

## HOW TO REPLACE YOUR PUMP MOTOR

You will need:

- A flathead or standard blade screwdriver.
- A Phillips head screwdriver.
- Heavy duty needle-nose pliers.
- A hammer.
- Silicone sealant.
- Machine oil (fine grade), such as 3 in 1 blue, or sewing machine oil.

The required parts are:

- Pump motor, part #95368, for all 110 volt models.
- Pump motor, part #95059, for 220 volt models.
- Pump impeller shaft, part #95081.
- Sealing tape, part #70232.

You will also want to inspect the pump housing, part #06017, before placing your order. The eyelet on the bottom of the housing is held in place by only one finger. At the top of the housing there are 4 locking tabs, 2 on the spout and 2 on the rounded part. If there is any play or looseness present in the pump housing when in position, you should replace it.

If you own an Autolab, remove the Upper Head from the Lower Motor Unit. If you need instructions for the Upper Head removal, refer to [Bulletin #B005](#).

Remove the Motor Unit from the trough.

If you own an ATL-3 and need instructions for removing the Motor Unit from the trough, refer to [Bulletin #B006](#).

If you own an ATL-2 Plus and need instructions for removing the Motor Unit from the trough, refer to [Bulletin #B007](#).

If you own an ATL-1 or ATL-2 and need instructions for removing the Motor Unit from the trough, refer to [Bulletin #008](#).

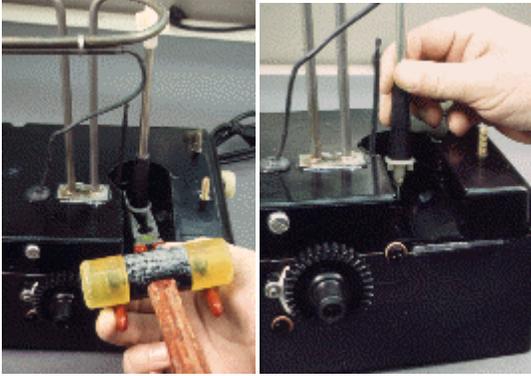
If you own a CPP-2 or a CPA-2 and need instructions for removing the Motor Unit from the trough, refer to [Bulletin #B009](#).



**Make sure the motor unit is unplugged.**



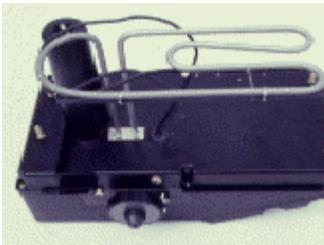
1. Turn the unit upside down and remove the pump housing from its receptacle, using a rocking motion, and pull it away from the motor unit.



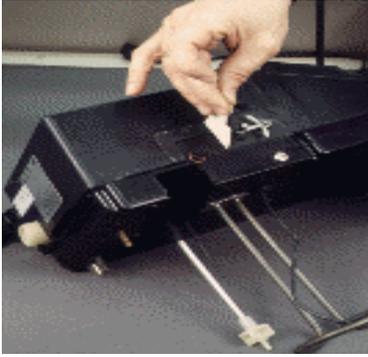
2. Remove the impeller shaft by inserting the pointed end of your needle nose pliers below the nylon flange on the impeller shaft. **NOTE:** On older Pump Shafts, it is not necessary to remove the cotter pin. Then, using the hammer, strike the handles of the pliers, causing the impeller shaft to be lifted from the motor. It may require more than one blow of the hammer to lift off the shaft.



3. After removing the shaft, remove the 2 screws that can be seen inside the housing receptacle.



4. Take out the 6 screws located around the edge of the motor unit. If these screws are corroded, replacements can be obtained by ordering part #34116.

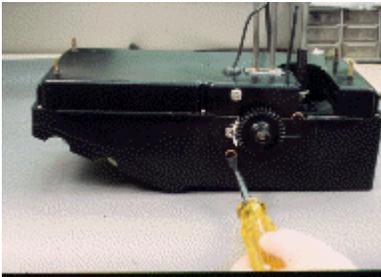


5. On the side of the unit by the rotation motor, you will find a sealing tape - remove it.

6) Stand the unit up so it is resting on the heating element.



7. Remove the knobs by pulling them off.



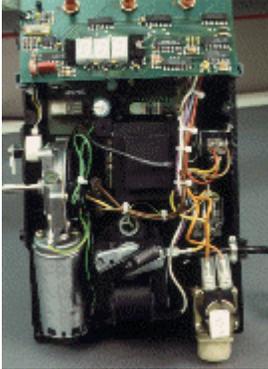
8. If you have a CPP-2 or a CPA-2 and are not using a JoboLift, you will need to remove the uppermost screw by the rotation motor shaft.

9. If you have a CPA-2, there is a long wire that runs from the lower unit to the lamp in the top cover. There is no need to disconnect it.

10. If you own an Autolab, you will need to take a knife or your screwdriver and break the silicone seal located between the top cover and the bottom housing on the rotation motor side of the unit.

11. **Carefully lift** off the top cover, being sure to avoid breaking the switches.

12. At this point your old motor will be loose inside the unit. Unplug the two wires that run from the motor to the board. **Note where the wires plug onto the circuit board.**



13. Disconnect the ground wire from the pump motor.

### **INSTALL THE NEW MOTOR**

Included with your new pump you will find:

- 2 Stainless screws & washers.
- 2 New wires.
- Diagram detailing washer placement.

1. Refer to the diagram included with your pump motor for correct washer placement.
2. Turn the unit on its side so the power cord side is on the bottom. Scrape any old glue present away from the pump motor screw holes.
3. Insert the motor into the housing with the electrical connections toward the back of the unit.
4. Fasten motor to unit using the new stainless hardware. To prolong the life of the motor, you must have even torque on the screws.
5. Check your motor for proper installation:
  - a. The motor should not wobble.
  - b. Flick the propeller of the motor - it should spin freely.
  - c. Spin the propeller slowly with one finger feeling for drag at any point.
6. If the propeller does not spin freely or if you can feel any drag, adjust the torque on the mounting screws until the propeller moves smoothly and freely.
7. Cover the screw heads with silicone to prevent leakage.
8. Attach the wires to the connectors on the motor and the circuit board.
9. Replace the ground wire.
10. Be sure the propeller on the pump motor will not be obstructed by any wires.
11. Put the top cover on the unit, being careful not to pinch any wires or break the switches.
12. If you own an Autolab, place a bead of silicone along the edge of the unit on the rotation motor side.

13. Turn unit upside down. Replace the 6 screws to secure the top cover.

14. Install the pump impeller shaft by pressing it onto the motor shaft.

15. Replace the pump housing. Be sure the tip of the impeller shaft goes through the center hole on the bottom of the housing. **Note:** The impeller blade should not rub against the bottom of the pump housing. If it does, press it farther onto the motor shaft.

16. The centering hole for the impeller shaft is only held on by 1 "finger."

17. Put the new sealing tape on the rotation motor side of the unit.

18. Reassemble your processor.

This completes the installation of the pump.