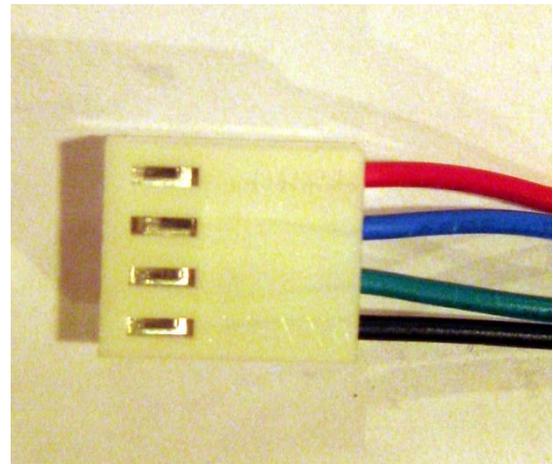
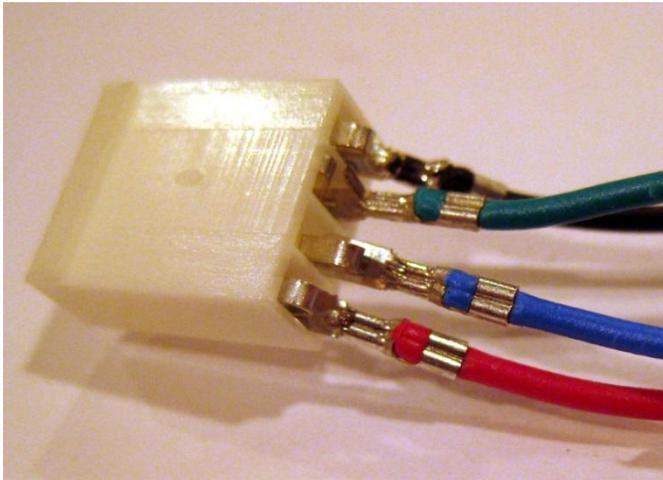


Chassis Assembly

Part 3

1. Attach the motor wires to the connector. The metal connectors are inserted into the white plastic housing. The loop on the connector goes on the opposite side of the housing as the small rectangular holes. The order is Red – Blue – Green – Black.



2. Attach the motors to the sway bars with two 4x4x 3/8" screw. Use the lock washers. Position so that the wires are on the top of the motor.



3. Connect the right motor's connector to the "Right Motor" connector on the Control board and the left to the "Left Motor" connector.

4. **Tire Assembly:** Place the foam which came with the tires in the center of the tire and arrange such that there is a hole in the center.



Work the tire over the wheel and adjust so that the tire bead is adjacent to the outer flange of the wheel.

5. Attach the wheels to the motors using the hex nut. The molded hex depression in the wheel goes towards the motor. Use a socket wrench to tighten the nut. Do not over tighten or the plastic wheel may crack.

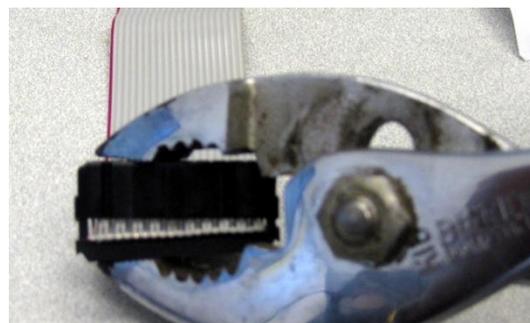
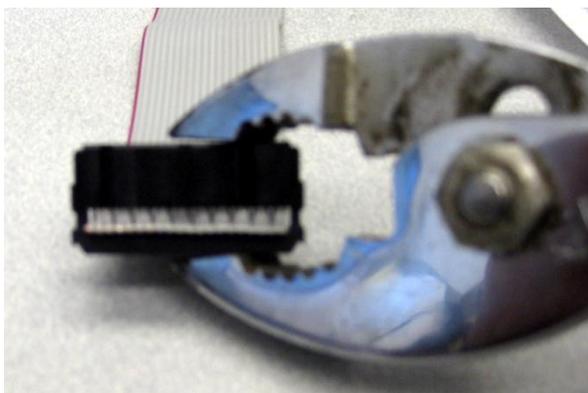
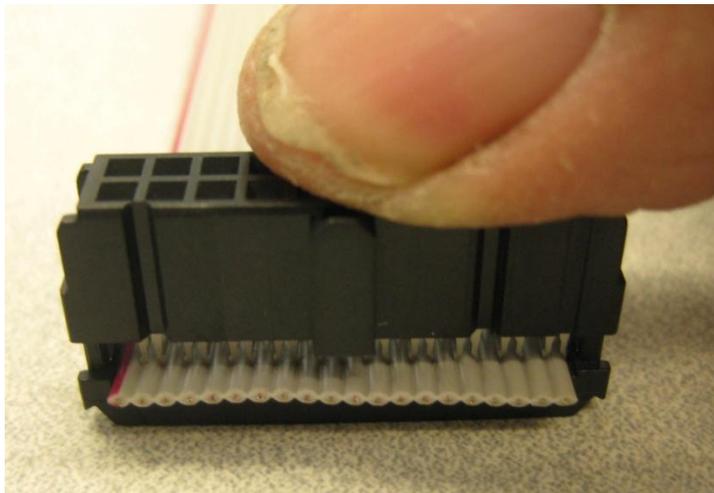
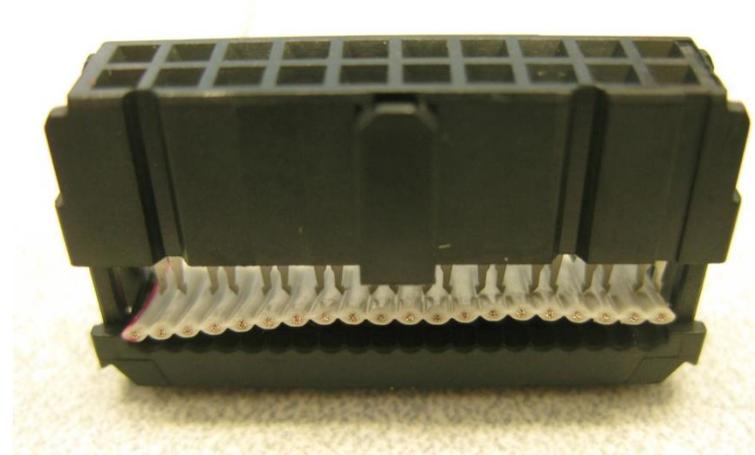
6. **Ribbon Cable Construction.**

Crimp twenty-pin connectors on each end of the 6" ribbon cable. Insert the cable through the opening. The side of the cable with the red marking can be on either side. The cable can extend slightly through the opening. Note the connector key (the vertical plastic guide) is on the short end of the cable.

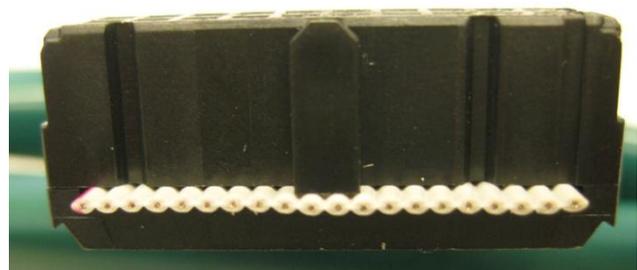
Press on the connector. You will hear two clicks as each end engages. The metal prongs should hold the wires in place.

Use pliers to force the connector together. The type of pliers shown work well because they can exert fairly even pressure on the surface. Needle nose pliers usually do not work well.

Move the pliers to the other end to keep the connector parts parallel.



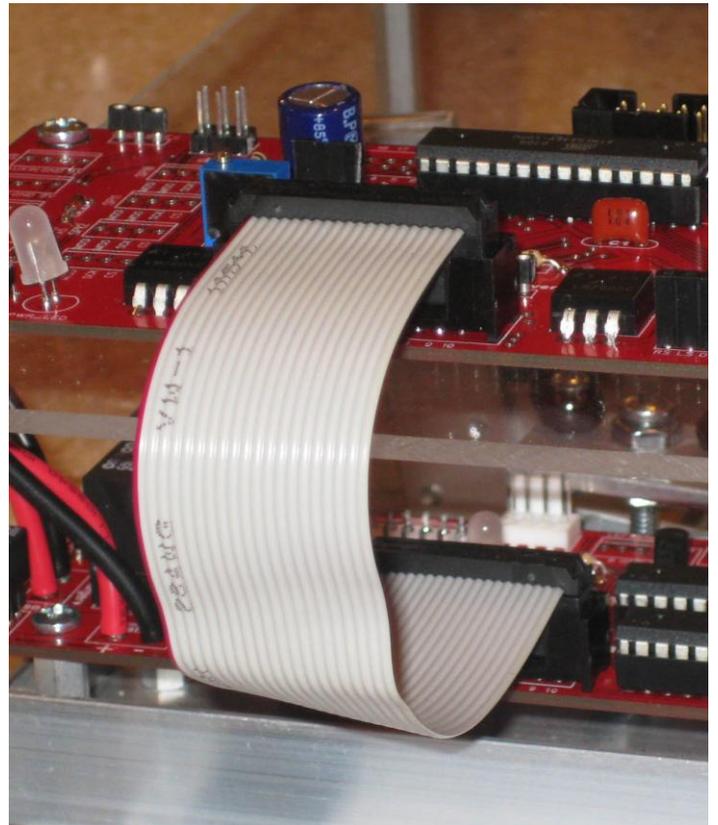
When completed, the plastic of the top part should be against the plastic of the other part.



7. Attach the second connector to the other end. **The plastic key goes to the stub end. The female sockets of one connector will point up and the other will point down.**



8. Connect the ribbon cable to the back two connectors on the Interface and Control boards. The plastic key will only allow you to place it one way.



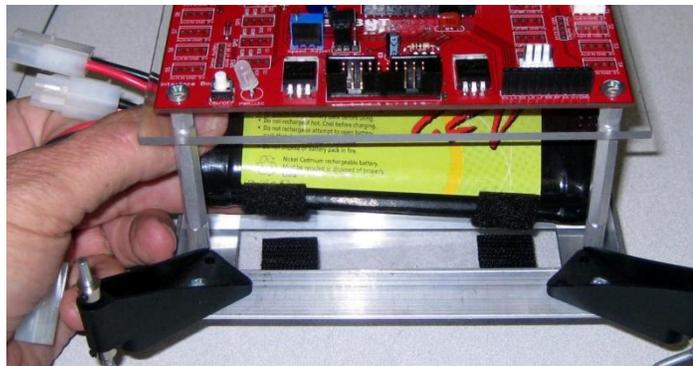
9. **Battery:** Place the two “fuzzy” pieces of Velcro on the bottom edge of the battery.



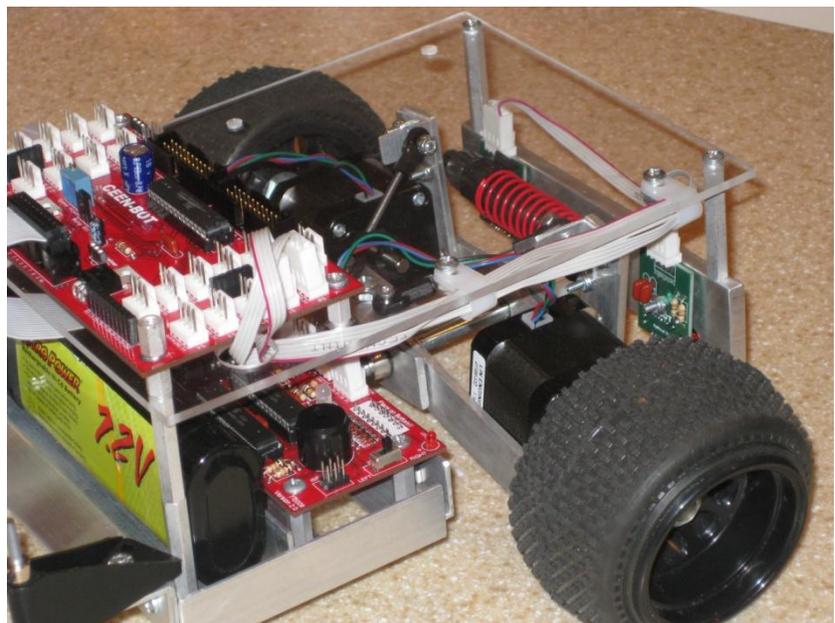
10. Place the mating Velcro on the “fuzzy” pieces and remove the protective film.



11. Carefully place the battery in its position in the CEENBoT to transfer the Velcro to the battery compartment base. Remove the battery and press the Velcro to the CEENBoT with your fingers.



12. Place the 15” cable from the left sensor board to connector S1 on the Interface board. Place the 11” cable from the right sensor board to connector S0 on the Interface board. Route the wires through the cable holders and the hole in the rear of the Plexiglas.



13. Connect the PlayStation controller card's 20 pin female connector to the 20 pin male connector located on the right side of the Interface card.
14. Replace the 6x32x 1/4" screw from the right rear corner of the Interface card with a 3/8" M-F stand off. Loop the cable from the PlayStation connector through a cable clamp and secure with the 6x32x 1/4" screw. Connect the PlayStation cable to the 8 pin male connector on the PlayStation controller card.

