



RC Train Toy

By: GRIP's Toy Adaptation Team

Average Time: #1 hr

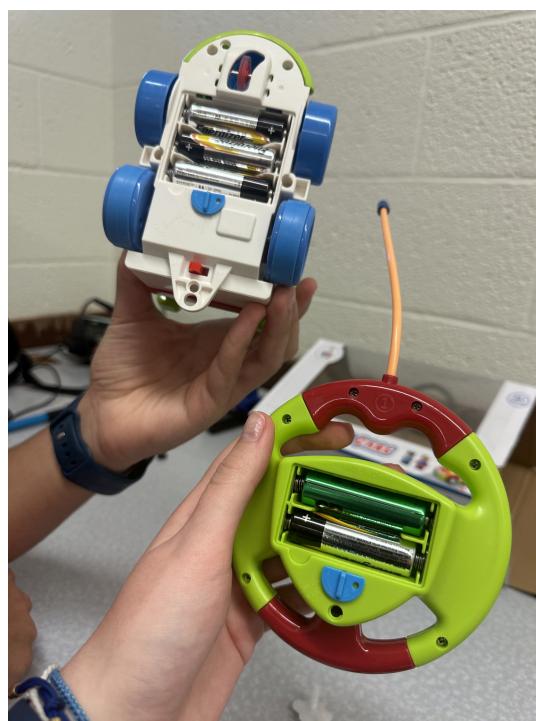
Supply List:

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

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.

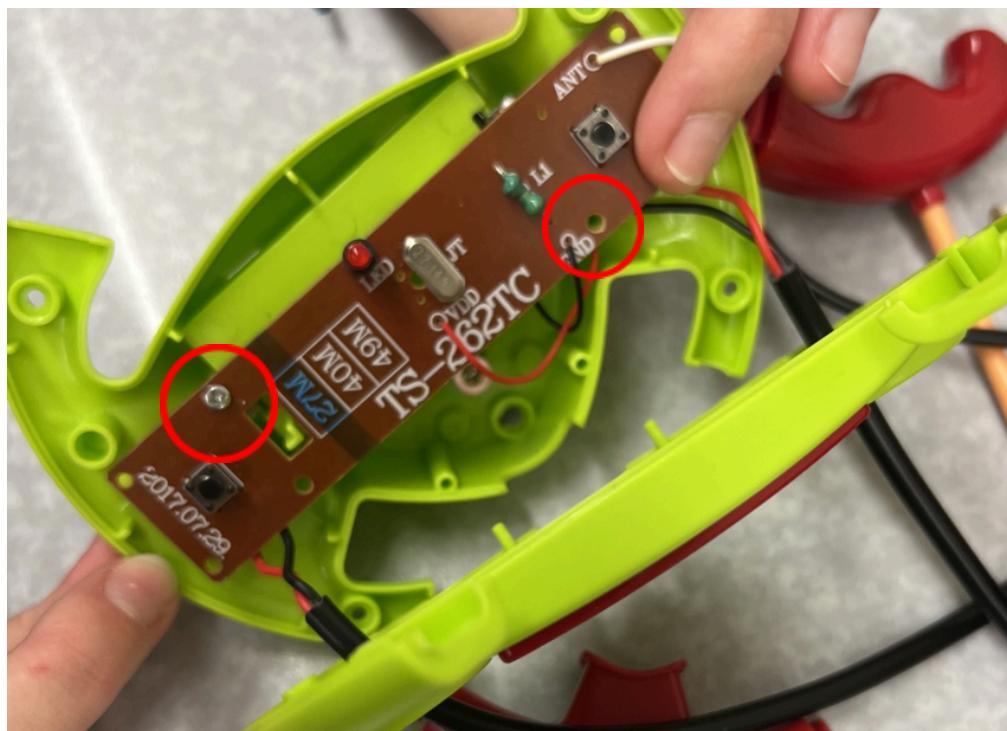
Procedures:

1. Carefully remove the toy from its packaging (it should be a train toy and a separate steering wheel).
2. Batteries are located in the back of the steering wheel. Remove them. Also remove batteries from the bottom of the train.

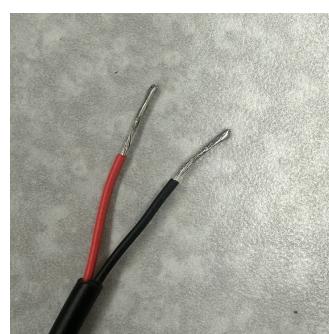




3. Use the small screwdriver to take off the cover of the remote control steering wheel. You will see the screws on the back.
4. Remove the cover.
5. You will see a long horizontal circuit board. Use the small screwdriver to unscrew and detach the circuit board. The location of the screws are circled in red below.

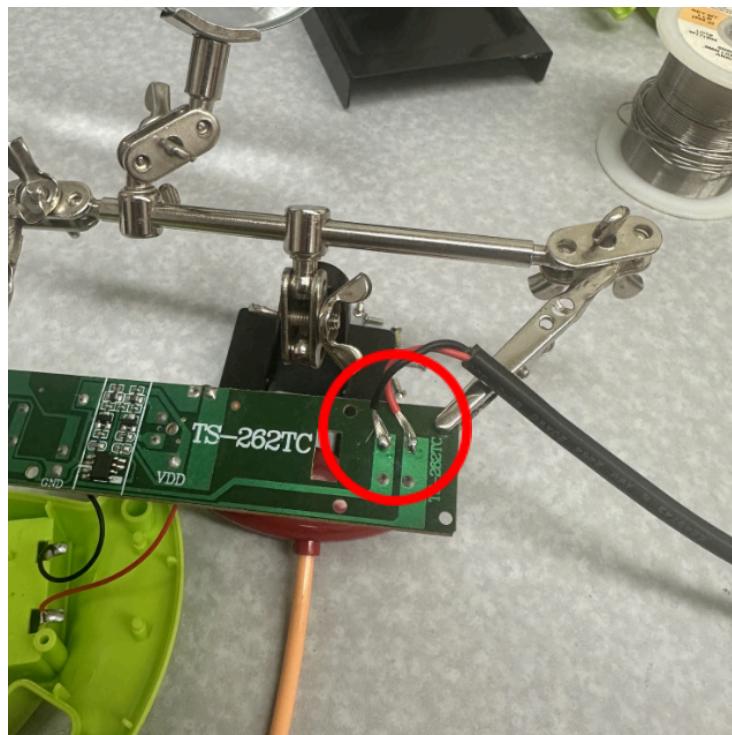


6. Now we will solder! Make sure your soldering iron is turned on. You should be able to see a red light and the dial/display should be at around 350-375 degrees C.
7. Tin (apply a small amount of solder) the ends of both wires on both sides.

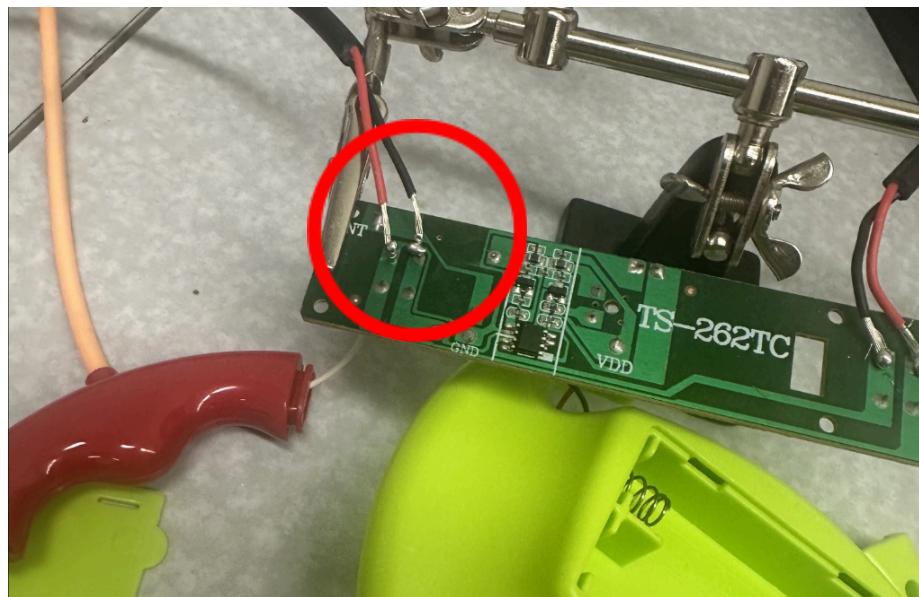




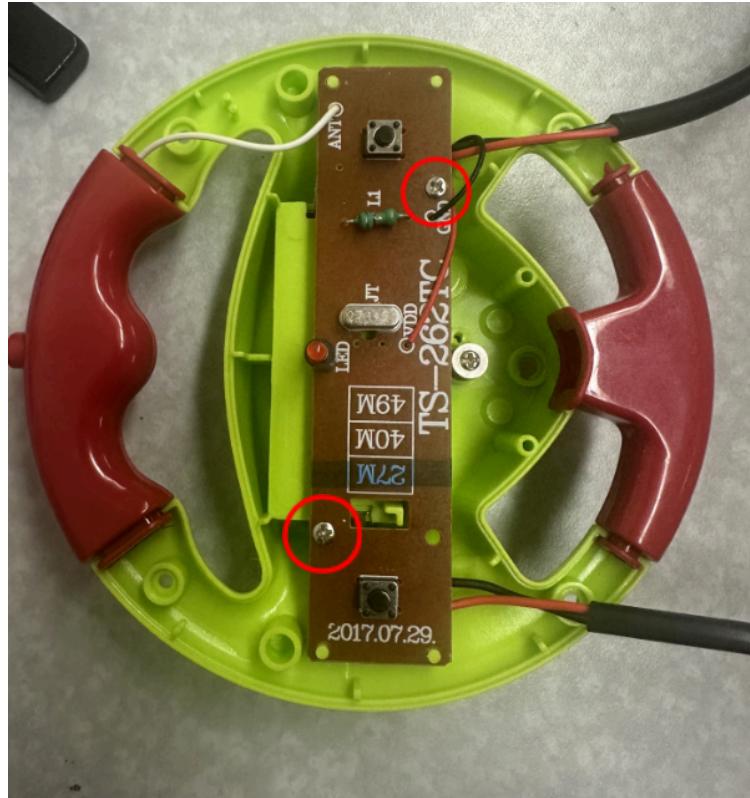
8. Solder the ends of the wires to the backside of the board as seen below.



9. Repeat step 8 for the the button on the other end of the board as well.



10. Now place the board back into its original position with the wires placed like the photo below.

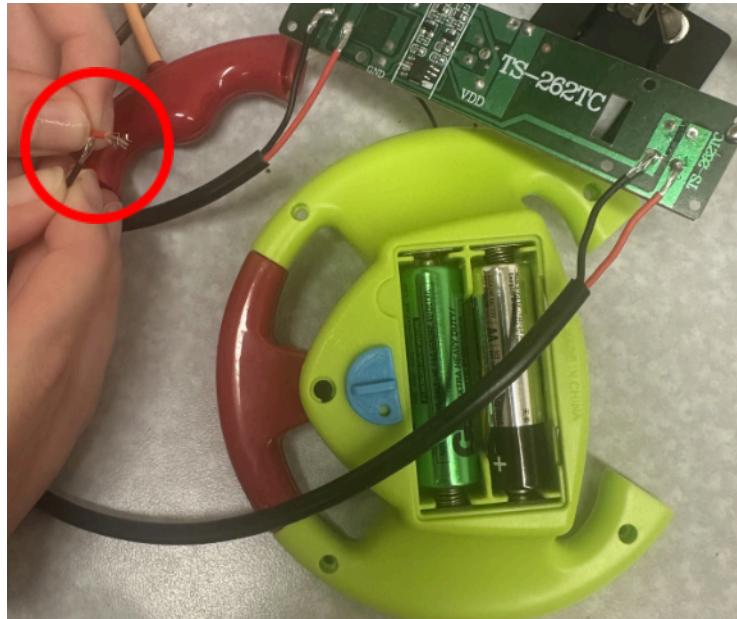


11. Place the cover and buttons back onto the remote. The wires should be going out of the remote like this.





12. Put the batteries back inside the remote and test it by touching the exposed metal wire tips together. The toy should turn on and move when the wires are touching. If this does not happen, open up the remote again to ensure the wires you soldered did not detach from the buttons.



13. Once you've verified that the toy works, take out the batteries again. We will begin soldering to the buttons!

14. Get a double button stand, 2 large buttons, and the unsoldered end of the wire you soldered to the push button on the toy.



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



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





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





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

19. Place the button in the stand.



20. Do steps 11-19 with another large button.



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21. Put the batteries back into the toy and test the buttons. If they work, add hot glue into the top holes of the button stand (circled in red below) so that they will stay in place.



22. Enjoy your adapted train toy!

