

How to Repair an Apple AC Adapter Broken Cable

A way to repair your Apple AC Adapter with minimal effort whilst also leaving the least amount of marks.

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This document was generated on 2020-11-13 10:11:07 PM (MST).

INTRODUCTION

The Apple AC adapter cable often starts to fray/separate near where the cable meets the power brick. This guide shows how to repair it cleanly while maintaining the original look of your AC adapter.

Alternatively, you can follow this guide to replace the cord instead of repairing it.



TOOLS:

- Soldering Iron (1)
- Utility Knife (1)
- Large Needle Nose Pliers (1)
- Cutting Pliers (1)
- Screwdrivers for prying no actual screws inside (1)
- Heat Shrink Tubing Assortment (1)

Step 1 — How to Repair an Apple AC Adapter Broken Cable



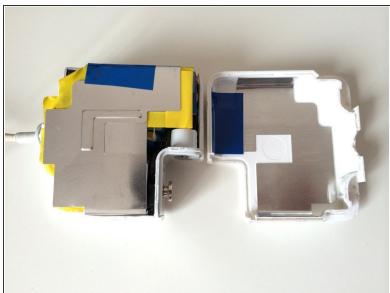
 The first thing you'll need, is to have managed to break the cable of your MagSafe Adapter.





- Lift up the 2 flaps, and SLOWLY separate the two halves of the casing with a set of pliers.
 - ⚠ Be careful, as this step can potentially do the most damage to the outer casing. Take your time, and wrap the plier tips with some tape if you don't want to leave any marks.
- After a good couple of pops, you'll be able to hold it open with your hands.





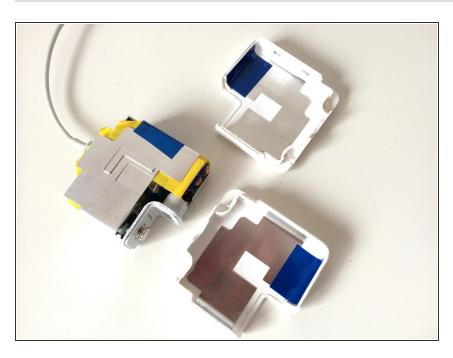
- Rinse and repeat: now heat the lower part of the adapter.
- Gently pull the two halves of the case apart.



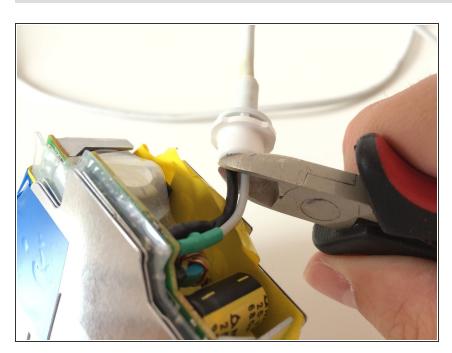


- Heat the lower part some more—this will loosen the AC Input Connector, which should still be stuck to one of the two sides.
- Give it a bit of screwdriver action if it's stubborn like mine was.

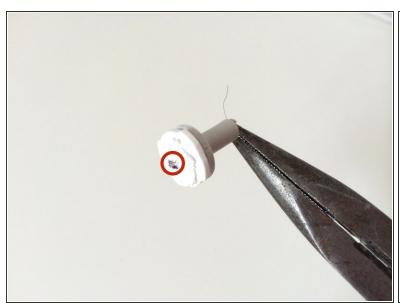
Step 5



 If all went well, you should have completely separated the 2 parts of the case from the actual power supply.



 Cut both wires as close to the little plastic thingy as possible.





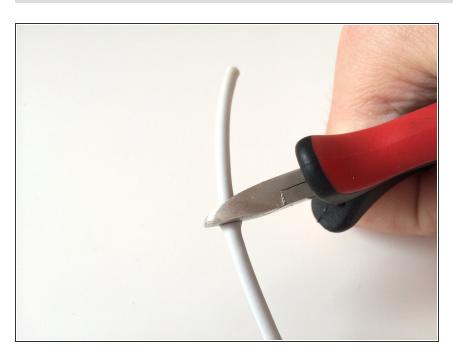
- To reuse the plastic stopper, using whatever you want (I used a cutting plier), remove as much of the white plastic as to still leave the lip for further reattachment.
- Using your normal pliers and/or a fine screwdriver/knife, try to jam out a little metal part that is clipping the two wires and attaching them to the white plastic.
- Next, pull out all the wires.







- The plastic mantle of the wire will still likely be attached to the plastic stopper.
- To get it out, sprinkle the thing with some rubbing alcohol (or water).
- Then, push it out with a bigger screwdriver head.
 - (i) This took the most time in my case, so, be patient—it'll give up eventually.



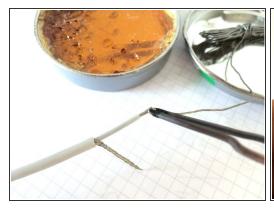
- Now to start prepping the wires:
 - Cut the main wire at a few centimetres away from where the tear occurred. This'll ensure you won't be reusing any damaged piece of the wire.



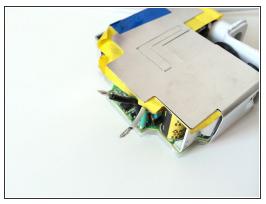


Using a utility knife or wire cutters, expose and prep the 4 wires like so.

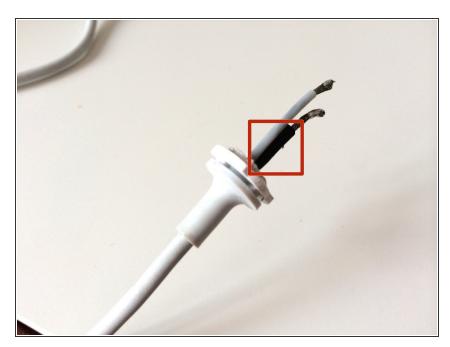
Step 11





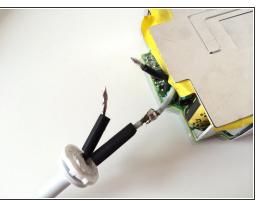


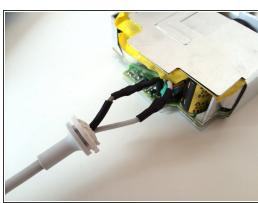
Using a soldering iron/gun, apply solder to all 4 ends of the wires.



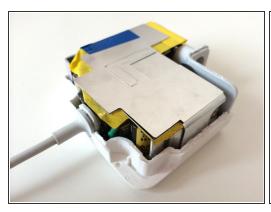
- Thread the rubber/plastic stopper back onto the wires.
 - Do this AFTER you have applied solder to the tips of the wires.
 - To do this, I sprayed a bit of alcohol on the whole thing, and pulled the wires with the pliers. It required a pretty decent amount of force—but don't worry, the cables should hold without a problem. Just make sure you're pulling both at the same time.
 - Note that I've also added a tiny length of shrink-tube on the exposed wire.

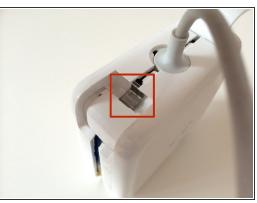






- Add 2 lengths of shrink-tube on the 2 wires.
- Now, solder the 4 wires together.
 - Make sure to connect white to white, and black to the bare metal one.
 - (i) Make sure to do this step really quickly, as the heat-shrink tube will contract from the heat of the soldering.
 - Alternatively, you could just use duct tape—just be careful so it doesn't slide off when you're bending the wires.
- Move the shirk-tube over the soldering spots, and heat it up. (Mine fell a bit short, so I did end up using a bit of duct tape.)







- Set the plastic stopper in its groove.
- Put the 4 pieces of the wire holder assembly back into place.
- Make sure the metal part goes UNDER the case, like so.





- Close up the case! You're done.
- I had some issues getting it to clamp back properly—check the part of the case with the groove on the edge for any left over pieces of plastic, and try your best to get them out.
- You can glue the case back together, or, in my case, since I had none, I used clear duct tape to stick it back together.
- Make sure you take good care of the wire from now on; make sure it doesn't get bent when you carry it around. :)