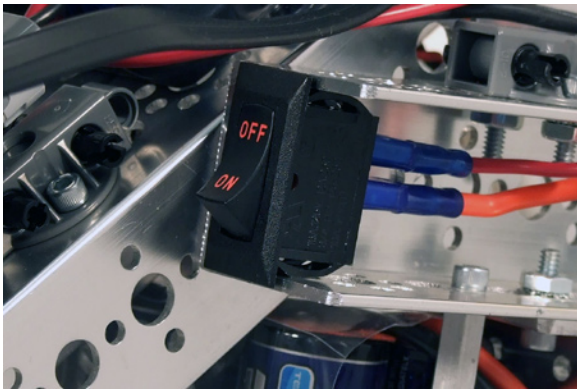


TETRIX™ Hardware

Safety

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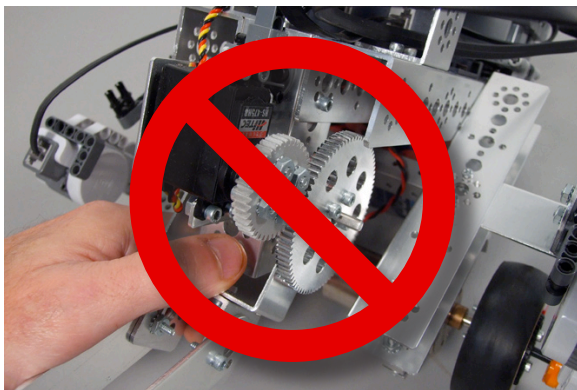
1. Personal Safety
2. Mechanical Safety
3. Electrical Safety



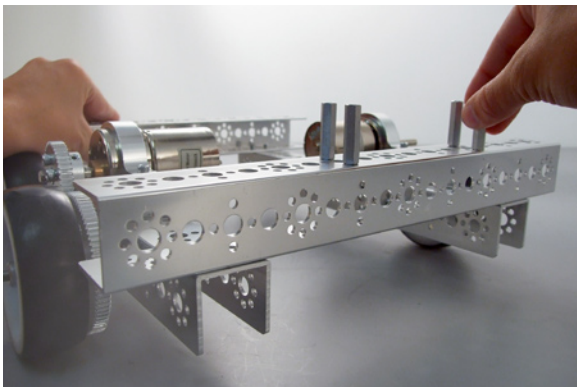
1. Personal Safety

The TETRIX DC motors have a very powerful torque rating of 300 oz/inches. Proper care must be taken to protect you as well as your assembly.

The robot should ***always*** be powered down before operating or working with any section of it.



Keep hair, clothing, and all parts of your body away from the moving components on the robot while it is turned on. This includes (but is not limited to) any motors, wheels and gears that could start spinning.



Only work in clean environments free of both clutter and moisture.

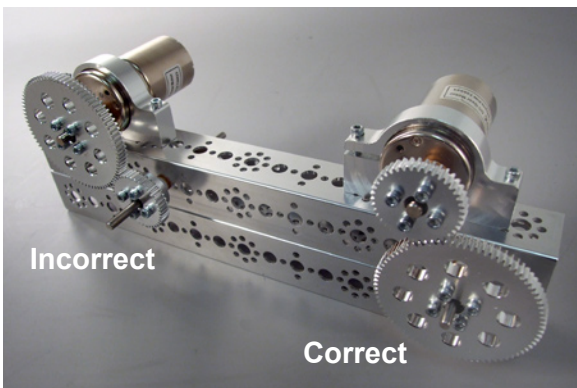
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When working on metal robots, wear safety gloves and goggles to protect the skin and eyes.

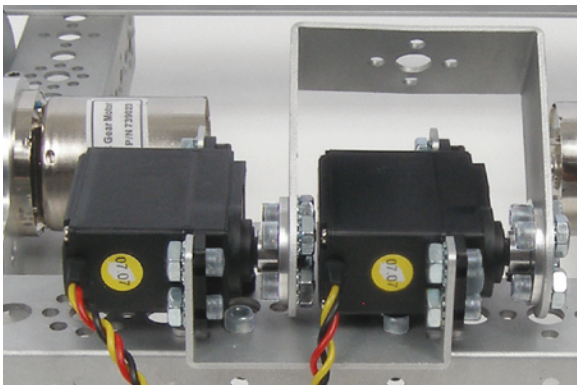


Use extra caution when cutting metal. Only do so under direct supervision and always cut away from your body (not toward). After cutting, be sure to file, sand down or tape off any rough or jagged edges.



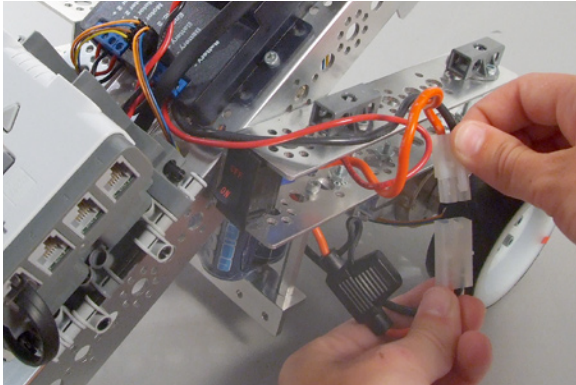
2. Mechanical Safety

Never drive a smaller gear with a larger gear. Doing so risks exceeding the the DC motor's torque rating and damaging the inner gearbox (burning out the motor).



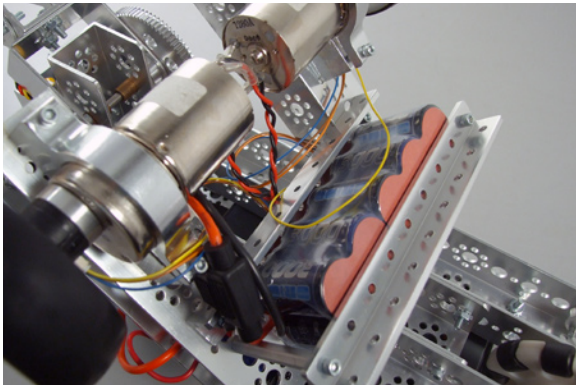
When using two or more servo motors together, the centers must be identified and aligned so the motors will run on a common axis. If this is not done, the servo's motion may be hindered and moving parts damaged by contact with mis-aligned components.

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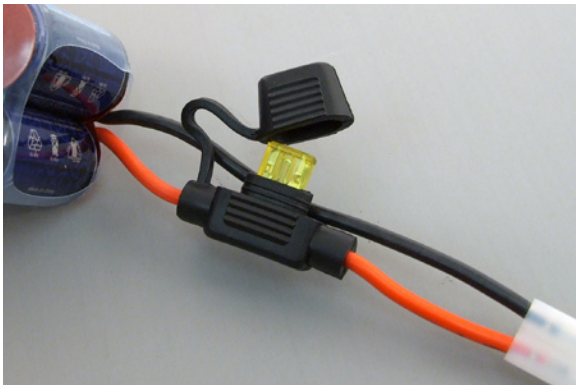


3. Electrical Safety

Make sure the power supply is disconnected when wiring the DC Motor or Servo Controllers.

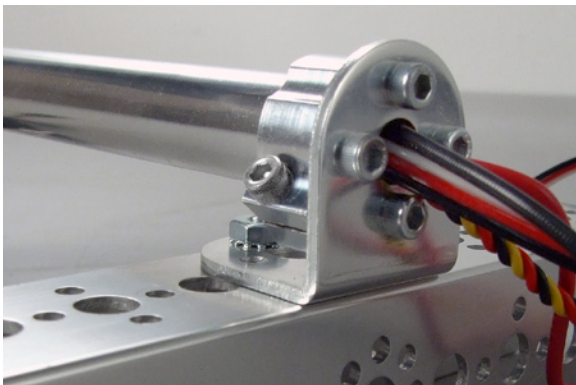


The battery should be positioned so it will not rub against sharp edges. A damaged, leaking battery is a safety hazard.



Never bypass the battery's inline fuse. Doing so will damage your robot's electrical components.

To extend the life of the battery, don't allow it to stay connected to the charger for extended periods of time.



Avoid running wires along 'pinch points'. Sharp metal pieces and gears can damage the wires and their insulation, causing them to break or be exposed.

When possible, run wires through metal tubing and wire-tie them to structural components.