Date: May 2, 2013

MALABAR

INTERNATIONAL

AIRCRAFT MAINTENANCE & SUPPORT EQUIPMENT

READ AND SAVE

THIS INSTRUCTION MANUAL

OWNER'S MANUAL FOR MALABAR MODEL

PF54124-11P

2 GALLON FLUID DISPENSER

* GENERAL DESCRIPTION
* OPERATION
* SERVICE
* PARTS BREAKDOWN

For Service & Spare Parts, Please Contact:

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OVER 65 YEARS OF SERVICE & EXPERIENCE

GENERAL DESCRIPTION, OPERATION, SERVICE AND PARTS BREAKDOWN

MALABAR MODEL PF54124-11P
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	MIL-PRF-83282	
Reservoir capacity	2 U.S. gal	7.6 liters
Pump outlet pressure	100 psig	689 kPa
Volume per stroke	2.5 cubic in	41 cc
Relief valve setting	50 ± 5 psig	345 ± 34 kPa
Hose length	84 in	2134 mm
Net weight (empty)	15 lbs	6.8 kg
Filter rating	3 micron nominal	
Fluid tank color	red	

GENERAL DESCRIPTION:

The Malabar Model PF54124-11P is a 2 gallon fluid dispenser used to service various commercial aircraft. The hand pump dispenser consists of a reservoir, pump assembly, 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. Close by-pass valve.
2. Connect the hose to the aircraft service point.
3. Use full steady pumping strokes when operating pump assembly.
4. Open by-pass valve to allow fluid to drain to reservoir.
5. 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.
2. NOTE: The relief valve should not be removed. The relief valve is set to by-pass oil back to the reservoir at 50 ± 5 PSIG.

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 6) and rod seal (item 11) 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 6), rod seal (item 11) and gasket (item 16) immediately if leakage is discovered. A repair parts kit (P/N PF2-59PK) 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.

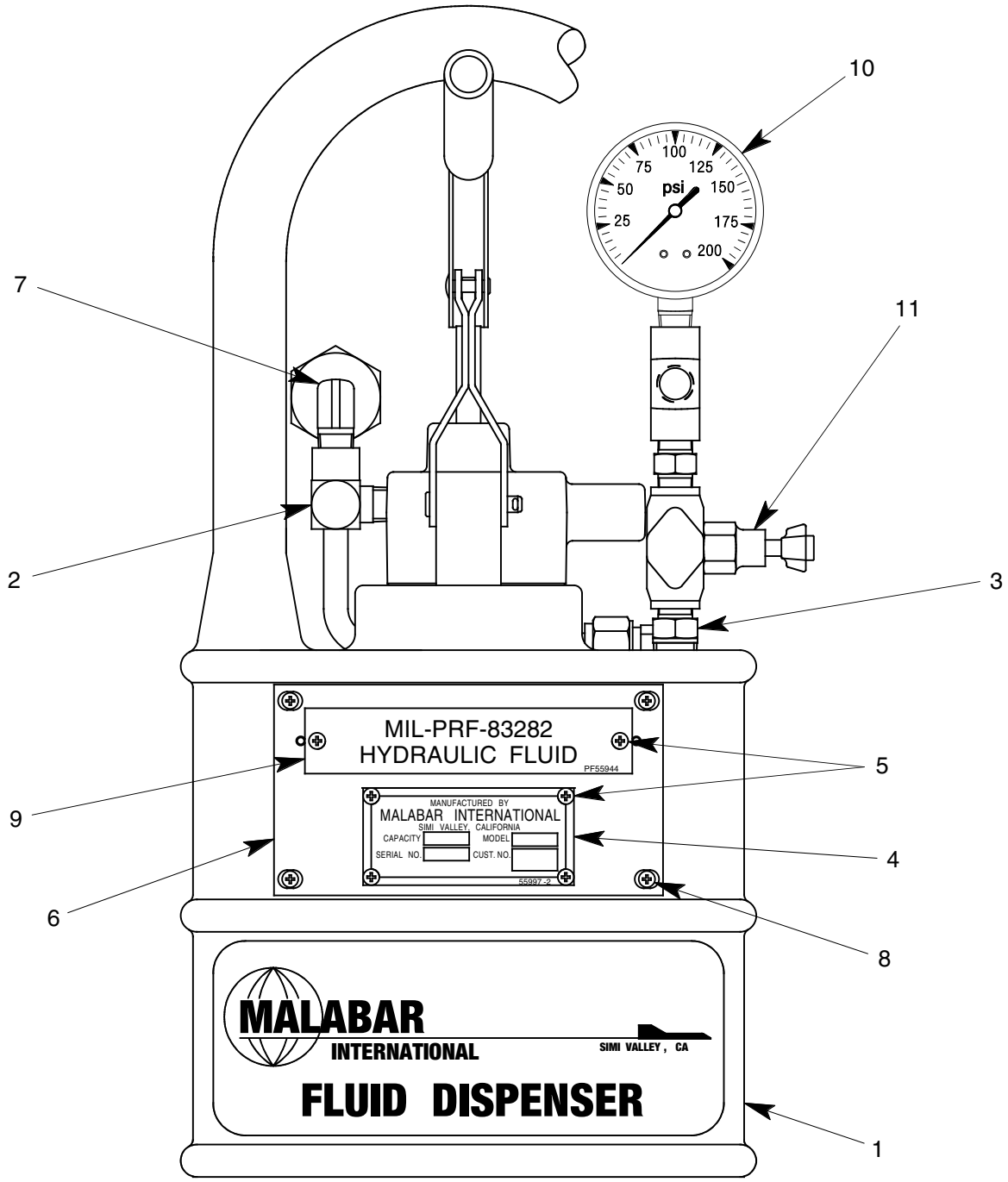
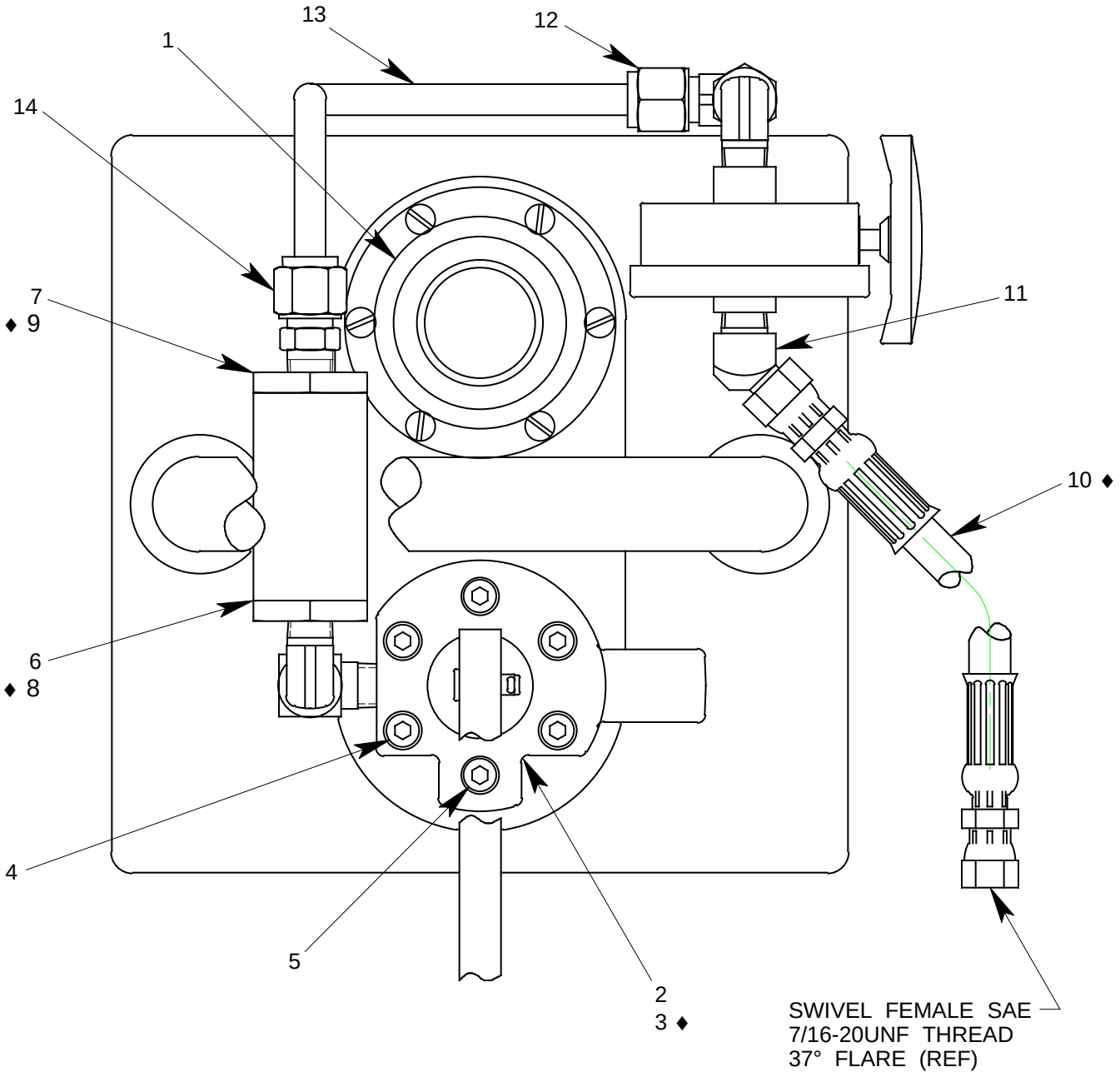


FIGURE 1A

PF54124-11P UNIT ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55838-1	FLUID TANK	7	1	712-022	ELBOW, 1/4 NPT
2	1	712-008	ELBOW, STREET, 1/4 NPT	8	4	344-011	FHMS, 6-32 x 7/16 LG
3	1	711-018	NIPPLE, 3/8 NPT x 1/4 NPT	9	1	PF55944	PLACARD, MIL-PRF-83282
4	1	55997-2	NAMEPLATE	10	1	482-050	GAUGE, 0-200 PSIG
5	6	397-010	SELF TAPPING SCREW, 6-32	11	1	424-017	BY-PASS VALVE
6	1	PF55859	PLACARD PLATE				



♦ **PART OF REPAIR PARTS KIT**

FIGURE 1B

PF54124-11P UNIT ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55447	FILLPORT ASSEMBLY	8	1	481-005	FILTER ELEMENT
2	1	PF55845-1	PUMP ASSEMBLY	9	1	55925-120	O-RING
3	1	PF55672	GASKET	10	1	PF55456-6	HOSE ASSEMBLY
4	5	323-038	SHCS, 1/4-28 x 1 3/4 LG	11	1	722-009	ELBOW, 3/8 37° x 1/4 NPT
5	1	323-063	SHCS, 1/4-28 x 1" LG	12	1	722-014	ELBOW, 3/8 TUBE x 1/4 NPT
6	1	PF712721	FILTER HOUSING	13	1	732-002	TUBING, 3/8 OD x .049 WALL
7	1	PF712722	FILTER RETAINER	14	1	721-009	CONNECTOR, 3/8 T x 1/4 NPT

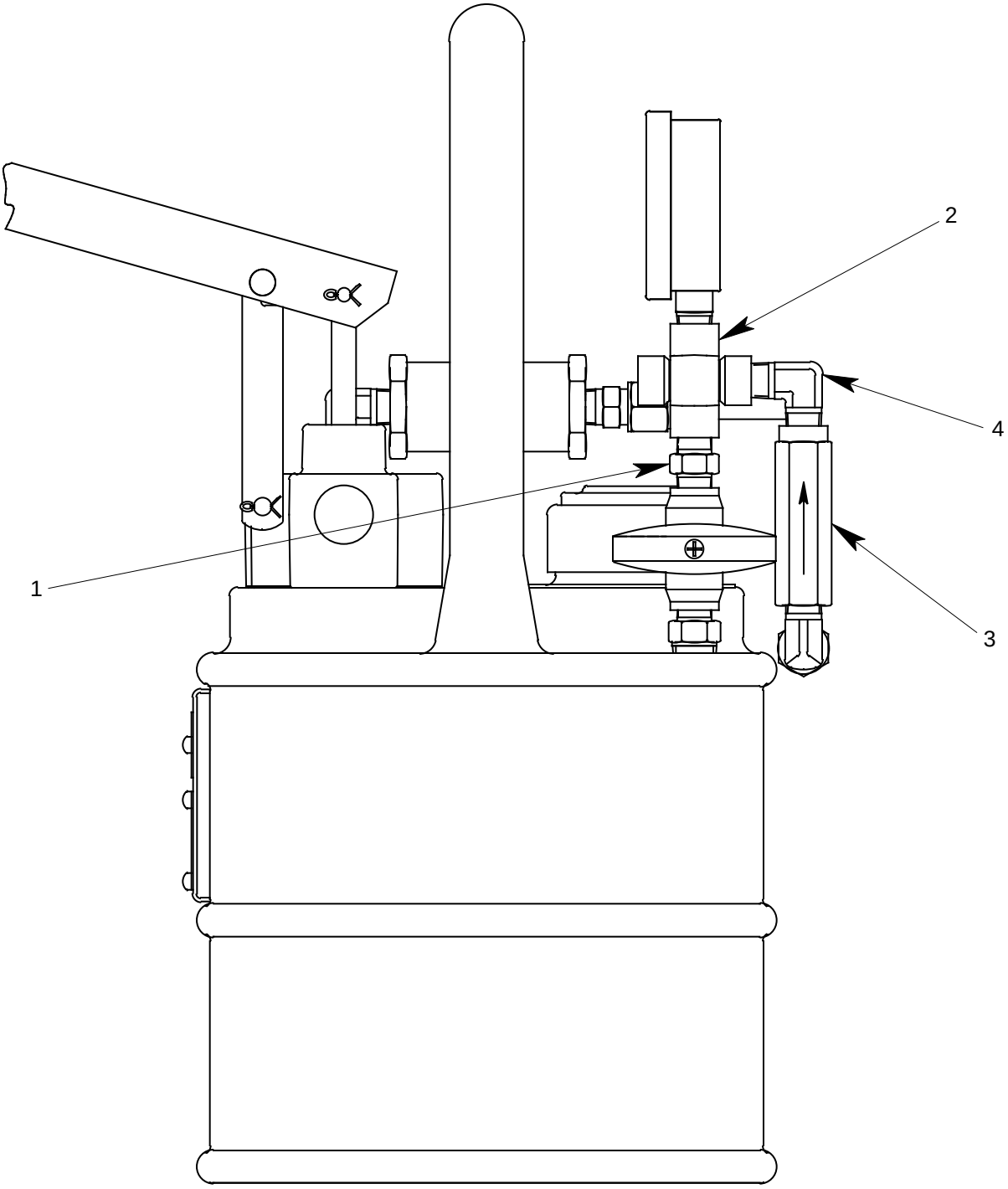
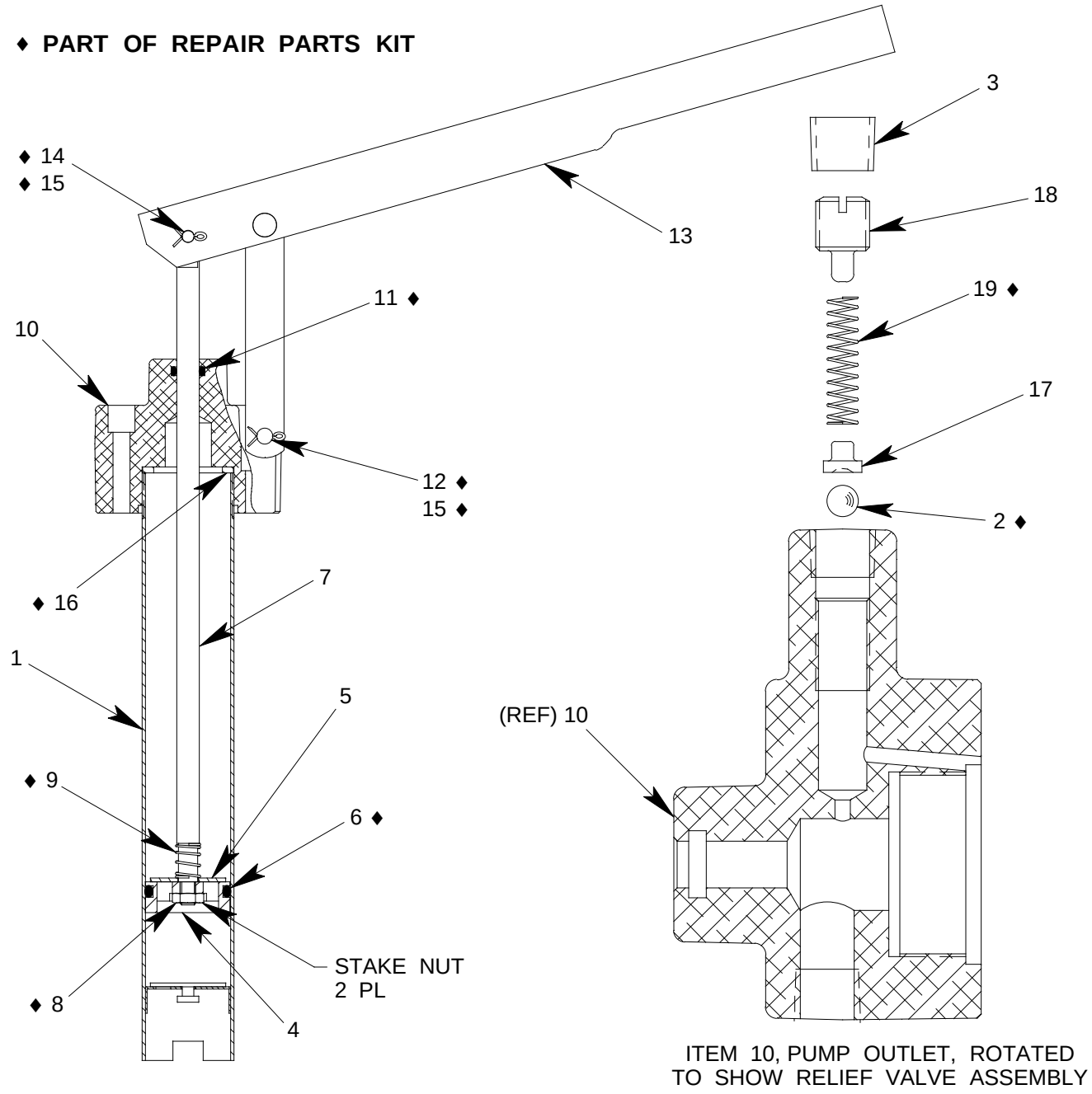


FIGURE 1C

PF54124-11P 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**

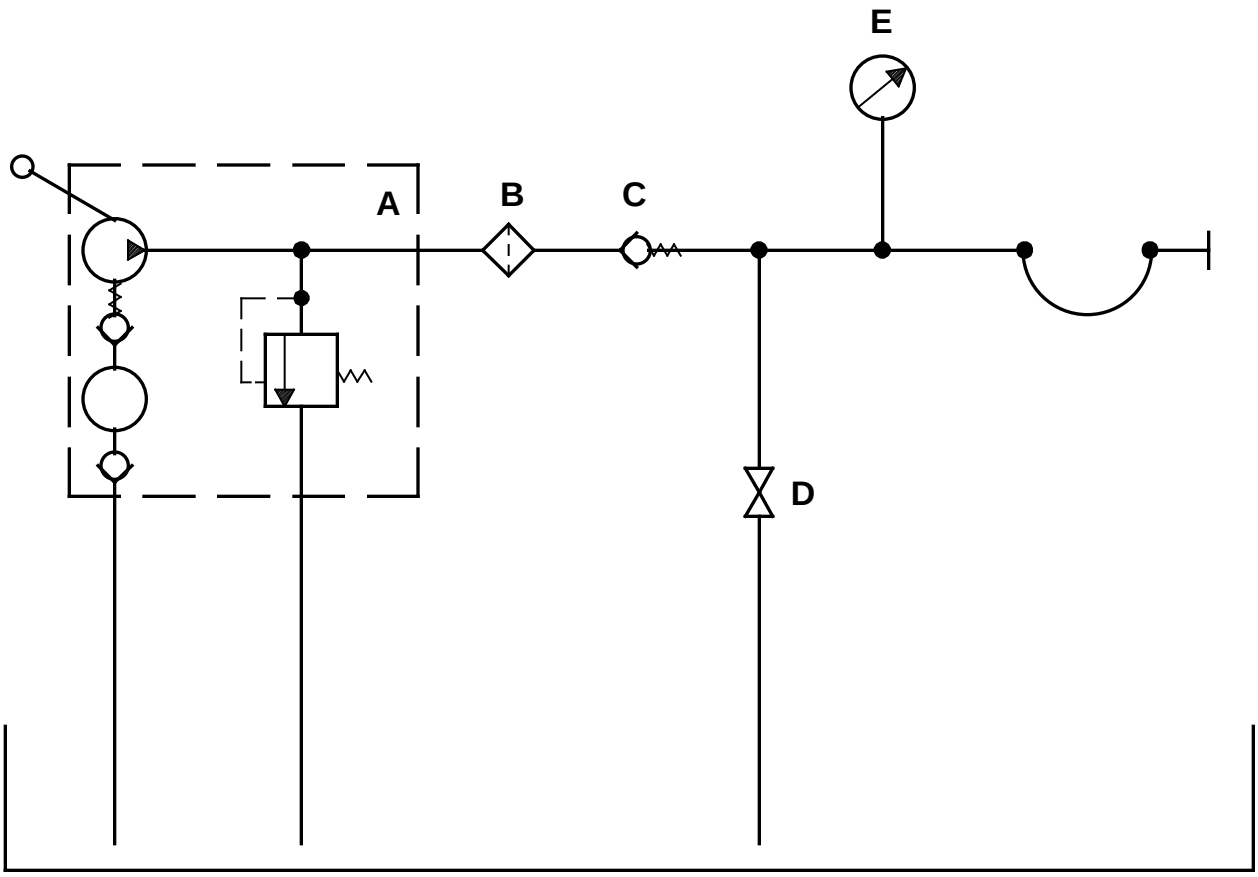


ITEM 10, PUMP OUTLET, ROTATED
TO SHOW RELIEF VALVE ASSEMBLY

FIGURE 2

PF55845-1 PUMP ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF53376	TUBE ASSEMBLY	11	1	55925-110	O-RING
2	1	412-004	STEEL BALL, 1/4 DIA	12	1	373-006	FH PIN, 1/4 DIA x 1 9/32 LG
3	1	717-006	PLUG, 1/4 NPT	13	1	494-017	HANDLE ASSEMBLY
4	1	PF53379	PISTON	14	1	AN393-17	FH PIN, 3/16 DIA x 17/32 LG
5	1	PF53380	PISTON CHECK DISC	15	2	372-011	COTTER PIN, 1/16 x 1/2 LG
6	1	55925-216	O-RING	16	1	PF54063	GASKET
7	1	PF53378	PUMP PISTON ROD	17	1	55153	SPRING GUIDE
8	1	352-011	HEX JAM NUT, 1/4-28	18	1	55148	SET SCREW
9	1	PF53406	SPRING	19	1	495-038	SPRING
10	1	PF55820-1	PUMP OUTLET				



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

FIGURE 3

HYDRAULIC DIAGRAM

PF2-59PK REPAIR PARTS KIT

QTY	PART NO.	PART NAME
1	PF55456-6	HOSE ASSEMBLY
1	PF54063	GASKET
1	PF55672	GASKET
1	55925-110	O-RING
1	55925-120	O-RING
1	55925-216	O-RING
1	481-005	FILTER ELEMENT
1	495-038	SPRING
1	PF53406	SPRING
1	AN393-17	FLAT HEAD PIN, 3/16 DIA x 17/32 LG
1	373-006	FLAT HEAD PIN, 1/4 DIA x 1 9/32 LG
1	352-011	HEX JAM NUT, 1/4-28
2	372-011	COTTER PIN, 1/16 x 1/2 LG
1	412-004	STEEL BALL, 1/4 DIA
1	PF2-59PKDOC	REPAIR PARTS KIT LIST