

Nintendo 64 Power Supply Fuse Replacement Guide

Thank you for your purchase of a Nintendo 64 power supply replacement fuse from Nintendo Repair Hut. We appreciate your patronage and look forward to serving you again in the future. If you have any questions please don't hesitate to contact us at Starwander@Comcast.net. This guide is intended to help you through the steps involved in installing your replacement fuse.

Items Needed to Start

- Nintendo 64 power supply fuse
- 4.5mm security screw kit
- Soldering iron
- Soldering braid or solder sucker
- Solder
- Wire cutters
- Safety goggle
- Gas respiratory or fume hood

Personal Protective Equipment

During the process of removing the fuse from the power adapter and installing the replacement one you will be vaporizing the solder and other materials on the circuit board. This will release toxic fumes into the air that will be inhaled if you are not using respiratory protection. We recommend that you use at the very least a gas respiratory to protect yourself and goggles to protect your eyes. The best solution is to use a fume hood if you have access to one.

Soldering Skills Needed

This repair requires extensive soldering skills and should not be attempted by a novice. You are more likely to damage the system if you don't have the proper skills. We recommend that if you are not completely comfortable with your soldering skills you return this repair kit for a full refund at this time.

Patience

This repair requires roughly fifteen to twenty minutes of work. If you start to get tired we recommend that you stop and come back to the work at a difference time. Attention to detail is an absolute must during this repair.

Fuse Index

This is an index of the fuse(s) that are found in the Nintendo 64 power adapter. Fuses are labeled by a F prefix before the number on the board.

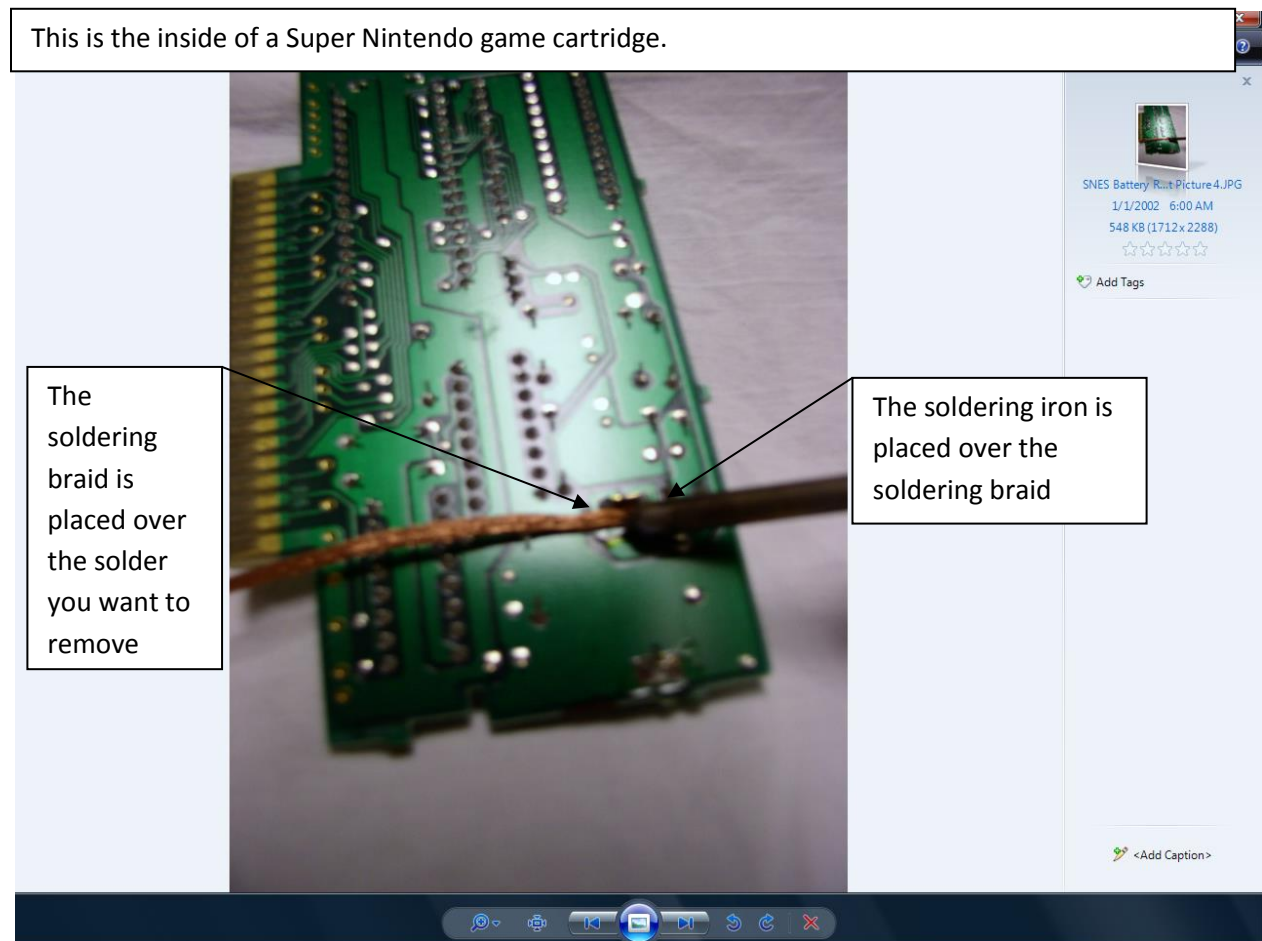
Mother Board Part Number	Capacitor Value	Mounting Style
F1	1.5A 250V	Radial

Soldering Techniques:

In order to solder and unsolder correctly you will need a soldering iron, solder and soldering braid or solder sucker. Once you have these items it is safe to proceed forward. For the duration of this project it is not recommended that you use a cold heat or any other instantaneous heating soldering gun, since these soldering devices use an electrical current to melt the solder. Passing a strong electrical current through your games or systems is not recommended and as such should be avoided. We recommend that you use a typical soldering gun, the type that you have to plug in and wait to heat up. In addition it is recommended that you set your soldering iron to 30watts for the duration of this project if possible.

Unsoldering:

Correctly unsoldering a joint is rather easy once you get the hang of it. In order to unsolder a joint place soldering braid over the solder you wish to remove and then place the soldering iron over the soldering braid. The soldering iron will heat the braid and in turn the solder will liquefy, which will be sucked up by the braid. Please see the picture below.



Picture Introduction: Proper usage of solder braid

Although it might take a little while to completely remove all of the solder, patience and persistence will pay off in this case. Every 10-15 seconds remove the soldering braid and check to see if the solder have been fully removed. As soldering braid is takes up solder periodically cut off these used sections as

needed. If you do not have soldering braid and instead have a solder sucker you can melt the solder with the soldering iron and then rapidly suck the solder up with the solder sucker.

Soldering:

Now that the solder has been removed you can now remove the object that the solder was holding in place and you are now ready to solder something new into place. During this project it is not safe to use excessive soldering material as bridging between joints is very easy due to their close proximity to each other.

The two most important things to keep in mind are:

- 1) Never allow patches of solder to overlap or touch, doing so creates a short, thereby rendering the circuit inoperable.
- 2) Make sure to use enough solder to securely attach whatever it is you are soldering, do not be afraid to test the joint out.

Keeping these items in mind lets continue with our demonstration. To apply the solder take it and place it over the soldering joint and then lightly place the soldering iron over the solder. This is just like unsoldering, although this time you are soldering and not unsoldering. This part is a little tricky when you first start and is hard to describe with words alone. It is recommended that you test out melting solder first to get an idea of how it behaves.

One ideal exercise you might want to try is to attempt to solder together two pieces of wire. Take two pieces of wire, strip the ends, twist the ends together and then practice applying solder over this twisted joint. During the course of this project if you run into trouble remember you can always back track and remove the solder and try again, using the soldering braid. Soldering braid and solder are very cheap and as such are worth playing around with to get comfortable with before you go ahead and try to solder in a replacement battery. Now that we have covered the basics of soldering and unsoldering, let's get started with the replacement of that fuse.

Step One:

To start please turn over the power supply and locate the two 4.5mm security screws holding the casing together seen in picture one below.



Picture One: Back side of Nintendo 64 power supply

Once you have located them please unscrew the screws and remove the back casing. As you attempt to remove the casings, the back casing snaps off relatively easily; however the top casing doesn't. It seems as if it is still screwed in someplace; however this isn't true. There are two small foam sticky pads that are glued to the top of the mother board and cement it to the inside of the top of the casing. If you pull really hard you will be able to pull off the top casing. Once the casings have been removed then proceed to step two.

Step Two:

Now that the casing has been removed your power supply mother board should look something like picture two below.

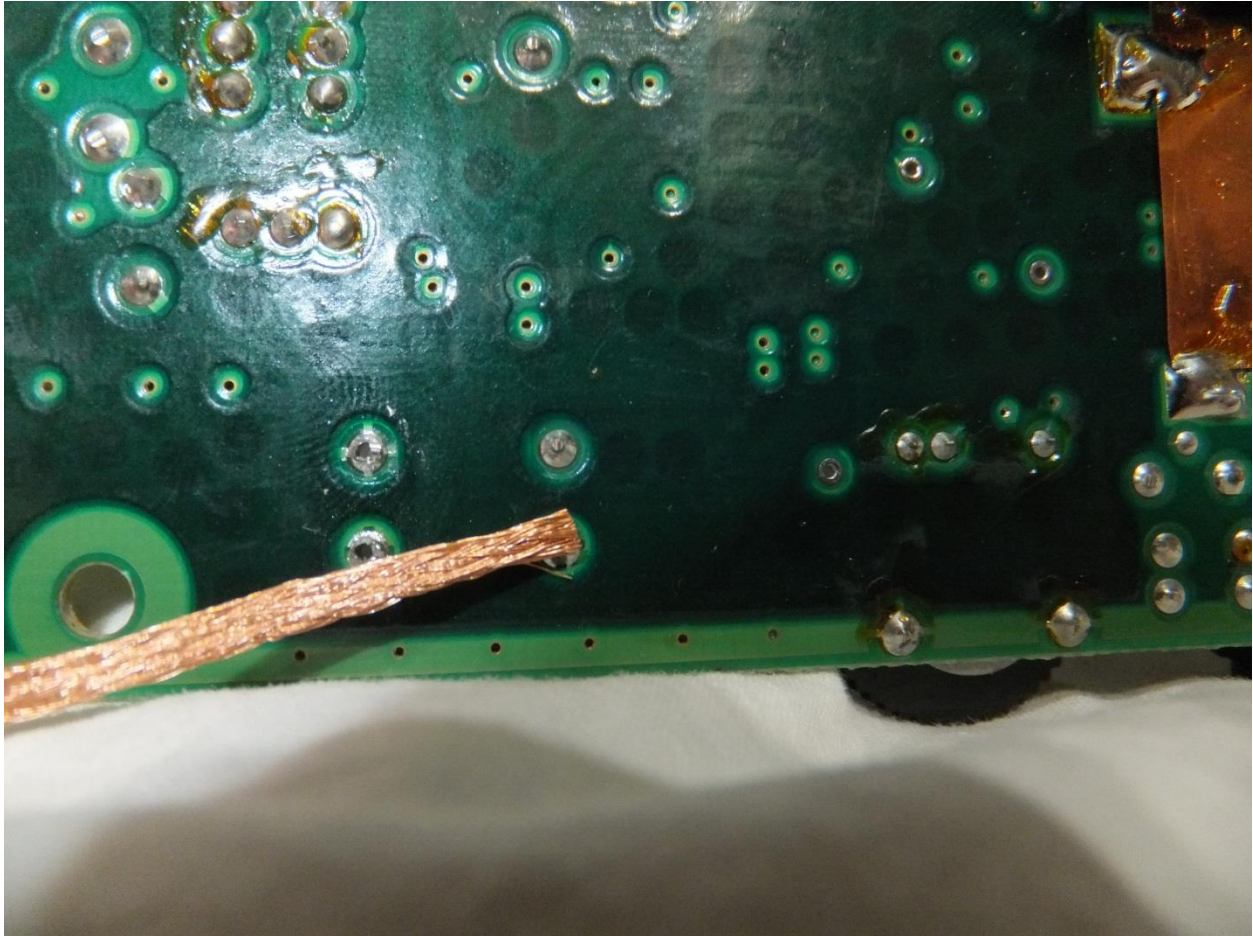


Picture Two: Nintendo 64 power supply mother board

Once the board has been accessed you are ready to start replacing that fuse. Please proceed to the next step.

Step Three

In order to unsolder the fuse we recommend the following strategy. For the purposes of this guide the following pictures are from a sample system and are not directly taken from the Nintendo 64 power adapter.



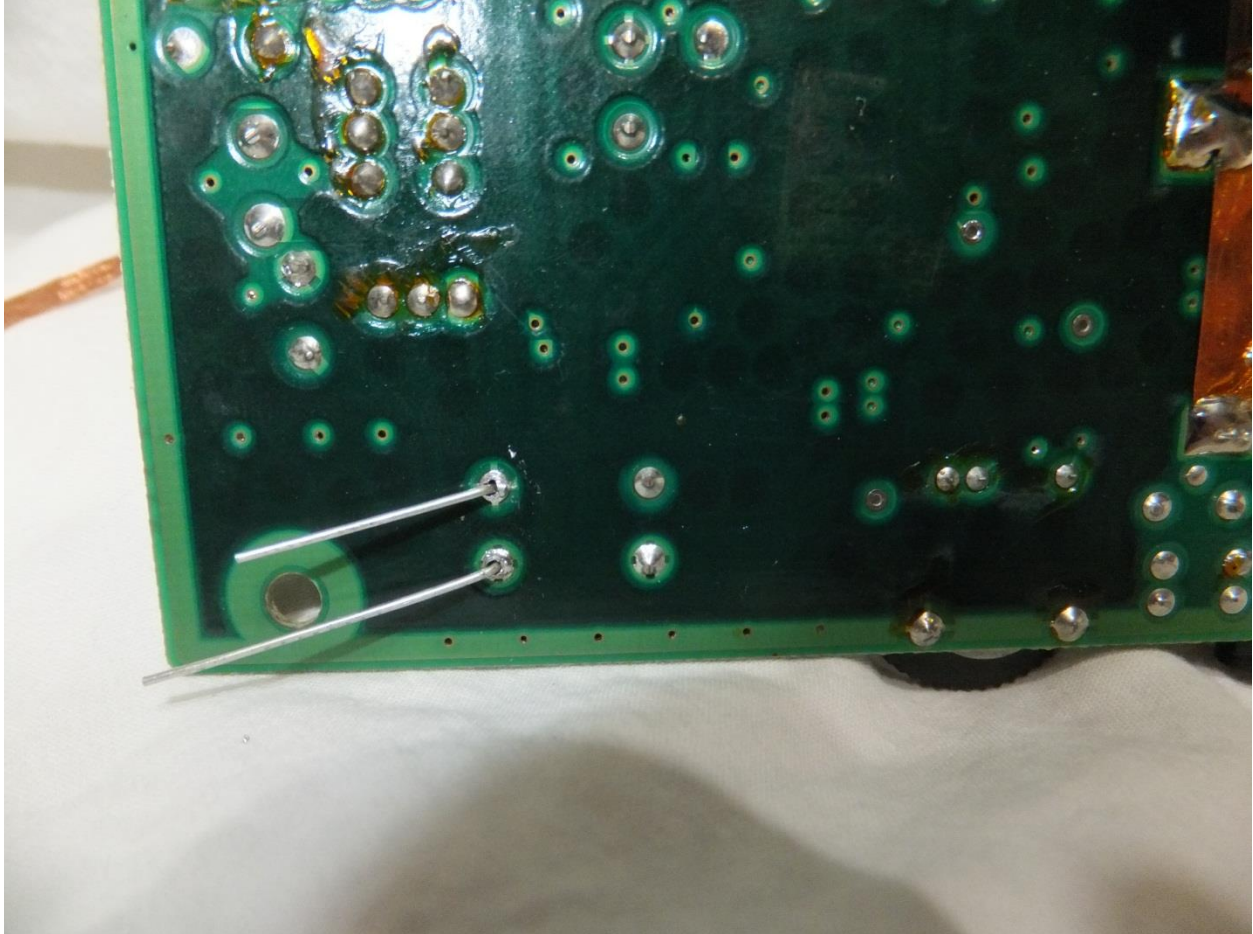
Picture Three: Proper usage of soldering braid

Place the soldering braid over the solder joint and then heat the joint with your soldering iron. The braid will suck up the solder and free the lead. You can also apply a small amount of traction on the lead by grasping the lead from the other side with a set of needle nose pliers and pulling if needed.

Once the leads are unsoldered please proceed to the next step.

Step Four

Next you need to solder the replacement fuse into place. Fuses are bidirectional so don't worry about what lead goes in what hole. We recommend the following strategy.



Picture Four: Lead soldering

Insert the leads and then bend them at a ninety degree angle. Then cut the leads down to the desired length. Finally solder the leads into place. Congratulations you are finished.

Troubleshooting Section

We are sorry to hear that you ran into complications from your repair. Unfortunately this particular repair is difficult to troubleshoot due to the complexity of the repair job, although here are some general guidelines.

- 1) Make sure that none of the terminals are bridge with solder
- 2) Make sure the power cable is not cut or damaged or replace it.