



iMac Intel 20" EMC 2105 and 2118 Inverter Replacement

Replace a broken display inverter to fix...

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INTRODUCTION

Replace a broken display inverter to fix backlight issues.

TOOLS:

Phillips #1 Screwdriver (1)

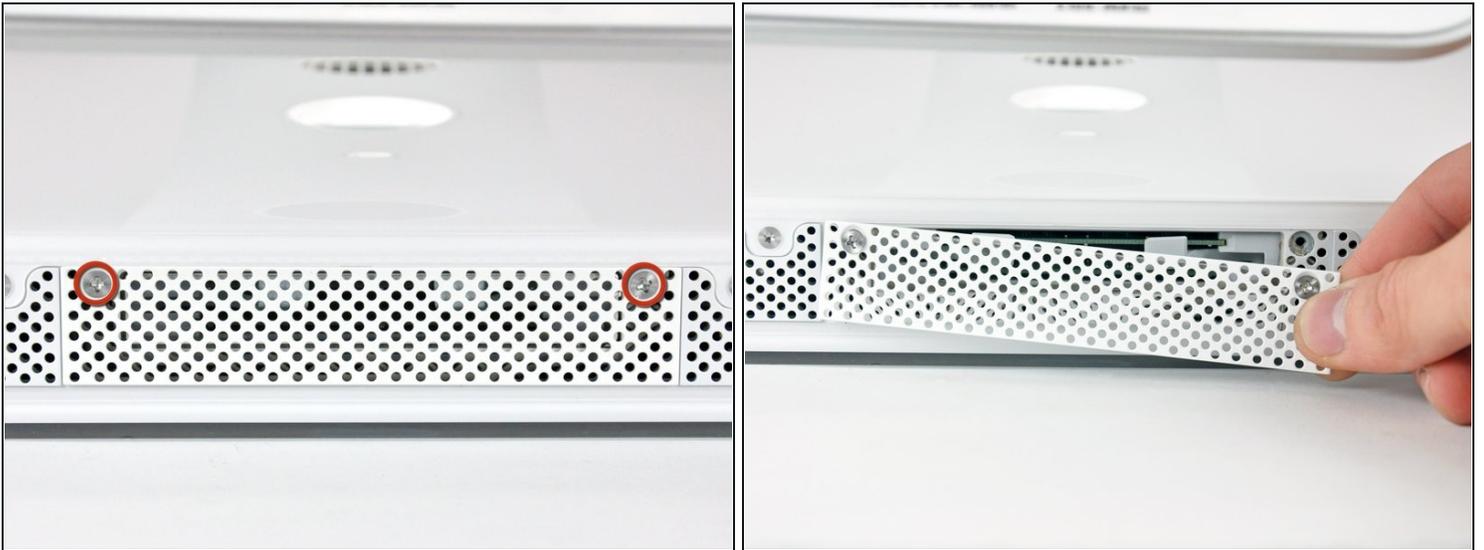
Plastic Cards (1)

TR10 Torx Security Screwdriver (1)

T6 Torx Screwdriver (1)

TR8 Torx Security Screwdriver (1)

Step 1 — Access Door



- Loosen the two Phillips screws securing the access door to your iMac.
- ⓘ Both screws remain captive within the access door.
- Remove the access door.

 Before beginning the repair, unplug the computer and press and hold the power switch for 20-30 seconds, to discharge internal capacitors.

Step 2 — Front Bezel



- Remove the following screws along the lower edge of your iMac:
 - Three 6 mm T8 Torx screws
 - One 8 mm T8 Torx screw (Right side of the RAM slot on 2105)

Step 3



- ① Re-orient your iMac so it sits upright on the stand.
- Insert a [plastic card](#) up into the corner of the air vent slot near the top of the rear case.
- Push the card toward the top of the iMac to release the front bezel latch.
- Pull the front bezel away from the rear case.
- Repeat this process for the other side of the front bezel.
- ① It may be necessary to apply several layers of duct tape to the top of the access card to aid in releasing the latches. Or use two cards for the additional thickness.
- If the bezel refuses to release, try lifting the lower edge of the front bezel slightly away from the rear case (detailed in the next few steps) and repeat the latch release process.

Step 4



- Lay your iMac stand-side down on a flat surface.
- To lift the front bezel off the iMac, simultaneously:
 - Use your thumbs to press in the RAM arms and hold the iMac down.
 - Use your index fingers to pull the small bridge of material on the front bezel toward yourself.
 - Pull the front bezel up with your index fingers.
- Once the small bridge of material has cleared the RAM arms, lift the front bezel by its lower edge just enough to clear the bottom edge of the rear case.

Step 5



- Lift the front bezel off the rear case and rotate it away from the bottom edge of the iMac, minding the camera and microphone cables still attached to its upper edge.

Step 6



- ⓘ If necessary, remove the strip of tape covering the microphone cable connector.
- ✦ The microphone connector is located near the inside of top edge of your iMac.

Step 7



- Disconnect the microphone cable.
- Disconnect the camera cable by pulling its connector away from the socket on the camera board.

⚠ The camera cable connector and socket are delicate and easily bent. Remove with caution.

Step 8 — Lower EMI Shield



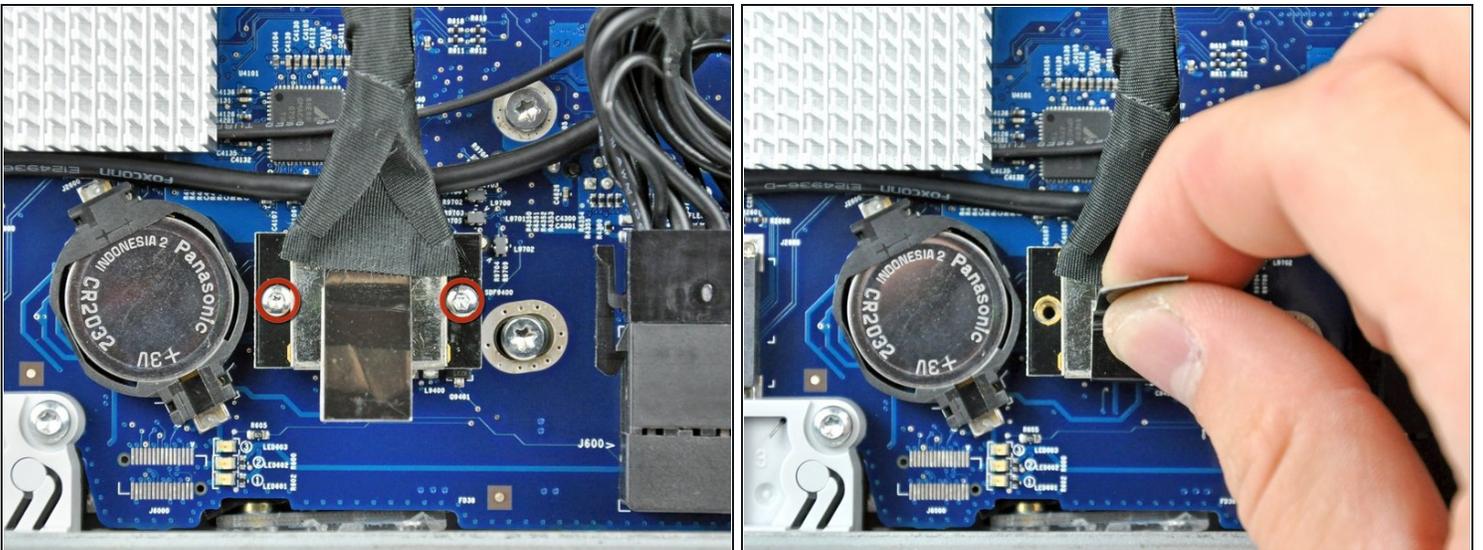
- Peel up the lower EMI shield from the rear case.
- ⓘ It is only necessary to peel the shield up from three sides. Leave it attached to the display.
- ⓘ If you happen to rip the EMI shield, use a piece of foil tape to cover the tear.

Step 9



- Tape the EMI shield to the face of the display to keep it out of the way.

Step 10 — Display



- Remove the two 5 mm T6 Torx screws securing the display data cable connector to the logic board.
- Pull the display data cable connector up off the logic board by its black pull tab.

Step 11



- Peel back the EMI tape from the two vertical edges of the display.
- ☒ During reassembly, it is helpful to use several small strips of tape to hold the EMI shielding along the left and right edges of the display footprint out of the way before lowering the display into the rear case of your iMac.

Step 12



- Allow the lower EMI shield to hang down from the display.
- Remove the four 7.5 mm T10 Torx screws securing the display to the rear case.
- ⓘ The screws are recessed, so a thin magnetic screwdriver aids in removal. Most bit drivers are too short to reach these screws.

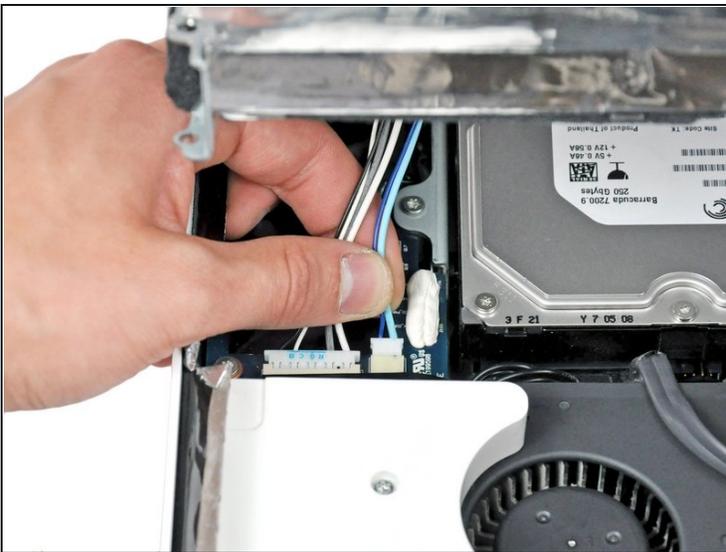
Step 13



- Lift the lower edge of the display and rotate it toward the top edge of your iMac.

⚠ Do not lift it too much, as the inverter cables are still attached.

Step 14



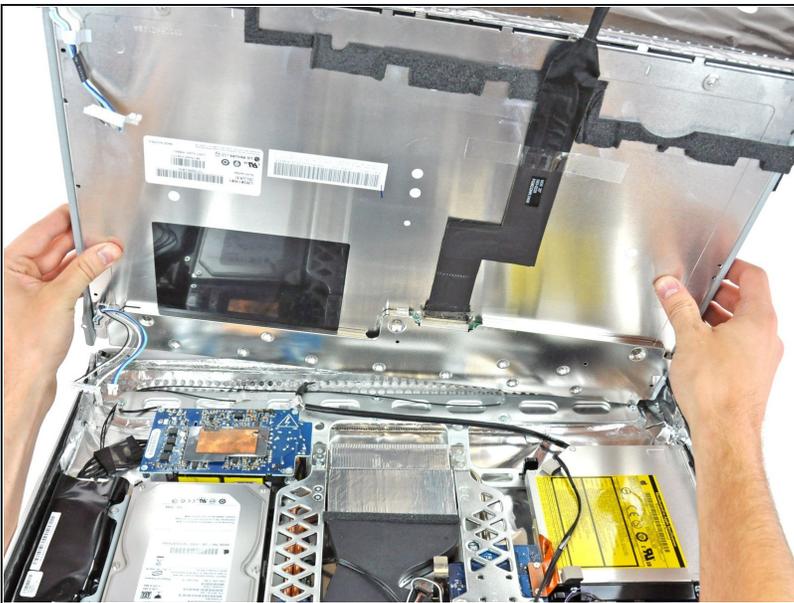
- Disconnect both inverter cables from the inverter board.
- i** These connectors are seated very tightly in their sockets. It is helpful to use your fingernails or the tip of a spudger to push the ears on either side of the connectors to dislodge them from their sockets. A small pair of hemostats helps a lot.

Step 15



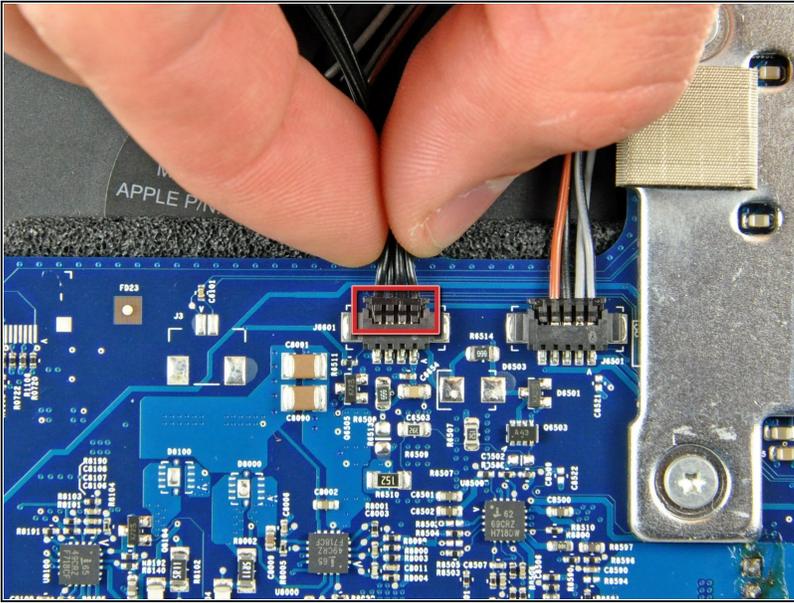
- Disconnect the two inverter cables at the top edge of the inverter using the method explained in the previous step.

Step 16



- Rotate the display until it is nearly perpendicular to the rear case and lift it up to peel it off the EMI shield stuck to its top edge.

Step 17 — Hard Drive



- Disconnect the hard drive thermal sensor from the top edge of the logic board.
- ⓘ Pull the connector parallel to the face of the logic board.

Step 18



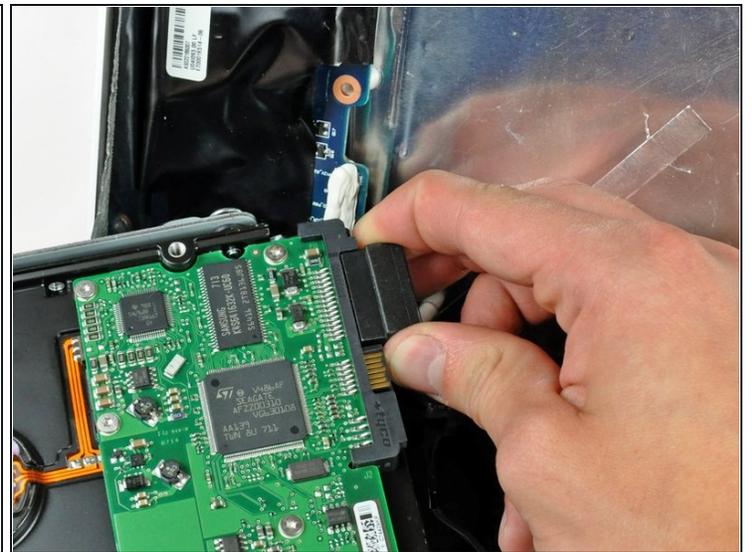
- Remove the two 9.2 mm T10 Torx screws securing the hard drive bracket to the rear case.

Step 19



- Lift the hard drive from its left edge enough to clear the inverter and pull it toward the left edge of your iMac to unseat the mounting pins from the chassis.
- ✦ During installation, do not push the rubber grommets through the chassis with the hard drive mounting pins as retrieving them will require removing the logic board.

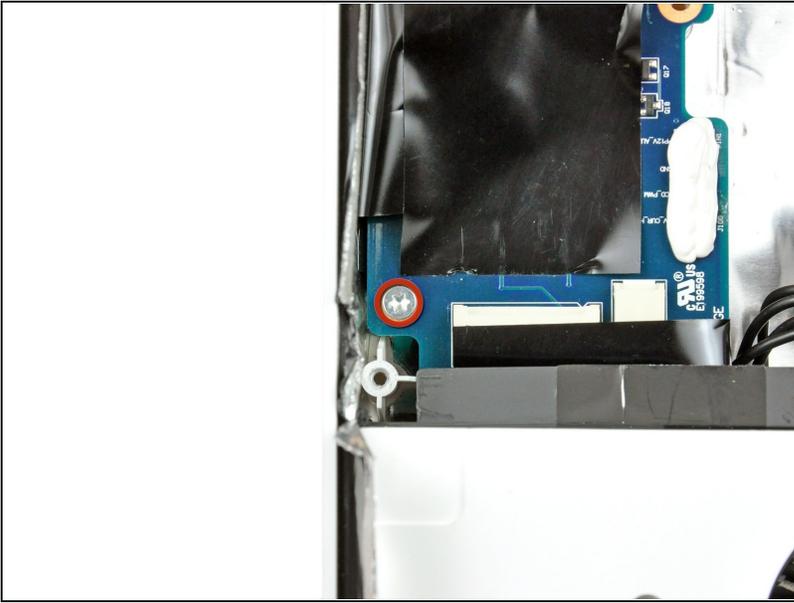
Step 20



- Pull both the SATA power and data cable connectors away from the hard drive.

⚠ Be careful when de-routng the hard drive thermal sensor cable from under the heat sink framework.

Step 21 — Inverter



- Remove the single T10 Torx screw securing the inverter board to the rear case.

Step 22



- Lift the inverter out of the rear case.
- Disconnect the inverter cable by simultaneously squeezing the locking mechanism and pulling the connector away from its socket.
- There are many steps missing--the cable is routed under the mother board. You must remove the speakers, move the hard drive fan aside, and lift the mother board to remove the long cable. This guide is incomplete!

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

