

Racor's FBO filter assemblies are designed to meet the toughest hydrocarbon refueling conditions and give maintenance personnel ease of filter changeouts. The FBO assembly can flow from 5 GPM (19 LPM) to 75 GPM (284 LPM) depending on the unit, cartridges installed, and fuels being filtered.

Features

The assembly features a "locking ring collar," that attaches the filter housing to the aluminum die-cast filter head with four bolts.



The slotted "locking ring collar" allows maintenance personnel to hand loosen the four collar bolts and rotate and lower the bowl assembly for cartridge changeouts. With a new cartridge installed, simply raise the bowl and rotate into position on the locking ring and hand tighten evenly.

Typical Applications

- Aviation Fuel Trucks
- Aviation Gas & Fueling Cabinets
- Marine Fuel Docks
- Fuel Dispensing Pumps

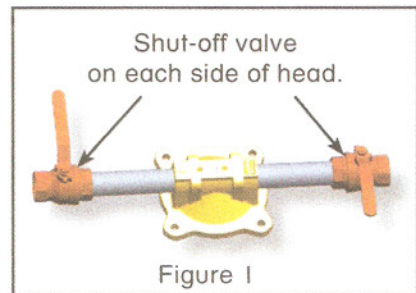


FBO Installation Instructions

- Fuel Systems on Large Diesel Engines
- Also Filters Gasoline, Kerosene, and other Hydrocarbon fuels

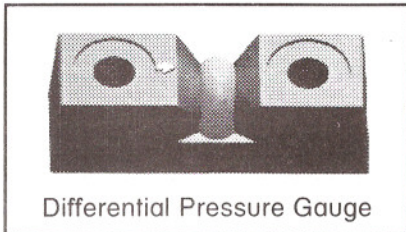
Installation

1. Remove the housing protectors from the inlet and outlet connections.
 2. Make certain that connections are free of any debris.
- CAUTION:**
Be sure to correctly identify the inlet and outlet connections to avoid piping the unit backwards. The unit will not perform properly if connections are reversed.
3. Provide shut-off valves in the inlet and outlet piping as close to the unit as possible. This is necessary for isolating the unit from the system when cartridge replacement is necessary. (See Figure 1).



4. Connect the housing into the piping system with a minimum number of turns and fittings, especially on the inlet side.
5. For installations on fuel dispensing pump, connect the fuel delivery hose directly to the outlet connection.
6. Provide room for the housing to clear the cartridge during change-out. (A minimum 2" base clearance is required).
7. We recommend installation of a differential pressure gauge so the differential pressure across the housing can be monitored.

(Part numbers 72694 or 72783).



Note: This allows accurate determination of when the cartridge should be changed.

8. For Absorptive Cartridges used in any fuel service, ALWAYS install a differential pressure gauge or other means of determining the differential pressure.

CAUTION:

On systems where pressures can exceed 75 psi, a pressure bypass around the pump must be installed to protect the cartridge and system from a high pressure shock or sudden cartridge shut-down due to a slug of water in the product.

Cartridge Replacement

When servicing aviation fuel systems replace cartridge when the differential pressure exceeds 15 PSI, replace cartridge when DP gauge reaches 25 PSI for all other applications. Replace cartridge after one year of service or if pressure is significantly reduced, if pressure has been climbing then begins to decrease, whichever comes first.

Note: When any of the above conditions are observed replacement is necessary, please follow the procedures below.

1. Close the inlet and outlet valves to isolate the filter from the system.
2. Open the vent valve on the head to allow the unit to thoroughly vent before loosening the (4) head knobs.

3. Open the drain valve on the bottom of the housing to allow all fluid to drain from the unit.
4. Loosen the (4) knobs attaching the head to slotted flange.
5. Remove the head gasket and discard.
6. Remove and discard the expended cartridge; **Note:** The used cartridge may become a fire hazard, discard in a fire safe place in accordance with all fire safety laws.
7. Flush the interior of the housing with clean, processed, filtered fuel or solvent; **Note:** A non metallic bristle brush may help remove caked-on debris. Rinse the housing and head with clean solvent and dry with a soft, lint-free cloth.

CAUTION:

Due to the toxic effects of some additives in filtered fluids, care should be taken in handling the expended cartridge and/or all internal parts that have been in contact with the filtered product.

8. Lightly lubricate the new O-ring with Vaseline or petroleum jelly and position it on the head. If Vaseline is not available, lubricate gasket with clean fuel or clean oil.

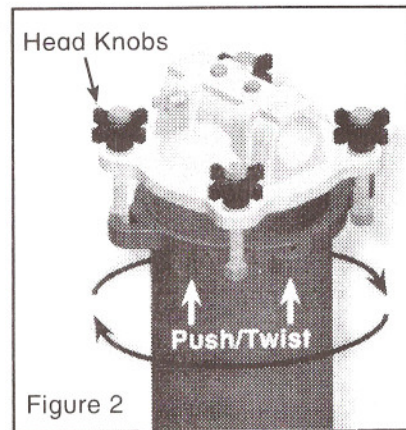


Figure 2

9. Insert a new cartridge into the housing. Position housing (with cartridge) underneath filter head. Push/Twist cartridge onto head spigot. The head conical spring will seat/seal the cartridge into the housing. (see Figure 2 & 3)

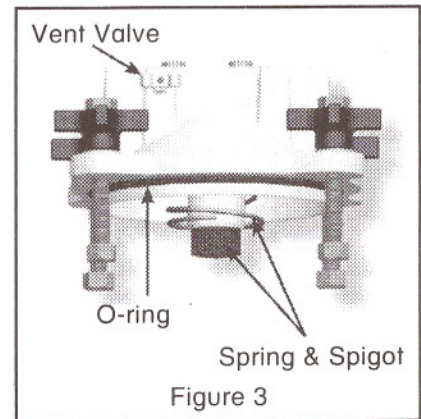


Figure 3

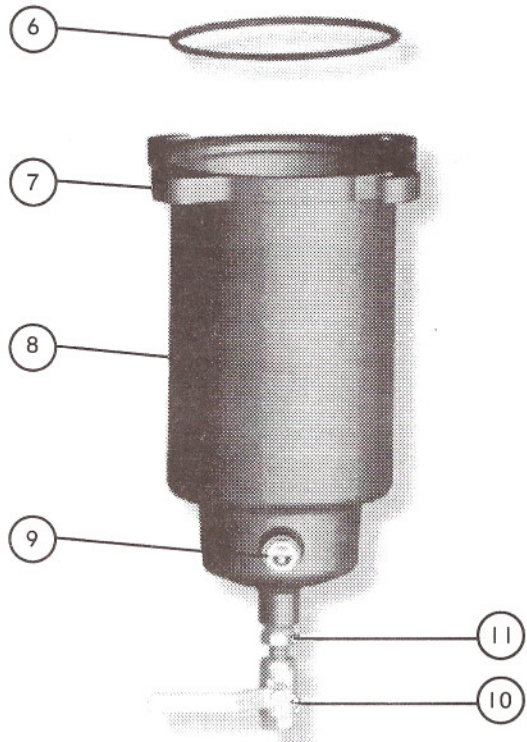
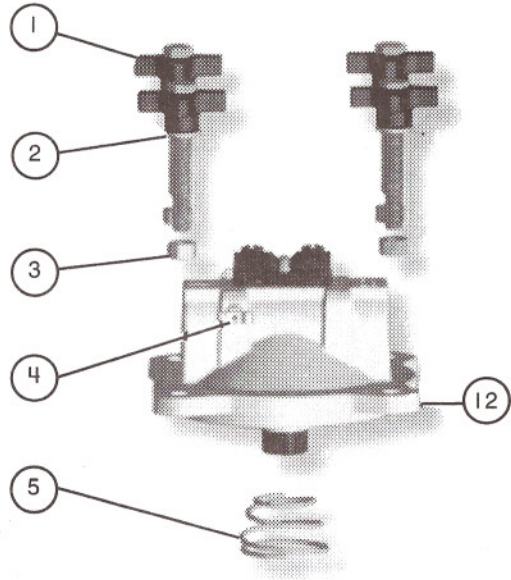
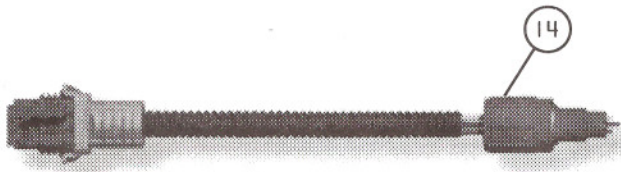
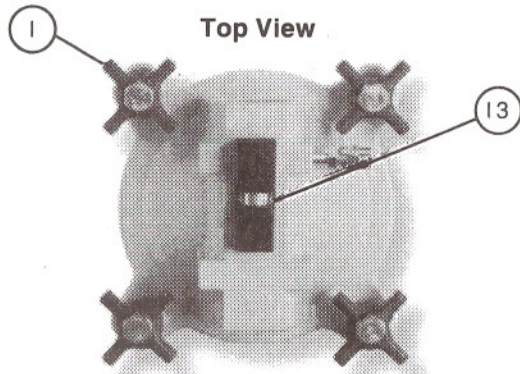
10. "Rotate" housing onto the bolts. Hand tighten knobs until head is snug to the housing.

Note: A torque wrench is recommended. Tighten all collar bolts to 100 inch lbs.

11. Close the drain valve on the bottom of the housing.
12. Slowly open the inlet and outlet valves with the vent valve on the head cracked open to vent the air.
13. Close the vent valve when a small amount of fluid starts to come out.
14. Examine all connections and seals for leaks, shut down immediately if leaks are present.

Note: Do not tighten head bolts if unit is pressurized, crack open vent valve to relieve pressure then address leaks.

Part Breakdown



<u>Part Number</u>	<u>Description</u>
1. 72712	Knob Handles (4)
2. 71328	1/2" Washer (4)
3. 71329	1/2" Hex Nut (4)
4. 72695	Vent Valve
5. 72368	Spring
6. 72699	O-ring
7. 73164	Slotted Flange
8. 72805	FBO-10 Housing Assembly
72806	FBO-14 Housing Assembly
9. 72710	Sight Glass
10. 71943-.25	1/4" NPT Ball Valve
11. 72709	1/2"-1/4" Bushing
12. 72531	FBO Head
13. 72694	15 PSI DP Gauge
72783	30 PSI DP Gauge
14. RK30880	Water Probe
Additional Parts (not shown)	
72700	1/8" Pipe Plug
72701	1/2" Pipe Plug
72812	1/4" NPT Close Nipple