

120R-RAC-01 & 120R-RAC-02

Gasoline Fuel Filter /Water Separators

MARINE



LISTED

168Y
120RRAC02



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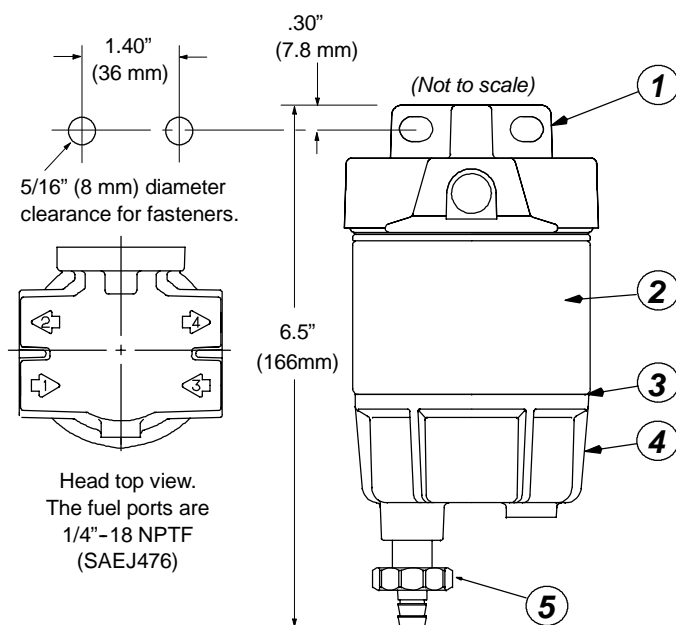
The Racor 120R-RAC-01 and 02 marine fuel filter/water separators feature a versatile four port head and are rated for fuel flows up to 30 gallons per hour (GPH). The head (and bowl on the 02) features an anodized base plating over a protective powder coating for superior corrosion resistance. The spin-on filter design is simple to replace and the reusable contaminant collection bowl features a self-venting drain (01 model) or plug (02 model) for removing unwanted water, with the engine off.

Only the 120R-RAC-02 model (with metal bowl) is Underwriters Laboratories, Inc. marine listed and may be used with gasoline inboard applications.

WARNING! GASOLINE IS HIGHLY FLAMMABLE AND EXPLOSIVE. YOU CAN BE BURNED OR SERIOUSLY INJURED WHEN HANDLING FUEL. STOP THE ENGINE AND KEEP HEAT, SPARKS AND FLAME AWAY. HANDLE FUEL ONLY OUTDOORS. WIPE UP SPILLS IMMEDIATELY.

INSTALLATION. Suction side of pump only.

- Any secondary/final or pressure side filters located between the pump and engine should be serviced and left in place.
- Mount the unit vertically on the suction side of the fuel pump, transfer pump or non-removable filters, whichever comes first. Maintain 1" (25mm) vertical clearance below the filter housing for removal of replacement element. (See installation diagram on next page).
- Ensure a suitable pipe thread sealing compound is used on the NPT threads of the fittings (customer supplied - steel plated fittings are recommended) prior to installation into the head. *Note: Do not use Teflon tape on NPT threads.*
- Use quality fuel hose in the maximum fuel line size applicable to reduce potential fuel flow restriction. *Note: USCG accepted hose is recommended. Racor offers USCG accepted hose in several sizes. Call your local Distributor for information. See parts list below.*



Model 120R-RAC-01 shown

SPECIFICATIONS

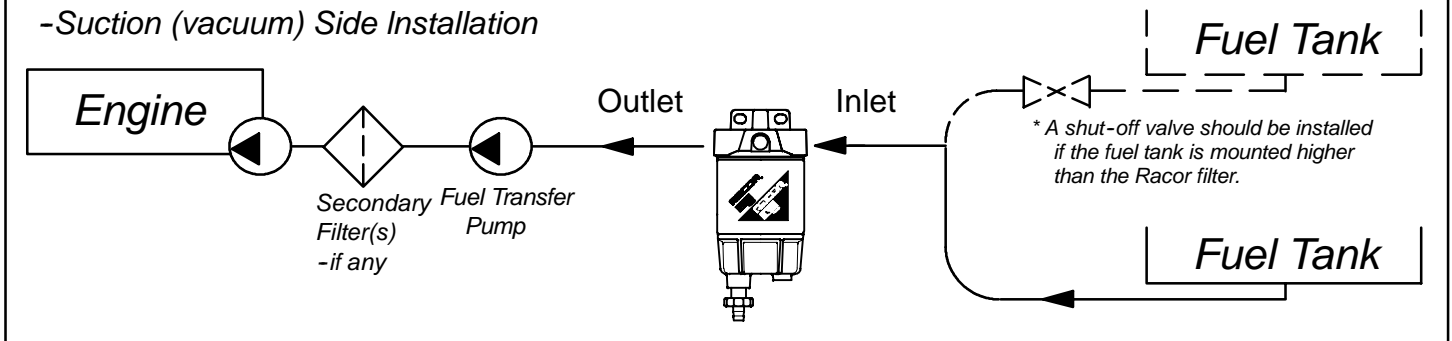
Fuel Ports (SAEJ476)	1/4"-18 NPTF
Maximum Flow Rate	30 GPH / 114 LPH
Element Removal, Minimum	1" (25 mm)
Underneath clearance req'd.	0.15 PSI (1.03 kPa)
Clean Pressure Drop	6.5" (166 mm)
Height	3.2" (81 mm)
Width	3.2" (81 mm)
Depth	1.1 lbs. (0.5 kgs)
Weight, Dry	-40° / +255° F (-40° / +124° C)
Temperature Rating	

PARTS LIST

Item/Part No.	Description
1 RK10214-01	Head, 1/4" NPTF Ports
2 S3240	120R-RAC-01 Service Element, 10 micron
S3240UL	120R-RAC-02 Service Element, 10 micron
3 RK10012	Bowl O-ring
4 RK10222	See-thru Bowl with Drain (for 01)
RK10109	Metal Bowl with Drain Plug (for 02)
5 RK30476	Drain Valve Assembly (for 01)
911-N4-H6	Steel Fitting, 1/4" NPT to 3/8" hose barb
913-N4-H6	Steel Fitting, 1/4" NPT to 90° 3/8" hose bead

The illustration below is a simplified view of the fuel system flow and is for reference only.

-Suction (vacuum) Side Installation



PRIMING THE UNIT.

1. Fill the Bowl and Element (assembled together) with clean fuel. (Note: If the fuel tank is mounted higher than the Racor filter, open the tank outlet valve and fill the unit using a gravity feed. Loosen the outlet connection to bleed air, if needed).
2. Spin the above onto the mounting Head and tighten snugly by hand (do not use tools to tighten).
3. Start engine and check for any leaks. If the engine is difficult to start or runs rough, check that the drain, bowl, element and port plugs are securely tightened. Check all connections for security and the hoses to ensure there are no kinks or sharp bends that would create excessive restriction.

SERVICE

DANGER: WHEN SERVICING GASOLINE FUEL SYSTEMS, GREAT CARE MUST BE EXERCISED TO AVOID POTENTIAL FIRE HAZARDS. DO NOT SMOKE OR PERMIT OPEN FLAMES NEAR THE FUEL SYSTEM DURING SERVICING PROCEDURES.

DRAINING THE COLLECTION BOWL.

Water is heavier than fuel and will settle to the bottom of the bowl and appear different in color. In extremely humid conditions, take a fuel sample (in a clear container) frequently (daily, if possible) and drain as required if water is present.

TO DRAIN CONTAMINANTS:

1. Place a container of sufficient volume below the unit to collect the contaminants.
2. Close the fuel tank valve (if applicable), then open the drain at the bottom of the '01' bowl or loosen/remove the drain plug on the '02' bowl. Note: a UL listed drain valve kit is available for '02' models. Order part number RK19492.
3. Prime the fuel system following manufacturer's procedure, if necessary, otherwise see '**PRIMING THE UNIT**'.

ELEMENT REPLACEMENT:

Element replacement frequency is determined by the contamination level in fuels. Fuel flow to the engine becomes restricted as the element slowly plugs with contaminants. Replace the element every 100 hours, 10,000 miles, every other oil change, annually, or at the first indication of power loss and/or hard starting, which ever comes first.

Always carry extra replacement elements as one tankful of excessively contaminated fuel can plug a fuel filter.

TO REPLACE THE ELEMENT:

Clean any debris or dirt away from the Head of the Racor filter prior to servicing.

1. Place a container of sufficient volume below the unit to collect the contaminants.
2. Open the drain (remove plug) to empty the unit of fuel. (Close tank outlet valve if tank is mounted higher than the Racor).
3. Spin the Element and Bowl off together, then remove the bowl from the element.
4. Clean the bowl o-ring gland and the sealing surface of the mounting head free of dirt, debris or gums.
5. Apply motor oil to the new square edged seal and to the bowl o-ring supplied with the new element.
6. Place the square edged seal onto the top of the new element and the o-ring into the bowl gland.
7. Spin the bowl onto the element snugly by hand. **DO NOT USE TOOLS TO TIGHTEN!**
8. Prime the fuel system following manufacturer's procedure, if necessary, otherwise see '**PRIMING THE UNIT**'.

TROUBLESHOOTING PROCEDURES

A major cause of power loss or hard starting is the result of an air leak (or clogged filter). If your unit will not prime or fails to hold prime, first check that the drain, bowl and element are properly tightened. Next, check all fitting connections and ensure none of the fuel lines are pinched or clogged with contaminants. If problems persist and the element is new, call Racor Customer Service for assistance: (800) 344-3286, 6 AM to 5 PM, Pacific Time, or e-mail us from our website, www.parker.com/racor.