

# Apple Thunderbolt Display Thunderbolt & MagSafe Cable Replacement

This guide shows you how to replace the...

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# **INTRODUCTION**

This guide shows you how to replace the all-in-one Display and MagSafe cable of your Apple Thunderbolt Display.

# 🖌 TOOLS:

Heavy-Duty Suction Cups (Pair) (1) iMac Service Wedge (1) TR10 Torx Security Screwdriver (1) Tweezers (1) Phillips #0 Screwdriver (1) T6 Torx Screwdriver (1)

# 🌣 PARTS:

Apple Thunderbolt Display Thunderbolt & MagSafe Cable (1)

#### Step 1 – LCD



- Lay down the display with screen side up.
- (i) Since the display is able to be tilted up and down, we found it useful to prop up the screen up with a styrofoam block in between the screen and the base.
- Place the two suction cups on both sides of the top of the screen and make sure to lock them in place.
- The glass screen is connected to the rest of the display by small magnets. Lift slowly and the screen will come right off.



• Unscrew the 12 screws around the side edges and the top of the LCD with the TR 10 Screwdriver.

# Step 3



- Slowly lift the LCD out from its placement and tilt it upwards.
- (i) It can be very helpful to have an extra set of hands to hold the LCD up while you work with the cables underneath.

A There are four wires that connect the LCD to the rest of the components. Make sure not to pull hard and break any of the wires.



• For the first of the four wires (furthest away from the wire that is held in by a screw), grab onto the connector and pull slowly.



- For the next connector, which is right next to the previous wire, there is a piece of tape attached to a metal bar.
- Flip the metal bar over using the tape as a handle.
- Next, grab onto the connector and slowly pull it from the socket in the logic board.



• For the connector on the other side of the logic board, grab the connector from underneath and carefully pull it from the board.

# Step 7



• For the last wire connecting to the LCD, use your T 10 Screwdriver to remove the screw.



• The LCD has now been fully disconnected from the casing and can be repaired/replaced!

i its best to set the LCD on a bed or on a thick towel to avoid damage to the LCD

#### Step 9 — EMI Filter



- You should now see the EMI filter right in the middle of the device (although held in by a few other components).
- Follow the wires coming out of the bottom of the Power adapter off to the left.
- Take the <u>tweezers</u> and remove the piece of tape holding the wires to the casing.
- There is only one connector that needs to be taken out (even though there are two right next to each other!).
- Grab the connector from the bottom and pull it carefully from its corresponding socket.



• Next, remove the piece of electrical tape that is holding wires into the casing connecting to the power adapter.



- The surrounding speaker component (the black box) around the power inlet needs to be removed.
- Use the TR 10 screwdriver to remove the four screws.
- Disconnect the speaker from behind the logic board by carefully pulling at the plastic end of the cable.
- Remove the speaker.



- Now that the middle speaker is out of the way, the EMI filter is easily accessible.
- Using tweezers, remove the silver tape that is at the top of the filter.



- The EMI filter is connected by three screws. Use the T10 screwdriver to remove them.
- The screw that holds in both the filter and a wire that is connected to it is a different size and should be kept identifiable from the other two screws.
- The green and yellow wire that was held in by the different screw is tucked behind another component. To get it out, squeeze it behind the black wire and the filter will be able to be removed from the casing.

#### Step 14 — Thunderbolt & MagSafe Cable



- Remove the two T10 screws from the metal plate holding the cable in place.
- Remove the metal plate.

# Step 15



• Carefully remove three cable connectors from the logic board by walking them out while holding them at the plastic end.

(*i*) From top to bottom these are:

- Fan control cable
- Temperature sensor cable
- Fan power cable

(i) In some cases there are only the top and bottom cables.



• Remove the seven Torx T10 screws from the logic board.



- Now you are able to reach behind the logic board to disconnect the cable running to the power board.
- (i) The connector has a small tab on the back that needs to be pressed for the connector to be pulled out.



- Carefully flip the logic board to the left using the remaining cables as a hinge to get access to the display port.
- Remove the two Torx T6 screws from the metal plate securing the display port connector.
- Remove the metal plate.

#### Step 19



- Unplug the Thunderbolt cable from the logic board.
- Thread the remaining Thunderbolt & MagSafe cable through the cutout in the rear case.

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