



Sennheiser HD428 Damaged Wire Repair

quick repair of a broken wire

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INTRODUCTION

one of the most common ways a pair of headphones brakes is the wires get flexed to much near the stereo jack and brake one of the 3-4 wires causing one or both of the speakers to "fail" you can save yourself \$100+ with a dollar store patch cable and some solder



TOOLS:

- [Electrical Tape in 6 Assorted Colors](#) (1)
- [Heat-shrink tubing various diameters](#) (1)

if you have it

- [helping hands](#) (1)

makes it eayser to solder but not needed

- [Lighter](#) (1)
- [Solder](#) (1)
- [Soldering Iron](#) (1)
- [Flush Wire Cutters](#) (1)

Scissors work fine, too.



PARTS:

- [3.5mm stereo plug cable](#) (1)

if needed

Step 1 — Sennheiser HD428 Damaged Wire Repair



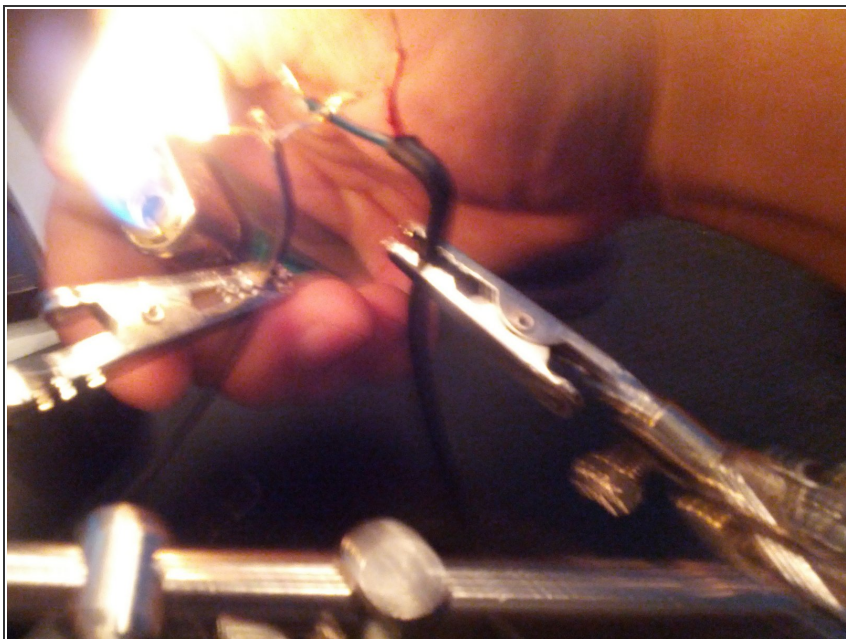
- First find the place where the wire is broken inside the rubber coating you can find the spot usaly by moving the cable around while playing music to see at what spot it makes sound or doesn't for this guide i will take the most commonly broken spot, just above the jack.

Step 2



- cut the cable just above the broken spot (if its in the middle of the cable cut below the spot too)
- cut your 3.5mm patch cable 3"-5" above the jack and strip 0.5"-1" off the cut end and expose the bare wire if

Step 3



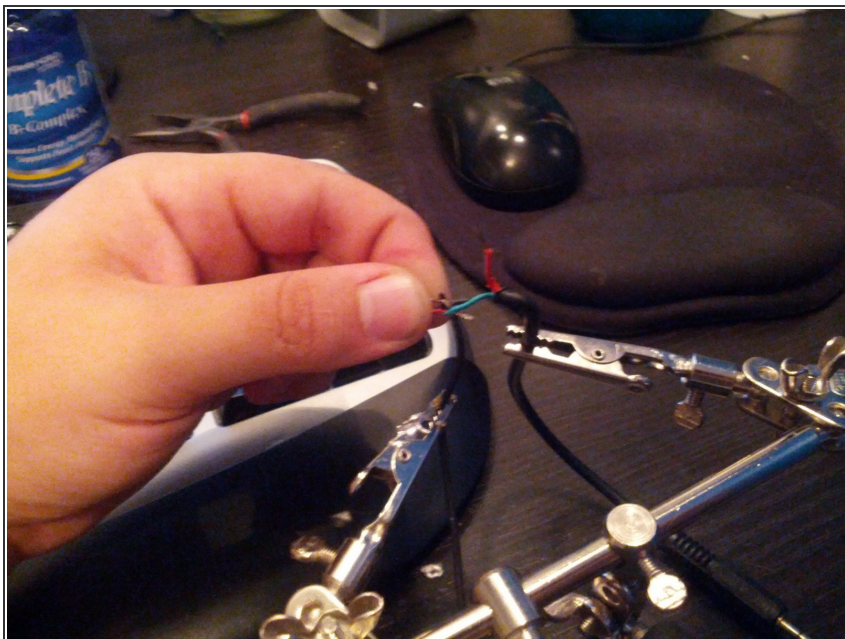
- strip the wire from where you cut it .5-1 inch should work fine the couler codeing on the wire is as follows
 - red=left ear cup
 - blue= right ear cup
 - copper/gold= ground
- the wires are clear coated so carefully use your lighter to burn the ends of the exposed wire

Step 4



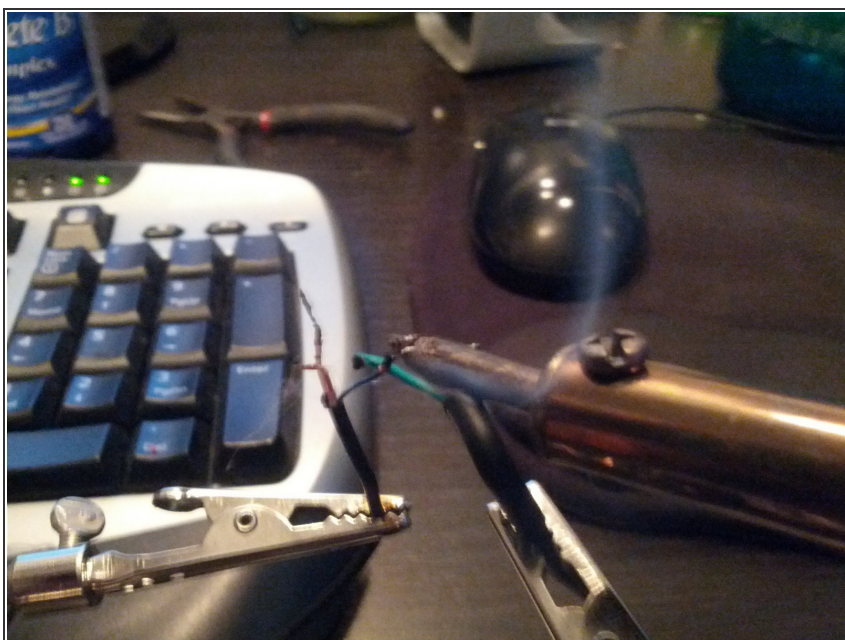
- do the same to the patch cable if it has rubber sheilding just strip off about 0.25"
- to find the right wires (color codes are different depending on the manufacturer):
 - take a multimeter and set it to resistance (or contanuity if you have a fancy one)
 - put one probe on the sleeve(the biggest part of of the 3.5 mm plug (the ground) and try each wire in turn with the other probe to find it
 - next repeat the process with the tip of the plug (the left channel)
 - the last wire (if you have 3) will be the right channel
 - you may have a 4th wire this is a second ground wire

Step 5



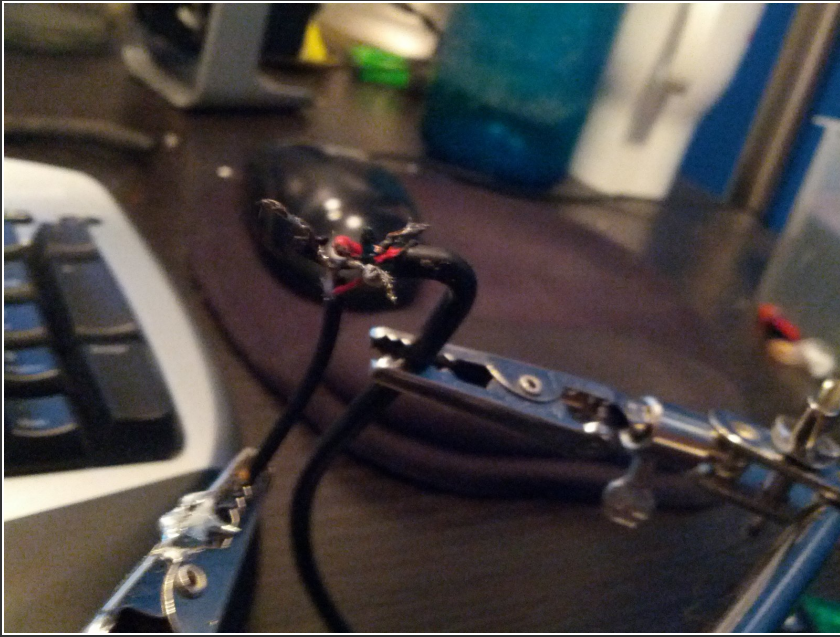
- simple enough match the proper wires together left to left, right to right, and ground to ground(s)
- and give them a little twist

Step 6



- solder the wires

Step 7



- make sure all 3 wires are separate from each other and put it in a media device to test the connection it works best if you can separate the signals to test each ear cup individually

Step 8



- once it works properly
- put the 2 cables paralel to each other and one of the wires down make sure its not touching any other exposed wire
- wrap electrical tape around once
- put a second wire down wrap it a second time with tape
- bend one of the cables to face the other direction and the last wire down
- wrap it 3-4 more times to make it sealed well or use heat shrink tubeing if you have it

Step 9



- test it agian

To reassemble your device, follow these instructions in reverse order.