



National High School evGrandPrix 2017

Quick Start Guide

The purpose of this document is to provide a quick and simplified version of the rules. This is only to be used as a reference for your team. All enforcement of the rules will be based off of the official rules provided to you. An official copy of the rules can be obtained on website www.evgrandprix.org.

Frame

- **Frame and Modification**
 - Any Sprint Kart Frame style will be accepted. We recommend the Top Kart frame built for our electric kart.
 - All modification to the frame must be TIG Welded.
 - All steel added to the kart must be at least 1" x 0.083" round or square tubing. Angle must be at least 1" x 1" x 0.083"
 - All steel sheet metal must be 18 gauge or heavier.
 - For aluminum specifications please see official rules.
- **Plastics**
 - All polycarbonate sheets must be 1/16" or thicker. **NO ACRYLIC ALLOWED.**
 - Front and side bumpers must be made of polyethylene. Factory bumpers that have been modified to fit the battery compartments are highly recommended. An Impact bumper or metal bumper must be on the rear of the kart.
- **Seat**
 - The seat must be a fiberglass seat in good condition with no cracks. The seat must be higher than the bottom of the frame.
- **Fasteners**
 - All fasteners must be class 5 (standard) or 8.8 (metric) hardened bolts or better.
 - Cotter pins or safety wires must be through all bolts that secure moving parts.



- Lock nuts must be used on non-moving parts
- The front axle must be cotter pinned.
- **Tires**
 - Tires must be manufactured for karting and free of defects.

Electronics

- **Batteries**
 - 4 – 12 volt 35ah batteries are required. We recommend using Interstate DCM0035 batteries for competition. NO OTHER BATTERIES WILL BE ACCEPTED.
 - All batteries must be enclosed in a container that will ensure they will not be removed from the vehicle during an accident. Polycarbonate is the preferred material for the boxes.
 - A 48V charger is highly recommended to charge all batteries at one time. We recommend a Schumacher 25A 48V Automatic Charger model INC-4825A. However you can charge each battery separately by disconnecting the wires with a 12V car battery charger.
- **Wiring**
 - A 4 gauge wire or larger is recommended for all wiring used for the motor, controller, batteries, etc.
 - 18 gauge wire or larger is recommend for all other applications.
 - A push button mushroom style emergency switch is required in the back of the kart. It must be easily accessible by track officials.
 - An on/off is required in the front of the kart accessible by the driver is required. Both switches must be wired in series so the kart can be turned off by either location.
 - A power indicating LED must be placed near the emergency and driver switch.
 - A minimum 250 A fuse and holder is required.
 - All exposed connections/wiring must be taped or covered with a rubber boots to prevent contact with the connections.
 - All wire must be secured to the frame.
 - All karts must use Anderson 175 amp connectors.
 - A 12" x 6" x 3" area must be available for the power monitoring system. This will be used in all races. The preferred location is on the battery boxes. Make sure your disconnects can reach this location.



- **Motor and Controllers**

- Motor – Montenergy electric brushed motor model ME0708 is the required motor. ALL OTHER MOTORS ARE PROHIBITED
- Motor Controller – Alltrax SPM 48300 is the required motor controller. ALL OTHER CONTROLLERS ARE PROHIBITED
- Contactor/solenoid – Tyco LEV48V

Safety Equipment

- Helmet must be Snell 2015 or higher and less than 5 years old.
- A full body karting suit is required.
- Rib protector is required.
- Leather or racing gloves must be worn.
- Full toes shoe are required.
- Safety glasses are required for members in the pits.
- Each team must have a CO₂ fire extinguisher.

Questions should be directed to:

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Please allow 48 hours for a response.