

MALABAR

INTERNATIONAL

AIRCRAFT MAINTENANCE & SUPPORT EQUIPMENT

OWNER'S MANUAL FOR MALABAR MODEL

PF55966-24PWS

2 GALLON FLUID DISPENSER

***READ
AND
SAVE***

**THIS
INSTRUCTION
MANUAL**

- * 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 PF55966-24PWS 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 ----- | MOBIL JET II | |
| 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----- | 125 ± 10 psig | 862 ± 69 kPa |
| Hose length ----- | 48 in | 1219 mm |
| Net weight (empty)----- | 12 lbs | 5.4 kg |
| Filter rating ----- | 1 micron nominal | |
| Fluid tank color----- | blue | |

GENERAL DESCRIPTION:

The Malabar Model PF55966-24PWS is a 2 gallon fluid dispenser used to service various commercial aircraft. The hand pump dispenser consists of a reservoir, pump assembly, relief valve, water stop filter assembly, desiccant dryer, pressure gauge, fluid meter and a fluid delivery hose with a coupling and a gravity fill adapter assembly.

PREPARATION FOR USE:

The unit is shipped fully assembled. Attach desired coupling to fillport elbow and fill reservoir 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. Remove dust plug from hose coupling and connect the hose coupling to the aircraft service point or connect coupling to gravity fill adapter assembly.
2. Use full steady pumping strokes when operating pump assembly during replenishing.
3. Disconnect the hose coupling or gravity fill adapter assembly from the aircraft service point, replace the dust plug and store the unit in a dry, dust free location.

ILLUSTRATED PARTS LIST:

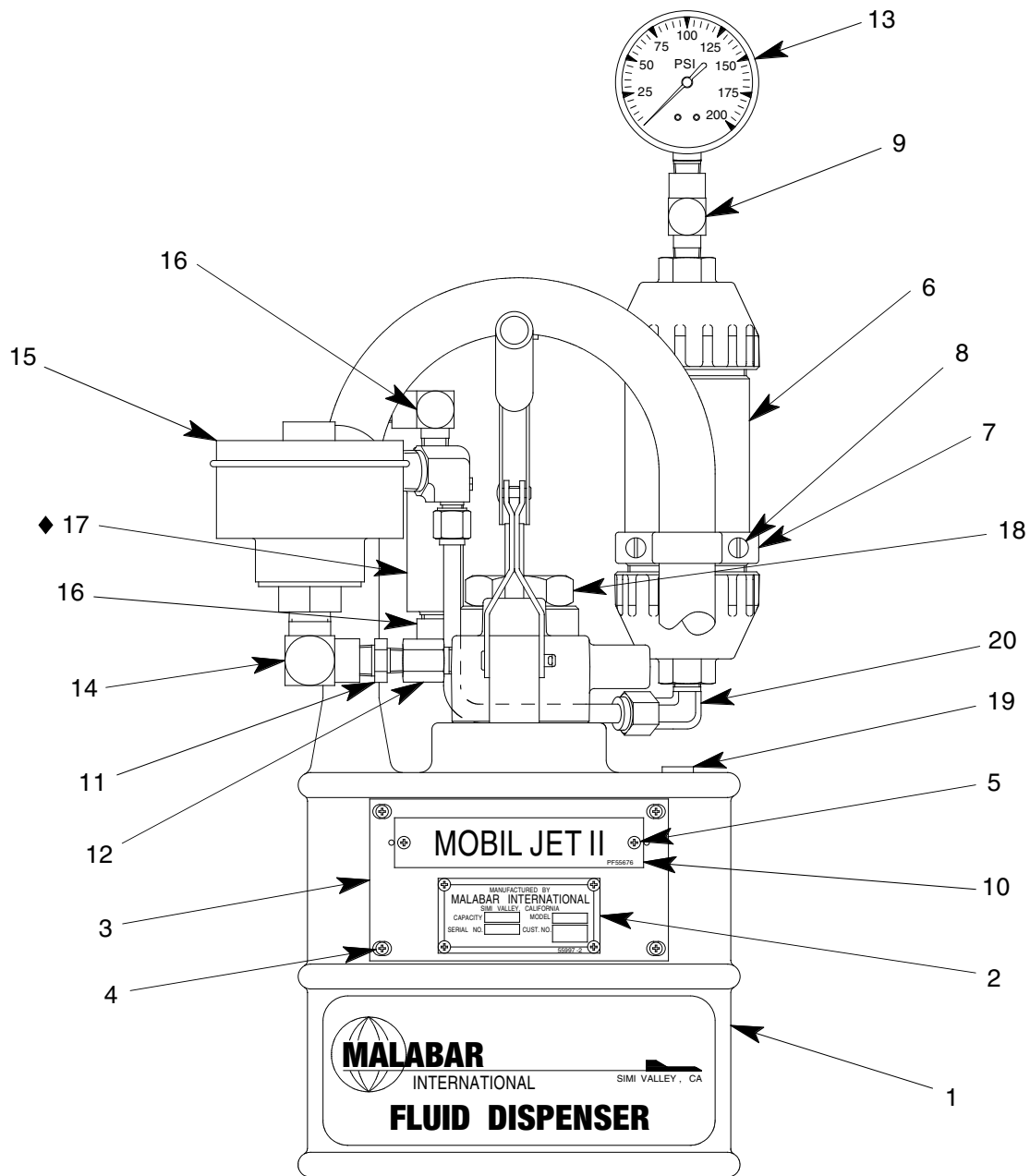
Refer to figure 1A & 1B for unit assembly (see sheets 3 & 4) or figure 2 for pump assembly (see sheet 5) or figure 3 for filter assembly (see sheet 6).

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.
3. The frequency of desiccant dryer change depends on operating conditions. Generally changes should be made when the crystals inside the chamber change color from black to amber. Refer to item 17 in figure 1A (see sheet 3) to change desiccant dryer.

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 5). 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 PF2-95PK) 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.

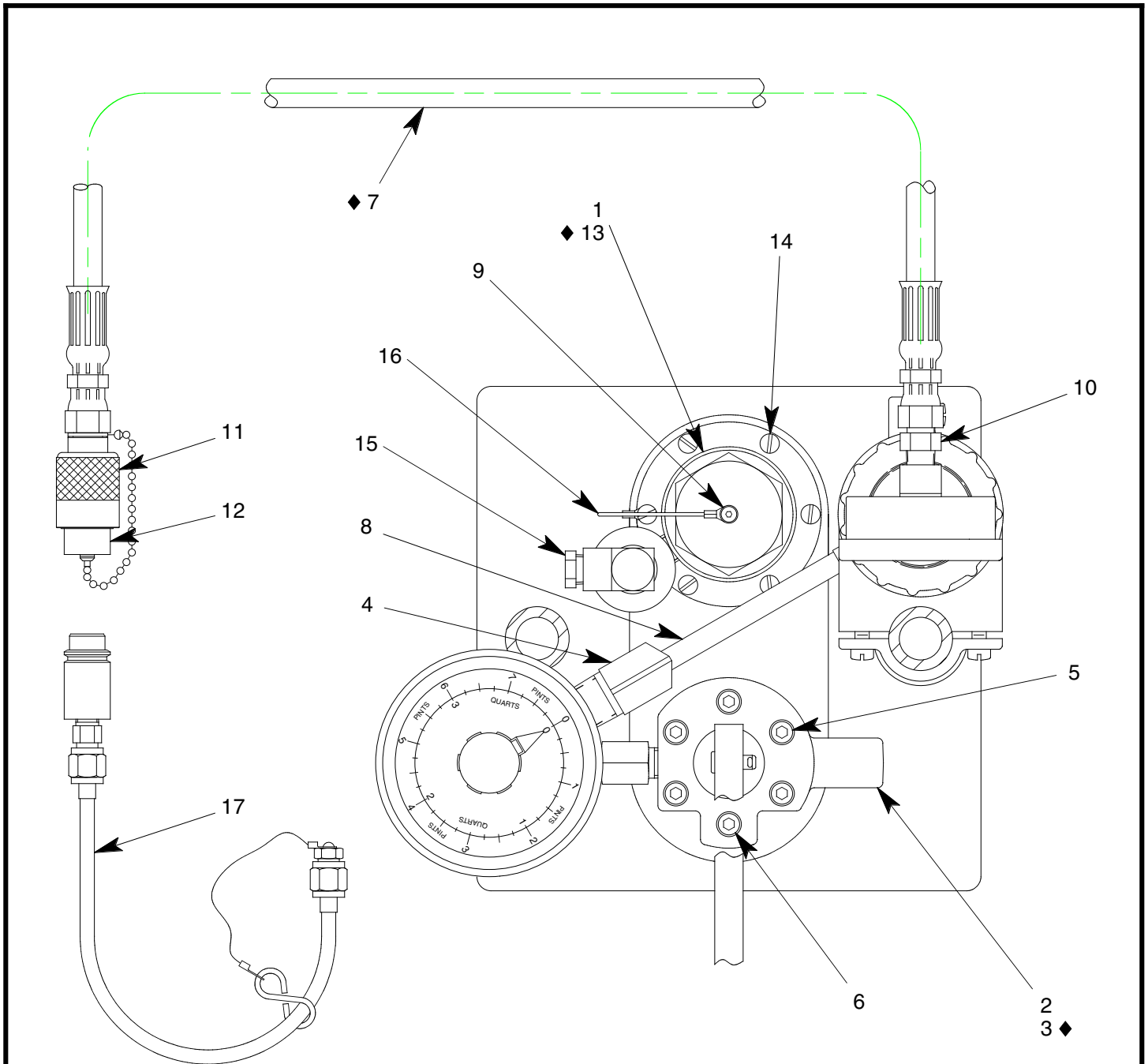


◆ PART OF REPAIR PARTS KIT

FIGURE 1A

PF55966-24PWS UNIT ASSEMBLY

| NO. | QTY | PART NO. | PART NAME | NO. | QTY | PART NO. | PART NAME |
|-----|-----|-----------|-------------------------------|-----|-----|----------|---------------------------|
| 1 | 1 | PF55838-5 | FLUID TANK | 11 | 1 | 711-018 | NIPPLE, 3/8 NPT x 1/4 NPT |
| 2 | 1 | 55997-2 | NAMEPLATE | 12 | 1 | 714-017 | BUSHING, 1/4 NPT |
| 3 | 1 | PF55859 | PLACARD PLATE | 13 | 1 | 482-050 | GAUGE, 0-200 PSIG |
| 4 | 4 | 344-011 | FHCS, 6-32 x 7/16 LG | 14 | 1 | 712-032 | ELBOW, 1/2 NPT x 3/8 NPT |
| 5 | 6 | 397-010 | SELF TAPPING SCREW, 6-32 | 15 | 1 | 486-024 | FLUID METER |
| 6 | 1 | PF55873 | FILTER ASSEMBLY | 16 | 2 | 712-008 | ELBOW, STREET, 1/4 NPT |
| 7 | 1 | PF55871-1 | YOKE CLAMP | 17 | 1 | 483-013 | DESICCANT DRYER |
| 8 | 3 | 342-010 | SCREW, FIL HD, 1/4-20 x 1" LG | 18 | 1 | PF56073 | FILL CAP |
| 9 | 1 | 713-048 | TEE, RUN, 1/4 NPT | 19 | 1 | 717-007 | PLUG, 3/8 NPT |
| 10 | 1 | PF55676 | PLACARD | 20 | 1 | 722-014 | ELBOW, 3/8 TUBE x 1/4 NPT |

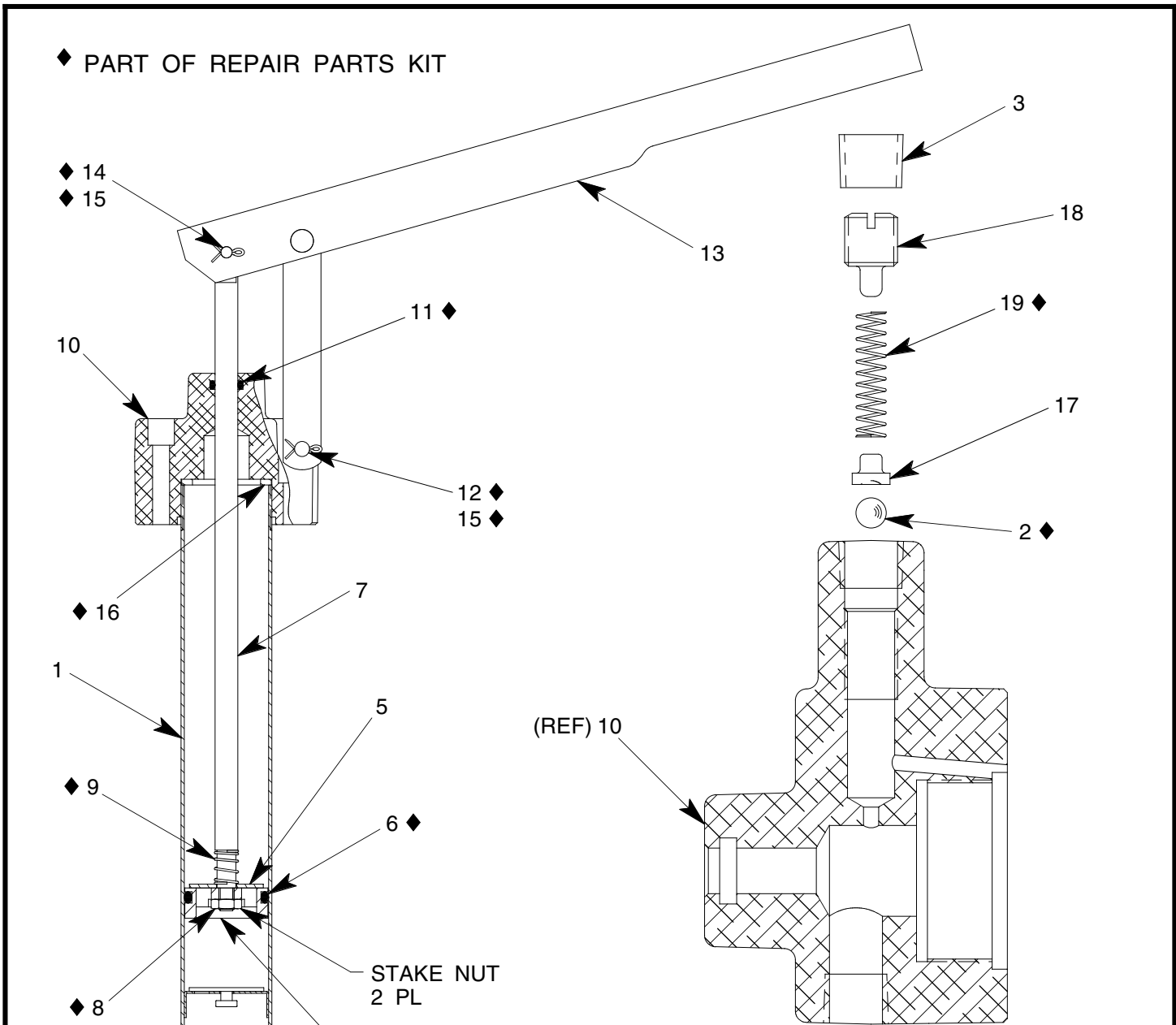


◆ PART OF REPAIR PARTS KIT

FIGURE 1B

PF55966-24PWS UNIT ASSEMBLY

| NO. | QTY | PART NO. | PART NAME | NO. | QTY | PART NO. | PART NAME |
|-----|-----|------------|-------------------------------|-----|-----|----------|-------------------------|
| 1 | 1 | PF56136 | RISER | 10 | 1 | 721-004 | CONN, 3/8 37° x 1/4 NPT |
| 2 | 1 | PF55845-1 | PUMP ASSEMBLY | 11 | 1 | 736-013 | COUPLING |
| 3 | 1 | PF55672 | GASKET | 12 | 1 | PF55987 | DUST PLUG & CHAIN |
| 4 | 1 | 722-015 | ELBOW, 3/8 TUBE x 1/2 NPT | 13 | 1 | 483-016 | GASKET, FLANGE |
| 5 | 5 | 323-038 | SHCS, 1/4-28 x 1 3/4 LG | 14 | 6 | 341-009 | RHCS, 10-32 x 1/2 LG |
| 6 | 1 | 323-063 | SHCS, 1/4-28 x 1" LG | 15 | 1 | 483-005 | BREATHER, 1/4 MPT |
| 7 | 1 | PF55456-17 | HOSE ASSEMBLY | 16 | 1 | 370-049 | LANYARD, 6" LG |
| 8 | AR | 732-010 | TUBING, 3/8 OD x .065 WALL | 17 | 1 | PF55759 | GRAVITY FILL ADAPTER |
| 9 | 1 | 330-016 | SHSS, 3/16 DIA x 1/4 LG, 8-32 | | | | |

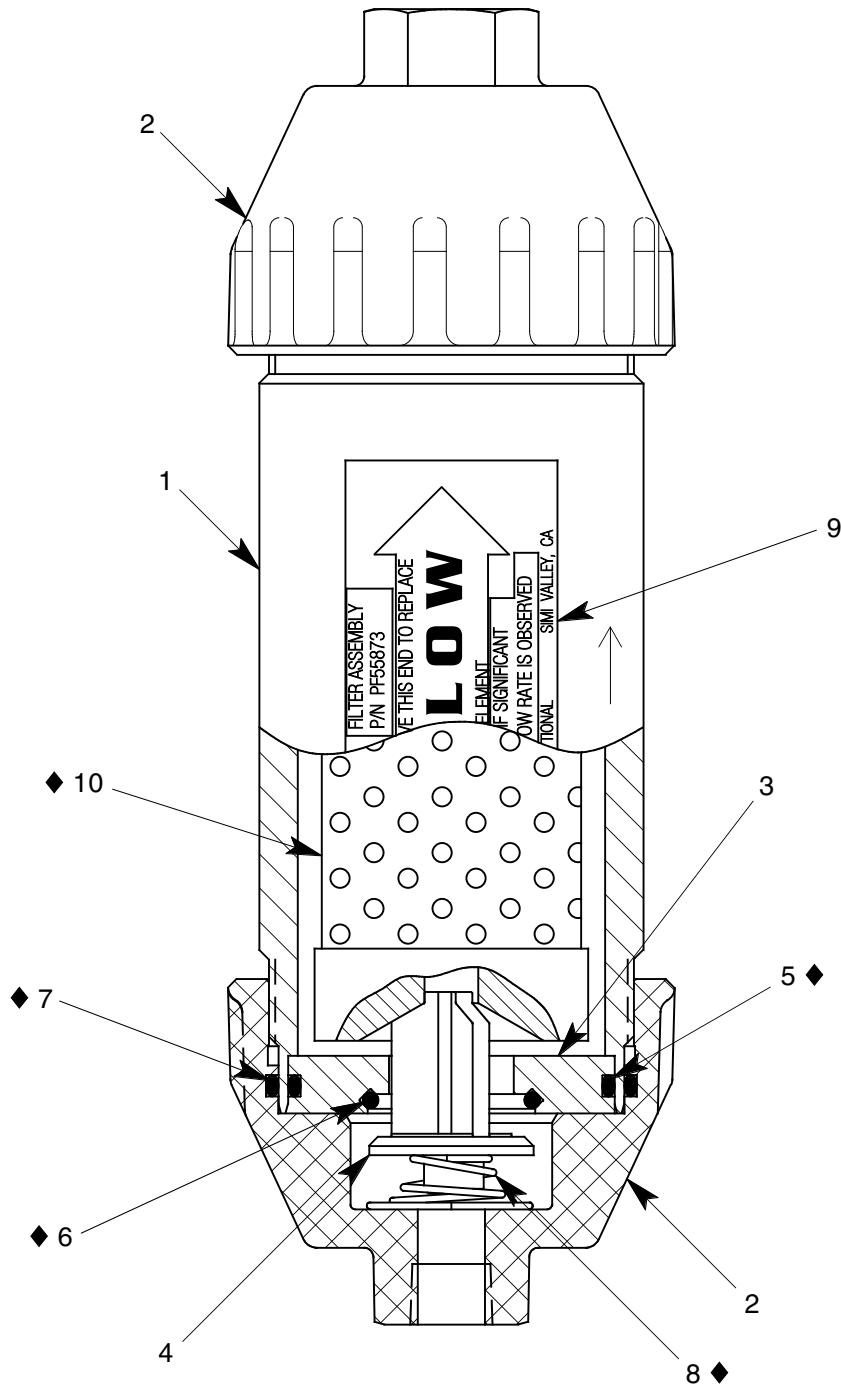


ITEM 10, PUMP OUTLET, ROTATED TO SHOW RELIEF VALVE ASSEMBLY

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 | | | | |



◆ 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 |

PF2-95PK REPAIR PARTS KIT

| QTY | PART NO. | PART NAME |
|-----|-------------|------------------------------------|
| 1 | PF55456-17 | HOSE ASSEMBLY |
| 1 | 55925-216 | O-RING |
| 1 | 55925-110 | O-RING |
| 1 | PF53406 | SPRING |
| 1 | 373-006 | FLAT HEAD PIN, 1/4 DIA x 1 9/32 LG |
| 2 | 372-011 | COTTER PIN, 1/16 x 1/2 LG |
| 1 | AN393-17 | FLAT HEAD PIN, 3/16 DIA x 17/32 LG |
| 1 | PF54063 | GASKET |
| 1 | 495-038 | SPRING |
| 1 | 412-004 | STEEL BALL, 1/4 DIA |
| 1 | 55925-120 | O-RING |
| 1 | 55925-135 | O-RING |
| 2 | 55925-140 | O-RING |
| 1 | 495-039 | SPRING |
| 1 | 481-068 | FILTER ELEMENT |
| 1 | 352-011 | HEX JAM NUT, 1/4-28 |
| 1 | PF55672 | GASKET |
| 1 | 483-013 | DESICCANT DRYER |
| 1 | 483-016 | GASKET, FLANGE |
| 1 | PF2-95PKDOC | REPAIR PARTS KIT LIST |