



## **SWIFT SPORT RALLYCROSS CHAMPIONSHIP**

### **Technical Regulations**

The Following M.S.A. Vehicle & Technical Regulations apply, according to the 2011 MSA Yearbook: Section J5, Technical Regulations N6.1 to 6.14.3 and these supplementary regulations.

**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 1600cc Suzuki Swift Sport VVTi (2006 onwards) 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, tailgate and rear quarter over panels. 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 Composite doors are permitted. Composite bonnet, tailgate and wings are permitted
- 1.7 All lights must be removed and the apertures blanked off, completely
- 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. (J5.16.6 refers)

The centre section and rear silencer can only be upgraded using the Sports Exhaust System supplied by Peter Gwynne Motorsport Ltd

- 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**
- 1.16 A sumpguard and fuel tank guard are **mandatory**
- 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**
- 1.21 Competition door numbers will be black with a minimum height of 230mm and width of 38mm. These are to be placed on the sponsor's background
- 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. See appendix 1.

## 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 (a), (g) or (h)
  - 2.1 (a) Optional bars as per K Appendix 2 Drawing 11 are permitted
- 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 with a minimum capacity of 1.75 litres AFFF (or equivalent -Refer to K3.1.2) is compulsory. The extinguisher should be retained by positive quick release brackets within reach of the driver while seated securely by their harness. The bracket is to be secured to the vehicle by a minimum of two 6mm bolts (Refer K3.1.4)
- 2.4. The standard front laminated windscreen can be replaced with a polycarbonate type **of minimum MSA required thickness of 4mm (Refer J5.20.8)**.

- 2.5. A Competition Seat with headrest is mandatory in accordance with K2.2, K2.3 and K13
- 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 HANS device is strongly **recommended**
- 2.9. An FIA approved crash helmet is **mandatory**
- 2.10. FIA approved 2 layer Nomex **overalls, boots and gloves** are **mandatory**.
- 2.11. Window nets are recommended.

### **3. Engine and Gearbox.**

- 3.1. The standard 1600cc Suzuki Swift Sport complete engine is **mandatory**. Bore 78 mm and stroke 83mm. Compression 11.10:1. 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 Swift Sport 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 as defined at as defined in 2011 MSA Blue Book "The Terminology".
  - 3.10. The standard 1600cc Suzuki Swift Sport gearbox is **mandatory**. No other parts are permitted. Straight cut gears or gearbox conversions are **not** permitted
  - 3.11. Limited slip differentials **are** permitted and supplied in the **PARTS KIT**
  - 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**
  - 4.2. Competition brake pads **are** permitted

- 4.3 Competition suspension units, supplied with the **PARTS KIT**, are **mandatory**
- 4.4 Minimum ride height is free
- 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** ('S' compound only)

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 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. Random fuel checks **may** be made
- 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 2011.
- 6.4 **Non** production of the Vehicle Log Book will render the vehicle unable to start

**Appendix A – Mandatory Parts Kit**

- 3-way Adjustable Suspension** - manufactured by AVO suspension
- Plated LSD Unit** - supplied by Peter Gwynne Motorsport
- 6.5 x 15 Wheels** - manufactured by Revolution Wheels
- 195/55 x 15 A048 Tyres** - manufactured by Yokohama Tyres

**Appendix B**

All parts to convert vehicle are available from Peter Gwynne Motorsport only.

Including:

- Bespoke MSA Specification Roll Cage** - Manufactured by Fabricage