Xbox One X Disc Drive Replacement

Follow this guide to replace the disc drive...

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INTRODUCTION

Follow this guide to replace the disc drive (also called the optical drive) on your Xbox One X model 1787. You might do this if other troubleshooting steps don't fix disc-reading issues.

Turn off the console and unplug any cables before beginning this guide. Follow general electrostatic discharge (ESD) safety procedures while repairing the console.

Because the disc drive's circuit board is linked to the console's motherboard, you will need to transfer the original board into the replacement disc drive. **This will require you to de-solder and solder two wires.** Follow general soldering safety guidelines such as wearing eye protection, working in a well-ventilated area, and washing your hands after with soap and water after soldering.

TOOLS:

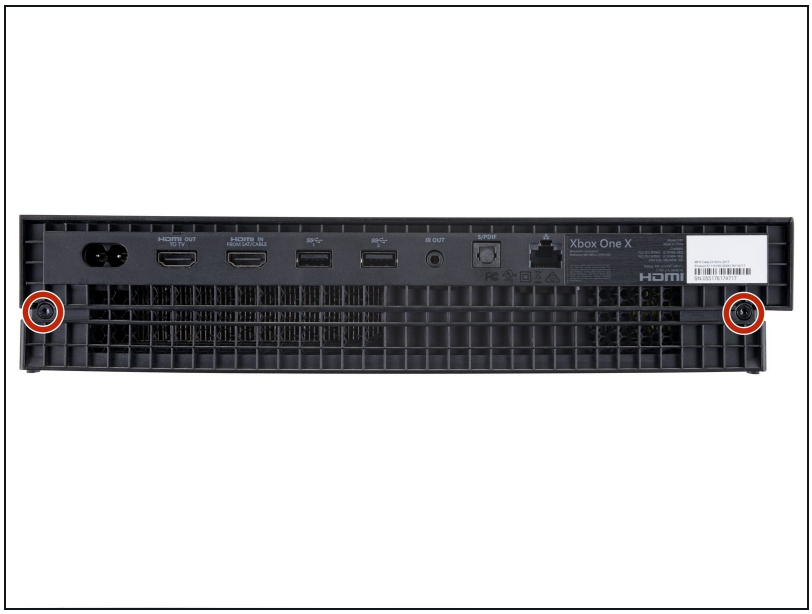
ESD Safe Blunt Nose Tweezers (1)
Spudger (1)
TR8 Torx Security Screwdriver (1)
TR10 Torx Security Screwdriver (1)
Phillips #00 Screwdriver (1)
Soldering Station Hakko FX-888D (1)
Solder ROHS Lead Free Rosin Core (1)

Step 1 — Remove the sticker

- Use blunt tweezers to peel off the sticker covering the right-side screw on the back of the console.

⚠ Before starting this guide: Turn off the device. Then, unplug any cables from the console.

Step 2 — Remove the external screws



- Use a T10 Torx screwdriver to remove the two 12.6 mm–long screws located on the back of the console.

Step 3 — Slide the upper case horizontally

- Rotate the console 90 degrees.
- Pull the front of the upper plastic case horizontally toward the front of the console until it comes to a stop. This slides the clips out of the slots on the upper plastic case.

Step 4 — Lift the upper case off the lower case

- Rotate the console 90 degrees so that the back is facing you.
- Lift up the left side of the upper plastic case (as viewed from the back of the console), stopping when it won’t lift any further.

Step 5



- While continuing to hold the left side of the upper plastic case, push up on the right side to move the right-side screw boss out of the way.

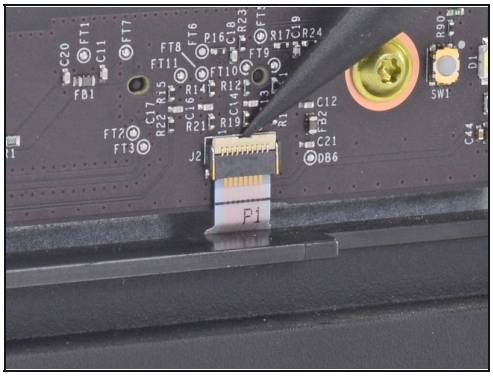
  ⓘ If pushing up on the case doesn't work, try moving it in different directions until it can swing open.

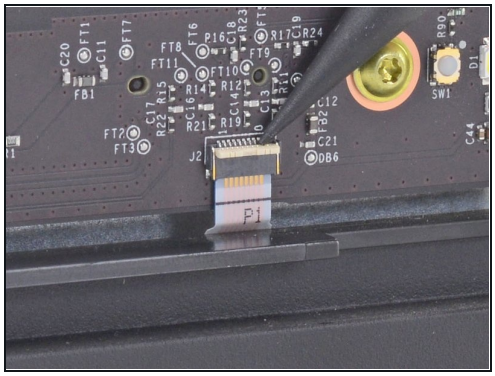
- Swing the upper plastic case open to 75 degrees.

Step 6


- Push the upper plastic case down and away from the console to remove it completely.

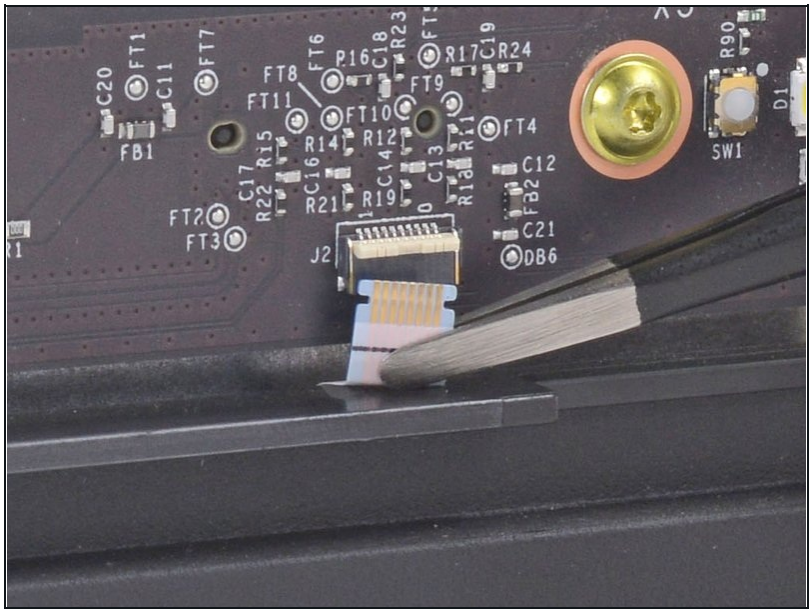
Step 7 — Disconnect the ribbon cable





- Use the pointed end of a spudger, an opening tool, or your fingernail to flip down the small, hinged locking flap on the ribbon cable ZIF connector on the front circuit board.

Step 8 — Disconnect the ribbon cable

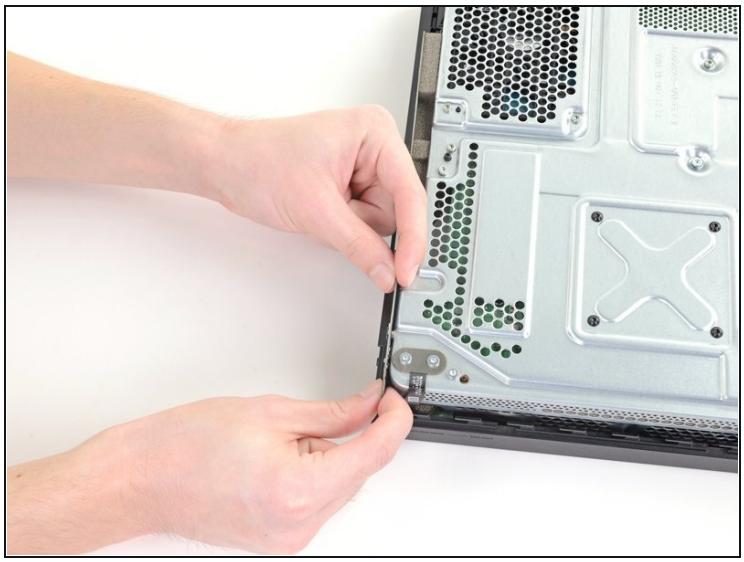


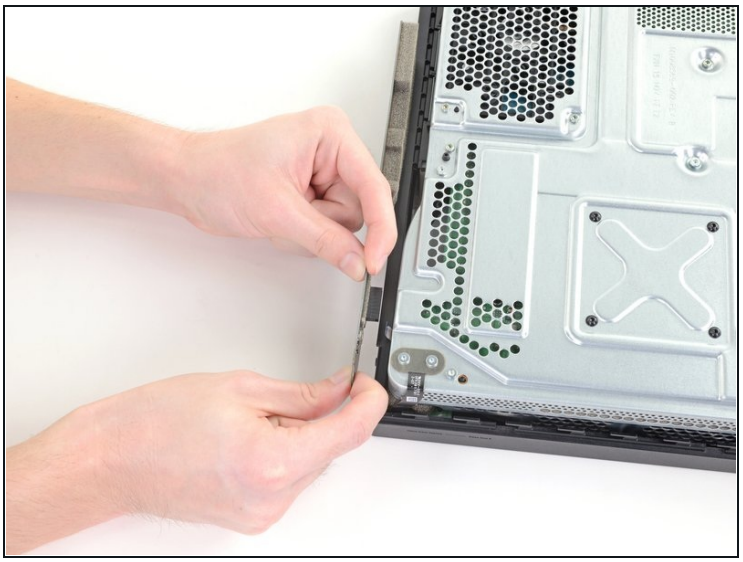
- Use blunt tweezers to pull the ribbon cable down out of the connector.

Step 9 — Remove the front circuit board screws

- Use a T8 Torx screwdriver to remove the three 13.3 mm screws securing the front circuit board to the upper metal case.

Step 10 — Remove the front circuit board

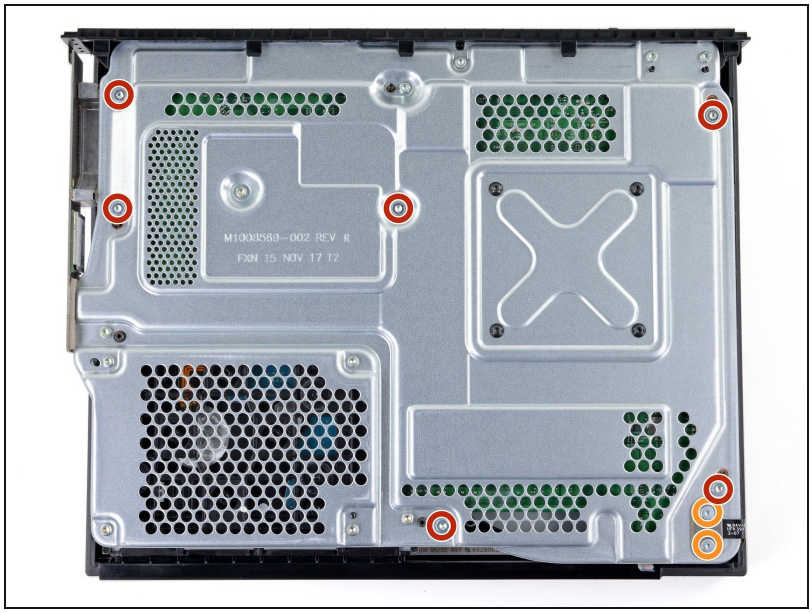




- Pull the front circuit board straight out away from the upper metal case and set it aside.

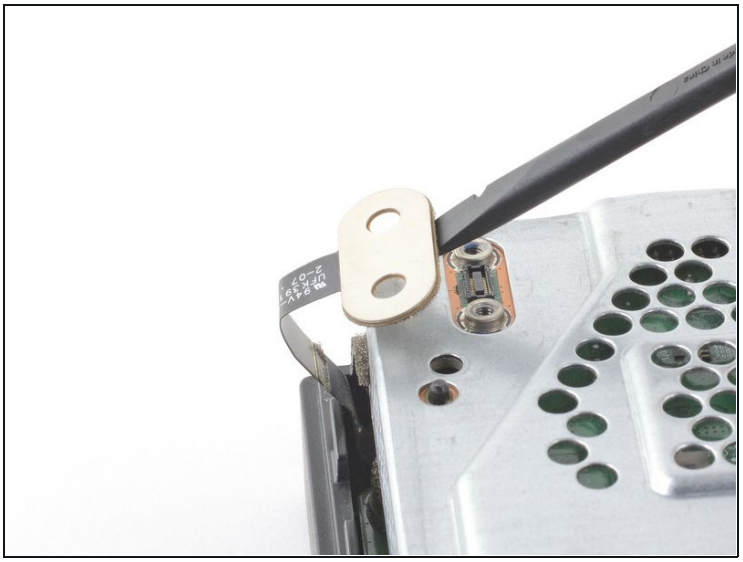
⚠ Grip the board on either side of where it is plugged in to avoid bending and damaging it.

Step 11 — Remove the upper metal case screws



- Use a T10 Torx screwdriver to remove the six 47.7 mm screws securing the upper metal case to the lower plastic case.
- Use a T8 Torx screwdriver to remove the two 7.5 mm screws securing the press connector to the upper metal case.

Step 12 — Detach the press connector



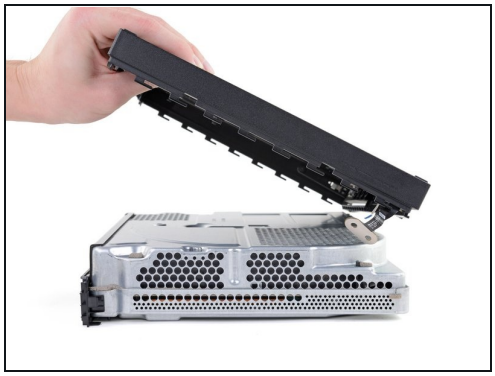
- Insert the flat end of a spudger underneath the press connector on the side opposite of the ribbon cable.
- Use the spudger to lift the press connector up and away from the upper metal case.

⚠ Don't push the spudger all the way to the socket. Prying up the socket may damage it.

To re-attach press connectors like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.

Step 13 — Remove the lower plastic case



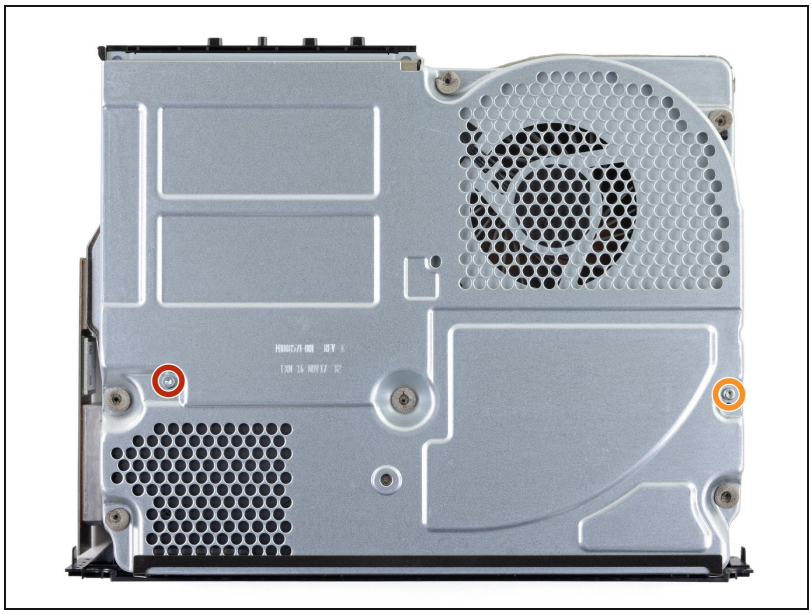


- Flip the console over.

ⓘ Hold on to the lower plastic case because it is no longer attached to the metal case.

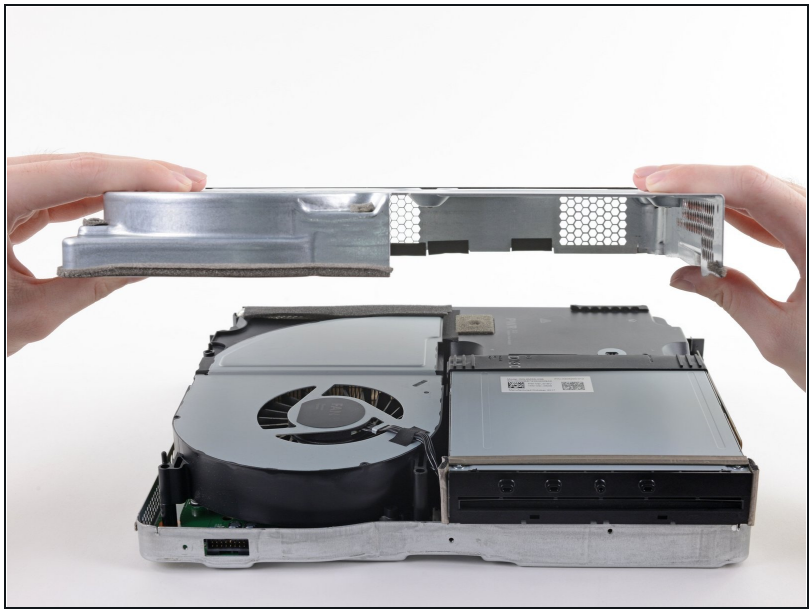
- Lift the lower plastic case up from the metal case and set it aside.

Step 14 — Remove the lower metal case screws



- Remove the two T10 Torx screws securing the lower metal case:
  - One 7.7 mm screw
  - One 11.4 mm screw

Step 15 — Remove the lower metal case

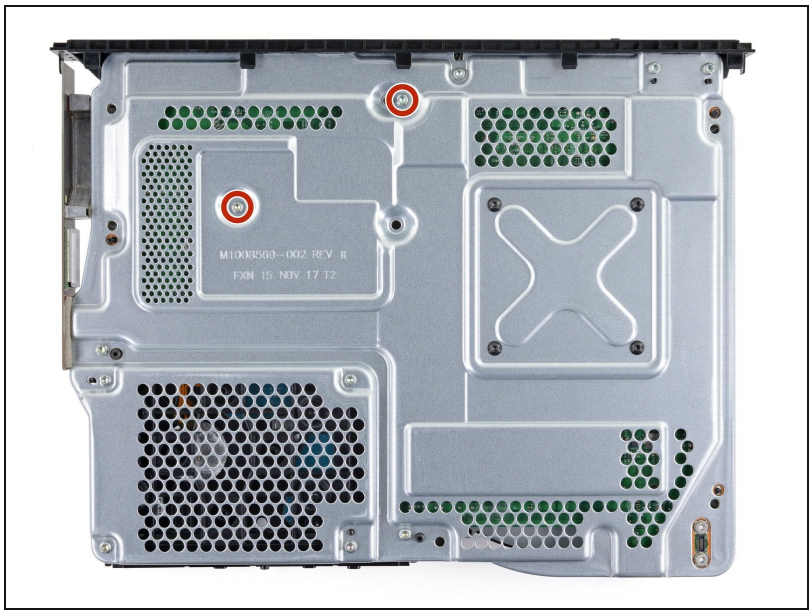


- Lift the lower metal case up off the upper metal case and internal components.

  ⓘ The disc drive may lift up with the lower metal case. Hold it down during this step.

- Set the lower metal case aside.

Step 16 — Unscrew the power supply



- Flip the console over.

⚠ The disc drive is only attached to the motherboard by two cable connectors. Hold the disc drive when flipping the console over to avoid damaging it.

- Use a T10 Torx screwdriver to remove the two 11.4 mm screws securing the power supply to the upper metal case

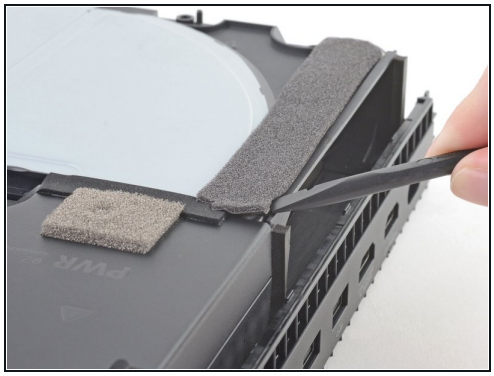
Step 17 — Loosen the disc drive

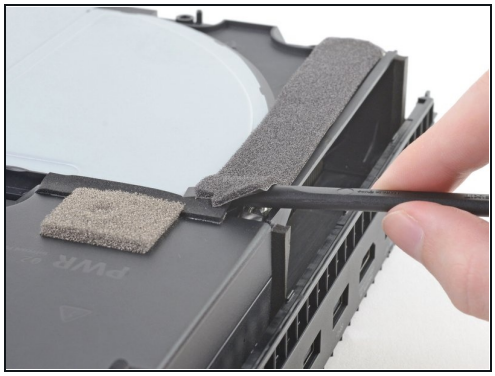
- Lift the disc drive so that its metal tab is unhooked from the power supply.

⚠ The disc drive is plugged into the motherboard. Don’t bend the wires more than necessary to avoid damaging them.

- Place the disc drive on the upper metal case so that it sits over the hard drive. You'll need enough space to unplug the power supply from the motherboard.

Step 18 — Unstick the foam tape on the power supply

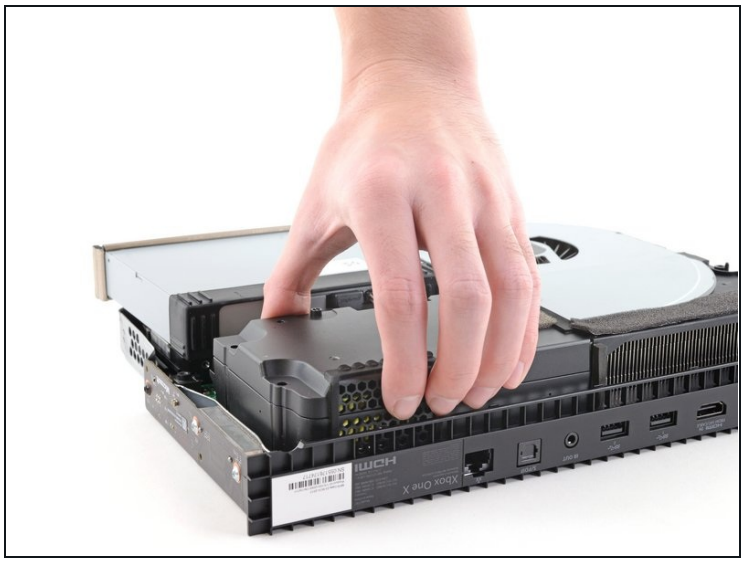
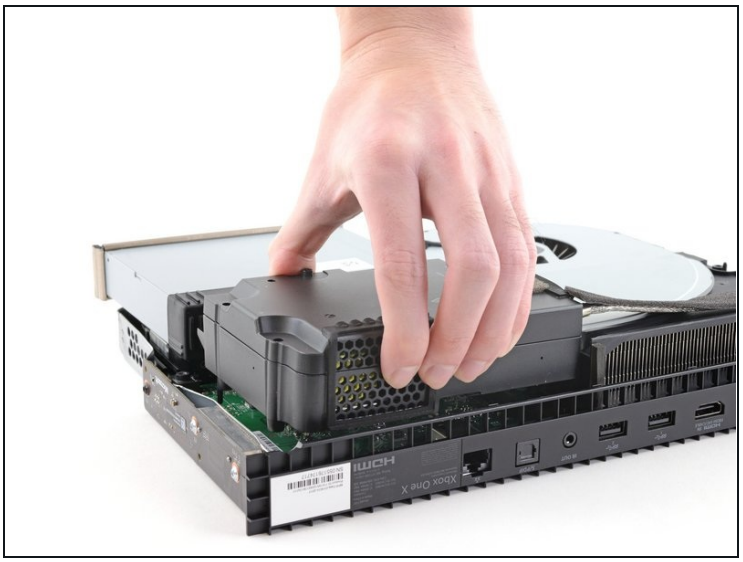




- Insert the flat end of the spudger underneath the dark grey foam tape starting at the corner closest to the power supply and edge of the console.
- Lift up the corner.
- Slowly push the spudger through to the other side of the tape until you can see the flat end emerge.

⚠ Remove the spudger slowly. There are two grey cables underneath the foam tape. Try to avoid hitting them with the spudger so that you don't damage them.

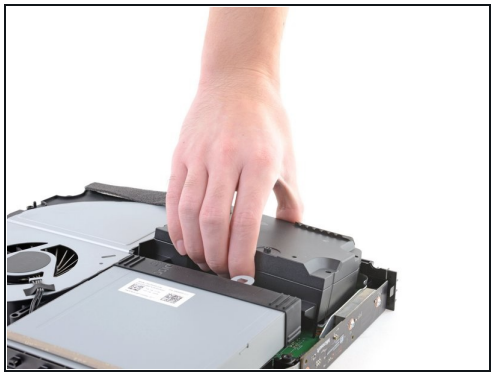
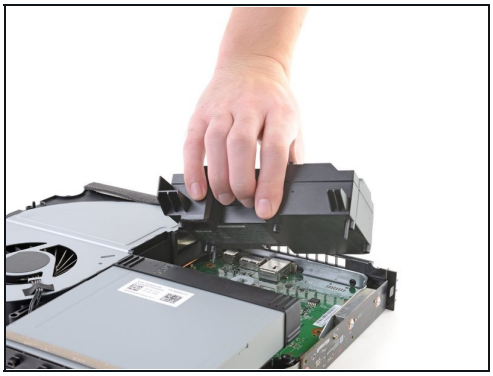
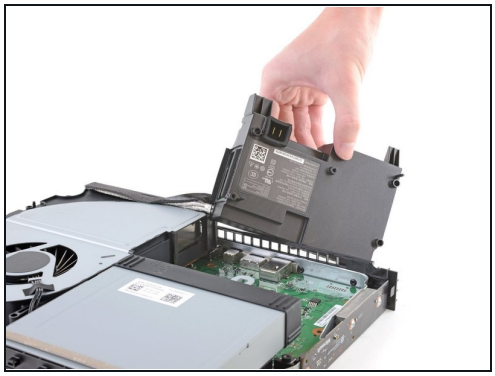
Step 19 — Unplug the power supply

- Lift the power supply directly upward to unplug it from the motherboard.

ⓘ Move the disc drive further away from the power supply if you need more space.

Step 20 — Set the power supply to the side

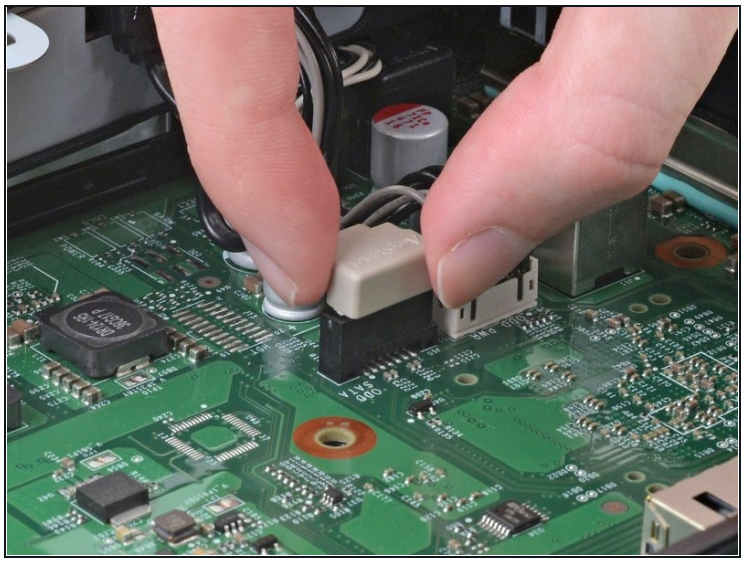
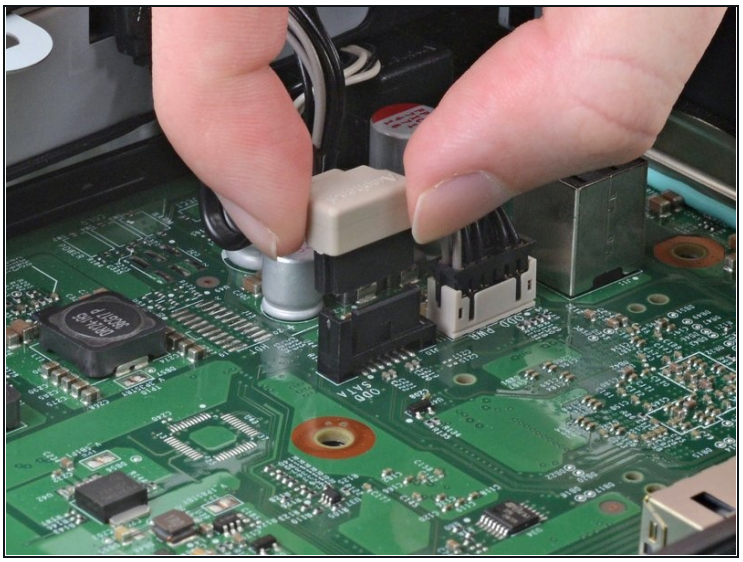




- After the power supply is unplugged from the motherboard, rotate and lift it away from the console.

⚠ The two grey cables are still attached to the console by the dark grey foam tape and the power supply socket beneath the fan case. Avoid bending the cables more than necessary to prevent damage.

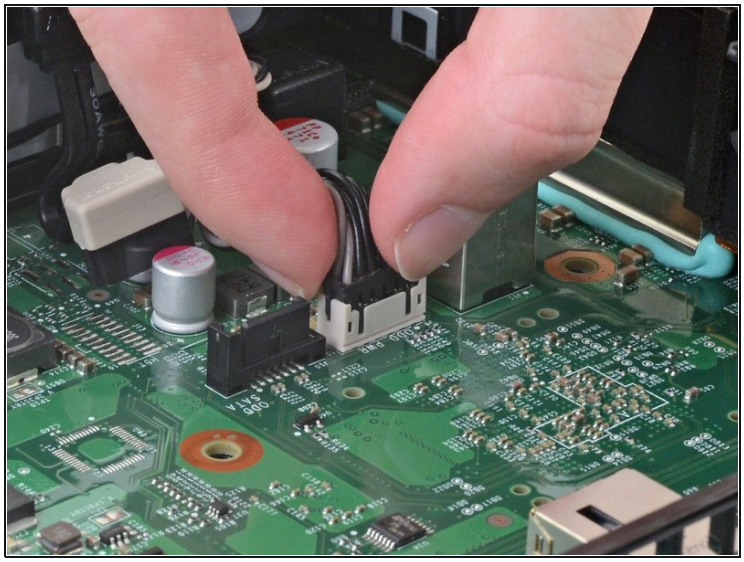
- Place the power supply so that it is sitting on its side just outside the upper metal case.

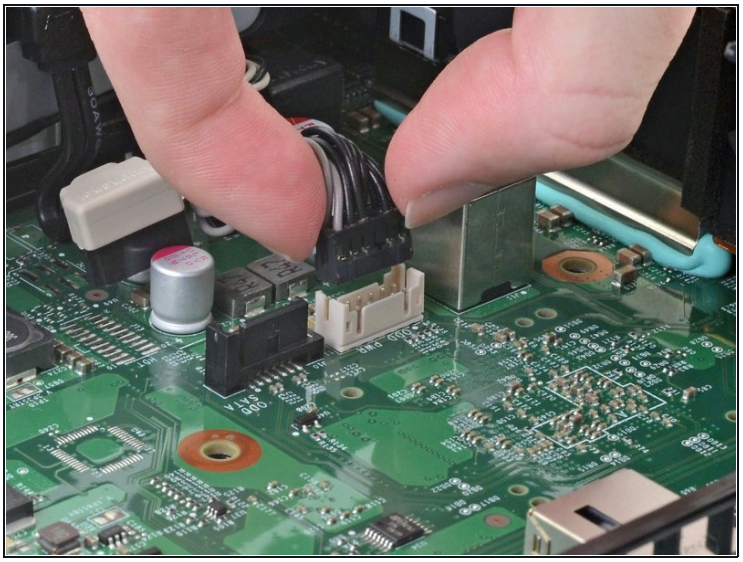
Step 21 — Unplug the disc drive

- Unplug the SATA cable connecting the disc drive to the motherboard by pulling directly upward.

Step 22



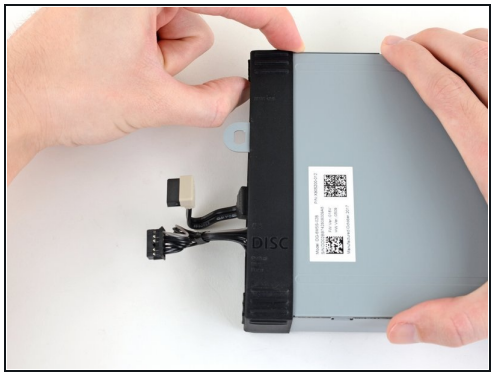


- Unplug the bundled cable connector connecting the disc drive to the motherboard by pulling directly upward.

Step 23 — Remove the disc drive

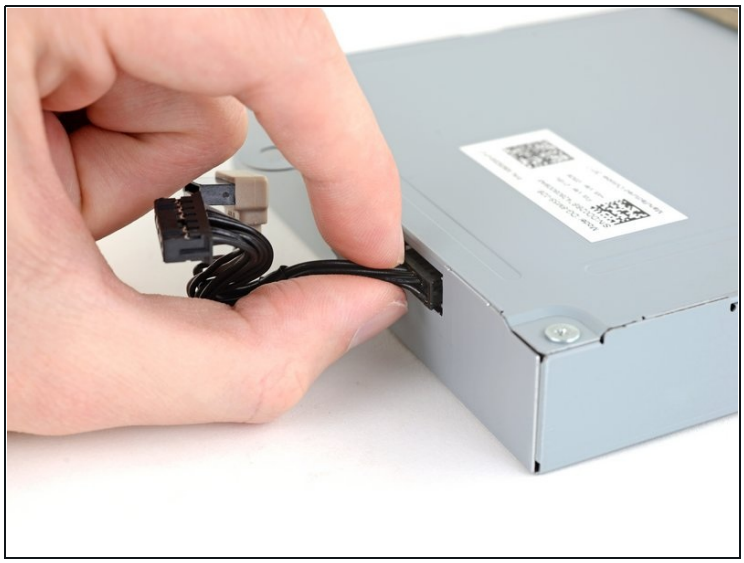
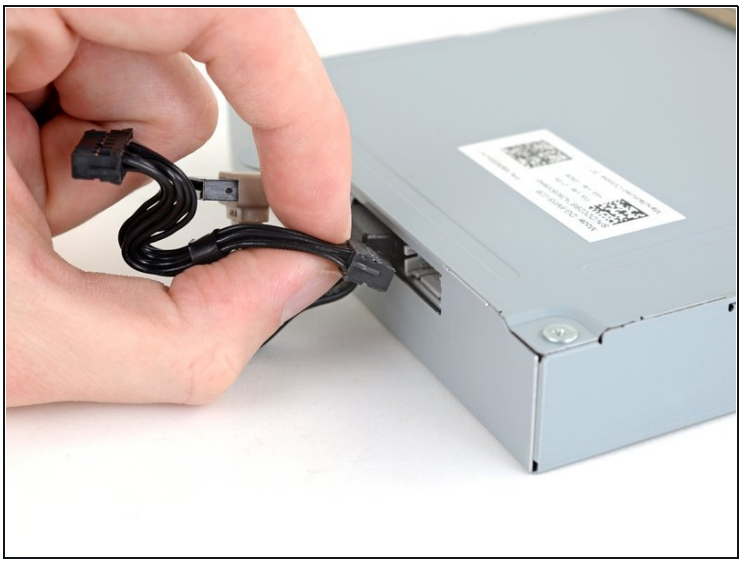
- Lift the disc drive out of the console.

Step 24 — Remove the vibration dampener



- Slide the rubber vibration dampener off of the disc drive.

Step 25 — Remove the external disc drive connectors

- Unplug the bundled cable connector from the disc drive.

Step 26

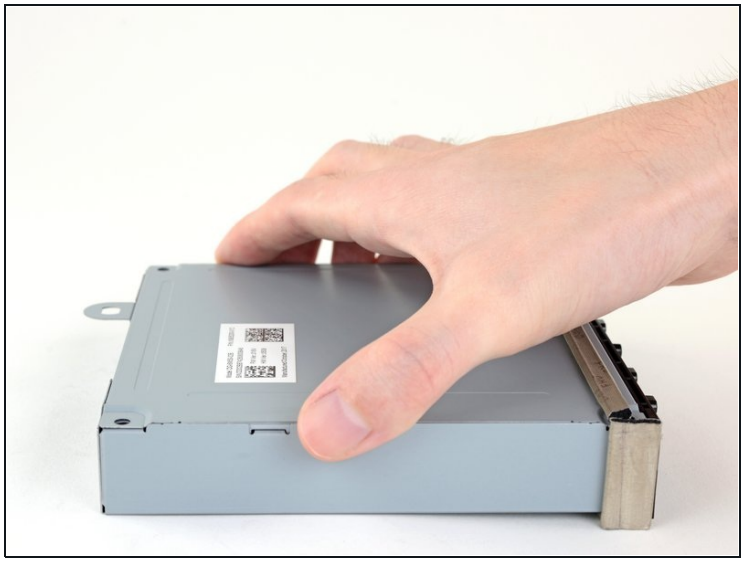
- Unplug the SATA cable from the disc drive.

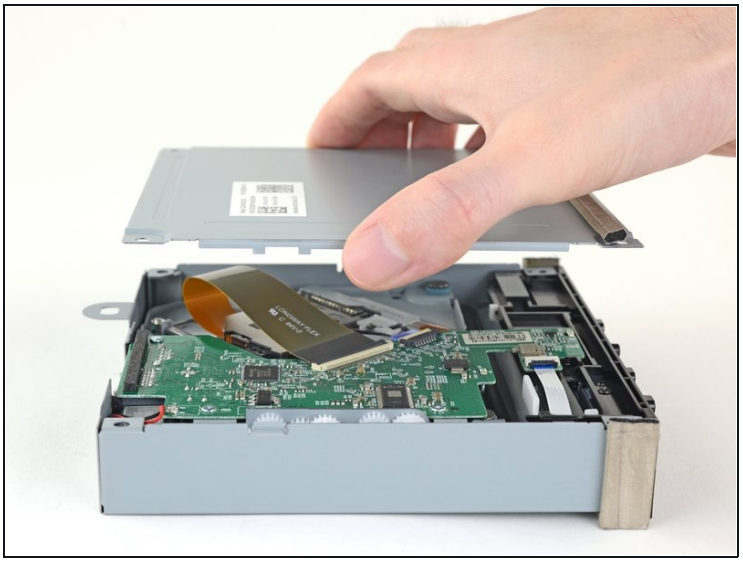
Step 27 — Remove the cover

- Use a Phillips screwdriver to remove the four 3.7 mm screws securing the disc drive cover.

  ⓘ You don't need to remove the foam covering the two right-side screws. Move the foam aside just enough to expose the screw.

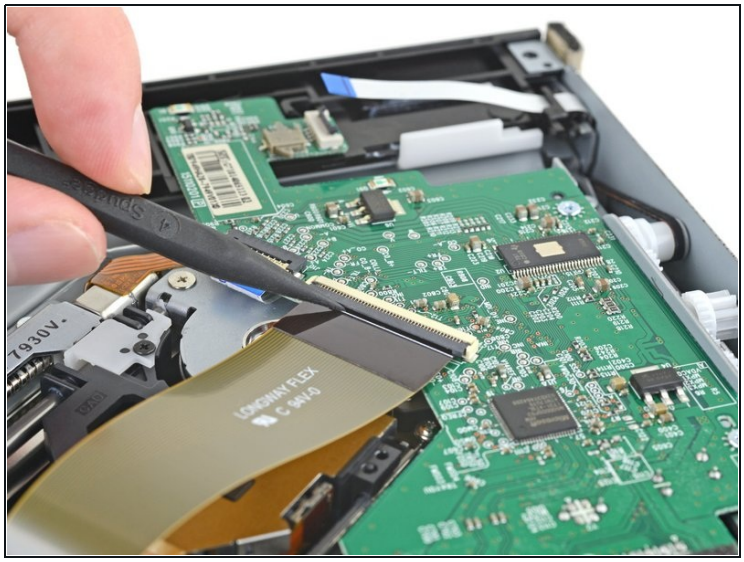
Step 28

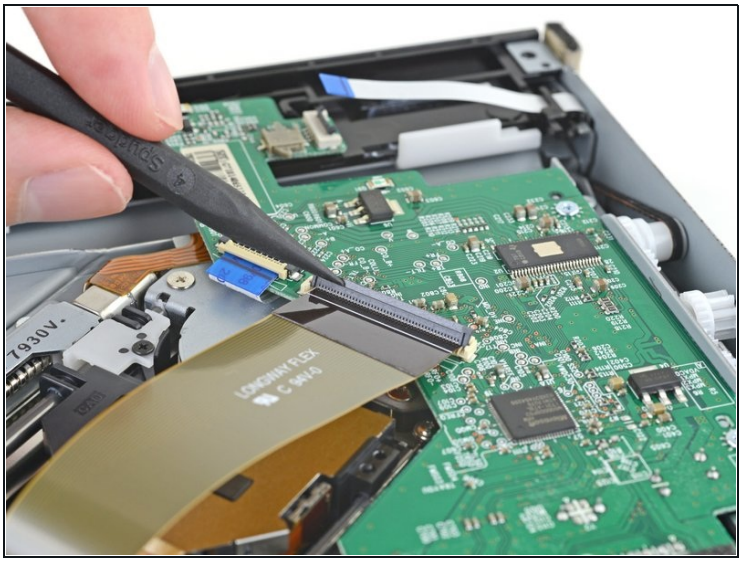




- Remove the cover from the disc drive.

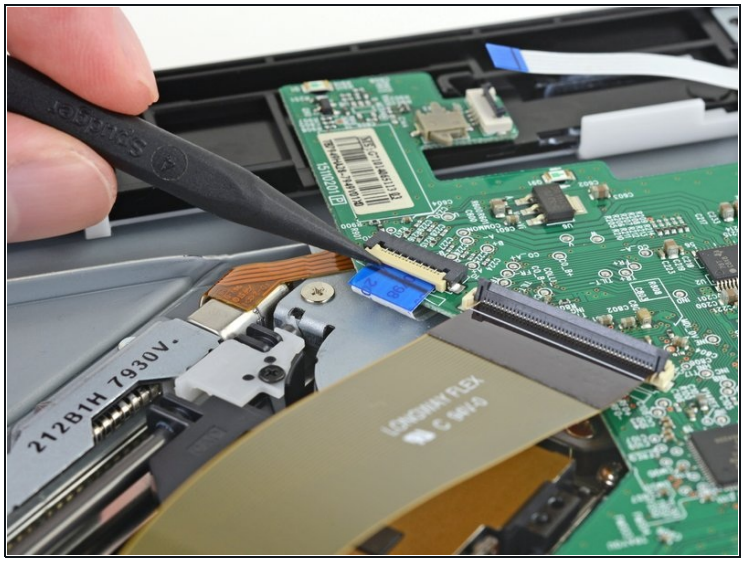
Step 29 — Disconnect the three ZIF connectors

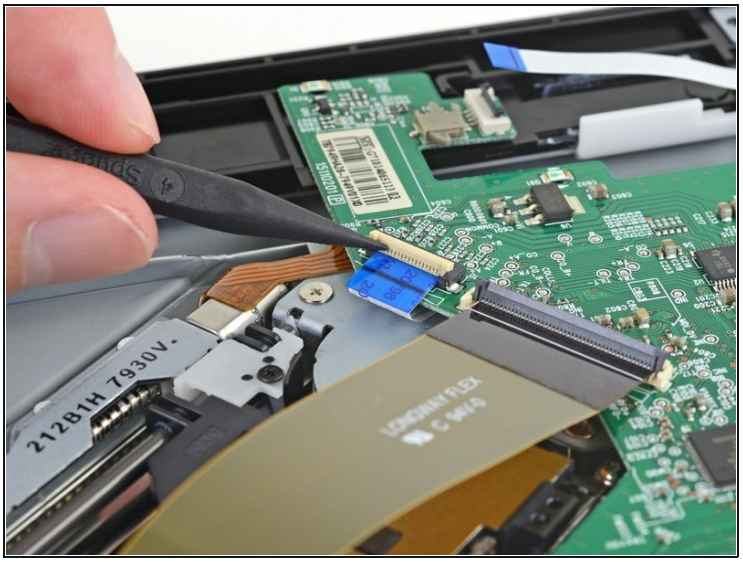




- Use the tip of a spudger, an opening tool, or your fingernail to flip up the small, hinged locking flap on the large ribbon cable ZIF connector.

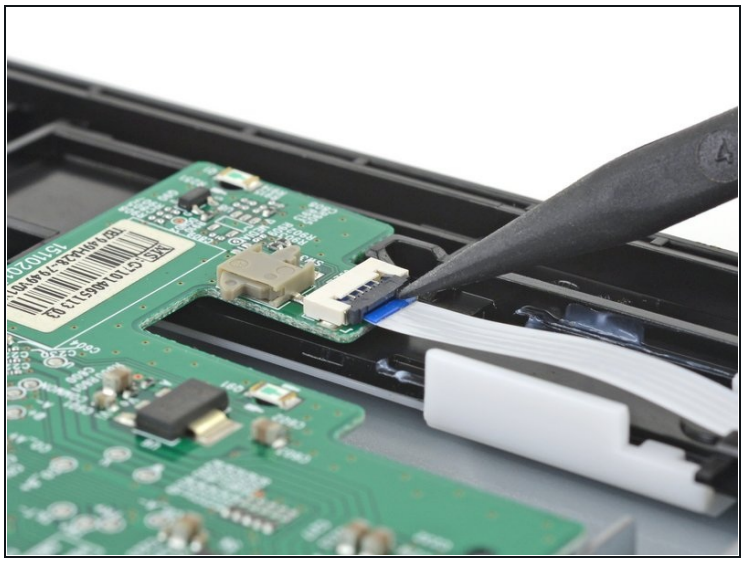
Step 30

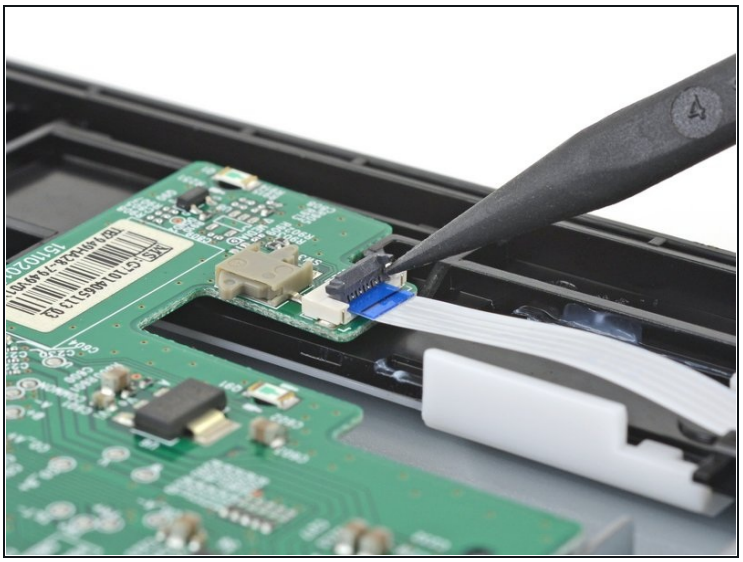




- Use the tip of a spudger, an opening tool, or your fingernail to flip up the small, hinged locking flap on the small ribbon cable next to the large ribbon cable ZIF connector.

Step 31



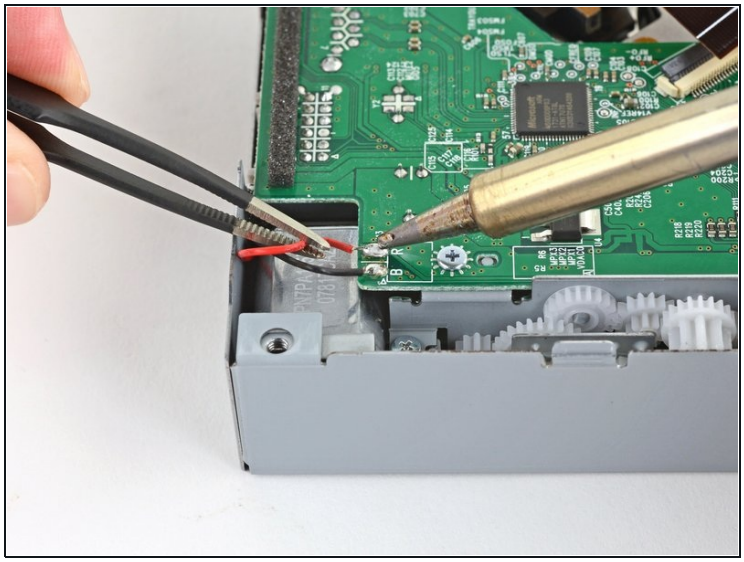


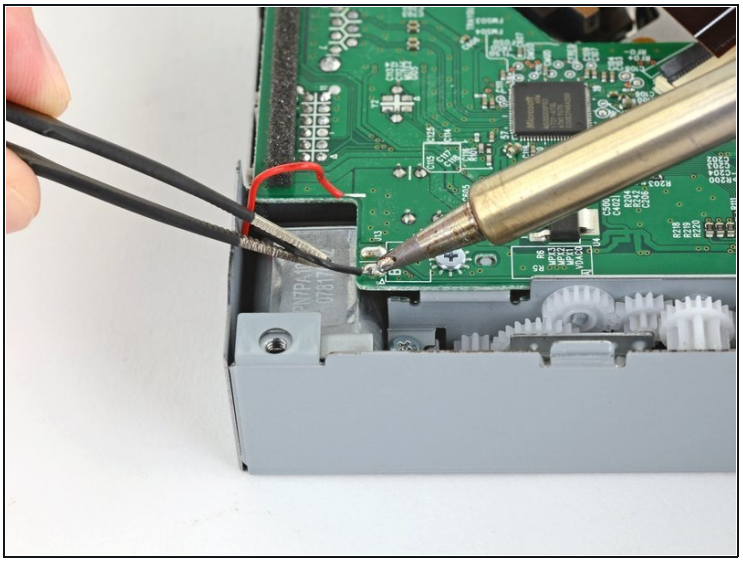
- Use the tip of a spudger, an opening tool, or your fingernail to flip up the small, hinged locking flap on the long ribbon cable in the corner of the disc drive ZIF connector.

Step 32

- Use blunt tweezers to pull out each of the three ribbon cables in the direction of the cable.

Step 33 — Desolder the two wires





- Use a soldering iron to desolder the red wire in the corner of the disc drive circuit board.
- Then, desolder the adjacent black wire. Use blunt tweezers to hold and pull away the wires from the circuit board.

⚠ Follow general soldering safety guidelines such as wearing eye protection, working in a well-ventilated area, and washing your hands with soap and water after soldering.

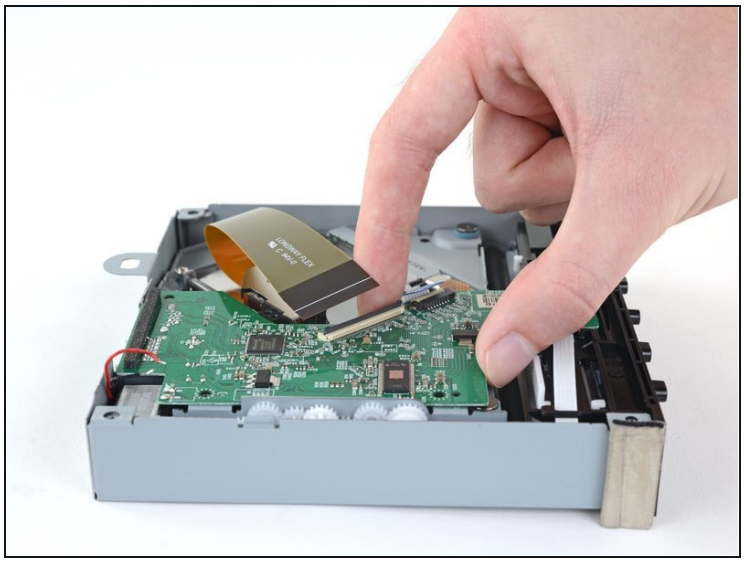
⚠ Excessive heat may damage electrical components. Don't apply the soldering iron to the board for long amounts of time.

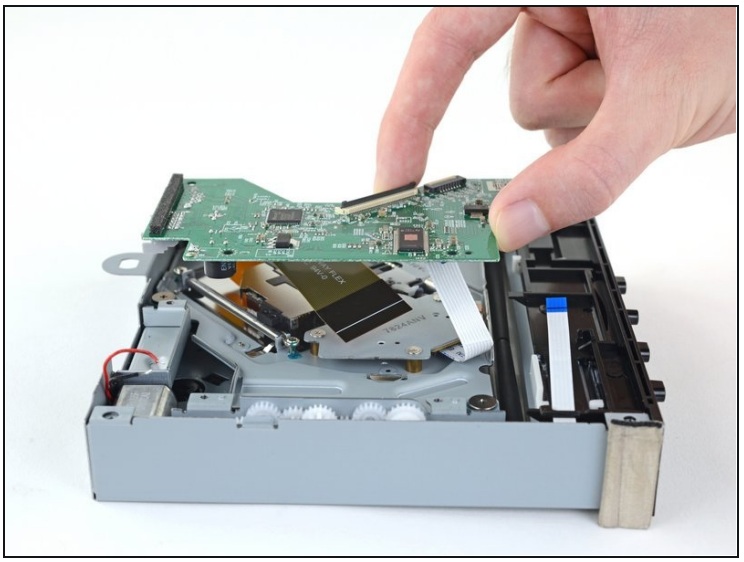
When you install the original circuit board into the replacement disc drive, solder the red wire to the solder pad labeled "R." Solder the black wire to the solder pad labeled "B."

Step 34 — Remove the circuit board screws

- Use a Phillips screwdriver to remove the three 3.4 mm screws securing the circuit board to the disc drive case.

Step 35 — Remove the disc drive circuit board





- Lift the circuit board out of the disc drive case and transfer it to the replacement drive.

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

Take your e-waste to an R2 or e-Stewards certified recycler.

Repair didn’t go as planned? Try some basic troubleshooting, or ask our Xbox One X Answers community for help.