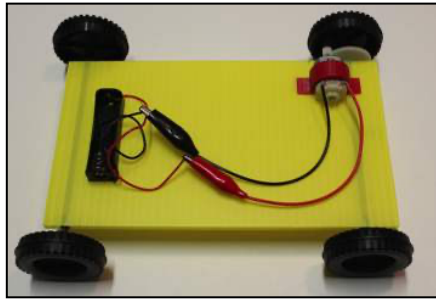


Model Solar Cars – Basic



Each Kit includes

- 4 Wheels 4 x 50mm
- 2 Axels - Fibreglass
- 4 Axel Collars - black tubes
- 1 Motor + Mount
- 1 Large Spur Gear 60T
- 1 Small Pinion Gear 10T
- 2 Alligator Clips
- 2 Pieces of wire
- 1 Battery pack 1 x AA



1 Chassis (Colour Corflute - 120mm x 200mm)

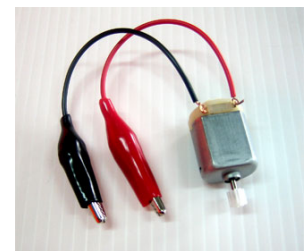
Take care with fibreglass axles. You can get small splinters of f/glass if you touch the ends with your hands. Please use the block sets provided.

Along with the kits you will have received a square block of wood and a round dowel (one per five kits). These are used to help put the kit together. You will also need a pair of pliers.



Steps to put your Model Car Together

1. The first step is to set up the **motor**. Take the plastic cover off the two alligator clips. Also take the ends off the two wires. Twist the end of the red wire and poke it through the hole at the rear of the alligator clip. Wrap it around the two spiky teeth at the rear of the clip and then use a pair of pliers to clamp the teeth over the wire and hold it in place. Slide the red cover over the red wire and over the clip. To get the cover back on the alligator clip hold the clip open by placing the pliers in the jaws so it holds the back down to help slide the cover over. Do the same with the black wire and alligator clip. The other end of the wire needs to be attached to the motor. Twist the ends of the wires to make them stay together and then thread them through the brass lug on the motor, twist again so they are secure. Now push the small white Pinion Gear onto the end of the motor shaft. It should look like the picture to the right.



2. Next you need to set up the **back** wheels. First you need to place the two axel collars in the corflute chassis. The collars are the two short pieces

of black tube. Push one into the corflute near the back and follow the channel to the other side and push the other collar into it. The axel will now run in these collars and act like a bearing. Place the large white gear (spur Gear) onto the square block of wood. Use the round dowel as a "pusher", see photo. Push the axel through the gear on the wooden block, all the way till it touches the bottom of the hole. Place one of the wheels on the bench with the hole up. Again with the pusher, push the axel with the spur gear on it into the wheel. Now slide it through the corflute where the black collars are located and place a wheel on the other side. It should spin freely and not wobble from side to side.



3. To set up the **front** wheel push an axel into one wheel using the pusher. Place the two axel collars into the corflute. Slide this axel through the front of the chassis and place the last wheel on the other side. This should also spin freely.



4. To place the motor

on the chassis you will need the plastic motor mount. Place it over the motor and it should hold in place. With the car on the bench now place the motor so it lines up with the large spur gear. Roll the car backwards and forwards to make sure it turns the pinion gear on the motor. Now place a piece of white tape on each tab of the motor mount. See the picture. You can also use double sided tape (see blow).



5. You are now ready to "power up" the car. If you have a solar panel simply attach the two alligator clips to the wires of the solar panel and place it in the sun. Please try and secure the panel to the chassis so it doesn't fall off. If you have a battery pack place a AA battery in the pack and connect the two alligator clips to the wires on the battery pack. Please do not connect both the solar panel and battery pack together as you can burn them out if not wired correctly. By reversing the clips the car will run the opposite way.
6. Now it is time to add your style to your car. You can use all sort of materials to make the body but remember to keep it light. More weight will slow your car down.
7. Solar power is a renewable energy, as long as the sun shines the panel will power your car. We have included a battery pack so you can have some fun with the car at any time, day or night, sun or no sun. They only need one AA battery.

