



Apple Thunderbolt Display EMI Filter Replacement

Replace the EMI Filter on your Apple Thunderbolt Display.

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INTRODUCTION

The EMI Filter is set into the device and is behind a few components. Because of this there are many wires surrounding it that are not part of this specific component. Make sure to carefully follow wires and components to make sure that the right parts are being removed.

TOOLS:

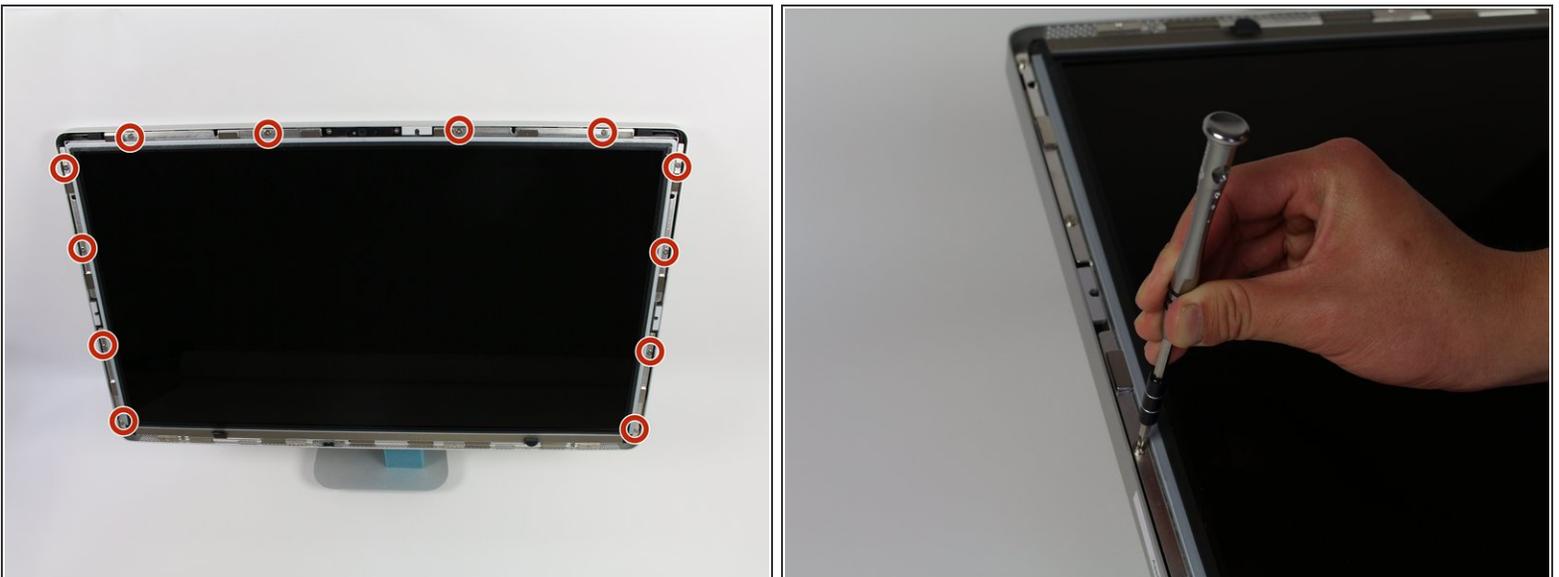
- [Heavy-Duty Suction Cups \(Pair\)](#) (1)
 - [T10 Torx Security Bit Screwdriver](#) (1)
 - [Tweezers](#) (1)
 - [iMac Service Wedge](#) (1)
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Step 1 — LCD



- Lay down the display with screen side up.
- ⓘ 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.

Step 2



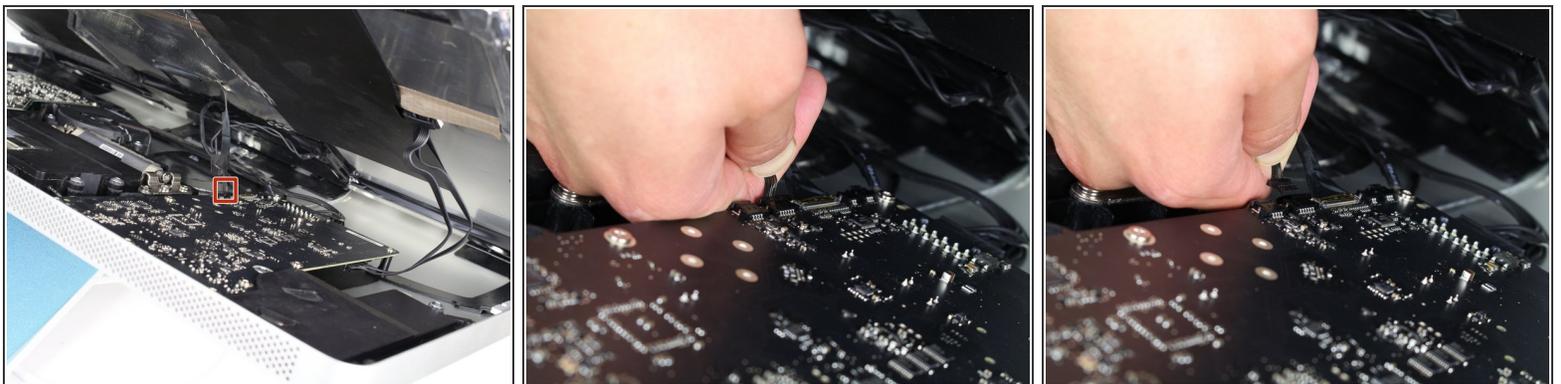
- Unscrew the 12 screws around the side edges and the top of the LCD with the TR 10 Screwdriver.

Step 3



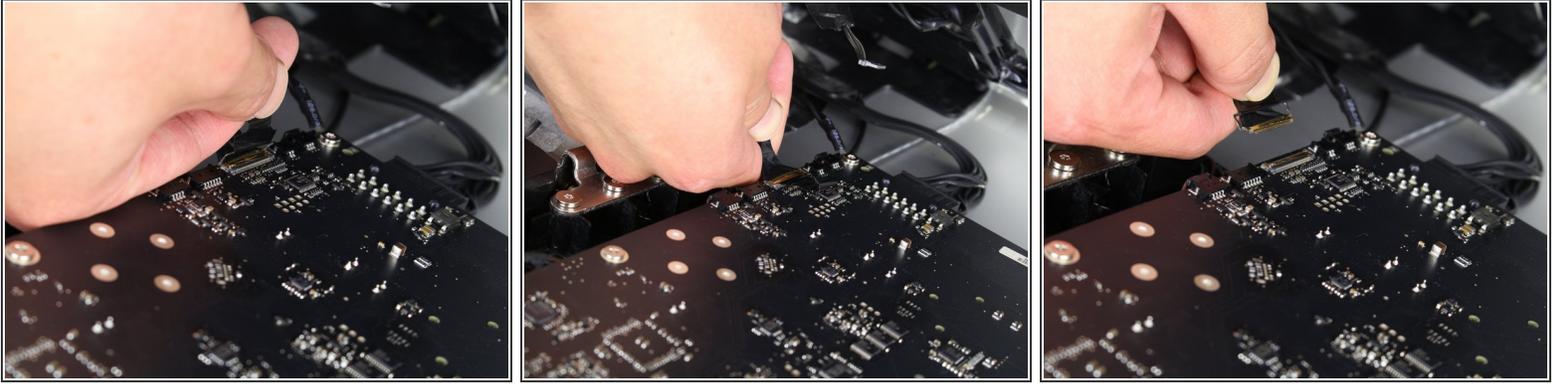
- Slowly lift the LCD out from its placement and tilt it upwards.
- ⓘ It can be very helpful to have an extra set of hands to hold the LCD up while you work with the cables underneath.
- ⚠ There are four wires that connect the LCD to the rest of the components. Make sure not to pull hard and break any of the wires.

Step 4



- 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.

Step 5



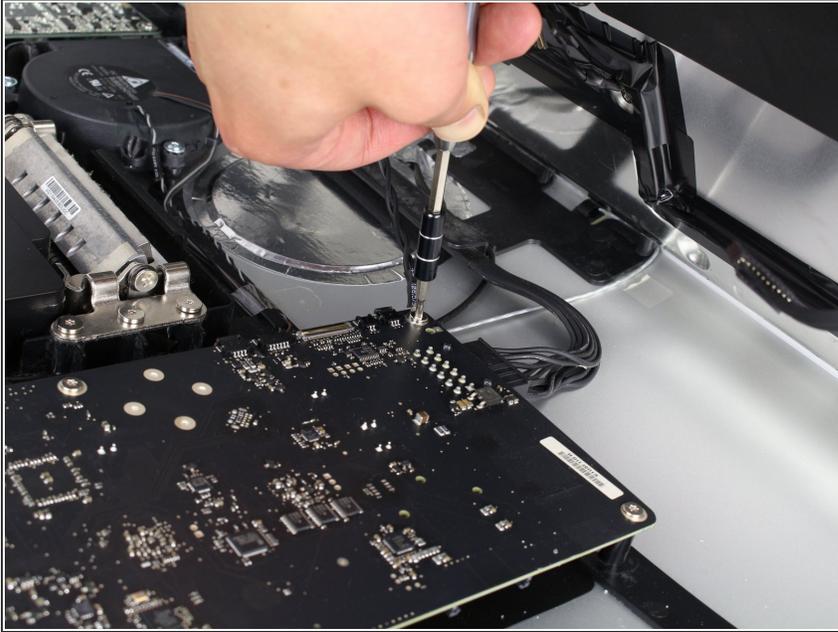
- For the next connector, which is right next to the previous wire, there is a piece of tape attached to a metal bar.
- Flip the metal bar over using the tape as a handle.
- Next, grab onto the connector and slowly pull it from the socket in the logic board.

Step 6



- 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



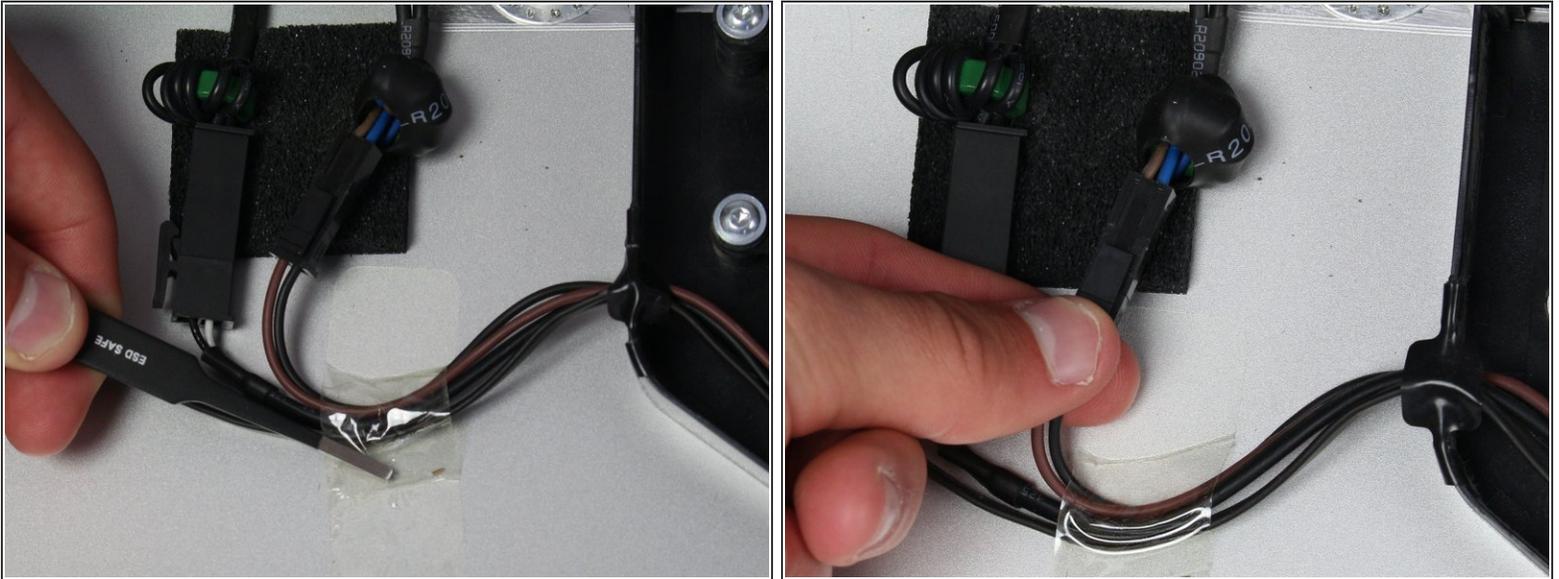
- For the last wire connecting to the LCD, use your TR 10 Screwdriver to remove the screw.

Step 8



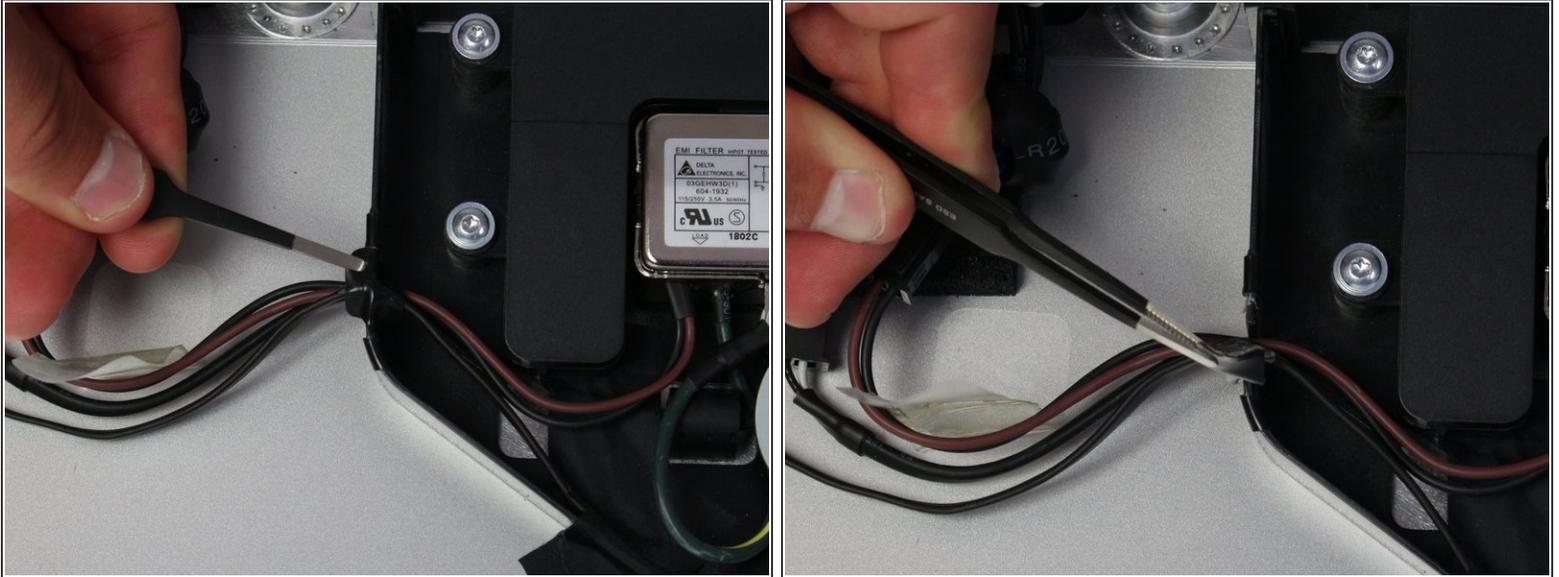
- The LCD has now been fully disconnected from the casing and can be repaired/replaced!

Step 9 — EMI Filter



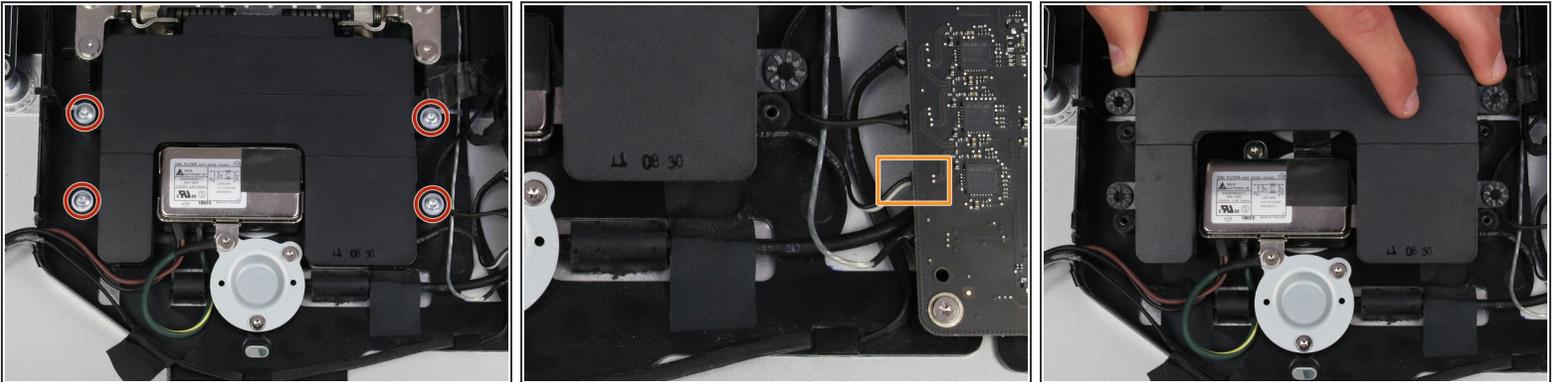
- You should now see the EMI filter right in the middle of the device (although held in by a few other components).
- Follow the wires coming out of the bottom of the Power adapter off to the left.
- Take the tweezers and remove the piece of tape holding the wires to the casing.
- There is only one connector 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.

Step 10



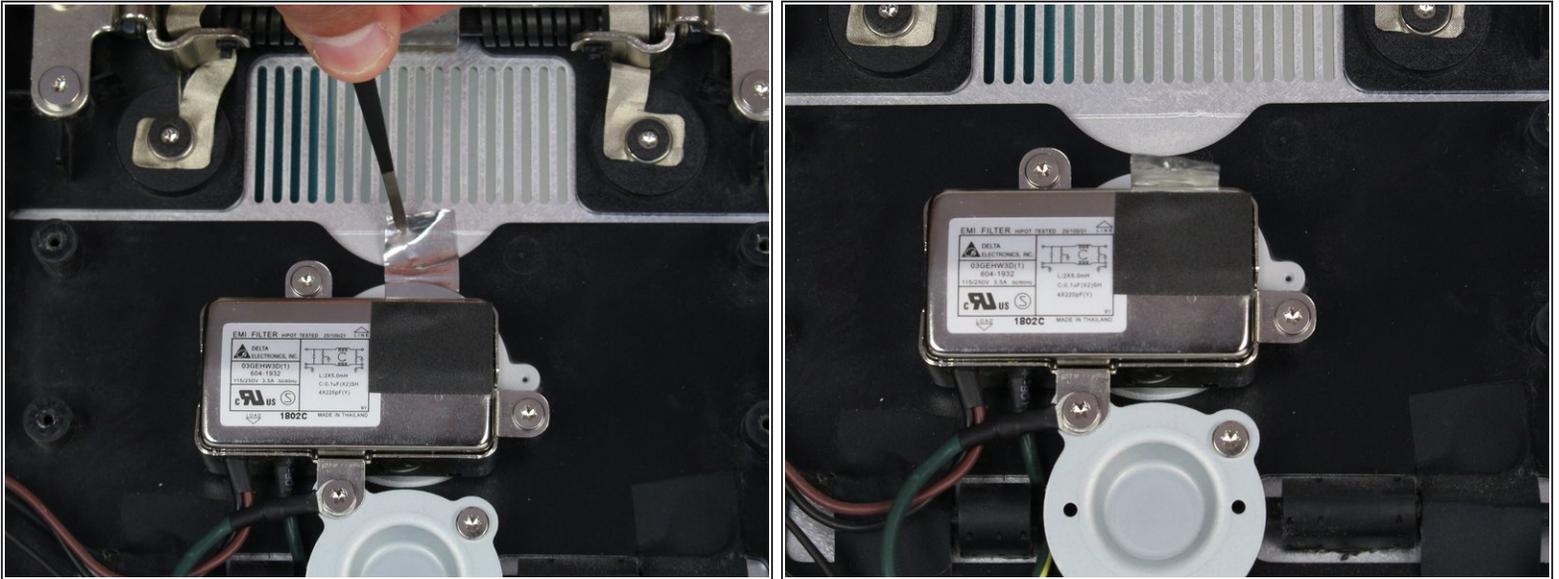
- Next, remove the piece of electrical tape that is holding wires into the casing connecting to the power adapter.

Step 11



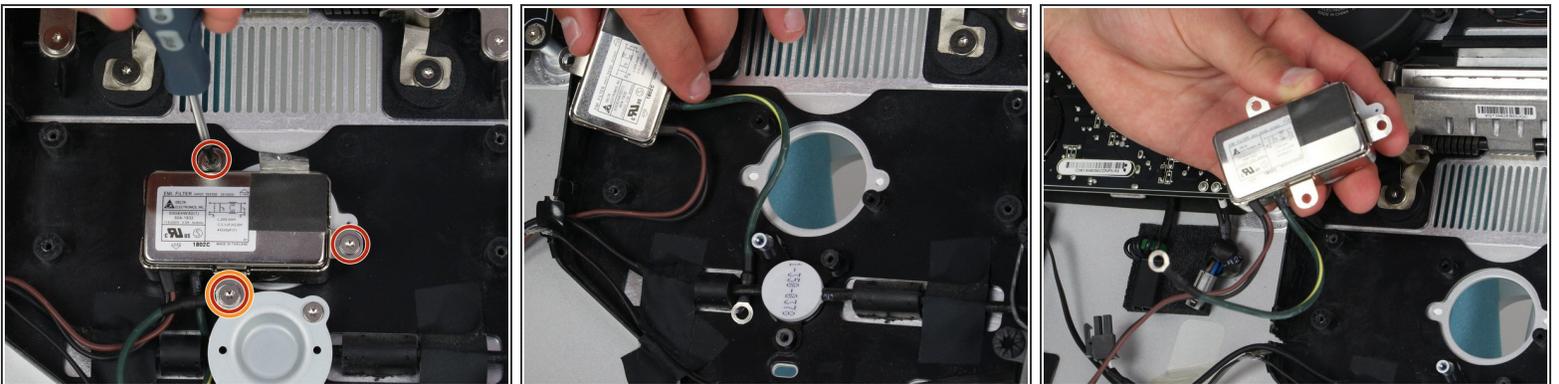
- The surrounding speaker component (the black box) around the power inlet needs to be removed.
- Use the TR 10 screwdriver to remove the four screws.
- Disconnect the speaker from behind the logic board by carefully pulling at the plastic end of the cable.
- Remove the speaker.

Step 12



- 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.

Step 13



- 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.

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