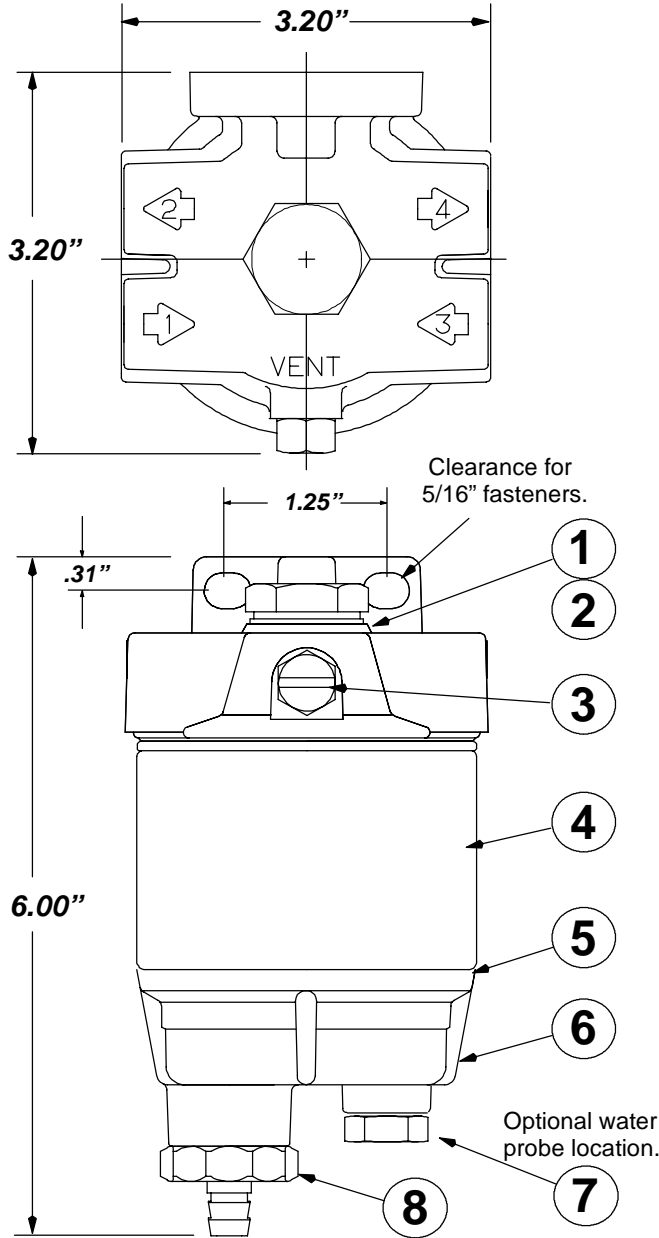


Model 120R Series Diesel Fuel Filter/Water Separator

RACOR[®]
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SPECIFICATIONS

Fuel Ports	1/4" NPTF (standard)
Maximum Flow Rate	15 GPH / 57 LPH
Replacement Element	See parts list
Under unit clearance, Min.	1" (25.4 mm)
Clean Pressure Drop	0.15 PSI (1.08 kPa)
Height	5.7" (145 mm)
Width	3.2" (81 mm)
Depth	3.2" (81 mm)
Weight, Dry	1.3 lbs. (.59 kgs)
Bowl Water Capacity*	25 ml
Temperature Rating	- 40 / +255° F (- 40 / +121° C)

* Measured at water probe (optional) tips.

The Racor Model 120R Series Diesel or Gasoline Fuel Filter/Water Separator is designed to be installed on the suction side of the fuel system with a maximum flow capacity of 15 gallons per hour (GPH).

The compact size and 4-port versatility make the Model 120R a very popular small fuel filter/water separator for many applications. Servicing is also made easier by the spin-on bowl assembly and simple element change procedure.

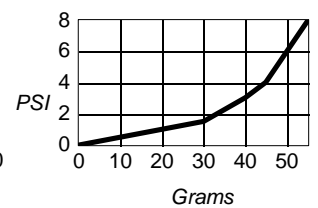
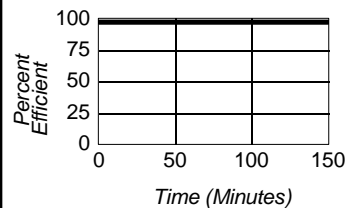
The Model 120R is extremely effective in removing better than 99% of free water normally found in fuel due to condensation. The R12S replacement filter uses Racor's proprietary Aquabloc™ filtering media which removes particulates down to 2 microns in size and prevents water from entering the injection system.

An optional In-bowl water probe is available to inform the operator when servicing is required.

NOTE: Do not exceed 7 PSIG in head pressure.

The 120RMAM unit is recommended for marine applications where UL Listed or USCG acceptance is desired.

PERFORMANCE GRAPHS



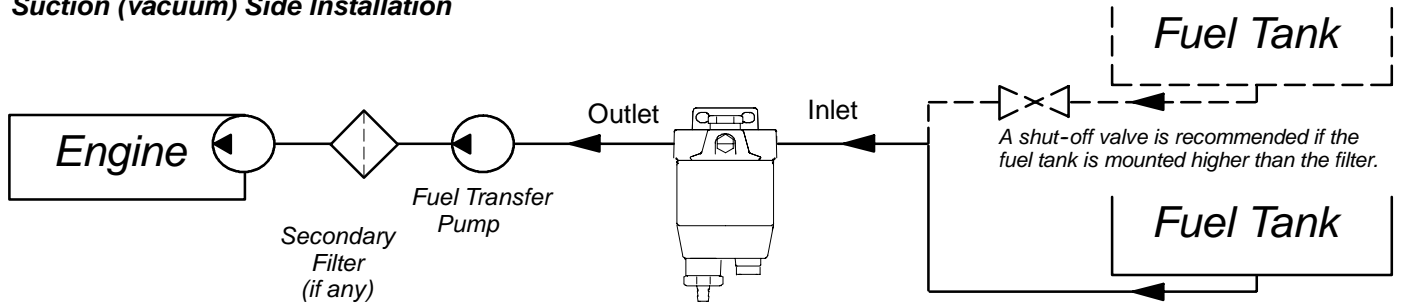
SAE J1839 Water Separation

SAE J905 Solids Capacity
(using: SOFTC-2A; R12S Element)

PARTS LIST

Item/Part No.	Description
1	RK10116 Head, 9/16" SAE Ports (optional)
	RK10117 Head, 1/4" NPT Ports
	RK10034 Check Valve Kit for 122 (not shown)
2	RK10006 Head Bolt Assembly (also Marine)
	RK10055 Primer Pump Assembly (122 models)
3	RK10110 Metal Vent Plug, 3/8"-16
4	R12S 2 micron Replacement Element
	R12SUL 2 micron Marine Element
5	RK10012 Bowl O-ring
6	RK10193 See-thru Bowl/Drain/Plug Assembly
	RK10109 Metal Bowl/Drain Assembly (Marine)
7	RK20022 Metal Plug, 1/2"-20 SAE
	RK10058 Water Probe (also order RK20725-12)
8	RK21319 Drain Valve Assembly
	RK10063 Seal Service Kit (all models)

Suction (vacuum) Side Installation



INSTALLATION

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 above and keep a few points in mind when installing the 120R.

A. Install the 120R 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.

B. Ensure that the fuel lines are secured to protect them from rubbing on other surfaces. Avoid tight bends and high heat sources.

PRIMING

Spin the bowl/element from the head and fill with clean fuel. Spin the bowl/element onto the head and tighten firmly by hand. Note: If using a torque wrench, do not exceed 60 inch pounds. Start the engine and check for leaks. Correct as necessary with the engine off.

122R Models with the in-head priming pump. Open head vent and operate the priming pump (it will be necessary to 'unscrew' the pump knob from the 'secured' position). When fuel purges at the vent, stop priming, close the vent and secure the pump knob.

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 (RK 10058) and Alarm Kit (RK 20725-12 ,12volt d.c.) will alert the operator when a high water level condition exists and servicing is needed.

WITH ENGINE OFF: Open the drain to evacuate contaminants, then close . **NOTE:** In some applications it may be necessary to open the vent plug first to 'break the vacuum'. For the 122R model, open the drain valve and then operate the pump to eject bowl contaminants. Follow PRIMING instructions, above.

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 occurs, 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, which ever occurs first. *Always carry an extra replacement element as one tankful of contaminated fuel can plug a fuel filter.*

1. Drain the unit of fuel by opening the drain valve.
2. Spin the bowl/element from the head and remove the element.
3. Coat the new seals with motor oil and then install the new element.
4. Spin the bowl/element onto the head and tighten firmly by hand. (Do not exceed 60 inch pounds). Follow PRIMING instructions, above.

TROUBLESHOOTING

If your unit will not prime or fails to hold prime, first check that the vent plug, drain valve, bowl/element and the head are properly tightened. Next, check fitting / fuel line connections for security, and ensure none of the lines are pinched or that the fuel tank strainer is clogged. If problems persist and the element is new, call your Racor Dealer or Racor Customer Service for assistance.

FITTINGS CHART FOR 120R SERIES PORTS			
	T1	H Hose I.D.	Part Number
Barbed Elbow 	NPT		
	1/4"	5/16"	953-N4-H5
	1/4"	3/8"	953-N4-H6
	SAE		
	9/16"	5/16"	913-O6-H5
	9/16"	3/8"	913-O6-H6
Barbed Straight 	NPT		
	1/4"	1/4"	951-N4-H4
	1/4"	5/16"	951-N4-H5
	1/4"	3/8"	951-N4-H6
	SAE		
	9/16"	5/16" to 3/8"	911-O6-H5/6

WARNING: The following statement is required pursuant to Proposition 65 applicable in the State of California: "This product may contain a chemical known to the State of California to cause cancer."
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 Product Brochure PN. 10218 Rev. -