

Technical Regulations MSF Super Production 2019



Malaysia Speed Festival



TECHNICAL REGULATIONS – SUPER PRODUCTION CATEGORY

(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/Mid/Rear Engine, FWD/RWD/4WD cars below 1500cc. 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

1.2. '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.

1.3. '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

Approval for entry is at the discretion of the Promoters.

2. DEFINITION OF STREET LIMITED CATEGORY

2.1. Defining what is a 'Street Limited' category vehicle:

2.1.1 Street Limited cars:

- The interior of the vehicle includes the minimum items which would define it visually to a casual observer as a car which may be driven on the street with daily amenities, such as:
 - o Air-conditioning and blower switches;
 - o OEM full length dashboard with all listed panels including steering column cover and indicator stalks, switches, and centre console with gear shift cover;
 - o OEM Front door trim panels on both driver's and passenger's side;
 - o OEM glass all around
 - o complete list of interior items refer to paragraph 4 'Interior'.



- Welded-in safety cages are limited to 6-points welded to the floor; to be basic in configuration and may NOT be welded to strengthen the shell; refer to 5.1 for details.
- Suspension hard points may NOT be altered. Subframes may be modified as required but must be based on the original structure and engineering concept of the original subframe. If the subframe is modified beyond what would be acceptable for Street usage, will not be accepted.
- Organiser's decision to accept or decline a car's categorisation shall be final.

3. GENERAL MODIFICATIONS

3.1. Modifications made to the vehicle cannot compromise the safety or structural integrity of the vehicle.

3.2. Outline for modifications to Street category vehicles:

- Original OEM fuel tank is required, in the original location with original refuelling hose and orifice.
- An inboard FIA specification fuel surge tank is allowed:
 - limited to one 5-litre surge tank only.
 - Petrol lines inside the vehicle, if any, must be certified safety fuel lines.
 - A fire-proof bulkhead and/or protective cover and/or compartment must enclose the fuel pump.
 - A pre-event inspection and approval is necessary and if they meet the organisers safety standards, will be registered and approved. An appointment minimum 1-week prior to the event is required.
- Spare wheel well may be cut and covered. Cover must be metal and must be welded to the body. No plastic or ABS or composite material permitted.

3.3. Brakes

- Brake callipers & disc rotors may be replaced with aftermarket items.
- Brake Pads & Brake Hoses may be replaced with aftermarket items.

3.4. Suspension

- Adjustable suspension top-mounts are permitted.
- Original rubber suspension bushes may be replaced with hard rubber, polyurethane, and nylon material bushes. Rose-joint / spherical bearing suspension components to replace the rubber bushes is also permitted. Mounting points must remain at the original OEM locations.
- OEM suspension types, mounting points and location must be used. Aftermarket coilover types may be used, adjustable top mounts to allow for camber adjustments is allowed.

4. INTERIOR

4.1. Interior of participating cars to be as such:

4.1.1. Fitted with OEM equipment as listed below:

- Air-conditioning and blower switches. Compressor, condenser and evaporator may be removed.
- OEM dashboard required. To be presentable.
- OEM Front door trim panels on both driver's and passenger's side.
- OEM glass all around. Front windscreen is to be 2-layer glass.
- Passenger side front seat is required

4.1.2 Fitted with OEM full length dashboard with all listed panels. Refer to diagram 2016a:

- Instrument Panel and cowling
- Steering Column cover and indicator stalks
- Centre console and switches
- Gear console and gear shift cover.



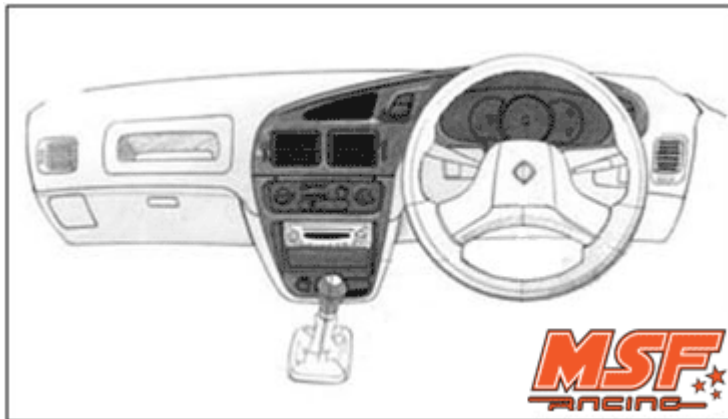


Figure 2016a

4.1.3 The following items may be removed and/or replaced with non-OEM material/items for safety and/or to accommodate safety equipment:

- A, B, and C pillar trim
- interior trim from the rear of B-pillar and Front seats
- headlining
- carpet

5. SAFETY EQUIPMENT

5.1. A bolt-in or welded-in 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.
- A driver side impact bar is compulsory. Minimum 1 diagonal bar between the A-pillar and B-pillar safety cage support. Recommended minimum 2 diagonal bars.
- Only the main 6 cage location points to the floor of the shell may be welded.
- No welding to front suspension turrets.
- No welding to pillars (Only bolting to existing locations on the pillars or bodyshell is acceptable).

5.2. Safety cage specifications.

Minimum specifications for MSF Racing legal rollcages as published are:

- Material type: Mild steel

Pipe diameter: 1 3/4 inch

Pipe thickness: 0.118 inch

- Material type: Cold drawn stainless steel

Pipe diameter: 40mm

Pipe thickness: 2mm

- Mount plates

Mount plate size: 5" x 6"

Mount plate thickness: 0.125 inch

Reinforce plate thickness: 0.125 inch

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



5.3. Certain parts of the interior can be stripped of certain trim to facilitate installation of Roll Cage Items that may be removed are:

- Rear Seat Back and Rear Seat Cushion.
- Rear parcel shelf or speaker shelf board.
- Floor carpets and headlining

5.4. Only the following listed items may be replaced for safety equipment installation:

- from the rear of the front seats and B-pillar onwards, the Rear Inner Door Panels and Rear Inner Side Panels must be in place, and may be replaced with other fire resistant panels that completely cover the window winder & door catch mechanism. There must not be any exposed metal in this area.
- Audio head unit may be removed and must be replaced with plastic panel to accommodate safety electric cut-off switch and other safety switches. There must not be any exposed hole in the dashboard.

5.5 Compulsory general safety items

5.5.1. Cut-off switches for electrical and fuel systems are compulsory for all categories with an external switch/lever. A sticker identifying the electrical cut off switch must be affixed near the switch.

5.5.2. Competition safety harness & Competition bucket seat is recommended.

5.5.3. A Fire Extinguisher must be fitted. Minimum is 1kg CO2 or Powder unit

5.6. Items in passenger compartment

5.6.1. 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.

5.6.2. 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.

5.7. General safety

5.7.1. No fluid leaks of any kind.

5.7.2. No loose items within engine bay.

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

5.7.4. 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 3.2 and 5.6.1.

6. BODYWORK

6.1. Composite material for certain bodyparts are allowed, all parts must still retain the OEM factory body look and style. Parts replaceable are

- Front Bonnet
- Rear Bootlid
- Front wings / fenders
- Front bumper
- Rear bumper.

Floorboard and any other part of the fundamental steel monocoque chassis body may not be cut and replaced with anything other than metal for the purposes of lightening.

6.2. Headlights and tail lights are recommended to be taped up.



6.3. All exterior lights must be functional.

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

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

6.5. Tyres must not protrude beyond OE bodywork. However if the wheel protrudes beyond bodywork additional wheel arches MUST be installed.

Wheel arches must cover from top of wheel & tire and reach to the bottom of vehicle floorpan level. Refer to diagram 2016b and 2016c below.

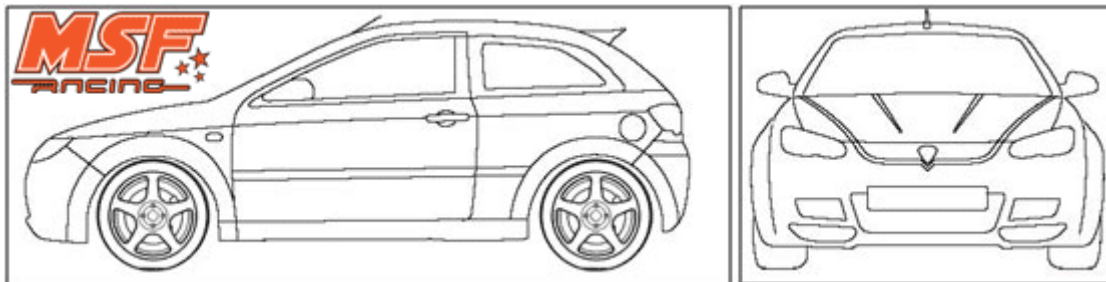


Figure 2016b & 2016c

7. DRIVER ATTIRE

7.1. Drivers are required to wear proper auto/motor Helmets. Minimum requirement is SIRIM Approved. No Bicycle Helmets allowed. It is highly recommended to use helmet which use double-D type strap fasteners.

7.2. 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.

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

7.4. Prohibited wear are Shorts, slippers or open-toe shoes.

8. POWERTRAIN

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

- Super Production category is 1500cc + 7.5cc
- The engine has a production minimum of 2,500 from the manufacturers Siblings.
- No rotary engines.
- Strictly naturally-aspirated engines only.
- Engines with variable valve timing and / or lift permitted.

8.2. The engine must have a production minimum of 2,500 from the manufacturers Siblings.

8.2.1. The following items must be the original OEM item, although may be modified internally:

- Cylinder heads; reverse heads not permitted.
- Intake manifold.
- Throttle body.

8.2.2. Other modifications to the engine:

- The numbers of attachment points to the bodyshell must remain as standard production.
- Exhaust manifolds may be replaced. Titanium material not allowed.
- Oil sump may be modified. Dry sump systems not permitted.
- Forced-induction not permitted.





8.3. Engine & Transmission mounting and location

- Fundamentals of the engine installation must not change. Original engine mounting points on the body / subframe must remain, even if the engine has been changed. Additional brackets, if required to mount different powertrain, is permitted.
- Rubber Engine mountings may be replaced

8.4. Gear box

- The gearbox must be derived from the manufacturer's range of production car gearbox transmission for the engine and body type. Original mounting points required but may be modified if required. The number and attachment points to the bodyshell must remain as standard production.
- Gear ratios may be modified. Final Drive ratio may be modified. Dog Engagement gears are not allowed.
- Limited-Slip Differentials (LSD) are permitted.

8.5. Fuel information

- Nitrous Oxide system is not allowed in any category.
- Any fuels or fuel blends that contain oxidisers and oxygenates in any alcohol forms (methanol, nitro-methanol, ethanol, butanol, etc) will not be permitted.
- Water-methanol injection into the intake manifold is not a fuel, and is permitted

9. TYRES

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

9.2. Super Production category to use size 195/50-15:

- Hankook Ventus V12 Evo2
- Hankook Ventus RS4 Z232

10. AERODYNAMIC DEVICES

Aerodynamic devices and equipment refers to:

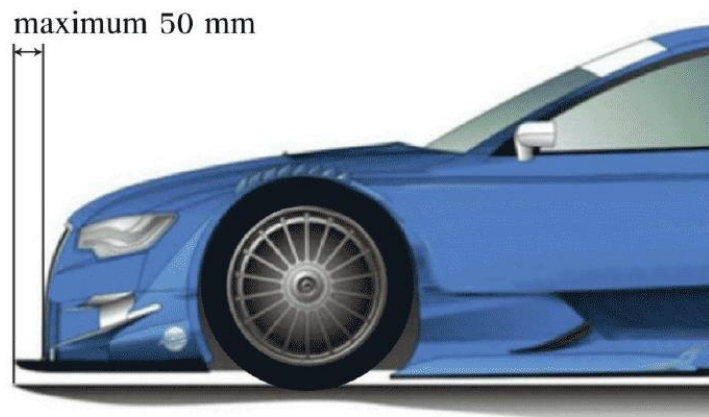
- Rear Spoilers and Front spoilers
- Frontal Canard fins
- Front Splitter
- Rear Diffuser
- Wing End Plate
- Rear Wing
- Side Skirt
- Gurney Flap
- Vortex Generator fins

10.1. Front Aero

Aerodynamic devices mounted in the front shall not be wider (laterally extended) than the width of the front wheel arches when viewed from the front.

- STREET CARS: Front aerodynamic devices must not extend beyond 50 mm from the front edge of the front bumper/nose, following the perimeter edge around the front bumper/nose.





10.2. Width of ALL Aero (Front, Sides, Rear, Wings)

No part of the aerodynamic device can be wider than or protrude beyond the width of the wheel arches when viewed from the front.



10.3. Aerodynamic Devices Material

- All aerodynamic devices must be manufactured from either Wood, Plastic, or Composite materials (eg, fiberglass, carbon fiber, Kevlar fiber).
- Metal may not be used for anything other than Rear Wing and rear wing stands/ mounts.
- There must be no sharp edges to all aerodynamic devices that would cause injury to humans and passers-by.

10.4. Rear Wing

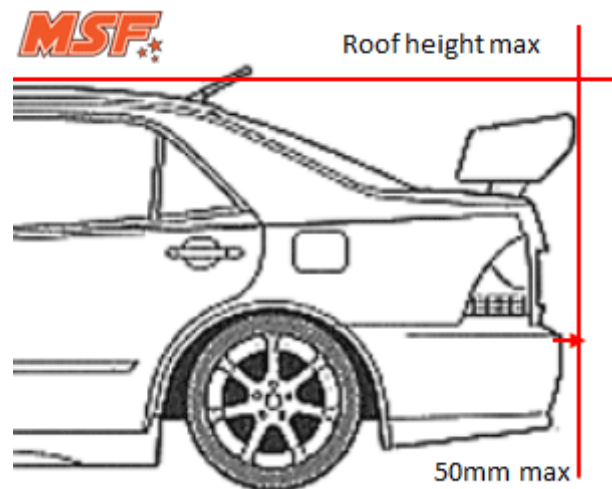
Only the rear wing, wing end plate, and legs/stands/mounts of the rear wing can be made of any material.

- SEDAN / 3 Box design vehicles: Rear wing height must not exceed the height of the vehicle roofline.
- HATCHBACK / 2 Box design vehicles where there is no suitable length of metal bootlid along the horizontal plane: Rear wing height must not exceed 50mm above the vehicle roofline.



10.5. Rear Aero

- Rear aerodynamic devices must not extend beyond 50mm of the end of the rear bumper



11. COMPETITION NUMBER & VEHICLE PRESENTATION

- 11.1. Competitors are obliged to carry the MSF partners' logos in the mandatory sticker areas.
- 11.2. Official MSF Sticker Board of MSF Series Sponsors must be located in the area below the front windows behind the front wheel.
- 11.3. Official MSF Tyre Partner sticker must be placed on the wheel arches, either front or rear arches on both sides.
- 11.4. Official MSF Title Sponsor sticker must be placed on the front windscreen area.
- 11.5. Other official MSF Partner stickers must be placed at the front or rear wings on both sides.
- 11.6. Competition numbers are to be placed in 2 locations:
- Door Numbers: Must be placed on each front Door. Each Number to be a minimum A3 Size (11" Wide x 16" High). All number must be of a contrasting colour to the car and reflective stickers are recommended.
 - 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.
- 11.7. 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.
- 11.8. 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.

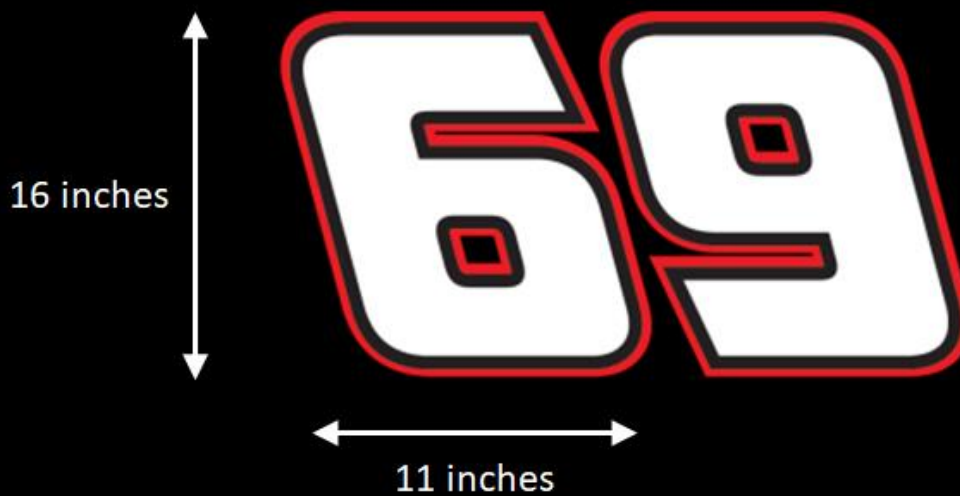
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MSF Racing Series



MSF Mandatory Decals Area



MSF SUPERTURISMO Competition Number Specifications



Sticker Placement for MSF Racing Series Cars 2018. [CLICK FOR LARGER IMAGE](#)

