

# Tech Note 129

#### SHURFLO PUMP HEAD REBUILD AND TEST

Instructions for rebuild kit P/N ME41576. Kit can be used to rebuild pumps P/Ns ME41190 and ME41574. Read and understand instructions before beginning procedure. If anything is not clear, call for assistance before proceeding.

CAUTION: Follow all SAFETY precautions for cleaning medical equipment. DO

NOT get motor or pressure switch excessively wet. If motor is NOT

attached, DO NOT get pump bearing excessively wet.

### **DISASSEMBLY:**

- 1. Disconnect the two wires from the pump pressure switch (if attached).
- 2. Remove the pump from the motor by removing the three (innermost) long screws (not the pressure switch screws).
- 3. Remove the three (outermost) short screws from the pump head.
- 4. Remove the pump head cover from the motor with a firm rocking movement.
- 5. Remove and discard old diaphragm and seal assembly from pump.
- 6. Remove and discard the three bypass springs and plastic caps (if applicable) from pump head cover.
- 7. Clean with water and remove any debris from pump head housing and cover.

  NOTE: Do not get pressure switch excessively wet.
- 8. Wipe parts clean and dry.

#### **ASSEMBLY:**

- 1. Place the new diaphragm and seal assembly into the pump head housing.
  - **NOTE:** Do not force the assembly together, they should snap together.
- 2. Align the pump head cover over the diaphragm, seal, and pump head housing.

**NOTE:** There are two small holes or notches in the back edge of the pump head housing. The holes should be by the motor mounting plate when assembled to the motor.

- 3. Install the three small screws into the pump head.
- 4. Align the motor shaft into the pump head and install the three long screws.
- 5. Attach the two wires to the pump pressure switch (if applicable).



# Tech Note 129

## **TESTING FIXTURE:** (Parts for test fixture are not supplied.)

- 1. Install a 3/8" NPT fitting into the inlet and outlet of the pump head.
- 2. Install approximately 3 feet of tubing onto the inlet fitting.
- 3. Install approximately 12 inches of tubing onto the outlet fitting.
- 4. Install a ball valve onto the end of the 12 inch tube.
- 5. Install approximately 12 inches of tubing onto the end of the ball valve.

### **TESTING:**

**CAUTION:** All safety precautions for water and electricity should be observed.

- 1. Plug into a 110V single phase power outlet (switched is preferred).
- 2. Fill container (bucket, sink) with water.
- 3. Insert inlet and outlet tubing from pump into water.
- 4. Turn on power. Insure pump primes and pumps water.
- 5. While pump is operating, close valve on outlet and ensure pump pressure switch stops pump. Open valve and ensure pump starts. Repeat three times.
- 6. Fill graduate (bucket) with 1000 ml of water.
- 7. Insert the inlet tubing from the pump into the graduate ensuring that the tube is at the bottom.
- 8. Turn on the pump for 10 seconds. The pump should pump 800 ml or more from the graduate.

**NOTE:** If pump passes all tests, remove tube, fittings, and drain all water from pump head before use.