

# PADDOCK RULES

Everyone (participants, volunteers & spectators) at Formula SAE Michigan would like to enjoy an accident-free event. The following guidelines have been established to advise teams of potential unsafe practices in the paddock area.

**BEHAVIOR:** Alcohol, illegal drugs, weapons or other illegal material are prohibited on the event site during the competition. Use of motorcycles, quads, bicycles, skateboards, rollerblades, scooters, or similar person-carrying devices in any part of the competition area, including the paddocks, is prohibited. (Rules GR.3.4, AD.7.2, AD.7.3)

**DRIVER'S EQUIPMENT:** Anytime the driver is in the cockpit with the engine running, the following approved safety equipment must be worn: helmet, driver's suit, racing gloves, goggles/face shields, racing shoes, and hair covering, if necessary (Rule VE.3 "Equipment Requirements").

**DRIVING PRACTICE:** Practice is only to take place in the designated areas during designated hours.

**ENGINE RUNNING (IC ONLY):** Engines may be run in the paddock provided the car has passed parts 1 and 2 of technical inspection and the following conditions are satisfied (Rule S2.7):

The car is on an adequate stand, and (B) The drive wheels are at least 10.2 cm (4 in) off the ground, or the drive wheels have been removed. Note – People may not be underneath the vehicles while engines are running.

**ENGINE RUNNING/SETTING THE TRACTIVE SYSTEM ACTIVE (EV ONLY):** Any time the tractive system is activated an Electrical Safety Officer (ESO) must be involved. Activation of the tractive system in the paddock is allowed provided the car has passed EV tech inspection and the following conditions are satisfied (Rule S2.7). The car is on an adequate stand, and (B) The drive wheels are at least 10.2cm (4 in) off the ground, or the drive wheels have been removed. Note – People may not be underneath the vehicles while the tractive system is active.

**FIRE EXTINGUISHERS:** Fire extinguishers are to be immediately accessible at all times. All team members must be familiar with their use. A fire extinguisher must accompany the car wherever it is in the paddock or moved to any part of the site. A team member must hold a fire extinguisher ready whenever the car is running in your stall.

**FIRES & SMOKING:** No open fires in the paddock including BBQ grills, oxy-acetylene torches, heaters, cigarettes, etc. Electric hot plates and MIG or TIG welding (with gas bottles safely secured) are allowed in your stall. Propane BBQ grills (NO charcoal) may be used only in the designated grass area near Danley Building. Smoking is prohibited onsite.

**FUEL & OIL:** No open fuel containers. All fuel containers must be DOT approved. Waste oil, etc., is to be taken to the fuel station for disposal. Fueling/Refueling is only allowed at the fuel station.

**JACKING:** When supporting cars off the ground, use strong, sturdy stands which support the vehicle in a stable and secure way. Do not use milk crates, piles of wood, four of the strongest team members, etc.

**RESTRICTED AREAS:** Please reference the Restricted Areas document.

UNDER NO CIRCUMSTANCES IS ANYONE TO CROSS OVER ORANGE SNOW FENCE.

**TRASH:** It is the Teams' responsibility to keep their Paddocks clean throughout the event. There are trash dumpsters and receptacles near every paddock row. No trash (including broken parts, old furniture, worn out tires or other materials) may be left behind at the end of the event. (Rule AD.7.4) Please Note: We are operating next to an active runway. Please be receptive to trash overflow.

**VEHICLE MODIFICATIONS:** If you make any major modifications to your car beside FSAE Rule IN.14.2, cars must return to scrutineering for re-approval

# Paddock Rules

**VEHICLE MOVEMENT (IC ONLY):** Vehicles may not move under their own power anywhere but on the practice or competition tracks. Whenever a car is moved, (Rule VE.2.1 and Rule VE.2.2) there must be:

- A driver wearing a full safety suit seated in the cockpit
- A fire extinguisher accompanying the car at all times
- Someone pushing the car with a push bar

**VEHICLE MOVEMENT (EV ONLY):** Vehicles may not move under their own power anywhere but on the practice or competition tracks. Whenever a car is moved, (Rule VE.2.1 and Rule VE.2.2) there must be:

- A driver wearing a full safety suit seated in the cockpit
- A fire extinguisher accompanying the car at all times
- Someone pushing the car with a push bar
- The detachable handle or key of the tractive system master switch must be taken-off completely and kept by an Electrical Safety Officer (ESO).
- In the event the car has not passed E-Scrutineering, the HVD must be disconnected while the car is moved around on the event site. This also includes taking part in static events.

**WORKING ON THE VEHICLE (ALL TEAMS):** Tools are expected to be used safely. Wear safety glasses when cutting, grinding, etc. Wear appropriate eye protection while welding.

**WORKING ON THE VEHICLE (EV TEAMS):** Additional requirements apply for FSAE Electric. Activities on the energized tractive system or accumulator must take place in the Charging area. An Electrical Safety Officer (ESO) and at least one more team member, who can intervene in case of emergency, must attend every activity on the tractive system. Only members of your team and Scrutineers are allowed to stay behind the barrier tape/markings. After any activity on the tractive system during which seals were broken an E-Scrutineering is mandatory! Work on the energized tractive system or accumulator must satisfy the following guidelines:

- Car/accumulator must be separated with barriers
- All team members working on the system must wear appropriate personal protective equipment (gloves).
- Insulated tools must be used when working on any live circuit
- A sign is clearly visible stating "High Voltage Work" including the maximum voltage of the system being worked on and the name/contact info of the ESO.
- At least one team member must not be directly involved in the work conducted on the accumulator but must be there to assist in case of an incident.

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Activities on the de-energized tractive system outside the accumulator may be performed in the paddock. The following procedure must be followed:

1. Switch off the tractive system master switch and lock out per team procedure.
2. Open/Remove the HV disconnect
3. Check for zero-potential using the three-point test
4. Install a sign, that declares the car as electrically secured/de-energized. Note the name of the ESO supervising the activities on the sign. The ESO is the only person who may remove the sign and re-energize the tractive system.

In case of measurements on the energized system or an activation of the tractive system in the tent for testing purposes please keep to the following procedure:

1. Separate the car with barrier tape/markings provided by officials
2. The car must be jacked up and the drive wheels removed
3. One team member must be prepared to push emergency button at any time
4. Team members who take part in the measurement activities must wear compliant safety equipment and use appropriate measurement devices and tools.
5. The tractive system must only be activated for as long as necessary

**A SPECIAL NOTE FOR DRIVERS:** All drivers should do a check of critical fasteners and components on their vehicles to assure complete control during the driving events. Fasteners come loose, parts break due to fatigue, and occasionally someone forgets to torque a nut – this may have serious consequences for your safety!

**REMEMBER:** USE THE KILL SWITCH in case of an engine, brake malfunction, or any serious incident such as crash or fire.

HAVE FUN – DRIVE SAFE – USE COMMON SENSE