

**2025 SOLAR CAR CHALLENGE
OFFICIAL REGISTRATION DOCUMENT**

Part I: Team Information

Team Name: _____

Address: _____
_____ Zip _____

Phone: () _____ -

Team
Adviser: _____

Adviser
Information Address: _____

Home phone () _____

E-mail: _____ **CRITICAL!**

Team
Captain _____

Captain
Information Address: _____

Home phone: () _____

E -mail: _____

Name of
Vehicle: _____

Team
Members: (attach a separate sheet)

School Name _____

School Address: _____

Phone: () _____

Part II: Vehicle Information:

Division

- Classic Advanced Classic Advanced
 Electric-Solar Cruiser

Dimensions of Vehicle

Length _____ m Width _____ m Height _____ m
Weight of Vehicle (without driver) _____ kg

Batteries

Manufacturer: _____
Model: _____
Number used: _____
Battery dimensions: Length _____
Width _____
Height _____
Battery weight _____ pounds per battery
Battery voltage (nominal) _____ Volts per battery
Battery capacity _____ Amp-hours per battery

Solar Cells

Manufacturer: _____
Model: _____
Number used: _____
Array dimensions: Length _____
Width _____
Efficiency: _____ percent
Overall size of array: _____ meters squared

Brakes

Type 1 _____
Where located: _____

Type 2 _____
Where located: _____

Motor

Manufacturer: _____
Model: _____
Horsepower: _____

Part III: Data Sheets:

Please attach the following to this application:

(1) Complete, detailed drawing(s) showing the mechanical structure of the vehicle. This should be drawn with a drafting program such as Solid Edge for clarity and is not limited to one page. This drawing should be at minimum, detailed enough to show crush zones, frame structure, and overall dimensions in three views (front, side, top). A final updated drawing must be submitted upon check in to the event if there has been any design changes since the first drawing was submitted.

(2) A complete, detailed schematic showing the electrical layout of the vehicle. This must include but does not need to be limited to all the wiring for the propulsion, solar, instrument, and battery systems. A final and current schematic must be submitted upon check in to the event.

(3) Email a digital team photo, in color, at least 5 X 7 inches in size. The photo must clearly show the solar car and team members. The photo can be e-mailed to the lehmanm743@aol.com

(4) Manufacturer's data sheets for the propulsion system batteries, including, but not limited to voltage per battery, capacity per battery, weight of each battery, and proof that the battery type is appropriate to the division entered. If batteries are not lead-acid, include manufacturer's data sheets for an appropriate battery management system

(5) Manufacturer's data sheets for the solar cells you intend to use, including, but not limited to the size of each solar cell, the efficiency rating, the number of watts per cell, and the list price of each solar cell.

(6) Manufacturer's data sheets for motors and motor controllers.

(7) Manufacturer's data sheets for wheels.

(8) Manufacturer's data sheets for braking systems, main fuse, and disconnect switches.

Please note that these diagrams and plans do not have to be your final work product. We understand that a solar car is always a "work in progress." We will need final electronic schematics, mechanical drawings, and manufactures data sheets at the time of your arrival at scrutineering. It is highly recommended that teams keep a copy of all submitted documents on hand during the race. For more information about data sheets please see Rule 3.6.

Part IV: Team Information

Team Members: ***Team Member names MUST be typed!***

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Chaperones: _____

Part V: Timeliness

Please be sure that your Official Registration Document is filed (postmarked) no later than March 1, 2025. No registrations will accepted after this date.

Registration fees must accompany your registration documents. Please make checks payable to The Solar Car Challenge Foundation.