

Date: August 21, 2013

# **MALABAR**

**INTERNATIONAL**

***AIRCRAFT MAINTENANCE & SUPPORT EQUIPMENT***

***OWNER'S MANUAL FOR MALABAR MODEL***

## **PF54124-32P**

***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 PF54124-32P 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-5606      |            |
| 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      |
| Hose length -----          | 84 in             | 2134 mm    |
| Net weight (empty)-----    | 12 lbs            | 5.4 kg     |
| Filter rating -----        | 3 micron absolute |            |
| Fluid tank color-----      | red               |            |

#### **GENERAL DESCRIPTION:**

The Malabar Model PF54124-32P is a 2 gallon fluid dispenser used to service various commercial aircraft. The hand pump dispenser consists of a reservoir, pump assembly, filter assembly, lockable fillport assembly, fluid meter, 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. Remove dust plug from desired end fitting and connect the end fitting to the aircraft service point.
2. Use full steady pumping strokes when operating pump assembly during replenishing.
3. Disconnect the end fitting from the aircraft service point, replace dust plug and store the unit in a dry, dust free location.

## **ILLUSTRATED PARTS LIST:**

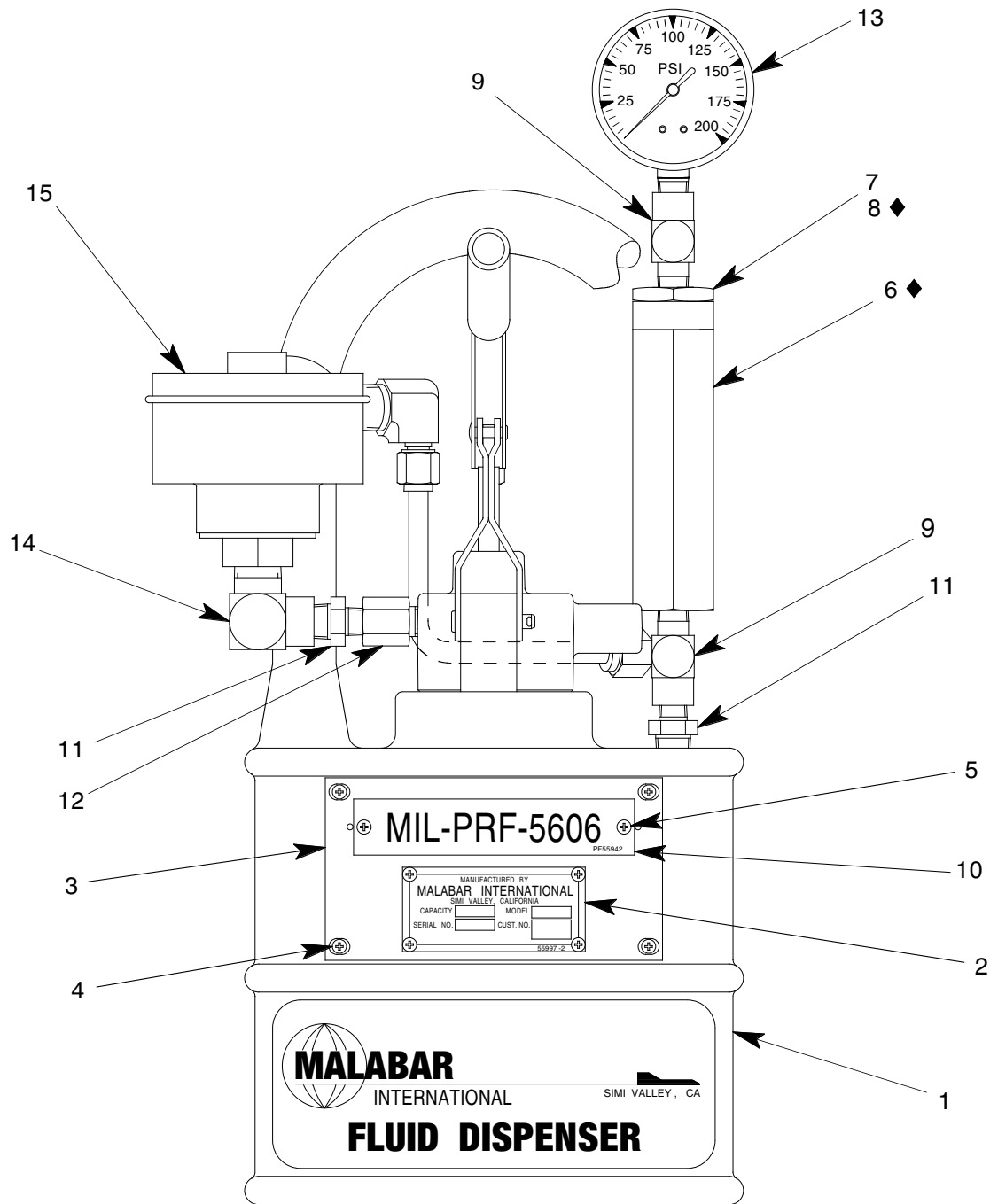
Refer to figure 1A & 1B for unit assembly (see sheets 3 & 4) or figure 2 for pump assembly (see sheet 5).

## **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 6 in figure 1A (see sheet 3) 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 5). 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 gasket (item 13) immediately if leakage is discovered. A repair parts kit (P/N PF2-91PK) is available and recommended to keep on hand at your facility. Refer to sheet 6 for the complete list of parts contained in the repair parts kit.

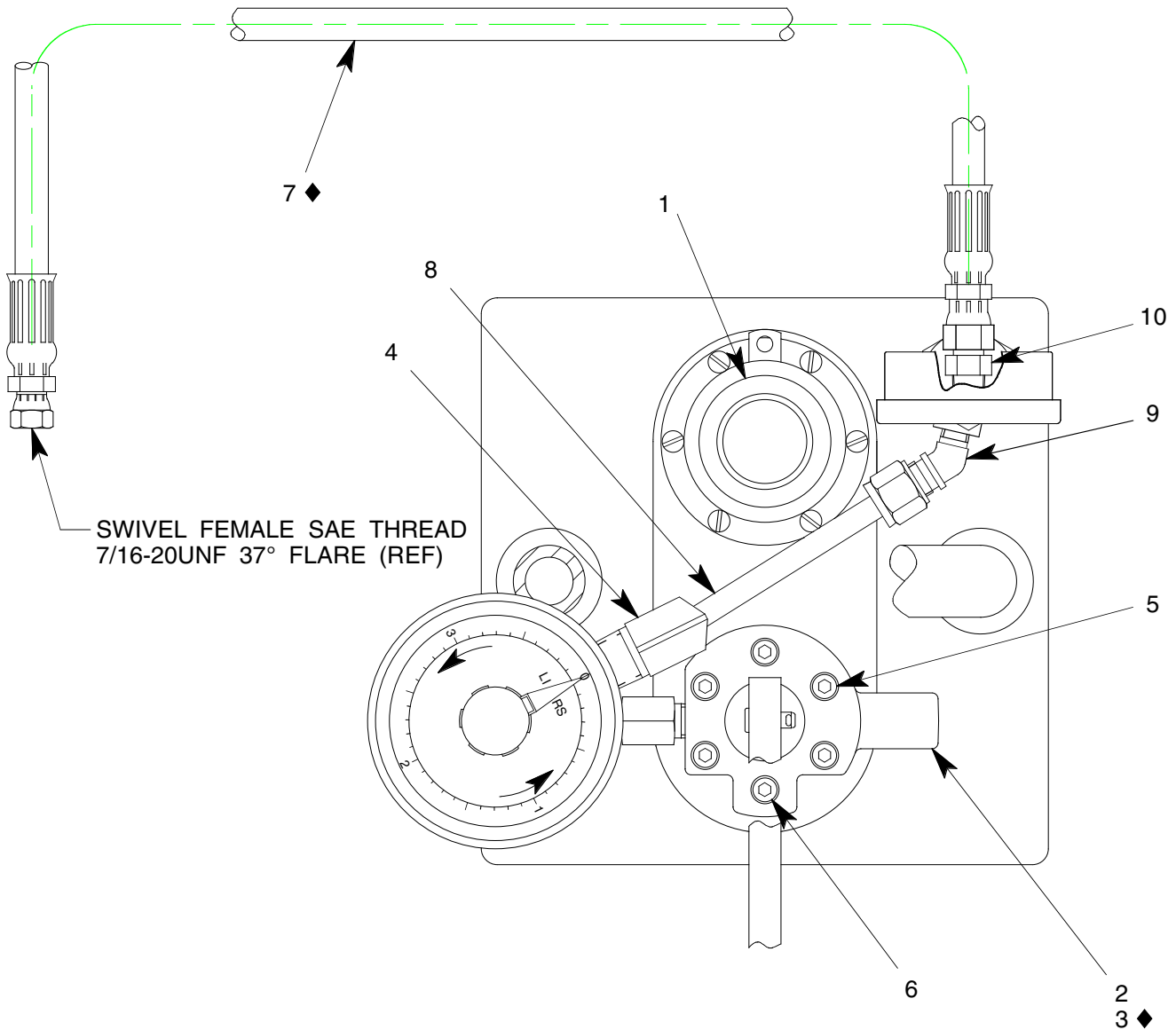


◆ PART OF REPAIR PARTS KIT

FIGURE 1A

**PF54124-32P UNIT ASSEMBLY**

| NO. | QTY | PART NO.  | PART NAME                | NO. | QTY | PART NO. | PART NAME                 |
|-----|-----|-----------|--------------------------|-----|-----|----------|---------------------------|
| 1   | 1   | PF55838-1 | FLUID TANK               | 9   | 2   | 713-048  | TEE, RUN, 1/4 NPT         |
| 2   | 1   | 55997-2   | NAMEPLATE                | 10  | 1   | PF53931  | PLACARD                   |
| 3   | 1   | PF55859   | PLACARD PLATE            | 11  | 2   | 711-018  | NIPPLE, 3/8 NPT x 1/4 NPT |
| 4   | 4   | 344-011   | FHCS, 6-32 x 7/16 LG     | 12  | 1   | 714-017  | BUSHING, 1/4 NPT          |
| 5   | 6   | 397-010   | SELF TAPPING SCREW, 6-32 | 13  | 1   | 482-050  | GAUGE, 0-200 PSIG         |
| 6   | 1   | 481-038   | FILTER ELEMENT           | 14  | 1   | 712-032  | ELBOW, 1/2 NPT x 3/8 NPT  |
| 7   | 1   | PF101160  | FILTER ASSEMBLY          | 15  | 1   | 486-020  | FLUID METER               |
| 8   | 1   | 55925-025 | O-RING                   |     |     |          |                           |



◆ PART OF REPAIR PARTS KIT

FIGURE 1B

**PF54124-32P UNIT ASSEMBLY**

| NO. | QTY | PART NO.   | PART NAME                 | NO. | QTY | PART NO.  | PART NAME                   |
|-----|-----|------------|---------------------------|-----|-----|-----------|-----------------------------|
| 1   | 1   | PF55948    | LOCKING FILLPORT ASSY     | 6   | 1   | 323-063   | SHCS, 1/4-28 x 1" LG        |
| 2   | 1   | PF53415A-1 | PUMP ASSEMBLY             | 7   | 1   | PF55470-6 | HOSE ASSEMBLY               |
| 3   | 1   | PF55672    | GASKET                    | 8   | 1   | 732-010   | TUBING, 3/8 OD x .065 WALL  |
| 4   | 1   | 722-015    | ELBOW, 3/8 TUBE x 1/2 NPT | 9   | 1   | 722-022   | ELBOW, 45°, 3/8 T x 1/4 NPT |
| 5   | 5   | 323-038    | SHCS, 1/4-28 x 1 3/4 LG   | 10  | 1   | 721-004   | CONN, 3/8 37° x 1/4 NPT     |

◆ PART OF REPAIR PARTS KIT

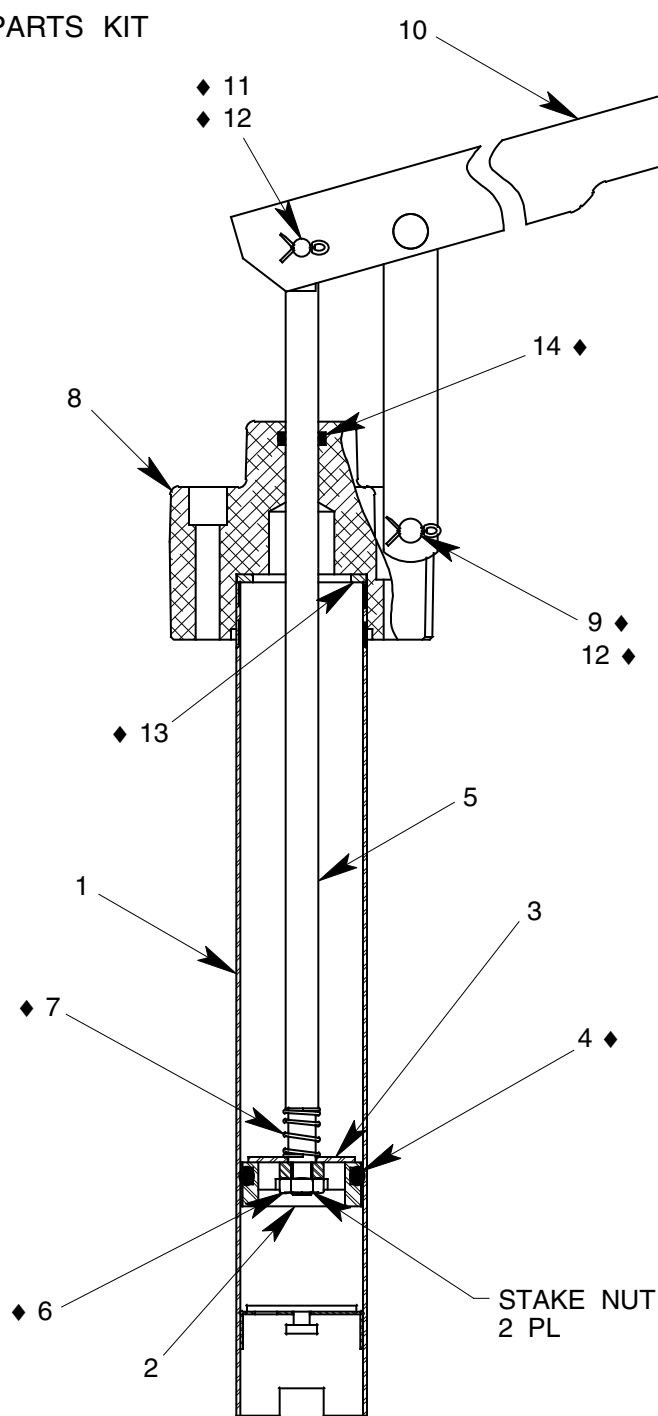


FIGURE 2

**PF53415A-1 PUMP ASSEMBLY**

| NO. | QTY | PART NO.  | PART NAME           | NO. | QTY | PART NO.  | PART NAME                   |
|-----|-----|-----------|---------------------|-----|-----|-----------|-----------------------------|
| 1   | 1   | PF53376   | TUBE ASSEMBLY       | 8   | 1   | PF55685   | PUMP OUTLET                 |
| 2   | 1   | PF53379   | PISTON              | 9   | 1   | 373-006   | FH PIN, 1/4 DIA x 1 9/32 LG |
| 3   | 1   | PF53380   | PISTON CHECK DISC   | 10  | 1   | 494-017   | HANDLE ASSEMBLY             |
| 4   | 1   | 55925-216 | O-RING              | 11  | 1   | AN393-17  | FH PIN, 3/16 DIA x 17/32 LG |
| 5   | 1   | PF53378   | PUMP PISTON ROD     | 12  | 2   | 372-011   | COTTER PIN, 1/16 x 1/2 LG   |
| 6   | 1   | 352-011   | HEX JAM NUT, 1/4-28 | 13  | 1   | PF54063   | GASKET                      |
| 7   | 1   | PF53406   | SPRING              | 14  | 1   | 55925-110 | O-RING                      |

**PF2-91PK REPAIR PARTS KIT**

| QTY | PART NO.    | PART NAME                          |
|-----|-------------|------------------------------------|
| 1   | PF55470-6   | HOSE ASSEMBLY                      |
| 1   | 481-038     | FILTER ELEMENT                     |
| 1   | 55925-025   | O-RING                             |
| 1   | PF55672     | GASKET                             |
| 1   | PF53406     | SPRING                             |
| 1   | AN393-17    | FLAT HEAD PIN, 3/16 DIA x 17/32 LG |
| 1   | 352-011     | HEX JAM NUT, 1/4-28                |
| 2   | 372-011     | COTTER PIN, 1/16 DIA x 1/2 LG      |
| 1   | 373-006     | FLAT HEAD PIN, 1/4 DIA x 1 9/32 LG |
| 1   | 55925-216   | O-RING                             |
| 1   | 55925-110   | O-RING                             |
| 1   | PF54063     | GASKET                             |
| 1   | PF2-91PKDOC | REPAIR PARTS KIT LIST              |