COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

BRAKE ACCUMULATOR ISOLATION VALVE ASSEMBLY/ALTERNATE BRAKE SELECTOR VALVE ASSEMBLY

PART NUMBER 274N1003–10, –13, –4, –5, –6, –7, –8, 274N1028–4, –5, –6, 274N1051–1, –2, –3, 274U0003–4, 65C26816–2, –3,

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COMPONENT MAINTENANCE MANUAL

Revision No. 22
Jul 01/2009

To: All holders of BRAKE ACCUMULATOR ISOLATION VALVE ASSEMBLY/ALTERNATE BRAKE SELECTOR VALVE ASSEMBLY 32-41-12.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

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

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

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

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Location of Change	Description of Change
32-41-12	
ILLUSTRATED PARTS LIST	Added clarifications and updated callouts.

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COMPONENT MAINTENANCE MANUAL

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

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BOEING

COMPONENT MAINTENANCE MANUAL

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR N52225	JAN 10/86
		PRR 52659	JAN 10/86
32-51		PRR 53135-70	OCT 10/86
32-1161		PRR 33983	JAN 10/87
32-51-R1			JUL 01/88
32-1161-R1		PRR 33983	JUL 01/88
		PRR 52850-27	JUL 01/92

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.

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

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

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

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.

BRAKE ACCUMULATOR ISOLATION VALVE ASSEMBLY/ALTERNATE BRAKE SELECTOR VALVE ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

A. The alternate brake selector valve assembly consists of a piston, and a matched slide and sleeve in an aluminum housing and a cap. Unions or reducers and a pressure switch are mounted externally. On the accumulator isolation valve, the pressure switch and return ports are plugged.

2. Operation

A. Under normal condition, hydraulic pressure is applied to both NORM PRESS A and ALT (PRESS B) ports and the BRAKE port is connected to the RETURN port. When hydraulic pressure in the NORM port drops to 1300 psi, the piston and slide will shuttle, due to pressure differential between NORM and ALT ports. This connects the ALT port to the BRAKE port for alternate system operation. The SWITCH port sends a signal to an indicator system showing the alternate system is operating.

3. Leading Particulars (Approximate)

A. Length – 6.0 inches

B. Height – 3.26 inches

C. Width – 3.0 inches

D. Weight – 2 pounds

E. Operating Medium – hydraulic fluid, D50122 BMS 3-11

F. Proof pressure – 4500 psi

4. CMM Verification Date

A. September 14, 1983

TESTING AND FAULT ISOLATION

1. General

A. This procedure has the data necessary to do a test of the mechanism after an overhaul or for fault isolation.

B. Refer to the Standard Overhaul Practice Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 for item numbers.

2. Preparation for Test

A. Tools/Equipment

NOTE: Equivalent substitutes may be used.

Reference	Description
STD-5485	Hydraulic Test Stand - Capable of supplying BMS 3-11 fluid at maximum flow rate of 5 gpm at variable pressure of 0-5000 psi. Fluid shall be filtered continuously to 15 microns and be maintained 70-110?F.

B. Procedure

CAUTION: THIS IS A PRECISION PART. BE SURE TO GIVE IT PROTECTION, AS IN A CONTAINER, WHEN NOT IN WORK.

WARNING: DO NOT APPLY COMPRESSED AIR TO PORTS AT ANY TIME.

CAUTION: DO NOT CYCLE UNIT AT PROOF PRESSURE (4500 PSI).

(1) Connect Hydraulic Test Stand, STD-5485 to valve. See TESTING AND FAULT ISOLATION, Figure 101 for port identification.

3. Test

NOTE: Refer to TESTING AND FAULT ISOLATION, Table 101 for probable causes and corrections.

A. Procedure

(1) Slide leakage and actuation test.

(a) Plug RETURN, BRAKE and SWITCH ports . Apply 3,000 psi hydraulic pressure alternately to PRESS A and PRESS B port to wear in seals for a suitable period not to exceed 50 cycles. Check that leakage of piston and slide from vent area does not exceed 2 drops per 25 cycles of operation.

NOTE: Use plugs AN814( ) or AN814( )J or AN814( )K or AN814( )S

(b) On 274N1051-1 valve:

1) Plug SWITCH port. Leave RETURN and BRAKE ports open.

2) Apply 3000 psi hydraulic pressure simultaneously to PRESS A and PRESS B ports.

3) Decrease pressure at PRESS B port.

4) Check that valve slide shifts at a pressure of 1300-1500 psi at PRESS B port. Shifting of slide is indicated by a flow from the BRAKE port.

(c) On 274N1051-2 or -3 valves:

1) Plug SWITCH port.
2) Apply 3000 psi hydraulic pressure to PRESS A and RETURN ports.
3) Adjust flow from BRAKE port, using a needle valve, to provide a low flow.
4) Apply 3000 psi pressure to PRESS B port.
5) Slowly decrease pressure at PRESS B port until valve shuttles, as evidenced by a momentary decrease in flow from BRAKE port. Shifting pressure measured at PRESS B port shall be 1300-1500 psi.

(2) Proof Pressure Test

(a) Plug RETURN, BRAKE and SWITCH ports. Apply 4500 psi pressure to PRESS A and PRESS B ports for a period of 2 minutes. Check that there is no external leakage or permanent set. Reduce PRESS B port pressure to 0 psi and check that slide shuttles with no binding.

(b) Repeat TESTING AND FAULT ISOLATION, Paragraph 3.A.(2)(a) using 5 psi hydraulic pressure. Check that there is no external leakage or permanent set.

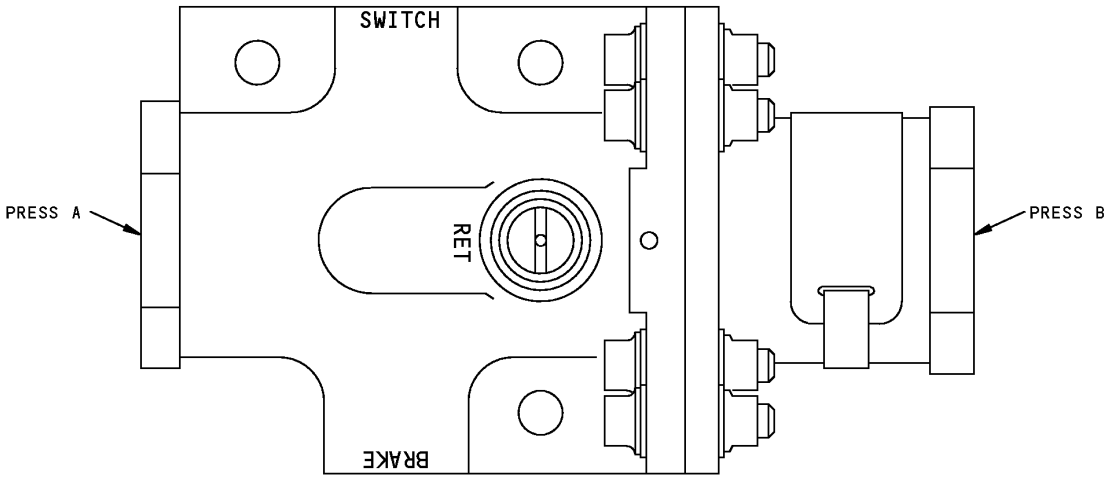
(3) Internal leakage test.

NOTE: Make a check of the leakage rate immediately when you apply the pressure. Do not wait for seating time. Drainage that collects at ports is not to be included as leakage.

(a) Apply 3000 psi hydraulic pressure to PRESS A and PRESS B ports with SWITCH port plugged. Make sure the leakage from RETURN and BRAKE ports, added together, is no more than 20 drops (1 cc) per minute.

(b) Decrease the pressure at the PRESS B port to 1300 psi with 3000 psi at PRESS A port. Make sure there is free flow from BRAKE port. (BRAKE port can be restricted to control flow.)

(c) Put a plug in the BRAKE port and apply 3000 psi pressure at PRESS A port with 0 psi pressure at PRESS B port. Make sure the leakage at the RETURN port is not more than 2 drops per minute on 274N1051-1, -2 valves (30 thru 30B), or 1 cc/min on 274N1051-3 valve (30C).



Valve Port Diagram
Figure 101

4. Post Test Procedures

A. Tools/Equipment

NOTE: Equivalent substitutes may be used.

Reference	Description
STD-5485	Hydraulic Test Stand - Capable of supplying BMS 3-11 fluid at maximum flow rate of 5 gpm at variable pressure of 0-5000 psi. Fluid shall be filtered continuously to 15 microns and be maintained 70-110?F.

B. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

C. References

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

D. Procedure

(1) Disconnect the Hydraulic Test Stand, STD-5485 from the valve assembly.

(2) Install clean plugs in the ports.

(3) Lockwire plugs (8) together (if applicable), cap (35) to bolt, and cap (85) to body (130), by the double twist method of SOPM 20-50-02 using lockwire, G01048.

Table 101: Trouble Shooting Chart

TROUBLE	PROBABLE CAUSE	CORRECTION
Leakage at vent area is more than 2 drops per 25 cycles.	Defective rings (65, 70, 110, 115)	Disassemble and replace parts per TESTING AND FAULT ISOLATION, Paragraph 5.A.(1), TESTING AND FAULT ISOLATION, Paragraph 5.A.(2).
Leakage at return and brake ports, added together, is more than 20 drops (1 cc) per minute.	Defective ring (120, 125)	Disassemble and replace parts per TESTING AND FAULT ISOLATION, Paragraph 5.A.(1), TESTING AND FAULT ISOLATION, Paragraph 5.A.(3).
Slide does not move at the specified pressure.	Defective slide (105)	Disassemble and replace parts per TESTING AND FAULT ISOLATION, Paragraph 5.A.(1), TESTING AND FAULT ISOLATION, Paragraph 5.A.(3).

5. Corrective Procedures

A. Procedure

(1) Drain all hydraulic fluid from the unit.

(2) Replacement of packings (70, 115), rings (65, 110).

(a) Disassemble unit per DISASSEMBLY.

(b) Replace defective parts as required.

(c) Assemble unit per ASSEMBLY.

(d) Repeat test per TESTING AND FAULT ISOLATION, Paragraph 3..

(3) Replacement of ring (120, 125), slide assembly (95).

(a) Remove plug (85) from body (130) and slowly remove slide assembly (95). Remove ring (120, 125) from slide assembly.

(b) Replace defective parts as required.

(c) Assemble unit per ASSEMBLY.

(d) Repeat test per TESTING AND FAULT ISOLATION, Paragraph 3..

DISASSEMBLY

1. **General**
   A. Use this procedure to disassemble the brake accumulator isolation valve assembly or the alternate brake selector valve assembly.
   B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
   C. Refer to TESTING AND FAULT ISOLATION to find the condition or possible cause of any malfunction and to see how much disassembly and repair is necessary.
   D. Refer to IPL Figure 1 for item numbers.
2. **Parts Replacement**
   A. Replacement of these parts is recommended. Replacement of other parts can be by in-service experience.
      (1) Lockwire
      (2) Packings and O-rings
3. **Disassembly**
   A. Procedure
      (1) As applicable, remove switch (5), union or reducer (6), plugs (8), unions or reducers (10, 20) and packings (7 or 9, 15, 25) from the valve. Refer to the vendor's instructions for overhaul of switch (5).
      (2) Hold body (130) and remove plug (85) from the body. Remove slide assembly (95) from the body and remove ring (110, 120), packing (115, 125) from the sleeve assembly.

      CAUTION: SLEEVE (100) AND SLIDE (105) COMPRISE A MATCHED SET AND MUST BE KEPT TOGETHER. SLEEVE AND SLIDE ARE PRECISION PARTS.

      (3) Unscrew plug (35) and remove piston (75), ring (65), packing (70) from cap.
      (4) Remove nuts (55), washers (50), bolts (45A) and cap (60) from body (130).
      (5) Remove packings (40, 90) from plugs (35, 85).

CLEANING

1. General

A. Use this procedure to clean the parts of the brake accumulator isolation valve assembly or the alternate brake selector valve 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 but switch (5) by standard industry practices and the instructions in SOPM 20-30-03.

(2) Clean switch (5) by the manufacturer's instructions.

CHECK

1. General

A. Use this procedure to find defects in the specified parts.

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. Check

A. References

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

B. Procedure

(1) Examine all parts for defects by standard industry practices.

(2) Magnetic particle check (SOPM 20-20-01):

(a) Orifice (80A)

(b) Piston (75)

(3) Penetrant check (SOPM 20-20-02):

(a) Body (130)

(b) Plugs (35, 85)

(c) Cap (60)

REPAIR

1. Content

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

Table 601:

P/N	NAME	REPAIR
274T4625	BODY	1-1
274T4627	CAP	2-1
274T4628	PISTON	3-1
274T4629	PLUG	4-1
274N1051	VALVE ASSEMBLY	5-1
- - - - -	MISCELLANEOUS PARTS REFINISH	6-1

2. Standard Practices

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

(1) SOPM 20-10-04 Grinding of Chrome Plated Parts

(2) SOPM 20-30-03 General Cleaning Procedures

(3) SOPM 20-41-01 Decoding Table for Boeing Finish Codes

(4) SOPM 20-41-02 Application of Chemical and Solvent Resistant Finishes

(5) SOPM 20-42-03 Hard Chrome Plating

(6) SOPM 20-42-05 Bright Cadmium Plating

(7) SOPM 20-43-01 Chromic Acid Anodizing

(8) SOPM 20-44-02 Temporary Protective Coating

(9) SOPM 20-50-12 Application of Adhesives

(10) SOPM 20-50-06 Installation of O-rings and Teflon Seals

(11) SOPM 20-60-01 Cleaning Materials

(12) SOPM 20-60-02 Finishing Materials

3. Materials

NOTE: Equivalent substitutes can be used.

A. Primer – BMS 10-11, Type 1 primer, C00259 (SOPM 20-60-02).

B. Protective Finish – Type 41 sealant, A50071 (SOPM 20-60-02)

C. Solvent – Aliphatic naphtha TT-N-95 solvent, B00316 (Replaces BMS 3-2, Type 1 solvent, B50078) (SOPM 20-60-01)

4. Dimensioning Symbols

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

—	STRAIGHTNESS
▱	FLATNESS
⊥	PERPENDICULARITY (OR SQUARENESS)
//	PARALLELISM
○	ROUNDNESS
⌭	CYLINDRICITY
⌒	PROFILE OF A LINE
⌓	PROFILE OF A SURFACE
◎	CONCENTRICITY
⌯	SYMMETRY
∠	ANGULARITY
↗	RUNOUT
↗↗	TOTAL RUNOUT
⌴	COUNTERBORE OR SPOTFACE
⌵	COUNTERSINK
⌖	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
Ø	DIAMETER
S Ø	SPHERICAL DIAMETER
R	RADIUS
SR	SPHERICAL RADIUS
()	REFERENCE
BASIC (BSC) OR [DIM]	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
[-A-]	DATUM
Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
Ⓛ	LEAST MATERIAL CONDITION (LMC)
Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
Ⓟ	PROJECTED TOLERANCE ZONE
FIM	FULL INDICATOR MOVEMENT
TIR	TOTAL INDICATOR READING

EXAMPLES

[— | 0.002]	STRAIGHT WITHIN 0.002
[⊥ | 0.002 | B]	PERPENDICULAR TO B WITHIN 0.002
[// | 0.002 | A]	PARALLEL TO A WITHIN 0.002
[○ | 0.002]	ROUND WITHIN 0.002
[⌭ | 0.010]	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER
[⌒ | 0.006 | A]	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM PLANE A
[⌓ | 0.020 | A]	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
[◎ | Ø 0.0005 | C]	CONCENTRIC TO C WITHIN 0.0005 DIAMETER
[⌯ | 0.010 | A]	SYMMETRICAL WITH A WITHIN 0.010
[∠ | 0.005 | A]	ANGULAR TOLERANCE 0.005 WITH A
[⌖ | Ø 0.002 Ⓢ | B]	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
[⊥ | Ø 0.010 Ⓜ | A] [0.510 Ⓟ]	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
[2.000] OR 2.000 BSC	THEORETICALLY EXACT DIMENSION IS 2.000

NOTE: DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME [0.020 | A] [A | 0.020]

True Position Dimensioning Symbols
Figure 601

BODY - REPAIR 1-1

274T4625–2

1. General

A. This procedure gives the data that is necessary to repair and refinish the body.

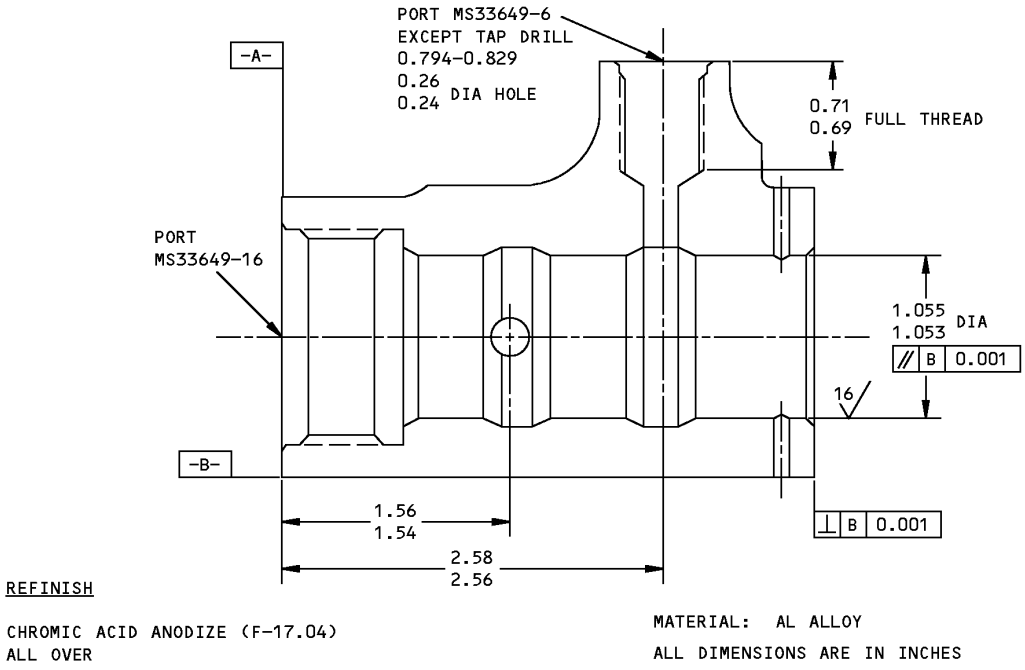
B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the Material codes identified in this procedure.

D. Refer to REPAIR-GENERAL, Figure 601 for standard true position dimensioning symbols shown in the repair.

2. Plating Repair

A. Repair is only replacement of the restoration of original finish. Refer to Refinish Instructions, REPAIR 1-1, Figure 601.



Body Refinish Details
Figure 601

CAP - REPAIR 2-1

274T4627–1

1. General

A. This procedure gives the data that is necessary to repair and refinish the cap.

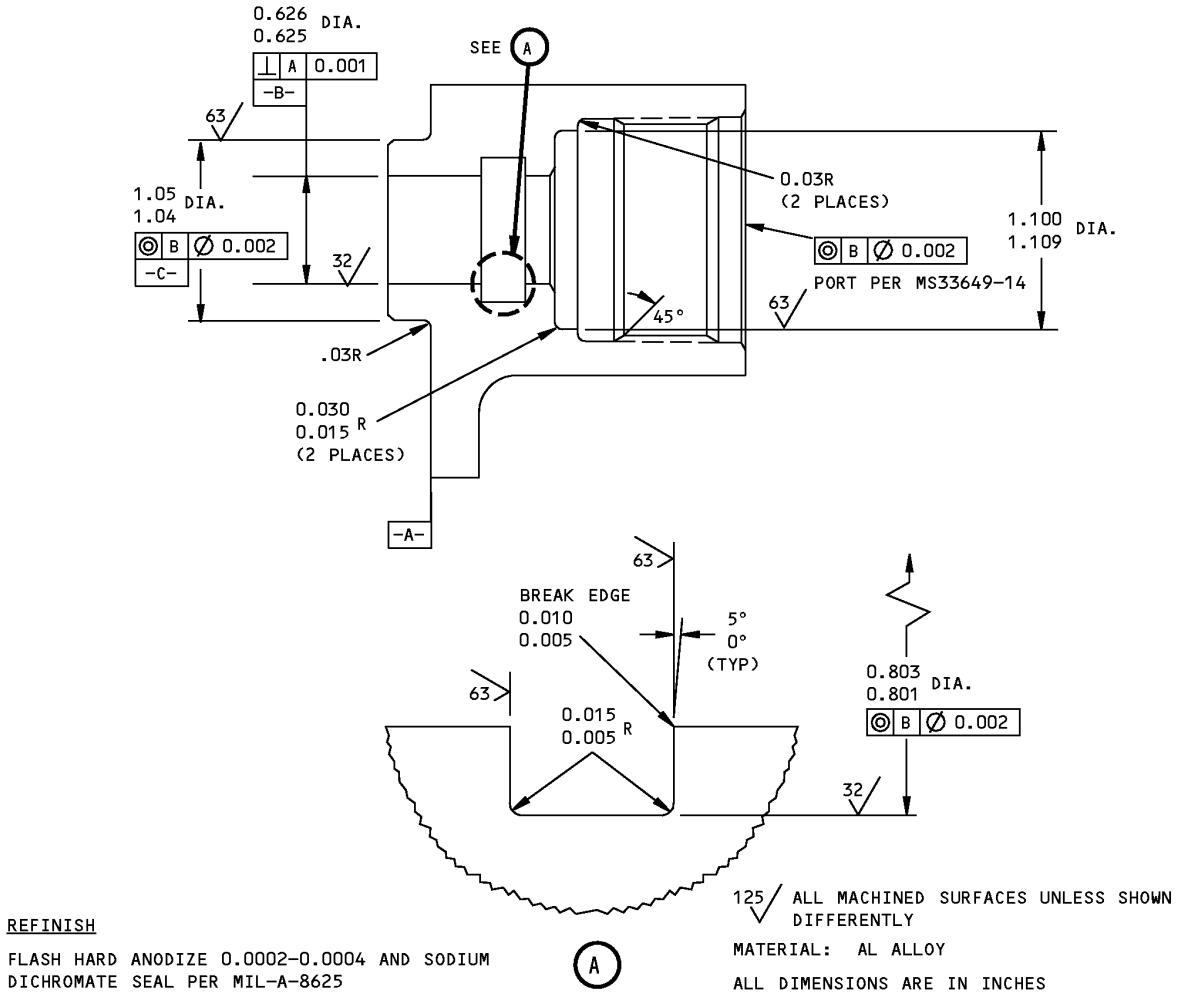
B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the Material codes identified in this procedure.

D. Refer to REPAIR-GENERAL, Figure 601 for standard true position dimensioning symbols shown in the repair.

2. Plating Repair

A. Repair is only replacement of the original finish. Refer to Refinish Instructions, REPAIR 2-1, Figure 601.



Cap Repair
Figure 601

PISTON - REPAIR 3-1

274T4628–1

1. General

A. This procedure gives the data that is necessary to repair and refinish the piston.

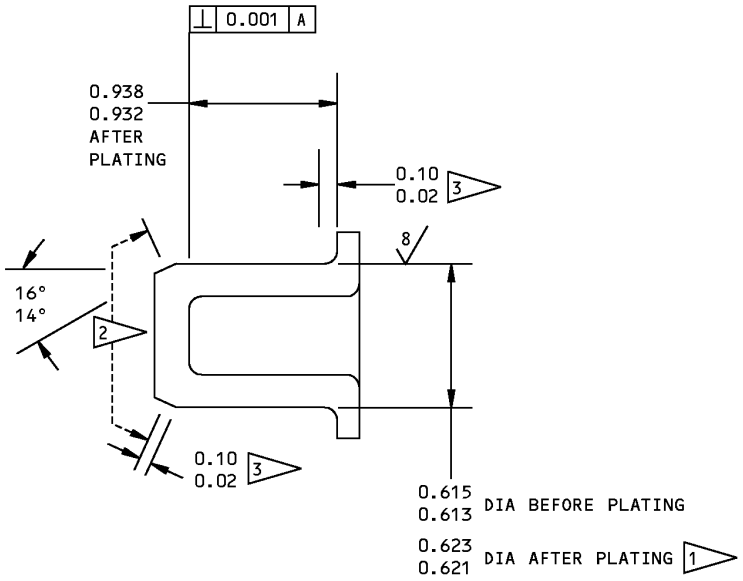
B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the Material codes identified in this procedure.

D. Refer to REPAIR-GENERAL, Figure 601 for standard true position dimensioning symbols shown in the repair.

2. Plating Repair

A. Repair is only replacement of the original finish. Refer to Refinish Instructions, REPAIR 3-1, Figure 601.



REFINISH

CHROME PLATE OD AS NOTED 1. CADMIUM PLATE END AS NOTED 2. NO FINISH OTHER SURFACES

1 CHROME PLATE (F-15.04) 0.003-0.005 THICK

2 CADMIUM PLATE (F-15.02)

3 CHROME PLATE RUNOUT

REPAIR

(SAME AS REFINISH)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: 4340 STEEL, 180-200 KSI

ALL DIMENSIONS ARE IN INCHES

Piston Repair and Refinish
Figure 601

PLUG - REPAIR 4-1

274T4629–1, –4

1. General

A. This procedure gives the data that is necessary to repair and refinish the plug.

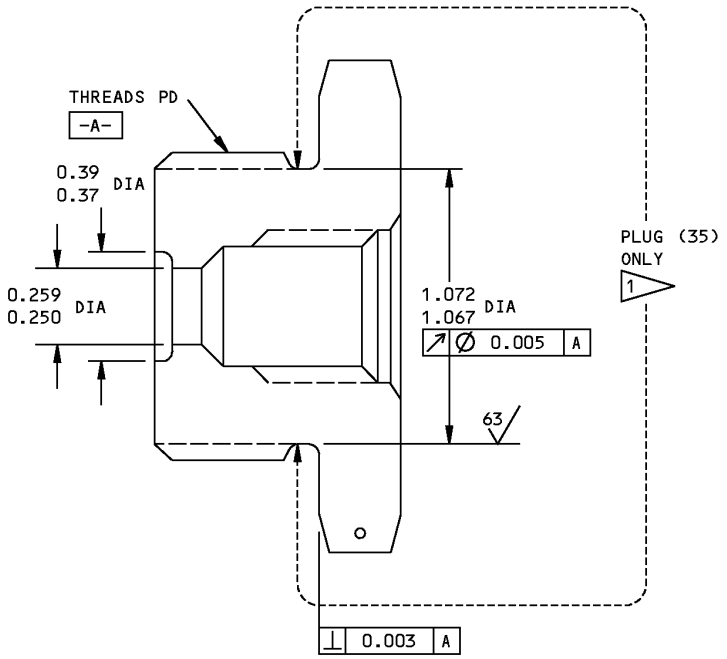
B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the Material codes identified in this procedure.

D. Refer to REPAIR-GENERAL, Figure 601 for standard true position dimensioning symbols shown in the repair.

2. Plating Repair

A. Repair is only replacement of the original finish. Refer to Refinish Instructions, REPAIR 4-1, Figure 601.



REFINISH

PLUG (35) — CADMIUM PLATE AREAS SHOWN BY 1
NO FINISH ON OTHER AREAS.

PLUG (35A) — CHROMIC ACID ANODIZE (F-17.04)

1 CADMIUM PLATE (F-15.02)

REPAIR

(SAME AS REFINISH)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: PLUG (35) — 4340 STEEL, 125-145 KSI

PLUG (35A) — AL ALLOY

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Plug Repair
Figure 601

VALVE ASSEMBLY - REPAIR 5-1

274N1051–1, –2, –3

1. General

A. This procedure gives the data that is necessary to repair and refinish the valve assembly.

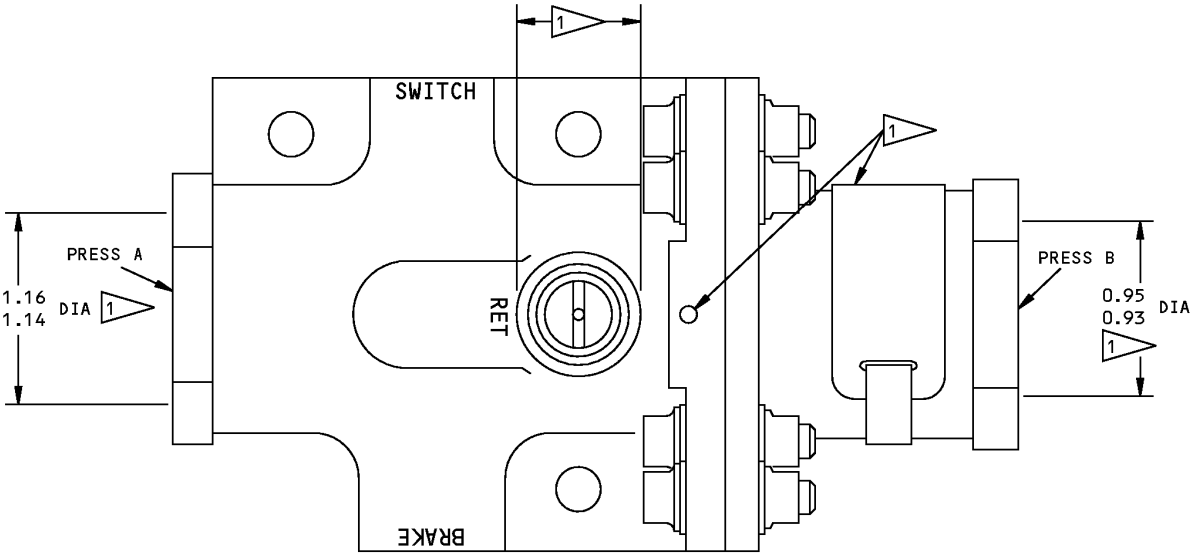
B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the Material codes identified in this procedure.

D. Refer to REPAIR-GENERAL, Figure 601 for standard true position dimensioning symbols shown in the repair.

2. Refinish

A. Repair is only replacement of the original finish. Refer to Refinish Instructions, REPAIR 5-1, Figure 601.



REFINISH

NOTE: APPLICATION OF THIS FINISH IS OPTIONAL.

APPLY BMS 10-11, TYPE 1, PRIMER (F-20.02)
AND SRF-14.9813 UNLESS SHOWN 1.

1 NO PRIMER OR ENAMEL ON THIS AREA.

ALL DIMENSIONS ARE IN INCHES

274N1051-1,-2,-3 Valve Assembly Top Coat Refinish
Figure 601

MISCELLANEOUS PARTS REFINISH - REPAIR 6-1

1. **General**
   A. Use this procedure to refinish the parts which are not in the other repairs.
   B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.
   C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the Material codes identified in this procedure.
   D. Refer to IPL Figure 1 for item numbers.
2. **Refinish**
   A. Repair of the parts in REPAIR 6-1, Table 601 is only replacement of the original finish.

Table 601: Refinish Details

IPL FIG. 1 ITEM	MATERIAL	FINISH
Valve assembly (30)	- - -	No finish (F-25.01).
Orifice (80A)	15-5PH CRES, 180-200 ksi	Passivate (F-17.25, which replaces F-17.09).
Plug (85)	Al alloy	Chromic acid anodize (F-17.04).
Sleeve (100), slide (105)	440C CRES	Passivate (F-17.25, which replaces F-17.09).

ASSEMBLY

1. General

A. Use this procedure to assemble the brake accumulator isolation valve assembly or the alternate brake selector valve 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. Lubrication

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D50097	Lubricant - Assembly, MSC352	
D50122	Fluid - Hydraulic, Skydrol	BMS3-11, Type IV or Type V

B. Procedure

(1) Lightly lubricate the O-rings with hydraulic fluid, D50122 or lubricant, D50097 before you install them.

3. Assembly (ASSEMBLY, Figure 701)

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995˜ C32
G50347	Lockwire - Nickel-copper, 0.032 inch diameter	NASM20995N˜ C32

B. References

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

C. Procedure

(1) Install bolts (45A), washers (50), nuts (55) on cap (60) and body (130). Tighten the nut.

(2) Install orifice (80A) in the body and tighten it to 75-125 pound-inches.

CAUTION: SLIDE (105) AND SLEEVE (100) ARE A MATCHED SET. PRIOR TO INSTALLATION VERIFY THAT RINGS (120, 125) ARE IN PLACE.

(3) Install rings (120, 110), packings (115, 125) on sleeve (100). Install slide assembly (95) on body (130). Install packing (90) on plug (85) and screw the plug into the body.

(4) Hold body (130) and tighten plug (85) to 710-790 pound-inches.

(5) Install ring (65), packing (70) on cap (60). Install packing (40) on plug (35) and screw the plug into the cap. Tighten the plug to 570-630 pound-inches.

(6) As applicable, install packings (7 or 9, 15, 25), switch (5), union or reducer (6), plugs (8), union or reducers (10, 20) on the valve assembly.

(7) Do a test of the unit per TESTING AND FAULT ISOLATION.

(8) After the test, install lockwire, G01048 or lockwire, G50347 (SOPM 20-50-02) as shown in ASSEMBLY, Figure 702.

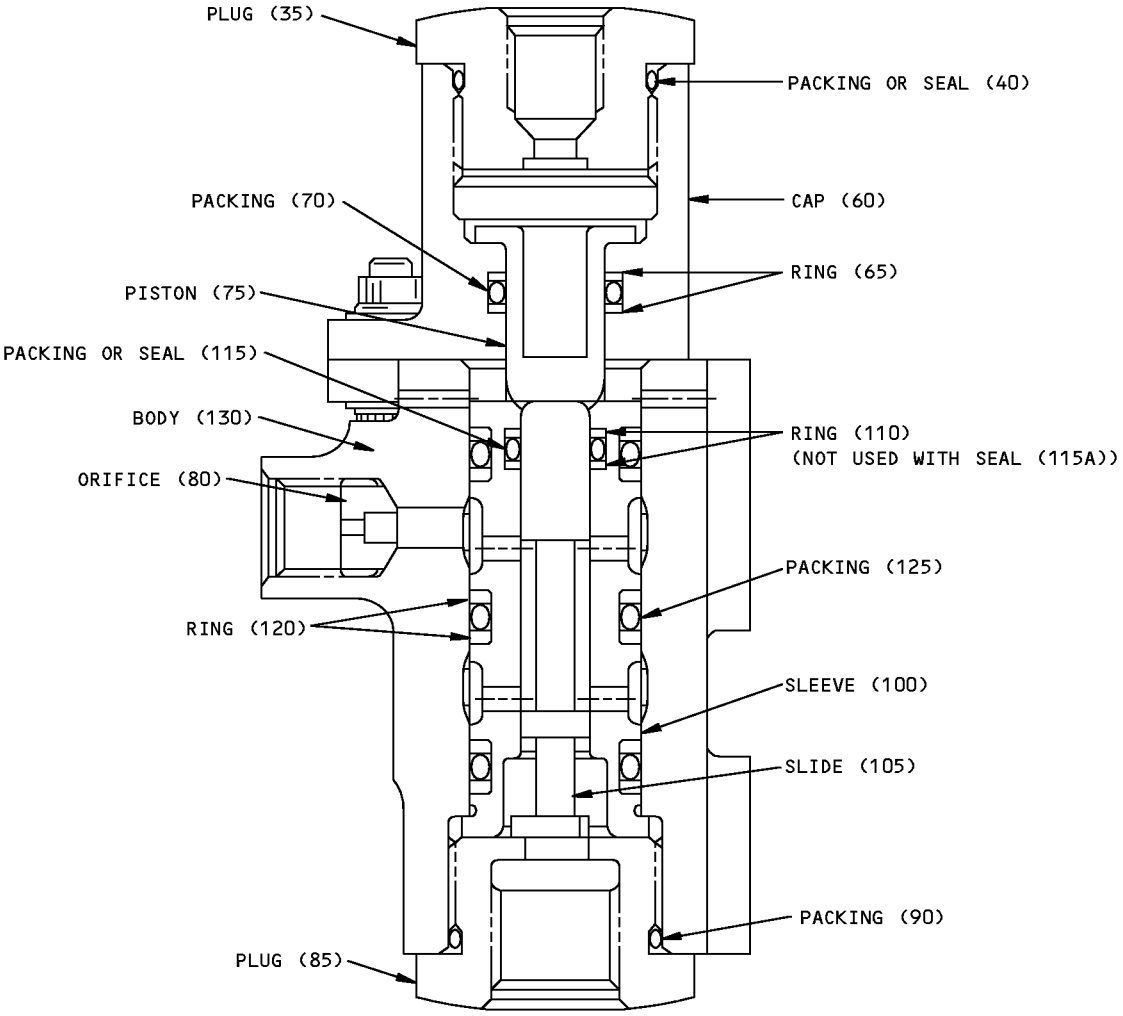
4. Storage Instructions

A. References

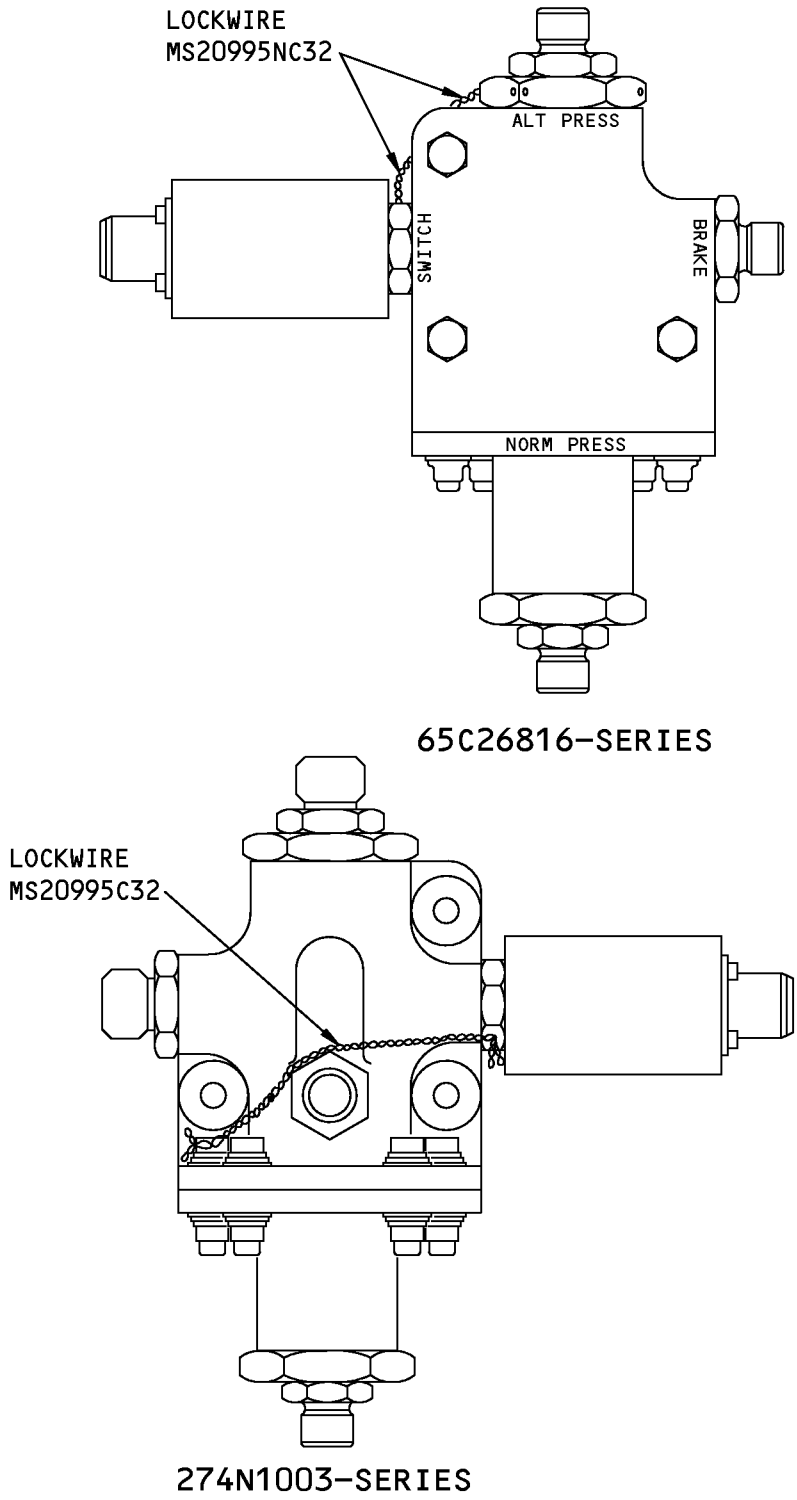
Reference	Title
SOPM 20-44-02	TEMPORARY PROTECTIVE COATINGS
SOPM 20-70-01	PROTECTION, STORAGE AND HANDLING OF AIRPLANE COMPONENTS

B. Procedure

(1) Give protection to the unit and put it away by standard industry practices and the instructions in SOPM 20-44-02 and SOPM 20-70-01.



Assembly Details
Figure 701



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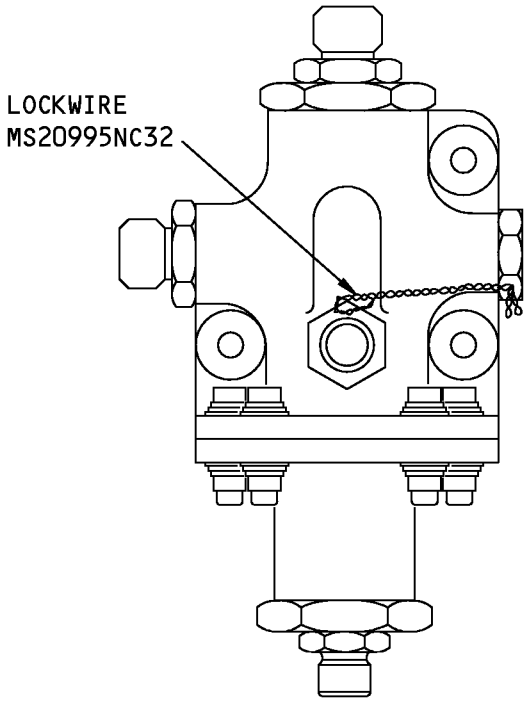
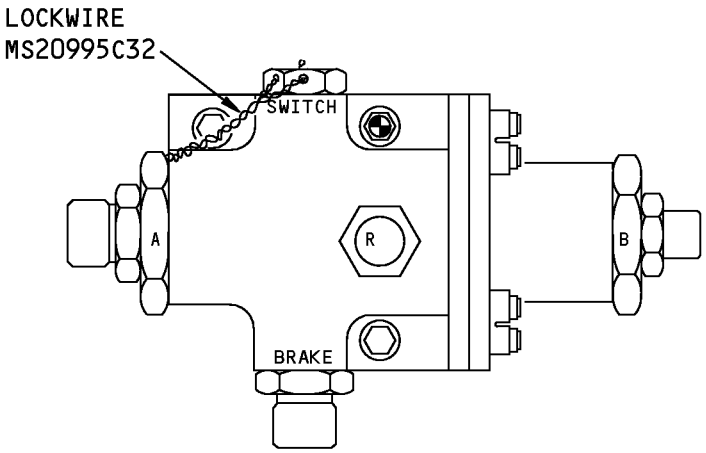
Lockwire Details
Figure 702 (Sheet 1 of 2)



274N1028-SERIES

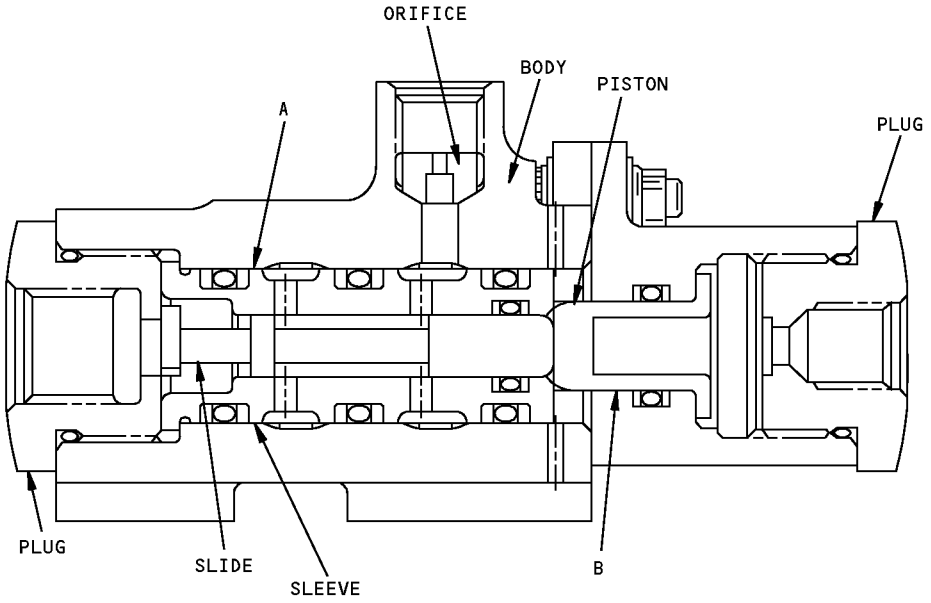


274U0003-SERIES

1653186 S0000303379_V1

Lockwire Details
Figure 702 (Sheet 2 of 2)

FITS AND CLEARANCES



Ref Letter Fig.801	Mating Item No. IPL Fig.	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID (130) OD (95)	1.053 1.050	1.055 1.051	0.002	0.005			
B	ID (60) OD (75)	0.625 0.621	0.626 0.623	0.002	0.005			

Fits and Clearances
Figure 801

REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
1	35	Plug	570-630	
1	80A	Orifice	75-125	
1	85	Plug	710-790	

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

81018 S00061046587_V2

Torque Table
Figure 802

BOEING®

COMPONENT MAINTENANCE MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

(NOT APPLICABLE)

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

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
01673	AIRDROME PRECISION COMPONENTS 3251 E AIRPORT WAY LONG BEACH, CALIFORNIA 90806-2407 FORMERLY AIRDROME PARTS CO
02697	PARKER-HANNIFIN CORP SEAL GROUP O-RING DIV 2360 PALUMBO DRIVE PO BOX 11751 LEXINGTON, KENTUCKY 40509 FORMERLY V17506 IN CLEVELAND, OHIO FORMERLY PARKER SEALS V4J413
02750	EATON AEROSPACE ENGINEERED SENSORS 15 DURANT AVENUE BETHEL, CONNECTICUT 06801-1901 FORMERLY CONSOLIDATED CONTROLS; FORMERLY EATON CORP PRESSURE SENSORS DIV
06710	LAMSON AND SESSIONS CO THE VALLEY-TODECO 12975 BRADLEY AVENUE SYLMAR, CALIFORNIA 91342-3830 FORMERLY VALLEY BOLT CORP VB0097 IN NORTH HOLLYWOOD, CA
06725	AIR INDUSTRIES CORPORATION 12570 KNOTT STREET GARDEN GROVE, CALIFORNIA 92641-3932 FORMERLY AIR INDUSTRIES OF CALIF IN GARDENA, CALIF.

Code	Name
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
09257	BUSAK AND SHAMBAN INC SEALS DIV 2531 BREMER DR PO BOX 176 FORT WAYNE, INDIANA 46801 FORMERLY SHAMBAN, W S AND CO
11328	Replaced: [V11328] AEROQUIP SEE EATON AEROQUIP V00624 LINAIR ENG A TELEDYNE CO SEE TELEDYNE LINAIR ENGINEERING TELEDYNE INC SEE LINAIR ENGINEERING TELEDYNE LINAIR ENG SEE AEROQUIP CORP LINAIR DIV by Code: Name and Address below 00624: EATON AEROQUIP INC ENGINEERED SYSTEMS DIV 300 S EAST AVE JACKSON, MICHIGAN 49203-1972 FORMERLY AEROQUIP ELBEE PLANT V99879 OR WESTERN PLANT V70128; FORMERLY AEROQUIP AEROSP DIV JACKSON PLANT; FORMERLY V11328 AEROQUIP LINAIR DIV
14397	FABER ENTERPRISES, INCORPORATED 6606 VARIEL AVE CANOGA PARK, CALIFORNIA 91303-2808
14798	DEUTSCH CO METAL COMPONENTS DIV 14800 SOUTH FIGUEROA STREET GARDEN, CALIFORNIA 90248-1795 FORMERLY WEATHERHEAD V79470 FOR AEROSPACE PROD V 61498 DEUSCH CO THE DEUTSCH AEROSPACE FITTINGS CO DIV

Code	Name
17943	FEDERAL MANUFACTURING CORPORATION 9825 DESOTO AVENUE CHATSWORTH, CALIFORNIA 91311 FORMERLY VB0098, FORMERLY IN NORTH HOLLYWOOD, CALIFORNIA
27624	PB FASTENERS DIV OF BRILES PAUL R 1700 WEST 132ND STREET GARDENA, CALIFORNIA 90249 FORMERLY PAUL R BRILES INC P.B. FASTENER DIV
30780	PARKER-HANNIFIN CORP TUBE FITTING DIVISION 3885 GATEWAY BLVD COLUMBUS, OHIO 43228 FORMERLY IN CLEVELAND, OHIO
30974	AEROFIT PRODUCTS INC 6460 DALE STREET BUENA PARK, CALIFORNIA 90621-3115
50948	PARKER-HANNIFIN CORP HUNTSVILLE AIRCRAFT FACILITY 9400 SOUTH MEMORIAL PARKWAY HUNTSVILLE, ALABAMA 35802 FORMERLY PARKER-HANNIFIN CORP TUBE FITTINGS DIV
73197	HI-SHEAR TECHNOLOGY CORP 2600 SKYPARK DRIVE TORRANCE, CALIFORNIA 90509
80539	SPS TECHNOLOGIES INC DIV AERPSOACE - SANTA ANA 2701 SOUTH HARBOR BOULEVARD SANTA ANA, CALIFORNIA 92704-5803 FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539 AND STANDARD PRESSED STEEL WESTERN DIV V17279
88334	DANA CORP WAREHOUSE OPERATIONS WESTERN REGION WAREHOUSE 8140 WEBB AVE PO BOX 9657 NORTH HOLLYWOOD, CALIFORNIA 91605-1507

Code	Name
92215	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3010 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5102 FORMERLY VOI-SHAN IN CULVER CITY, CALIF
93907	TEXTRON INC CAMCAR DIV 600 18TH AVENUE ROCKFORD, ILLINOIS 61101
96906	MILITARY STANDARDS PROMULGATED BY MILITARY DEPARTMENTS UNDER AUTHORITY OF DEFENSE STANDARDIZATION MANUAL 4120 3-M
97928	Replaced: [V97928] SEE V17446 HUCK INTL by Code: Name and Address below 17446: HUCK INTL INC AEROSPACE FASTENER DIV 900 WATSON CENTER ROAD CARSON, CALIFORNIA 90745-4201 FORMERLY V32134 REXNORD INC; FORMERLY V97928 HUCK INTL

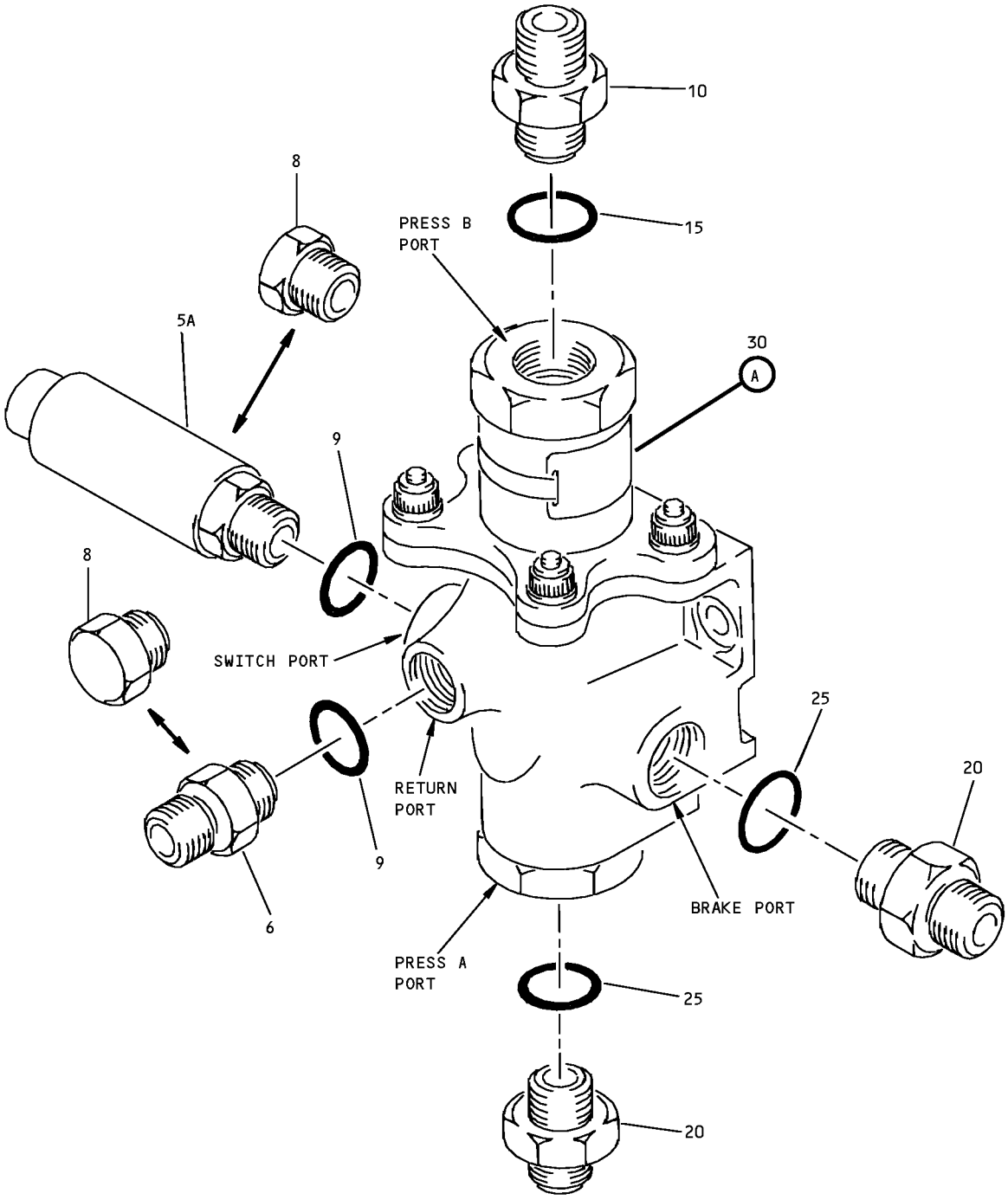
NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
2-01076T6		1	6	1
		1	10	1
2-01076T8		1	20	2
2-02700-6D		1	8A	2
211C223-203		1	5D	1
211C223-209		1	5A	, 1
		1	5B	, 1
211C223-296		1	5A	, 1
		1	5B	, 1
211C223-327		1	5C	1
251N3245-1		1	100	1
251N3245-2		1	108	1
251N3246-1		1	105	1
251N3247-1		1	95	1
274N1003-10		1	1J	RF
274N1003-13		1	1K	RF
274N1003-4		1	1	RF
274N1003-5		1	1A	RF
274N1003-6		1	1B	RF
274N1003-7		1	1C	RF
274N1003-8		1	1D	RF
274N1028-4		1	3	RF
274N1028-5		1	3A	RF
274N1028-6		1	3B	RF
274N1051-1		1	30	1
		1	30A	1
274N1051-2		1	30B	1
		1	30C	1
		1	30D	1
274N1051-3		1	30E	1
		1	30F	1
274N1098-1		1	107	1
274N1099-1		1	109	1
274T0001-1		1	80A	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
274T4625-2		1	130	1
274T4626-1		1	85	1
274T4627-1		1	60	1
274T4628-1		1	75	1
274T4629-1		1	35	1
		1	35C	1
274T4629-4		1	35A	1
		1	35B	1
		1	35D	1
274U0003-4		1	1L	RF
3-914E515-80		1	40A	1
31794-6D		1	8A	2
4120-587206D		1	8A	2
		1	8A	2
65C26816-2		1	1E	RF
65C26816-3		1	3C	RF
65C26816-4		1	3D	RF
65C26816-5		1	1F	RF
65C26816-6		1	3E	RF
65C26816-7		1	1G	RF
65C26816-8		1	3F	RF
65C26816-9		1	1H	RF
69B80300-18		1	135	1
AFP230-06		1	6	1
		1	10	1
AFP230-08		1	20	2
AFP952-06D		1	8A	2
AN814-6DL		1	8	2
		1	8B	1
AN960D416L		1	50	8
AP1001-06		1	6	1
		1	10	1
AP1001-08		1	20	2
AP1016-06D		1	8A	2
AP10166D		1	8A	2

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BAC27NHY0156		1	140	1
BACB30MR4HK8		1	45A	4
BACB30MR4K8		1	45C	4
		1	45C	4
		1	45C	4
		1	45C	4
		1	45C	4
		1	45C	4
		1	45C	4
		1	45C	4
		1	45C	4
		1	45C	4
BACP20AU6D		1	8A	2
BACU24K6		1	6	1
		1	10	1
BACU24K8		1	20	2
BC902T6		1	6	1
		1	10	1
BC902T8		1	20	2
DB0P20AU6D		1	8A	2
DB0U24K6		1	6	1
		1	10	1
DB0U24K8		1	20	2
ER0806-6D		1	8A	2
ER21902T6		1	6	1
		1	10	1
ER21902T8		1	20	2
F10-6		1	6	1
		1	10	1
F10-8		1	20	2
FER22649T6		1	6	1
		1	10	1
FER22649T8		1	20	2
MS21902-6		1	6A	1
MS21902-6T		1	6	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	10	1
MS21902-8T		1	20	2
MS21916-6-4		1	10A	1
		1	13	1
MS21916-8-6		1	20A	2
MS28774-111		1	110	2
MS28774-114		1	65	2
MS28774-211		1	120	6
NAS1611-111		1	115	1
NAS1611-114		1	70	1
NAS1611-121		1	40	1
NAS1611-211		1	125	3
NAS1612-16		1	90	1
NAS1612-6		1	9	2
		1	15	1
NAS1612-8		1	25	2
NAS1804-4		1	55	4
S271T452-15		1	5C	1
S271T452-7		1	5D	1
S271T452-8		1	5A	, 1
		1	5B	, 1
S30775-111H5		1	117A	1



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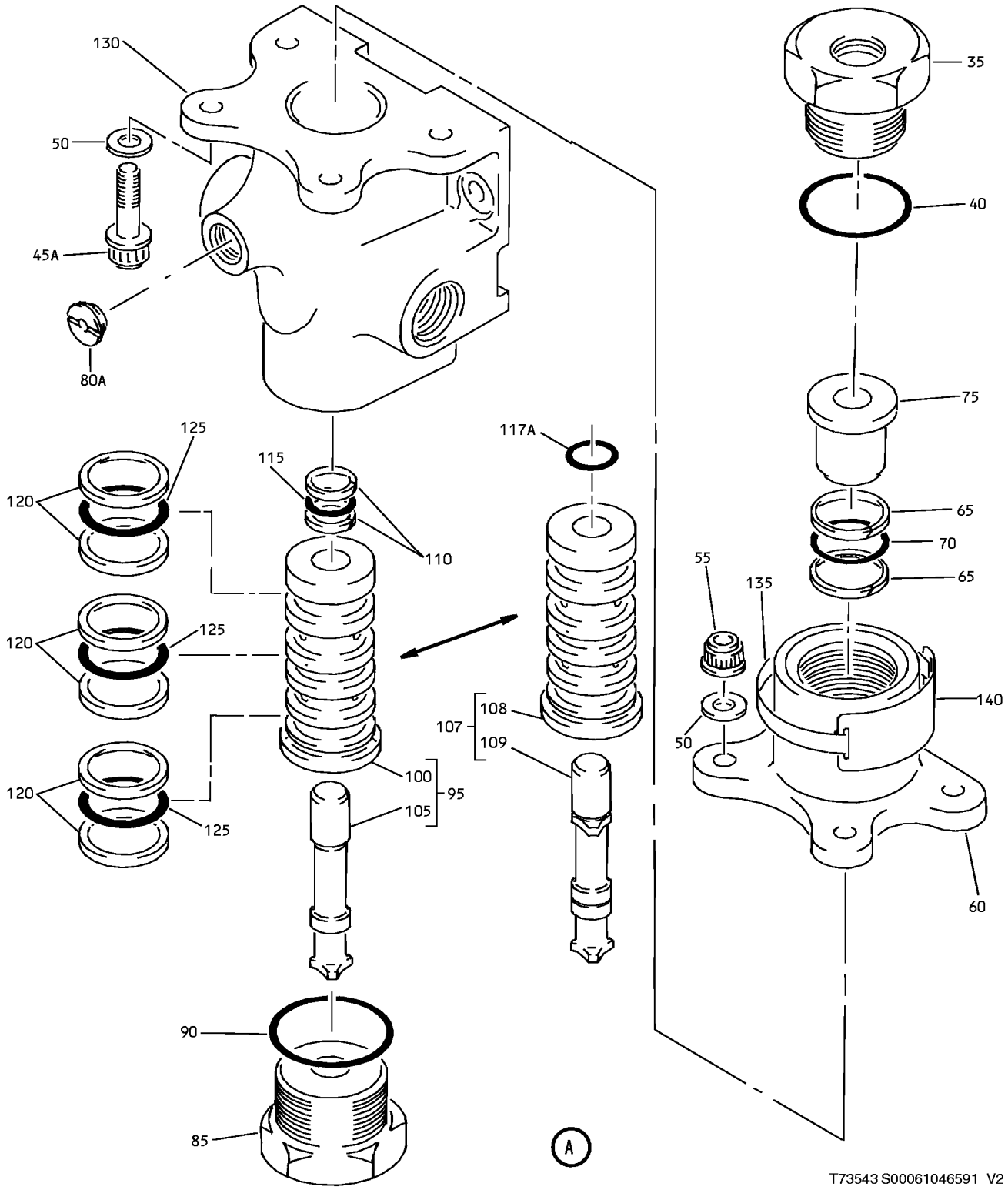
Alternate Brake Selector Valve Assembly
IPL Figure 1 (Sheet 1 of 2)



Alternate Brake Selector Valve Assembly
IPL Figure 1 (Sheet 2 of 2)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–1	274N1003-4		VALVE ASSY-ALTERNATE BRAKE SELECTOR	A	RF
–1A	274N1003-5		VALVE ASSY-ALTERNATE BRAKE SELECTOR	C	RF
–1B	274N1003-6		VALVE ASSY-ALTERNATE BRAKE SELECTOR	D	RF
–1C	274N1003-7		VALVE ASSY-ALTERNATE BRAKE SELECTOR	G	RF
–1D	274N1003-8		VALVE ASSY-ALTERNATE BRAKE SELECTOR	H	RF
–1E	65C26816-2		VALVE ASSY-ALTERNATE BRAKE SELECTOR	J	RF
–1F	65C26816-5		VALVE ASSY-ALTERNATE BRAKE SELECTOR	K	RF
–1G	65C26816-7		VALVE ASSY-ALTERNATE BRAKE SELECTOR	L	RF
–1H	65C26816-9		VALVE ASSY-ALTERNATE BRAKE SELECTOR	M	RF
–1J	274N1003-10		VALVE ASSY-ALTERNATE BRAKE SELECTOR	S	RF
–1K	274N1003-13		VALVE ASSY-ALTERNATE BRAKE SELECTOR	T	RF
–1L	274U0003-4		VALVE ASSY-ALTERNATE BRAKE SELECTOR	U	RF
–3	274N1028-4		VALVE ASSY-ACCUMULATOR ISOLATION	B	RF
–3A	274N1028-5		VALVE ASSY-ACCUMULATOR ISOLATION	E	RF
–3B	274N1028-6		VALVE ASSY-ACCUMULATOR ISOLATION	F	RF
–3C	65C26816-3		VALVE ASSY-ACCUMULATOR ISOLATION	N	RF
–3D	65C26816-4		VALVE ASSY-ACCUMULATOR ISOLATION	P	RF
–3E	65C26816-6		VALVE ASSY-ACCUMULATOR ISOLATION	Q	RF

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–3F	65C26816-8		VALVE ASSY-ACCUMULATOR ISOLATION	R	RF
5	211C223-175		DELETED		
5A	211C223-296		. SWITCH-HYDR PRESSURE (V02750) (SPEC S271T452-8) (OPT 211C223-209 (V02750))	A, C, D, G, T	, 1
–5B	211C223-209		. SWITCH-HYDR PRESSURE (V02750) (SPEC S271T452-8) (OPT 211C223-296 (V02750))	A, C, D, G	, 1
–5C	211C223-327		. SWITCH-HYDR PRESSURE (V02750) (SPEC S271T452-15)	H, S	1
–5D	211C223-203		. SWITCH-HYDR PRESSURE (V02750) (SPEC S271T452-7)	J-M	1
6	BC902T6		. UNION (V50948) (SPEC BACU24K6) (OPT DB0U24K6 (V14798)) (OPT ER21902T6 (V88334)) (OPT FER22649T6 (V14397)) (OPT F10-6 (V73197)) (OPT 2-01076T6 (V11328)) (OPT AFP230-06 (V30974)) (OPT AP1001-06 (V01673)) (OPT MS21902-6T (V96906))	A, C, D, G, H, S, T, U	1
6A	MS21902-6		. UNION	J-M	1
7	NAS1612-6		DELETED		
8	AN814-6DL		. PLUG AND BLEEDER	B, E, F, P, Q, R, U	2

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–8A	DB0P20AU6D		. PLUG (V14798) (SPEC BACP20AU6D) (OPT ER0806-6D (V88334)) (OPT 2-02700-6D (V11328)) (OPT 4120-587206D (V30780)) (OPT AP10166D (V01673)) (OPT 4120-587206D (V50948)) (OPT 31794-6D (V14397)) (OPT AFP952-06D (V30974)) (OPT AP1016-06D (V01673))	N	2
–8B	AN814-6DL		. PLUG AND BLEEDER	U	1
9	NAS1612-6		. PACKING		2
10	BC902T6		. UNION (V50948) (SPEC BACU24K6) (OPT DB0U24K6 (V14798)) (OPT ER21902T6 (V88334)) (OPT FER22649T6 (V14397)) (OPT F10-6 (V73197)) (OPT 2-01076T6 (V11328)) (OPT AFP230-06 (V30974)) (OPT AP1001-06 (V01673)) (OPT MS21902-6T (V96906))	A-H, S, T, U	1
–10A	MS21916-6-4		. REDUCER	J-R	1
–13	MS21916-6-4		. REDUCER	J-R	1
15	NAS1612-6		. PACKING		1
20	BC902T8		. UNION (V50948) (SPEC BACU24K8) (OPT DB0U24K8 (V14798)) (OPT ER21902T8 (V88334)) (OPT FER22649T8 (V14397)) (OPT F10-8 (V73197)) (OPT 2-01076T8 (V11328)) (OPT AFP230-08 (V30974)) (OPT AP1001-08 (V01673)) (OPT MS21902-8T (V96906))	A-H, S, T, U	2
–20A	MS21916-8-6		. REDUCER	J-R	2
25	NAS1612-8		. PACKING		2
30	274N1051-1		. VALVE ASSY	A, B, N	1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
30A	274N1051-1		. VALVE ASSY (OPT ITEM 30B)	J, P	1
–30B	274N1051-2		. VALVE ASSY (OPT ITEM 30A)	J, P	1
–30C	274N1051-2		. VALVE ASSY	K, Q	1
–30D	274N1051-2		. VALVE ASSY (OPT ITEM 30E)	C, E	1
–30E	274N1051-3		. VALVE ASSY (OPT ITEM 30D)	C, E	1
–30F	274N1051-3		. VALVE ASSY	D, F, G, H, L, M, R-U	1
–32	274N1051-2		DELETED		
–32A	274N1051-3		DELETED		
–34	274N1051-3		DELETED		
35	274T4629-1		. . PLUG (OPT ITEM 35A) (USED ON ITEMS 30B, 30C, 30D)		1
–35A	274T4629-4		. . PLUG (OPT ITEM 35) (USED ON ITEMS 30B, 30C, 30D)		1
–35B	274T4629-4		. . PLUG (USED ON ITEMS 30E, 30F)		1
35C	274T4629-1		. . PLUG (REPLACED BY ITEM 35D) (USED ON ITEM 30D)		1
–35D	274T4629-4		. . PLUG (REPLACES ITEM 35C) (USED ON ITEM 30D)		1
40	NAS1611-121		. . PACKING (USED ON ITEMS 30, 30A, 30B, 30C, 30D)		1
–40A	3-914E515-80		. . PACKING (V02697) (USED ON ITEMS 30E, 30F)		1
–42	3-914E515-80		DELETED		
–45	BACB30MT4HT8		DELETED		

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
45A	BACB30MR4HK8		. . BOLT (OPT ITEM 45C)		4
–45B	BACB30MR4HK8		DELETED		
–45C	BACB30MR4K8		. . BOLT (V06710) (SPEC BACB30MR4K8) (OPT BACB30MR4K8 (V06725)) (OPT BACB30MR4K8 (V08524)) (OPT BACB30MR4K8 (V17943)) (OPT BACB30MR4K8 (V27624)) (OPT BACB30MR4K8 (V80539)) (OPT BACB30MR4K8 (V92215)) (OPT BACB30MR4K8 (V93907)) (OPT BACB30MR4K8 (V97928)) (OPT ITEM 45A)		4
50	AN960D416L		. . WASHER		8
55	NAS1804-4		. . NUT		4
60	274T4627-1		. . CAP		1
65	MS28774-114		. . RETAINER-BACKUP		2
70	NAS1611-114		. . PACKING		1
75	274T4628-1		. . PISTON		1
–80	274T0001-10		DELETED		
80A	274T0001-1		. . ORIFICE		1
85	274T4626-1		. . PLUG		1
–85A	274T4626-3		DELETED		
–87	274T4626-3		DELETED		
90	NAS1612-16		. . PACKING		1
95	251N3247-1		. . SLIDE ASSY (USED ON ITEMS 30, 30A, 30B, 30C, 30D)		1
100	251N3245-1		. . . SLEEVE (MATCHED SET)		1
105	251N3246-1		. . . SLIDE (MATCHED SET)		1
107	274N1098-1		. . SLIDE ASSY (USED ON ITEMS 30E, 30F)		1
108	251N3245-2		. . . SLEEVE (MATCHED SET)		1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
109	274N1099-1		. . . SLIDE (MATCHED SET)		1
110	MS28774-111		. . RETAINER-BACKUP (USED ON ITEMS 30, 30A, 30B, 30C, 30D)		2
115	NAS1611-111		. . PACKING (USED ON ITEMS 30, 30A, 30B, 30C, 30D)		1
–117	S30775H5		DELETED		
117A	S30775-111H5		. . SEAL ASSY (V09257) (USED ON ITEMS 30E, 30F)		1
120	MS28774-211		. . RETAINER-BACKUP		6
125	NAS1611-211		. . PACKING		3
130	274T4625-2		. . BODY		1
135	69B80300-18		. . STRAP		1
140	BAC27NHY0156		. . NAMEPLATE		1

–Item not Illustrated