



## Service Instrustions for Orbit

## Orbit 2 and 4

**Disassembly:** Remove the impeller cages by carefully pulling them away from the motor. Twisting the cage during this process can make it easier to remove. Pull of the propellers, these should come off the axle easily.





**Cleaning:** Once fully disassembled, place the propeller cages, propellers, and motor assembly in a 50/50 solution of hot water and vinegar, or a solution of citric acid for cleaning. This will ensure that the solution makes contact with the surface of each pieces, and ensure to remove any calcium build up on the axle and spindle.

**NOTE:** When reassembling the Orbit, ensure that the propellers and cages are being installed on the correct side of the motor. Each side is colour coded, so red to red, and green to green.





The Spindles, the black pieces jutting out from the motor, can be removed and reinstalled. It will take a large amount of force to remove them, but there is no issue when reinstalling them. This process should only be needed if propellers are being installed on a replacement motor, where these pieces will need to be removed and reinstalled on the replacement motor. A pair of pliers may be needed, and make sure to grab these pieces near the motor to ensure there is no damage caused to the portion that connects to the propellers. The axles that the spindle are installed on



have 2 flat sides, and 2 curved sides, keep this in mind while installing the spindles.

Removing the rotor assembly: Press the side with the green bearing firmly on a table. This can be done with the spindles both installed and uninstalled, but I would recommend removing the spindles first. Once you see the red bearing pop out of the assembly, you should be able to remove the rotor by hand. The Rotor is not directional and can be installed in either orientation. Ensure that the Green bearing is reinstalled on the right side of the Al logo on the front of the pump. Ensure that the two internal washers are directly installed on each side of the rotor before reinstalling.

**NOTE:** Pressing on the wrong side of the motor can result in the internal washers breaking, always make sure to press down on the green side. The internal washers will likely stay connected to the rotor, but be careful that they do not fall out when removing the rotor.

