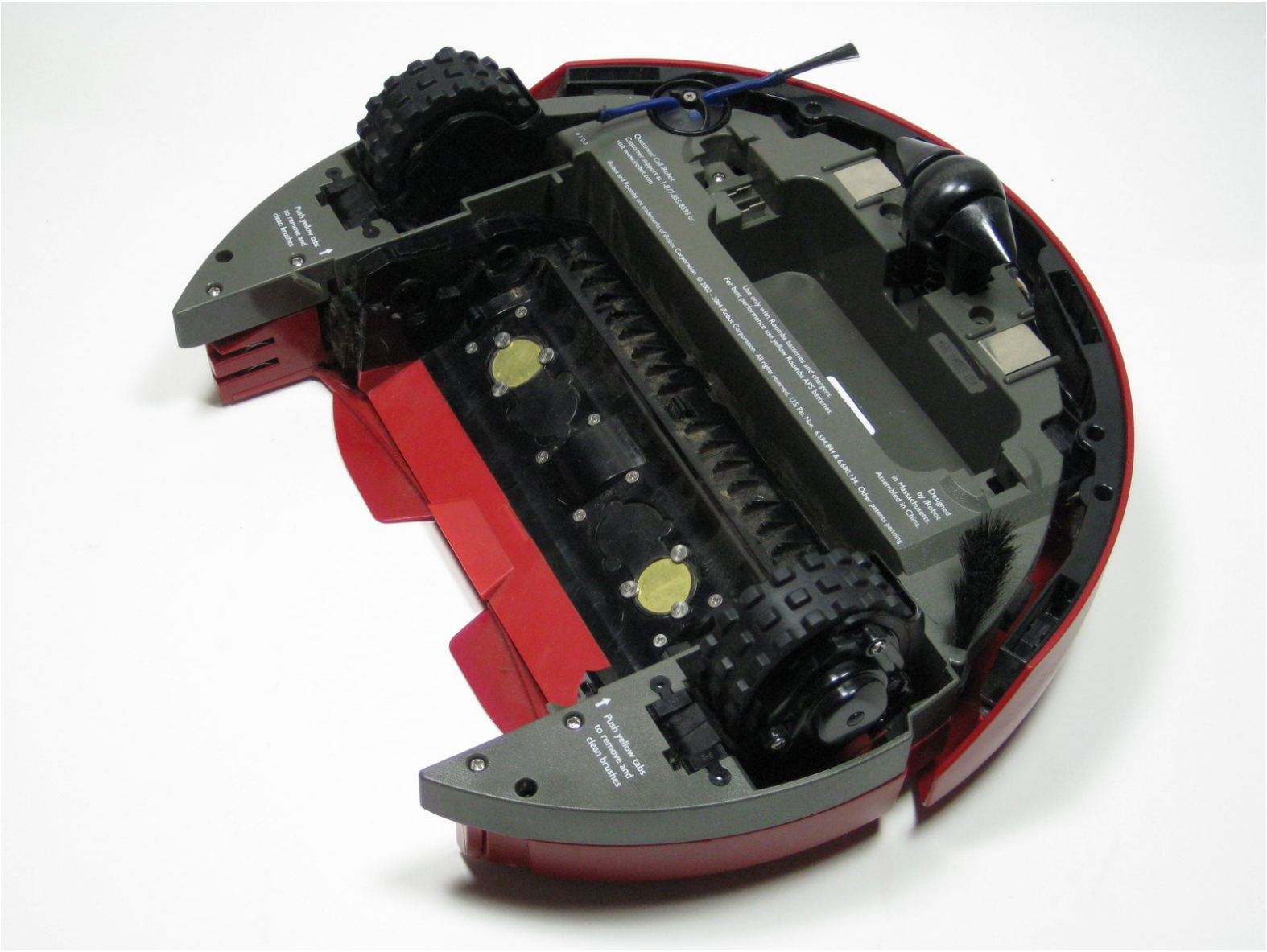
How to clean iRobot Roomba 4100 optical sensors to fix Circle Dance

By cleaning the optical encoders and cleaning the gear shaft the iRobot Roomba 4100 will no longer preform the "circle dance" and will function correctly.

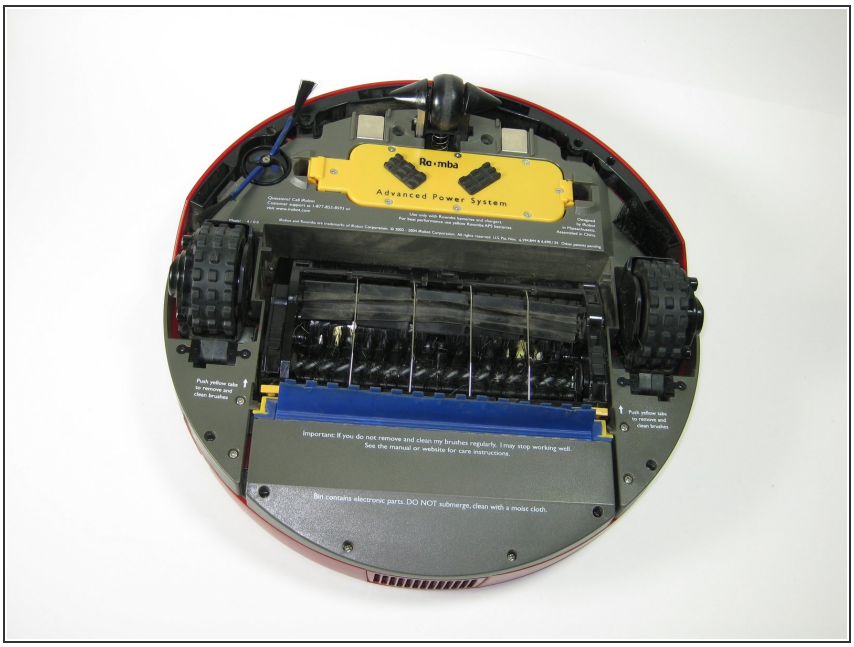
Written By: Christian



TOOLS:

- Phillips #1 Screwdriver (1)

Step 1 — Battery Pack

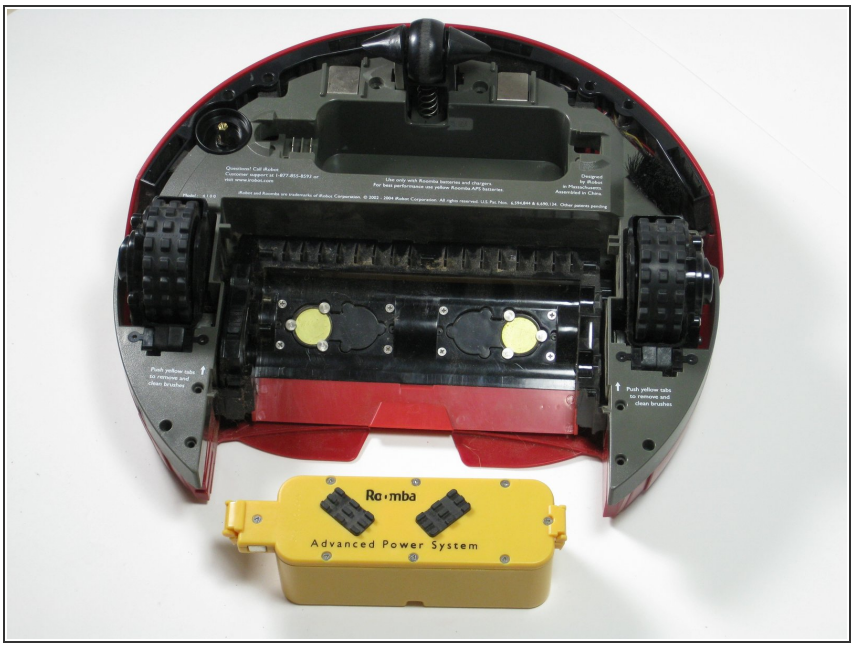


- The Roomba Battery is the large yellow block under the Roomba's front bumper.

Step 2

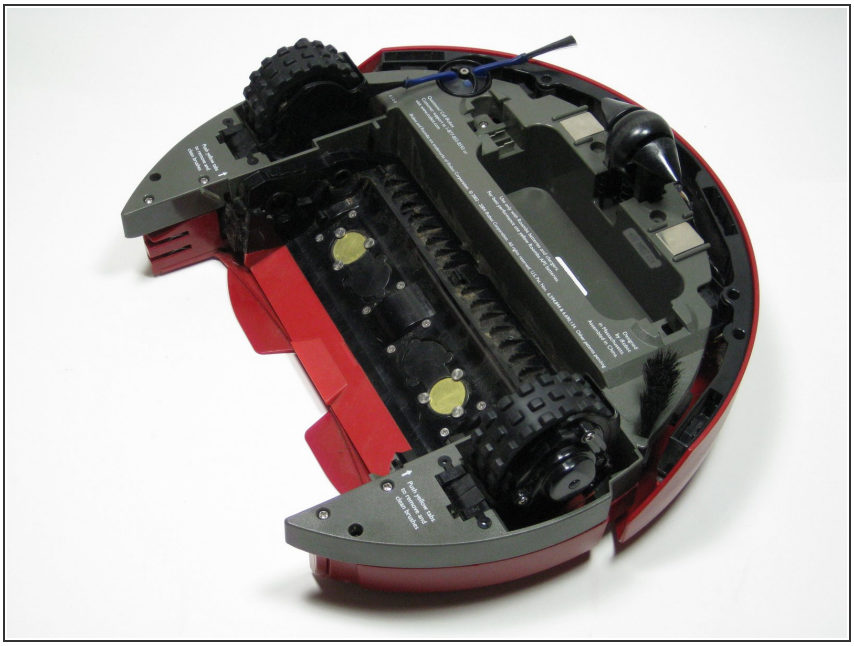
- Remove the battery by pressing the two side tabs, as demonstrated.
- Gently lift the battery up and out of the device.

Step 3



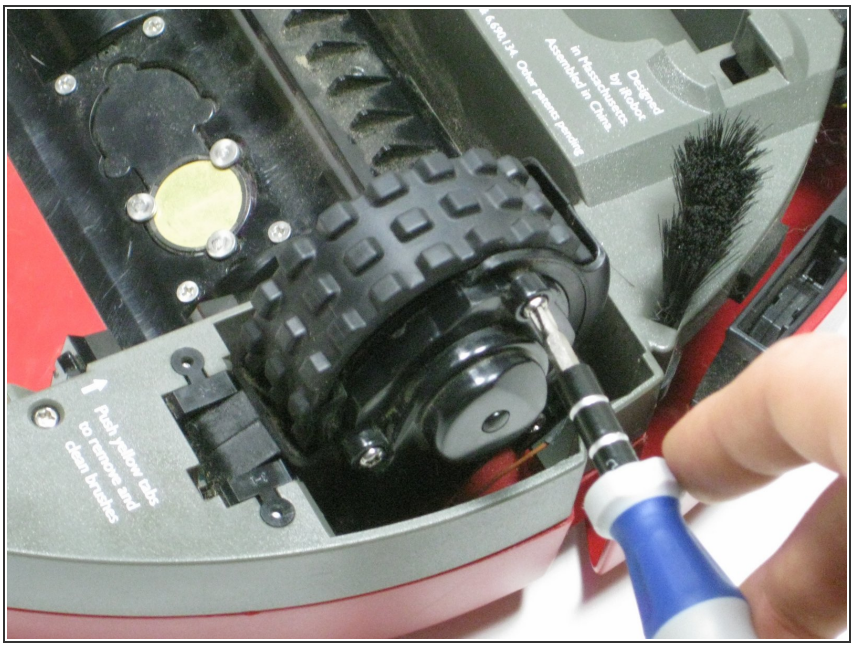
- Obtain a replacement battery cell from the manufacturer. Simply drop the new battery into place.

Step 4 — How to clean iRobot Roomba 4100 optical sensors to fix Circle Dance



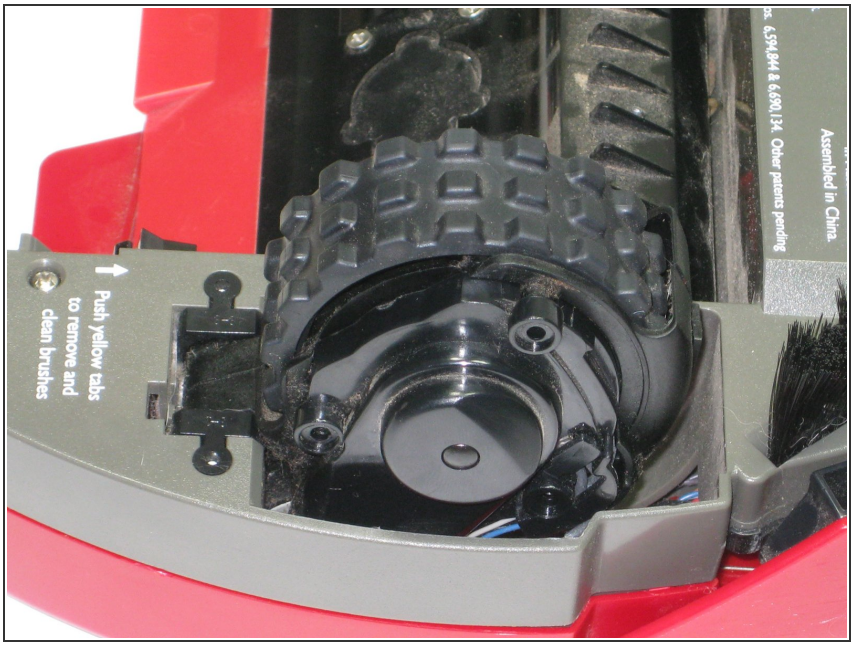
- Begin by removing the rear particle bin.

Step 5



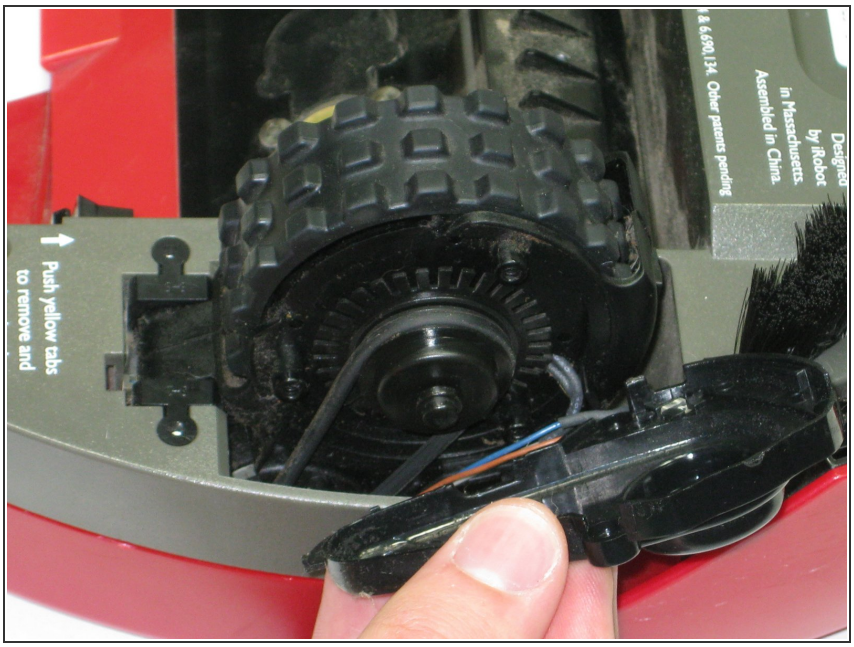
- Choose either of the two wheels on the side of the Roomba and identify the three screws located on the hubcap of the wheel.

Step 6



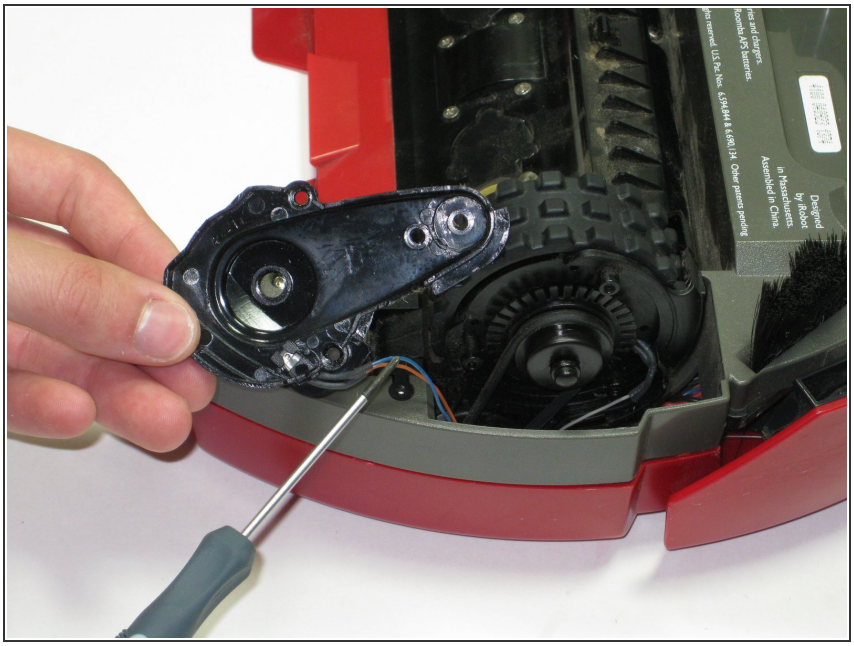
- Using a Phillips Head screwdriver, remove all three screws on the side of the hubcap of the wheel.

Step 7



- Gently slide the hubcap up and out of the wheel well of the Roomba.

Step 8

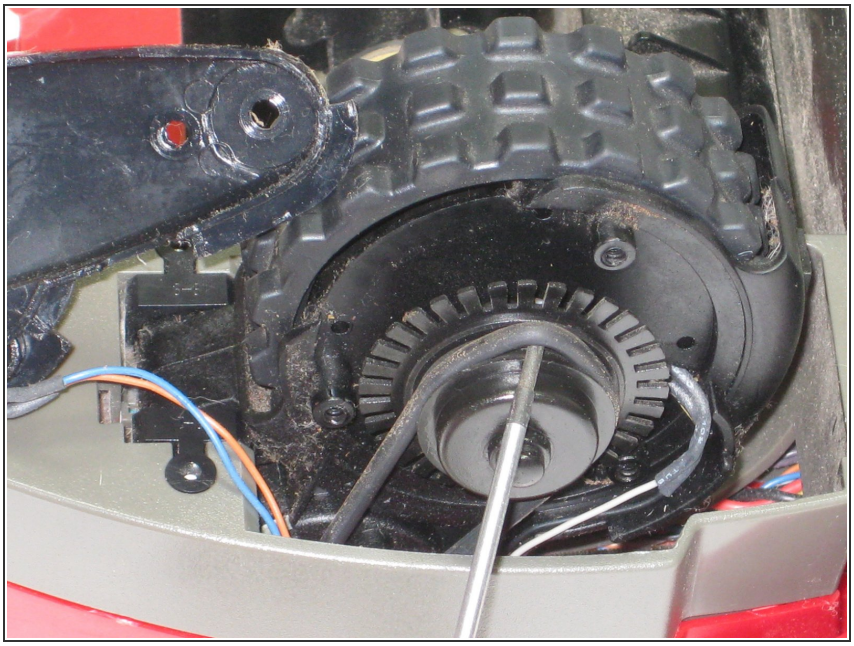


- Mind the wires attached to the optical encoder located in the hubcap.

Step 9

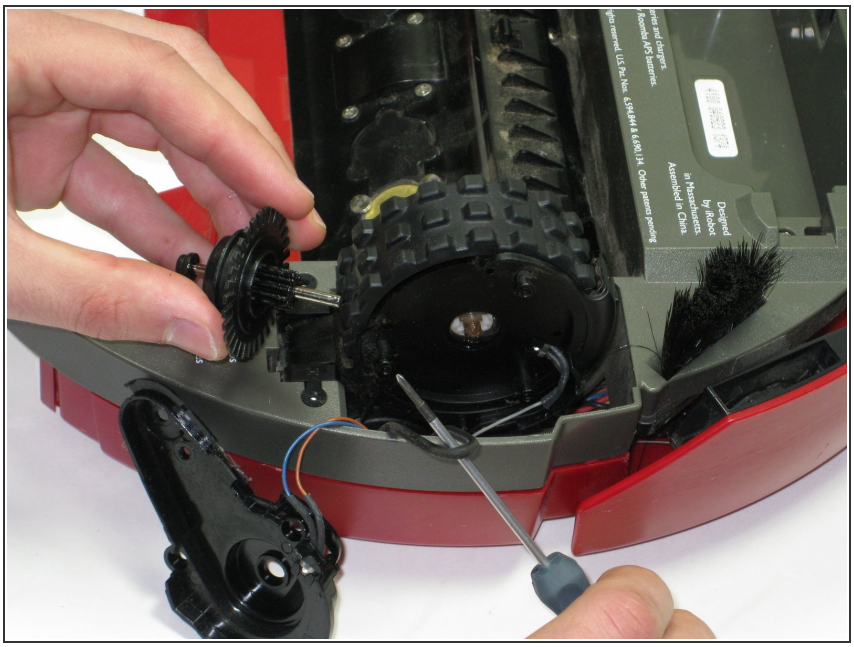
- Using compressed air, thoroughly clean the optical encoder until satisfied.

Step 10



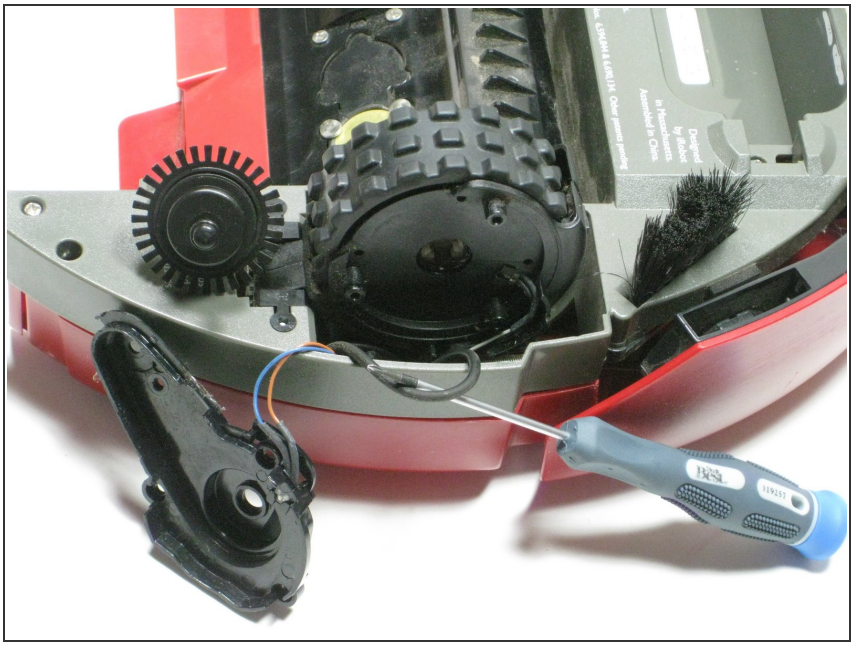
- With a screw driver, gently remove the drive belt from the gear.

Step 11



- Carefully slide the gear out of the gear shaft of the wheel.

Step 12



- Thoroughly clean the exposed area of the wheel using either compressed air or a moist cotton swab. Be mindful of the exposed inner drive shaft when cleaning the wheel area to prevent any preexisting dust from entering the drive shaft.

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

