

Guidelines of Testing and Work Safety

<Test Run>

2023/03/08

Driving a vehicle that uses an engine or motor as a power source requires caution and skill in driving, just like vehicles that require a driver's license on public roads. It is necessary to take measures to prevent accidents caused by run off the track due to driving errors or machine troubles.

1 Track

- (1) In order to prevent contact and collision with staff and spectators when the machine becomes uncontrollable, it is recommended to physically separate and isolate the machine by installing a protective body.
- (2) The area where staff and spectators can enter is not set in the area facing the traveling direction of the vehicle or in the outside of the curved section, but in the area parallel to the straight section of the vehicle's track (outside in the traveling direction). In addition to separation/isolation, consider setting it a certain distance behind the guard.
- (3) At the pick-up and drop-off locations, take care to limit the speed at which machines enter. Only staff will be allowed to enter the same area and its surroundings, and the staff will assist with boarding and disembarking.
- (4) Pay attention of the track is kept in good condition (inspection of protective equipment, road surface cleaning, etc.).
- (5) The following ① to ③ are strongly recommended for firefighting and emergency response.
 - ① Installation of fire extinguisher
 - ② Deployment of emergency vehicles
 - ③ Allocation of qualified personnel who can respond to emergencies

2 Driver

- (1) Be sure to confirm that the driver is in good condition
- (2) Driver's equipment must comply with FSAE rule
- (3) Conduct a safety inspection of the vehicle before driving
- (4) If you feel any trouble while driving, stop driving immediately (driver's health and vehicle trouble etc)
- (5) Drive at low speeds for a few laps because the tyres are not warm.

3 Driving Director

- (1) 1. Be sure to appoint a Driving Director for each driving event.
- (2) Be sure to check the safety of the track before driving.
- (3) Create a safety plan (emergency safety manual) in advance and inform all staff.
- (4) It is desirable to take a record (movie, etc.) that shows the safety management status while driving.
- (5) All participants (including drivers) must have appropriate personal accident insurance to cover damages in the event of an accident.

4 Safety Plan (Emergency Safety Manual)

- (1) Be sure to create a safety plan for each driving event based on the attached format.
- (2) Contents: Date, venue, organizer, director, time schedule, emergency hospital guide map, Course map, staff name, emergency response, etc.

[Detailed Account]

- 1 Have a meeting in advance based on the safety plan (emergency safety manual)
- 2 Spectators are basically not allowed to enter the venue (if they do, they must comply with the regulations of this event).
- 3 No person may enter the track during vehicle travel (except staff in case of emergency).
- 4 Multiple cars are not allowed to run at the same time (multiple cars must comply with FSAEJ participation).
- 5 The event may not be held on the track or at the side of the track where non-officials may enter.
- 6 Workspaces that do not need to be located by the tracks should be as far away from the track side as possible.
- 7 The layout should have as few staff and various equipment on the same plane in the truck as possible.
- 8 Trucks must be free of structures that could cause injury in the event of a collision, such as vehicles or utility poles.
- 9 If there are structure or other objects on the track, check safety measures.
- 10 Be aware of the dangers of crawling into single guardrails, guard ropes, parked vehicles, etc. and take countermeasures.
- 11 Safety measures should be taken in case of collisions with structures in or outside the track
- 12 Staff should be placed safely outside the track (preferably outside the protective barrier)
- 13 Make it known that pylons and tapes may restrict entry but do not barricade vehicle.
- 14 Recognize that even if there is a sufficient distance between the track and the outside, it is dangerous when setting the course.
- 15 It is desirable to have a staff who can rush to the trouble spot within 15 seconds (approximate).
- 16 Be sure to place the course members and hold the event, and placing too many people may be dangerous on the contrary.
- 17 Staff must keep an eye on during vehicle travel
- 18 Staff must wear high-visibility clothing.
- 19 Staff must not sit back and be ready to act in sudden situations.
- 20 Prepare two or more ABC powder fire extinguishers weighing 3 kg or more
- 21 In the event of a fire or other trouble, only those who are necessary for rescue operation should go to the scene.
- 22 It is desirable to prepare a transport vehicle that can be transported in an emergency.
- 23 It is desirable to assign qualified those who can respond to emergencies (fire department, Red Cross, LSO, etc. trainees)
- 24 Ensuring the safety of the pit area (Avoid being on the same plane as the track as much as possible)
- 25 Be sure to install an impact attenuator when driving.
- 26 ICV must be equipped with Impact Attenuator, check for fuel leaks
- 27 EV must be equipped with Impact Attenuator, TSAL, IMD, and Shutdown SW