Black and Decker 3-Cup Rice Cooker Circuitry Repair

In this guide we will check the internal circuitry for missing connections.

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INTRODUCTION

The Black and Decker 3-Cup Rice Cooker contains several pairs of wires inside. If any pair are disconnected from each other, the device will not work properly. In this guide we will identify disconnected pairs, and learn how to fix them.

Throughout these steps, the pictures will help us connect wires to their pair. If you find a wire that was not part of a junction during disassembly and was not color coded, count the wires in the wire groups to identify which group it is part of.

TOOLS:

- Phillips #1 Screwdriver (1)
- iFixit Opening Tools (1)
- Spanner 2.6 Screwdriver (1)
- Colored Highlighters (1)
- Masking Tape (1)
Step 1 — Remove the Lid and Bowl

⚠️ Make sure the device is unplugged before beginning disassembly!

- Lift the lid and bowl from the top of the device.

Step 2 — Turn the Device Upside-Down

- Turn the device upside-down, so that the four legs of the device point upwards.
Step 3 — Remove the Rubber Cushions

- Each of the four legs has a rubber cushion on its bottom. For each cushion, insert a plastic opening tool between the plastic leg and rubber cushion, and pry off the rubber cushion.

Step 4 — Remove the Spanning Screw

- Using a spanner screwdriver, remove the one 10mm long 7mm diameter spanner screw from the side of the brass panel.
Step 5 — Remove the Leg Screws

- Using a Phillips screwdriver, remove the 10mm long 7mm diameter Phillips-head screws from the inside of all four legs.

- The smaller leg at the bottom is now loose and not attached to the device. Set it aside.

Step 6 — Remove the Brass Plate

- Lift the brass plate off the device and set it aside.
Step 7 — Color the Wires

Color coordinating wire groups make it easier to identify the wire groups during reassembly.

Inside the device, there are three junctions with wires joined by Phillips-head screws. The first is connected to two wires, and the other two are connected to three wires each.

- Unscrew the screw at the junction near the opposite side of the device from the front panel.
- Label each of the two wires at this junction with a single color of tape.
Step 8 — Label the Second Wire Junction

- Unscrew the screw at the junction just clockwise from the button panel.
- Label the three wires of this junction with tape of a second color.

Step 9 — Label the Third Wire Junction

- Unscrew the screw from the wire junction just behind the front panel.
- Label the three wires at this junction with a third color of tape.
Step 10 — Wire Bunch 1

If another repair is needed besides to the circuitry, do that repair first. This guide reattaches wires, making other repairs much more difficult.

These steps will help you to identify which wires need to connect together in junctions.

There are 8 wires, in several groups

- Locate one of the wires attached to the power cord is covered in a thick layer of plastic, and is ziptied to a second, more thinly coated wire.

Step 11 — Wire Bunch 2

- Locate two wires that are attached by a ziptie and covered in only a thinner layer of plastic.
Step 12 — Wire Bunch 3

- Locate another wire that is attached to the power cord, is covered by a thick layer of plastic, and is not ziptied to any other wires.

Step 13 — 3 Single Wires

- The remaining 3 wires are thin and not connected to the power cord or any other wires via ziptie.
Steps 9 - 12 disassemble any part of the device, so no reassembly is needed. If any of the wires were not part of junctions when the device was reassembled, reassemble the device by including the lone wire in the proper junction, as identified in this step.