TO: ALL HOLDERS OF STANDBY SYSTEM MODULAR PACKAGE ASSEMBLY OVERHAUL MANUAL, 29-23-21

REVISION NO. 19, DATED JUL 1/03

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D&O	D/Assy	Cleaning	Insp/Chk	Repair	Assy	F/C	Test	T/Shooting	S/Tools	Storage	IPL	L/Overhaul
Added package assemblies 65-44680-19, 65-44681-18 and 276A2001-2 with a housing thicker around the ports per PRR 35005-184					X	X		X	X			X	
Added clarifications and updated callouts					X	X		X	X		X	X	

STANDBY SYSTEM MODULAR PACKAGE ASSEMBLY

29-23-21

BOEING P/N 65-44680-2, -4 thru -7, -10, -11, -12, -14 thru -19
65-44681-1, -3 thru -6, -9, -10, -11, -14 thru -18
276A2001-1, -2

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 31169	Nov 15/68
		PRR 31843	Mar 10/72
		PRR 31941	Mar 10/72
		PRR 32070-10	Mar 10/72
		PRR 32453	Jul 5/76
		PRR 33994	Jun 5/86
29-1044			Sep 5/87
		PRR 34358	Mar 5/88
29-1044R1			Mar 5/89
		PRR 34907	Dec 5/90
29-1062			Sep 5/91
		PRR 35005-184	Jul 1/03

* Indicates pages revised, added or deleted in latest revision
F Indicates foldout pages - print one side only

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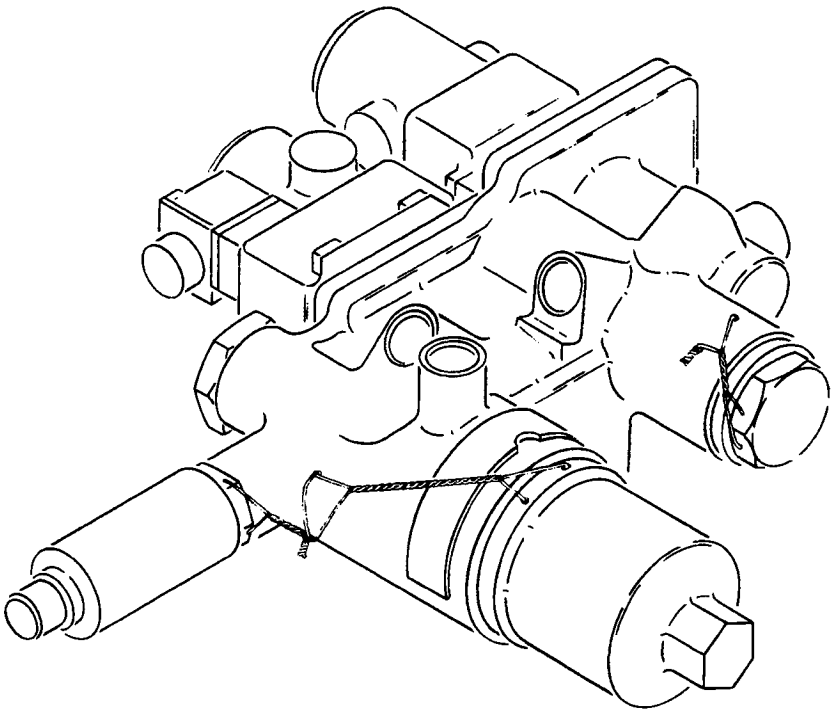
STANDBY SYSTEM MODULAR PACKAGE ASSEMBLY



Standby System Modular Package Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

   A. The standby system modular package assembly consists of two electric motor valve assemblies mounted on a housing. Installed in the housing are a check valve, a pressure relief valve, a pressure switch, a filter element protected by a filter bowl. The housing has one pressure port, one return port and three pressure supply ports.

2. Operation

   A. The unit is installed on the aft bulkhead of the wheel well of the airplane. By operating the three-way two-position valves with electric motors, hydraulic pressure is supplied from the hydraulic standby system to operate hydraulic actuators of the leading edge flaps and the rudder of the airplane.

3. Leading Particulars

   Length (overall) -- 12.5 inches
   Height (overall) -- 12.5 iinches
   Width (overall) -- 4.75 inches
   Weight -- 11.3 pounds

DISASSEMBLY

1. If installed, remove unions (1), union or valve (2), union, valve or plug (2A), reducers (3), reducer or union (3A), and packings (4) from modular package assembly (5) per Fig. 1102. Cut and remove all lockwire.

2. Remove screws (1) and washers (2). Lift off motor valve assemblies (7) taking care not to mar valve stem. Disassemble parts (3 thru 6) (Fig. 1101).

3. Unscrew pressure switch assembly (10). Remove parts (8, 9).

4. Unscrew check valve, adapter, or adapter assembly (15). Disassemble parts (11 thru 14) or (13, 14).

   NOTE: Do not remove Lee jet (15A) from adapter assembly (15) unless required for repair or replacement.

5. Unscrew filter bowl (16). Pull out filter element assembly (19). Remove parts (17, 18, 22, 23).

6. Unscrew filter fitting (20). Remove packing (21).

7. Unscrew pressure relief valve (26). Disassemble parts (24 and 25).

   NOTE: Do not remove inserts (28), shim (30) or nameplate (31) unless required for repair.

CLEANING

1. Wash all metal parts with dry cleaning solvent, Federal Specification P-D-680.

2. Clean all bores, holes, threads and passages with a stiff bristle brush to remove stubborn accumulations of foreign matter.

3. Rinse and dry thoroughly with dry compressed air or with clean, lint-free cloth.

4. For further information, refer to "General Cleaning Procedures," SOPM 20-30-03.

INSPECTION/CHECK

1. Visual Check (Fig. 1101)

   A. Examine all metal parts for pits, scratches, cracks, burrs, corrosion, and damage using strong light and minimum of 10-power magnification.

   B. Carefully check for damage to packing seats, valve lands and grooves.

   C. Check all plated and painted surfaces for blisters and flaking.

   D. Check threads for cross-threading and stripping.

   E. Check nameplate (31) for legibility and adhesion to housing (29).

2. Special Check (Fig. 1101)

   A. If visual examination discloses evidence of defects in any of the parts listed, perform the following checks:

      (1) Dye penetrant check per SOPM 20-20-02 -- filter bowl (16), filter fitting (20) and housing (29).

      (2) Magnetic particle check per SOPM 20-20-01 -- adapter (15, 15B).

REPAIR

1. Materials

   NOTE: Equivalent substitutes can be used.

   A. Adhesive -- Type 38 (SOPM 20-50-12)

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

2. Refinish (Fig. 1101)

   NOTE: Refer to SOPM 20-30-02 for stripping of protective finishes and to SOPM 20-41-01 for explanation of F and SRF finish codes.

   A. Adapter (15, 15B)

      (1) 69-54685-series: Cadmium plate (F-15.06) all exterior surfaces, 0.0003-0.0005 inch thick. No finish on interior surfaces. Material: 4130 steel, 125-145 ksi. Optional: 4340 steel, 125-145 ksi, or 4330 steel, 150-170 ksi.

      (2) 69-74738-2: Cadmium plate (F-15.06) all exterior surfaces, 0.0003-0.0005 inch thick. No finish on interior surfaces. Material: 4340 or 4340M steel, 150-170 ksi, or 304 CRES, 150-170 ksi.

   B. Bowl (16)

      (1) 65-17989-5, -7, -11 -- Chromic acid anodize (F-2.26) all over. Material: Al alloy.

      (2) 65-17989-9 -- Chromic acid anodize (F-17.02) all over. Material: Al alloy.

   C. Fitting (20) -- Chromic acid anodize (F-17.02). Material: Al alloy.

   D. Housing (29)

      (1) 65-44683-2, -4, -6, -8, -10: Chromic acid anodize (F-2.26). Material: Al alloy.

      (2) 65-44683-12: Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.35). Material: Al alloy.

3. Replacement (Fig. 1101)

   A. Replace all packings and filter element assembly (19) at each overhaul.

   B. Replace parts found unserviceable or which are damaged beyond simple repair.

C. Nameplate (31) -- Steel-stamp serial number and dash number on the replacement nameplate before installation. Bond the nameplate on housing (29) per SOPM 20-50-12, Type 38, Method 1.

NOTE: Do not change the preformed contour of nameplate. Make sure the nameplate is away from all radii and boss identification numbers.

D. Insert (28) -- Remove the old sleeve from tapped hole. Install a replacement insert with wet BMS 10-11, Type 1 primer and remove the tang (SOPM 20-50-22).

E. Shim (30) -- Bond a replacement in place per SOPM 20-50-12, Type 38 adhesive.

F. Lee jet (15A) -- Install a replacement jet (SOPM 20-50-04).

ASSEMBLY

1. Materials

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

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

2. General

   A. Before assembly lubricate all packings and backup rings with hydraulic fluid or assembly lube.

   B. Lightly lubricate all threads with hydraulic fluid or assembly lube.

   C. Install packings per SOPM 20-50-06.

3. Assembly (Fig. 1101)

   A. Install packing (24) and backup rings (25) on relief valve (26). Turn the valve into the bore of housing (29). Tighten to 50-200 pound-inches.

   B. Install packing (22) and backup rings (23) in groove inside housing bore. Slide packing (21) over the threads of filter fitting (20). Screw fitting into housing bore. Tighten to 210-250 pound-inches.

   C. Install packing (17) and backup ring (18) on filter element assembly (19). Slide on filter fitting (20) in housing.

   D. Screw filter bowl (16) into housing. Tighten to 50-200 pound-inches.

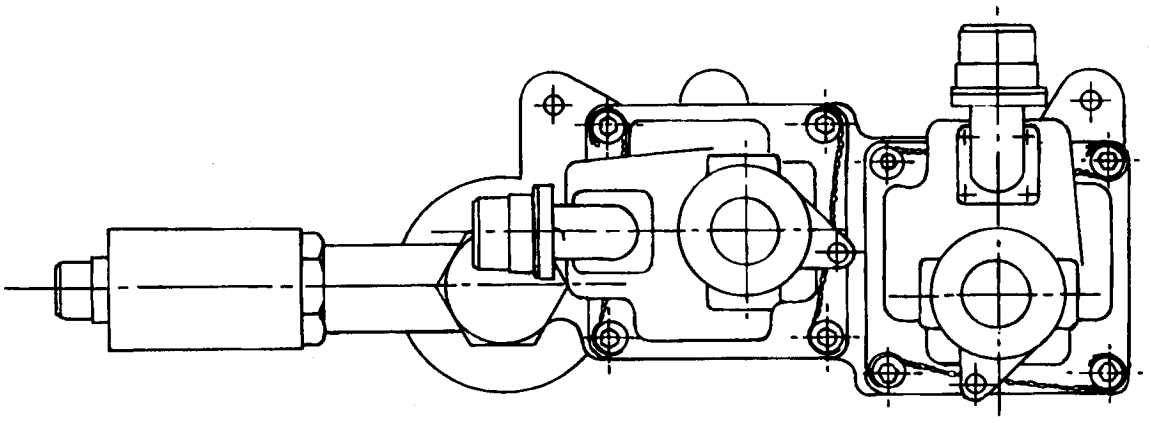
   E. Install packings (11 and/or 13) and backup rings (12 and/or 14) on check valve or adapter (15). Insert and screw into housing. Tighten to 50-200 pound-inches.

   F. Install packing (8) and backup rings (9) on pressure switch assembly (10). Screw into housing. Tighten to 50-200 pound-inches.

   G. Install packings (5) and backup rings (6) on motor valve assemblies (7). Clean faying surfaces of motor valve assemblies (7) per SOPM 20-11-03, Category One, Cleaning Method CM1. Put valve stem into housing bores. Align mounting bolt holes. Bond motor valve assemblies (7) to housing per SOPM 20-11-03. Install and faying surface bond washers (2) and screw (1) per SOPM 20-11-03.

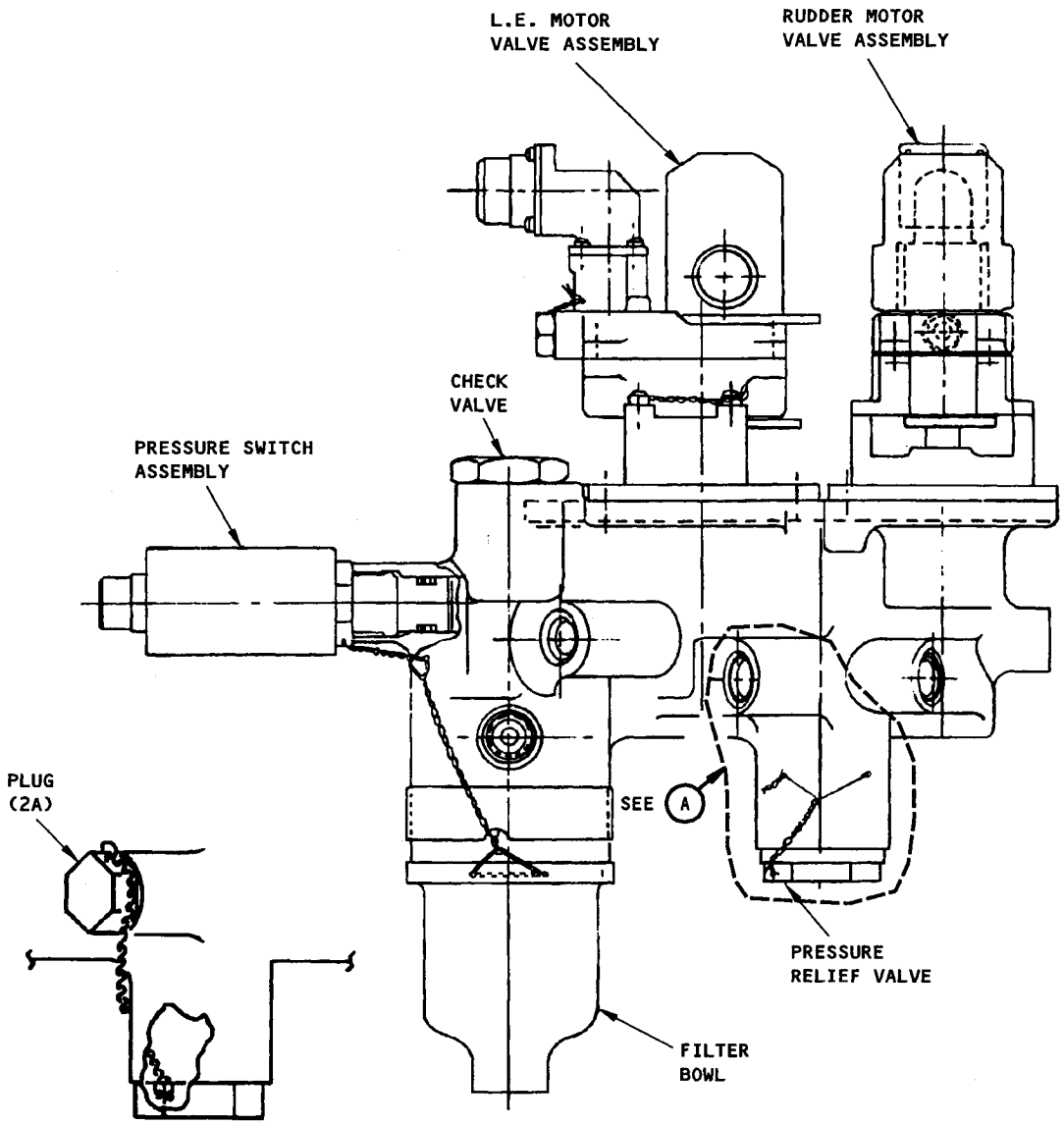
   H. Do the test (Ref Testing).

   I. Lockwire the unit per SOPM 20-50-02, as shown in Fig. 501.



TOP VIEW OF UNIT

Lockwiring Diagram
Figure 501 (Sheet 1)



65-44680-14,-16 THRU -19

(A)

SIDE VIEW OF UNIT

Lockwiring Diagram
Figure 501 (Sheet 2)

TESTING

1. Test Equipment

   A. Test bench to supply controlled hydraulic pressure up to 4500 psi.

   B. Multimeter or self-powered continuity tester

   C. Connectors with pigtail leads:

      (1) MS24266R10B5S

      (2) MS24266R14B7S (2 required)

   D. Dummy relief valve -- SE29-1302

2. Preparation for Test

   A. Install hydraulic fittings per Fig. 1102.

      (1) Lightly lubricate packings (4), and threads of unions (1), union or valve (2), union or valve (2A), reducer or union (3A), and reducers (3) with BMS 3-11 hydraulic fluid or MCS 352 assembly lube before installation.

      (2) Install packings (4) on reducers (3) and reducer or union (3A), and install in ports 2 and 3 of modular package assembly (5).

      (3) Install packings (4) on unions (2) and install in port 4 of modular package assembly (5).

      (4) Install packing (4) on union (1) and install in port 1 of modular package assembly (5).

      (5) Install packing (4) on union (2A) and install in port 5 of modular package assembly (5).

      NOTE: Do not install plug or valve (2A) on 65-44680-5, -7, -10, -12, -14, -16 thru -19 or 276A2001-1, -2 units.

   B. Do these tests at room temperature with BMS 3-11 hydraulic fluid.

   C. Do these tests in the sequence shown below.

   D. Flow through any open port is not to be considered external leakage.

E. Ports not mentioned in a test can be open or closed, but port 6 on 65-44681-4, -6, -9, -11, -14 thru -18 must stay closed during all tests but the continuity test, par. 3.F.(1).

F. After each electrical operation of motor valves, make sure of the correct position of indicators before you continue the test.

G. Install test connectors on pressure switch and motor valves.

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

3. Functional Tests (Fig. 801 and 1101)

A. Proof pressure test

(1) Replace relief valve (26) with dummy relief valve SE29-1302 or equivalent to prevent flow across the relief valve cavity. With ports 2 and 3 plugged, 4 and 5 open, and motor valves (7) in position No. 2, apply 4500-psi hydraulic pressure to port 1 for 2 minutes. There must be no external leakage or permanent set.

(2) Do step (1) again at 2-psi pressure. There must be no external leakage.

(3) Replace the dummy relief valve with relief valve (26). With port 1, 2, 3 and 4 plugged, apply 900 psi hydraulic pressure to port 5 for 2 minutes. There must be no external leakage or permanent set.

(4) Do step (3) again at 2 psi pressure. There must be no external leakage.

B. Pressure switch test

(1) Connect the continuity tester to pins 2 and 3 on the pressure switch connector and verify continuity.

(2) With ports 2 and 3 plugged and 4 open, gradually apply pressure to port 1. Pressure switch (10) must operate in these pressure ranges, as indicated by the continuity tester. Make a note of the actual pressure.

65-44681-1 thru -10	950-1450 psi
65-44681-11, -14 thru -18 (without pressure switch 10-60552-35)	950-1450 psi
65-44681-11, -14 thru -18 (with pressure switch 10-60552-35)	1600 psi maximum

(3) With leading edge (LE) motor valve (7) (Fig. 501) in position No. 2, decrease the pressure through port 3. The pressure switch must close at pressure 100 psi or more below the pressure you measured in step (2), but not below these values:

65-44681-1 thru 10	700 psi
65-44681-11, -14 thru -18 (without pressure switch 10-60552-35)	700 psi
65-44681-11, -14 thru -18 (with pressure switch 10-60552-35)	1300 psi

C. Motor valve test

(1) Apply 3000 psi hydraulic pressure to port 1. Keep this pressure on port 1 during all of this test.

(2) Set motor valves (7) in position No. 2, and plug ports 2, 3, and 4. After 2-minute period, leakage through port 5 must not be more than 32 cc per minute.

(3) Do step (2) again with motor valves in position No. 1. Operate valves electrically.

NOTE: Switch valves to position 1 by grounding pin 1 and applying +28 volts dc to pin 3.

(4) Do step (2) again with motor valves in position 2. Operate valves electrically.

NOTE: Switch valves to position 2 by grounding pin 1 and applying +28 volts dc to pin 2.

D. Check valve test (65-44681-1, -3, -5, and -10 only)

(1) With rudder motor valve in position No. 1 and LE motor valve in position No. 2, apply 900-psi pressure to port 3 for 2 minutes. Leakage through port 1 must not be more than 1 cc per minute.

E. Relief valve test

(1) With ports 2, 3, and 5 plugged and both motor valves in position No. 2, gradually apply 3000-psi pressure to port 1 and hold for 2 minutes. Leakage from port 4 must not be more than 32 cc per minute.

(2) Set pressure at 3400 psi and gradually increase pressure until the relief valve opens, but do not increase the pressure more than 3750 psi.

NOTE: Increase in flow (more than 32 cc per minute) from port 4 indicates the relief valve is open.

(3) At pressure of 3950-4050 psi, make sure the flow from port 4 is 4.0 GPM or greater and that back pressure is less than 200 psi.

(4) Decrease pressure until flow from port 4 is 32 cc per minute or less, which indicates the relief valve is closed. This pressure must not be less than 3150 psi for assembly 65-44681-1, and not less than 3400 psi for assemblies 65-44681-3, -4, -5, -6, -9, -10, -11, -14 thru -18. Remove the check valve (2) Fig. 1102 on standby modular package assemblies 65-44680-14, -16 thru -19, 276A2001-1, -2.

(5) With ports 1, 2 and 5 plugged and both motor valves in position No. 2, apply pressure (900 psi max.) to port 4. Flow must come from port 3.

F. Continuity test

(1) Do continuity tests at conditions given in Fig. 701.

Test No.	Plugged Ports	Open Ports	Motor Valve Position		Hydraulic Pressure (900 psi max.) applied to Port	Free Flow from Port
			L.E.	Rudder		
1	6 *[1]	2 and 3	1	2	1	2
2	6 *[1]	2 and 3	2	1	1	3
3	1, 3, 5 and 6 *[1]	2	2	1	4	2
4	1, 2, 4 and 6 *[1]	3	1	2	5	3
5 *[2]	---	6 *[1]	1	1	1	6

*[1] Port 6 for 65-44680-5, -7, -10, -12, -14, -16 thru -19, 276A2001-1, -2.

*[2] Test No. 5 for 65-44680-5, -7, -10, -12, -14 , -16 thru -19, 276A2001-1, -2.

Continuity Test
Figure 701

(2) Test check valve (2A) on 65-44680-5, -7, -10, -12 assemblies as follows:

(a) Install packing (4, Fig. 1102) on valve (2A) and install the valve in port 5 of modular package assembly (5).

NOTE: Install check valve (2A) with flow out of modular package assembly (5).

(b) With both motor valves in position No. 2, and port 4 open, apply 4500-psi hydraulic pressure to port 5. There must be no flow from port 4.

(c) With port 5 open, apply 900-psi hydraulic pressure to port 4. Flow must come from port 5.

(3) Test check valve (2) on 65-44680-14 thru -19 and 276A2001-1, -2 assemblies as follows:

(a) Install packing (4, Fig. 1102) on valve (2) and install the valve in port 4 of modular package assembly (5).

NOTE: Install check valve (2) with flow out of modular package assembly (5).

(b) With both motor valves in position No. 2, and port 5 open, apply 4500-psi hydraulic pressure to port 4. There must be no flow from port 5.

(c) With port 4 open, apply 900-psi hydraulic pressure to port 5. Flow must come from port 4.

G. Preparation for storage

(1) After the test, partially fill the unit with BMS 3-11 hydraulic fluid.

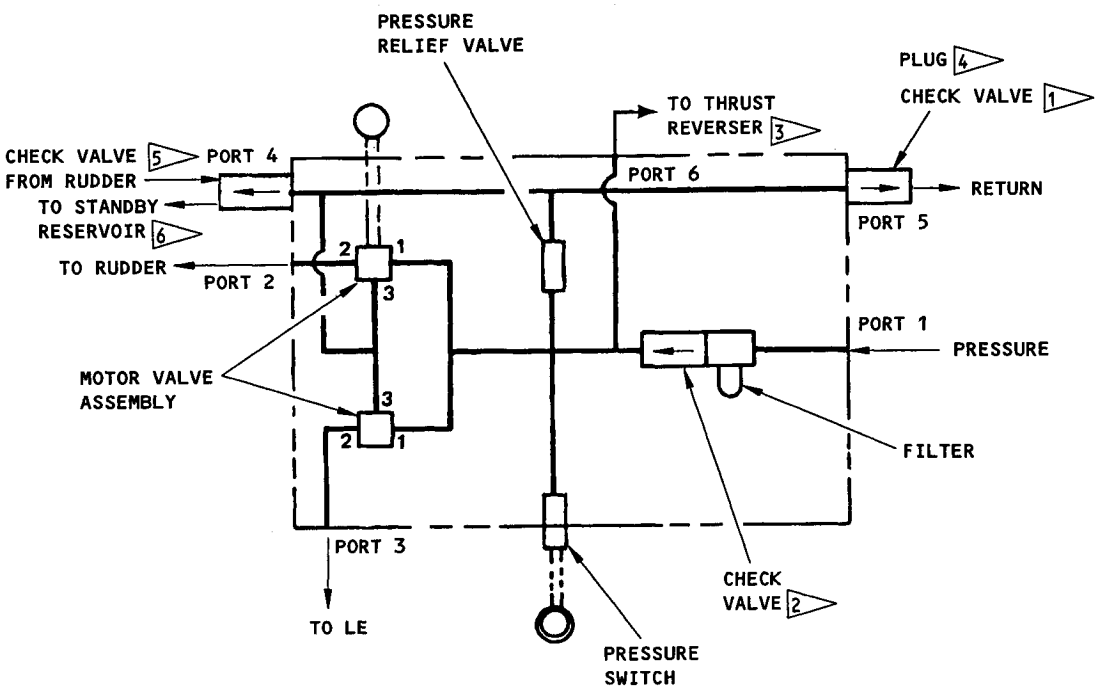
(2) Cap or plug ports with BMS 3-11 resistant packings and caps or plugs.

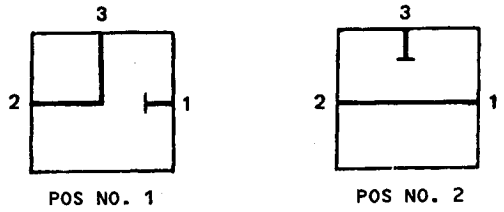
TROUBLE SHOOTING

1. Trouble shooting is keyed to individual steps of the test procedure. The items show the test procedure steps in which the noted trouble could occur. See Fig. 801 for schematic diagram.

	Trouble	Possible Cause	Correction
A.	Leakage around filter bowl; check valve, pressure switch or motor valves, par. 3.A.(1) or 3.A.(2)	Packing or backup ring defective	Replace packing or backup ring
B.	Leakage around relief valve, par. 3.A.(3) or 3.A.(4)	Packing or backup ring defective	Replace packing or backup ring
C.	Electrical continuity or pressure switch does not open or close at correct pressure, par. 3.B.(1), 3.B.(2) or 3.B.(3)	Pressure switch defective	Repair or replace pressure switch per vendor's overhaul instructions
D.	Leakage more than 32 cc per minute, par. 3.C.(2)	Pressure relief valve or motor valve packing or backup ring defective	Replace packing or backup ring
		Pressure relief valve or motor valve defective	Isolate and repair or replace pressure relief valve or motor valve
E.	Motor valve does not operate electrically, par. 3.C.(3) or 3.C.(4)	Motor valve windings open or shorted	Repair or replace motor valve per vendor's overhaul instructions
F.	Leakage more than 1 cc per minute, par. 3.D.(1)	Check valve not seated	Replace check valve

	Trouble	Possible Cause	Correction
G.	Leakage more than 32 cc per minute, par. 3.E.(1)	Pressure relief valve packing or backup ring defective or pressure relief valve open	Replace packing, backup ring or pressure relief valve
H.	Flow from port 4 does not increase at correct pressure, par. 3.E.(2) or 3.E.(3)	Pressure relief valve does not open	Replace pressure relief valve
I.	Flow from port 4 does not decrease to 32 cc per minute at correct pressure, par. 3.E.(4)	Pressure relief valve not closed	Replace pressure relief valve
J.	No flow from port 3, par. 3.E.(5)	Pressure relief valve does not open	Replace pressure relief valve
K.	Free flow does not come, Fig. 701	Channel through housing or motor valve plugged or blocked	Repair or replace housing or motor valve
L.	Flow from port 4, par. 3.F.(2)(b)	Check valve not closed	Replace check valve
M.	No flow from port 5, par. 3.F.(2)(c)	Check valve not open	Replace check valve





MOTOR VALVE
POSITIONS

1 CHECK VALVE ON 65-44680-5,-7,-10,-12 ONLY.

2 CHECK VALVE ON 65-44680-2,-4,-6,-11 ONLY.

3 PORT 6 ON 65-44680-5,-7,-10,-12,-14, -16 THRU -19, 276A2001-1,-2.

4 PLUG ON 65-44680-14,-16 THRU -19, 276A2001-1,-2.

5 CHECK VALVE ON 65-44680-14,-16 THRU -19, 276A2001-1,-2.

6 FLOW DIRECTION IS OPPOSITE AND GOES TO THE STANDBY RESERVOIR FOR 65-44680-14,-16 THRU -19, 276A2001-1,-2.

Standby System Modular Package Assembly
Schematic Diagram
Figure 801

N50037

STORAGE INSTRUCTIONS

1. Partially fill the unit with BMS 3-11 hydraulic fluid. Cap or plug ports with hydraulic fluid resistant O-rings and caps or plugs.

2. Wrap unit in vapor barrier paper. Attach tag showing test date and cure date for packings and that the unit contains hydraulic fluid.

3. For more instructions, refer to SOPM 20-44-02 and 20-70-01.

ILLUSTRATED PARTS LIST

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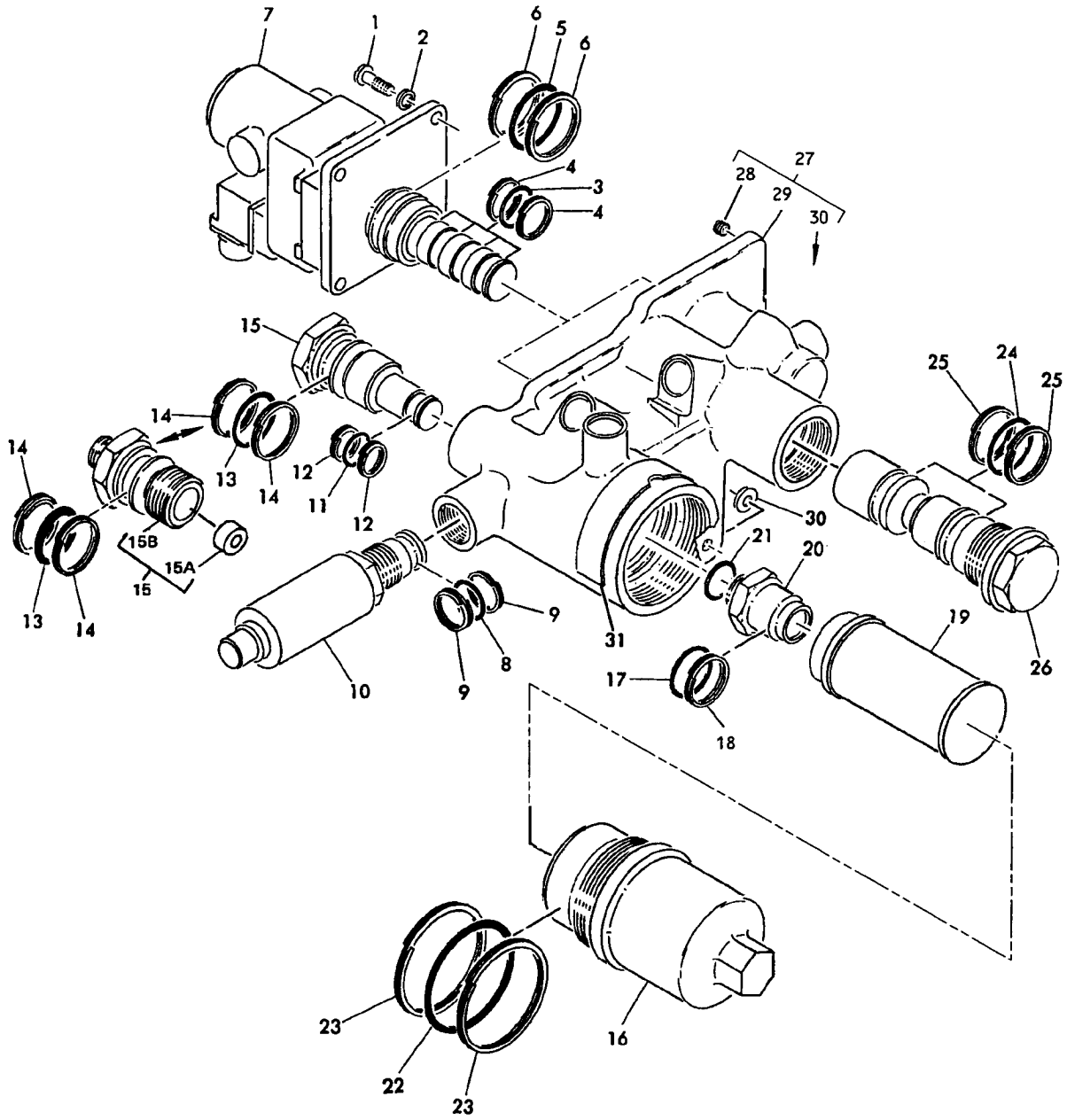
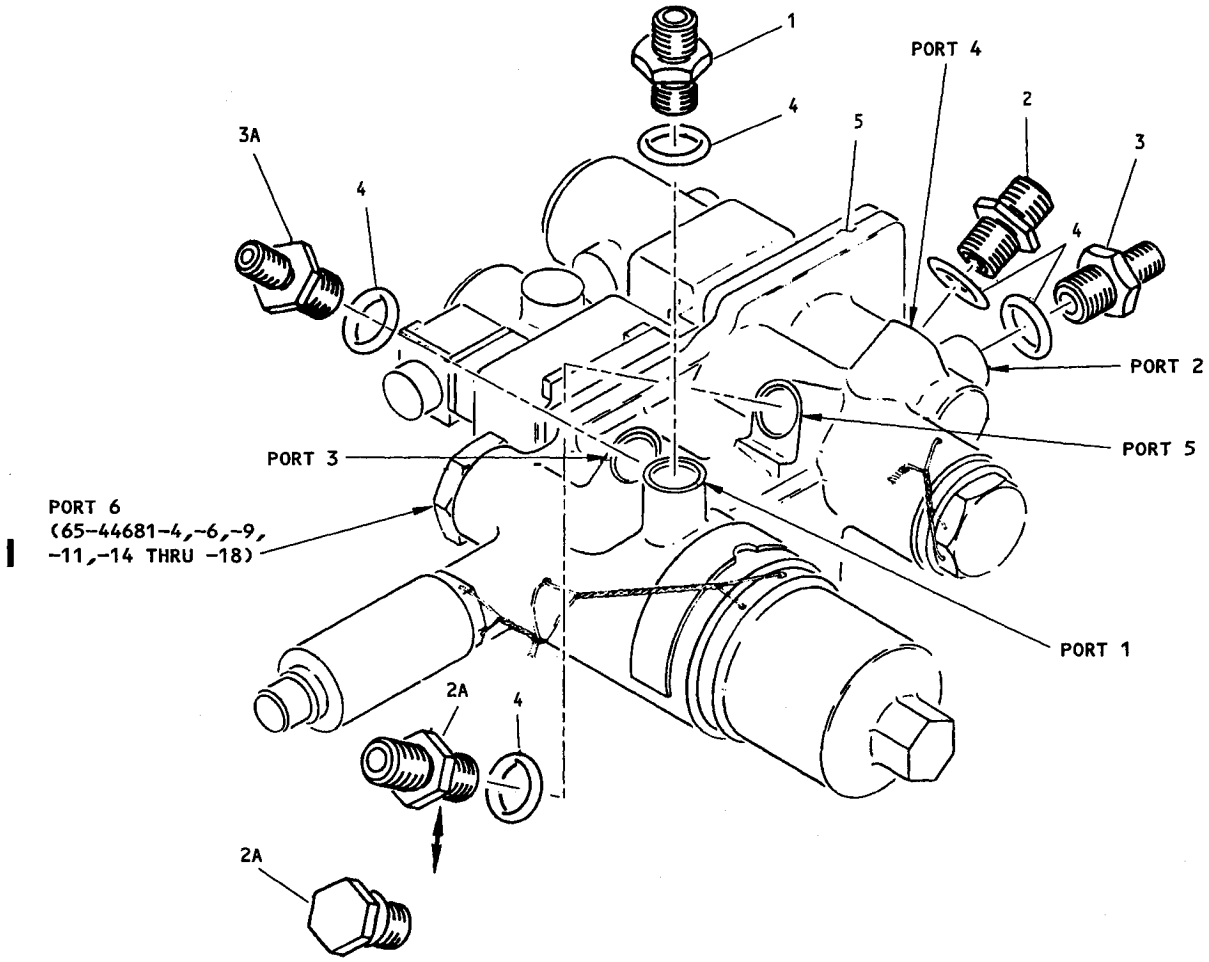


Standby System Modular Package Assembly
Figure 1101

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-44681-1		PACKAGE ASSY, STANDBY SYSTEM MODULAR	A	RF
	65-44681-3		PACKAGE ASSY, STANDBY SYSTEM MODULAR	B	RF
	65-44681-4		PACKAGE ASSY, STANDBY SYSTEM MODULAR	C	RF
	65-44681-5		PACKAGE ASSY, STANDBY SYSTEM MODULAR	D	RF
	65-44681-6		PACKAGE ASSY, STANDBY SYSTEM MODULAR	E	RF
	65-44681-9		PACKAGE ASSY, STANDBY SYSTEM MODULAR	F	RF
	65-44681-10		PACKAGE ASSY, STANDBY SYSTEM MODULAR	G	RF
	65-44681-11		PACKAGE ASSY, STANDBY SYSTEM MODULAR	H	RF
	65-44681-14		PACKAGE ASSY, STANDBY SYSTEM MODULAR	I	RF
	65-44681-15		PACKAGE ASSY, STANDBY SYSTEM MODULAR	J	RF
	65-44681-16		PACKAGE ASSY, STANDBY SYSTEM MODULAR	K	RF
	65-44681-17		PACKAGE ASSY, STANDBY SYSTEM MODULAR	L	RF
	65-44681-18		PACKAGE ASSY, STANDBY SYSTEM MODULAR	M	RF
1	MS24678-20		. SCREW		8
2	NAS620A416L		. WASHER	A-K	8
2	NAS620-416L		. WASHER	LM	8
3	NAS1611-016		. PACKING, 0-RING		8
4	MS28774-016		. RING, BACKUP		16
5	NAS1611-025		. PACKING, O-RING		2
6	MS28774-025		. RING, BACKUP		4
7	AV13J5105		. VALVE ASSY, MOTOR V73760 (BOEING 10-60581-2)	A-G	2
7	AV13J5147		. VALVE ASSY, MOTOR V73760 (BOEING 10-60581-3)(OPT TO AV13J5105)	G	2
7	AV13J5147		. VALVE ASSY, MOTOR V73760 (BOEING 10-60581-3)	H-M	2
8	NAS1611-113		. PACKING, O-RING		1
9	MS28782-11		. RING, BACKUP		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
10	90G183		. SWITCH ASSY, PRESSURE, V09049 (BOEING 10-60552-11) (PREF)	A-G	1
10	1225P6-2		. SWITCH ASSY, PRESSURE, V98087 (BOEING 10-60552-35) (OPT)	A-G	1
10	1225P6-2		. SWITCH ASSY, PRESSURE, V98087 (BOEING 10-60552-35) (PREF)	H-M	1
10	90G183		. SWITCH ASSY, PRESSURE, V09049 (BOEING 10-60552-11)(OPT)	H-M	1
10	1225P6-1		. SWITCH ASSY, PRESSURE, V98087 (BOEING 10-60552-22)(OPT)		1
10	90G37		. SWITCH ASSY, PRESSURE, V09049 (BOEING 10-60552-1)(OPT)	A-K	1
11	NAS1611-111		. PACKING, O-RING	ABDG	1
12	MS28782-9		. RING, BACKUP	ABDG	2
13	NAS1611-211		. PACKING, O-RING		1
14	MS28782-16		. RING, BACKUP		2
15	H61C0551		. VALVE, CHECK, V92003 (BOEING 10-60491-1)	ABDG	1
15	69-54685-1		. ADAPTER	CEFH	1
15	69-54685-2		DELETED		
15	69-54685-4		. ADAPTER ASSY	IJ	1
15	69-74738-1		. ADAPTER ASSY	KLM	1
15A	JEPA1873050A		. . LEE JET, V92555 (OPT) (USED ON 69-54685-4)		1
15A	JEPX05166008		. . LEE JET, V92555 (OPT) (USED ON 69-54685-4)		1
15A	JEHA1872200L		. . LEE JET, V92555 (USED ON 69-74738-1)		1
15B	69-54685-3		. . ADAPTER (USED ON 69-54685-4)		1
15B	69-74738-2		. . ADAPTER (USED ON 69-74738-1)		1
16	65-17989-5		. BOWL, FILTER (PRE SB 29-1062)	A-E	1
16	65-17989-11		. BOWL, FILTER (POST SB 29-1062)	A-E	1
16	65-17989-7		. BOWL, FILTER (PRE SB 29-1062)	F-K	1
16	65-17989-9		. BOWL, FILTER (PREF) (POST SB 29-1062)	F-K	1
16	65-17989-9		. BOWL, FILTER	LM	1
17	NAS1611-212		. PACKING, O-RING		1
18	MS28782-17		. RING, BACKUP		1
19	7511122		. ELEMENT ASSY, HYDRAULIC FILTER, V05228 (BOEING 10-60592-2)		1
19	AC7681E2		. ELEMENT ASSY, HYDRAULIC FILTER, V18350 (OPT)(BOEING 10-60592-2)		1
19	054285		. ELEMENT ASSY, HYDRAULIC FILTER, V90005 (OPT)(BOEING 10-60592-2)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
20	66-12197-1		. FITTING, FILTER		1
21	NAS1612-8		. PACKING		1
22	NAS1611-226		. PACKING, O-RING		1
23	S12766-226		. RING, BACKUP, V97820		2
24	NAS1611-213		. PACKING, O-RING		2
25	MS28782-18		. RING, BACKUP		4
26	A61498		. VALVE, PRESSURE RELIEF, V81982 (BOEING 10-60551-1)	A	1
26	1652		. VALVE, PRESSURE RELIEF, V06177 (BOEING 10-60551-3)	B-M	1
27	65-44683-7		. HOUSING ASSY (OPT TO 65-44683-11)	ABC	1
27	65-44683-1		. HOUSING ASSY (OPT TO 65-44683-7)	ABC	1
27	65-44683-3		. HOUSING ASSY (OPT TO 65-44683-7)	ABC	1
27	65-44683-9		. HOUSING ASSY	DE	1
27	65-44683-11		. HOUSING ASSY (PREF)	A-E	1
27	65-44683-11		. HOUSING ASSY	F-L	1
27	65-44683-13		. HOUSING ASSY	M	1
28	MS21208F4-10		. . INSERT, SCREW THREAD (USED ON 65-44683-1, -3, -7, -9)		8
28	MS21209C4-10P		. . INSERT, SCREW THREAD (USED ON 65-44683-13)		8
29	65-44683-2		. . HOUSING (USED ON 65-44683-1)		1
29	65-44683-4		. . HOUSING (USED ON 65-44683-3)		1
29	65-44683-6		. . HOUSING (USED ON 65-44683-7)		1
29	65-44683-8		. . HOUSING (USED ON 65-44683-9)		1
29	65-44683-10		. . HOUSING (USED ON 65-44683-11)		1
29	65-44683-12		. . HOUSING (USED ON 65-44683-13)		1
30	65-44683-5		. . SHIM (USED ON 65-44683-1)		1
31	66-22826-1		. NAMEPLATE		1
31	66-22826-2		. NAMEPLATE (OPT)		1



Standby System Modular Package Assembly
Figure 1102

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1102-					
	65-44680-2		PACKAGE ASSY, STANDBY SYSTEM MODULAR	A	RF
	65-44680-4		PACKAGE ASSY, STANDBY SYSTEM MODULAR	B	RF
	65-44680-5		PACKAGE ASSY, STANDBY SYSTEM MODULAR	C	RF
	65-44680-6		PACKAGE ASSY, STANDBY SYSTEM MODULAR	D	RF
	65-44680-7		PACKAGE ASSY, STANDBY SYSTEM MODULAR	E	RF
	65-44680-10		PACKAGE ASSY, STANDBY SYSTEM MODULAR	F	RF
	65-44680-11		PACKAGE ASSY, STANDBY SYSTEM MODULAR	G	RF
	65-44680-12		PACKAGE ASSY, STANDBY SYSTEM MODULAR	H	RF
	65-44680-14		PACKAGE ASSY, STANDBY SYSTEM MODULAR	I	RF
	65-44680-15		PACKAGE ASSY, STANDBY SYSTEM MODULAR	J	RF
	65-44680-16		PACKAGE ASSY, STANDBY SYSTEM MODULAR	K	RF
	65-44680-17		PACKAGE ASSY, STANDBY SYSTEM MODULAR	L	RF
	65-44680-18		PACKAGE ASSY, STANDBY SYSTEM MODULAR	M	RF
	65-44680-19		PACKAGE ASSY, STANDBY SYSTEM MODULAR	N	RF
	276A2001-1		PACKAGE ASSY, STANDBY SYSTEM MODULAR	O	RF
	276A2001-2		PACKAGE ASSY, STANDBY SYSTEM MODULAR	P	RF
1	MS21902-6		. UNION	A-N	1
1	MS21902-6T		. UNION	OP	1
2	MS21902D6		. UNION	A-H	1
2	BACV10CE2		. VALVE, CHECK	I-N	1
2	BACV10CE12		. VALVE, CHECK	OP	1
2A	MS21902D6		. UNION	ABDG	1
2A	BACV10BU2		. VALVE, CHECK	CEFH	1
2A	MS24391D6L		. PLUG	I-P	1
3	MS21916-6-4		. REDUCER	A-N	1
3	MS21916-6-4T		. REDUCER	OP	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1102-					
3A	MS21916-6-4		. REDUCER	A-H	1
3A	MS21902-6		. UNION	I-N	1
3A	MS21902-6T		. UNION	OP	1
4	NAS1612-6		. PACKING, O-RING		5
5	65-44681-1		. MODULAR PACKAGE ASSY (FIG. 1101)	A	1
5	65-44681-3		. MODULAR PACKAGE ASSY (FIG. 1101)	B	1
5	65-44681-4		. MODULAR PACKAGE ASSY (FIG. 1101)	C	1
5	65-44681-5		. MODULAR PACKAGE ASSY (FIG. 1101)	D	1
5	65-44681-6		. MODULAR PACKAGE ASSY (FIG. 1101)	E	1
5	65-44681-9		. MODULAR PACKAGE ASSY (FIG. 1101)	F	1
5	65-44681-10		. MODULAR PACKAGE ASSY (FIG. 1101)	G	1
5	65-44681-11		. MODULAR PACKAGE ASSY (FIG. 1101)	HI	1
5	65-44681-14		. MODULAR PACKAGE ASSY (FIG. 1101)	J	1
5	65-44681-15		. MODULAR PACKAGE ASSY (FIG. 1101)	K	1
5	65-44681-16		. MODULAR PACKAGE ASSY (FIG. 1101)	L	1
5	65-44681-17		. MODULAR PACKAGE ASSY (FIG. 1101)	MO	1
5	65-44681-18		. MODULAR PACKAGE ASSY (FIG. 1101)	NP	1

VENDORS

V05228	PTI TECHNOLOGIES, INC., 501 DEL NORTE BLVD., OXNARD, CALIFORNIA 93030-7983
V06177	PNEUDRAULICS, INC., 8575 HELMS AVE., RANCHO CUCAMONGA, CALIFORNIA 91730-4519
V09049	CUSTOM CONTROL SENSORS, INC., 21111 PLUMMER ST., CHATSWORTH, CALIFORNIA 91311-4905
V18350	PALL AEROPOWER CORP., 5775 RIO VISTA DR., CLEARWATER, FLORIDA 33760-3137
V73760	ITT AEROSPACE CONTROLS, 28150 INDUSTRY DR., VALENCIA, CALIFORNIA 91355-4101
V81982	CRANE CO., HYDRO-AIRE DIV., 3000 WINONA AVE., P.O. BOX 7722, BURBANK, CALIFORNIA 91504-2540
V90005	PUROLATOR FACET FILTER, 8439 TRIAD DR., GREENSBORO, NORTH CAROLINA 27409-9018
V92003	PARKER HANNIFIN CORP., 14300 ALTON PKWY., IRVINE, CALIFORNIA 92618-1898
V92555	LEE COMPANY, 2 PETTIPAUG RD., P.O. BOX 424, WESTBROOK, CONNECTICUT 06498
V97820	SHAMBAN POLYMER TECH GROUP, 711 MITCHELL RD., P.O. BOX 665, NEWBURY PARK, CALIFORNIA 91320-2214
V98087	ITT AEROSPACE CONTROLS, 28150 INDUSTRY DR., VALENCIA, CALIFORNIA 91355-4101