20 and 0. Measure and record direction and number of revolutions and check for compliance with Table I (Fig. 105).
 - (2) Move PIA actuating arm to the following successive detent positions: 25, 30 and 0. Measure and record direction and number of revolutions and check for compliance with Table I (Fig. 105).
- C. Check manual override.
- (1) Switch off 28 VDC electrical power. With the PIA actuating arm in the zero detent position, move the manual override handle to Position 1 as shown in Fig. 101.
 - (2) Move the PIA actuating arm from the zero to the number 30 detent position. Check that the output shaft does not move. Return the PIA actuating arm back to the zero detent position. Move the manual override handle back to Position 2. Restore 28 VDC power.
- D. Check torque output.
- (1) With the output shaft coupled to the dynamic torque reading device, apply hydraulic pressure, 2900–3100 psi, to the hydraulic control valve module (95, IPL Fig. 1; 135, IPL Fig. 2).
 - (2) Move PIA actuating arm to detent positions in accordance with Table II (Fig. 106). Gradually apply and maintain normal operating torques at each position for a minimum of 15 seconds, checking for compliance with Table II. Output shaft will stop turning after completing specified number of revolutions for each detent position. Remove hydraulic power.
- E. Deleted.

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F. Check alternate electric motor operation.

- (1) Supply 28 VDC to control valve module NORMAL circuit and 115 VAC, 400 Hz, 3 phase to ARM RELAY as shown in Fig. 103.
- (2) Move PIA actuating arm to the zero detent position and identify the corresponding output shaft "Flaps Retracted" position. Move NORMAL/BYPASS switch to BYPASS Position as shown in Fig. 103.
- (3) Move EXTEND/RETRACT switch to EXTEND position. Check that output shaft rotates in the "Extend" direction at shaft speed of 86-106 rpm. Allow shaft to rotate for 15-30 seconds. Move EXTEND/RETRACT switch to neutral position.

CAUTION: DO NOT RETRACT UNIT FOR MORE REVOLUTIONS THAN WERE OBTAINED DURING IMMEDIATELY PRECEDING EXTEND OPERATION, OR GEARBOX/CONTROL UNIT COUPLING MAY SHEAR.

- (4) After output shaft has stopped rotating, note total number of revolutions, then move switch to RETRACT position. Check that output shaft rotates in the "Retract" direction at shaft speed of 86-106 rpm. Allow shaft to rotate for 5-10 seconds. Move EXTEND/RETRACT switch to neutral position.
- (5) Move NORMAL/BYPASS switch to NORMAL. Apply hydraulic power and allow unit to travel to fully retracted position.
- (6) Move PIA actuating arm to the following successive detent positions: 25, 30, and 0. Allow output shaft to stop revolving at each detent position before proceeding to the next detent position.
- (7) Remove hydraulic and electrical power supplies.

G. Perform post-functional test inspection.

- (1) Upon completion of the above tests, thoroughly inspect the unit to ensure that no degradation has occurred during testing.

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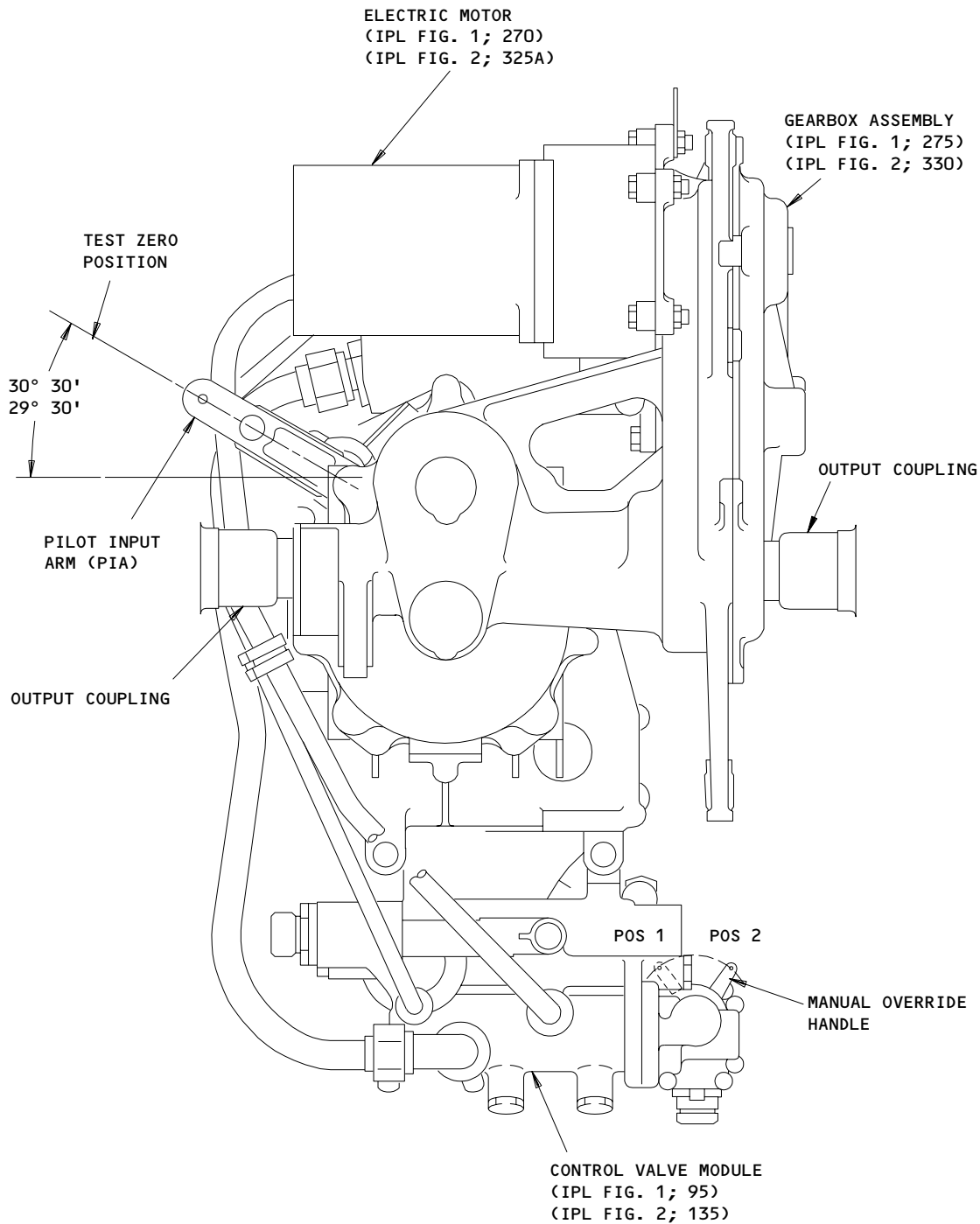
- | (2) Cap all exposed hydraulic ports with Skydrol (BMS 3-11) resistant plugs.

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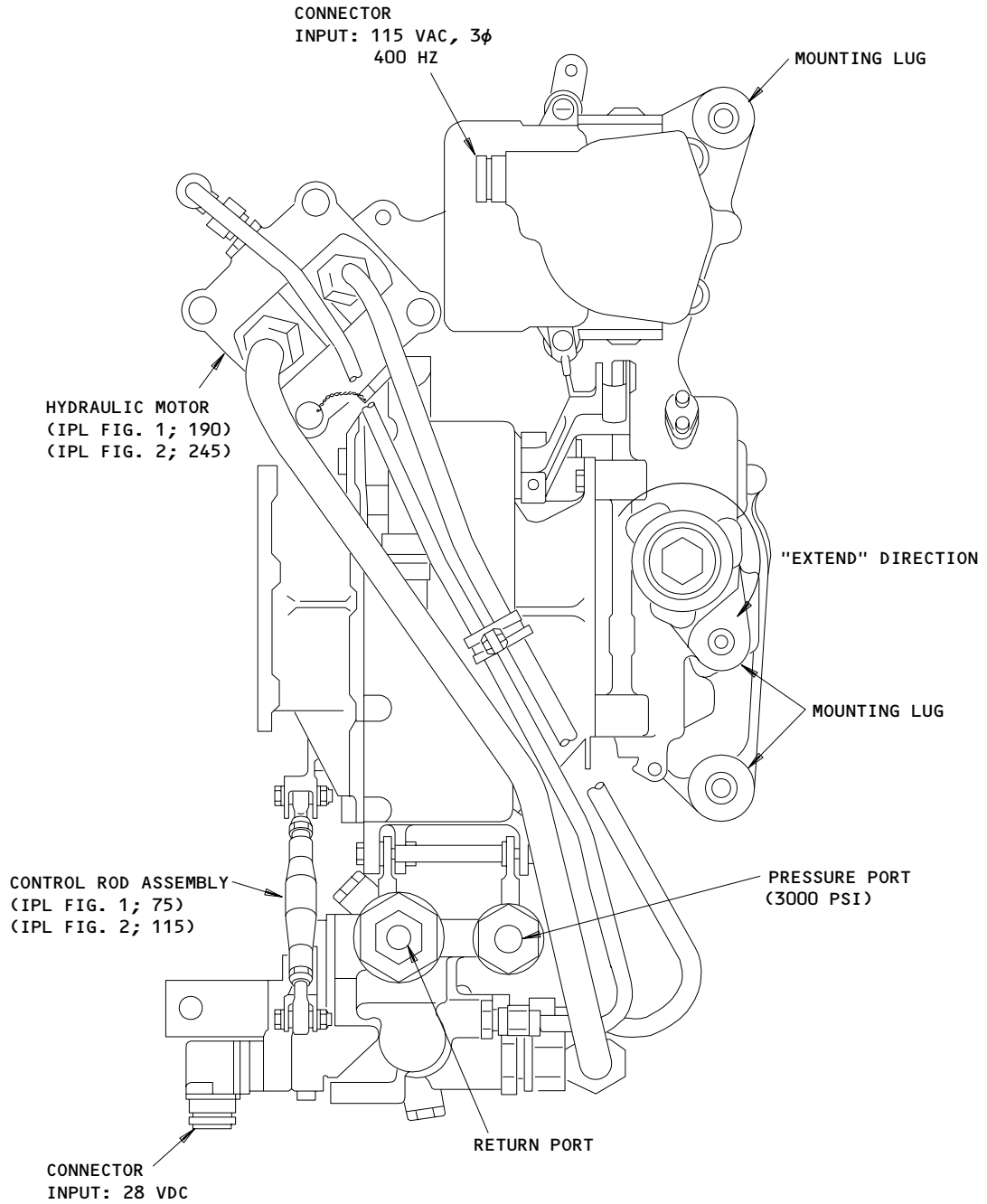
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256T3110-2 SHOWN

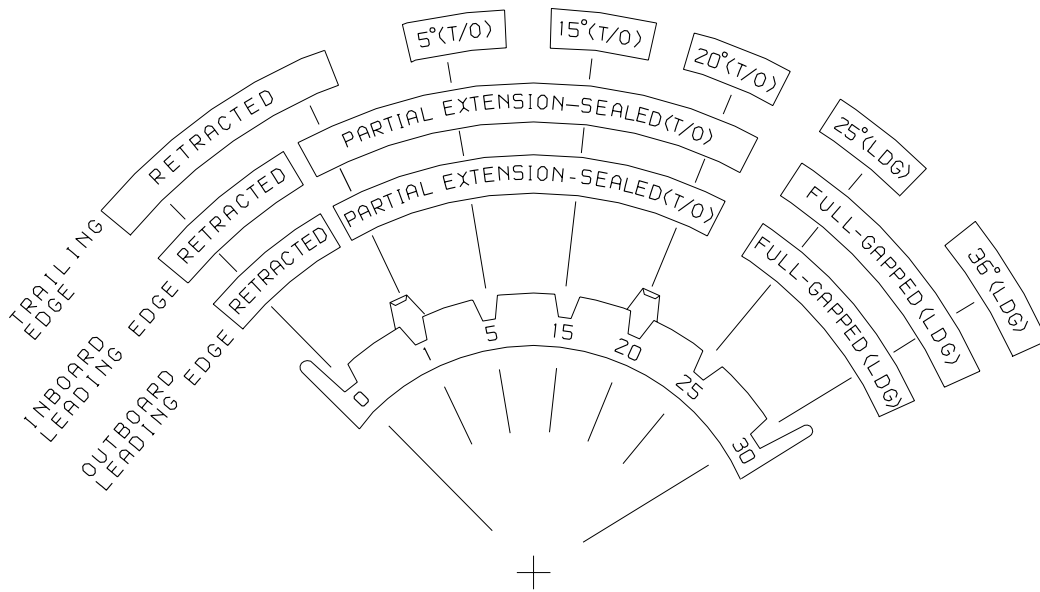
Power Drive Unit (PDU) Assembly
 Figure 101 (Sheet 1)

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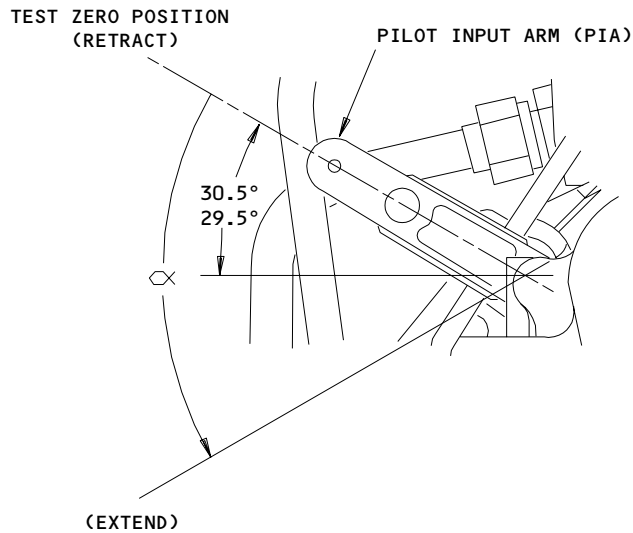
Power Drive Unit (PDU) Assembly
Figure 101 (Sheet 2)

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**FLAP HANDLE DEVICE
(PILOT INPUT ARM ACTUATION DEVICE)**

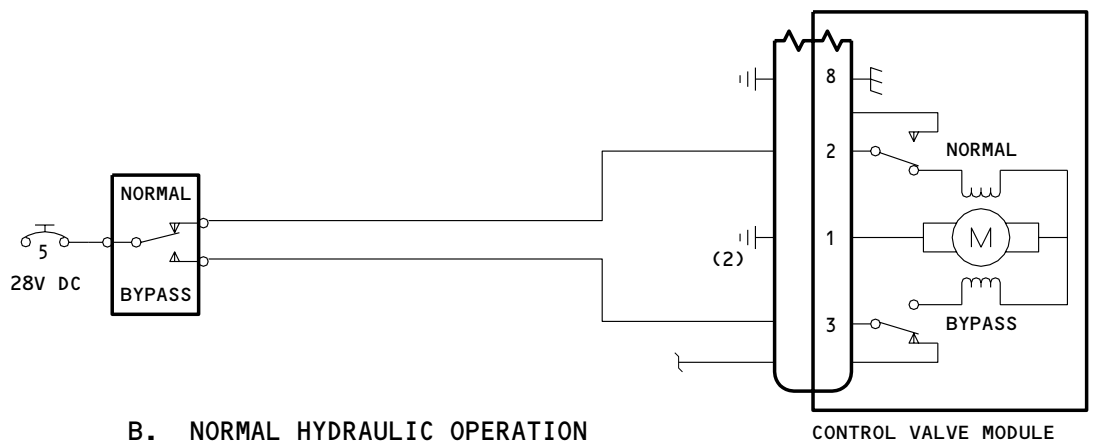
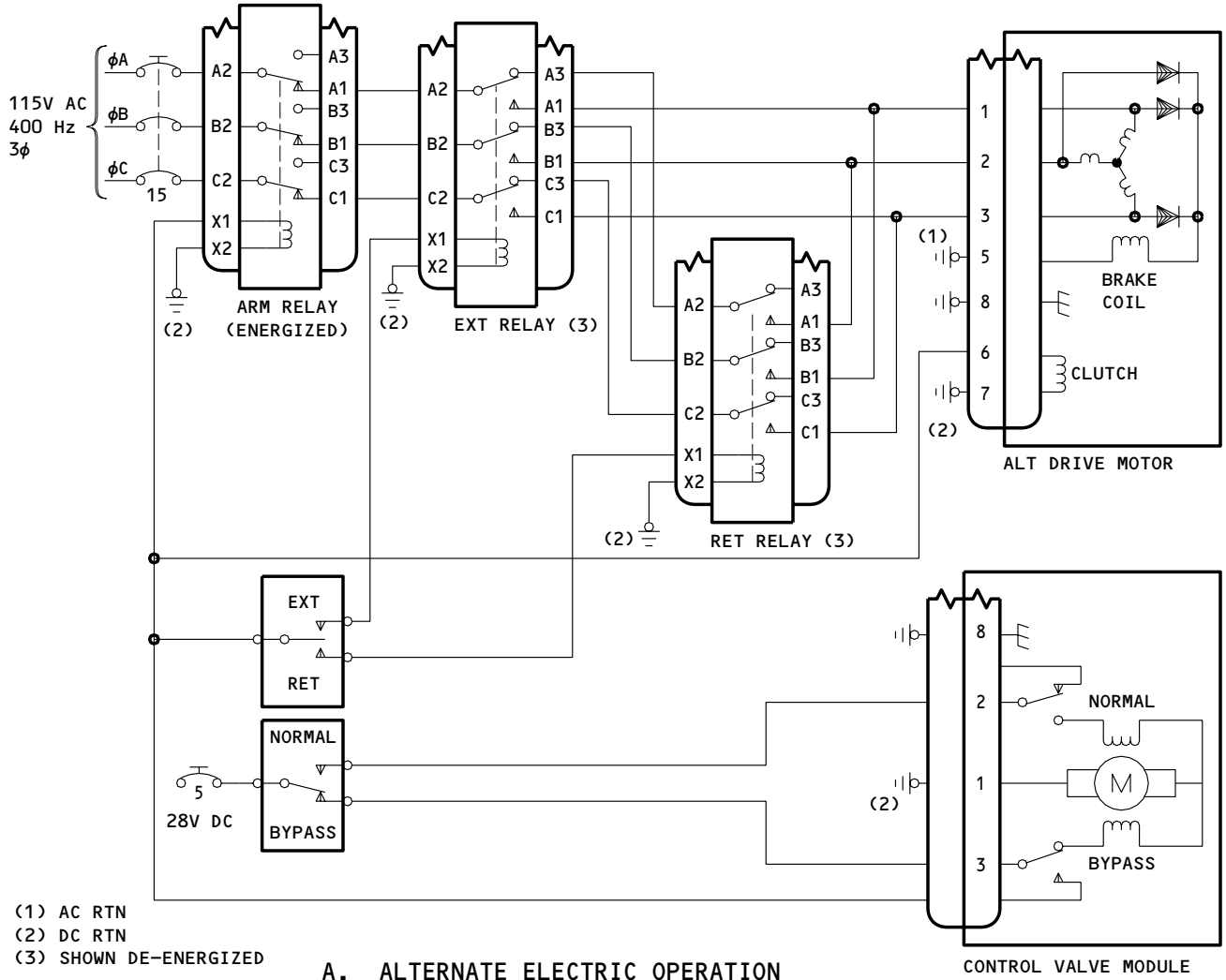
DETENT NO.	0	1	5	15	20	25	30
∠ (DEG)	0	7-13	17-23	27-33	37-43	47-53	57-63



**Pilot Input Arm Actuation
Figure 102**

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Functional Test Electrical Schematic Diagram
 Figure 103

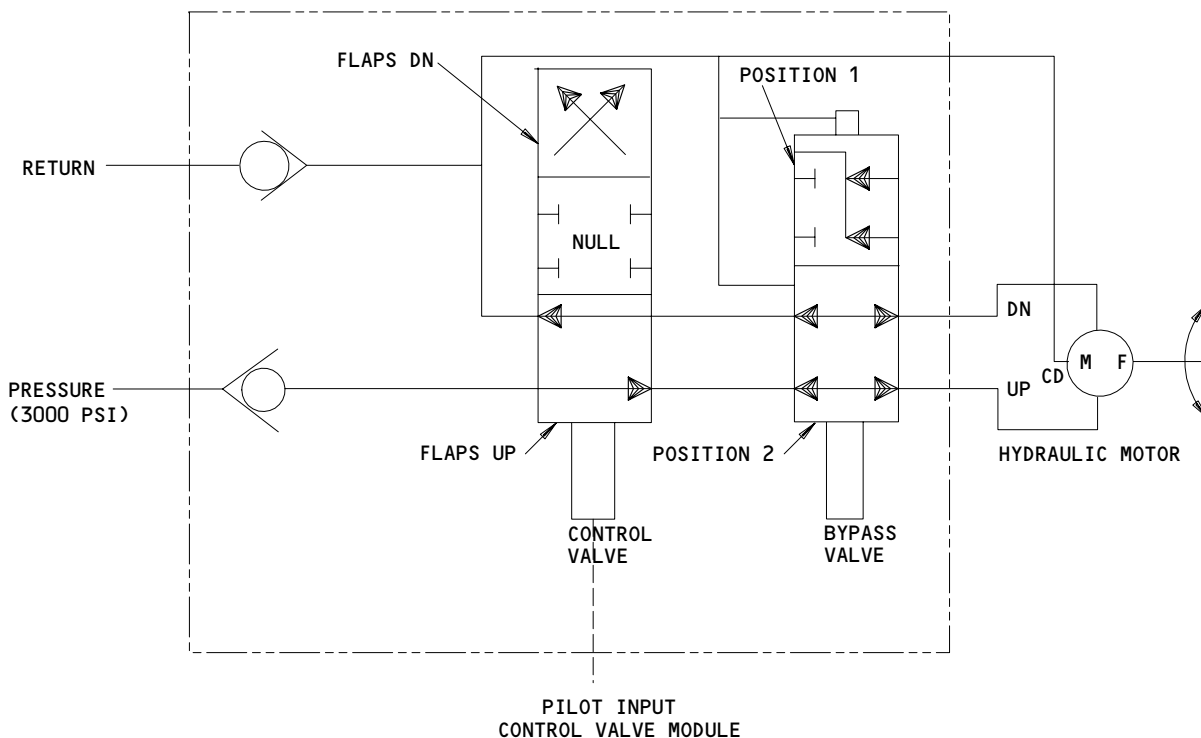
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Hydraulic Functional Schematic Diagram
 Figure 104

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







DETENT POSITION 	OUTPUT SHAFT REVOLUTIONS			DIRECTION OF ROTATION 
	256T3110-2 THRU -5,-8,-11,-16 015T0850-1 THRU -4,-7	256T3110-6,-10,-13 015T0850-5,-9	256T3110-7,-9,-12,-17 015T0850-6,-8	
0	0	0	0	-
1	0	0	0	-
5	207.5-209.5	239-241	260-262	EXTEND
15	Δ 59.0 	Δ 21.0	Δ 29.0	EXTEND
20	Δ 23.0 	Δ 29.0	Δ 23.5	EXTEND
0	289.5-291.5	289.5-291.5	312.5-314.5	RETRACT
0	0	0	0	-
25	311-313	311-313	355.5-357.5	EXTEND
30	Δ 48.5 	Δ 48.5	Δ 33	EXTEND
0	359.5-361.5	359.5-361.5	388.5-390.5	RETRACT

TABLE I

-  REFER TO FIG. 102
 REFER TO FIG. 101
 Δ DENOTES CHANGE FROM PREVIOUS DETENT POSITION.

Normal Hydraulic Operation
 Figure 105

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


DETENT POSITION 	NORMAL OPERATING TORQUE (LB-IN.)	OUTPUT SHAFT REVOLUTIONS			DIRECTION OF ROTATION 
		256T3110-2 THRU -5,-8,-11,-16 015T0850-1 THRU -4,-7	256T3110-6,-10,-13 015T0850-5,-9	256T3110-7,-9,-12,-17 015T0850-6,-8	
0	0	0	0	0	-
15	1470-1530	266-268	260-262	289-291	EXTEND
0	0	266-268	260-262	289-291	RETRACT
20	1570-1630	289.5-291.5	289.5-291.5	312.5-314.5	EXTEND
0	0	289.5-291.5	289.5-291.5	312.5-314.5	RETRACT
30	1230-1290	359-361	359-361	388.5-390.5	EXTEND
0	0	359-361	359-361	388.5-390.5	RETRACT

TABLE II

-  REFER TO FIG. 102
 REFER TO FIG. 101

Torque Output
 Figure 106

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DISASSEMBLY

NOTE: See Testing and Trouble Shooting to establish the condition of the component or most probable cause of its malfunction. This is to determine the extent of disassembly required without completely tearing down and rebuilding the component.

1. Parts Replacement

NOTE: The following parts are recommended for replacement. Unless otherwise specified actual replacement of parts may be based on in-service experience.

A. Lockwire, packings

2. Disassembly (IPL Fig. 1)

CAUTION: USE EXTREME CARE WHEN REMOVING TUBE ASSEMBLIES (15, 30, 70). DO NOT FORCE OR BEND TUBE ASSEMBLIES DURING REMOVAL.

A. Remove tube assemblies (15, 30, 70).

(1) Remove tube assembly (15) by loosening coupling nuts.

(2) Remove parts (55A thru 65A) and clamps (47, 50A).

(3) Remove tube assemblies (30, 70).

B. Remove elbows (7, 45), unions (5, 20, 35) and packings (10, 25, 40).

C. Remove lockwire, then remove plug (220A) and packing (225) from hydraulic motor (190).

D. Remove the bolts (195, 197, 200), washers (205), and nuts (210), then remove the hydraulic motor (190). Remove the packing (215A).

NOTE: Refer to the manufacturer's instructions for disassembly and repair of the hydraulic motor.

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E. For assemblies with electric motor (270, 270A, 270B, 270C, 270D, or 270E) installed:

- (1) Remove the bolt (230B), washers (235A, 240A), and nut (245B), then remove the support (250).
- (2) Remove the bolts (165C, 255B), washers (170B, 260A), and nuts (265B), then remove the electric motor.

NOTE: Refer to the manufacturer's instructions for disassembly and repair of the electric motor.

F. For assemblies with electric motor (272) installed:

- (1) Remove the bolts (290), washers (295), and jumper assemblies (300, 305), and remove the electric motor (272) from the adapter plate on the gearbox assembly (275).

NOTE: The adapter plate is part of the electric motor.

- (2) Remove the bolts (310, 315, 320), washers (330), nuts (335), and the support (325), and remove the adapter plate from the gearbox assembly (275).

- (3) Attach the adapter plate to the electric motor (272) with the fasteners (290, 295) to keep the parts together.

NOTE: Refer to the manufacturer's instructions for disassembly and repair of the electric motor.

G. Remove bolts (80), washers (85A) and nuts (90A) and remove rod assembly (75).

NOTE: Refer to 27-00-11 for repair of rod assembly (75).

H. Remove parts (100 thru 130) and remove control valve module (95).

NOTE: Refer to manufacturer's instructions for disassembly and repair of control valve module (95).

I. Remove lockwire and remove bolts (140, 150) and washers (145A, 155, 160). Separate the control unit assembly (180) from the gearbox assembly (275) and remove the support (185) and jumper (175).

NOTE: Refer to 27-51-50 for disassembly and repair of the gearbox assembly (275).

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J. Remove plugs (135) and quill shaft (280) from the control unit assembly (180).

NOTE: Refer to 27-51-16 for disassembly and repair of the control unit assembly (180).

3. Disassembly (IPL Fig. 2)

CAUTION: USE EXTREME CARE WHEN REMOVING TUBE ASSEMBLIES (20, 45, 100).
DO NOT FORCE OR BEND TUBE ASSEMBLIES DURING REMOVAL.

A. Remove tube assemblies (20, 45, 100).

(1) Remove tube assembly (20) by loosening coupling nuts.

(2) Remove parts (85 thru 95 and clamps (75, 80).

(3) Remove tube assemblies (45, 100).

B. Remove elbows (10, 70), unions (5, 35, 60) and packings (15, 40, 65).

C. Remove lockwire, then remove plug (280) and packing (285) from hydraulic motor (245).

D. Remove bolts (250, 255, 260), washers (265), nuts (270) and hydraulic motor (245). Remove packing (275).

NOTE: Refer to manufacturer's instructions for disassembly and repair of hydraulic motor.

E. Remove the bolts (227), washers (228A), and jumper assemblies (230, 300), then remove the electric motor (325A) from the adapter plate on the gearbox assembly (330).

NOTE: The adapter plate is part of the electric motor.

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F. Remove the bolts (220A, 290, 310), washers (225, 295, 315), nuts (297, 320), and the support (305), then remove the adapter plate from the gearbox assembly (330).

G. Attach the adapter plate to the electric motor (325A) with the fasteners (227, 228A) to keep the parts together.

NOTE: Refer to the manufacturer's instructions for disassembly and repair of the electric motor.

H. Remove bolts (120), washers (125) and nuts (130) and rod assembly (115).

NOTE: Refer to 27-00-11 for repair of rod assembly (115).

I. Remove parts (140 thru 170) and the control valve module (135).

NOTE: Refer to manufacturer's instructions for disassembly and repair of the control valve module (135).

J. Remove lockwire, then remove bolts (200, 205) and washers (210, 212, 215). Separate the control unit assembly (235) from the gearbox assembly (330) and remove the support (240) and jumper (230).

NOTE: Refer to 27-51-50 for disassembly and repair of the gearbox assembly (330).

K. Remove plugs (175) and quill shaft (335) from the control unit assembly (235).

NOTE: Refer to 27-51-16 for disassembly and repair of the control unit assembly (235).

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CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.
2. Penetrant check per 20-20-02 -- Shaft (280, IPL Fig. 1; 335, IPL Fig. 2).
3. Refer to manufacturer's instructions to check the control valve module (95, IPL Fig. 1; 135, IPL Fig. 2), hydraulic motor (190, IPL Fig. 1; 245, IPL Fig. 2) and electric motor (270, IPL Fig. 1; 325, IPL Fig. 2).
4. Refer to 27-51-16 to check the control unit assembly (180, IPL Fig. 1; 235, IPL Fig. 2).
5. Refer to 27-00-11 to check the rod assembly (75, IPL Fig. 1; 115, IPL Fig. 2).
6. Refer to 27-51-50 to check the gearbox assembly (275, IPL Fig. 1; 330, IPL Fig. 2).

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CHECK

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REPAIR – GENERAL1. Content

- A. Repair, refinish and replacement procedures are included in separate repair sections as follows:

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
BAC27TCT0174	NAMEPLATE	1-1
---	MISC PARTS REFINISH	2-1

2. Standard Practices

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

20-30-02 Stripping of Protective Finishes
 20-41-01 Decoding Table for Boeing Finish Codes
 20-43-01 Chromic Acid Anodizing
 20-50-12 Application of Adhesives

3. Material

NOTE: Equivalent substitutes may be used.

- A. Primer -- BMS 10-11, Type 1 (Ref 20-60-02)
 B. Adhesive -- Type 70 (BMS 5-92) (Ref 20-60-04)

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REPAIR-GENERAL

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NAMEPLATE – REPAIR 1-1

BAC27TCT0174

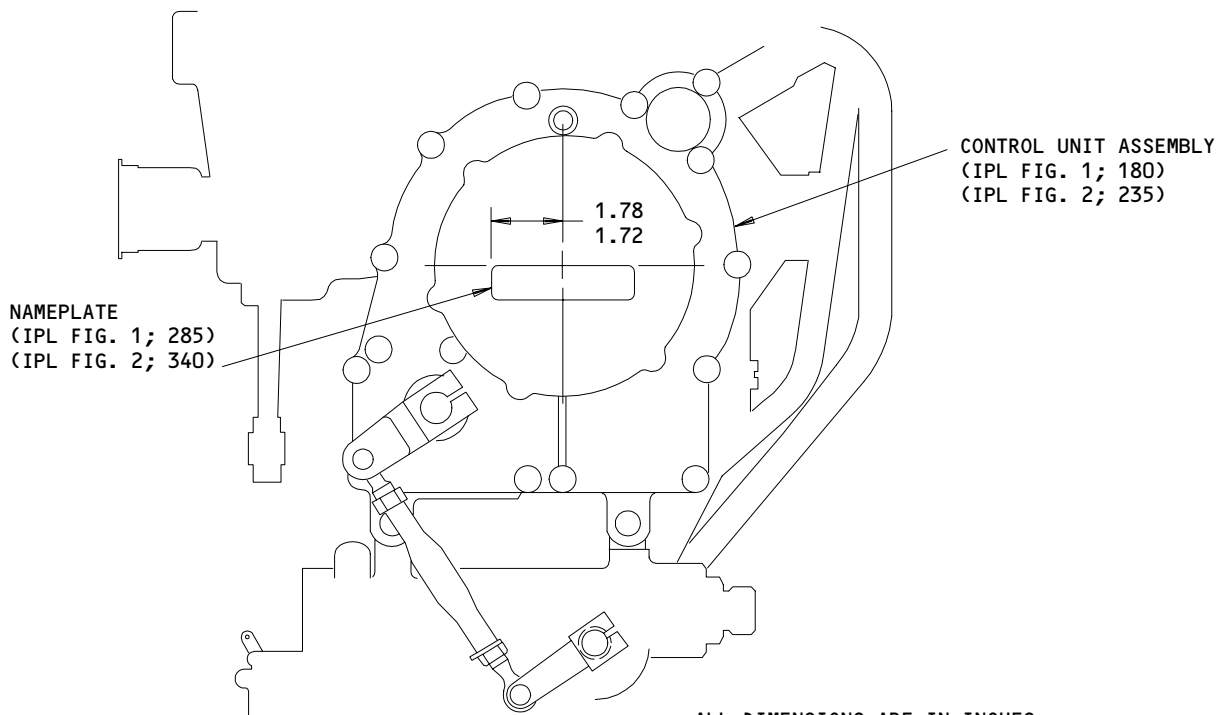
NOTE: Refer to REPAIR-GEN for list of applicable standard practices.

1. Nameplate Replacement

- A. Remove damaged or defective marker.
- B. Prepare control unit mounting surface per 20-50-12.

NOTE: If mounting surface requires restoration of original finish, refer to 27-51-16.

- C. Bond replacement nameplate with Type 70 adhesive in location shown in Fig. 601.



Nameplate Replacement
Figure 601

MISCELLANEOUS PARTS REFINISH – REPAIR 2-1

1. Repair of parts listed in Fig. 601 consists of restoration of original finish.

IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Supports (185, 250)	Al alloy	Chemical treat and apply 1 coat of BMS 10-11, type 1 primer (F-18.06). Optional: Chemical treat or chromic acid anodize and apply 1 coat of BMS 10-11, type 1 primer (F-18.05).
Quill shaft (280)	Al alloy	Chromic acid anodize (F-17.02).
<u>Fig. 2</u>		
Supports (240, 305)	Al alloy	Chemical treat and apply 1 coat of BMS 10-11, type 1 primer (F-18.06). Optional: Chemical treat or chromic acid anodize and apply 1 coat of BMS 10-11, type 1 primer (F-18.05).
Quill shaft (335)	Al alloy	Chromic acid anodize (F-17.02).

Refinish Details
 Figure 601

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REPAIR 2-1

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ASSEMBLY1. Material

NOTE: Equivalent substitutes may be used.

- A. Grease -- MIL-G-23827 (Ref 20-60-03)
- B. Grease -- BMS 3-24 (Ref 20-60-03)
- C. Sealant -- BMS 5-26 (Ref 20-60-04)
- D. Lockwire -- MS20995C32

2. Equipment

NOTE: Equivalent substitutes may be used.

- A. Rigging Pins, 0.187 and 0.250 in. dia.
- B. Milliohmeter, general purpose -- Cutler-Hammer-Shellcross Mfg. Co., Model 665

3. Assembly (IPL Fig. 1)

- A. Assemble control valve module (95) and control unit (180).

- (1) Rotate pilot input arm (Ref 27-51-16) of control unit (180) to position shown in Fig. 701 and install 0.250-inch rigging pin. Adjust position of pilot input arm as required until pin can be fully inserted.

NOTE: This position fixes the pilot input arm in flap retracted position.

CAUTION: DO NOT ROTATE VALVE INPUT ARM MANUALLY. ADJUST POSITION OF VALVE INPUT ARM BY ROTATING FOLLOW-UP CAM SHAFT ONLY.

- (2) Rotate follow-up cam shaft (Ref 27-51-16) on control unit using quill shaft (280) or equivalent tool until valve input arm is at position shown in Fig. 701 and install 0.250-inch rigging pin. Adjust follow-up cam as required until rigging pin can be fully inserted.

NOTE: This position fixes the follow-up cam in flap retracted position.

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- (3) Apply a thin film of grease, BMS 3-24, to shank and threads of bolts (100, 105).
- (4) Position control valve module on control unit and install parts (100 thru 130) with washers (110A) under bolt heads and washers (115) under nuts. Clean and bond area shown in Fig. 701 per 20-11-03. Check that resistance across the bond area is 0.001 ohm maximum.
- (5) Rotate arm on control valve module (95) until hole for rigging pin on arm lines up with hole in body and install 0.187-inch rigging pin.
- (6) Apply a thin film of grease, BMS 3-24, to shank and threads of bolts (80) and faces of washers (85A).
- (7) Attach rod assembly (75) (nominal length 6.56 inches) to valve input arm of control unit with parts (80 thru 90).
- (8) Loosen locking devices and adjust ends of rod assembly as required to attach free end to arm of control valve module. Install parts (80 thru 90). Secure locking devices with lockwire per 20-50-02, double-twist method. Coat exposed threads of rod ends with a thin film of grease, BMS 3-24.
- (9) Check that all rigging pins can be removed and reinserted without binding.

B. Install the electric motor (270, 270A, 270B, 270C, 270D, or 270E).

- (1) Coat the spline of the electric motor with grease, MIL-G-23827, and install the motor on the gearbox assembly (275).
- (2) Apply a thin film of grease, BMS 3-24, to the shank and threads of bolts (255B) and associated washers (260A, 262). Do not apply grease to the fasteners at the other locations.
- (3) Install the electric motor on the gearbox assembly with the fasteners (165C thru 170B, 230B thru 245B, 255B thru 265B), jumper assemblies (175, 247), and the support (250). Install the minimum number of washers (240A) necessary to bring the washer height flush with, or above, the cast surface around the spotface. Install at least one washer (240A). Make sure that you point the support (250) in the direction shown in Fig. 701.
- (4) Install the jumper assemblies (175, 247) per 20-11-03. Make sure that the resistance across the bond is not more than 0.001 ohm. At the jumper (247) location, 0.0005 ohm more is permitted for each washer (240A) installed between the jumper and the gearbox.

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C. Install the electric motor (272).

- (1) Coat the spline of the electric motor with grease, MIL-G-23827, and install the motor on the gearbox assembly (275).
- (2) Remove the adapter plate from the electric motor, and install the adapter plate on the gearbox assembly (275) with the fasteners (310 thru 335). Make sure that you point the support (325) in the direction shown in Fig. 701.
- (3) Attach the electric motor to the adapter plate with the fasteners (290, 295) and the jumper assemblies (300, 305).
- (4) Install the jumper assemblies per 20-11-03. Make sure that the resistance across the bond is not more than 0.001 ohm.

D. Assemble the gearbox assembly (275) and control unit assembly (180).

CAUTION: DO NOT FORCE CONTROL UNIT ONTO GEARBOX OR PARTS MAY BE DAMAGED.

- (1) Coat the spline of the quill shaft (280) with grease, MIL-G-23827, and slide the shaft into the follow-up cam shaft of the control unit assembly. Install the control unit assembly on the gearbox assembly, rotating the gearbox output shaft as required to mate the quill shaft with the spline in the gearbox assembly.
- (2) Attach free end of jumper (175) and support (185) with fasteners (140 thru 160) per Fig. 701.

NOTE: Install jumper and support per 20-11-03.
- (3) Install lockwire on bolts (140, 150) per Fig. 701 using double-twist method (Ref 20-50-02).

E. Install hydraulic motor (190).

- (1) Install plug (220A) and packings (215A, 225) on hydraulic motor.
- (2) Coat the spline of the hydraulic motor with grease, MIL-G-23827, and position the motor on the gearbox assembly (275).
- (3) Apply a thin film of grease, BMS 3-24, to the shanks and threads of the bolts (195, 197, 200), the faces of the washers (205), and the threads of the nuts (210).
- (4) Secure the hydraulic motor to the gearbox assembly with parts (195 thru 210).
- (5) Lockwire bolt (197) to plug (220A) per 20-50-02, double-twist method.

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F. Install tube assemblies (15, 30, 70).

CAUTION: USE EXTREME CARE WHEN INSTALLING TUBE ASSEMBLIES (15, 30, 70).
DO NOT FORCE OR BEND TUBE ASSEMBLIES.

- (1) Install unions (35A) and packings (40) on hydraulic motor (190) and control valve module (95).
- (2) Install elbow (45) on union (35A) on hydraulic motor and tighten swivel nut on elbow finger-tight.
- (3) Install tube assembly (70) on control valve module and attach the other end to elbow (45). Position elbow so that there is no preload in tube assembly and tighten swivel nut on elbow.
- (4) Install unions (20) and packings (25) and install tube assembly (30).
- (5) Install unions (5), elbow (7), and packings (10) and install tube assembly (15).
- (6) Install clamps (47, 50A) on tube assemblies (30, 70) and secure with parts (55A thru 65A).

G. Remove rigging pins and install plugs (135).

H. Check that force required to move pilot input arm to any detent position does not exceed 10 pounds (measured perpendicular to input arm). Check force in both extension and retraction directions.

I. Fillet seal the contact area between the gearbox assembly and control unit assembly with sealant.

J. Test unit per TESTING/TROUBLE SHOOTING.

4. Assembly (IPL Fig. 2)

A. Assemble the control valve module (135) and control unit assembly (235).

- (1) Rotate the pilot input arm (Ref 27-51-16) of the control unit assembly (235) to the position shown in Fig. 701 and install 0.250-inch rigging pin. Adjust the position of the pilot input arm as required until the pin can be fully inserted

NOTE: This position fixes the pilot input arm in the flap retracted position.

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CAUTION: DO NOT ROTATE VALVE INPUT ARM MANUALLY. ADJUST POSITION OF VALVE INPUT ARM BY ROTATING FOLLOW-UP CAM SHAFT ONLY.

- (2) Rotate the follow-up cam shaft (Ref 27-51-16) on the control unit assembly using the quill shaft (335) or equivalent tool until the valve input arm is at the position shown in Fig. 701, and install 0.250-inch rigging pin. Adjust the follow-up cam as required until the rigging pin can be fully inserted.

NOTE: This position fixes the follow-up cam in the flap retracted position.

- (3) Apply a thin film of grease, BMS 3-24, to shank and threads of bolts (140, 145).
- (4) Position the control valve module on the control unit assembly and install parts (140 thru 170) with washers (150) under bolt heads and washers (155) under nuts. Clean and bond the area shown in Fig. 701 per 20-11-03. Check that the resistance across the bond area is 0.001 ohm maximum.
- (5) Rotate arm on control valve module (135) until hole for rigging pin on arm lines up with hole in body and install 0.187-inch rigging pin.
- (6) Apply a thin film of grease, BMS 3-24, to shank and threads of bolts (120) and faces of washers (125).
- (7) Attach the rod assembly (115) (nominal length 6.56 inches) to the valve input arm of the control unit assembly with parts (120 thru 130).
- (8) Loosen locking devices and adjust ends of rod assembly as required to attach free end to arm of control valve module. Install parts (120 thru 130). Secure locking devices with lockwire per 20-50-02, double-twist method. Coat exposed threads of rod ends with a thin film of grease, BMS 3-24.
- (9) Check that all rigging pins can be removed and reinserted without binding.

B. Install the electric motor (325A).

NOTE: The electric motor (325A) comes with an adapter plate and two sets of fasteners which are installed separately.

- (1) Coat the spline of the electric motor (325A) with grease, MIL-G-23827, and install the motor on the gearbox assembly (330).

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- (2) Remove the adapter plate from the electric motor, and install the adapter plate on the gearbox assembly (330) with the fasteners (220A, 225, 290 thru 297, 310 thru 320) and the support (305). Make sure that you point the support (305) in the direction shown in Fig. 701.
- (3) Attach the electric motor to the adapter plate with the fasteners (227, 228A), jumper assemblies (230, 300), and support (305).
- (4) Install the jumper assemblies per 20-11-03. Make sure that the resistance across the bond is not more than 0.001 ohm.

C. Assemble the gearbox assembly (330) and control unit assembly (235).

CAUTION: DO NOT FORCE CONTROL UNIT ONTO GEARBOX OR PARTS MAY BE DAMAGED.

- (1) Coat the spline of the quill shaft (335) with grease, MIL-G-23827, and slide the shaft into the follow-up cam shaft of the control unit assembly. Install the control unit assembly on the gearbox assembly, rotating the gearbox output shaft as required to mate the quill shaft with the spline in the gearbox.
- (2) Attach free end of jumper (230) and support (240) with fasteners (200 thru 215) per Fig. 701.

NOTE: Install jumper and support per 20-11-03.

- (3) Install lockwire on bolts (200, 205) per Fig. 701 using double-twist method (Ref 20-50-02).

D. Install hydraulic motor (245).

- (1) Install plug (280) and packings (275, 285) on hydraulic motor.
- (2) Coat the spline of the hydraulic motor with grease, MIL-G-23827, and position the motor on the gearbox assembly (330).
- (3) Apply a thin film of grease, BMS 3-24, to the shanks and the threads of the bolts (250, 255, 260), the faces of the washers (265), and the threads of the nuts (270).
- (4) Secure the hydraulic motor to the gearbox assembly with parts (250 thru 270).
- (5) Lockwire bolt (255) to plug (280) per 20-50-02, double-twist method.

E. Install tube assemblies (20, 45, 100).

CAUTION: USE EXTREME CARE WHEN INSTALLING TUBE ASSEMBLIES (20, 45, 100). DO NOT FORCE OR BEND TUBE ASSEMBLIES.

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- (1) Install unions (60) and packings (65) on hydraulic motor (245) and control valve module (135).
- (2) Install elbow (70) on union (60) on hydraulic motor and tighten swivel nut on elbow finger-tight.
- (3) Install tube assembly (100) on control valve module and attach the other end to elbow (70). Position elbow so that there is no preload in tube assembly and tighten swivel nut on elbow.
- (4) Install unions (35) and packings (40) and install tube assembly (45).
- (5) Install unions (5), elbow (10), and packings (15) and install tube assembly (20).
- (6) Install clamps (75, 80) on tube assemblies (45, 100) and secure with parts (85 thru 95).

F. Remove rigging pins and install plugs (175).

G. Check that force required to move pilot input arm to any detent position does not exceed 10 pounds (measured perpendicular to input arm). Check force in both extension and retraction directions.

H. Fillet seal the contact area between the gearbox assembly and control unit assembly with sealant.

I. Test unit per TESTING/TROUBLE SHOOTING.

5. Storage

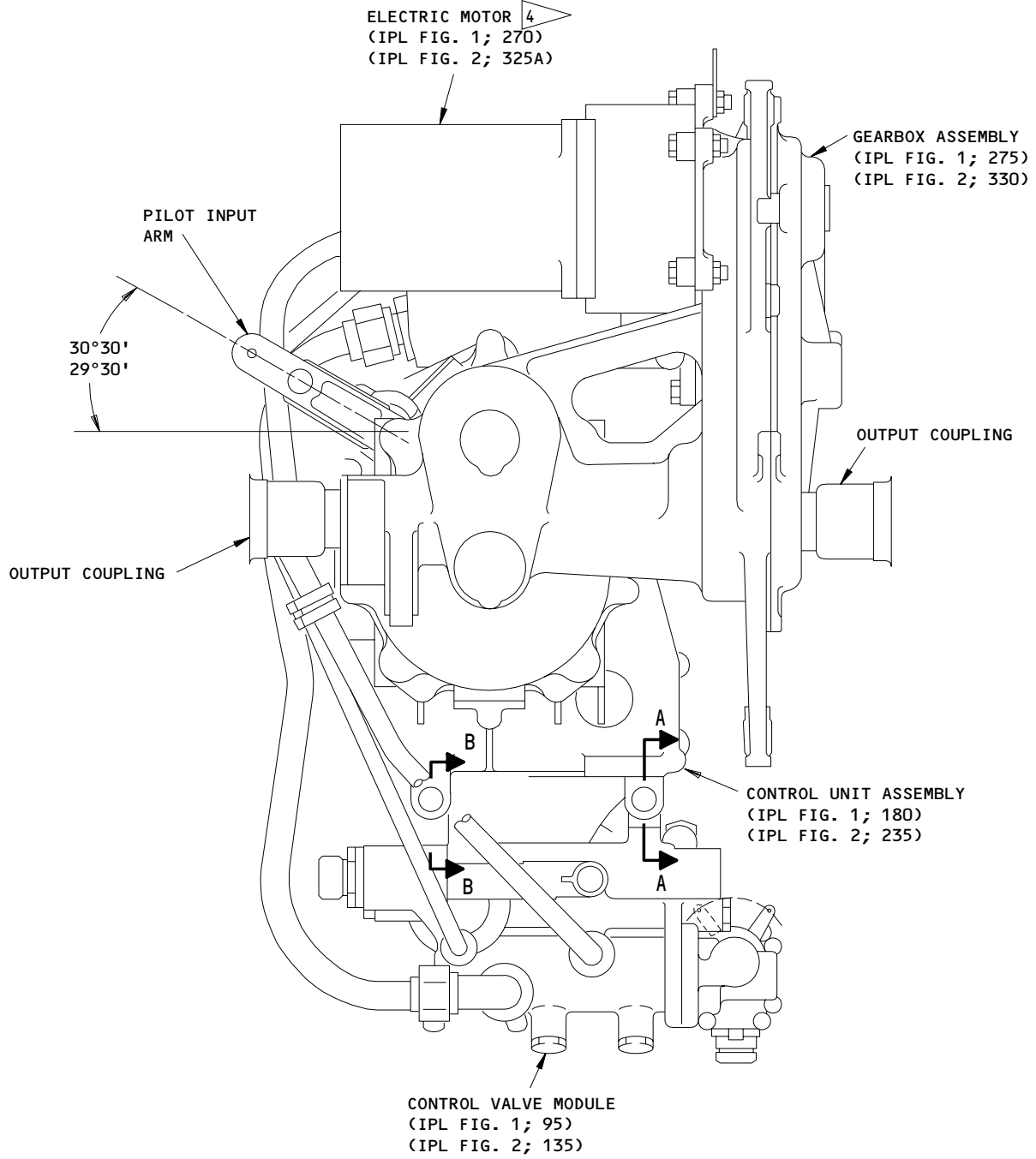
A. Plug or cap exposed hydraulic ports with hydraulic fluid resistant caps or plugs.

B. Use standard industry practices and information contained in 20-44-02 to store this component.

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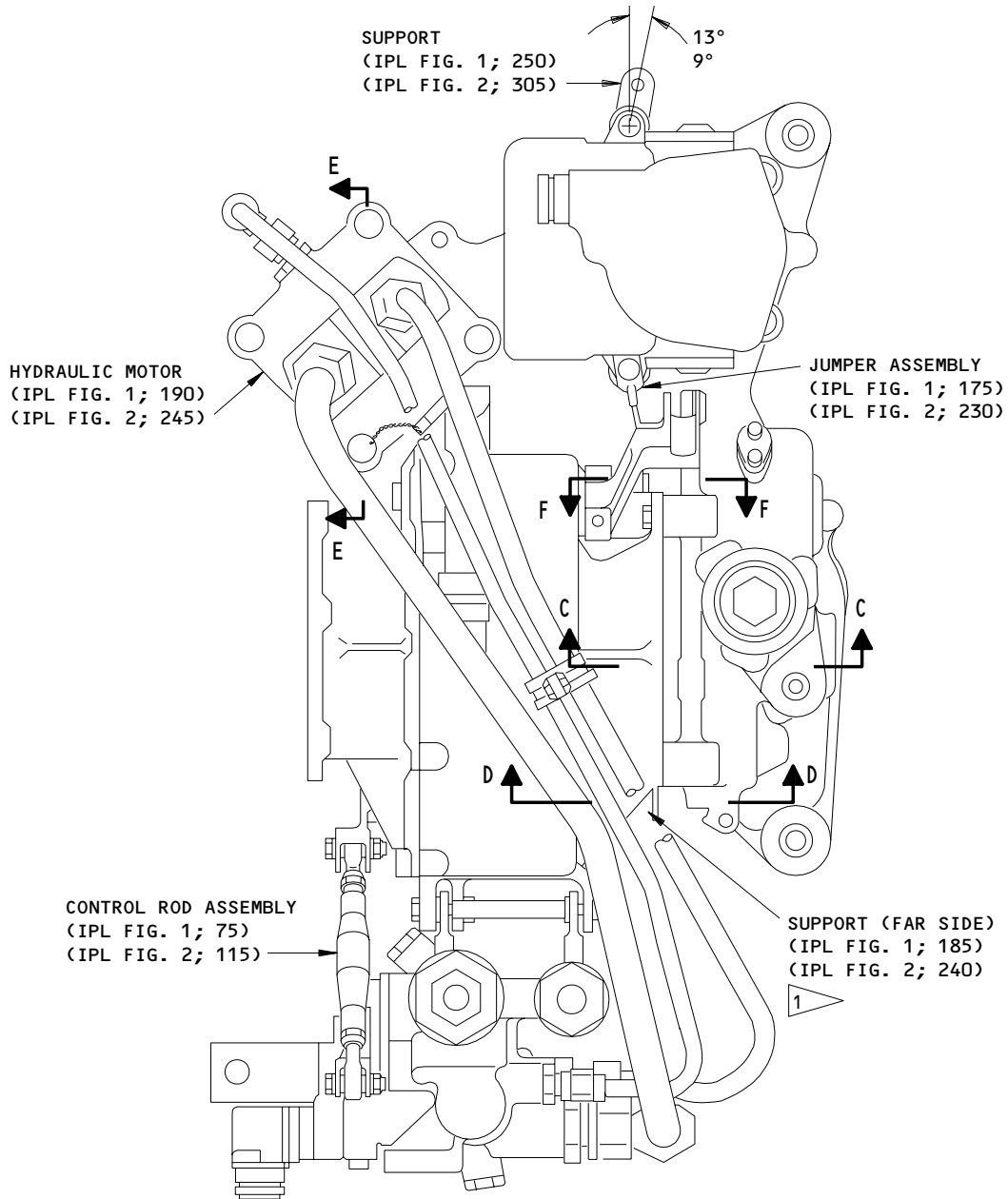
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Assembly Details
Figure 701 (Sheet 1)

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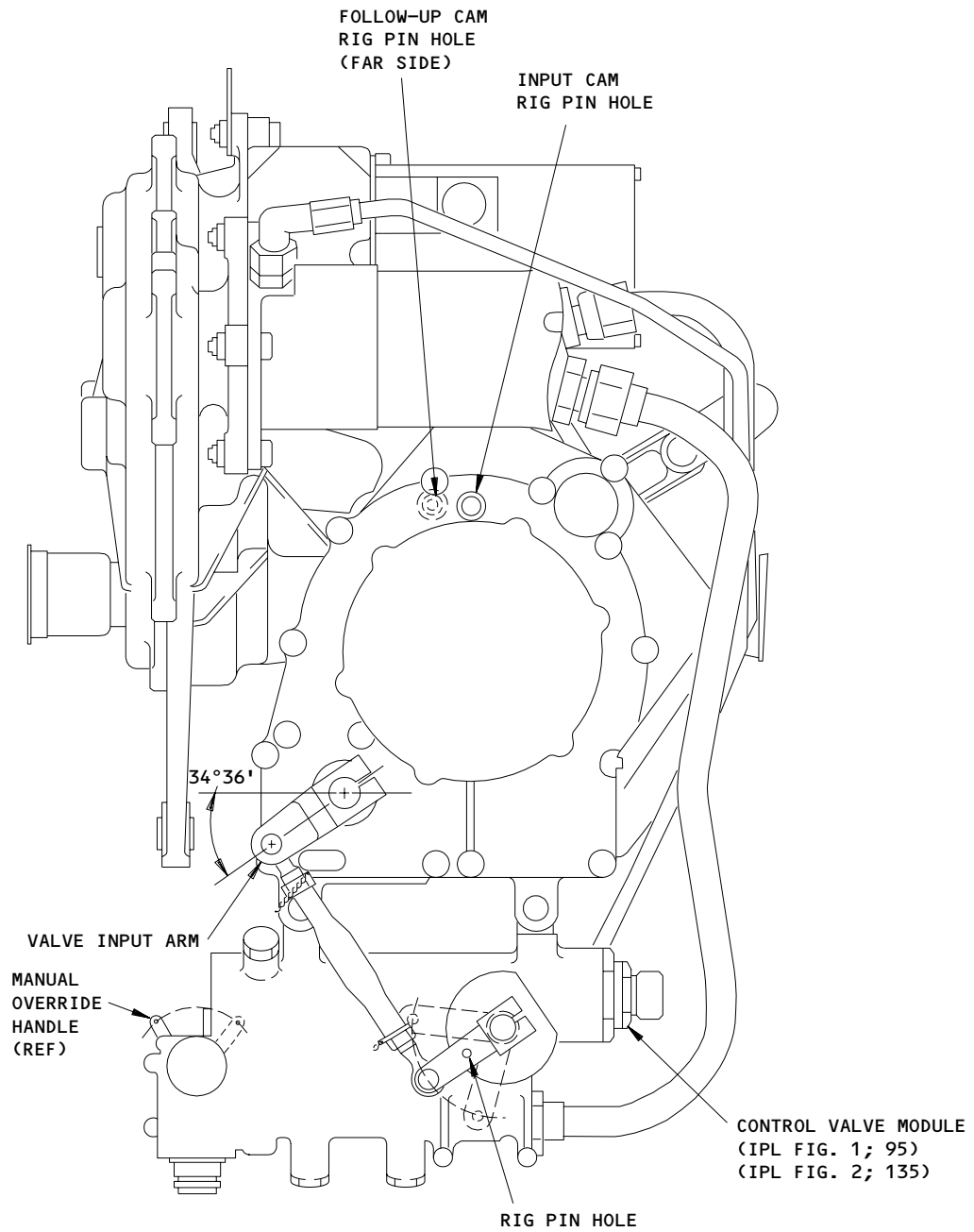


Assembly Details
Figure 701 (Sheet 2)

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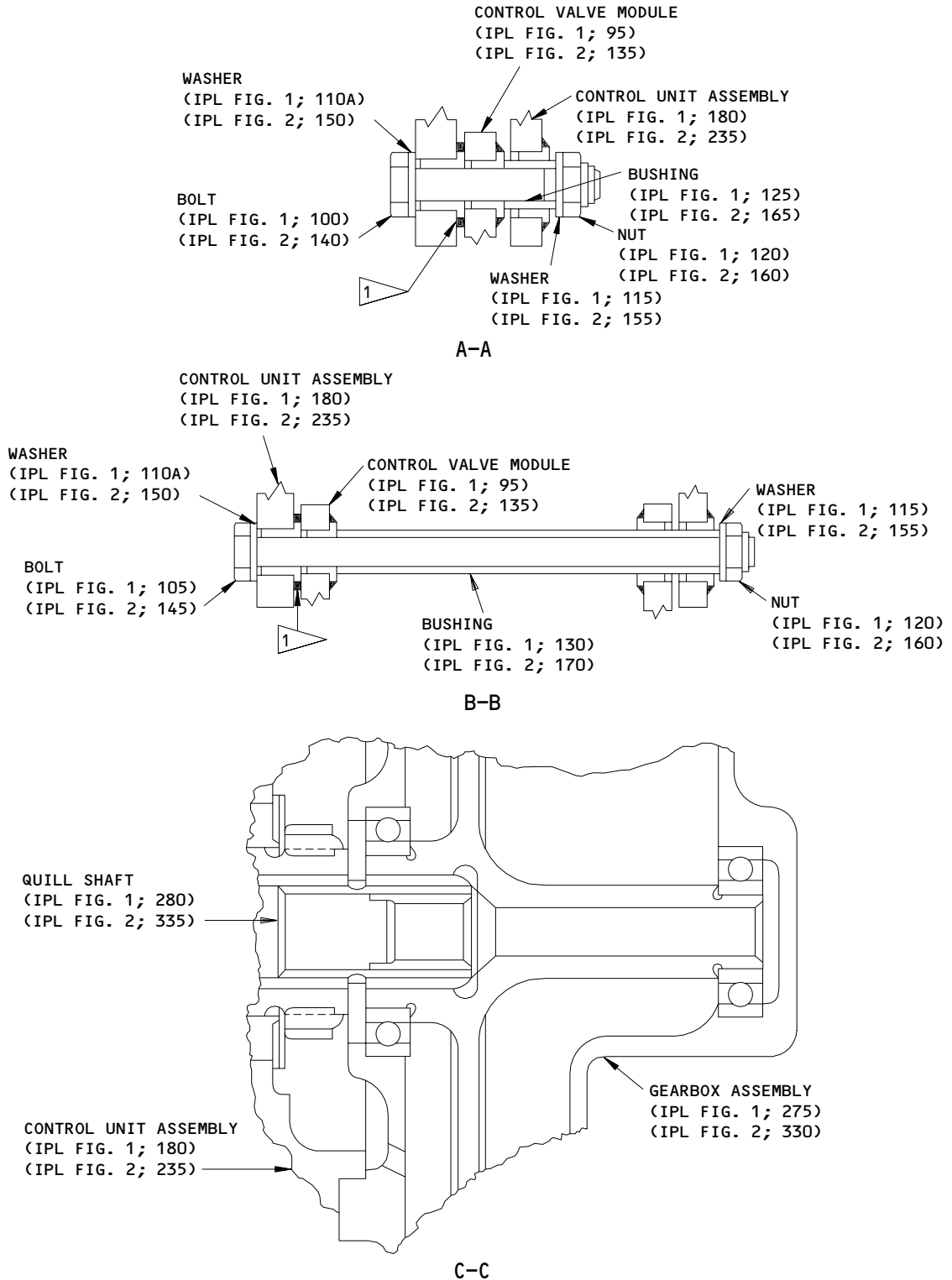
Assembly Details
Figure 701 (Sheet 3)

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Assembly Details
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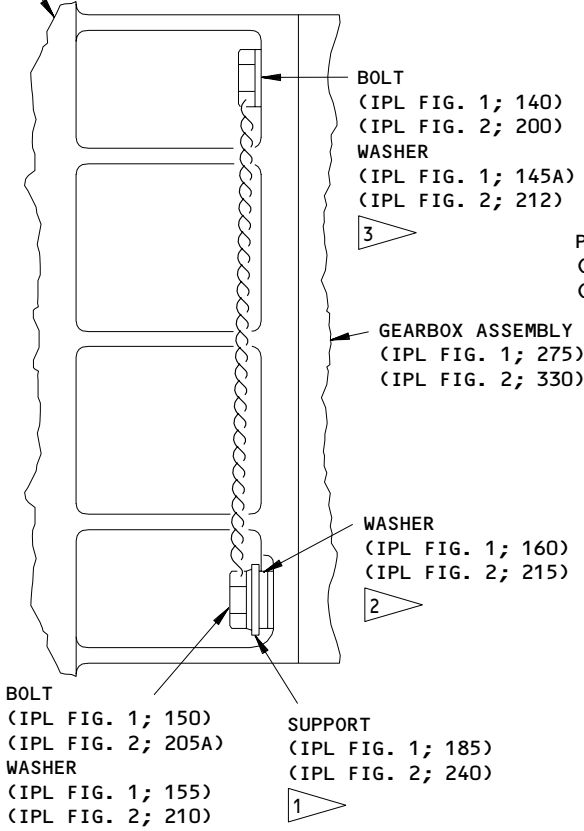
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**COMPONENT
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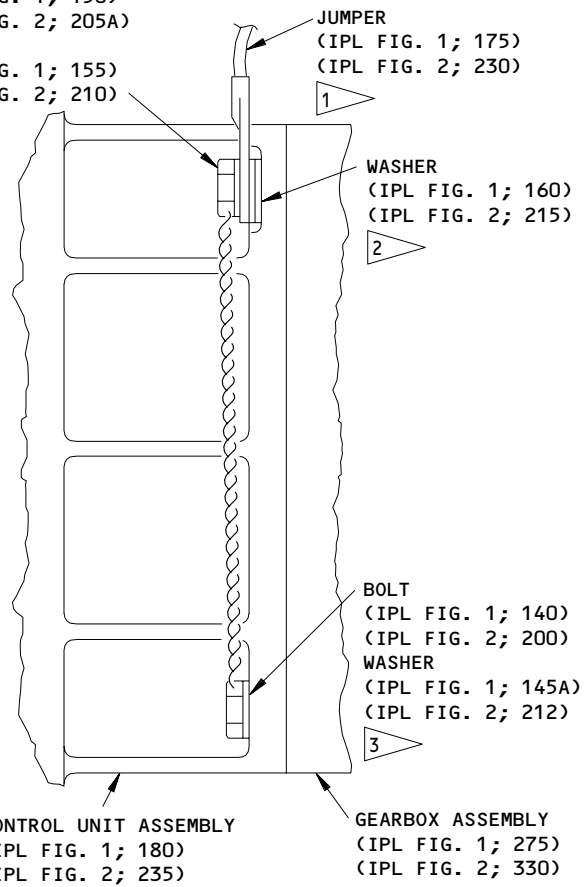
 CONTROL UNIT ASSEMBLY
(IPL FIG. 1; 180)
(IPL FIG. 2; 235)

 HYDRAULIC MOTOR
(IPL FIG. 1; 190)
(IPL FIG. 2; 245)

 GEARBOX ASSEMBLY
(IPL FIG. 1; 275)
(IPL FIG. 2; 330)

 PACKING
(IPL FIG. 1; 215A)
(IPL FIG. 2; 275)

 BOLT
(IPL FIG. 1; 150)
(IPL FIG. 2; 205A)
WASHER
(IPL FIG. 1; 155)
(IPL FIG. 2; 210)

E-E



1 CLEAN AND BOND PER 20-11-03. MAXIMUM TOTAL RESISTANCE ACROSS BOND SHALL BE 0.001 OHM PLUS 0.0005 OHM FOR EACH WASHER ADDED PER 2

2 INSTALL MINIMUM NUMBER OF WASHERS AS REQUIRED SO THAT WASHER HEIGHT IS FLUSH WITH OR PROTRUDES LESS THAN ONE WASHER THICKNESS ABOVE CASTING SURFACE

3 ADD WASHERS AS REQUIRED TO ENSURE ADEQUATE WRENCH ENGAGEMENT WITH BOLT HEAD

4 REFER TO FIG. 702 FOR DETAILS OF INSTALLATION OF ELECTRIC MOTOR S256T011-1

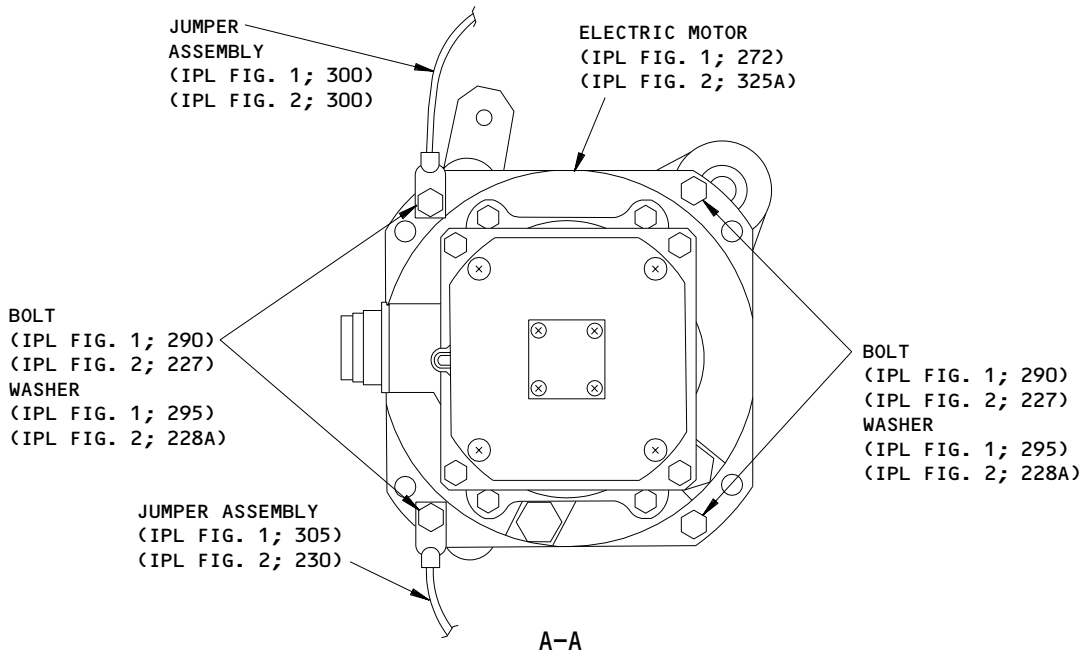
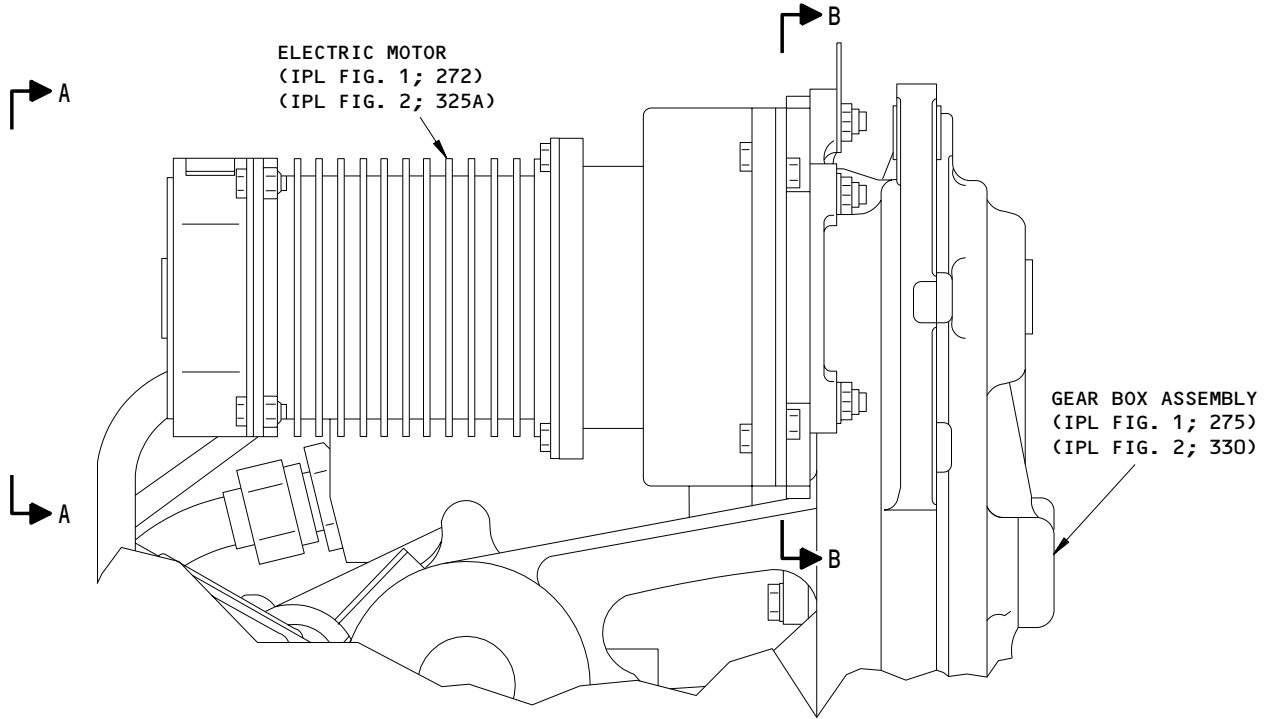
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 Assembly Details
Figure 701 (Sheet 5)

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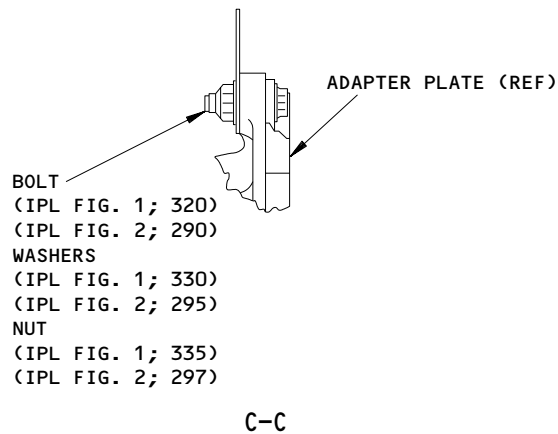
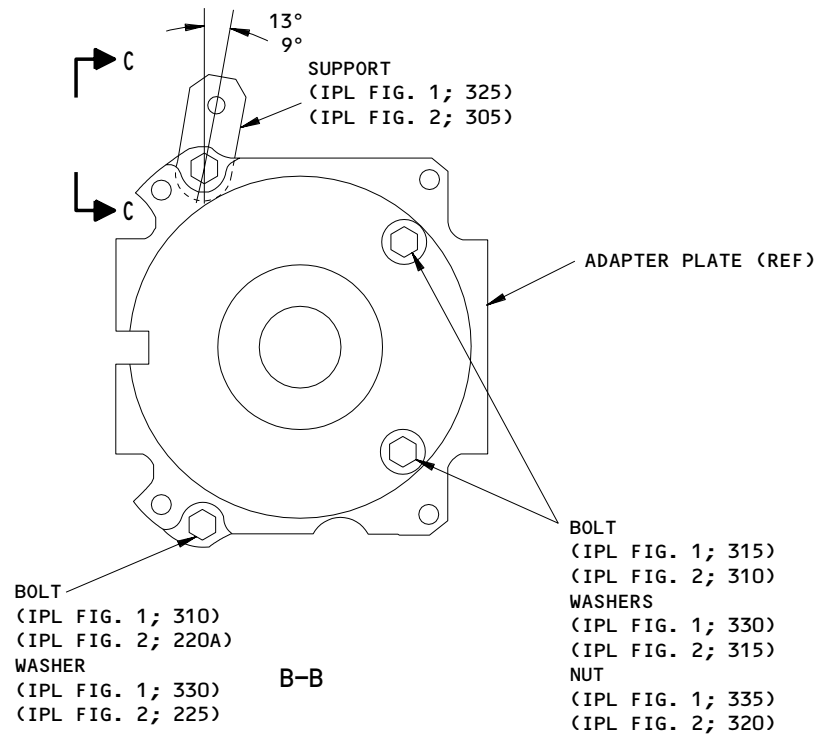


Electric Motor Installation
 Figure 702 (Sheet 1)

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Electric Motor Installation
 Figure 702 (Sheet 2)

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SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

NOTE: Equivalent substitutes may be used.

- | 1. A27079-90 -- Fixture Assembly (replaces A27079-79) *[1]
2. A27079-7 -- Support Assembly *[1]
3. A27079-85 -- Gauge Assembly *[1]
4. A27081-1 -- Readout Equipment
5. A27081-2 -- Control Equipment

|*[1] Part of Test Equipment A27079-89 (replaces A27079-78) and -96.

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SPECIAL TOOLS

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ILLUSTRATED PARTS LIST

1. This section lists and illustrates replaceable or repairable component parts. The Illustrated Parts Catalog contains a complete explanation of the Boeing part numbering system.
2. Indentures show parts relationships as follows:

Assembly

Detail Parts for Assembly

Subassembly

Attaching Parts for Subassembly

Detail Parts for Subassembly

Detail Installation Parts (Included only if installation parts may be returned to shop as part of assembly)

3. One use code letter (A, B, C, etc.) is assigned in the EFF CODE column for each variation of top assembly. All listed parts are used on all top assemblies except when limitations are shown by use code letter opposite individual part entries.
4. Letter suffixes (alpha-variants) are added to item numbers for optional parts, Service Bulletin modification parts, configuration differences (except left- and right-hand parts), product improvement parts, and parts added between two sequential item numbers. The alpha-variant is not shown on illustrations when appearance and location of all variants of the part is the same.
5. Service Bulletin modifications are shown by the notations PRE SB XXXX and POST SB XXXX.
 - A. When a new top assembly part number is assigned by Service Bulletin, the notations appear at the top assembly level only. The configuration differences at detail part level are then shown by use code letter.
 - B. When the top assembly part number is not changed by the Service Bulletin, the notations appear at the detail part level.

6. Parts Interchangeability

Optional
(OPT)

The parts are optional to and interchangeable with other parts having the same item number.

Supersedes, Superseded By
(SUPSDS, SUPSD BY)

The part supersedes and is not interchangeable with the original part.

Replaces, Replaced By
(REPLS, REPLD BY)

The part replaces and is interchangeable with, or is an alternate to, the original part.

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ILLUSTRATED PARTS LIST

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VENDORS

S4096 SHIMADZU SEISAKUSHO
KYOTO, JAPAN
FORMERLY VZ2239

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

08199 SIERRACIN-HARRISON
3020 EMPIRE AVENUE
BURBANK, CALIFORNIA 91504-3109
FORMERLY TECHNICAL IND INC OR HARRISON MFG CO DIV AXIAL CORP

11328 AEROQUIP CORP LINAIR DIV
651 WEST KNOX STREET
GARDENA, CALIFORNIA 90248-4409
FORMERLY LINAIR ENG A TELEDYNE CO. AND TELEDYNE LINAIR
ENG TELEDYNE IND, FORMERLY V70195 AND V17687

14397 FABER ENTERPRISES, INCORPORATED
6606 VARIEL AVE
CANOGA PARK, CALIFORNIA 91303-2808

14798 DEUTSCH CO METAL COMPONENTS DIV
14800 SOUTH FIGUEROA STREET
GARDENA, CALIFORNIA 90248-1719
FORMERLY WEATHERHEAD V79470 FOR AEROSPACE PRODUCTS

15653 KAYNAR TECHNOLOGY KAYNAR DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92831-3001
FORMERLY MICRODOT AEROSP LTD VK6405

30974 AEROFIT PRODUCTS INC
8531 WHITAKER STREET
BUENA PARK, CALIFORNIA 90621-3129

34270 GARRETT HYDRAULIC DIV OF GARRETT CORP
2150 NORTHWEST 62ND STREET
FT LAUDERDALE, FLORIDA 33309
FORMERLY AERO HYDRAULICS INC SUB OF GARRETT CORP

50948 PARKER-HANNIFIN CORP HUNTSVILLE AIRCRAFT FACILITY
9400 SOUTH MEMORIAL PARKWAY
HUNTSVILLE, ALABAMA 35802
FORMERLY PARKER-HANNIFIN CORP TUBE FITTINGS DIV

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VENDORS

52828 REPUBLIC FASTENER MFG CORP
 1300 RANCHO CONEJO BLVD
 NEWBURY PARK, CALIFORNIA 91320-1405
 FORMERLY IN SYLMAR, CALIFORNIA

57771 STIMPSON EDWIN B. COMPANY INC
 900 SYLVAN AVENUE
 BAYPORT, NEW YORK 11705-1012
 FORMERLY IN BROOKLYN, NEW YORK

62554 SIMMONDS MECAERO FASTENERS INC
 1734 SEQUOIA AVENUE
 ORANGE, CALIFORNIA 92668

71087 BOOTS ACFT NUT DIV TOWNSEND CO SEE TEXTRON INC CHERRY
 FASTENER TOWNSEND DIV V11815

72962 HARVARD INDUSTRIES INC
 3 WERNER WAY SUITE 210
 LEBANON, NEW JERSEY 08833
 FORMERLY AMERACE CORP ESNA DIV
 FORMERLY ELASTIC STOP NUT IN UNION, NJ

73197 HI-SHEAR TECHNOLOGY CORP
 2600 SKYPARK DRIVE
 TORRANCE, CALIFORNIA 90509

80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
 2701 SOUTH HARBOR BOULEVARD PO BOX 1259
 SANTA ANA, CALIFORNIA 92702-1259
 FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539
 AND STANDARD PRESSED STEEL WESTERN DIV V17279

88334 WEATHERHEAD GLENDALE, CALIF SEE WEATHERHEAD CLEVELAND V79470

92215 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
 3010 W LOMITA BLVD
 TORRANCE, CALIFORNIA 90505-5102
 FORMERLY VOI-SHAN IN CULVER CITY, CALIF

98889 TELEFLEX CONTROL SYSTEMS
 1950 WILLIAMS DRIVE
 OXNARD, CALIFORNIA 93030
 FORMERLY TALLEY CORP, NEWBURY PARK DIV

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
AFP107-10		1	33A	2
		2	55A	2
AFP107-12		1	18A	2
		2	30A	2
AFP107-6		1	73C	2
AFP175V06P		1	72A	2
		2	105	2
AN814-4DL		1	220A	1
		2	280	1
AN960-416L		1	115	2
		2	155	2
AN960D10L		1	137	3
		2	185	3
AN960D416		1	160	4
		2	215	2
AN960D416L		1	155	2
		2	210	2
AN960JD10L		1	60A	2
		2	90	2
AN960JD416		1	145A	2
		2	212	2
AN960JD416L		1	85A	4
		1	110A	2
		2	125	4
		2	150	2
		1	170B	1
		1	205A	7
AN960JD516		1	330	7
		2	225	1
		2	265	7
		2	295	2
		2	315	4
		1	240A	2
AN960JD516L		1	260A	2
AP1028T10		1	33A	2
		2	55A	2
AP1028T12		1	18A	2
		2	30A	2
AP1028T6		1	73C	2
AP2097-06HP		1	72A	2
		2	105	2
AP2097HP06		2	105	2
AS1581-06T		1	72	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
AS1581-10T		1	32	2
AS1581-10T		2	50	2
AS1581-12T		1	17	2
		2	25	2
BACB28AK04-041		1	125	1
		2	165	1
BACB28AK04-335		1	130	1
		2	170	1
BACB30MR5C14		1	255B	2
BACB30MR5C15		1	230B	1
BACB30MR5K10		1	165C	1
BACB30MR5K18		1	230C	1
BACB30NR4K17		1	100	1
		2	140	1
BACB30NR4K64		1	105	1
		2	145	1
BACB30NR5K10		1	315	2
		2	310	2
BACB30NR5K11		1	320	1
		2	290	1
BACB30NR5K3		1	310	1
		2	220A	1
BACE21AW0606L		1	45	1
BACE21AW1212M		1	7	1
		2	10	1
BACJ40A20-8		1	139	1
		2	195A	1
BACJ40A21-9		1	300	1
		2	300	1
BACJ40A22-9		1	247	1
BACJ40A30-6		1	305	1
		2	230	1
BACJ40A31-6		1	175	1
BACN10JC3		1	65A	1
		1	138	1
BACN10JC4CD		1	90A	2
		1	120	2
BACN10JC5CD		1	210	3
BACN10NR10		1	33A	2
		2	55A	2
BACN10NR12		1	18A	2
		2	30A	2
BACN10NR6		1	73C	2
BACN10YA10		1	33	2
		2	55	2
BACN10YA12		1	18	2
BACN10YA12		2	30	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACN10YA6		1	73	2
BACN10YR3CD		2	95	1
		2	190	1
BACN10YR4CD		2	130A	2
		2	160	2
BACN10YR5CD		2	270	3
BACP20B65		1	135	2
		2	175	2
BACS13BX06HP		1	72A	2
		2	105	2
BACU24K10		1	20	2
		2	35	2
BACU24K12		1	5	2
		2	5	2
BACU24K6		1	35A	2
		2	60	2
BAC27TCT0174		1	285	1
		2	340	1
BC921T10		1	33A	2
		2	55A	2
BC921T12		1	18A	2
		2	30A	2
BC921T6		1	73C	2
BRH10A3		1	65A	1
		1	138	1
DBON10NR10		1	33A	2
		2	55A	2
DBON10NR12		1	18A	2
		2	30A	2
DBON10NR6		1	73C	2
DBOS13BX06HP		1	72A	2
		2	105	2
D2587PB		1	135	2
		2	175	2
ER01921-10T		1	33A	2
		2	55A	2
ER01921-12T		1	18A	2
		2	30A	2
ER01921-6T		1	73C	2
FER8928-10		1	33A	2
		2	55A	2
FER8928-12		1	18A	2
		2	30A	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
FER8928-6		1	73C	2
F11-10		1	33A	2
		2	55A	2
F11-12		1	18A	2
		2	30A	2
F11-6		1	73C	2
H10-3BAC		1	65A	1
		1	138	1
H52732-3CD		2	95	1
		2	190	1
H52732-4CD		2	130A	2
		2	160	2
H52732-5CD		2	270	3
MS20002C5		1	166	1
		1	235A	1
		1	262	2
MS21921-6D		1	73B	2
		2	110	2
M85052-2-10		1	47	1
		2	75	1
M85052-2-6		1	50A	1
		2	80A	1
NAS1149D0432H		1	295	8
		2	228A	8
NAS1611-019		1	215A	1
		2	275	1
NAS1612-10		1	25	2
		2	40	2
NAS1612-12		1	10	2
		2	15	2
NAS1612-4		1	225	1
		2	285	1
NAS1612-6		1	40	2
		2	65	2
NAS1762D0606		1	45A	1
		2	70	1
NAS1762T1212		1	7A	1
		2	10A	1
NAS1801-3-8		1	136	1
		2	180	1
NAS1801-4-16		1	290	4
		2	227	4
NAS1804-5		1	245B	1
		1	265B	2
		1	335	3
		2	297	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS1804-5		2	320	2
NAS6603-2		1	55A	1
		2	85	1
NAS6704-13		1	80	2
		2	120	2
NAS6704-17		1	100A	1
NAS6704-64		1	105A	1
NAS6704H15		1	140A	2
		2	200	2
NAS6704H17		2	205A	2
NAS6704H19		1	150	2
NAS6705-13		1	195	2
		2	250	2
NAS6705-6		1	200	1
		2	260	1
NAS6705H13		1	197	1
		2	255	1
NS202101-02		1	65A	1
		1	138	1
PLH53CD		2	95	1
		2	190	1
PLH54CD		2	130A	2
		2	160	2
PLH55CD		2	270	3
RMLH9075-3W		1	65A	1
		1	138	1
S256T003-1		1	190	1
S256T004-1		1	270	1
S256T004-11		1	270C	1
S256T004-8		1	270A	1
S256T005-1		1	95	1
S256T005-11		1	95M	1
		2	135	1
S256T005-7		1	95C	1
S256T011-1		1	272	1
		2	325A	1
T6S1032J		1	65A	1
		1	138	1
VN303A02		1	65A	1
		1	138	1
015T0850-1		1	2	RF
1823T100-1		1	270	1
1823T100-3		1	270A	1
2-02903-06HP		1	72A	2
		2	105	2
2-03005T10		1	33A	2
		2	55A	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
2-03005T12		1	18A	2
		2	30A	2
2-03005T6		1	73C	2
2473T100-1		1	270C	1
251T0100-306		1	75	1
		2	115	1
256T3104-1		1	280	1
		2	335	1
256T3110-10		1	1H	RF
256T3110-101		1	70	1
256T3110-102		1	30	1
		2	45	1
256T3110-103		1	15	1
256T3110-104		1	70A	1
		2	100	1
256T3110-105		1	15A	1
		2	20	1
256T3110-11		1	1J	RF
		2	1A	RF
256T3110-17		1	1N	RF
		2	1B	RF
256T3110-2		1	1	RF
256T3130-4		1	275	1
256T3130-5		1	275A	1
		2	330	1
256T3160-2		1	180	1
		2	235	1
256T3160-4		1	180A	1
		2	235A	1
31783-10		1	33A	2
		2	55A	2
31783-12		1	18A	2
		2	30A	2
31783-6		1	73C	2
35235VN06		1	72A	2
		2	105	2
4087T100-3		1	272	1
		2	325A	1
4100362-1		1	190	1
		2	245	1
69B82604-15		1	185	1
		2	240	1
69B82604-17		1	250	1
		1	325	1
		2	305	1

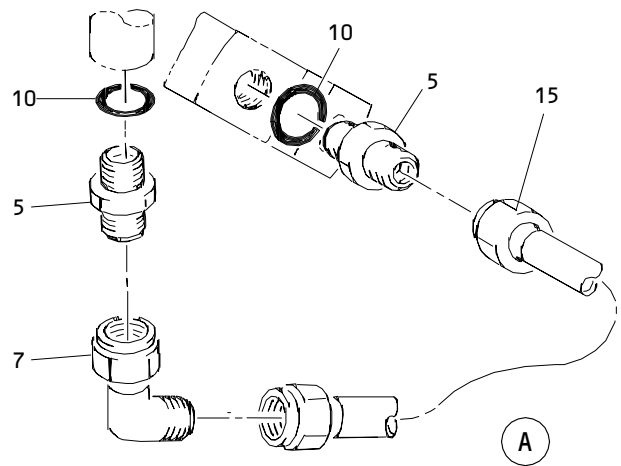
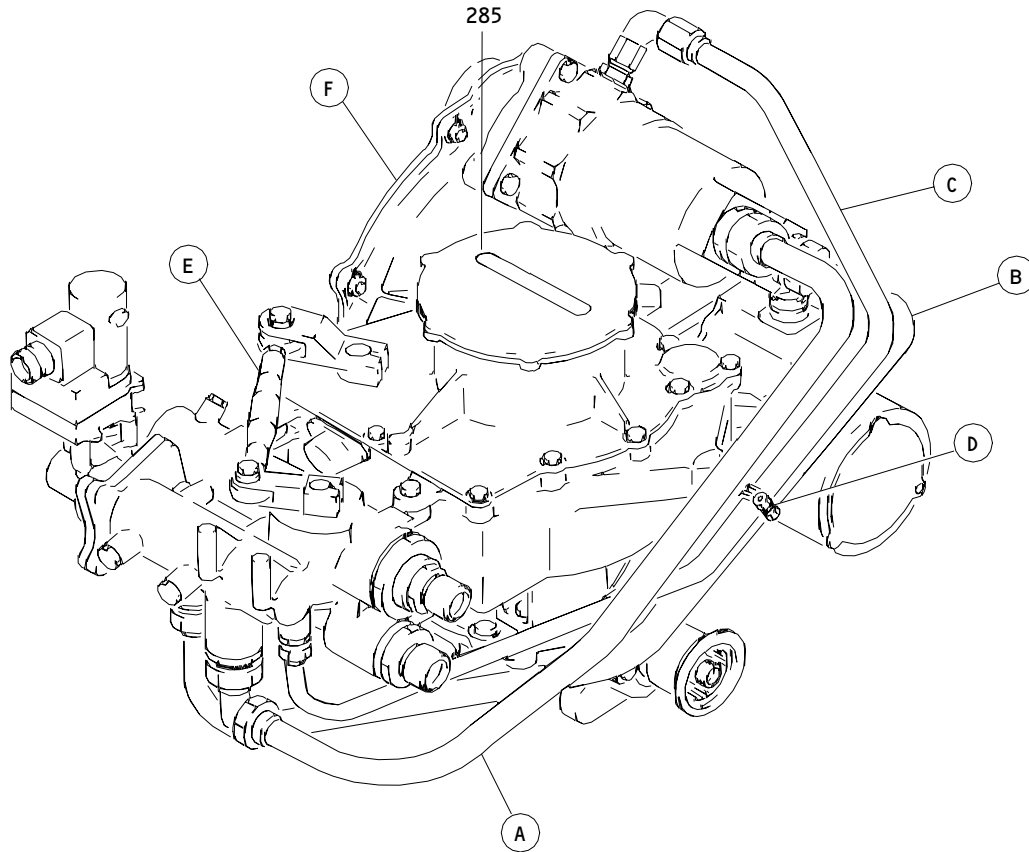
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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
732-18550-01		1	95	1
		2	135	1
732-18550-08		1	95P	1
		2	135A	1
96-02		1	65A	1
		1	138	1

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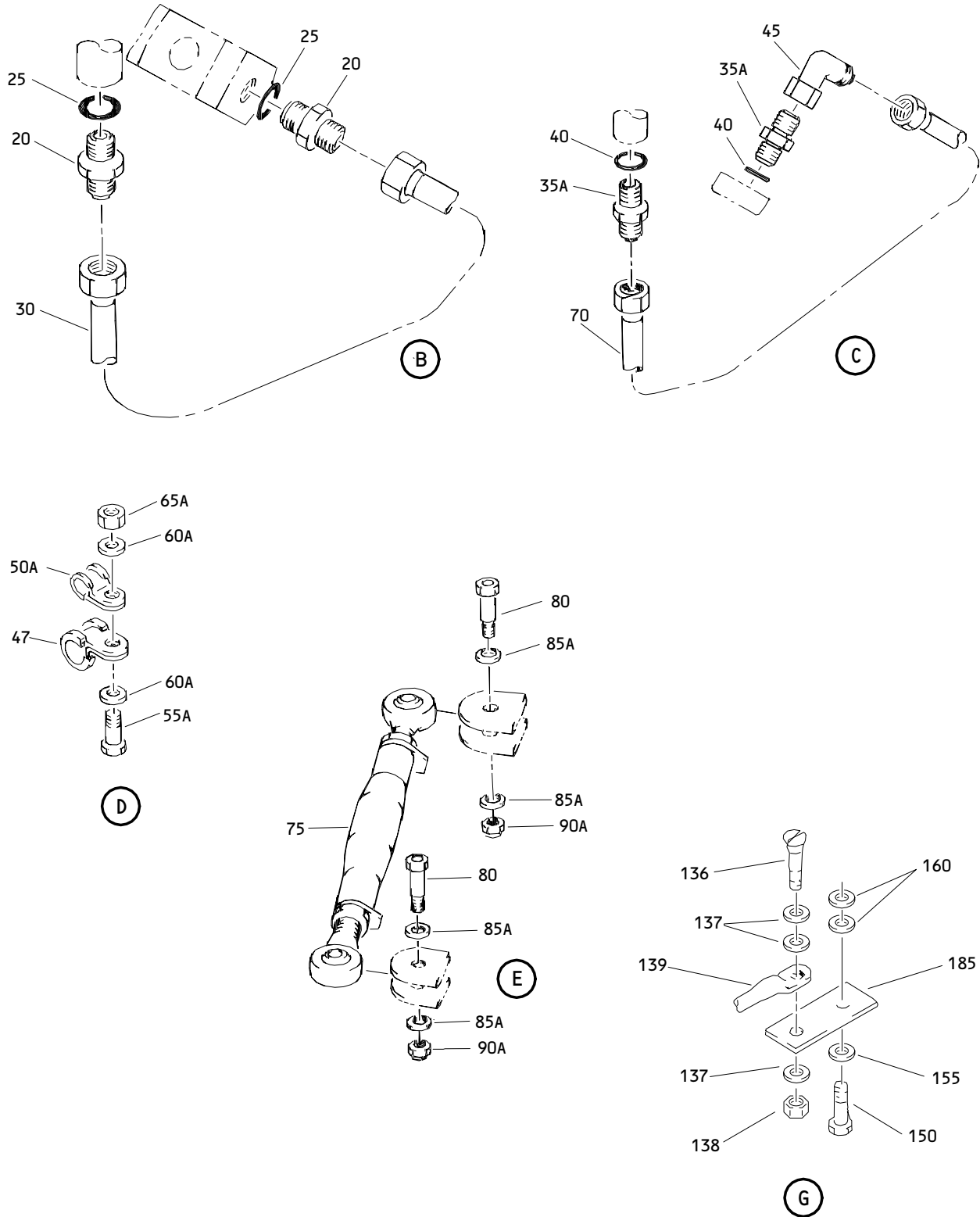
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Trailing Edge Flap Drive Power Drive Unit Assembly
Figure 1 (Sheet 1)

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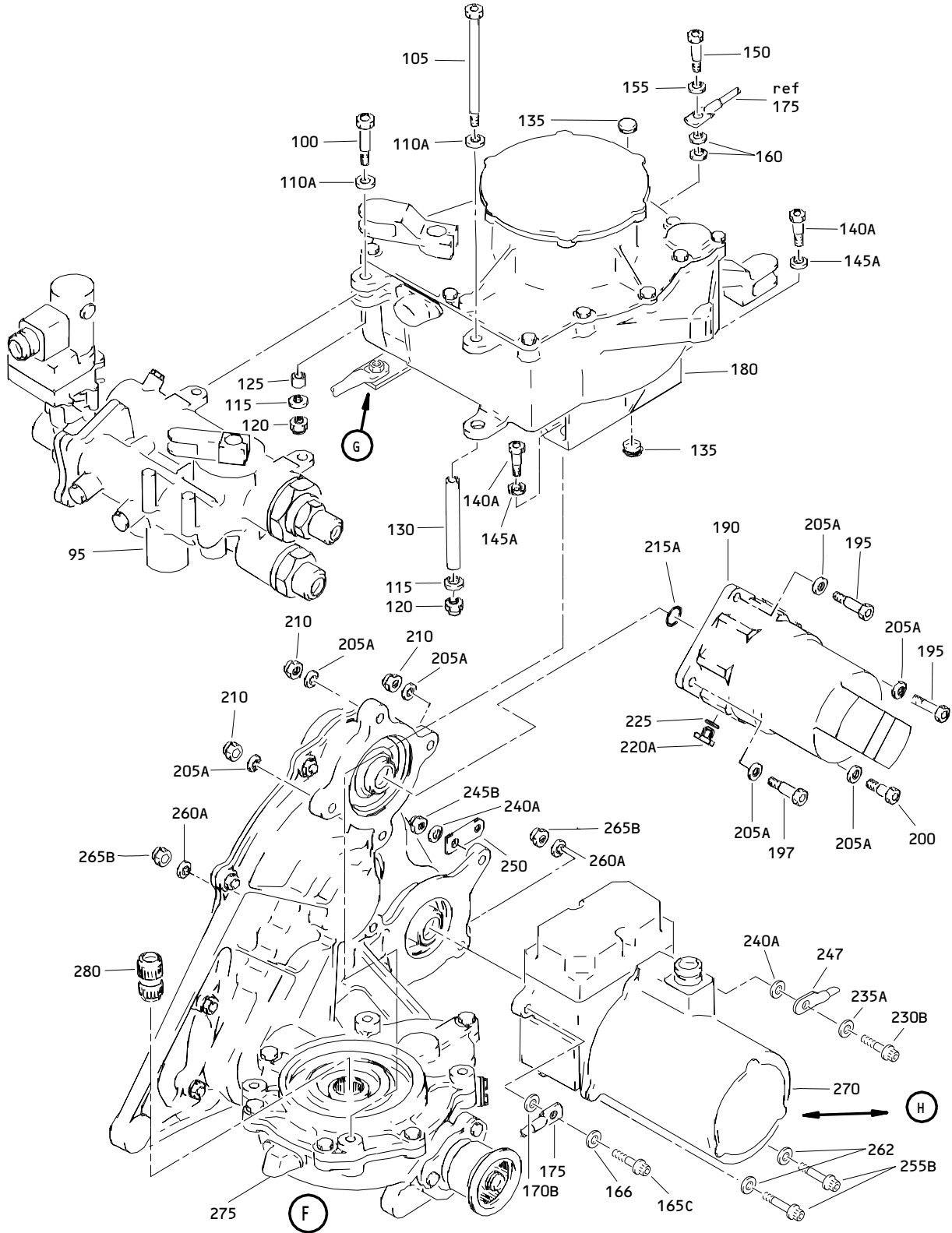
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Trailing Edge Flap Drive Power Drive Unit Assembly
 Figure 1 (Sheet 2)

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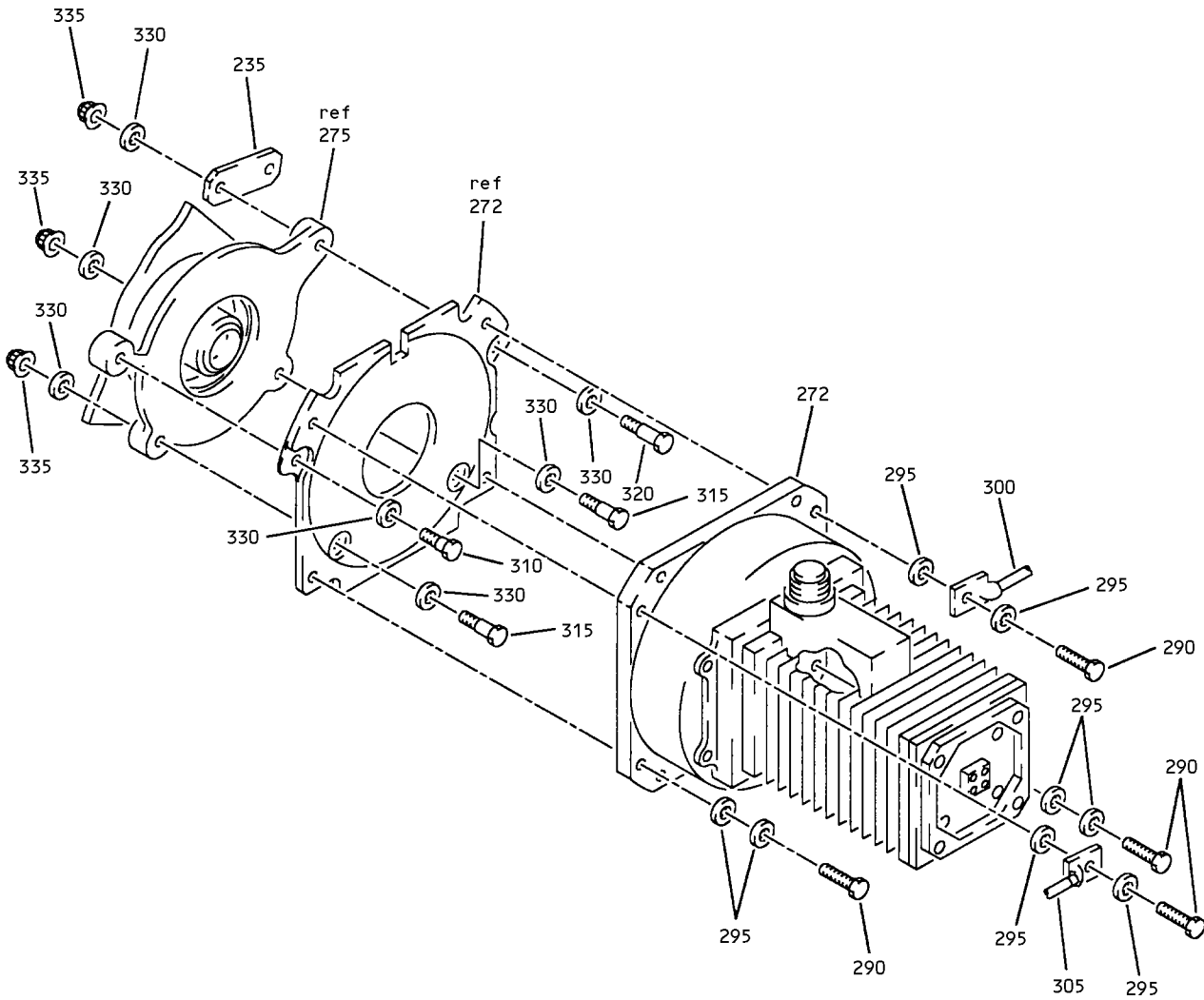
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Trailing Edge Flap Drive Power Drive Unit Assembly
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Trailing Edge Flap Drive Power Drive Unit Assembly
Figure 1 (Sheet 4)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -1	256T3110-2		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (PRE SB 767-27-0096R2)	A	RF
-1A	256T3110-3		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (PRE SB 767-27-0096R2)	B	RF
-1B	256T3110-4		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (PRE SB 767-27-0040) (PRE SB 767-27-0096R2)	C	RF
-1C	256T3110-5		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (POST SB 27-40) (PRE SB 767-27-0096R2)	D	RF
-1D	256T3110-6		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE) (PRE SB 767-27-0096R2)	E	RF
-1E	256T3110-7		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE) (PRE SB 767-27-0096R2)	F	RF
-1F	256T3110-8		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (PRE SB 767-27-0096R2)	G	RF
-1G	256T3110-9		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE) (PRE SB 767-27-0096R2)	H	RF
-1H	256T3110-10		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE) (PRE SB 767-27-0096R2)	J	RF
-1J	256T3110-11		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE)	K	RF
-1K	256T3110-12		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE)	L	RF
-1L	256T3110-13		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE)	M	RF
-1M	256T3110-16		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE)	N	RF
-1N	256T3110-17		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE) (FOR DETAILS SEE FIG. 2)	P	RF
-2	015T0850-1		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	Q	RF
-2A	015T0850-2		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	R	RF

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -2B	015T0850-3		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	S	RF
-2C	015T0850-4		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	T	RF
-2D	015T0850-5		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	U	RF
-2E	015T0850-6		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	V	RF
-2F	015T0850-7		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	W	RF
-2G	015T0850-8		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	X	RF
-2H	015T0850-9		UNIT ASSY-TE FLAP DRIVE (POST SB 767-27-0096R2)	Y	RF
5	BACU24K12		.UNION	A-M, Q-Y	2
7	BACE21AW1212M		.ELBOW- (OPT ITEM 7A)	A-M, Q-Y	1
-7A	NAS1762T1212		.ELBOW- (OPT ITEM 7)	A-M, Q-Y	1
10	NAS1612-12		.PACKING	A-M, Q-Y	2
15	256T3110-103		.TUBE ASSY- (MFD FROM TITANIUM 3AL-2.5V SEAMLESS TUBING AMS4944B OPTL BMS7-234 GRADE 1 .750 O.D. X .039 IN W X 027.0 LG F-25.01)	A-C, Q-S	1
-15A	256T3110-105		.TUBE ASSY- (MFD FROM TITANIUM 3AL-2.5V SEAMLESS TUBING AMS4944B OPTL BMS7-234 GRADE 1 .750 O.D. X .039 IN W X 027.0 LG F-25.01)	D-M, T-Y	1
-17	AS1581-12T		..SLEEVE	A-M, Q-Y	2
-18	BACN10YA12		..NUT- (OPT ITEM 18A)	A-M, Q-Y	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -18A	AFP107-12		..NUT- (V30974) (SPEC BACN10NR12) (OPT AP1028T12 (V01673)) (OPT BC921T12 (V50948)) (OPT DBON10NR12 (V14798)) (OPT ER01921-12T (V88334)) (OPT FER8928-12 (V14397)) (OPT F11-12 (V73197)) (OPT 2-03005T12 (V11328)) (OPT 31783-12 (V14397)) (OPT ITEM 18)	A-M, Q-Y	2
20	BACU24K10		.UNION	A-M, Q-Y	2
25	NAS1612-10		.PACKING	A-M, Q-Y	2
30	256T3110-102		.TUBE ASSY- (MFD FROM TITANIUM 3AL-2.5V SEAMLESS TUBING AMS4944B OPT BMS7-234 GRADE 1 .625 OD X .32 IN W X 026.0 LG F-25.01)	A-M, Q-Y	1
-32	AS1581-10T		..SLEEVE	A-M, Q-Y	2
-33	BACN10YA10		..NUT- (OPT ITEM 33A)	A-M, Q-Y	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -33A	AFP107-10		. .NUT- (V30974) (SPEC BACN10NR10) (OPT AP1028T10 (V01673)) (OPT BC921T10 (V50948)) (OPT DBON10NR10 (V14798)) (OPT ER01921-10T (V88334)) (OPT FER8928-10 (V14397)) (OPT F11-10 (V73197)) (OPT 2-03005T10 (V11328)) (OPT 31783-10 (V14397)) (OPT ITEM 33)	A-M, Q-Y	2
35	BC902T06		DELETED		
35A	BACU24K6		.UNION	A-M, Q-Y	2
40	NAS1612-6		.PACKING	A-M, Q-Y	2
45	BACE21AW0606L		.ELBOW- (OPT ITEM 45A)	A-M, Q-Y	1
-45A	NAS1762D0606		.ELBOW- (OPT ITEM 45)	A-M, Q-Y	1
47	M85052-2-10		.CLAMP	A-M, Q-Y	1
50	JP0030-6		DELETED		
50A	M85052-2-6		.CLAMP	A-M, Q-Y	1
55	NAS6703-5		DELETED		
55A	NAS6603-2		.BOLT	A-M, Q-Y	1
60	AN960PD10L		DELETED		
60A	AN960JD10L		.WASHER	A-M, Q-Y	2
65	BRH10C3MD		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-65A	H10-3BAC		.NUT- (V15653) (SPEC BACN10JC3) (OPT NS202101-02 (V80539)) (OPT RMLH9075-3W (V72962)) (OPT T6S1032J (V71087)) (OPT VN303A02 (V92215)) (OPT 96-02 (V80539)) (OPT BRH10A3 (V52828))	A-M, Q-Y	1
-65B 70	H52732-3CD 256T3110-101		DELETED .TUBE ASSY- (MFD FROM TITANIUM 3AL-2.5V SEAMLESS TUBING AMS4944B OPT BMS7-234 GRADE 1 .375 O.D. X .019 IN W X 034.0 LG F-25.01) (OPT ITEM 70A)	A-M, Q-Y	1
-70A	256T3110-104		.TUBE ASSY- (MFD FROM 6061-T6 ALUM SEAMLESS TUBING MIL-T-7081 .375 O.D. X .035 W X 21.4 LG) (OPT ITEM 70)	G-M, Q-Y	1
-72	AS1581-06T		..SLEEVE- (USED ON ITEM 70)	A-M, Q-Y	2
-72A	DB0S13BX06HP		..SLEEVE- (V14798) (SPEC BACS13BX06HP) (OPT 2-02903-06HP (V11328)) (OPT 35235VN06 (V08199)) (OPT AP2097-06HP (V01673)) (OPT AFP175V06P (V30974)) (OPT AFP175V06P (V30974)) (USED ON ITEM 70A)	A-M, Q-Y	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -73	BACN10YA6		..NUT- (OPT ITEM 73C) (USED ON ITEM 70)	A-M, Q-Y	2
-73A	AFP107-06		DELETED		
-73B	MS21921-6D		..NUT- (USED ON ITEM 70A)	A-M, Q-Y	2
-73C	AFP107-6		..NUT- (V30974) (SPEC BACN10NR6) (OPT AP1028T6 (V01673)) (OPT BC921T6 (V50948)) (OPT DBON10NR6 (V14798)) (OPT ER01921-6T (V88334)) (OPT FER8928-6 (V14397)) (OPT F11-6 (V73197)) (OPT 2-03005T6 (V11328)) (OPT 31783-6 (V14397)) (OPT ITEM 73) (USED ON ITEM 70)	A-M, Q-Y	2
75	251T0100-306		.ROD ASSY- (REF CMM 27-00-11) ATTACHING PARTS	A-M, Q-Y	1
80	NAS6704-13		.BOLT	A-M, Q-Y	2
85	AN960PD416L		DELETED		
85A	AN960JD416L		.WASHER	A-M, Q-Y	4
90	BACN10JC4D		DELETED		
90A	BACN10JC4CD		.NUT	A-M, Q-Y	2
-90B	H52732-4CD		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-95	732-18550-01		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-1) (OPT 732-18550-02 (VS4096)) (OPT ITEMS 95C, 95D, 95K, 95R) (PRE SB 767-27-0040) (PRE SB 767-27-0096)	A,B	1
-95A	732-18550-02		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-1) (OPT 732-18550-01 (VS4096)) (OPT ITEMS 95C, 95D, 95K, 95R) (PRE SB 767-27-0040) (PRE SB 767-27-0096)	A,B	1
-95B -95C	S256T005-7 732-18550-03		DELETED .MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-04 (VS4096)) (OPT 732-18550-05 (VS4096)) (OPT 732-18550-06 (VS4096)) (OPT ITEMS 95, 95A) (POST SB 767-27-0040) (PRE SB 767-27-0096)	A,B	1
-95D	732-18550-04		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-03 (VS4096)) (OPT 732-18550-05 (S4096)) (OPT 732-18550-06 (VS4096)) (OPT ITEMS 95, 95A) (POST SB 767-27-0040) (PRE SB 767-27-0096)	A,B	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -95E	732-18550-01		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-1) (OPT 732-18550-02 (VS4096)) (PRE SB 767-27-0096)	C	1
-95F	732-18550-02		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-1) (OPT 732-18550-01 (VS4096)) (PRE SB 767-27-0096)	C	1
-95G	732-18550-03		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-04 (VS4096)) (OPT 732-18550-05 (VS4096)) (OPT 732-18550-06 (VS4096)) (PRE SB 767-27-0096)	D-J	1
-95H	732-18550-04		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-03 (VS4096)) (OPT 732-18550-06 (VS4096)) (OPT 732-18550-05 (VS4096)) (PRE SB 767-27-0096)	D-J	1
-95J	732-18550-06		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-03 (VS4096)) (OPT 732-18550-04 (VS4096)) (OPT 732-18550-05 (VS4096)) (PRE SB 767-27-0096)	D-J	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -95K	732-18550-06		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-03 (VS4096)) (OPT 732-18550-04 (VS4096)) (OPT 732-18550-05 (VS4096)) (OPT ITEMS 95, 95A) (PRE SB 767-27-0096)	A,B	1
-95L -95M	S256T005-11 732-18550-07		DELETED .MODULE-CONT VALVE (VS4096) (SPEC S256T005-11) (OPT 732-18550-08 (VS4096))	K-M	1
-95N	732-18550-07		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-11) (OPT 732-18550-08 (VS4096)) (POST SB 767-27-0096)	Q-Y	1
-95P	732-18550-08		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-11) (OPT 732-18550-07 (VS4096))	K-M	1
-95Q	732-18550-08		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-11) (OPT 732-18550-07 (VS4096)) (POST SB 767-27-0096)	Q-Y	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -95R	732-18550-05		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-03 (VS4096)) (OPT 732-18550-04 (S4096)) (OPT 732-18550-06 (VS4096)) (OPT ITEMS 95, 95A) (POST SB 767-27-0040) (PRE SB 767-27-0096)	A,B	1
-95S	732-18550-05		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-7) (OPT 732-18550-04 (VS4096)) (OPT 732-18550-03 (VS4096)) (OPT 732-18550-06 (VS4096)) (PRE SB 767-27-0096)	D-J	1
97	M85052-2-10		DELETED		
100	BACB30NR4K17		.BOLT- (OPT ITEM 100A)	A-M, Q-Y	1
-100A	NAS6704-17		.BOLT- (OPT ITEM 100)	A-M, Q-Y	1
105	BACB30NR4K64		.BOLT- (OPT ITEM 105A)	A-M, Q-Y	1
-105A	NAS6704-64		.BOLT- (OPT ITEM 105)	A-M, Q-Y	1
110	AN960PD416L		DELETED		
110A	AN960JD416L		.WASHER	A-M, Q-Y	2
115	AN960-416L		.WASHER	A-M, Q-Y	2
120	BACN10JC4CD		.NUT	A-M, Q-Y	2
-120A	H52732-4CD		DELETED		
125	BACB28AK04-041		.BUSHING	A-M, Q-Y	1
130	BACB28AK04-335		.BUSHING	A-M, Q-Y	1

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01-135	D2587PB		.PLUG BUTTON- (V57771) (SPEC BACP20B65)	A-M, Q-Y	2
136	NAS1801-3-8		.SCREW	K-M	1
137	AN960D10L		.WASHER	K-M	3
138	H10-3BAC		.NUT- (V15653) (SPEC BACN10JC3) (OPT NS202101-02 (V80539)) (OPT RMLH9075-3W (V72962)) (OPT T6S1032J (V71087)) (OPT VN303A02 (V92215)) (OPT 96-02 (V80539)) (OPT BRH10A3 (V52828))	K-M	1
-138A	H52732-3CD		DELETED		
139	BACJ40A20-8		.JUMPER ASSY	K-M	1
140	NAS6704H17		DELETED		
140A	NAS6704H15		.BOLT	A-M, Q-Y	2
145	AN960PD416		DELETED		
145A	AN960JD416		.WASHER	A-M, Q-Y	2
150	NAS6704H19		.BOLT	A-M, Q-Y	2
155	AN960D416L		.WASHER	A-M, Q-Y	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-160	AN960D416		.WASHER	A-M, Q-Y	4
165	NAS6705-8		DELETED		
165A	BACB30MR5K8		DELETED		
165B	BACB30MR5C8		DELETED		
165C	BACB30MR5K10		.BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
-165D	BACB30NRK3		DELETED		
166	MS20002C5		.WASHER- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
170	AN960D516		DELETED		
170A	AN960PD516		DELETED		
170B	AN960JD516		.WASHER- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-175	BACJ40A31-6		.JUMPER ASSY- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
-175A 180	BACJ40A30-6 256T3160-2		DELETED .UNIT ASSY-CONT (REF CMM 27-51-16)	A-D,G ,K, Q-T,W	1
-180A	256T3160-4		.UNIT ASSY-CONT (REF CMM 27-51-16)	E,J,M ,U,Y	1
-180B	256T3160-5		.UNIT ASSY-CONT (REF CMM 27-51-16)	F,H,L ,V,X	1
185	69B82604-15		.SUPPORT	A-M, Q-Y	1
190	4100362-1		.MOTOR-HYDR (V34270) (SPEC S256T003-1)	A-M, Q-Y	1
195	NAS6705-13		.BOLT	A-M, Q-Y	2
197	NAS6705H13		.BOLT	A-M, Q-Y	1
200	NAS6705-6		.BOLT	A-M, Q-Y	1
205 205A	AN960PD516 AN960JD516		DELETED .WASHER	A-M, Q-Y	7
210	BACN10JC5CD		.NUT	A-M, Q-Y	3
-210A 215 215A	H52732-5CD NAS1611-113 NAS1611-019		DELETED DELETED .PACKING	A-M, Q-Y	1
220 220A	AN814-4D AN814-4DL		DELETED .PLUG AND BLEEDER	A-M, Q-Y	1
225	NAS1612-4		.PACKING	A-M, Q-Y	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- 230 230A 230B	NAS6705-15 BACB30MR5K15 BACB30MR5C15		DELETED DELETED .BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-K, Q-Y	1
-230C	BACB30MR5K18		.BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	L,M	1
-230D 235 235A	BACB30NR5K11 AN960PD516 MS20002C5		DELETED DELETED .WASHER- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
-235B 240 240A	AN960JD516 AN960PD516L AN960JD516L		DELETED DELETED .WASHER (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	2
245 245A 245B	BRH10C5MD BACN10GW5 NAS1804-5		DELETED DELETED .NUT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-247	BACJ40A22-9		. JUMPER ASSY- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	K-M	1
-247A 250	BACJ40A21-9 69B82604-17		DELETED . SUPPORT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
255 255A 255B	NAS6705-14 BACB30MR5K14 BACB30MR5C14		DELETED DELETED . BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	2
-255C 260 260A	BACB30NR5K10 AN960PD516 AN960JD516L		DELETED DELETED . WASHER- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	2
-260B	AN960JD516		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
			1234567		
01-262	MS20002C5		.WASHER- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	2
265	BRH10C5MD		DELETED		
265A	BACN10GW5		DELETED		
265B	NAS1804-5		.NUT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	2
270	1823T100-1		.MOTOR-ELEC (V98889) (SPEC S256T004-1) (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B) (OPT ITEMS 270A, 270C)	A,Q	1
-270A	1823T100-3		.MOTOR-ELEC (V98889) (SPEC S256T004-8) (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B) (OPT ITEMS 270, 270C)	A,Q	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -270B	1823T100-3		.MOTOR-ELEC (V98889) (SPEC S256T004-8) (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B) (OPT ITEM 270D)	B,R	1
-270C	2473T100-1		.MOTOR-ELEC (V98889) (SPEC S256T004-11) (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B) (OPT ITEMS 270, 270A)	A,Q	1
-270D	2473T100-1		.MOTOR-ELEC (V98889) (SPEC S256T004-11) (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B) (OPT ITEM 270B)	B,R	1
-270E	2473T100-1		.MOTOR-ELEC (V98889) (SPEC S256T004-11) (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	C-M, S-Y	1
-270F	S256T011-1		DELETED		
-270G	4087T100-1		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R 01-272	4087T100-3		.MOTOR-ELEC (V98889) (SPEC S256T011-1) (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B) (OPT 4087T100-1 (V98889))	A-M, Q-Y	1
275	256T3130-4		.GEARBOX ASSY- (REF CMM 27-51-50)	A-F, Q-V	1
-275A	256T3130-5		.GEARBOX ASSY- (REF CMM 27-51-50)	G-M, W-Y	1
280	256T3104-1		.SHAFT-QUILL	A-M, Q-Y	1
285	BAC27TCT0174		.DECAL	A-M, Q-Y	1
290	NAS1801-4-16		.BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	4
295	NAS1149D0432H		.WASHER- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	8
300	BACJ40A21-9		.JUMPER ASSY- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-305	BACJ40A30-6		.JUMPER ASSY- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
310	BACB30NR5K3		.BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
315	BACB30NR5K10		.BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	2
320	BACB30NR5K11		.BOLT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1
R 325	69B82604-17		.SUPPORT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	1

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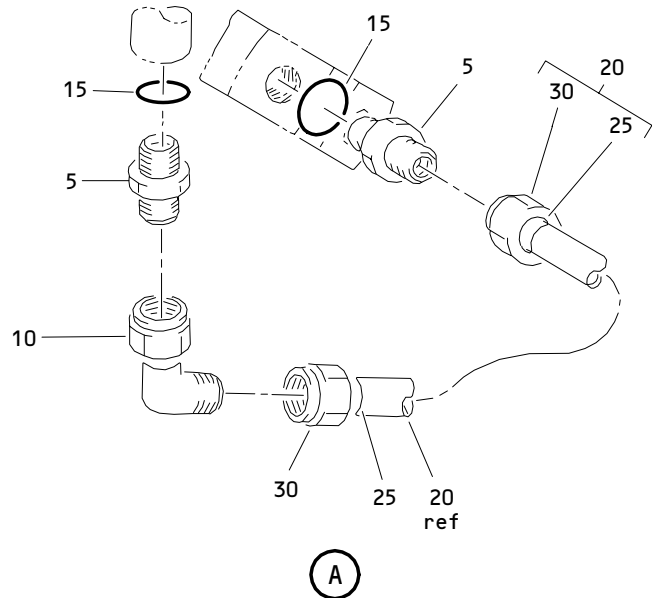
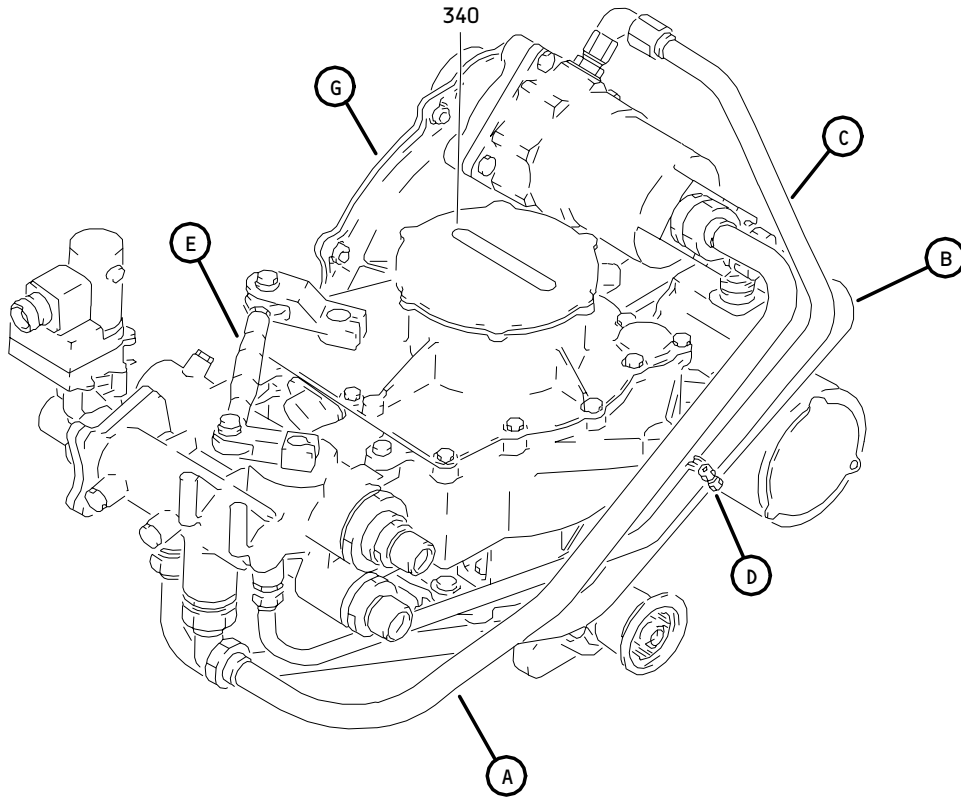
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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-330	AN960JD516		.WASHER- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	7
335	NAS1804-5		.NUT- (ITEM 272 USED WITH ITEMS 290 THRU 335 OPT TO ITEM 270, 270A, 270B, 270C, 270D OR 270E USED WITH ITEMS 165C THRU 175, AND 230B THRU 265B)	A-M, Q-Y	3

- Item Not Illustrated

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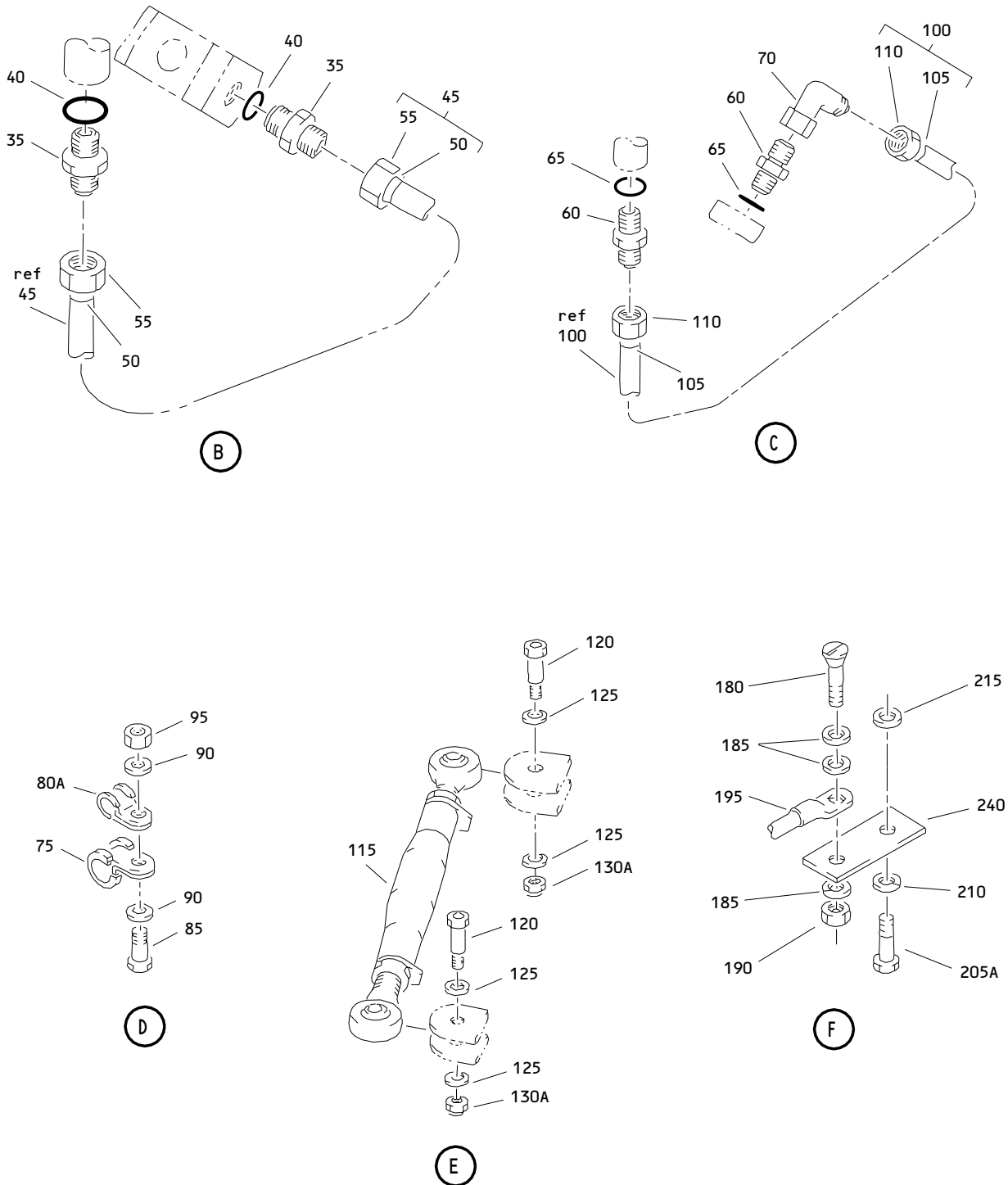
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Trailing Edge Flap Drive Power Drive Unit Assembly
Figure 2 (Sheet 1)

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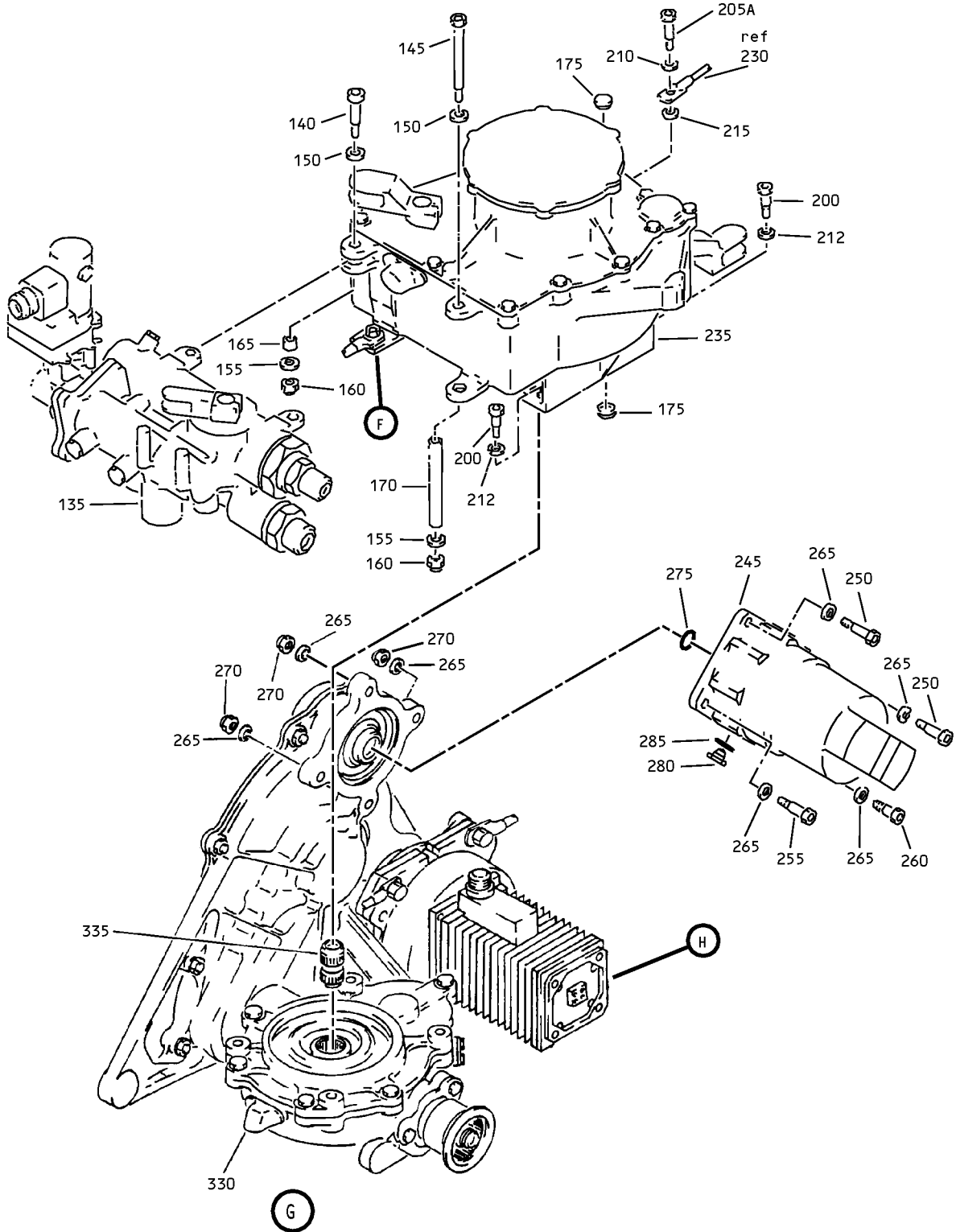
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Trailing Edge Flap Drive Power Drive Unit Assembly
 Figure 2 (Sheet 2)

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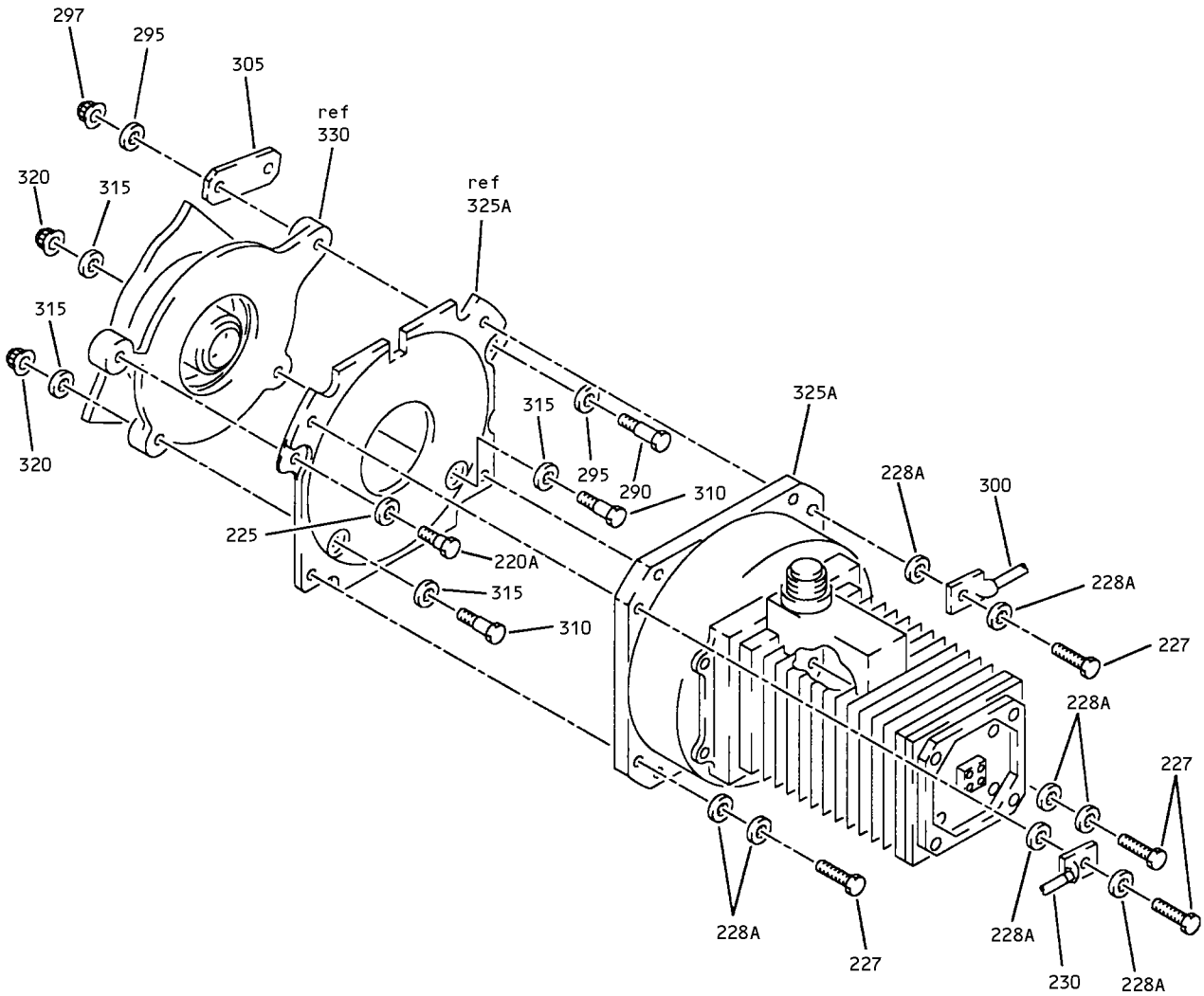
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Trailing Edge Flap Drive Power Drive Unit Assembly
Figure 2 (Sheet 3)

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Trailing Edge Flap Drive Power Drive Unit Assembly
Figure 2 (Sheet 4)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -1A	256T3110-16		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE)	N	RF
-1B	256T3110-17		UNIT ASSY-TE FLAP DRIVE PWR DRIVE (VARIABLE)	P	RF
5	BACU24K12		.UNION	N,P	2
10	BACE21AW1212M		.ELBOW- (OPT ITEM 10A)	N,P	1
-10A	NAS1762T1212		.ELBOW- (OPT ITEM 10)	N,P	1
15	NAS1612-12		.PACKING	N,P	2
20	256T3110-105		.TUBE ASSY- (MFD FROM TITANIUM 3AL-2.5V SEAMLESS TUBING AMS4944B OPT BMS7-234 GRADE 1 .750 O.D. X .039 IN W X 027.0 LG F-25.01)	N,P	1
25	AS1581-12T		..SLEEVE	N,P	2
30	BACN10YA12		..NUT- (OPT ITEM 30A)	N,P	2
-30A	AFP107-12		..NUT- (V30974) (SPEC BACN10NR12) (OPT AP1028T12 (V01673)) (OPT BC921T12 (V50948)) (OPT DBON10NR12 (V14798)) (OPT ER01921-12T (V88334)) (OPT FER8928-12 (V14397)) (OPT F11-12 (V73197)) (OPT 2-03005T12 (V11328)) (OPT 31783-12 (V14397)) (OPT ITEM 30)	N,P	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
35	BACU24K10		.UNION	N,P	2
40	NAS1612-10		.PACKING	N,P	2
45	256T3110-102		.TUBE ASSY- (MFD FROM TITANIUM 3AL-205V SEAMLESS TUBING AMS4944B OPT BMS7-234 GRADE 1 .625 OD X .32 IN W X 026.0 LG F-25.01)	N,P	1
50	AS1581-10T		..SLEEVE	N,P	2
55	BACN10YA10		..NUT- (OPT ITEM 55A)	N,P	2
-55A	AFP107-10		..NUT- (V30974) (SPEC BACN10NR10) (OPT AP1028T10 (V01673)) (OPT BC921T10 (V50948)) (OPT DBON10NR10 (V14798)) (OPT ER01921-10T (V88334)) (OPT FER8928-10 (V14397)) (OPT F11-10 (V73197)) (OPT 2-03005T10 (V11328)) (OPT 31783-10 (V14397)) (OPT ITEM 55)	N,P	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
60	BACU24K6		.UNION	N,P	2
65	NAS1612-6		.PACKING	N,P	2
70	NAS1762D0606		.ELBOW	N,P	1
75	M85052-2-10		.CLAMP	N,P	1
80	M785052-2-6		DELETED		
80A	M85052-2-6		.CLAMP	N,P	1
85	NAS6603-2		.BOLT	N,P	1
90	AN960JD10L		.WASHER	N,P	2
95	H52732-3CD		.NUT- (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))	N,P	1
100	256T3110-104		.TUBE ASSY- (MFD FROM 6061-T6 ALUM SEAMLESS TUBING MIL-T-7081 .375 O.D. X 034.0 LG)	N,P	1
105	DB0S13BX06HP		..SLEEVE- (V14798) (SPEC BACS13BX06HP) (OPT 2-02903-06HP (V11328)) (OPT 35235VN06 (V08199)) (OPT AP2097-06HP (V01673)) (OPT AFP175V06P (V30974)) (OPT AP2097HP06 (V01673))	N,P	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
110	MS21921-6D		.NUT	N,P	2
115	251T0100-306		.ROD ASSY- (REF CMM 27-00-11)	N,P	1
120	NAS6704-13		.BOLT	N,P	2
125	AN960JD416L		.WASHER	N,P	4
130	BACN10YRCD		DELETED		
130A	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	N,P	2
135	732-18550-07		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-11) (OPT 732-18550-08 (VS4096)) (OPT 732-18550-13 (VS4096))	N,P	1
-135A	732-18550-08		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-11) (OPT 732-18550-07 (VS4096)) (OPT 732-18550-13 (VS4096))	N,P	1
-135B	732-18550-13		.MODULE-CONT VALVE (VS4096) (SPEC S256T005-11) (OPT 732-18550-07 (VS4096)) (OPT 732-18550-08 (VS4096))	N,P	1
140	BACB30NR4K17		.BOLT	N,P	1
145	BACB30NR4K64		.BOLT	N,P	1
150	AN960JD416L		.WASHER	N,P	2
155	AN960-416L		.WASHER	N,P	2
160	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	N,P	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
165	BACB28AK04-041		.BUSHING	N,P	1
170	BACB28AK04-335		.BUSHING	N,P	1
175	D2587PB		.PLUG BUTTON- (V57771) (SPEC BACP20B65)	N,P	2
180	NAS1801-3-8		.SCREW	N,P	1
185	AN960D10L		.WASHER	N,P	3
190	H52732-3CD		.NUT- (V15653) (SPEC BACN10YR3CD) (OPT PLH53CD (V62554))	N,P	1
195	BACJROA20-8		DELETED		
195A	BACJ40A20-8		.JUMPER ASSY	N,P	1
200	NAS6704H15		.BOLT	N,P	2
205	NAS6704H19		DELETED		
205A	NAS6704H17		.BOLT	N,P	2
210	AN960D416L		.WASHER	N,P	2
212	AN960JD416		.WASHER	N,P	2
215	AN960D416		.WASHER	N,P	2
220	BACB30NRK3		DELETED		
220A	BACB30NR5K3		.BOLT	N,P	1
225	AN960JD516		.WASHER	N,P	1
227	NAS1801-4-16		.BOLT	N,P	4
228	NAS1149D0432		DELETED		
R 228A	NAS1149D0432H		.WASHER	N,P	8
230	BACJ40A30-6		.JUMPER ASSY	N,P	1
235	256T3160-2		.UNIT ASSY-CONT (REF CMM 27-51-16)	N	1
-235A	256T3160-5		.UNIT ASSY-CONT (REF CMM 27-51-16)	P	1
240	69B82604-15		.SUPPORT	N,P	1
245	4100362-1		.MOTOR-HYDR (V34270) (SPEC S256T003-1)	N,P	1
250	NAS6705-13		.BOLT	N,P	2
255	NAS6705H13		.BOLT	N,P	1
260	NAS6705-6		.BOLT	N,P	1
265	AN960JD516		.WASHER	N,P	7
270	H52732-5CD		.NUT- (V15653) (SPEC BACN10YR5CD) (OPT PLH55CD (V62554))	N,P	3

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
275	NAS1611-019		.PACKING	N,P	1
280	AN814-4DL		.PLUG AND BLEEDER	N,P	1
285	NAS1612-4		.PACKING	N,P	1
290	BACB30NR5K11		.BOLT	N,P	1
295	AN960JD516		.WASHER	N,P	2
297	NAS1804-5		.NUT	N,P	1
300	BACJ40A21-9		.JUMPER ASSY	N,P	1
305	69B82604-17		.SUPPORT	N,P	1
310	BACB30NR5K10		.BOLT	N,P	2
315	AN960JD516		.WASHER	N,P	4
320	NAS1804-5		.NUT	N,P	2
325	4087T100-1		DELETED		
325A	4087T100-3		.MOTOR-ELEC (V98889) (SPEC S256T011-1) (OPT 4087T100-1 (V98889))	N,P	1
330	256T3130-5		.GEARBOX ASSY- (REF CMM 27-51-50)	N,P	1
335	256T3104-1		.SHAFT-QUILL	N,P	1
340	BAC27TCT0174		.DECAL	N,P	1

- Item Not Illustrated

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