

Irish Touring Car Championship 2017

ITCC TECHNICAL REGULATIONS

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) (www.itcc.ie)

1. GENERAL

1.1a 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.

1.1b Competitors must agree to take part in the Official Prize Giving Ceremony.

1.1c. The sponsor decals supplied by the ITCC will at all times take precedence with regard to the placement on cars as indicated in the drawing attached, in cases of dispute the Scrutineer's decision concerning the precise location of the Series stickers will be final. Allocated race numbers to be placed on front doors as far forward as possible or rear passenger window as indicated in the below drawing.

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 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 conforming to MI Appendix 2.16.

1.5 A Hans type or similar Frontal Head Restraint Safety System is Highly Recommended by the organisers but NOT MANDATORY

1.6 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.

1.7 Seat Belts complying with MI Appendix 2.7 must be fitted and in good condition.

1.8 Fire Extinguishers complying with MI Appendix 2.6 (as required must be fitted, filled with permitted extinguishant and carry a current certificate.

1.9 Competition seat with FIA Approval mounted in accordance with FIA regulations must be fitted

1.10 Additional fasteners must be fitted on bonnet (not less than two) and tailgate (not less than two). The original locking mechanisms must be removed.

1.11 Towing eyes must be fitted at front and rear and be clearly visible painted in red or yellow and must have a red or yellow arrow pointing to the tow eyes. 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.

1.12 The bulkhead between engine and drivers compartment must be sealed against the passage of flame or fluid

1.13 All cars must have working head lights.

Headlights may be covered with vinyl or other material. An area measuring 2mm x 2mm must be left clear to assist in verify a working headlight bulb.

1.14 Any car which, in the opinion of the appointed scrutineer does not meet with these technical regulations will be excluded from the results and not receive any points or prizes for that round. The final decision regarding the eligibility of any car rests with the appointed eligibility scrutineer.

2.0 ELIGIBLE VEHICLES:

2.1 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.

2.2 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 drive shafts to wheels are permitted, whether active or not.

2.3 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.

2.4 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.

2.5 No convertible vehicles are permitted.

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

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

2.8 The minimum ride height is 50mm, measured from the lowest point on the car to the ground. Cars must be able to pass over a measured item without any part of the car making contact.

2.9 Original floor and bulkhead 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 the original panel 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

- 2 mm for steel parts

- 2 mm for aluminium 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 are forbidden. The reinforcing part/material must not have any other function than that of reinforcement

2.10 Touring cars from recognised FIA approved touring car series, such as BTCC, Seat Super Copa, WTCC, S2000 chassis cars are permitted provided they are in possession of FIA homologation papers and that the vehicle meets the regulations as stipulated in these papers. They must run to the original series specification. The following ITCC regulations will overrule homologation papers: 2.1, 2.2, 2.5, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 5.5, 6.2, 6.1, 6.3

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 and 3.2

3.2 Engine

ECU is free for all classes.

Class A Normally aspirated and forced induction cars. A Maximum of 4050cc is permitted for normally aspirated cars. A maximum of 2550cc with a maximum of 5 Cylinders is permitted for forced induction cars. All other modifications are free.

3.2.1 Maximum BHP output for Class A Cars is 350bhp. The organisers can, at their sole discretion, demand that any car be subjected to a power output test at a rolling road facility of their choosing at any point in the season. Once a car is chosen for power output testing it will be sealed as deemed necessary by a Motorsport Ireland designated scrutineer. ECUs, tuning ports, diagnostic ports and any other component of the vehicle deemed fit must be accessible by the scrutineer s for sealing purposes. Any car sealed by the scrutineer must be presented by the driver/entrant - at their cost – to the designated rolling road facility within 10 working days. Only figures obtained by the designated rolling road will be considered admissible

3.2.2 Class B engine size is limited to 2200cc.

3.2.3 Maximum BHP output for Class B Cars is 250bhp. The organisers can, at their sole discretion, demand that any car be subjected to a power output test at a rolling road facility of their choosing at any point in the season. Once a car is chosen for power output testing it will be sealed as deemed necessary by a Motorsport Ireland designated scrutineer. ECUs, tuning ports, diagnostic ports and any other component of the vehicle deemed fit must be accessible by the scrutineer s for sealing purposes. Any car sealed by the scrutineer must be presented by the driver/entrant - at their cost – to the designated rolling road facility within 10 working days. Only figures obtained by the designated rolling road will be considered admissible

Class B cars must retain the same engine manufacturer as the model being raced. The engine may be from a different model from that manufacturer but MUST NOT exceed the maximum engine capacity (cc) available from the model of car being raced.

3.3 Location

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

3.4 Transmission

Class A it is permitted to fit a sequential type aftermarket gearbox but must carry an additional 30kgs of weight, this will be imposed over standard min weights. Cars that are fitted with sequential/ semiautomatic gearboxes from the factory will carry no additional weight. Class B Cars are not permitted to fit after market sequential gearboxes, Gear engagement type must remain as OEM for model

3.5 Exhaust

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.

3.6 Air Intake

Class A Normally aspirated cars:

Intake is free.

Class A forced induction :

Forced induction is allowed and equipment is free

Class B Intake Manifold and throttle body are free. Independent Throttle Bodies are only permitted where OEM to the engine or the engine is less than 1650cc Non variable camshaft timing. Air filter is free.

Class B cars that are forced induction the turbo or supercharger must be OEM to engine and remain standard and unmodified.

3.7 Oil/Water Cooling

Free

3.8 Exhaust Systems

3.8.1 Class A exhaust manifold is free.

3.8.2 Class B Exhaust Manifold is free.

3.8.3 A silencer must be fitted and the car must pass a noise test as per section 3.5 of these regulations. The exhaust must exit behind the rear axle.

3.9 Ignition Systems

FREE

3.10 Fuel delivery systems

FREE

3.11 Catch tanks for oil and water must be installed and securely fastened with the contents easily visible on inspection.

3.12 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.

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

3.14 Use of power aids such as turbo's or superchargers is permitted but no nitrous oxide systems are allowed

3.15 Motorcycle engines are not permitted.

4.0. FUEL & FUEL SYSTEM

4.1. Vehicles must run on diesel or petrol pump fuel as per FIA standards

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

4.3 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 fuelled 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 recognised 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.

5.0 STEERING, SUSPENSION & BRAKES

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

Class A: Suspension arms and bushings are free.

Class B must use OEM/Standard suspension arms and components. Bushings can be replaced with polyurethane type or direct replacement spherical bearings.

5.2 All steering components are free.

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

5.4 The vehicle steering lock mechanism must be removed.

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

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

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

5.8 Class A it is permissible to move suspension pickup points on the chassis from their original manufactured position, but by no more than 25mm in any direction. Coil-over dampers and springs are free.

Class B it is not permitted to change or replace suspension sub frames or move suspension arm pickup points. The fitting of traction bars or any other extra pickup points is NOT permitted.

It is permitted to fit camber adjustable suspension arms or adjustable damper top mounts. Height adjustable Coil-over type dampers and springs are free.

5.9 Class A only: 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

6.0 TYRES & WHEELS

6.1 Tyre Manufacturer is free in all classes.

Class A cars must race on the tyres they qualify on. Tyres must be presented to the class appointed scrutineer in parc ferme after qualifying on race weekends. It is permitted to nominate 1 spare tyre

per day in case of a puncture or damage sustained during a timed session. Any other replacement tyres fitted out-side of the 1 nominated spare tyre unless deemed to be unsafe by a scrutineer, will be in breach of ITCC Technical regulations and will result in exclusion from the session.

Wet weather tyres:

Are FREE and carry no restrictions.

6.2. Tyre Warmers, space heaters or any similar devices for heating or softening the tyre compound is not permitted at any time. The use of any chemical mixture that is placed in the vicinity of, or applied to the tyre that would restructure the compound of the tyre is also prohibited.

6.3 Tyres & Weights

6.3.1 Class A Tyre Manufacturer is free.

6.3.2 Maximum Rim/Wheel Size: it is permitted to use any Rim/Wheel size up to 18". There is no limit of wheel width
6.3.3 Max Tyre Width is 245mm. For eligibility purposes the width as referenced by the size stamp on the tyre will be considered as the width.

6.4 Class A Weights:

All weights include the driver and car as it finishes an official timed session or race.

6.4.1 Normally Aspirated weights:

1000cc – 1350cc Minimum weight 520kg
1351cc – 1650cc Minimum weight 720kg
1651cc – 1850cc Minimum weight 855kg
1851cc – 2050cc Minimum weight 1000kg
2051cc – 2550cc Minimum weight 1100kg
2551cc – 3050cc Minimum weight 1200kg
3051cc – 4050cc Minimum weight 1275kg

6.4.2 Forced Induction weights:

1000cc – 1350cc Minimum weight 840kg
1350cc – 1650cc Minimum weight 1020kg
1656cc – 1850cc Minimum weight 1150kg
1850cc – 2050cc Minimum weight 1225kg
2050cc – 2550cc Minimum weight 1350kg

Class organisers reserve the right to amend the above weights and the weights of specific cars if they deem fit.

6.4.3 Rotary Engine Car Weights: The capacity of the rotary engine will be multiplied by 1.5 and the resulting figure will be used as the capacity to determine the weight as per 6.4.1
Example a 1300cc rotary engine is deemed to be 1950cc and the minimum weight (as per 6.4.1) is 1000kg

6.4.4 Class A cars that fall into section 2.10 of these regulations must run 1450kg minimum weight

6.4.5 Class B Weights:

Cars in excess of 1650cc – 1000kg
Cars below 1650cc – 850kg
Forced Induction Cars (any capacity)– 1100kg

6.5 It is only permitted to use "MI Tyre List 1A" tyres. Only tyres named on this list may be used. Tyres not named in the "MI Tyre List 1A" must be submitted for approval by the

championship organiser at least 7 days before a race meeting.

In addition to the above named tyre list ITCC Organisers have added the following type of tyre:

Yokohama AD08-R

6.6 Maximum tyre width for production class is as follows

15" tyre – 205

16" tyre – 215

17" tyre – 225

18" tyre - 235

For eligibility purposes the width as referenced by the size stamp on the tyre will be considered as the width

6.7 Tyres may not be cut or altered in any way from that supplied by the manufacturer. No tyre may be buffed, re-trimmed, faced or by any mechanical or hand held device whatsoever.

6.8 There will be no tolerance on minimum weights as per GCR. The only weight recognised is that generated by the official scales used by the appointed scrutineer.

6.9 No aluminium wheel studs are allowed

7.0 BODYWORK, WINDOWS & INTERIOR

7.1 Pillars must be metal. It is permitted to replace original panels with GRP and/or Carbon Fibre materials, the replacement panels must mirror the originals when viewed from a "side on" perspective. Flaring of arches is permitted.

7.2 The front windscreen must be laminated glass, with the exception of polycarbonate where it is only permitted once it has been passed by the scrutineer. All other windows may be replaced with lexan materials. Where polycarbonate is used the window must be securely held in place.

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

7.4 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.

7.5 Any additional equipment inside or outside the vehicle including electrical equipment must be securely mounted in place. In car cameras can only be used after permission has been granted by Motorsport Ireland and cameras must be mounted securely. Any such additional equipment must be fitted before scrutineering.

7.6 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.

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

7.8 The driver's side window can be lowered, but by no more than 2", a mandatory window net must be used as per Motorsport Ireland Appendix 2.24.

7.9 **Class B** Vehicle silhouette must remain as original. Rear Spoilers must be OEM type. Front air dam type splitters are not permitted. It is permitted to fit an aftermarket front lip and side

skirts. No other modifications are permitted to the body work of the car. Any replacement panels must be an exact replica of the OEM part being replaced.

8.0 ELECTRICAL SYSTEM

8.1 At least two brake lights, headlights, front wipers and high intensity rear fog/rain light must be in good working condition. **It is recommended that a third high level brake light is fitted.** 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. See 1.13.

8.2 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.

8.3 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 drivers compartment must be securely mounted in a sealed and insulated box.

9.0 FIREWALLS

9.1 There must be a firewall between the engine bay and the passenger compartment capable of preventing the passage of fire or liquid. Larger holes should be covered by metal plates or fibreglass. Smaller holes can be fitted with bolts, rivets or fireproof mastic. If the standard bulkhead has no unfilled holes in it, then it is deemed a satisfactory firewall.

9.2 If the boot contains any of the fuel system then it must be separated from the passenger compartment with a firewall.

ANY CARS FOUND IN BREACH OF THESE TECHNICAL REGULATIONS WILL BE EXCLUDED FROM THE EVENT RESULTS AS PER MI GCR'S AND SUBJECT TO PENALTIES AS PER ITCC SPORTING REGULATIONS.