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).
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.