## **RC Truck Adaptation**

Instructions created by Shawn Parris, T.A.S.C. Volunteer

Items needed:

- 1) 20 gauge solid copper wire
- 2) Small Phillips screwdriver
- 3) Wire cutter
- 4) Wire stripper
- 5) Exact-O knife with shape point
- 6) 15-watt Pencil soldiering iron
- 7) 4 mini audio plugs (Digi-key #: CP-3502MJ-ND, connector Audio Jack 3.5 mm mono, MJ-3502)
- 8) Drill
- 9) ¼ inch drill bit
- 10) Something to mark the following: forward, reverse, left, and right

Steps to adapt the RC Truck with multiple switches:

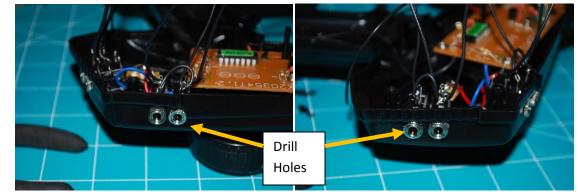
- 1) Remove batteries from the controller.
- 2) Remove the screws from the controller.



3) Remove the cover from the controller (May have to slice the stickers in the battery compartment of the controller).



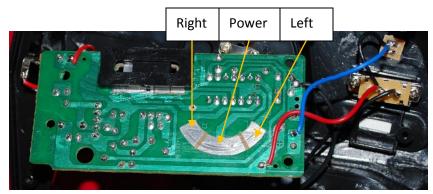
4) Locate the area for the plugs to be access.



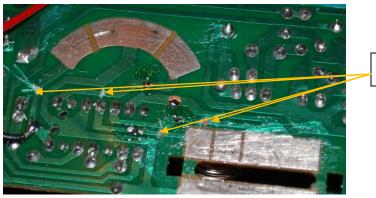
- 5) Drill the holes for the plugs in the controller's frame.
- 6) Remove the screws from the circuit board so that the pads and circuits traces to be exposed.



7) Locate the pads or traces that go to the switches in the controller.

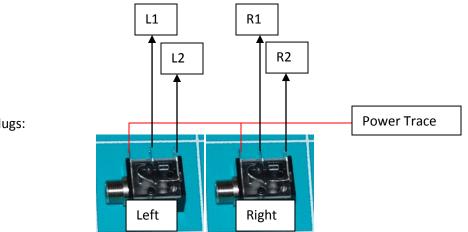


8) The traces will need to be cut to disable the switches when the adapted switches to be used, so the controller will not be damaged. But still, the adapted switches for forward and reverse should not be used at the same time due to possible damage to the vehicle.

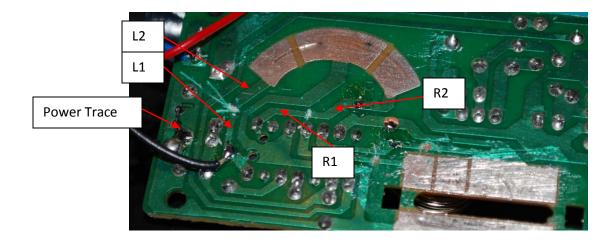


Cut Traces

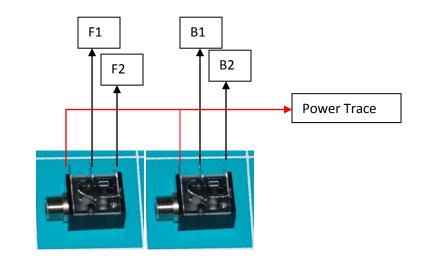
- 9) Install the plugs for the adapted switches:
- 10) Solider wires between the plugs and traces (Be careful in not to short or overheat the traces on the circuit board.

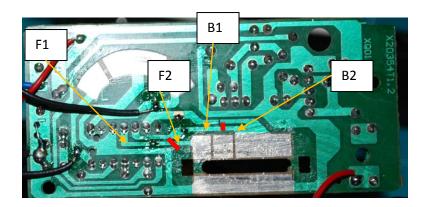


Left and Right plugs:



Forward and Reverse Plugs: (May want to add a potentiometer on the power trace to vary the speed for forward and reverse. Try 1,000 ohm potentiometer)





- 11) Assemble the controller
- 12) Install the battery
- 13) Test the Switches



14) Mark the plugs (Model paint was used in this prototype) for Left, Right, Forward, and Reverse.



15) Enjoy!