



Installing PlayStation 3 Motherboard

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TOOLS:

- [Arctic Silver Thermal Paste \(1\)](#)
- [Phillips #0 Screwdriver \(1\)](#)
- [Phillips #1 Screwdriver \(1\)](#)
- [Spudger \(1\)](#)
- [T10 Torx Screwdriver \(1\)](#)

SUMMARY

Use this guide to replace a blown motherboard. Replacing the motherboard requires removal of nearly every component in your PS3.

Step 1 — Smart Plate



- Use the tip of a spudger to remove the black rubber screw cover from the side of the PS3.

Step 2



- Remove the single 8.5 mm T10 Security Torx screw from the smart plate.
- This screw is a T10 Security Torx screw



Step 3



- Pull the smart plate toward the hard drive bay, then lift it off the body of the PS3.

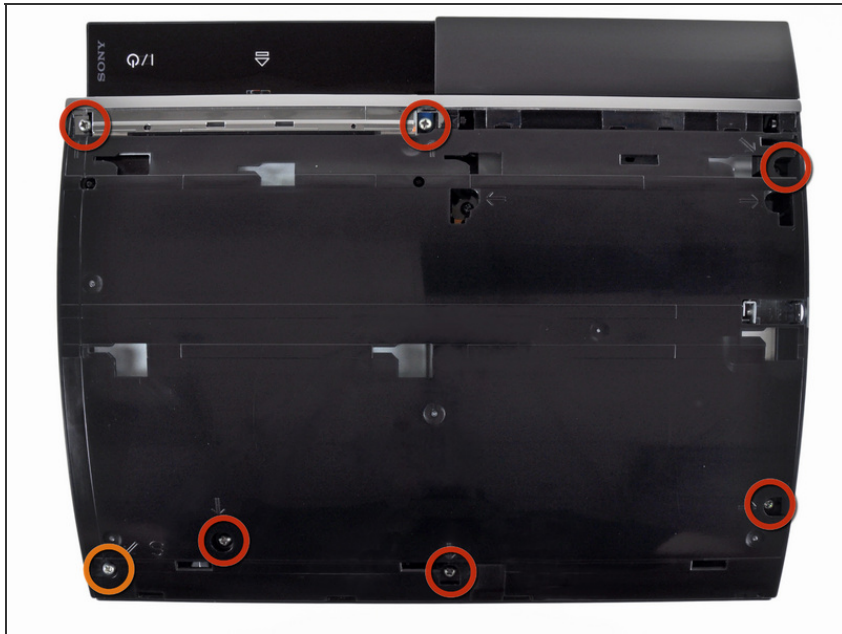
Step 4



- Be sure to keep track of the small metal bracket loosely held in the top cover.



Step 5 — Top Cover



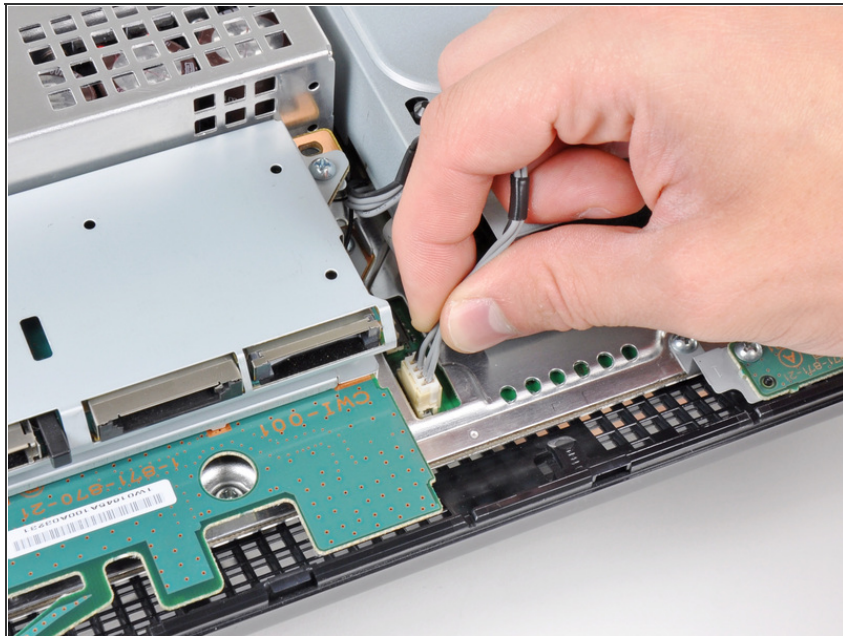
- Remove the following seven screws:
 - Six 52 mm Phillips screws
 - One 30 mm Phillips screw

Step 6



- Lift the top cover from its rear edge and rotate it toward the front of the PS3.
- Remove the top cover.

Step 7 — Blu-ray Disc Drive



- Disconnect the Blu-ray power cable from the motherboard.
- Pull the connector straight up and out of its socket.

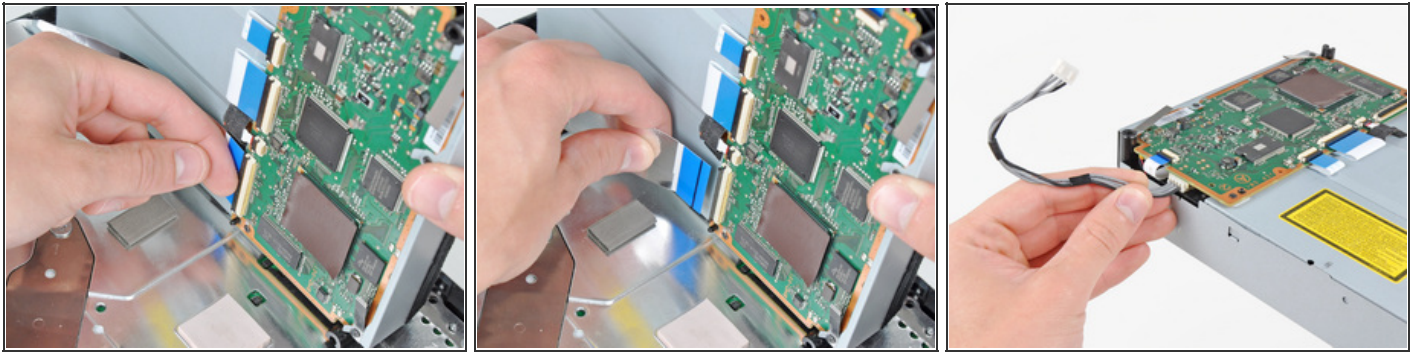


Step 8



- Lift the Blu-ray drive from the edge nearest the power supply and rotate it away from the chassis enough to access its ribbon cable.

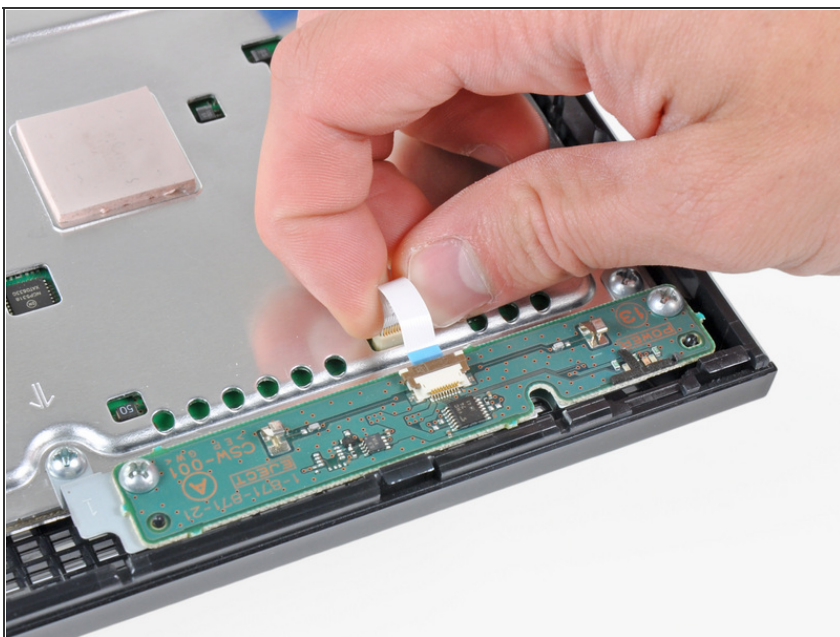
Step 9



- Use your fingernail to flip up the retaining flap on the Blu-ray ribbon cable socket.
- Be sure you are prying up on the retaining flap, **not** the socket itself.
- Pull the ribbon cable out of its socket.
- Remove the Blu-ray drive from the PS3.
- If replacing the Blu-ray drive, transfer the power cable to your new drive.

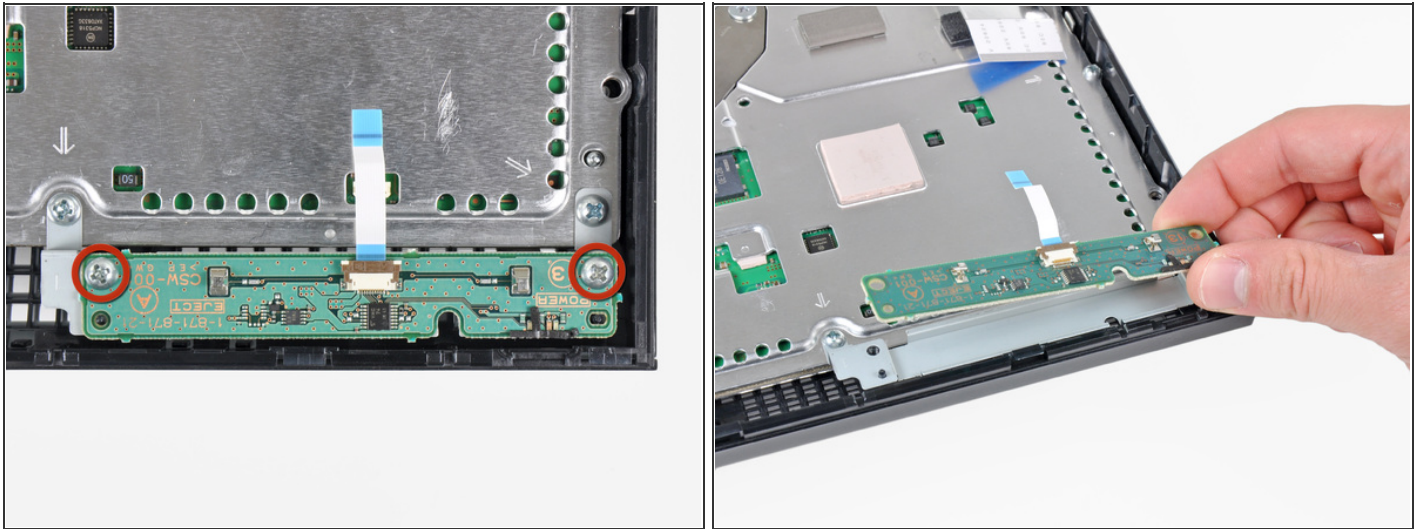


Step 10 — Motherboard Assembly



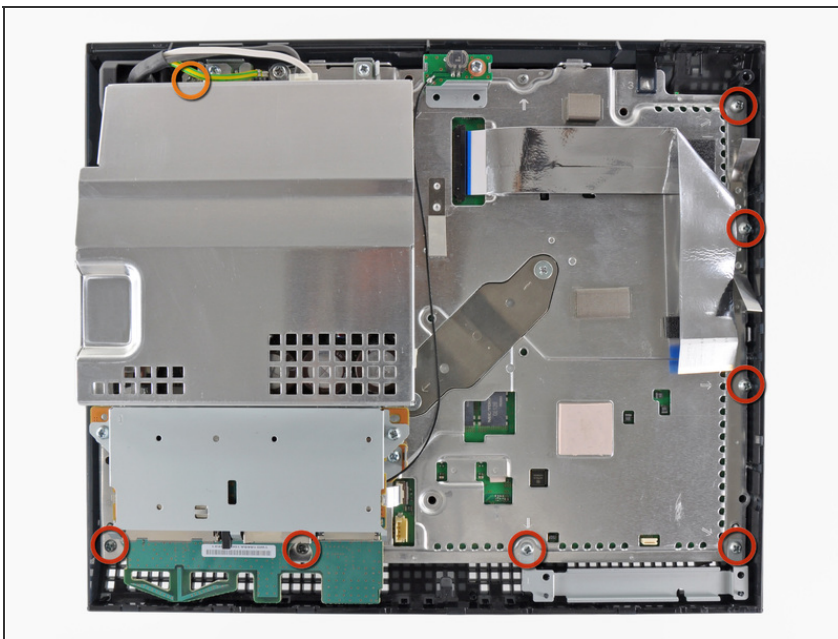
- Pull the control board ribbon cable straight up and out of its socket on the motherboard.

Step 11



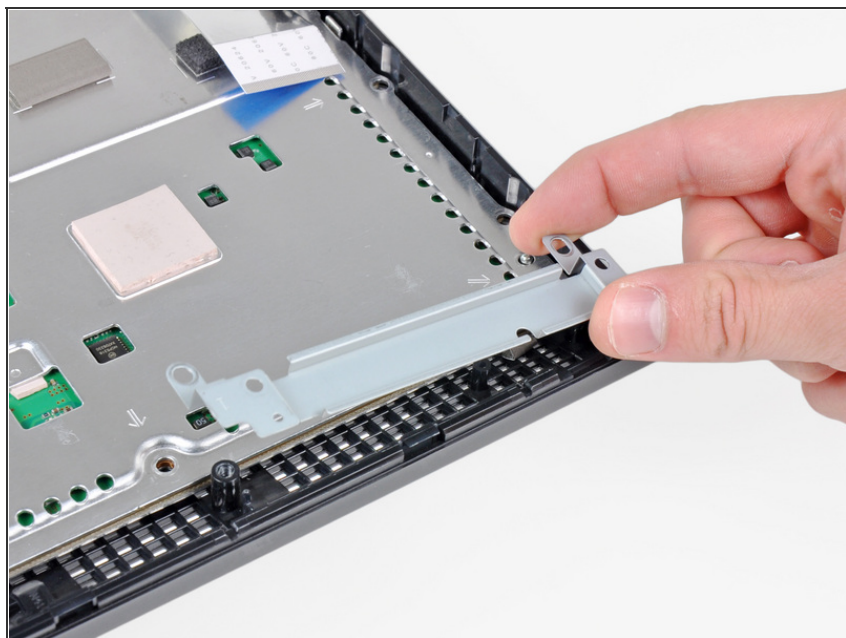
- Remove the two 12 mm Phillips screws securing the control board to the lower case.
- Remove the control board and its attached cable from the PS3.

Step 12



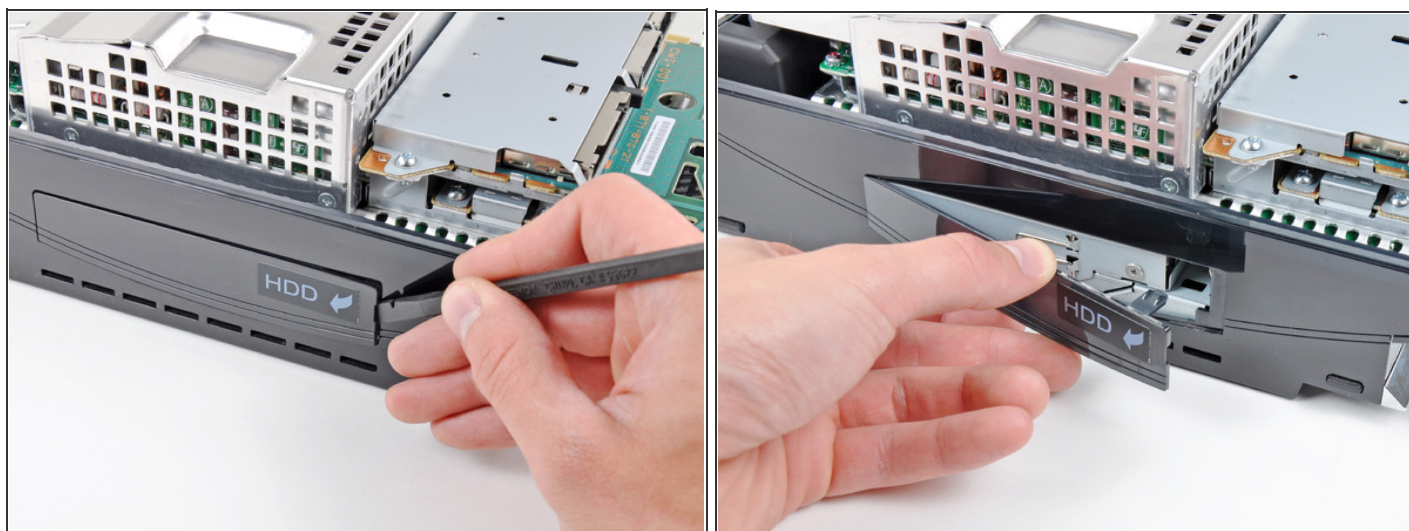
- Remove the following eight screws securing the motherboard assembly to the lower case:
 - Seven 12 mm Phillips screws
 - One 30 mm Phillips screw

Step 13



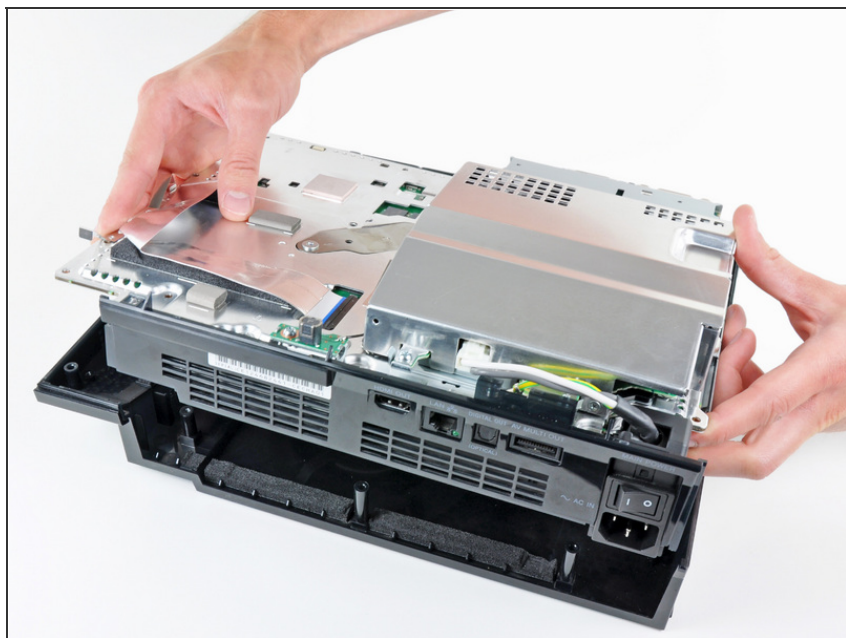
- Remove the control board bracket.

Step 14



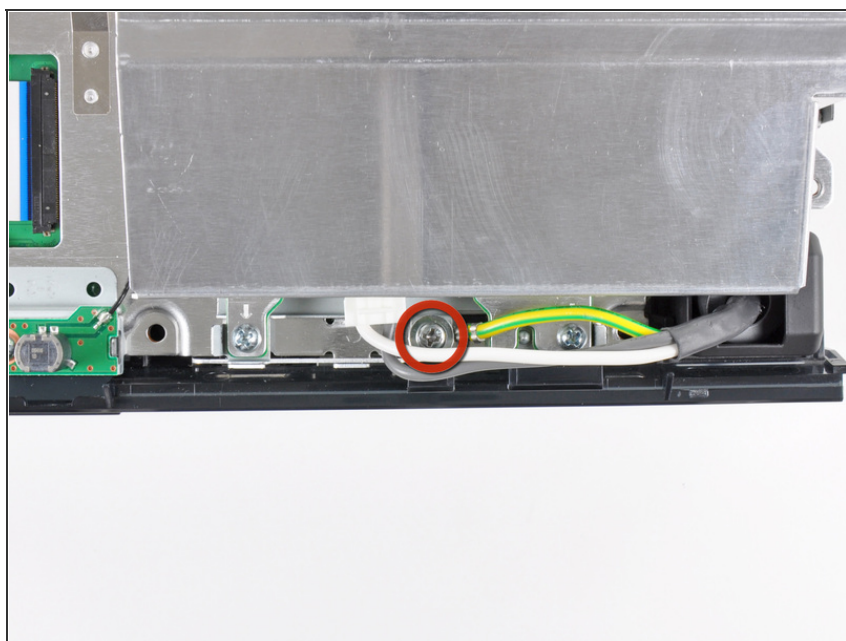
- Use the flat end of a spudger to pry the hard drive bay cover away from the lower case.
- Remove the hard drive bay cover.

Step 15



- Lift the motherboard assembly out of the lower case.

Step 16 — AC Inlet



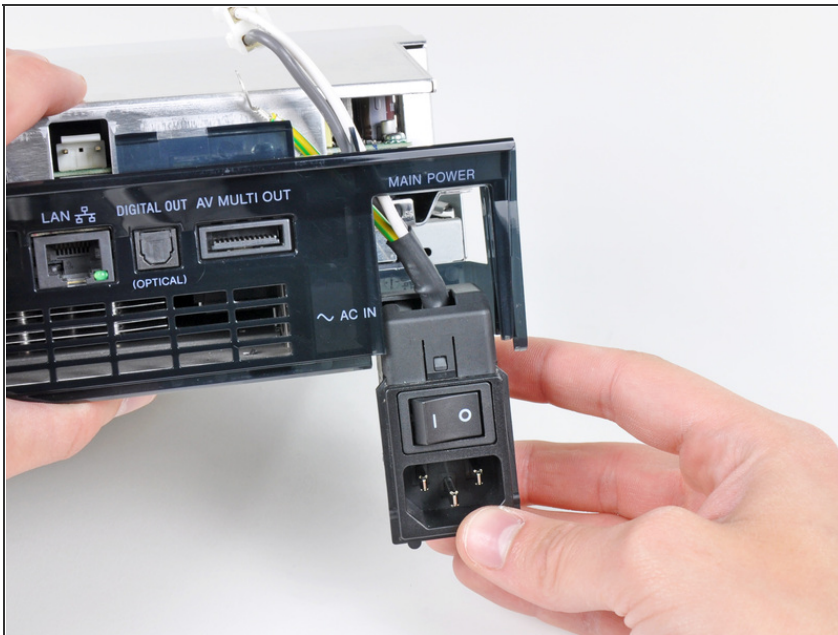
- Remove the 7.7 mm Phillips screw securing the ground strap to the chassis.

Step 17



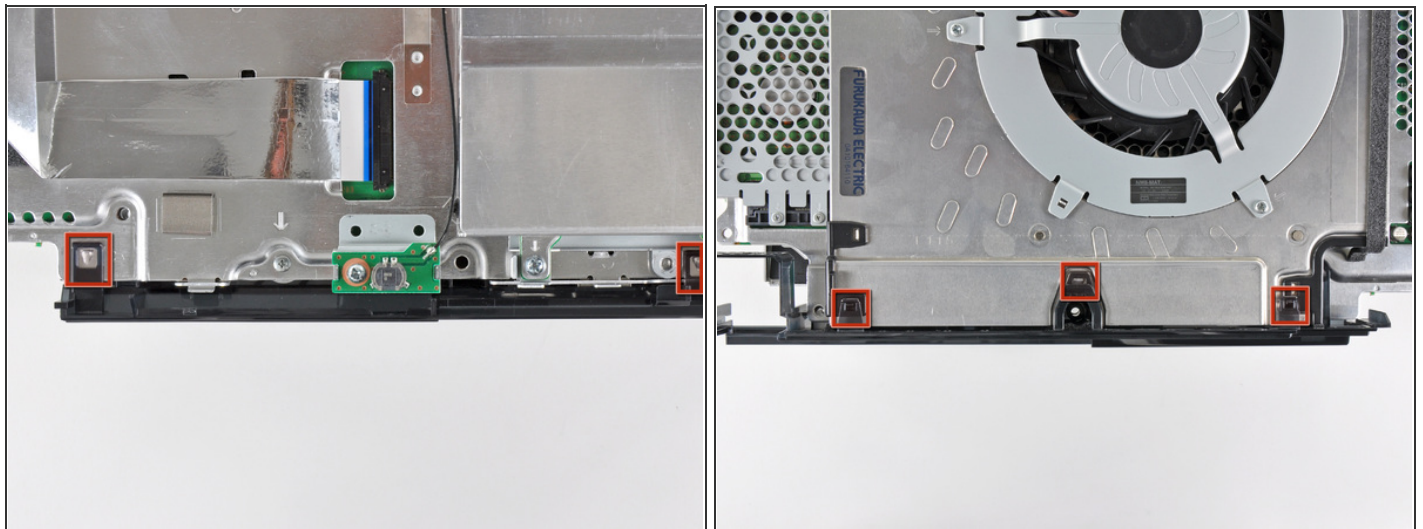
- Pull the AC-In cables slightly away from the rear cover for clearance to access the AC-In connector.
- While depressing its locking mechanism, pull the AC-In connector out of its socket on the power supply.

Step 18



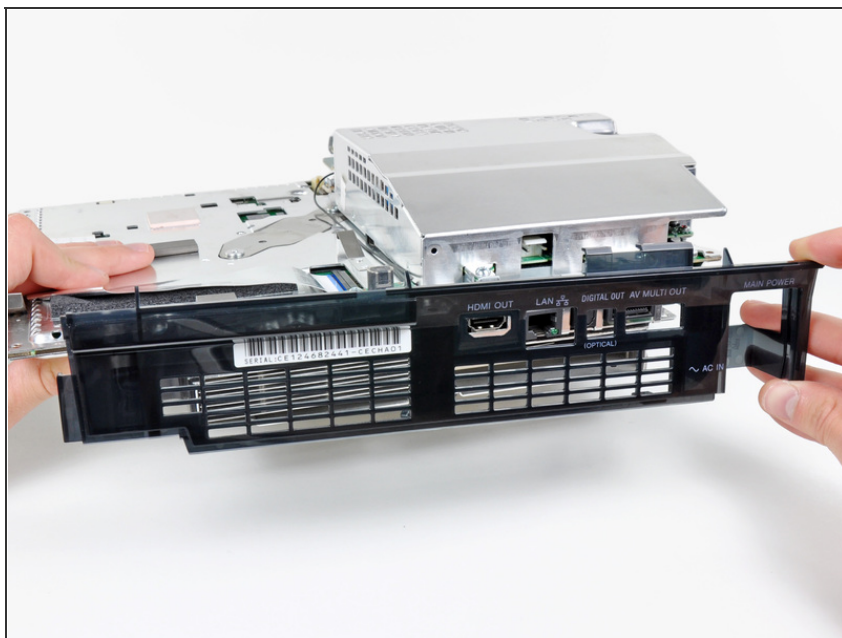
- Pull the AC inlet out from the bottom of the rear cover, minding any of its cables that may get caught.

Step 19 — Rear Cover



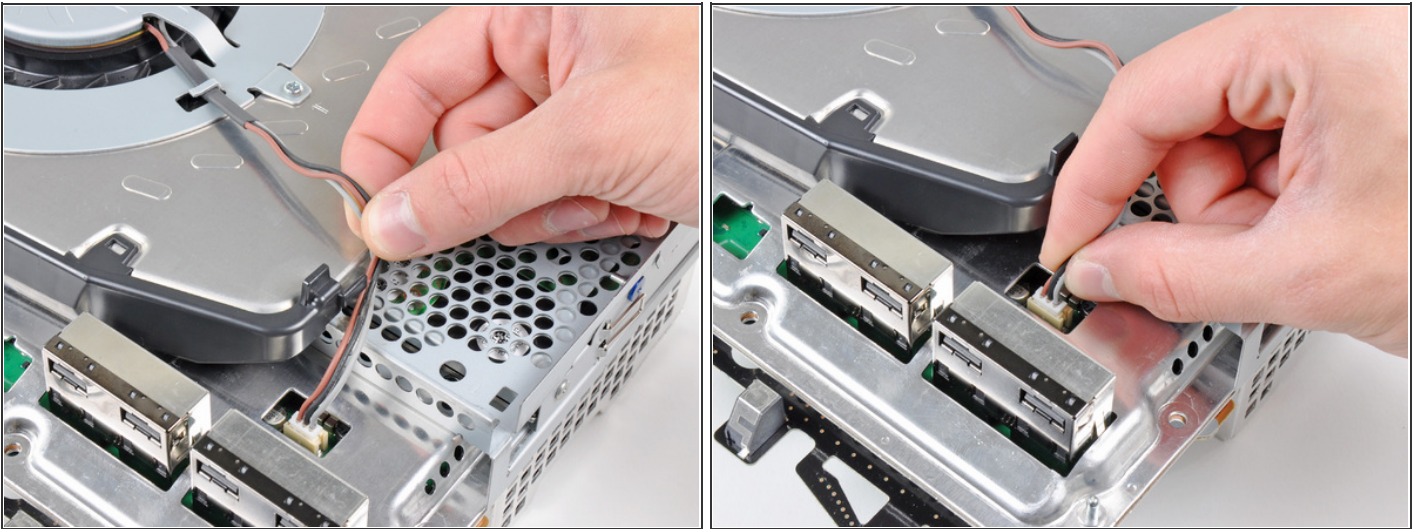
- While lightly pulling the rear cover away from the logic board assembly, use the flat end of a spudger to release the clips along the top and bottom edges of the rear cover.

Step 20



- Remove the rear cover from the logic board assembly.

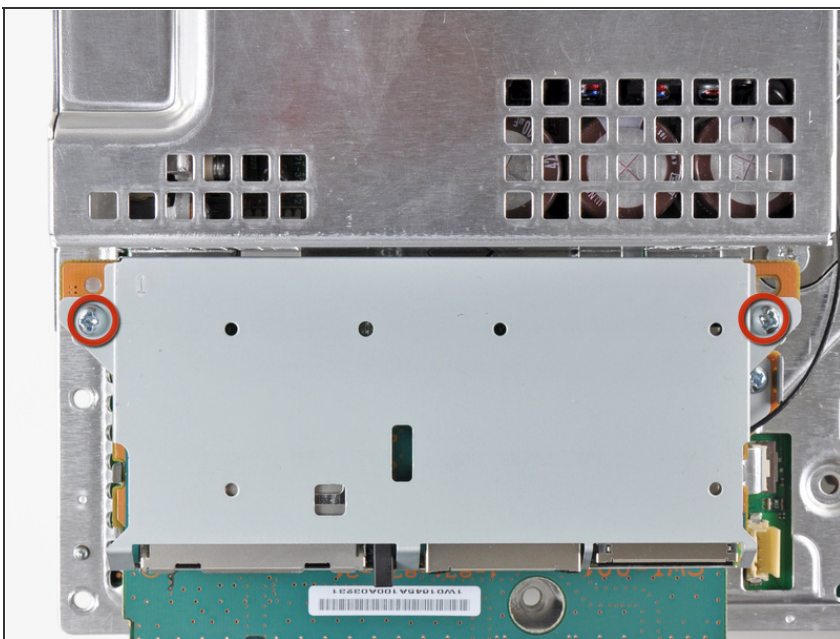
Step 21 — Heat Sink



- De-route the fan cables from the plastic finger molded into the heat sink.
- Disconnect the fan from the motherboard.
- Pull the connector straight up and out of its socket.

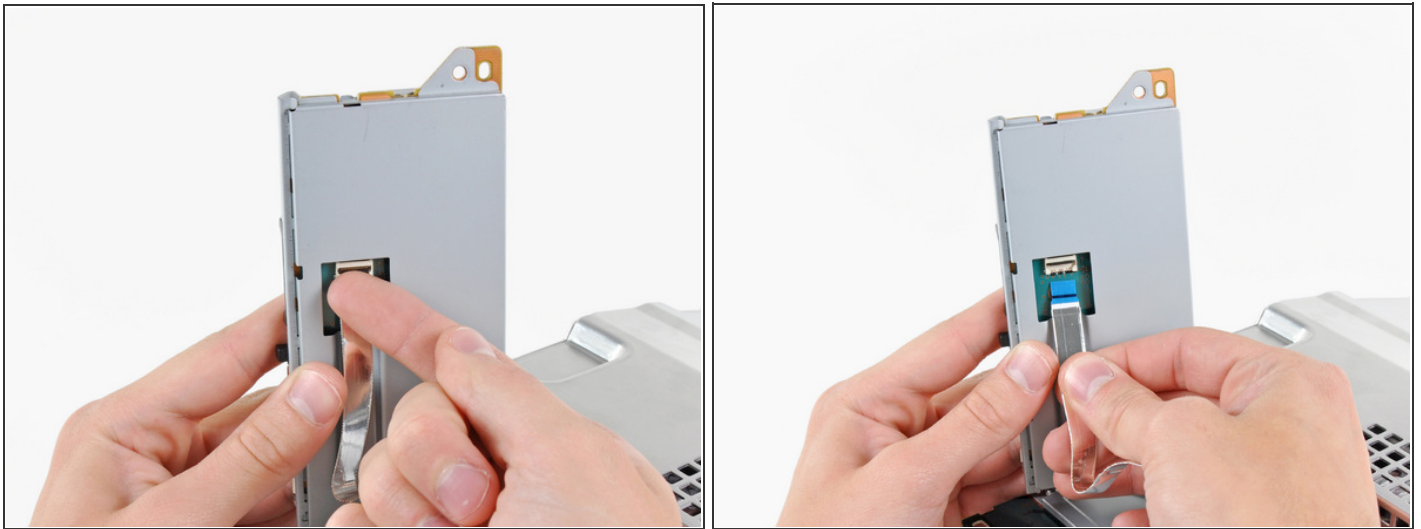


Step 22



- Remove the two 9 mm Phillips screws securing the memory card reader to the chassis.

Step 23



- Lift the memory card reader out of the PS3 enough to access its ribbon cable.
- Flip up the retaining flap on the memory card reader ribbon cable socket.
- Be sure you are prying up on the retaining flap, **not** the socket itself.
- Pull the ribbon cable out of its socket and remove the memory card reader.



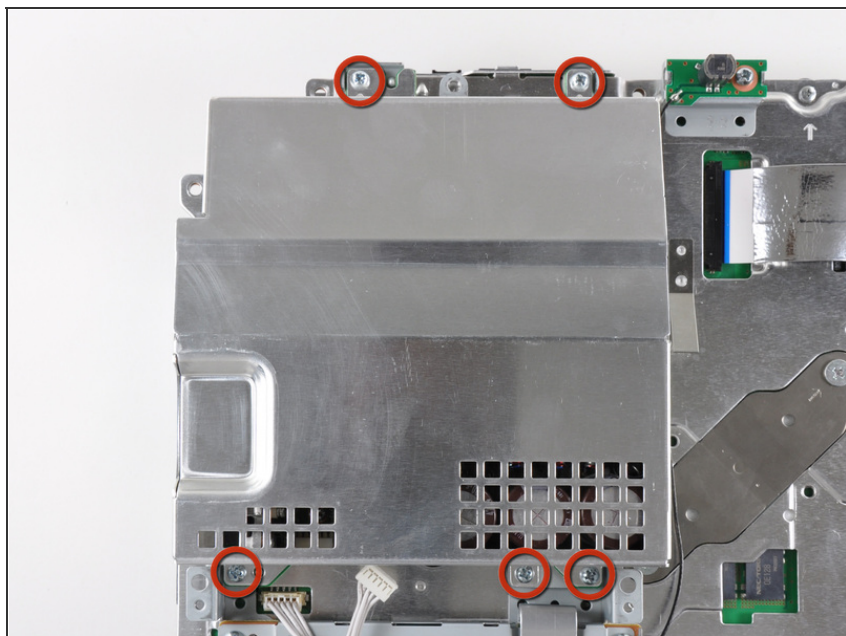
Step 24



- Disconnect the DC-In cables from the front of the heat sink.
- Pull the connector toward the front of the PS3.

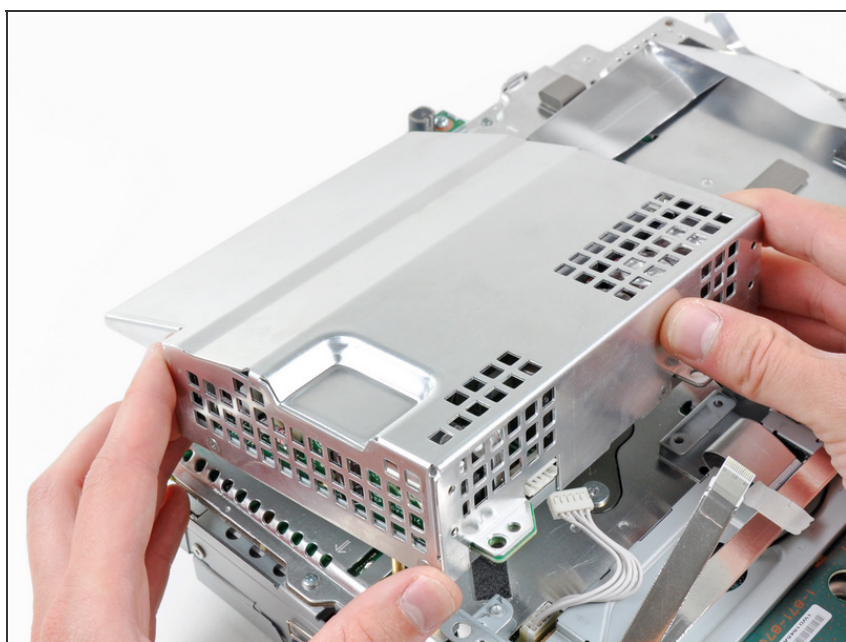


Step 25



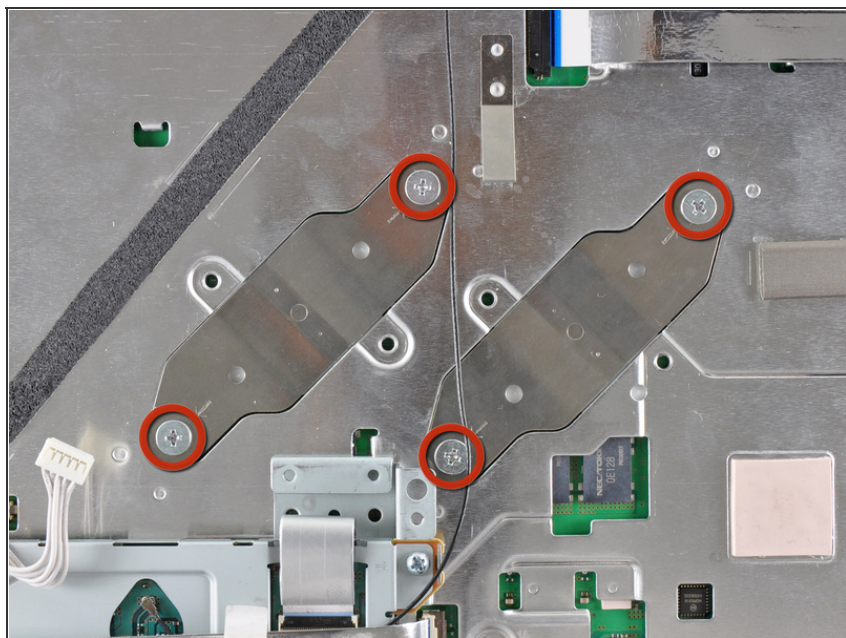
- Remove the five 9 mm Phillips screws securing the power supply to the chassis.

Step 26



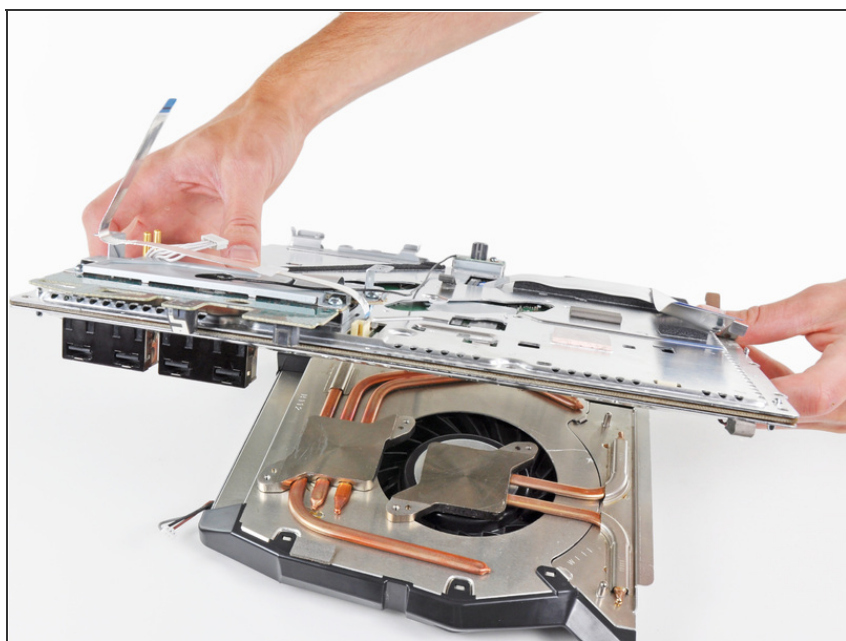
- Lift the power supply by its front edge to clear the two posts attached to the motherboard.
- Remove the power supply.



Step 27



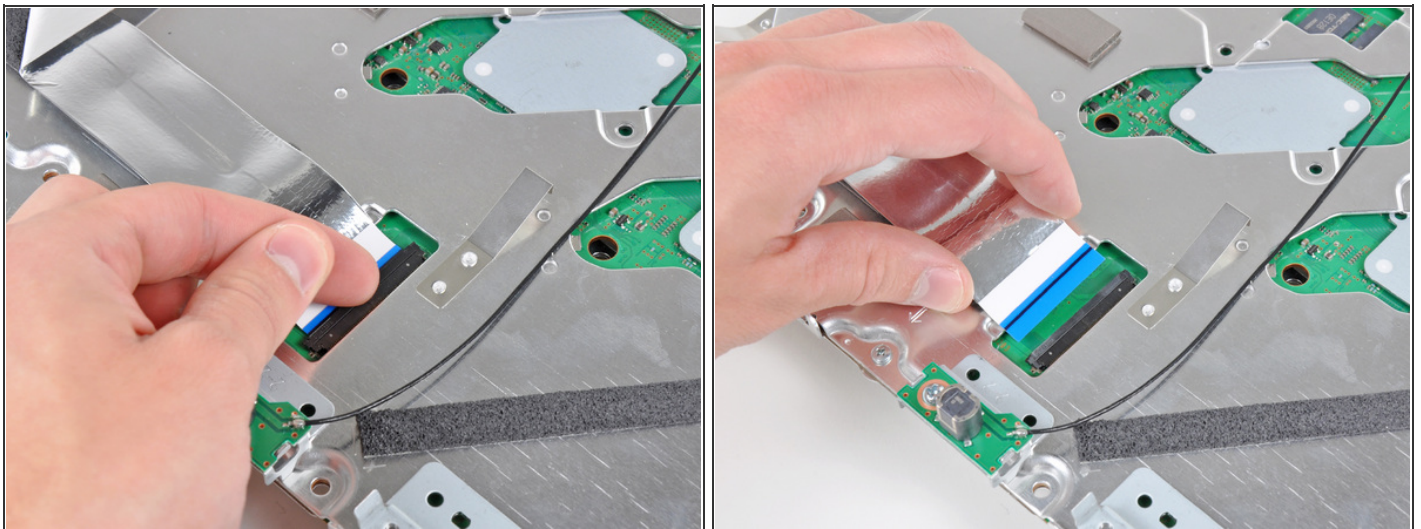
- Remove the four 16.5 mm shouldered Phillips screws securing the heat sink to the motherboard.
- Remove the two brackets held under the screws you just removed.

Step 28



- Lift the motherboard assembly off the heat sink.
- The heat sink may still be held in place by the thermal  paste. If this is the case, gently pry the heat sink away from the motherboard housing. Make sure to not bend the copper piping on the heat sink.
- Be sure to apply a new layer of thermal paste when reattaching the heat sink.
- Never applied thermal paste before? Our [thermal paste guide](#)  makes it easy.

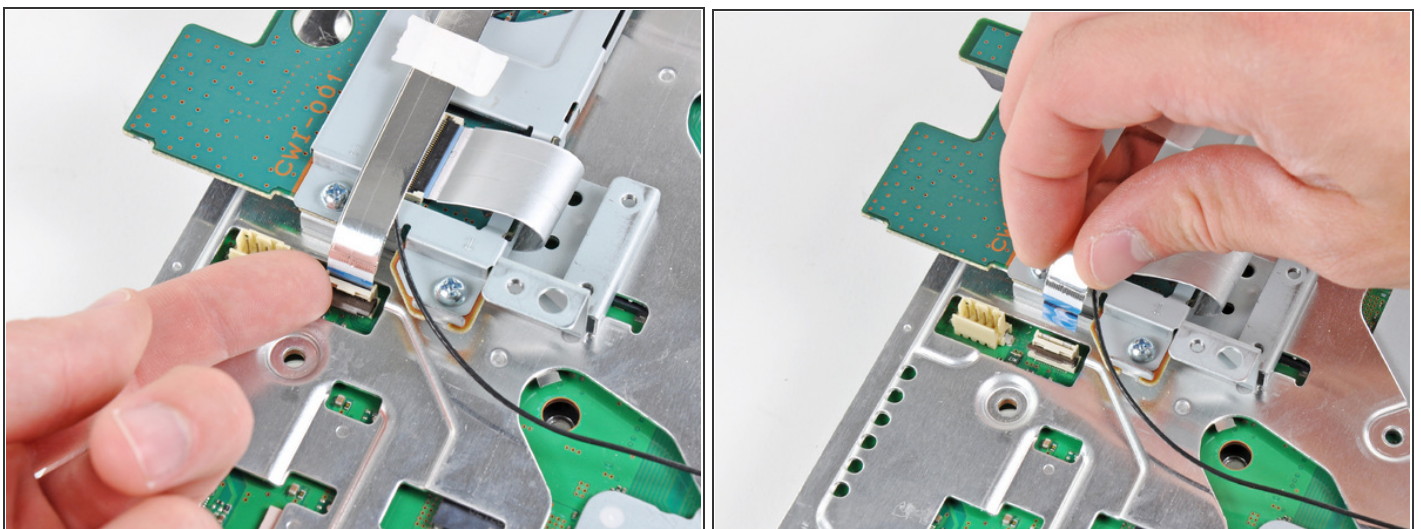
Step 29 — Motherboard



- Flip up the retaining flap on the Blu-ray ribbon cable socket.
- Be sure you are prying up on the retaining flap, **not** the socket itself.
- Remove the Blu-ray ribbon cable.

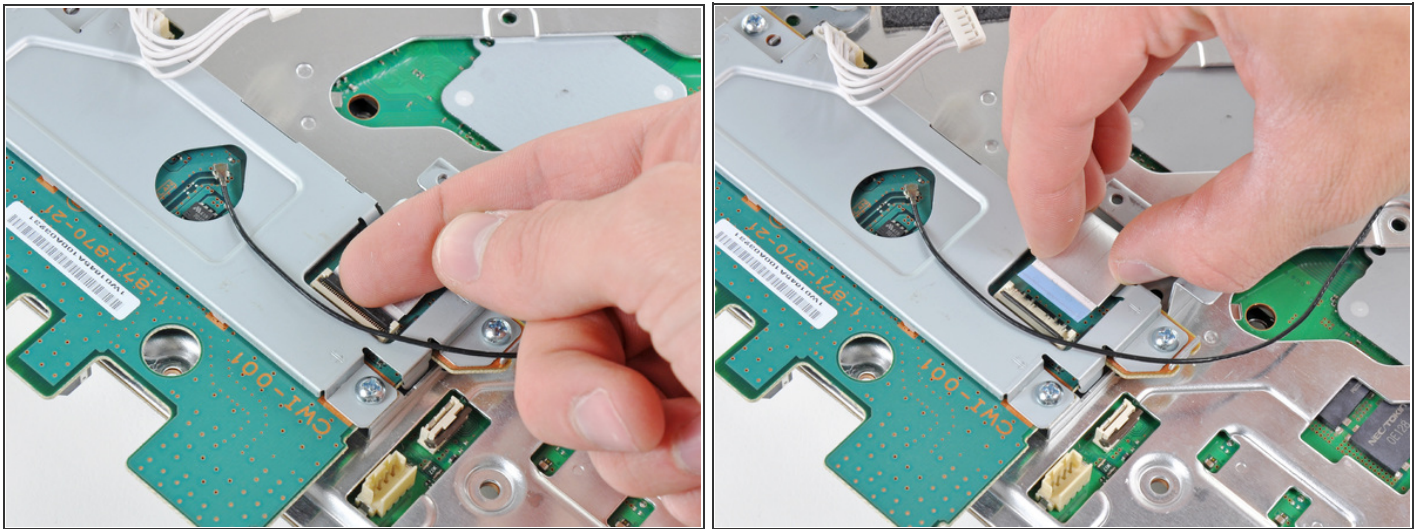


Step 30



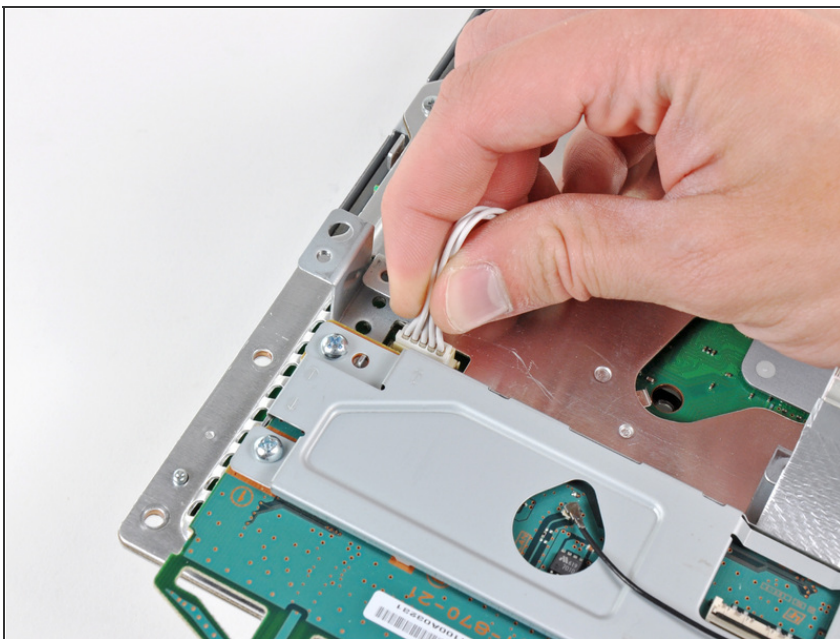
- Flip up the flap on the memory card reader ribbon cable socket and remove the ribbon cable.

Step 31



- Flip up the retaining flap on the Wi-Fi/Bluetooth ribbon cable socket.
- Pull the Wi-Fi/Bluetooth ribbon cable out of its socket.

Step 32



- Disconnect the DC-In cable from the motherboard and set it aside.
- Pull the connector straight up and out of its socket on the motherboard.



Step 33



- Disconnect the PRAM battery from the motherboard.
- The PRAM socket is delicate and has the potential to break off the motherboard. If possible, hold down the socket as you disconnect the PRAM battery cable.

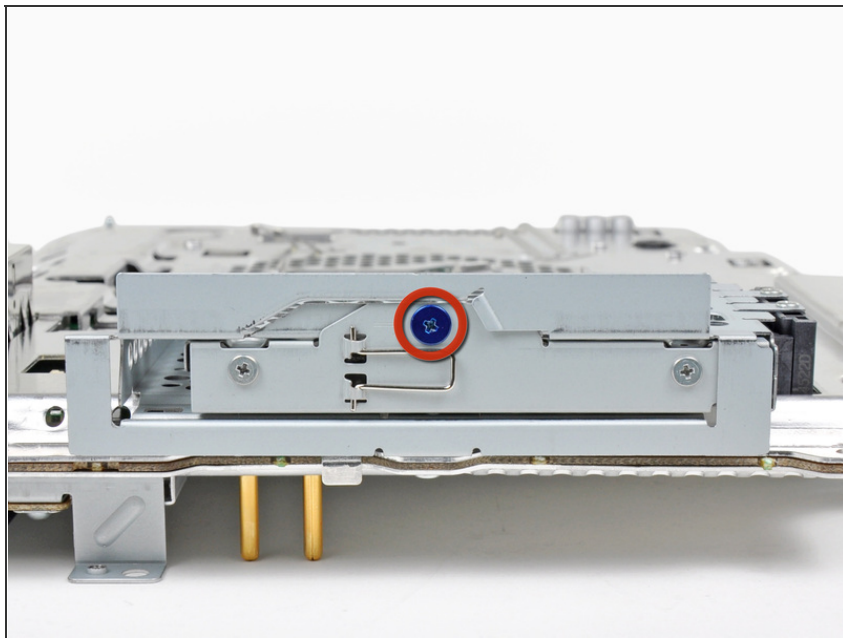


Step 34



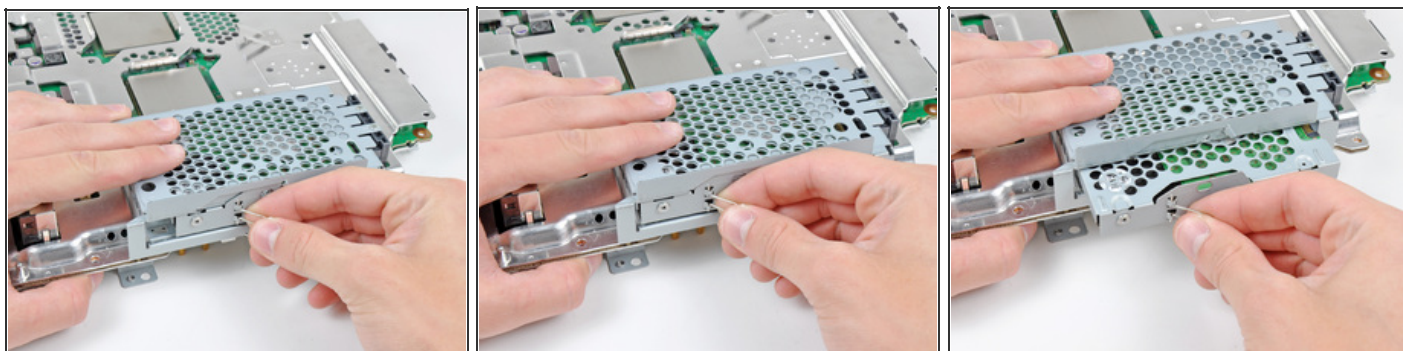
- Rotate the PRAM battery slightly counter-clockwise and remove it from the motherboard assembly.

Step 35



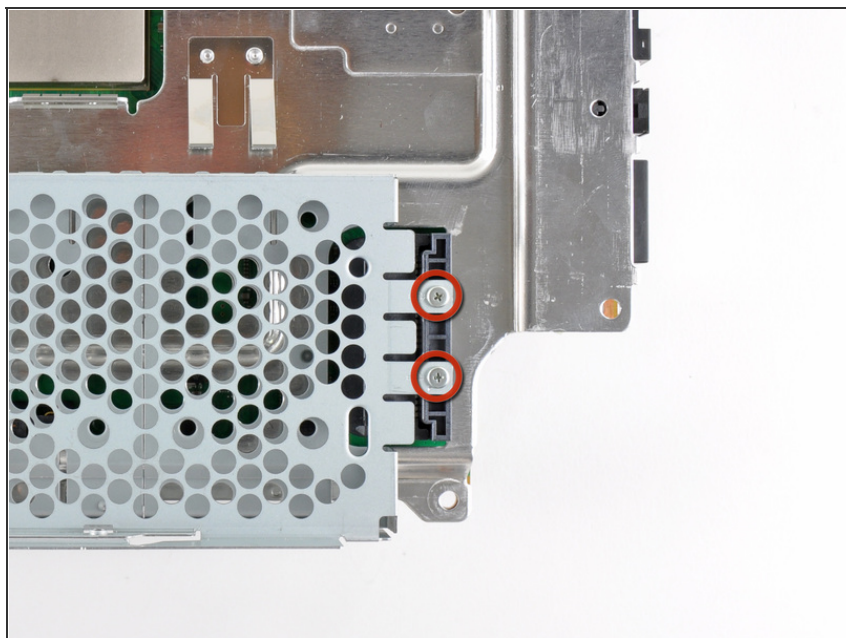
- Remove the blue 8 mm Phillips screw securing the hard drive cage to the chassis.

Step 36



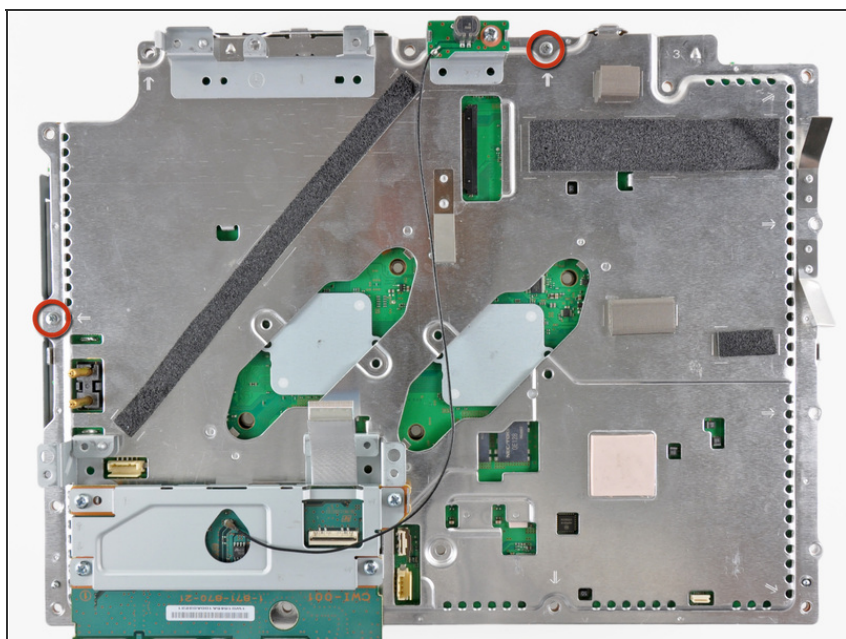
- Push the hard drive cage toward the front of the motherboard assembly.
- Remove the hard drive from the motherboard assembly.

Step 37



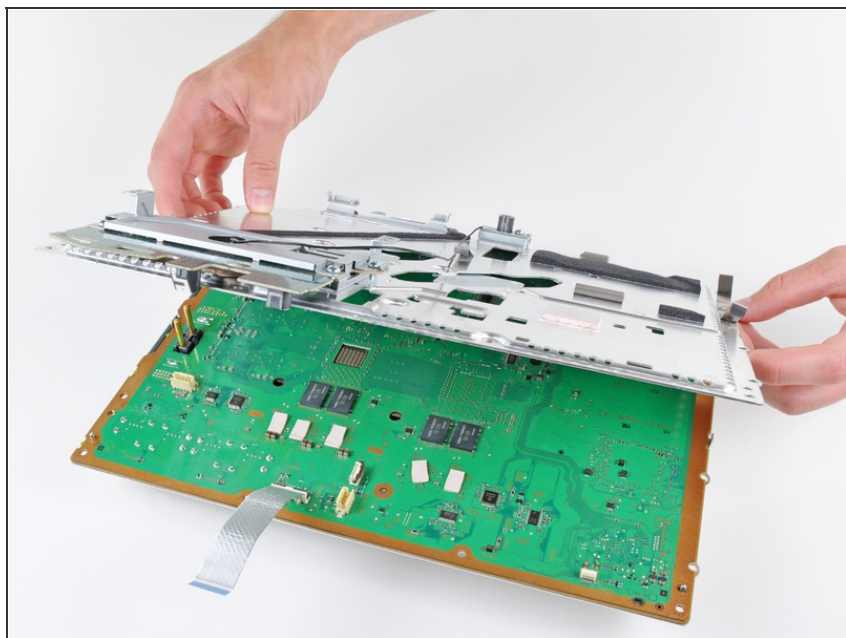
- Remove the two 3.7 mm #0 Phillips screws securing the chassis to the hard drive socket.

Step 38



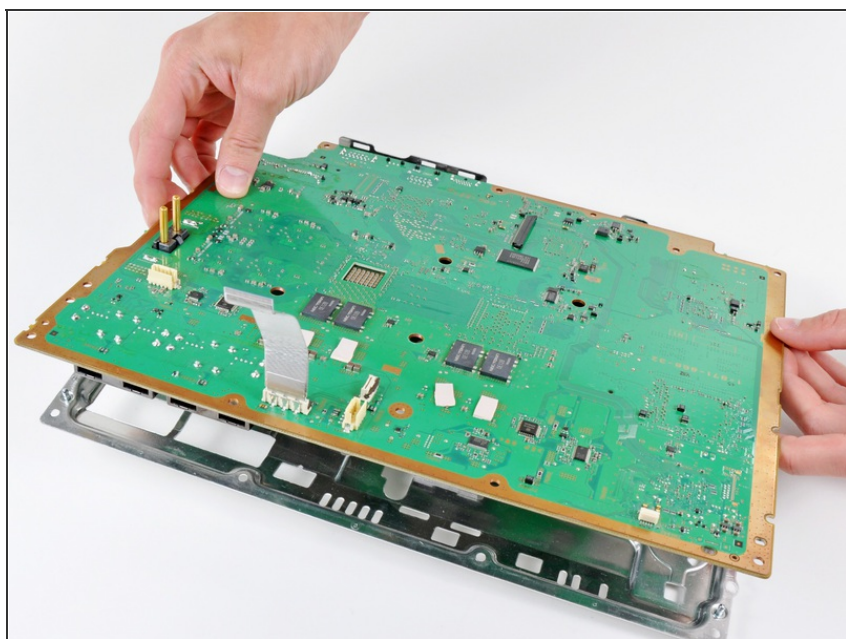
- Remove the two 8.3 mm #0 Phillips screws securing the two halves of the motherboard together.

Step 39



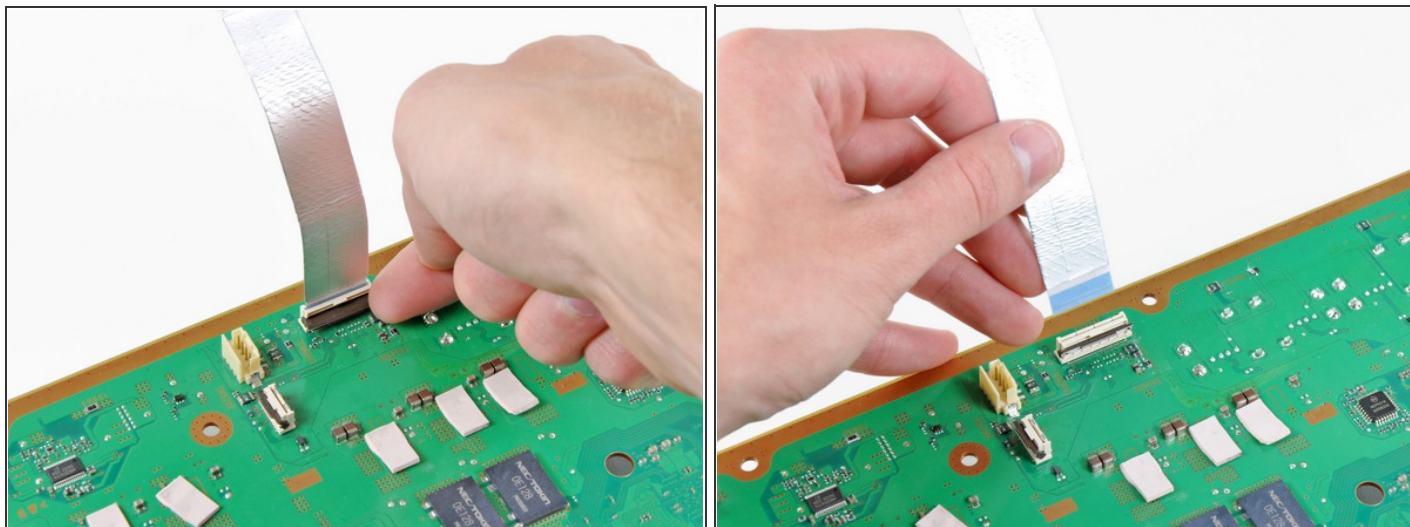
- Carefully feed the Wi-Fi/Bluetooth ribbon cable through the hole in the top motherboard cover.
- Remove the top motherboard cover.

Step 40



- Remove the motherboard from the bottom motherboard cover.

Step 41



- Flip up the retaining flap on the Wi-Fi/Bluetooth ribbon cable socket.
- Remove the Wi-Fi/Bluetooth ribbon cable from the motherboard.
- Motherboard remains.

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

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