TO: ALL HOLDERS OF BRAKE ACCUMULATOR ISOLATION VALVE ASSEMBLY/ALTERNATE BRAKE SELECTOR VALVE ASSEMBLY COMPONENT MAINTENANCE MANUAL 32-41-12

REVISION NO. 18 DATED NOV 01/00

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.	DESCRIPTION OF CHANGE
701	Deleted lockwire requirement.

BOEING

COMPONENT
MAINTENANCE MANUAL

BRAKE ACCUMULATOR ISOLATION VALVE ASSEMBLY
ALTERNATE BRAKE SELECTOR VALVE ASSEMBLY

PART NUMBERS 65C26816-2 THRU -9
274N1003-4 THRU -8,-10,-13
274N1028-4 THRU -6
274N1051-1 THRU -3
274U0003-4

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

81015

COMPONENT
MAINTENANCE MANUAL

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

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
32-51, Rev. 1			JUL 01/88
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32-1161, Rev. 1		PRR 33983	JUL 01/88
		PRR 52850-27	JUL 01/92

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602	BLANK	
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601	JUL 01/99	01.1
602	BLANK	
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* = REVISED, ADDED OR DELETED

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TABLE OF CONTENTS

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
2. Record of Revisions
3. Temporary Revisions & Service Bulletin Record
4. List of Effective Pages
5. Table of Contents
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 -- Sep 14/83
Disassembly -- Sep 14/83
Assembly -- Sep 14/83

ALTERNATE BRAKE SELECTOR VALVE ASSY/ACCUMULATOR ISOLATION VALVE ASSY

DESCRIPTION AND OPERATION

1. 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. 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)

   Length -- 6.0 inches
   Height -- 3.26 inches
   Width -- 3.0 inches
   Weight -- 2 pounds
   Operating Medium -- BMS 3-11 hydraulic fluid
   Proof pressure -- 4500 psi

TESTING AND TROUBLE SHOOTING

1. Test Equipment and Materials

NOTE: Equivalent substitutes can be used.

A. Hydraulic Test Stand -- To supply hydraulic fluid at 0-5000 psi.

B. Hydraulic Fluid -- BMS 3-11, continuously filtered by 15 micron absolute filter (Ref SOPM 20-60-03).

C. Assembly Lube -- MCS-352 (Ref SOPM 20-60-03)

D. Port Plugs -- AN814( ) or AN814( )J or AN814( )K or AN814( )S

2. Preparation for Test

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

A. Connect test equipment to valve. See Fig. 101 for port identification.

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

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

3. Test

NOTE: See Fig. 102, TROUBLE SHOOTING CHART for probable causes and corrections.

A. Slide leakage and actuation test.

(1) 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.

(2) On 274N1051-1 valve:

(a) Plug SWITCH port. Leave RETURN and BRAKE ports open.

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

(c) Decrease pressure at PRESS B port.

(d) 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.

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

(a) Plug SWITCH port.

(b) Apply 3000 psi hydraulic pressure to PRESS A and RETURN ports.

(c) Adjust flow from BRAKE port, using a needle valve, to provide a low flow.

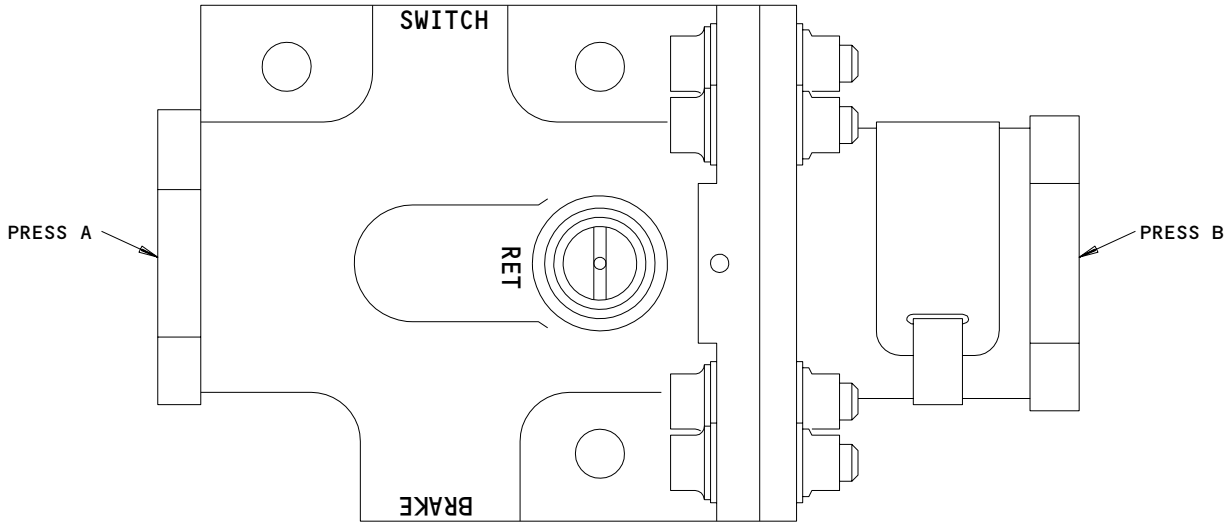
(d) Apply 3000 psi pressure to PRESS B port.

(e) 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.

B. Proof Pressure Test

(1) 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.

(2) Repeat step (1) using 5 psi hydraulic pressure. Check that there is no external leakage or permanent set.



Valve Port Diagram
Figure 101

99200

C. 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.

(1) 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.

(2) 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.)

(3) 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).

4. Post Test Procedures

A. Disconnect the test equipment from the valve assembly.

B. Install clean plugs in the ports.

C. 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.

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 par. 5.A., 5.B.
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 par. 5.A., 5.C.
Slide does not move at the specified pressure.	Defective slide (105)	Disassemble and replace parts per par. 5.A., 5.C.

Trouble Shooting Chart
Figure 102

5. Corrective Procedures

A. Drain all hydraulic fluid from the unit.

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

(1) Disassemble unit per DISASSEMBLY.

(2) Replace defective parts as required.

(3) Assemble unit per ASSEMBLY.

(4) Repeat test per par. 3.

C. Replacement of ring (120, 125), slide assy (95).

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

(2) Replace defective parts as required.

(3) Assemble unit per ASSEMBLY.

(4) Repeat test per par. 3.

DISASSEMBLY

NOTE: Refer to TESTING/TROUBLE SHOOTING to establish condition or probable cause of any malfunction and to determine extent of disassembly and repair.

1. Parts Replacement

   A. Lockwire

   B. O-ring, back-up ring

2. Disassembly (IPL, Fig. 1)

   A. As applicable, remove switch (5), union or reducer (6), plugs (8), unions or reducers (10, 20) and packings (7 or 9, 15, 25) from valve.

   B. Restrain body (130) and remove plug (85) from body. Remove slide assy (95) from body and remove ring (110, 120), packing (115, 125) from sleeve assy.

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

   C. Unscrew plug (35) and remove piston (75), ring (65), packing (70) from cap.

   D. Remove nuts (55), washers (50), bolts (45A) and separate cap (60) from body (130).

   E. Remove packings (40, 90) from plugs (35, 85).

CLEANING

1. Clean all parts, except switch (5, IPL Fig. 1) using standard industry practices (Ref 20-30-03).

2. Clean switch (5) in accordance with manufacturer's instructions.

CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.

2. Magnetic particle check per 20-20-01:

   A. Orifice (80)

   B. Piston (75)

3. Penetrant check per 20-20-02:

   A. Body (130)

   B. Plug (35, 85)

   C. Cap (60)

REPAIR - GENERAL

1. Content

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

P/N	NAME	REPAIR
274T4625	BODY	1-1
274T4627	CAP	2-1
274T4628	PISTON	3-1
274T4629	PLUG	4-1
274N1051	VALVE ASSY	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.

20-00-00 Introduction
20-10-04 Grinding of Chrome Plated Parts
20-30-03 General Cleaning Procedures
20-41-01 Decoding Table for Boeing Finish Codes
20-41-02 Application of Chemical and Solvent Resistant Finishes
20-42-03 Hard Chrome Plating
20-42-05 Bright Cadmium Plating
20-43-01 Chromic Acid Anodizing
20-44-02 Temporary Protective Coating
20-50-12 Application of Adhesives
20-50-06 Installation of O-rings and Teflon Seals
20-60-01 Cleaning Materials
20-60-02 Finishing Materials

3. Materials

NOTE: Equivalent substitutes can be used.

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

B. Protective Finish -- Type 41 (Ref SOPM 20-60-02)

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

4. Dimensioning Symbols

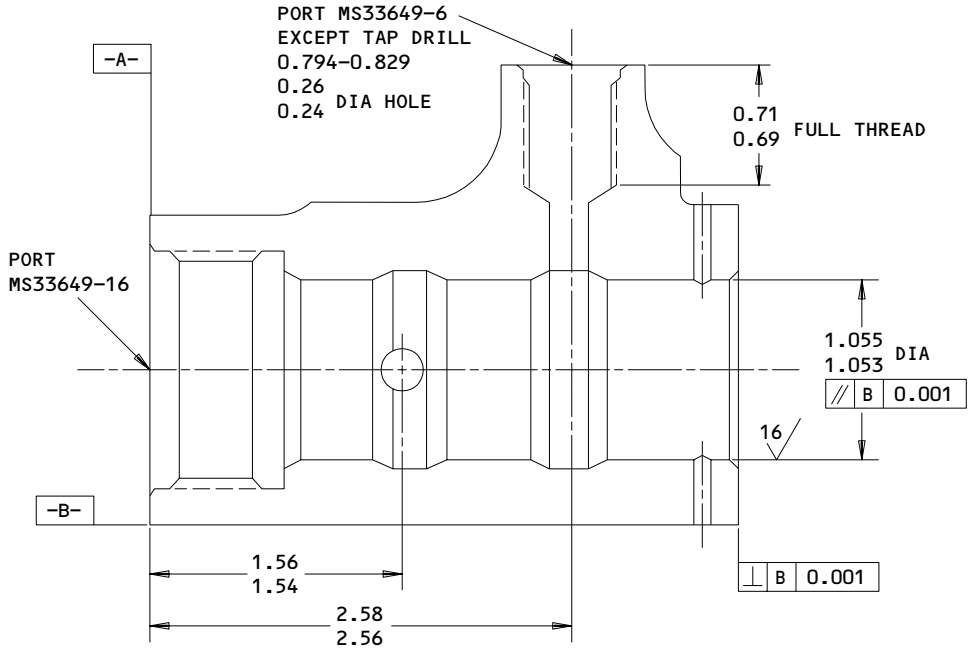
A. Standard True Position Dimensioning Symbols used in applicable repair procedures are shown in SOPM 20-00-00.

BODY - REPAIR 1-1

274T4625-2

1. Plating Repair

A. Repair is only replacement of the restoration of original finish. Refer to Refinish instructions, Fig. 601. Refer to REPAIR-GEN for a list of applicable standard practices.



REFINISH

CHROMIC ACID ANODIZE (F-17.04)
ALL OVER

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

Body Refinish Details
Figure 601

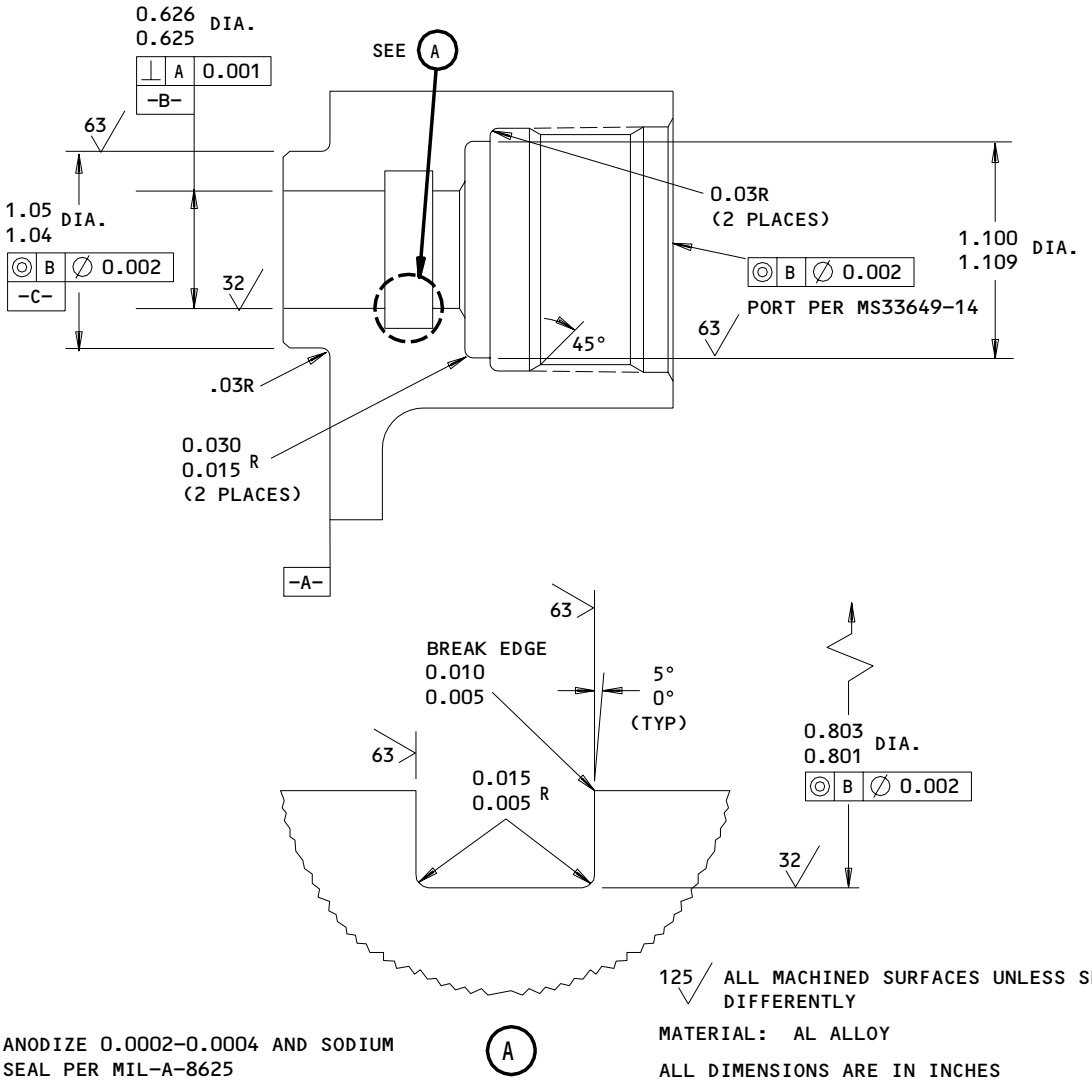
99201

CAP - REPAIR 2-1

274T4627-1

1. Plating Repair

A. Repair is only replacement of the original finish. Refer to Refinish instructions, Fig. 601. Refer to REPAIR-GEN for a list applicable standard practices.



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

REFINISH

FLASH HARD ANODIZE 0.0002-0.0004 AND SODIUM DICHROMATE SEAL PER MIL-A-8625

Cap Repair
Figure 601

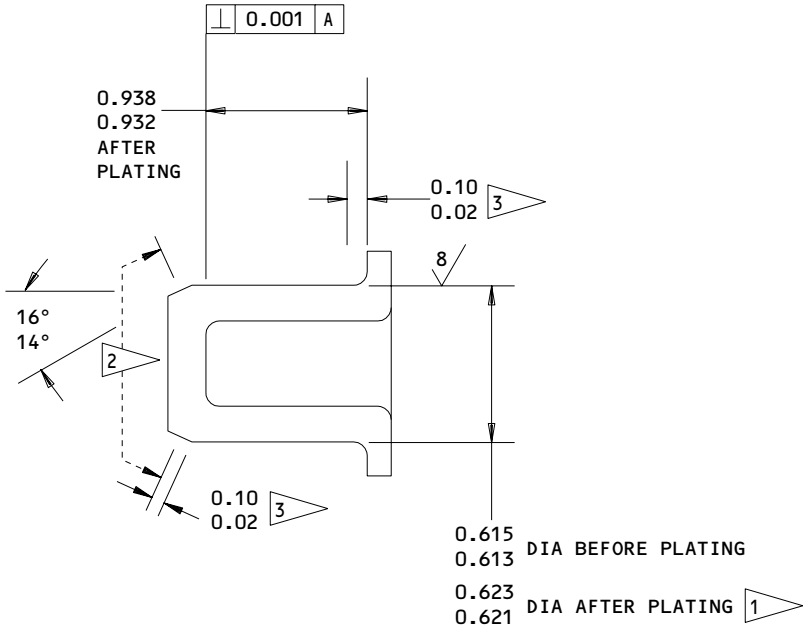
81019

PISTON - REPAIR 3-1

274T4628-1

1. Plating Repair

A. Repair is only replacement of the original finish. Refer to Refinish instructions, Fig. 601. Refer to REPAIR-GEN for a list of applicable standard practices.



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

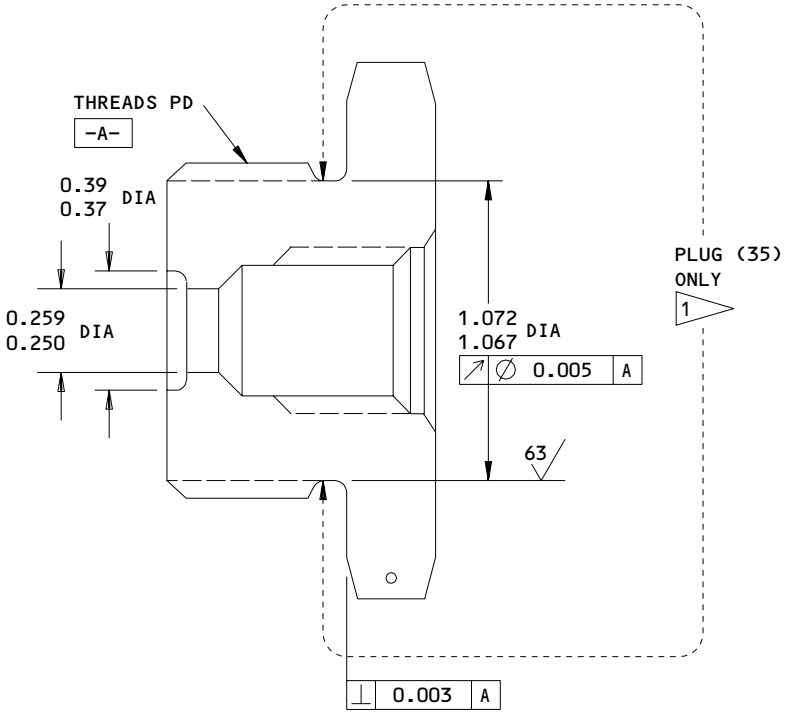
81020

PLUG - REPAIR 4-1

274T4629-1, -4

1. Plating Repair

A. Repair is only replacement of the original finish. Refer to Refinish instructions, Fig. 601. Refer to REPAIR-GEN for a list of applicable standard practices.



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

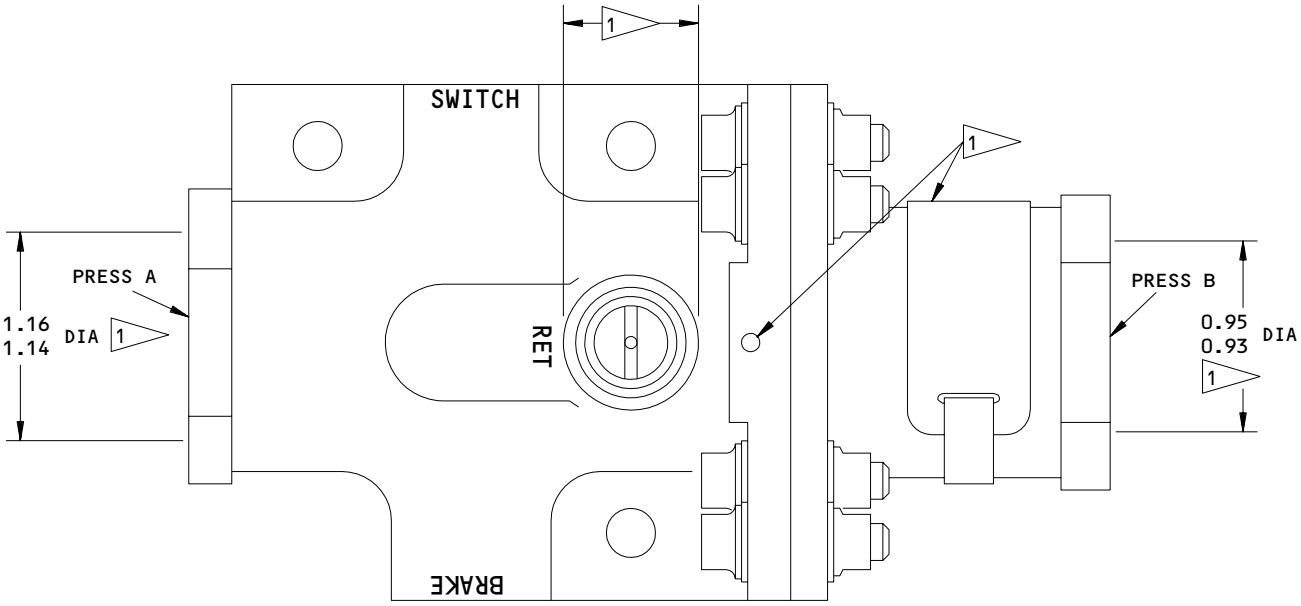
ALL DIMENSIONS ARE IN INCHES

Plug Repair
Figure 601

VALVE ASSEMBLY - REPAIR 5-1

274N1051-1, -2, -3

A. Repair is only replacement of the original finish. Refer to Refinish instructions, Fig. 601. Refer to REPAIR-GEN for a list of applicable standard practices. standard practices.



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

99206

MISCELLANEOUS PARTS REFINISH - REPAIR 6-1

1. Repair of these parts is only replacement of the original finish. Refer to REPAIR-GEN for a list of applicable standard practices.

IPL FIG. 1 ITEM	MATERIAL	FINISH
Valve assembly (30, 32, 34)		No finish.
Orifice (80)	15-5PH CRES, 180-200 ksi	Passivate (F-17.09).
Plug (85)	4340 steel, 125-145 ksi	No finish.
Sleeve (100), slide (105)	440C CRES	Passivate (F-17.09).

Refinish Details
Figure 601

ASSEMBLY

1. Materials

NOTE: Equivalent substitutes can be used.

A. Hydraulic fluid -- BMS 3-11 (SOPM 20-60-03)

B. Assembly lube -- MCS-352 (SOPM 20-60-03)

2. Lubrication

A. Lightly lubricate O-rings with hydraulic fluid or assembly lube prior to assembly.

3. Assembly (IPL, Fig. 1)

A. Install bolts (45A), washers (50), nut (55) on cap (60) and body (130). Install orifice (80) on body. Tighten nut.

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

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

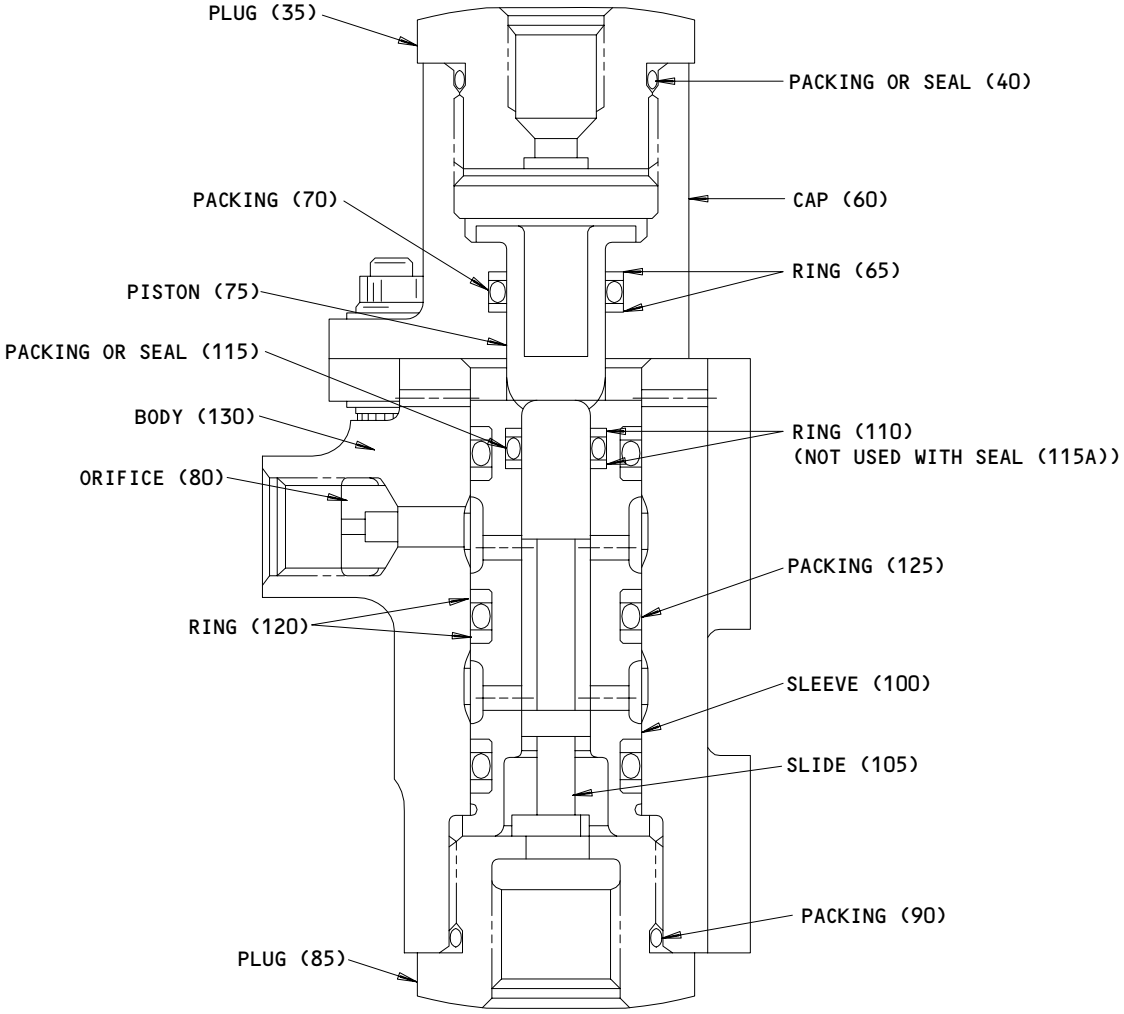
C. Restrain body (130) and tighten plug (85) to 710-790 lb-in.

D. Install ring (65), packing (70) on cap (60). Install packing (40) on plug (35) and screw plug into cap. Tighten plug to 570-630 lb-in.

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

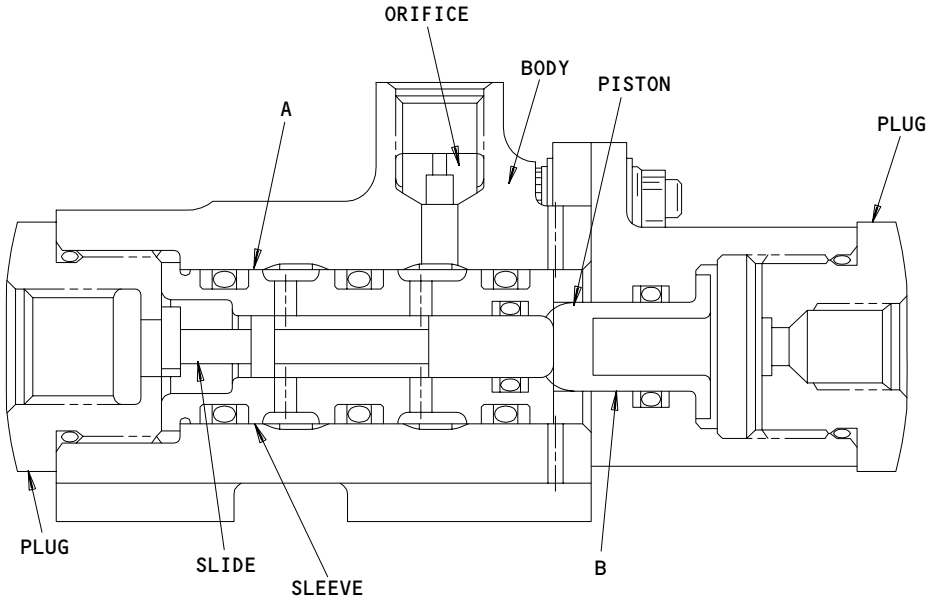
F. Test unit per TESTING/TROUBLE SHOOTING.

4. Give protection to the unit and put it away by standard industry practices.



Assembly Details
Figure 701

81021



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

FOR TORQUE VALUES OF STANDARD FASTENERS, REFER TO 20-50-01			
ITEM NO. IPL FIG. 1	NAME	TORQUE	
		POUND-INCHES	POUND-FEET
35	PLUG	570-630	
85	PLUG	710-790	

Torque Table
Figure 802

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 are 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.

VENDORS

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

02697 PARKER-HANNIFIN CORP SEAL GROUP O-RING DIV
2360 PALUMBO DRIVE PO BOX 11751
LEXINGTON, KENTUCKY 40509

02750 CONSOLIDATED CONTROLS CORPORATION
15 DURANT AVENUE
BETHEL, CONNECTICUT 06801-1901

06710 LAMSON AND SESSIONS CO THE VALLEY-TODECO
12975 BRADLEY AVENUE
SYLMAR, CALIFORNIA 91342-3830

06725 AIR INDUSTRIES CORPORATION
12570 KNOTT STREET
GARDEN GROVE, CALIFORNIA 92641-3932

08524 DEUTSCH FASTENER CORP SEE CODE V97928

09257 SHAMBAN, W.S. & COMPANY
2531 BREMER DRIVE PO BOX 176
FORT WAYNE, INDIANA 46801

11328 AEROQUIP CORP LINAIR DIV
651 WEST KNOX STREET
GARDENA, CALIFORNIA 90248-4409

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

14798 DEUTSCH CO METAL COMPONENTS DIV
14800 SOUTH FIGUEROA STREET
GARDENA, CALIFORNIA 90061-1719

17943 FEDERAL MANUFACTURING CORPORATION
6910 FARMDALE AVENUE
NORTH HOLLYWOOD, CALIFORNIA 91605-6210

27624 PAUL R BRILES INC P.B. FASTENER DIV
1700 WEST 132ND STREET PO BOX 1157
GARDENA, CALIFORNIA 90249-2008

VENDORS

30780 PARKER-HANNIFIN CORP TUBE FITTING DIVISION
3885 GATEWAY BLVD
COLUMBUS, OHIO 43228

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

50948 PARKER-HANNIFIN CORP HUNTSVILLE AIRCRAFT FACILITY
9400 SOUTH MEMORIAL PARKWAY
HUNTSVILLE, ALABAMA 35802

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

88334 WEATHERHEAD GLENDALE,CALIF SEE WEATHERHEAD CLEVELAND V79470

92215 VOI-SHAN DIV OF VSI CORP SUB OF FAIRCHILD INDUSTRIAL INC
8463 HIGUERA STREET
CULVER CITY, CALIFORNIA 90230

93907 TEXTRON INC CAMCAR DIV
600 18TH AVENUE
ROCKFORD, ILLINOIS 61101

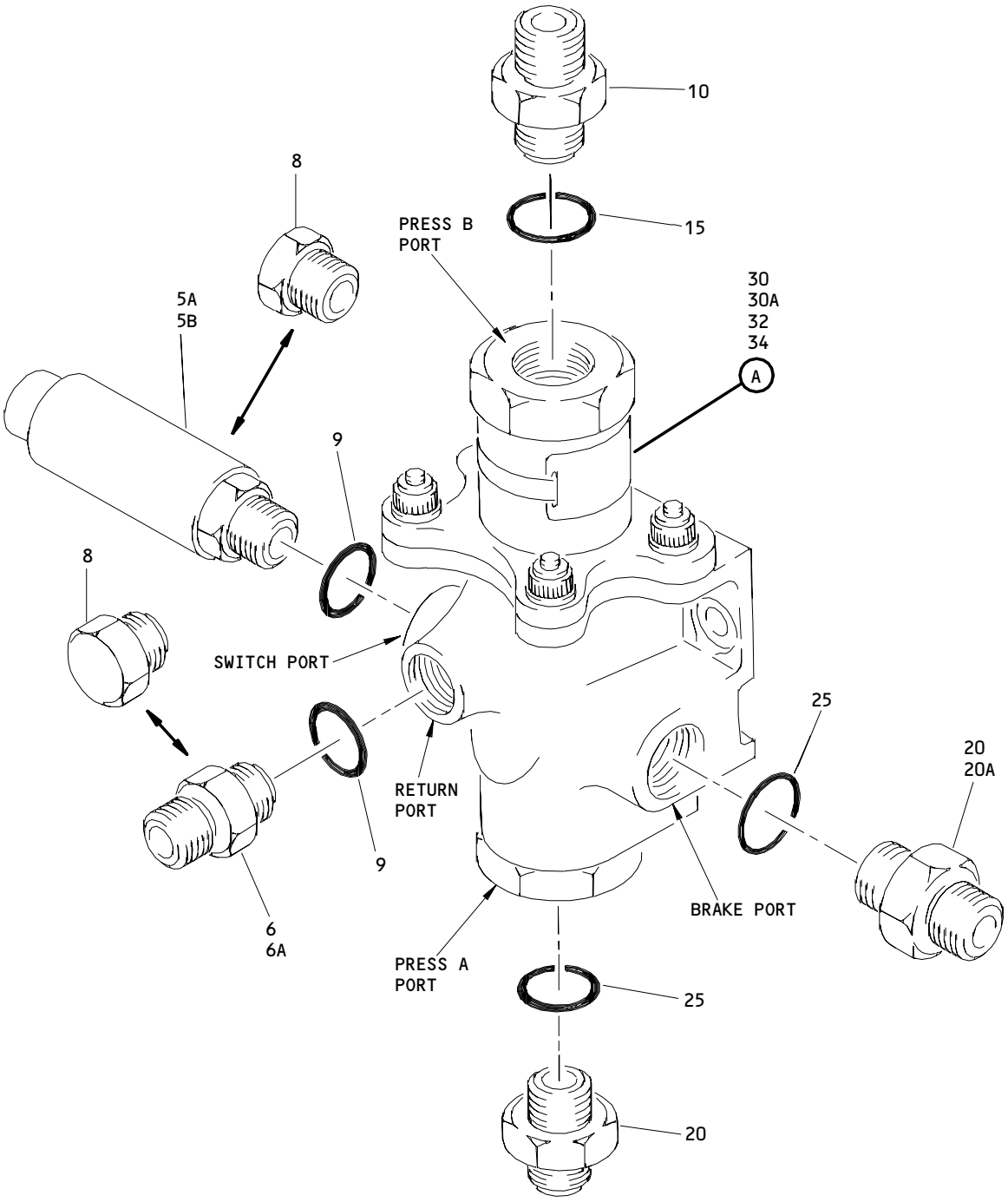
96906 MILITARY STANDARDS PROMULGATED BY MILITARY
DEPARTMENTS UNDER AUTHORITY OF DEFENSE
STANDARDIZATION MANUAL 4120 3-M

97928 DEUTSCH FASTENER CORP
3969 PARAMONT BOULEVARD
LAKEWOOD, CALIFORNIA 90712-4193

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
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
BACB30MR4HK8		1	45A	4
		1	45B	
BACB30MR4K8		1	45C	4
BACB30MT4HT8		1	45	
BACP20AU6D		1	8A	2
BACU24K6		1	6	1
		1	10	1
BACU24K8		1	20	2
BAC27NHY0156		1	140	1
BC902T6		1	6	1
		1	10	1
BC902T8		1	20	2
DBOP20AU6D		1	8A	2
DBOU24K6		1	6	1
		1	10	1
DBOU24K8		1	20	2
ERO806-6D		1	8A	2
ER21902T6		1	6	1
		1	10	1
ER21902T8		1	20	2
FER22649T6		1	6	1
		1	10	1
FER22649T8		1	20	2
F10-6		1	6	1
		1	10	1
F10-8		1	20	2
MS21902-6		1	6A	1
MS21902-6T		1	6	1
		1	10	1
MS21902-8T		1	20	2
MS21916-6-4		1	13	1
		1	10A	1
MS21916-8-6		1	20A	2
MS28774-111		1	110	2
MS28774-114		1	65	2

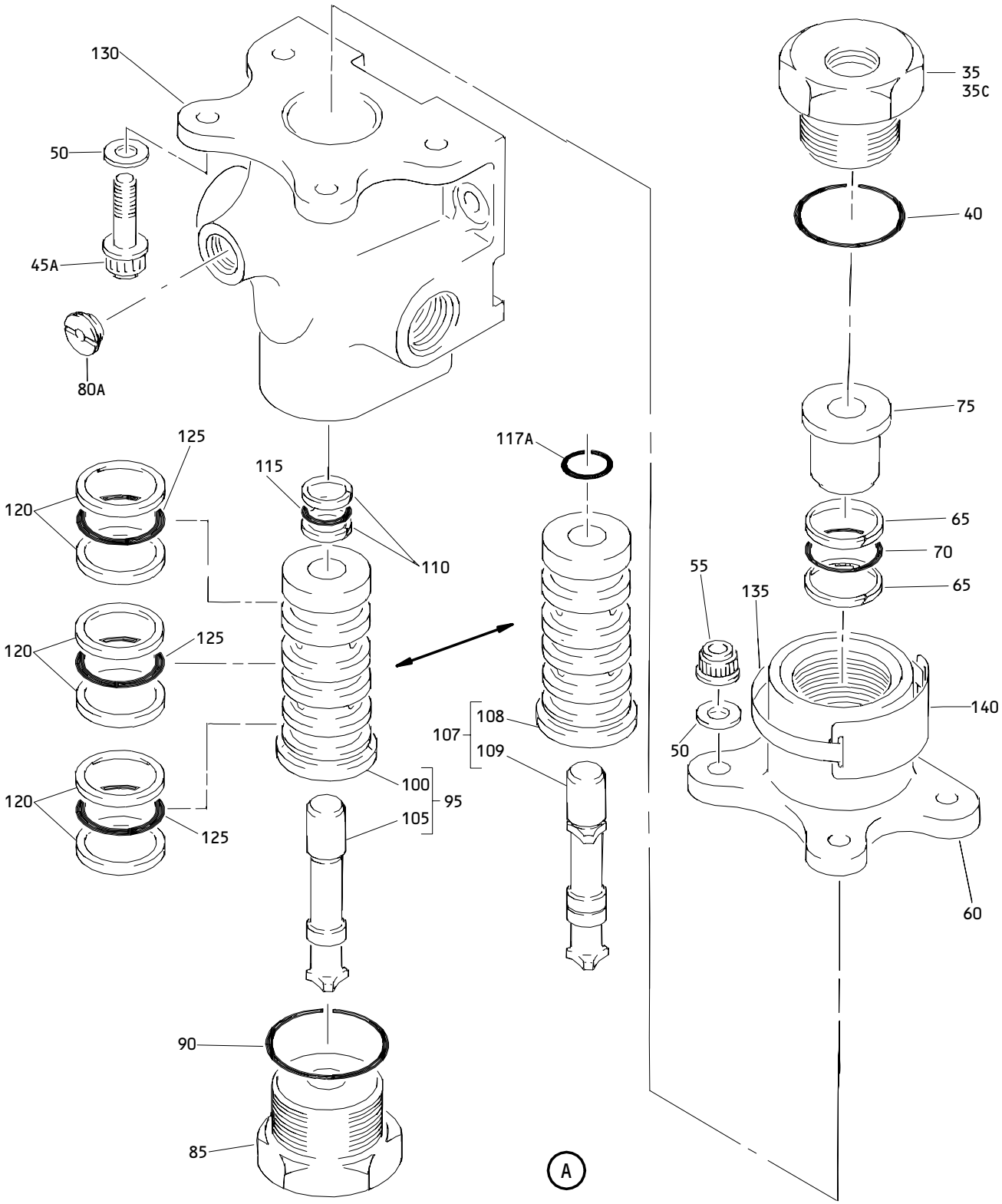
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MS28774-211		1	120	6
NAS1611-111		1	115	1
NAS1611-114		1	70	1
NAS1611-121		1	40	1
NAS1611-211		1	125	3
NAS1612-16		1	90	1
NAS1612-6		1	7	
		1	9	2
		1	15	1
NAS1612-8		1	25	2
NAS1804-4		1	55	4
S271T452-15		1	5C	1
S271T452-7		1	5D	1
S271T452-8		1	5A	1
		1	5B	1
S30775-111H5		1	117A	1
S30775H5		1	117	
2-01076T6		1	6	1
		1	10	1
2-01076T8		1	20	2
2-02700-6D		1	8A	2
211C223-175		1	5	
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	32	1
		1	30B	1
		1	30C	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
274N1051-3		1	34	1
		1	32A	1
274N1098-1		1	107	1
274N1099-1		1	109	1
274T0001-1		1	80A	1
274T0001-10		1	80	
274T4625-2		1	130	1
274T4626-1		1	85	1
274T4626-3		1	87	
		1	85A	
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	42	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



Alternate Brake Selector Valve Assembly
Figure 1 (Sheet 1)

T73542



Alternate Brake Selector Valve Assembly
Figure 1 (Sheet 2)

T73543

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-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
-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))	ACDGT	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-5B	211C223-209		.SWITCH-HYDR PRESSURE (V02750) (SPEC S271T452-8) (OPT 211C223-296 (V02750))	ACDG	1
-5C	211C223-327		.SWITCH-HYDR PRESSURE (V02750) (SPEC S271T452-15)	HS	1
-5D	211C223-203		.SWITCH-HYDR PRESSURE (V02750) (SPEC S271T452-7)	J-M	1
6	BC902T6		.UNION- (V50948) (SPEC BACU24K6) (OPT DBOU24K6 (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))	ACDGH STU	1
6A	MS21902-6		.UNION	J-M	1
7	NAS1612-6		DELETED		
8	AN814-6DL		.PLUG AND BLEEDER	BEFPQ RU	2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-8A	DBOP20AU6D		.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 DBOU24K6 (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-HST U	1
-10A	MS21916-6-4		.REDUCER	J-R	1
-13	MS21916-6-4		.REDUCER	J-R	1
15	NAS1612-6		.PACKING		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
20	BC902T8		.UNION- (V50948) (SPEC BACU24K8) (OPT DBOU24K8 (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-HST U	2
-20A	MS21916-8-6		.REDUCER	J-R	2
25	NAS1612-8		.PACKING		2
30	274N1051-1		.VALVE ASSY	ABN	1
30A	274N1051-1		.VALVE ASSY (OPT ITEM 30B)	JP	1
-30B	274N1051-2		.VALVE ASSY (OPT ITEM 30A)	JP	1
-30C	274N1051-2		.VALVE ASSY	KQ	1
-32	274N1051-2		.VALVE ASSY (OPT ITEM 32A)	CE	1
-32A	274N1051-3		.VALVE ASSY (OPT ITEM 32)	CE	1
-34	274N1051-3		.VALVE ASSY	DFGHL MR-U	1
35	274T4629-1		..PLUG (OPT ITEM 35A) (USED ON ITEMS 30B,30C, 32)		1
-35A	274T4629-4		..PLUG (OPT ITEM 35) (USED ON ITEMS 30B,30C, 32)		1
-35B	274T4629-4		..PLUG (USED ON ITEM 32A,34)		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
35C	274T4629-1		..PLUG- (REPLACED BY ITEM 035D) (USED ON ITEM 32)		1
-35D	274T4629-4		..PLUG- (REPLACES ITEM 35C) (USED ON ITEM 32)		1
40	NAS1611-121		..PACKING- (USED ON ITEMS 30, 30A, 30B, 30C, 32)		1
-42	3-914E515-80		..PACKING- (V02697) (USED ON ITEM 32A, 34)		1
45	BACB30MT4HT8		DELETED		
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

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
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, 32)		1
100	251N3245-1		...SLEEVE-(MATCHED SET)		1
105	251N3246-1		...SLIDE-(MATCHED SET)		1
107	274N1098-1		..SLIDE ASSY- (USED ON ITEM 32A, 34)		1
108	251N3245-2		...SLEEVE-(MATCHED SET)		1
109	274N1099-1		...SLIDE-(MATCHED SET)		1
110	MS28774-111		..RETAINER-BACKUP (USED ON ITEM 30, 30A, 30B, 30C, 32)		2
115	NAS1611-111		..PACKING- (USED ON ITEM 30, 30A, 30B, 30C, 32)		1
117	S30775H5		DELETED		
117A	S30775-111H5		..SEAL ASSY- (V09257) (USED ON ITEM 32A, 34)		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
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