

How to Fix the C6 Error for an Instant Pot

Does your Instant Pot show the dreaded C6 error...

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INTRODUCTION

Does your Instant Pot show the dreaded C6 error while it makes alarming beeps? Follow this guide to diagnose what's wrong and learn how to fix it!

The C6, C6L, and C6H errors means that one of the pressure sensors isn't working. Most of the time, it's due to a buildup on the sensor contacts. Cleaning the contacts will likely fix the problem.

This guide was written with an Instant Pot DUO80, but the general procedure can be applied to many electric pressure cookers because most use similar electronics and sensors.

TOOLS:

T15 Torx Screwdriver (1)
Large Needle Nose Pliers (1)
Spudger (1)
Multimeter (1)
220 Grit Sandpaper (1)
Flat head Screwdriver (1)

Step 1 — Access the Instant Pot innards

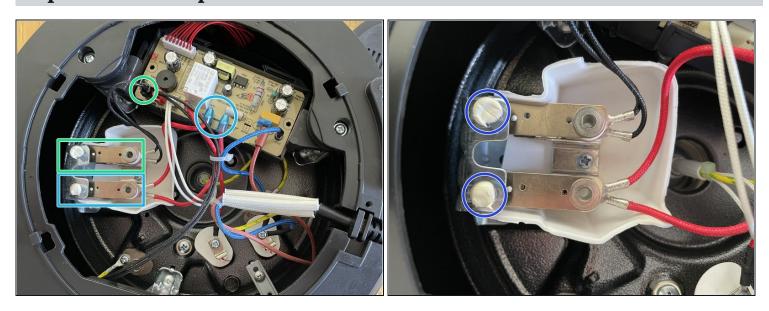






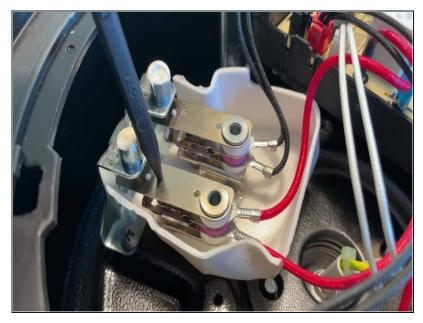
- ⚠ Be sure to unplug your Instant Pot before you begin your repair. Once opened, there's exposed wiring that can electrocute you if the device is plugged in.
- Flip the Instant Pot upside down.
- Use a T15 Torx driver to remove the screw securing the bottom plate.
- Twist and remove the bottom plate.
- (i) Depending on your model, this procedure may be slightly different.

Step 2 — Locate the pressure sensors



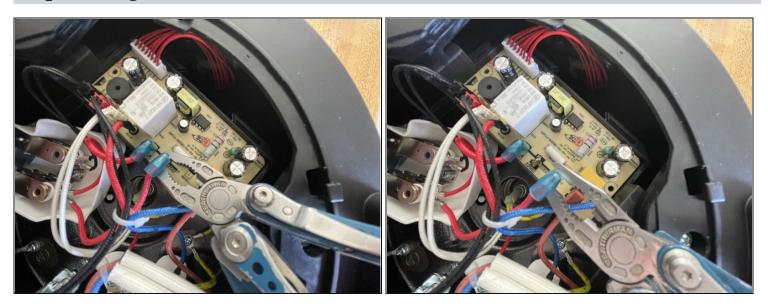
- (i) Here's a quick overview of the Instant Pot pressure sensors. Depending on your model, the components may differ slightly.
 - The T6L (low pressure) sensor and its connector. Some models may not have this.
 - The T6H (high pressure) sensor and its connectors.
- (i) Each sensor consists of metal strips. Normally, the strips touch each other, creating an electrical path.
 - ② Once the Instant Pot heats up, the strips flex apart, breaking the electrical circuit.
- The screws underneath the white resin are calibration screws.
 - **Don't mess with the calibration screws!** They will change what temperature and pressure the Instant Pot turns off, and can result in inaccurate and dangerous cooking situations.

Step 3 — Test the sensors



- Use a spudger or your finger to firmly press the top of a sensor. You should hear a loud click, signifying that the metal strips in the sensor are flexing properly.
- Repeat for the second sensor.
- i If you don't hear a click, the contacts may be fused together, or the metal springs are worn out. You'll need to replace the sensor.
- Sometimes, just flexing the sensors will fix the problem.
 Carefully re-assemble the Instant Pot and check if it works.
 - If the Instant Pot doesn't work, unplug the device, and follow the subsequent steps to further diagnose the problem.

Step 4 — Diagnose the C6 or C6H error



- (i) The next three steps show how to test the high pressure sensor more extensively. You should check this sensor if you get a C6 or C6H error.
 - (i) If you don't have a "duo" Instant Pot, you will only have one pressure sensor, and it's this high pressure one.

⚠ Make sure the Instant Pot is unplugged from the outlet.

- Use pliers or your fingers to lift and disconnect one of the sensor's spade connectors from the circuit board.
 - These connectors can be stubborn. Gently wiggle the connector as you pull to loosen it.
 - (i) This disconnects the sensor electrically, so we can do a continuity test.





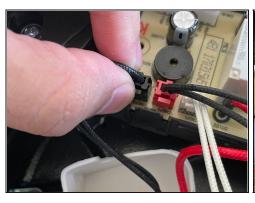


- Attach a multimeter/ohmmeter lead to both exposed ends of the sensor wires, making sure the leads don't touch each other.
 - (i) Test lead polarity doesn't matter for these tests.
- Set your meter to resistance mode or continuity mode.



- in its resting state, the pressure sensor should be continuous, which means the meter should read almost zero resistance.
 - If the meter shows a high resistance or no continuity, it could mean that the sensor contacts are dirty. Doublecheck your meter contacts and make sure they're grasping onto the wires.
- Use a spudger or your finger to firmly press on the top of the sensor until it clicks.
 - The meter should change to show no continuity (0.L, in my meter's case). If it doesn't, there is a potential electrical short—the contacts may be fused, or you may need to replace the sensor.

Step 7 — Diagnose the C6L error

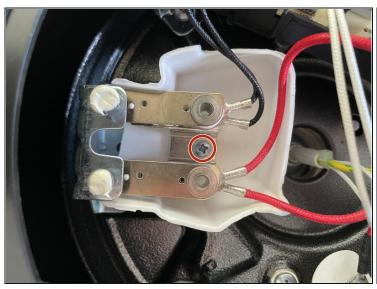


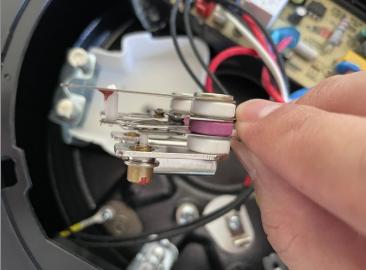




- (i) This step shows how to test the low pressure sensor more extensively. You should check this sensor if you get a C6L error.
 - if you don't have a "duo" Instant Pot, you won't have this sensor.
- Disconnect the low pressure sensor by squeezing its circuit board connector to disengage the lock, then pull straight up.
- Attach a multimeter lead to both exposed ends of the sensor wires, making sure the leads don't touch each other.
- Set the meter to resistance/continuity and test for continuity, when the sensor is resting, and when it's depressed.
 - (i) The meter should show low resistance/continuous when the sensor is resting, and no continuity when the sensor's depressed.

Step 8 — Clean the sensor contacts





- If your tests suggest that you may have dirty contacts, or you suspect the contacts have fused, follow the next steps to remove the sensors to clean them.
- Use a Phillips screwdriver to remove the screw securing the sensors to the Instant Pot.
 - (i) This screw can be very tight. Be sure to use the right sized screwdriver to avoid stripping it.
- Lift the sensor assembly out of its recess.

Step 9







- Press down on the sensor to open the contacts.
- Use some sandpaper, a file, or electrical contact cleaner to clean the contacts. Be sure to clean both mating surfaces.



 Use a multimeter to test the sensors for proper operation before you reassemble your Instant Pot.

Step 11 — Test and calibrate a new Instant Pot sensor



- i The next step will give you general guidance on how to test a **new high pressure** sensor.
- Install your replacement pressure sensor and reassemble the Instant Pot.
- Add 3 cups of water to the Instant Pot and set it to cook on high pressure for five minutes.
- ⚠ If the emergency vent begins to leak or vent during the heating cycle, the pot is overpressurizing. Immediately unplug the Instant Pot and perform a quick release.
- Once the five minutes are up, vent using quick release.
 - i There should be a strong pressure release. If there isn't, the Instant Pot is not reaching sufficient pressure.
- i If the emergency vent didn't leak during the cycle and the quick release vented with strong pressure, your new pressure sensor is working as intended. You don't need to calibrate the sensor.



- (i) If your new high pressure sensor is under-pressurizing or over-pressurizing, follow this step to adjust the pressure sensor.
- Unplug your Instant Pot and disassemble it until you can access the pressure sensors.
- Use a spudger to pry away the white adhesive covering the high pressure sensor calibration screw.
 - This reveals the calibration screw's flat screwhead.
- If your Instant Pot is **over-pressurizing**, use a screwdriver to turn the screw **clockwise** (tighten) by a quarter turn. This makes the sensor trigger and turn off at a lower heat.
- If your Instant Pot is **under-pressurizing**, use a screwdriver to turn the screw **counter-clockwise** (loosen) by a quarter turn. This makes the sensor trigger and turn off at a higher heat.
- Reassemble the Instant Pot and perform the pressure test in the previous step. Readjust the calibration screw as needed.
- Once you've calibrated the Instant Pot, <u>cover the calibration screw with some silicone</u> <u>or heat-tolerant adhesive</u>. This prevents the calibration screw from turning.

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