

# AS-100 Bilge Pump Control Kit Installation, Operation, and Maintenance

**The Concept:** AS-100 uses the simple and reliable pressure fluctuation from a rising or falling bilge water level to turn your bilge pump on and off automatically.

There are no floats to stick in the up position to allow your bilge pump to run continuously, or to crack and fill with water so they fail to turn your bilge pump on at all.

**Installation:** Temporarily place the black neoprene "air bell" about one foot away from the bilge pump, at a level approximately one inch above the level of the base of the pump. Hint: The air bell may be placed on top of a block of wood to achieve the desired level. Secure the air bell only after verifying proper operation (see the section on operation).

Connect the switch to the air bell with the clear tubing supplied. The fit will be tight, so no clamps or adhesives are required.

Locate the pressure switch as high and dry as possible. The switch is not waterproof; a submerged switch and/or electrical connections will cause switch failure. Water damage to the switch voids product warranty. Ensure that there are no sags or sharp bends in the hose.

Fasten the switch securely to a sturdy surface with #10 stainless steel screws (not supplied).

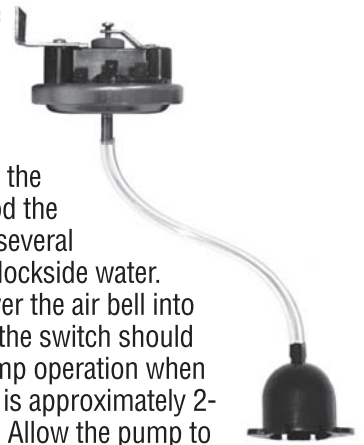
**Electrical:** AS-100 switch has (3) tabs for 1/4" "fast-on" terminals. For bilge pump applications use only the terminals marked "1" and "3". Refer to the wire size selection chart supplied. Assure that adequate wire size and crimp-on terminals are used between power, the pump, and the AS-100 switch.

Note: Most pump and switch failures are caused by faulty crimps.

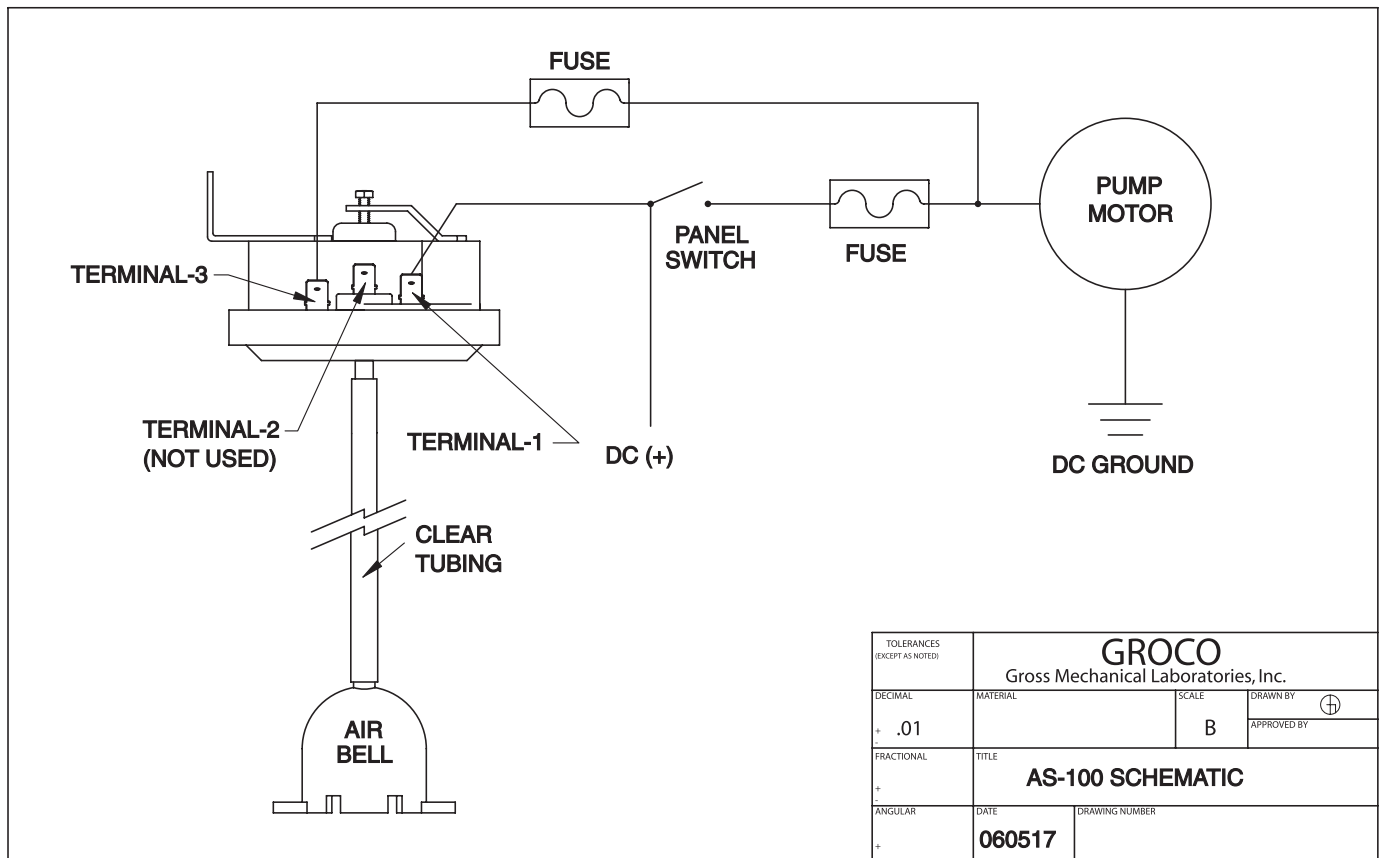
The maximum continuous pump current is 15 amps @12VDC. Refer to the schematic attached for the details of proper hookup.

**Operation:**

To verify that the switch is properly controlling the pump, flood the bilge with several inches of dockside water. Slowly lower the air bell into the water; the switch should trigger pump operation when the air bell is approximately 2-3/4" deep. Allow the pump to run while you lower the air bell to the bilge floor; the pump should turn off when the level of water in the bilge is approximately 1" deep. Experiment with air bell locations until the pump operates as you wish.



**Important Note:** Do not locate the air bell below the level of the pump as this will allow the pump to run continuously even though the pump has evacuated as much water as it is capable of.



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