

MALABAR

INTERNATIONAL

AIRCRAFT MAINTENANCE & SUPPORT EQUIPMENT

OWNER'S MANUAL FOR MALABAR MODEL

PF55481-1P

2 GALLON FLUID DISPENSER

***READ
AND
SAVE***

**THIS
INSTRUCTION
MANUAL**

- * GENERAL DESCRIPTION
- * OPERATION
- * SERVICE
- * PARTS BREAKDOWN

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OVER 65 YEARS OF SERVICE & EXPERIENCE

GENERAL DESCRIPTION, OPERATION, SERVICE AND PARTS BREAKDOWN

***MALABAR MODEL PF55481-1P
2 GALLON FLUID DISPENSER***

CAUTION: AIRCRAFT MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS MUST BE FOLLOWED. IN THE EVENT OF CONTRADICTION BETWEEN AIRCRAFT MANUFACTURER'S SPECIFICATIONS AND MALABAR'S, AIRCRAFT MANUFACTURER'S WILL PREVAIL.

SPECIFICATIONS:

Fluid -----	PGW	
Reservoir capacity -----	2 U.S. gal	7.6 liters
Pump outlet pressure -----	150 psig max	1034 kPa
Volume per stroke-----	1.0 cubic in	16.4 cc
Hose length -----	84 in	2134 mm
Net weight (empty)-----	15 lbs	6.8 kg
Filter rating -----	3 micron nominal	
Fluid tank color-----	translucent	

GENERAL DESCRIPTION:

The Malabar Model PF55481-1P is a 2 gallon fluid dispenser used to service various commercial aircraft. The hand pump dispenser consists of a reservoir, pump assembly, relief valve, filter assembly, check valve, by-pass valve, pressure gauge and a fluid delivery hose.

PREPARATION FOR USE:

The unit is shipped fully assembled. Fill reservoir at fillport with approved fluid. Operate hand pump assembly a few strokes to bleed all air out of the system. The unit is now ready for use.

OPERATION:

1. Connect the hose to the aircraft service point.
2. Use full steady pumping strokes when operating pump assembly during replenishing.
3. Disconnect the hose from the aircraft service point and store the unit in a dry, dust free location.

ILLUSTRATED PARTS LIST:

Refer to figure 1A, 1B & 1C for unit assembly (see sheets 3, 4 & 5) or figure 2 for pump assembly (see sheet 6).

HYDRAULIC DIAGRAM:

Refer to figure 3 for hydraulic diagram (see sheet 7).

SERVICING:

1. The frequency of filter change depends on operating conditions. Generally, changes should be made every 3-4 months or sooner if more than normal resistance is felt on the pumping stroke at low pressure. Refer to item 8 in figure 1B (see sheet 4) to change element.

REPAIR AND REPLACEMENT:

No definite time schedule can be established for the overhaul of the pump assembly for the replacement of the various moving parts. The number of times the pump assembly is operated materially affect the life of the working parts. The moving piston seal (item 4) and rod seal (item 14) are normally the first to wear (see sheet 6). This is usually indicated by leakage of fluid past the piston or rod. It is advisable to change piston seal (item 4), rod seal (item 14) and static seal (item 13) immediately if leakage is discovered. A repair parts kit (P/N PF2-78PK) is available and recommended to keep on hand at your facility. Refer to sheet 8 for the complete list of parts contained in the repair parts kit.

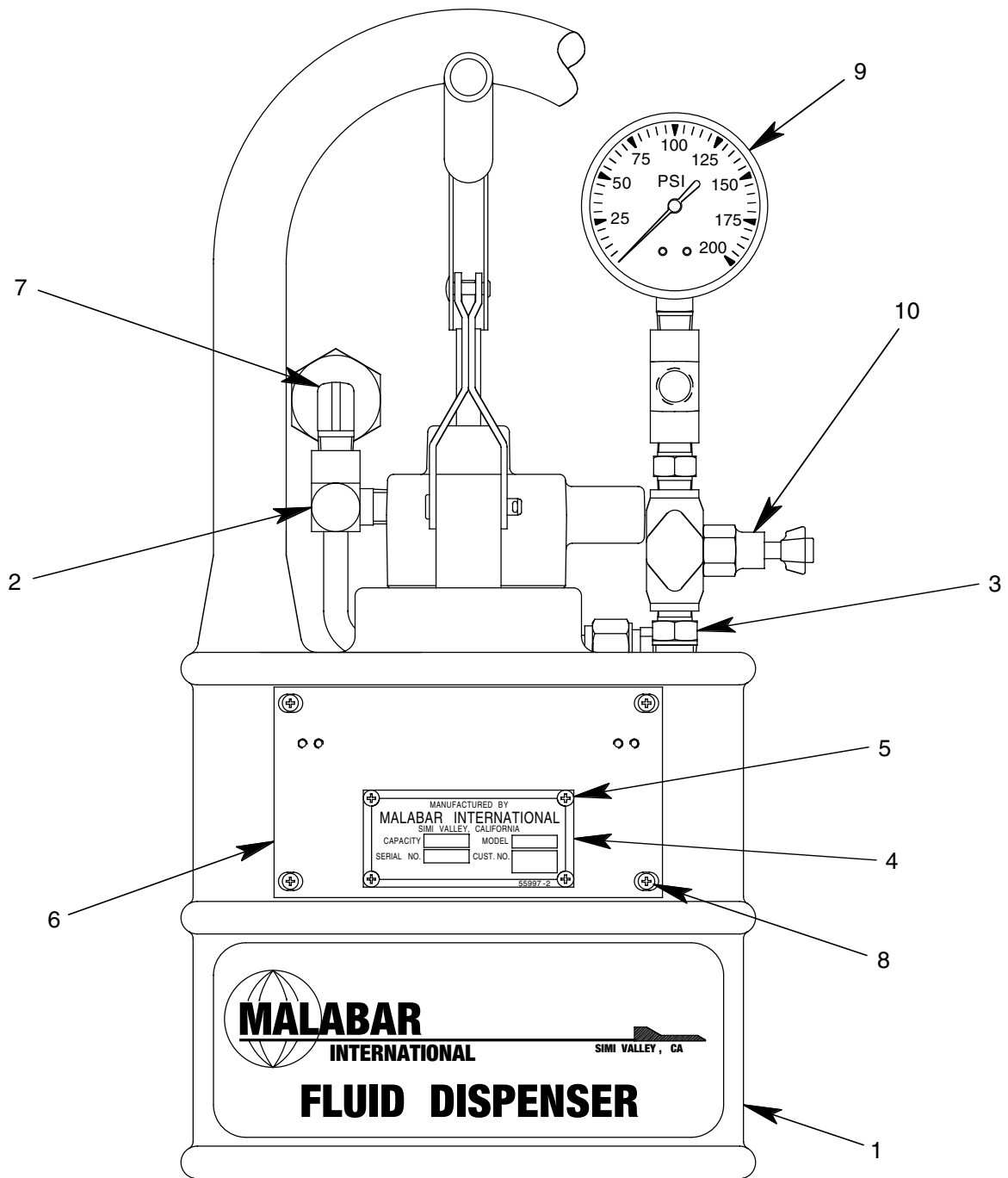
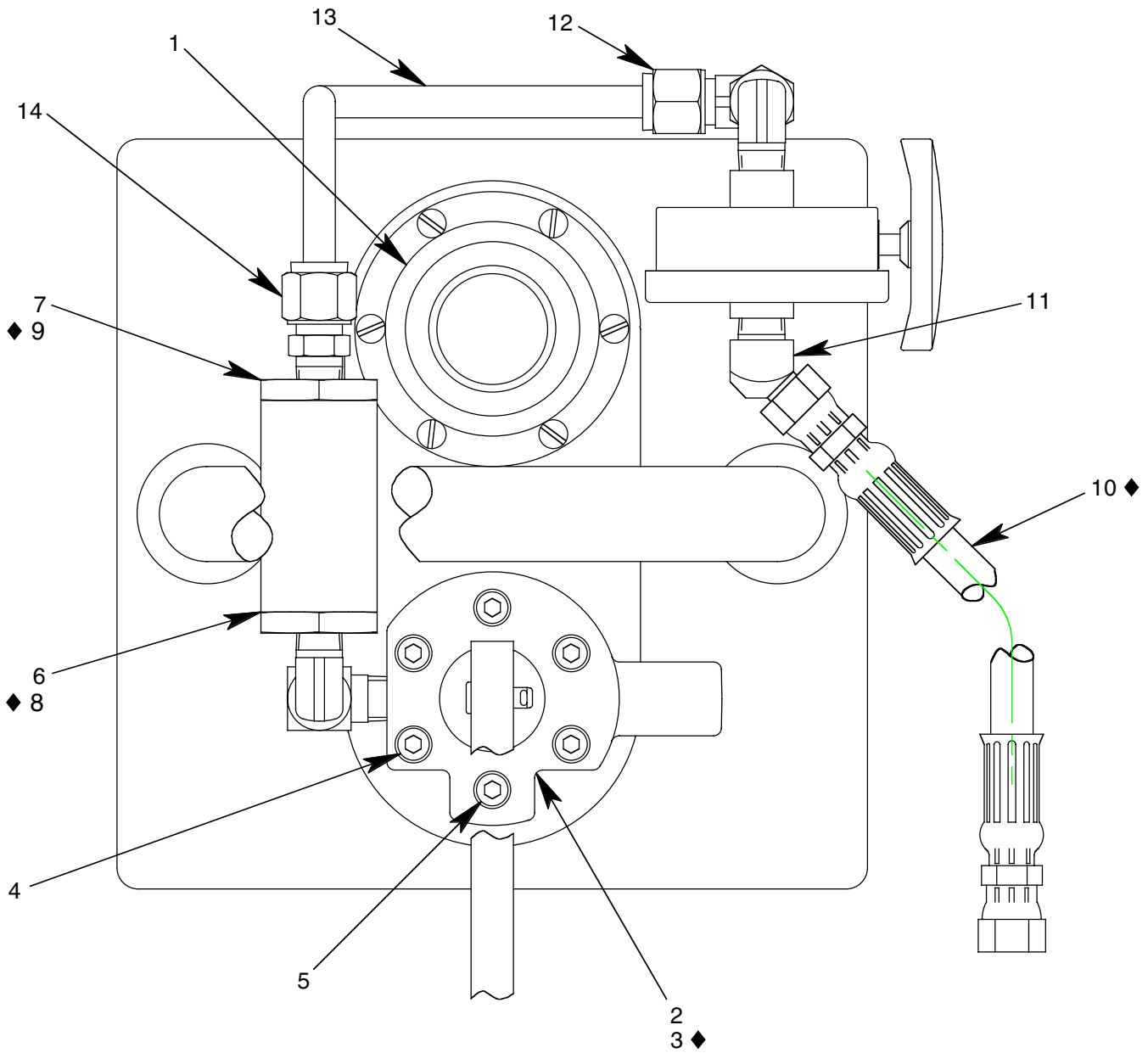


FIGURE 1A

PF55481-1P UNIT ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55838-4	FLUID TANK (TRANSLUCENT)	6	1	PF55859	PLACARD PLATE
2	1	712-008	ELBOW, STREET, 1/4 NPT	7	1	712-022	ELBOW, 1/4 NPT
3	1	711-018	NIPPLE, 1/4 NPT x 3/8 NPT	8	4	344-011	FHMS, 6-32 x 7/16 LG
4	1	55997-2	NAMEPLATE	9	1	482-050	GAUGE, 0-200 PSI
5	4	397-010	SELF TAPPING SCREW, 6-32	10	1	PF53680	BY-PASS VALVE



◆ PART OF REPAIR PARTS KIT

FIGURE 1B

PF55481-1P UNIT ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55447	FILLPORT ASSEMBLY	10	1	PF55470-1	HOSE ASSEMBLY
2	1	PF55460-1	PUMP ASSEMBLY	11	1	722-009	ELBOW, 3/8 37° x 1/4 NPT
3	1	PF55672	GASKET	12	1	722-014	ELBOW, 3/8 TUBE x 1/4 NPT
4	5	323-038	SHCS, 1/4-28 x 1 3/4 LG	13	1	732-002	TUBING, 3/8 OD x .049 WALL
5	1	323-063	SHCS, 1/4-28 x 1" LG	14	1	721-009	CONNECTOR, 3/8 T x 1/4 NPT
6	1	PF712721	FILTER HOUSING				
7	1	PF712722	FILTER RETAINER				
8	1	481-007	FILTER ELEMENT				
9	1	55930-120	O-RING				

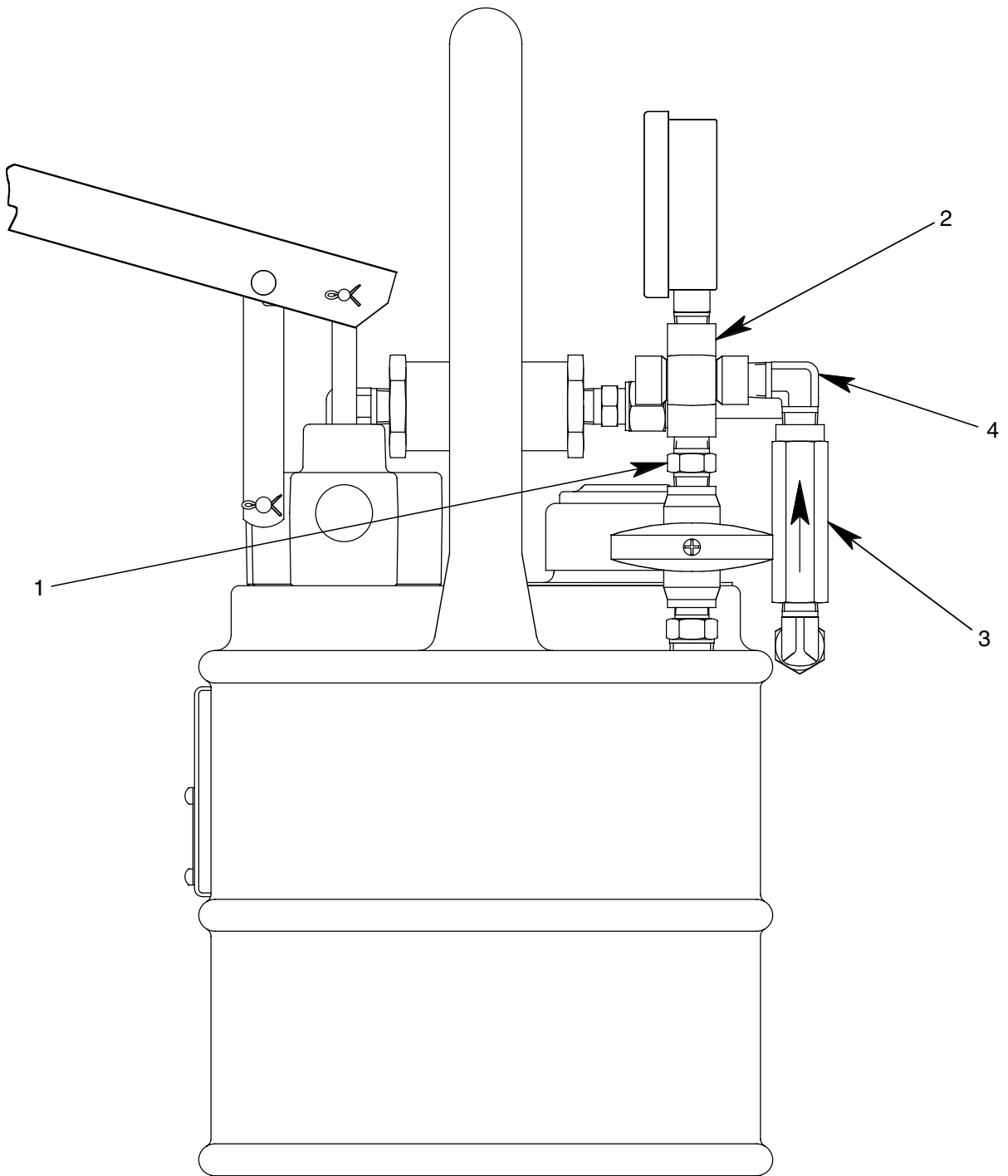


FIGURE 1C

PF55481-1P UNIT ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	711-003	NIPPLE, 1/4 NPT	3	1	422-013	CHECK VALVE
2	1	715-002	CROSS, 1/4 NPT	4	1	712-022	ELBOW, 1/4 NPT

◆ PART OF REPAIR PARTS KIT

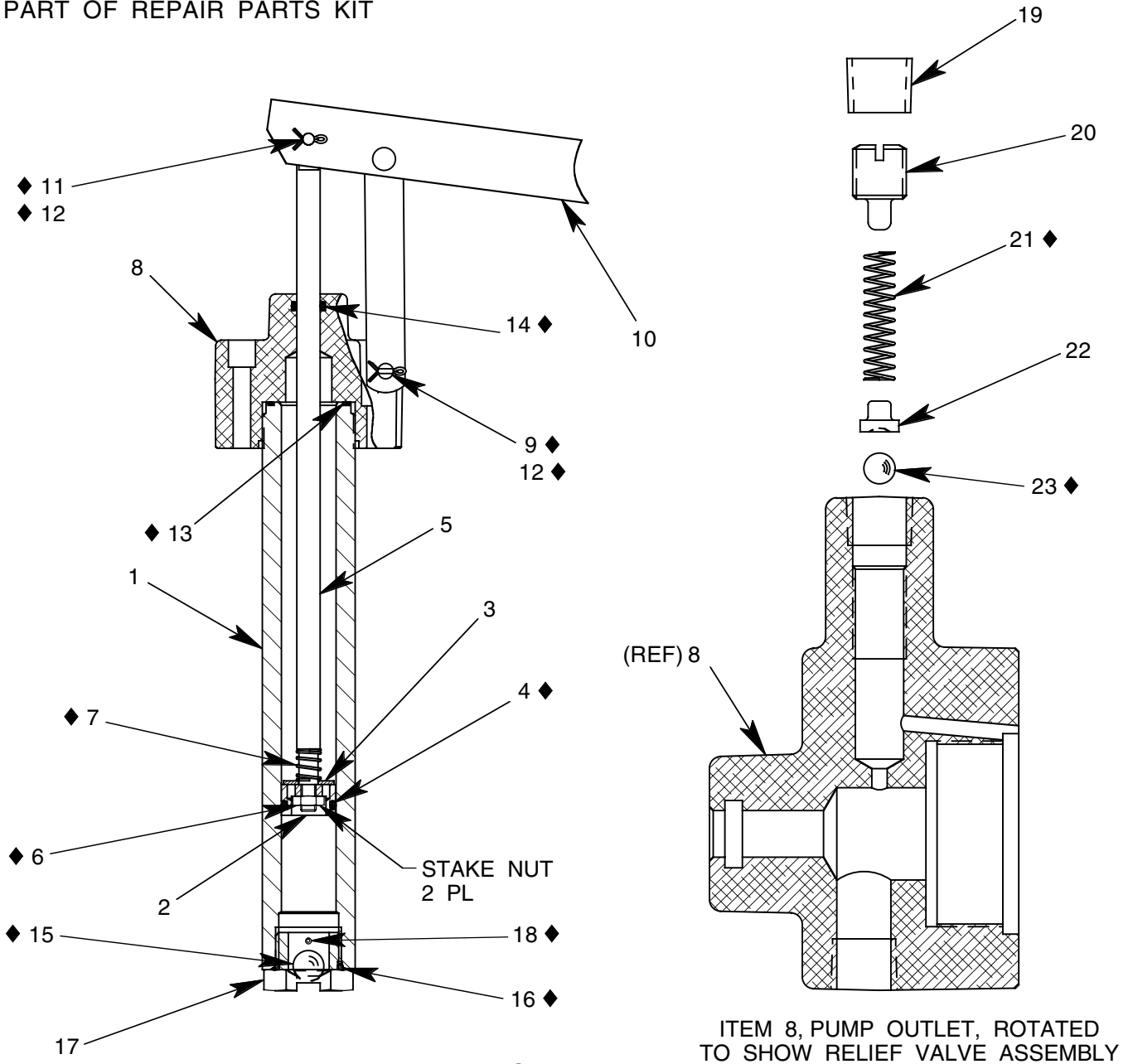
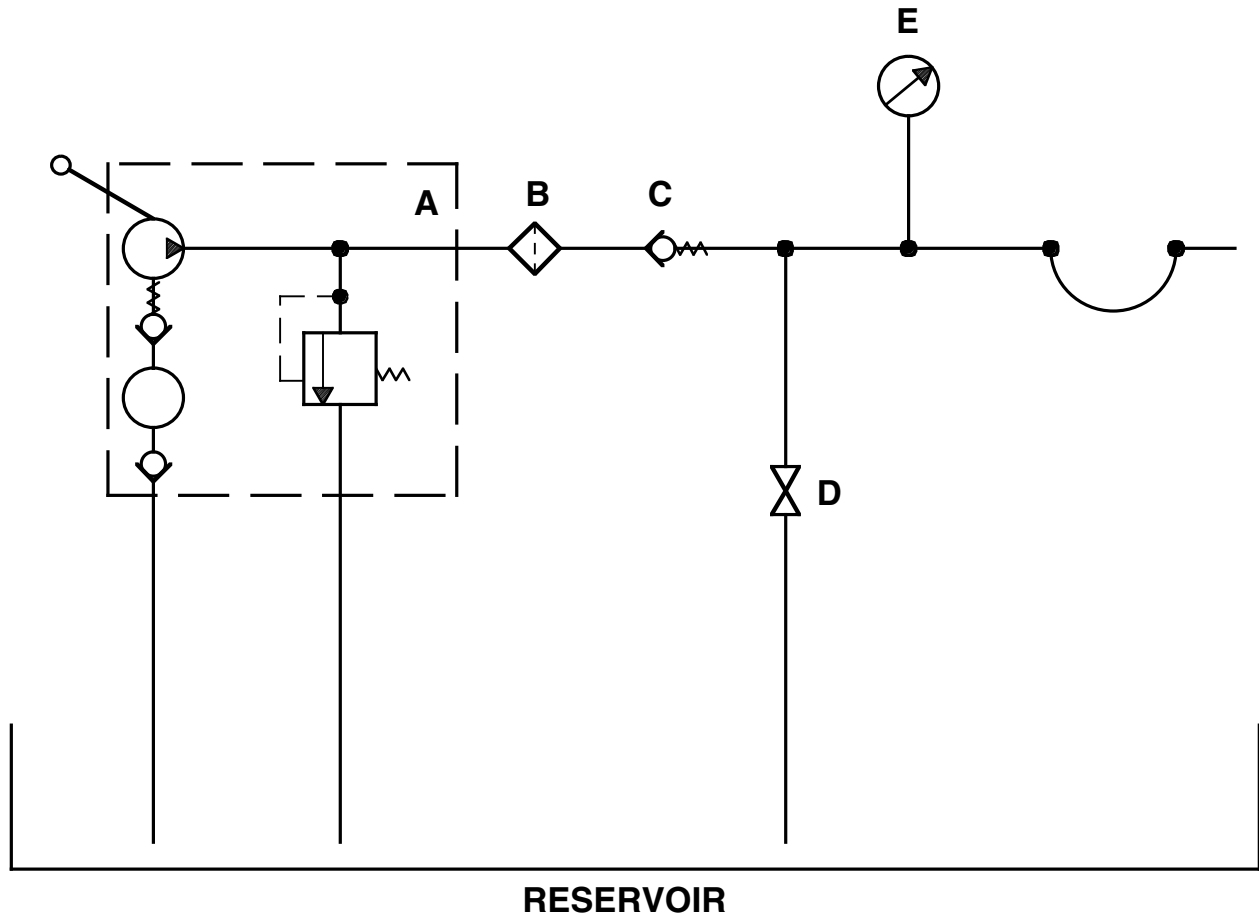


FIGURE 2

PF55460-1 PUMP ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55441	PUMP TUBE	13	1	55930-024	O-RING
2	1	PF55452	PUMP PISTON	14	1	55930-110	O-RING
3	1	PF55453	PUMP PISTON DISC	15	1	412-006	STEEL BALL, 1/2 DIA
4	1	55930-115	O-RING	16	1	55930-912	O-RING
5	1	PF53378	PUMP PISTON ROD	17	1	PF55442	VALVE BODY
6	1	352-011	HEX JAM NUT, 1/4-28	18	1	371-017	ROLL PIN, 3/32 DIA x 7/8 LG
7	1	PF53406	SPRING	19	1	717-006	PLUG, 1/4 NPT
8	1	PF55820-1	PUMP OUTLET	20	1	55148	SET SCREW
9	1	373-006	FH PIN, 1/4 DIA x 1 9/32 LG	21	1	495-038	SPRING
10	1	494-017	HANDLE ASSEMBLY	22	1	55153	SPRING GUIDE
11	1	AN393-17	FH PIN, 3/16 DIA x 17/32 LG	23	1	412-004	STEEL BALL, 1/4 DIA
12	2	372-011	COTTER PIN, 1/16 x 1/2 LG				



- A - HAND PUMP ASSEMBLY WITH INTEGRAL RELIEF VALVE
- B - FILTER
- C - CHECK VALVE
- D - BY-PASS VALVE
- E - GAUGE

FIGURE 3

HYDRAULIC DIAGRAM

PF2-78PK REPAIR PARTS KIT

QTY	PART NO.	PART NAME
1	PF55470-1	HOSE ASSEMBLY
1	PF55672	GASKET
1	55930-120	O-RING
1	481-007	FILTER ELEMENT
1	373-006	FLAT HEAD PIN, 1/4 DIA x 1 9/32 LG
2	372-011	COTTER PIN, 1/16 DIA x 1/2 LG
1	AN393-17	FLAT HEAD PIN, 3/16 DIA x 17/32 LG
1	55930-024	O-RING
1	PF53406	SPRING
1	412-006	STEEL BALL, 1/2 DIA
1	55930-110	O-RING
1	55930-912	O-RING
1	55930-115	O-RING
1	352-011	HEX JAM NUT, 1/4-28
1	371-017	ROLL PIN, 3/32 DIA x 7/8 LG
1	495-038	SPRING
1	412-004	STEEL BALL, 1/4 DIA
1	PF2-78PKDOC	REPAIR PARTS KIT LIST