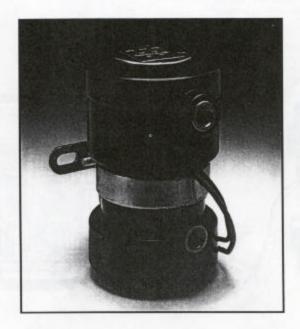
# MARINE ELECTRONIC FUEL PUMPS



Walbro marine electronic pumps are engineered to the strictest safety requirements. They exceed the fire resistance, corrosion resistance and dielectric requirements of the Marine Division of Underwriters Laboratory. They also meet the "Boat and Associated Equipment Safety Standards for Electrical and Gasoline Fuel Systems" published by the United States Coast Guard, January 31, 1977

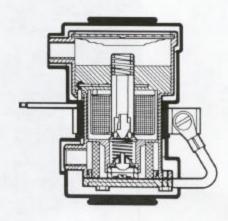
Walbro marine diesel electronic pumps provide dependable, pressure-controlled fuel supply. They can pull or push fuel. They are self priming, eliminate hand pumping, and reduce vapor lock problems. They can be used as a completely independent fuel pump system, or as a booster or standby unit. They can transfer diesel or gasoline.

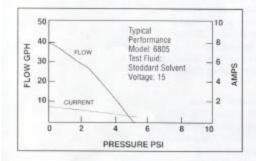
Thanks to the solid state design, mechanical switching elements are eliminated for reliable operation. Only three moving parts are incorporated in the pump, so there is little to wear out. The electrical system is fully insulated and sealed, with a two-wire hookup and static ground connection. Current draw is low. Two filters are used. A magnetic filter traps metallic particles while a microbon filter dissipates water and collects fine particles.

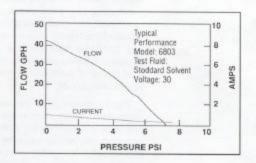
# **WALBRO MARINE PUMPS**

The Walbro marine diesel pump is engineered for safety. Electrical system fully insulated. Doubte wire hookup. Completely sealed. Eliminates hand pumps. Will push or pull fuel. To be installed with oil pressure safety shut-off switch. (Page 69)









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New Model # 6805 6806	Old Model # 6095 6096	Volts 12 24	Orifice 1/4" NPSF 1/4" NPSF
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7 pet

New Model #	Old Model #	Volts	Orifice
6802	6092	12	1/4" NPSF
6803	6093	24	1/4" NPSF

# INSTALLATION INSTRUCTIONS FOR WALBRO MARINE ELECTRONIC FUEL PUMPS

IMPORTANT: Great care must be exercised in the installation of this fuel pump. Read these instructions carefully before proceeding with the installation.

Be certain that the voltage of the pump is the correct voltage of your boat's electrical system: 12 volt, 24 volt, or 32 volt.

These installation instructions meet with the United States Coast Guard safety standards for electrical and fuel systems – final rule (January 31, 1977).

## Planning the installation

- Arrange pump so that it can be reached for inspection, removal, or maintenance without removal of permanent boat structure.
- Arrange pump above the fuel tank and beyond the antisiphon device or fuel stop valve.
- Pump must be mounted on the engine it serves, or within 12 inches of the engine, unless it is used to transfer fuel between tanks.
- Pump and conducting wires must be mounted away from the battery. If the pump and fuel lines are within 12 inches and above the horizontal plane of the battery top surface, they must be shielded with dielectric material.

# Installation Precautions

# A.Electrical System

- Use No. 16 AWG or larger conductor listed for Marine Use in all electrical wiring.
- Support all electrical wiring at intervals of 18 inches or less
- 3. For termination of electrical wiring not otherwise in a

- junction box or other enclosure, use closed ring connectors, eyelet connectors, or captive spade connectors.
- For overcurrent protection, use a 5 amp fuse between pump and oil pressure safety switch.
- For static protection, use a No. 6 AWG wire to connect the mounting bracket to a common ground.

#### B. Fuel System

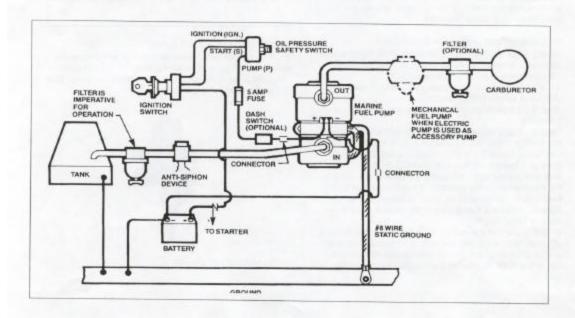
- Hoses (non-metallic) used between the pump and carburetor must be USCG Type A.
- 2. Hose clamps must be used at all fuel line connections.
- The fuel line, if cut, must have a bead or flare at the end if a hose is to be attached.
- 4. Use corrosion resistant materials.
- An oil pressure safety switch must be incorporated in the circuit to shut off the fuel pump in the event that the engine should stop while the ignition is still on. The fuel pump must not operate except when the engine is running or when the engine is being started.
- A fuel filter must be installed between fuel tank and pump and must be supported on the engine or boat independent of the fuel line.

## Installation Instructions

Step 1. The gas tank (tanks) should be nearly empty and the antisiphon device or fuel stop valve closed.

Step 2. Switch on the boat's bilge blower motor and allow to run at least ten minutes to evacuate any gasoline furnes that may have accumulated.

Step 3. Turn off all boat accessories and then disconnect the ground cable from the battery (batteries, if more than one).



Step 4. Locate pump above the outlet of the fuel tank and antisiphoning device and below the level of the carburetor. Step 5. Mount pump on the engine or within 12 inches of the engine and away from engine heat. Should not be mounted where it could be immersed in water.

Step 6. If a mechanical fuel pump being replaced is used solely as a fuel pump, it can be removed and the hole blocked off. If the old pump is also the source of vacuum for some of the accessories, there will be a third line running to it.

Step 6a. In the event that the old pump is being used to drive vacuum accessories, you will still need the vacuum, so leave the pump in place. Just remove the fuel inlet and outlet lines and plug both of these pump orifices.

Step 7. Examine your pump to identify the inlet and outlet ports. These are plainly marked on the pump cover. The inlet port should lead to the gas tank and the outlet port towards the carburetor.

Step 8. Locate the pump in an upright position and using the pump as a template, drill two 9/32\* holes.

Step 9. Using a #6 wire, connect one end to the fuel pump mounting bracket and the other end to the boat's common ground, (Use terminals where applicable.) Attach the pump's static ground strap to the mounting bracket and secure pump firmly with screws, nuts, and washers. (Corrosion resistant.)

Step 10. Using Coast Guard Type A fuel hose, connect the pump to the fuel line and carburetor. (Optional-include a filter between the pump and carburetor and secure it to the boat or engine.)

If it is necessary to cut the existing metal fuel line, do it with a fine-tooth hacksaw (or better still, a rotary tube cutter).

After cutting the fuel line, flare the end with a proper flaring tool. Remove burrs. Use enough hose to fit at least 2 inches over the fuel line and secure with clamps. If it is necessary to bend the fuel line, do it gradually to avoid sharp bends and buckling. Always strive to keep the fuel lines free of any foreign particles.

# Installation Instructions - Electrical

Step 1. The Walbro Marine Electronic Fuel Pump may be used as a "booster" or stand-by unit or as a completely independent fuel pump installation.

Step 2. Make electrical connections with insulated wire (No. 16 or larger) USCG-approved.

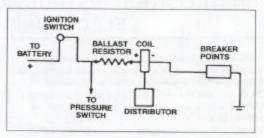
Step 3. If a separate switch is used, minimum ratings are 5 ampers.

Step 4. If your system is NEGATIVE GROUND, connect the BLACK WIRE to a suitable ground. If it is POSITIVE GROUND, connect the RED WIRE to a suitable ground.

Step 5. Connect the length of 16 AWG (or larger) stranded marine type wire from the PUMP (P) terminal on the oil pressure safety switch to the remaining fuel pump lead wire (via terminal block, post, or spade connector).

Step 6. Include a 5 amp fuse in the line if the line is not already fused.

Step 7. Connect a wire from the IGNITION (IGN) terminal of the oil pressure safety switch to a voltage source which is energized when the ignition is turned on. A good location is the "IGN" terminal of the ignition switch or at the fuse block.



CAUTION: The voltage source connection (Step 7) must be positioned ahead of any ballast resistor or resistance wiring.

Step 8. Re-connect the battery (batteries) ground cable.

#### Installation Check

Step 1. Switch on the boat's bilge blower motor and allow to run at least ten minutes to evacuate any gasoline furnes that may have accumulated.

Step 2. Switch ignition on and start up engine to see if pump is working. You should hear it clicking as the plunger reciprocates inside the pump;

NOTE: On boats equipped with fresh water cooling systems, perform function test with boat in water or have an ample source of water to provide for engine cooling.

Step 3. Check all the connections to see that they are dry and that no gasoline is leaking from any of the fuel line connections. Tighten any connections if necessary.

#### Service Data

The Walbro Marine Electronic Pump incorporates two (2) built-in filters, one for filtering fine particles and the other (a magnet) for trapping metallic particles. Due to construction of the protective outer shell, these filters cannot be serviced.

## Marine Safety Shut-off Switch

A safety shut-off switch must be installed with the marine electronic fuel pump. This switch shuts off the fuel pump when the oil pressure drops to dangerously low levels (2-5 psi) as the result of engine failure, etc.



Model 14-527U (UL Listed)