

Multiplex Priming Pump

RKP1912 (12 vdc) RKP1924 (24 vdc)

Instruction Part Number 15426 Rev -



Use this Instruction for adding a Racor Priming Pump Kit to a 900 or 1000 series FGV, FGX, FHV, FHX, MAV, or MAX filter assembly.

Prior to the introduction of the Racor Priming Pump Kit, operators would remove the filter T-handle, lid, and cartridge filter to fill (prime) the housing full of fuel. This method is messy, subjects the interior of the housing to contaminants and in the event of a fuel spill, will create a dangerous environment.

With the new Priming Pump Kit, handling of filter components and fuel is eliminated! Now, an electric priming pump uses fuel from the tank to fill the Racor filter at the push of a button! This saves time and trouble, while maintaining a safe, clean working environment.



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Installation

Choose one of the two (duplex) or one of the three (triplex) Racor filter positions to install the primer pump.

Hint: choose the position that is easiest to access. The pump has a cleanable stainless steel stainer that is easiest to service from the front of the cover. The pump body can be positioned in 90 degree increments onto the Racor body, so choose the best orientation for your installation.

Caution: Do not use the priming pump to prime the filter with the engine running. This is because the outlet valve(s) to the fuel system must be closed to build back-pressure to purge out the

trapped air. If the engine is running, there will be no fuel system back-pressure as the fuel pump is pulling fuel through the system.

Follow the instructions included with the priming pump but keep a few points in mind:

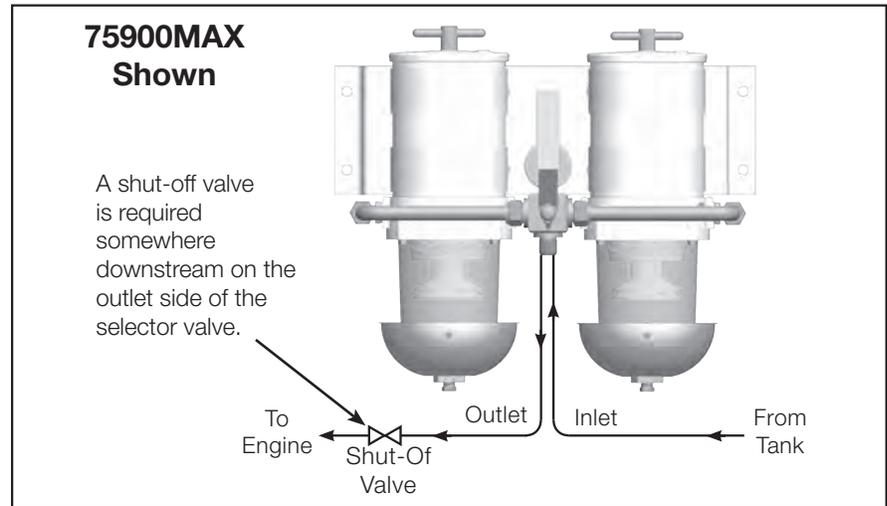
1. Read through all instructions so you can become familiar with the necessary steps, tools needed and safety requirements.
2. Remember to mount the primer pump to the Racor filter which will be easiest to access. Also, orient the pump cover for best access and allow at least 8 in. (20.3 cm) clearance from the



cover for removing the pump motor and stainer screen.

- For marine filters with the fire deflection shields, it will be easier to remove the shield from the bowl to access and install the new longer mounting bolts. Also, consider adding the optional UL listed drain valve kit (**RK19492**) to each bowl to simplify the draining procedure.
- On all installations, ensure a shut-off valve is installed somewhere downstream (at outlet side) of the Racor duplex or triplex assembly (see illustration). This valve will be needed to assist in the priming steps (valve not included with this kit). In many vehicle/vessel installations, there will be a shut-off valve already present in the plumbing system- if so, this valve will be adequate and no additional valve is needed.

Installation Diagram



The Selector Valve

The selector valve allows the operator to isolate one filter at a time for servicing— **The handle POINTER always indicates which unit is ON.** Service the opposite Filter. See illustrations below. **Note:** Primer pump kit not shown for clarity.

Warning! Handle rotates 360°. Avoid BOTH OFF position if engine is running.



BOTH ON



LEFT ON / Right off



Left off / RIGHT ON



BOTH OFF

Priming: FGX, FHX and MAX units only. All other units, continue to page 3.

On these dual units, a shut-off valve must be added and installed somewhere on the OUTLET side of the unit. This aids in priming the filters.

If this is the first time priming the unit, you must do it manually by filling just the Racor housing—the one with the pump kit installed. This is considered the “Primary” filter. **Note:** The pump needs initial manual priming, thereafter it can prime itself.

Remove the lid and the filter cartridge. Fill the housing to within 2

inches of the top. To avoid spillage, install the cartridge with a slow downward turning motion. Replace the lid and tighten the T-handle by hand, snugly.

- Rotate the selector valve handle until the “Primary” filter is selected ON (see Selection Valve illustration above).
- Close the shut-off valve downstream of the OUTLET side of the selector valve. (see illustration above.)
- On the Primary unit, loosen the vent plug or T-handle on the top lid - do not remove. Note: If you have a Racor Venting Valve

installed, just push it down - (See Accessories.)

- Operate the priming pump until all air is vented.

CAUTION: As air vents completely, fuel will follow! Wrap a shop cloth around the vent valve, vent plug or T-handle/Lid to control the fuel spillage until you can quickly tighten the plug or T-handle. (see illustration that follows).

- Tighten vent plug, T-handle or release the Venting Valve, as applicable.
- Rotate the selector valve handle to the ALL ON (pointer down).

- For remaining Racor filter unit(s). Loosen the vent plug or T-handle on the top lid - do not remove. Note: If you have a Racor Venting Valve installed, just push it down - **(See Accessories.)**
- Operate the priming pump until air is vented.

CAUTION: As air vents completely, fuel will follow! Wrap a shop cloth around the vent valve, vent plug or T-handle/lid, to control the fuel spillage until you can quickly tighten the plug or T-handle.

- OPEN the shut-off valve from Step 2.
- Operate the priming pump for a minute or two to push any trapped air within the fuel lines out to the engine. Note: Check equipment or engine manufacturer's priming instructions and open any downstream vents to purge any remaining air.
- Start engine and check the Primer Pump installation for any air or fuel leaks. Correct immediately with the engine turned off.

CAUTION: While performing repairs ensure any inlet and outlet valves are closed to prevent fuel spillage.

Servicing: Element Replacement and Priming

Subsequent priming does not require manually filling the Primary Racor housing with fuel.

- Rotate selector valve to the ALL OFF position.
- Remove the T-handle/lid and then slowly pull the filter cartridge out with a slow, twisting motion. **Note:** Have a collection pan ready to catch dripping fuel and to set the element in.
- Remove the old gasket (and discard) and clean the mating sealing surfaces of any debris. Apply a coating of silicone-based lube to the new lid gasket and place it in the lid gasket gland. Do the same for the T-handle O-ring.

- Install the new filter cartridge slowly and use a slight twisting action as you push lightly down. **Note:** Push lightly. If the filter releases friction and slips into the housing, fuel spillage can occur!
- On late model units, the filter will stop at contact with the safety-valve. At this point, install the lid and seat it completely by tightening the T-handle.
- Prime the filters using the priming pump.

PRIMING: FGV, FHV, MAV UNITS ONLY – Valve Positions on next page.

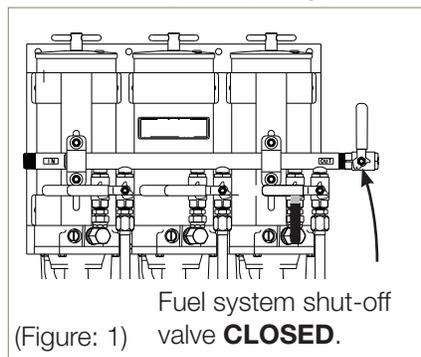
On these dual or triple units, a shut-off valve must be added and installed somewhere on the OUTLET side of the unit. This aids in priming the filters. (see illustrations that follow).

In many applications, there may already be a shut-off valve installed in the vehicle/vessel plumbing. If so, this valve will be adequate and no additional valve is needed.

If this is the first time priming the unit, you must do it manually by filling just the Racor housing – the one with the pump kit installed. This is considered the 'Primary' filter (the pump needs initial manual priming, thereafter it can prime itself).

Remove the lid and the filter cartridge. Fill the housing to within 2 inches of the top.

To avoid spillage, install the cartridge with a slow downward turning motion. Replace the lid and tighten the T-handle by hand, snugly.

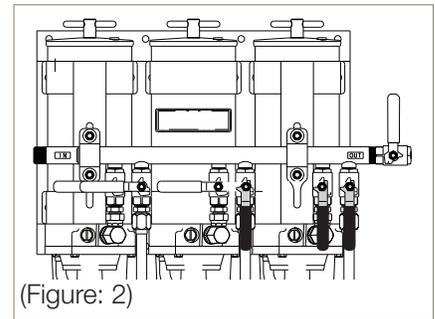


- Close the fuel system shut-off valve from the Racor pipe outlet (wherever it may be installed).

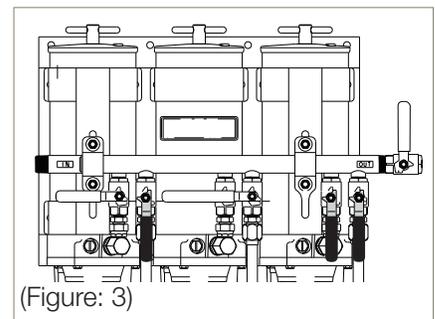
- Open the Inlet valve to the Racor 'primary' unit.
- Ensure the Outlet valve to the same unit is closed. **(Figure: 1)**
- Loosen the vent-plug or T-handle on the top lid (on the Primary unit) - do not remove. (If you have a 'venting valve', just push it down using a shop cloth to absorb the fuel).
- Operate the priming pump until all air is vented.

CAUTION: As air vents completely, fuel will follow! Wrap a shop cloth around the vent valve, vent plug or T-handle/Lid, to control the fuel spillage until you can quickly tighten the plug or T-handle. (not applicable to 'venting valve' units).

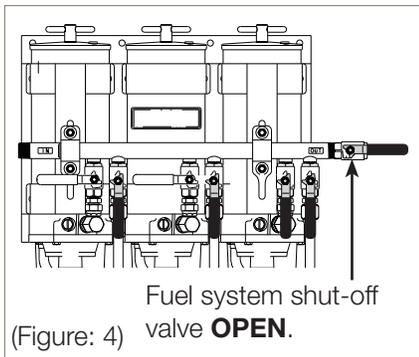
- Tighten vent plug, T-handle or release the 'venting valve', as applicable.



- Open the Outlet valve to the 'primary' unit. **(Figure: 2)**
- To prime the second unit, open its OUTLET valve and ensure the INLET valve is closed and repeat step 4 through 6. **(Figure: 2)**
- Close the second filter OUTLET valve.

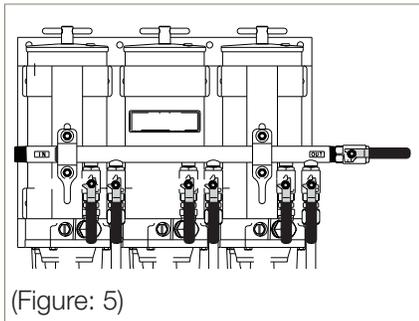


- To prime the third unit, open its OUTLET valve and ensure the INLET valve is closed and repeat step 4 through 6. **(Figure: 3)**



11. Open all OUTLET valves and the 'primary' INLET valve. Operate the priming pump for a minute or two to push any trapped air within the fuel lines out to the engine. **(Figure: 4)**

Note: Check equipment or engine manufacturer's priming instructions and open any vents to purge any remaining air.



12. Open all remaining INLET valves as desired and then start the engine and check the Primer Pump installation for any air or fuel leaks. **(Figure: 5)** Correct immediately with the engine turned off. Ensure any inlet and outlet valves are closed to prevent fuel spillage while performing repairs.

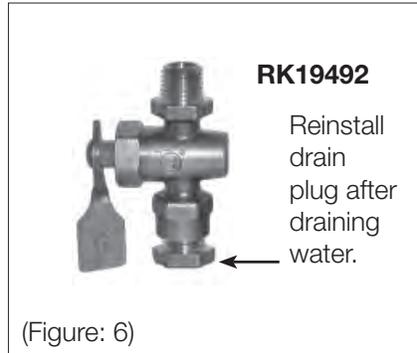
SERVICING -DRAINING WATER - ALL MODELS (with engine off)

Water may be drained from the collection bowls as before (refer to your owner's manual). You may also use the primer pump to push the contaminants from the collection bowl. This ensures no additional air is ingested into the units.

Marine versions of the multiplex units are equipped from the factory with a USCG approved drain plug. Racor recommends updating this design with a USCG approved and UL

Marine Listed drain valve, part number RK19492, shown in **(Figure: 6)**.

This drain valve simplifies draining water and practically eliminates all fluid spillage. Use one drain valve kit per unit.



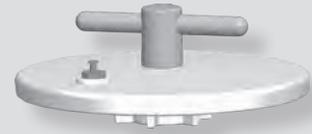
All Units: Open the self-venting drain, remove drain plug or open the drain valve, as applicable.

Push the momentary prime button to evacuate contaminants. Close drains when complete.

Note: You must close the drains or reinstall the drain plug to stop fuel from completely evacuating the filter housings.

CAUTION: Wear eye protection at all times: Fluids will evacuate the see-through bowl under pressure. Ensure an adequately sized collection vessel is used to prevent fluid spillage and spraying.

Racor Accessories



Metal Lid Kits for 900/1000FH/MA Series

RK11005B-02 Metal Lid w/vent port & plug -almond color
- For FG Models

RK11-1933-02 Metal Lid w/vent port & plug -almond color
- For FH Models

RK11-1933-06 Metal Lid w/vent port white color
- For Marine Models

RK15425 Venting Valve Kit
- (one each per kit)
Works with all lids above.



Metal Bowls Kits for 900/1000FH/MA Series

RK 11734 (beige/no probe port)

RK 11734-01 (beige/1/2" w/probe port)

RK 11734-03 (white/1/2" w/probe port)

Racor's policy is one of continual improvement in design and manufacturing to insure still finer products; therefore, specifications, equipment and product information, while correct at time of publication, is subject to change without notice.

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