

Sony M-430 Microcassette-Corder Motherboard Replacement

The motherboard is the brain of your...

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INTRODUCTION

The motherboard is the brain of your microcassette-corder. Following the steps in this guide will allow you to remove the motherboard and install a new one, saving your microcassette-corder.

TOOLS:

Flathead 3/32" or 2.5 mm Screwdriver (1) Soldering Workstation (1) Tweezers (1)

Step 1 — Battery



- Find the arrow on the battery cover on the back of the device.
- While pressing down on the arrow, slide the cover towards the bottom of the recorder until it clicks.



• Lift the cover and remove the batteries.

Step 3 — Back Cover



- Remove the battery cover by first tilting it so it is at a right angle with the rest of the device.
- Next, twist it to the side as shown in the second picture. The lid should simply snap off.

A Be careful not to apply too much force, as the lid may break.

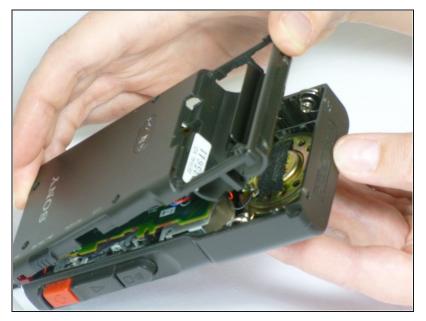


- Use a #00 Phillips head screwdriver to remove the four (1.7x16 mm) screws from the back case.
- Next, use the same screwdriver to unscrew the (1.7X5 mm) screw, which is located inside the battery compartment.

Step 5

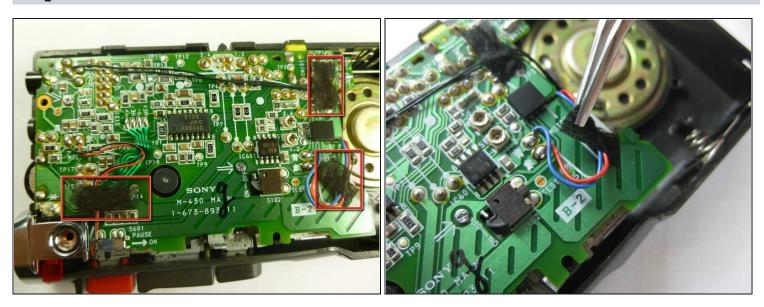


- Use a spudger to push in the two tabs located on the bottom of the device.
- It works best to push the tabs at an upward angle (towards the top of the battery compartment)
- It may take a decent amount of force in order to push in the tabs.

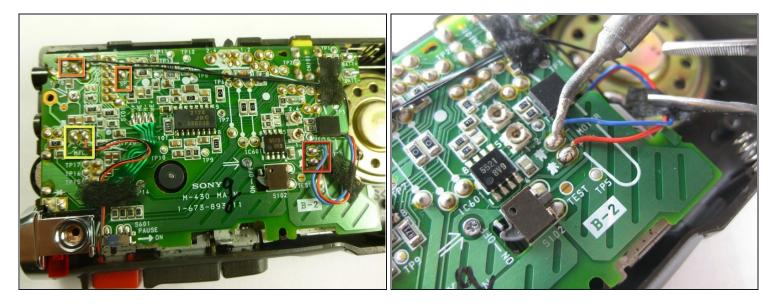


- With a firm grip on the larger half, remove the back cover by lifting first on the battery area.
- The back cover should lift cleanly off.

Step 7 — Motherboard



- Using <u>tweezers</u>, pull upward on the black tape which secures the wires.
- Removing this tape allows you to move the wires out of the way for the next step.



• Desolder all wires connecting components to the motherboard.

 \triangle Be careful to not melt the solder points together.

- A red wire and a blue wire connect the motor to the motherboard.
- Two black wires connect the speaker to the motherboard.
- A red wire and a black wire connect the microphone to the motherboard.

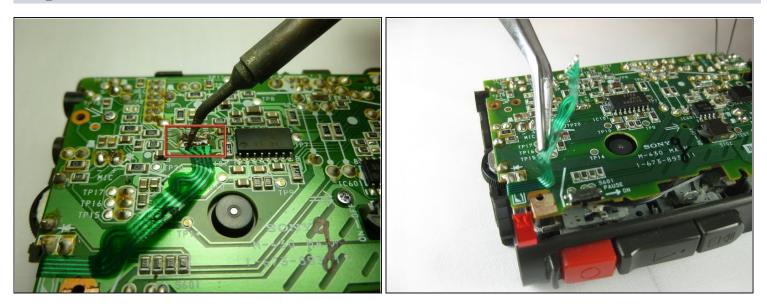


• After desoldering the microphone connections, pull the microphone straight out from the device and set aside.

A Be careful not to tear the wires off of the microphone.

• Removing the microphone gives you access to the green ribbon cable that connects to the mechanism deck.

Step 10



- Desolder the 4 connections of the green ribbon cable.
- Pull upward on the green ribbon cable to separate it from the motherboard.

 \triangle Be careful when pulling up the film as it may tear.

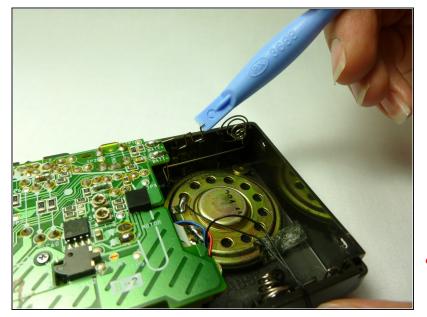


 Using a #00 Phillips screwdriver, remove the two 1.4x3 mm screws securing the motherboard.

Step 12

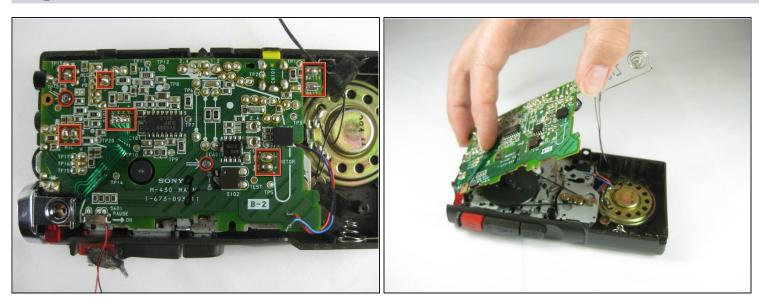


- If the replacement motherboard does not have the wire battery terminals attached, desolder the two battery connections on the motherboard.
- Leave the wire battery terminals in place.
- If the replacement motherboard has battery terminals attached, the connections do not need to be desoldered.



- To remove the battery terminals, use a prying tool to push the lip of the metal wire towards the motherboard.
- Lift up on the wire while the small lip is depressed and slide the wire terminals out of the plastic guides.
- A Be careful not to bend the wire terminals.

Step 14



- Verify all of the connections have been desoldered and the screws removed.
- Lift the motherboard upward to remove it from the microcassette-corder.

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