

Appendix "J" Art. 254 - Specific regulations for Production Cars (Gr. N)

1) DEFINITION

Large scale series production touring cars.

2) HOMOLOGATION

At least 5000 identical units must have been produced in 12 consecutive months and homologated by the FISA in Touring Cars (Gr. A).

The Optional Variants (VO) of the Touring Cars (Gr. A) form shall not be valid in Production Cars (Gr. N), unless they refer to:

- fly-wheel for automatic gearboxes;
- fuel tank;
- automatic gearboxes;
- sun roof;
- 2/4 doors versions;
- safety roll cage.

The use of tanks homologated in VO on the Touring Car (Group A) form must be carried out under the conditions laid down in Article 5.9.2 of the Touring Car (Group A) regulations.

Likewise evolutions of the type (ET) homologated in Touring Cars (Gr. A) are not valid in Production Cars (Gr. N).

Production Cars (Gr. N) cars must derive from cars homologated In Touring Cars (Gr. A) in a stage of evolution after 1.1.1979.

The FISA shall only grant its homologation to a model which does not present any differences compared with the basic form of the country of construction which would affect the basic characteristics.

3) NUMBER OF SEATS

Cars must have at least 4 seats, in accordance with the dimensions defined for Touring Cars (Gr. A).

4) MODIFICATIONS AND ADJUNCTIONS ALLOWED OR OBLIGATORY

All the modifications which are not allowed are expressly forbidden.

The only work which may be carried out on the car is that necessary for its normal servicing; or for the replacements of parts worn through use or accident. The limits of the modifications and fittings allowed are specified hereinafter. Apart from these, any part worn through use or accident can only be replaced by an original part identical to the damaged one.

The cars must be strictly series production models identifiable by the homologation form data.

5) MINIMUM WEIGHT

Cars must have at least the weight appearing on the homologation form plus the weight of the safety devices.

As far as rolcages or rolibars which cannot be removed from the car and which were manufactured in accordance with Art. 253.8.2,8.3 and 8.4 of Appendix J are concerned, the following weights will be taken as a basis for the safety cage:

- Rollbar manufactured according to drawings 1/2: 15 kg.
- Rollcage manufactured according to drawings 3,4,4 a, 5,6,7,11,12: 25kg.
- Rollcage manufactured according to drawings 8, 9,10: 30 kg.

This is the real weight of the empty car (without persons or luggage aboard) without tools, jack. All the liquid tanks (lubrication, cooling, braking, heating where applicable) must be at the normal level foreseen by the

manufacturer, with the exception of the windscreen wiper or headlight wiper, brake, cooling system, fuel and water injection tanks, which shall be empty. Additional headlights which do not appear on the homologation form must be removed before weighing.

6)

6.1) ENGINE

The accelerator cable may be replaced or doubled by another one regard-less of whether it comes from the manufacturer or not.

- **Ignition:** make and type of plugs are free as are rev-limiters and high tension cables.
- **Cooling system:** the thermostat is free as is the control system and the temperature at which the fan cuts In. Locking system for the radiator cap is free.

- **Fuel feed:** Carburettor(s) parts or fuel injection system parts regulating the quantity of fuel reaching the engine may be modified, provided that they have no influence on air admission. The original injection system must be maintained. The injectors may be changed for injectors which are identical except with regard to the size of the pintle nozzle hole at the end.

Competitors using cars with any hydraulic valve lift system whatsoever must be able to supply the scrutineers with a mechanical valve lifter to enable them to measure the valve lift.

The elastic material of the engine mountings is free, but not the number.

- Exhaust (Rally only):

It will be possible:

- either to remove the inside of the original silencer;
- or to modify the exhaust from the first silencer to the exit, the maximum dimensions of the duct being those of the pipe situated upstream of the first silencer. (see drawing n 254-3, page 256).

Should two inlets exist in the first silencer, the section of the modified duct must be less than or equal to the total of the two original sections.

The exit should be situated in the same position as that of the series production exhaust system.

These liberties must not entail any bodywork modifications and must respect the laws of the country in which the event is run with regard to noise levels.

Additional parts for the mounting of the exhaust are authorized.

If an exhaust silencer is added, it must be of the original type and must contain noise-absorbing material.

- **Cruising speed controller:** This controller may be disconnected.

6.2) TRANSMISSION

- **Clutch:** the disc is free, including the weight, with the exception of the number and diameter.

6.3) SUSPENSION

Springs:

Coil springs: The length is free, as is the number of coils, the wire diameter, the type of spring (progressive or not), the external diameter and the form of the spring seat.

Leaf springs: The length, width, thickness and vertical curvature are free.

Torsion bars: The diameter is free.

- **Shock absorbers:** free, provided that their number, their type, (telescopic, arm, etc.) their working principle (hydraulic, friction, mixed, etc.) and their attachment points remain unchanged.

Gas filled dampers, regarding their working principle, will be considered as hydraulic dampers.

If, in order to change the damping element of a MacPherson suspension, or a suspension operating in a identical manner, it is necessary to replace the entire MacPherson strut, the replacement parts must be mechanically equivalent to the original ones and have the same mounting points.

The form of the spring seats in McPherson suspensions is free.

6.4) RUNNING GEAR

The wheels must be those homologated by the manufacturer. Tyres are free provided that they can be mounted on those wheels.

The spare wheel may be changed for a wheel identical to those of the running gear and it may be brought inside the driving compartment, on condition that it is firmly secured there and that it is not installed in the spare reserved for the driver and the front seat passenger. The original spare wheels or the original running gear wheel may be used as spare wheels.

Wheel fixations by bolts may be changed to fixations by pins and nuts provided that the number of attachment points and the diameter of the threaded parts as indicated on drawing n0 254-1 (page 256).

6.5) BRAKING SYSTEM

Brake linings are free, as well as their mountings (riveted, bonded, etc.) provided that the contact surface of the brakes is not increased.

Protection plates may be dismantled or bent.

In the case of a car fitted with servo-assisted brakes, or an anti-locking device, this device may be disconnected. The same applies for anti-lock braking systems.

Brake lines may be changed for aviation type lines.

6.6) BODYWORK

6.6.1) Exterior: hubcaps must be removed.

Protective headlight covers may be fitted provided that their only function is to cover the glass, and that they have no influence on the car's aerodynamics.

The fitting of underbody protections is authorized In rallies only, provided that these really are protections which respect the ground clearance, which are removable and which are designed exclusively and specifically in order to protect the following parts: engine, radiator, suspension, gearbox, tank, transmission, exhaust.

Any locking system may be used for the cap of the petrol tank.

If the spare wheel is fixed underneath the bodywork, (I.e. if it is leaked by the airflow), or inside the engine compartment it may be brought inside the cock-pit, on condition that it is firmly secured and that is is not installed in the space reserved for the driver and the front-seat passenger.

6.6.2) Passenger space

All accessories which have no effect on the vehicle's behaviour are allowed without restrictions, such as those concerning the aesthetics or interior comfort (lighting, heating, radio, etc.), on the express condition that they do not influence, even in a secondary manner, the efficiency of the engine, steering, strength, transmission, braking, or road-holding.

All the passenger seats if occupied must be fitted with a headrest.

All the controls must be those provided by the manufacturer and they must retain their original function but they can be worked on to make them more accessible or more easily usable for example, the addition of an extension to the handbrake lever, of an additional flange to the brake pedal, etc.

The following is allowed in particular:

- 1) Additional measuring instruments, counters, etc. may be freely installed, provided that their fitting is not likely to create any danger.

- 2) The horn may be changed or an additional one, possibly for the passenger's use, added.
- 3) The mechanism of the handbrake lever may be adapted in order to obtain instant unlocking (fly-off handbrake).
- 4) Seat supports may be modified, and all kinds of seat-covers may be added including those creating bucket seats.
- 5) Bucket seats are allowed provided that they have at least the same minimum weight as the original seats or provided that they are ballasted to bring them up to the weight of the original seat:
- 6) Additional compartments may be added to the glove compartment as well as additional pockets to the doors.
- 7) Steering wheel is free.
- 8) It is authorised to replace the electric windows by manually operated windows.

6.6.3) Reinforcements

It is permitted to fit to the front reinforcement bars on condition that they are removable and fixed exclusively by bolts onto the suspension or spring mounting points.

A hole may also be bored in the upper suspension trim to fit these rods. These bars may also be fitted at the rear, in the same conditions.

Strengthening of the suspended part is allowed provided that the material used follows the original shape and is in contact with it.

6.6.4) When the spare wheel is originally set in a closed accommodation, and when this wheel is changed for a thicker one from the running gear (see Article 6.4), situated in this space, it is possible to remove from the cover of the location of the wheel the surface induced by the diameter of the new wheel (drawing n0 254-2, page 256).

6.7) ELECTRICAL SYSTEM

- **Battery:** the make, capacity, and battery cables are free. The tension and the site of the battery must be retained.

- **Generator:** may be replaced by a more powerful one. A dynamo may not be replaced by an alternator and vice-versa.

- **Lighting system:**

Additional headlights including the corresponding relays are allowed, provided that the total does not exceed eight (tail and parking lights not included provided that this is accepted by the laws of the country). They may not be housed within the bodywork.

The original headlights can be made Inoperative and covered with adhesive tape. They can be replaced by other headlights, In compliance with this article.

Headlights and other exterior lights must always exist in pairs. A reversing light may be fitted provided It can only be used when police regulations on this subject are observed.

Fuses may be added to the electrical system.

6.8) FUEL CIRCUIT

Providing the original tank is equipped with an electric pump and an interior filter, it is possible when using an FT3 tank to place a filter and a pump with identical characteristics to the homologated one outside. These parts must be protected in adequate fashion.

Should FT3 tanks be used, the Group A regulations may be used for the fitting of a filler hole.

Fuel lines must be changed for aviation type lines if an FT3 tank is used, the route of these lines being free. Should a series production tank be used, this change is optional.

6.9) **Jack:** The jack is free on condition that its anchor points on the car are not modified.