

IMPORTANT

- Pump is water resistant but not waterproof. Do not submerge in water.
- The maximum pumping rate will decrease as the amount of lift increases.
- Replace the tubing regularly. The pump will be inefficient if the tubing is worn. This will show as a limited ability to lift water. If the tubing looks worn, flattened or cracked, replace the tubing.
- If used in cold weather, ensure that there is no ice in the tubing before starting the pump.

Power

The pump operates from an external 12V DC power supply such as a car, truck or marine 12 volt battery and has a 12 ft (3.6 m) power cable with connector clips for direct battery connection.

The power cable clips are oversized for use with automotive batteries. The red clip connects to the positive (+) battery terminal, black to negative (-) battery terminal. If the battery is connected with reverse polarity the pump will not be harmed, but it will NOT operate until the polarity is connected correctly.

An externally accessible fuse holder is located on the side of the pump case. In the event of a blown fuse due to a stalled pump head, replace fuse with an 8 AMP, type 3AG (1/4" x 1 1/4") 'Slo-Blow' fuse. Do not use a larger amperage fuse.

If the pump is to be powered by a vehicle battery for extended periods (more than 3 hours continuous), start vehicle and run for 15 minutes to recharge the battery.

Operation

1. Ensure that the chosen silicon tubing has been properly installed in the pump head.
2. Connect one end of the silicon tubing to the down-hole sample line.
3. Either connect the other end of the silicon tubing to a discharge tube, or simply discharge out of this end of the tubing.
4. Connect the negative (black) battery clip to the negative terminal post on a 12V DC battery.
5. Connect the positive (red) battery clip to the positive terminal on a 12V DC battery.

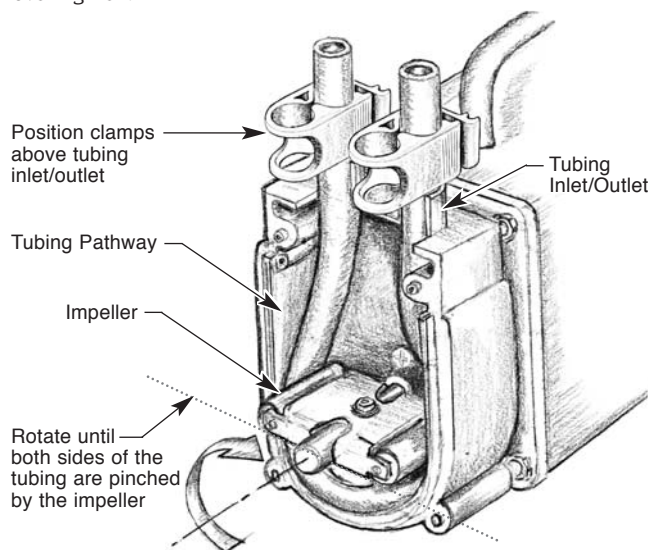


Controls

- The Solinst Peristaltic Pump has an integral Forward/Reverse, variable flow dial with an OFF position, which has a central detent. When turning the unit OFF, ensure you feel the dial snap into position.
- The pump should always be kept with the control in the OFF position when it is being attached to a power source or stored.
- Once attached to a power source, turn the dial in the direction required and adjust the flow as desired.
- The standard 5/8" (16 mm) OD medical grade silicon tubing can be attached to 1/2" (13 mm) OD down-hole sample tubing and gives purge rates up to 3.5 L/min and 120 mL/min at the low end.
- 3/8" (10 mm) OD silicon tubing and the optional adaptor kit allow the use of 1/4" (6 mm) OD down-hole sample tubing, giving flow rates up to 900 mL/min and sampling rates as low as 40 mL/min.

Changing or Installing 5/8" Silicon Tubing

1. To install or replace the tubing, disconnect the pump from its power supply and then undo the four thumbscrews on the drive head (black plastic end). Remove the drive head cover.
2. Manually rotate the pump impeller in any direction, while pulling gently on the tubing to pull it away from the body.
3. Remove tube clamps from the old tubing.
4. Position the new tubing around the impeller in a "U" shape. Holding half of the tubing in place around the impeller, begin to manually rotate the impeller. Repeat for the remaining half of the tubing. Replace clamps onto the tubing close to the drive head. The clamps prevent the tubing from being pulled into the drive head.
5. Reposition the pump head cover and screw it firmly in place. Thumbscrews should be finger tight. Do not use a wrench or over tighten.



Optional Adapter Kit Includes

- 3 ft of 3/8" OD Silicon Tubing
- 2 Tube Bushings
- 2 Tube Clamps
- 1 Drive Head Insert

To Install Adapter Kit for 3/8" Silicon Tubing

1. To install or replace the adaptor kit, disconnect the pump from the power supply and then undo the four thumbscrews on the drive head (black plastic end). Remove the drive head cover. Remove the existing tubing.
2. Make a "U" shape with the white plastic drive head insert and place around the tubing pathway in the drive head.
3. Position the new tubing around the impeller in a "U" shape with equal lengths. Holding half of the tubing in place, begin to manually rotate the impeller, positioning the remaining tubing in place.
4. Place the bushings onto the tubing making sure they are placed INTO the drive head tubing inlet/outlet.
5. Replace the clamps onto the tubing making sure they are flush with the bushings. The clamps prevent the tubing from being pulled into the drive head.
6. Re-position the pump head cover and screw it firmly in place. Thumbscrews should be finger tight. Do not use a wrench or over tighten.