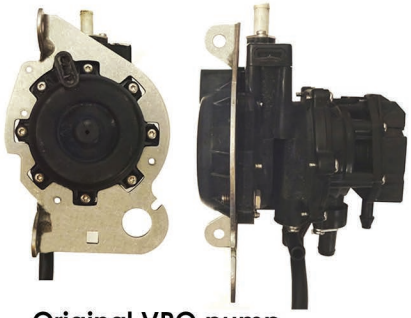
EMP 7359 VRO System Replacement Pump Installation Guide



Original VRO pump.

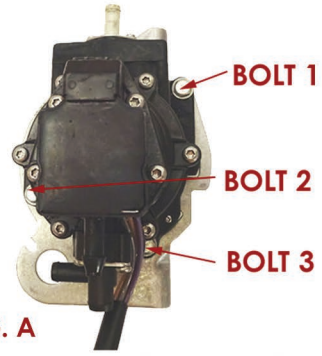


FIG. A

FIG. B1

FIG. B2

Remove original VRO pump and bracket from engine. The pump is attached to the mounting bracket by 3 bolts [**see FIG A**]. Remove bracket and dispose of old pump, keeping mounting bracket and bolts.

Place bracket, flat-side down, on a surface and draw a line from the center of the semicircle to the end of the bracket (just left of bottom mount) and a second line from the bottom of the first notch on the left to the end of the bracket [**see FIG B1**]. With a hacksaw or similar tool, cut along both lines to modify bracket for use with pump [**see FIG B2**].

Place the VRO Replacement Pump on the bracket as shown in **FIG C**. Note that the replacement pump will only use two of the mounting bolts. The tubing on the new pump should fall into the area vacated by the bracket modification.

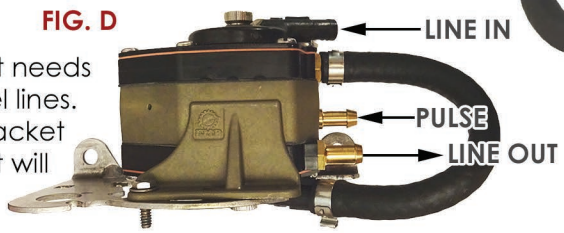
FIG. C

Install new pump back into boat engine. The fuel line should enter at the top of the pump and exit at the bottom. The vacuum pulse hose attaches to the center [**see FIG D**].

If you have any issues with the installation contact Engineered Marine Products or your local marine parts dealer.

FAQ

FIG. D



Do I have to cut the mounting bracket? The mounting bracket needs to be trimmed to make room for the replacement pump's fuel lines. This modification does not damage the integrity of the the bracket at all. If you decide later you want to return to a VRO pump, it will still attach to the mounting bracket even after modification.

This is a "non-oiling" pump. What exactly does that mean? Unlike the VRO Pump, this pump does not add oil into the fuel. The result of this is you have to pre-mix the fuel and oil prior to use. Simply mix your 2-cycle oil and gasoline in a 48:1 ratio **[1 pint oil to 6 gallons fuel].**

Will this pump fit my engine? The 7359 is designed for 90° V4 (90-140 Hp) looper and V6 (150-235 Hp) looper and crossflow outboards. *Due to spacing under the cowl, it will not work with the 60° models.* **Not sure if yours is 90°?** There are two ways to determine your engine type: **METHOD 1**. The 60° V4 and V6 cowl will have vents at the top, the 90° typically will not. **METHOD 2**. Looking at the top of the outboard, the 90° motor will have a more triangular profile [**see FIG E1**], while the 60° is more rounded [**see FIG E2**].

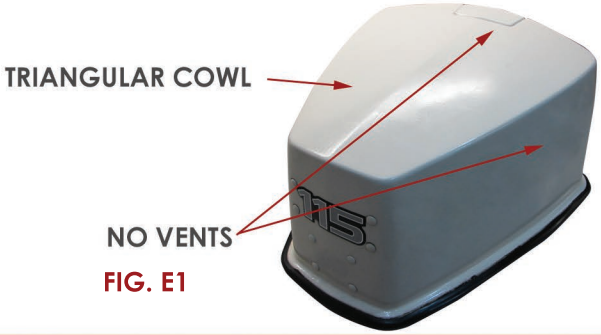


FIG. E1

90° ENGINE vs 60° ENGINE

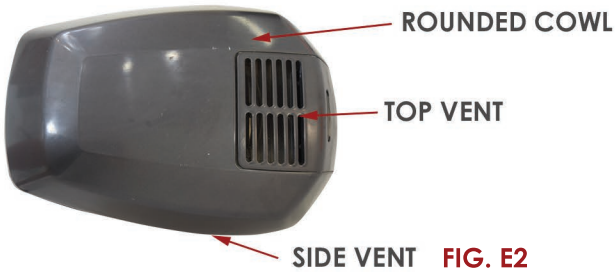


FIG. E2