**Solar Car Challenge**

**Components & Sources – 2022-23**

***Sources graciously provided by solar car teams of the Solar Car Challenge***

General Guideline

*“One piece of advice that I would give any team new or existing is to find a business owner in their community that is an approved vendor for their school. All public schools have to use an approved vendor system in order to purchase items. Not all businesses want to become vendors and the process to add a vendor can be difficult. We built a relationship with our locally owned automotive supplier that is an approved vendor and he adds whatever we need to his inventory. This gives us access to anything on the Internet whether it is new or used. This can help to stretch a solar car team’s budget.*

*Joe Pitts, Team Advisor*

*Greenville High School “Iron Lions” Solar Car Team*

**SOLAR PANELS**

 Unbound Solar - [www.unboundsolar.com](http://www.unboundsolar.com)

 SBM Solar - [www.sbmsolar.com](http://www.sbmsolar.com)

 CED Green Tech- <https://www.cedgreentech.com/>

 Maxon (SunPower Cells) - <https://maxeon.com/us/solar-panel-products/maxeon-solar-cell-technology>

 SunCat Solar – [www.facebook.com/SunCatSolar](http://www.facebook.com/SunCatSolar)

Eco Direct – [www.ecodirect.com](http://www.ecodirect.com)

**POWER TRACKERS**

 Unboundsolar- <https://unboundsolar.com/>

 MidNite Solar - [www.midnitesolar.com](http://www.midnitesolar.com/)

 AERL - <https://www.aerl.com.au/>

 Genasun – [https://genasun.com](https://genasun.com/)

 Outback Power - [http://www.outbackpower.com](http://www.outbackpower.com/)

 Nomura Co - https://www.facebook.com/NomuraCo

 Elmar - <https://www.prohelion.com/shop/mppt/elmar-solar-race-mppt/>

**BATTERIES**

 Unbound Solar - [www.unboundsolar.com](http://www.unboundsolar.com)

 Sun Xtender - [www.sunxtender.com](http://www.sunxtender.com)

 AA Portable Battery Corp - [www.batteryspace.com](http://www.batteryspace.com) [turn-key lithium battery systems]

 PowerSonic – [www.powersonic.com](http://www.powersonic.com)

 Eco Direct – [www.ecodirect.com](http://www.ecodirect.com)

 Battery Guys – [www.batteryguys.com](http://www.batteryguys.com)

 Prolion - <https://www.prohelion.com/>

**MOTORS**

 Cloud Electric – <http://www.cloudelectric.com>

 Electric Motorsport - <http://www.electricmotorsport.com/>

EV Drives – [http://www.evdrives.com](http://www.evdrives.com/)

 Thunderstruck Motors - <http://www.thunderstruck-ev.com/>

 Mitsuba Motors - <https://www.mitsuba.co.jp/scr/products>

 Nomura Co special part supplier – [www.facebook.com/NomuraCo](http://www.facebook.com/NomuraCo)

**MOTOR CONTROLLER**

 Cloud Electric – [www.cloudelectric.com](http://www.cloudelectric.com)

 Electric Motor Sport – [www.electricmotorsport.com/](http://www.electricmotorsport.com/)

EV Drives – [http://www.evdrives.com](http://www.evdrives.com/)

Thunder Struck – [www.thunderstruck-ev.com/](http://www.thunderstruck-ev.com/)

Nomura Co special part supplier – [www.facebook.com/NomuraCo](http://www.facebook.com/NomuraCo)

Prolion - <https://www.prohelion.com/>

**CUSTOM SPROCKETS**

 Supersprox - [www.supersproxusa.com/special-sprockets/](http://www.supersproxusa.com/special-sprockets/)

 Rocket Sprockets - [www.rocketsprocket.net](http://www.rocketsprocket.net)

 Rush Gears - <https://www.rushgears.com/>

 Sprocket Specialist - <https://sprocketspecialists.com/>

 Rebel Gears - <http://www.rebelgears.com/customsprockets.html>

**SWITCHES**

 Tecknowledgey - [www.tecknowledgey.com](http://www.tecknowledgey.com)

 Electric Motorsport – [www.electricmotorsport.com](http://www.electricmotorsport.com)

 Mouser Electronics – [www.mouser.com](http://www.mouser.com)

 DigiKey – [www.digikey.com](http://www.digikey.com)

**RELAYS**

 Evolve Electronics – GV200: <https://evolveelectrics.com/products/gigavac-gv200>

 GX11: <https://evolveelectrics.com/collections/contactors/products/gigavac-gx11>

 EV Drives - <https://www.evdrives.com/product_p/sol-lev200-12v.htm>

**FUSES**

 Electric Motorsport – [www.electricmotorsport.com](http://www.electricmotorsport.com)

 Mouser Electronics – [www.mouser.com](http://www.mouser.com)

 DigiKey – [www.digikey.com](http://www.digikey.com)

 Grainger – [www.grainer.com](http://www.grainer.com)

 Waytek - [www.waytekwire.com](http://www.waytekwire.com)

 McMaster-Carr - [www.mcmaster.com](http://www.mcmaster.com)

**BRAKES**

 BMI Karts – [www.bmikarts.com](http://www.bmikarts.com)

 Motivational Tubing - [www.motivationaltubing.com](http://www.motivationaltubing.com)

 Chassis Shop - [www.chassisshop.com/](http://www.chassisshop.com/)

**STEERING**

 Motivational Tubing - [www.motivationaltubing.com](http://www.motivationaltubing.com)

 Chassis Shop – [www.chassisshop.com](http://www.chassisshop.com)

**SUSPENSION**

 ATV A-arm suspension – [www.ebay.com](http://www.ebay.com)

 Chassis Shop – [www.chassisshop.com](http://www.chassisshop.com)

 FOX – [www.ridefox.com](http://www.ridefox.com)

**WHEELS**

 [www.summitracing.com](http://www.summitracing.com)

 <https://www.treatland.tv/new-puch-peugeot-motobecane-vespa-moped-parts-s/88.htm>

<http://shop.adapterkings.com> – they make adapter to go from ATV to car

 Nomura Co special part supplier – [www.facebook.com/NomuraCo](http://www.facebook.com/NomuraCo)

**WHEEL ADAPTERS**

 Adapter Kings - [www.adapterkings.com](http://www.adapterkings.com)

**METAL for CONSTRUCTION** – [go local if possible]

 Online Metals - [www.onlinemetals.com](http://www.onlinemetals.com)

 Metals Depot - [www.metalsdepot.com](http://www.metalsdepot.com)

 Wicks Aircraft – [www.wicksaircraft.com](http://www.wicksaircraft.com)

**BRAKE LIGHTS & TURN SIGNALS**

 Chrome Glow - <https://chromeglow.com/> (Super Bright)

O’Reilly Auto Parts - [www.oreilyautoparts.com](http://www.oreilyautoparts.com)

 Grainger - [www.grainger.com](http://www.grainger.com) [for ECCO lights]

 Etrailer - [www.etrailer.com](http://www.etrailer.com)

 J&P Cycles - [www.jpcycles.com](http://www.jpcycles.com)

**NUTS/BOLTS/SMALL PARTS**

 McMaster-Carr - [www.mcmaster.com](http://www.mcmaster.com)

Bolt Depot – [www.boltdepot.com](http://www.boltdepot.com)

 Kimball Midwest- [www.kimballmidwest.com](http://www.kimballmidwest.com/)

**LOW VOLTAGE ALARM [12v]**

 12v Technology - <https://12vtechnology.com/collections/alarms-panel-mount>

 Low voltage alarms from 12v Technology can be found on Ebay and Amazon. These

 alarms are easy to install and fairly cheap.

**COMPOSITE MATERIALS**

 ACP Composits – [www.acpcomposites.com](http://www.acpcomposites.com)

 Rockwest Composits - <https://www.rockwestcomposites.com/>

Dragon Plate - [www.dragonplate.com](http://www.dragonplate.com)

 Fibreglast - [www.fibreglast.com](http://www.fibreglast.com)

**Plastic Sheeting**

Eplastics – [www.eplastics.com](http://www.eplastics.com)

 Unites States Plastic Corp – [www.usplastics.com](http://www.usplastics.com)

 Professional Plastics – [www.professionalplastics.com](http://www.professionalplastics.com)

**SHRINK WRAP**

 Big Shrink - <http://www.bigshrink.com>

Mr. Shrink Wrap - <https://mrshrinkwrap.com/>

Pro-Tect plastics & Supply - <https://shrinkwrapcontainments.com>

**POLYISOCYANURATE FOAM**

 Elliott Company - [www.eliottfoam.com](http://www.eliottfoam.com)