

The Trinidad and Tobago Rally Club

Vehicle Regulations

Group A

Version 1.2

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Introduction

The Trinidad and Tobago Rally Club (TTRC) is a non-profit motorsport club located in the Caribbean Island of Trinidad & Tobago. The club was founded in 1977 and is the NGB (National Governing Body) for the sport of rallying in Trinidad & Tobago, and is the sole local body recognized by the Ministry of Sport and Community Development of the government of Trinidad & Tobago.

What do we do?

The conducts:

- The organization, execution and supervises Treasure Hunt events.
- The organization, execution and superintends Stages Rallying
- The organization, execution and superintends training of marshals for the sport.
- The organization, execution and superintends the development of drivers/Co-Drivers

The following safety regulations were developed to promote fun, fair and safe competition. If you encounter any issues such as spelling or grammatical errors or a dispute, please don't hesitate to notify a member of the TTRC Executive Committee, and we will gladly address them as needed.

Unless a modification is otherwise stated within this rule book, then the modification is strictly not allowed. Anyone can contact a TTRC Executive Committee member for confirmation.

These regulations will be in effect from 1st April 2024.

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Large scale series production touring cars.

HOMOLOGATION

At least 2500 identical units must have been produced. Unless restriction specified on the homologation form, all homologations valid for Group N are valid for Group A.

NUMBER OF SEATS

Cars must have at least four seats minimum.

MODIFICATION AND ADJUNCTION ALLOWED OR OBLIGATORY

All the modifications which are not allowed by the present regulations 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 and identifiable from the information specified in the articles on the Homologation form.

MINIMUM WEIGHT

Minimum weight is 1230kg. This is the real weight of the empty car (without persons or luggage aboard) without tools or jack. When two spare wheels are carried in the car, the second sparewheel must be removed before weighing. 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 must be empty.

At no time during the competition may a car weigh less than this minimum weight.

The use of ballast is permitted once the ballast is secured and will not pose a danger to the driver and/or Co-driver.

GENERAL ALLOWED MODIFICATIONS

Irrespective of the parts for which the present article lays down freedom of modification, the original mechanical parts necessary for the propulsion as well as all accessories necessary for their normal functioning, excepting any steering, braking, or suspension part, having undergone the normal machining operations laid down by the manufacturer for series production may be subjected to all tuning operations through finishing, scraping but not replacement. In other words provided that the origin of the series production part may always be established, its shape may be ground, balanced, adjusted, reduced or modified through machining. Chemical and heat treatment are allowed, in addition to the above. However, the modifications defined by the above paragraph are allowed on condition that the minimum weights and dimensions mentioned are maintained.

NUTS AND BOLTS

Throughout the car, any nut, bolt, screw may be replaced by any other nut, any other bolt, any other screw and have any kind of locking device (washer, lock nut, etc.).

Any addition of material or parts is forbidden unless it is specifically allowed by an article in these regulations. Any material removed is not to be reused. Restoration of body shape and chassis geometry, following accidental damage, is permissible by the addition of the materials necessary to effect the repairs (body filler, weld metal, etc.); other parts which are worn or damaged are not to be repaired by the addition or attaching of material unless an article in these regulations allows appropriate freedom. Using the above rule a car much still meet the minimum weight as specified.

ENGINE

CYLINDER-BLOCK-CYLINDER-HEAD

It is permitted to close the unused apertures in the cylinder block and cylinder head, if the only purpose of this operation is that of closing. A rebore of 0.6 mm maximum is allowed in relation to the original bore without this leading to the capacity class limit being exceeded. The resleeving of the engine is allowed within the same conditions as for reboring, and the sleeve material may be modified. The sleeves must have a circular internal section and be concentric with the cylinders, dry or wet and distinct from one another. Planning of the cylinder-block and of the cylinder head is allowed. In the case of rotary engines, on condition that the original dimensions of the intake inlet ports and of the exit of the exhaust are respected, the dimensions of the inlet and exhaust ducts into the engine block are free

COMPRESSION RATIO

The compression ratio may be modified. For turbocharged engines, it must not exceed 11.5:1 at any time.

If the car is homologated with a higher rate, it must be modified so as not to exceed 11.5:1.

CYLINDER HEAD GASKET

Free

PISTONS

Free as well as the piston-rings, gudgeon pins and their securing mechanism.

CONNECTING RODS, CRANKSHAFT

Apart from the modifications permitted by the above paragraph "General Allowed Modification", additional mechanical treatments, different from those carried out on the series production part, are allowed to be made to the crankshaft and the con rods

BEARING SHELLS

Make and material are free; they must however retain their original type and dimensions.

FLYWHEEL

It may be modified in accordance with the above paragraph "General Conditions" provided that the original flywheel may still be identified.

FUEL AND AIR FEE

The accelerator cable and its cable sleeve stop are free.

The air filter and the filter box are free. For a normally aspirated engine, the plenum is free, but it must remain in the engine bay. The air filter along with its box may be removed, moved in the engine compartment or replaced by another. The air intake may be fitted with a grill.

Fuel pumps are free. They may not be fitted in the cockpit unless this is an original fitting, in which case they must be well protected. Petrol filters, with a maximum unit capacity of 0.5 I may be added to the fuel feed circuit.

The accelerator linkage is free.

The original heat exchangers and intercoolers, or any other device fulfilling the same function, must be retained, and remain in their original location, which means that their supports and position must remain original. The pipes between the supercharging device, the intercooler and the manifold are free (on condition that they remain in the engine bay), but their only function must be to channel air and to join various parts together. Furthermore, for a turbocharged engine, the total volume between the restrictor and the butterfly (or butterflies) must not exceed 20 litres.

In the case of air-water intercoolers, the pipes connecting the intercooler and its radiator are free, but their only function must be that of channelling water.

Any system for injecting water into the intake manifold and/or intercooler is forbidden.

AIR INJECTION

The original system and its type, as specified on the homologation form of the vehicle (such as K-Jetronic) must be retained, as must its location. The elements of the injection device regulating the metering of the quantity of fuel admitted to the engine may be modified, but not the diameter of the opening of the butterfly. The air-measuring device is free. The injectors are free, except for their number, their position, their assembly axis and their operating principle. The petrol lines feeding them are free. The electronic box is free, insofar as it does not incorporate more data. The fuel pressure regulator is free.

The number of cylinders is limited to 6.

CUBIC CAPACITY

The cubic capacity is limited as follows:

NORMALL ASPIRED ENGINES

- 3L maximum for tow valves per cylinder
- 2.0L maximum for more than two valves per cylinder.

All 2 wheel-drive cars, with a cylinder capacity greater than 1600 cm3 and using parts homologated in Kit Variant (VK) must be fitted with an intake restrictor according to their homologation forms.

TURBO/SUPER CHARGED ENGINES

The nominal cylinder capacity is limited to 2500 cm3 maximum. The supercharged system must comply with that of the homologated engine. All supercharged cars must be fitted with a restrictor fixed to the compressor housing.

All the air necessary for feeding the engine MUST PASS through this restrictor which must respect the following:

- See Drawing 254-4
- The maximum internal diameter of the restrictor is 34mm.
- This diameter must be maintained for a minimum length of 3mm.
- This length is measured upstream of plane A.
- Plane A is perpendicular to the rotational axis of the turbocharger and is at a maximum of 47 mm upstream of plane B, measured along the neutral axis of the intake duct.
- Plane B passes through the intersection between the most upstream extremities of the wheel blades and a cylinder of 34 mm diameter the centreline of which is the rotational axis of the turbocharger.

This diameter must be complied with, regardless of the temperature conditions. The external diameter of the restrictor at its narrowest point must be less than 40 mm, and must be maintained over a distance of 5 mm to each side. The mounting of the restrictor onto the turbocharger must be carried out in such a way that two screws have to be entirely removed from the body of the compressor, or from the restrictor, in order to detach the restrictor from the compressor. Attachment by means of a needle screw is not authorised. For the installation of this restrictor, it is permitted to remove material from the compressor housing, and to add it, for the sole purpose of attaching the restrictor onto the compressor housing. The heads of the screws must be pierced so that they can be sealed. The restrictor must be made from a single material and may be pierced solely for the purpose of mounting and sealing, which must be carried out between the mounting screws, between the restrictor (or the restrictor/compressor housing attachment), the compressor housing (or the housing/flange attachment) and the turbine housing (or the housing/flange attachment) (see Drawing 254-4)



254-4 Drawing 254-4

CAMSHAFT(s)

Free, except the number and number of bearings. It is permitted to add sleeve bearings to the bearings but their widths must not be greater than those of the original bearings. Timing is free. The material, type and dimensions of the pulleys, chains and belts for driving the camshafts are free. The material of the gearing and sprockets associated with the camshaft is free. The route and the number of belts and chains are free. The guides and tensioners associated with these chains or belts are also free, as are protective covers.

VALVES

The material and the shape of the valves are free, as is the length of the valve stem.

The other characteristic dimensions, mentioned on the homologation form, must be retained, including the respective angles of the valves axis.

Valve lift is free. With regard to the cylinder head orifices (inner side of the engine), in the case of rotary engines, only those dimensions which have been entered on the homologation form have to be respected. The cups, cotters and guides (even if they do not exist as original parts) are not subject to any restriction. Shims may be added under the springs. The material of the seats is free.

ROCKER ARMS AND TAPPETS

Rocker arms may only be modified in accordance with "General allowed modifications" above. The diameter of the tappets as well as the shape of the tappets and rocker arms are free, but the rocker arms must be interchangeable with the original ones. It is possible to use backing plates to adjust them.

IGNITION

The ignition coil(s), condenser, distributor, interrupter and plugs are free subject to the ignition system (battery/coil or magneto), remaining the same as provided by the manufacturer for the model concerned. The fitting of an electronic ignition system, even without a mechanical interrupter, is allowed provided no mechanical part other than those mentioned here above is modified or changed, with the exception of the crankshaft, the flywheel or the crankshaft pulley, for which modifications limited to the necessary additions is possible. In the same conditions, it is possible to change an electronic ignition for a mechanical ignition. The number of plugs may not be modified; that of the coils is free.

COOLING SYSTEM

Provided the original fitting on the car is retained, the radiator and its fixation are free, as are the lines linking it to the engine. A radiator screen may be fitted.

The fan and its drive system can be changed freely, or be withdrawn. It is allowed to add a fan per function. Thermostat is free. Dimensions and material of the fan/turbine are free, as are their

number. The fitting of a water catch tank is allowed. The radiator cap may be locked. The expansion chamber may be modified; if one does not exist originally, one may be added.

LUBRICATION

Radiator, oil/water exchanger, lines, thermostat, sump and pump strainers are free, without modifying the bodywork. The number of pump strainers is free. The driving ratio and the internal parts of the oil pump are free. The flow rate may be increased relative to the original part. Oil pressure may be increased by changing the discharge valve spring. The housing of the oil pump and its cover if any, as well as their position inside the oil sump must be original, but the inside of the housing and its cover if any may be machined. The fitting of an oil pump chain tensioner is permitted. The addition of oil lines is allowed inside the engine block, these lines may be used for spraying oil. These oil lines must not have a structural function. They may have a flow control valve only when the series engine block has them (the number and type of valves must be identical to those of the original series engine). The fitting of an oil radiator outside the bodywork is only allowed below the horizontal plane passing through the hub in such a way that it does not protrude beyond the general perimeter of the car seen from above as it stands on the starting line, without modifying the bodywork. Fitting an oil radiator in this manner does not allow the addition of an enveloping aerodynamic structure. All air openings must have the sole effect of inducing the necessary air for the cooling of the radiator, and must not have any aerodynamic effect. If the lubrication system includes an open type sump breather, it must be equipped in such a way that the oil flows into a catch tank. Dry Sumps are not allowed. The original wet sump may be modified or expanded.

This must have a capacity of 2 litres for cars with a cubic capacity equal to or below 2000 cm3, and 3 litres for cars with a cubic capacity of over 2000 cm3. This container must be made either out of plastic or must include a transparent window. An air/oil separator can be mounted outside the engine (maximum capacity 1 litre), in accordance with the Drawing 255-3.



Drawing 255-3

The oil must only flow from the oil catch tank towards the engine by the force of gravity alone. A fan may be fitted for cooling the engine oil, but must have no aerodynamic effect.

<u>Oil Gauge</u>

The oil gauge is free, but must be present at all times and have no other function. It may be moved from its original position.

<u>Oil Filter</u>

The fitting of an oil filter, or a cartridge, in working order is mandatory, and the entire oil flow must pass through this filter or cartridge. The filter or cartridge is free, provided that it is interchangeable with the original filter or cartridge.

ENGINE MOUNTING - ANGLE AN DPOSITION

Mountings are free (but not their number) provided that the angle and position of the engine within its compartment are not modified, and that Articles 5.7.1 and 5-General Conditions are respected. Supports may be welded to the engine and to the bodywork and their position is free.

EXHAUST

All cars must have a full exhaust which exits at the rear of the car.

The exhaust exit must be inside the car's perimeter. For cars with turbocharged engines the exhaust can only be modified after the turbocharger.

Thermal screens may be fitted on the exhaust manifold, the turbocharger and on the exhaust device, with, however, the sole function of thermal protection

NORMALLY ASPIRATED ENGINES

The gas flow must never be modified by means of electronic or mechanical controls.

TURBO/SUPERCHARGED ENGINES

The gas flow may only be modified through the operation of the waste-gate and/or the control for injecting fresh air into the exhaust manifold.

DRIVE PULLEYS, BELTS AND CHAINS FOR ANCILLARIES SITUATED OUTSIDE THE ENGINE

The material, type and dimensions of the pulleys, chains and belts for driving the ancillaries are free. The route and the number of belts and chains are free.

GASKETS

Free

ENGINE SPRING

Springs are not subject to any restrictions but they must keep their original functioning principle.

STARTER

It must be retained, but its make and type are free.

TURBO/SUPERCHARGER PRESSURE

This pressure may be modified. The connection between the housing and the waste-gate may be made adjustable if it is not originally so. The original system of operation of the waste-gate may be modified and be rendered adjustable but this system must be retained. A mechanical system must remain mechanical, an electrical system must remain electrical, etc.

TRANSMISSION

CLUTCH

Clutch is free, but the homologated bell housing must be retained, together with the operation type. The clutch fluid tanks may be fixed inside the cockpit. In that case, they must be securely fastened and be protected by a liquid and flame proof covering.

GEARBOX

Converter gearboxes are forbidden. An additional lubrication and oil cooling device is allowed (circulation pump, radiator, and air intakes situated under the car), but the original lubrication principle must be retained. However, a gearbox homologated as an additional one with an oil pump can be used without this pump.

A fan may be fitted for cooling the gearbox oil, but must have no aerodynamic effect. The interior of the gearbox is free. Gearbox ratios must be homologated in Group A. Gearbox supports are free, but not their number.

Sequential Gearboxes are permitted with paddle shift and/or gear lever as desired. Gearbox housing must remain as homologated

FINAL DRIVE AND DIFFERENTIAL

A limited-slip differential is allowed provided that it can be fitted into the original housing without any modification other than those laid down in the above paragraph "General Allowed Modifications".

The original differential may also be locked. The original lubricating principle for the rear axle must be retained. However an additional lubricating and oil cooling device is allowed (circulation pump, radiator, and air intakes situated under the car)

An oil radiator and/or an oil pump may be fitted in the boot (without modifying the series body) but a liquid- and flameproof bulkhead must separate them from the occupants of the vehicle.

The differential supports are free.

The use of active differentials, i.e. any system acting directly on the differential adjustments (initial stress, pressure...), is forbidden for all 2-wheel drive cars.

For cars with four-wheel drive, the front and rear differentials and self-locking systems must be in conformity with the following points :

- Only entirely mechanical systems are allowed for front and rear differential
- The differential must be of the planetary or epicyclic single stage type
- The self-locking system must be of the type with plates and ramps.
- Electronic differential controllers are allowed for centre differential
- Hydraulic differential pumps are free but must only be used for the differential.

None of the parameters of the front and rear differentials can be modified except with the help of tools when the car is stopped.

TRANSMISSION SHAFTS

Titanium alloy transverse shafts are forbidden. Titanium alloy longitudinal shafts are forbidden,

SUSPENSION

The position of the rotational axes of the mounting points of the suspension to the wheel uprights and to the shell (or chassis) must remain unchanged.

In the case of an oil-pneumatic suspension, lines and valves connected to the spheres (pneumatic parts) are free.

REINFORCEMENT BARS

Reinforcement bars may be fitted on the suspension mounting points to the bodyshell or chassis of the same axle, on each side of the car's longitudinal axis. The distance between a suspension attachment point and an anchorage point of the bar cannot be more than 100 mm, unless the bar is a transverse strut homologated with the safety cage, or unless it is an upper bar attached to a McPherson suspension or similar.

In the latter case, the maximum distance between an anchorage point of the bar and the upper articulation point must be 150 mm (Drawings 255-2 and 255-4). Apart from these points, this bar must not be mounted on the bodyshell or the mechanical parts.



Drawing 255-2 and 225-4

STRENGTHING

Strengthening of the mounting points and of the running gear, by joining of material, is allowed.

ANTIROLL BAR

The antiroll bars homologated by the manufacturer may be replaced or removed, provided that their mounting points on the chassis remain unchanged. These anchorage points can be used for the mounting of reinforcement bars.

Only mechanically operated antiroll bar systems are authorised. The antiroll setting can only be adjusted directly by the driver, using an exclusively mechanical system without external power.

Any connections between front and rear antiroll bars are forbidden.

Titanium alloy antiroll bars are forbidden.

JOINTS AND MOUNTING POINTS

The joints may be of a different material from the original ones.

The suspension mounting points to the bodyshell or chassis may be modified :

- By using a "Uniball" joint. The original arm can be cut and a new seat for the "Uniball" welded. Braces will be used next to the "Uniball" itself
- By using a screw with a greater diameter
- By reinforcing the anchorage point through the addition of material within the limit of 100 mm from the anchorage point. The position of the centre of the articulation cannot be changed (see Drawing 255-5).



Drawing 255-5

SPRINGS

The spring dimensions are free but not the type and the material (which must be iron-based alloy). The spring seats may be made adjustable even if this includes the adjunction of material.

A coil spring may be replaced with two or more springs of the same type, concentric or in series, provided that they can be fitted without any modifications other than those specified in this article.

The ride height must be adjustable only with the use of tools and when the car is immobile.

SHOCK ABSORBERS

Make is free, but not the number, the type (arm, etc.), the system of operation (hydraulic, friction, mixed, etc.) nor the supports.

The checking of the operating principle of the shock absorbers must be carried out as follows : Once the springs and/or the torsion bars are removed, the vehicle must sink down to the bump stops in less than 5 minutes.

With regard to their principle of operation, gas-filled shock absorbers are considered as hydraulic shock absorbers. If in order to change the damping element of a McPherson suspension, or suspension working on an identical principle, it is necessary to replace the entire McPherson strut, the replacement part must be mechanically equivalent to the original one, except for the damping element, and the spring cup.

If the shock absorbers have separate fluid reserves located in the cockpit, or in the boot if this is not separated from the cockpit, these must be strongly fixed and must have a protection.

A suspension travel limiter may be added. Only one cable per wheel is allowed, and its sole function must be to limit the travel of the wheel when the shock absorber is not compressed. Any servo control activating a power circuit acting directly or indirectly on the suspension parts is forbidden.

A system allowing the setting of the shock absorbers to be adjusted electronically is authorised. Any electronic control system for the shock absorbers is forbidden.

HUB CARRIERS

Titanium alloy hub carriers are forbidden.

WHEELS AND TYRES

Complete wheels are free provided that they may be housed within the original bodywork; this means the upper part of the complete wheel, located vertically over the wheel hub centre, must be covered by the bodywork, when measured vertically.

Wheel fixations by bolts may be freely changed to fixations by pins and nuts.

The use of tyres intended for motor cycles is forbidden. Forged magnesium is forbidden for wheels.

FOR GRAVEL

6" wide by 15" maximum rim. The wheels do not necessarily have to be of the same diameter

FOR TARMAC

8" wide by 18" maximum rim. The wheels do not necessarily have to be of the same diameter

Except for gravel, should the wheel be fixed using a central nut, a safety spring must be in place on the nut throughout the duration of the competition and must be replaced after each wheel change.

BRAKING SYSTEM

The braking system is free, provided that:

- It includes at least two independent circuits operated by the same pedal. (Between the brake pedal and the callipers, the two circuits must be separately identifiable, without any interconnection other than the mechanical braking force balancing device)
- There is no device or "system" fitted between the master cylinder and the callipers.

Data logging sensors, contact switches for the rear red lights or front and rear mechanical limiters and handbrakes activated directly by the driver are not considered as "systems".

Material and mounting method (riveted or bonded) are free provided that the dimensions of the linings are retained.

SERVO BRAKES, BRAKING FORCE ADJUSTERS, ANTI-LOCKING DEVICES

Servo-brakes may be disconnected and removed; braking force adjusters and anti-locking devices may be disconnected, but not removed. The adjusting device is free.

The braking force adjusters may not be moved from the compartment in which they are originally situated (cockpit, engine compartment, exterior, etc.).

COOLING OF BRAKES

Protection shields may be modified or removed, but material may not be added.

Only one flexible pipe to bring the air to the brakes of each wheel is allowed, but its inside section must be able to fit into a circle with a 10 cm diameter.

This pipe may be doubled, but in that case the inside section of each pipe must be able to fit into a circle with a 7 cm diameter. The air pipes must not go beyond the perimeter of the car, seen from above.

BRAKE DISCS

The only operation allowed is rectification. A device for scraping away the mud that collects on the brake discs and / or the wheels may be added.

The handbrake device may be disconnected but only for closed course races (circuit, hill climbs, slaloms).

HYDRAULIC PIPES

Hydraulic pipes may be replaced by lines of aircraft quality. The brake fluid tanks may be fixed inside the cockpit. In that case, they must be securely fastened and be protected by a liquid and flame proof covering.

BRAKE CALLIPERS

Only one calliper is authorised on each wheel. The section of each calliper piston must be circular.

MASTER CYLINDER

The brake master cylinder is free

STEERING

Power steering may be disconnected but not removed. Any steering system which permits the re-alignment of more than two wheels is forbidden.

Power assisted steering systems may not be electronically controlled. No such system may have any function other than that of reducing the physical effort required to steer the car. If the production car is fitted with an electronically controlled power steering system:

- If this type of system is retained, no part of the system may be modified, but the electronic control unit may be reprogrammed
- It is possible to use a new type of power steering system provided that it is not electronically controlled.

BODYWORK-CHASSIS

LIGHTENING AND REINFORCEMENTS

Strengthening of the sprung parts of the chassis and bodywork is allowed provided that the material used follows the original shape and is in contact with it.

Reinforcements by composite materials are allowed in accordance with this article, whatever their thickness, according to the Drawing 255-8.



Insulating material may be removed from under the car floor, from the engine compartment, the luggage boot, and the wheel arches.

Unused supports (e.g. spare wheel) situated on the chassis/bodywork can be removed, unless they are supports for mechanical parts which cannot be moved or removed.

It is possible to close the holes in the cockpit, the engine and luggage compartments, and in the fenders. The holes may be closed using sheet metal or plastic materials, and may be welded, stuck or riveted. The other holes in the bodywork may be closed, by adhesive tape only.

EXTERIOR

<u>BUMPERS</u> Overriders may be removed.

Cars are permitted to replace body panels with non OEM replacements however the replaced panels must all function as original and be fabricated from multi-layered composite material. The Minimum weight for all cars must be met as advised by these rules, regardless of any replaced panels.

HUB-CAPS and WHEEL EMBELLISHERS

Hub-caps may be removed. Wheels embellishers must be removed.

WINDSCREEN WIPERS

Motor, position, blades and mechanism are free but there must be at least one windscreen wiper provided for the windscreen. The headlamp washer device may be dismounted.

WINDSCREEN WASHER TANK

The capacity of the washer tank is free and the tank may be moved inside the cockpit, trunk or the engine compartment. The pumps, lines and nozzles are free.

The removal of external decorative strips, following the contour of the car and less than 55 mm high, is authorised.

Jacking points may be strengthened, moved, and increased in number.

Headlight covers may be fitted provided their sole aim is to protect the headlight glass and they have no effect on the car's aerodynamics

Additional safety fastenings for the windscreen and the side windows may be fitted provided they do not improve the aerodynamic qualities of the car.

Front windscreens must be OEM or equivalent replacement laminated glass only. All other non-front windshield are free to be swapped to polycarbonate. The car must still meet the minimum weight for the class.

The fitting of underbody protections is authorised, 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, extinguisher bottles.

These protections must be made from either aluminium alloy / steel and carbon kevlar and have a minimum thickness of 4 mm and 2 mm for steel. Nevertheless, it is possible to reinforce the upper part with metal or composite ribs and to add non-structural composite parts.

Underbody protections may extend the whole width of the underside part of the font bumper only in front of the front wheel axis.

It is permitted to fold back the steel edges or reduce the plastic edges of the fenders and the bumpers if they protrude inside the wheel housing. Plastic soundproofing parts may be removed from the wheel openings. These plastic elements

may be changed for aluminium /plastic or Carbon Kevlar elements of the same shape. The attachment of the fenders by weld may be changed for attachment by bolts/screws.

Skirts" are banned. All non-homologated devices or constructions designed so as to fully or partially fill the space between the sprung part of the car and the ground is forbidden in all circumstances.

No protection authorised can play a role in the aerodynamics of the car.

The door hinges must not be modified.

The hinges and/or joins of the bonnet, boot lid and tailgate are free, but it is not possible to change or add their locations or to change their functions.

SEATS

The front seats may be moved backwards but not beyond the vertical plane defined by the front edge of the original rear seat. The limit relating to the front seat is formed by the height of the seatback without the headrest, and if the headrest is incorporated into the seat, by the rearmost point of the driver's shoulders. The passenger's seat may be removed as well as the rear seats.

DASHBOARD

The trimmings situated below the dashboard and which are not parts of it may be removed. It is permitted to remove the part of the centre console which contains neither the heating nor the instruments

DOOR- SIDE TRIM

It is permitted to remove the soundproofing material from the doors, provided that this does not modify the shape of the doors. In the case of a two-door car, the trim situated beneath the rear side windows may also be removed but must be replaced with panels made from non-inflammable composite material.

It is permitted to remove the trim from the door together with the side protection bar in order to install a side protection panel which is made from non-inflammable composite materials. The minimum configuration of this panel must comply with that shown on Drawing 255-14



255-14

Drawing 255-14

If the original structure of the doors has not been modified (removal, even partially, of the tubes or reinforcements), the door panels may be made from metal sheeting at least 0.5 mm thick, from carbon fibre at least 1 mm thick or from another solid and non-combustible material at least 2 mm thick.

The minimum height of this panel must extend from the base of the door to the maximum height of the door strut. It is permitted to replace electric winders with manual ones

In the case of cars with 4 or 5 doors, the lift mechanism for the rear windows may be replaced with a device that locks the rear windows in the closed position.

FLOOR

Carpets are free and must be removed.

OTHER SOUND PROOFING MATERIALS AND TRIM

Other padding materials, except for those mentioned under section (Doors) and (Dashboard), may be removed.

AIR-CONDITIONING

May be added or removed but heating must be assured.

STEERING WHEEL

Free; the anti-theft device may be removed. The quick release mechanism must consist of a flange concentric to the steering wheel axis. he release must be operated by pulling the flange along the steering wheel axis.

AIRPIPES

Air pipes may only pass through the cockpit if these are intended for the ventilation of the cockpit.

ADDITIONAL ACCESSORIES

All those which have no influence on the car's behaviour are allowed, for example equipment which improves the aesthetics or comfort of the car interior (lighting, heating, radio, etc.).

In no case may these accessories increase the engine power or influence the steering, transmission, brakes, or road holding even in an indirect fashion

All controls must retain the role laid down for them by the manufacturer. They may be adapted to facilitate their use and accessibility, for example a longer handbrake lever, an additional flange on the brake pedal, etc.

The horn may be changed or an additional one added, within reach of the passenger

Additional compartments may be added to the glove compartment and additional pockets in the doors provided they use the original panels.

ELECTRICAL SYSTEM

The nominal voltage of the electrical system including that of the supply circuit of the ignition must be retained

The addition of relays and fuses to the electrical circuit is allowed as is the lengthening or addition of electric cables. Electric cables and their sleeves are free.

GENERATOR, VOLTAGE REGULATOR AND ALTERNATOR-STARTER

Free, but the driving system of the generator must not be modified. The generator and the voltage regulator may be moved but must remain in their original compartment (engine bay, etc...). They may be combined if the homologated vehicle had them originally and provided they come from another series model.

LIGHTING

All lighting and signalling devices must be retained. The make of the lighting devices is free. The original holes for all lighting must remain.

A car must have minimum following functioning lights:

- Pair of head lights Front
- Pair of indicator lights Front
- Pair of park lights Front
- Pair of rear tail lights
- Pair of rear indicator lights
- Pair of park lights rear
- 1 Reverse light

The fitting of a reverse-light is authorised, if necessary by embedding it into the coachwork, provided that it is only switched on when the reverse gear is engaged and that the police regulations are respected

If the series fog lamps are kept, they are counted as additional headlights.

FUEL TANKS

Fuel tanks can be changed to fuel cell and installed into the trunk area. The use of the OEM tank is allowed but a metal protection shield is required to cover the bottom of the tank.

Fuel tanks are free. If a fuel tank is installed in the trunk non flammable metal shield is required to separate the trunk area from the vehicle interior. Fuel tank capacity is limited to 100liters.