Drift Evolution Technical Rule Book 2022

vs1.6



1. Code of Conduct

- Unsportsmanlike conduct will not be tolerated
- If a driver, crew member or team member is acting in any way that is endangering others they may be immediately expelled from the event. All drivers and their teams must make safety their number one priority. Drift Evolution reserves the right to deem any action or condition unsafe. Unsafe behavior will not be tolerated.
- Vehicles may not have any obscene or drug nature logos/ decals/ markings. Drift Evolution reserves the right to remove or cover these items while event is in session.
- Drift Evolution would prefer all stereos to be off at events. If music is being played it must be at a low volume and radio edit at all times.
- The driver is responsible for his car, team, crew and guest conduct at all times during any Drift Evolution event/ function.
- Demeaning talk or action toward any other driver or team will not be tolerated and will result in a 1 event suspension.
- Drift Evolution is a family geared event all drivers and teams should act accordingly
- If an unregistered driver is found driving a registered car, the car and driver will be expelled from that event and forfeit entry fee.
- The use of any drug or alcohol is strictly prohibited. If any Drift Evolution staff believes a driver or team member is under the influence they will be immediately expelled and forfeit entry fee. Alcohol is only allowed after the track goes cold.
- All drivers must attend drivers meeting.

2. Driver Requirements for Licensing

- All drivers must be 18-years of age to compete. Drivers under 18 years old may compete with additional release forms signed by the parent or guardian and that parent or guardian present at the event at all times.
- Driver must believe that they are capable of controlling the vehicle at all times and do so in a safe manner.

3. Technical Inspection

Before being allowed on track all vehicle and driver equipment must undergo a technical inspection. In addition, every vehicle is subject to further technical inspection at any time before, during or after an event, at the time and in the place and manner directed by any event official. Drift Evolution may at any time inspect a participant's vehicle. Not complying in full with any inspection request will result in disqualification of further track time for said vehicle. Technical inspection assists event officials with determining, in their judgment, eligibility for participation in an event. The technical inspection does not in any way change the fact that the driver, the crewmembers, and the vehicle owner are ultimately responsible for the safety and operation of the vehicle and equipment. The participant agrees that participant is in the best position to know about the construction and operation of participant's vehicle, equipment, and clothing, and whether there has been compliance with all Drift Evolution rules, regulations and agreements, including but not limited to those contained in the Rulebook. Moreover, in the case of technical violations, the participant acknowledges, understands and agrees that the participant is charged with full knowledge of every component of participant's vehicle and that even if a third party has caused the participant's vehicle to be noncompliant, the participant will still be responsible. Disclaiming knowledge of the particular part or parts, or disclaiming knowledge of the rule or rules, or disclaiming responsibility for the actions of the third party, will not be defenses.

4. Tech Requirements

- Vehicle must be in good working condition and safe to operate.
- No vehicle may be higher than 6" when measured from the lowest point of the frame rails to the ground
- Vehicle may not have any fluid leaks of any kind. Vehicle must have a radiator catch can.
- No anti-freeze is allowed to be ran in vehicles. Water wetter is ok.
- Wheels must be securely attached using all lug nuts. Bearings and suspension joints must be tight and free of play.
- Vehicle battery must be securely fastened with no movement at all. (a bunji cord is not enough) All electrical connections must be securely fastened.
- Vehicle must have a front and rear towing apparatus (factory tow hook or aftermarket)
- Any holes in the firewall or transmission tunnel must be of the minimum size for the passage of controls and wires, and must be completely sealed to prevent the passage of fluids or flames from the engine compartment to the cockpit.
- No fuel lines may be running through driver's compartment.
- If coolant lines must be run through the driver's compartment, they must be covered in a waterproof and abrasion resistant material. (Example: metal plate, composite plate, primary line ran inside a secondary line.)

- Vehicle must have at least 1 working headlamp and tail light, if that vehicle is to run after sunset.
- Interior must be clean with no loose objects.
- Drivers must wear closed toed shoes while driving
- Helmets must be *full face* and DOT approved or better
- Steering wheel must be securely fastened using all possible hardware and free of play.
- Vehicle must have factory seat belts of a lap and shoulder type or a 4,5, or 6 point harness correctly installed. If you are using a harness refer to section 6
- Vehicle's doors must be able to be opened from the outside and opening mechanism must be clearly visible.
- Vehicle door's structure may not be modified in any way except to create room for roll cage. If roll cage is used refer to section 5.
- Tires must be in good condition. No cords/ metal banding may show.
- Vehicle must have an A,B,C rated fire extinguisher mounted in vehicle within drivers reach, secured by a metal bracket with a quick release.
- If you have a soft top convertible, you must have some form of factory roll over protection. Or (and preferably) a roll cage. See section 7 for minimum roll cage requirements.
- All Vehicles must have a front and rear towing apparatus. The hole in it must measure at least 2" and be a contrasting color to the car and easy to see for quick recoveries of vehicles. (*The longer it takes to get cars off the track and out of the way the less track time everyone else gets. Pleas be considerate of everyone's track time and experience.*)

5. Tech certification

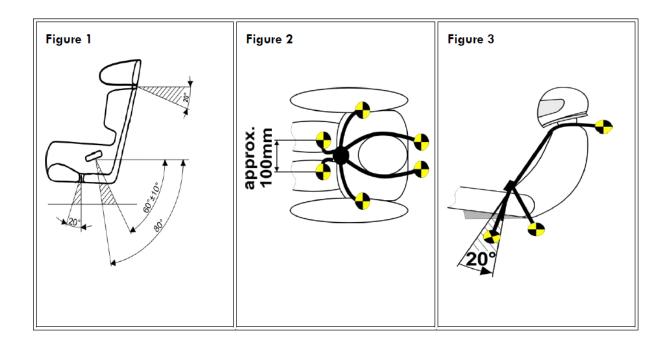
- Once your vehicle passes tech you will get either an "S" or a "T" on your windshield.
- Once you get your "S" or "T" the tech inspector will sign the tech sheet you filed out. then you can take it to the registration booth to get your drivers wrist band.
- An "S"- This means you are welcome to drive and practice as much as you want, and you can drive with up to 1 other driver on track to practice tandem.
- A "T" This means you are welcome to drive and practice as much as you want, and you can drive with 2 or more other drivers on track in tandem trains.

- The decision of whether you get an "S" or a "T" is up to the tech inspector and based on your understanding of tandem etiquette and experience level of driving with other drivers.
- If you get a "T" you are not obligated to go in tandem trains or even tandem at all for that matter. Remember it is always your decision who you tandem with. Make sure you only drive with people you trust and are comfortable driving with.
- If you get an "S" and you feel you are ready to drive in tandem trains, let the inspector know that you would like an audition. One of our officials will put you with a willing "T" driver to drive on track with you to make sure you have the capability and understanding to maintain a drift with multiple cars at once. It is a big responsibility to be in a train. So, keep that in mind. You will be expected to link the full track in one continuous drift while being predictable to chaise and keeping good proximity to the car in front of you. We want to create an environment where all drivers with a "T" on their windshield should be able to drive well and safely with any other driver with a "T" regardless if they have ever driven together.

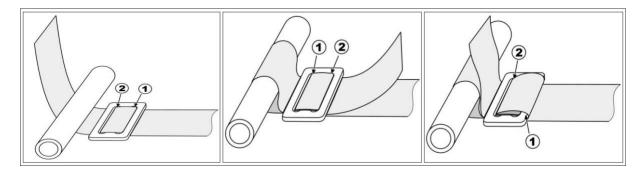
6. Harness Requirements

- Regardless of the date of manufacture, the safety harness shall be replaced if the webbing is cut/ frayed, if any of the buckles are bent/cracked, or at the direction of the tech inspector.
- The shoulder harness shall be mounted as closely behind the seat back as possible, not to exceed twelve inches (12"). The shoulder harness shall be above a line drawn downward from the shoulder point at an angle of no more than 20-degrees with the horizontal and shall not be above 0-degrees. (Figure 1) The shoulder straps shall pass through the seat back when the occupant is seated, without interference (up, down, or side to side), to the attachment points. (Figure 1).
- The lap belts shall be mounted rearward of the pelvis, between two lines drawn at 45-degrees, and 80degrees, below the horizontal with the optimum angle of 60-degrees (Figure 1). The lap belts shall pass through the seat, without interference, from the attachment points and should ride over the pelvis, just below the pelvic crest, to the buckle. The top of the buckle should be positioned at least 1-inch below the belly button. The lap belt attachment must allow the lap belt to pivot at the mounting point to prevent the webbing from being loaded at an edge when loaded and must pull on the hardware in plane.
- The minimum acceptable bolts used in the mounting of all belts end harnesses are SAE Grade 5.
- Where possible, seat belt, shoulder harness, and anti-submarine strap(s) should be mounted to the roll structure, or frame of the car. Where this is not possible, large diameter mounting washers or equivalent should be used to spread the load. Bolting through aluminum floor panels, etc., is not acceptable.
- The single or double anti-submarine strap(s) shall be attached to the floor structure of the car and have a metal-to-metal connection. Bolts through the floor pan must use a backing plate on the underside of the body. If the chassis does not have a steel floor pan, other provisions must be made to provide a steel plate or bar traversing the frame rails and transmission tunnel of sufficient strength to take a minimum load of at least 1,200lbs for each mounting point.
- All seat belt systems are to be mounted according to the manufacturer's instructions or to the SFI Guide to Seat Belt Mounting (Figure 2) If "3-bar" adjusters are used for a lap or shoulder belt, they shall be placed as close to the mounting points as possible and must be wrapped with the final loop (Figure 4).

Straps utilizing a hook with a spring-loaded clip, which attaches to an eyebolt, must use a cotter pin, or safety wire, through the small hole that prevents the clip from opening.



(Figure 4) The figure below is the preferred method for harness attachment to harness bar.



7. Roll Cages

7.1 General

The basic purpose of the roll cage is to protect the occupant in the unlikely event of the car turning over. It shall be designed to withstand compression forces from the weight of the car coming down on the rollover structure and to take fore/aft and lateral loads resulting from the car skidding along on its rollover structure.

7.2 Roll Cage Material

• Roll Cage Material must be Seamless SAE 1020 or 1025 mild steel tubing, DOM, and or chromoly. ERW tubing is not permitted. All roll cage tubing in the requirements listed below must be a minimum of 1.5in x .095. The minus tolerance for wall thickness should not be less than .010" below the nominal thickness.

7.3 Welding

- All roll cages must be based on a single Main Hoop of one (1) continuous length of tubing with smooth continuous bends and no evidence of crimping or wall failure. The radius of bends in the roll cage hoop (measured at centerline of tubing) shall not be less than three (3) times the diameter of the tubing. Welding shall conform to American Welding Society D1.1:2002, Structural Welding Code, Steel Chapter 10, Tubular Structures. Whenever D1.1 refers to "the Engineer" this shall be interpreted to be the owner of the vehicle. Welds shall be continuous around the entire tubular structure. All welds shall be visually inspected and shall be acceptable if the following conditions are satisfied:
- The weld shall have no cracks.
- Grinding down of welds is prohibited.
- Thorough fusion shall exist between weld metal and base metal.
- All craters shall be filled to the cross section of the weld.
- Undercut shall be no more than 0.01 inch deep.
- Aluminum bronze or silicon bronze welding technique is permitted, but extreme care shall be used in preparation of parts before bronze welding and in the design of the attaching joints.

7.4 Main Hoop

- The main roll hoop (behind the driver) shall extend the full width of the driver/passenger compartment and shall be as near the roof as possible with a maximum of 4 bends, totaling 180 degrees ± 10 degrees.
- The roll cage main hoop should start from the floor of the car and be attached to the chassis/unibody via Mounting Plate specifications.
- Diagonal lateral brace is a piece of tubing equal to the roll bar diameter, installed across the main hoop to prevent lateral distortion. This brace must attach to the driver side upper corner of the main hoop, not more than six (6) inches from the radius, and to the opposing leg, not more than six (6) inches from the base plate.

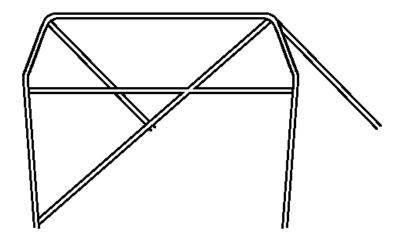
- A horizontal brace is a piece of tubing equal to the roll bar diameter, installed behind the driver's seat for the purpose of mounting seat belts. This tube shall be no higher than shoulder height and continue the full width of the main hoop, attached to both legs.
- Either the diagonal brace or the horizontal brace must be one continuous piece of tube, with the other attaching to it.
- Any number of additional reinforcing bars, gussets or supports is permitted within the structure of the cage.

7.5 Rear Hoop Supports

- The main roll hoop shall have two braces extending to the rear attaching to the frame or chassis.
- Braces shall be attached as near as possible to the top of the main hoop not more than six (6) inches below the top and at an included angle of at least thirty (30) degrees.
- No bends are allowed on rear braces.

7.6 Mounting Plates

- Each mounting plate shall be at least 0.125" thick
- Mounting plates must be fully welded to the structure of the vehicle
- Each mounting plate shall not be greater than 100 square inches and shall be no greater than twelve (12) inches or less than two (2) inches on a side. The mounting plate may be multi-angled but must not exceed these dimensions in a flat plane
- Whenever possible, mounting plates shall extend onto a vertical section of the structure (such as a rocker box or door pillar)
- Any number of tubes may attach to a single plate or to each other.



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Please always feel free to talk to any Drift Evolution staff member about any questions or concerns. REMEMBER TO HELP SUPPORT OUR SPONSORS WITHOUT THEM THIS SERIES WOULD NOT BE POSSIBLE.

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