

Atari 2600 Pause Kit Installation Instructions

Congratulations on your purchase of an Atari 2600 Pause Kit! Once installed in your Atari 2600, you'll be able to pause your favorite games at any time. You can answer the phone, get a bite to eat, go to work, and when you return to your 2600 you can resume your game right where you left it!



While paused, the Atari 2600 will display either a blank screen, "garbage", or an invalid television signal. There's not much that can be done about that, unfortunately. The Atari 2600 was never designed to be paused in this nature!

Parts Included:

- Populated Atari 2600 Pause Kit circuit board
- Red, Black, Blue, Green and Orange (x2) wires
- Heat shrink tubing
- Toggle switch
- Double-sided tape



Tools Needed:

- Soldering Iron (and solder)
- X-Acto Knife
- Drill with 1/4" Drill Bit
- Needle-nose Pliers
- Phillips-head Screwdriver

Installation Instructions:

You can install the 2600 Pause Kit in a variety of Atari 2600 consoles produced by Atari (Heavy Sixer, 4-switch, Vader, Junior, 2800). We have not tested this Pause Kit in third-party Atari 2600 consoles (such as the Coleco Gemini) or the Atari 5200 VCS Adapter. If you successfully install this board in a non-Atari 2600 console (or the 5200 adapter) please let us know and we'll update these instructions.

The installation procedure is basically the same, regardless of the specific console.

Step 1:

Open your Atari 2600 console, remove the circuit board from the case, and remove the RF shielding if present. You'll need to use a pair of needle-nose pliers (or something similar) to straighten the metal tabs holding the two halves of the RF shield together. Try to straighten the tabs as much as possible, as this will make it easier to put the two halves back together when you are finished.

Step 2:

You must desolder a resistor on the Atari 2600 circuit board. The location varies depending on which console you are modifying. Please refer to the images at the end of this document that show the resistor you need to remove. We suggest desoldering the resistor (so you can "undo" this modification if need be), but you can also cut the resistor out if you'd prefer.

Step 3:

Now you must cut a single trace on the circuit board. Again, please refer to the images at the bottom of this document to see which trace you need to cut. An X-Acto knife works well for this purpose. It can't be stressed enough that you must be **extremely careful** when cutting the trace on the board so you do not damage any other nearby traces! You do not want to do permanent damage to your 2600!

Step 4:

You need to solder four wires from the 2600 Pause Kit to four locations on the 2600 circuit board. Depending on which console you modify (Heavy Sixer, 4-Switch, Junior, or 2800), the board will be laid out differently. You will be soldering the VCC, GND, 6507, and TIA connections on the Pause Kit to the appropriate locations on the Atari 2600 board.

We suggest using the Red wire for VCC, Black for GND, Blue for 6507 and Green for TIA. You don't have to use these particular colors, but make sure you save the two long Orange wires for the toggle switch!

Be very careful when soldering the wires to the Atari 2600 chips! These integrated circuits are sensitive to heat, so take care to not leave your soldering iron in contact with individual pins for more time than is necessary.

Step 5:

Now you can connect the 2600 Pause Kit circuit board to the Toggle Switch using the provided orange wires.

Step 6:

Your 2600 Pause Kit is now electrically complete! Before going further, it's a good idea to test out the Pause Kit to make sure it is working properly. Place your 2600 circuit board on a non-conductive surface, plug in your favorite Atari 2600 game, attach the power and RF cables, and power it up!

If you don't see a picture, try switching the toggle switch. If you still don't see the game, verify that you removed the correct resistor, that you cut the correct trace on the board, and carefully check your solder connections.

Step 7:

Slide the heat shrink tubing over the 2600 Pause Kit circuit board and use a heat gun or hair dryer to evenly heat the tubing until it shrinks around the board. This will help prevent any electrical shorts.

Step 8:

Use the included piece of double-sided tape to affix the 2600 Pause Kit circuit board to one of the chips on the 2600 circuit board. Take care not to put any stress on the connections you made to the 6507 and TIA chips.

Step 9:

Reattach the RF shield, routing the two wires for the toggle switch under the shield or through an opening (if available). The edges of the RF shield may be sharp (and perhaps rusty), so be careful not to damage the wires or yourself!

Step 10:

Using a drill with a 1/4" drill bit, drill a hole in the top half of your Atari 2600 case where you want to place the toggle switch. When selecting a location, make sure that the switch will not interfere with assembling the two halves of the case together after the switch is installed. Here are two examples showing possible installation locations for 2600 Jr. and 4-Switch models:



Step 11:

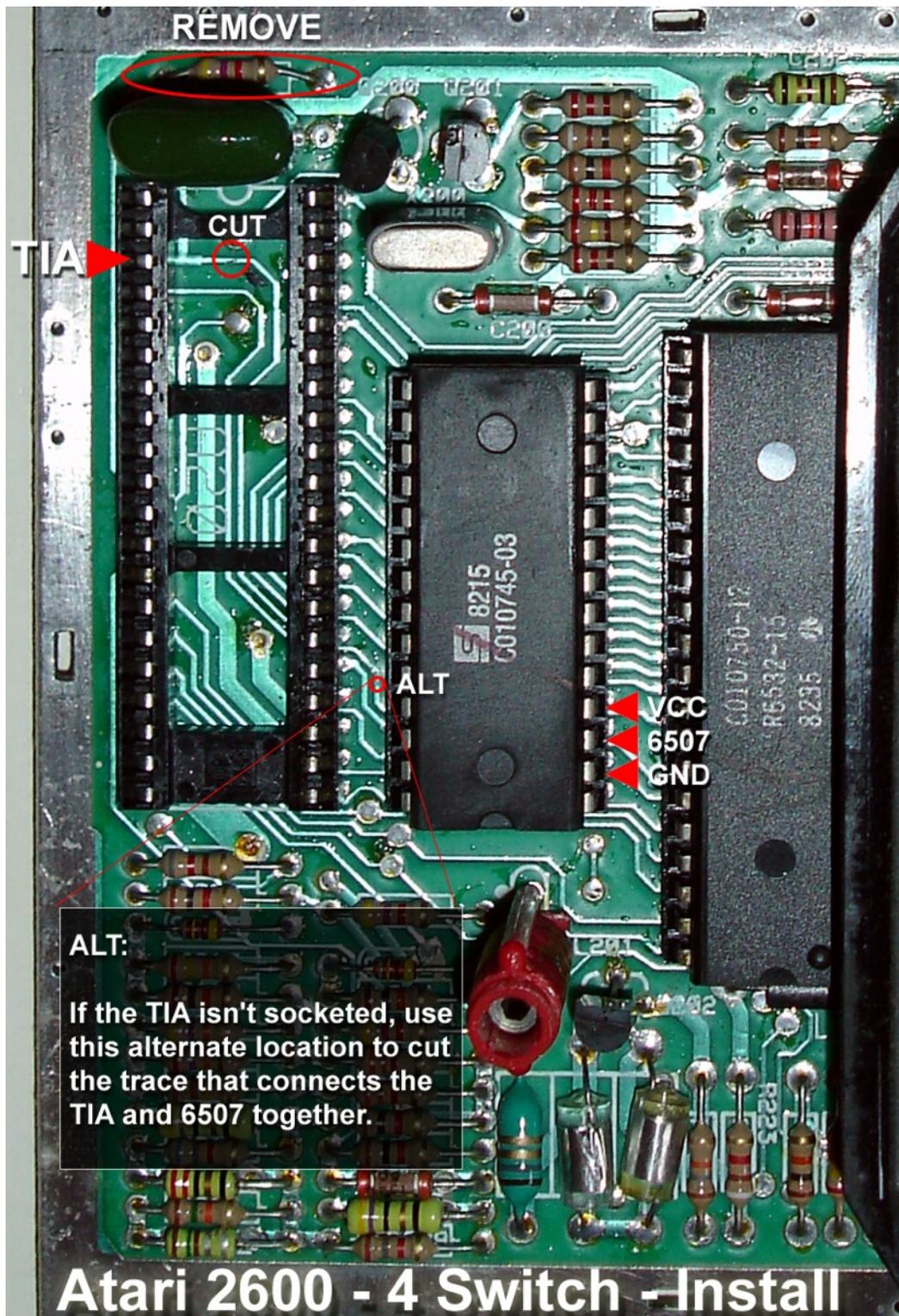
Unscrew the nut and small washer from the switch (leave the larger washer in place). Push the threaded portion of the switch through the case from the inside, and then attach the washer, followed by the nut. You can rotate the switch before tightening it based on your preference for how you want the switch to operate (left/right or up/down), as well as which position is "Paused". Tighten up the nut with your pliers.

Step 12:

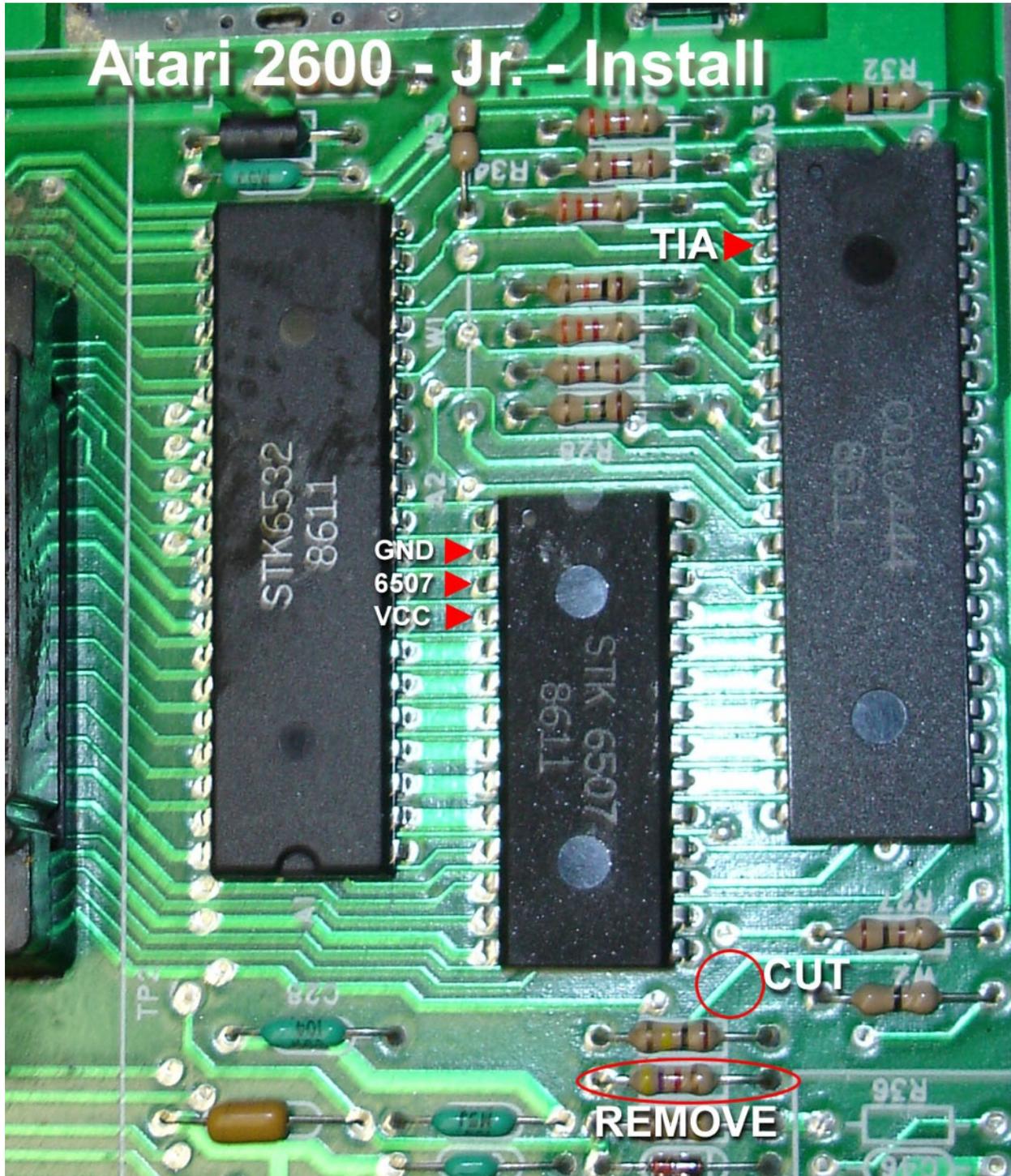
Now it's time to reassemble your 2600! Place the 2600 circuit board in the bottom half of its case and then fit the top half of the case on the lower half. Be aware of the position of the orange wires for the switch, so that they do not get pinched by the case, switches, screw posts, or anything else in the case! Use the screws you removed earlier to fasten the two halves of the case back together.

You're finished! Hook up your 2600 and test out your new Pause functionality!

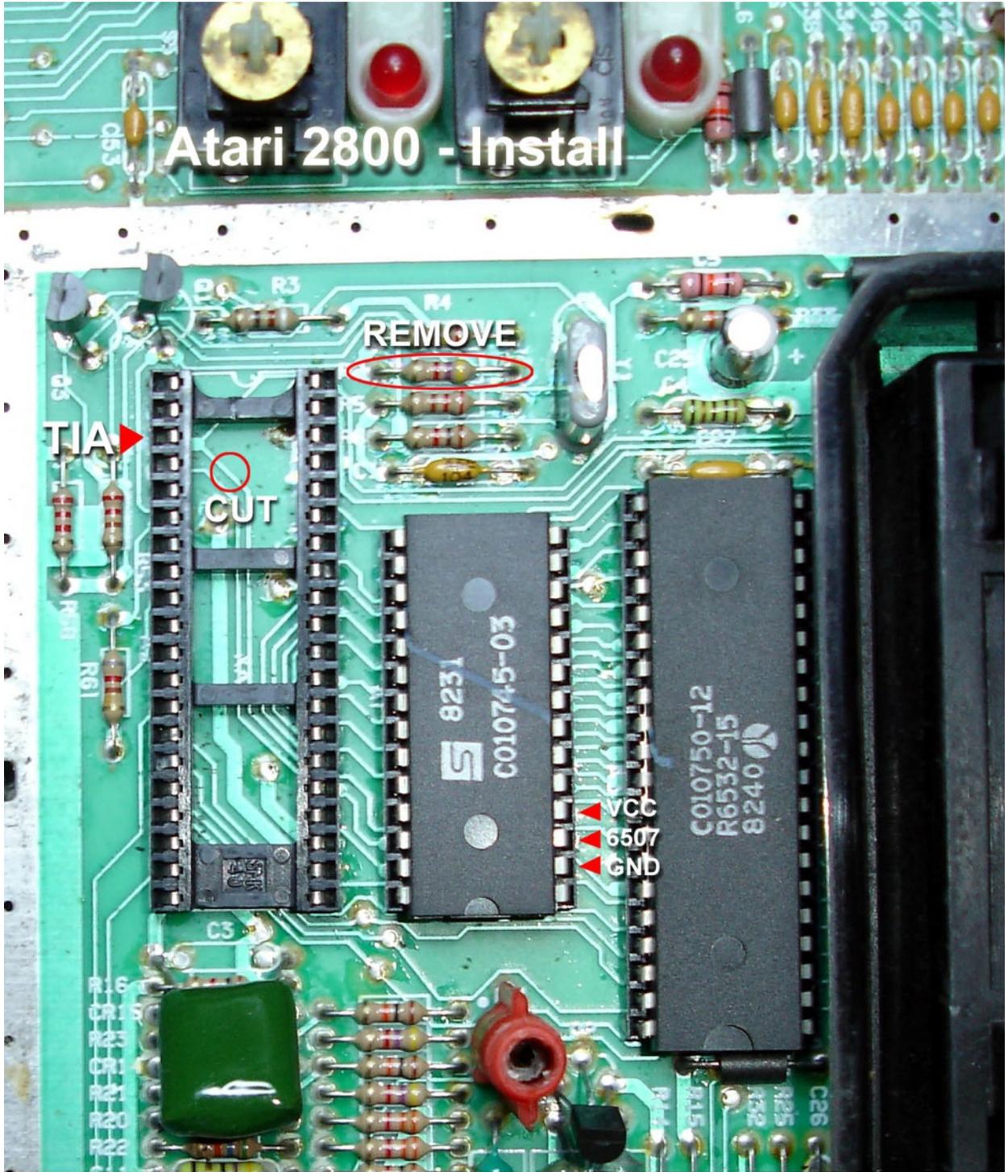
Atari 2600 4-Switch Installation Guide



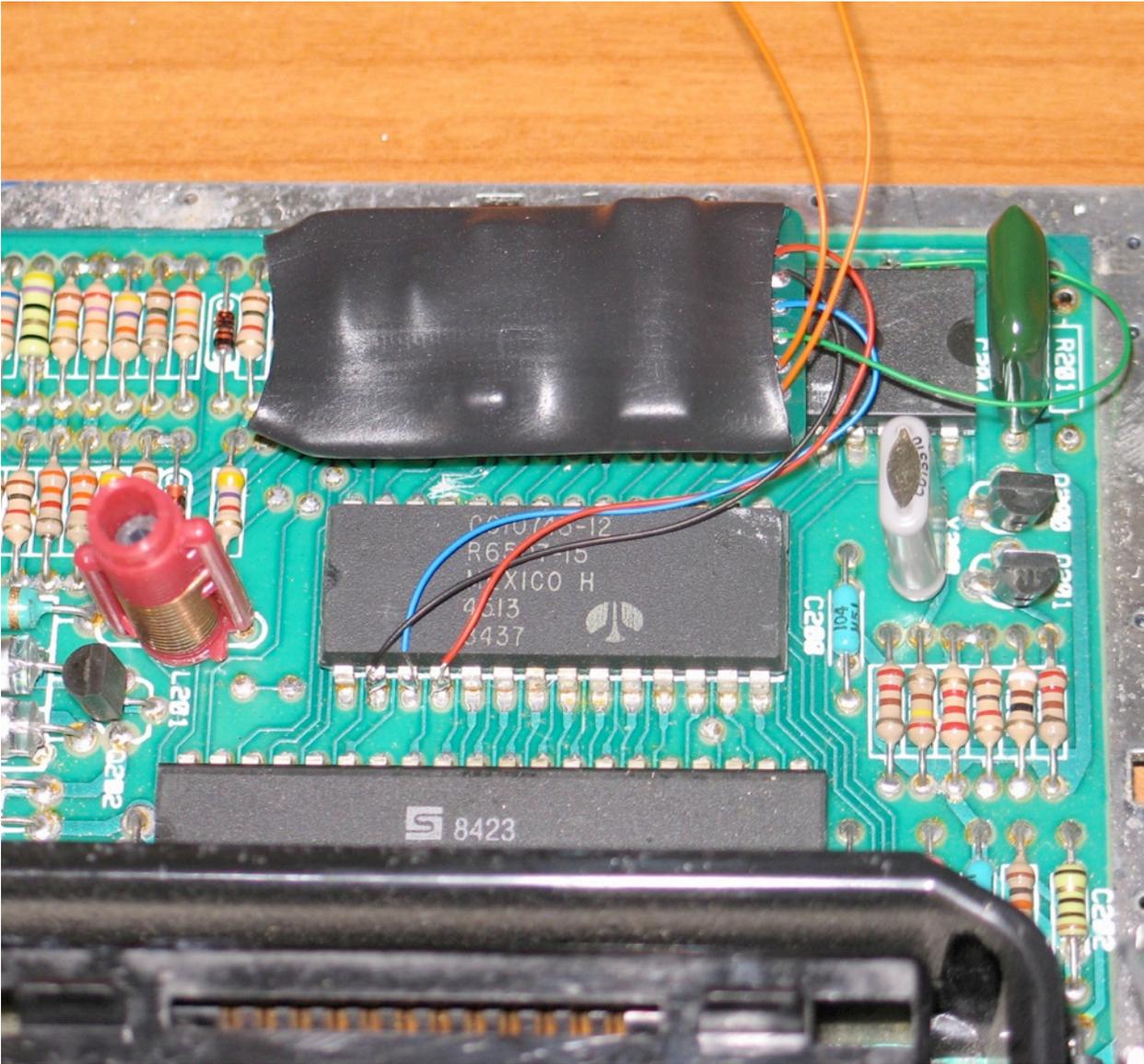
Atari 2600 Jr. Installation Guide



Atari 2800 Installation Guide



Final install, 4-Switch 2600

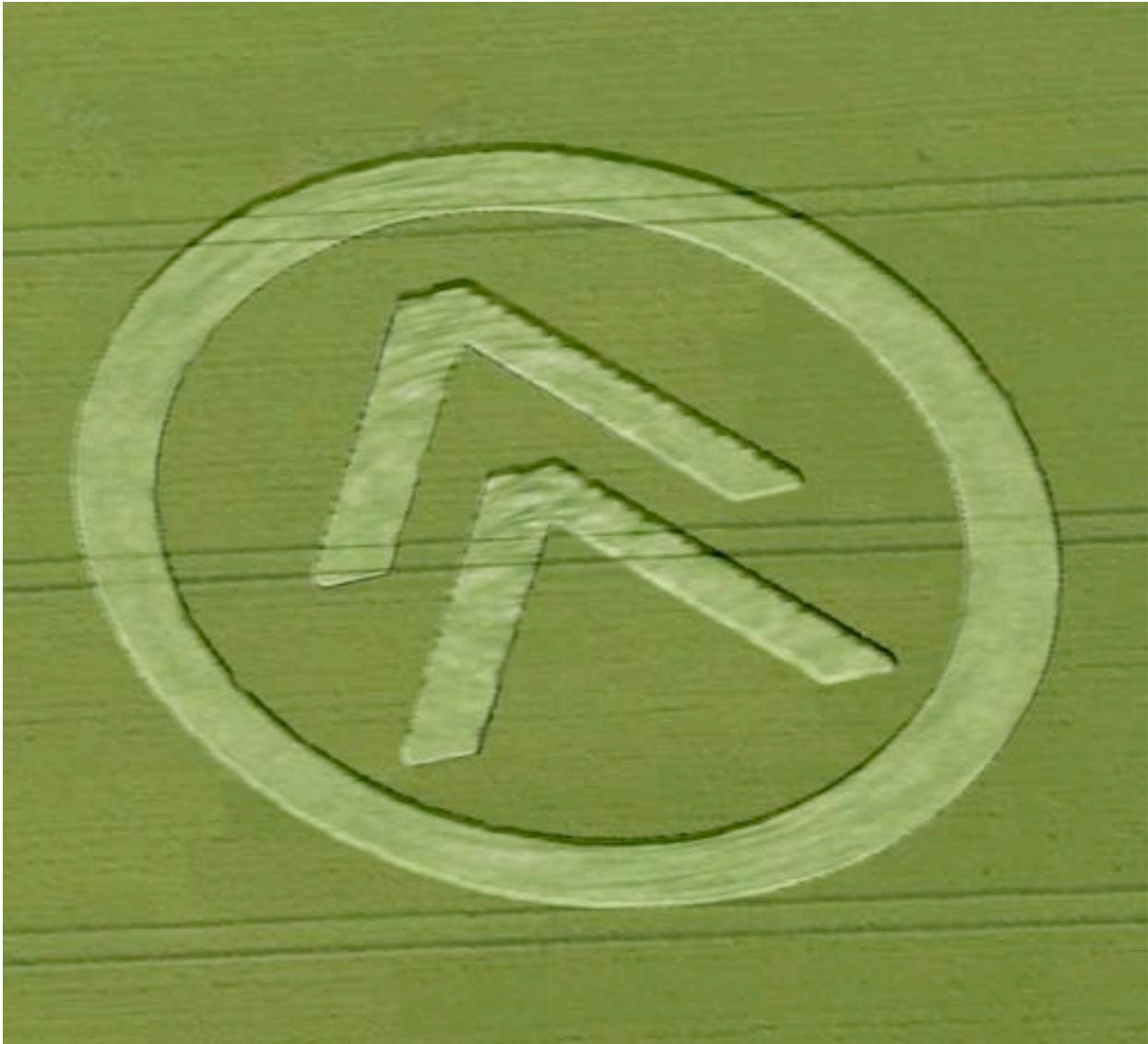


Need Help?

If you have any questions or comments regarding the Atari 2600 Pause Kit, please write us at sales@atariage.com.

Please visit us at www.AtariAge.com!

Atari 2600 Pause Kit © 2010 CPUWIZ



Rev 1.00