



MSA Junior Rallycross Championship

Technical Regulations

The Following M.S.A. Vehicle & Technical Regulations apply, according to the 2014 MSA Yearbook: Section J5, Technical Regulations N6.1 to 6.14.3 and these supplementary regulations.

NOTE: All vehicles must comply with specific MSA approval as provided for in N7. The MSA specifically has the right to impose further restrictions to engine performance as set out in N7.1.8.

INTRODUCTION.

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can make a modification you should work on the principle that you cannot.

PLEASE READ THESE REGULATIONS THOROUGHLY. IF IT DOES NOT STATE YOU CAN, THIS MEANS YOU CANNOT. ANY DOUBTS, ASK.

For these regulations, STANDARD means: Series Production for the Eligible Vehicle Model ONLY.

1. VEHICLE

- 1.1 The Suzuki Swift 1328cc (2005 to 2011) is permitted
- 1.2 Only the approved Safety and Performance parts are permitted. These parts to be supplied as a mandatory part kit (Appendix A)
- 1.3 The body shell **must** remain unaltered and as standard, excluding the MSA specification Roll Cage, doors, front wings, bonnet and tailgate. All other parts **MUST** remain as standard fitment.
 - 1.3.1 The standard front upper bumper support must remain in position and as standard. The lower bumper support may be removed, but cannot be replaced with any other material
- 1.4 All interior trim must be removed including carpets, roof lining, and passenger seats
- 1.5 Interior door panels may be replaced with carbon panels to accommodate the roll cage
- 1.6 The driver's door must remain the standard steel but the passenger door may be replaced by a composite version. Composite bonnet, tailgate, front wings and rear quarter over panels are permitted. The standard steel quarter panel must remain.
- 1.7 All lights **must** be removed and the apertures blanked off, completely

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- 1.8 The original interior rear view mirror is **mandatory**
- 1.9 Front and rear towing eyes are **mandatory**
- 1.10 Standard petrol tank, fuel pump and position are **mandatory**
- 1.11 The standard exhaust manifold and standard catalytic converter must remain unaltered. (J5.16 refers)

The centre section and rear silencer can only be upgraded using the Sports Exhaust System supplied by Peter Gwynne Motorsport Limited.
- 1.12 Steering wheel and mounting hub are free
- 1.13 The standard steering column **and** steering rack are **mandatory**, with the steering lock rendered inoperable
- 1.14 Standard dashboard and instruments must be retained and operable
- 1.15 Handbrake system must remain as standard. **The ratchet button may have a screw fitted to make a fly off**
- 1.16 A sumpguard and fuel tank guard are **mandatory, supplied by Peter Gwynne Motorsport Limited.**
- 1.17 Engine cooling system to remain as **standard**
- 1.18 The engine ECU will be supplied at the events by the Championship organisers and is **mandatory**. These will be drawn independently and issued to competitors at the events
- 1.19 Mud flaps are to be fitted behind all 4 wheels
- 1.20 Minimum weight of car **INCLUDING** driver must not be less than **1055kg**. In addition, the minimum weight of car **EXCLUDING** driver must not be less than **960kg**. **Any ballast required must be fitted on the passenger floor under the seat area.**
- 1.21 **Competition numbers to as per the MSA Junior Rallycross Championship sporting regulations (section 5.5.2.)**
- 1.22 The driver's family name must appear in both rear side windows, using **white** self-adhesive capital letters, 75mm high and 10mm width
- 1.23 Sponsors decals must be fitted. Decals to be supplied. These decals are to be fitted in designated areas **only** as set out in Championship Bulletins
- 1.24 Only the approved parts supplied in the mandatory **parts kit** are permitted
- 2. **SAFETY**

Minimum, Comply with current MSA Yearbook regulation N6.11 to 6.12.6 inclusive. In addition:
 - 2.1. The roll over structure, as a minimum, must comply with K1.6.1, K Appendix 2 Drawing 5, with additional door bars as Drawing 9, or Drawing 12 (g) or (h)
 - 2.1 (a) Optional bars as per K Appendix 2 Drawing 11 are permitted

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- 2.1 (b) If using the standard seat mountings, an additional seat mounting bar is to be fitted between the standard front and rear mountings. This part will be supplied by PETER GWYNNE MOTORSPORT LIMITED along with a diagram for fixing.
- 2.2. Where the driver's body or crash helmet could come into contact with the safety cage, **FIA** approved padding must be fitted for protection
- 2.3. A fire extinguisher in accordance with N7.1.23.2 (K3.1.2(a)).
- 2.4. The standard front laminated windscreen must be replaced with a polycarbonate type (refer N7.1.13 and J5.20.8)
- 2.5. Be fitted with a driver's seat that is currently FIA Homologated, mounted in accordance with K.2.2.
- 2.6. Current FIA Homologated 6 point Seat Belts are mandatory, with two separate fixing points for the shoulder straps.

From a 'race ready' position with seat belts fastened, the driver must be able to vacate the car in 5 seconds
- 2.7. FIA approved seat-mounting brackets are **mandatory**
- 2.8. **A FHR device is mandatory.**
- 2.9. An approved crash helmet is mandatory as provided at K10.3.1 (a) with FHR device fitments.
- 2.10. FIA approved 2 layer Nomex **overalls, underwear, socks, balaclava, boots and gloves** are **mandatory**
- 2.11 Window nets must be fitted on the driver's side of the vehicle.

3. Engine and Gearbox.

- 3.1.** The standard 1328cc Suzuki Swift complete engine is **mandatory**. Dry sumping is not permitted. **No machining or drilling of cylinder block is allowed**
- 3.2.** Lightening and/or balancing of any engine part, including the flywheel is **not** permitted
- 3.3.** The complete ignition system **must** remain as standard
- 3.4.** The Championship supplied engine ECU is **mandatory**
- 3.5.** Competition spark plugs **are** permitted
- 3.6.** A standard Suzuki flywheel is **mandatory** and may **not** be lightened or modified in any way. Steel or alloy competition flywheels are **not** permitted
- 3.7.** **Fuel** pump **must** remain as standard
- 3.8.** An MSA approved fuel sampling valve must be fitted in accordance with MSA regulations
- 3.9.** **No** fuel additives are permitted
- 3.10.** The standard 1328cc Suzuki Swift gearbox is **mandatory**. No other parts are permitted. Straight cut gears or gearbox conversions are **not** permitted

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3.11. Limited slip differentials **are** permitted and can only be supplied through PETER GWYNNE MOTORSPORT LIMITED.

3.12. A competition clutch **is** permitted

3.13. Competition engine mountings **are** permitted

4. **Suspension and Brakes**

4.1 Standard brake discs and callipers are **mandatory**

4.1.1. All standard brake components, excluding pipes, must remain as standard and fitted in the original position.

4.2 Competition brake pads **are** permitted

4.3 Competition suspension units, supplied with the **PARTS KIT**, are **mandatory**

4.4 Minimum ride height to comply with MSA Blue book J5.20.11

4.5 Competition alloy wheels, supplied with the **PARTS KIT**, are **mandatory**

4.6 A control single Dry/Wet tyre is **mandatory**. Manufacturer and Type – **Yokohama Tyres 195/55 x 15 A048**

5. **Electrical Equipment**

5.1 Each car **must** be fitted with two high level RED brake lights, as per MSA regulations

5.2 A 'poor visibility' light **must** be fitted according to Section K. The light **must** be switchable from the driver's seated position

5.3 The standard battery charging system is **mandatory**

5.4 The standard battery may be replaced but the standard battery position is **mandatory**. The battery earth lead **must** be coloured yellow. Battery terminals **MUST** be covered with insulating material. Insulating tape will **not** be permitted. Battery **must** be securely mounted to the vehicle

5.5 The standard electrical wiring loom is **mandatory**

5.6 A shift light is **not** permitted.

6. **Eligibility Checks**

6.1 Random eligibility checks **will** be made at any meeting and engine/ gearbox assemblies checked or sealed for subsequent checking, by the nominated Championship Scrutineer. All eligibility costs must be covered by the competitor. Random fuel checks may be carried out.

6.2 Engines and gearboxes **will** be sealed by the Championship Eligibility scrutineer, using **only** MSA numbered seals

6.3 MSA Vehicle Logbooks are **compulsory**, in accordance with J2 of the MSA Yearbook.

6.4 **Non** production of the Vehicle Log Book will render the vehicle unable to start

Appendix A



SWIFT JUNIOR RALLYCROSS CHAMPIONSHIP

MANDATORY PARTS KIT

MSA SPECIFICATION ROLL CAGE with ONE EXTRA SEAT MOUNTING RAIL
AVO SINGLE ADJUSTABLE SUSPENSION with SPRINGS
4 OFF CHAMPIONSHIP WHEELS and TYRES
SUMP GUARD KIT – ALLOY
FUEL TANK GUARD – KEVLAR
REAR EXHAUST SECTION
POLYCARBONATE WINDOW KIT – NOT INCLUDING WINDSCREEN.
SWIFT SPORT FRONT BUMPER with GRILLS
SWIFT SPORT REAR BUMPER with TRIM
2 OFF REAR COMPOSITE QUARTER OVER PANELS
2 OFF COMPOSITE SILL GUARDS

4 OFF MUDFLAPS
2 OFF COMPOSITE HEADLAMP BLANKS
2 OFF COMPOSITE REAR LIGHT BLANKS
FIRE EXTINGUISHER
2 SETS BONNET PINS
DRIVERS WINDOW NET
2 HIGH LEVEL REAR BRAKE LIGHTS
SWIFT SPORT REAR ROOF SPOILER
BATTERY MASTER CUT OFF SWITCH with PULL CABLE

**ALL NON STANDARD PARTS MUST BE PURCHASED THROUGH
PETER GWYNNE MOTORSPORT LIMITED.**