



ANNUAL INSPECTION PREPARATION TIPS 2019

The Milwaukee Region Tech Inspectors want to help drivers get through their annual inspection as smoothly as possible. We have assembled this annual inspection preparation list to assist in this process.

The car's annual inspection is valid for one year from the date of inspection. The driver's safety equipment **does not** need to be inspected with the car, but it needs to be inspected within the current calendar year. The driver's safety equipment is included in this list for convenience.

This is not an all-inclusive list but does include the most common issues tech inspectors encounter. Please remember that you are responsible for reading and complying with the GCR, Fastrack updates, and event supplementary regulations.

Log Book

- Have the vehicle log book with the car. Make sure the number on the log book matches the number stamped in the roll cage of the car.
- Any issues noted in the log book must be corrected.
- Have both required up to date pictures in the log book.
- Locate the log book number and inspection hole on the roll cage. An inspection hole may not be drilled if an ultrasonic tester is used to initially measure the roll cage thickness which should be noted in log book.
- Have the original homologation certificate or letter of exemption available if required. A photocopy or picture is not acceptable.
- Have the shop manual available—and a means to view it if not printed—if required for the car class.
- Know the minimum weight for the car—how it is calculated for certain classes—and the current GCR spec page number.

Exterior

- The car is presented for annual inspection with race tires securely mounted.
- Body panels are secure, in good repair, and no exposed metal or primer is showing. Fenders cover the tire contact patch. Bring all the body panels along for the annual inspection.
- Glass headlights are taped. Brake/rain/tail light(s) function properly. Brake/tail lights are red and only covered with **transparent tape**. Strobing lights are **NOT** permitted except as rain lights on Formula and Sports Racing cars.

- Car Numbers are at least 8" high with a 1½" stroke and contrast with their background. The distance between numbers shall be as wide as the stroke of the numbers. Car Numbers are on the rear wing side plate of formula cars equipped with a rear wing—as large as possible if 8" high numbers don't fit. Any 3 digit numbers **MUST** start with the number "1". Metallic (reflective) numbers and class letters are prohibited.
- Car Class designations are on both sides of the car. Car Class designations are at least 4" high with a 1/2" stroke. No other class designations are displayed.
- **Summit Racing Equipment SCCA Road Racing** stickers are displayed on the front and both sides of the car. No other sanctioning bodies are displayed.
- OFF sticker indicates the location of the Master Switch if required. The off position of the switch should be indicated.
- Circle "E" sticker(s) indicates the location of an on-board fire system. **The circle "E" decal shall not appear on cars which only have a hand-held fire extinguisher.**
- The Minimum Weight of the car is displayed on each side of the car—these just need to be visible—for all classes except ASR, FB, FC, FE, FE2, FF, FM, FS, FST, FV, SM5, SR, SRF, and SRF3.
- Any car required to run a restrictor **must** display the restrictor size and type should be displayed near the minimum weight if possible.
- 2" ID tow eye or strap that does not dangerously protrude from the bodywork. Removable towing eye carried inside the car is not acceptable, except a tow bar for formula and sports racing cars. Faired in formula cars shall have access holes for insertion of a bar or strap. Making the towing eyes easy to locate either through color or an arrow indicating location is recommended.
- Windshields and rear windows have clips and straps installed if required. Lexan—if installed—is of the proper thickness and fastened properly.

Interior/Roll Cage

- Check roll cage configuration. Make sure all welds are complete. Make sure there are two door bars on each side of the car for production based and GT cars.
- Open wheel cars, make sure the front crush structure and side intrusion panels are installed and correct.
- Verify that there are no holes in the firewall.
- A scatter shield or chain guard is installed and of the appropriate thickness if required.

— Continued —



ANNUAL INSPECTION PREPARATION TIPS 2019

- Verify the exhaust system exit point is properly located.
- Catch tanks are proper sizes—at least 1 US pint for coolant and 1 US quart for oil—and are properly vented/rated.
- On-Board Fire System (9.3.22.A) required for all classes except T3, T4, STL, SM, & IT. On-Board Fire System must be securely mounted, display required information, and have at least two discharge nozzles. One nozzle must be located in the cockpit with the second nozzle located in either the engine compartment or over the fuel cell. Nozzles in all three locations are recommended. **If there is not a gauge on the bottle it must be removed and weighed without the valve assembly. Be prepared to remove any panels or the bottle as necessary to read the gauge or weigh the bottle.** Be sure bottles with a service date are current.
- Hand-Held Fire Extinguisher (9.3.22.B) may be used in T3, T4, STL, SM, & IT classes. Cars equipped with a Hand-Held Fire Extinguisher **MUST NOT** display the circle “E” decal and be securely mounted with quick release metal brackets.
- The Drivers Restraint Harness is correctly sized and installed. The harness is SFI 16.1 or 16.5 or FIA 8853/98 or 8854/98 and **NOT EXPIRED**. Make sure the SFI and/or FIA labels are visible. Harnesses are installed with SAE grade 5 or Metric 8.8 bolts if the manufacturers hardware is not utilized. Angle of harness mount is no more than 20° below shoulder.
- Driver's seat is one-piece bucket-type and properly mounted.
- If a head rest is separate from the seat the minimum size is 36 sq. in. by 1 in and the driver's helmet can not get hooked over the pad.
- Window net—if required—must drop down, must be properly mounted to the roll cage, and must be labeled **SFI 27.1 or FIA J253.11**. Dual acting window nets are acceptable. An inside net is highly recommended.
- Internal and/or external mirrors are secure.
- Ballast is the proper type, properly located, and properly mounted. Verify mounting location by class.
- Cameras larger than a 8 oz. must be secured on 2 different sides of the body. GoPro camera mounts have been known to break—a fishing lure leader can be used to help secure it.
- A Fuel Sampling Port/Valve/Device is required on **all** cars and must comply with Fuel Sample Acquisition section 9.3.25.B.
- If the car is equipped with a fuel cell it must be FIA FT-3 or higher rated or SFI 28.3. It must be properly located, have a positive locking cap, and have a bulkhead between it and the driver.
- The fuel cell vent must exit the car, not vent through roll cage, and verify if a check valve is required. Some formula cars have a minimum distance that the fuel cell vent must be from the cockpit opening.
- The Master Switch shall cut all electrical circuits but not an on-board fire system. Be prepared to demonstrate that the master switch functions properly and shuts the engine off. **It is advised to test the Master Switch prior to the annual inspection.**
- **All terminals** of the master switch **must be** insulated—tape is OK. Be prepared to remove any panels as necessary to verify that all terminals on the master switch are insulated.
- The battery must be properly located and securely mounted to the frame or chassis even if inside a marine container. Wet cell batteries in the driver compartment **must be** in a non-conductive container. The Positive terminal of the battery **must be** insulated. Be prepared to remove any panels as necessary to verify mounting and positive terminal insulation.

Driver's Safety Equipment

- Helmet is Snell SA2010/SAH2010 or newer or SFI 31.1, FIA 8860-2004 or later, or British Standards Institute BS6658-85 type A/FR. The driver's name **must be** on the helmet.
- Head and Neck Restraint System label is visible and **SFI 38.1** or FIA 8858-2002 or 8858-2010.
- Driving suit is FIA 1986 Standard or FIA 8856-2000 or **SFI 3.2A/1** with fire resistant underwear or **SFI 3.2A/5** or higher without underwear. An SCCA Club Racing patch must be sewn on the drivers suit (right chest preferred).
- The socks, shoes, and gloves are made from fire resistant material and in good condition.
- Balaclavas are required for drivers with facial hair and must be of fire resistant material.
- Arm restraints are required for drivers of open cockpit cars.

Engine/Electrical/Fuel System

- Make sure the engine compartment is clean and dry. Check for collected liquids, leaks, worn belts, and exposed wiring.