

Super Nintendo Fuse Replacement Guide

Thank you for your purchase of a replacement Super Nintendo fuse from Mortoff Games. If at any time during the course of this guide you run into any questions that are not answered please don't hesitate to contact us at customerservice@mortoffgames.com

The installation of a replacement Super Nintendo fuse is a complicated procedure that requires soldering skills. The first part of this guide is an introduction to soldering and should be referenced if you are new to it. If you are experienced with the usage of a soldering iron then please skip ahead to step one on page three.

Things you will need

Solder Items:

- 1) Soldering iron
- 2) Desoldering braid
- 3) Solder

Parts:

- 1) Super Nintendo 125V 1.5A fuse. Some retailers sell 250V fuses instead of 125V fuses. The reason for this is they are about 1/10 the cost of the 125V fuses. The problem is they offer less protection than the 125V fuses that we offer. To use the difference in price is worth better protection for your console.

Other:

- 1) 4.5mm Security Screw Bit
- 2) Clean work area where small screws will not get lost or with nothing flammable nearby.
- 3) 30-45minutes of free time

Introduction to Soldering

Soldering is a skill that takes a life time to master, although is quick to learn. The level of soldering skill needed for this procedure isn't considerable, which makes it a good project for a person new to soldering after they have completed this tutorial.

The first thing you need to do is develop an understanding of how soldering works. A soldering iron is a device that heats and is used to melt solder. Solder is a special combination of metals that will quickly melt when exposed to heat and reform when the heat is removed. Historically solder was made out of lead, although this is no longer the case. However this being said solder is still toxic when inhaled and soldering should preferably be done in a well-ventilated area.

Lastly it is important to understand the difference between a cold heat soldering iron and the traditional one you plug into the wall. A cold heat soldering iron uses an electrical charge to melt the solder, which when deactivated leaves the soldering iron cold to touch and therefore helps to prevent burn injuries. The problem is this electric discharge can damage certain electronics and as such we do not recommend their usage during this procedure. Instead the traditional plug into the wall type is recommended. The only down side to the traditional soldering iron is they get very hot and will produce serious burns if touched against the skin. The utmost caution must be utilized whenever you are using a soldering iron. Furthermore they pose a significant fire hazard and should never be left unattended or placed on a flammable surface. Most soldering irons come with a holster that is intended to hold the soldering iron when it is hot and these should always be utilized.

Now that you have an introduction to the two basic elements of soldering it is time to begin soldering for real. Acquire a length of rubber coated wire and cut it into two pieces using a wire stripper. Strip the ends of both wires to expose the metal parts. Next take your soldering iron and plug it in and wait for it to heat up. Typically most soldering iron holsters come with a sponge that you can use to clean the tip of the soldering iron. Soak this sponge with water. You know the soldering iron is of the appropriate heat once you touch it to the wet sponge and you hear a sizzling sound. Most soldering irons have two settings a 15W and 30W setting. We recommend the 30W setting.

While the soldering iron is heating up take the two exposed ends of your wires and twist them together. Once the soldering iron is hot touch take your solder and touch it to the soldering iron's tip, being careful not to touch the wire you're your hands. The metal will become hot and can burn you. Once you have some solder on the tip of the soldering iron go ahead and touch the tip of the soldering iron to the wire were you twisted it together attempting to spread the solder onto the wire.

While this is intrinsically hard to explain with words alone, what is important really is you experiment and try it until you find what works for you. The overall goal of this exercise is to become comfortable with the whole process of soldering two wires together and in doing so you are becoming proficient with using the soldering iron.

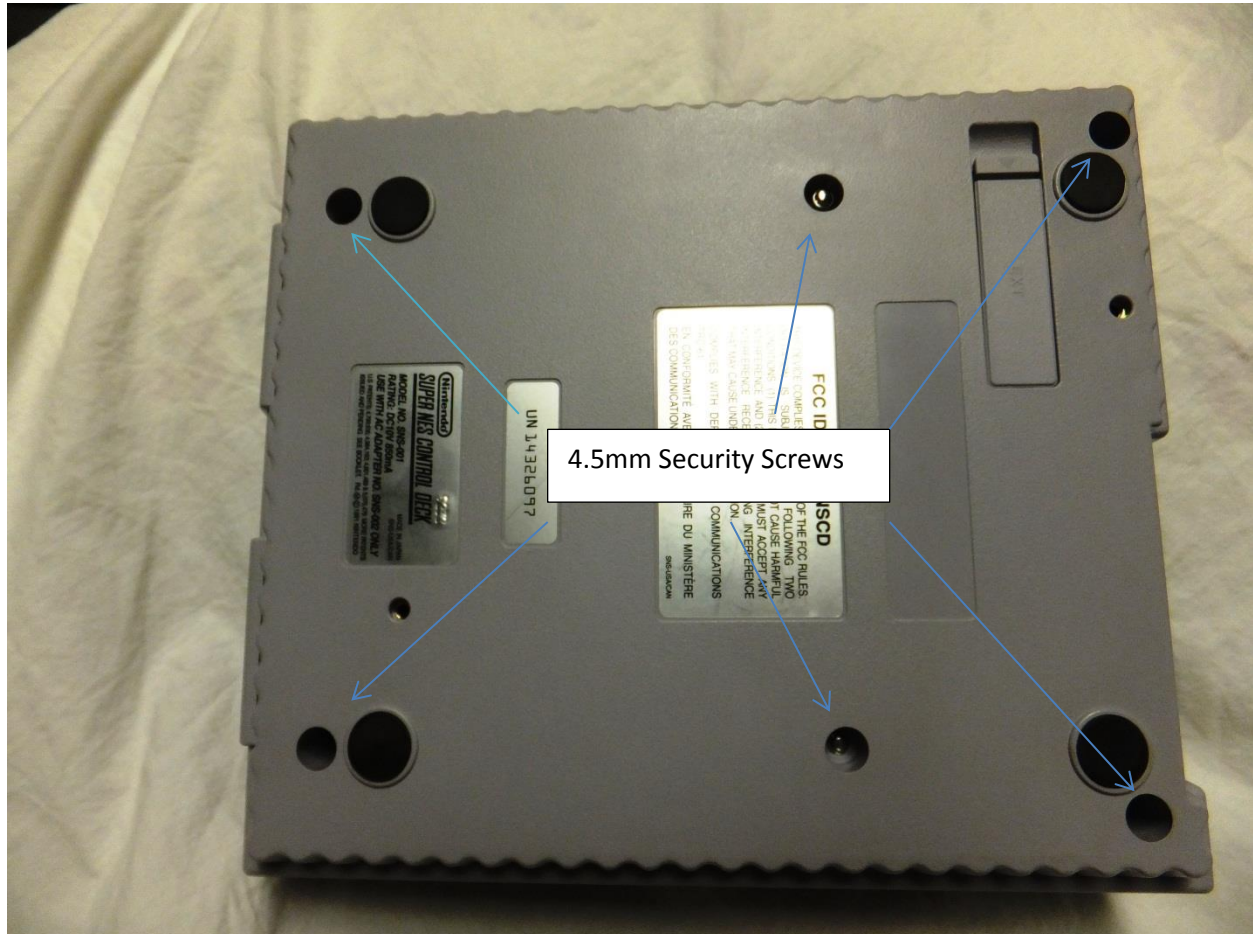
After you feel comfortable with this step and have repeated it several times to ensure you have the knack of it I recommend you attempt to unsolder the wires you just joined. This process is quite easy.

Take your desoldering braid and place it onto of the solder you wish to remove. Next place the tip of the soldering onto of the desoldering braid. The soldering braid will soak up the solder, although don't just sit there and hold it until all of the solder is gone, but instead repeat the procedure several times using a fresh piece of desoldering braid each time. Practice this until you get the hang of it and are comfortable with desoldering a joint.

Before you continue onto the actual replacement of the power jack, which is discussed next, make sure you are comfortable with the above techniques. Make your mistakes no rather than later as wire, solder and desoldering braid are cheap compared to having to replace your entire console; practice, practice, practice.

Step One:

Firstly flip over the console and identify the six 4.5mm security screws that are holding the casing together as identified on picture one.

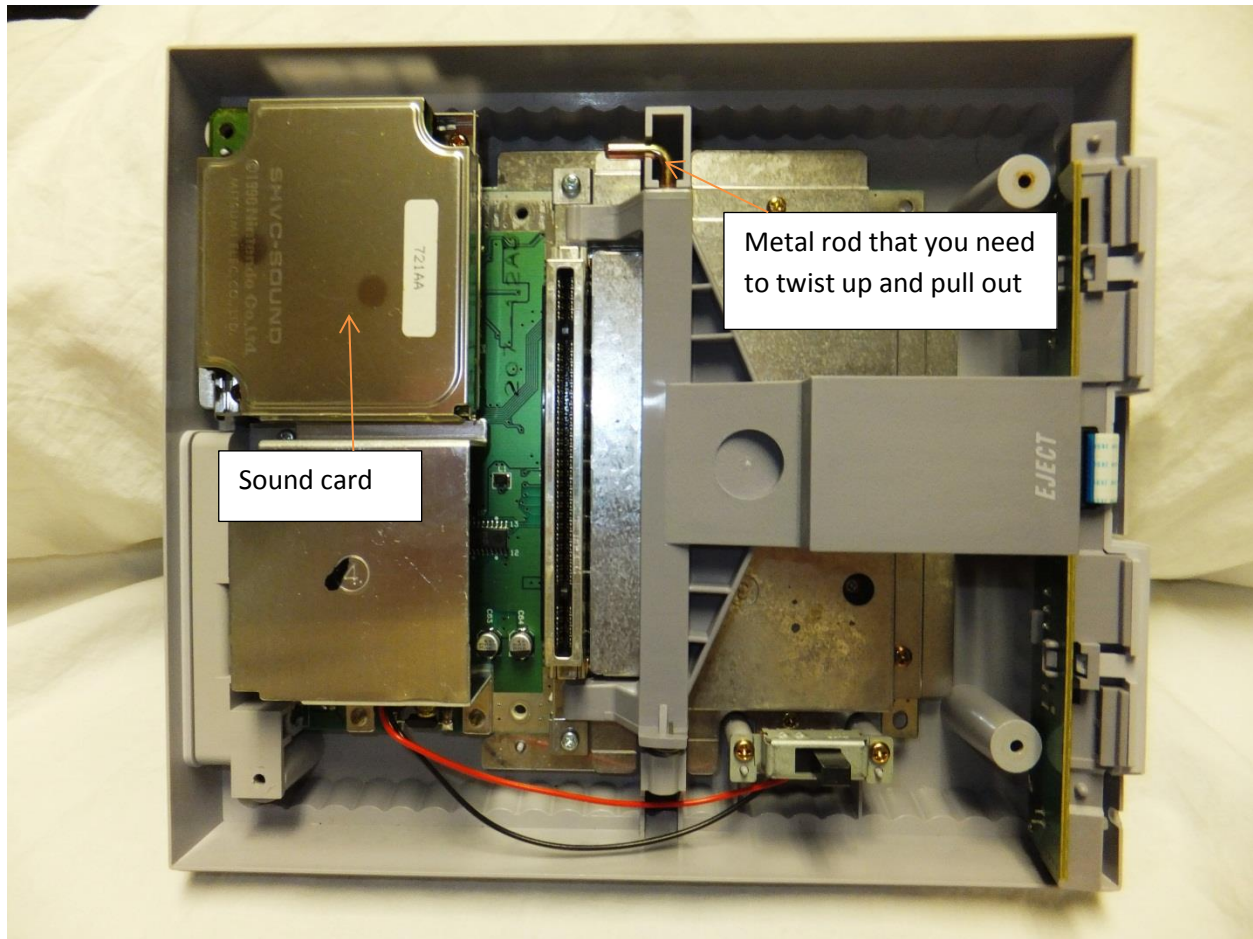


Picture One: Bottom of the Super Nintendo system

Once you remove the six 4.5mm security screws flip over the console and separate the two halves of the console. If the two halves will not separate one or more of the screws still need to be unscrewed. Once the two halves of the console are separated please proceed to step two.

Step Two:

Once the two halves of the casing shell are removed this is what you will see:



Picture Two: Inside of the Super Nintendo system

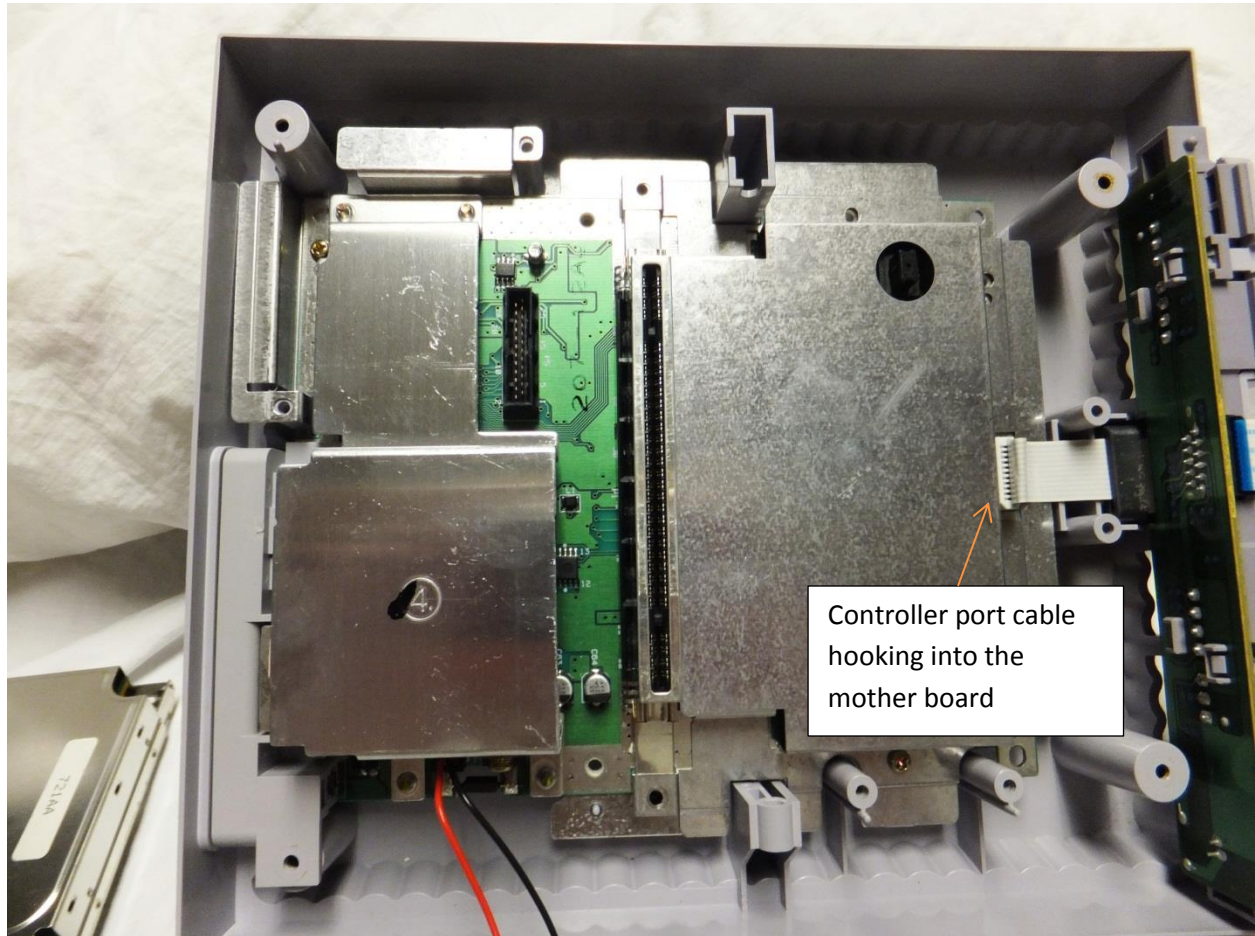
You might not see a sound card, as later models of the Super Nintendo do not have this. If it is not present don't worry about it.

Unscrew all of the visible screws at this point. After you have removed the accessible screws you have to remove the eject lever. Please make sure that you pay detailed attention to how the lever is installed as it will be very difficult to reinstall if you don't remember how it was installed. Again memorize how the eject lever is installed before you take it out.

As indicated in the above picture located the metal rod of the ejection lever twist it up and then pull it out. The ejection level will then be easy to remove.

Step Three-

Once you have removed the accessible screws and the ejection lever please remove the sound card, if present. Once it is removed your console should look like picture three below.



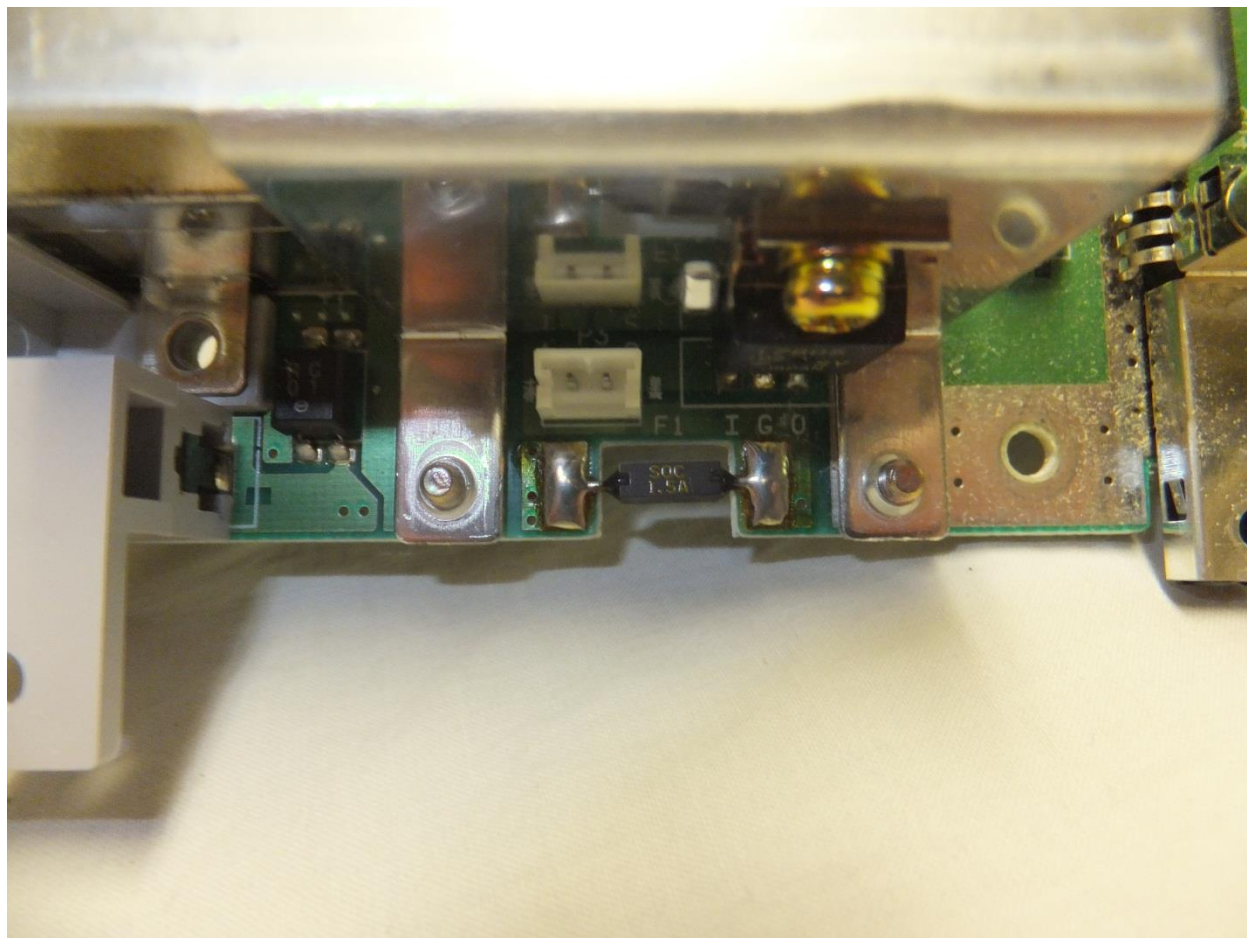
Picture Three: Inside of the Super Nintendo system

Next unscrew any other screws that are visible or accessible at this point. Finally please unplug the controller port from the mother board. The ribbon cable should disconnect by simply pulling it upwards.

Once all of these steps are finished please pull the mother board off of the bottom casing shell.

Step Four:

Next please locate the fuse on the mother board. It is located in the left top corner of the system; it is shown in picture four below.

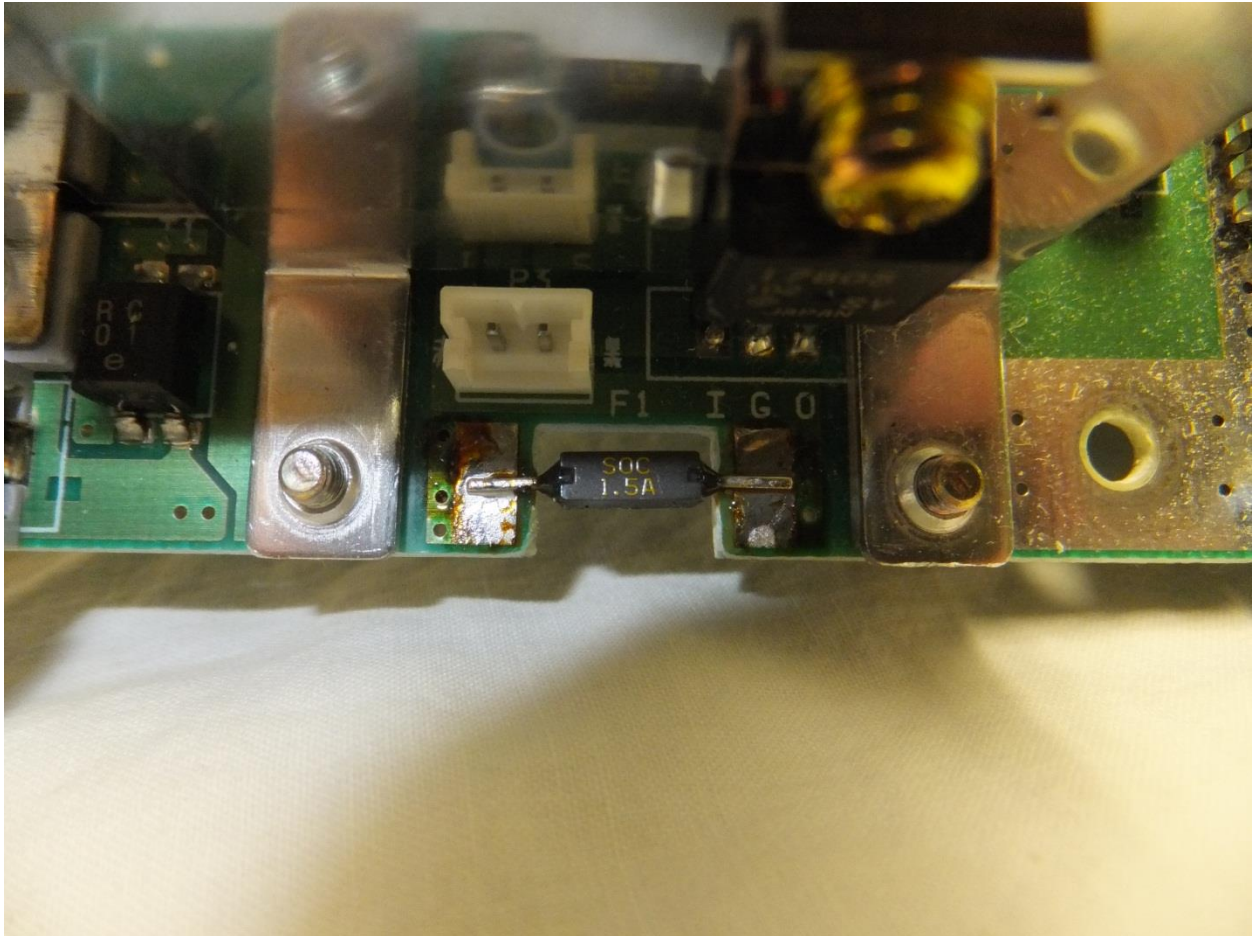


Picture Four: Fuse of the Super Nintendo system

Using the skills discussed earlier please remove the solder holding down the fuse and please proceed to step five.

Step Five:

Once the solder is removed your fuse should look like picture five below. You will notice that the fuse is still firmly attached to the mother board. This is not because all of the solder has been removed, but because the leads are glued to the mother board. Please use a set of needle nose pliers to pry the fuse off the mother board.

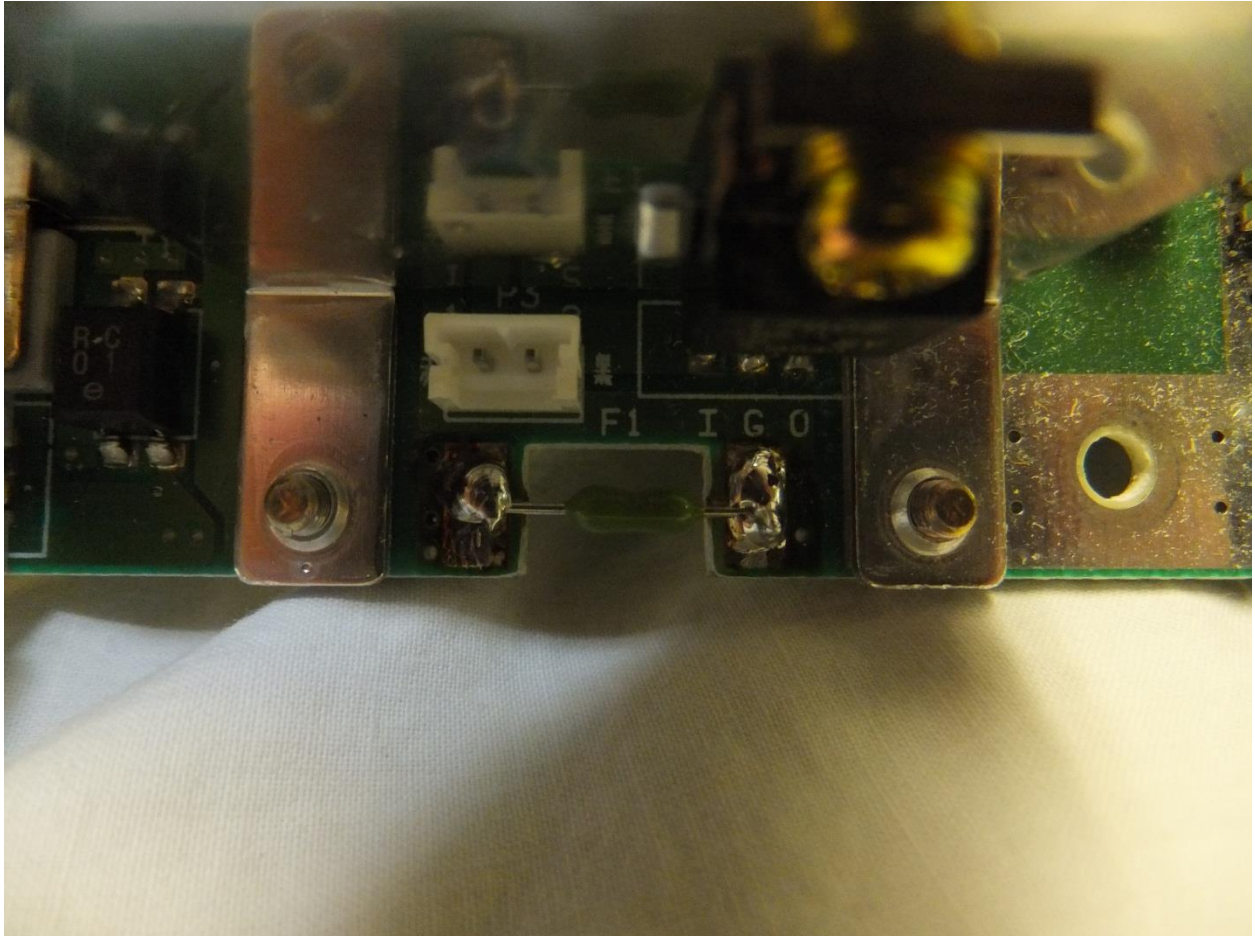


Picture Five: Fuse desoldered

Once the fuse is removed please proceed to step six.

Step Six:

Now that the fuse has been removed please solder in the replacement fuse. Please align the replacement fuse so the text on the fuse aligns in the same direction as seen in picture five above. Once the replacement fuse is installed your system should look like picture six below.



Picture Six: Replacement fuse installed

Once the fuse is installed please reassemble your system and enjoy your repaired system. If you still experience problems with your system after the repair is completed please see our troubleshooting section at the end of this guide.

Troubleshooting Section

This section of the guide is to help you figure out what might be going wrong with your system after you have replaced the fuse. Please read the list of problems to find the one that makes your problem. If you require further assistance please don't hesitate to ask us at customerservice@mortoffgames.com

1) My system does not power up

- a. Firstly are you sure that you soldered the joint correctly?
- b. Next the power adapter itself may be defective; try replacing it with another power adapter

2) My controllers don't work

- a. Make sure the cable hooking up the controller ports are hooked up to the mother board. This can be seen in picture three.
- b. Next make sure the problem isn't the controller. Try another controller to rule out this problem.
- c. If the cable is firmly installed and you have ruled out the controller as the problem then the controller port most likely needs to be replaced.
- d. If the controllers are still not working after you replace the controller port then it is a mother board problem and you need to replace the system.