

## **№ BorgWarner**

# Cat. No. 0486 Series Evaporative Emissions Carbon Canister Installation Instructions

Note: Failing to follow these instructions when installing the evaporative emissions canister in a piece of nonroad equipment violates federal law (40 CFR 1068.105(b)), subject to fines or other penalties as described in the Clean Air Act.

#### Location

The canister can be mounted in any location that the current vent line is located. The canister is installed between the fuel tank vent fitting and the fresh air vent fitting. The canister must be mounted above the highest point of the fuel tank. Thought must be given to the following when choosing a location:

- The hose connections to the canister must be accessible for inspection and service.
- The canister should not be mounted in a location where it will be stepped on or otherwise have a force exerted upon it.
- The canister is designed to withstand a temperature range from -40° C to 80° C.
- The canister can be mounted in any orientation
- If mounted in the engine compartment, the canister must have a heat shield (this is an optional component that will be integral to the canister).

#### **System Requirements**

The fuel tank vent system must be designed in such a way that liquid fuel is not passed through the vent line and into the canister. The vent system must also prevent the intake of water into the vent system and into the canister. These are requirements of the EPA regulation. When designing your fuel system you must also consider fuel expansion and situations such as storage of the vessel with a full tank on an incline.

### **Mounting of the Canister**

The canister (with the bracket) is designed to be mounted with (4) #10 flat head or oval head screws. This is the setup that has been validated to ABYC standards. If the installer chooses to mount the canister in some other fashion (not using the end brackets), they are responsible for the validation of the mounting. Please note that the canister has an internal plate and spring that must be able to move inside the body of the canister. For this reason any mounting mechanism must not constrict the body for 50 mm (2 inches) from either end of the canister body.

#### Connection of the Vent Line to the Canister

The vent hose must be anchored to the boat structure within 6 inches of the canister fittings. The vent hose must be routed to prevent a load from being exerted onto the canister fittings.

Hose clamps must used in accordance with ABYC Fuel System Vent Hose Clamping Standards (H24 Table 3). The clamp must not distort the fitting on the canister when tightened. Leak test system per CFR33 requirements. Canister may not be pressurized to more than 5 psi.



Without Heat Shield

Cat No.	<b>Description</b>
0486005	Canister 0.5 Liter
0486007	Canister 0.75 Liter
0486010	Canister 1.0 Liter
0486015	Canister 1.5 Liter
0486020	Canister 2.0 Liter
0486030	Canister 3.0 Liter
0486040	Canister 4.0 Liter



With Heat Shield

Cat No.	<u>Description</u>
0486H05	Canister 0.5 Liter with Heat Shield
0486H07	Canister 0.75 Liter with Heat Shield
0486H10	Canister 1.0 Liter with Heat Shield
0486H15	Canister 1.5 Liter with Heat Shield
0486H20	Canister 2.0 Liter with Heat Shield
0486H30	Canister 3.0 Liter with Heat Shield
0486H40	Canister 4.0 Liter with Heat Shield