

## Solar Car common problem and Solutions

### 1. My car keeps on curving in one direction.

- a. Check the wheels to see if they are tight up against the bearings or not. Too much friction will cause the car to curve. If they are too tight, put some washers in between the wheel and the bearing.
- b. Make sure the axels fit the chassis – if the axles are too long, the wheels will shift back and forth causing the car to curve. Cut the axles down, and use washers to take up the rest of the space.
- c. Make sure that any wires, or other things glued on the chassis are not dragging on the ground or are rubbing against the wheels.
- d. Try adding rubber grips to your wheels for more traction.
- e. Check that your bearings are on straight. If not, remove them, and use a T-Square to place them accurately.
- f. Make sure that the weight of everything on the chassis is evenly distributed.

### 2. My motor is getting power, but my car won't go anywhere!

- a. Make sure that the teeth on your pinion gear are engaged with the teeth on the drive gear.
- b. Make sure that your motor is secure on the chassis. If it is loose it might pull away from the gear and not engage the drive gear.
- c. Make sure that your wheels and gears are tight on your axle. If they are loose, the car won't move.

### 3. I put in the battery pack, but the car won't move!

- a. Check the wires, alligator clips, the battery pack, and motor that everything is hooked up correctly.
- b. Make sure the two metal clips on the battery packs are not touching each other. This causes a short in your circuit and will not allow the electricity to go to the motor.
- c. Try new batteries.
- d. Try new wires/alligator clips.
- e. Make sure that the pinion gear doesn't have so much friction with the drive gear that it won't move.

### 4. My (something) keeps falling off/breaking.

- a. Make sure that everything is secured onto the chassis with glue, Velcro, or tape (glue is best, Velcro for battery packs).
- b. Make sure the chassis you constructed is sturdy enough to handle everything you're putting on it.