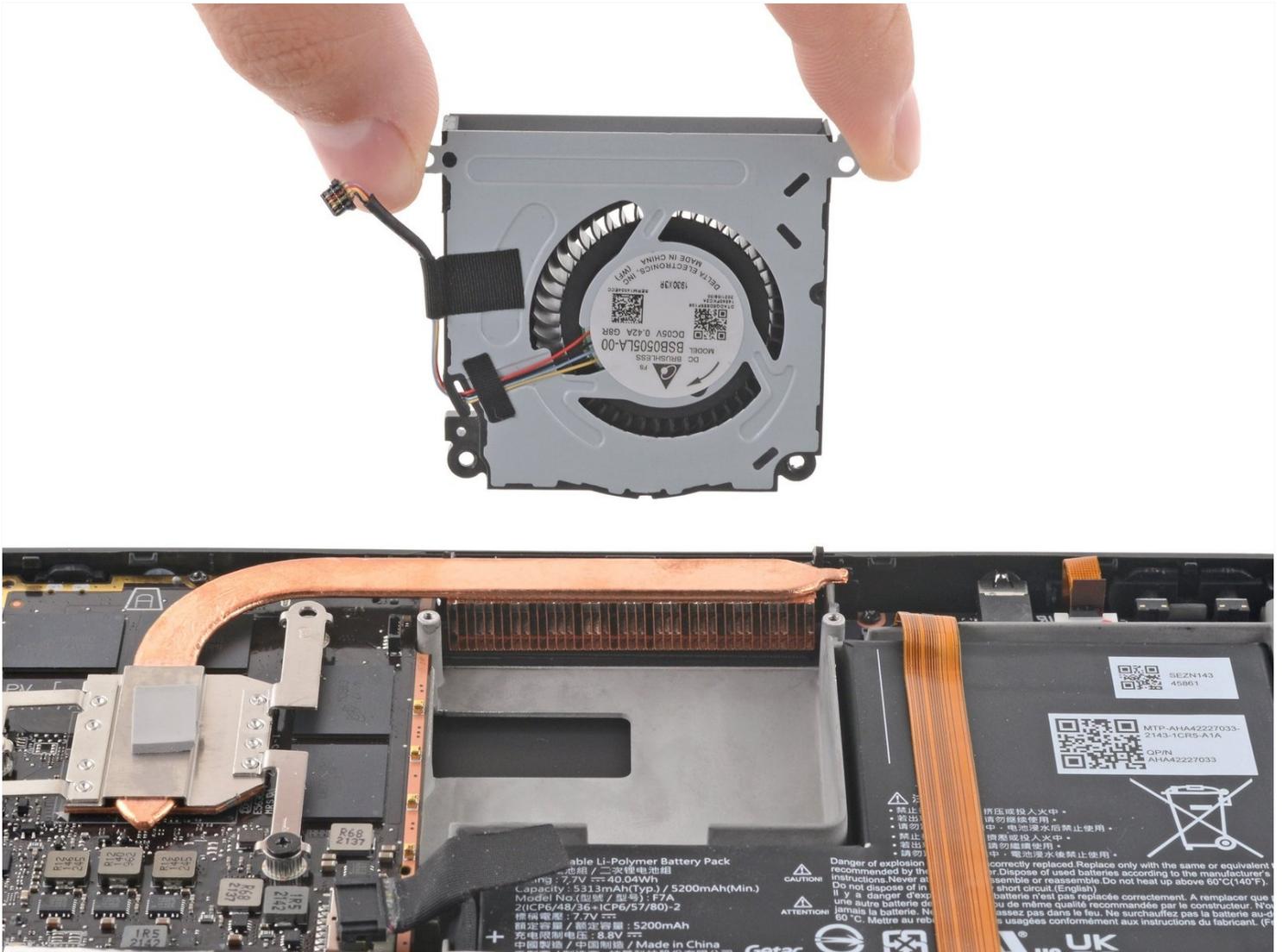


Steam Deck Fan Replacement

Use this guide to replace the cooling fan in...

Written By: Carsten Frauenheim



INTRODUCTION

Use this guide to replace the cooling fan in your Steam Deck LCD, or remove it for cleaning.

Remember: follow general [electrostatic discharge \(ESD\) safety procedures](#) while repairing your device.

Note: Valve started shipping Steam Decks with refreshed internal designs in early 2023. Your Steam Deck may look different than the one depicted in the photos, but the procedure is the same. **The Steam Deck's fan design differs between versions.** Before ordering a replacement fan, [remove the back cover](#) of your Steam Deck to check what version you have. An original Steam Deck will have a metallic motherboard shield and a fan with square sides, as [seen here](#). A refreshed Steam Deck will have a black motherboard shield and a fan with curved sides, as [seen here](#).

TOOLS:

[Phillips #1 Screwdriver](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[Tweezers](#) (1)
[Phillips #0 Screwdriver](#) (1)

PARTS:

[Steam Deck \(Original Model\) Fan](#) (1)
[Steam Deck \(Refreshed Model\) Fan](#) (1)

Step 1 — Prepare your Steam Deck for disassembly



⚠ Turn on your Steam Deck and allow the battery to discharge below 25% before starting your repairs, as a charged lithium-ion polymer battery can be dangerous if accidentally punctured.

ⓘ As an extra precaution, Valve recommends putting your Steam Deck into **battery storage mode** within the BIOS before starting any internal repairs. [Read how to do that here.](#)

- Power down your Steam Deck and unplug any cables.

⚠ If you have a microSD card installed, **make sure to remove it** before opening the Steam Deck. If you attempt to remove the back cover with it still installed, [it could snap right in half.](#)

ⓘ During your repair, it can be helpful at times to lay the Steam Deck face-down into its case to protect the thumbsticks and prevent wobble.

Step 2 — Remove the back cover screws



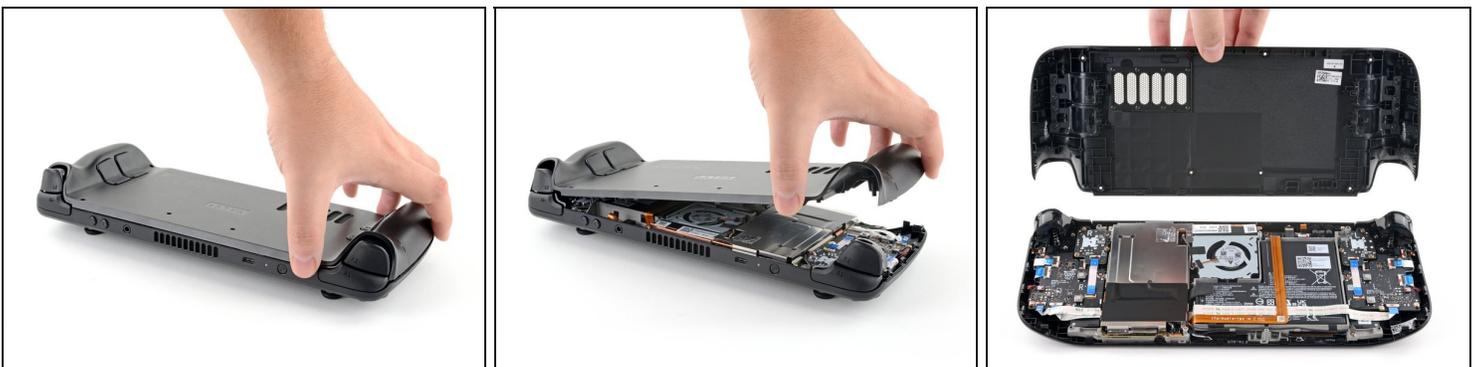
- Use a Phillips driver to remove the eight screws securing the back cover:
 - Four coarse thread 9.5 mm-long screws
 - Four fine thread 5.8 mm-long screws
- ⓘ Despite the standards, Phillips screwdrivers can vary in size and shape—two drivers labeled as the same size may fit differently in the same screw. Use the size that fits the snuggest into the screw head.
- ⓘ Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from to avoid damaging your Steam Deck.

Step 3 — Unclip the back cover



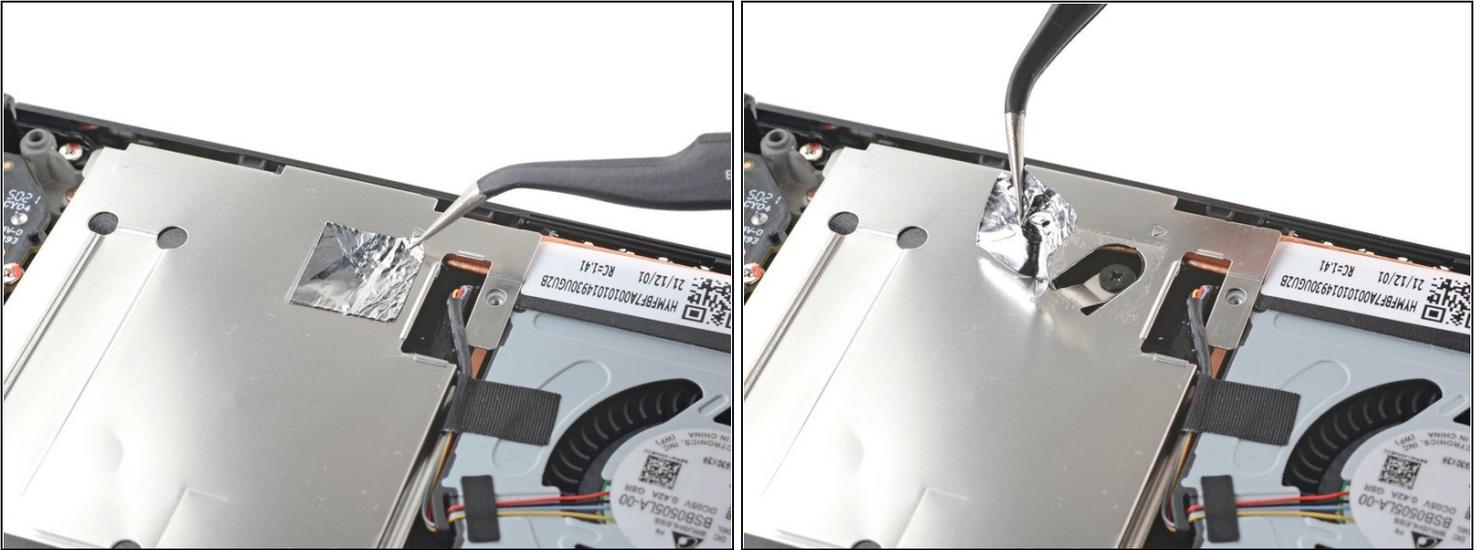
- Insert an opening pick into the thin gap between the back cover and the front shell, along the edge of the right grip.
 - ⓘ If you're having trouble inserting your pick at the grip seam, try starting at either the top or bottom long edges first, then slide the pick towards the grip.
- Pry up on the back cover to release it from the locking clips.

Step 4 — Remove the back cover



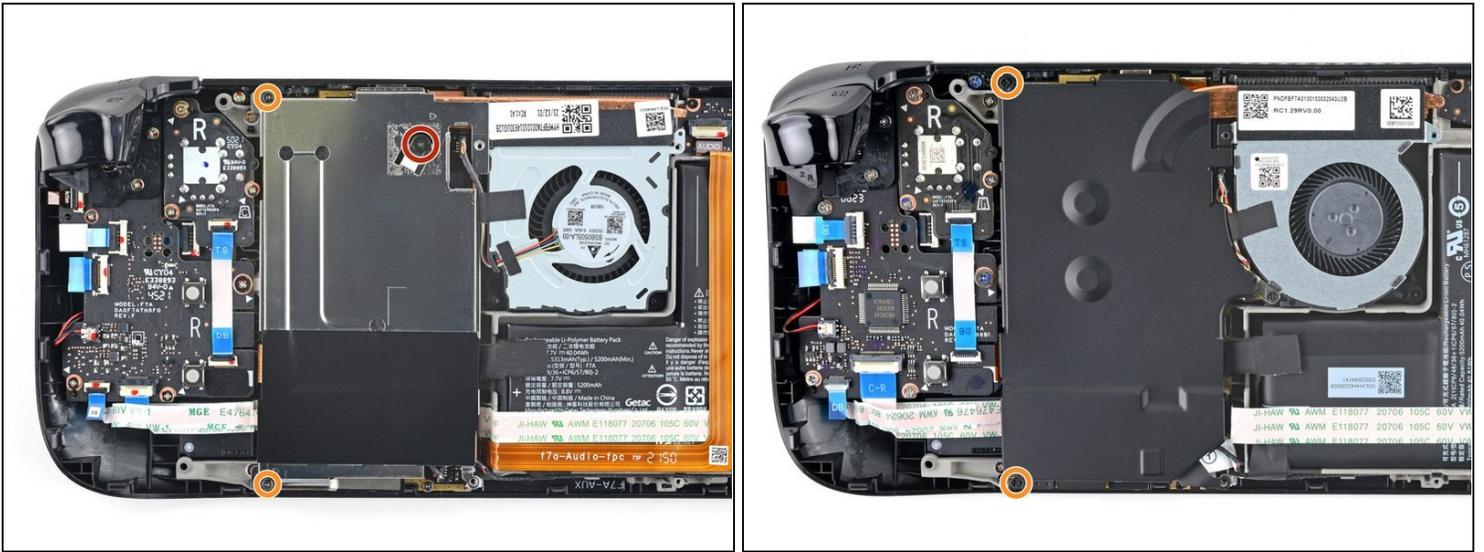
- ⓘ Once the clips are disconnected from one edge, the rest disconnect easily.
- Grip the back cover at the opening you just created and pull it up and away from the device to unclip the long edges.
- Remove the back cover.

Step 5 — Uncover the hidden shield screw



- ① If you have a [refreshed Steam Deck version](#) with the black motherboard cover, skip this step.
- Use a pair of tweezers to remove the piece of foil tape covering the hidden screw on the board shield.
 - ① If possible, try not to rip or tear this tape so it can be reused. If necessary, you can fashion a replacement by cutting a piece of aluminum foil tape to fit.

Step 6 — Remove the shield screws



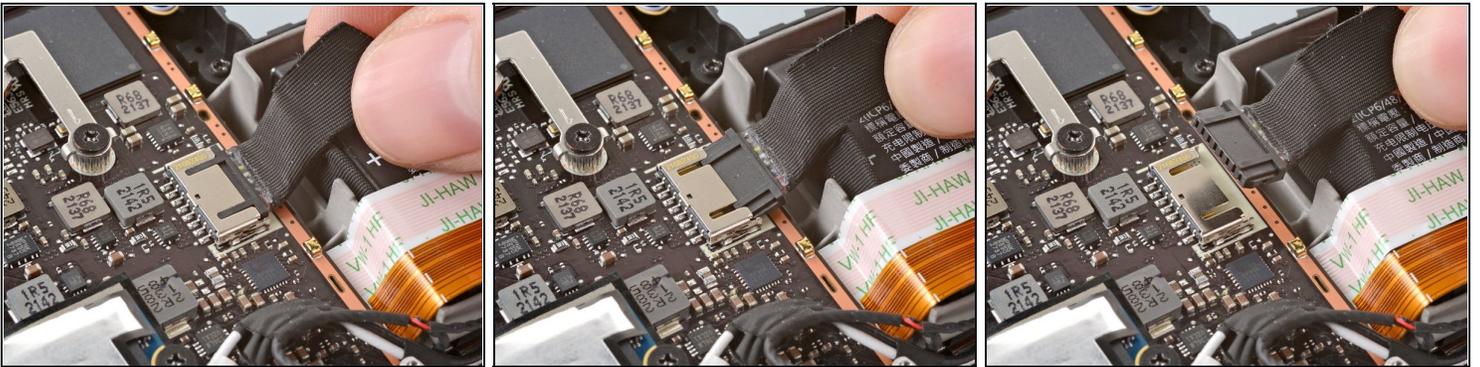
- Use a Phillips driver to remove the three screws securing the board shield:
 - One 3.4 mm screw
 - Two 3.7 mm screws
- ⓘ Only the two 3.7 mm screws along the left edge are present in refreshed Steam Decks.

Step 7 — Remove the shield



- Remove the board shield.
- ⓘ Depending on the age of your Steam Deck, this shield may stick to the thermal pads underneath.
- ☑ During reassembly, ensure that the fan cable [lays on the side of the board shield](#) and isn't pinched underneath.

Step 8 — Disconnect the battery



- Grip the battery cable by its pull tab and pull it directly away from the motherboard to disconnect it.
 - ① Alternatively, use the flat end of a spudger or a clean fingernail to gently push the connector out of its socket, then disconnect it completely by hand.

Step 9 — Remove the heatsink sticker



- Use a pair of tweezers to remove the sticker from the top edge of the fan.
 - ① If possible, try not to rip or tear this sticker so it can be reused. Use a little bit of heat if necessary to soften the adhesive.
 - ① If the sticker feels like it might tear, use tweezers to peel up one edge just until you can grip it with your fingers, then remove the rest by hand.

Step 10 — Disconnect the fan



- Use a pair of tweezers to grip the edges of the fan connector and pull up to disconnect it from the motherboard.

⚠ Pull the fan cable by its connector, not the wires themselves.

- ☑ During reassembly, be gentle while plugging in the fan connector.

⚠ If the connector is misaligned, the use of too much force can damage the fragile internal pins.

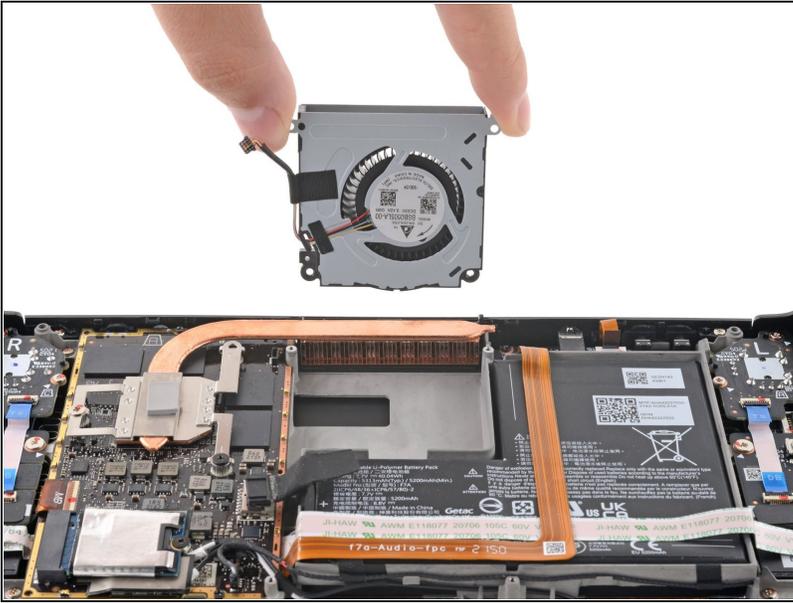
Step 11 — Remove the fan screws



- Use a Phillips driver to remove the two 3.7 mm screws securing the fan.

ⓘ No, your eyes don't deceive you! The other two fan screws were removed earlier in the disassembly: they double as [two back cover screws](#).

Step 12 — Remove the fan



- Remove the fan.
- ☒ When installing a replacement fan, peel off the plastic liner on the cable adhesive and adhere it to the fan body in the same location as the cable on the old fan, so it'll [lay on the side of the board shield](#) and not get pinched underneath.

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 [Steam Deck answers community](#) for help.