



The Federation of Motor Sports Clubs of India

2017

**Technical Regulation
for
Indian Junior Touring Cars (TC-2)**

Member of		
		
Federation Internationale de l' Automobile	Federation Internationale de Motocyclisme	Indian Olympic Association

2017 Specific Technical Regulations for Indian Junior Touring Cars (TC-2)

The following Articles of 2017 FMSCI Appendix J is applicable

Art.251 – Classification and Definitions

Art.252 – General Prescriptions for Production Cars (Group N), Touring Cars (Group A)

Art.253 – Safety Equipment (Groups N, A)

Art.254 – Specific Regulations for Production Cars (Group N)

Art.255 – Specific Regulation for Touring Cars (Group A)

It is permitted to use after market replacement parts as long as such parts are in conformity with the homologated parts (including of Optional Variants in Group N) in ALL ASPECTS except the brand name. Such parts should have no additional functions relative to the original parts.

Series Part (SP)

Series Part being original parts or replacement parts identical to the original parts as fitted to the car / engine at the time of manufacture or subsequently replaced due to use or accident. All such parts shall be available through the original car manufacturer's dealer network. All relevant specifications shall be referenced from the manufacturers' official data or applicable FIA/FMSCI homologation form or TDF form.

Free Part (FP)

Free Part being parts that may be freely sourced. Such parts may be removed or replaced with another part on condition that the substitute part has no additional function relative to the part it replaces. These parts may have other conditions imposed under these technical regulations.

Classes

Up to 1200cc

Above 1201cc up to 1600cc

Eligible of cars:

Only 2010 and later Manufactured Cars are allowed

1.1 Engine

Re boring of 0.5mm maximum is allowed in relation to the original bore without this leading to the capacity class limit being exceeded.

2.1 Piston

Free part

The distance between Gudgeon Pin centre to Top of the Piston should remains as per Homologation / TDF.

Forged Piston not allowed.

Minimum weight of the piston remains as per Homologation / TDF.

3.1 Compression Ratio

The Compression Ratio may be modified, If the car is homologated with higher rate, It must be modified so as not to exceed 10.8 +0.2 : 1.

Planning of the Cylinder head is allowed to achieve Compression Ratio.

4.1 Cylinder Head

Cylinder head Porting is allowed but adding of materials is not allowed.

5.1 Connecting Rod

Oil Squirters are allowed.

6.1 Braking System

No modification permitted.

Handbrake: Fly-off hand brake is permitted.

Brake Pads are Free but original shape and Dimension to be maintained.

Brake Fluid Free

7.1 Gasket

Free

8.1 Camshaft

Standard

9.1 Lubrication

The fitting of an oil radiator outside the bodywork is only allowed below the horizontal plane passing through the hub in such a way that it does not protrude beyond the general perimeter of the car seen from above as it stands on the starting line, without modifying the bodywork.

Fitting an oil radiator in this manner does not allow the addition of an enveloping aerodynamic structure.

The fitting of baffles in the oil sump is authorized.

10.1 Safety

2017 FMSCI Safety Regulations (Article 253)

Fire Extinguisher Systems Mounted

The minimum Quantity of Extinguishant for system mounted must be 3kg.

Manual Extinguishers

Minimum Quantity of Extinguishant:

AFFF	2.4 liters
FX G-TEC	2.0 kg
Viro 3	2.0 kg
Zero 360	2.0 kg
Powder	2.0 kg

Fire Extinguishers to be rigidly fastened with a quick release clamps (minimum 2 nos.) fitted in an easily accessible and a visible position. The mounting bracket of the fire extinguisher must be bolted to the floor with a bolt of minimum 10 mm diameter

Protective Padding

Where the occupant's bodies could come into contact with the safety cage, flame retardant padding must be provided for protection.

Rear View

Reward visibility must be ensured by two external rear-view mirrors (one on the right and one on the left).

An inside rear view mirror is optional

11.1 Intake Manifold

Free

But the Mounting points of the Intake Manifold should be same as OE.

Fitment dose not entail the modification of other components, (Ex. Fire wall & Bonnet).

12.1 Throttle Body

Number has to be respect to the Homologation / TDF.

Diameter of the Throttle Valve must be OE.

Vehicle equipped with Motorized Throttle body may change to mechanical Throttle body vise versa.

13.1 Exhaust

Free

Fitment dose not entail the modification of other components.

The Exit of the Exhaust pipe shall be at the Rear of the Car below the Bumper.

The noise level must respect the stated maximum prescribed by the ASN where the car competes.

14.1 Gear Box

Gear Box housing must be OE

Gear Ratio Free

Final Drive Ratio Free

Mechanical type Limited Slip Differential (LSD) is authorized provide that it can be fitted in series Housing.

Gear selecting Grid pattern on series model be retained.

Welding and Adding of Materials not allowed.

15.1 Electronic Control Unit (ECU)

Free Part

Modification of the Wiring Harness must be within 10 inches from ECU connector.

Additional Sensors and Actuators not permitted.

16.1 Weight

The minimum weight of the cars will be "cc" divided by a constant which is **1.3 for 1200cc and 1.65 for 1600cc** WITH DRIVER. This is the real weight of the car WITH DRIVER.

All the liquid tanks (lubrication, cooling, braking, heating where applicable) must be at the normal level foreseen by the manufacturer, with the exception of the windscreen wiper.

17.1 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. Spare wheel & AC blower units may be removed.

18.1 Exterior

- i. Only the front bonnet, front fenders and the rear boot/ Tail gate may be made of fiberglass or carbon fiber.
- ii. Headlights can be removed. However the opening must be covered with a fiberglass / metal plate and be safely secured.

Fiberglass Specification

Fiberglass must be minimum of 3mm thickness.

Fire Retardant Resin (FRR) must be used in Fiberglass making.

Ribs in the Fiberglass bonnet is recommended.

THE TECHNICAL DELEGATE (in his absence the Chief Scrutineer) IS THE FINAL AUTHORITY ON THE CONDITION, STRUCTURE AND SAFTY OF THE MODIFIED PARTS.

19.1 Roll Cage

Basic Structure

The basic structure must be made according to one of the following designs :

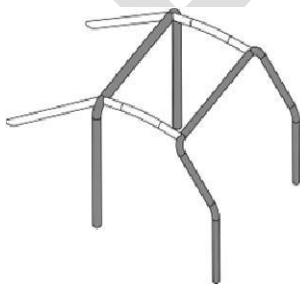
1 main rollbar + 1 front rollbar + 2 longitudinal members + 2 backstays + 6 mounting feet (Drawing 253-1)

or

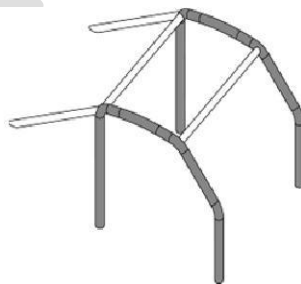
2 lateral rollbars + 2 transverse members + 2 backstays + 6 mounting feet (Drawing 253-2)

or

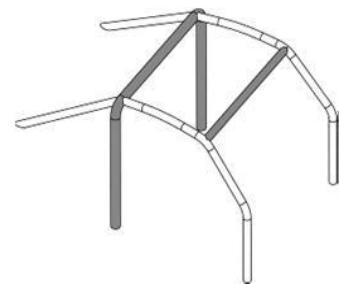
1 main rollbar + 2 lateral half-rollbars + 1 transverse member + 2 backstays + 6 mounting feet (Drawing 253-3)



253-1



253-2



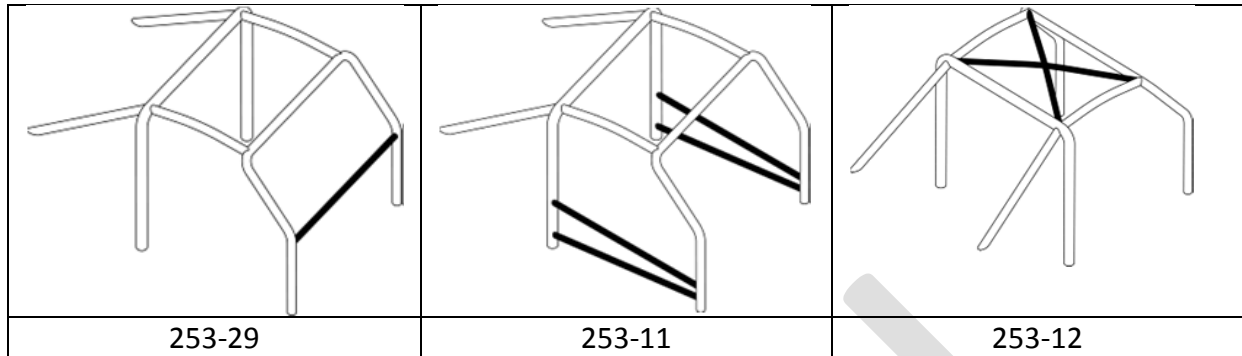
253-3

Compulsory members and reinforcements

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. (Single Cross member is also allowed in Drawing 253-12).



20.1 Tyre

Maximum of 15 inch is allowed
Specified by the Organizer

21.1 Suspension

2 way damping is permitted

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).

22.1 Ballast

It is permitted to complete the weight of the car by one several ballast provided that they are strong and unitary blocks, fixed by means of tools with the possibility to fix seals, placed on the floor of the cockpit, visible and sealed by the scrutineers.

Note : Other than the modifications permitted expressly above should follow 2017 Group N Technical Regulations FMSCI.