



Steam Deck Action Buttons (ABXY) Replacement

Use this guide to replace the action buttons...

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INTRODUCTION

Use this guide to replace the action buttons (ABXY) and their membrane in your Steam Deck LCD.

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. [Remove the back cover](#) 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)
[Spudger](#) (1)

PARTS:

[Steam Deck LCD Action Buttons](#) (1)
[Steam Deck LCD and Steam Deck OLED Action Button Rubber Membrane](#) (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



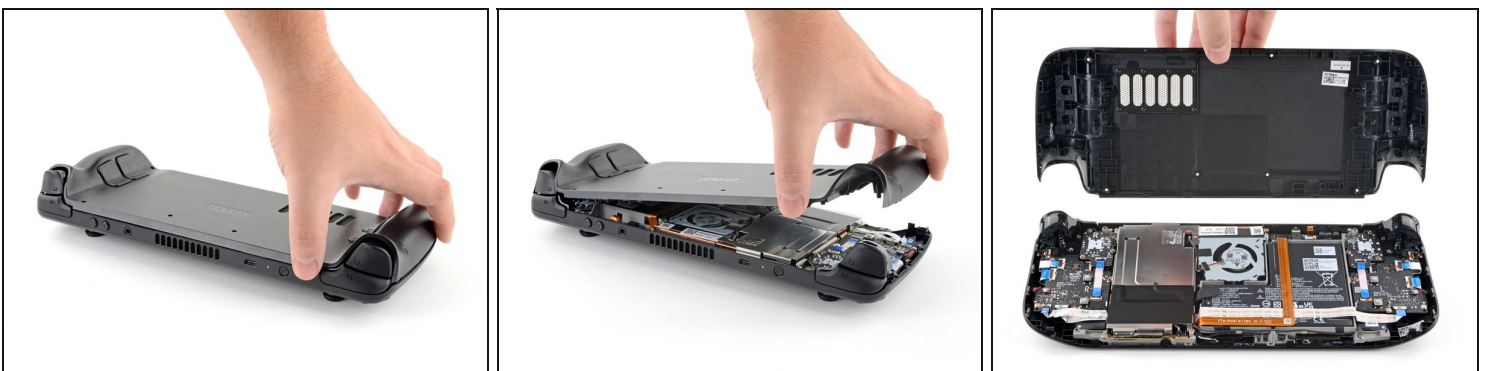
- Use a Phillips driver to remove the eight screws securing the back cover:
 - Four coarse thread 9.5 mm-long screws
 - Four fine thread 5.8 mm-long screws
- ⓘ Despite the standards, Phillips screwdrivers can vary in size and shape—two drivers labeled as the same size may fit differently in the same 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



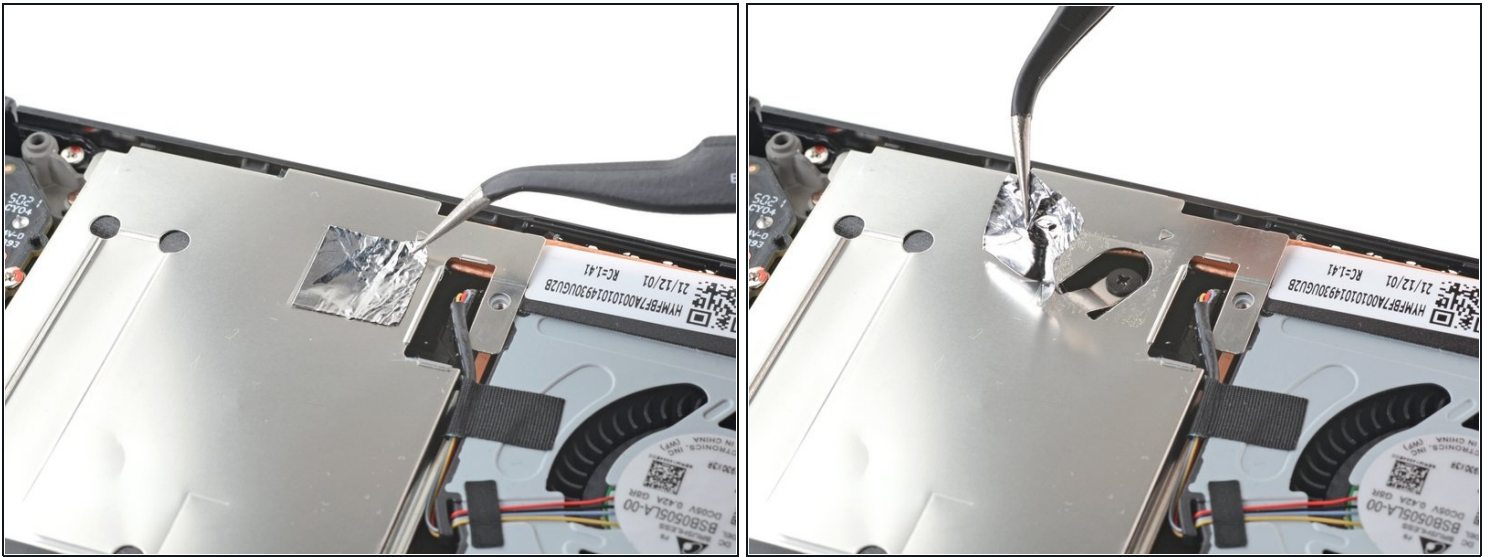
- Insert an opening pick into the thin gap between the back cover and the front shell, along the edge of the right grip.
 - ❗ If you're having trouble inserting your pick at the grip seam, try starting at either the top or bottom long edges first, then slide the pick towards the grip.
- Pry up on the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

Step 4 — Remove the back cover



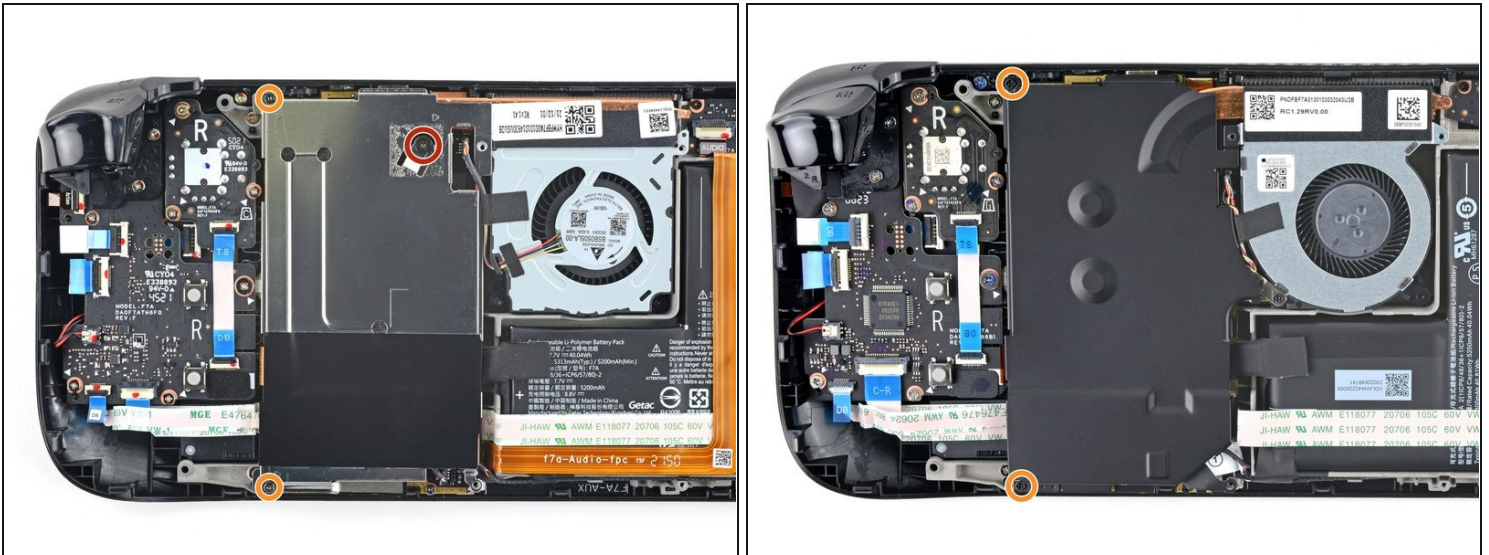
- ❗ Once the clips are disconnected from one edge, the rest disconnect easily.
- Grip the back cover at the opening you just created and pull it up and away from the device to unclip the long edges.
- Remove the back cover.

Step 5 — Uncover the hidden shield screw



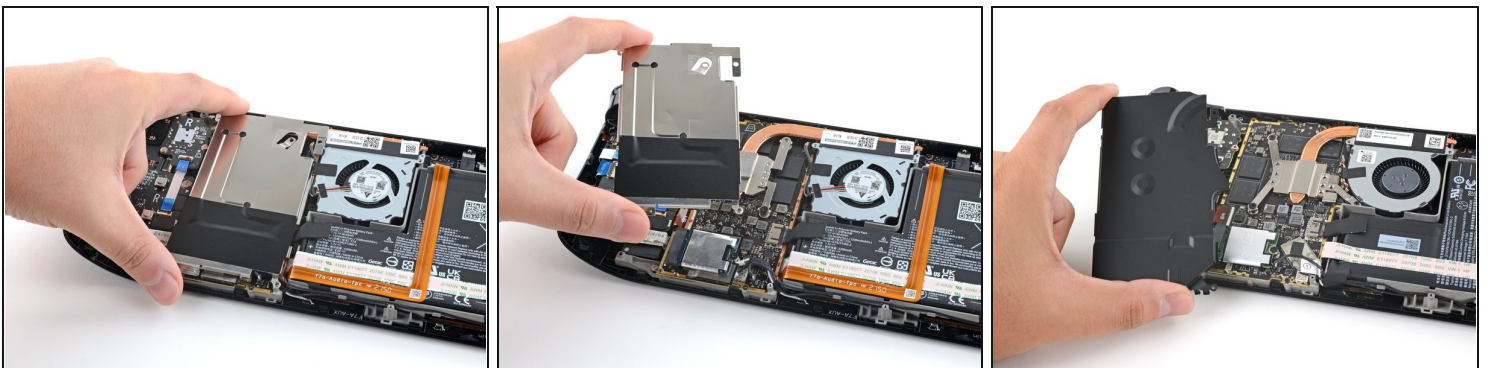
- ① If you have a [refreshed Steam Deck version](#) with the black motherboard cover, skip this step.
- Use a pair of [tweezers](#) to remove the piece of foil tape covering the hidden screw on the board shield.
 - ① If possible, try not to rip or tear this tape so it can be reused. If necessary, you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

Step 6 — Remove the shield screws



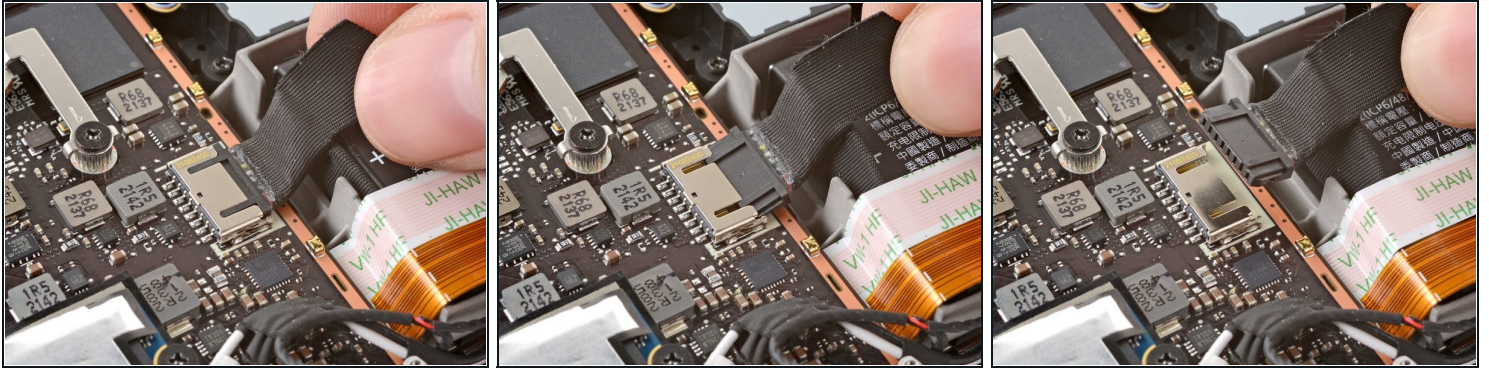
- Use a Phillips driver to remove the three screws securing the board shield:
 - One 3.4 mm screw
 - Two 3.7 mm screws
- ⓘ Only the two 3.7 mm screws along the left edge are present in refreshed Steam Decks.

Step 7 — Remove the shield



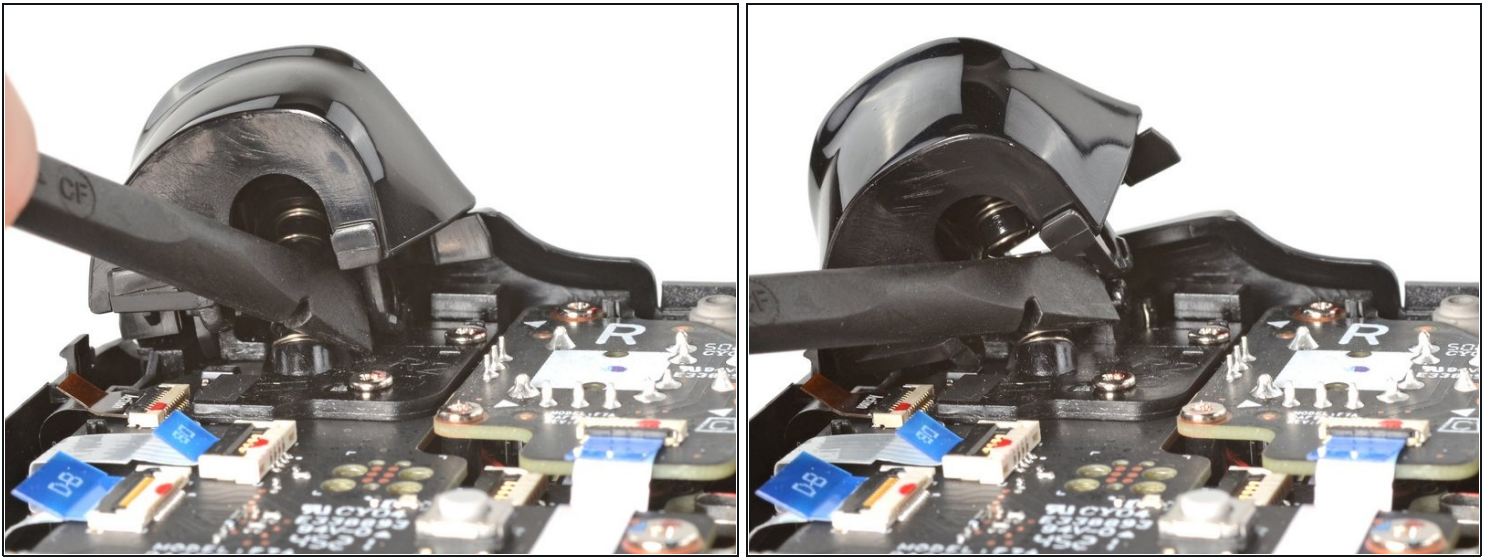
- Remove the board shield.
- ⓘ Depending on the age of your Steam Deck, this shield may stick to the thermal pads underneath.
- ☑ During reassembly, ensure that the fan cable [lays on the side of the board shield](#) and isn't pinched underneath.

Step 8 — Disconnect the battery



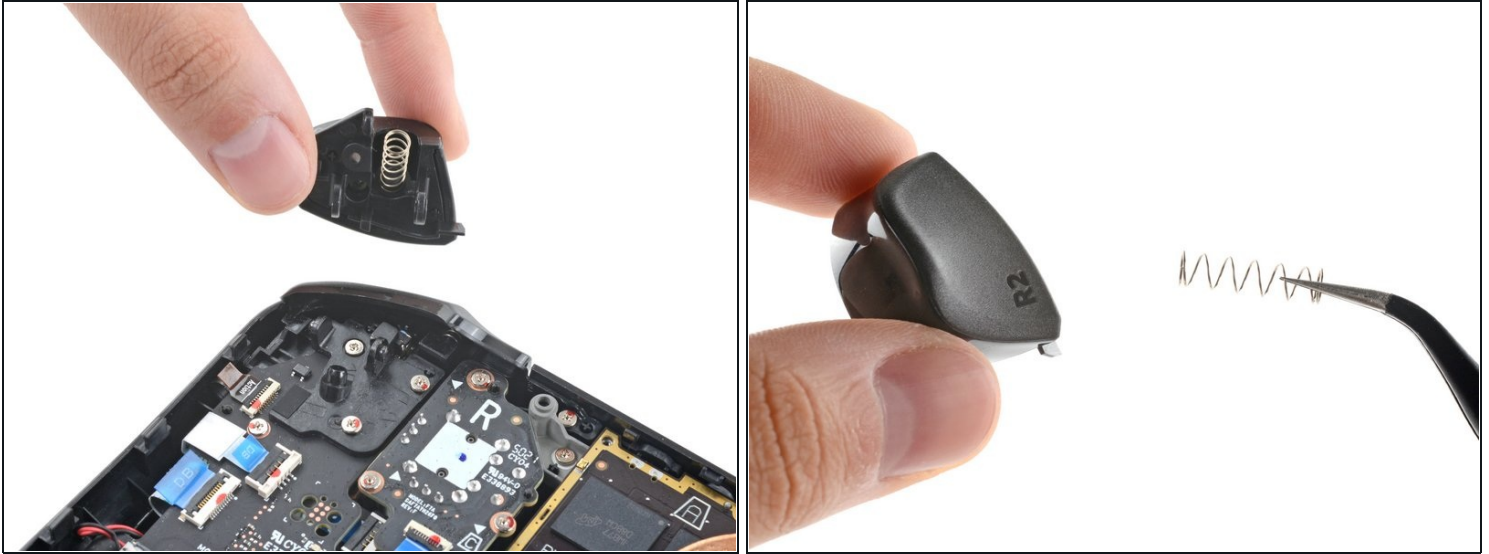
- Grip the battery cable by its pull tab and pull it directly away from the motherboard to disconnect it.
- ① Alternatively, use the flat end of a spudger or a clean fingernail to gently push the connector out of its socket, then disconnect it completely by hand.

Step 9 — Unclip the right trigger



- ① The **right** trigger will be on your **left-hand side** when working on the Steam Deck, as it's laying upside down.
- ① The Steam Deck's triggers clip into place on two pegs on the trigger bracket, which doubles as the hinge.
 - Place the flat end of a spudger onto the inside edge of the trigger's right clip.
 - Pivot the trigger clip out, away, and up from the peg to unlatch it.
- ✦ During reassembly, latch the outermost peg first. Once in place, push down on the trigger to latch the innermost peg, producing an audible "**click**" sound.
 - ① Check to make sure that the trigger spring is properly aligned. Test the trigger action before continuing reassembly.

Step 10 — Remove the right trigger



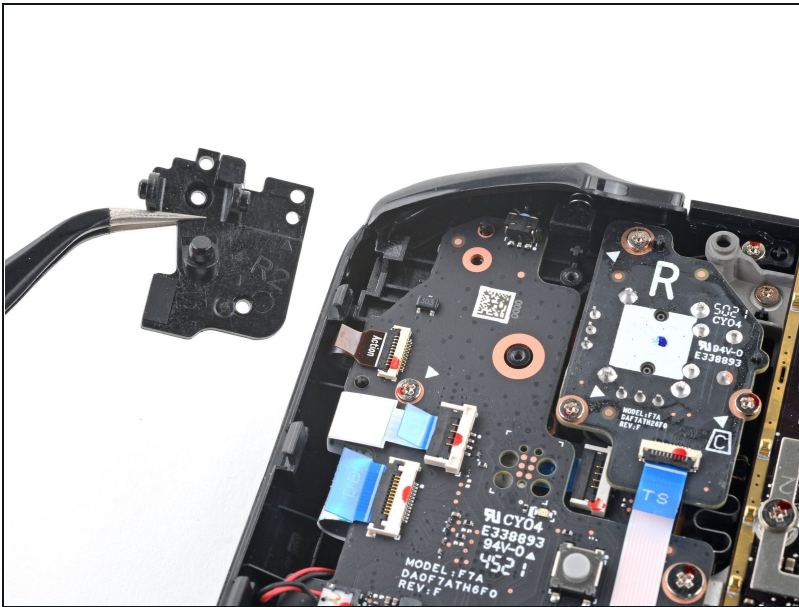
- Remove the right trigger.
- ⓘ Take care to not lose the trigger spring. It press-fits onto a peg on the trigger's underside.

Step 11 — Remove the trigger bracket screws



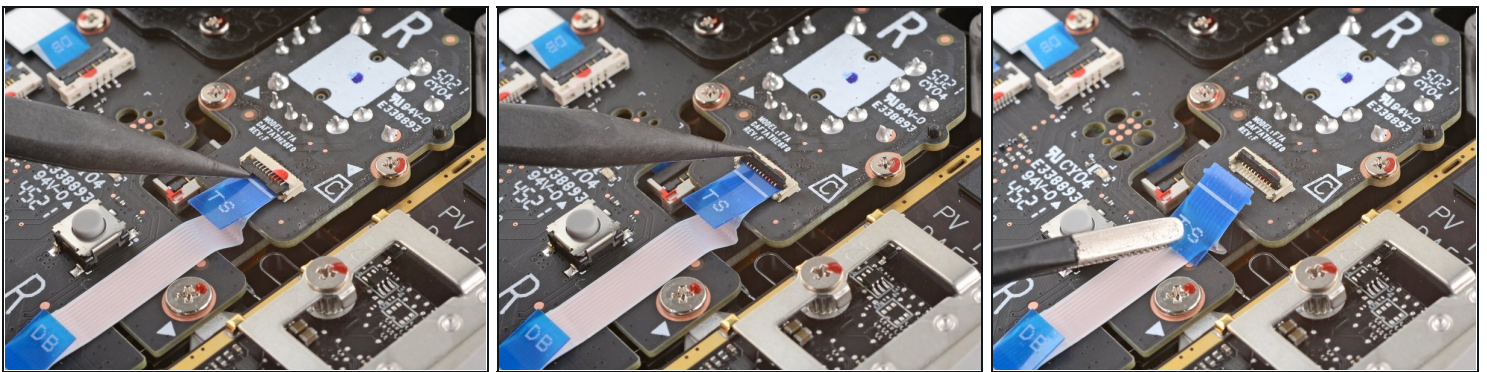
- Use a Phillips driver to remove the three 5.2 mm screws securing the right trigger bracket.

Step 12 — Remove the trigger bracket



- Remove the right trigger bracket.
- ☑ Replacement triggers require calibration to work as expected. To calibrate new triggers, follow [this calibration guide](#).

Step 13 — Disconnect the right thumbstick



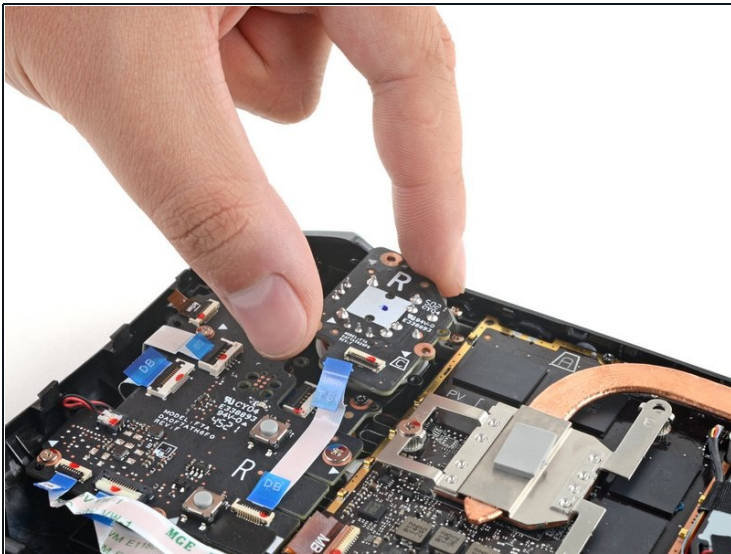
- Use the pointed end of a spudger to lift up the small locking flap on the thumbstick cable's [ZIF connector](#).
- Use a pair of [tweezers](#) to slide the cable out of its connector.
 - ⓘ Grip the cable by the blue pull tab, not by the cable itself.

Step 14 — Remove the thumbstick screws



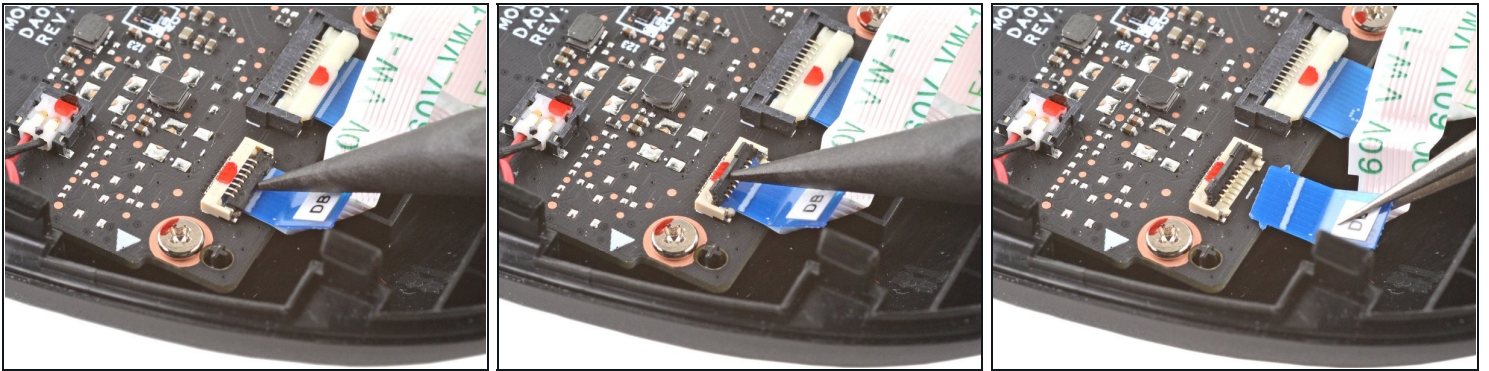
- Use a Phillips driver to remove the three 5.2 mm screws securing the thumbstick.
- ⓘ During reassembly, you may need to hold the Steam Deck off of the work surface so it isn't resting on the new thumbstick while you tighten down the screws.

Step 15 — Remove the right thumbstick



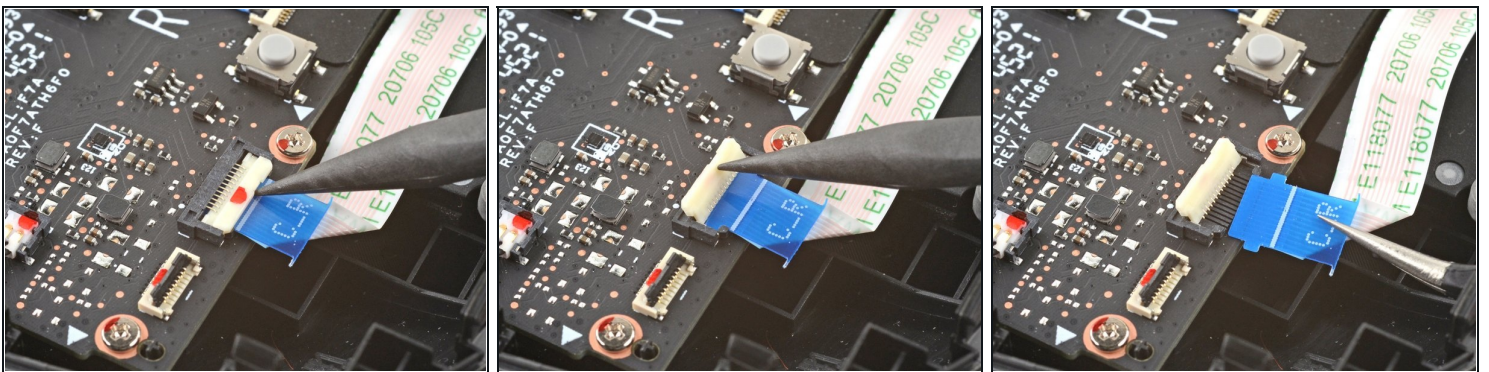
- Remove the right thumbstick.

Step 16 — Disconnect the button board cable



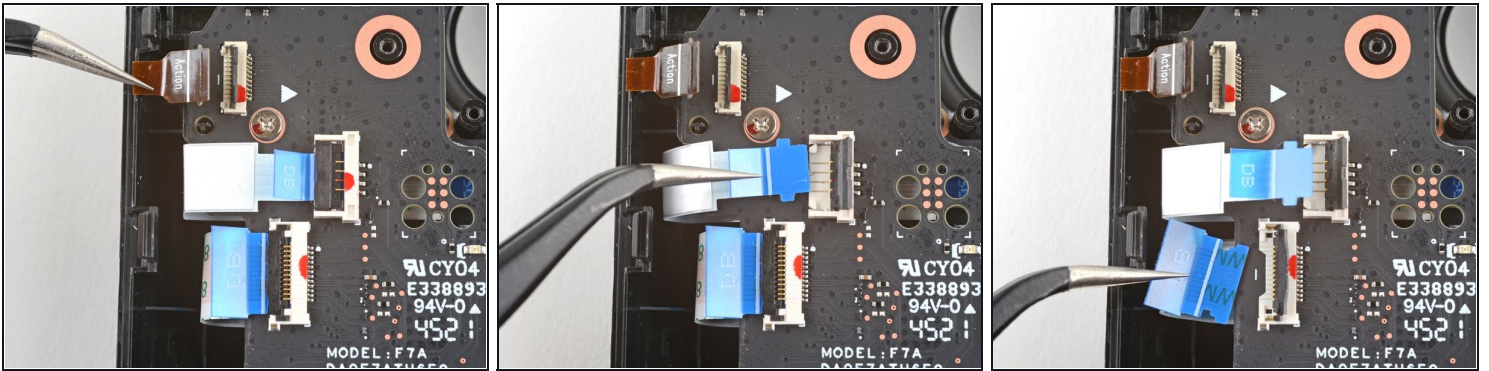
- Use the pointed end of a spudger to lift up the small locking flap on the button board cable's ZIF connector.
- Use a pair of tweezers to slide the cable out of its connector.
 - ① Grip the cable by the blue pull tab, not by the cable itself.

Step 17 — Disconnect the interconnect cable



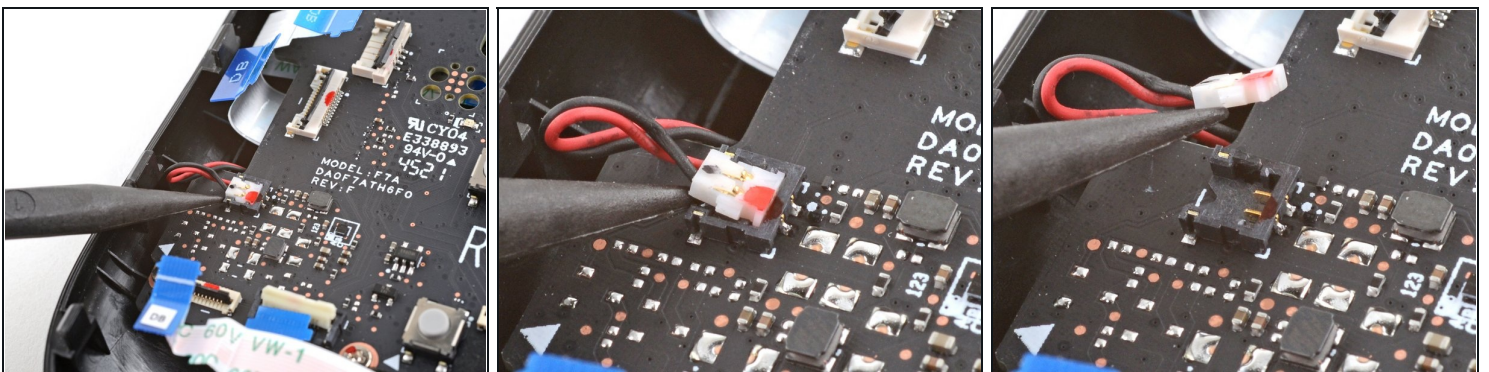
- Use the pointed end of a spudger to lift up the small locking flap on the button board interconnect cable's ZIF connector.
- Use a pair of tweezers to slide the cable out of its connector.
 - ① Grip the cable by the blue pull tab, not by the cable itself.

Step 18 — Disconnect the remaining button board cables



- If any connectors are [covered with tape](#), use a pair of tweezers to remove it.
- Use the pointed end of a spudger to lift up the small locking flaps on the rest of the button board ZIF connectors. Use a pair of tweezers to slide the cables out of their connectors:
 - Disconnect the action buttons cable.
 - Disconnect the touchpad board cable.
 - Disconnect the touchpad cable.

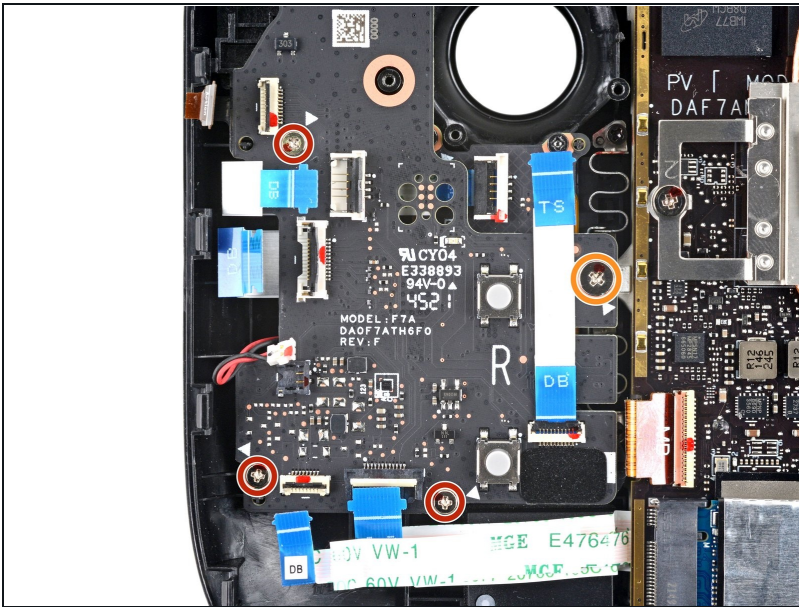
Step 19 — Disconnect the right haptics



⚠ Exercise caution when lifting this connector—pry up on the connector itself, not its housing.

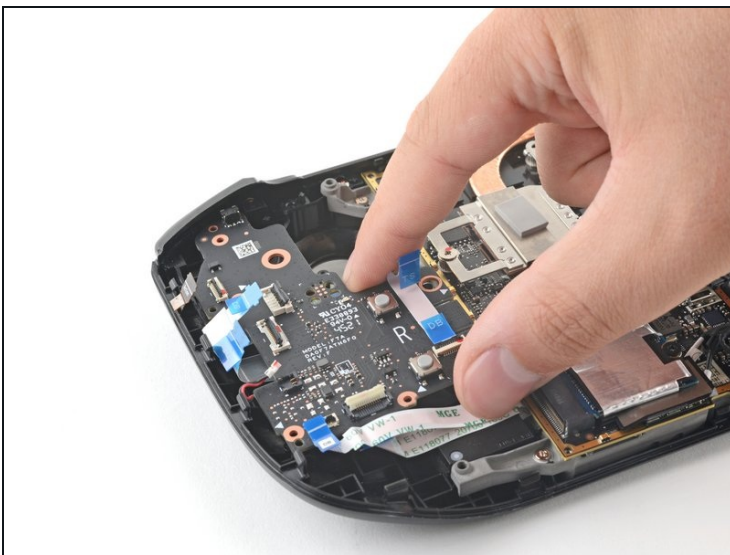
- Use the pointed end of a spudger to lift up on the haptics cable to disconnect it.
- ① Alternatively, you can leave the haptics connected to the button board and flip the board up and over the edge of the shell and out of the way.

Step 20 — Remove the button board screws



- Use a Phillips driver to disconnect the four screws securing the right button board:
 - Three 5.2 mm screws
 - One 3.9 mm screw

Step 21 — Remove the button board



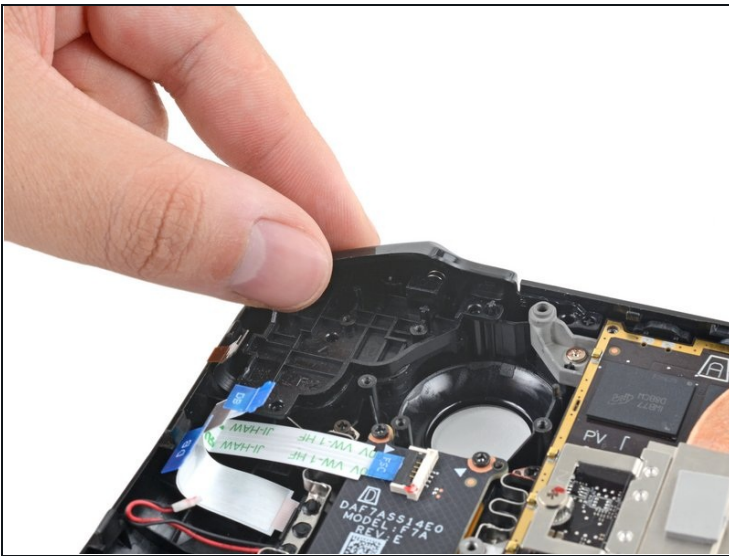
- Remove the right button board.
- ❗ Keep track of the [quick access button](#) and its membrane, as once the right button board is removed, they're no longer secured in place.

Step 22 — Remove the bumper screws



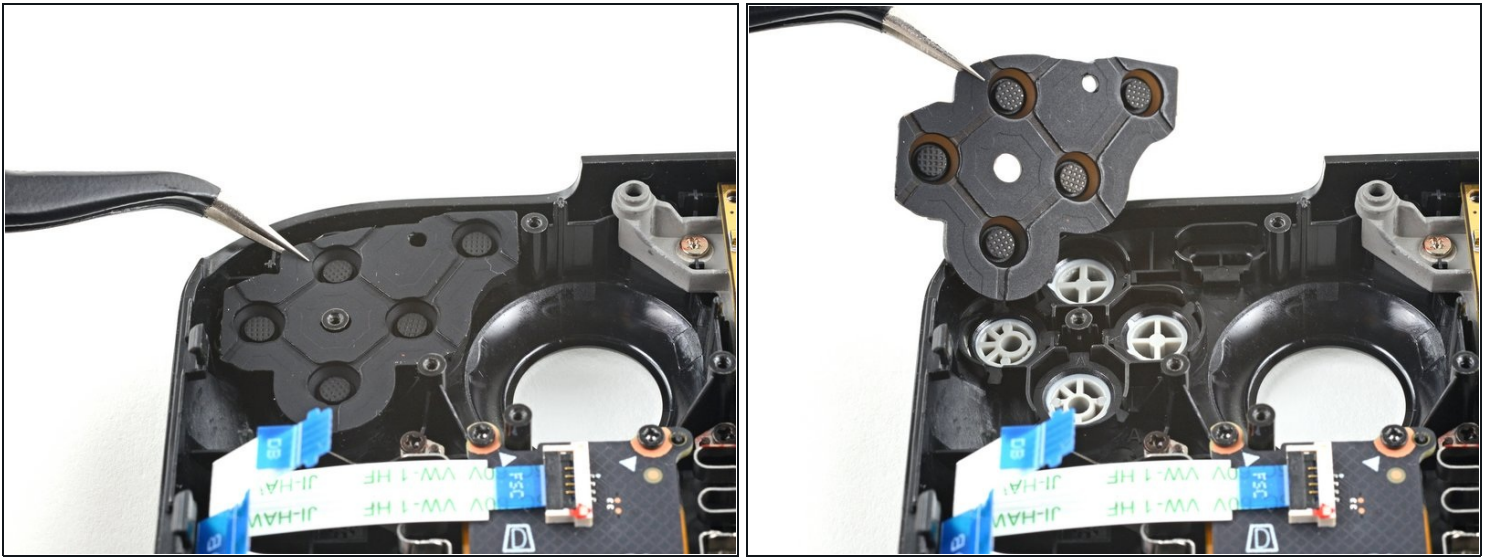
- Use a Phillips driver to remove the two 5.2 mm screws securing the right bumper assembly.

Step 23 — Remove the right bumper assembly



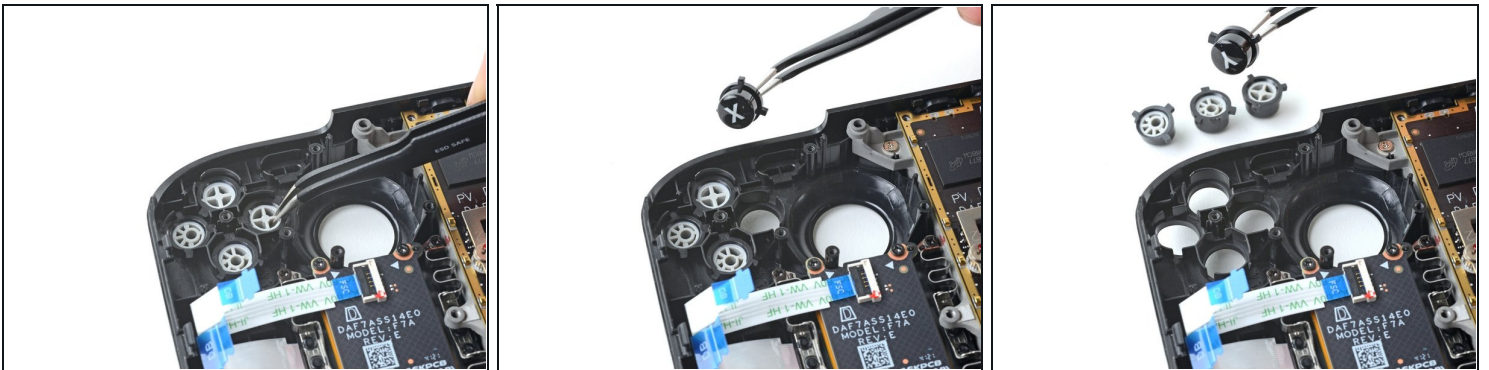
- Remove the right bumper assembly.

Step 24 — Remove the action buttons membrane



- Use a pair of [tweezers](#) to remove the action buttons membrane.

Step 25 — Remove the action buttons



- Use a pair of tweezers to remove the four action buttons, A, B, X, and Y.
- ☒ During reassembly, don't worry! The buttons are keyed—they can only be reinstalled in one orientation.

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.

