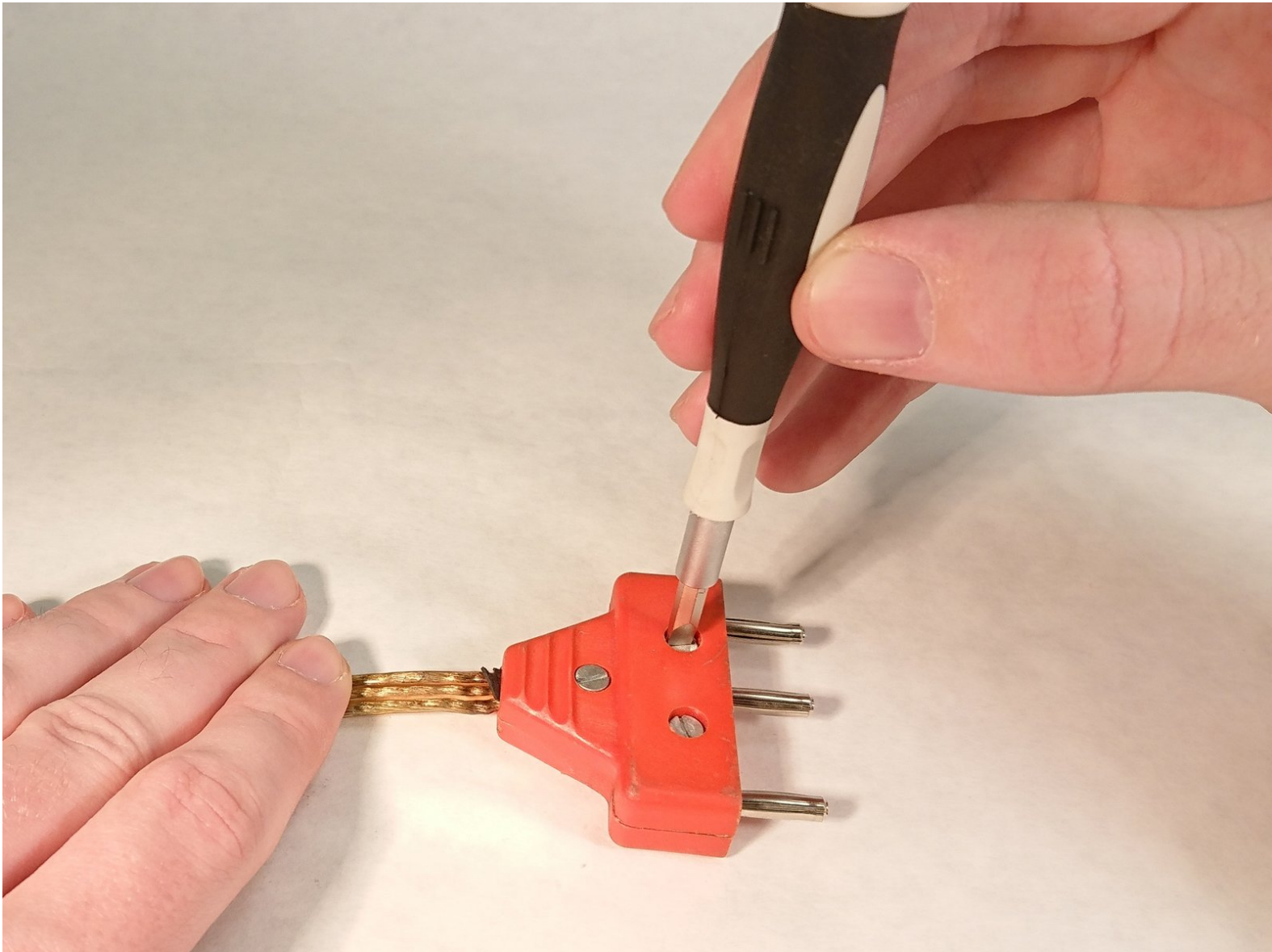




Repairing a Broken 3-Prong Bodycord for a Fencing Sword

This guide fixes a damaged 3-prong bodycord for the three types of fencing swords.

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INTRODUCTION

Overview:

This guide is useful for repairing all types of German (prongs and hard plastic case) fencing bodycords: Foil, Epee, and Sabre. Bodycords can become damaged from normal use over time and/or improper handling. This guide demonstrates how to fix the most common problem with this style of bodycord: a wire break at the clamshell juncture.

Prior Knowledge:

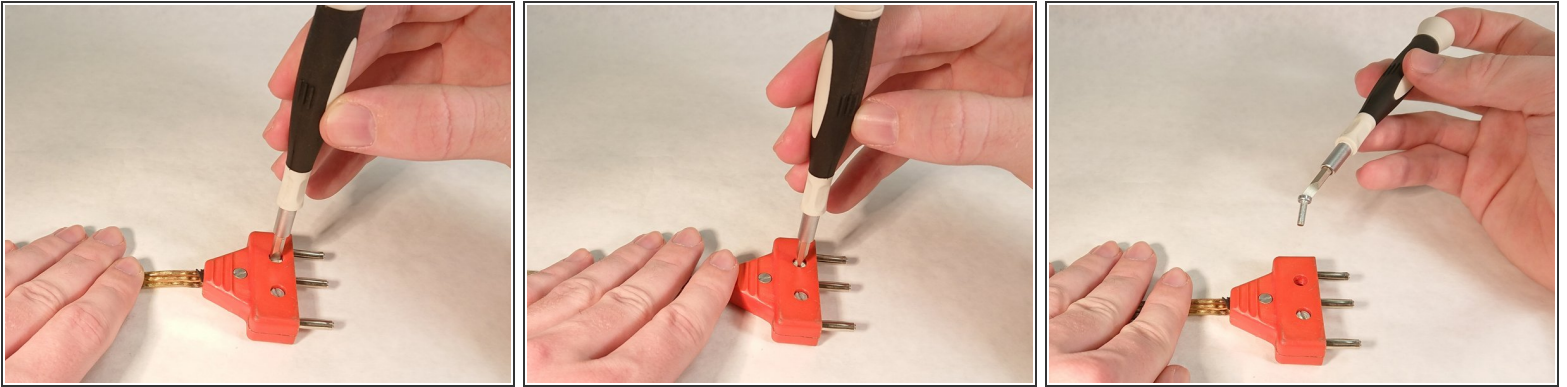
- How to strip wire insulation without damaging the inner conductor.
- How to find location of the break. When plugged into the scoring boxes, the break can be found by wiggling the wires at the bases of the plugs and either seeing a white light **turn on** (foil & sabre) or by holding down the tip and seeing the score light **turn off**.
 - A side to side motion works best for wiggling.
 - This guide only covers 3-prong plugs, so if you find the break at the 2-prong end (foil & sabre), then this guide can only serve as a reference, not a complete guide.



TOOLS:

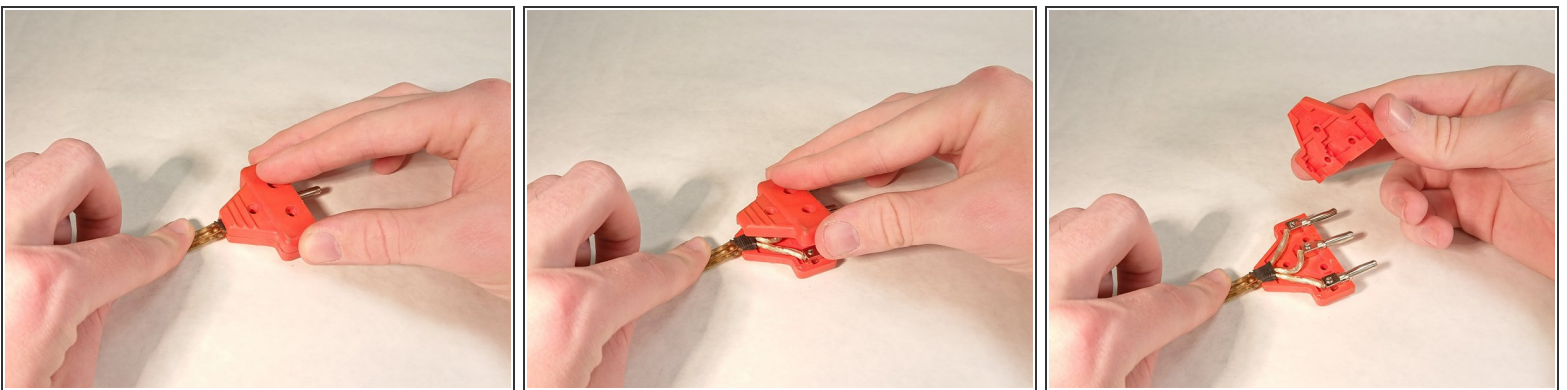
- [Marker](#) (1)
- [Wire Stripper](#) (1)
- [Large Needle Nose Pliers](#) (1)
- [Flathead 4 mm Screwdriver](#) (1)
- [2.0 mm Flathead Screwdriver](#) (1)

Step 1 — Repairing a Broken 3-Prong Bodycord for a Fencing Sword



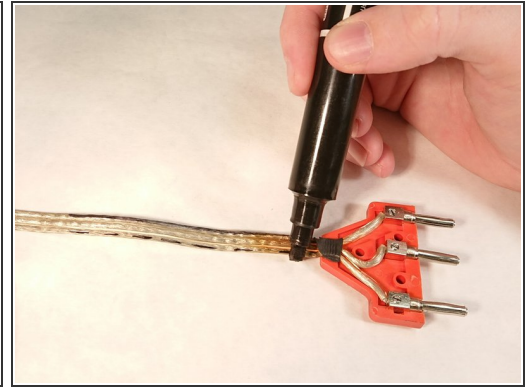
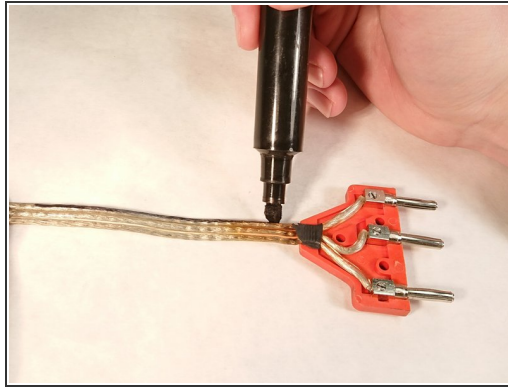
- Remove the three bolts from the clamshell using a 4mm screwdriver.
- ❗ The clam shell is the hard plastic that protects the internal wiring of the prongs.
- ★ During reassembly, remember to replace the nuts into their respective holes if they fell out during disassembly.

Step 2



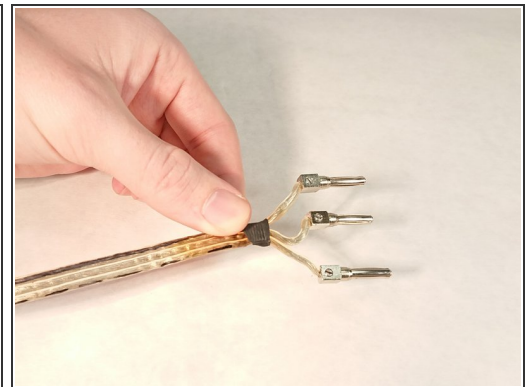
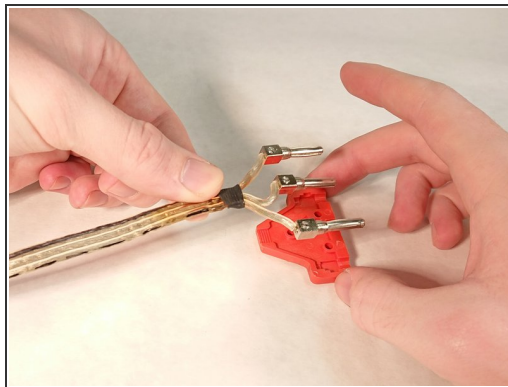
- Remove the top piece of the clamshell.
- ★ When reassembling, run the wires within the grooves to prevent pinching. If the wires are pinched, they can become damaged.

Step 3



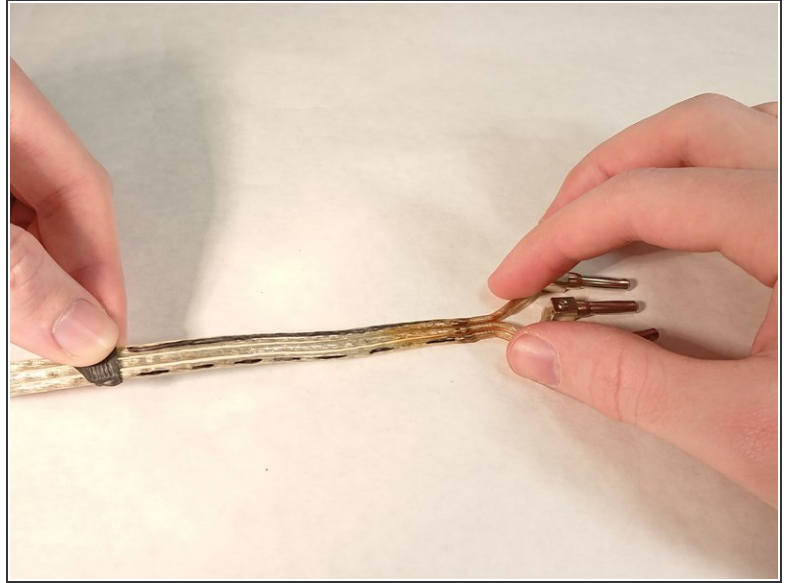
- Mark the wires with a marker in unique patterns to remember their order.
- ❗ In this case, a solid line marks the wire that leads to the prong that is on the outside and near to the middle prong. A dashed line marks the wire leading to the prong that is far from the middle prong.

Step 4



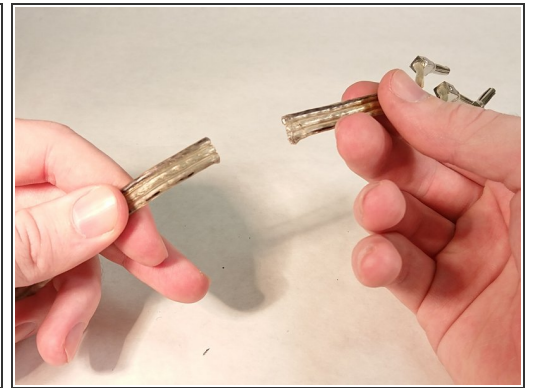
- Lift the wires and prongs out of the clamshell.

Step 5



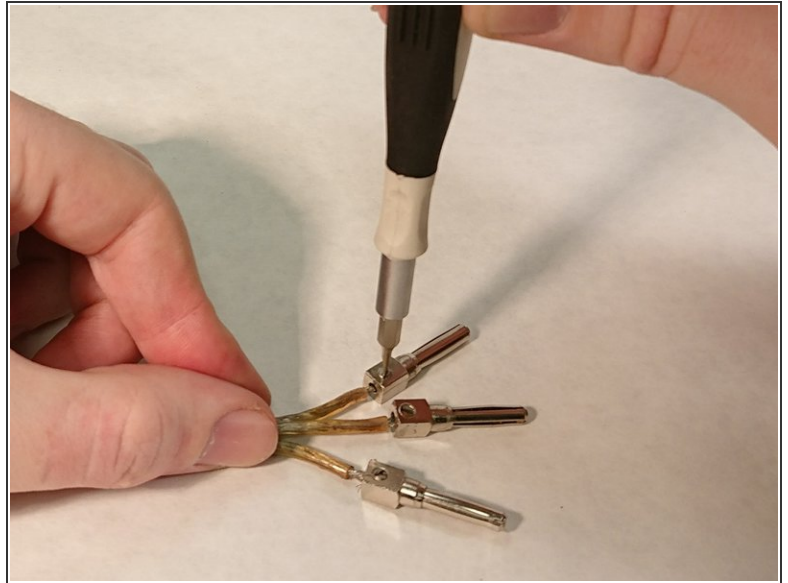
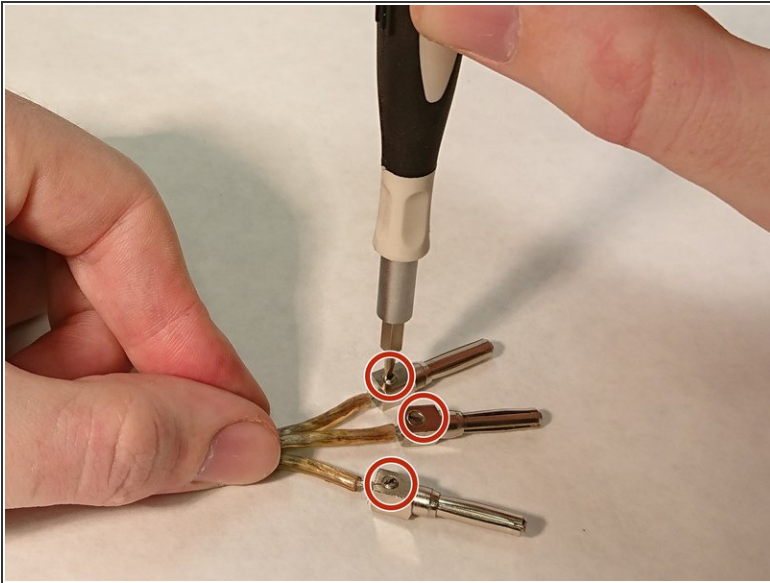
- Pull the shrink wrap down the cord.
- ☑ During reassembly, remember to place the shrink wrap partly into the clamshell.

Step 6



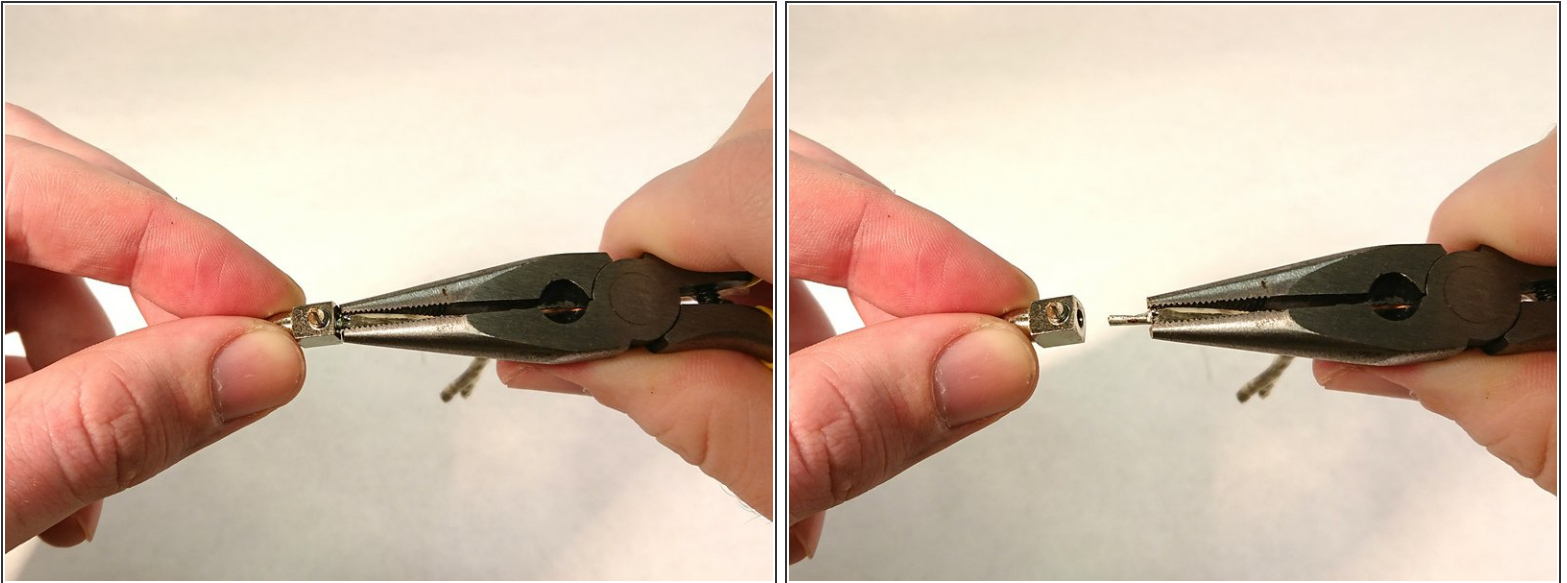
- ⚠ Be careful to cut all three wires to the same length.
- Cut the wires below the break point.
- ⓘ Usually the break point is at the place where the wires enter the clamshell.
- ⓘ Start by cutting small amounts at a time; if you did not cut below the break point, you may cut more of the wire as needed.

Step 7



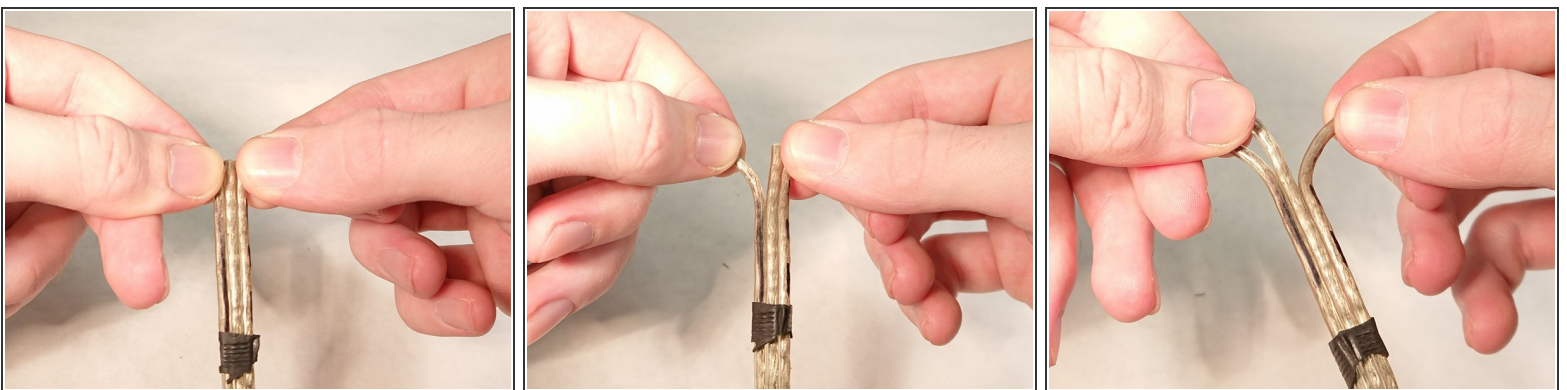
- Loosen the grub screws on each prong using a 2mm screwdriver.
- ⓘ You can remove the screws. However, it is easier to just loosen them for reassembly.

Step 8



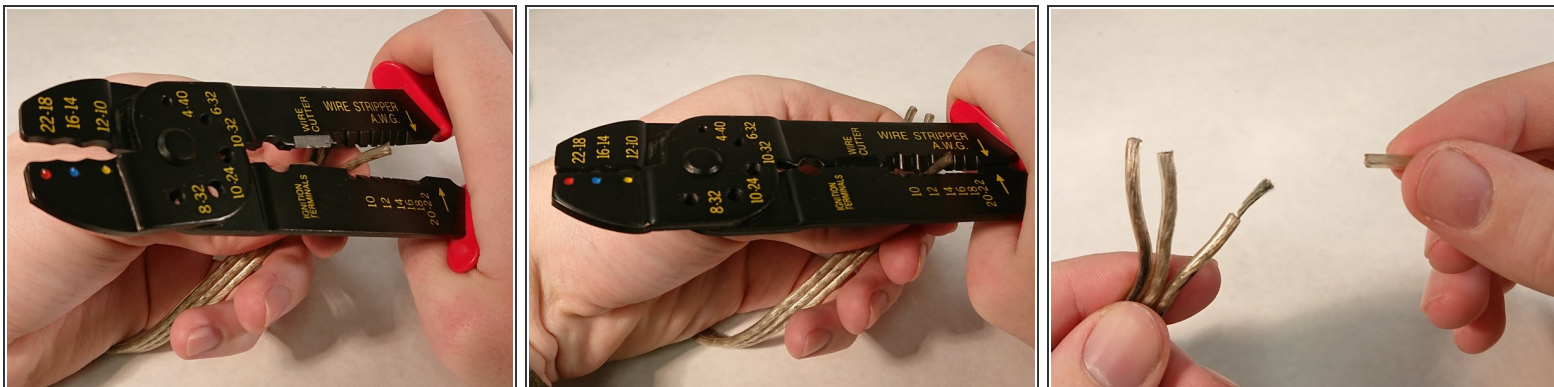
- Remove the wires from the prongs using fingers or needle nose pliers.
- Set the prongs aside.
- ❗ If pulling straight out is difficult, try a gentle twisting motion inline with the prong.

Step 9



- Peel the wires of the cord apart about 1" (2cm).
- ❗ Use the part of the wire that you cut off as a reference for how far to peel the wires apart.

Step 10



- Strip the wires, about 1/4", or 5 mm, from the end.
- i* Stripping the wires is removing the plastic insulation to expose the inner metal conductor.
- Repeat for each wire.

Step 11



- Twist the loose wire strands together.
- Repeat for each wire.
- i* This step facilitates reinsertion of the wires into the prongs.

To reassemble your bodycord, follow steps 1-8 in reverse order, skipping steps 3 and 6.

To keep your bodycord in working order longer, remember to always pull it out of the sockets by holding onto the plastic, not the wires.