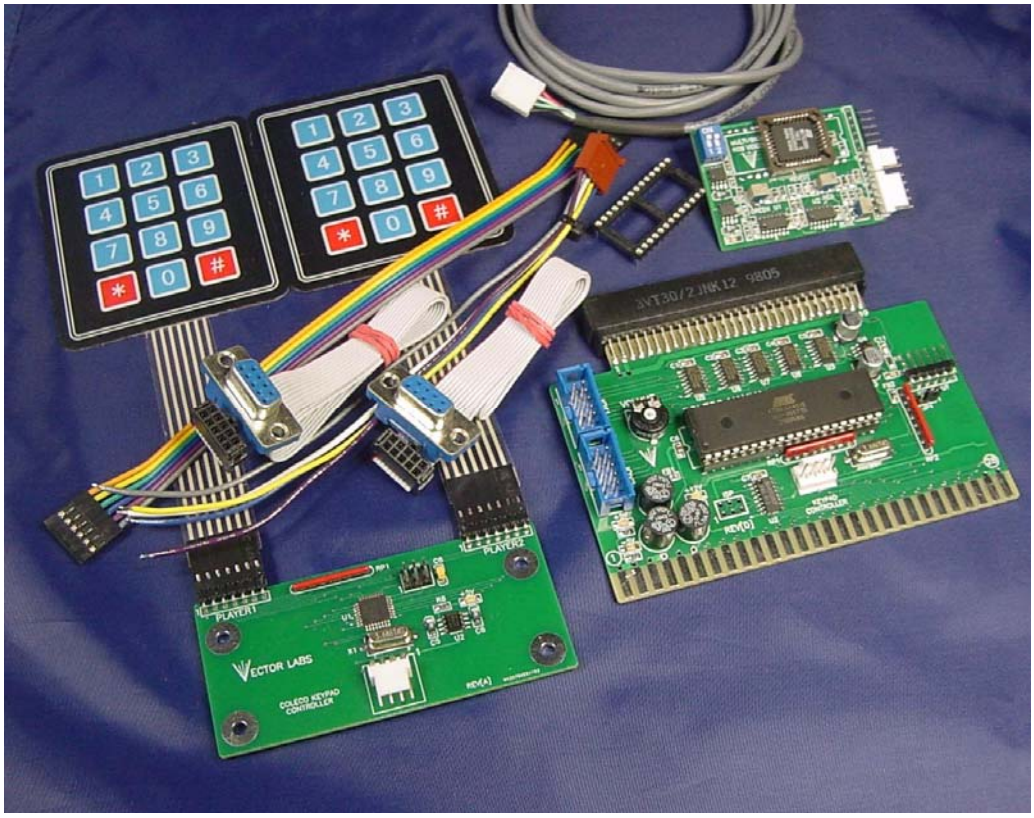
Colecovision JAMMA Installation Guide



The installation kit contains the following items:

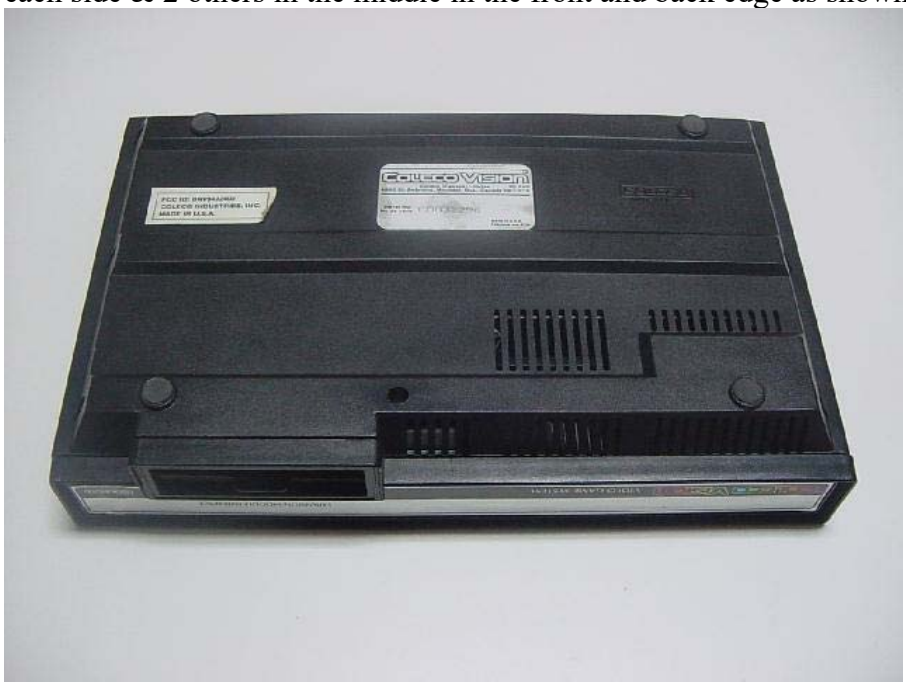
1. Colecovision RGB Mod board & 28p socket
2. Jamma Interface board.
3. Keypad Controller board
4. 5 wire cable with tinned leads (blue, white, yellow, gray & violet)
5. 6 wire video interconnect cable.
6. Two DB9 to Ribbon cables.
7. Two 3x4 Keypads & PCB standoffs
8. 4 wire Keypad Controller Extension Cable

The following list of tools are also recommended:

1. Phillips screwdriver
2. Soldering iron w/solder
3. Solder wick or de-soldering tool
4. Sharp angled cutters PLATO 170 or similar
5. Small drill
6. 1/8” and ¼” bits
7. Xacto knife

Phase1 *Case Top Removal*

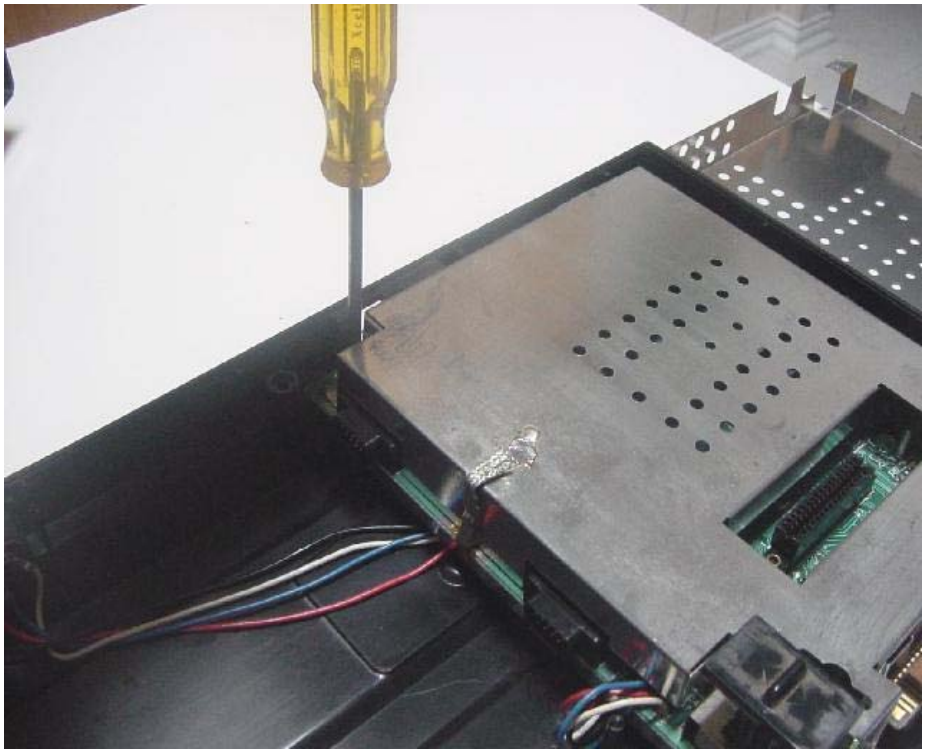
Place Coleco upside down on clean non-scratch surface and remove the 8 screws with the Phillips screwdriver. Three are located along each side & 2 others in the middle in the front and back edge as shown below.



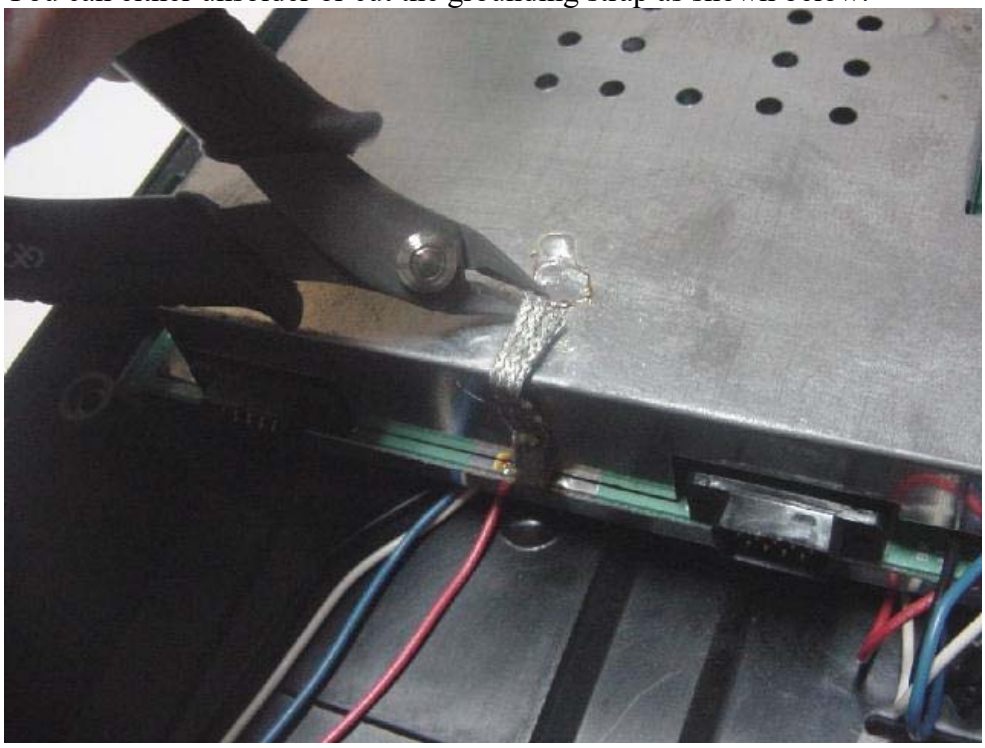
The Colecovision top cover is tricky to remove. After removing the 8 screws you need to pull out on the front edge of the case top where the expansion door is. Continue to work along the front edge until the bottom is free from the top edge as shown below.

Phase1 *Shield Removal*

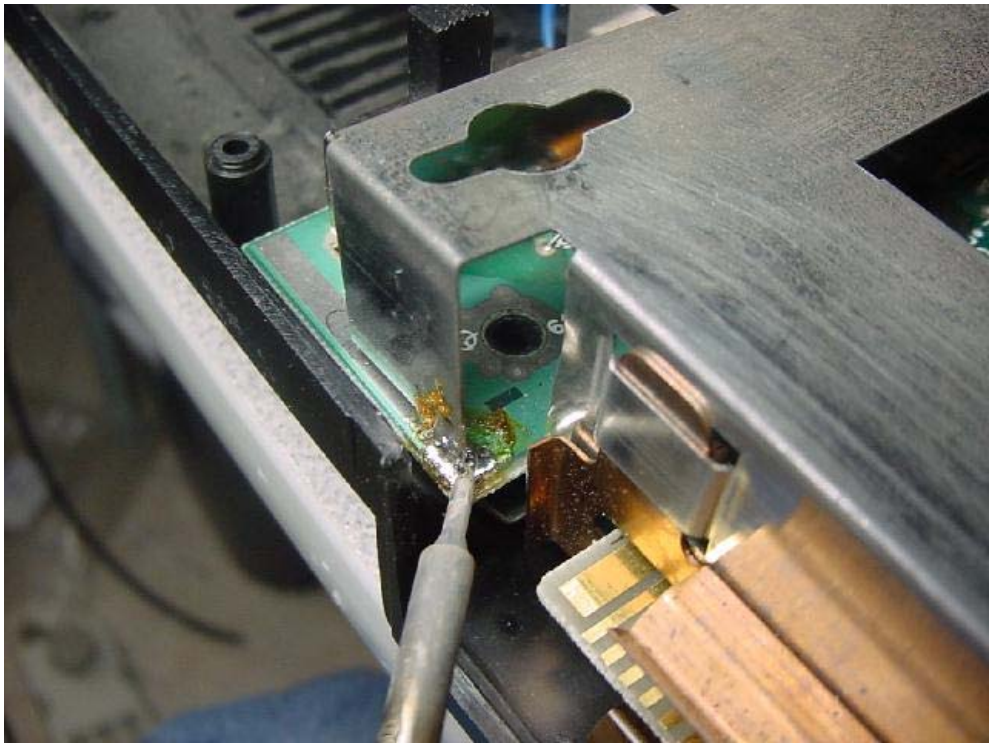
After the case is separated flip the Colecovision over and remove two screws from the RF shield. One is on the front right corner and the other is on the rear left corner as shown in the two pictures below.



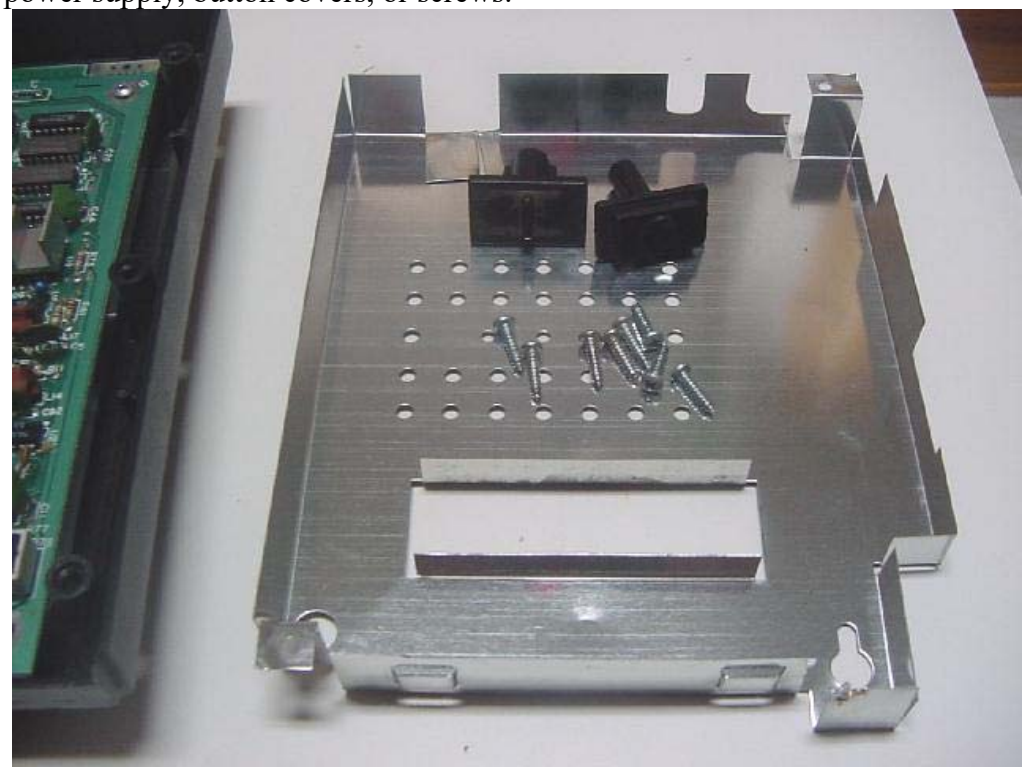
You can either unsolder or cut the grounding strap as shown below.



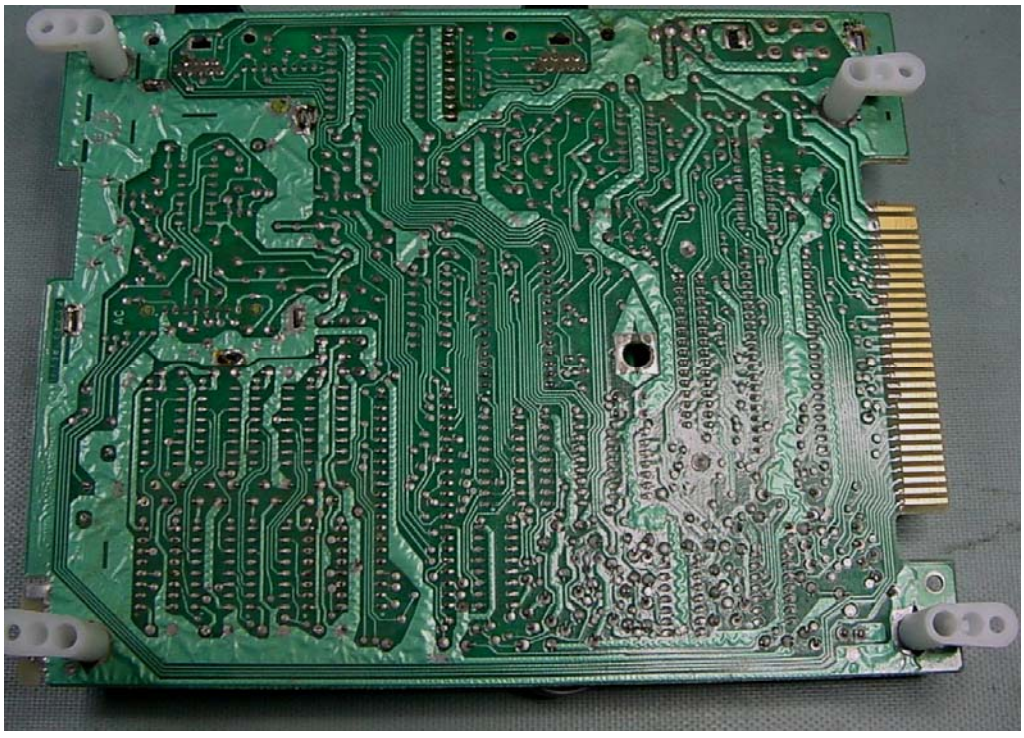
You will need to also de-solder the shield from the front as shown below.



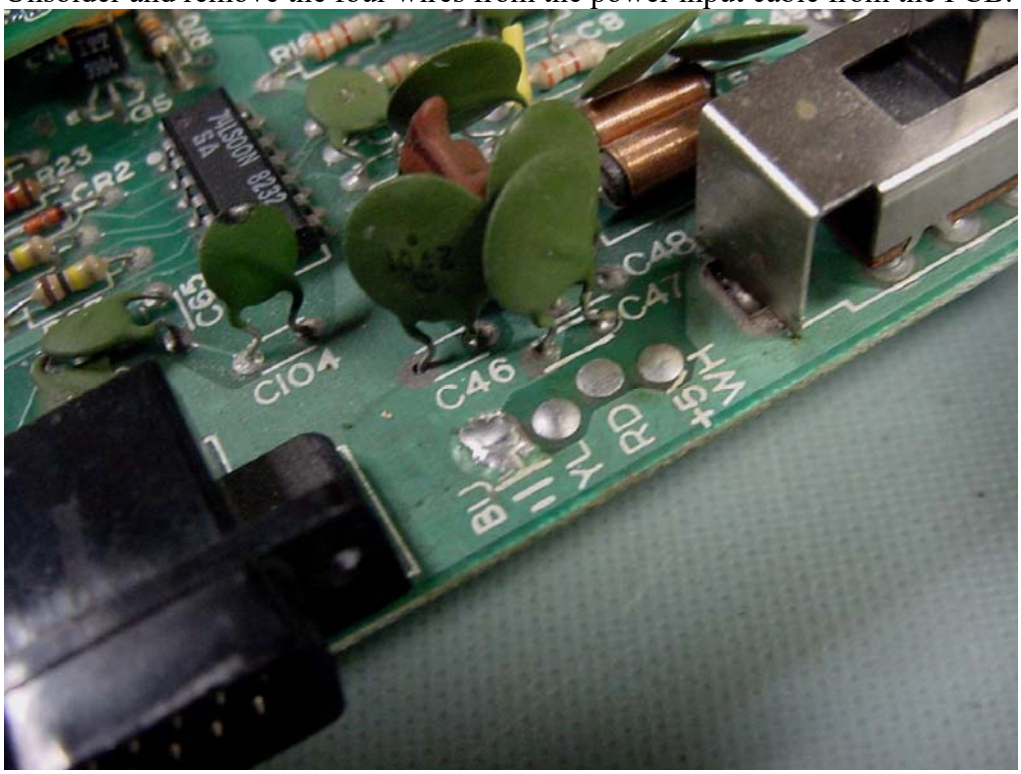
Remove PCB from case & shield and re-assemble Coleco unit and store in the event you may want to un-convert the Colecovision. The conversion does not use the case, shields, power supply, button covers, or screws.



Attach the four PCB standoffs as shown below.

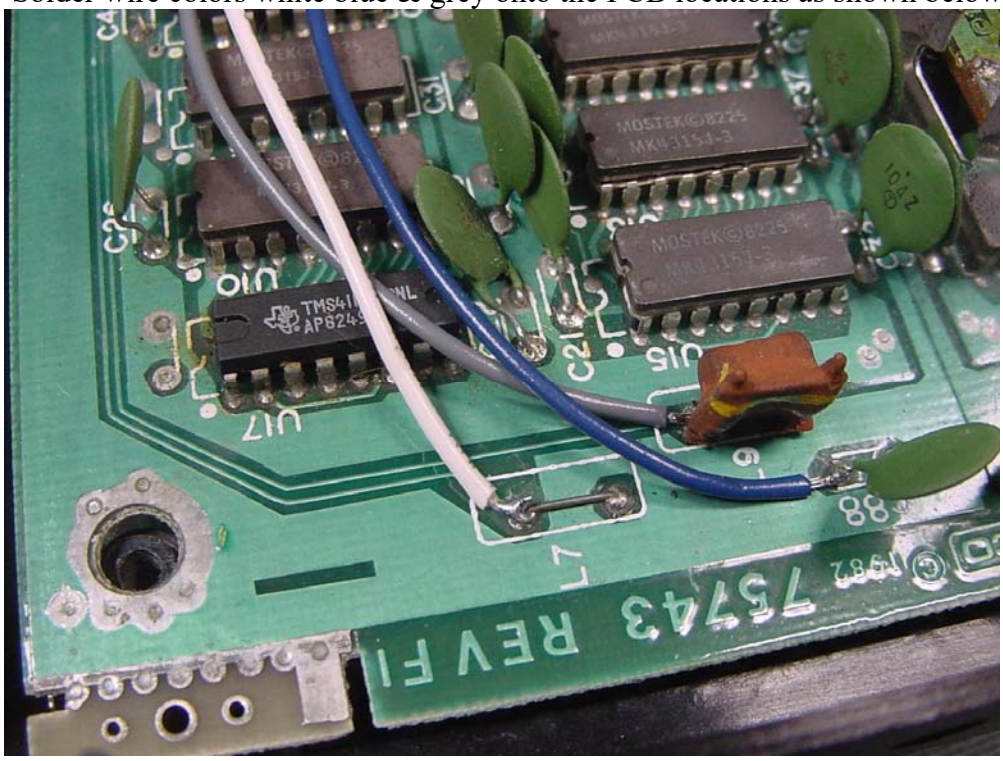


Unsolder and remove the four wires from the power input cable from the PCB.

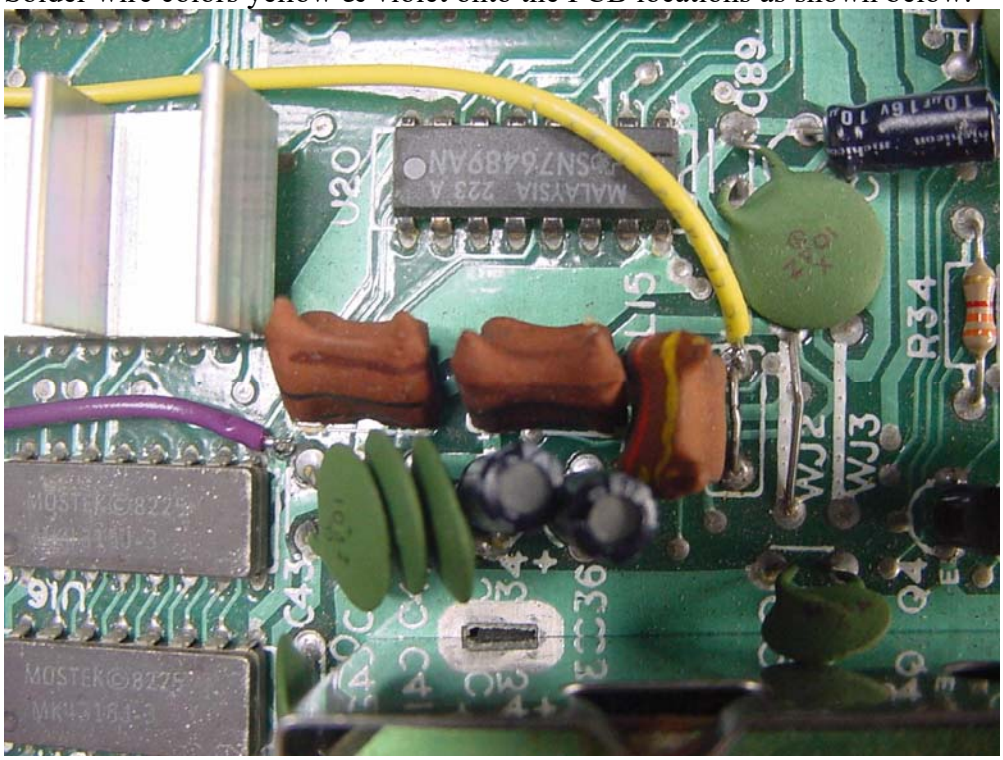


Phase3 Motherboard Modification & Wiring

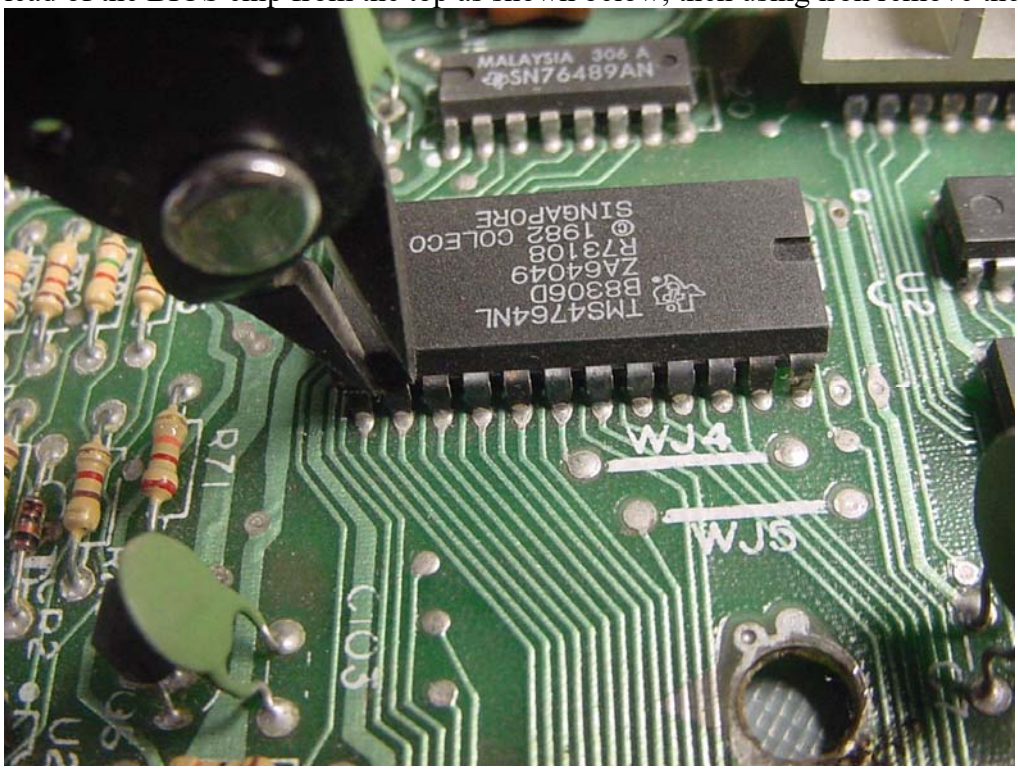
Solder wire colors white blue & grey onto the PCB locations as shown below.



Solder wire colors yellow & violet onto the PCB locations as shown below.

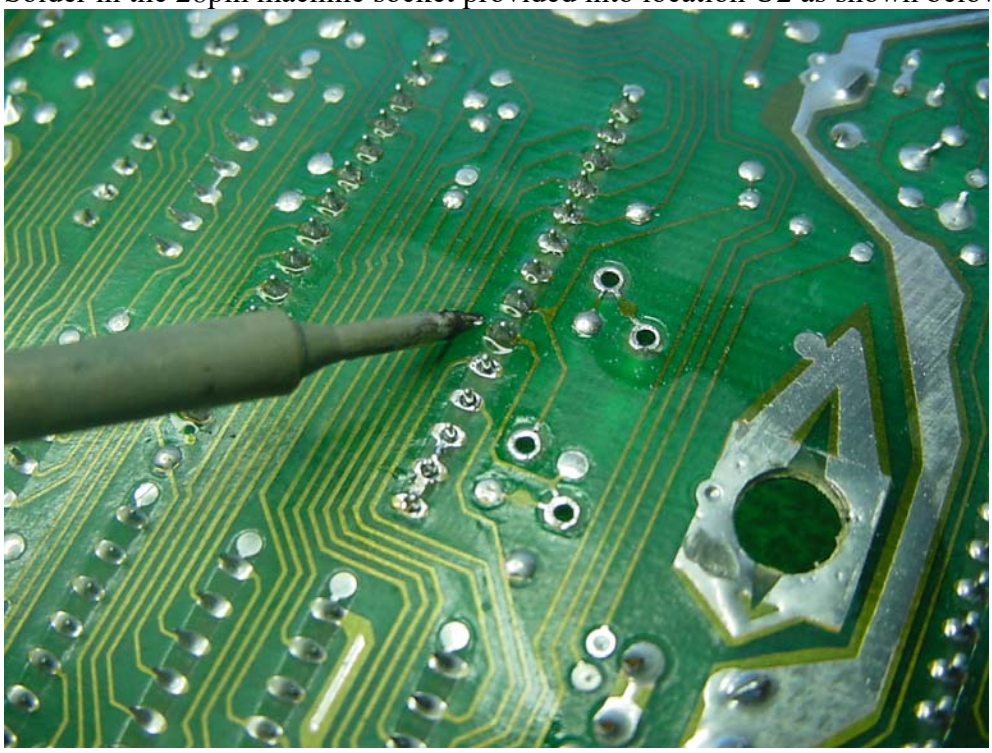


It is recommended to use sharp flush wire cutter like the Plato 170 to clip each lead of the BIOS chip from the top as shown below, then using iron remove the pins

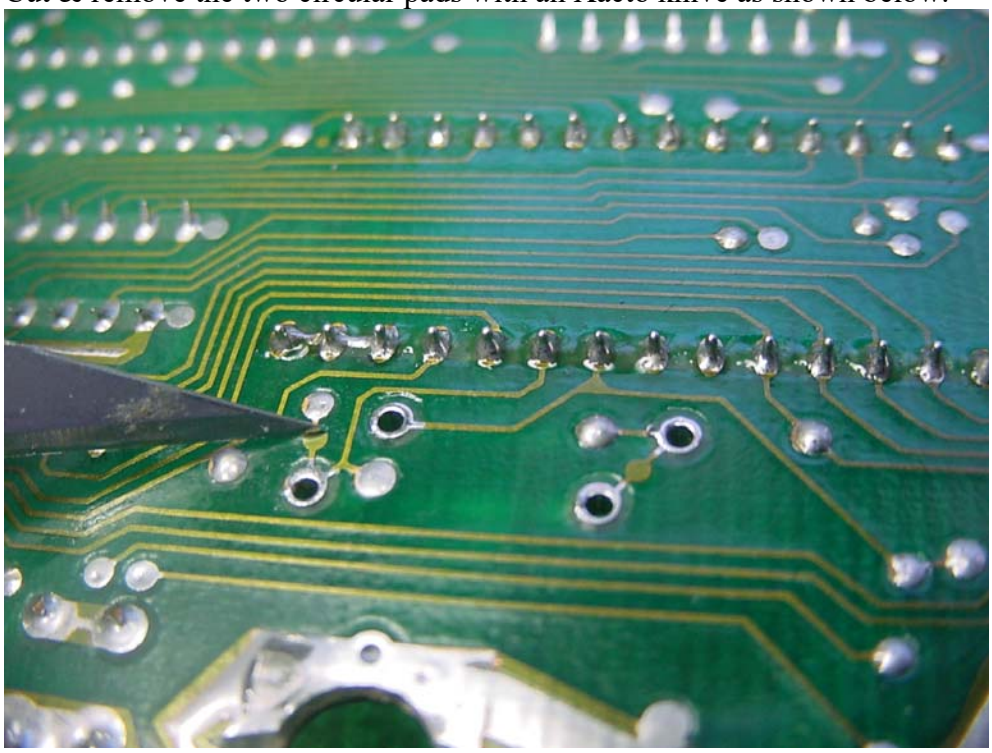


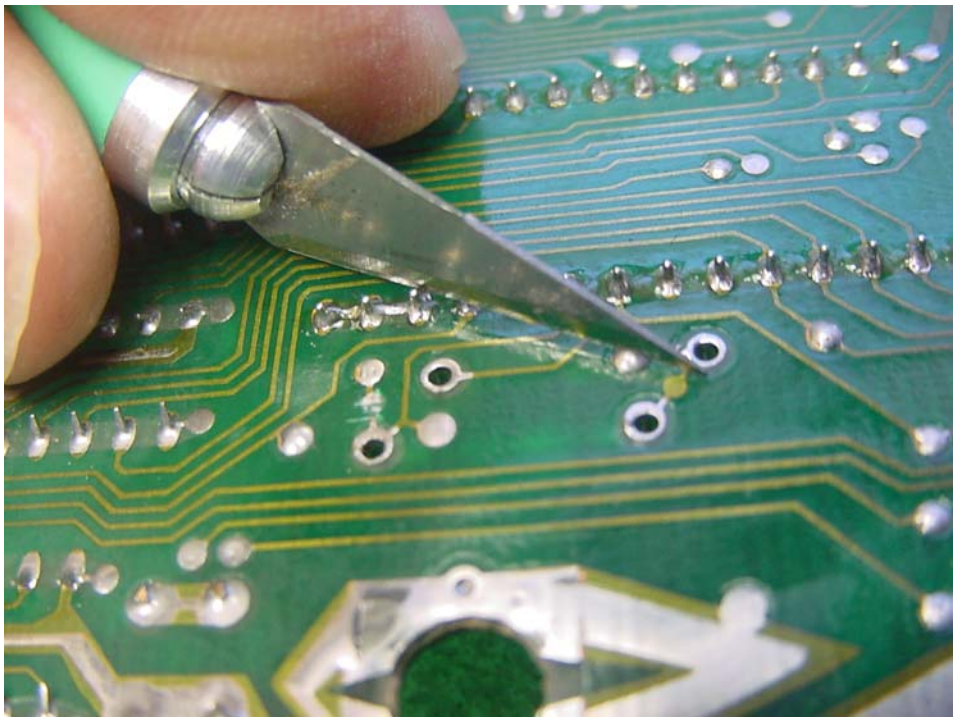
If you would prefer to use solder wick or de-soldering tool to remove the BIOS chip then be aware that it increases the chance of damaging the trace or destroying the pad due to excessive heat. Also remove solder from WJ4 & WJ5 as shown below.

Solder in the 28pin machine socket provided into location U2 as shown below.

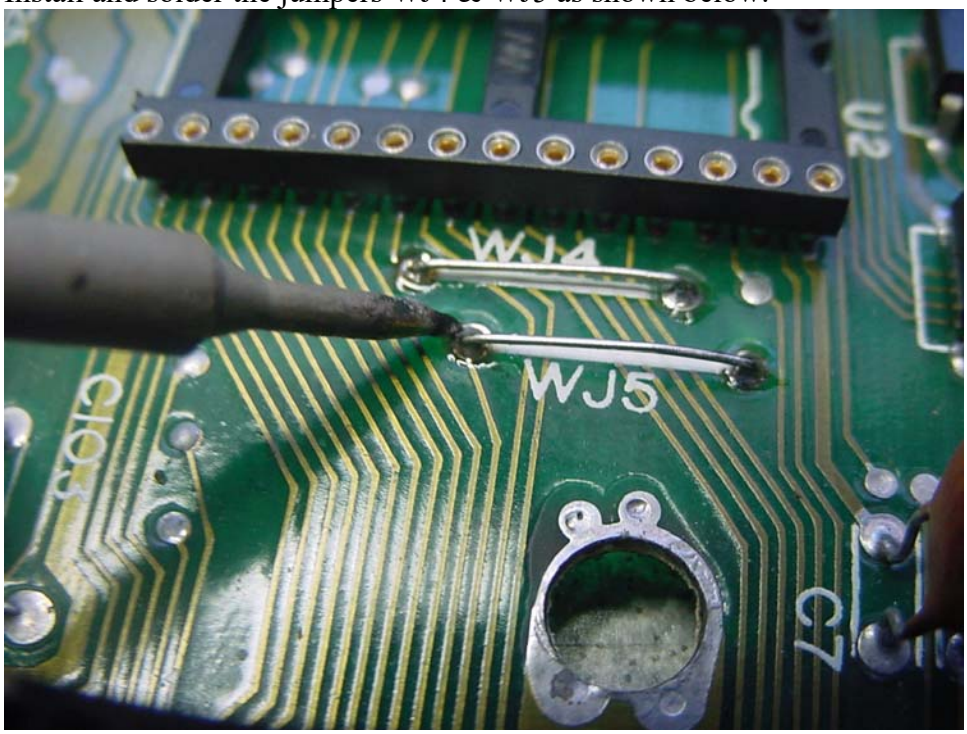


Cut & remove the two circular pads with an Xacto knive as shown below.

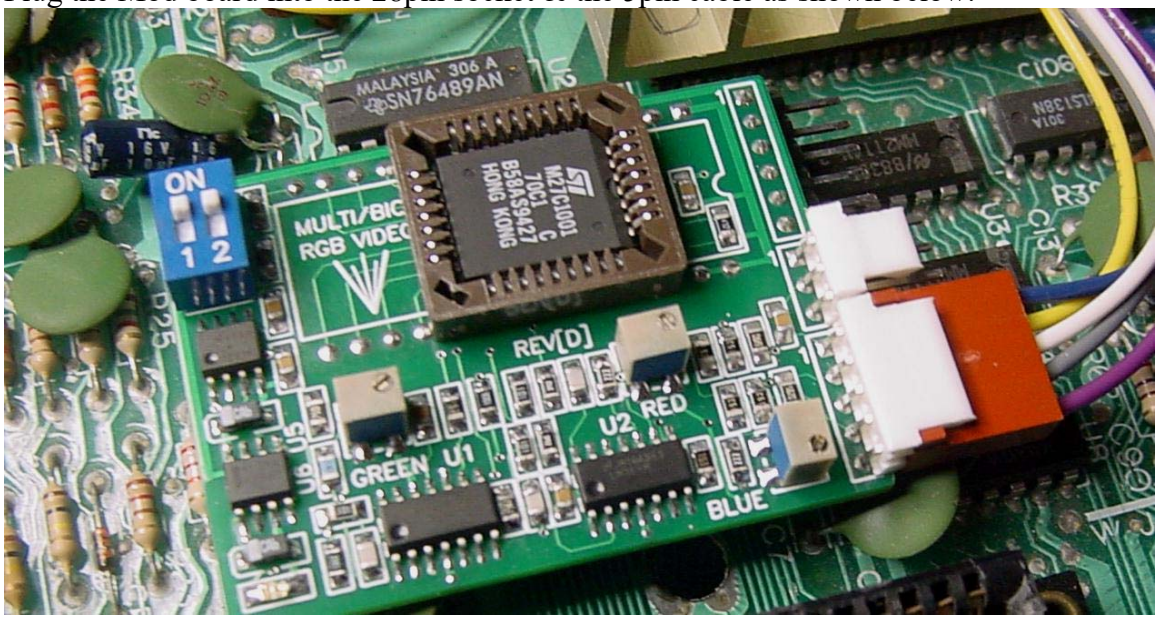




Install and solder the jumpers WJ4 & WJ5 as shown below.



Plug the Mod board into the 28pin socket & the 5pin cable as shown below.

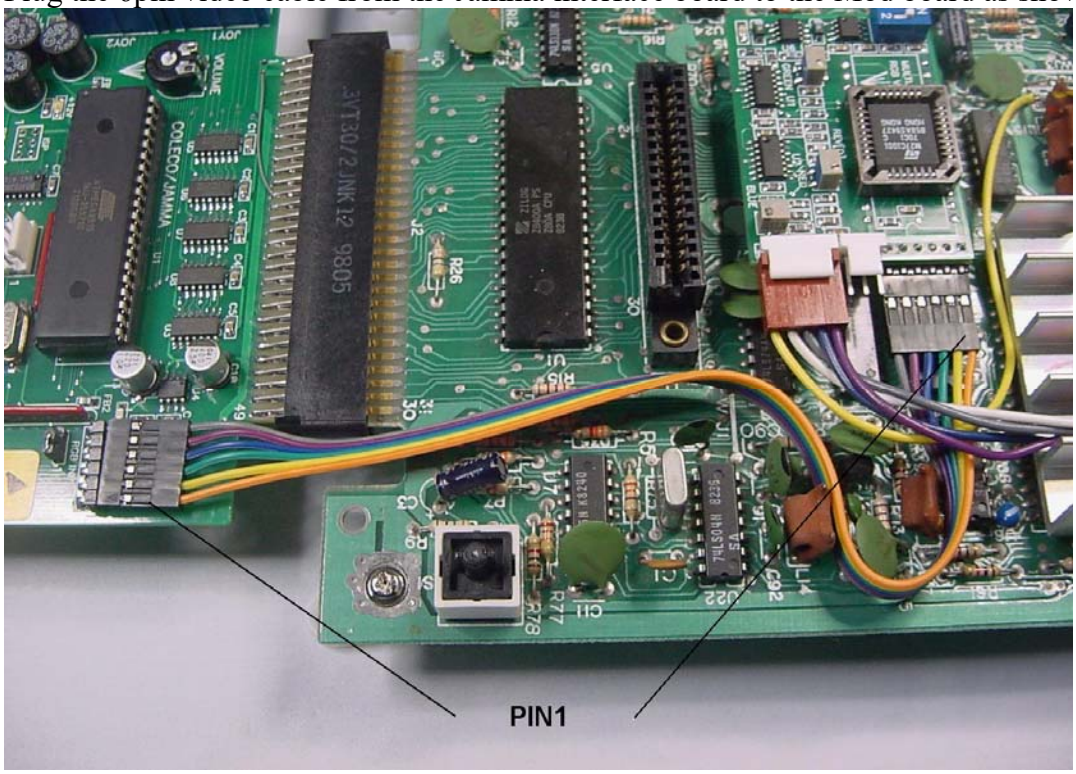


The dip switch on the mod board selects which BIOS you want to use. The following table describes their function

1 = on 2 = on	Original font Colecovision Bios.
1 = off 2 = on	Alternate font Bios w/fire button to get past startup delay
1 = on 2 = off	No title delay Bios, goes directly to player screen

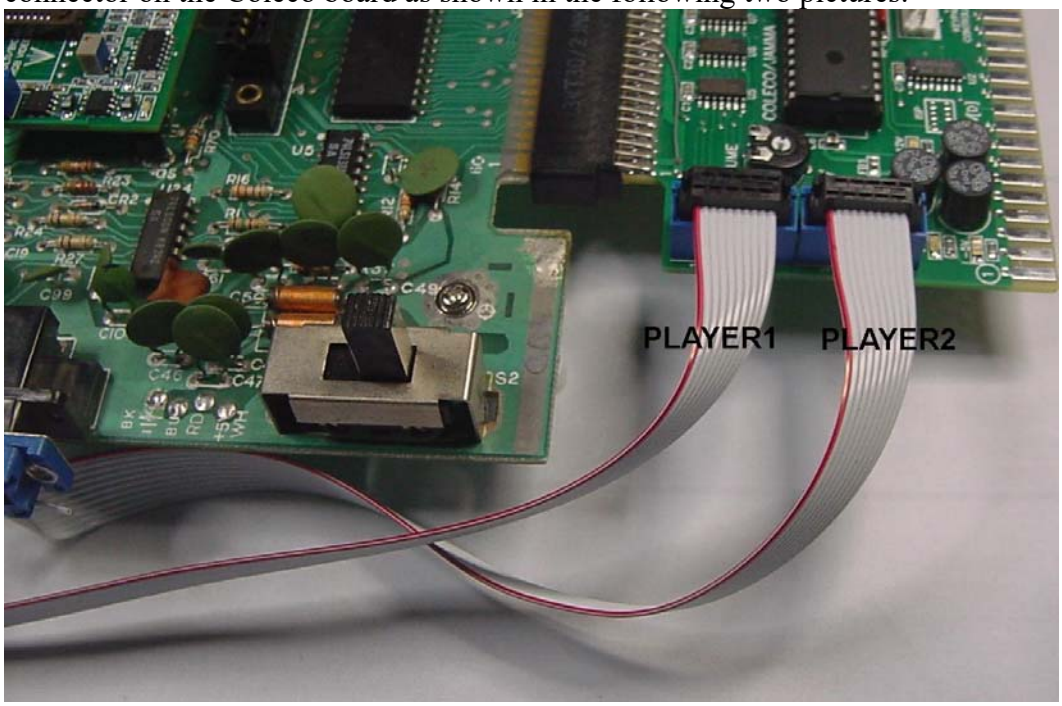
During the power up testing the three RGB trim pots can be adjusted to get the best color purity.

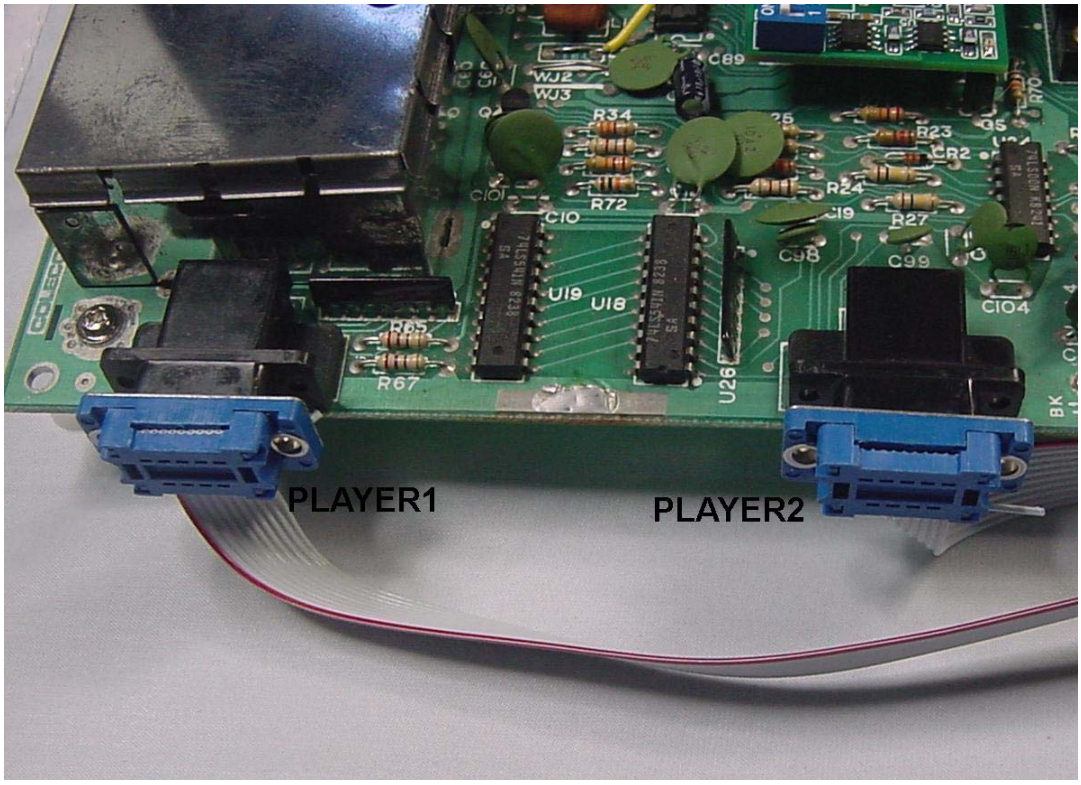
Attach the Jamma interface board onto the edge connector on the Coleco PCB.
Plug the 6pin video cable from the Jamma interface board to the Mod board as shown.



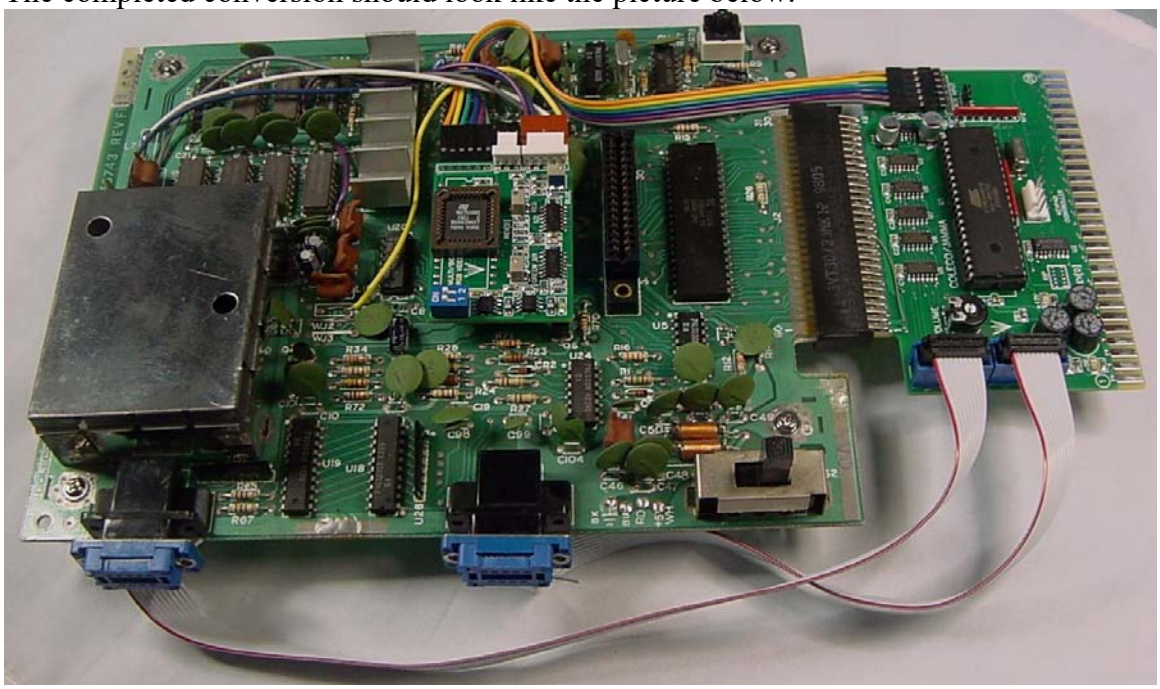
**NOTE* the colors of the 6pin cable will be random, so just insure that the PIN1 position on each end is correct. In this example the orange wire is PIN1

Attach the two DB9 to ribbon cables (the longer cable is Player1 and goes to the back connector on the Coleco board as shown in the following two pictures.





The completed conversion should look like the picture below.

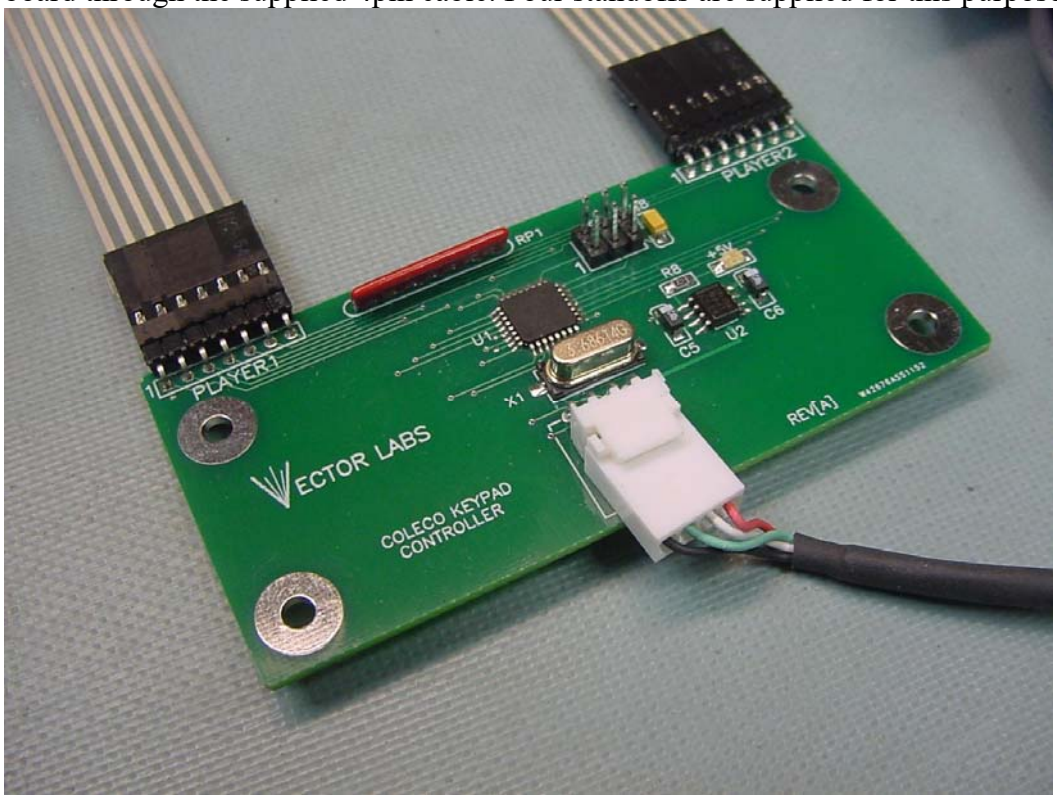


The power slide switch on the Coleco board is now non functional, however the reset push button still functions as before.

The Coleco board +5, +12 and -5v is supplied by the Jamma interface. Also note the three removeable power rail fuses and power status LED’s on the Jamma interface.

The coleco controller functions UP, DOWN, LEFT, RIGHT are mapped onto the Jamma player1 & player2 controls. Coleco FIRE is mapped to Jamma button1 and Coleco ARM is mapped to Jamma button2.

Most games require some input from the keypad, so it is recommend to mount the Keypad controller onto your control panel and connect to the Jamma interface board through the supplied 4pin cable. Four standoffs are supplied for this purpose.

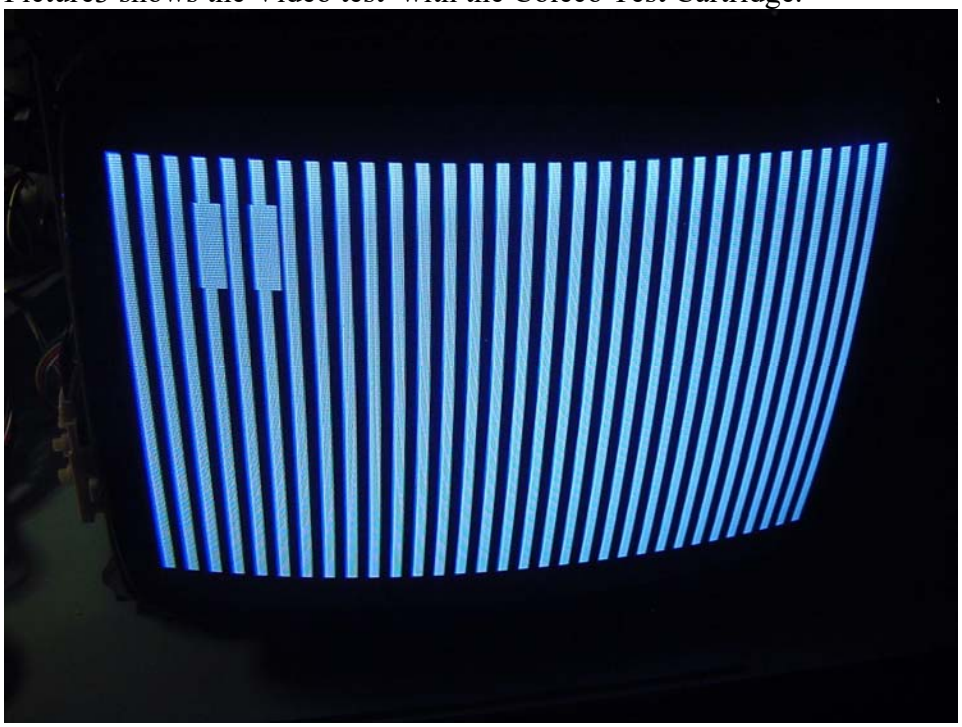


The Coleco test rom cart is recommended for testing player1 & player2 controls keypad input and also video output, but for just video you could use any known good game cart. Below are pictures using a standard Arcade CGA monitor.

Picture1 shows the video with no cartridge installed.

Picture2 is the video with the Coleco Test Cartridge RAM/ROM test

Picture3 shows the Video test with the Coleco Test Cartridge.



Picture4 shows the Coleco Test Cartridge Keypad/Joystick test.

Existing customers of any of the Colecovision RGB mods or Jamma conversion products can order a custom test cartridge for only $19.95 (normally $39.95)

The cart contains the following 16 binary files:

1. Final Test Program
2. Noise Test
3. Frogger2
4. Galaxian
5. Pitfall2
6. Boulderdash
7. Burgertime
8. Choplifter
9. Defender
10. DigDug
11. Moon Patrol
12. Gyruss
13. Joust
14. Pacman
15. Space Fury
16. Time Pilot

IF YOU HAVE ANY PROBLEMS OR SUGGESTIONS ON
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THANK YOU FOR YOUR PURCHASE