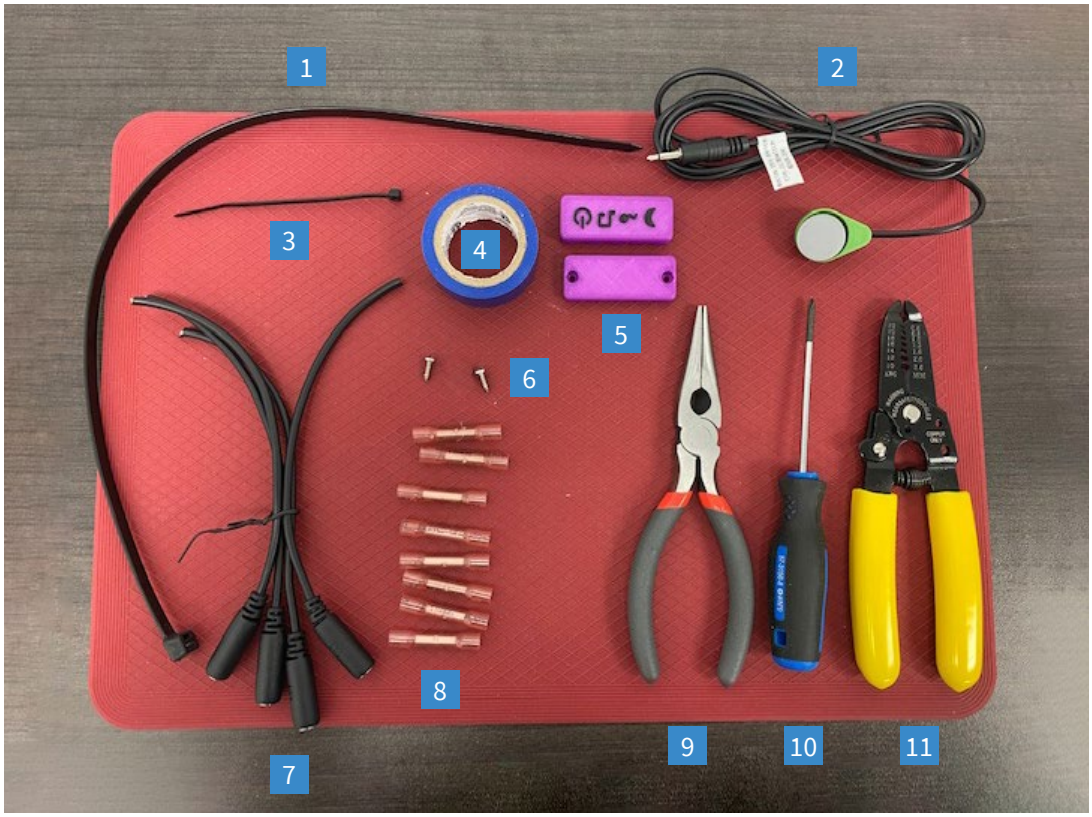
Toy Hack

COMPONENTS AND TOOLS

Makers Making Change
A Neil Squire Program

COMPONENTS



1. 18” Zip Tie
2. Raindrop Switch
3. 4” Zip Tie
4. Electrical Tape
5. 3D Printed Cable Clamp
6. 3/8" Screws x 2
7. 3.5mm Female Audio Cable Halves x 4
8. Crimp Connectors x 8
9. Needle Nose Pliers
10. Phillips Screwdriver
11. Wire Stripper

TOYS

Violet

Scout

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ASSEMBLY GUIDE

Assembly Instructions

Step 1

Opening the toy:

a) Open the package carefully to unveil the internal battery case.

Note: It is ideal to leave the toy in the box when doing this hack so it can easily be repackaged and sent to the end user.

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b) Remove the case from the package but don't cut the zip tie attaching Violet/Scout to the box. Take out the three AA batteries and set them aside.

c) Near the bottom of the case by the printed "Item No.", carefully tear the fabric **by 1cm** to expose the zip tie underneath. Cut off the zip tie knot to release the casing from the fabric.

d) Carefully pull the white casing out of the fabric to expose the wires coming out the back.

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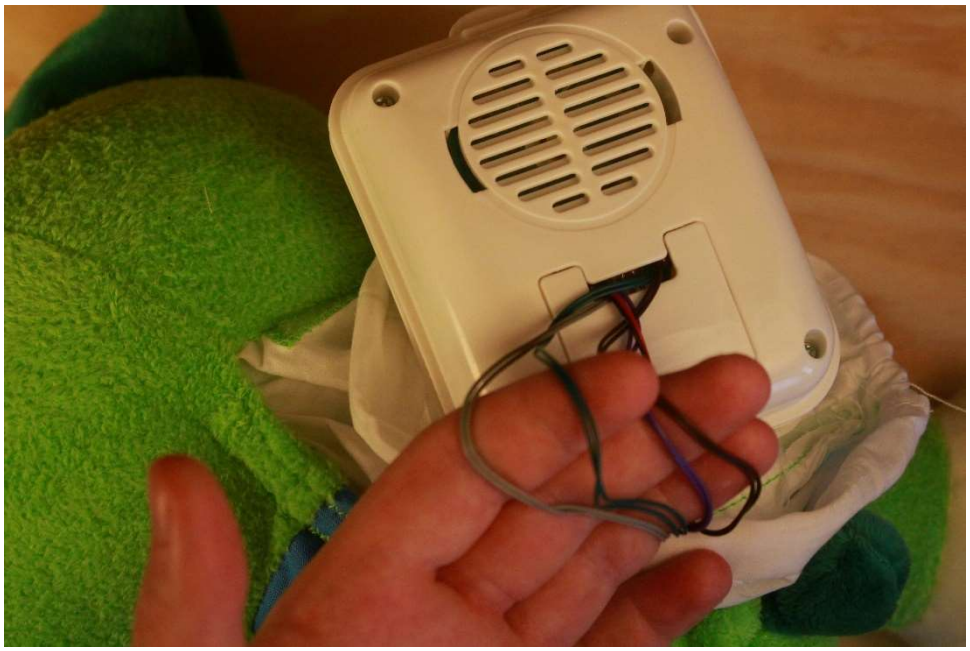
Step 2

Wire connections:

a) Locate the pairs of wires going down each limb of the toy and select one pair. The 4 wire pairs in this toy are coloured as grey, green, purple, and brown. (Order as seen in the photo below)



b) Cut one of the wires in the pair and strip 1cm from each new end, then twist these exposed ends back together. Do the same with the other wire in the pair.

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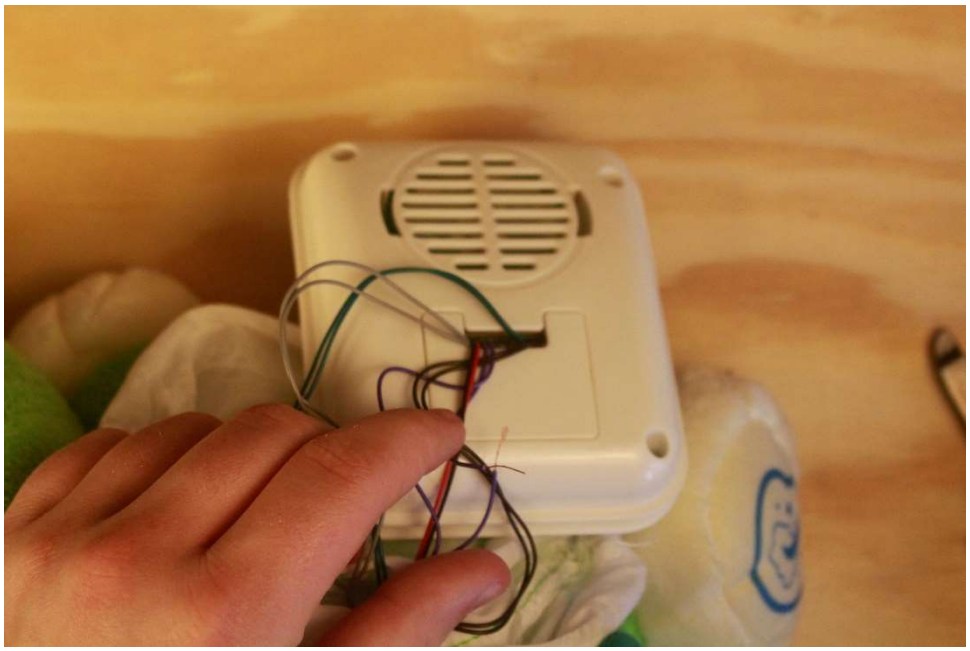

c) Cut the audio lead/splitter so there is at least 5” of cable to the jack end, and then strip 3cm off the wire end to expose the internal wires. Then Strip 1cm from each internal wire (red and white wires).

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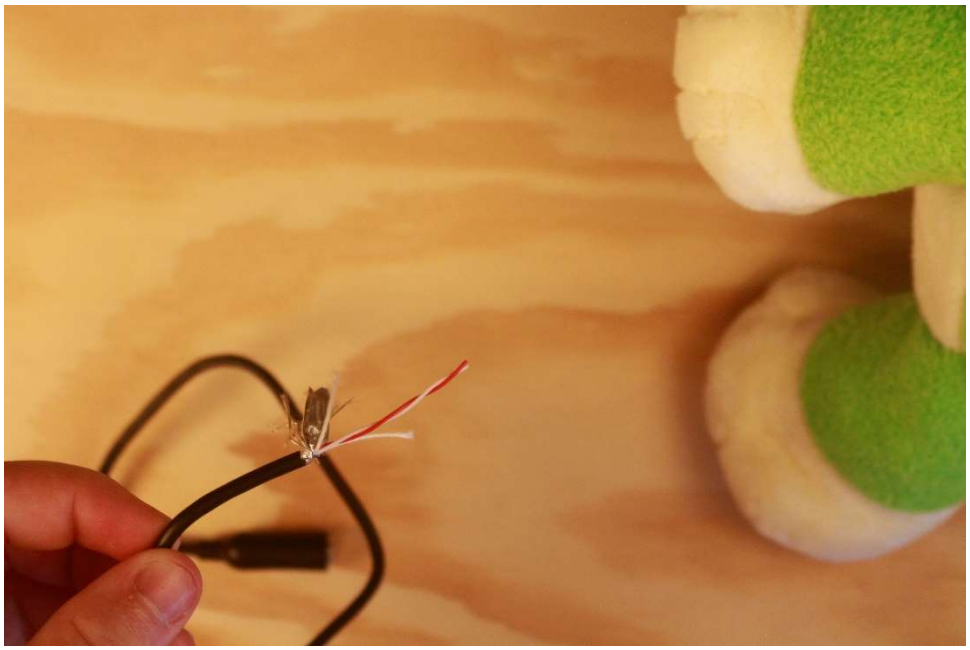

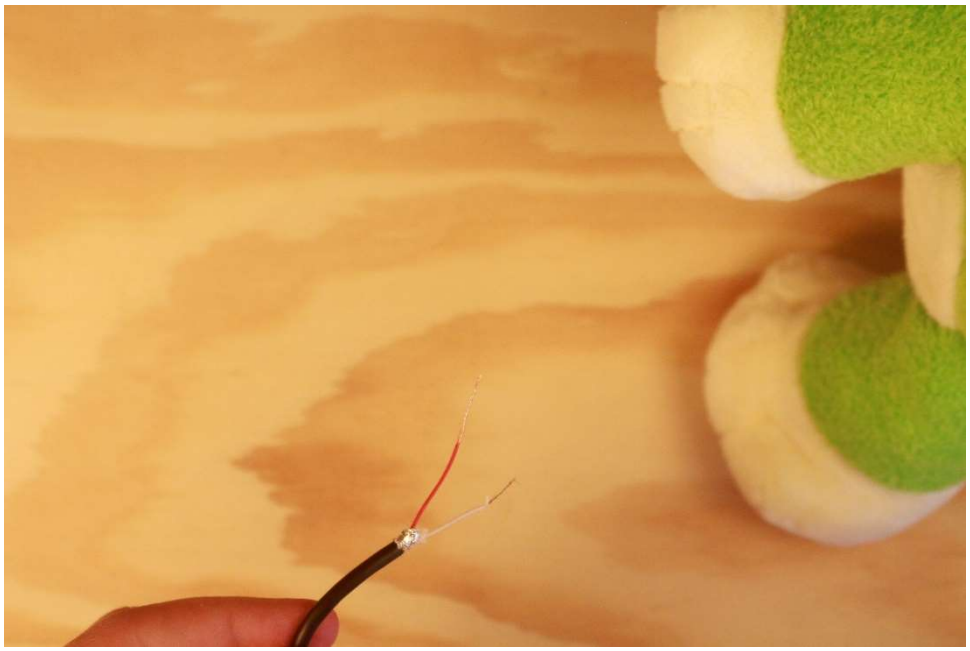

d) Using a crimp connector, insert the twisted together wires from the toy in one side and one of the newly exposed audio lead wires in the other, then crimp the connector with the pliers. Repeat with the other wire from the pair.
Note: This step may be easier if these specified wires are all twisted together and inserted into one end of the crimp connector. Marrettes or other such cable connectors may be used instead.

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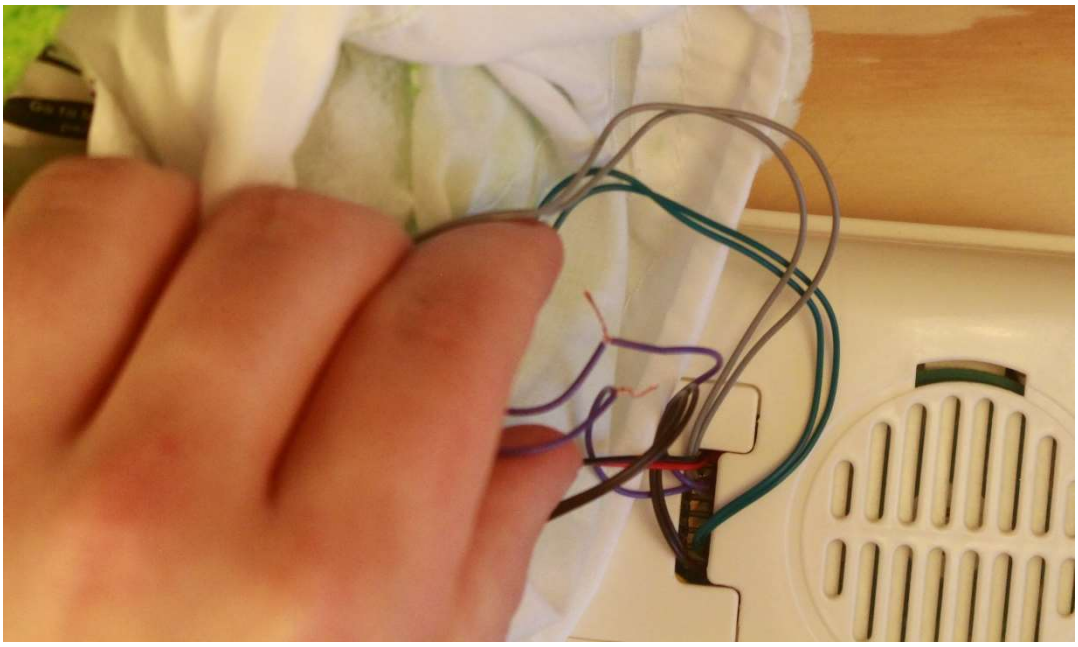
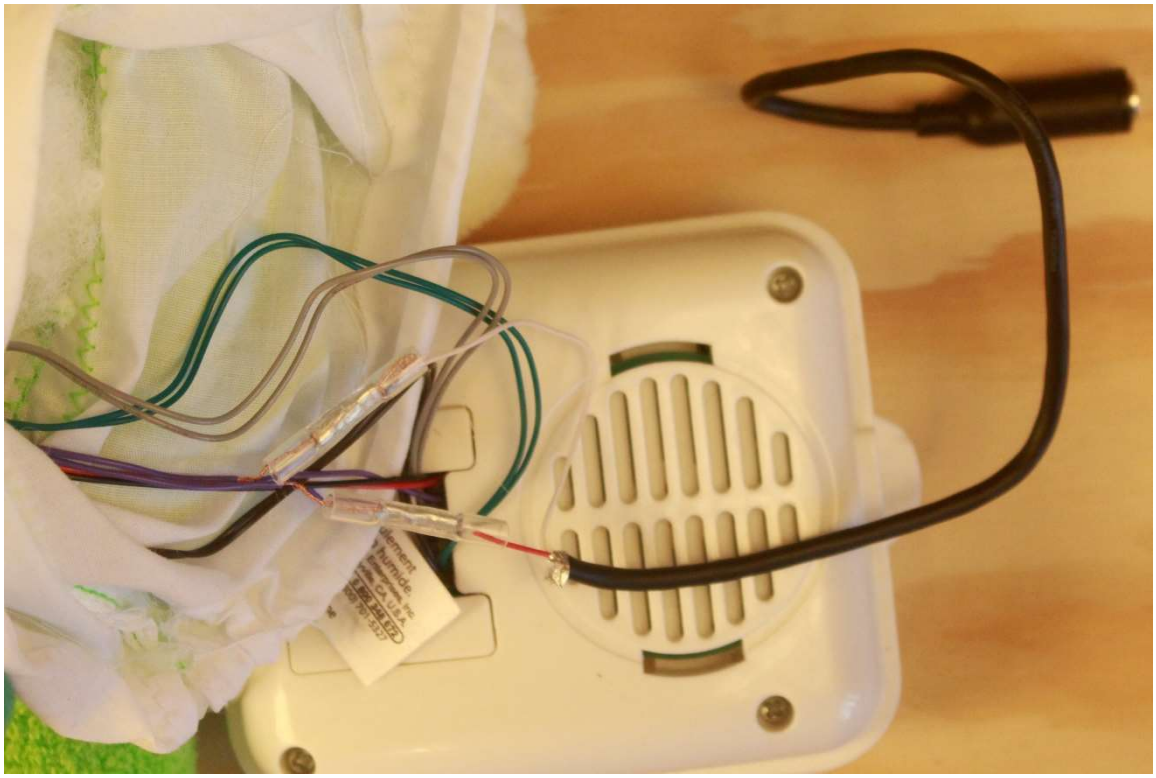
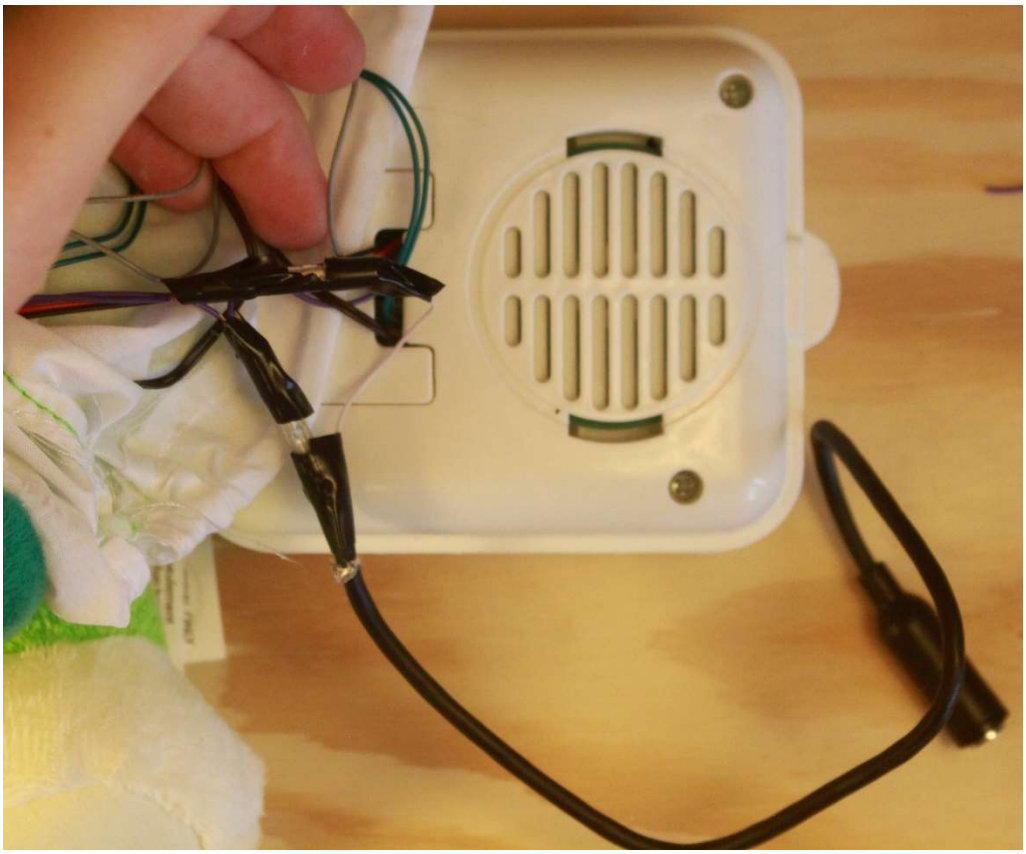




e) Wrap the connection with electrical tape and repeat these steps for each pair of wires.



f) Insert the batteries back into the toy and test each jack with a switch. Ensure the buttons in the paws of the toy also still work.

Step 3

Closing the toy:

a) Pull the female audio leads through to the outside and using the new zip tie, “reseal” the casing back into the fabric of the plushy. Then, cut off the excess end of the zip tie and tuck the head of the zip tie into the fabric.

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b) Secure the audio cables in the cable clamp, ensuring the jacks go in their corresponding spots based on the images that match the images on the toy's paws. This can be done using a switch to test each jack and pushing on the buttons in the paws to compare.

c) Secure all four cables between the toy and the cable clamp together with the small zip tie.

d) Reseal the box as it was before. Note that the above toy is removed from it's box and if you completed the toy in the box, it will look more like the image in step 1 but with the cables and cable clamp protruding from the bottom.