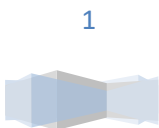




Technical Regulations Rennplatz Standard Production & Rennplatz Standard Production MAX 2024

Version 1.1
29 Jan 2024

Malaysia Speed Festival



TECHNICAL REGULATIONS – STANDARD PRODUCTION & MAX

(The regulations are subject to change, which will be published via Additional Supplementary Regulations – ASR)

1. GENERAL

1.1. Eligible cars

- It being 4-wheeled production based car, Front Engine, FWD/RWD/4WD cars with the following engine capacity limits;
 - a) **Standard Production:** 1600cc and below, newer production years in less than the past 10-years (model / engine specific: refer to article 13.3);
 - b) **Standard Production MAX:** 1600cc and below, older production years post-2006 (model / engine specific: refer to article 13.3).

1.2 The production Model must have 4 seats

- It being from a Model with a production minimum of 2,500 cars
- It being from a production family of Siblings with a production minimum of 5,000 cars
- The engine has a production minimum of 2,500 from the manufacturers Siblings.
- The model of which was in production in the year 2006 onwards. Vehicle models produced before 2006 are not permitted
- The Sibling and Model being made available for sale in any country world wide

1.3. 'Model' definition

All the identical cars belonging to a family of Siblings (see below) and to a production series distinguishable by an identical conception and identical external general lines of the bodywork, and by an identical mechanical conception of the engine and the transmission to the wheels. At least 2,500 cars must have been produced in 12 consecutive months.

For all cars of the same model, the materials of the front and rear bumpers must be identical. The same applies for the material of the boot lid, engine bonnet and front wings, respectively. The bumpers of cars derived from the same model may not include adjustable parts.

1.4. 'Siblings' definition

Different series models belonging to one and the same production vehicle of the same manufacturer. It refer to older previous models of the vehicles.

All models must have been available through the normal commercial channels of the manufacturer. Siblings of the same Model would have the following:

- similar name
- newer generation model replaced the previous, older generation at which point production of the previous model was completely stopped
- left- and right-hand drive versions,
- 2 and 4-door versions.

EXAMPLES:

- Toyota Vios / Vitz Sedan models XP40, XP90, XP150
- Honda Jazz / Fit models GD, GE, GK
- Proton Saga BLM onwards

Approval for entry is at the discretion of the Promoters.

1.5. Technical bulletins on Balance Of Performance

It is the intention of the Organisers to equalise the performance of the cars by setting minimum weights. The Organisers reserve the right to amend any of the minimum weights specified at any stage of the season. If changes are to be made during the season, a minimum of 4 weeks' notice will



be given. There is no appeal against the application or addition of weight or ballast or any updates that concern improving the Balance Of Performance for a category.

2. DRIVER ATTIRE

2.1. Drivers are required to wear proper auto/motor Helmets. Minimum requirement is SNELL SA / DOT Approved. No Bicycle Helmets allowed. It is highly recommended to use a helmet which uses double-D type strap fasteners.

2.2. Drivers are required to wear proper racing attire: Flame Retardant club-level Racing suit complying minimum SFI 3.2A/1 and/or EN533. Similar Flame Retardant shoes and gloves required.

2.3. Use of Hand And Neck Restraint (HANS) device is recommended.

2.4. Prohibited to wear non-flame retardant suit or open-toe shoes.

3. SAFETY EQUIPMENT

3.1. A Safety cage must be installed.

- It must be secured at minimum six (6) points on the floor with secure bolts or welded plates. Mounting points are the base of the A Pillar, B Pillar and the rear wheel arch or rear suspension turret.

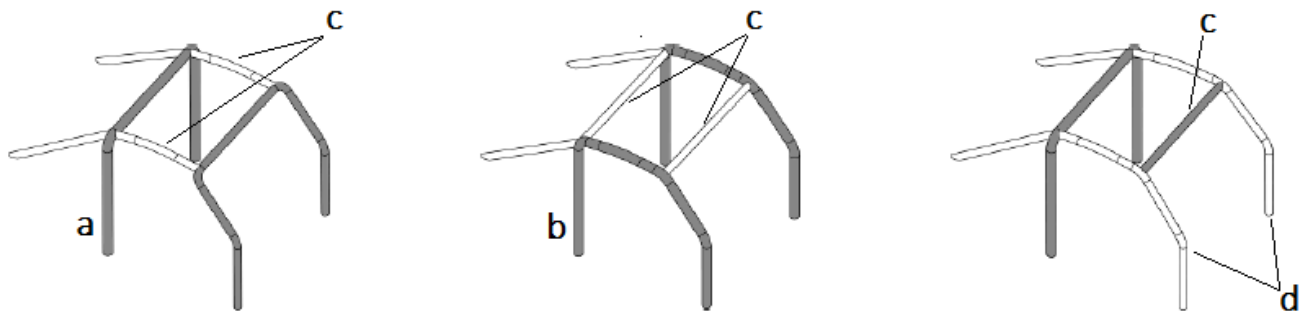


Diagram 5-1

- At least 1 diagonal bar minimum is required between the Main Rollbar Hoop and a lower mounting point – either on the main hoop or on the rear bar to the floor – to create a truss.

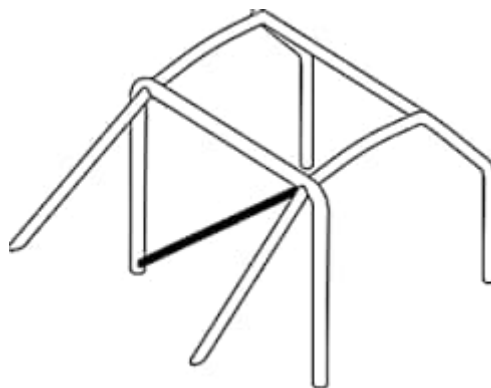


Diagram 5-2



- A 2-bar side impact bar is compulsory. 2 diagonal X-bars or parallel-bars required on both left and right sides.

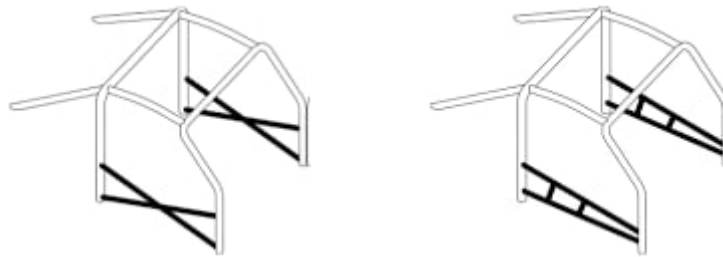


Diagram 5-3

3.2. Safety cage specifications.

Safety Cage Specifications. Only steel circular tubes are allowed for use.

3.2.1. Specifications are

Dimensions (mm)		Use
*Recommended	45 x 2.5 (1¾" x 0.095") or 50 x 2.0 (2.0" x 0.083")	<ul style="list-style-type: none">• Main rollbar (A in Diagram 5-1)• Lateral rollbars (B in Diagram 5-1)• Transverse members (C in Diagram 5-1)
*Minimum requirement	38 x 2.5 (1½" x 0.095") [CDS only] or 40 x 2.0 (1.6" x 0.083") [Mild Steel]	<ul style="list-style-type: none">• Main rollbar (A in Diagram 5-1)• Lateral rollbars (B in Diagram 5-1)• Transverse members (C in Diagram 5-1)• Lateral half-rollbars (D in Diagram 5-1)• Any other parts of the safety cage

3.2.2. Mount plates

Mount plate size: 120mm x 120mm

Mount plate thickness: 3mm

Reinforce plate thickness: 3mm

3.2.3. Welding: full welding around the diameter of the tubing. It is not permitted to grind or plate the welding.

3.3. Compulsory general safety items

3.3.1. Cut-off switches for electrical and fuel systems are compulsory with an external switch/lever.

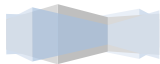
A sticker identifying the electrical cut off switch must be affixed near the switch.

3.3.2. Competition safety harness belt are required. Minimum 4 points.

3.3.3. Competition bucket seat is recommended.

3.3.4. A Fire Extinguisher must be fitted of minimum specification:

- DCF (CF3 BR): 4.9kg
- NAF 83: 3.2kg



- NAF P: 3.2kg
- AFF: 2.4kg
- Powder: 2.0kg

3.4. Items in passenger compartment

3.4.1. Any battery placed within the passenger compartment must be of sealed Dry cell type.

It must be installed securely within a secure box with lid cover.

3.4.2. Oil Catch tank within Engine bay must be of non-flammable material ie alloy or steel material

- must be securely mounted
- must be enclosed with no leaks or gaps
- must have hoses that are securely attached
- plastic bottles are not permitted.

3.5. General safety

3.5.1. No fluid leaks of any kind.

3.5.2. No loose items within engine bay.

3.5.3. Poorly engineered and poorly attached bars inside the cabin are not allowed.

3.5.4. Cache tanks, items, pumps, etc that involve lubricant and/or oil are not permitted in the passenger cabin of the cars, excluding items mentioned in 3.4.

4. FUEL TANK

4.1. Original fuel tank is required, in the original location with original refuelling hose and orifice.

- tank location and fuel pump must be standard
- Standard OEM refuelling system is to be maintained

5. BRAKING SYSTEM

5.1. Brake disc rotors, pads, brake shoes, and brake hoses may be replaced with direct-replacement aftermarket items.

- Stainless steel braided brake hoses are required.
- Standard brake rotors may be replaced with slotted and / or cross-drilled items, but must be a direct after-market replacement and maintain the original dimensions. Brake rotors may only be of a ferrous material.
- The standard brake calipers and system must be maintained front and rear.
- Adjustable brake bias is not permitted.
- *Vehicles where brake calipers and / or disc rotors are replaced with non-original items that ARE NOT direct replacement and ARE NOT the original dimensions will be required to carry additional 30 KG weight ballast.*

6. SUSPENSION

6.1. The standard specification suspension configuration must be retained and the standard mounting points and position of the suspension components to the bodyshell and related suspension units must be used and remain as standard. All suspension components (uprights, wishbones, hubs, bottom ball joints, suspension top mounts, steering arms, rear beams, anti-roll bars, supports bolted to the bodyshell or subframe) must be standard, unmodified, and remain in their standard position, with no omissions, additional, lightening or modifications allowed to the mounting points and be manufacturer from the stand material type except where specifically allowed in these regulations. No additions or modifications may be made to the mounting points. Suspension must be controlled to avoid fouling of wheels on chassis or bodywork.

- Modifications to the suspension pick up points are prohibited.
- Modifications to the engine subframe or its mounting position prohibited.
- Spherical joints, rose joints, and rod ends are prohibited



- No additional springing medium may be utilised
- Rear suspension and stub axles must remain standard; no strengthening or addition / removal of material is permitted.

7. TYRES & WHEELS

7.1. All categories - with no exceptions - are to use the control tyre in the sizes described below:

- Standard Production category to use :
Hankook Ventus RS4 (Z232) in size 195/50-15

7.2. Wheels specification is open: width, offset, design

8. POWERTRAIN

8.1. The maximum engine capacity permitted is the allowed capacity as stated below for each Category +0.5% for tolerance.

- Standard Production category is 1600cc + 8cc

8.2. Nitrous Oxide

- Nitrous Oxide system is not allowed in any category

8.3. Induction system

The complete induction system must be of the standard specification for the vehicle and be retained in its entirety; components must be used in their standard positions, with no additional or omissions except for the following:

- Aftermarket air filter can be used to replace the standard part. This must be of the correct specification for the model to which it is fitted.
- No other modifications are permitted.

8.4. Engine Management – Fuelling, Ignition, and valve timing

- Components must be of standard specification for the vehicle and used in their standard positions, with no additions or omissions. Remapping of ECU is allowed. Piggy back ECU control is permitted for Toyota Vios 1.5 only.

8.5. Cylinder Head

- Must remain to standard specifications.
- No material may be added or removed from the cylinder head; inlet and exhaust ports may not be modified in any way and must remain as cast and as per standard specification.
- The head casting cannot be ground, smoothed, welded or in any way altered, whether to achieve optimisation of gas flow or otherwise. Any attempt to alter the shape of the ports, valve throats or the valve seats is prohibited.
- Valve sizes must not be altered from the standard specification.

8.6. Gear box

- Must be of the standard coded type and specification for the vehicle. The method of clutch actuation must not be altered in any way.
- Final drive and gear ratios must remain as per standard and it is prohibited to mix and match any components. Gearbox casting codes must correspond with the gear ratios contained within.
- Aftermarket Limited-Slip Differentials (LSD) are permitted



8.7. Other modifications

- Standard pistons may not be replaced by forged pistons or 'machined from billet' pistons. Piston crowns must not be machined from standard in shape or profile.
- Fitment of an oil pump from a different production model is prohibited.
- Fuel injectors cannot be substituted for non-standard parts.
- Dry sump systems not permitted.
- Forced-induction not permitted.

8.8. Fuel information

- Nitrous Oxide system is not allowed in any category.
- Fuel blends that contain oxidisers and oxygenates in any alcohol forms (methanol, nitro-methanol, ethanol, butanol, etc) are not allowed.
- Water-methanol injection into the intake manifold is not permitted.

9. COOLING SYSTEM

9.1. Water radiators must remain of standard mass production for the model being raced, in design, size and position. The standard radiator fan and fan cowling must also be retained. No modifications are permitted. Fitment of radiator from an automatic transmission version of the same vehicle to a manual transmission vehicle is permitted.

10. EXHAUST SYSTEM

10.1. Exhaust system must exit with sideways or rearward-facing exhaust outlets.

If rearwards, the outlet/s shall be between 100mm and 450mm above the ground and shall not protrude more than 50mm beyond the rearmost portion of the automobile.

If directed sideways, the outlet/s must be located rearward of the midpoint of the wheelbase. In any case, they shall not project beyond the maximum width of coachwork /body when seen from above.

10.2. A muffler/s must be fitted, which are subject to particular examination by scrutineers.

WARNING: The aim of this is exhaust noise reduction, even if just a little – a muffler box which is emptied out of noise-absorbing material or baffle plates or such will not be accepted. Do not test the Technical team's intelligence.

11. ELECTRICS

- The standard wiring loom must be retained.
- Substitution of ignition coils with high power ignition coils is prohibited.
- The standard alternator and engine belting must be retained.

12. INTERIOR

12.1. Interior may be stripped of any interior equipment such as carpets, door trims, centre consoles, etc. Replacement door panels permitted.

12.2 Fitted with original full-length dashboard with all listed panels. Refer to diagram 2023a

- Air-conditioning System and blower can be removed, but Air Conditioning Vent Panel must be maintained.





Figure 2023a

13. BODYWORK

13.1. In general must be of the standard specification for the vehicle, with no additions or omissions. Mandatory fitment of laminated windscreen. Strengthening of the mounting points, and changes in component material are prohibited. Seam welding is permitted.

13.2. Unless specifically authorised, the use, substitution of, and / or addition of any parts, material or processes is prohibited, other than welding or repairing material or the fitting of standard replacement parts, for the sole purpose in every respect of restoring the vehicle to the manufacturer's standard specification or to comply with safety requirements.

- bumper mountings are free provided the bodywork and the shape and position of the bumpers remain unchanged.
- It is not permitted to increase the width of the wheel arch by the addition of material to, or the deformation of, the outside or inside of the wheel arch. NO additional holes may be cut into the bodywork or spoiler to aid cooling, brake ducting, air intake, etc. Apertures may not be enlarged.
- The removal of underseal from vehicle wheel arches and any areas outside the vehicle wheelbase is prohibited.

13.3. All exterior lights must be functional.

- Both original headlights location must have functional headlamps
- Additional spot/fog lights are allowed.
- All Tail/Rear lights must be functional. Brake Lights must be functional.

13.4. Front and rear Tow Hooks must be attached and Arrow Stickers in fluorescent Red must be affixed.

13.5. Tyres must not protrude beyond original bodywork.

As per 13.2. modifications to the wheel arch is not permitted.

13.6. Windows

All windows are to remain as standard and may not be replaced with non-glass items.

14. AERODYNAMIC DEVICES

Aerodynamic devices and equipment refers to:



- Rear Spoilers and Front spoilers
- Frontal Canard fins
- Front Splitter
- Rear Diffuser
- Wing End Plate
- Rear Wing
- Side Skirt
- Gurney Flap
- Vortex Generator fins

All and any form of non-standard and non-factory aerodynamic devices are not permitted. Official factory accessories body kit permitted, including official OEM suppliers (Gazoo, TRD, Mugen, Modulo, Suzuki Sport, R3, etc)

15. MINIMUM WEIGHT

15.1. General

- The minimum weight of a Car is to be set and weighed excluding the Driver and the Driver's apparel. This weight is with all fluids, and with enough fuel to be able to start and drive away after any weighing of the vehicle at Scrutineer or Parc Ferme.
- The minimum weight stated in 15.3 below for each category must be achieved at all times throughout a Race Meeting with no exception.
- The organiser reserves the right at all times to amend the weights of Cars in the interests of equitable competition.

15.2. Adding extra weights

- To have the minimum weight as prescribed, additional weight and ballast may be added, and anchored firmly and securely. The ballast is to be placed on the floor of the cockpit, spare wheel well, or luggage compartment.
- The material used must be of a unitary block construction, fastened by a bolt with minimum of 10 mm in diameter with a metal plate on the bottom.
- The ballast must not have sharp edges. The scrutineer would have the rights to reject any ballast which is deemed unsafe.

15.3. Minimum weights by category

• **Standard Production**

- L15B, 6-speed: 1050 KG
- L15B, 5-speed: 1030 KG
- M16A, 6-speed: 1000 KG
- NCP150 and newer: 950 KG
- Myvi 3rd Gen: 950 KG
- Any other vehicle: 950 KG

• **Standard Production MAX**

- L15A, 6-speed: 990 KG
- L15A, 5-speed: 970 KG
- M16A, 5-speed: 970 KG
- NCP42 NCP93: 950 KG
- Myvi 1st & 2nd Gen: 920 KG
- Any other vehicle: 950 kg

15.4. A maximum tolerance of +/- 5 kg is acceptable but absolutely no more no less.



16. COMPETITION NUMBER & VEHICLE PRESENTATION

16.1. Competitors are obliged to carry the MSF partners' logos in the mandatory sticker areas.

16.2. Official MSF Sticker Board of MSF Series Sponsors must be located in the area below the front windows behind the front wheel.

16.3. Official MSF Tyre Partner sticker must be placed on the wheel arches, either front or rear arches on both sides.

16.4. Official MSF Title Sponsor sticker must be placed on the front windscreen area.

16.5. Other official MSF Partner stickers must be placed at the front or rear wings on both sides.

16.6. Competition numbers are to be placed in 2 locations:

- Door Numbers: Must be placed on doors on the side of the vehicle, to be clear and of contrasting colour to the body colour. General dimensions for each number digit to be roughly A3 Size (11" Wide x 16" High). Competition numbers must be of a contrasting colour to the car and reflective stickers are recommended.

Objectives are for the numbers to be clearly visible to the Time Keepers, Marshals, and Race Control.

- Windscreen Numbers: Must be placed on the left front of windscreen, below Category Partner sticker. Must be 6" high in Arial Narrow font using White or fluorescent Yellow sticker.

16.7. Competitors & team own sponsors may be located at all other locations such as:

- Front Bonnet.
- Roof.
- Rear Door/fender.
- Rear Bootlid or Tailgate.
- Front & Rear bumpers.

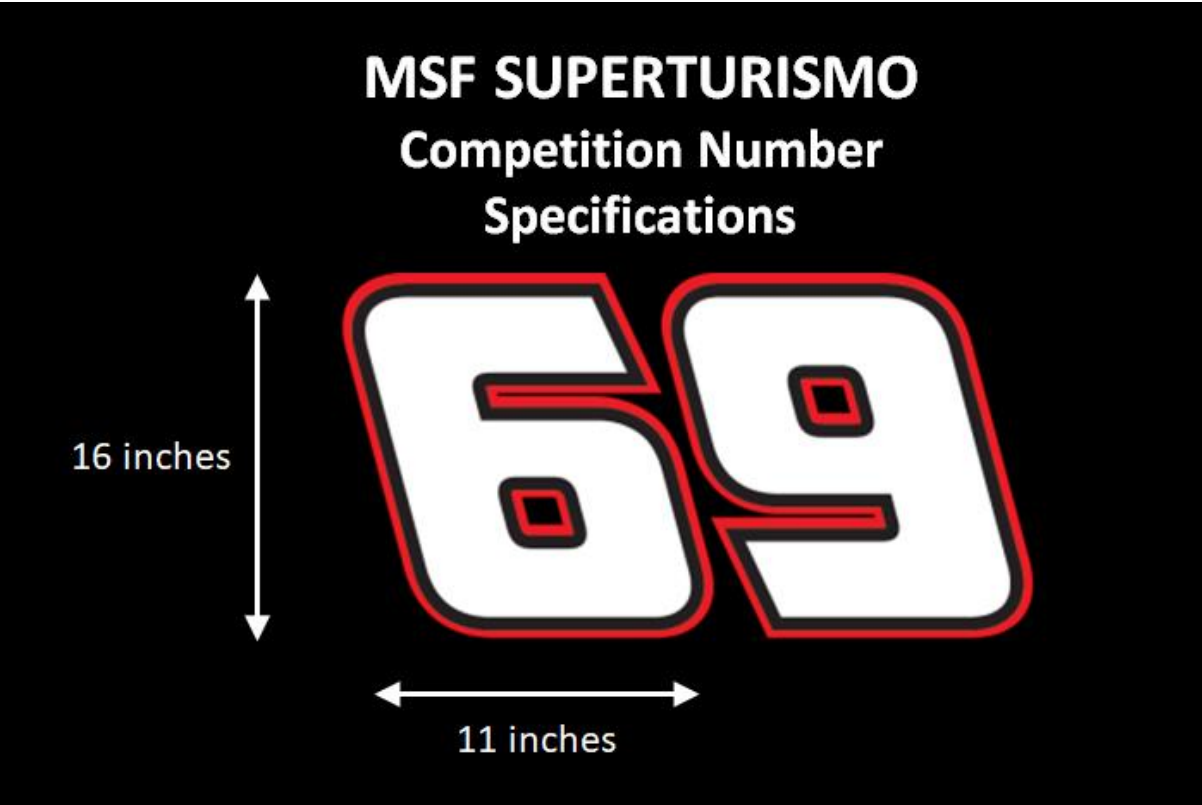
16.8. A rejection fee of RM 2,500.00, for every deleted Partner /Sponsor sticker, is required of any Competitor that does not apply any MSF Partner /Sponsor stickers.

Copyright 2024 Matrix Motorsports Promotion Sdn Bhd 508407-T

Creators, Owners, Official Promoters

MSF Racing Series





Sticker Placement for MSF Racing Series Cars 2024.

