

120A and 120B

Fuel Filter / Water Separator

Installation, Service, and Part Information



Filtration

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The Racor models 120A and 120B fuel filter / water separators are designed to be installed on the suction side of the fuel system with maximum flow capacities of 15 and 20 gallons per hour (GPH). The compact size and four (4) port versatility make the 120 series a very popular small fuel filter / water separator for many applications. Servicing is simplified by the self-venting bowl drain and the spin-on service element and bowl assembly.

These units are extremely effective in removing better than 99% of free water normally found in fuel due to condensation. The replacement filters use Racor's proprietary Aquabloc™ filtering media which removes particle down to two microns and prevents water from entering the injection system. An optional in-bowl water probe is available to inform the operator when servicing is required. Note: do not exceed seven (7) PSI of head pressure on the filter assembly. Also, the 120RMAM unit is recommended for marine applications where UL listed or USCG acceptance is desired.

Specifications

Basic Models	120A	120B
Maximum Flow Rate	15 GPH (57 LPH)	20 GPH (80 LPH)
Port Size (SAE J476)	1/4"-18 NPTF	1/4"-18 NPTF
Replacement Elements: 2 micron 10 micron 30 micron	R12S R12T R12P	R13S R13T R13P
Minimum Service Clearance	2 in. (51 mm)	2 in. (51 mm)
Center Threads	M18 X 1.5	M18 X 1.5
Height	6.5 in. (166 mm)	8 in. (203 mm)
Depth	3.2 in. (81 mm)	3.2 in. (81 mm)
Width	3.2 in. (81 mm)	3.2 in. (81 mm)
Weight (dry)	1.1 lb (0.5 kg)	1.2 lb (0.6 kg)
Clean Element Pressure Drop	.15 PSI (1 kPa)	.15 PSI (1 kPa)
Maximum Allowable Pressure ¹	7 PSI (48 kPa)	7 PSI (48 kPa)
Water in Bowl Capacity	52 ml	52 ml
Operating Temperature	-40° to +255°F / -40° to +121°C	

Special Notes

¹ Pressure installations are applicable up to the maximum PSI shown. Vacuum installations are recommended.

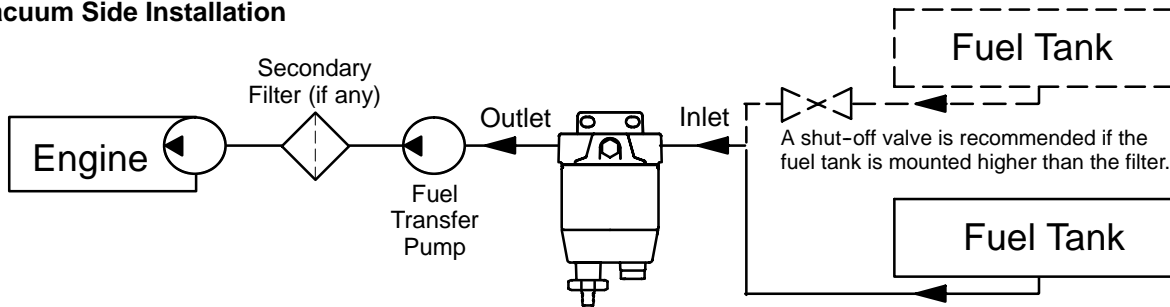
Installation Instructions

Warning! Do not smoke, allow open flame or heat near the installation which could create a fire. Perform the installation in a well ventilated area. Refer to the installation diagram below and keep these few points in mind while installing the unit.

- Apply thread sealant to tapered threads of inlet and outlet fittings prior to installing into the mounting head.
- Install the unit underhood for protection against extreme cold temperatures. This will help in preventing fuel gelling. Diesel fuel additives containing alcohol can damage non-metal components in fuel systems and are not recommended.
- Ensure that fuel lines are secured to protect them from rubbing on other surfaces. Avoid tight bends and high heat sources.



Vacuum Side Installation



Priming Instructions

Spin the bowl and element (together) from the mounting head and fill with clean fuel. Spin the bowl and element (together) onto the head and tighten firmly by hand. Start the engine and check for leaks. Correct as necessary with the engine off.

Draining the Collection Bowl

Water is heavier than fuel and will settle to the bottom of the bowl and appear different in color. In marine or high humidity environments, check the collection bowl frequently (daily if a poor fuel source is suspected). A unit equipped with an in-bowl water probe (RK30964) and alarm kit (RK20725, 12 vdc) will alert the operator when a high water level condition exists and servicing is needed.

Element Replacement

Element replacement frequency is determined by the contamination level in fuels. Fuel flow to the engine becomes restricted as the element gradually plugs with contaminants, resulting in noticeable power loss and/or hard starting. When any one of these occur, change the element as soon as possible. As a guideline, change the element every 500 hours, 10,000 miles, every other oil change, annually or at the first indication of power loss, whichever occurs first. Always carry extra replacement elements as one tankful of excessively contaminated fuel can plug a filter.

Part List

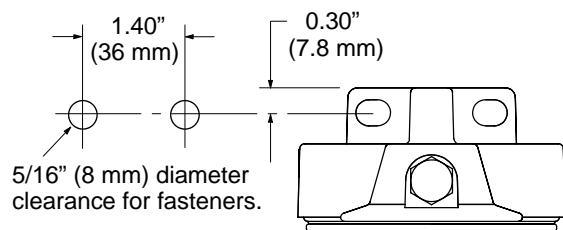
Part Number	Description
1 RK10214	Head, 1/4" NPTF Ports
2 RK10110	Metal Vent Plug, 3/8"-24
3 (Various)	Replacement Elements (see chart on previous page)
4 RK10012	Bowl O-ring
5 RK10215	See-thru Bowl with Drain
6 RK20126	Plastic Plug, 1/2"-20 SAE
7 RK30476	Drain Valve Assembly

Additional Parts

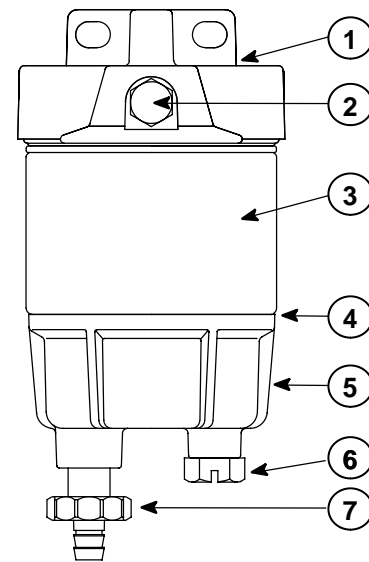
RK10109	Metal Bowl Kit
RK30964 ¹	Water Probe and Connector

¹ Must be used with water detection kit.

Mounting Pattern

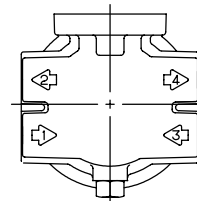


Refer to specifications for filter dimensions.



(Not to scale)

Head top view.
The fuel ports are
1/4"-18 NPTF
(SAE J476)



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