



The Federation of Motor Sports Clubs of India

2018

**Technical Regulation
for
Esteem Cup (TC-5)**

Member of



**Federation Internationale
de l' Automobile**



**Federation Internationale
de Motocyclisme**



Indian Olympic Association

2018 Specific Technical Regulations for Esteem Cup (TC-5)

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)

Changes to the above Articles specific to 2017 Esteem Cup Car are reproduced below:

1.1 Engine

Maruti 1000 and Maruti Esteem cars shell and fitted with Maruti Esteem MPFI engines only.

Maruti Zen, Esteem and Swift Blocks may be used as long as the same dimensions of the homologated Esteem block are maintained.

2.1 Safety

All safety equipment that is used - seats, seatbelts, helmet, gloves, balaclava, shoes to be FIA homologated.

2018 FMSCI Safety Regulations (Article 253)

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

3.1 Modifications

Modifications and Adjuncts allowed or obligatory.

No Modifications are permitted.

4.1 Minimum Weight

The minimum weight of all Esteem Cup Cars will be cc divided by a constant which is **1.65 WITH DRIVER (i.e. 1298 / 1.65 which is 787kgs rounded down to nearest kg)**. This is the real weight of the car WITH DRIVER (without persons or luggage aboard) without tools, jack. 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.

5.1 ECU

ENGINE CONTROL UNIT: Free including wiring.

6.1 Fuel Tank and Pump

Only Maruti Esteem MPFI Fuel Tank (see picture below) and MPFI Fuel Pump Assembly is permitted.

Additional fuel pump CANNOT be fitted.



7.1 Engine and Gear Box Mount

The Engine and Gear box mountings are Free provided the number of mounts and location remain as homologated.

8.1 Exhaust

FREE (Exhaust manifold to the exit is free).

However the exhaust ports in the cylinder head should remain as provided by the manufacturer.

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 exhaust system must not be provisional.

Exhaust gases may only exit at the end of the system.

These liberties must not entail any bodywork modifications.

9.1

Fuel Purge Canister and the Resonator Box may be removed.

10.1 Clutch

Only OE Components permitted.

11.1 Gear box

Only Maruti Esteem MPFI Gear Ratios are permitted.

12.1 Differential

The use of mechanical type Limited Slip Differential is authorized provided that it can be fitted in the series housing.

13.1 Suspension

Body shell, Shock Absorber and /or Spring Turrets/Perches shall not be modified in any manner (Except addition of a plate for reinforcement of area).

Droop Changes shall be achieved only through Shock absorber length. No special purpose shims and spacers may be used.

Shock absorbers free but only bump and rebound adjustment permitted on shock absorbers (ie 2 way adjustable only).

Cockpit and / or Remote control of shock absorbers is not permitted. Shocks with canisters allowed.

Springs AND RIDE HEIGHT IS 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 with driver on board.

Spring Rating is FREE.

Shock Absorber Suspension bushes are free.

Reinforcement bars may be fitted on the suspension mounting points (both top and bottom) to the bodyshell or chassis of the same axle, on each side of the car's longitudinal axis, on condition that they are removable and are attached by means of bolts.

14.1 Wheels

The Wheels are free, respecting the homologated maximum diameter. One inch oversize width from the homologated maximum width will be permitted, provided the entire contour of wheels form within the coach work / body work of the car.

Where permitted over size width tyres are used, the Maximum Track Width as per Art.207 of the Homologation Form shall read as

Front – 1395 mm

Rear – 1370 mm

Spare wheel must be removed.

No portion of the tyres should be visible when viewed from the top.

15.1 Braking System

No modification is permitted.

Handbrake: Fly off handbrake is permitted.

16.1 Exterior

A fabricated shield may be incorporated in place of an AC condenser.

Hubcaps must be removed.

The bumpers, body skirts, OE spoilers, fog lamps, head lights & front bonnet & fenders and mesh of Maruti Esteem Type 1, Type 2 or Type 3 may be interchanged or used. Front grill mesh may be modified.

17.1 Interior

Dashboard: The dashboard may be removed

Floor: Carpets are free and may thus be removed.

18.1 Doors

Bonnet and boot lid / doors except the driver's side door may be replaced with fiberglass in order to comply with the minimum weights. Door pads and all insulating material may be removed.

Fiberglass Specification

3mm thickness of Fiberglass is Recommended.

Fire Retardant Resin (FRR) is Recommended in Fiberglass making

Ribs in the Fiberglass Bonnet is Recommended.

19.1 Head Light

Headlight maybe removed and the area covered with a plate/panel.

20.1 Fuel

Only Petrol to be used. No top fuels to be used. No Nitrous oxide or other injectable gasses permitted.

21.1 Roll Cages

Basic Structure

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

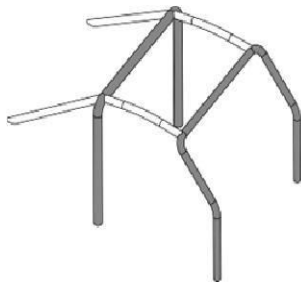
1 main rollbar + 1 front rollbar + 2 longitudinal members + 2 backstays + 6 mounting feet (Drawing 253-1)

or

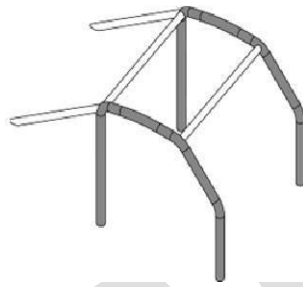
2 lateral rollbars + 2 transverse members + 2 backstays + 6 mounting feet (Drawing 253-2)

or

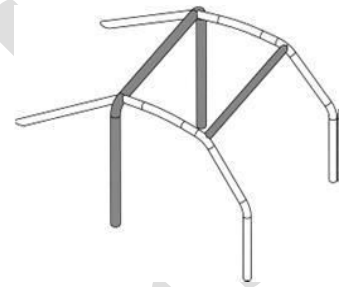
1 main rollbar + 2 lateral half-rollbars + 1 transverse member + 2 backstays + 6 mounting feet (Drawing 253-3)



253-1



253-2



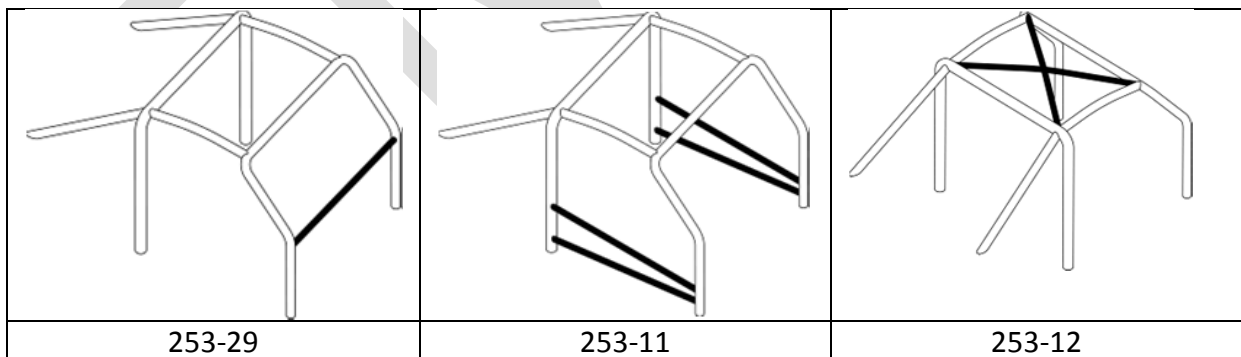
253-3

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).



22.1 Seat Belt

Minimum required is a five point harness and following the technical drawings regarding mounting points (Article 253 – 42 to 45, 52 and 53 of Appendix J – FIA Regulations)

23.1 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

24.1 Windows

Side and Rear Windows : The use of transparent or colourless anti shatter film on the side windows is mandatory.

25.1

The components relating to the A/C and Heating may be removed so long as the nominated weight of the car is maintained.

26.1 Reinforcement of Aprons (Front)

It is permitted to add a member between the front aprons above and below the front cross member (the front jacking point) provided it is removable and mounted only by means of bolt & nuts.

27.1 Steering

Power assisted Steering Assembly may be removed and replaced with non-power assisted Steering Assembly. All modifications required for fitment of manual steering assembly is permitted.

28.1 Radiator

Use of Maruti Swift Radiator is a permitted modification in the Esteem Cup Category. The radiator mount/mounting points and radiator hoses may be modified accordingly to suit fitment of the above mentioned radiator.





29.1 Water Pump Pulley

Material and diameter of water pump pulley and Engine Drive pulley are Free.

30.1 Restrictor

All engines will be fitted with a Air Restrictor.

Restrictor with the adaptor will be supplied by the FMSCI. All restrictors will be sealed at the time of Pre-event Scrutiny after verifying the Restrictor size.

Restrictor size : 30 mm

31.1 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.