

Nintendo 64 Controller PAK Replacement Battery Installation Guide

Thank you for your purchase of a replacement Nintendo 64 controller PAK battery from Nintendo Repair Hut. We know that you have a choice amongst online game stores and we appreciate your business. If at any time you have questions please don't hesitate to contact us at Starwander@Comcast.net. This guide will take you through the steps of installing your replacement battery.

Things you will need before starting:

- CR2032 Coin Cell Battery with tabs
- Soldering Iron
- Soldering braid
- Solder
- 3.8mm security screw driver
- Clean work area and about five minutes of spare time

Getting Started

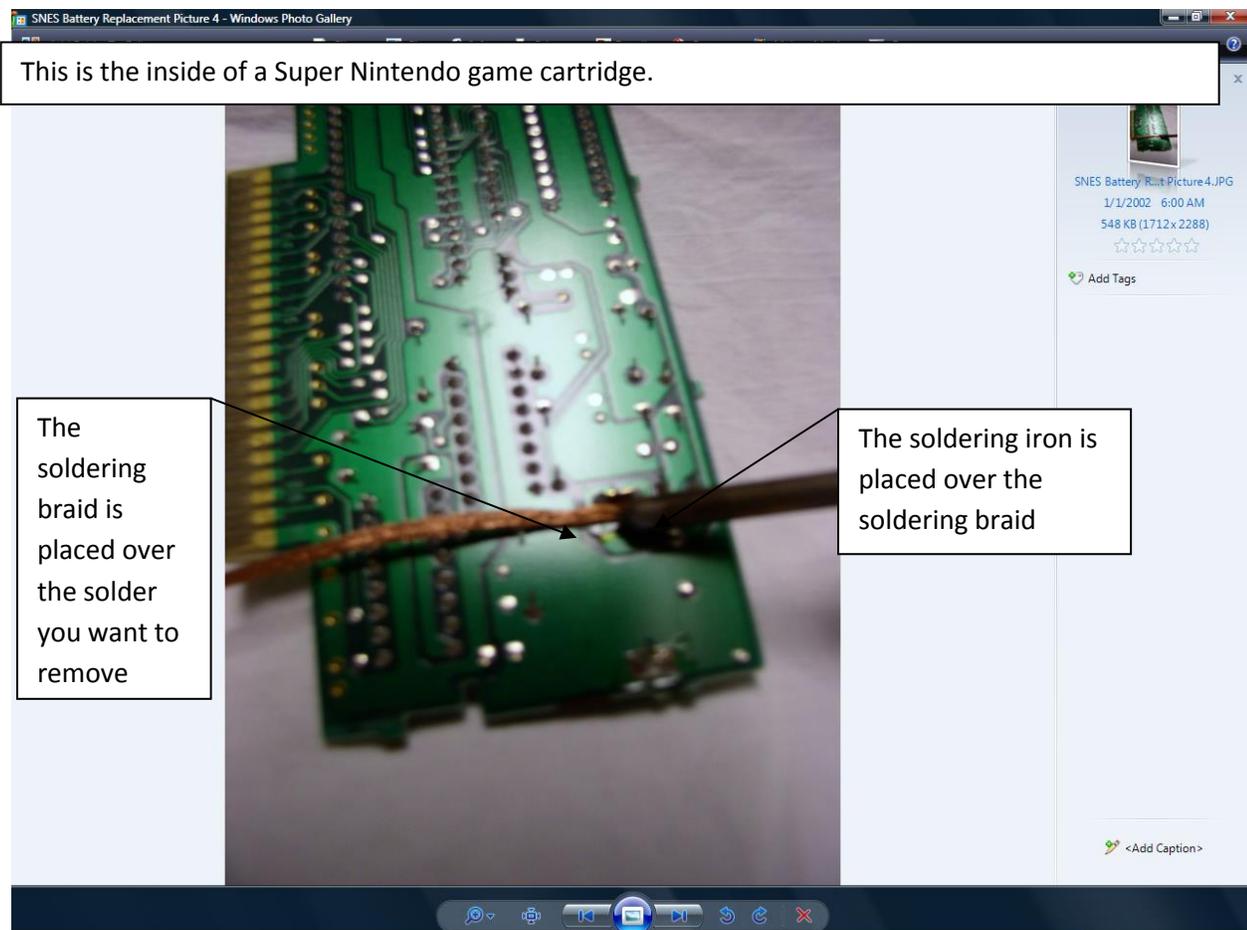
If you have a fair amount of soldering knowledge it is safe to skip ahead to step one, otherwise it is recommended that you read the following how to solder guide, which will discuss the soldering techniques you will need to successfully replace your save game battery.

Soldering Techniques:

In order to solder and unsolder correctly you will need a soldering iron, solder and soldering braid. 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 devices use an electrical current to melt the solder. Passing a strong electrical current through your games 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.

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



Introduction Picture One: Soldering braid usage

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 has been fully removed. Take note to notice that the solder is accumulating on the soldering braid as it is being sucked up. As it is sucked up you should periodically keep cutting off the used portion of the soldering braid and use fresh braid as needed.

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. For the purposes of this project it is safe to use a generous amount of solder, though this is not always the case with most soldering projects. 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. This part of the project is pretty easy once you get used to doing it. All you have to do is take your solder 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 save game battery.

Step One

Please flip over the Nintendo 64 controller PAK and locate the two 3.8mm security screws located in picture one below. Once located please unscrew them. If you do not have a 3.8mm security screw bit we sell them on our website.



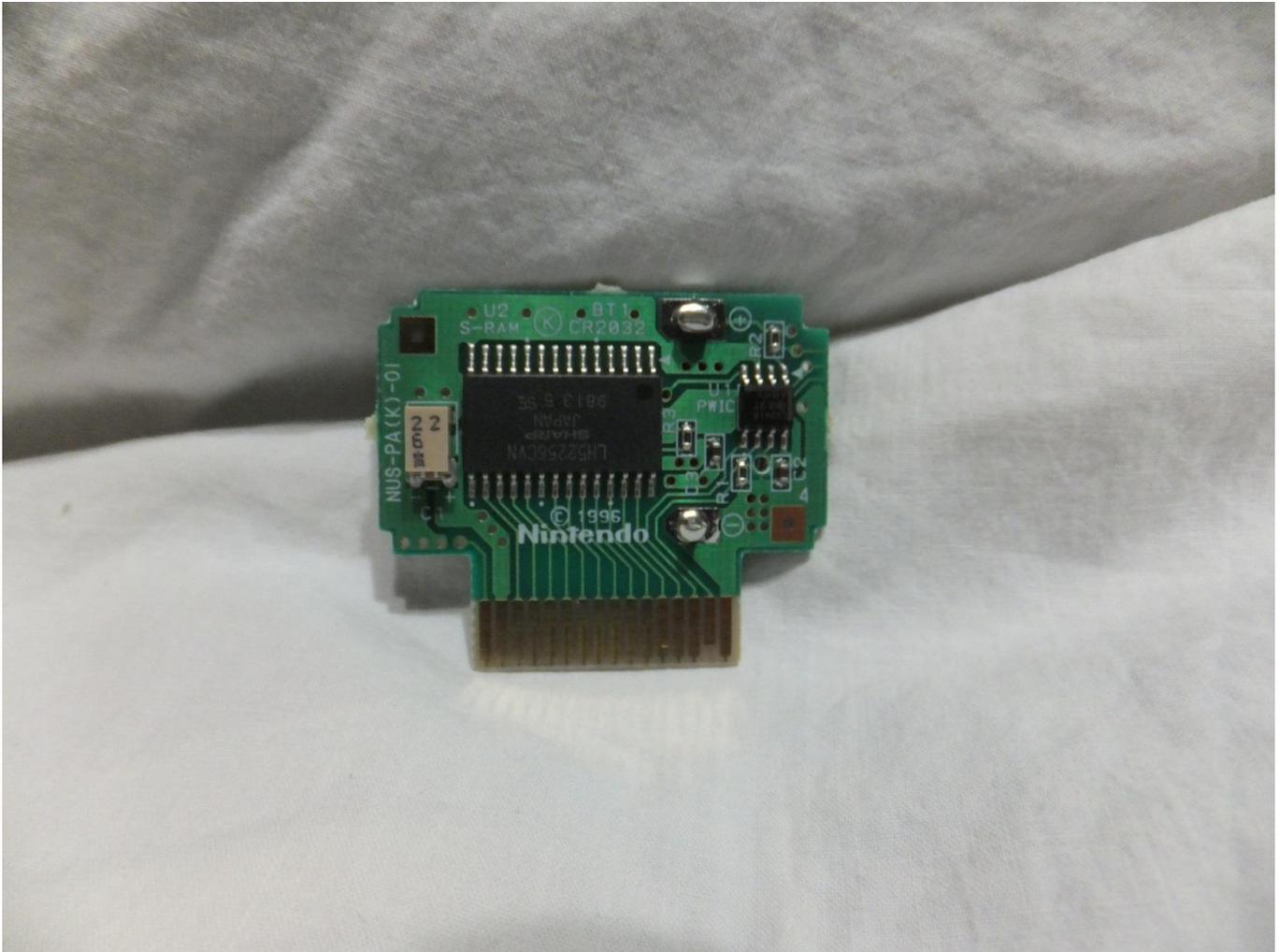
Picture One: Back side of the Nintendo 64 Controller PAK

Once the screws are removed please open the game case. To do this you have to slide the back case in the direction of the green arrow above. Once the casing is open please proceed to step two.

Step Two

Now that the casing is open the circuit board is accessible. Your board should look like picture two below. Now using the techniques discussed in the introduction please remove the old battery. It is recommended that before you start unsoldering the old battery that you trim down the leads down to the solder joints so you have better access to the sites with your soldering braid and iron.

If it seems to be taking a long time just remember patience will eventually pay off. Just keep going at it until the battery can be removed.



Picture Two: Extracted Circuit Board

Once the old battery is removed please proceed to step three.

Step Three

Now that the old battery has been removed please insert the new battery onto the circuit board. Please keep in mind that the positive lead of the battery must be inserted into the positive terminal on the circuit board and vice versa. Fortunately they are marked for you.

After you insert the leads into the circuit board bend the leads over as seen in picture three below to keep the battery in place. This will allow for an easier soldering job and will make the solder joint more secure.



Picture Three: Installing the New Battery

Once the battery is inserted please solder the battery on. Once you are finished your circuit board should look like picture two back in step two. Once finished reassemble your controller PAK and enjoy.

If your controller PAK fails to operate correctly after you have reassembled it please see our troubleshooting section at the end of this guide.

Troubleshooting Guide

We are sorry to hear that your controller PAK is failing to work properly. Please choose the problem that is most similar to the one you are experiencing from the list below. If you cannot find your problem listed or if you have any questions please contact us at Starwander@Comcast.net

- 1) My save games are being erased
 - a. This is a sign that the battery is not working correctly. Open your game and ensure that it is soldered firmly onto the board. If it is make sure that you soldered the positive terminal of the battery to the correct location. If you unsure of which is the positive terminal check another game as a reference.
 - b. Try using the controller PAK with another controller to see if the controller is the problem.
- 2) My controller PAK is no longer recognized by the controller.
 - a. This problem is typically only caused by the usage of an instantaneously heating or cold heat soldering gun. Most likely the controller PAK has been permanently damaged and needs to be replaced; however it is recommended that you try it with another controller first before arriving at this conclusion.