

ITCC TECHNICAL REGULATIONS 2019

Introduction

The series will run in accordance with the General Competitions Rules (hereinafter GCR) of Motorsport Ireland and Sporting Code of the FIA, and these rules which will constitute supplementary regulations. The series organisers reserve the right to amend or vary the Technical Regulations at any time before or during the series and further issue additional statements concerning the regulations from time to time subject to MI approval. All statements will be issued as a Bulletin by publishing on the website of MI (www.motorsportireland.com)

1. GENERAL

- 1.1** Where these regulations refer to the passenger compartment, or driver compartment, this refers to the whole of the interior of the vehicle – including the rear passenger area.
- 1.2** It should be understood that if it is not clearly specified that you can carry out modification then you should work on the principle that you cannot.
- 1.3** 1.2.5 Safety Requirements – See MI Yearbook – Safety requirements conform to Appendix “2” of the Motorsport Ireland Yearbook.
- 1.4** A Safety Rollover Cage must be fitted and comply to FIA or MI regulations.
- 1.5** A Master cut out switch operable from outside and inside of the car, which will isolate all electrics and kill the engine must be fitted.
- 1.6** Seat Belts complying with MI Appendix 2.7 must be fitted and in good condition.
- 1.7** A plumbed in fire extinguisher must be fitted as per Motorsport Ireland regulations.
- 1.8** Competition seat with FIA Approval mounted in accordance with FIA regulations must be fitted
- 1.9** Additional fasteners must be fitted on bonnet (not less than two) and tailgate (not less than two). The original locking mechanisms must be removed
- 1.10** Towing eyes must be fitted at front and rear and be clearly visible painted in red or Yellow. If a solid item they must not protrude beyond the bodywork of the car. It is recommended that wire or strap type towing eyes are used.
- 1.11** The bulkhead between engine and driver's compartment must be sealed against the passage of flame or fluid

2.0 ELIGIBLE VEHICLES:

- 2.1.** Class A 320bhp per tonne
Class B 250bhp per tonne
Class C 210bhp per tonne

All power figures above refer to horsepower measured at the Flywheel. **BHP Figures are the**

Maximum allowed in each class.

Power will be measured using the ITCC Approved Dyno Dynamics Rolling Road as per section 2.2 of these regulations.

If there is reason to doubt the correctness of placement in a particular class based on the results achieved and the lap times in particular, Eligibility Scrutineer & the Organisers **Technical Liaison** can check the minimum weight of any car after the end of qualifying session or race and fit the championship supplied power meter to the car for the next official timed session. If the power meter indicates that the power is not as per the rolling road power figure supplied by the driver at the start of the season, then the driver must present their car at one of the designated rolling roads before the next weekend of the championship to have their car tested. If the car does not comply with the BHP/Tonne for the class raced in all championship points scored up to that date will be removed.

Competitors should be aware that it is their entire responsibility to ensure that the vehicle complies with the relevant power to weight ratio at all times.

Any changes to the race car throughout the season, it is the driver's responsibility to inform either an ITCC committee member or the ITCC **Technical Liaison** in writing.

All drivers must provide a power figure for the vehicle being raced prior to attending their first race meeting and must be weighed accordingly.

To establish the minimum car weight, an indicated tolerance of 5 kg applies to the scales supplied by Motorsport Ireland TAG Minimum car weights will be applied to each car using the BHP figure supplied by the Driver. Minimum weight is measured including the driver.

2.2. ITCC Approved Dyno Dynamics operators:
Stone Motorsport, Old Grange, Monasterevin, Co Kildare.
AP Performance, Carnmore West, Co Galway

Street Racer, Bangor, Co Down

2.3. Vehicles must be constructed by a major vehicle manufacturer and be currently or previously available as a factory OEM vehicle with factory seating capacity for at least 4 people

No tube frame/ space frame vehicles or tube frame chassis extensions are permissible. Vehicles must have steel main pillars.

2.4. 4wd vehicles are not permitted. It is permissible to convert what was originally a manufacturer supplied 4wd car to run in 2wd, where this is done a maximum of two driveshafts to wheels are permitted, whether active or not.

2.5. It is permitted to fit additional triangulation and bracing of suspension turret/mounting points, as long as the modifications do not alter the appearance of the vehicle.

2.6. Vehicles must retain their original VIN (chassis number) and original plate, which must be clearly visible and readable. The VIN must be valid for the chassis it is attached to.

2.7. Touring cars from recognized FIA approved touring car series, such as BTCC, Seat Super Copa, WTCC, S2000, TCR chassis cars are NOT permitted.

2.8. No convertible vehicles are permitted.

2.9. Vehicles appearance must remain similar to that of the original vehicle.

2.10. Engine must be located in front of the driver's feet/pedals

2.11. The minimum ride height is 50mm, measured from the lowest point on the chassis to the ground.

2.12. It is permitted to modify the original bulkhead and gearbox tunnel to facilitate the fitment of alternative gearbox.

2.13. The Original floor must be retained and not modified, it is permissible to remove the spare wheel well and replace with a flat section of steel not less than 2mm in thickness.

This piece must be no more than 1000mm in any direction and no higher than the surrounding original floor.

Strengthening of the suspended parts of the chassis and bodywork through the addition of parts and/or material is allowed under the following conditions:

The shape of the reinforcing part/material must follow the surface of the part to be reinforced, having a shape similar to it and the following maximum thickness measured from the surface of the original part

- 4 mm for steel parts
- 12 mm for aluminum alloy parts.

For bodywork parts, the reinforcing

part/material must be on the area not visible from the outside. Stiffening ribs are allowed but the making of hollow sections is forbidden.

The reinforcing part/material must not have any other function than that of reinforcement

3.0. ENGINE, TRANSMISSION & DRIVETRAIN:

3.1 It is permitted to fit an alternative engine to the vehicle provided it complies with Regulations 2.7

3.2 Location

The engine must be installed in the original engine compartment and the crankshaft axis must be retained in the original orientation.

3.3 Vehicles must retain an exhaust system, complete with a silencer, which must be capable of passing a static 105db noise test, with the engine running at 2/3rd of the maximum rpm of the engine.

3.4 Oil/Water Cooling

Free

3.5 Exhaust Systems

Exhaust manifold are free. A silencer must be fitted, and the car must pass a noise test as per section 3.3 of these regulations. Exhausts must exit behind the driver.

3.6 ECU

FREE

3.7 Fuel delivery systems

FREE

3.8 Catch tanks for oil and water must be installed and securely fastened with the contents easily visible on inspection. Plastic Bottles are not Acceptable

3.9. The throttle mechanism must be in good condition and have an effective return spring. It is recommended to fit an additional return spring to the throttle mechanism.

3.10 It is NOT permitted to convert a front wheel drive car to rear wheel drive, or vice versa

3.11 Use of power aids such as turbos or superchargers is permitted but no nitrous oxide systems are allowed

3.12 Motorcycle engines are not permitted.

4.1. FUEL & FUEL SYSTEM

4.2. Vehicles must run on diesel or petrol pump fuel as per **Motorsport Ireland Guide lines.**

4.3. All fuel lines must be securely fastened at intervals of no more than 100mm throughout its length.

The fuel-line can be run through the car, but it must be a continuous (unbroken) metal pipe or braided hose and must be fitted on the passenger side of the vehicle. All other parts of the fuel system must have a firewall between the driver and equipment. The firewall must be sealed to prevent passage of fluids and fire.

4.4. All fuel lines and filling devices must be clean and sealed after vehicles are fueled to ensure no fuel can escape.

4.5. The original OEM fuel tank is

permitted, but it is also permissible to change this to an approved racing fuel tank. Dry break and bobble breathing systems from recognized manufacturers are permitted. If the fuel tank is housed within the driver's compartment it must be protected by a firewall.

4.6. The fuel tank filler neck should have a spillage collector that drains to the outside of the car.

5.1. STEERING, SUSPENSION & BRAKES

5.2. All suspension parts and wheel bearings must be in good condition.

5.3. All steering components are free.

5.4. Steering wheel must be of continuous construction in either a circle or D shape

5.5. The vehicle steering lock mechanism must be removed.

5.6. All brakes components are free with the exception of carbon discs and/or pads which may not be used.

5.7. The brake systems must be in good serviceable condition and no leaks of any kind are permitted.

5.8. An effective handbrake must be present, but the operating mechanism is free.

5.8 Any Suspension

Pickup/Mounting points may be moved within 25mm in any direction from the original pickup/Mounting point (It is permissible to move suspension pick up points on the chassis from their original manufactured position. **But by no more than 25mm in any direction.**)

5.9 It is permissible to change the rear suspension of a vehicle, originally equipped with either a torsion bar or solid rear beam type rear axle to that of an independent rear suspension system.

5.10 It is permissible to fit brake cooling ducts, these must be mounted within the front bumper of the car and not protrude more than 10mm from the bumper at the location they are mounted

6.1. TYRES

6.2. Tyre manufacturer and size are FREE

6.3. Tyre warmers are not permitted.

7.1. BODYWORK, WINDOWS & INTERIOR

7.2. It is permitted to replace original panels with GRP and/or Carbon Fiber materials, but the replacement panels must mirror the originals. Pillars and Roof must be metal.

7.3. With the exception of the front

windscreen which must be laminated glass, all other windows may be replaced with lexan materials. Where lexan is used the window must be securely held in place.

7.4. It is permitted to remove the dashboard and replace it with a bespoke design dash.

7.5. It is permitted to modify, lighten or exchange the doors for GRP and/or Carbon Fibre units. In such a scenario the roll cage must consist of dual side impact bars

7.6. Any additional equipment inside or outside the vehicle including electrical equipment must be securely mounted in place. In car cameras must be mounted securely and are Mandatory for all cars. Any such additional equipment must be fitted before scrutineering.

7.7. All doors, boot lids, bonnets and exterior openings must be serviceable from the outside, door handles and locking systems must be operational at all times from the exterior of the vehicle.

7.8. All bodywork must be secure and attached to the vehicle.

7.9. The driver's side window can be lowered, but It must have a window net fitted.

8.1. ELECTRICAL SYSTEM

8.2. At least two brake lights, front wipers and high intensity rear fog/rain light must be in good working condition. A windscreen demister fan or electrically heated front windscreen must be fitted and in working condition. Headlight glass must be protected against breakage by tape or security film. Headlights may be replaced by blank GRP mold's but must mirror the original and must have a forward-facing light attached or integrated into the blanks.

8.3. Vehicles must have battery isolators installed, which must be capable of being activated in the driver's compartment, by the driver when normally seated. In addition, the isolator must be capable of being operated remotely from the front window splash panel. On the passenger side (RHD Car) and clearly marked with an official sticker.

8.4. Batteries must be securely mounted, and all connections must be in a serviceable and clean condition. Positive terminals should be insulated. Negative leads should be braided or have yellow identifying marking. Batteries housed in the driver's compartment, must be securely mounted and be of dry cell type.

9.1. Seals

9.2. Any Drivers that are requested by **ITCC Technical Liaison/ Scrutineer** during the

racing season to be re tested on the ITCC approved Rolling Road as per 2.2 of these regulations Must present their car to the **ITCC Technical Liaison/ Scrutineer** to apply the Class tamper proof seals to the ECU and tuning ports, and in the case of a forced induction car also to the boost controller if it is not controlled by the ECU.