



iRobot Roomba 980 Motherboard Replacement

How to replace the motherboard in an iRobot Roomba 980.

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INTRODUCTION

If all efforts to repair the Roomba® 980 vacuum fail, replacing its motherboard is usually the last step before a full resolution is achieved. There can be several reasons why this replacement is necessary, from water to physical damage, the process can be a complicated, lengthy installation. Finally, proceed with caution when handling the circuit board's connectors and pins as damaging this can result in irreparable damage.



TOOLS:

- [Phillips #1 Screwdriver](#) (1)
 - [iFixit Opening Tool](#) (1)
 - [Tweezers](#) (1)
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Step 1 — Battery



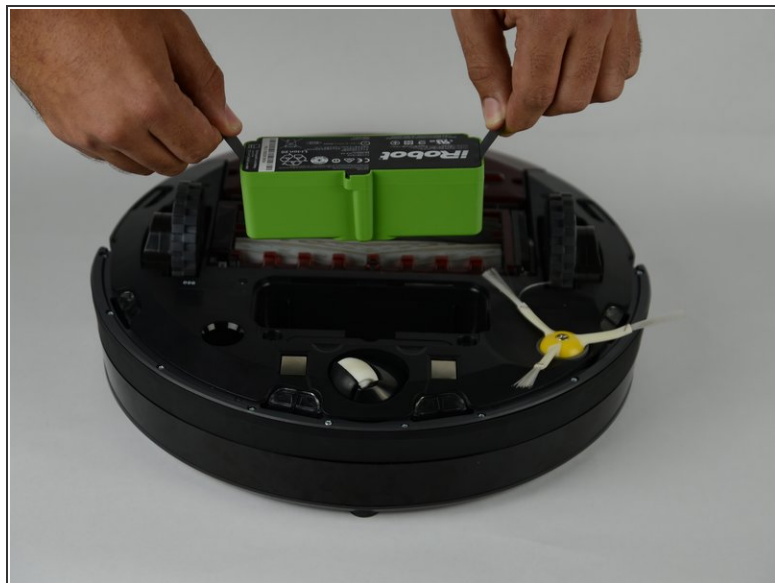
- Flip over the device and remove the two 11.5 mm screws using the Phillips #1 screwdriver.

Step 2



- Unscrew the back plate using a Phillips #1 screwdriver.
- Carefully lift the panel up once the screws are removed.

Step 3



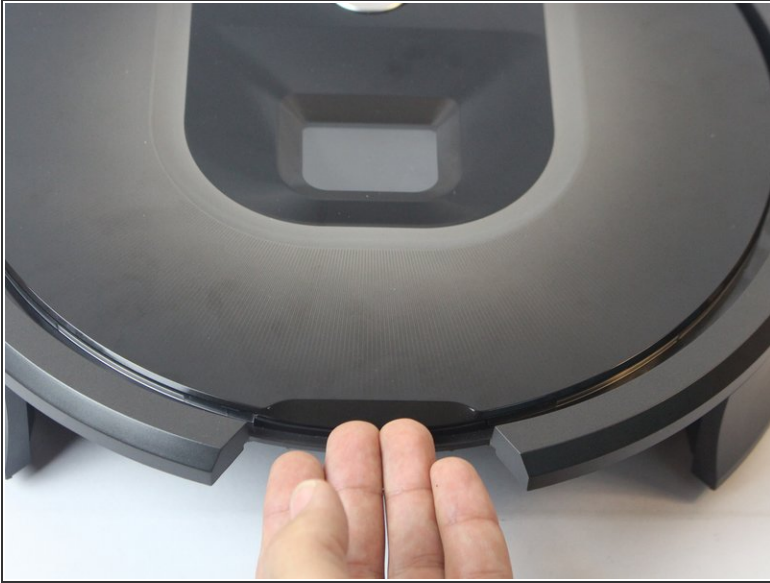
- With both hands, grab the two black tabs on each end of the battery.
- Pull the tabs upwards to remove the battery.

Step 4 — Motherboard



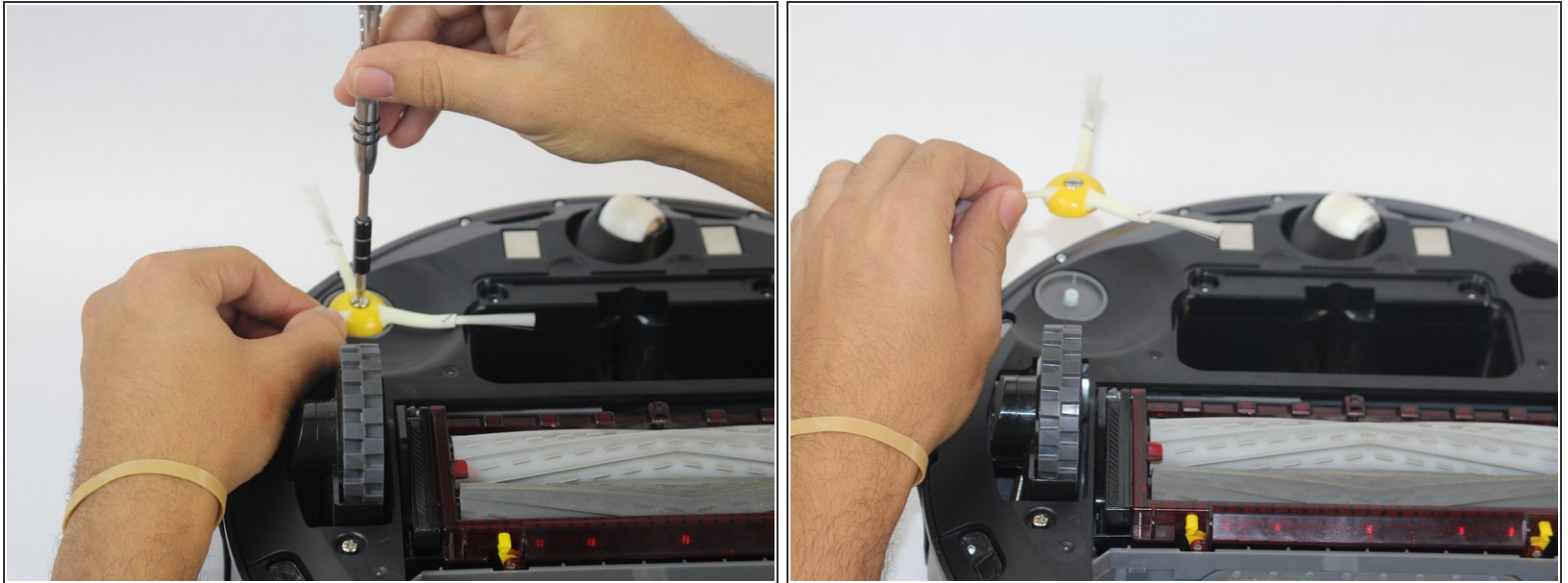
- Remove the dust bin by pressing down on the rear button on the device.
- Pull the bin towards you to remove it.

Step 5



- Insert the opening tool in the back of the device under the wedge.
 - Slowly pry the plate loose and lift it from the device.
- i** The face plate is only designed to be removed back to front.

Step 6



- Loosen the screw holding the side brush in place, by using a Phillips #1 screwdriver
- ⓘ The screw is attached to the side brush and does not come out completely.
- Lift the side brush.

Step 7



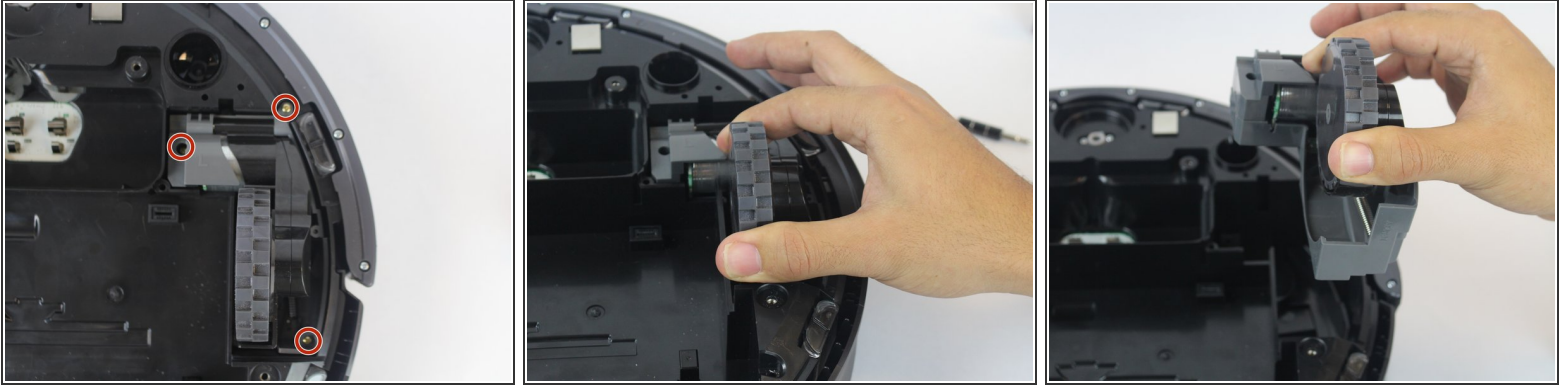
- Remove the two 11.5mm screws holding down the bottom plate using a Phillips #1 screwdriver
- Carefully lift the bottom plate.

Step 8



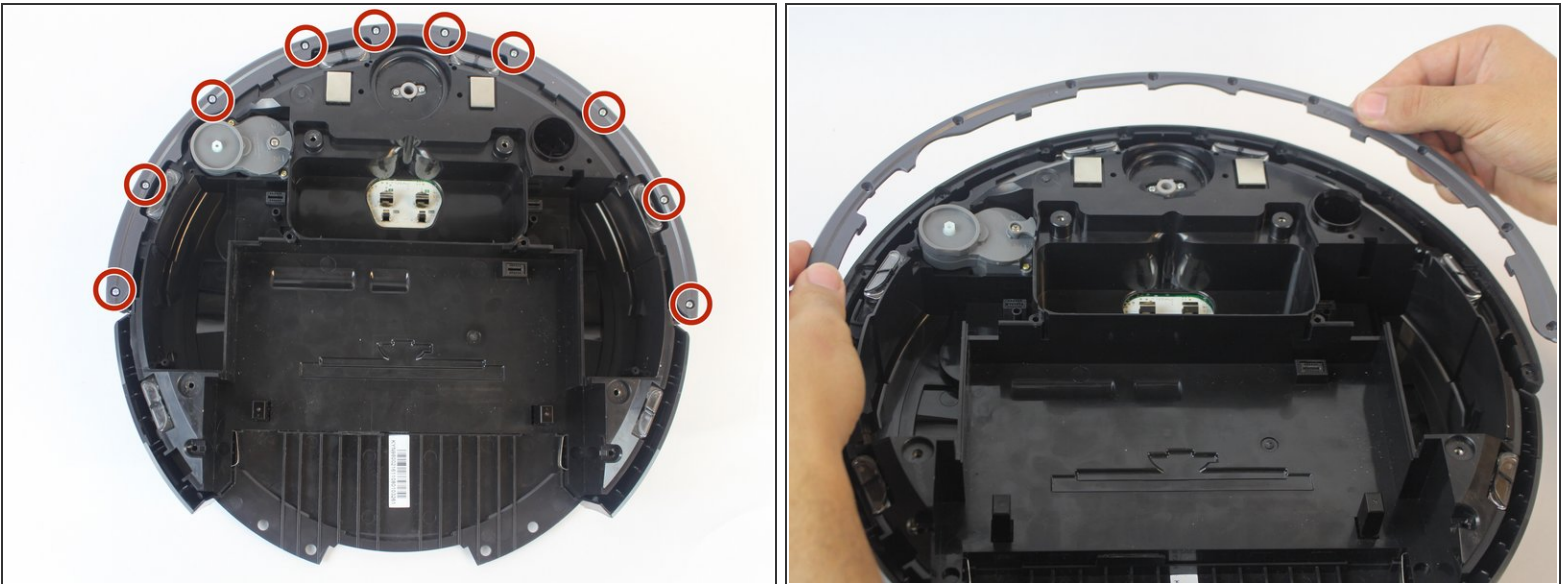
- Remove the four 15.8mm gold screws around the brush module using the Phillips #1 screwdriver.
- Lift the brush module carefully using both hands.

Step 9



- Remove the three 15.8mm gold screws with a Phillips #1 screwdriver.
- Lift the wheel module to remove it from the vacuum.
- Remove the other wheel by repeating these steps.

Step 10



- Remove the ten 6.1 mm silver screws using a Phillips #1 screwdriver.
- Lift the bottom guard off the front sensor panel by pulling it upwards.

Step 11



- Lift the two corner guards at the rear of the device by lifting and popping them out.
- Pull the front sensor away slowly from the vacuum.

⚠ The cable connecting the front sensor to the Roomba is delicate, so proceed with caution.

Step 12



- Flip the sensor over and use a Phillips #1 screwdriver to remove the two 3.8 mm silver screws that hold the sensors to the panel.

⚠ While the two 3.8mm screws look very similar to the 6.1mm screws, the two sizes are not interchangeable, so make sure not to mix the two sizes up when reassembling the Roomba.

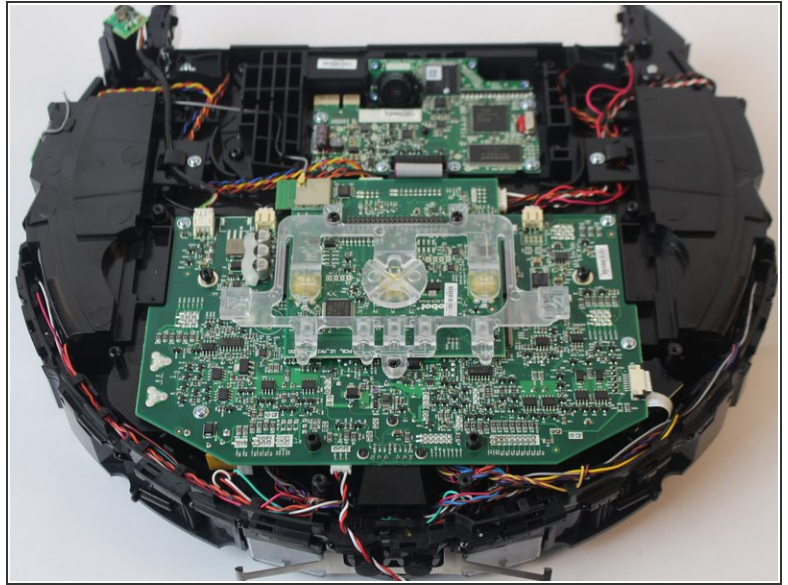
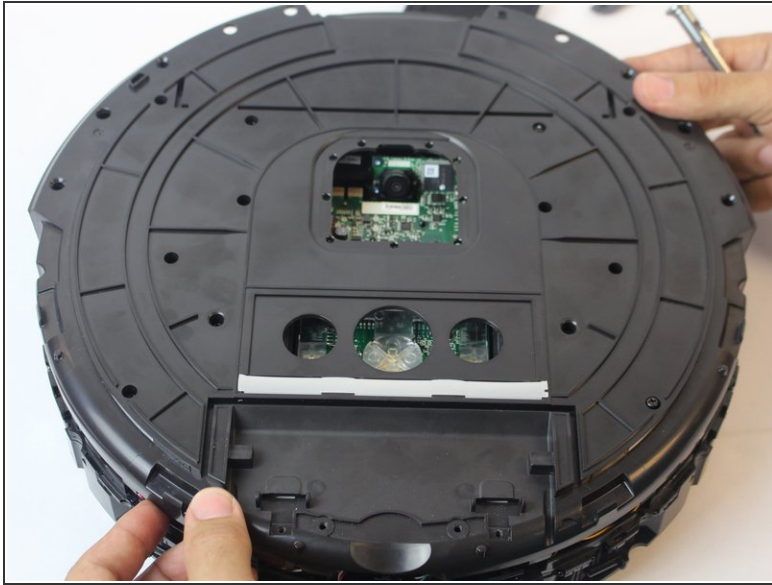
- Once removed, pull the panel away carefully.

Step 13



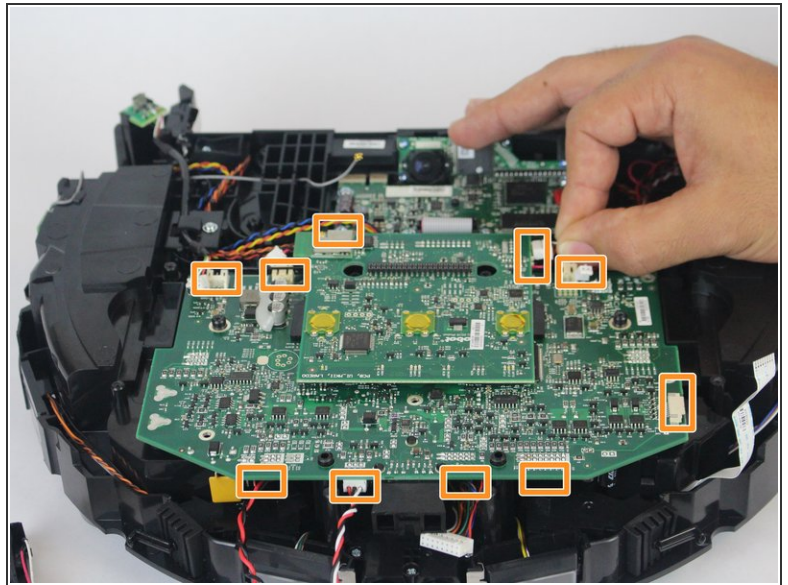
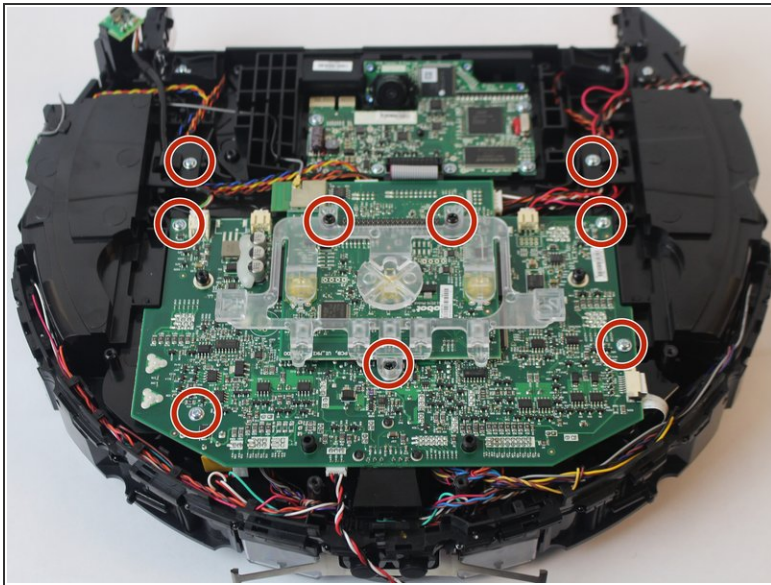
- Remove the fourteen 6.6 mm black screws holding down the top plate using a Phillips #1 screwdriver.
- Push the lip back towards the logo to remove two 6.6 mm black screws found under it using a Phillips #1 screwdriver.

Step 14



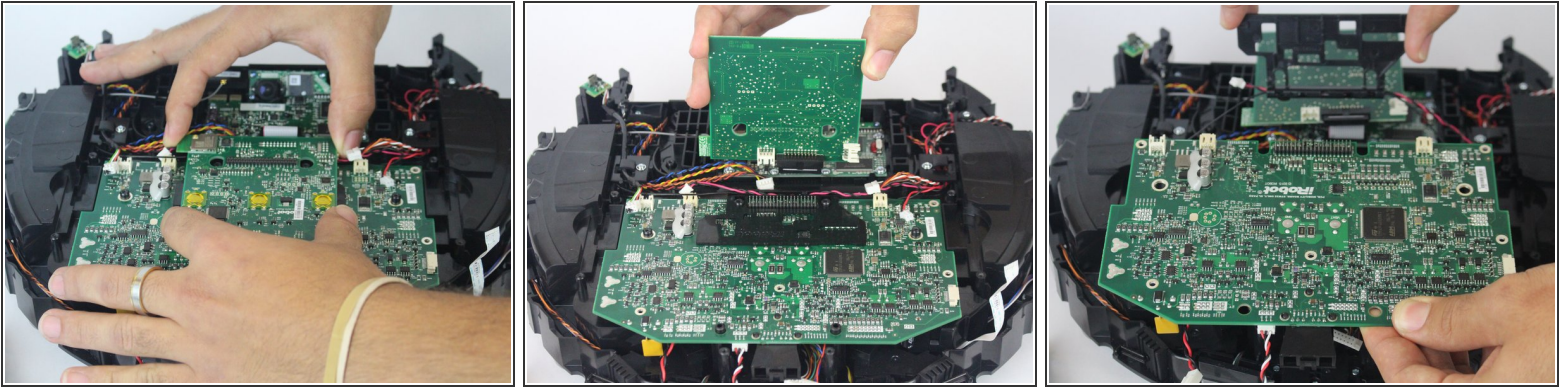
- Lift the top plate slowly, being careful not to damage the vacuum components while exposing the motherboard.

Step 15



- Remove the nine 6.4 mm silver screws holding the motherboard to the vacuum body and the clear plastic guard using a Phillips #1 screwdriver.
- Carefully remove the connector-clips that are attached to the motherboard.
- ⓘ Some connectors will be difficult to remove.

Step 16

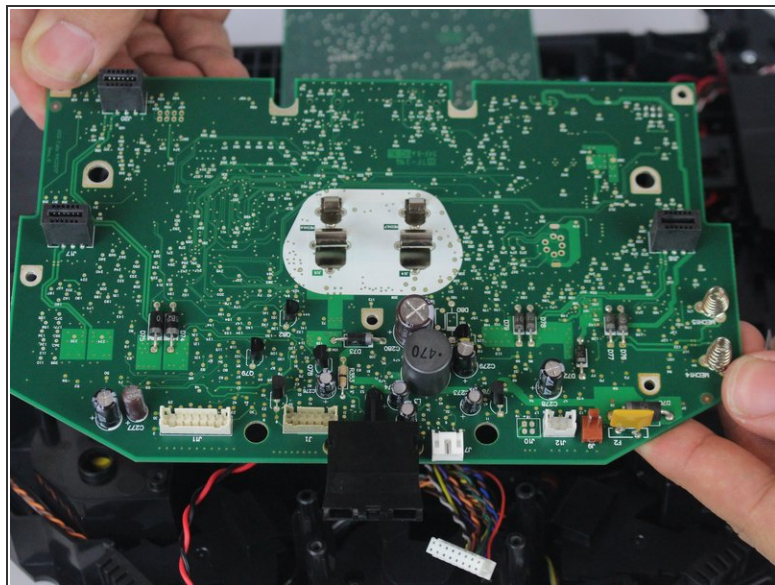
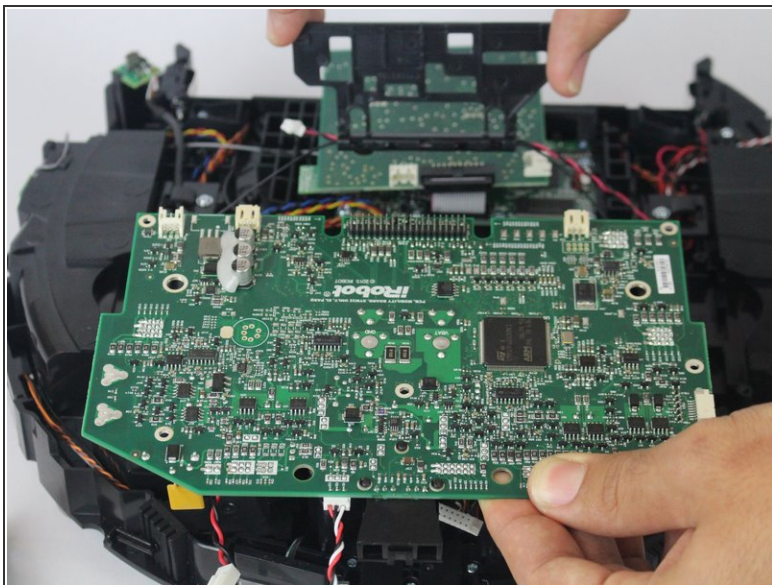


- Using both hands, lift the motherboard connected to the camera away from the device's main motherboard.

⚠ Only lift the motherboard upwards to avoid bending the pins and causing further damage to the device's electronics.

- Remove the black plastic guard that is placed in between the two computer boards

Step 17



- Lift the main motherboard upward and off of the vacuum.
- ⓘ The screw inserts are holding it in place so it will have to be lifted evenly.
- Remove the motherboard from your device.

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