

Sega Dreamcast System Replacement Memory Battery Installation Guide

Thank you for your purchase of a Sega Dreamcast System Memory Battery from Mortoff Games. This guide is designed to take you through the steps involved in the replacement of your Sega Dreamcast system memory battery. If you have any questions during the course of the installation of your battery please contact us at customerservice@mortoffgames.com.

Thing you will need:

- 1) LIR2032 rechargeable battery with tabs



- 2) Philips head screw driver
- 3) Soldering iron
- 4) Soldering Braid
- 5) Solder

Getting started:

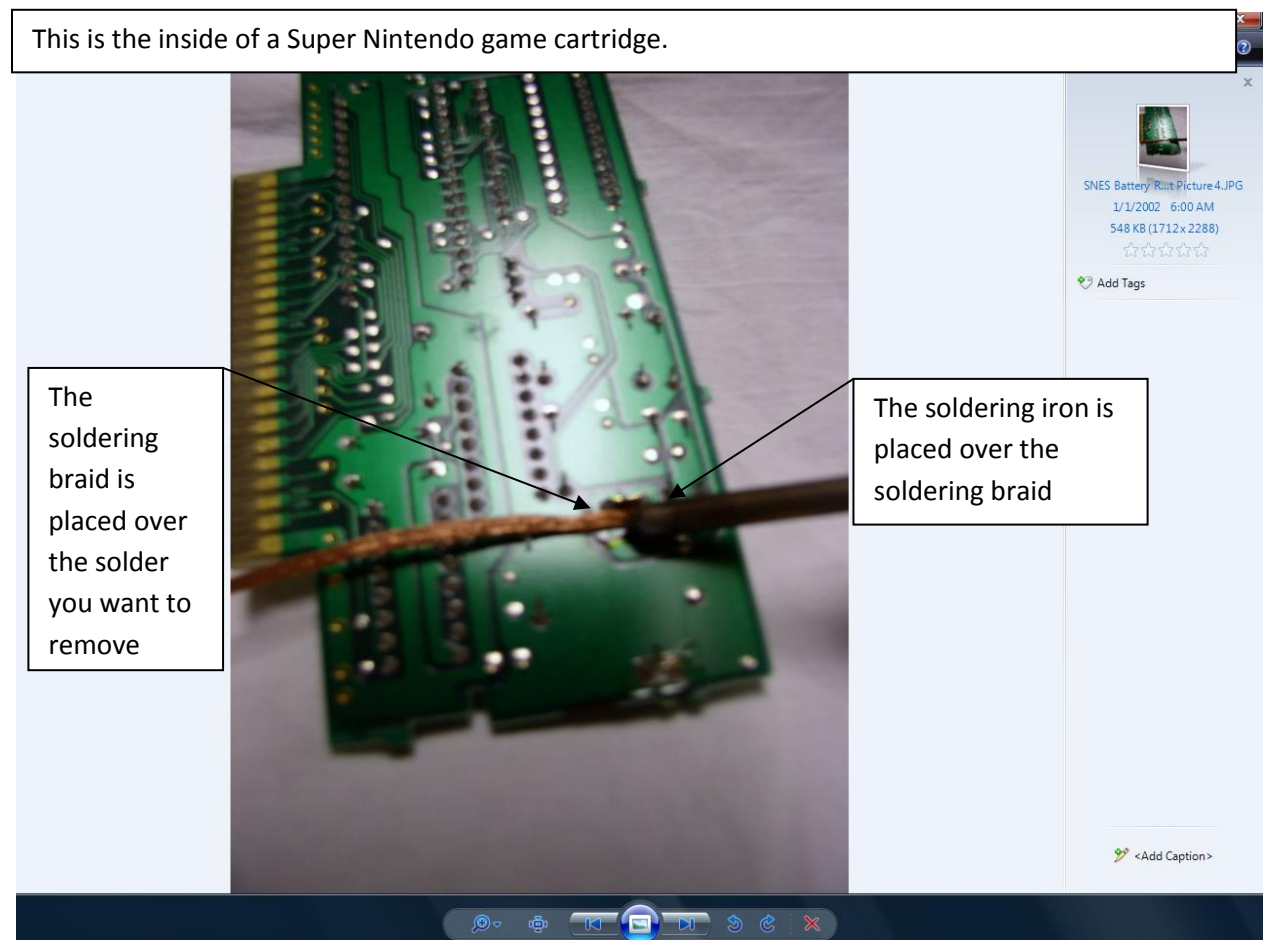
If you have a fair amount of soldering knowledge it is safe to skip ahead to step one, otherwise it is recommended that you read the following how to solder guide, which will discuss the soldering techniques you will need to successfully install your repair kit.

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 picture one



Picture Introduction: 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 the accumulation of solder on the soldering braid. As it is sucked up you should periodically keep cutting off the used portion of the soldering braid and use fresh braid as needed. Once you have successfully removed the solder you will want to clean the area off with a little rubbing alcohol to ensure the area is clean.

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. 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 memory battery.

Step One:

Firstly flip your system over and disconnect the network adapter from the system by pressing down on the tab indicated in picture one below and then separating the adapter from the system.



Picture One: Separating the network adapter

Once the network adapter is removed please proceed to step two.

Step Two:

Now that the network adapter is removed please locate the four Philips head screws that are holding the two halves of the casing together and remove them.

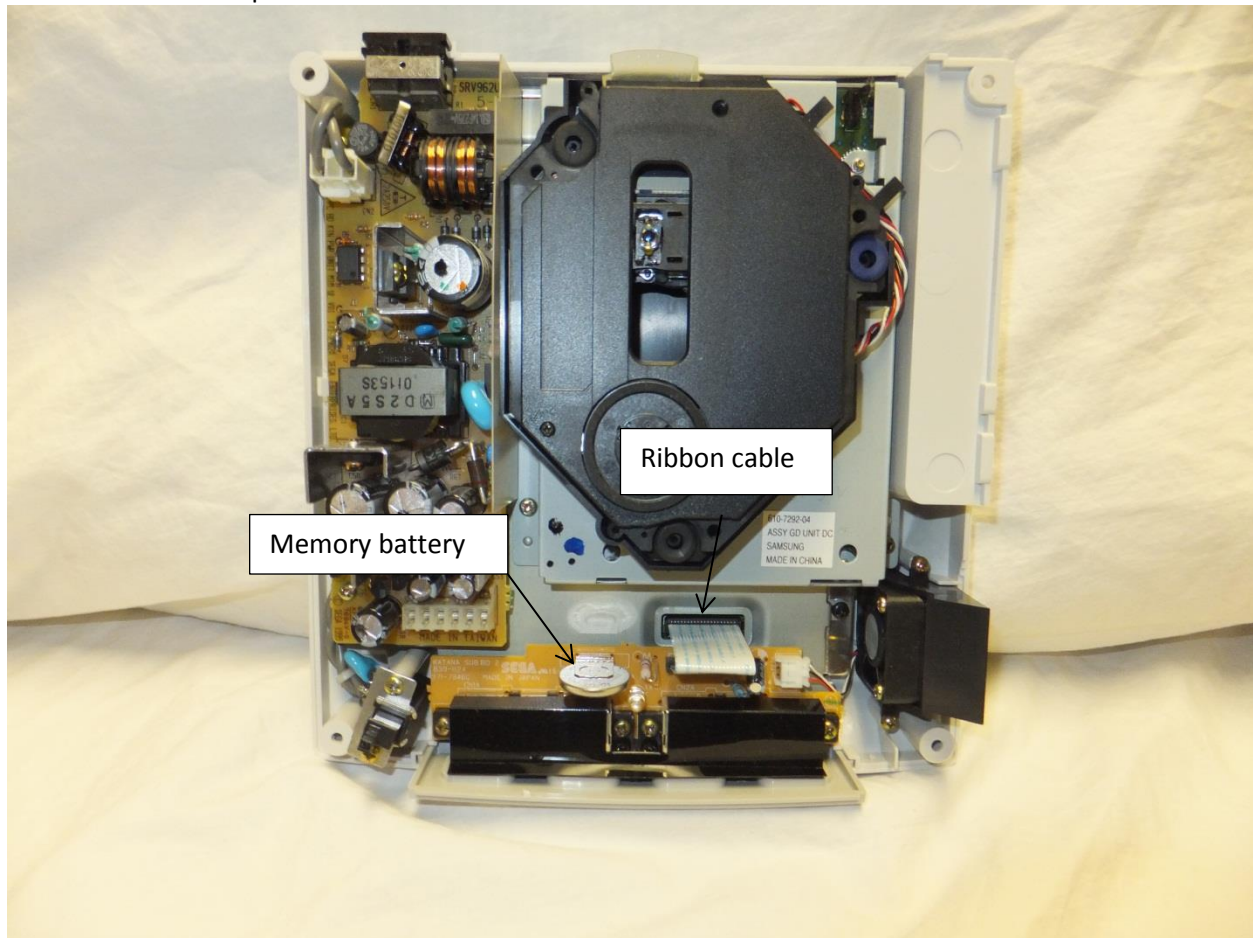


Picture Two: Removing the four screws holding the two halves of the casing together

Once the screws are removed please separate the two halves of the casing and proceed to step three.

Step Three

Now that the system has been opened please locate the memory battery as seen in picture three below. Once you have located the battery please proceed to do the following. Unscrew the four screws holding down the controller port circuit board and then disconnect the ribbon cable as seen below.

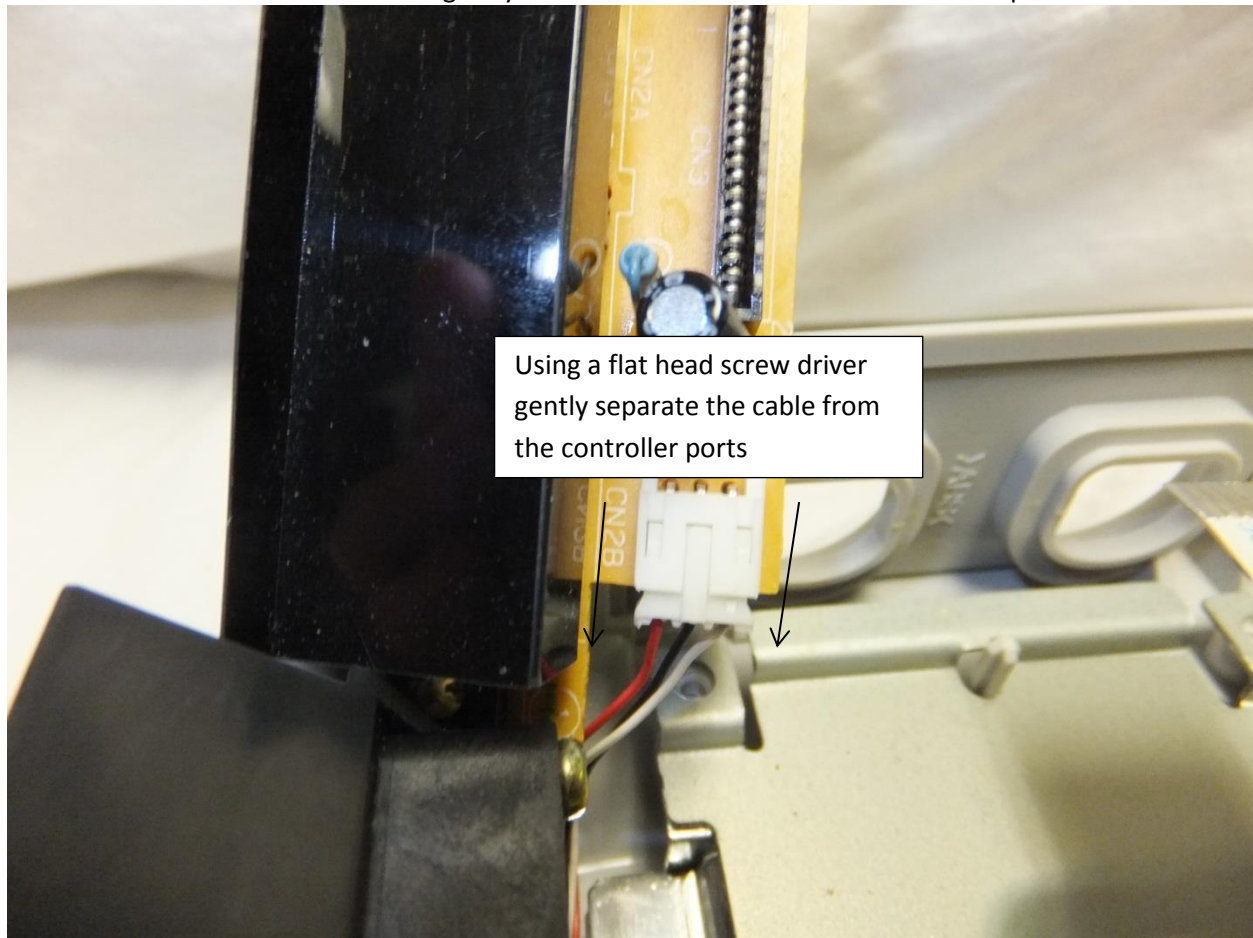


Picture Three: Controller port

Once the controller port circuit board is unscrewed and the ribbon cable is disconnect there is one more cable holding down the controller port circuit board. Please proceed to step three for instructions on its proper disconnection.

Step Four:

As seen in picture four below is the last cable connected to the controller port circuit board. Please do not pry the two cables as this can damage either the port or the cable itself. We recommend that you use a small flat head screw driver to gently disconnect the cable from the controller port circuit board.

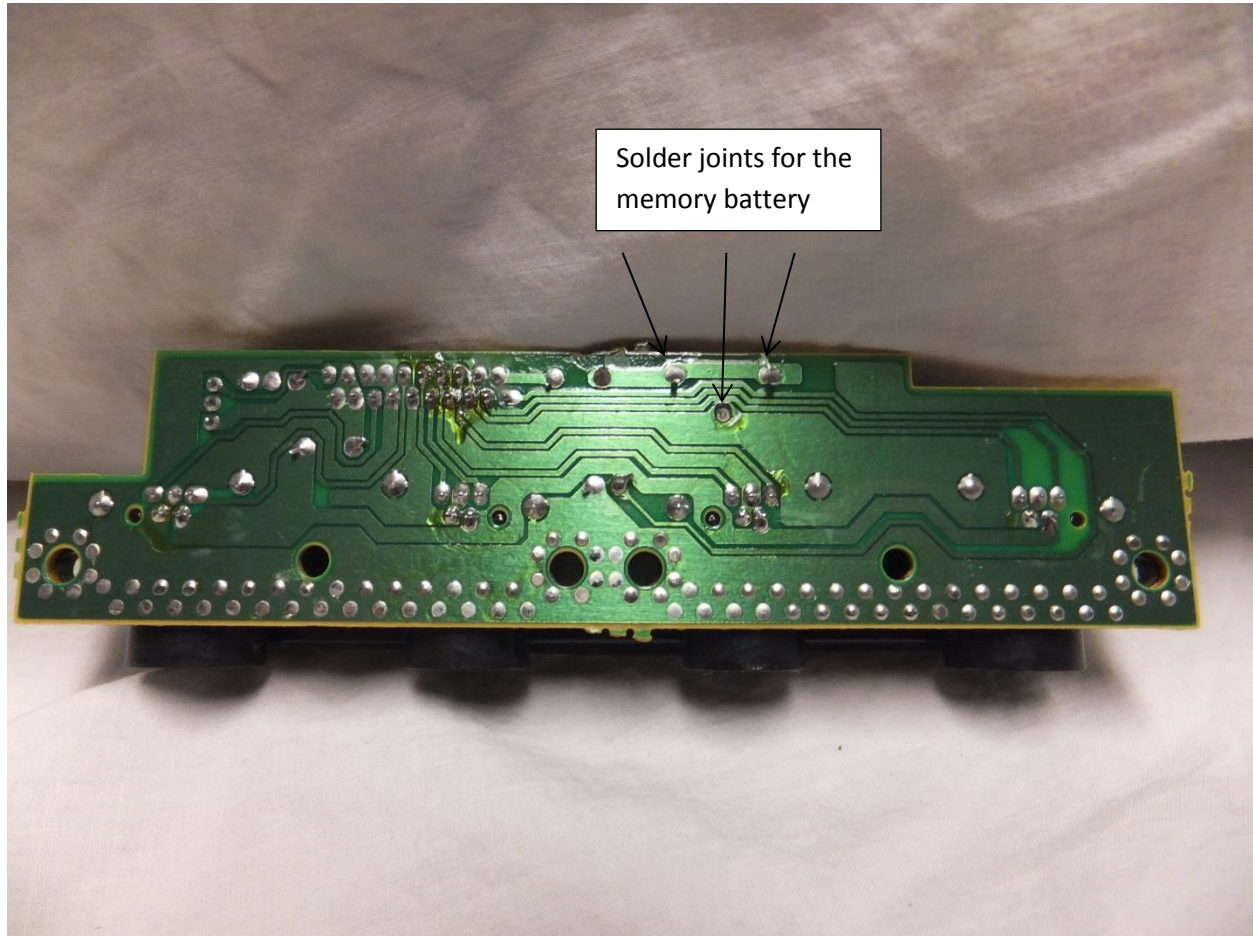


Picture Four: Last cable holding down the controller port

Once the last cable is removed please proceed to step five.

Step Five:

Now that the controller port is free please turn it over and observe how the battery is soldered to the controller port circuit board. This is shown in picture five below.



Picture Five: Memory battery soldering joints

Once you locate the solder joints please unsolder them with the techniques discussed earlier. Once down please remove the old battery and solder in the replacement battery. Afterwards reassemble your system and enjoy your repaired system. If you run into any problems after the installation of your memory battery please see our troubleshooting section at the end of this guide.

Troubleshooting Guide

We are sorry to hear that you ran into problems during the installation of your memory battery. Please select the problem that is the closest to the one that you are experiencing from the list below. If you have additional questions please contact us at customerservice@mortoffgames.com

1) My controller ports don't work

- a. Did you make sure to plug the cables back into the controller port circuit board?

2) I still have to reenter my date and time when I restart my system

- a. Your battery is defective. Please contact us for assistance.