



Canon EOS Rebel T2i Top Cover Replacement

Replacing the top piece of a Canon T2i (550D). In my case, I had a broken hot-shoe, but as most controls on this camera are built into the same part, this repair guide will solve many repairs.

Requires removing front, back and top panels.

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INTRODUCTION

The knobs, switches, buttons, flash and other components are part of a single assembly from Canon. Canon do not generally sell parts directly to consumers, and suggest you send your camera to them for repairs.

This guide will show you how to remove the top, front and back panels of your camera, so you can access and replace many of the external components that may have become worn or broken.

TOOLS:

- [8" Needle Nose Plier](#) (1)
 - [Tweezers](#) (1)
 - [iFixit Opening Tools](#) (1)
 - [Phillips #1 Screwdriver](#) (1)
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Step 1 — Top Cover



- As you can see here, we've got a damaged hot shoe on this T2i (550D). A little bit of searching on eBay has yielded the part we need to replace. It's an entire assembly of the top cover.
- You'll need the following:
 - Plastic opening tool
 - Small Screwdrivers
 - Pliers (or surgical clamps :D)
 - Tweezers
 - Pen and paper
- Get the camera ready by removing the neck strap, battery, lens and SD card.

Step 2



- Remove the two top screws from under where the strap attaches to the camera body.
 - Remove screws from bottom of camera. Note that these can be quite tight. Use one hand to hold the screwdriver down, and another to turn the pliers, or clamp.
- Note down the location of each screw. They are not all the same size or threading.

Step 3



- Remove two screws from the right side of the camera, next to the CF card.
 - Remove one screw from the right side of the camera. Leave those under the rubber door for later, we just want to do the one outside for now.
 - Remove the eyepiece, and the two screws beneath it.
 - Remove the two black screws on the front of the camera, just above the lens mount.
 - Remove the screw in the centre of the viewfinder focus knob. It will come out with the knob attached.
- i** If you've got them all, you will have removed 10 screws from the upper body, and 7 from the bottom.

Step 4



- Pry open the bottom of the camera with the opening tool or screwdriver. The front panel should come forward, but must be lifted (pried) over the tripod mounting. It may help to slide a small screwdriver under the panel via the battery door.
 - Once you've slipped the front cover's base over the tripod mount, gently pull it away from the camera body.
- ⚠ Do not remove the screws on the metal lens mount ring. Doing so may cause issues with auto-focus.
- ⚠ See that thing that looks like an AA battery? That is actually a very large capacitor to charge the flash to high voltage. Do not go near it with any metal object. Do not touch the two leads at the bottom. It can give you a very serious shock, even without the battery installed!

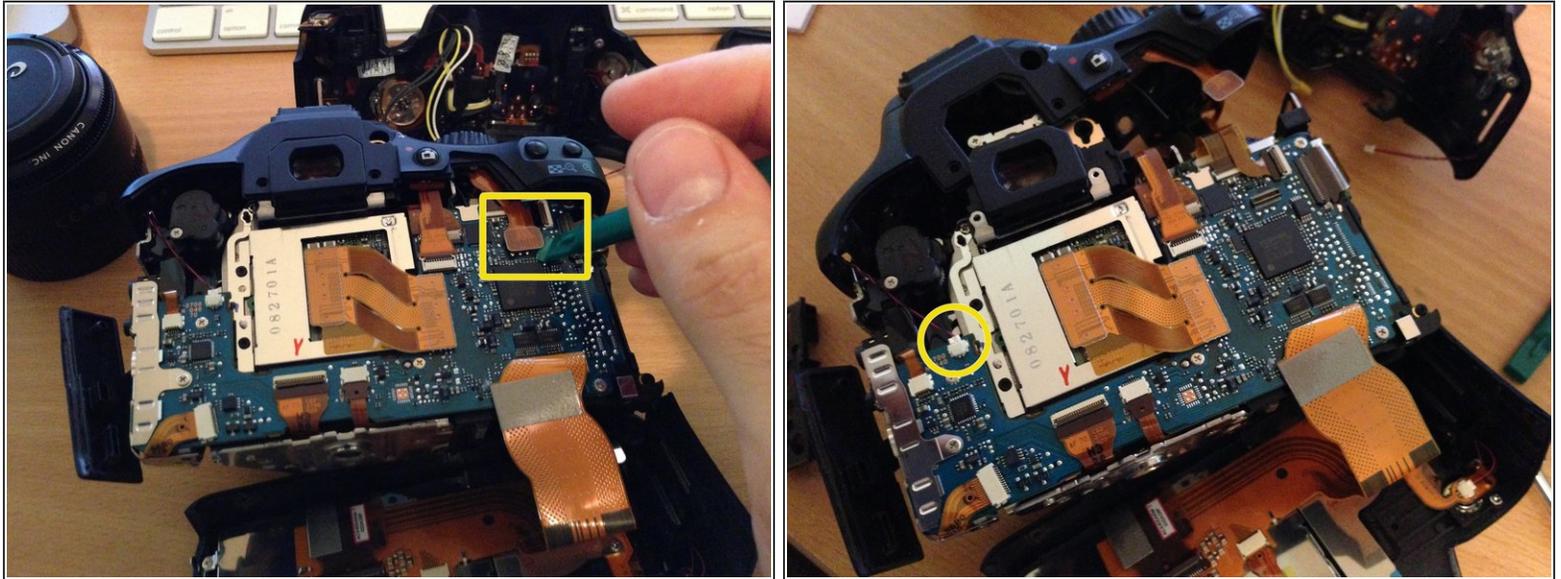
Step 5



- Remove the last two screws holding the back of the camera onto the body by removing them from under the connections door on the left side.
- Remove the connection plate and rubber door and set aside.
- Gently pull the back of the camera away from the body.

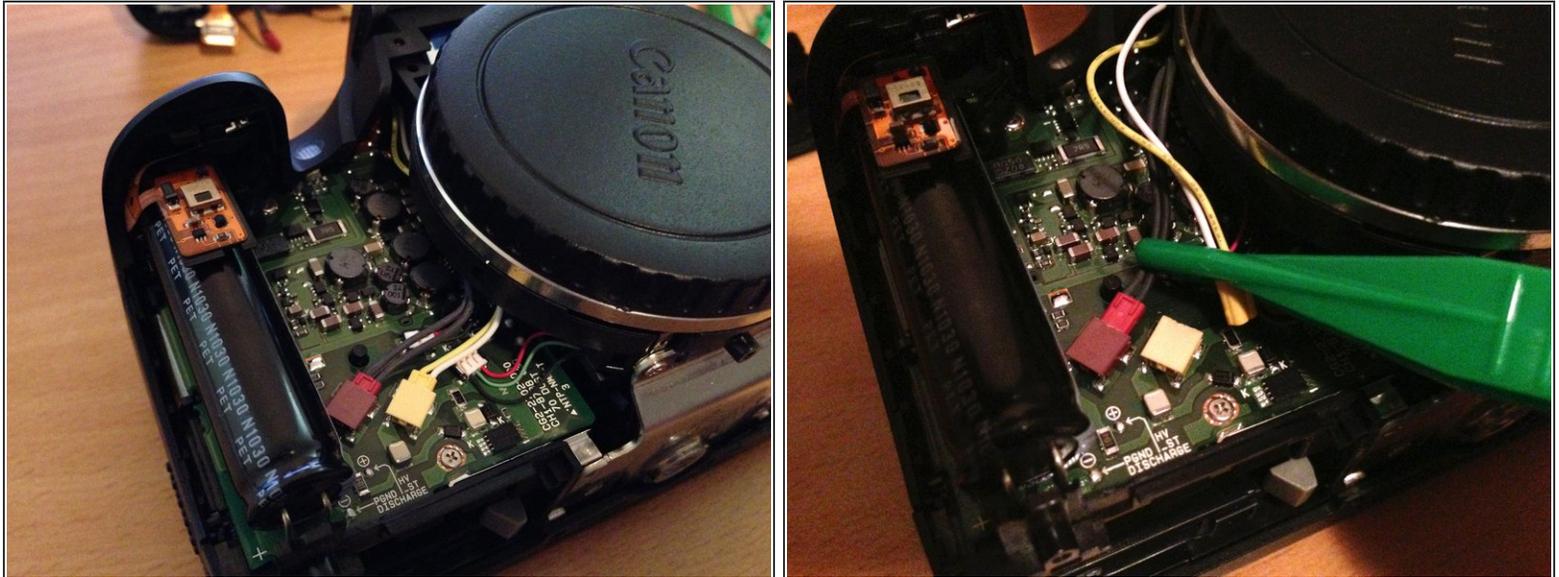
 Do not detach the cables. In the case of this guide, we only need to access the connection for the top cover.

Step 6



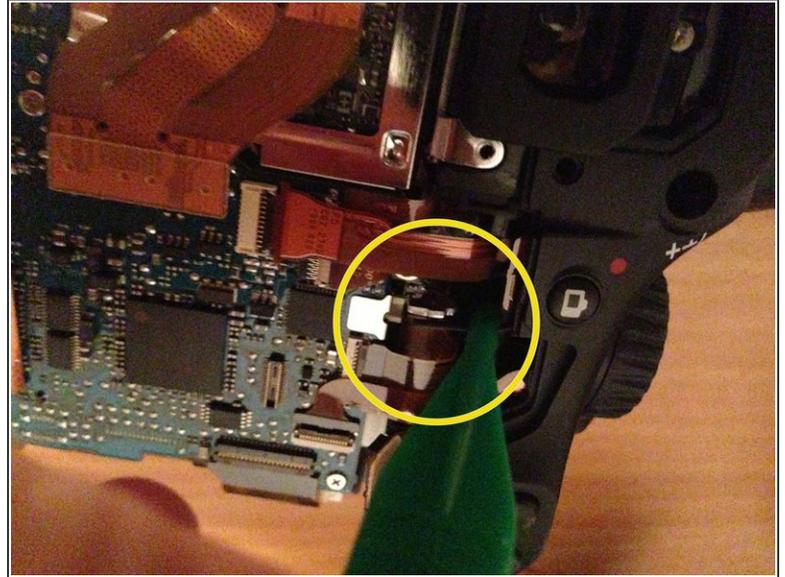
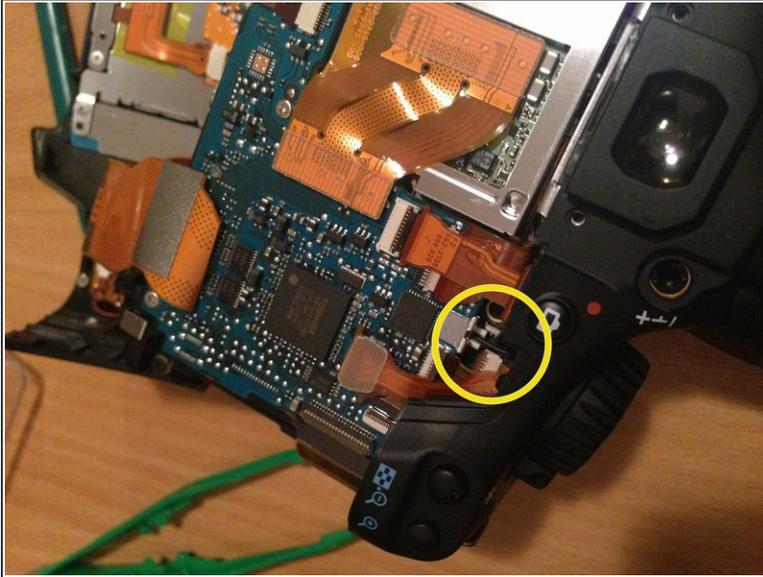
- Locate the ribbon connector connecting the main circuit board to the top cover, near "zoom in" button, under where your right thumb would sit while using the camera.
- Carefully and gently pry the connector loose with the blade of a plastic opening tool.
- Locate the microphone connection, and disconnect it. It is to the left of the sensor on the circuit board.

Step 7



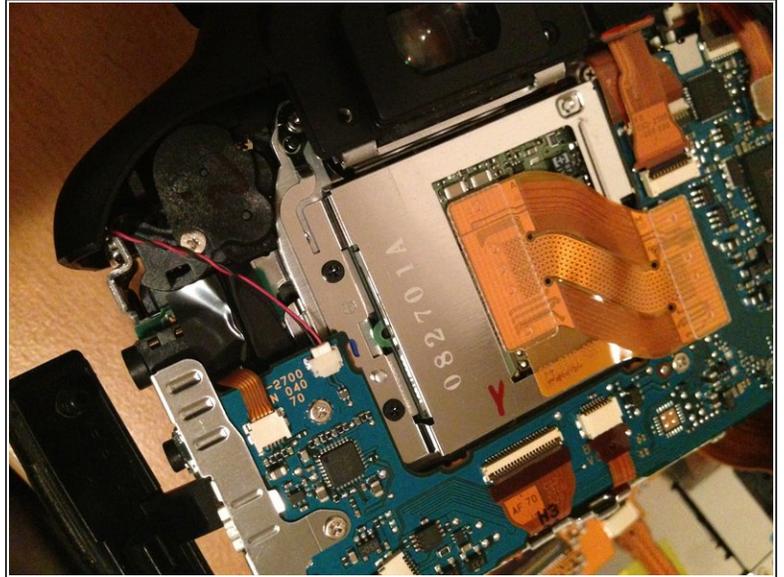
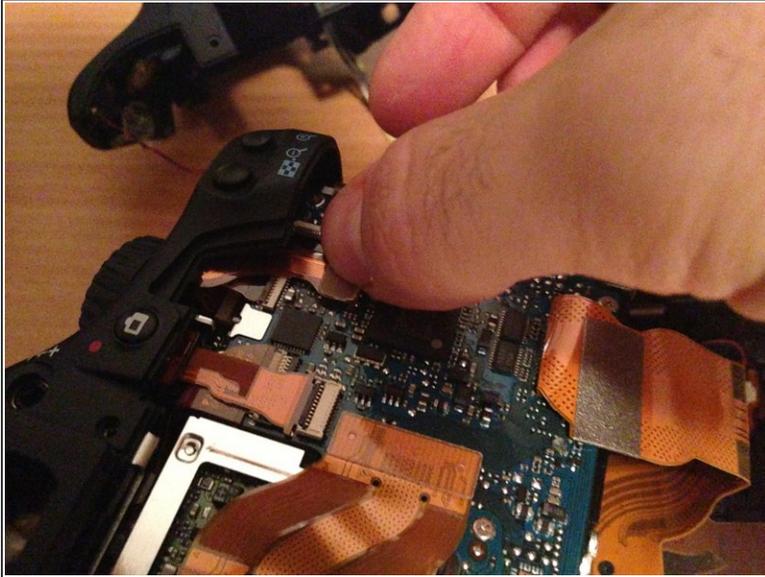
- On the front of the camera, disconnect the red and yellow wires from the circuit board. If you have a plastic tweezers, simply pull them away from their connectors.
 - The top cover is now free. Gently pull it away from the body, and replace it with the new one. Be sure that the cables are running to the correct side of the body. Red and yellow to the front; ribbon and tiny black and red microphone cable to the back.
- ⚠** See that thing that looks like an AA battery? That is actually a very large capacitor to charge the flash to high voltage. Do not go near it with any metal object. Do not touch the two leads at the bottom. It can give you a very serious shock, even without the battery installed!

Step 8



- As you seat the cover, note that there are 5 cables dangling from the new part.
 - A pair of wires with a red connector and dark wire.
 - A pair of wires with a yellow connector, one yellow, one white.
 - A tiny red and black wire with a white connector.
 - A gold ribbon cable with flat square connector.
- In my case, I did not notice the black wire until I removed it. I believe it is the ground wire for hot shoe devices. It slots into a tiny space on the top of the camera, in front of the circuit board.
- Bend the wire to match the old one, as mine was straight and difficult to manage.
- Use a tweezers to slide the wire into the white connector slot on the board.

Step 9



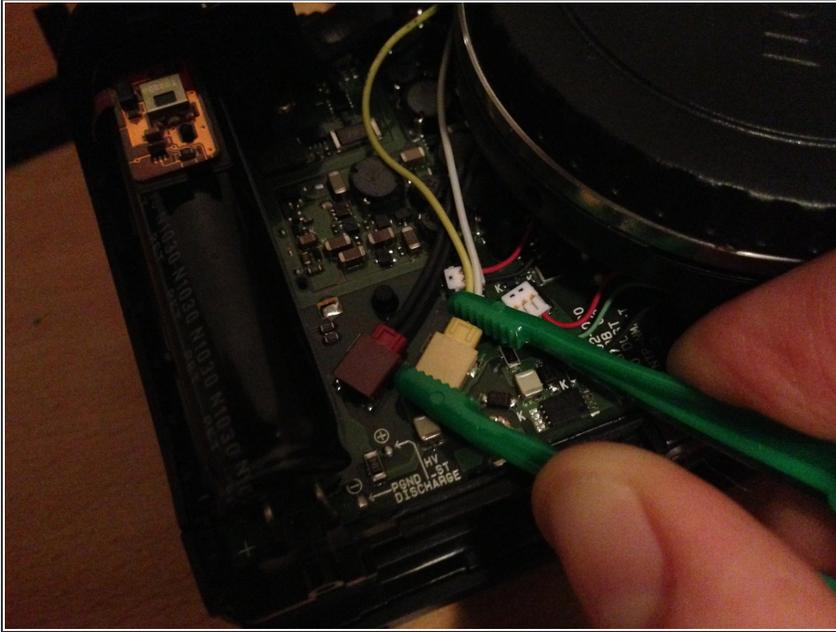
- Reattach the ribbon cable to the connector on the main circuit board.
- Reattach the red and black microphone cable to the board.

Step 10



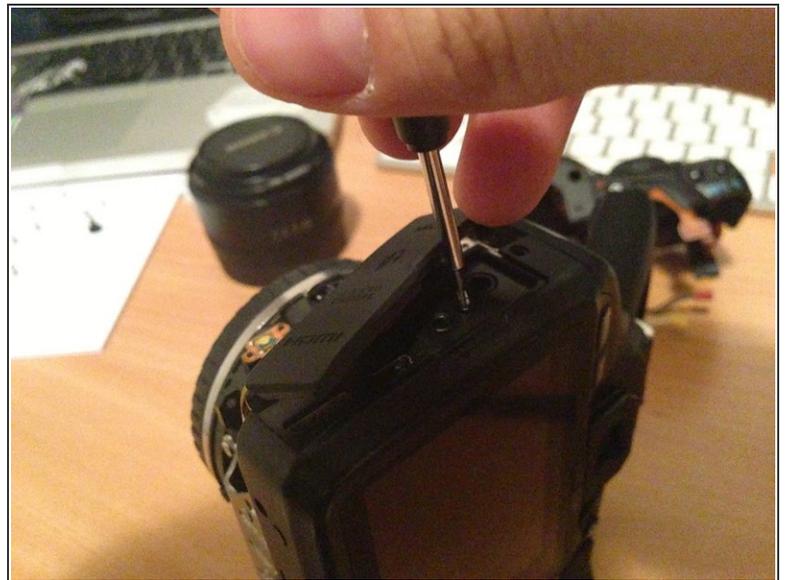
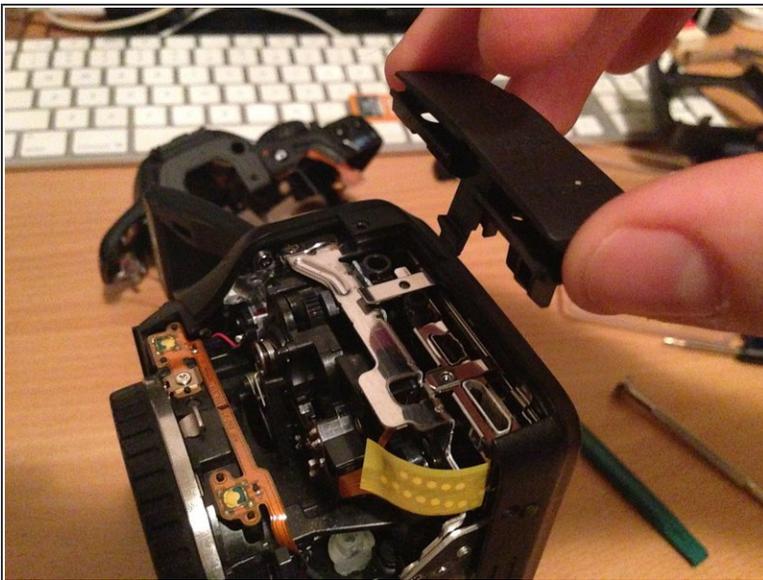
- Gently place the back onto the camera as you removed it. Squeeze down gently but firmly until top cover and back are in place and screw holes are aligned.

Step 11



- Reattach the red and yellow connectors on the front of the camera. Be sure to route the cables so they cannot interfere with the front cover when replaced.

Step 12



- Put the rubber connection door onto the connector plate and set them in place.
- Replace both screws to attach the plate.

Step 13



- Replace front cover of camera.
- Be sure that all components are aligned, such as infrared receiver and AF assist lamp.

Step 14



- Gently squeeze the front of the case onto the back, remembering that the front needs to slide over the tripod attachment.
- You may need to use the opening tool to get things aligned again, but with a bit of squeezing things should fall back into place with a satisfying snap.

Step 15



- Replace all screws.
- Replace viewfinder focus knob. Be sure to align notches.
- ⓘ For best results, thread each screw into its location just loosely at first, then return to tighten once all screws have been placed to be sure holes are aligned.

Step 16



- Replace eyepiece, battery and lens.
- Test camera.
- You're done!

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