

Drivers competing in this class must hold a **Speed National A Licence**. If you are new to Motorsport this means you must compete in 6 Motorsport Ireland events in a car up to 1600cc before moving on to cars above 1600cc.

1. **GENERAL REMARKS.** It is the driver's responsibility to ensure that the car driven complies with these regulations. All modifications are forbidden unless specifically authorised by these regulations. The term "standard" refers to the components as fitted to the vehicle by the original manufacturer when the model was in production. If you have any queries about these regulations please contact the series coordinator or series eligibility scrutineer. NB The competitor must be able to supply technical data to support any parts used on the vehicle.
2. **ELIGIBLE VEHICLES.** The Production Car Class is for cars that are, or have been available on general sale to the public **in the EU** and are at least 3 years old. Eligible cars must be 2 wheel drive with a normally aspirated engine. If you are building a Japanese car you must make sure the engine and gearbox in the car were on general sale in the European market. Cars, Engines or Gearbox's that were only available in Japan are not permitted. Homologation specials are not permitted. The cars will run in two classes to include:

#### **2.1. Class A, cars up to 1650cc**

2.1.1. Normally aspirated 2wd cars with engine capacities up to 1650cc having no more than 4 valves per cylinder including cars with variable valve timing as standard original equipment. Cars with "Honda VTEC" type variable valve timing will have to carry extra weight. **(Drivers using the 6<sup>th</sup> generation Honda Civic should be aware that only the VTI model may be used. The EK9 type R model and SIR Model are not permitted or any of its components or shell. These models were only available in Japan)**

#### **2.1.2. Class B, Cars from 1650cc up to 2050cc.**

Normally aspirated 2wd cars with engine capacities from 1650cc up to 2050cc, with no more than 5 valves per cylinder including cars with "Honda VTEC" type variable valve timing as standard original equipment. Although these cars will have to carry extra weight. **(Drivers using the Honda Civic EP3 may only use the UK version of this car with the 200 BHP K20A2 engine. The 220 BHP K20A, Japanese version of this car is not permitted.)**

2.2.2. Both classes will run together in heats and finals. These capacity limits are excluding any increase from the permitted maximum rebore of +0.5mm over standard bore size.

2.3. N.B. It is the intention of the Organisers, If necessary, to equalise the performance of cars. This may be done by various means including.

2.3.1. A minimum weight limit.

2.3.2. Addition of air intake restrictors.

2.3.3. Addition of engine rev. limiters. 2.3.4. Grid Positioning. These changes may be imposed at any time during the season. There is no appeal against the implementation of any of the performance equalisation control measures.

2.3.4. If you are unsure if a car is eligible for the class please contact the Rallycross committee and **"ASK BEFORE YOU BUILD OR BUY"** Colin Dowling 087-7868392.

### **3. SAFETY REQUIREMENTS.**

3.1. Roll cage. A roll cage must be fitted which complies with Appendix 2 of MI yearbook. In addition double side intrusion (door bars) must be fitted to both sides of the cage. The entire

cage must be constructed from a material complying with Appendix 2 16 of MI yearbook, the number of fixing points is free and the method of fixing is free. The addition of additional strengthening braces and their material is free, provided that the front bulkhead is not penetrated and that no part of the cage extends rearwards beyond the rear shock absorber mounting points.

3.2. Fire extinguisher. A fire extinguisher **MUST** be fitted; the minimum specification must be to current MI regulations. If a plumbed-in system is fitted this **MUST** be capable of being operated by the driver when strapped into the driver's seat. In addition the system **MUST** be able to be operated from an external triggering point located at the base of the windscreen on the driver's side of the car. The external triggering point can be connected to the plumbed-in extinguisher system by means of a pull cable.

3.3. Safety harness. An FIA approved safety harness must be fitted to the car, as per Appendix 2 of MI yearbook

3.4. Driver's seat. The driver's seat **MUST** be securely fitted to the car. An FIA approved seat as per Appendix 2 must be used.

3.5. Battery cut-off switch. A battery cut-off switch **MUST** be fitted to all vehicles that can be operated by the driver whilst strapped in the driver's seat. In addition the cut-off switch **MUST** be able to be operated from an external triggering point located at the base of the windscreen on the driver's side of the car. The external triggering point can be connected to the cut-off switch by means of a pull cable. The battery cut-off switch **MUST** isolate ALL electrical circuits (with the exception of those that operate fire extinguishers) and **MUST** interrupt the electrical supply to the ignition system.

#### 4. **CHASSIS/BODY.**

4.1. Body shell. The standard body shell **MAY NOT** be strengthened except for the following:

4.1.1. The fitting of the roll cage as per 2A.

4.1.2. The reinforcing of the standard suspension mounting points may **NOT** extend to more than a radius of 100mm from the centre of the suspension point.

4.1.3. To prolong the life of the body shell it is permitted to carry out seam welding to the engine bay only.

4.1.4. The exterior of the car **MUST** remain as standard including mirrors, door handles and bumpers, although it is permitted to remove body mouldings, badges and the radio aerial. It is permitted to fit guards to engine sump and fuel tank. It is **NOT** permitted to reinforce the bumpers or their mountings.

4.1.5. Glass sunroofs **MUST** be replaced as per Appendix 2 of MI yearbook.

4.1.6. **IN THE INTERESTS OF SAFETY IT IS STRONGLY RECOMMENDED THAT** - The side and rear window glass may be replaced with Lexan or polycarbonate having a minimum thickness of 4mm. If retained see Appendix 2 Article 19.2. Anti-shatter film. Consideration **MUST** be given to driver's compartment ventilation and for this purpose only, it is permitted to cut a maximum of 4 X 2-inch diameter holes in each of the rear side and tailgate windows.

4.1.7. The interior of the car **MUST** have the roof lining; carpets and all the seats, apart from the driver's, removed. It is also required that any audio equipment, spare wheel, tools and standard seat belts be removed. It is permitted to remove the door trim panels and the window regulators (the windows must then be fixed to prevent them opening). It is recommended that aluminium or Kevlar panels replace the trim panels. An interior mirror of a minimum of 50 sq. cm. **MUST** be fitted. The original dashboard **MUST** be retained although addition instruments may be fitted.

**5. SUSPENSION.**

- 5.1 It is permitted to fit non-standard shock absorbers and springs provided that they mount onto the body at the standard suspension mounting points. Any shock absorber units may only have a single method of damping adjustment. Multi-adjustable and/or remote reservoir types are prohibited. The ride height may be altered and adjustable spring platforms are permitted.
- 5.2. It is permitted to fit uprated bushes to the suspension (NO rose type joints permitted).
- 5.3. It is permitted to fit, remove or uprate antiroll bars (NO rose type joints permitted).
- 5.4. It is NOT permitted to have adjustable suspension geometry. I.E. Camber, Caster unless fitted as standard to the original car, the car MUST retain the type of suspension fitted as original equipment.
- 5.5. Camber must at all times be no more than 1 degree more or less than manufacturer's figure. Competitors must be able to provide manufacturer's data to prove original camber of their car.
- 5.6. Strut braces are permitted and their design and material are free, but they must not connect to the front bulkhead at any point. ONLY THE MODIFICATIONS LISTED BELOW ARE PERMITTED.

**6. ENGINE.**

- 6.1. The engine and gearbox MUST be as originally fitted to the car; they MUST retain their original configuration and location. It is not permitted to mix and match components from different engines. For example, if you are entering a Peugeot 106 GTI you must use a standard 106 gti engine in its entirety. You cannot take parts from another similar Peugeot engine and use them in your 106 GTI engine. The same applies to all components of the car. **Drivers using the Honda Civic VTI must only use the B16A2 engine. Drivers using the Honda Civic EP3 model must only run the K20A2 engine. The K20A engine is not permitted or any of its components.**
- 6.2. The engine may be rebored a maximum of + 0.5mm on the original size, but only standard pattern, unmodified pistons can be used. Competition orientated pistons are prohibited. Stroke must comply with Manufacturer's original specification.
- 6.3. Lightening of crankshaft or con rods is prohibited. Balancing may be carried out by pin drilling only.
- 6.4. Camshaft must be standard as originally supplied for the type of engine used. It may not be machined or reprofiled. Original timing gear must be used; offset keys or adjustable vernier drives may not be used, unless fitted to the original engine.
- 6.5. Cylinder head must be standard as originally fitted to the type of engine used. No gas flowing or polishing is allowed. Rough casting marks must be seen in inlet & exhaust ports and in 83.1 237 APPENDIX 83.1 RALLYCROSS combustion chambers. Heads may be skimmed for maintenance purposes only and may not exceed the manufacture's minimum dimension.
- 6.6. Competition Flywheels are not permitted. The standard unit may not be lightened or machined.

7. **RADIATOR.** Water radiator and hoses are free but the original radiator location MUST be retained. It is permitted to remove the heater. The associated pipework can be blanked off or linked together in the engine compartment. Cold start systems may be disconnected or removed.

**8. OIL COOLER.**

It is permitted to fit an oil cooler within the engine compartment.

**9. SUMP.**

It is permitted to baffle the standard sump and modify the oil pick up pipe. Dry sumping is not allowed.

**10. AIR INTAKE.**

It is permitted to remove/replace the original air filter and filter housing with a performance filter or induction kit. Where engine breather pipes cannot be refitted to the induction system, breather pipes must go to a catch tank of adequate size. It is permitted to change carburettor jets or injectors. It is NOT permitted to modify the inlet manifold system including the throttle mechanism, carburettor, fuel pressure regulators, and throttle body apart from fitting an additional external throttle spring.

- 11. IGNITION SYSTEM.** The standard type of ignition/engine management system MUST be retained and must not be modified in any way. **It is not permitted to add any chip or piggy back any other management system. The ECU must be exactly the same as it left the factory with the original map.** Rev. Limiters may be fitted or removed. Spark plugs and ignition leads are free. It is NOT permitted to add additional ignition or management systems. 3D management systems are NOT permitted. ANY form of traction control is NOT permitted.

**12. EXHAUST SYSTEM.**

The standard exhaust manifold MUST be retained. The exhaust system beyond the existing manifold is free but it MUST exit from the rear of the car and meet the current permitted noise levels for Rallycross. It is free to remove the catalytic converter.

**13. FUEL SYSTEM.**

13.1 The fuel pump, filter and fuel lines are free. Consideration should be given to the route taken by and the materials used for fuel lines to minimise any likely damage and reduce the danger of fire.

13.2 It is no longer permitted to have the fuel tank under the bonnet. A foam filled aluminium tank may be put inside the car but this tank must be kept inside a sealed box which cannot leak in to the driver compartment even if the car is upside down. This tank must also be vented to the outside of the car. Example photos of a tank as described can be provided on request. The standard tank may also be used or a foam filled tank in the original tanks position.

**14. TRANSMISSION.**

The standard bell housing, gearbox casing and all internals MUST be retained except for Torque bias and limited slip differentials (LSD), which are NOT permitted even if fitted as original equipment. Torque bias and LSD's MUST be replaced by a normal differential with the correct ratio. ANY form of traction control is NOT permitted. Gear ratios & final drive ratios must be the same as originally supplied for that model of car. Lightening of any of the gears is prohibited. Standard drive shafts MUST be retained. The clutch drive plate and cover may be up-rated by a standard pattern type. The following homologated gearboxes may be used as replacements for the Citroen **Saxo 8 valve VTR**: Citroen Saxo VTS (homologation no. A-5564), Peugeot 106 Rallye (**homologation no, N-5561, 1.6 Rallye gearbox only, not 1.3 Rallye gearbox**), Peugeot 106 16v (homologation no. N-5565), Peugeot 106 XSi (homologation no. A-5453).

**Drivers using the Peugeot 106 GTI or Citroen Saxo VTS must run the original gearbox with the following Ratios**

1<sup>st</sup>. 3.471

2<sup>nd</sup> 1.95

3<sup>rd</sup> 1.36

4<sup>th</sup> 1.05

5<sup>th</sup> 0.85

**Final Drive. 3.938**

**Drivers using the Honda Civic VTI must run the original UK version of the gearbox with the following ratios. (LSD'S ARE NOT PERMITTED EVEN IF FITTED AS STANDARD EQUIPMENT).**

1st 3.230

2<sup>nd</sup> 2.105

3<sup>rd</sup> 1.458

4<sup>th</sup> 1.107

5<sup>th</sup> .848

**Final Drive 4.4**

**(Y21, Y80, S80, S4C NON LSD)**

**Drivers using the Honda Civic EP3 must run the original UK version of the gearbox (NPQ3) with the following ratios. LSD'S ARE NOT PERMITTED**

1<sup>st</sup> 3.266

2<sup>nd</sup> 2.13

3<sup>rd</sup> 1.517

4<sup>th</sup> 1.147

5<sup>th</sup> 0.921

6<sup>TH</sup> 0.738

**Final Drive. 4.7**

## **15. ELECTRICAL SYSTEM.**

15.1. Battery. The type of battery and location is free but it MUST be secured. Batteries located in cockpit must be in battery box. The battery MUST be capable of repeatedly starting the engine.

15.2. Lights. It is recommended that all lights are removed and similar shaped covers are fitted to the resulting holes. Two high-Level brake lights MUST be fitted to the inside of the rear window in accordance with the Rallycross section of the current yearbook. A working rain light must be fitted to the rear of the vehicle.

15.3. Charging and starting. Both charging and starting circuits MUST be as standard and function efficiently. The alternator must be connected and charging at all times. There must not be any mechanism which allows this system to be turned on or off.

15. **STEERING LOCK.** The steering lock MUST be removed.

## **16. BRAKES.**

16.1. The standard type and size of brakes **MUST** be retained although it is permitted to fit nonstandard pattern friction material. Standard pattern aftermarket ferrous discs and drums may be used. It is **NOT** permitted to use cross-drilled or grooved brake discs/drums.

16.2. Brake lines may be re-routed. It is recommended that flexible braided brake lines be installed.

16.3. It is permitted to replace/add a brake pressure limiting valve. Any such valve **MUST NOT** be able to be adjusted by the driver while driving the car. 83.1 238 APPENDIX 83.1 RALLYCROSS

16.4. It is permitted to remove or deform brake back plates and add additional ducting to aid brake cooling.

17. **WHEELS.** 17.1 All cars competing in **Class A (up to 1650cc)** must run on the original size wheel maintaining the same off set.

17.2 All cars running in **Class B (1600cc up to 2050cc)** must run on the original size wheel maintaining the same off set.

18. **TYRES.**

18.1. All cars in class 1 must run an unmodified road legal tyre with all manufactures markings clearly visible or a Yokohama AO48 185/60R14 medium compound tyre.. Honda Civic VTI may also run a Yokohama AO48 195/60R15 medium compound tyre. Cars in class 2 must run a road legal tyre with all manufactures markings clearly visible only.

18.2 The use of tyre heating/heat retention devices are prohibited.

18.3 Scrubbing, re-grooving, re-cutting or modifying the thread pattern in any way is prohibited.

18.4 Where a control tyre of correct dimension is not made, the organisers may, at their discretion authorise a wheel with a different diameter and/or width.

19 **FUEL.**

19.1. Only Petrol widely available at the forecourts may be used and additives are prohibited.

19.2. Racing fuel is strictly Prohibited.

20 **WEIGHT.** A minimum weight including driver, may be set for individual makes and models of eligible cars. If the car you are using is not listed then you must make contact with the organisers to have a weight specified for that car. The Regs will then be updated by bulletin on the MI website.

**Class A**

**Class B**

Peugeot 205 Gti 1.6

850 KG

Honda Civic EP3

1250 KG

Citroen Saxo VTR

865 KG

All other cars

1150KG

Peugeot 106 GTI

900 KG

Specific weights for different cars may be issued if

Citroen Saxo VTS

900 KG

deemed necessary.

Honda Civic VTI

1100 KG

All weights include car and driver in full race gear with the car ready to race with sufficient fuel to complete a 5 lap race. These weights may be adjusted at any time if the organisers feel it is necessary to equalise racing or for safety reasons.

**21 MISCELLANEOUS.**

21.1. Strut braces are permitted and their design and material is free, but they must not connect to any part of the front bulkhead.

21.2. Adequate ventilation **MUST** be provided to the passenger compartment.

21.3. MI, the organisers or the series scrutineer have the right to seal and inspect any aspect of the car.

21.4. Contravention of the regulations will result in the loss of TWO maximum scores in the Rallycross Championship. Other penalties including the loss of ALL points may apply depending on the severity of the contravention as 83.1 239 APPENDIX 83.1 RALLYCROSS decided by the Championship Registrar whose decision may be appealed to the MI Championship Stewards in accordance with the established procedure at the time.

21.5. Sealing. The Series Eligibility Scrutineer may wish to seal engines and transmissions as a control at any time during the championship or after an event for subsequent checking. The competitor **MUST** provide the facility to seal (3mm holes drilled in two adjacent bolt/studs/castings) so that no stripping can be done without removing a seal. The following items must have the facility to be sealed so that they cannot be removed and or dismantled without breaking the seal(s):

21.5.1. Cylinder head.

21.5.2. Camshaft.

21.5.3. Sump.

21.5.4. Inlet manifold.

21.5.5. Exhaust manifold.

21.5.6. Clutch housing.

21.5.7. Gearbox.

21.5.8. Differential.

It is the aim of the Production Class Rallycross division to encourage close safe racing at an affordable level and the organisers will constantly monitor the cars so that the spirit of the division is maintained.

**22 CONTACT NUMBERS.** Colin Dowling 087-7868392. [dowlingcolin81@gmail.com](mailto:dowlingcolin81@gmail.com)

**23 All cars competing in this class must register for the championship. All drivers must fill out a registration form declaring which model of car you are using. You must also declare which engine, gearbox and ECU you are using by providing the code/part number for each item. If there is any change to any of these parts it must be declared before the car competes in a championship event and the registration form updated. Drivers who fail to complete the form and hand it in to the organisers will not score championship points. Points will not be back dated after late submission of this form.**