

Top Tips

How to get the best results from your solar car kits and race practice.



Schools Solar Challenge

Organisation tips:

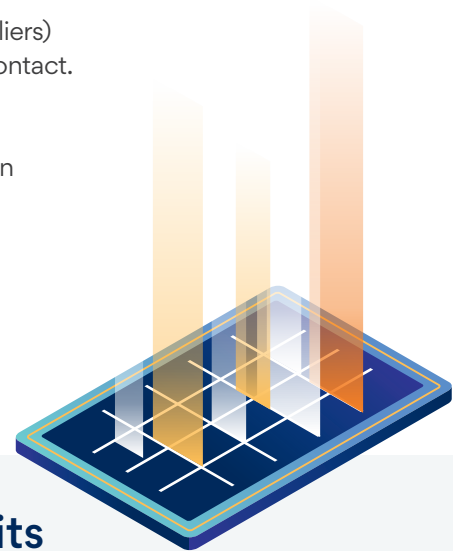
- Empty the car kit components from the re-sealable bag into a container/tray/box. Be careful as small parts like the pin gear and collars can easily get lost.
- Store individual kits in separate containers/boxes.
- Corflute is cheap and easy to replace, so you can get a fresh-looking car by replacing the corflute chassis (double sided tape on the corflute becomes more difficult to remove as it ages).

Engineering and construction tips for the solar car model:

- Use a minimal amount of double sided tape and remove the tape soon after use. This not only reduces vehicle weight but makes it easier for them to be used again.
- Secure the switch with double sided tape rather than the cable tie.
- Secure wires to the switch and motor using spade connectors. Use wire strippers (or pliers) to clamp the wire into the connector. An adhesive tape can be used to ensure good contact.
- Align gears, motor and wheels so that they remain firm, in contact and run smoothly.
- Include the battery pack and switch in construction as these are a required inclusion on raceday, if shady.
- Keep the kits in separate boxes and get students to practice assembling the car from start to finish more than once.

Practice tips:

- Practice using batteries. You never know what will happen on the day.
- Read the rules on how races are started. Make a paddle to cover your solar panel and practice the starts.
- Practice at school to help:
 - ✓ Identify the best position to fix the solar panels and balance weight over the wheels.
 - ✓ Identify how best to angle the panel to get maximum sunlight.
 - ✓ Determine the wheel combination to use on raceday.
 - ✓ Determine the gear ratio (combination) to use on raceday.
 - ✓ Refine your skills in fixing and aligning gears, motor and wheels.
 - ✓ Refine a take off technique at the start.



Additional kits and parts:

- Extra kits and all parts are available directly from Kite Magic:
kitesite.com.au/schools/solarcars/wasynergy.html
- Available through Bunnings:
 - » Double sided tape
 - » The corflute chassis (130 mm x 240 mm). Corflute sheets - Project Panel 900 mm x 600 mm x 5 mm of White Corflute for less than \$10:
bunnings.com.au/search/products?q=corflute