

Please follow the easy installation instructions carefully to assure maximum efficiency in your bilge pump operation.

AUTOMATIC CARTRIDGE BILGE PUMP INSTALLATION INSTRUCTION

1. Mount pump at lowest point in the bilge.
2. Select a point where bilge water is to be pumped over board, at least 1 foot above the water line and the shortest distance from the pump. Install a 3/4" thru hull (a 1-1/16" hole is required with most thru hull fittings).
3. Fasten a 3/4" fuel resistant hose from pump outlet to the thru hull fitting. Avoid sharp bends or loops. Support hose if necessary. It is important that the hose be constantly rising and not be allowed to dip below the outlet port.

WIRING THE PUMP

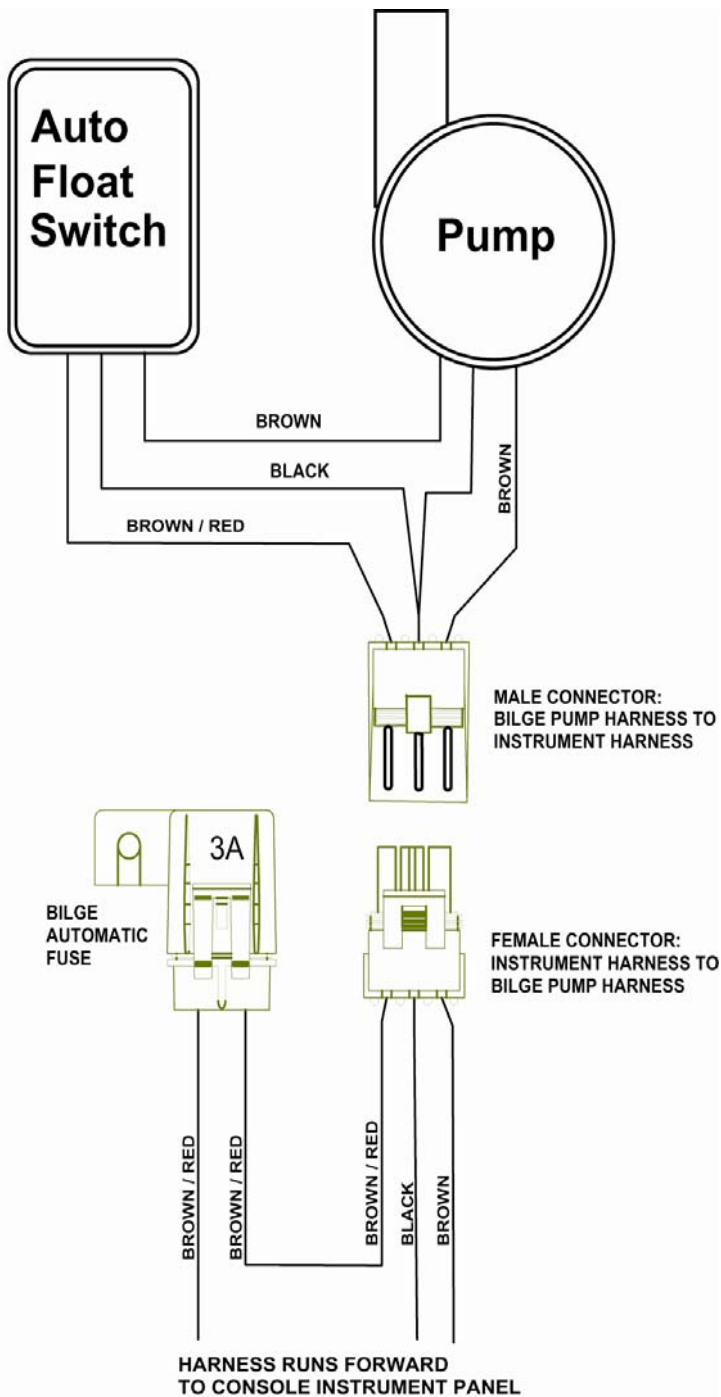
1. Do not cut back insulation more than 3" from pump and keep all connections well above water levels. A submerged splice will render the warranty void.
2. Fuse sizes for models **0550 require 2.0 amps fuses, 0570 uses 4.0 amps and 0590 use 5.0 amps.**
3. For longer pump life, do not run dry.

TO REMOVE OR REPLACE POWER CARTRIDGE

1. Lift tab and rotate the two fins in a counter clockwise direction and lift out. (fig. 1 ,2 & 3).
2. To reinstall, first make sure the 'O' Ring is properly located . Coat the 'O' Ring with a light film of vegetable oil or mineral oil, then align the two cams on either side of the power cartridge with the two slots in the outer housing. Press down and twist in a clockwise rotation. To ensure that the power cartridge is properly located, twist fins in a counter clockwise direction without lifting tab. Cartridge should stay in place.

2-WIRE REPLACEMENT POWER CARTRIDGE

1. Remove the power cartridge from the pump housing as described above.
2. Cut off the 3 wires from the old power cartridge close to the pump.
3. Replacement pump cartridges have 2 wires, 1 is brown and the other is black.
4. Use heat shrink butt connectors to connect the black wire from the cartridge to the black wire from the Packard style connector.
5. Use heat shrink butt connectors to connect both the brown wire from the float switch and the brown wire from the cartridge to the brown wire from the Packard style connector.



Black	Ground (Negative)
Brown	Manual Power (Positive)
Brown / Red Trace	Automatic Power (Positive)

Always use a 3 Amp replacement fuse on the automatic side of the bilge pump. If the fuse continues to blow or the panel circuit breaker trips repeatedly, remove the power cartridge from the housing and clear any debris that is restraining the impellor.