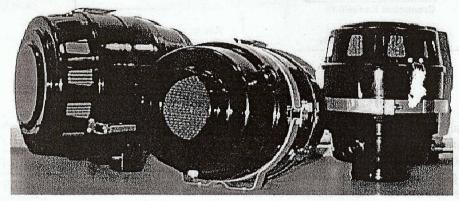
Marine Air Filter/Silencer Systems

Installation, Operation, and Parts Information



Filtration

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Marine diesel engines require a large volume of air to complete the combustion process necessary to produce power for propulsion. Fuel efficiency and engine reliability depend on the quantity and cleanliness of the air introduced into the combustion chamber and must be contaminant–free while offering a low inlet restriction.

Air filtration is necessary to keep airborne contaminants such as dust, salt, carpet fibers, carbon, and corrosion normally found in the engine room from entering the engine air intake. These contaminants can decrease efficiency and damage internal engine components.

Installation of a high quality marine air filter will help lower engine noise levels associated with intake howl and turbo whine in addition to filtering the inlet air. Racor Marine Air Filter/Silencer Systems meet these requirements with the following features and benefits:

Epoxy coated, all-metal housing for long lasting corrosion protection.
Epoxy coated, wire reinforced, and washable element for easy service or replacement.
Large inlet ports for higher air flow requirements.
"No tools required" latches for quick element change.
Crankcase filtration (CCV) hose port and inlet venturi are standard on all models.
Port and starboard service restriction indicator taps are standard.

Installed by major manufacturers worldwide.

Racor Marine Air Filters can be used in combination with a Racor Crankcase Ventilation Filter System or as a stand alone air intake/silencer. An optional restriction indicator can be added to insure proper change-out intervals and maximum inlet air restriction.

Installation Instructions

1 Choose the appropriate size marine air filter according to the table below and the illustration on the next page. 2 Connect marine air filter to engine intake. (Customer must supply one (1) clamp per marine air filter. Hump

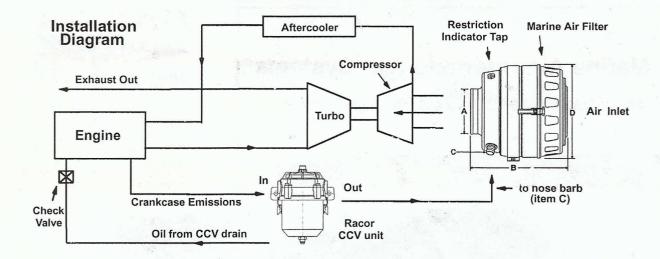
hose may also be required.)

Connect hose from outlet of Racor CCV to connector (C) on the marine air filter and clamp in place. If Racor CCV is not used, place cap and clamp provided over hose barb (item C), and secure in place.

Marine air filter must be firmly attached to a stationary surface. Various applications may require an adapter bracket. This bracket(s) must be supplied or fabricated by the customer. Loosen band-clamp fastener and rotate to attach to bracket. Additional fastener(s) are customer supplied.

Marine Air Filter Model	Outlet Diameter (A)	Length (B)	Hose Barb (C)	Filter Outside Diameter (D)	Replacement Element Part Number
AF M408512	4.00"	12.00"	1.00"	8.50"	AF M8040
AF M501012	5.00"	12.00"	1.25"	10.00"	AF M8050
AF M601212	6.00"	12.00"	1.25"	12.00"	AF M8060

Note: AF M601212 includes 1 1/4" x 1 1/2" bushing (connects to 1 1/2" ID hose)



Engine Application Information

In order to determine the correct marine air filter application, you will need to know the marine air filter rating (AFR). The customer will need to provide the hose connection to the turbo. Choose the correct marine air filter application per the following guideline (see chart 2). Verify all dimensions of the marine air filter before ordering.

4 Cycle Engines: Horse Power (HP) x 2.0 = AFR 2 Cycle Engines: Horse Power (HP) x 2.5 = AFR

Note: If AFR exceeds the maximum flow rate listed in chart 2, then use the next size larger marine air filter.

Maximum Flow Rate				
Marine Air Filter	AFR			
AF M408512	800 CFM			
AF M501012	1200 CFM			
AF M601212	1600 CFM			

CFM = Cubic Feet Per Minute
Chart 2

In addition, note the dimensions of the marine air filter outlets and the Racor CCVt connector barb outside diameter from chart 1 to insure the correct installation for your engine. The marine air filters typically correspond with the following CCVt models (see chart 3).

Marine Air Filter	CCV models
AF M408512	CCV4500
AF M501012	CCV6000
AF M601212	CCV8000

Chart 3

Service Instructions

- 1 The element **MUST** be serviced at no more than 25 inches of H₂O restriction. **WARNING!** Failure to service the element can cause loss of engine performance, physical harm and/or fire.
- 2 Release latches holding the marine air filter canister together and remove loose half of canister to expose element.
- 3 Remove the marine air filter element by pulling straight out.
- 4 Clean the marine air filter media by washing it with hot soapy water. **WARNING! Do Not** use **any** flammable spirits to clean this marine air filter media. Doing so can result in physical harm, fire, or engine runaway.
- 5 Allow the Marine Air Filter to air dry thoroughly. **CAUTION:** Check for cracks and/or damage to the element seals. Use of element with degraded seals can result in engine damage.
- 6 Re-oil the air filter media with any suitable air filter oil. Do not run with dry element.
- 7 Re-install the air filter element.
- 8 Align the latches of both canister halves together and center the replacement element. Push the two halves together so they interlock.
- 9 Snap the latches shut.
- 10 Reset the restriction indicator, if installed.

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 the time of publication) is subject to change without notice.

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