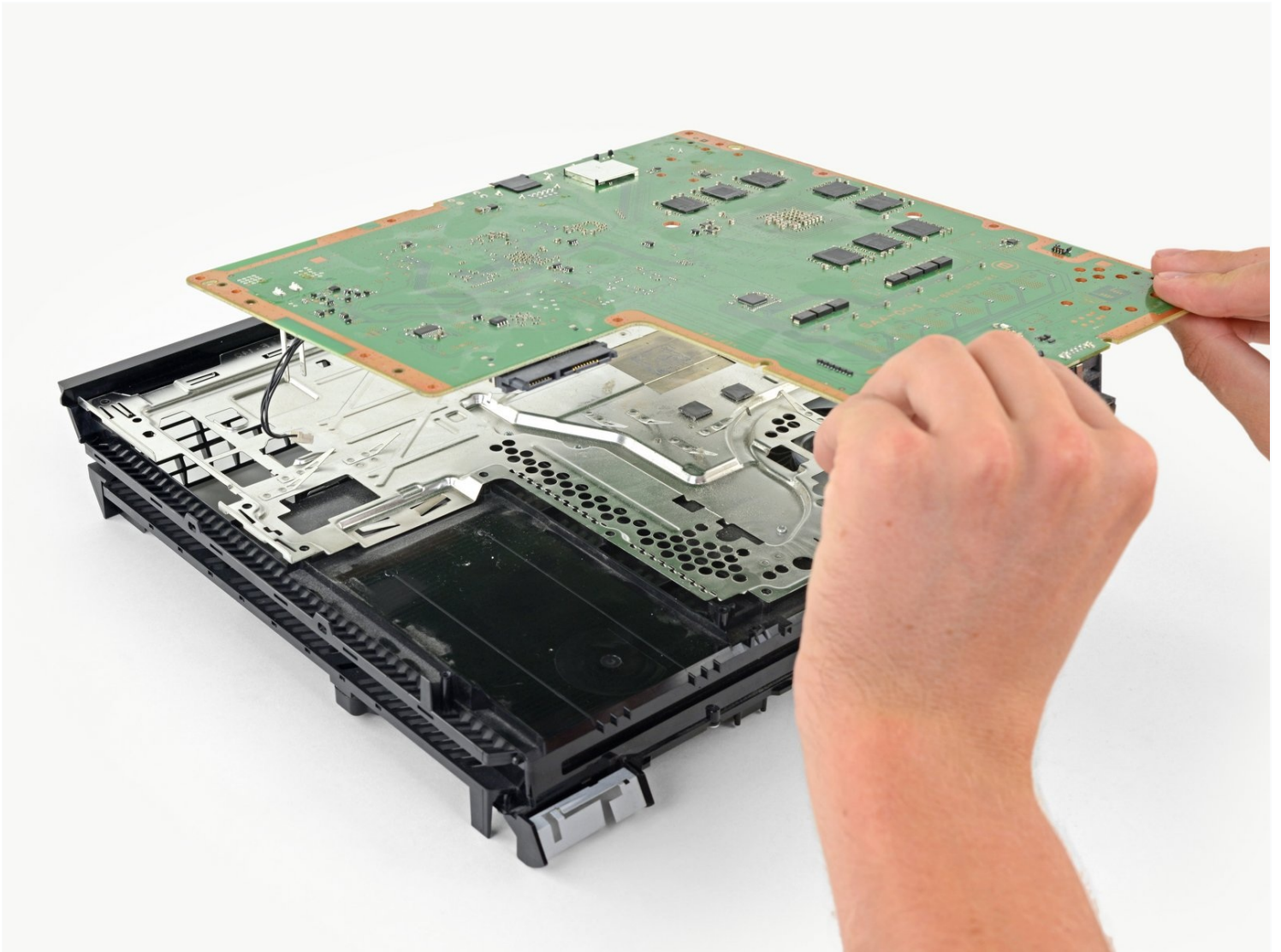# PlayStation 4 Motherboard Replacement

Follow this guide to replace the motherboard on...

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INTRODUCTION

Follow this guide to replace the motherboard on your Sony Playstation 4.

The motherboard and optical drive are paired, thus replacing only the motherboard will result in a non-functioning device. Be sure to order the correct paired optical drive and motherboard for your PS4 model and replace both.

Unplug your PS4 before beginning any repairs.

🔧 TOOLS:

Tweezers (1)
TR8 Torx Security Screwdriver (1)
Phillips #0 Screwdriver (1)
Spudger (1)

⚙ PARTS:

PlayStation 4 SAA-001 Motherboard and Paired Optical Drive (1)
Playstation 4 SAB-001 Motherboard and Paired Optical Drive (1)
PlayStation 4 SAC-001 Motherboard (1)

Step 1 — Remove the hard drive cover

- Grip the PS4 with both hands along the gap in the top cover.

- Push the glossy side of the top cover with your thumbs until it pops to the side.

- Lift the glossy top cover up and back to remove it from the PS4.

Step 2 — Remove the hard drive bracket screw

- Use a Phillips screwdriver to remove the 6.5 mm screw securing the hard drive bracket to the enclosure.

Step 3 — Remove the hard drive bracket

- Pull the hard drive bracket out of the enclosure.

⚠ Be careful not to drop the hard drive. The internal components are fragile and are susceptible to damage by sudden shock.

Step 4 — Flip over the PS4

- Flip the PS4 upside-down with the back side facing towards you.

Step 5 — Remove the warranty stickers

- Use [tweezers](#) to remove the two stickers in the center of the back of the PS4 exposing two case screws.

Step 6 — Remove the plastic screw covers

- Use tweezers to carefully remove the plastic screw covers in each corner, exposing two more case screws.

Step 7 — Remove the rear case screws

- Remove the four 7.2 mm Torx security screws on the back of the PS4.

Step 8 — Remove the lower case

- Use your thumbs to lift the lower case up and off the PS4.

- ⓘ The lower case is held into place by plastic clips. You may need to use significant force to release the lower case.
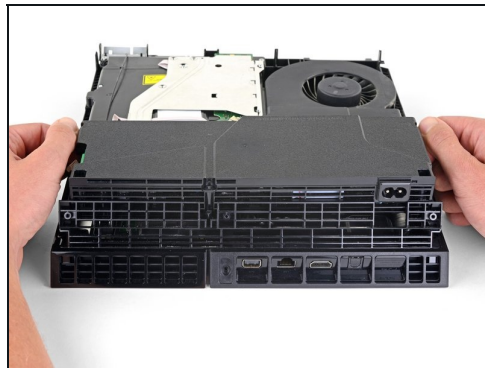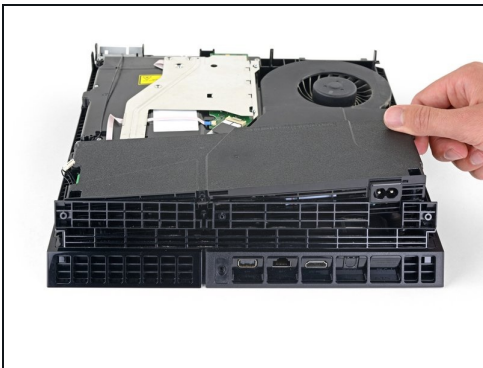
Step 9

- Use a pair of tweezers to pull the power supply cable straight out and disconnect the power supply unit from the motherboard.
  - ⓘ If your connector feels stuck, use a spudger to gently pry the connector out.

Step 10 — Remove the power supply unit
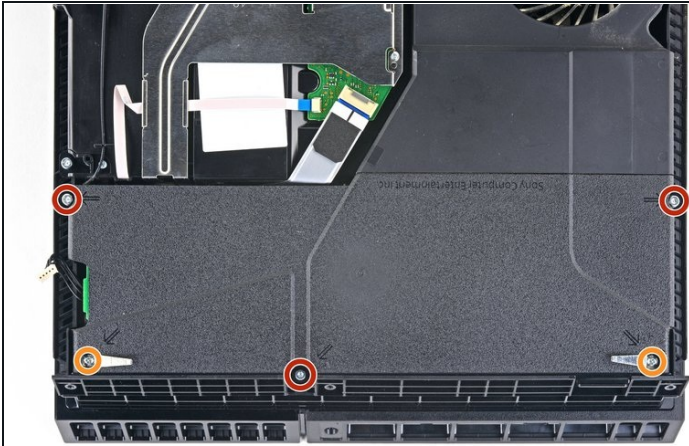
- Remove three 9.7 mm Torx security screws.

- Remove two 41 mm Phillips screws and brackets.

Step 11
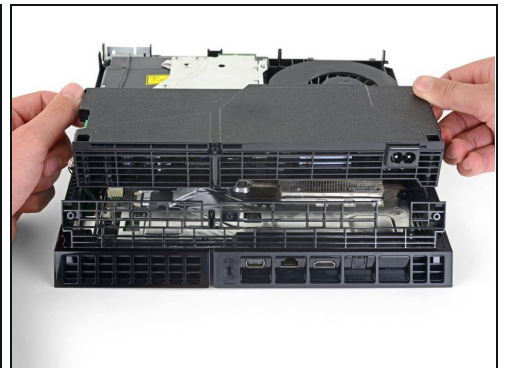
- Lift the power supply straight up and out of the PS4.

- ⓘ The power supply is held firmly in place by prongs on the left side. It may take multiple attempts to remove it.

- ☑ During reassembly, ensure the prongs are aligned, then press the power supply into place.
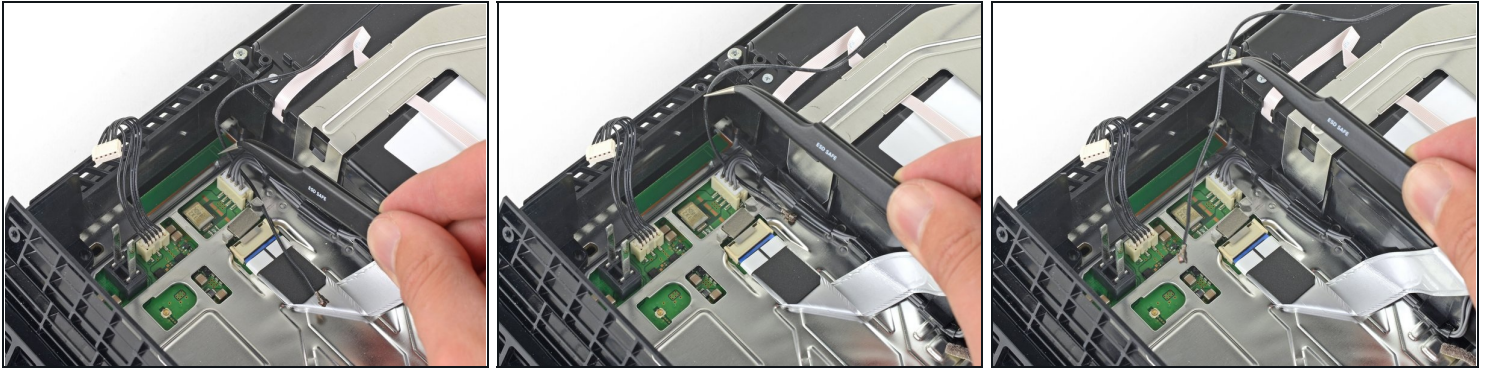
Step 12 — Remove the Wi-Fi antenna
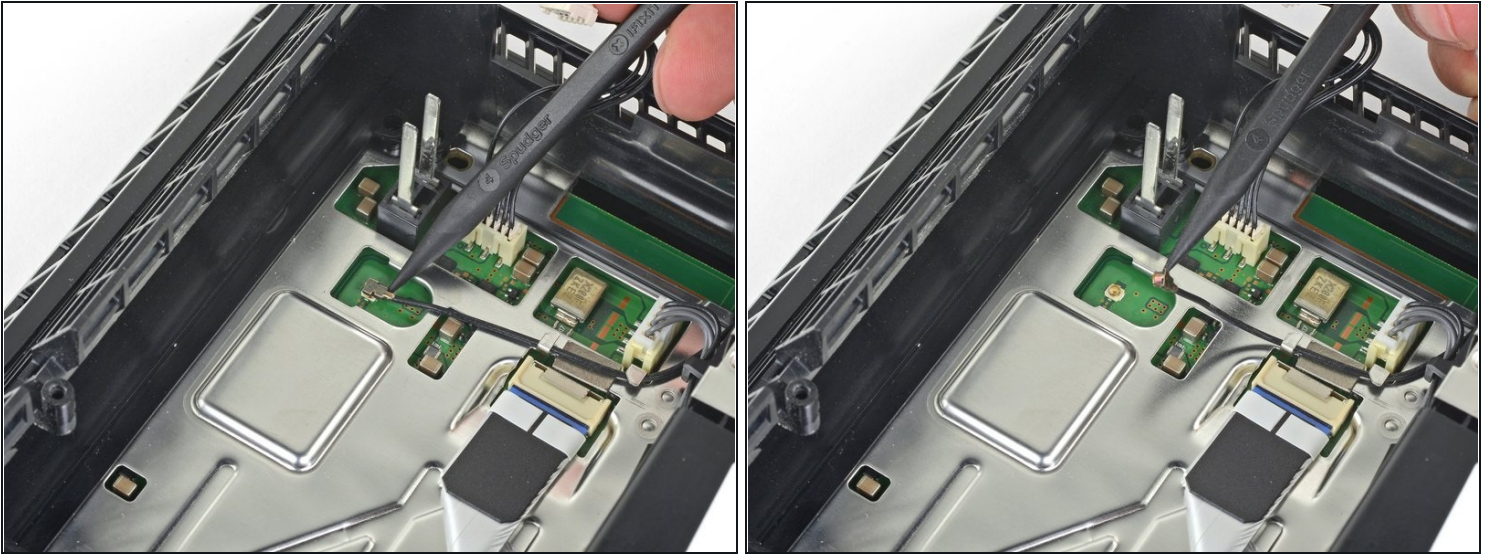
- Use the tip of a spudger to disconnect the antenna cable from the motherboard.
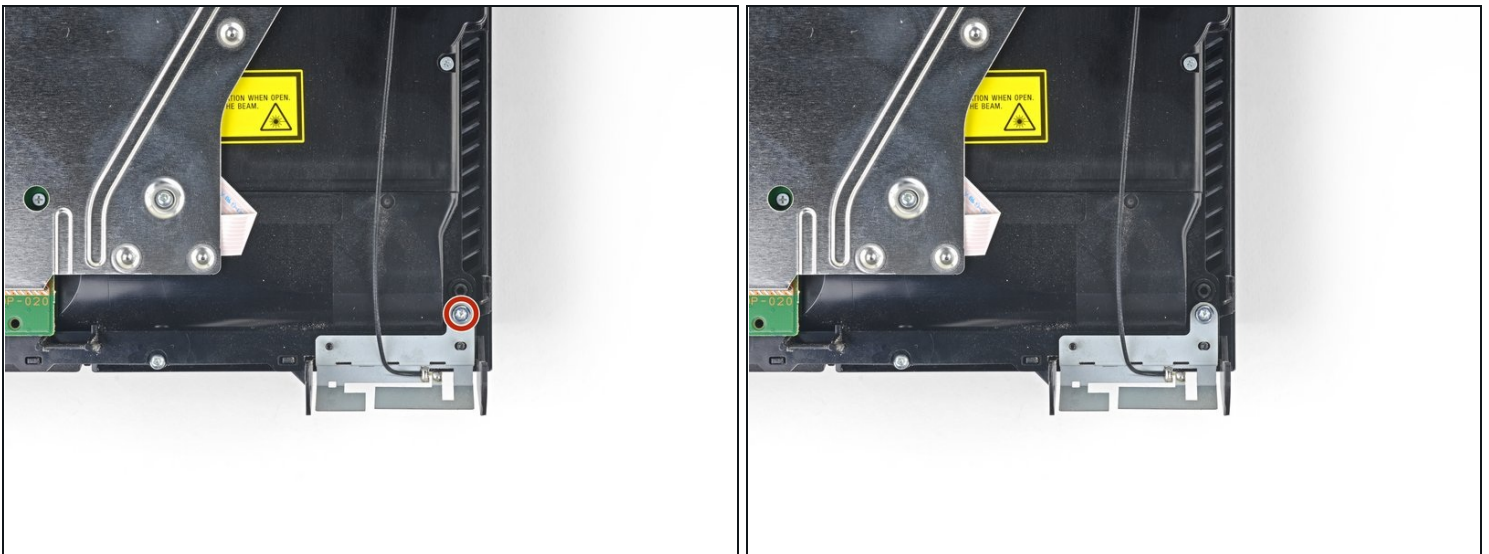
Step 13
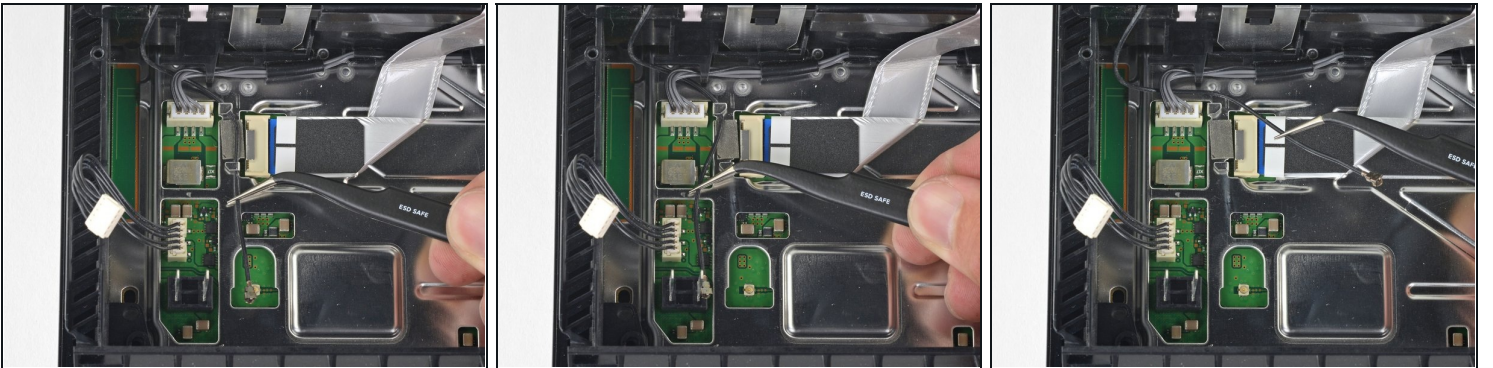
- Use a pair of [tweezers](#) or your fingers to grab the antenna cable and move it out from the cable guides.
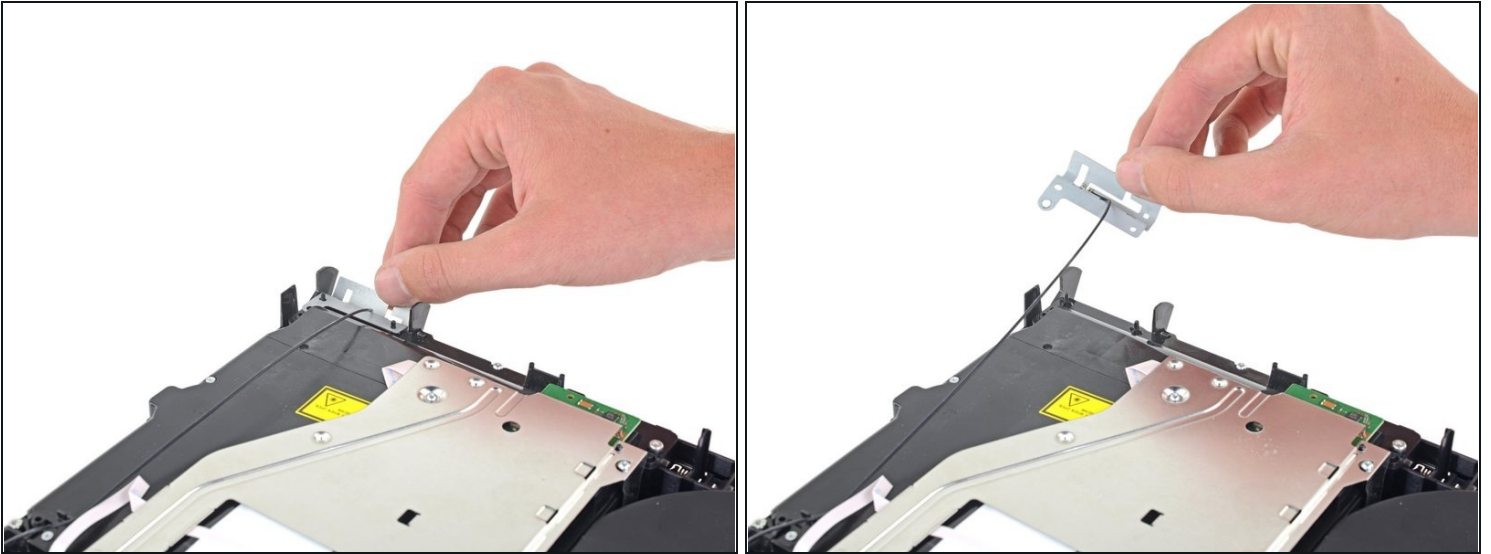
Step 14

- Use a pair of tweezers or your fingers to thread the antenna cable out from underneath the optical drive cable.

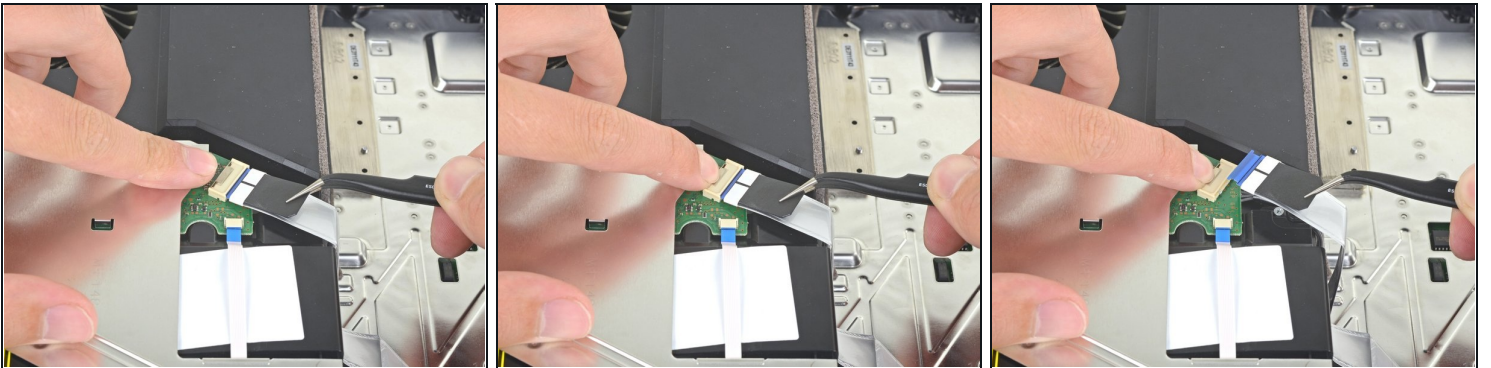## Step 15

- Remove the 9.7 mm Torx security screw securing the antenna.

Step 16

- Remove the Wi-Fi antenna.

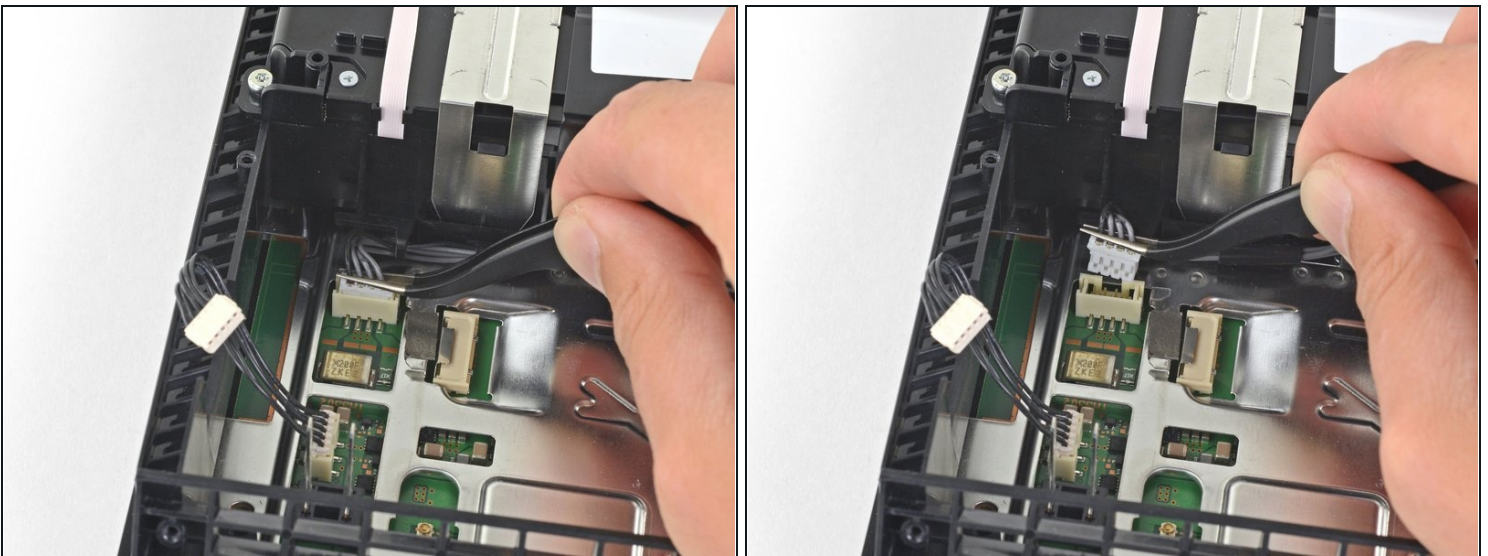**Step 17 — Disconnect the optical drive**

- Use your fingernail to press down on the metal release lever of the ribbon cable on top of the optical drive.

- Use your fingers or a pair of [tweezers](#) to disconnect the ribbon cable by pulling on the black tab.

- ⬛ You do not need to press the metal lever when inserting the ribbon cable back in. You will hear a click once it is fully inserted.

Step 18
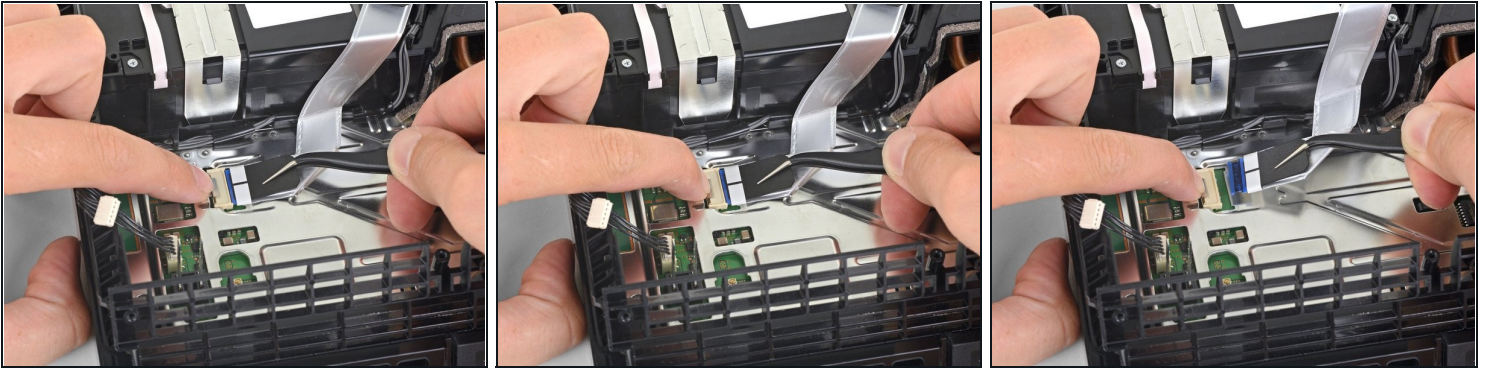
- Use your fingernail to press down the metal release lever for the ribbon cable connected to the motherboard.

- Use your fingers or a pair of tweezers to disconnect the ribbon cable by pulling on the black tab.

- Set the ribbon cable aside for reassembly.

☑ You do not need to press the metal lever when inserting the ribbon cable back in. You will hear a click once it is fully inserted.
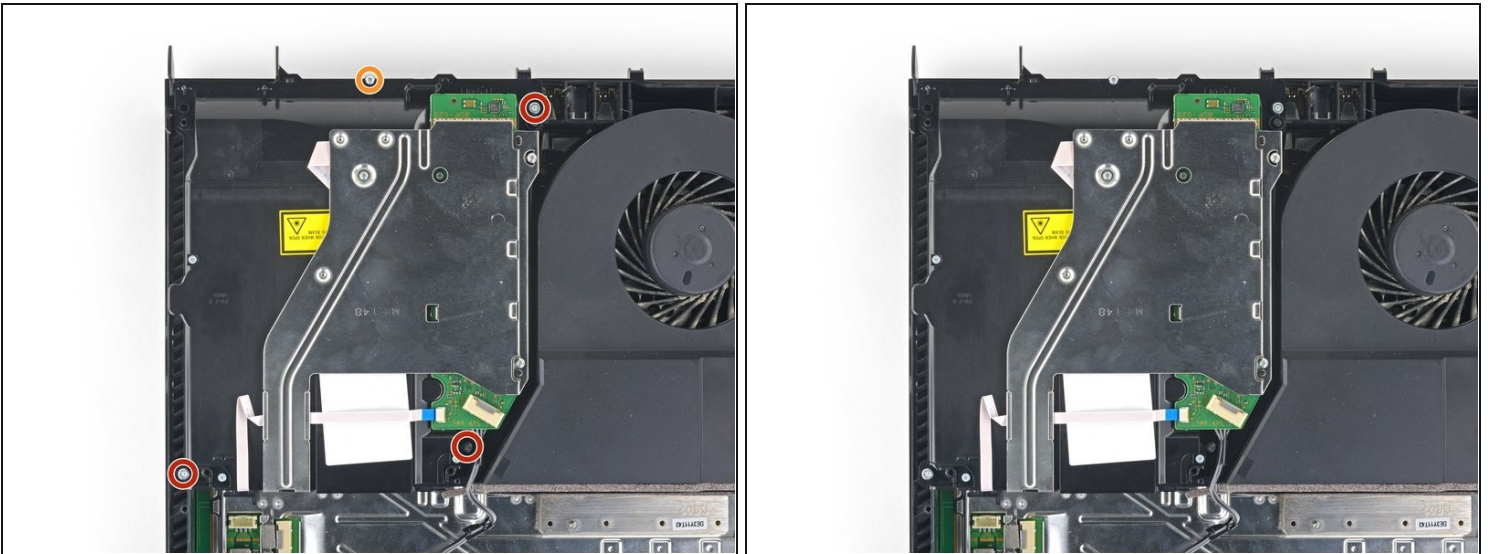
Step 19

- Use your fingers or a pair of tweezers to disconnect the optical drive cable from the motherboard.
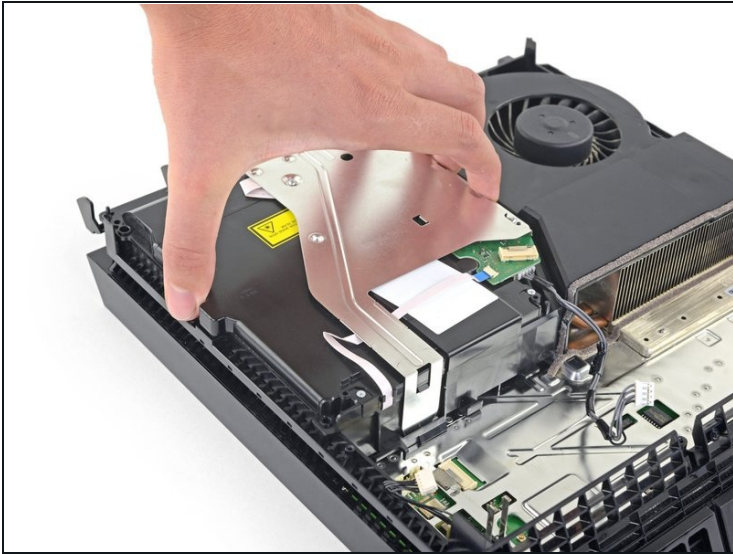
Step 20

- Use your fingers or a pair of tweezers to remove the optical drive cable from the cable guides that hold it in place.
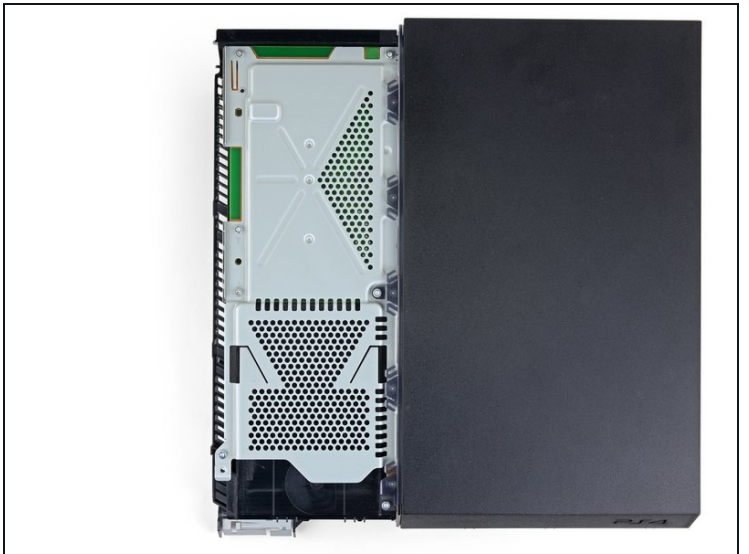
Step 21 — Remove the optical drive

- Remove the four screws securing the optical drive.
  - Three 9.7 mm Torx screws
  - One 6.2 mm Phillips screw

Step 22

- Lift the optical drive straight up and out of the PS4.

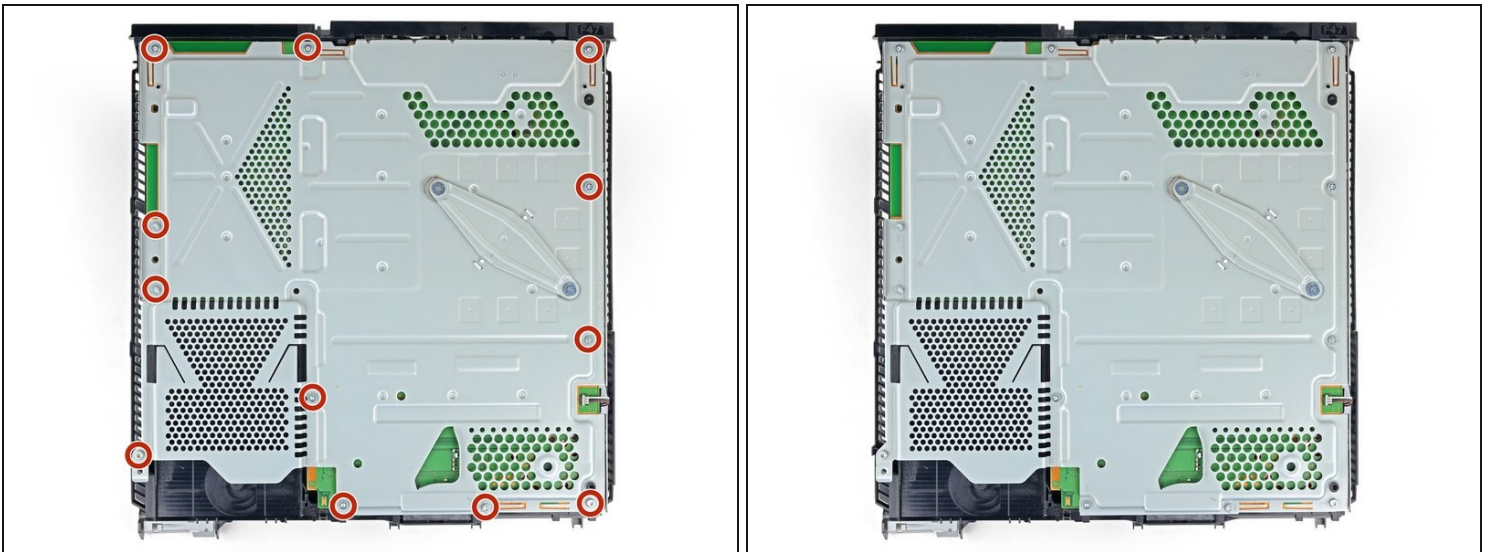## Step 23 — Remove the upper case

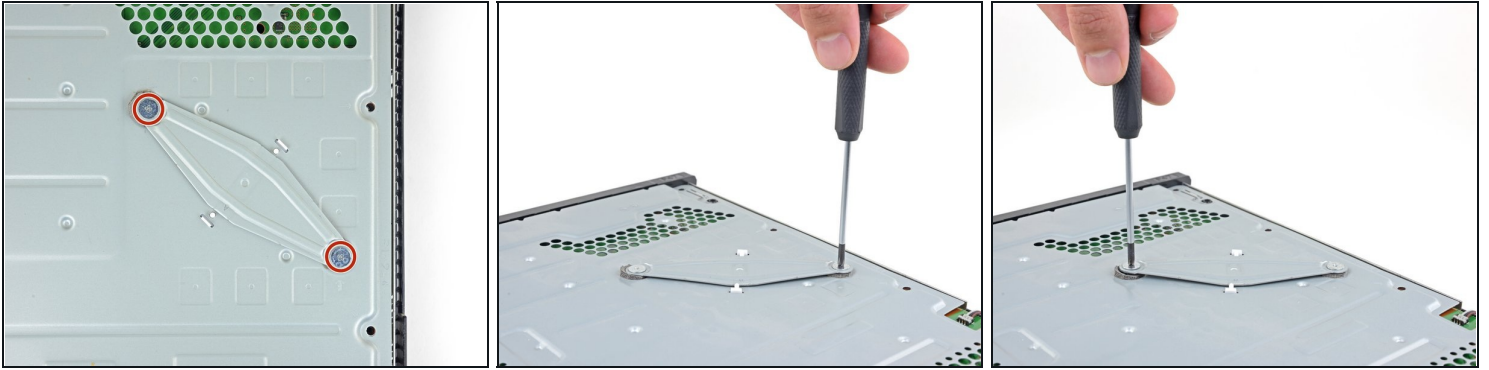- Remove the two 9.7 mm Torx screws securing the upper case.

Step 24

- Lift the upper case up and back to remove it from the PS4.

- ⓘ The upper case in held in place by plastic tabs on the front side. It will take significant force to separate them.

Step 25 — Remove the upper EMI shield

- Remove the twelve 9.7 mm Torx screws securing the upper EMI shield.

Step 26

ⓘ This step shows you how to properly unscrew the pressure plate.

- Remove the two 15.6 mm Phillips screws.
  - Gradually unscrew the pressure plate by turning each screw one half turn at a time.

  - Alternate between the two screws to maintain even pressure on the pressure plate.
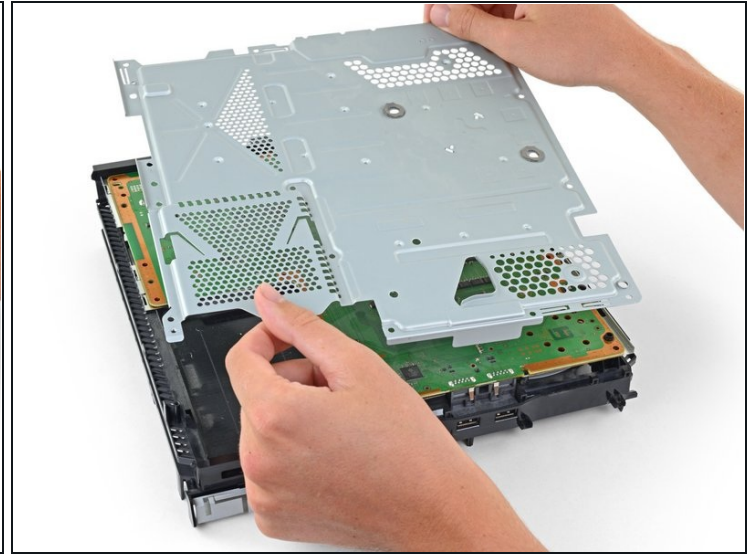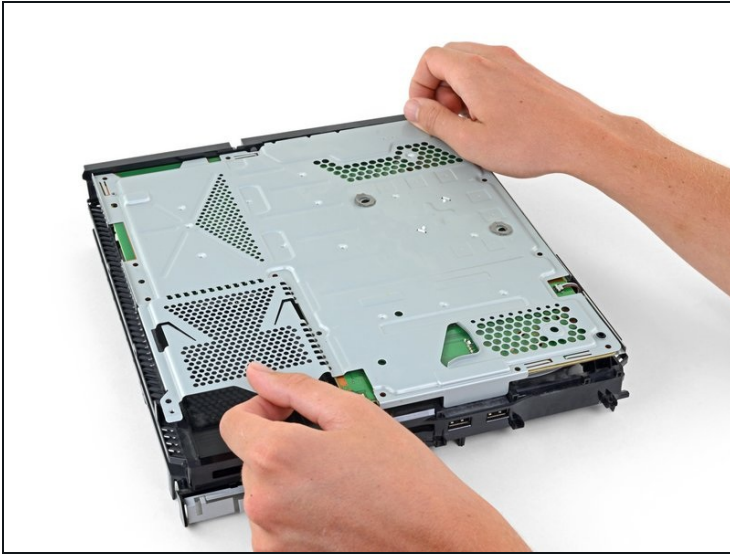
⚠ Do **not** unscrew one side completely before unscrewing the other side or you may damage the processor.
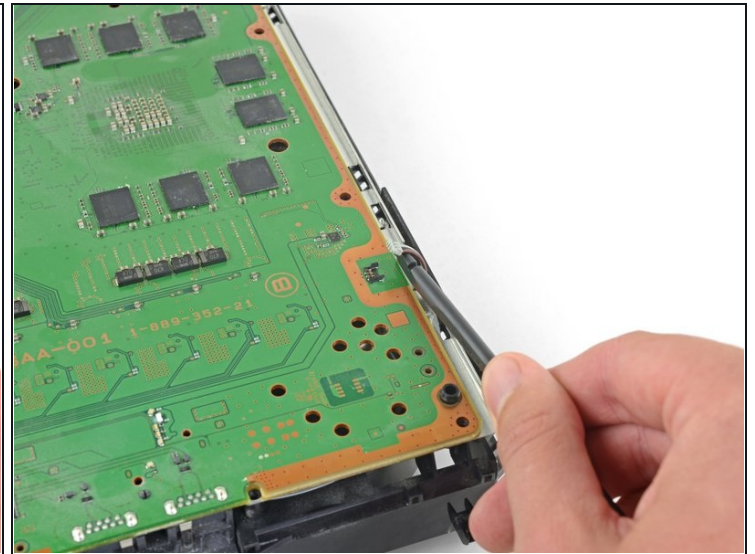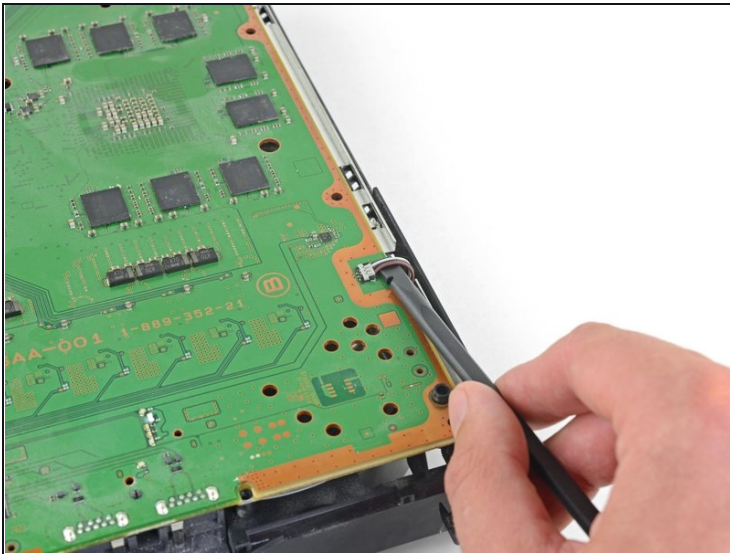
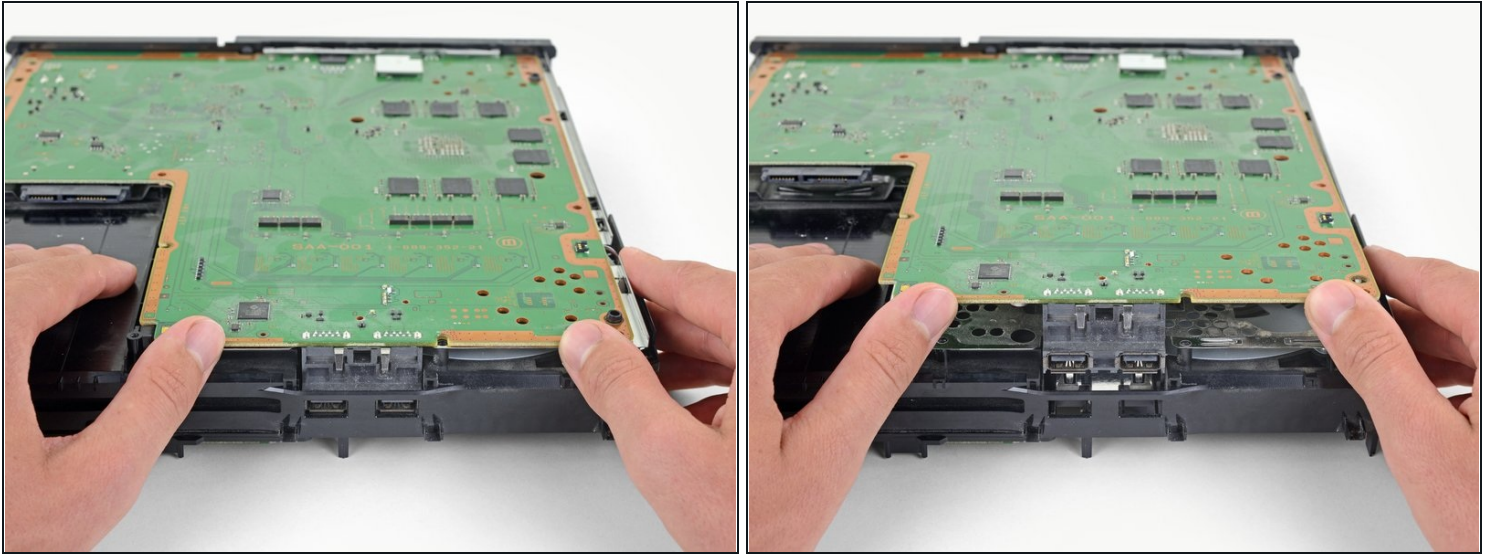## Step 27

- Remove the pressure plate.

Step 28

- Remove the upper EMI shield.
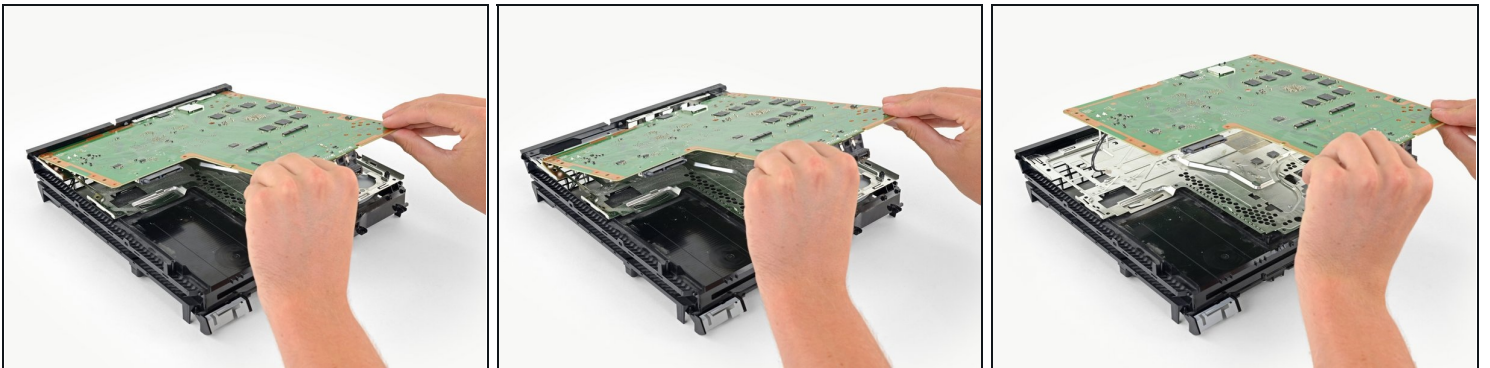
Step 29 — Remove the motherboard

- Insert the flat end of a spudger in between the fan cable and the motherboard.

- Twist the spudger to lift the connector straight up and disconnect it from the motherboard.

Step 30

- Grab the edge of the motherboard on the front of the PS4.

- Lift the motherboard until the USB ports clear the PS4 case.

Step 31

- Lift the motherboard out from the PS4.

- ⊡ Apply a new layer of thermal paste to the processor before installing a motherboard using [this guide](#).

- ⚠ Failure to properly install new thermal paste will cause your PS4 to overheat.

- ⊡ Insert the I/O side of the Motherboard in first, then lower the other side in.

To reassemble your device, follow the above steps in reverse order.

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Check out our [Answers community](#) for troubleshooting help.

Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.