




Switch Adapted Peppa Pig Plush

MAKER GUIDE

Required Components

1.	2.	3.	BOM
			<ol style="list-style-type: none"> 1. Hasbro Oink Along Songs Peppa Pig Plush 2. 3.5 mm Female Mono Cable 3. Cable tie (small – around 15 cm is good)

Required Tools

- Small Philips or flathead screwdriver
- Drill with 1/8" drill bit
- Flush cutters
- Wire strippers
- Soldering iron and solder

Required Personal Protective Equipment (PPE)

- Safety glasses

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Assembly Instructions

Step 1

Turn over the Peppa Pig and lift the dress to reveal a Velcro strip along the back.

Open up the inside compartment.



Step 2

Remove the white speaker/battery compartment from inside the Peppa as shown in this picture.

Set aside the plush part of the Peppa Pig toy for now.



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Step 3

Turn it around and unscrew the screw to the battery compartment, shown in red.

Remove the battery compartment lid.

NOTE: set aside screw in a safe place or leave in the lid.



Step 4

Remove the batteries, circled in blue. Set aside.

Remove the two screws circled in red.

NOTE: You may need to use something to pry the batteries out, such as a small screwdriver or pliers.

NOTE: Set aside screws in a safe place.



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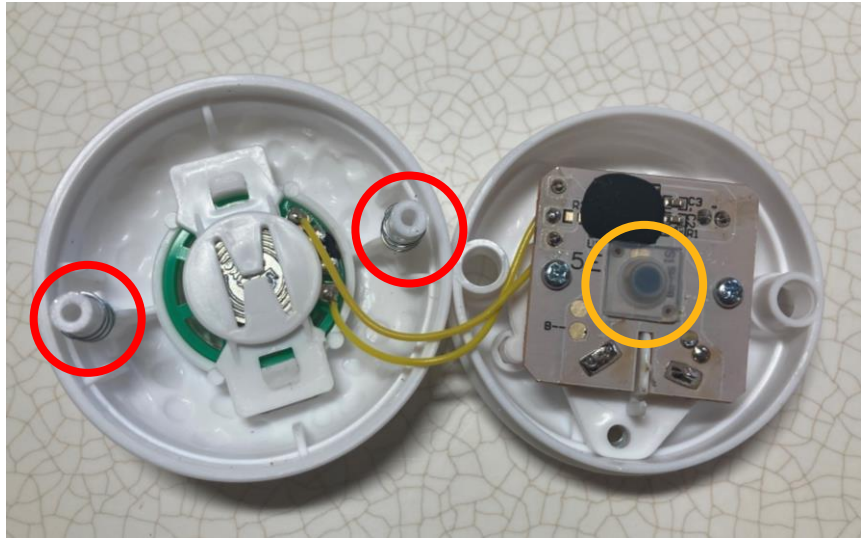
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Step 5

Separate the two halves of speaker compartment.

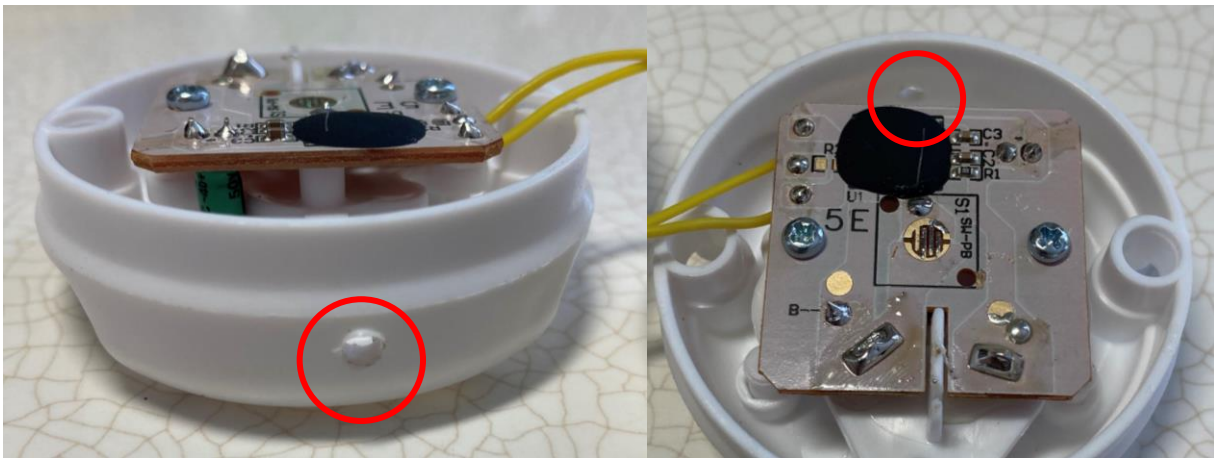
Remove the two springs, circled in red, and set aside in a safe place.

Remove the silicone button cover circled in yellow. You should be able to pull the silicone legs out of the small holes. Set aside.



Step 6

Drill a hole in the location shown using a drill with a 1/8" drill bit.

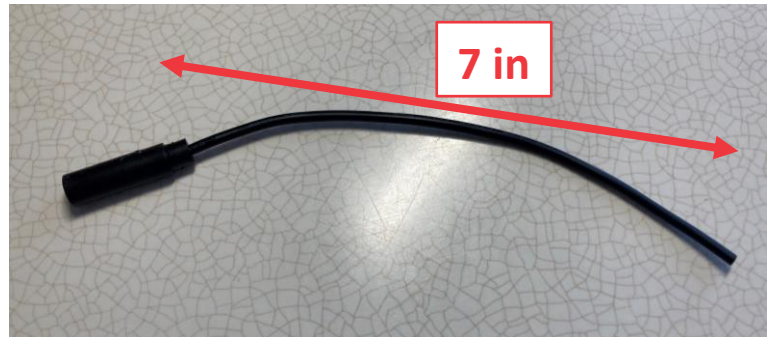


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Step 7

Take the wire with the 3.5 mm jack end and cut it to be approximately 7 inches or 18 cm.

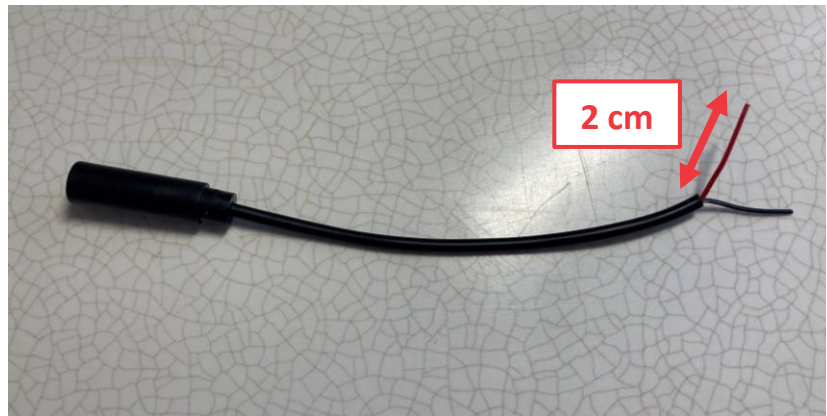


Step 8

Strip approximately 2 cm of the outside wire, revealing the wires on the inside.

The ideal size for the wire strippers is 14 AWG, but if your wire strippers are smaller, just close them until you feel some give.

If any of the internal wires get cut, you can cut off this section of wire and try again.

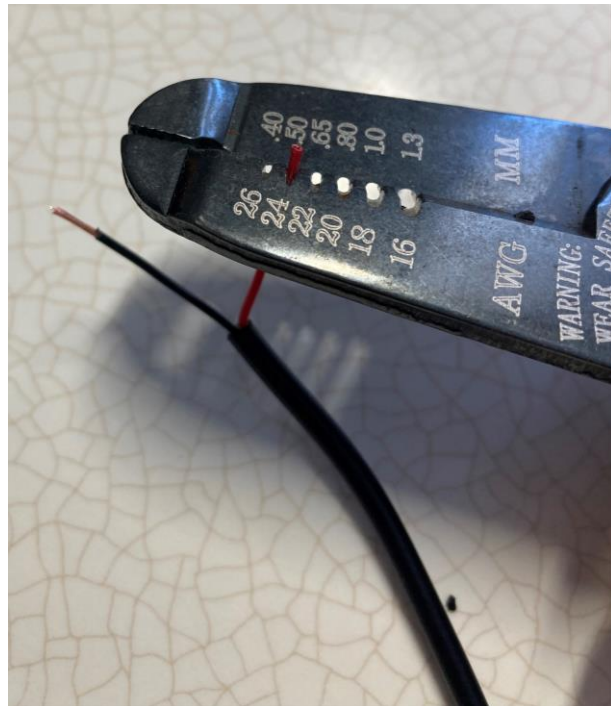


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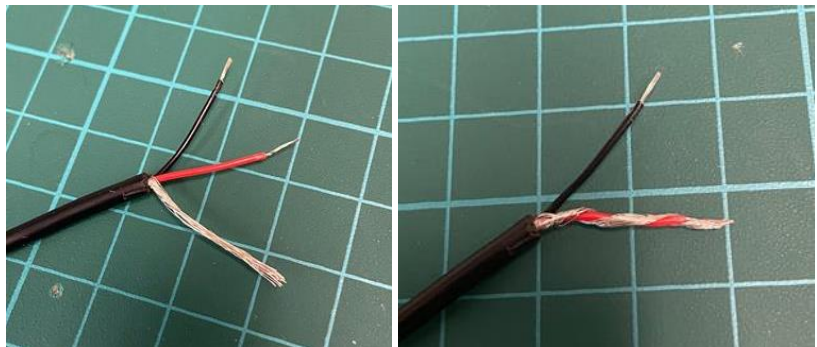
Step 9

Next, strip approximately 0.5 cm of the individual internal wires



Step 10

If there are three internal wires (red, black, and exposed) like in the first picture, then **strip off more of the red insulation (1.5 cm)** and take the red wire and the exposed wire and twist them together like the second picture. Make sure the wires have good contact between them.



If there are only two internal wires, then skip this step.

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Step 11

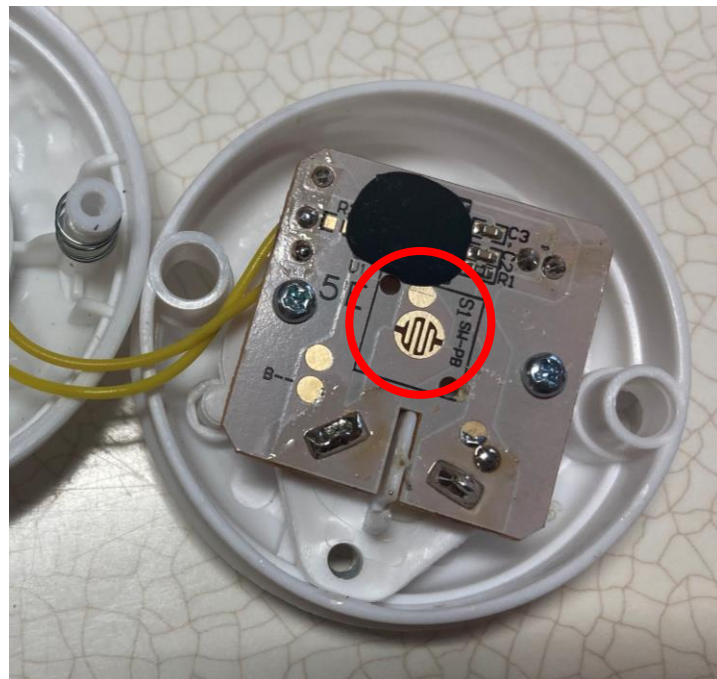
Take the ends of the internal wires, and melt solder onto them.

This can be done by holding the solder iron against the wire and bringing the solder wire to it until it melts and flows onto the wire.



Step 12

With the silicon button removed, a zig zag shape and a small circle on the circuit board will be revealed, as shown circled in red.



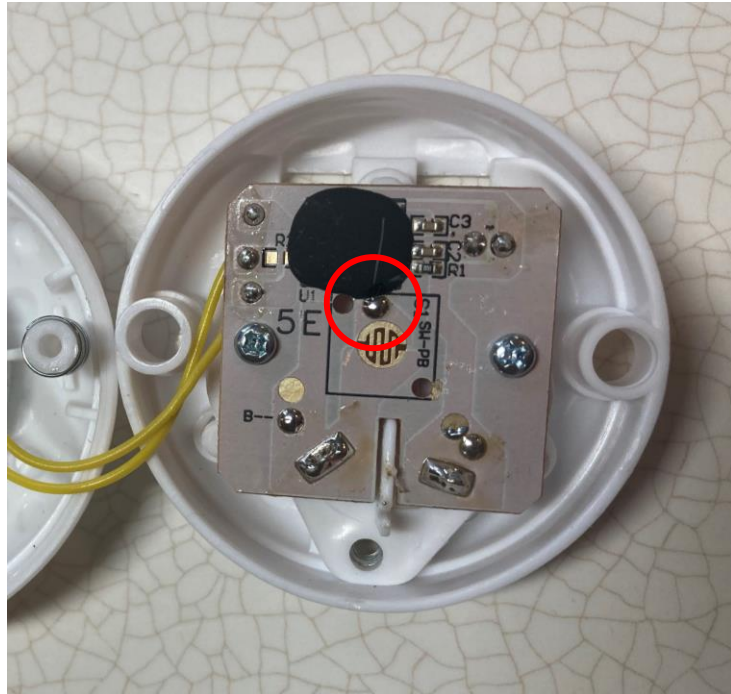
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Step 13

On the small circle, shown circled in red, place a blob of solder.

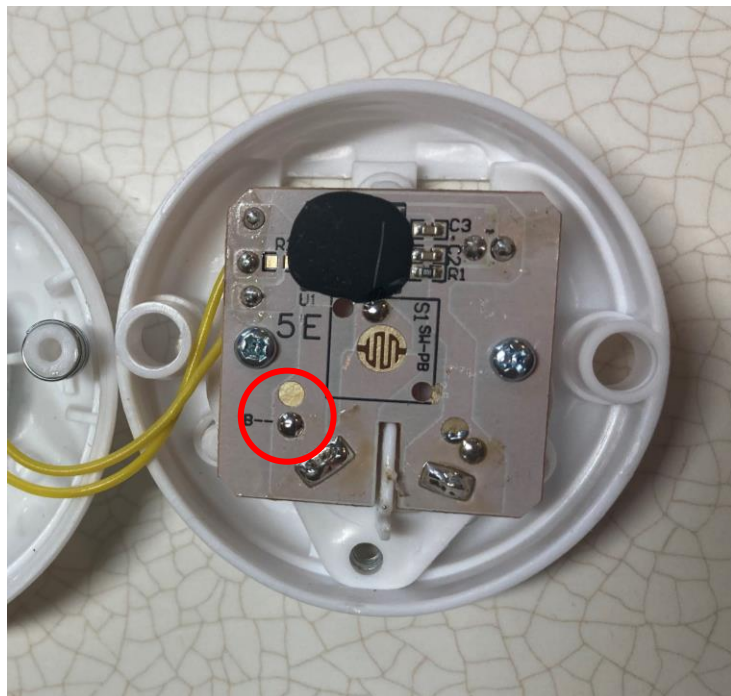
This can be done by placing your solder iron on the circle, and then bringing the solder wire in contact with the circle. It should melt and flow onto the circle, leaving a blob as shown here.



Step 14

On the circle pad next to the letter “B” (shown circled in red) melt another blob of solder.

This can be done by placing your solder iron on the circle, and then bringing the solder wire in contact with the circle. It should melt and flow onto the circle, leaving a blob as shown here.

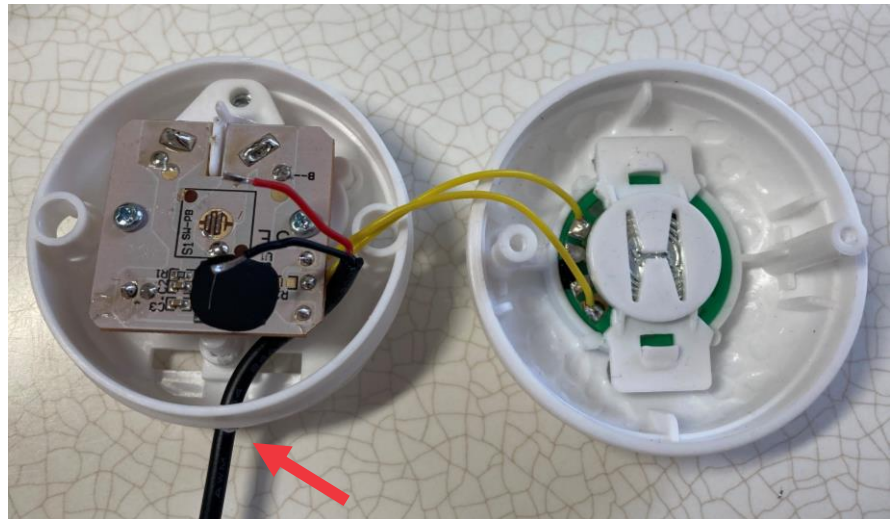


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Step 15

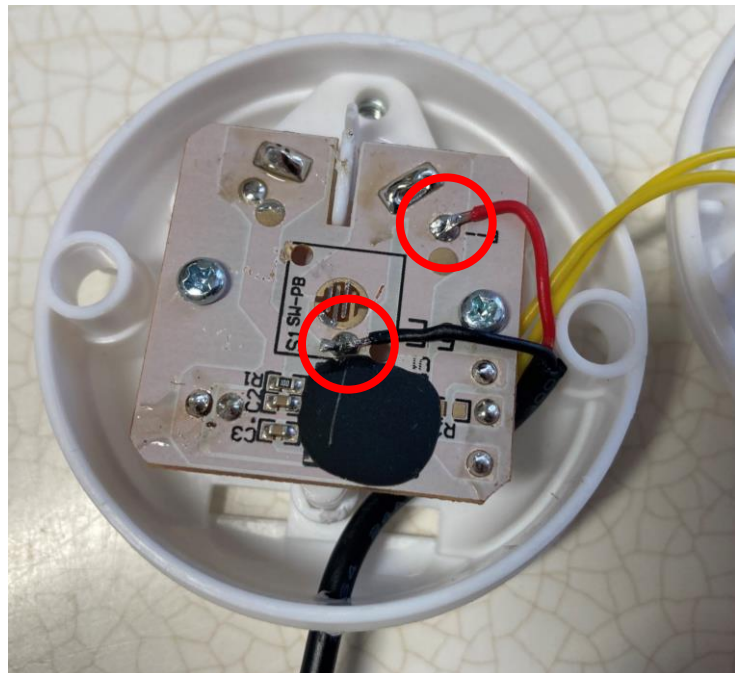
Thread the cable through the drilled hole.



Step 16

Solder the two wires in the locations shown.

These locations are the solder blobs made in steps 13 and 14.



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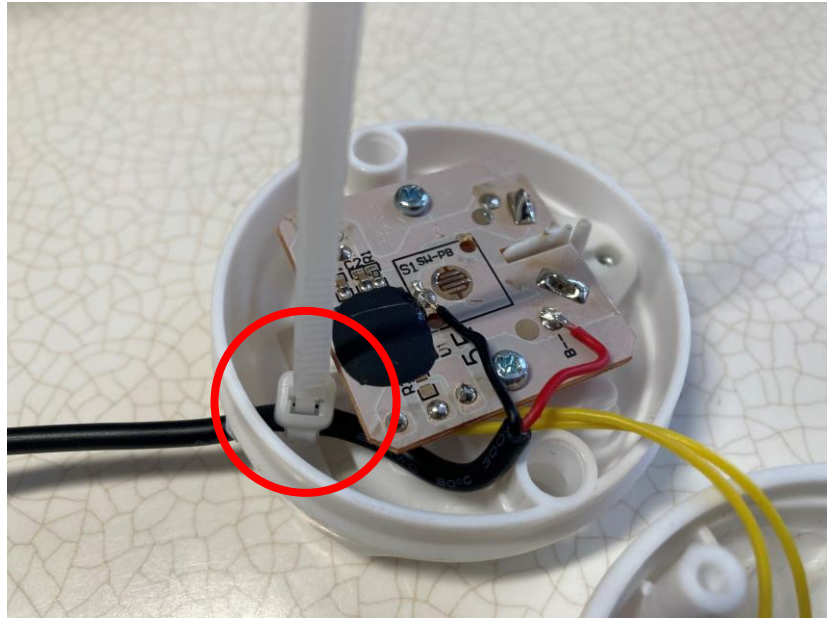
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Step 17

Attach a cable tie to the cable, on the inside of the white case- as close as possible to where it enters.

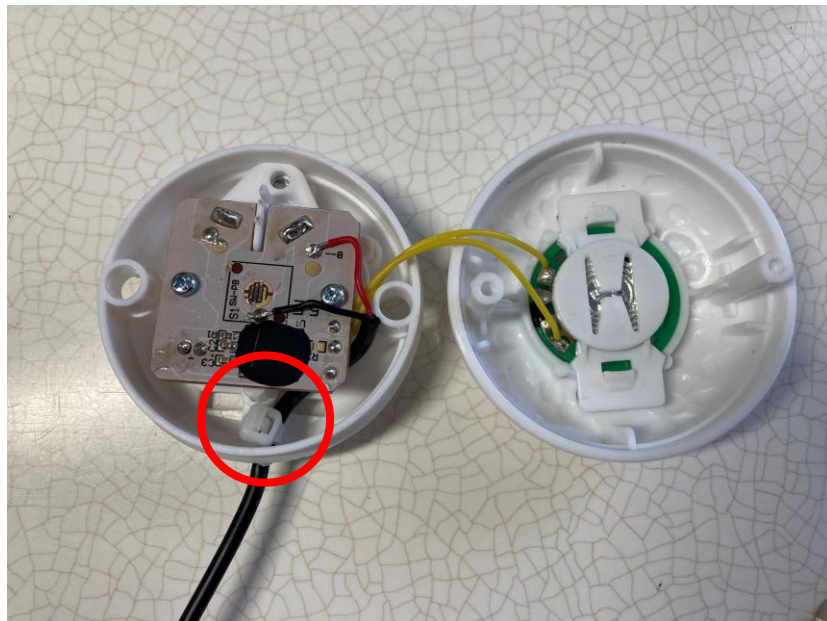
Tighten the cable tie as much as you can.

This cable tie will serve as strain relieve, so that if the cable is pulled it won't break the solder connections.



Step 18

Cut the excess portion of the cable tie with the flush cutters.



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Step 19 – Stop and Test!

Test that your adaptation was successful by replacing the batteries and plugging in an assistive switch.

The assistive switch should replicate the button functions and Peppa should make noises.

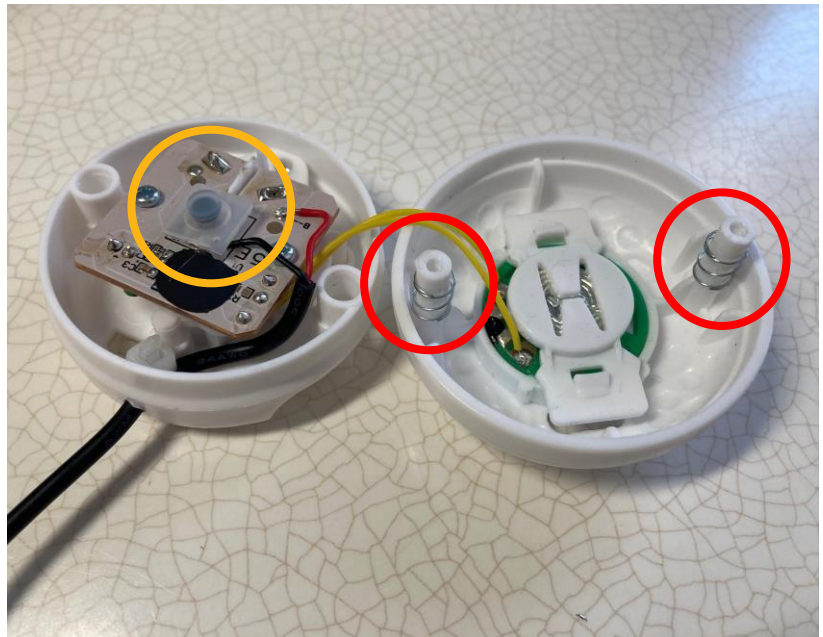
- If Peppa makes no noises when switch is activated, check your connections, and make sure the batteries are all the way in.
- If Peppa continues to make noises and will not stop, check your connections



Step 20

If possible, replace the silicone cover over where you soldered, circled in yellow. This is so the original switch still works, but if it does not fit the switch adaption will still work.

Replace the springs back onto the posts, circled in red.



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Step 21

Fit the two halves back together and secure with screws, circled in red.



Step 22

Replace the battery compartment lid and secure with the screw, circled in red.



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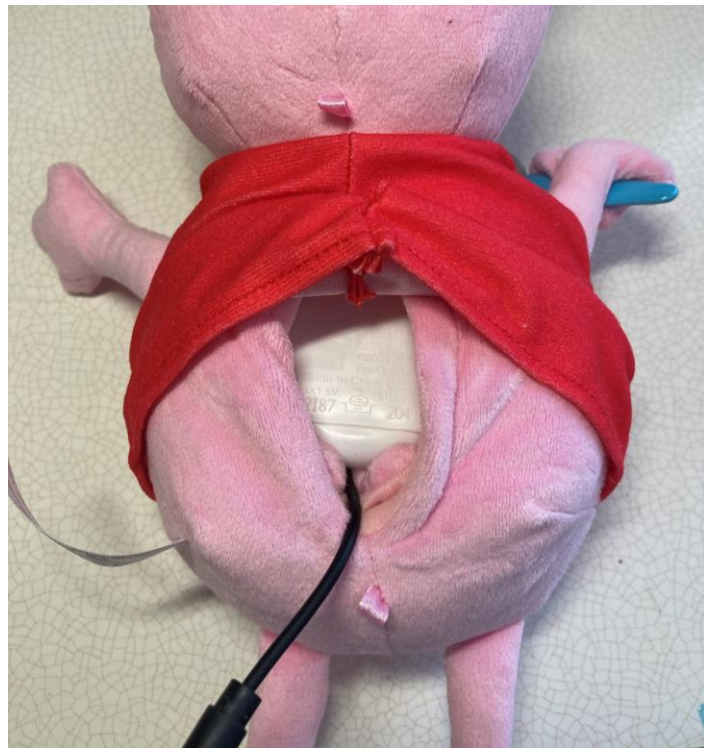
Step 23

Take the Peppa Pig plush toy and turn it over. Lift up the dress and open up the inside compartment as seen here.



Step 24

Put the white speaker/battery compartment inside this opening, leaving the cable sticking out.

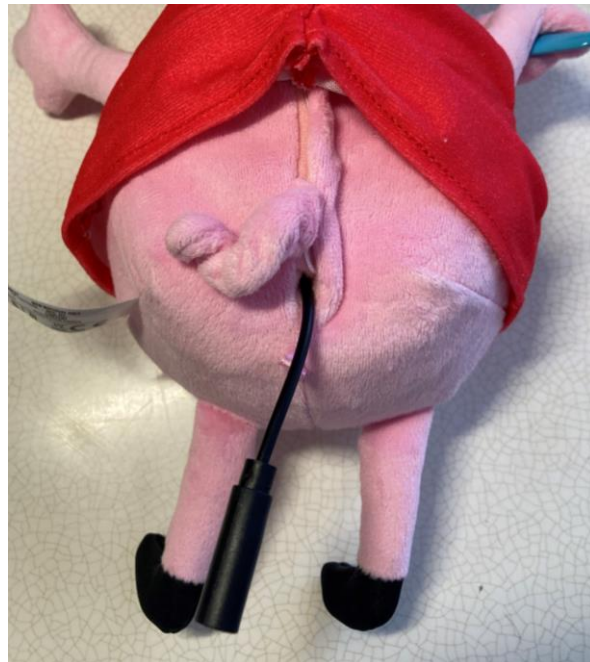


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Step 25

Close this back compartment, make sure the tail and the cable with the mono jack are sticking out.



Step 26

Pull the back of the dress back down, pulling the tail and the cable through the hole on the dress.



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Step 27 - Test

Test again that your adaptation was successful by plugging in an assistive switch.

The assistive switch should replicate the button functions and Peppa should make noises.

If Peppa does not make noises or does not stop making noises, open the inside compartment again and check the connections.

If the assistive switch works as intended, then the switch adaption is finished!

