



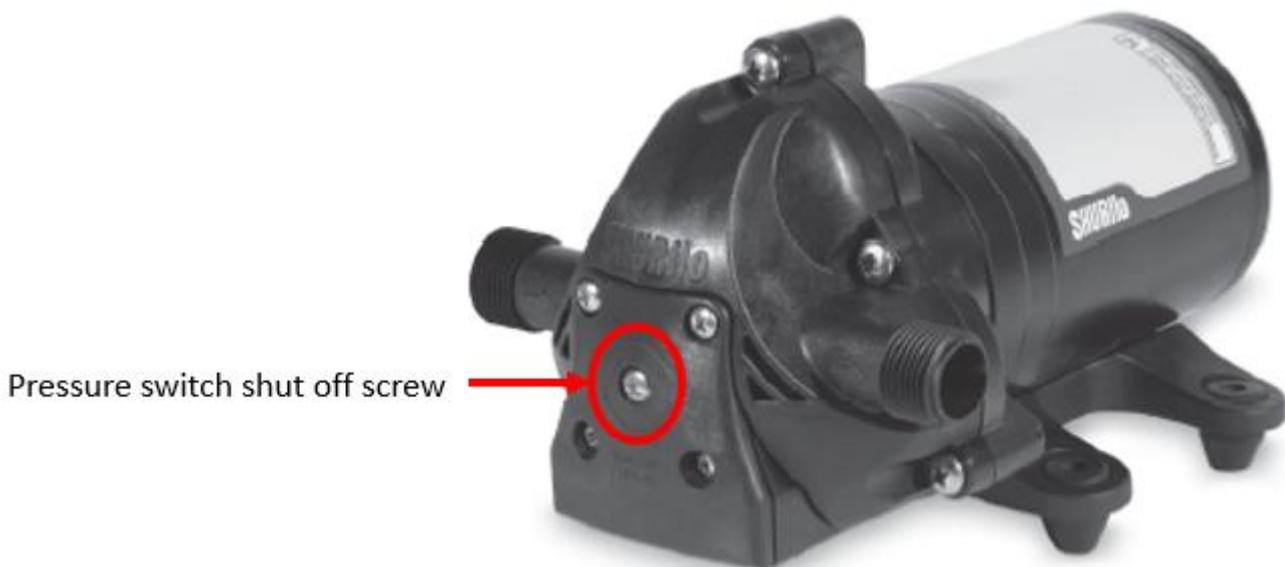
## User's manual

### 4. Operating of water pump

#### **Shurflo - Trail king 7 12V -7L/min 20PSI**

SHURflo's Marine Duty fresh Water Pumps were developed to endure the harsh marine environment. The patented design delivers smooth, consistent flow at all ranges of operation, while drawing low current. The balanced motor design incorporates precision ball bearings for long life, motor is equipped with an integral thermal breaker and U/I Marine listed. All Marine duty pumps have sealed switches and are finished with an Electro Coating to inhibit corrosion. Marine duty fresh water pumps are enclosed to prevent incidental moisture from entering and when installed correctly, Marine Duty fresh Water Pumps provide years of quiet operation.

*The pump is a pressure switch pump that automatically switch on and off between high and low pressures in the water system. To adjust pressure shut off limit, turn the pressure switch shut of screw by using a Philips/star screwdriver.*



Before switching pump on:

- ✓ Ensure tap/water mixer at kitchen unit is close properly.
- ✓ Switch pump on at the pump switch on power panel.
- ✓ Check for any leakages at pump, geyser and kitchen unit when switching the pump on.
- ✓ Ensure pump is switched of at power panel while traveling.

### **TROUBLESHOOTING**

#### **PUMP WILL NOT START**

- ✓ Ensure 12V master switch on power panel is on.
- ✓ Ensure pump switch on power panel is on.
- ✓ Ensure the batteries are charged and that the power panel displays a voltage above 10.5V.
- ✓ Ensure wire output connections underneath power panel are secure in place. (See illustration 1)

- ✓ Check if the motor is hot? Thermal breaker may have triggered; it will reset when cool.
- ✓ Ensure water is not frozen.
- ✓ Pressure switch operation/adjustment incorrect, Adjust pressure switch shut-off screw.

#### **PUMP WILL NOT PRIME/SPUTTERS (No Discharge/Motor Runs)**

- ✓ Is the strainer clogged with debris?
- ✓ Is there water in the tank,
- ✓ Is the inlet pipe sucking in air at water pipe connections (vacuum leak)?
- ✓ Is inlet/outlet pipe severely restricted or kinked?
- ✓ Check for debris in pump inlet/outlet valves or swollen/dry valves.
- ✓ Check pump housing for cracks or loose drive assembly screws.

#### **LEAKS FROM PUMP HEAD OR SWITCH**

- ✓ Check for loose screws at switch or pump head.
- ✓ Check if switch diaphragm is ruptured or pinched.
- ✓ Check for punctured diaphragm if water is present in the drive assembly.

#### **PUMP WILL NOT SHUT-OFF / RUNS WHEN FAUCET IS CLOSED**

- ✓ Check output side (pressure) pipe for leaks, and inspect for leaky connections.
- ✓ Check for air trapped in outlet pipe or pump head.
- ✓ Check for loose drive assembly or pump head screws.
- ✓ Pressure switch operation/adjustment incorrect –

#### **NOISY OR ROUGH OPERATION**

- ✓ Check for mounting feet that are loose or
- ✓ Check for loose pump head to motor screws. (3 long screws)

#### **RAPID CYCLING (Switch on and of repeatedly)**

- ✓ Adjust pressure switch shut-off screw.
- ✓ Check for restrictive plumbing, flow restrictors in faucets/shower heads.