

A Guide to Disassembling the
**COLECO
VISION**

**Game Console
(Model 2400)**



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The ColecoVision (Model 2400) game console can be tricky to disassemble for those who have not done it before. With those people in mind, I am designing this guide. The first time I opened my CV, I was unaware of the physical design of the system, and was afraid at multiple steps that I might break something. Once I was successful in disassembling it, I was able to determine what I consider the best course of action to open it without damaging the unit.

IMPORTANT SAFETY NOTES:

1. All power and audio/video connections must be disconnected from the console before any work on the console is worked on, to reduce the possibility of electric shock. It is also highly recommended that proper grounding measures (anti-static mat and wrist strap) be used to help prevent damage to the console electronics.
2. While working on the console, sharp edges and the possibility of pinching will be encountered. Take necessary precautions to prevent injury while working on the console.

Disclaimer:

This guide is for educational and informational purposes only. I cannot be held responsible for any damage or injury incurred to you or your ColecoVision console. Use this guide at your own (and your ColecoVision's) risk.

Special thanks to the folks at AtariAge.com for their contributions via tips, recommendations and corrections. I appreciate you.

Step 1: Remove the Screws



There are 8 screws on the bottom, numbered in the above image. Remove all of them with a phillips screwdriver and set them out of the way.

It is good to note that all of the screws used for the CV are the same. There will be no need to keep track of which screws go where. :)

Step 2: Crack the Case (not literally)

Here is where the tricky stuff starts. Apparently there is the “correct” way. The “correct” way involves removing 3 screws from the front bezel, which I assume would make disassembly much easier. The problem with the “correct” way is that they are under the silver ColecoVision sticker. This would require 1 - Punching holes in the sticker at the location of the screws, thereby destroying the sticker, or 2 – Removing the sticker carefully, keeping from kinking or tearing it. If you've ever removed a sticker like this, you'll know this process can be difficult to accomplish without some sort of damage to the sticker.

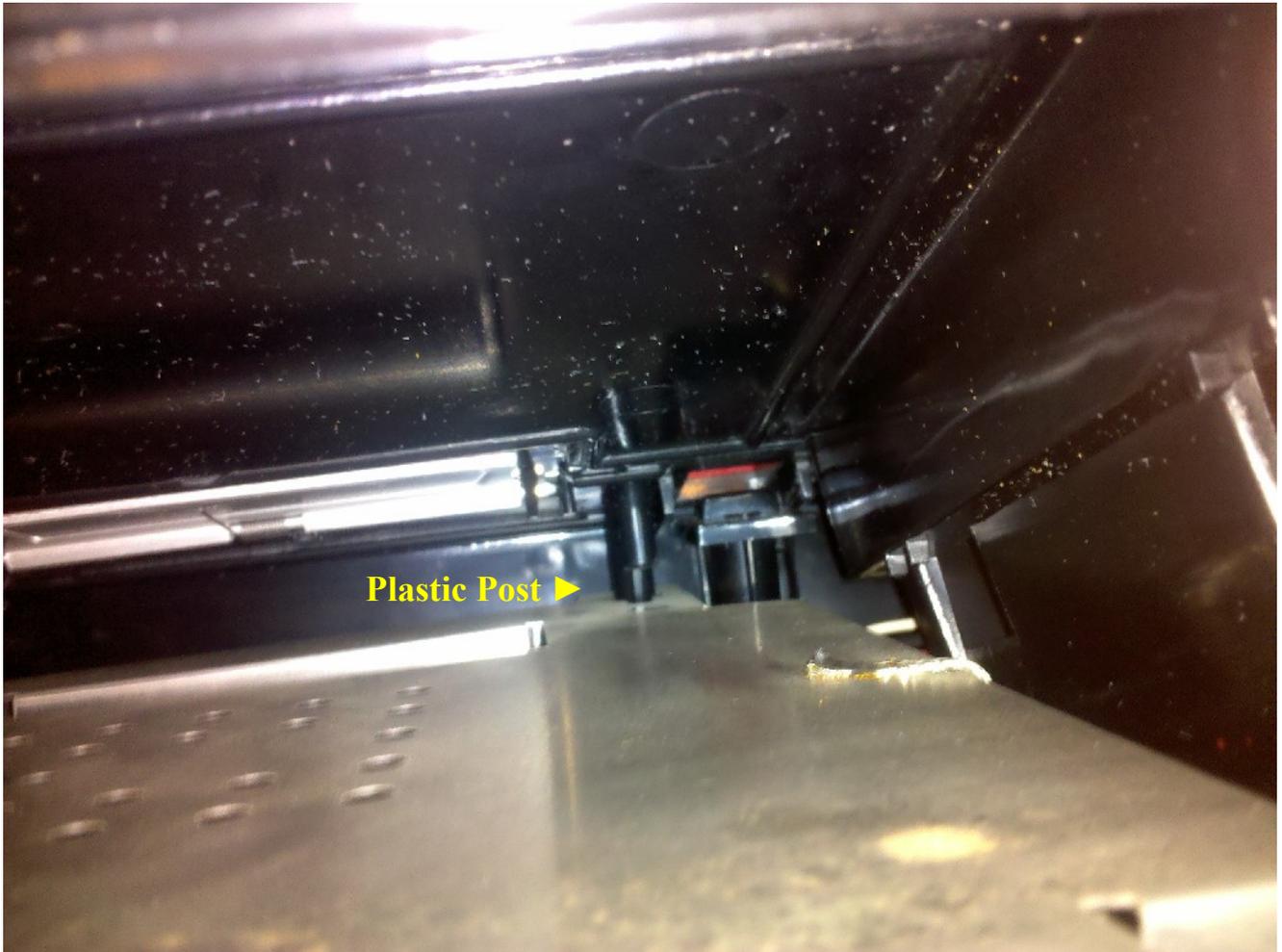
The “incorrect” way involves getting a bit mean with your console, but should not damage the sticker in any way. This method is used by many DIYers, and has high success rates.

The bezel is screwed to the top cover of the CV, so it will be the bottom (tray) of the CV we will be detaching.



Turn the CV upside down. In the above image you will see that the tray is partially removed from the plastic expansion slot casing. While pulling backward on the tray, pull forward on the bottom of the bezel casing. This should expose the front edge of the tray. Work your way along to both ends of the bezel, exposing the rest of the tray. Once completed, the entire front edge of the tray should be exposed. You shouldn't have to lever the tray much from the back to make this happen.

Useful CV Construction Info:



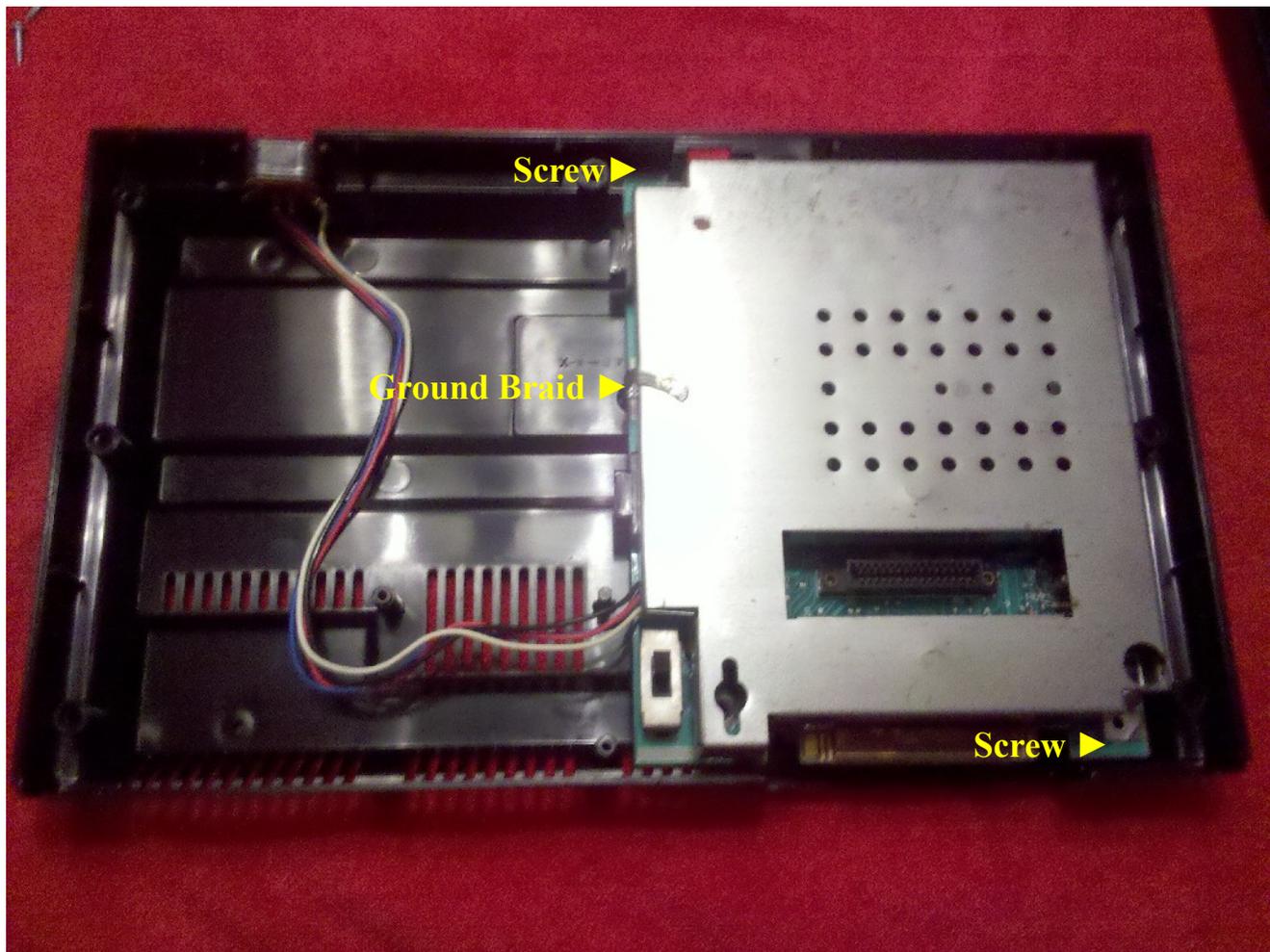
This plastic screw post, molded to the top and located next to the power switch, goes through a hole in the RF shield, and appears to keep the tray from being able to slide backwards more than $\frac{1}{4}$ inch or so. However, $\frac{1}{4}$ inch is all we need for the next step.

Step 3 – Remove the Tray



Once the front of the tray is exposed the tray needs to be slowly worked up and off the top. While doing this, try to keep the tray level to the top. My experience seemed to reveal the tray will come off easiest if it is not levered too much.

Step 5: Remove the Top RF Shield



Remove the 2 screws (above) holding down the top part of the RF shield. Pull up the shield and rotate it (like a book) to the other side of the tray. This will expose the mainboard. Note that the necessary ground braid (above) keeps the RF shield attached to the mainboard. If you desire, you can temporarily desolder the braid, however, I found it easy to just lay the shield back without much interference from the braid.

Step 6: Remove the Mainboard and Bottom RF Shield



Remove the two screws shown above. You should now be able to remove the mainboard from the case. You'll also need to detach the power connector from the tray before removing. Pay attention to the orientation of the connector (wires facing down).

Now that you've got the mainboard removed, you can remove the bottom RF shield from the tray.

The Disassembled ColecoVision Console:



Step 7: Reassemble Your ColecoVision

Reassembly is the reverse of disassembly. (Duh, right?)

1. Insert the bottom RF shield.
2. Reinstall the mainboard. Tighten down with 2 screws. Reinsert the power connector in the tray.
3. Reinstall top RF shield. Tighten down with 2 screws.
4. Place CV top upside down
5. Insert power and reset buttons in respective slots in top cover.
6. Replace tray on top, and begin working into position. Same as disassembly, I found it simplest to try to keep the tray level with the top while reassembling, not creating much lever action between the tray and top. You may need to work with the power and reset buttons to position them correctly, as well as make sure the post inserts properly through the shield. There should be enough room on the side of the CV case to see and position them from the inside.
7. When the case is almost reassembled, there may still be a small gap between the tray and the front bezel. I found it easy to push down on the front of the tray, and push it forward from the back, and the tray easily snapped into position.
8. Tighten down the 8 screws.

Afternote about the power switch:

If you find that the power switch seems too stiff after you've reassembled the console, you can try backing off the screw next to it, on the underside of the unit. $\frac{1}{4}$ to $\frac{1}{2}$ turn should suffice to return the switch to normal operation.

Revision History

Rev 1

- Added safety and anti-static advisory
- Added notes about using proper anti-static measures
- Added notes about adjusting stiff power switch
- Various grammatical and procedural corrections