TO: ALL HOLDERS OF SYSTEM B HYDRAULIC MODULAR PACKAGE ASSEMBLY OVERHAUL MANUAL, 29-23-31

REVISION NO. 11, DATED DEC 5/93

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
Provided optional information for 10-60552 pressure switches												X	

SYSTEM B HYDRAULIC MODULAR PACKAGE ASSEMBLY

29-23-31

BOEING P/N 65-17822-1 thru -6, -8, -9, -10
65-17851-7, -12, -19, -27, -30, -31, -33 thru -37, -44, -46, -47, -48
65-44590-2 thru -6, -9
65-73874-2

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
29-19			Jan 15/67
		PRR 22961	Nov 15/68
		PRR 22966	Nov 15/68
		PRR 31169	Nov 15/68
		PRR 23158-88	Feb 10/72
		PRR 23445	Feb 10/72
		PRR 32070-10	Feb 10/72
29-21		PRR 23745	Aug 10/74
		PRR 32364	Aug 10/74
29-44			Nov 10/76
		PRR 33935	Dec 5/85
29-1062		PRR 34907	Sep 5/91

LIST OF EFFECTIVE PAGES

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

	PAGE	DATE	PAGE	DATE	PAGE	DATE
	29-23-31					
	T-1	Sep 5/91				
	T-2	BLANK				
*	LEP-1	Dec 5/93				
	LEP-2	BLANK				
	T/C-1	Jan 5/74				
	T/C-2	BLANK				
	1	Jan 5/74				
	2	Jan 5/74				
	3	Jan 5/74				
	4	BLANK				
	101	Jan 5/74				
	102	BLANK				
	301	Jan 5/74				
	302	BLANK				
	401	Dec 25/75				
	402	BLANK				
	501	Dec 5/84				
	502	Dec 5/84				
	503	Dec 5/84				
	504	BLANK				
	701	Aug 10/74				
	702	Jun 5/91				
	702A	May 10/75				
	702B	BLANK				
	703	Jun 5/91				
	704	Dec 5/85				
	801	Jan 5/74				
	802	Jan 5/74				
	901	Aug 10/74				
	902	BLANK				
	1101	Jan 5/74				
	1102	Jan 5/74				
	1103	Sep 5/91				
*	1104	Dec 5/93				
*	1104A	Dec 5/93				
*	1104B	BLANK				
	1105	BLANK				
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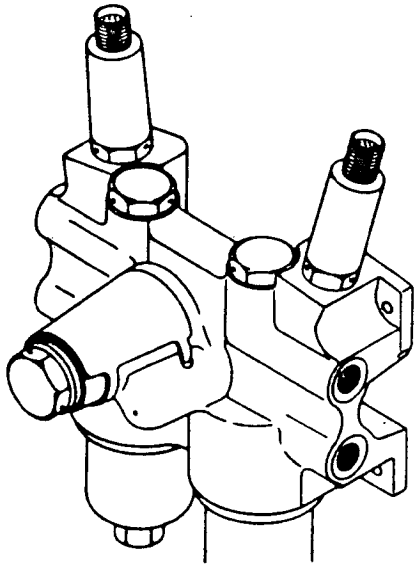
*[1] Special instructions not required. Use standard industry practices.

SYSTEM "B" HYDRAULIC MODULAR PACKAGE ASSEMBLY



System "B" Hydraulic Modular Package Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

   A. The system "B" hydraulic modular package assembly consists of a forged aluminum housing in which are installed two filters, two pressure switches, two cartridge-type check valves and one cartridge-type relief valve.

   B. External hydraulic fittings provide connections to the aircraft hydraulic system, and internal ports in the housing provide for hydraulic fluid flow to the various components of the unit.

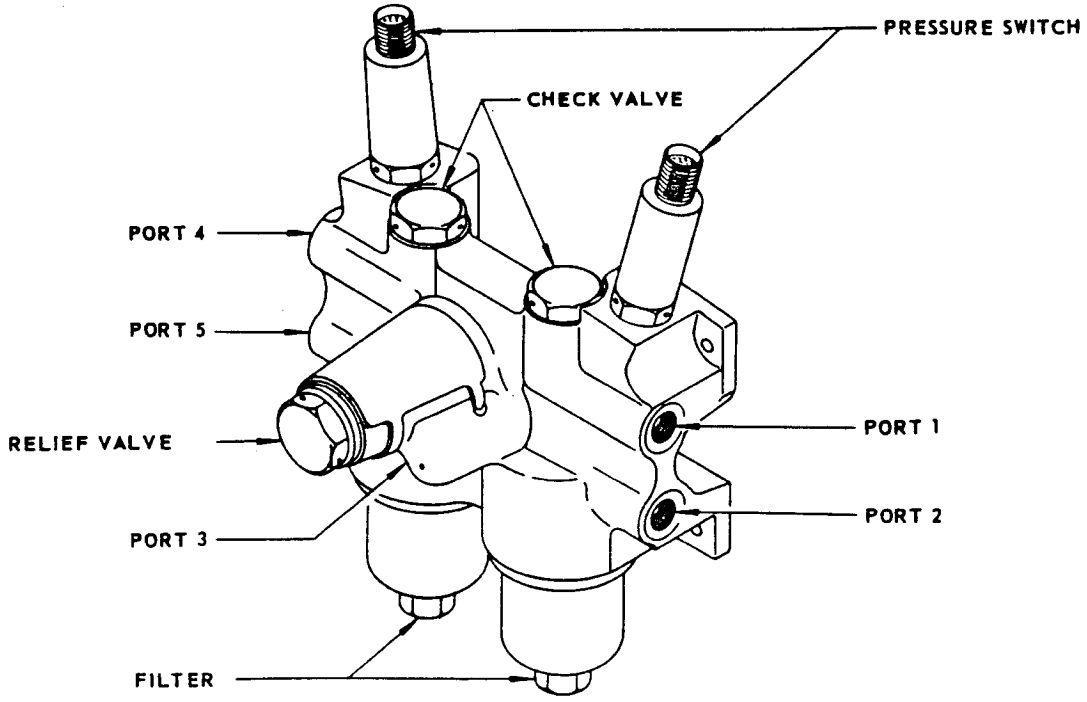
2. Operation

A. Hydraulic pressure from the electrically-driven pumps enters the unit through ports 2 and 5 (Fig. 2 and 801). It passes through the high pressure filters and the check values and normally leaves the modular package through port 1 or 4, except in model 707, port 4 is plugged.

B. In the event system pressure rises to the point where there is a danger of exceeding the allowable maximum, the relief valve opens and allows the excess fluid to return to the system reservoir through port 3. Two pressure switches are connected into the high pressure supply in such a manner that if either electrically-driven pump loses pressure, the pressure switch will illuminate the applicable low pressure warning light in the control cabin.

3. Leading Particulars

Size -- 12 x 9 x 7 inches (approximate)
Weight -- 9.8 pounds
Operating Fluid -- Fire resistant hydraulic fluid BMS 3-11 for Part Numbers 65-17822-1 thru -6, 65-17851 and 65-44590
-- Hydraulic fluid MIL-H-5606 for Part Numbers 65-17822-8 and 65-73874-2
Proof pressure -- 4500 psi



GENERAL ARRANGEMENT

System "B" Hydraulic Modular Package Details and Arrangement
Figure 2

DISASSEMBLY

1. Use standard industry practices for disassembly of this component, except for the following:

   A. After the modular package disassembly, refer to applicable manufacturer's overhaul manuals for overhaul instructions on pressure switches (10), relief valve (13) and check valves (16), and for cleaning instructions for filter elements (5) (Fig. 1101).

INSPECTION/CHECK

1. Use standard industry practices for inspection/check of this component, and additional check in step 2.

2. Perform penetrant examination per 20-20-02 on filter bowls (2), filter fittings (8) and housing (21) (Fig. 1101).

REPAIR

1. Refinish (Fig. 1101)

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

   A. Filter bowl (2), filter fitting (8) and Housing (21) -- Chromic acid anodize (F-2.26) all over. Material: Al Alloy.

2. Replacement (Fig. 1101)

   A. If necessary to replace nameplate (1), steel stamp serial number and assembly dash number on nameplate before installation.

ASSEMBLY

1. Materials

   A. Lubricants

      (1) Fire Resistant Hydraulic Fluid -- BMS 3-11 (source optional)

      (2) Skydrol Assembly Lube -- MCS352, Monsanto Co. Inc., 800 North Lindbergh Blvd., St. Louis, Mo. 63166

      (3) Hydraulic Fluid -- MIL-H-5606

   B. Testing Fluid

      (1) BMS 3-11, Fire Resistant Hydraulic Fluid (source optional) or Skydrol 7000, Monsanto Co. Inc., 800 North Lindbergh Blvd., St. Louis, Mo. 63166

      (2) Hydraulic Fluid -- MIL-H-5606

   C. Grease -- Batco 8401 No. 1 (No. 2 Optional) (Ref 20-60-03)

   D. Solvent -- MEK (TT-M-261) (Ref 20-60-01)

   E. Sealant -- BMS 5-26 Type II, Class B-1/2 (Class B-2 Optional) (Ref 20-60-04)

2. General Assembly Instructions (Fig. 1101)

   A. Lightly lubricate all packings prior to assembly. Use hydraulic fluid, BMS 3-11 or Skydrol assembly lube MCS352 for parts operating with BMS 3-11. Use hydraulic fluid, MIL-H-5606 for parts operating with MIL-H-5606. Refer to leading particulars.

   B. For assembly of packings, refer to 20-50-06, Installation of O-rings and Teflon Seals.

   C. Overhaul check valves (16), relief valve (13), and pressure switches (10) per manufacturer's instructions prior to installation in housing (21). Install only new or cleaned filter elements (5).

3. Install Check Valves

   A. Install items (17 thru 20) on check valves (16).

   B. Apply a light coating of grease to the underside of the flange of the check valve and to the atmospheric side of its sealing diameter for parts operating with BMS 3-11. Lightly lubricate threads with hydraulic fluid MIL-H-5606 for parts operating with MIL-H-5606.

C. Install check valves in housing (21). Tighten to a torque range of 200 to 250 pound-inches.

4. Install Relief Valve

A. Install items (14 and 15) on relief valve (13).

B. Thread relief valve in housing (21) to engage approximately two threads. Apply a light coating of grease to exposed threads for parts operating with BMS 3-11. Lightly lubricate threads with hydraulic fluid MIL-H-5606 for parts operating with MIL-H-5606. Tighten to a torque range of 200 to 275 pound-inches.

5. Install Pressure Switches

A. Install items (11 and 12) on pressure switches (10).

B. Thread pressure switches in housing (21) to engage approximately two threads. Apply a light coating of grease to exposed threads for parts operating with BMS 3-11. Lightly lubricate threads with hydraulic fluid MIL-H-5606 for parts operating with MIL-H-5606. Tighten to a torque range of 200 to 275 pound-inches.

6. Install Filters

A. Install packings (9) on filter fittings (8).

B. Install filter fittings (8) in housing (21). Tighten to a torque range of 200 to 250 pound-inches.

CAUTION: DO NOT DENT OR SCRATCH SEAL SURFACE OF FITTING DURING INSTALLATION.

C. Install items (6 and 7) on filter elements (5); install filter elements on filter fittings (8).

D. Install items (3 and 4) on filter bowls (2); install bowls in housing (21). Tighten to a torque range of 200 to 275 pound-inches.

7. Lockwire Assembly

A. Lockwire filter bowls (2) and relief valve (13) from component body to housing (21).

B. Lockwire each check valve (16) to adjacent pressure switch (10) using double twist method.

8. Apply Corrosion Protection

   A. Wipe off excess grease from around check valves (16), relief valve (13), and pressure switches (10).

   B. Clean joint between housing (21) and pressure switches, relief valve, and check valves using solvent.

   C. Apply a bead of sealant to the cleaned joints.

   D. Allow sealant to cure and check that sealant has bonded to the surfaces.

TESTING

NOTE: For units, Part Numbers 65-17822-1 thru -6 and -9, 65-17851 and 65-44590, test with hydraulic fluid BMS 3-11 (Skydrol 7000, optional) only. If Skydrol 7000 is used, drain and flush thoroughly before putting unit in service or storage. For units 65-17822-8, and 65-73874-2, test with hydraulic fluid MIL-H-5606 only.

1. Test Equipment

A. Test bench capable of delivering hydraulic pressure up to 4500 psi.

B. Continuity Tester: Ohmmeter, self-powered test light, or equivalent

C. Connector with Pigtail Leads: MS24266R10B5S (2 required)

1A. Test Preparation

A. Install hydraulic fittings in unit per Fig. 1102.

(1) Lightly lubricate packings (3, 3A, 3B and 5) as applicable, threads of unions (1, 1A, 1B and 2) as applicable and threads of union or reducer (4) or plug (4A) prior to installation in modular package (6). Use hydraulic fluid BMS 3-11 or Skydrol assembly lube MCS352 or MIL-H-5606 as applicable.

(2) Place packing (5 or 3B) on union or reducer (4) or plug (4A) and install in port 4.

(3) Place packing (3 or 3A) on union (2) and install in port 3.

(4) Place packings (3, 3A or 3B) on unions (1, 1A or 1B) and install in ports 1, 2, and 5.

B. Conduct tests at room temperature, using applicable hydraulic fluid in the sequence shown.

WARNING: BE SURE THAT ALL AIR IS REMOVED FROM UNIT BEFORE PROOF PRESSURE TEST IS CONDUCTED. DO NOT APPLY COMPRESSED AIR TO PORTS AT ANY TIME. DO NOT CYCLE UNIT AT PROOF PRESSURE.

C. Ports not specifically mentioned in steps of following test procedure may be either open or closed.

D. Install test connectors on pressure switches.

2. Proof Test

   A. With ports 1, 3 and 4 plugged, apply 4500-psi hydraulic pressure to ports 2 and 5 simultaneously. Maintain pressure for 2 minutes. There shall be no external leakage or permanent set.

   B. Repeat step 2.A. above, with 2-psi hydraulic pressure. There shall be no external leakage.

3. Continuity Test

   A. Open all ports.

   B. Apply hydraulic pressure to port 2. There shall be free flow from ports 1 and 4.

   C. Apply hydraulic pressure to port 5. There shall be free flow from ports 1 and 4.

   D. Apply hydraulic pressure to port 3. There shall be free reverse flow through relief valve from ports 1 and 4.

4. Pressure Switch Operation

   A. Attach a continuity tester (ohmmeter, self-powered test light, or equivalent) to contacts 2 and 3 on each pressure switch connector.

   B. With ports 1, 3 and 4 plugged, gradually apply hydraulic pressure to ports 2 and 5 simultaneously. Pressure switches should open at a pressure of:

Pressure Switch	Opening Pressure
10-60552-1, -10	950 psi min to 1450 psi max
10-60552-11, -22	1200 psi min to 1500 psi max
10-60552-35	1400 psi min to 1600 psi max

   C. Gradually decrease hydraulic pressure. Each switch should close 100 psi or more below pressure at which it opened, but in no case should pressure reading be less than the following:

Pressure Switch	Minimum Closing Pressure
10-60552-1, -10	700 psi
10-60552-11, -22	1100 psi
10-60552-35	1300 psi

5. Check Valve Test

   A. With ports 3 and 4 plugged, and ports 2 and 5 open, apply 2000-psi hydraulic pressure to port 1.

   B. After an initial valve seating period of 2 minutes, there should be no leakage from ports 2 and 5.

6. Relief Valve Tests (Fig. 1101)

A. Perform relief valve test as follows on 65-17822-1, -2 and -3 only.

(1) With ports 2, 4 and 5 plugged, and port 3 open, apply hydraulic pressure with a potential flow of 4 GPM maximum to port 1. Relief valve should crack at a pressure between 3450 and 3550 psi for package assembly using valve (13), 10-60551-1, with no S/N suffix; at 3400 to 3600 psi for package assembly using valve (13) 10-60551-1, with S/N suffix "A," "B" or "C". Crack of valve occurs when flow suddenly increases.

(2) Gradually increase pressure to a range of 3700 and 3800 psi. Flow from port 3 should increase as pressure increases. (Rated flow capacity of valve is 7 GPM.)

(3) Gradually decrease pressure until valve reseats, as indicated by stopping of fluid flow from port 3. This pressure should not be less than 3100 psi for package assembly using valve (13), 10-60551-1, with no S/N suffix and 3250 psi for package assembly using valve (13), 10-60551-1, with S/N suffix "A," "B" or "C."

B. Perform relief valve test as follows on 65-17822-4, -5, -6 , -8 and -9.

(1) Close port 4 and open port 3.

(2) Apply fluid pressure to port 1 and establish a flow of 7 gpm from port 3 with a back pressure of 45 to 55 psi at port 3. The pressure drop between port 1 and port 3 must not exceed 3850 psi.

(3) Decrease the applied pressure at port 1 until the relief valve reseats to the closed position and flow from port 3 ceases. Reseat pressure shall be 3400 psi or more. Leakage from port 3 must not exceed 6 cc per minute.

Test Phase	Limit
Proof Test:	
1. Apply 4500 psi hydraulic pressure for 2 minutes to inlet ports, outlet ports blocked	1. No leakage or permanent set
2. Repeat 1 above with 2 psi pressure	2. No leakage
Continuity:	
1. Check flow from outlet ports with pressure applied at inlet port	1. Flow unrestricted with flow path per schematic diagram
2. Check reverse flow from outlet ports with pressure applied at return port	2. Same as 1, above
Pressure Switch Operation	
1. Increase and decrease pressure at inlet pressure ports. Check point of switch actuation	1. Switch opens on increasing pressure between 950 psi min to 1450 psi max (10-60552-1,-10), 1200 psi min to 1500 psi max (10-60552-11, -22) and 1400 psi min to 1600 psi max (10-60552-35). Switch closes on decreasing pressure at least 100 psi below opening pressure, but not below 700 psi (10-60552-1,-10), 1100 psi (10-60552-11,-22) and 1300 psi (10-60552-35)

Test Limits
Figure 701 (Sheet 1)

Test Phase	Limit
Check Valve Test	
1. Apply reverse-flow pressure to outlet port and check for leakage through check valves at inlet ports	1. No leakage after 2-minute period allowed for valve seating
Relief Valve Test for 65-17822-1, -2 and -3 only	
1. Increase and decrease pressure at inlet pressure ports. Check opening and reseating pressure of relief valve	1. For package using relief valve with no suffix after the serial number, relief valve opens on increasing pressure at 3450 to 3550 psi, passes full flow at 3700 to 3800 psi, and reseats at not less than 3100 psi For package using relief valve with suffix "A," "B" or "C" after the serial number, relief valve opens on increasing pressure at 3400 to 3600 psi, passes full flow at 3700 to 3800 psi, and reseats at not less than 3250 psi
Relief Valve Test for 65-17822-4, -5, -6, -8, and -9	
Close port 4 and open port 3. Apply pressure to port 1. Establish 7 gpm flow from port 3 with back pressure of 45 to 55 psi at port 3	The pressure drop between port 1 and port 3 must not exceed 3850 psi
Decrease applied pressure at port 1 until relief valve reseats to the closed position	Reseat pressure shall be 3400 psi or more. Leakage from port 3 must not exceed 6 cc per minute

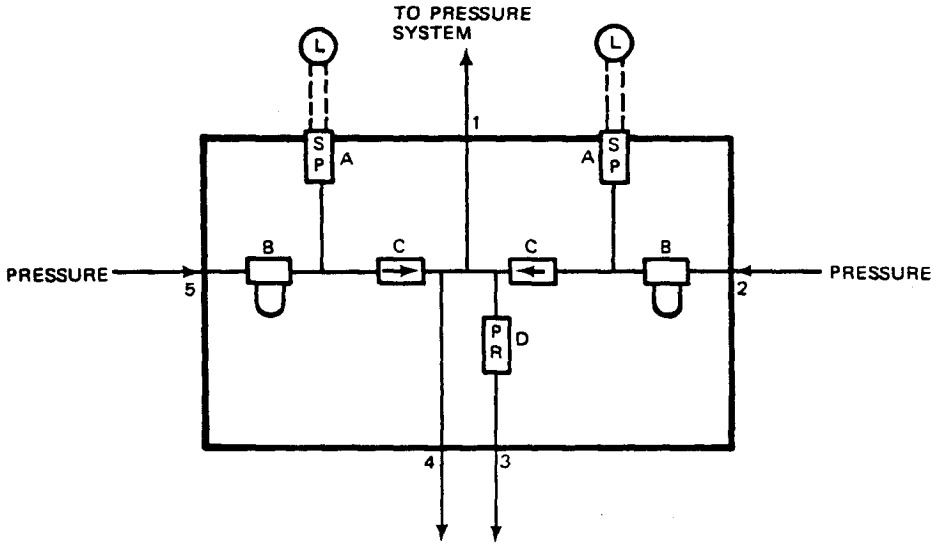
Test Limits
Figure 701 (Sheet 2)

TROUBLE SHOOTING

1. Trouble shooting is keyed to individual steps of the test procedure. Referenced paragraphs show test procedure step in which the noted trouble would appear. (See figure 801.)

	Trouble	Possible Cause	Correction
A.	External leakage around parts installed in housing, paragraph 2.A. or 2.B.	Damaged packing or backup ring	Remove component and replace packings and backup rings as required. Reinstall and tighten to specified torque value
B.	Free flow not observed, paragraph 3.B. or 3.C.	Passage through housing clogged or blocked	Clear passage through housing
C.	Free flow not observed through relief valve, paragraph 3.D.	Defective relief valve	Replace relief valve
D.	Pressure switch does not operate at correct pressure, paragraph 4.B. or 4.C.	Defective pressure switch	Repair or replace pressure switch per manufacturer's instructions
E.	Leakage through check valve, paragraph 5.B.	Damaged packing or backup ring	Remove check valve and replace packing or backup rings as required. Reinstall and tighten to specified torque value
		Defective check valve	Replace check valve
F.	Relief valve does not open at proper pressure, paragraph 6.A.(1) or does not have proper pressure drop, paragraph 6.B.(2)	Damaged packing or backup ring	Remove relief valve and replace packing or backup rings as required. Reinstall and tighten to specified torque value
		Defective relief valve	Replace relief valve

Trouble	Possible Cause	Correction
G. Relief valve does does not reseat at proper pressure, paragraph 6.A.(3) or 6.B.(3)	Defective relief valve	Replace relief valve



A PRESSURE SWITCH
B FILTER
C CHECK VALVE
D RELIEF VALVE
1-5 EXTERNAL CONNECTION PORTS

System "B" Hydraulic Modular Package Assembly Schematic Diagram
Figure 801

STORAGE INSTRUCTIONS

1. After testing is completed, partially fill assembly P/N 65-17822-1 thru -6, and -9, 65-17851, 65-44590 with hydraulic fluid, BMS 3-11. If Skydrol 7000 was used for testing, unit must be thoroughly drained and flushed before BMS 3-11 is added. Partially fill assembly P/N 65-17822-8 and 65-73874-2 with hydraulic fluid MIL-H-5606.

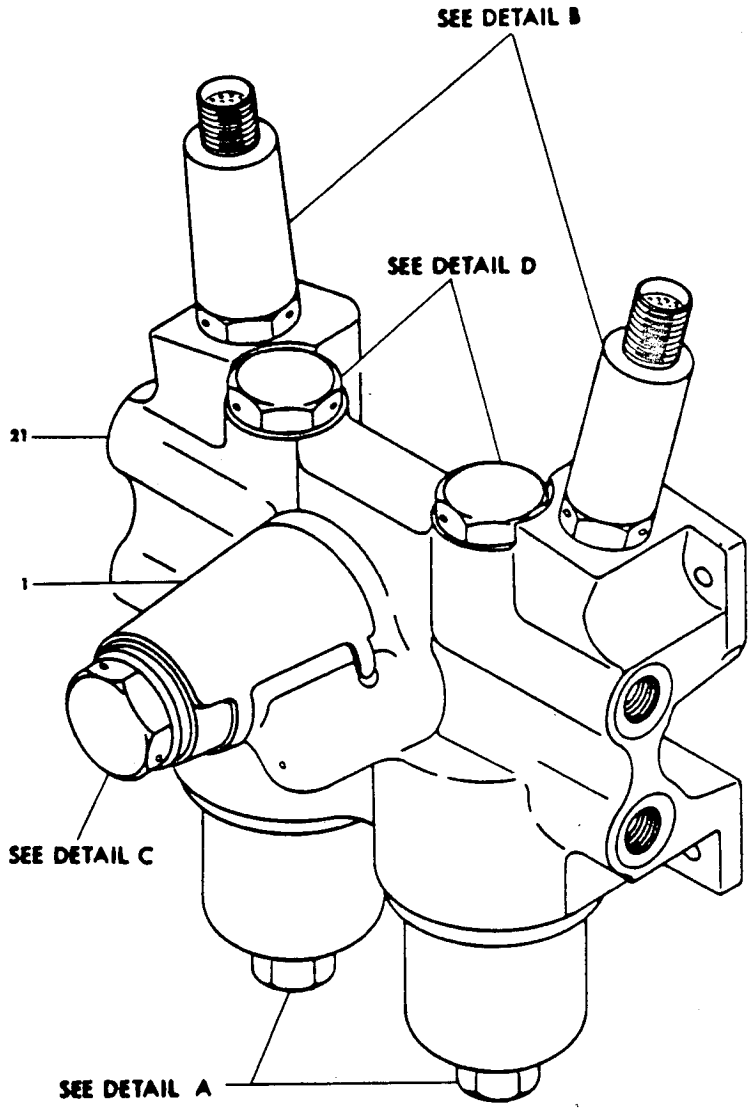
2. Plug or cap all ports with hydraulic-fluid-resistant closures to prevent contamination or leakage from unit during storage.

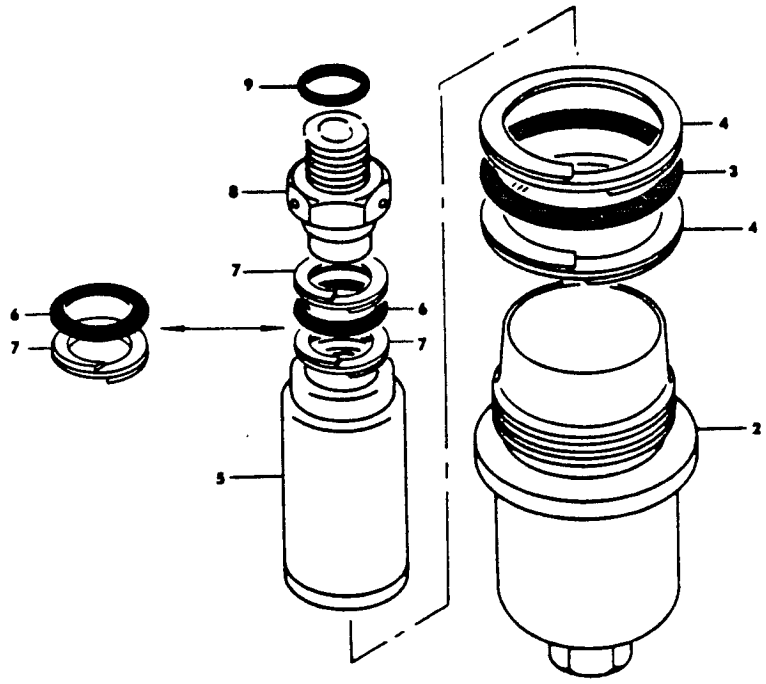
3. Tag unit with cure date of packings and test date.

4. Wrap unit in vapor barrier paper and store.

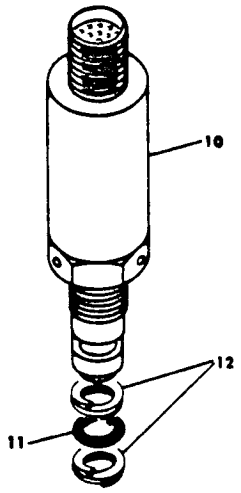
5. For further information refer to 20-44-02, Temporary Protective Coatings.

ILLUSTRATED PARTS LIST





DETAIL A



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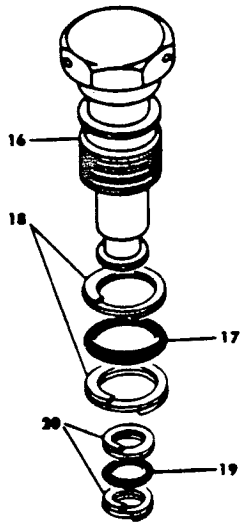

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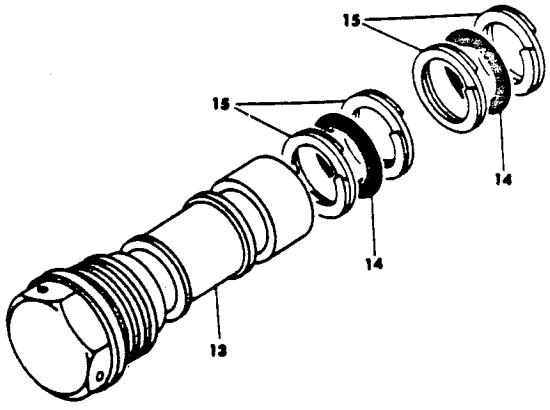


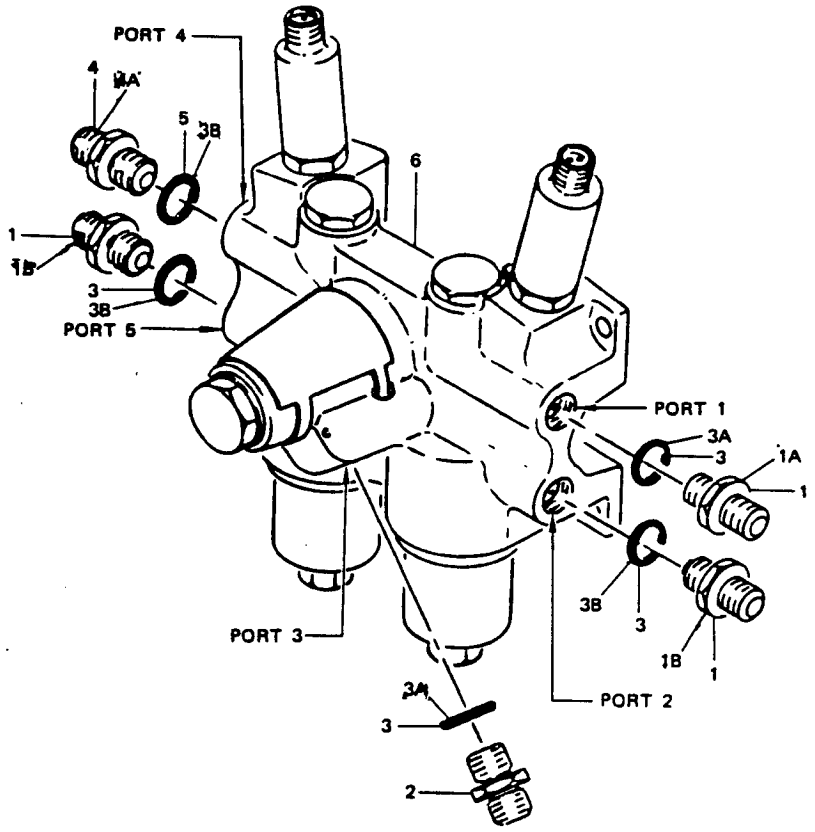
DETAIL C

System "B" Hydraulic Modular Package Assembly
Figure 1101 (Sheet 2)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-17822-1		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	A	REF
	65-17822-2		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	B	REF
	65-17822-3		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	C	REF
	65-17822-4		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	D	REF
	65-17822-5		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	E	REF
	65-17822-6		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	F	REF
	65-17822-8		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	G	REF
	65-17822-9		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY (SB 29-44)	H	REF
	65-17822-10		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	I	REF
1	BACN12A3KR		. NAMEPLATE	AB	1
1	BACN12A3LW		. NAMEPLATE (OPT TO BAC27DHY038)	C-FHI	1
1	BAC27ODHY0308		. NAMEPLATE (OPT TO BACN12A3LW)	C-FHI	1
1	BAC27CHY54		. NAMEPLATE	G	1
1	BAC27DHY0267		. NAMEPLATE (OPT)	H	1
2	65-17989-9		. FILTER BOWL (PREF)(PRE SB 29-1062)	A-E	2
2	65-17989-5		. FILTER BOWL (OPT)(PRE SB 29-1062)	AB	2
2	65-17989-1		. FILTER BOWL (OPT)(PRE SB 29-1062)	AB	2
2	65-17989-5		. FILTER BOWL (OPT)(PRE SB 29-1062)	CDE	2
2	65-17989-11		. FILTER BOWL (POST SB 29-1062)	A-E	2
2	65-17989-7		. FILTER BOWL (OPT)(PRE SB 29-1062)	FGHI	2
2	65-17989-9		. FILTER BOWL (PREF)(POST SB 29-1062)	FGHI	2
3	NAS1611-226		. PACKING, O-RING	A-FHI	2
3	MS28775-226		. PACKING, O-RING	G	2
4	S12766-226		. RING, BACKUP (PREF) V97820	AB	4
4	MS28783-4		. RING, BACKUP (OPT)	AB	4
4	BACR12BM226		. RING, BACKUP (PREF)	C-I	4
4	S12766-226		. RING, BACKUP (OPT) V97820	C-I	4
5	7500173		. FILTER, V81321 (BOEING 10-60489-1) (REPLD BY 10-60592-2 PER SB 29-19)	A	2
5	7511142		. FILTER, V81321 (BOEING 10-60569-2) (REPLD BY 10-60592-2 PER SB 29-19)	B	2
5	AC7681E2		. FILTER, V01414 (BOEING 10-60592-2)	A-FHI	2
5	7511122		. FILTER, V81321 (BOEING 10-60592-2)	A-FHI	2
5	7513128		. FILTER, V05228 (BOEING 10-60592-4)	G	2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
6	NAS1611-212		. PACKING, O-RING	A-FHI	2
6	MS28775-212		. PACKING, O-RING	G	2
7	MS28782-17		. RING, BACKUP	A	4
7	MS28782-17		. RING, BACKUP	B-I	2
8	66-12197-1		. FILTER FITTING		2
9	NAS1612-8		. PACKING, O-RING	A-FHI	2
9	MS28778-8		. PACKING, O-RING	G	2
10	90G37		. SWITCH, PRESSURE, V09049 (BOEING 10-60552-1)(OPT)	A-F	2
10	90G183		. SWITCH, PRESSURE, V09049 (BOEING 10-60552-11)(OPT)	A-F	2
10	1225P6-1		. SWITCH, PRESSURE, V98087 (BOEING 10-60552-22)(PREF)	A-F	2
10	S90G162		. SWITCH, PRESSURE, V09049 (BOEING 10-60552-10)	G	2
10	1225P6-2		. SWITCH, PRESSURE, V98087 (BOEING 10-60552-35)	H	2
10	90G183		. SWITCH, PRESSURE, V09049 (BOEING 10-60552-11) (OPT)	H	2
10	90G183		. SWITCH, PRESSURE, V09049 (BOEING 10-60552-11)	I	2
10	1225P6-1		. SWITCH, PRESSURE, V98087 (BOEING 10-60552-22) (OPT)	HI	2
11	NAS1611-113		. PACKING, O-RING	A-FHI	2
11	MS28775-113		. PACKING, O-RING	G	2
12	MS28782-11		. RING, BACKUP		4
13	A61498		. VALVE, PRESSURE RELIEF, V81982 (BOEING 10-60551-1)	ABC	1
13	1652		. VALVE, PRESSURE RELIEF, V06177 (BOEING 10-60551-3)	DEFHI	1
13	1747		. VALVE, PRESSURE RELIEF, V06177 (BOEING 10-60551-5)	G	1
13	3314711		. VALVE, PRESSURE RELIEF	I	1
14	NAS1611-213		. PACKING, O-RING	A-FHI	2
14	MS28775-213		. PACKING, O-RING	G	2
15	MS28782-18		. RING, BACKUP		4
16	H61C0551		. VALVE, CHECK, V92003 (BOEING 10-60491-1)	A-FHI	2
16	2730458		. VALVE, CHECK, V92003 (BOEING 10-60491-5)	G	2
17	NAS1611-211		. PACKING, O-RING	A-FHI	2
17	MS28775-211		. PACKING, O-RING	G	2
18	MS28782-16		. RING, BACKUP		4

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
19	NAS1611-111		. PACKING, O-RING	A-FHI	2
19	MS28775-111		. PACKING, O-RING	G	2
20	MS28782-9		. RING, BACKUP		4
21	65-17979-4		. HOUSING (PREF)	A-D	1
21	65-17979-1		. HOUSING (OPT)	A-D	1
21	65-17979-4		. HOUSING	E-HI	1



System "B" Hydraulic Pressure 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-					
	65-17851-7		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	A	REF
	65-17851-12		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	B	REF
	65-17851-19		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	C	REF
	65-17851-27		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	D	REF
	65-17851-30		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY (SB 29-21)	E	REF
	65-17851-31		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY (SB 29-21)	F	REF
	65-17851-33		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	G	REF
	65-17851-34		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	H	REF
	65-17851-35		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	I	REF
	65-17851-36		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	J	REF
	65-17851-37		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	K	REF
	65-44590-2		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	L	REF
	65-44590-3		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	M	REF
	65-44590-4		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	N	REF
	65-44590-5		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	O	REF
	65-73874-2		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	P	REF
	65-17851-44		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	Q	REF
	65-17851-46		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	R	REF
	65-44590-6		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	S	REF
	65-17851-47		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	T	REF
	65-17851-48		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	U	REF
	65-44590-9		SYSTEM "B" HYDRAULIC PRESSURE MODULAR PACKAGE ASSY	V	REF

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1102					
1	BACU24K8		. UNION	A	3
1	BACU24K8		. UNION (PREF)	B	3
1	MS21902-8		. UNION (OPT)	B	3
1	BACU24X8		. UNION (REPLD BY MS 21902-8 PER SB 29-21)	CD	3
1	MS21902-8		. UNION (REPLS BACU24X8 PER 29-21)	CD	3
1	MS21902-8		. UNION	E-OQR STUV	3
1A	MS21902-8		. UNION	P	1
1B	MS21916-8-6		. REDUCER	P	2
2	MS21902D8		. UNION		1
3	NAS1612-8		. PACKING, O-RING		4
3A	MS28778-8		. PACKING, O-RING	P	2
3B	MS28778-6		. PACKING, O-RING	P	3
4	BACU24K6		. UNION	A	1
4	BACU24K6		. UNION (PREF)	B	1
4	MS21902-6		. UNION (OPT)	B	1
4	MS21902-6		. UNION	C-IQT	1
4	MS21916-6-4		. REDUCER	JKRU	1
4	MS21916-8-6		. REDUCER	L-OSV	1
4A	MS21913-6		. PLUG (REPLD BY AN814-6DL)	P	1
4A	AN814-6DL		. PLUG (REPLS MS21913-6)	P	1
5	NAS1612-6		. PACKING, O-RING		1
6	65-17822-1		. MODULAR PACKAGE ASSY, SYSTEM "B" HYDRAULIC PRESSURE	ABCE	1
6	65-17822-2		. MODULAR PACKAGE ASSY, SYSTEM "B" HYDRAULIC PRESSURE	DF	1
6	65-17822-3		. MODULAR PACKAGE ASSY, SYSTEM "B" HYDRAULIC PRESSURE	GL	1
6	65-17822-4		. MODULAR PACKAGE ASSY, SYSTEM "B" HYDRAULIC PRESSURE	HM	1
6	65-17822-5		. MODULAR PACKAGE ASSY, SYSTEM "B" HYDRAULIC PRESSURE	IJN	1
6	65-17822-6		. MODULAR PACKAGE ASSY, SYSTEM "B" HYDRAULIC PRESSURE	KOQT	1
6	65-17822-8		. MODULAR PACKAGE ASSY, HYDRAULIC PRESSURE	P	1
6	65-17822-9		. MODULAR PACKAGE ASSY, HYDRAULIC PRESSURE	RS	1
6	65-17822-10		. MODULAR PACKAGE ASSY, HYDRAULIC PRESSURE	UV	1
6	65-17822-10		. MODULAR PACKAGE ASSY, HYDRAULIC PRESSURE	UV	1

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V09049 CUSTOM COMPONENT SWITCHES, INC., 21111 PLUMMER STREET, CHATSWORTH, CALIFORNIA 91311

V81321 PUROLATOR, INC., 970 NEW BRUNSWICK AVENUE, RAHWAY, NEW JERSEY 07065

V81982 HYDRO-AIRE DIVISION, CRANE CO., 3000 WINONA AVE., BURBANK, CALIFORNIA 91502

V92003 PARKER HANNIFIN CORPORATION, 18321 JAMBOREE BOULEVARD, IRVINE, CALIFORNIA 92664

V97820 SHAMBAN W.S. AND COMPANY, 711 MITCHELL ROAD, NEWBURY PARK, CALIFORNIA 91320

V98087 NEO DYN, INC., P.O. BOX 506, 20200 SUNBRUST ST., CHATSWORTH, CALIFORNIA 91311