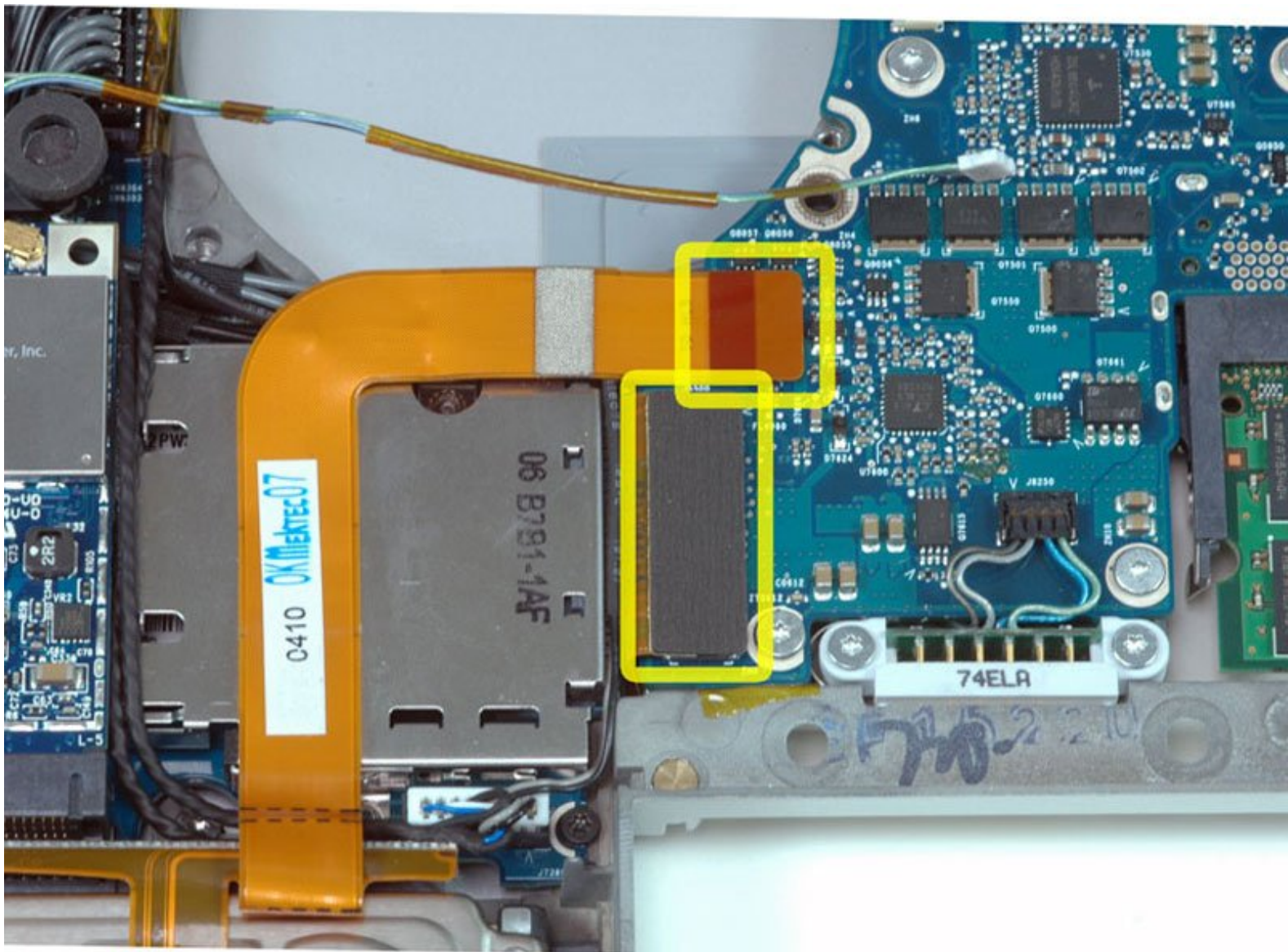




MacBook Pro 15" Core 2 Duo Model A1211

ExpressCard Cage Replacement

Written By: iRobot



INTRODUCTION

You can again use ExpressCard accessories by replacing a faulty ExpressCard cage.



TOOLS:

- [4mm Nut Driver](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [T6 Torx Screwdriver](#) (1)



PARTS:

- [MacBook Pro 15" \(Models A1150/A1211\) ExpressCard Cage](#) (1)

Step 1 — Battery



- Use your fingers to push both battery release tabs away from the battery, and lift the battery out of the computer.

Step 2 — RAM Shield



- Remove the three identical Phillips screws from the memory door.

Step 3



- Lift the memory door up enough to get a grip on it, and slide it toward you, pulling it away from the casing.

Step 4 — Upper Case



- Remove the two 2.8 mm Phillips screws in the battery compartment near the latch.

Step 5



- Remove the following 6 screws:
 - Two 10 mm T6 Torx screws on either side of the RAM slot.
 - Four 14.5 mm Phillips screws along the hinge.

Step 6



- Remove the four 3.2 mm Phillips screws on the port side of the computer.

Step 7



- Rotate the computer 90 degrees and remove the two 3.2 mm Phillips screws from the rear of the computer.

Step 8



- Rotate the computer 90 degrees again and remove the four 3.2 mm Phillips screws from the side of the computer.

Step 9



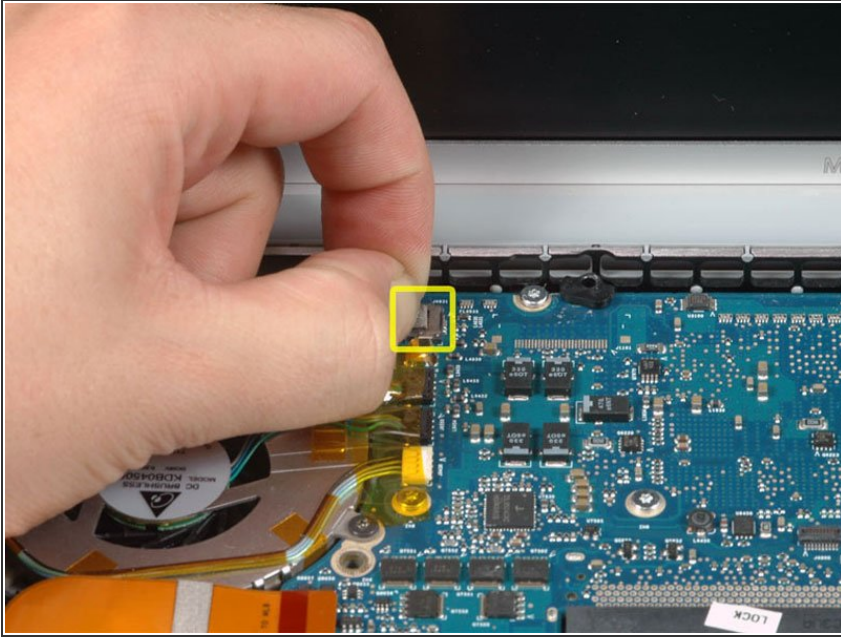
- ❗ Do not yank the upper case off quickly. The case is attached to the logic board via a ribbon cable.
- Lift up at the rear of the case and work your fingers along the sides, freeing the case as you go. Once you have freed the sides, you may need to rock the case up and down to free the front of the upper case (there are some hidden plastic clips that need to be clicked off).

Step 10



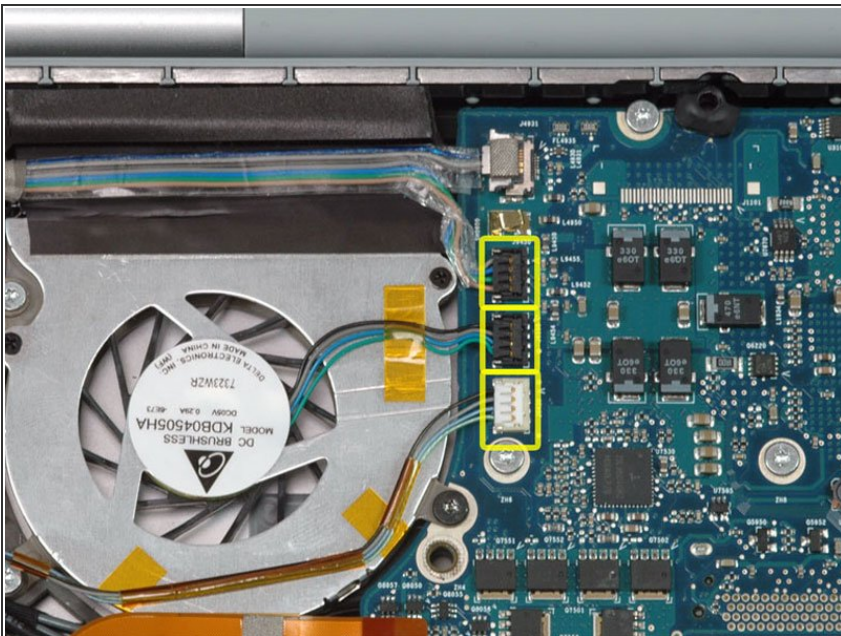
- Disconnect the trackpad and keyboard ribbon cable from the logic board, removing tape as necessary.
- Remove the upper case.

Step 11 — Left Fan



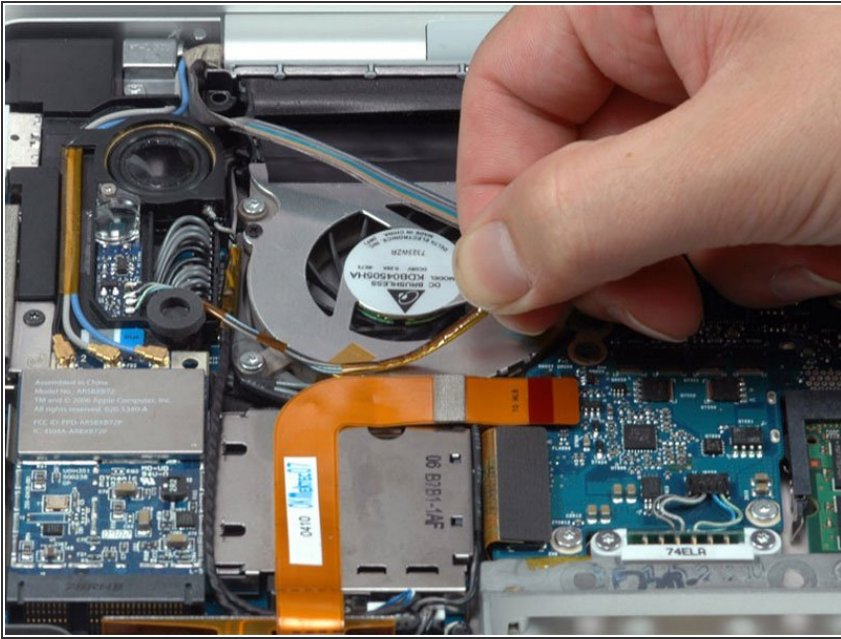
- Disconnect the iSight cable from the logic board by sliding the cable to the left and out of its connector.

Step 12



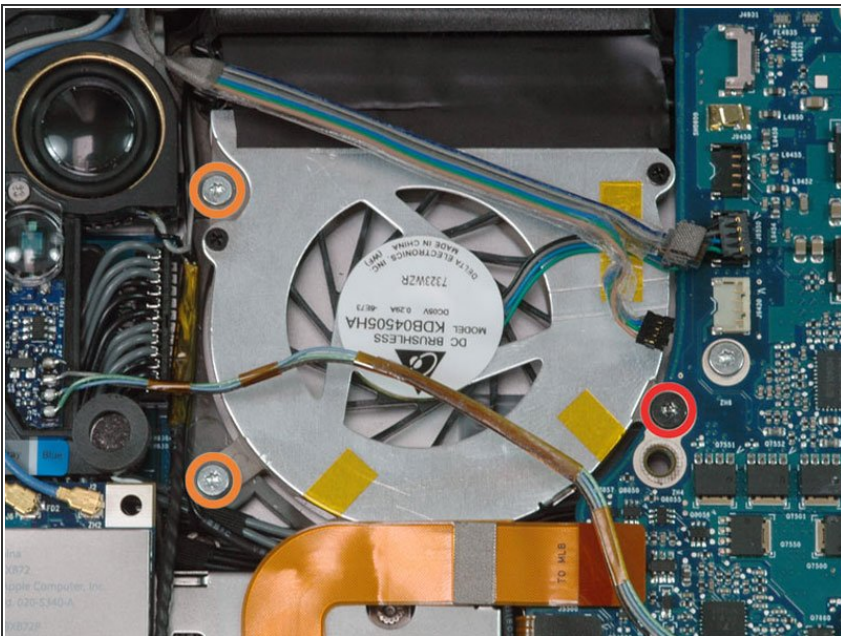
- Disconnect the inverter, left fan, and left ambient light sensor cables by placing a spudger beneath each cable and lifting up.

Step 13



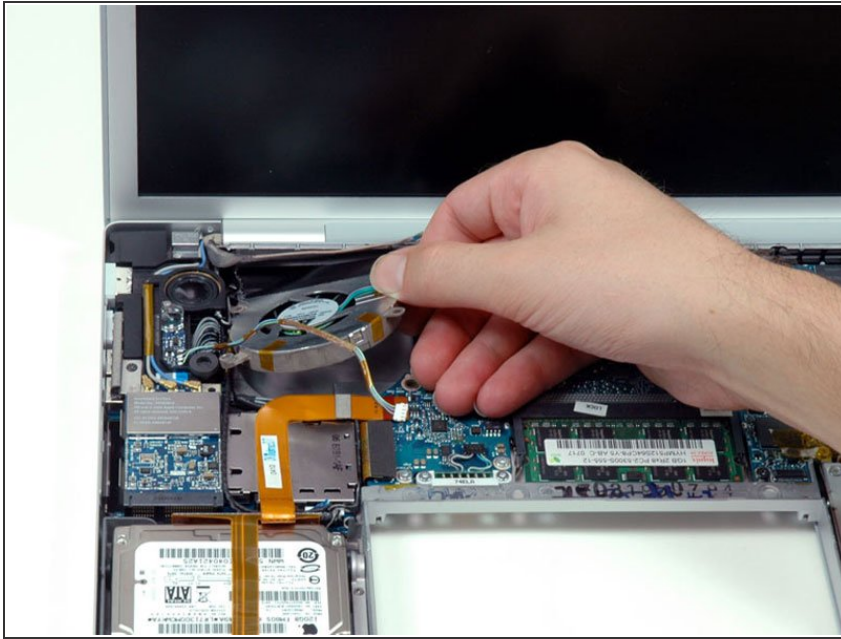
- Peel up the left ambient light sensor cable from above the left fan, removing tape as necessary.

Step 14



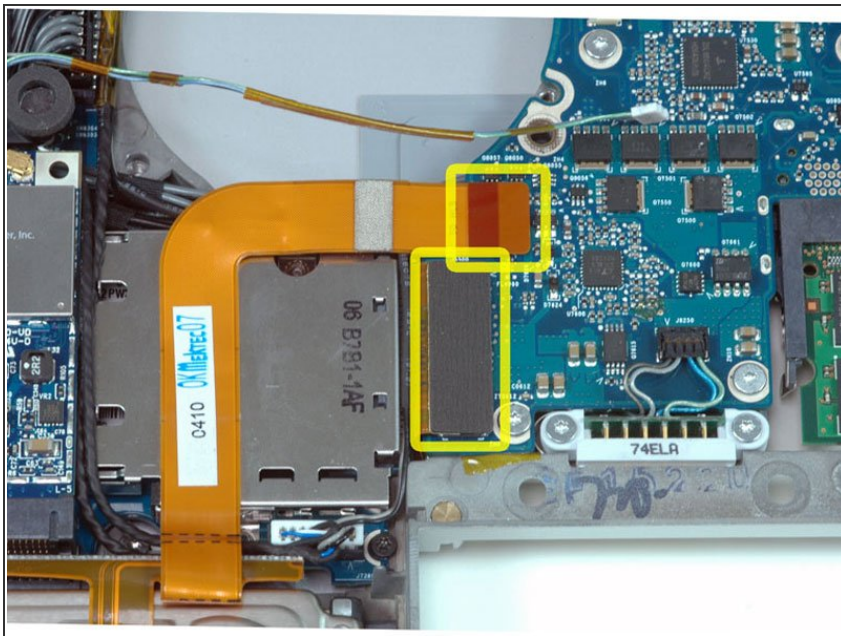
- Remove the following 3 screws:
 - One 6.2 mm black T6 Torx screw from the right side of the fan.
 - Two 9.4 mm silver T6 Torx screws from the left side of the fan.

Step 15



- Lift the left fan up and carefully peel up the tape securing the fan to the heat sink as you go.

Step 16 — ExpressCard Cage



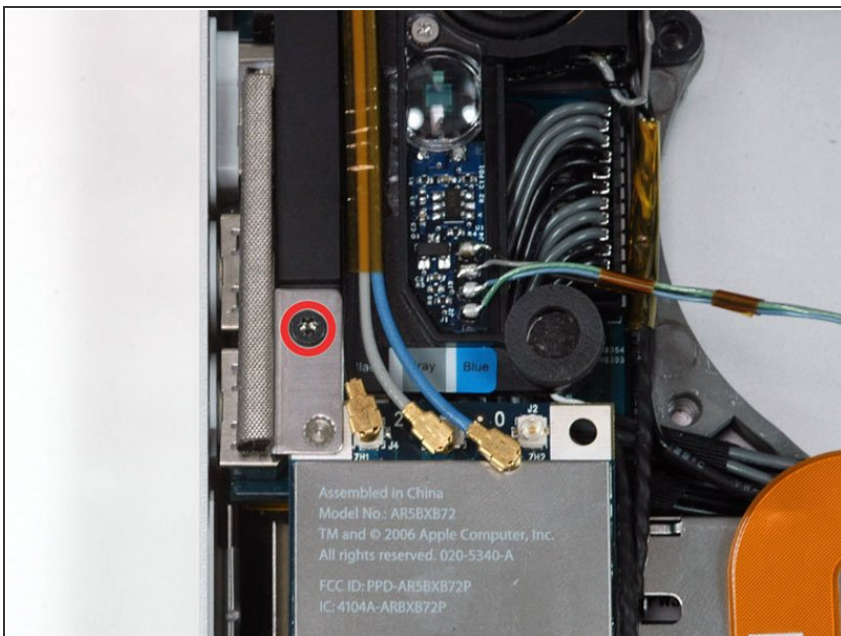
- Disconnect the hard drive and ExpressCard connectors from the left side of the logic board.

Step 17



- Disconnect the three antenna cables attached to the Airport Extreme card.
- ★ Apple was kind enough to include a label showing where each color antenna cable plugs in - just make sure to look at this when reconnecting the antenna cables.

Step 18



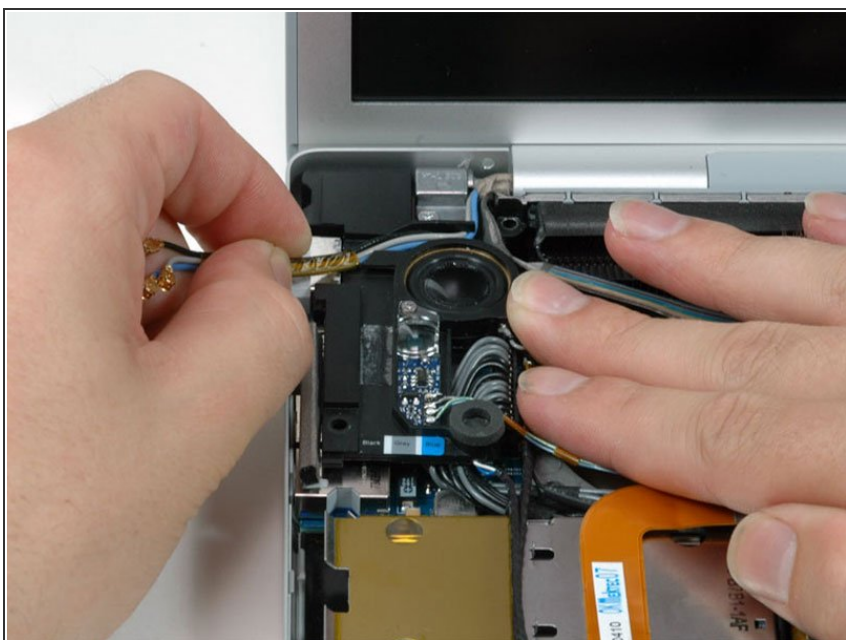
- Remove the single black T6 Torx screw located just above the Airport Extreme card.

Step 19



- Lift the Airport Extreme card up and slide it out of its connector.

Step 20



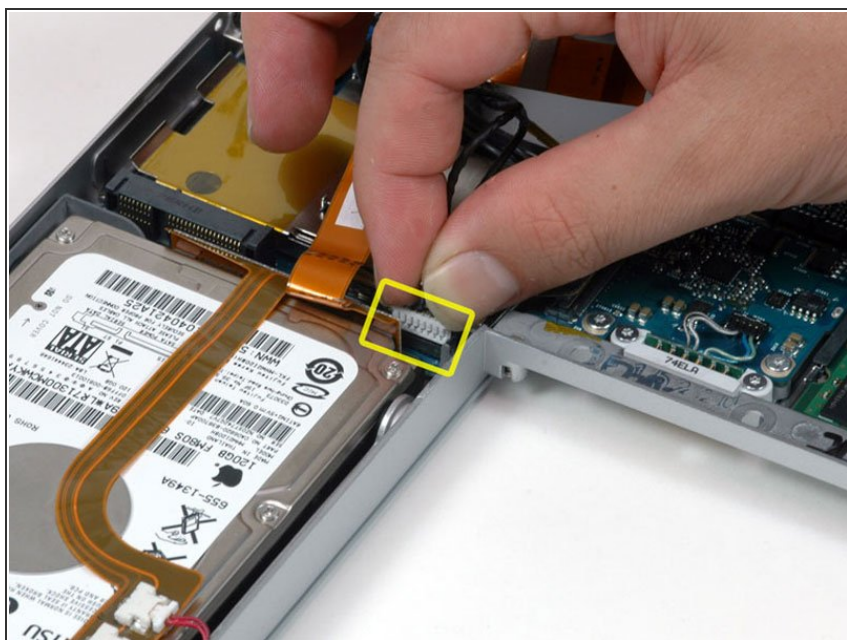
- Deroute the Airport antenna cables from their channel in the left speaker.

Step 21



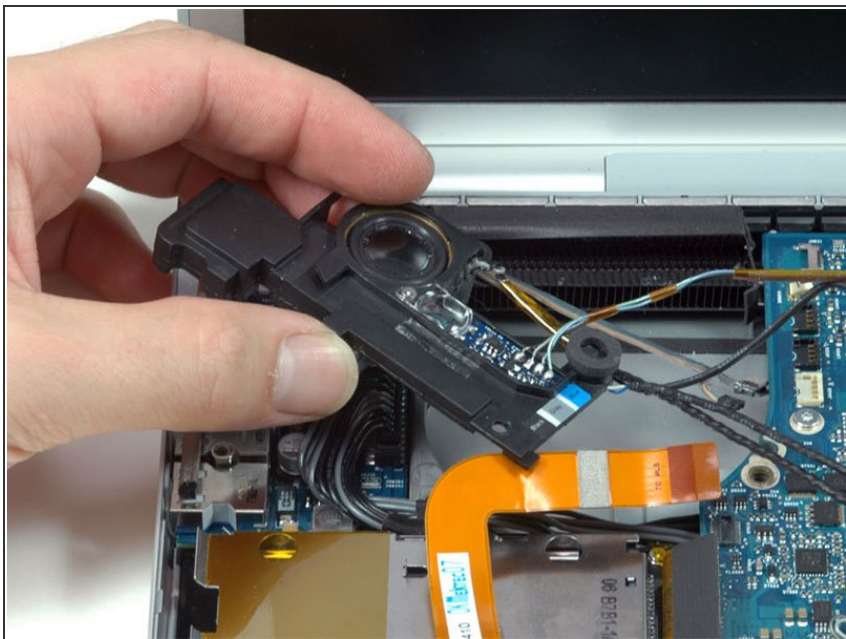
- Peel up the orange hard drive cable from above the ExpressCard cage.

Step 22



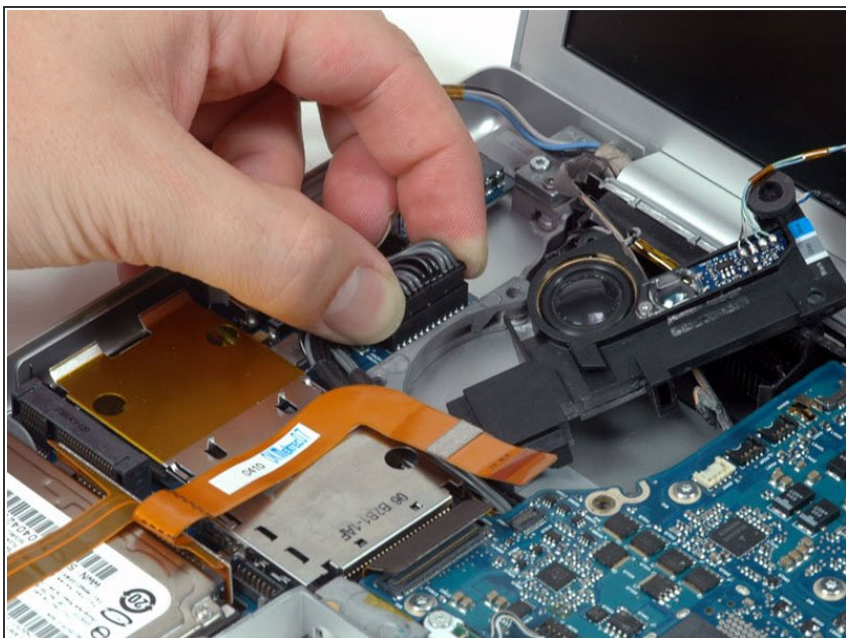
- Disconnect the speaker cable from the corner of the left I/O board.

Step 23



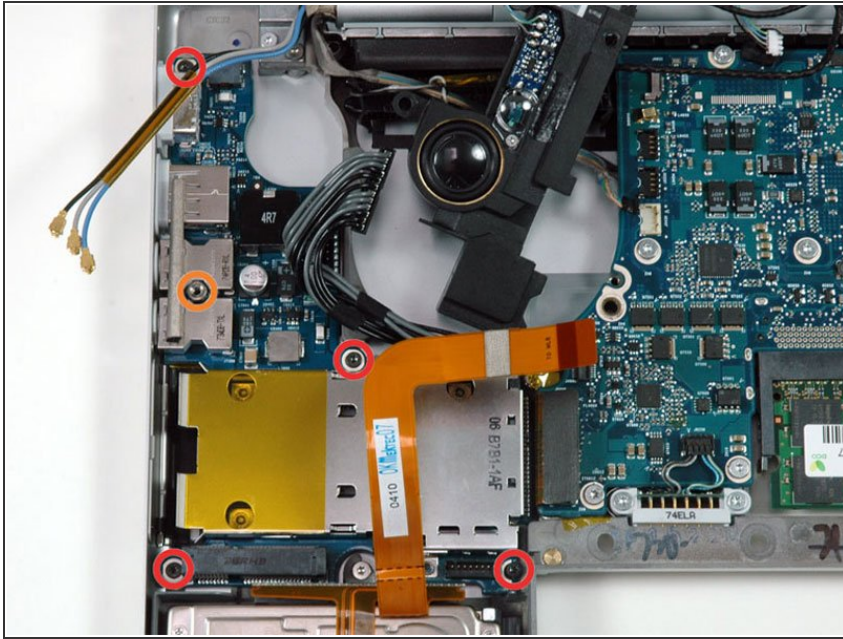
- Lift the left speaker assembly out of its housing and place it in the area previously occupied by the left fan.

Step 24



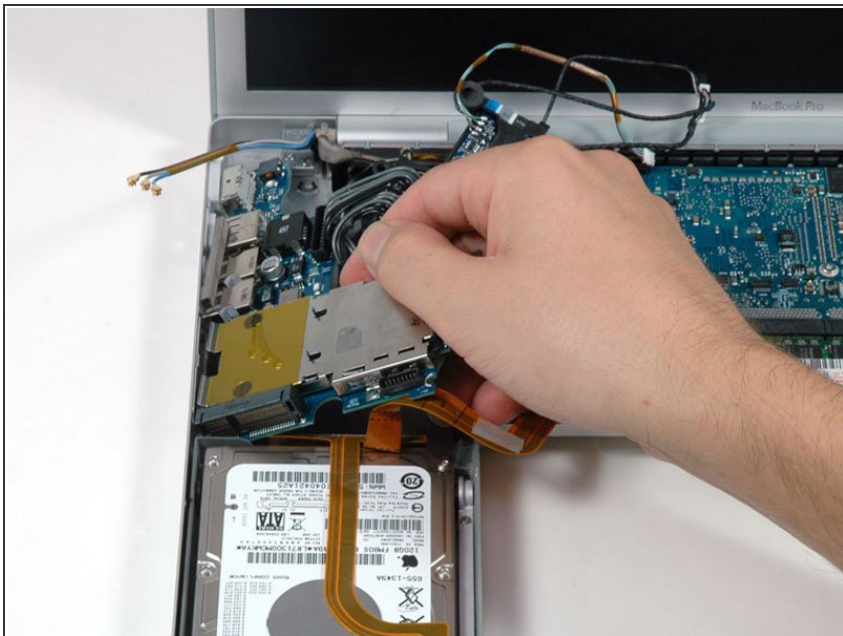
- Disconnect the large gray and black power cable from the left I/O board.

Step 25



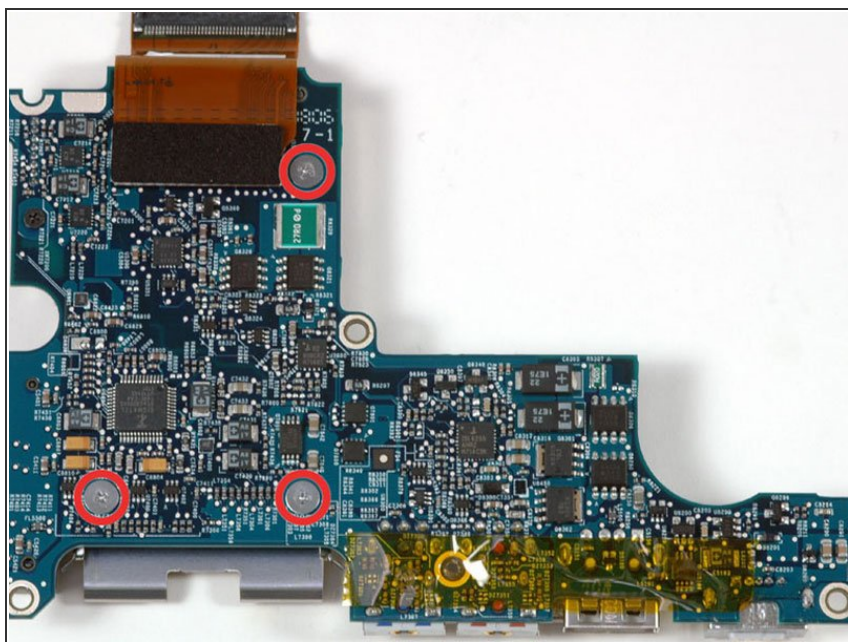
- Remove the following 5 screws/standoffs:
 - Four black T6 Torx screws securing the left I/O board to the lower case.
 - One 4 mm standoff located between the audio jacks.

Step 26



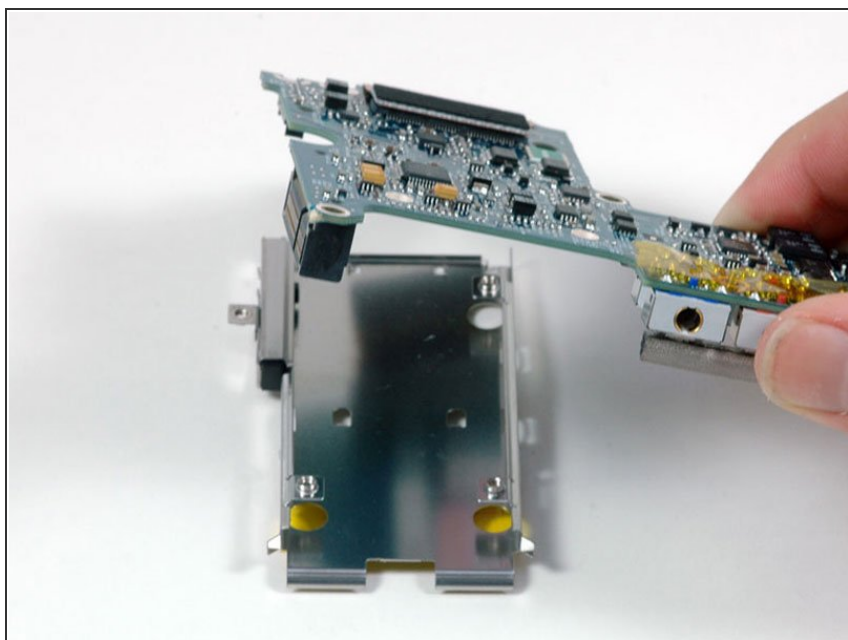
- Lift up the right side of the left I/O board and slide it out of the computer.

Step 27



- Remove the three silver Phillips screws securing the ExpressCard cage to the left I/O board.

Step 28



- Lift the left I/O board off the ExpressCard cage.

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