Shark ION Robot R75 Side Sensor Replacement

Replacement guide for the front facing sensors on the side of the Shark ION Robot R75.

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INTRODUCTION

Your robot navigates through a combination of random movements and sensors to guide it around a room. This guide will show you how to access two of these senors in the event that they fail and need to be replaced. Faulty senors will result in sporadic robot movement, more frequent collisions, and the robot eventually flashing error codes.

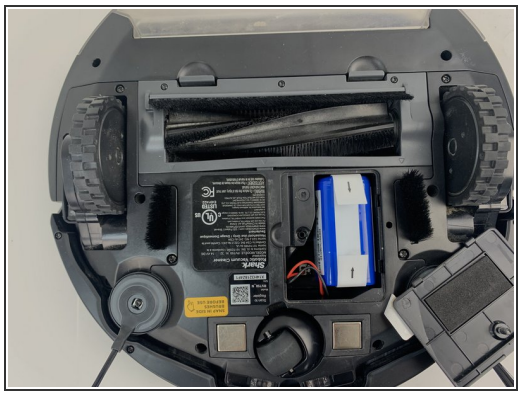
Remember to periodically clean all sensors with a dry microfiber cloth to keep your R75 performing properly.

TOOLS:

- Phillips #00 Screwdriver (1)
- Phillips #1 Screwdriver (1)
- TR9 Torx Security Screwdriver (1)
- Tweezers (1)
- T15 Torx Screwdriver (1)

Step 1 — Battery

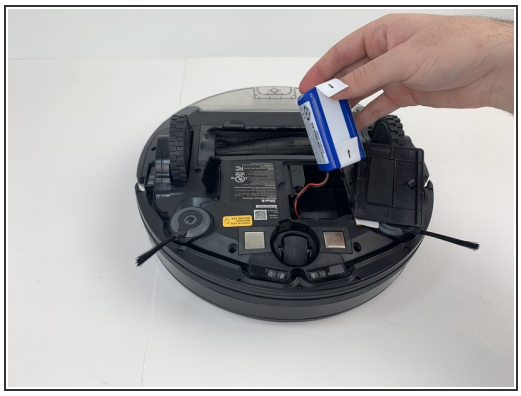
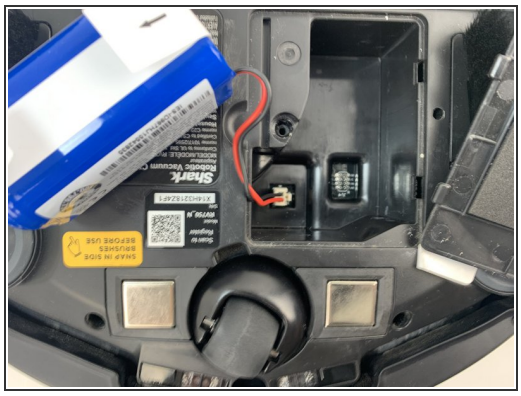




Make sure the robot is shut off by pressing the power button on top.

- Flip the R75 over so that the underside is facing up.
- Using a Phillips #1 screwdriver, remove the 4mm screw in the battery cover.
- Remove the battery cover.

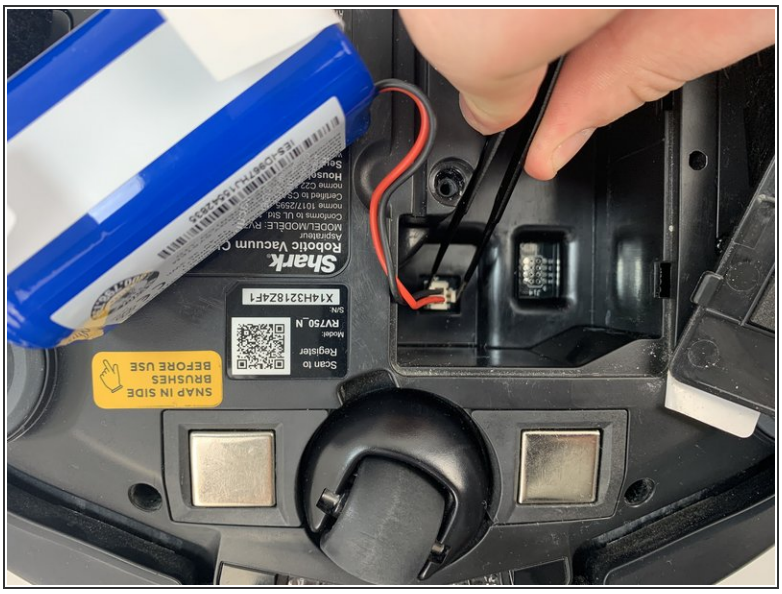
Step 2

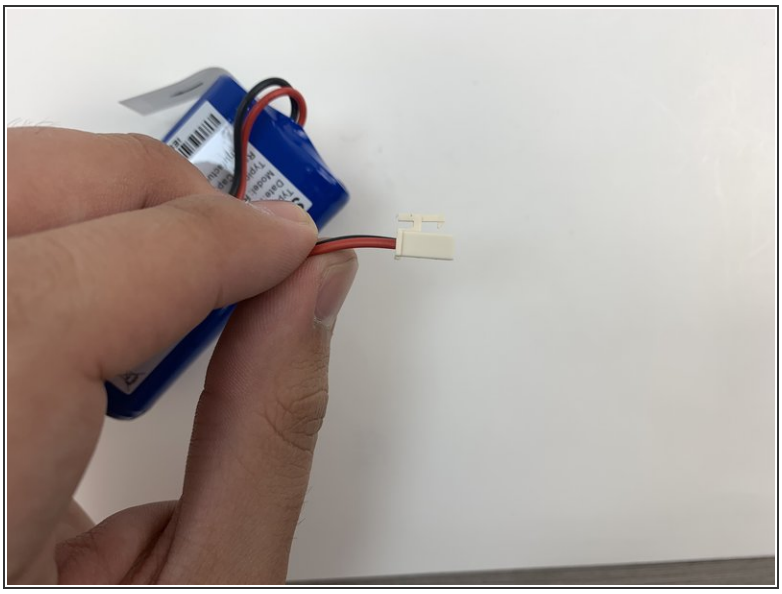




Be careful when removing the battery, as it will still be connected to a wire.

- Slowly pull the white tabs outward to remove the battery.

Step 3





⚠ Be careful when removing the connector, as the part can break if too much force is used.

- Push down on the tab of the battery connector using a set of tweezers and pull the connector away from the robot to free the wire.
- Remove the battery from the device.

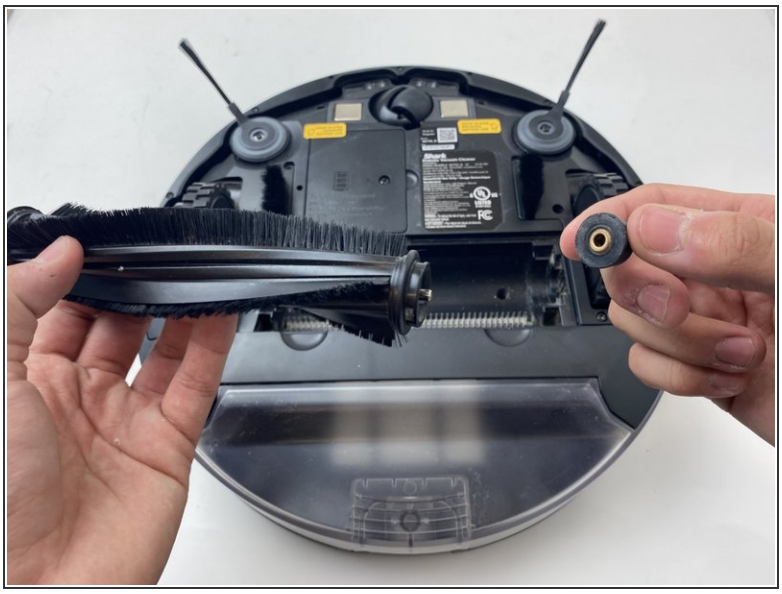
Step 4 — Main Brush

- Push on the two tabs on the edge of the main brush cover and pull up to remove the cover.

Step 5

- Pull the main brush slightly to the right to remove it from the compartment.

Step 6

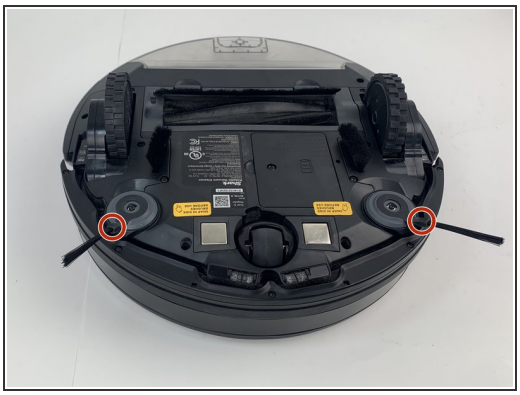


- Remove the rubber end cap indicated by the red circle.

This step is not needed for a replacement. However, it is important for maintenance. Hair will build up in this area over time, and will cause error messages to pop up, as well as stopping the R75 from cleaning and moving.

Inspect this component at least every six months. This time may be less if you have animals.

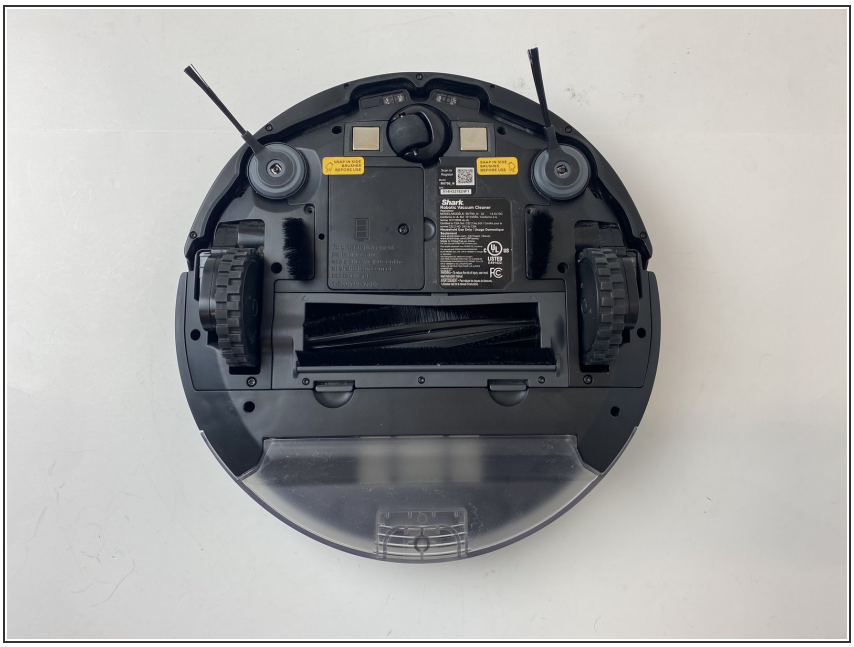
Step 7 — Side Brush



- Grab the side brushes by the plastic tab at the base of the bristles, and gently lift up.

It's recommended to clean the area with a dry microfiber cloth during replacement, as debris can collect beneath the brush during use.

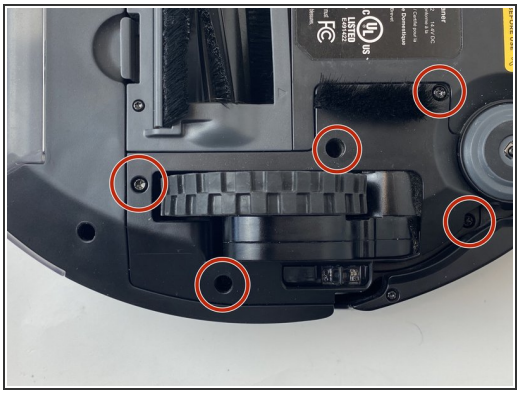
Step 8 — Drive Wheel Assembly

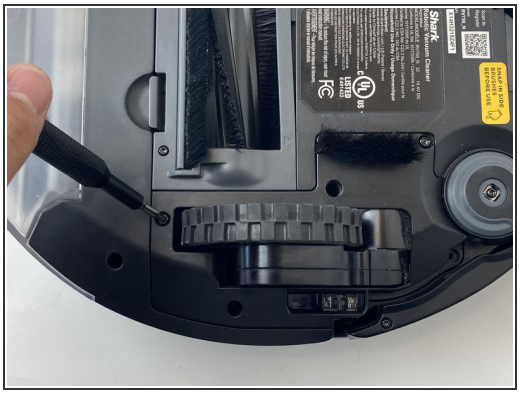


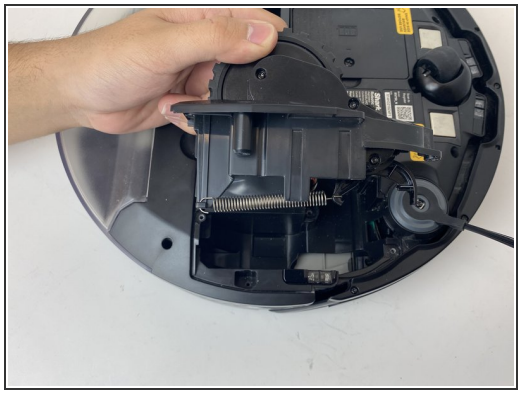
- Flip the R75 to its underside.
- Make sure the R75 is shut off.

For extra security, disconnect the battery by following the prerequisite guide.

Step 9



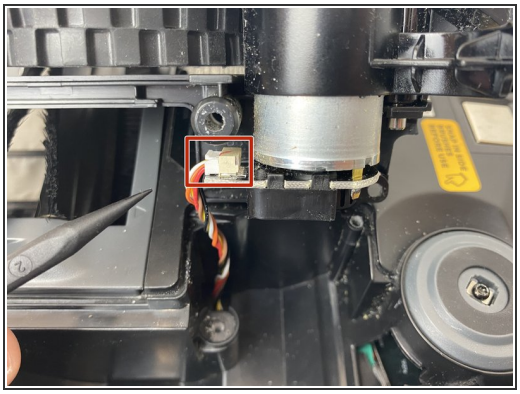
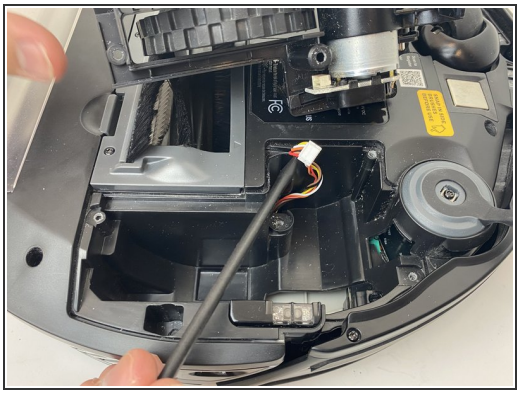
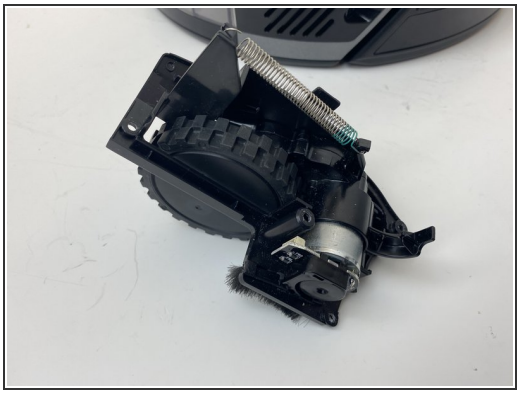




- Using a Torx T15 screwdriver, remove the five screws from the drive wheel assembly.
- Carefully lift the drive wheel assembly from the wheel well by gently pulling up on the wheel.

The assembly will still be connected to the motherboard via a cable, so be sure not to pull so hard that the cable rips.

Step 10

- Flip the wheel assembly over and disconnect the cable connector on its underside.
- Remove the drive wheel assembly.

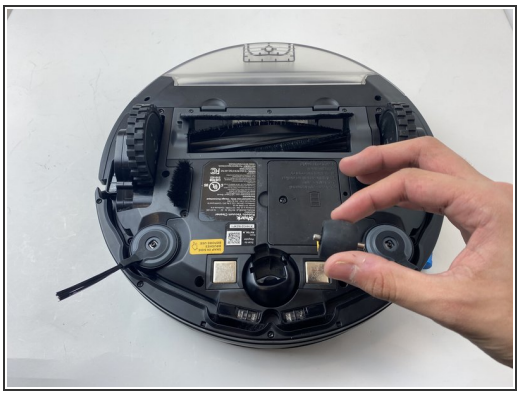
Repeat this process for the other side if necessary.

Step 11 — Shark ION Robot R75 Caster Wheel

- Orient the device with the bottom facing up.

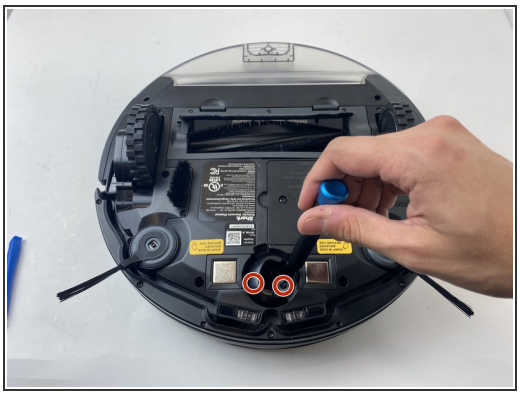
Step 12





- Using a plastic opening tool, pry first one side of the wheel, then the other out of the caster.
- Remove the wheel.

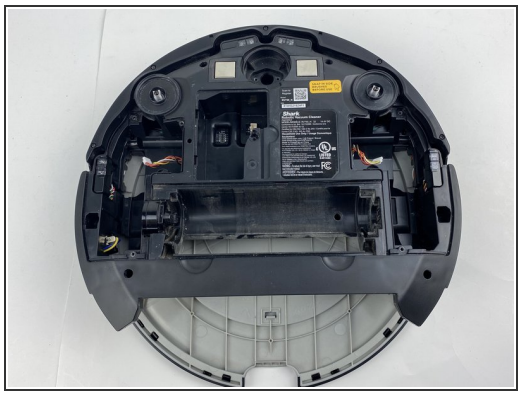
Step 13



- Using a Torx TR9 screwdriver, remove both screws from the caster assembly beneath the wheel.
- Pull the caster assembly up from its slot in the device.

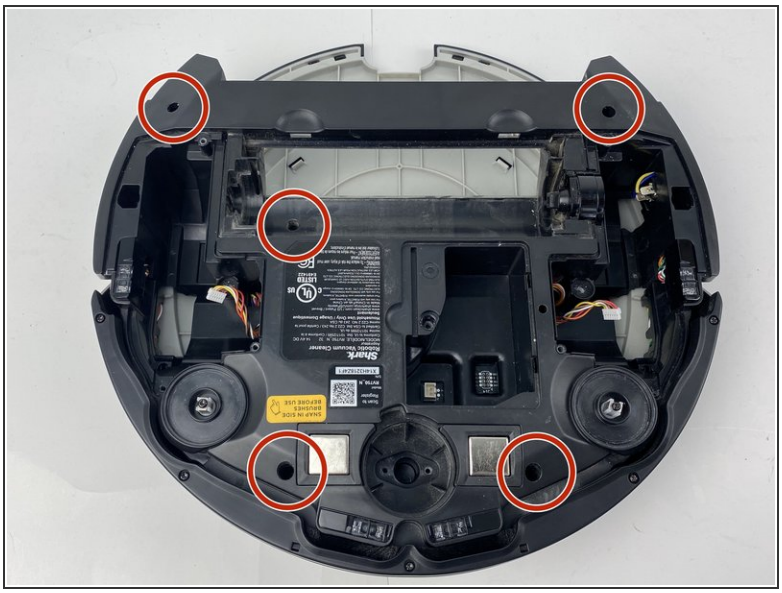
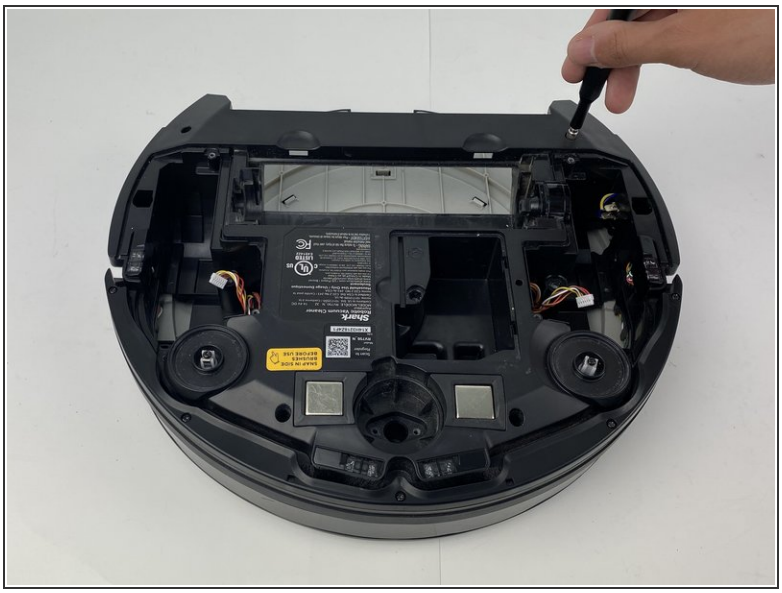
Step 14 — Top Cover





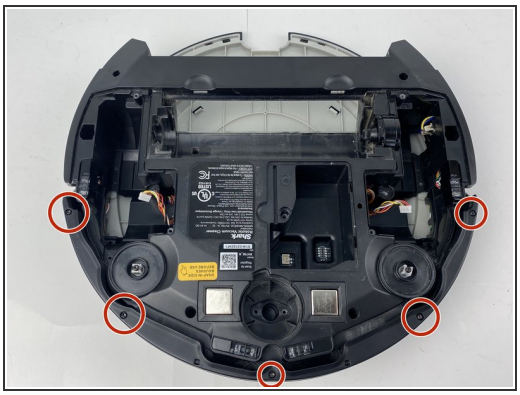
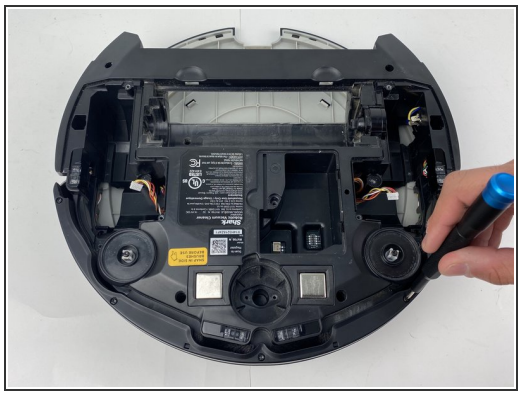
- Push down on the black tab and remove the dust bin

Step 15

- Using a Torx TR15 screwdriver, remove the five screws from the bottom cover.

Step 16


Make sure the robot is facing rearward

- Using a Torx TR15 screwdriver, remove the five screws along the front edge of the device.
- Pull the bottom part of the bump guard away from the body of the device.

Step 17

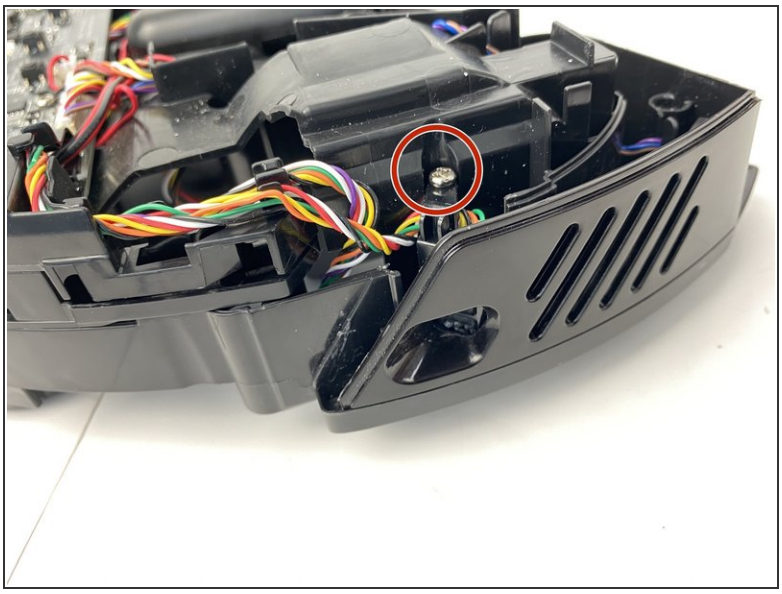


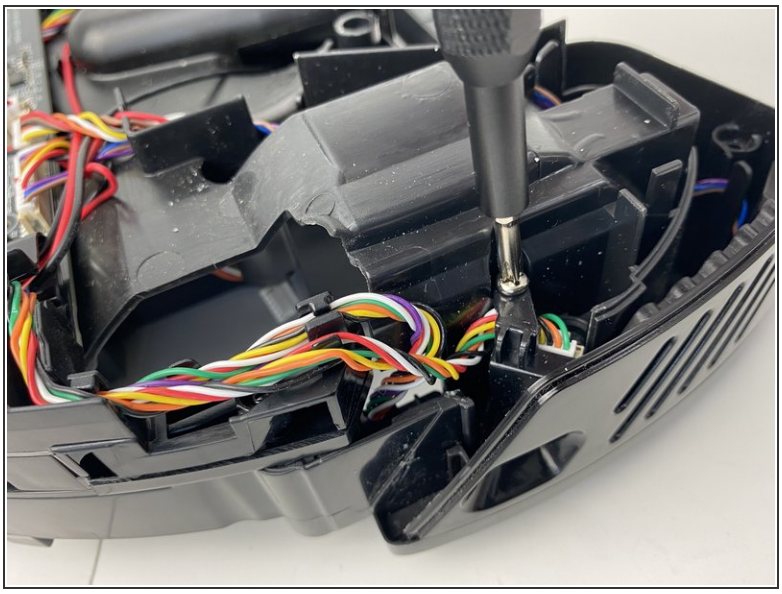
- Lift the top cover up from the rear of the robot to separate the top cover from the rest of the robot.

Be careful when separating the top from the rest of the robot, as the plastic clips can break if excessive force is applied.

From here, easy access to all sensors, the main brush motor, and the fan are all granted.

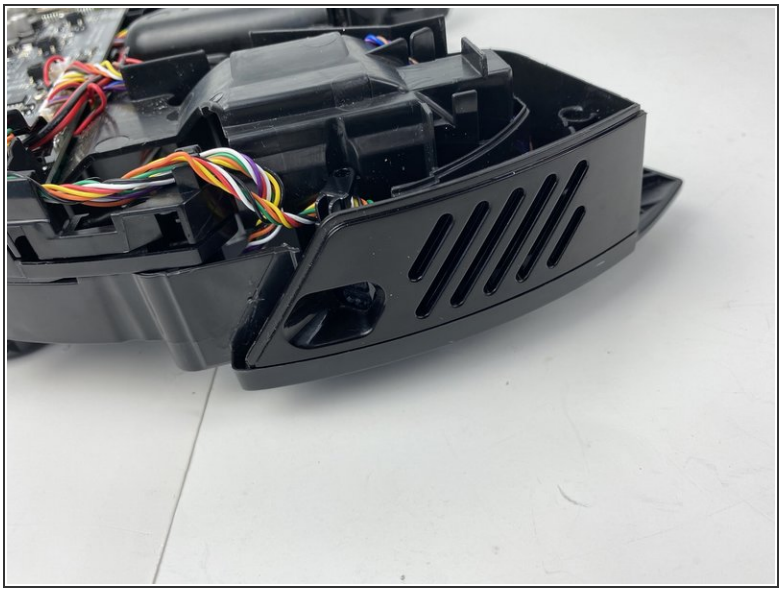
Step 18 — Side Sensor

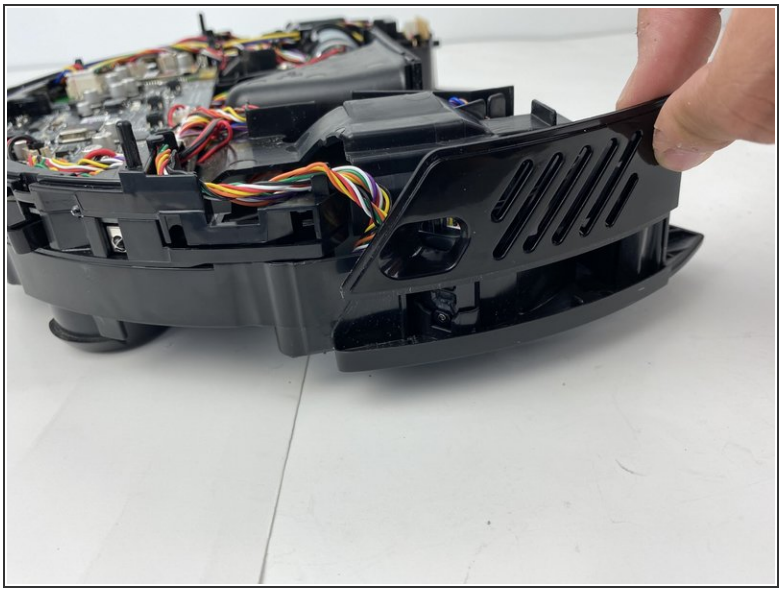




- Using a Phillips #00 screwdriver, remove the screw holding down the diagonally vented side cover.
- Slide the sensor out from the base of the robot

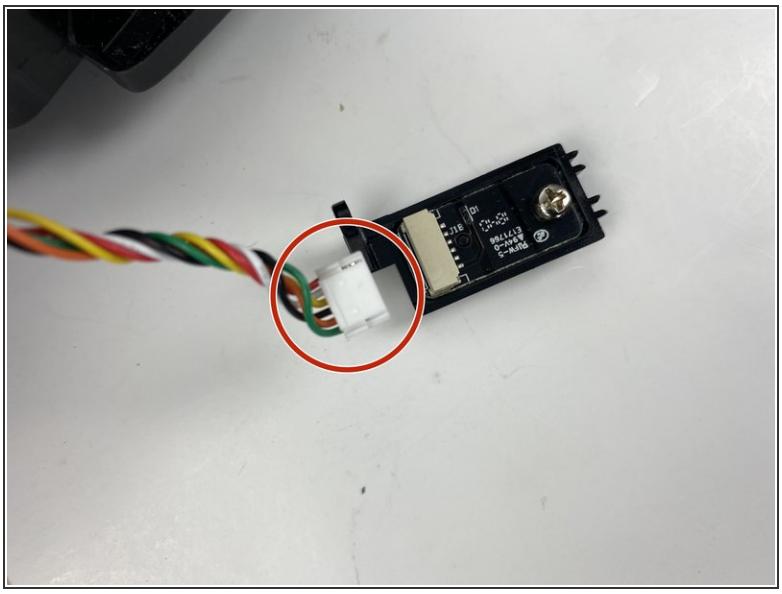
Step 19





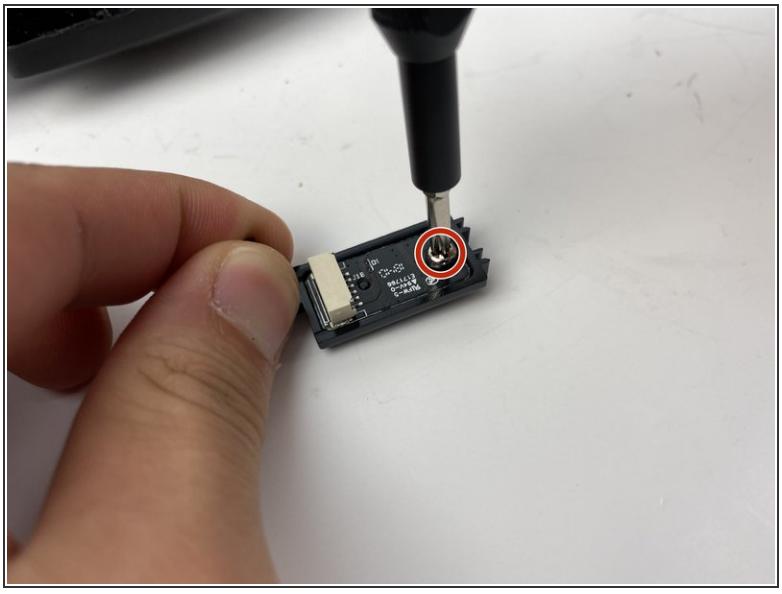
- Lift up the diagonally vented cover on the side of the robot containing the side sensor.

Step 20



- Disconnect the white connector from the sensor.

Step 21



- Using a Phillips #00 screwdriver, remove the screw on the sensor.
- Remove the sensor from its mount.

To reassemble your device, follow these instructions in reverse order.

