

Basic Repair Instructions for Wave 75



Table of Contents

I. Tools needed for repair	Page 3
II. Testing and replacing main components	Page 4
– Analyze power supply	Page 4
– Analyze cable	Page 5
– Replace motor unit	Page 10
III. Replacing brushes	Page 15
IV. Replacing tracks	Page 21
V. Replacing filter bag	Page 25

***NOTE: Some images may differ slightly in shape, color, etc.**

I. Tools needed for repair



A Dolphin tester, Dolphin key, screw driver or screw gun, and needle nose pliers (for brushes only) are the only tools you will need.

Please note: when repairing any Dolphin cleaner, only hand-tighten screws. Do not over tighten! For automatic screw guns use low torque setting only.

II. Testing the Dolphin

Step 1. Analyze power supply



Insert round end of Dolphin tester into power supply where cable connects. Plug in power supply and push power button.



If you get a green light, power supply is good! If there is no light, the power supply should be replaced.

II. Testing the Dolphin

Step 2. Analyze cable



Remove screw(s) holding impeller cover in place.



Remove impeller cover.

II. Testing the Dolphin

Step 2. Analyze cable



Remove the 4 screws (2 per side) that hold the robot cover to the chassis

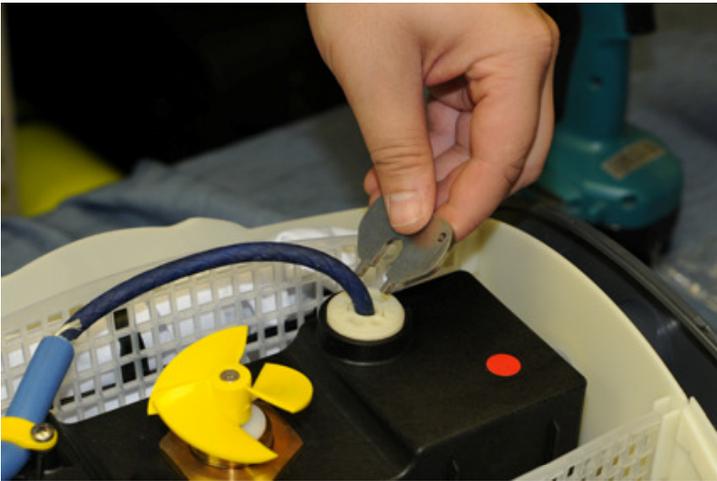


Location of screws.
2 per side.

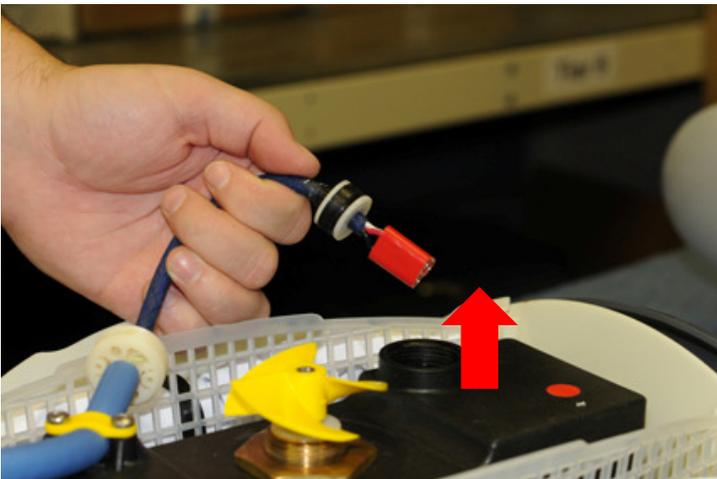
Once 4 screws are removed, lift off robot cover.

II. Testing the Dolphin

Step 2. Analyze cable



Unscrew nut at cable connection using silver key.



Unplug cable by gently pulling upward.

II. Testing the Dolphin

Step 2. Analyze cable



Plug cable into triangular end of Dolphin tester.



Plug other end of cable into power supply and turn the power supply on.

II. Testing the Dolphin

Step 2. Analyze cable

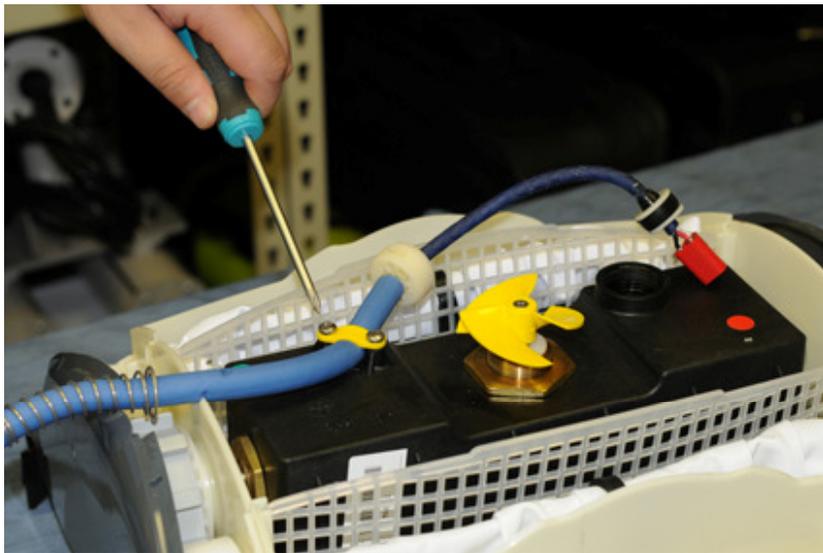


A green light indicates the cable is good. If you do not get a green light, and you are sure all connections are secure, replace cable.

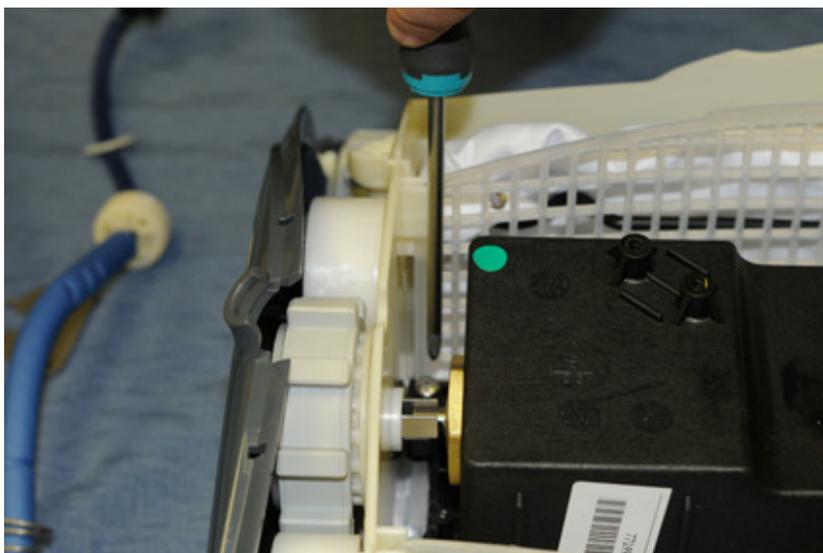
II. Testing the Dolphin

Step 3. Replace motor unit

Note: If both the power supply and cable are working, by process of elimination, you should replace the motor unit.



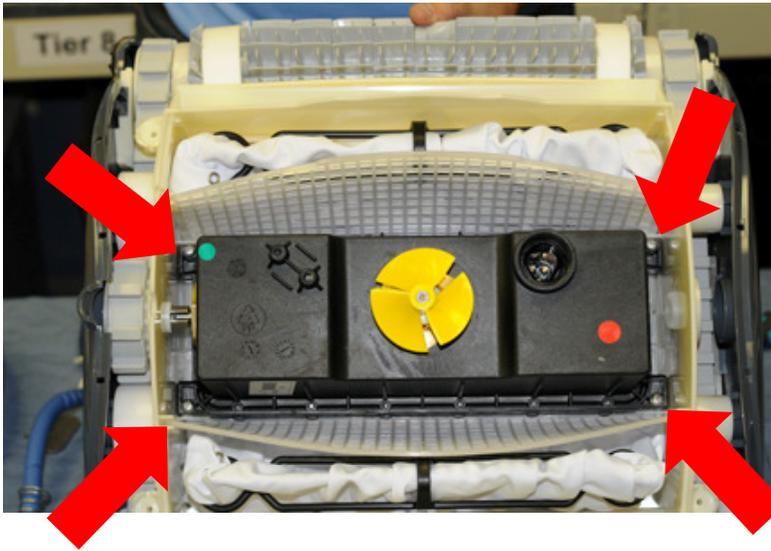
Remove the 2 screws holding the cable in place and disconnect the cable.



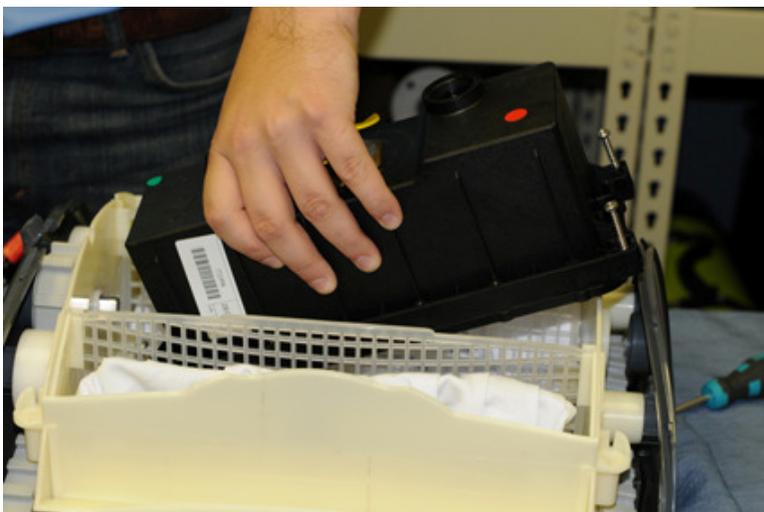
Remove the 4 screws holding the motor unit in place.

II. Testing the Dolphin

Step 3. Replace motor unit



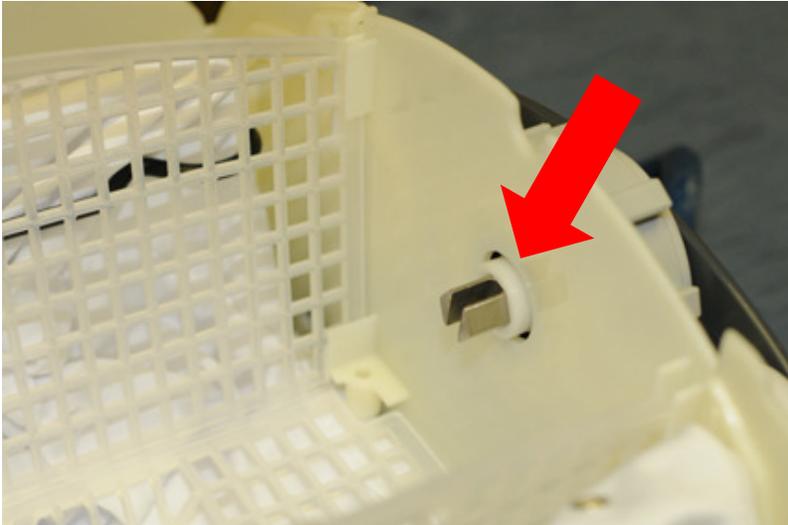
Location of 4 screws



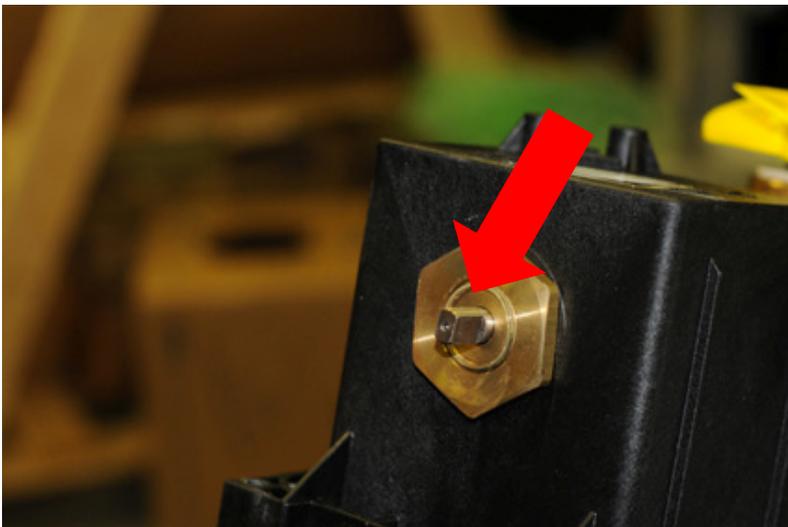
The entire motor unit easily comes out and can be replaced with a new one.

II. Testing the Dolphin

Step 3. Replace motor unit

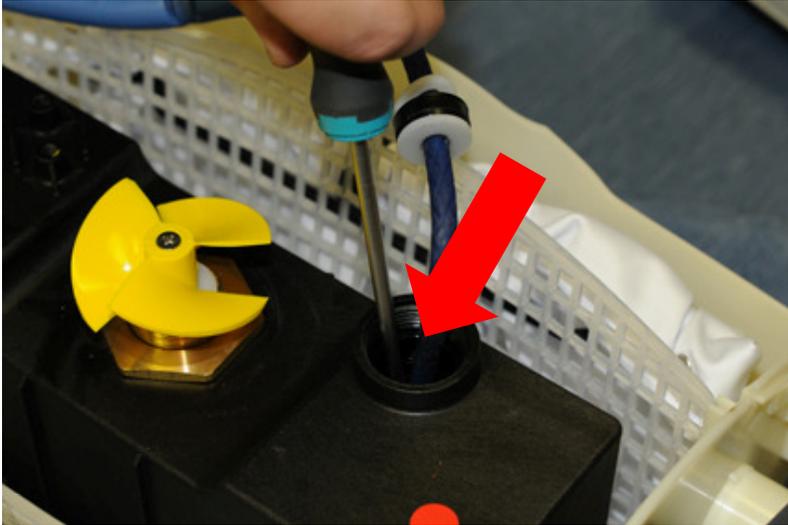


When removing or inserting motor unit, the slot which fits the motor drive shaft needs to be in the vertical position. Manually rotating the robot's brushes will rotate the slot.

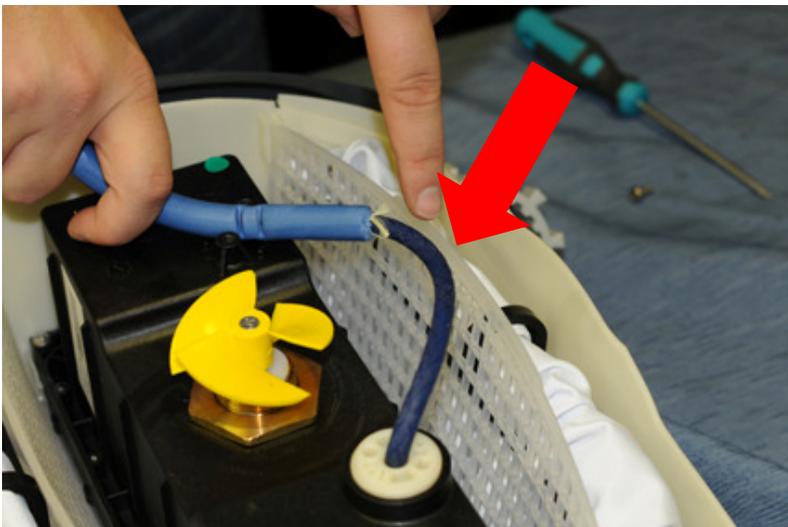


II. Testing the Dolphin

Step 3. Replace motor unit



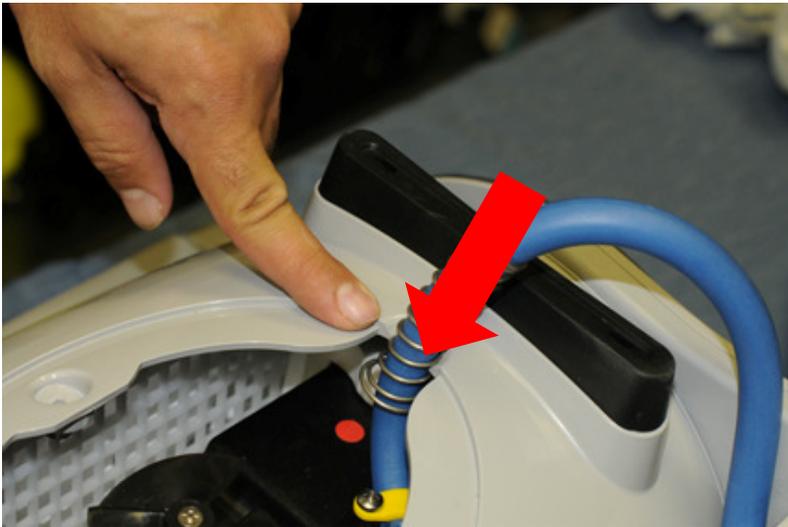
When re-inserting the cable into the motor unit, make sure you use a screw driver to push the triangular piece all the way to the bottom to ensure connectivity.



Make sure that when re-securing the cable you leave enough slack so that it touches the plastic net. This ensures it will not be damaged by the spinning impeller.

II. Testing the Dolphin

Step 3. Replace motor unit



When replacing the impeller cover, ensure that the bottom two coils of the strain relief spring are *inside* the unit before securing.

III. Replacing Brushes

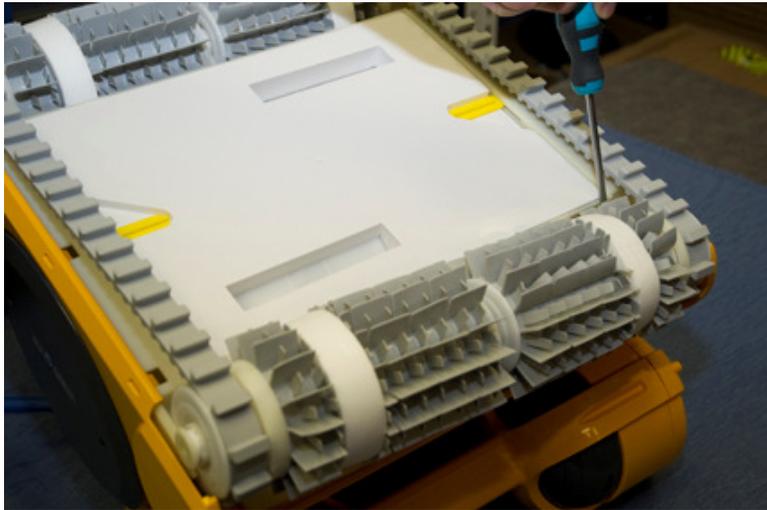


Turn the robot over and insert a screw driver between the brush and the bottom lid at the side next to the tracks.

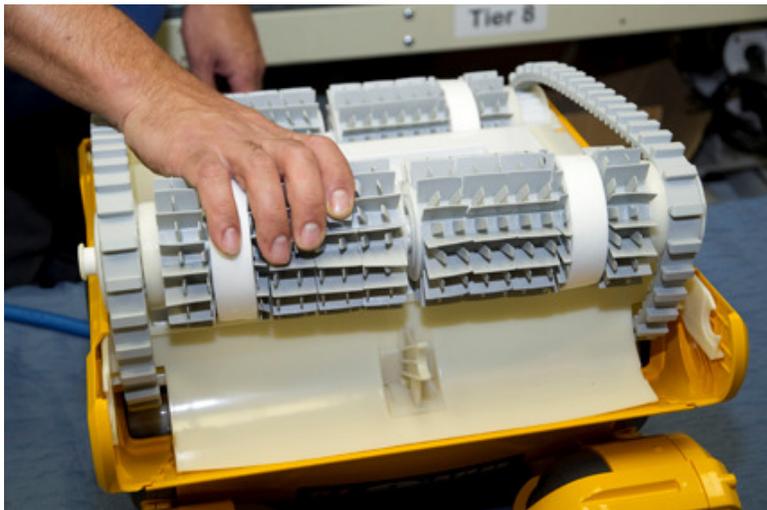


Pop the brush loose by gently prying the brush upward with the screw driver.

III. Replacing Brushes

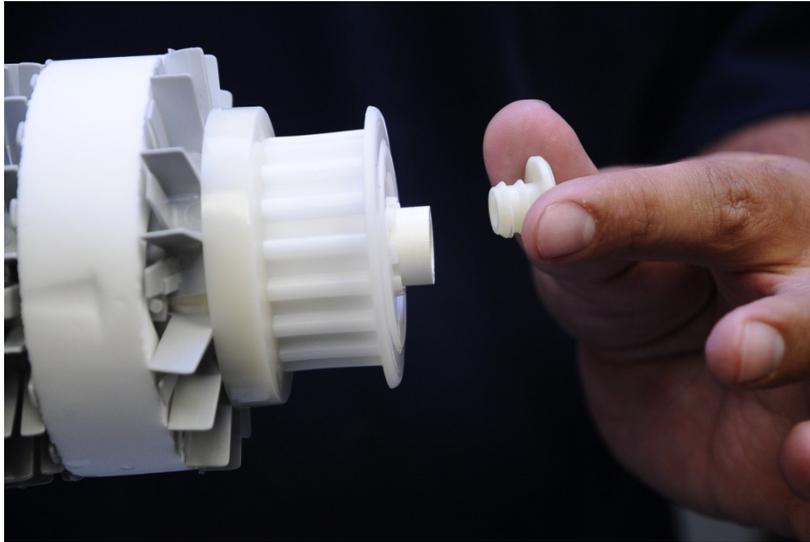


Repeat on the other side

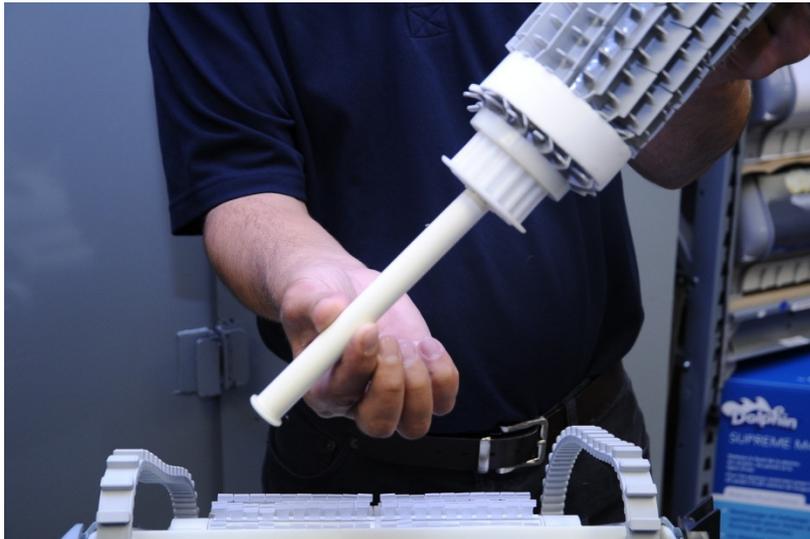


Roll the brush straight back to free it from the tracks

III. Replacing Brushes

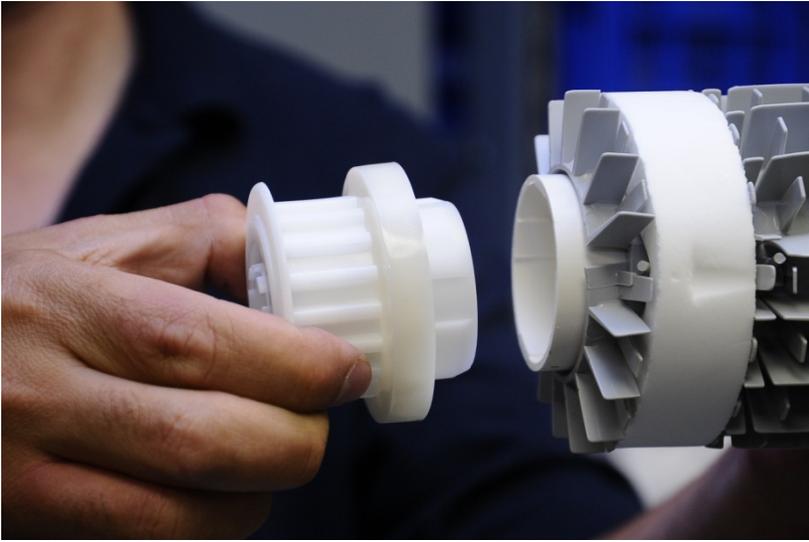


Remove spacer at end of brush assembly by pulling it straight out.

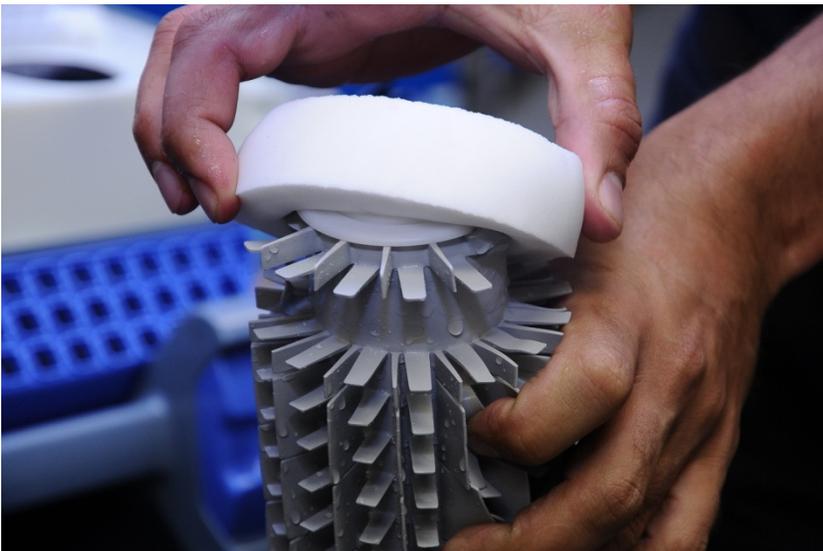


Remove shaft from brush assembly

III. Replacing Brushes



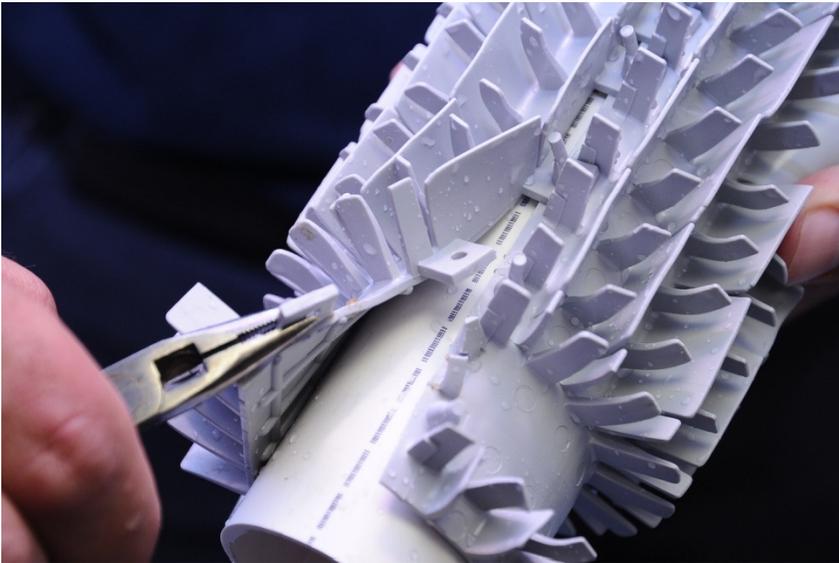
Remove wheel bearing by pulling it straight out.



Foam climbing rings can be removed and replaced by stretching them over the end of the brush assembly.

Note: you may have to soak the brush in water for a couple of minutes to soften the rings in order to remove them.

III. Replacing Brushes

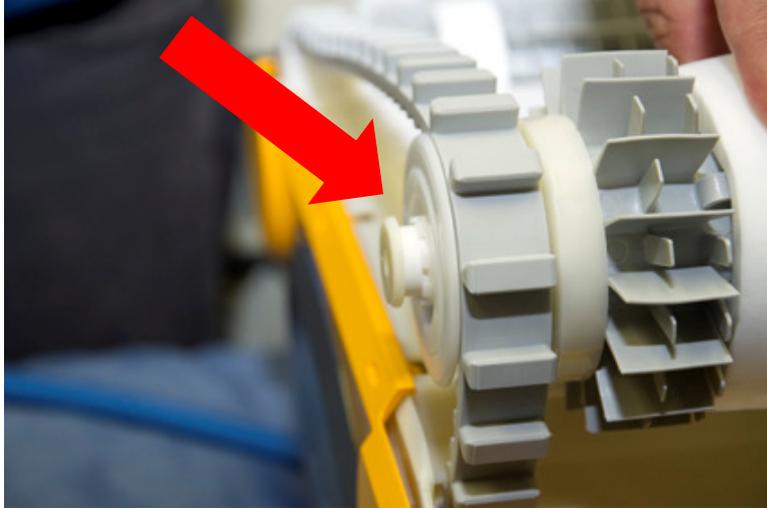


PVC brushes can be removed with needle nose pliers by lifting the tabs along the seam



PVC brushes can be replaced by pulling the stems at the seam through the holes in the tabs using pliers. **Note: A diluted solution of dish soap can help lubricate the stems.**

III. Replacing Brushes

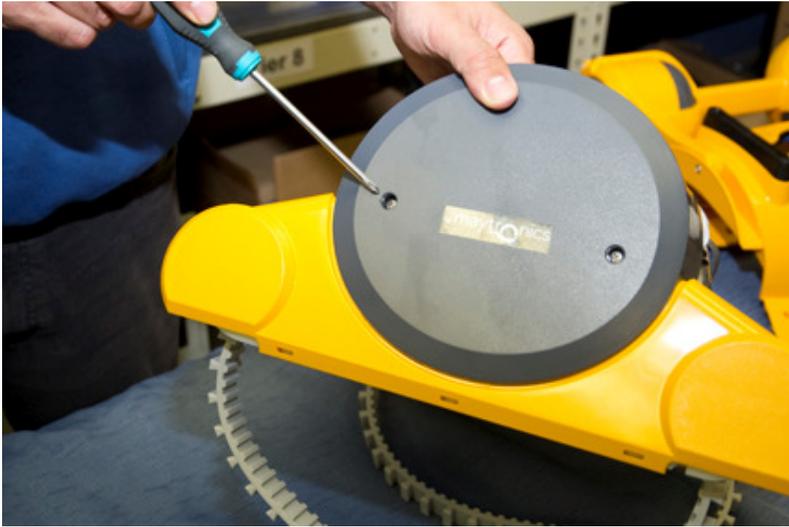


To put new brush in place, center the axle inside the brush so there is a small gap on either side



Snap new brush into place by aligning brush under the tracks and firmly rolling it forward until it clicks in place.

IV. Replacing Tracks



With cover and brushes removed, remove the 2 screws holding the side panel in place.

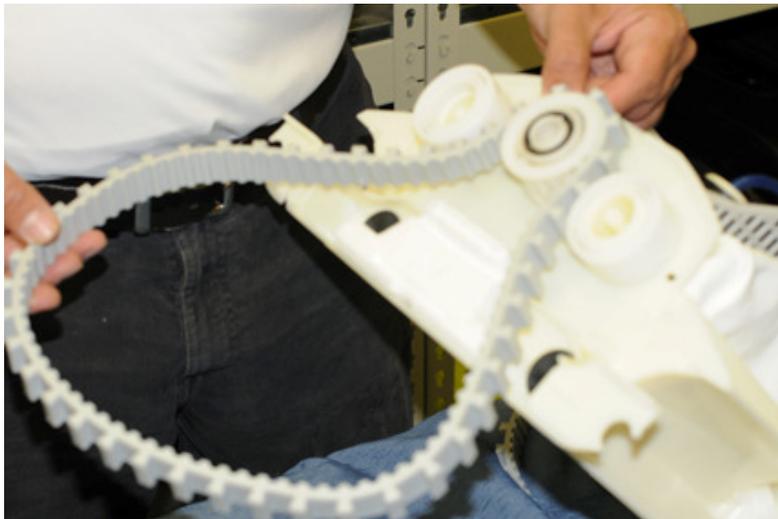


Location of the side panel screws

IV. Replacing Tracks

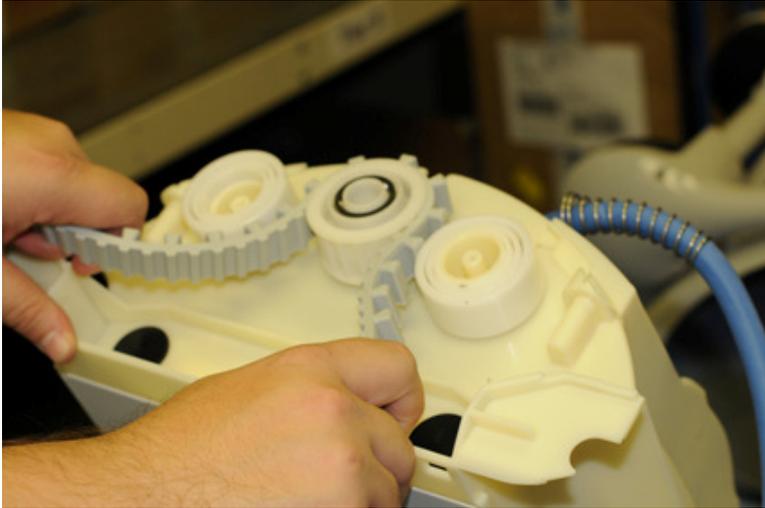


Remove the two side panel pieces.

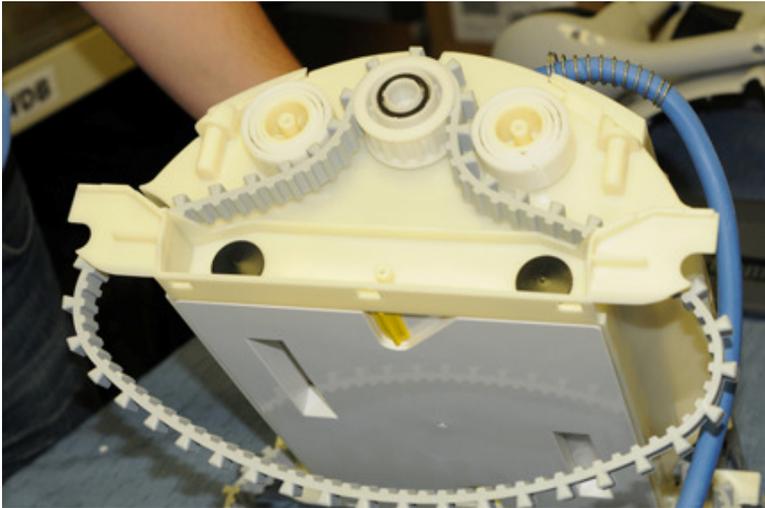


Remove track

IV. Replacing Tracks

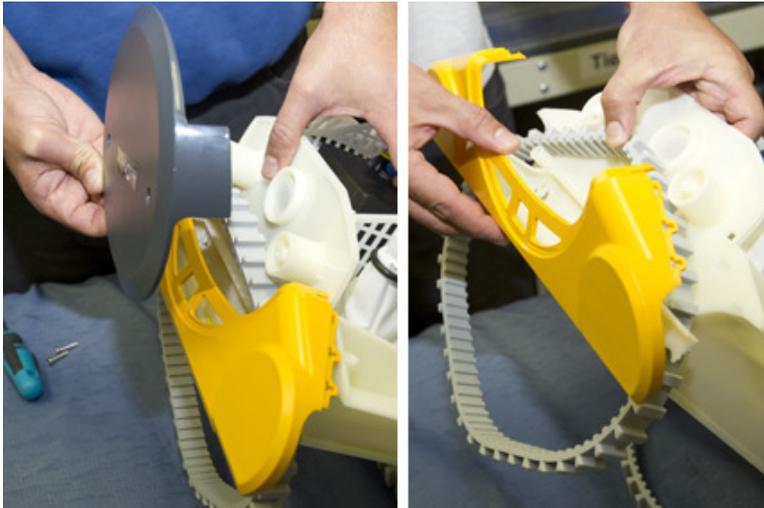


To replace tracks, wind track around the center gear first.

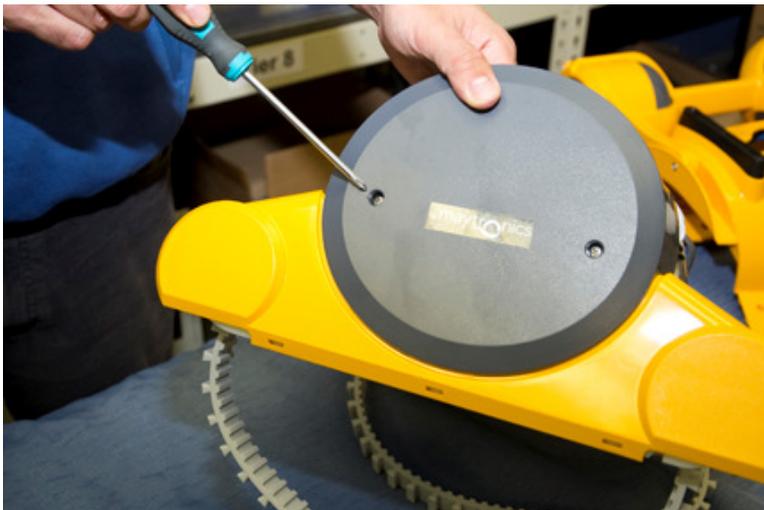


Track shown in place behind side panel bracket.

IV. Replacing Tracks

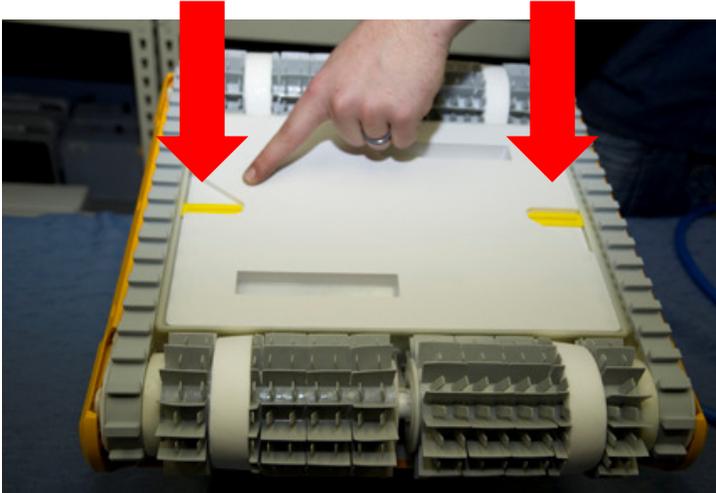


Replace side panel pieces.



Replace 2 screws

V. Filter Bags



Access the filter bag by turning the unit over and sliding the plastic clips to the side.



Remove the bottom lid. The filter bag will be attached to the lid on a metal frame.

V. Filter Bags

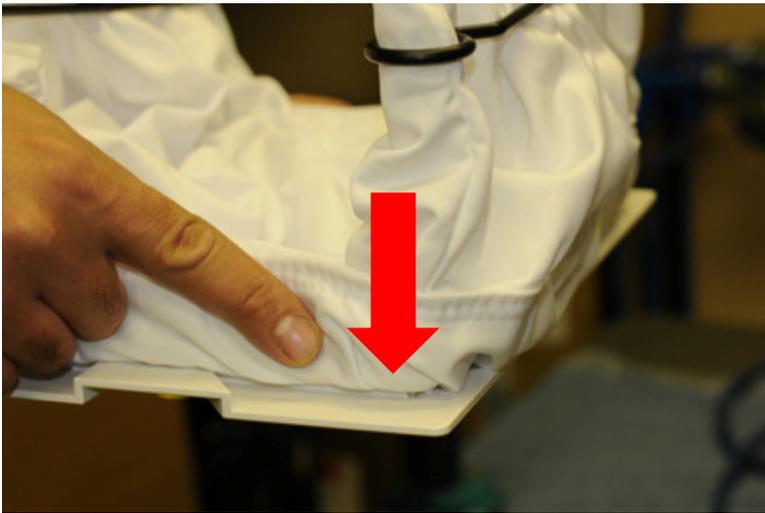
[for bag models only]



To remove the filter bag, remove black plastic clips and slide bag off of metal frame.

V. Filter Bags

[for bag models only]



When putting filter bag back in place, ensure that the elastic band is completely down over the lip at the base of the bottom plate to prevent dirt and debris from escaping bag.