120RMAM Series Marine Fuel Filter/Water Separators

Instruction Part Number 12945 Rev. B

The 120RMAM series features 1/4"-18 NPTF inlet and outlet fuel ports and a unitized mounting bracket for mounting versatility. They also feature an Aquabloc® replacement filter that repels water and removes solid contamination. This rugged, compact filter assembly fits a variety of engine applications.

Features and benefits include:

- Removes 99% of free water
- UL listed and USCG approved • for inboard marine use
- 15 GPH (57 LPH) maximum flow rate
- Superior corrosion resistance with electrostatic powder coating

Contact Information

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Specifications	120RMAM2	120RMAM30
Application: Inboard Outboard	Yes Yes	Yes Yes
Maximum Flow Rate	15 GPH (57 LPH)	15 GPH (57 LPH)
Replacement Filter	R12SUL	R12PUL
Center Threads	M18 x 1.5	M18 x 1.5
Port Size	1/4"-18 NPTF	1/4"-18 NPTF
Number of Ports: Inlets Outlets	2 2	2 2
Height	5.7 in. (14.5 cm)	5.7 in. (14.5 cm)
Width	3.2 in. (8.1 cm)	3.2 in. (8.1 cm)
Depth	3.2 in. (8.1 cm)	3.2 in. (8.1 cm)
Weight (dry)	1.4 lb (0.6 kg)	1.4 lb (0.6 kg)
Clean Pressure Drop	0.15 PSI (1.08 kPa)	0.15 PSI (1.08 kPa)
Maximum Allowable Pressure	7 PSI (0.5 bar)	7 PSI (0.5 bar)
Underbowl Clearance	2.0 in. (5.1 cm)	2.0 in. (5.1 cm)
Water Removal Efficiency	99%	99%
Ambient Temperature Range	-40° to +255°F (-40° to +124°C)	
Maximum Fuel Temperature	190°F (32°C)	







Installation Guidelines

Danger! Great care must be exercised to avoid potential fire hazards during installations. Do not smoke or permit open flames or sparks near the fuel system.

Refer to Installation Diagram on page 4 prior to beginning installation.

- Any secondary or pressure side filters located between pump and engine should be serviced and left in place.
- Mount unit vertically on suction side of fuel pump, transfer pump, or non-removable filters, whichever comes first.
- Ensure a suitable pipe thread sealing compound is used on NPT threads of fitting prior to installation into head. For mounting flexibility, there are two inlet ports and two outlet port. Plated steel fittings are recommended. Plug unused ports with provided steel NPT plugs—do not use tapes on NPT threads.
- Use quality fuel hose in maximum fuel line size applicable to reduce potential fuel flow restrictions. Note: USCG accepted hose recommended.
- 1. Make sure engine is off and cool to touch.
- Thread fittings into appropriate fuel ports and tighten snugly. Plug unused ports (if any) with port plugs and tighten snugly.
- Attach fuel lines to filter. Avoid tight bends, rubbing areas and heat sources when routing hose.
- 4. Follow Priming Instructions.
- 5. Make sure all fittings and connections are tight and secure.
- 6. Start engine check for leaks. Correct as necessary with engine off.

Priming

Always follow your engine manufacturer's guidlines for priming the fuel system. To prime the filter:

- 1. Loosen head bolt with a 15/16" wrench.
- 2. Spin bowl and filter off of mounting head (together).
- 3. Fill filter with clean fuel.
- 4. Apply a coat of motor oil or clean fuel to filter gasket.
- 5. Spin bowl and filter (together) onto mounting head tighten by hand - do not use tools.
- 6. Tighten head bolt snugly.
- 7. Start engine and check for leaks. Correct as necessary with engine off.

Service

Draining The Bowl

Water is heavier than fuel and will settle to bottom of bowl and appear different in color. In high humidity environments, check bowl frequently (daily if a poor fuel source is suspected). 120RMAM series bowls are equipped with a water sensor port that will accept a water probe (sold separately) and will alert operator of a high water condition in the filter.

- 1. Make sure engine is off and cool to touch.
- 2. Close shut-off valve between fuel tank and filter, if applicable.
- 3. Open vent plug on mounting head with a 1/2" wrench.
- 4. Slowly open drain plug on bottom of collection bowl with a 7/16" wrench and allow only water to drain out—do not leave drain open for very long as it will eventually drain the entire filter of all water and fuel.

- 5. When fuel is detected coming out of drain, close drain quickly and tighten snugly.
- 6. Close vent plug and tighten snugly.
- 7. Open Shut-off valve if applicable.
- 8. Follow Priming instructions.

Filter Replacement

Element replacement frequency is determined by contamination level in fuels. Fuel flow to engine becomes restricted as element gradually plugs with contaminants, resulting in noticeable power loss and/or hard starting. As a guideline, change element every 500 hours, every other oil change, annually, or at first indication of power loss, whichever occurs first. Always carry extra replacement filters as one tankful of excessively dirty fuel can quickly plug a filter.

- 1. Make sure engine is off and cool to touch.
- 2. Drain filter assembly of fuel.
- 3. Loosen head bolt with a 15/16" wrench.
- Spin bowl and element (together) off of mounting head.
- 5. Spin collection bowl off and save.
- 6. Dispose of filter properly.
- Lubricate new seals with motor oil or clean fuel and install only with new filter.
- 8. Install new O-ring onto collection bowl.
- 9. Install collection bowl onto new filter.
- 10. Install new gasket onto new filter.
- 11. Follow Priming instructions.

120RMAM Replacement Parts

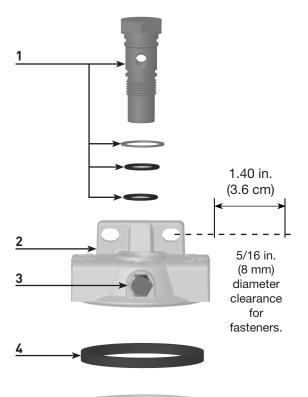
Part No.

1.	RK 10006	Head Bolt Assembly Kit
		(includes washer and o-rings)

Description

2. RK 10117 Head Kit (1/4"-18 NPTF Ports) (includes #'s 1 to 4)

- **3. RK 10110** Metal Vent Plug Kit (3/8"-24 UNF)
- 4. RK 10503 Gasket Kit
- 5. Replacement Filter (includes #'s 4 and 6)
 - R12SUL (2 Micron) UL Recognized
 - R12PUL (30 Micron) UL Recognized
- 6. RK 10012 Bowl O-ring Kit
- 7. RK 10109 Metal Bowl Kit (includes #'s 6 to 9)
- 8. RK 20022 Metal Plug Kit (1/2"-20 UNF)
- 9. 01SP-2S Steel Drain Plug (1/8" NPT)





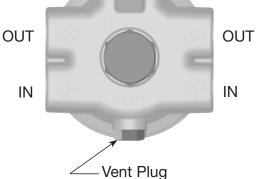




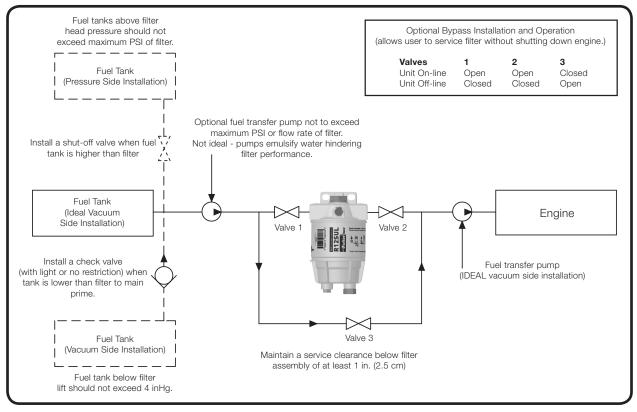








Installation Diagram



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