



The Federation of Motor Sports Clubs of India

2018

Technical Regulation

for

Indian Junior Touring Cars (TC-2)

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

2018 Specific Technical Regulations for Indian Junior Touring Cars (TC-2)

The following Articles of 2018 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)

Any modifications are forbidden unless expressly authorized by the regulations specific to the group as mentioned below.

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.

Eligible Vehicles

Any large scale series production Touring car manufactured / assembled in India.
Only vehicles with Homologation / TDF (Technical Data Form) are allowed.
Only 2010 and later sold cars are allowed.

Classes

Up to 1200cc
Above 1201cc up to 1600cc

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.

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 Cylinder Head

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

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 Piston

Free part

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

Forged Piston is allowed.

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

5.1 Connecting Rod

Oil Squirters are allowed.

6.1 Gasket

Free

7.1 Camshaft

Standard

8.1 Engine & Gearbox Mounting

Engine and Gearbox Mount material Free.

Not their Numbers.

9.1 Throttle Body

Number has to be as per the Homologation / TDF.

Diameter of the Throttle Valve must be OE.

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

10.1 Intake Manifold

Free

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

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

11.1 Exhaust

Free

Fitment does not entail the modification of other components.

The exit of the exhaust may be on the right or left side of the car, behind the mid-point of the wheelbase and below the door sill.

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

12.1 Gearbox

Gear Box housing must be OE

Gear Ratio Free, Synchronized or Non Synchronized (Dog Box)

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 to the Gearbox housing.

13.1 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.

14.1 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

Brake Hoses Braided hoses are allowed.

15.1 Suspension

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).

Front and Rear suspension top mount - fitting of uniball joint is permitted and modifications required in the strut tower to accommodate the uniball joint may be allowed.

Front Suspension Top mounts Free

Camber and Caster can be modified (camber/caster change only through top mounts)

3 way dampers are permitted - (One way, two way and three way dampers are allowed)

16.1 Tyre

Maximum of 15 inch is allowed

Specified by the Organizer

17.1 ECU

Free Part

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

Additional Sensors and Actuators not permitted.

18.1 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.

19.1 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.

20.1 Safety Equipment

2018 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

21.1 Roll Cage**Basic Structure**

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

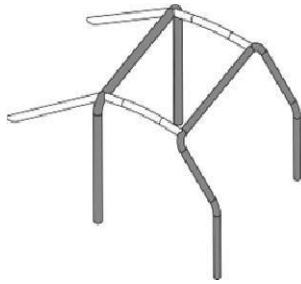
1 main rollbar + 1 front rollbar + 2 longitudinal members + 2 backstays + 6 mounting feet (Drawing 253-1)

or

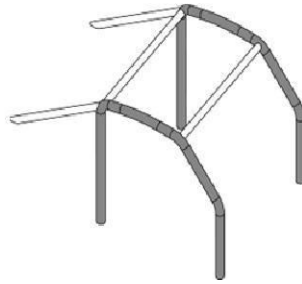
2 lateral rollbars + 2 transverse members + 2 backstays + 6 mounting feet (Drawing 253-2)

or

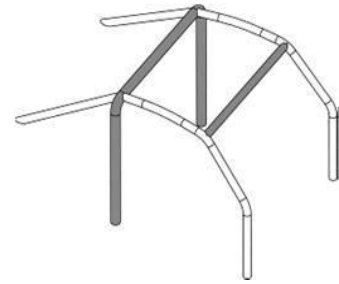
1 main rollbar + 2 lateral half-rollbars + 1 transverse member + 2 backstays + 6 mounting feet
(Drawing 253-3)



253-1



253-2



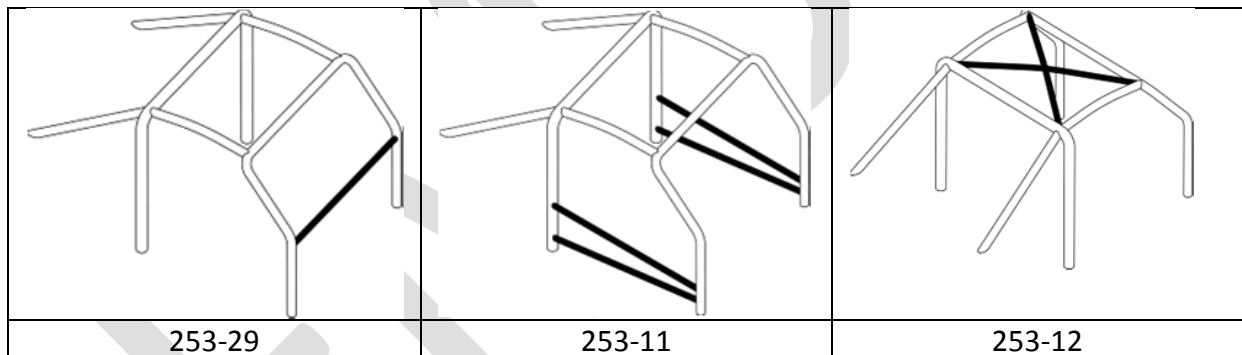
253-3

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).



22.2 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 Specific Regulations for Production Cars Group N 2018.