



The Federation of Motor Sports Clubs of India

2016

**FMSCI 4 Wheeler Technical Regulations
(Indian Touring Cars)**

Member of



Federation Internationale
de l' Automobile



Federation Internationale
de Motocyclisme



Indian Olympic Association

- a) Upto 1799 cc
- b) Above 1800 cc upto 2200 cc
- c) Two classes of ITC can be run, one with cubic capacity restricted to 1799 cc and 2nd category 1800 cc to 2200 cc. The events may be run concurrently for both the classes.

All modifications are forbidden unless expressly authorised by the regulations specific to the group as mentioned below.

Article 1	Eligible Vehicles
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- 1.1 Any Vehicles manufactured / Assembled in India and licensed for use on public roads only.
- 1.2 The engine and the power train cannot be shifted from the front to the rear or vice versa.
- 1.3 Space frame type of chassis with body bolted on is NOT permitted . The original subframe cannot be removed . The original subframe can be modified to accommodate brackets, mounts for suspension, engine, gearbox etc . Additional frames of any kind can be bolted / welded on to strengthen , or to locate suspension arms and components thereof.
- 1.4 Drilling is allowed for weight reduction.
- 1.5 Rear spare wheel well can be removed.

Article 2	Weights
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- 2.1 The minimum weight of the cars with water, oil, fuel and the driver (Wearing Racing gear and Helmet) shall be the declared cubic capacity of the engine divided by 1.60. (Eg. 1300cc / 1.60 = 812 kg. rounded down to nearest kg).
- 2.2 In order to maximize equality of performance, the FMSCI reserves the right to adjust the minimum weight of a class.
- 2.3 These minimum weights must be respected at all times during the event.
- 2.4 It is permitted to complete the weight of the vehicle by one or several ballasts, provided that they are safely secured, visible and approved by the scrutiny. Holes in the mounting points must be provided for sealing.
- 2.5 The organisers have the right to weigh the cars at any time during the event.
- 2.6 Failing to meet the required weight regulations will result in exclusion of the relevant car.

Article 3	Engine
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- 3.1 The Engines generic to the make of the donor chassis from the same family of the manufacturer only can be used, e.g. an esteem can be fitted with any Maruti engine only. Cylinder Head with Block as a unit or individually may be used. Internals are free but the crankshaft and connecting rods are limited to be made out of steel and no exotic materials such as Titanium or carbon fibre allowed for these components.

In principle only 2 engines may be used per season. The spare engine may be fitted to another car or kept separately as a spare engine. It is the competitors choice on whether the scrutiny is done before the start of the season or during or after the season. In any case the engines shall be sealed and only cars with sealed engines will be allowed on the track.

The penalties for the third or additional engines shall be specified and detailed in the supplementary regulations for the individual race series. The grid penalty will also be specified in the supplementary regulations. For whatever reason if the sealed engine is removed from the car which was used for the races the same should be handed over to the scrutineer immediately after the races on the same day. This procedure will also be detailed in the supplementary regulations.

- 3.1 (a) All modifications are permitted to the engine.

3.3 Cylinder Head

- 3.3.1 All modifications are permitted to the Cylinder Head including addition and removal of material.

Modifications such as drilling, welding, larger valves, machining, porting, manifolding etc are free. Only the donor engine including the cylinder head may be used. For example: the esteem engines with imported dual overhead cams are not allowed. Any sub assembly /assembly which is available from the donor engine from a car marketed in India can be used.

3.4 Compression Ratio

The Compression Ratio is free

3.5 Ignition & ECU

Free

3.6 Flywheel and clutch assembly

Free

3.7 Induction

Any naturally aspirated engines only ex. Carburetor, Fuel Injection. Cold Air Intakes are allowed FROM ANY PLACE. Turbo Chargers / Super Chargers are not allowed. Use of NOS is not permitted.

3.8 Exhaust

Free

3.9 Lubricants

Free. Dry sump lubrication is permitted.

3.10 Cooling System

Free

Article 4 Engine and Gearbox Mountings and Linkages

Adaptor plates and modification to output flanges, drive shafts hubs and other attachments and spaces free. Engine mount and gear box mount free.

Article 5 Braking System

Free, but must be dual circuit brakes.

Article 6 Steering System

Free

Article 7 Transmission

Any Racing Gear box is permitted. Mechanical Shift mechanism including sequential shift mechanism are allowed but electronic assistance/control selection not allowed. The internals are completely free. LSD's are allowed and the type, make and functions is free. Modification to Shift mechanism permitted. No microprocessor based mechanism or electrical or electro magnetic solenoids can be used. GPS based command module not permitted. Carbon fibre axles not permitted.

Article 8 Suspension

- 8.1 Free. Ride height free. Ground clearance must be such that the bodywork does not touch the ground when two tyres on the same side of the car are deflated
- 8.2 Shock absorbers 2 way damping to control bump and rebound only. Complex Hi-speed/slow speed controlling not allowed. GPS controlled and manipulated shock settings not allowed as also electronic manipulation and control. Mechanical / Hydraulic control or selection of settings on the fly allowed. Adjustments can control only one parameter of bump and one parameter of rebound.

Article 9 Rims and Tyres

9.1 Tyres

Specified by the Organiser.

9.2 Rims

Free

Article 10 Fuel / Fuel Tank

- 10.1 Only petrol may be used. Only fuel available from commercial petrol pumps is permitted. No top fuels allowed. Nitrous oxide Injection not allowed.
- 10.2 The fuel tank may be modified / altered or be newly made with alternate materials but must be placed at the original location. The Fuel filler must be at the original location. The spare wheel well behind the fuel tank must adequately protect the cockpit from spillage / leakages if the same has been altered or removed.

Article 11 Safety Equipment

- 11.1 As per FMSCI Group N Technical Regulations (Art.253). Use of AFFF plumbed fire extinguisher system is recommendatory.

Article 12 Bodywork (Interior and Exterior)
12.1 Interior

- i. The use of a fixed back-with headrest-securely mounted seat is mandatory. FIA homologated racing seats are mandatory.
- ii. The fitment of a 5-point harness with a 5-point mounting or more point's harness with turn buckle is mandatory. FIA homologated harness is mandatory.
THE TECHNICAL DELEGATE (in his absence the Chief Scrutineer) IS THE FINAL AUTHORITY ON THE CONDITION AND SAFETY OF THE SEATS AND SEATBELTS USED
- iii. The passenger seat and rear seat(s) may be removed.
- iv. The removal of soundproofing, insulating material and carpeting is permitted.
- v. The steering wheel is free. The locking anti theft system device must be inoperative.
- vi. Extra gauges or meters are permitted.
- vii. Door pads & dashboards may be removed.
- viii. Spare wheel & AC blower units may be removed.
- ix. Scoops/Air vents can be incorporated anywhere on the body work.
- x. Rear wings, front skirting, side skirting are permitted. Change of bumper shape is permitted.
- xi. Body work modifications are permitted to accommodate larger wheel and tyre size. No portion of the tyre should be visible when viewed from the top.

12.2 Exterior

- i. Only the rear doors, front passenger door, front bonnet, front fenders and the rear boot may be made of fiberglass or carbon fiber. In place of the rear doors, a fiberglass / carbon fiber filler section may be securely fixed. Driver door can be of fiber glass if side impact cage is installed in the cars roll cage assembly. Rear windscreen and door glasses may be replaced with clear Perspex. Original bumpers may be replaced by Fiberglass bumpers.
- ii. Headlights can be removed. However the opening must be covered with a fibre glass / metal plate and be safely secured, unless used as air intake ducts.

- iii. No part of the car must touch the ground when all the tyres on one side are deflated. This test shall be carried out on a flat surface under race conditions (occupants on board).

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Article 13 Driver Equipment

- 13.1 All drivers must be equipped with any FMSCI or FIA race approved fire retardant race suit, gloves and boots. FIA Approved Helmets are mandatory.
- 13.2 The driver equipment and helmet must be presented to the series scrutineers or race officials for eligibility.
- 13.3 Drivers will be required to wear safety attire during all practices and races.
- 13.4 HANS device is mandatory.

Article 14 Data Acquisition

Data acquisition permitted provided Live Telemetry is not used. Onboard cameras permitted and if used should be made available to Stewards on demand.

Article 15 Roll Cages

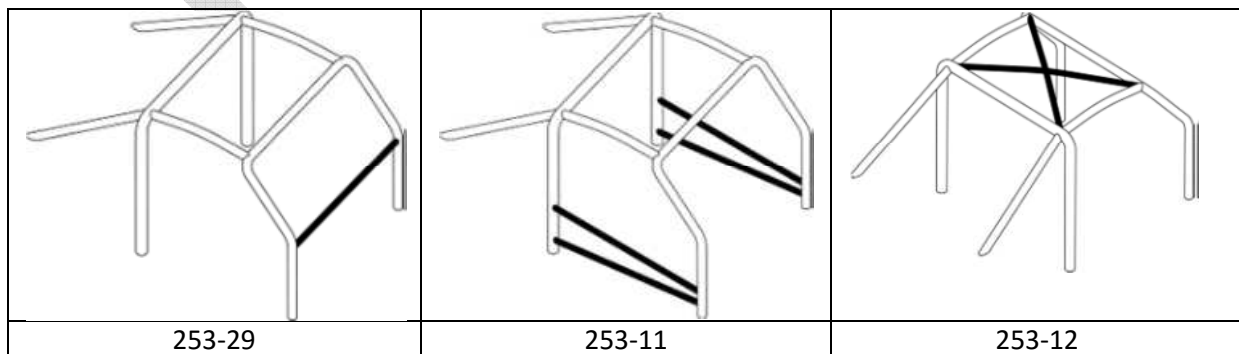
Roll Cages:

Cold drawn seamless unalloyed carbon steel tube (Containing a maximum of 0.3% of carbon) with a minimum tensile strength of 350 N/mm²

The minimum dimensions being 45mm X 2.5mm or 50mm X 2mm.

The basic minimum structural requirement as per Drawing 253-29 with side impact bars as in Drawing 253-11 and roof reinforcement Drawing as in 253-12

for Cars built before 2014, it is sufficient to have one cross bar above Drivers Head



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