

GBHD™ ADVANCE^{SP}



INTERMEDIATE
Installation &

Assembly Guide

For AGS-101 models

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Gamebox^{LLC} can, in no way, be held liable for any damage to the user's property, or the user's health from following these instructions. While these instructions aim to give the user a comprehensive and safe guide to completing this modification, there are many potential variables that could result in the unit that the user is attempting to modify requiring more restorative measures. There is also a serious risk of, injuries, and death when working with electronics. At the time of this guide's writing the AGB 001 handheld are rapidly aging, and even working units should be recapped as soon as possible. Chemicals associated with some of these processes are quite toxic and should be handled with care and adult supervision. Results may vary. "GBHD", "GBHD Advance", "GBHD Advance SP", "Gamebox", "Gamebox Systems", "gamebox.systems", its associated internet domains, and the associated logos in this document are trademarks(™) of Gamebox^{LLC}, A Limited Liability Company. This document, text and, images contained there-in are property of Gamebox^{LLC} ©2022 Gamebox^{LLC}, all rights reserved.

FEATURE LIST

- Triple Resolution Support
 - * 1080i (*1920x1080 interlaced*)
 - * 720p (*1280×720 progressive, Default Mode*)
 - * 480p (*720×480 progressive*)
 - Scaling Modes
 - * 6x Linear (*1080i mode*)
 - * 4x Linear (*720p Mode*)
 - * 3x Linear (*480p Mode*)
 - * Full Screen non-Linear
 - * TV Mode (*Slight Crop Full Screen*)
 - * Overscan
 - Gamma Correction
 - Pixel Smoothing (*2x Smoothing*)
 - SNES Controller Input
 - 4 Scanline Modes
 - 64 Border Color Options
 - Button Remap Option
 - * AB Remapped to YB
 - USB-C power
- Kit Contents:

 - GBHD Advance SP PCB
 - 34 Pin ribbon cable
 - Quick Solder flex cable
 - SNES Port
 - 3x M2 machine screws
 - 3x M2.5 washers
 - 4x M2 self tapping screws
 - Case (Top, Bottom, Tray cover)

Tools Required:

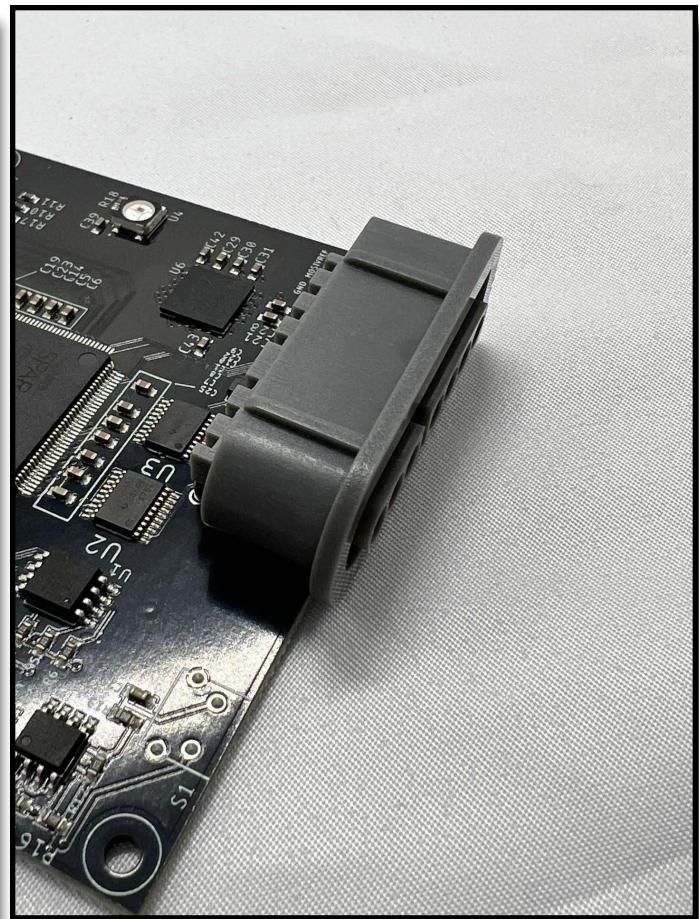
 - Phillips screwdriver
 - Small flathead screwdriver
 - Soldering iron
 - Solder
 - Needle nose pliers (recommended, not required)

Parts Required:

 - Gameboy Advance SP motherboard
 - Gameboy Advance SP power switch cover

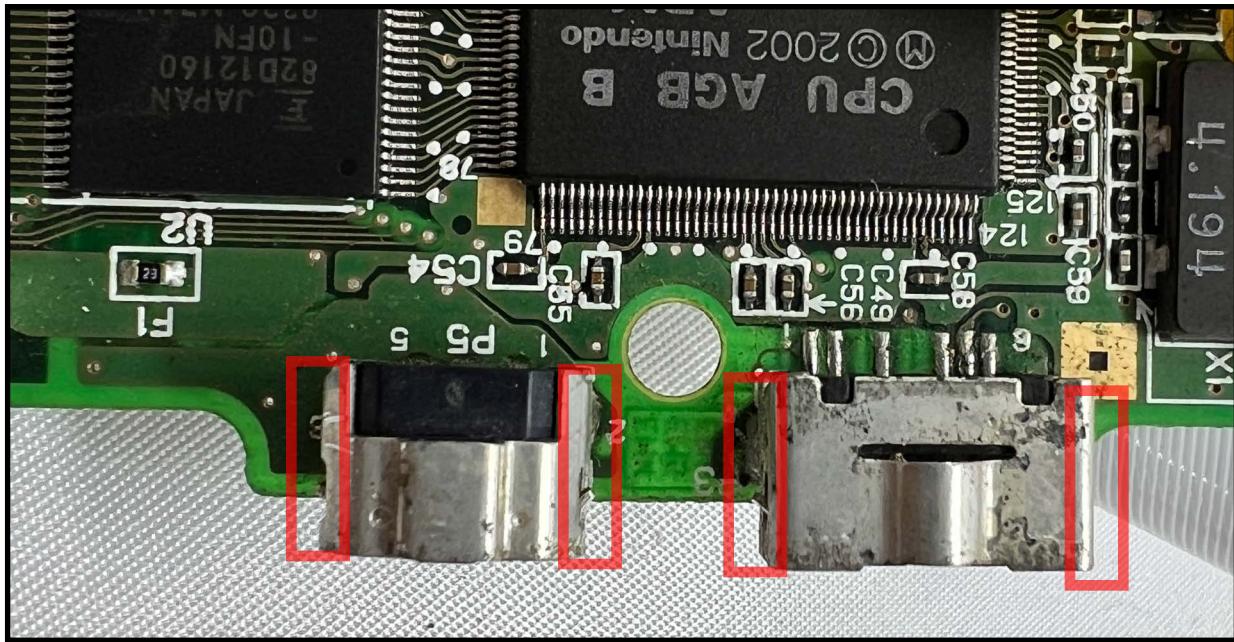
STEP 1

SP



Solder the SNES port to the GBHD PCB in the orientation shown. (Above)

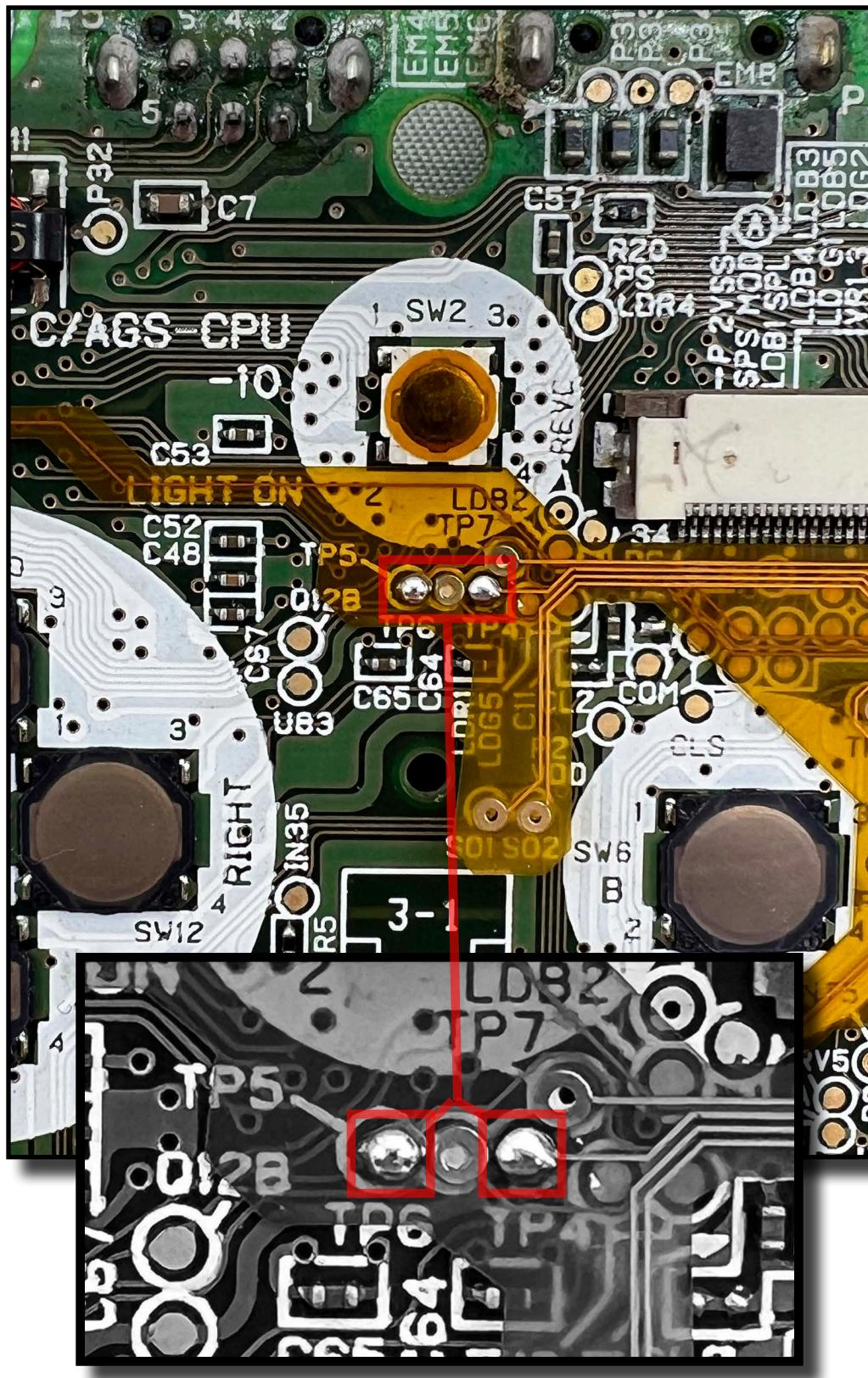
STEP 2



Flatten or remove the small metal fins on the side of the P3 and P5 as shown. (Above)

STEP 3

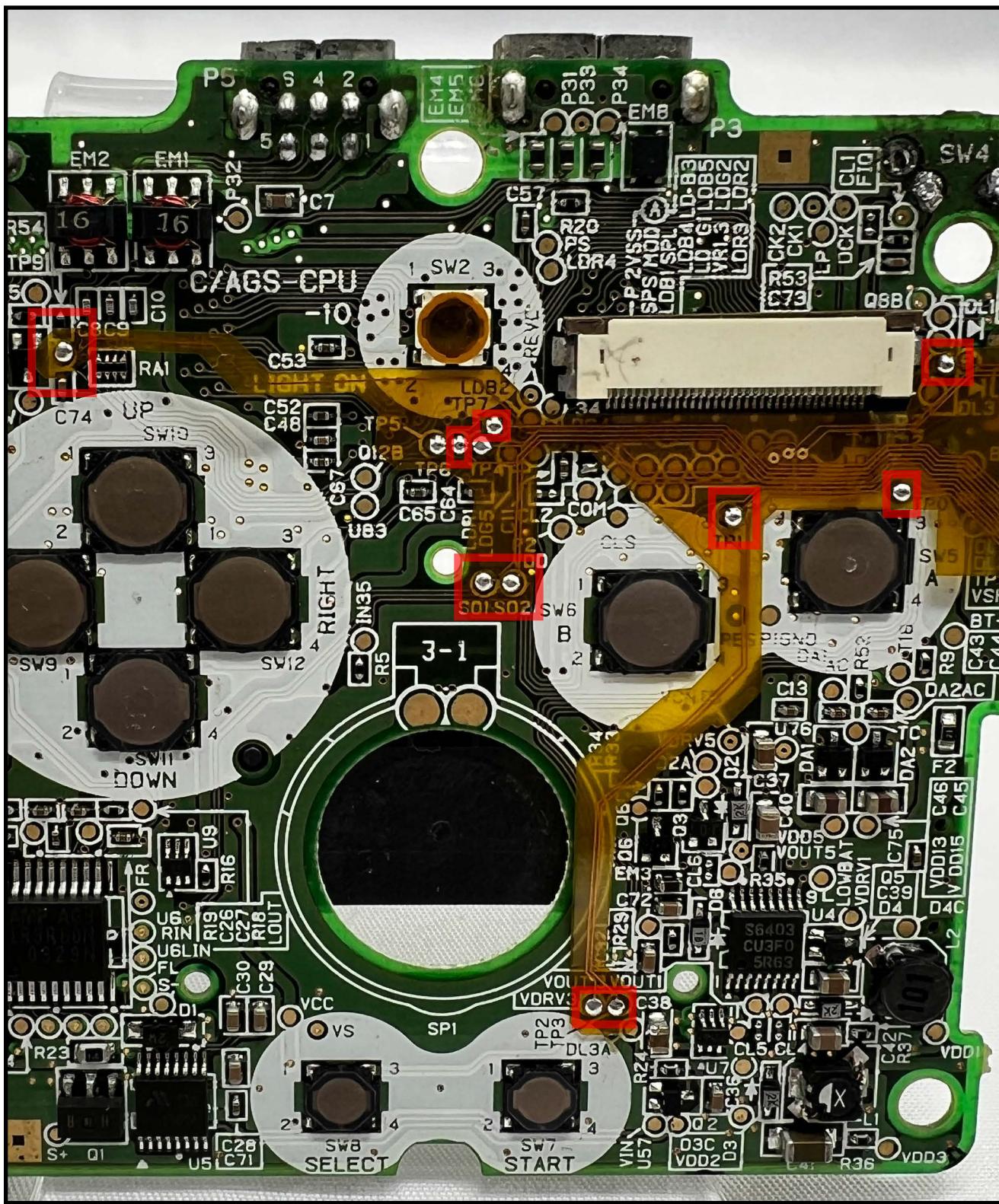
SP



Line up the flex cable to the SP motherboard and anchor the flex cable with solder to the two points shown. (Above) A full map is included on the next page.

STEP 4

SP



Solder the remaining 10 test points on the SP motherboard as shown.(Above)

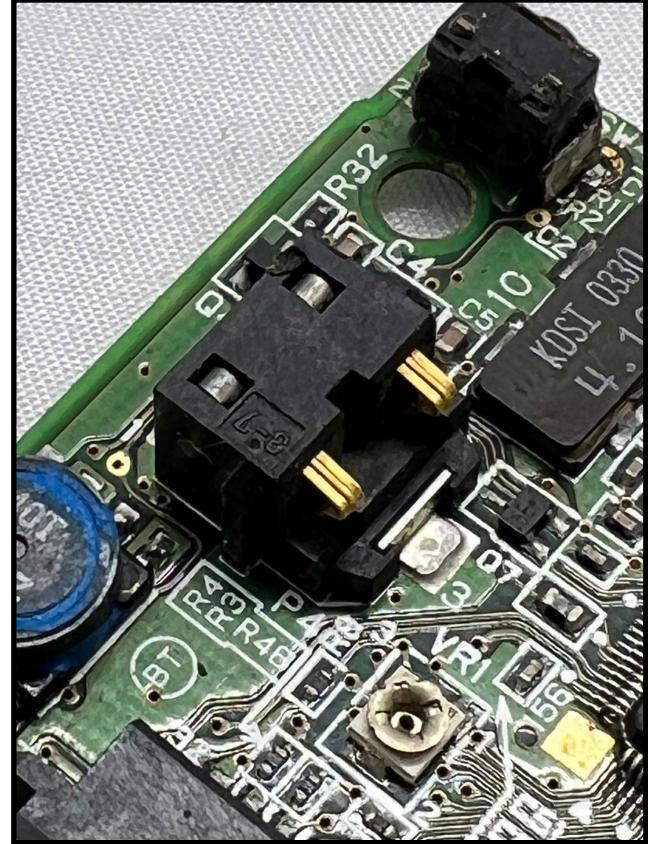
STEP 5

SP



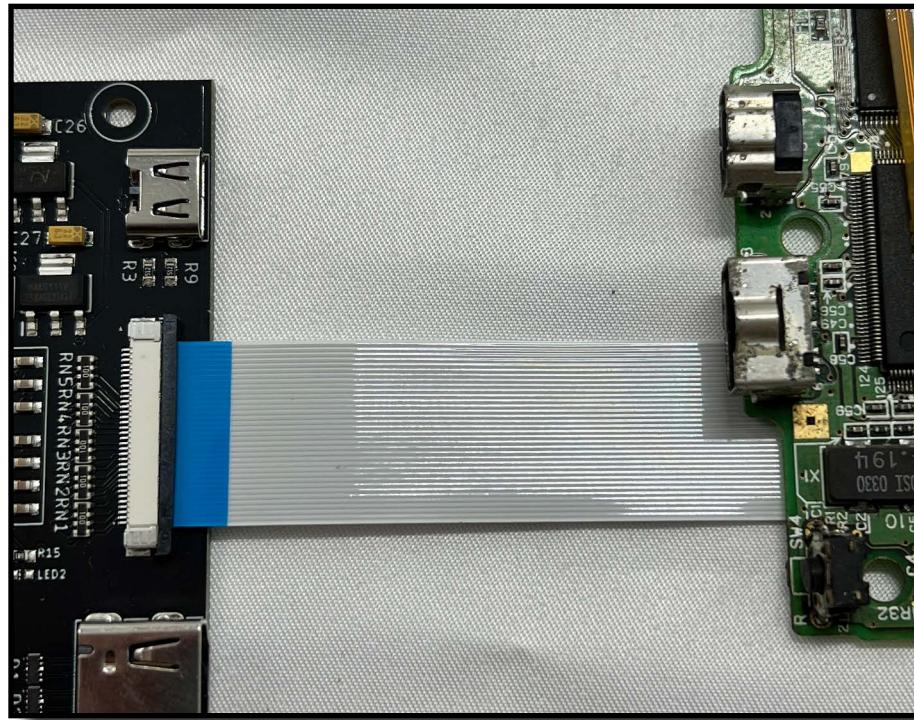
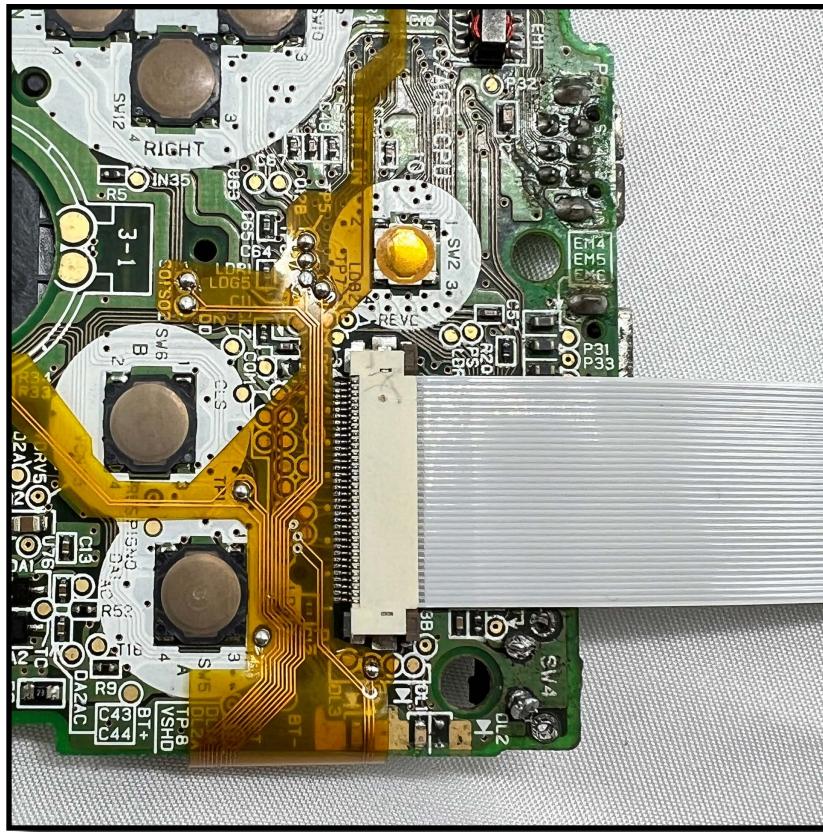
Solder the power pads (long oval solder points on the quick solder flex) to either the top of the black battery contact block or to the battery contacts directly.

NOTE: If the flex is soldered directly to the battery contacts, this mod will not be reversible unless the battery contact block is replaced.



STEP 6

SP



Connect the SP motherboard to the GBHD PCB as shown. Orient contacts up on the SP side, and then orient the contacts down on the GBHD side.

STEP 7

SP



Double back the quick solder flex cable so that it runs across the length of the SP motherboard. Bend the cable so that the pins face outwards when the cable is inserted.

NOTE: It is recommended to test the unit before starting final assembly. Disassembling GBHD Advance SP once fully assembled can be time consuming and difficult due to tight tolerances with the case's design.

STEP 8

SP



Insert the GBHD PCB into the lower case SNES port first. Continue to shimmy the PCB into the case until the HDMI port is positioned as shown in the third picture above. To get the PCB to drop into place, use a small flathead to gently pry the back of the case outward and push down on the top middle of the PCB until the HDMI port has cleared the case. Alternatively, apply pressure at an angle toward the SNES port. This will allow the back to bend slightly and let the HDMI port clear the case.

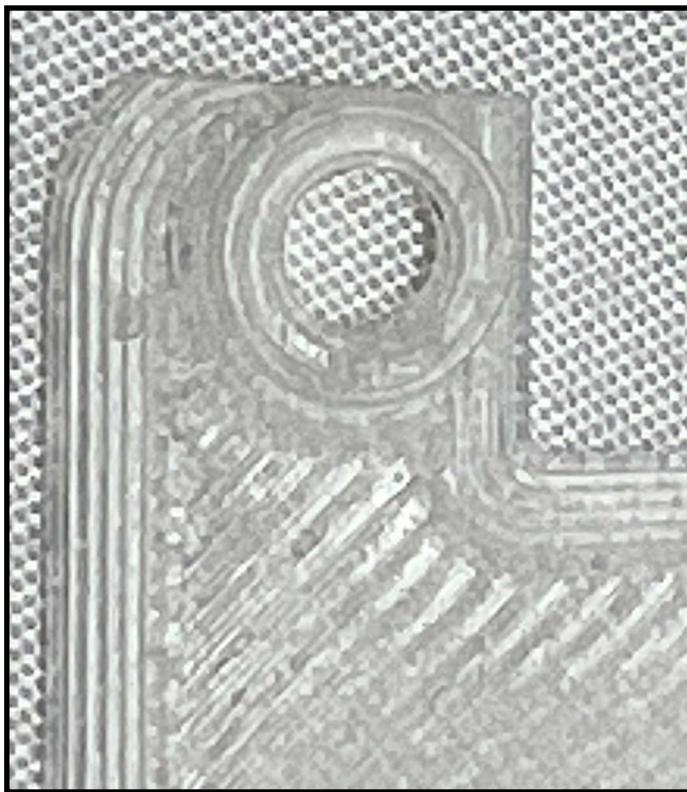
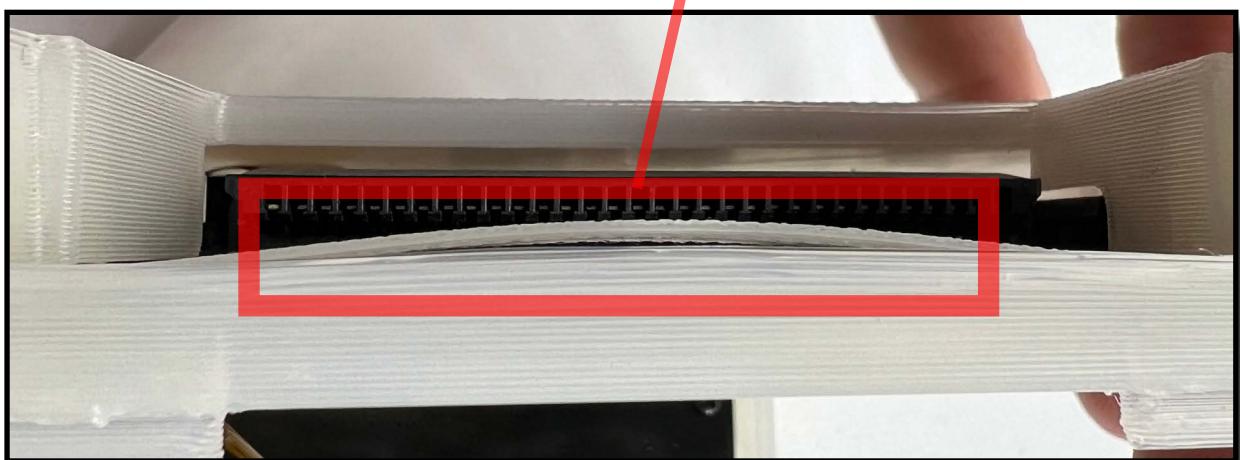
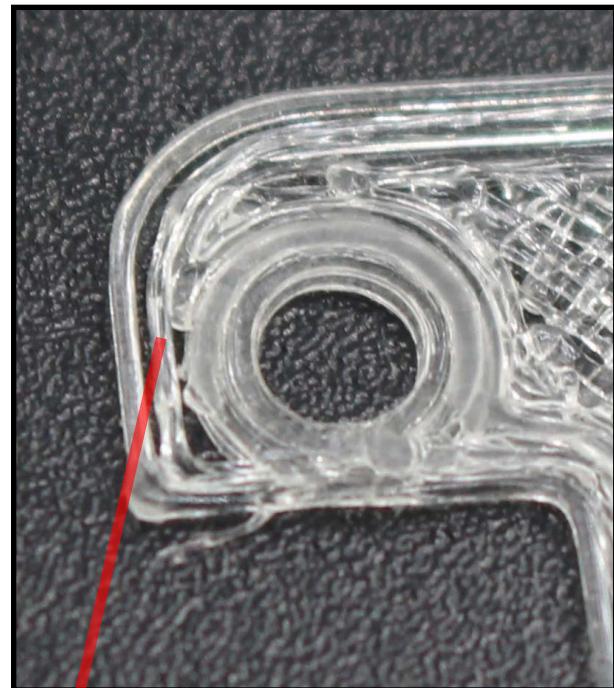
NOTE: The tolerances for the bottom case are very tight. Apply firm pressure but **do not** use excessive force. Applying too much force may result in damage to the PCB, flex cables, or case.

STEP 9

SP



Use the four black M2 self tapping screws to secure the PCB in the four corners of the PCB.

TRIMMED**UNTRIMMED**

Snip a small piece of plastic off the left and right side of the tray cover. Due to printing tolerances, failure to clip the tray will result in it bowing as shown.(Above)

STEP 11

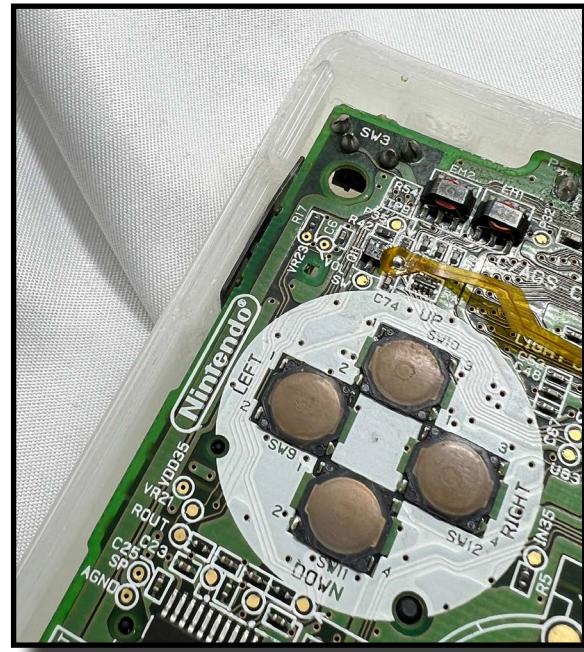
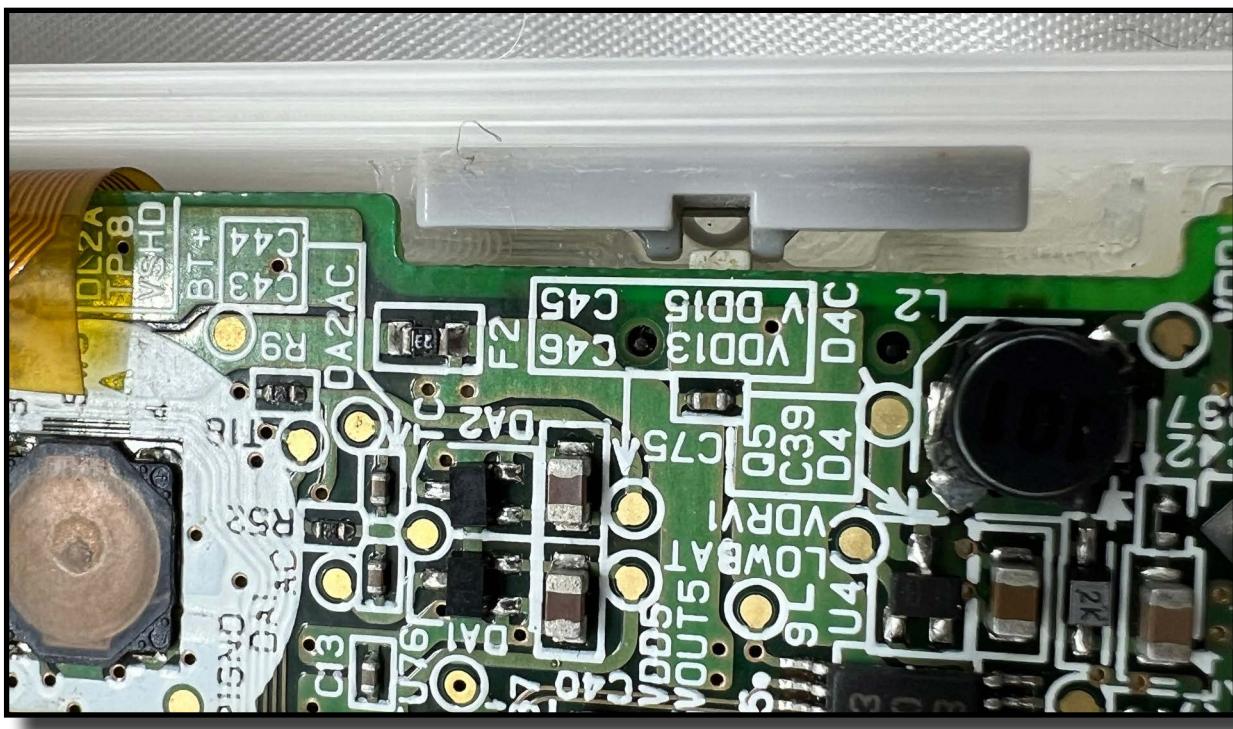
SP



Install the power button cover into the top case and align the cart tray as shown.(Above)

STEP 12

SP

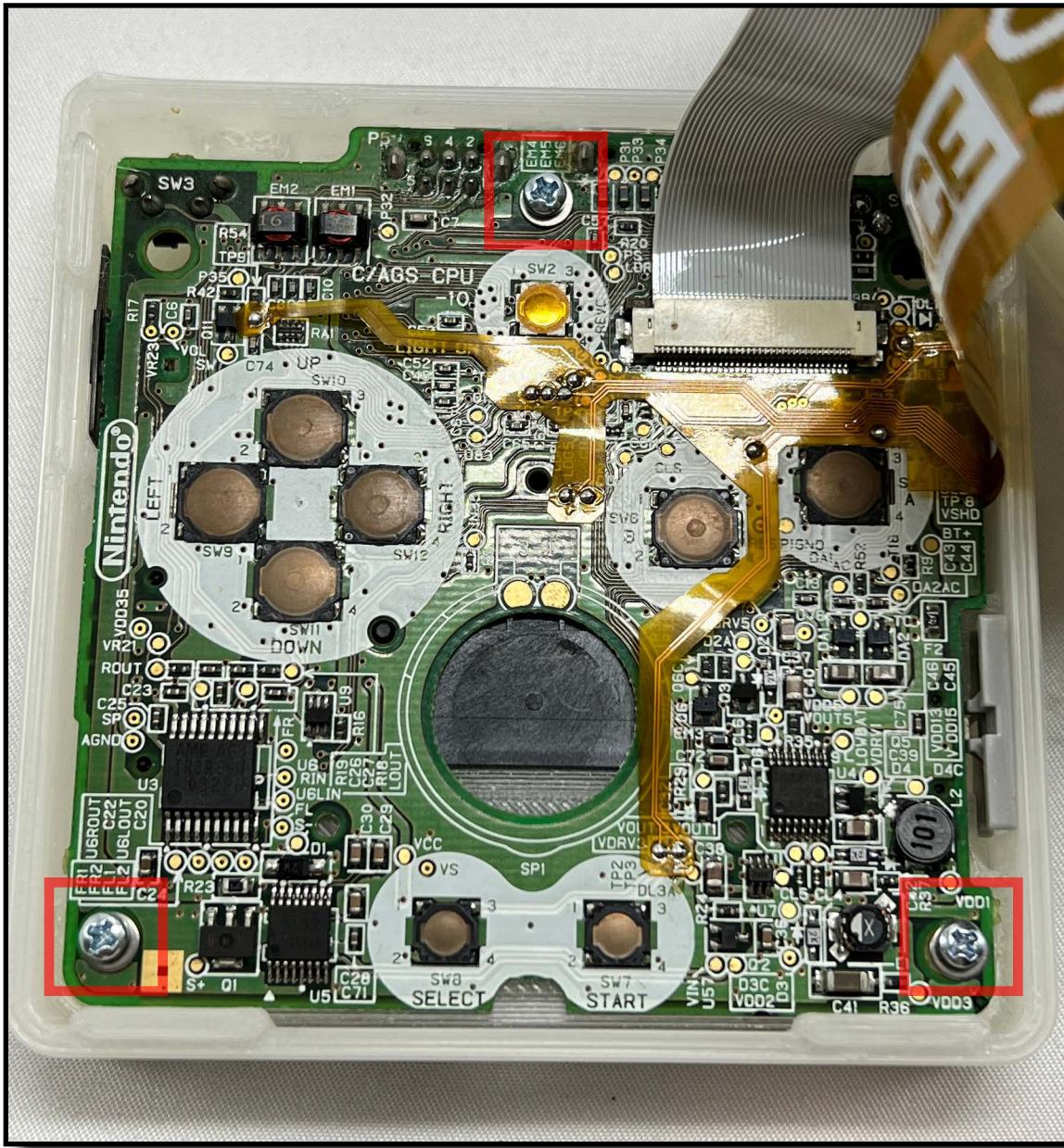


Insert the SP motherboard audio slider first. Maneuver the motherboard around the clips of the top case. The motherboard should slide into place.

NOTE: Ensure the power switch and tray cover are aligned for **Step 13**. If it does not slide into place easily, make sure the metal fins on the ports in step 2 are flattened adequately.

STEP 13

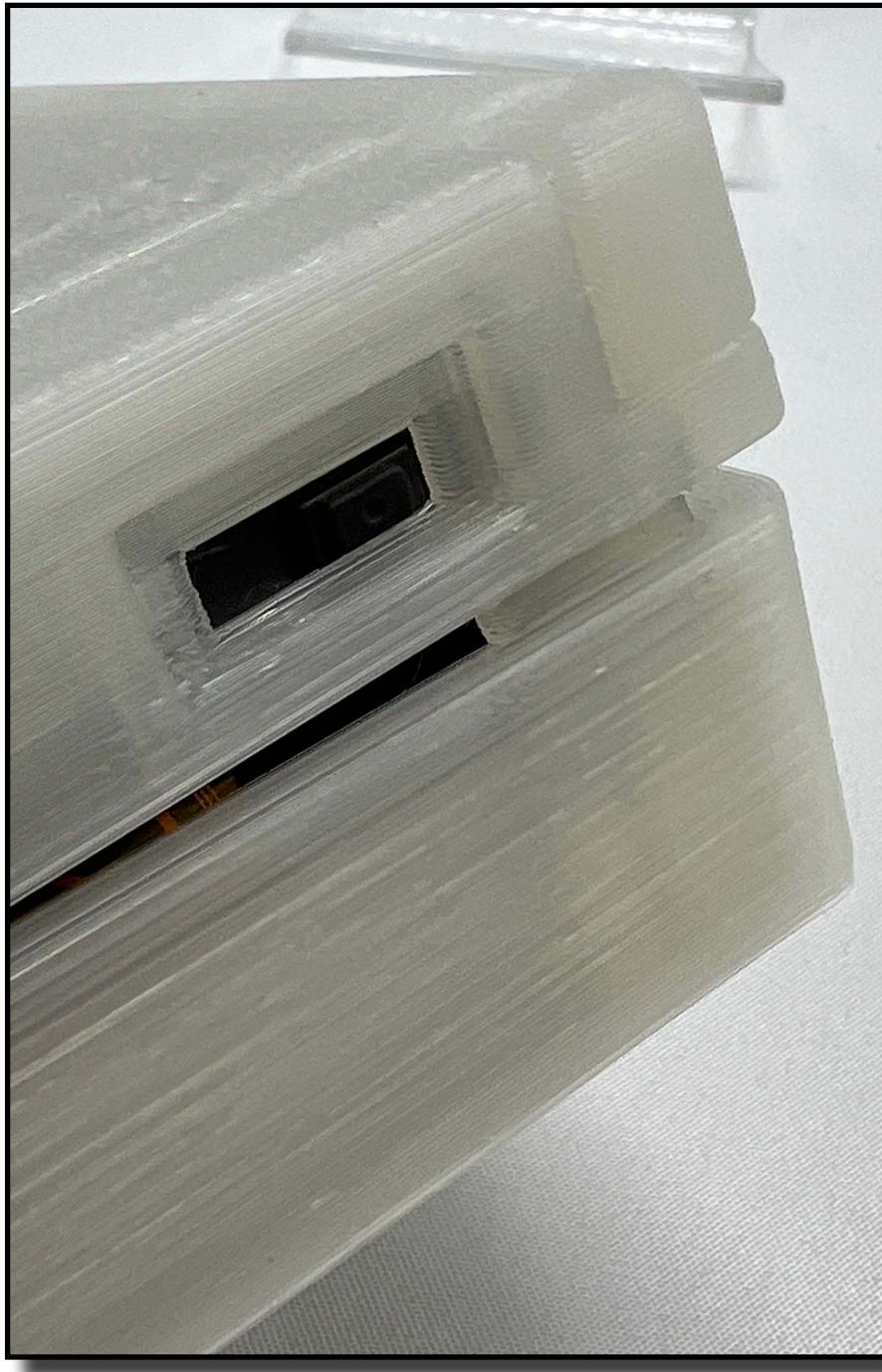
SP



Use the three M2 machine screws and M2.5 washers to secure the SP motherboard to the top case.

STEP 14

SP



Starting on the left side of the top case (The side with the power switch), begin to clip together the two halves of the case.

NOTE: DO NOT use excessive force when clipping together the case. Use of excessive force may break the clip resulting in a case that does not stay together. If the clips do not quite align with the clip slot, apply a small amount of pressure to the top of the case above the clip. The case will clip together.

Enjoy your new consolizer.

Page 16