



# Singing/Dancing Cactus Toy

By: GRIP's Toy Adaptation Team

Average Time: #1.5 hours

Supply List:

- Toy
- Small Screwdriver
- Soldering Iron
- Solder
- Wire
- 2 Buttons
- Double Button Stand
- Hot glue gun
- Ziptie

**Caution:** This manual uses drills and soldering irons. Make sure you review the safety guidelines before using these devices to prevent injury. GRIP is not liable for any injuries/damage caused.

Procedures:

1. Carefully remove the toy from its packaging.
2. Remove the batteries from the bottom of the toy.



**Bottom is taken off already.**



3. Carefully cut along the vertical seam, avoid the top and bottom horizontal seams.

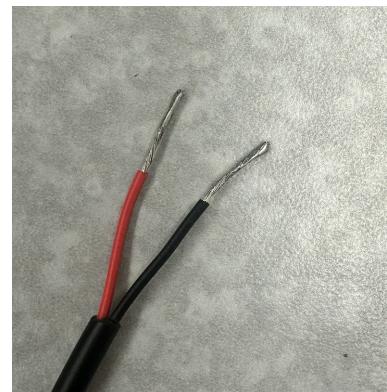
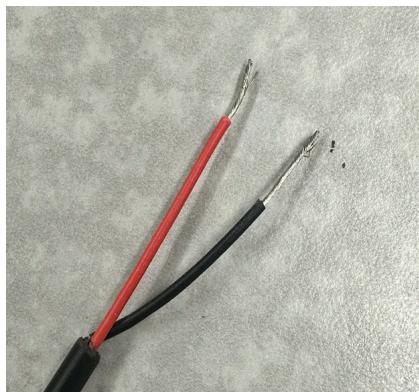


**Note: This is the length you should cut, not the location. You should cut along the physical vertical seam.**

4. Rotate the fabric until you see a push button that looks like this.



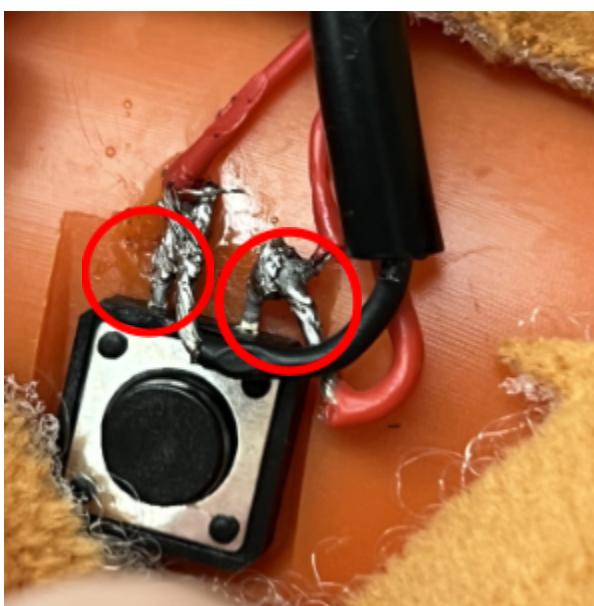
5. Tin (apply a small amount of solder) the ends of both wires on both sides.



6. Make sure that you have pulled back the fabric so you have no chance of touching the soldering iron to the fabric (FIRE HAZARD)!!



7. Solder black and red wires to either side of the push button.





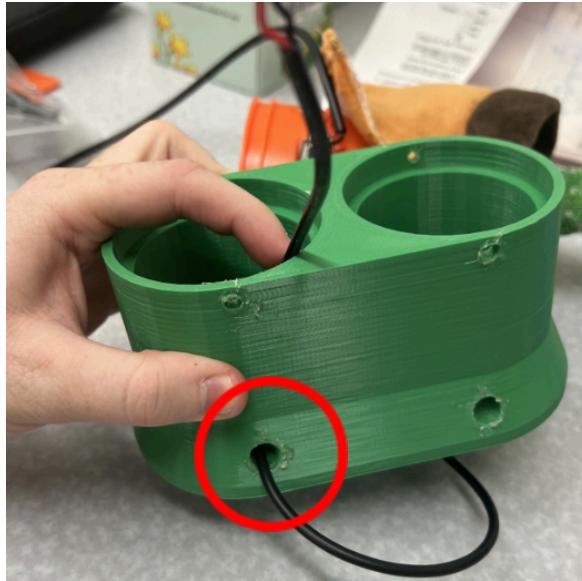
8. Repeat steps 4-6 for the second push button, located across the speaker from the button you just soldered.
9. Put the batteries back into the toy.
10. Test the soldered-on wires by pressing the red and black tips together.  
The toy should turn on when the exposed metal part of the wires are touching. If this does not happen, check your soldering job to make sure the ends of the wires attached to the toy are not touching each other.



11. Press the push buttons originally on the toy to ensure they still work.
12. Get a double button stand, 2 arcade buttons, and the unsoldered end of the wire you soldered to the push button on the toy.



13. Pull the wire through the bottom hole in the button stand.



14. Tie a knot in the wire so that it can't be pulled out.





15. Line up the wires to the terminals on the button and pull each wire through. Then, solder the wire to the terminal.



16. Pull on the wires to make sure they are soldered enough to the button and won't detach.

17. Place the button in the stand.



18. Repeat steps 12-18 with the second button and place it in the hole next to the one you just did.



19. Test the buttons. If they do not work, reach out to a mentor.
20. If they work, add hot glue into the top holes so that they will stay in place.
21. Get a zip tie and thread it through the bottom horizontal portion of the fabric pot.



22. Slide the zip-tie through the sleeve at the bottom of the fabric. Tighten the zip-tie around the plastic channel at the base of the pot to secure the bottom portion of the fabric.



23. Once you are sure everything is attached correctly and the new buttons are functional, hot glue the cut seam back in place. .

24. Remove the batteries from the toy.

**25. Enjoy your adapted Dancing Cactus!**