

MALABAR

INTERNATIONAL

AIRCRAFT MAINTENANCE & SUPPORT EQUIPMENT

OWNER'S MANUAL FOR MALABAR MODEL

PF53481-66WS

5 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 PF53481-66WS
5 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-----	5 U.S. gal	18.9 liters
Pump outlet pressure -----	100 psig	689 kPa
Volume per stroke -----	3.0 cubic in	49 cc
Hose length -----	240 in	6096 mm
Net weight (empty) -----	35 lbs	15.9 kg
Filter rating-----	1 micron nominal	
Fluid tank-----	stainless steel	

GENERAL DESCRIPTION:

The Malabar Model PF53481-66WS is a 5 gallon fluid dispenser used to service various commercial aircraft. The hand pump dispenser consists of a reservoir, pump assembly, water stop filter assembly, fluid meter, pressure gauge, lockable fillport 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:

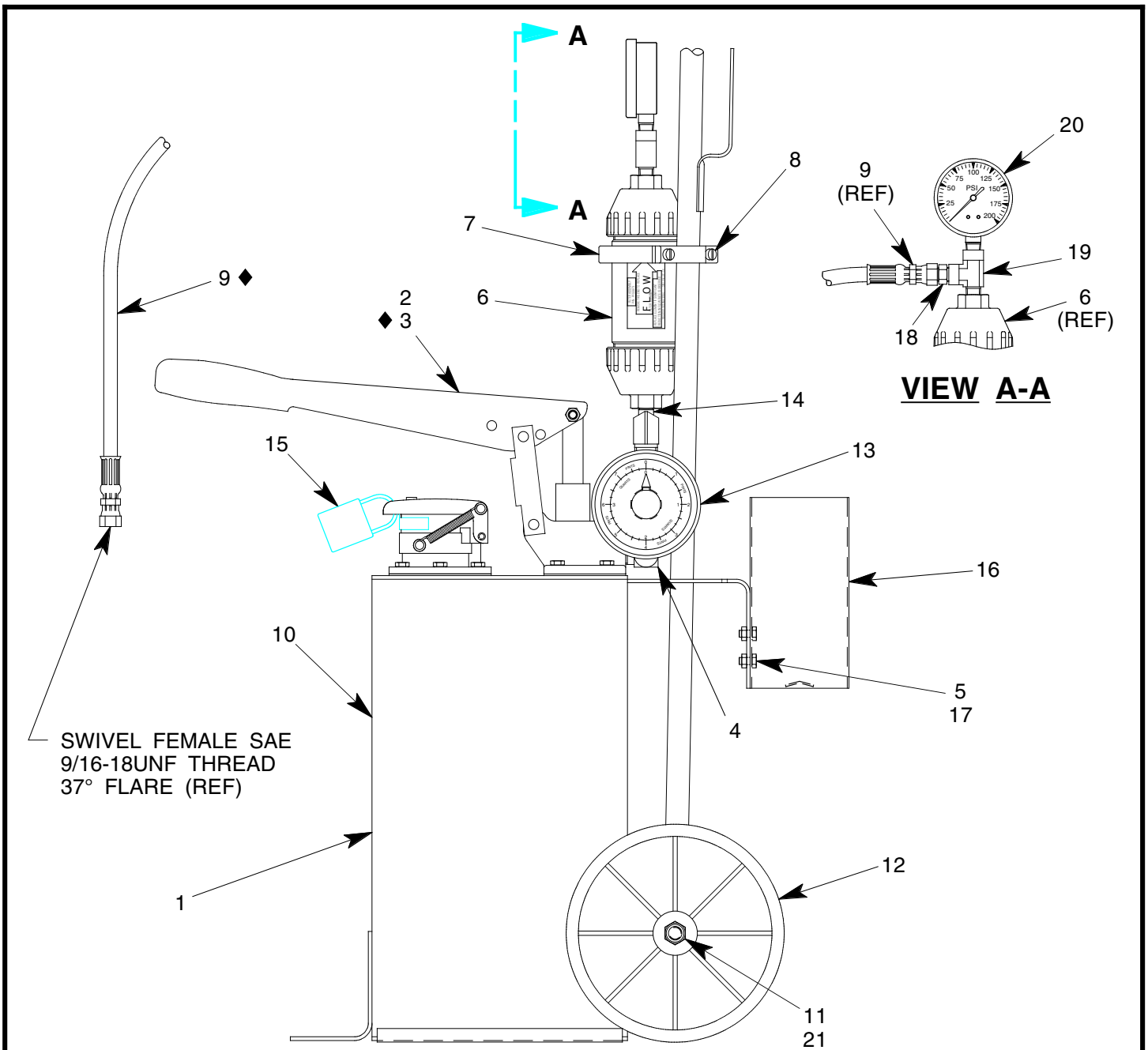
Refer to figure 1A & 1B for unit assembly (see sheets 3 & 4) or figure 2 for pump assembly (see sheet 5).

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 10 in figure 3 (see sheet 6) to change element. Proper element must be installed, otherwise unit will not pump fluid.
2. NOTE: The relief valve should not be removed. The relief valve is set to by-pass oil back to the reservoir at 125 ± 10 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 14) and rod seal (item 15) are normally the first to wear (see sheet 5). This is usually indicated by leakage of fluid past the piston or rod. It is advisable to change piston seal (item 14) and rod seal (item 15) immediately if leakage is discovered. A repair parts kit (P/N PF5-50PK) is available and recommended to keep on hand at your facility. Refer to sheet 7 for the complete list of parts contained in the repair parts kit.

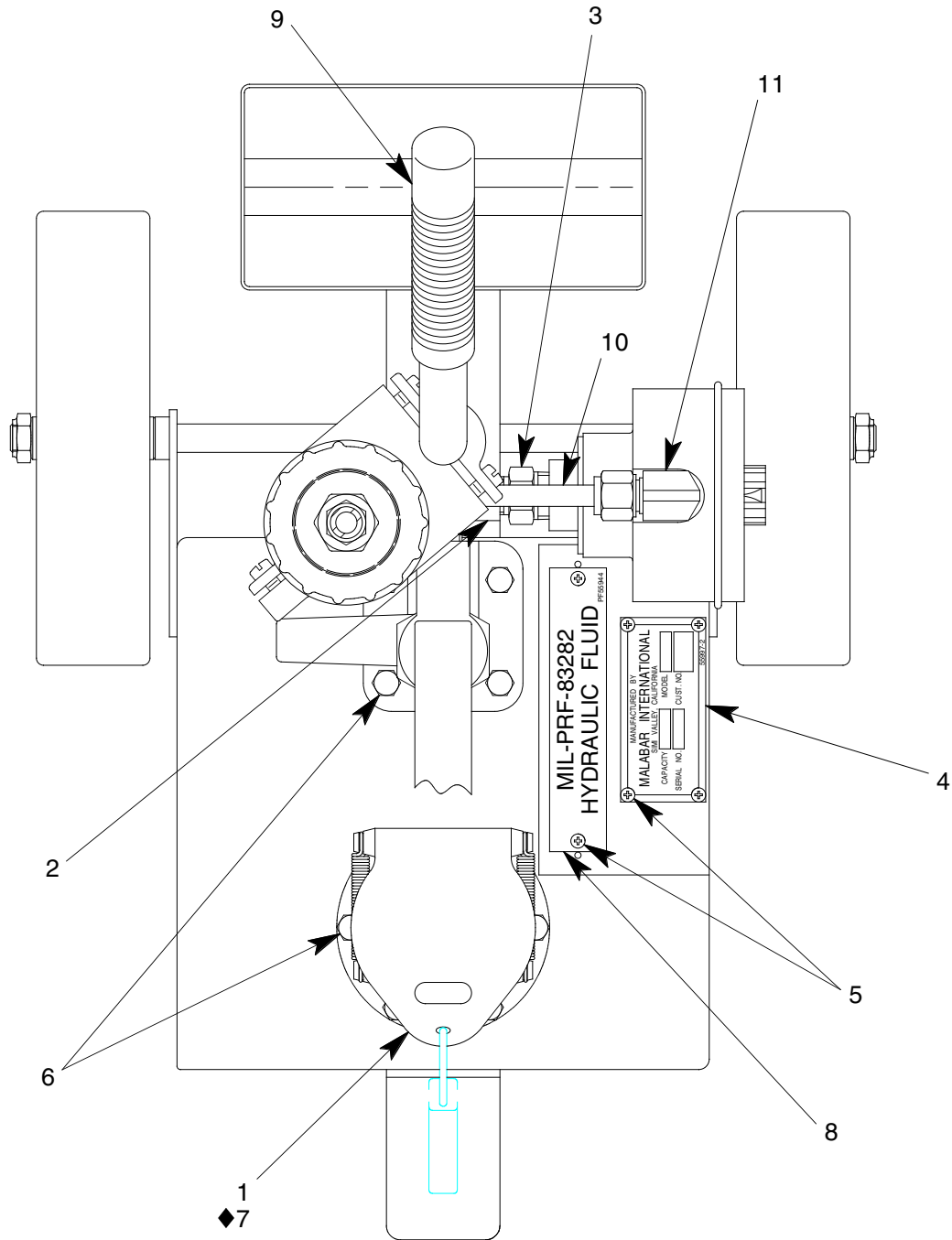


◆ PART OF REPAIR PARTS KIT

FIGURE 1A

PF53481-66WS UNIT ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55416	TANK WELDMENT	12	2	492-218	WHEEL, POLYURETHANE
2	1	PF55847-2	PUMP ASSEMBLY	13	1	486-024	FLUID METER, QUARTS/PINTS
3	1	PF53602	GASKET, PUMP ASSEMBLY	14	1	722-014	ELBOW, 3/8 TUBE x 1/4 NPT
4	1	712-017	ELBOW, STREET, 3/8 NPT	15	1	---	LOCK SUPPLIED BY OTHERS
5	2	329-007	HHCS, 1/4-28 x 21/32 LG	16	1	PF53842	BOX
6	1	PF55873	FILTER ASSEMBLY	17	2	355-007	NUT, SELF LOCKING, 1/4-28
7	1	PF55871-2	YOKE CLAMP	18	1	721-004	CONNECTOR, 1/4 NPT x 3/8 37°
8	3	342-010	SCREW, FIL HD, 1/4-20 x 1" LG	19	1	713-012	TEE, 1/4 NPT
9	1	PF55470-6	HOSE ASSEMBLY	20	1	482-050	GAUGE, 0-200 PSIG
10	1	55998	STICKER, MALABAR	21	4	362-018	FLAT WASHER
11	2	355-013	HEX LOCKNUT, 1/2-20				



◆ PART OF REPAIR PARTS KIT

FIGURE 1B

PF53481-66WS UNIT ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55956	FILLPORT ASSY, LOCKING	7	1	PF53628	GASKET, FILLPORT
2	1	712-017	ELBOW, STREET, 3/8 NPT	8	1	PF55944	PLACARD, MIL-PRF-83282
3	1	711-022	NIPPLE, 1/2 NPT x 3/8 NPT	9	1	494-006	HANDLE GRIP
4	1	55997-2	NAMEPLATE	10	AR	732-010	TUBING, 3/8 O.D. x 6" LG
5	6	397-010	SELF TAPPING SCREW, 6-32	11	1	722-015	ELBOW, 3/8 TUBE x 1/2 NPT
6	10	329-007	HHCS, 1/4-28 x 21/32 LG				

◆ PART OF REPAIR PARTS KIT

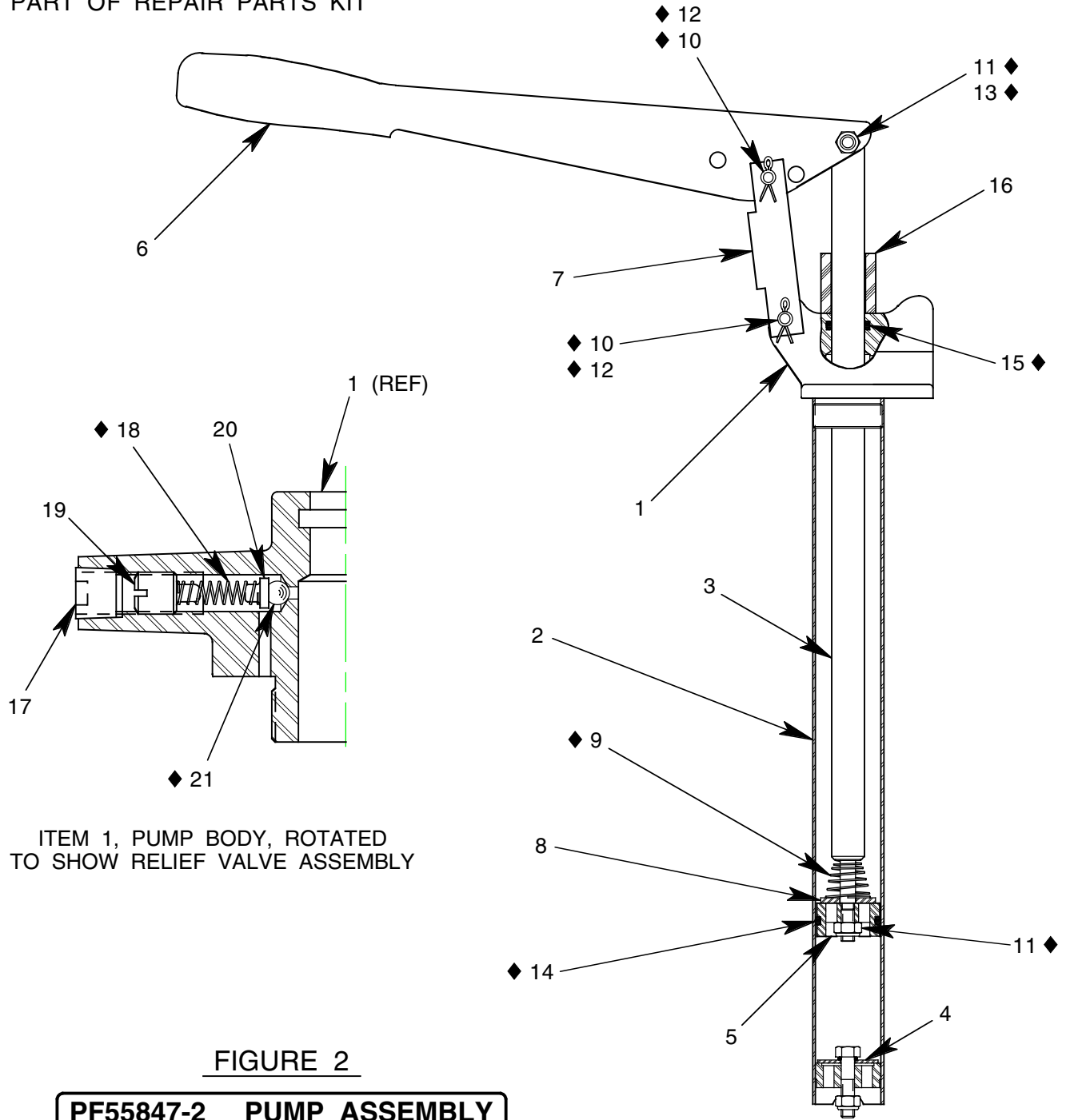
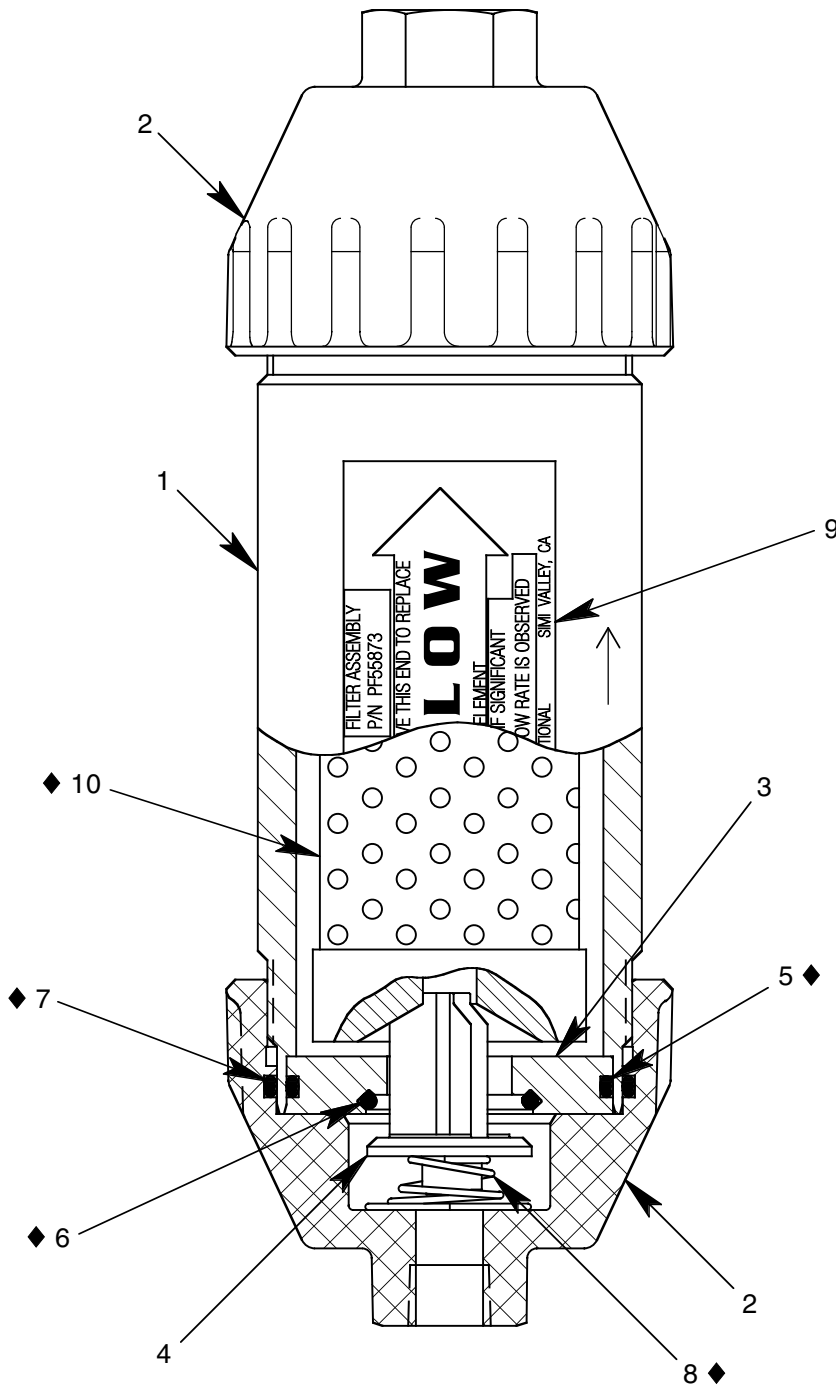


FIGURE 2

PF55847-2 PUMP ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55846	PUMP BODY	12	2	372-001	COTTER PIN, 3/32 x 3/4 LG
2	1	PF53514	TUBE	13	1	AN5-12A	HHCS, 5/16-24 x 1 11/32 LG
3	1	PF53515	PLUNGER ROD	14	1	55925-218	O-RING
4	1	PF53594	VALVE ASSEMBLY	15	1	55925-210	O-RING
5	1	PF53599	PLUNGER BODY	16	1	PF55867	HANDLE STOP
6	1	PF53517	HANDLE	17	1	717-006	PLUG, 1/4 NPT
7	1	PF53533	LINK	18	1	495-038	SPRING
8	1	PF53535	VALVE PLATE	19	1	55148	SET SCREW
9	1	PF53600	SPRING	20	1	55153	SPRING GUIDE
10	2	PF53518	PIN	21	1	412-004	STEEL BALL, 1/4 DIA
11	2	355-021	SELF LOCK NUT, 5/16-24				



◆ PART OF REPAIR PARTS KIT

FIGURE 3

PF55873 FILTER ASSEMBLY

NO.	QTY	PART NO.	PART NAME	NO.	QTY	PART NO.	PART NAME
1	1	PF55849	FILTER HOUSING	6	1	55925-120	O-RING
2	2	PF55852	FILTER HOUSING END CAP	7	2	55925-140	O-RING
3	1	PF55853	RETAINER DISC	8	1	495-039	SPRING
4	1	PF55850	RETAINER VALVE	9	1	PF55872	DECAL, FLOW
5	1	55925-135	O-RING	10	1	481-068	FILTER ELEMENT

PF5-50PK REPAIR PARTS KIT

QTY	PART NO.	PART NAME
1	PF55470-6	HOSE ASSEMBLY
1	PF53602	PUMP GASKET
1	PF53628	FILLPORT GASKET
1	PF53600	SPRING
2	PF53518	PIN
2	355-021	SELF LOCK NUT, 5/16-24
2	372-001	COTTER PIN, 3/32 DIA x 3/4 LG
1	AN5-12A	HHCS, 5/16-24 x 1 11/32 LG
1	55925-218	O-RING
1	55925-210	O-RING
1	495-038	SPRING
1	412-004	STEEL BALL, 1/4 DIA
1	55925-135	O-RING
1	55925-120	O-RING
2	55925-140	O-RING
1	495-039	SPRING
1	481-068	FILTER ELEMENT
1	PF5-50PKDOC	REPAIR PARTS KIT LIST