

ARTICLE 261 - 2013
REGLEMENTATION SPECIFIQUE AUX VOITURES DU GROUPE R5
SPECIFIC REGULATIONS FOR CARS IN GROUP R5

	RALLYE 5 - R5 Essence REGLEMENTATION	RALLY 5 / R5 Petrol REGULATIONS
00-0		Foreword: this Article 261 must be used with Articles 251, 252 and 253 of Appendix J and with the corresponding Group VR5 and Group A forms.
01-1	DEFINITION	
01-2		Touring Cars or Large Scale Series Production Cars, supercharged Petrol engine, 4-wheel drive.
02-1	HOMOLOGATION	
02-2		At least 2500 identical examples of these cars must have been manufactured in 12 consecutive months and homologated by the FIA in Touring Cars (Group A). The basic Group A form will be used, completed by the VR5 form and the specific VO's (see 02-3)
02-3		All parts homologated in specific VO for Group R5 of the Group A form may be used in Group R5. All the parts homologated on the R5 form must be used in their entirety. These parts must not be modified. All other Group A VO's are prohibited in Group R5.
	JOKER / JOKER	
		All the parts homologated on the VR5 Variant form must be used in their entirety. These parts must not be modified. The use of a part homologated as "Joker" on a car will be noted on its technical passport. It will no longer be possible to use the old part as from the date specified.
03-1	MODIFICATIONS ET AJOUTS AUTORISES / AUTHORISED MODIFICATIONS AND ADDITIONS	
03-2		These regulations are written in terms of authorisation; therefore, what is not expressly authorised hereinafter is prohibited.
03-4		Damaged threads can be repaired by screwing on a new thread with the same interior diameter ("helicoil" type). 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 or specific part identical to the damaged one. The cars must be strictly series production models identifiable from the information given on the homologation form.
03-5		Materials: the use of magnesium alloy is prohibited except in the case of parts fitted on the series model.

		<p>The use of ceramics and titanium alloy is not authorised unless these materials are present on the series vehicle. Only these standard parts should be used.</p> <p>The use of carbon or Kevlar is authorised on condition that only one layer of fabric is used and is affixed to the visible face of the part.</p> <p>The side protections of the bodywork parts may be made of several layers of Kevlar or fibreglass.</p> <p>The fuel tank protections may be made from several layers of Kevlar, carbon fibre or fibreglass.</p> <p>The free parts as well as the parts homologated in VR5 must be in conformity with Articles 252-1.3 of Appendix J.</p>
201-01	POIDS MINIMUM / MINIMUM WEIGHT	
201-02		The cars must have at least the following weight:
201-03		<p>This is the real weight of the car, with neither driver nor co-driver nor their equipment.</p> <p>The equipment comprising the following:</p> <ul style="list-style-type: none"> - driver's helmet + head restraining device - co-driver's helmet + head restraining device. <p>At no time during the event may a car weigh less than this minimum weight.</p> <p>In case of a dispute during weighing, the full equipment of the driver and co-driver (see above) will be removed; this includes the helmet, but the headphones external to the helmet may be left in the car.</p> <p>The use of ballast is permitted in the conditions provided for under Article 252-2.2 of the "General Prescriptions".</p>
201-04		<p>The minimum weight is 1200 kg under the conditions of Article 201-03 (and with only one spare wheel).</p> <p>The combined minimum weight of the car (under the conditions of Article 201-03 and with only one spare wheel) and crew (driver + co-driver) is 1360 kg.</p> <p>When two spare wheels are carried in the car, the second spare wheel must be removed before weighing</p>
205-1	GARDE AU SOL / GROUND CLEARANCE	
205-2		<p>No part of the car must touch the ground when all the tyres on one side are deflated.</p> <p>This test shall be carried out on a flat surface under race conditions (occupants on board).</p>
300-1	MOTEUR / ENGINE	
300-2		Engine shields made of plastic material, the purpose of which is to hide mechanical components in the engine compartment, may be removed if they have a solely aesthetic function.
300-3		Soundproofing material and trim fitted under the bonnet and not visible from the outside may be removed.
300-4		The screws and bolts may be changed, provided that the replacements are made from ferrous material.
302-1	Supports Moteur / Boîte de vitesses	Engine / Gearbox mountings
302-3		The engine mountings must be original or homologated in VR5. The material of the elastic part may be replaced; the number of mountings must be the same as the original.

304-1	Turbocompresseur	Turbocharger
304-2		<p>Turbocharger: it must be homologated in VR5. No additional supercharging device relative to the original is authorised. The maximum internal diameter of the restrictor is 32 mm* and the external dimension is 38 mm*, in the conditions set out in Article 255.5.1.8.3. This diameter may be revised at any time without notice. The housing of the turbo may be modified by machining or through the addition of material in order to install the restrictor (Drawing 254-4) and the Turbo speed sensor; this modification must be homologated in VR5. The maximum boost pressure will be 2,5 bar *</p> <p>*subject to additional tests</p>
304-2-bis	Echangeur d'air de suralimentation	Supercharging air exchanger
		<p>Supercharging air exchanger: Original or homologated in VR5 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. Their maximum internal diameter is 80 mm. The air cooling lines upstream of the exchanger are free. The cooling air screens of the exchanger may be made from composite material. The supports and the position of the exchanger are free (on condition that it is installed in the engine bay). Furthermore, the total volume between the restrictor and the butterfly must not exceed 20 litres.</p>
305-1	Nombre de cylindres en rallyes	Number of cylinders in rallies
305-2		The number of cylinders is limited to 4.
310-0	Rapport de compression	Compression Ratio
310-1		Maximum ratio: 10,5:1
317-0	Piston complet	Complete piston
317-1		Homologated in VR5.
318-0	Bielle	Connecting rod
318-1		Original or homologated in VR5.
319-0	Vilebrequin	Crankshaft
319-1		Original or homologated in VR5.
319-3		<p><u>Shell bearings :</u> Their make and material are free, but they must retain their original type and dimensions.</p>
320-0	Volant moteur	Engine flywheel
320-2		Original or homologated in VR5.

321-0	Culasse	Cylinder head
321-1		Homologated in VR5. It is authorised to close the unused openings in the cylinder head, if closing them is the only purpose of this operation.
321-2		All devices for recycling the exhaust gases or equivalent systems (e.g. an additional air pump, active carbon filters) may be removed and the openings resulting from that operation sealed.
322-0	Joint de culasse	Cylinder head gasket
322-2		Original or homologated in VR5.
324-a0	Système d'injection	Injection system
324-a1		Any additional injection system (i.e. water ...) is prohibited. <u>Injectors</u> For direct petrol injection, at any point of the fuel circuit, the maximum pressure authorised is 8 bars in the low pressure circuit and 200 bars average on one cycle in the high pressure circuit (direct injection only).
324-a2		The ECU must be homologated in VR5.
324-a3		Inputs to the ECU (sensors, actuators, etc.), including their functions, must be homologated in VR5. The looms are free. The accelerator cable may be replaced or doubled by another one regardless of whether it comes from the manufacturer or not. Components of the injection system situated downstream of the air-flow measuring device, and which control the quantity of petrol entering the combustion chamber, may be modified but not replaced, provided that they do not have any influence over the quantity of air admitted. Only sensors / actuators homologated in VR5 must be used.
324-a4-5		Any data recording system which is homologated in VR5 is authorised.
325-0	Arbres à cames / Poulies	Camshaft / Pulleys
325-1		Maximum lift 11 mm. The cam lift must be homologated in VR5. The number and diameter of the bearings must be retained. "VVT" and "VALVETRONIC" etc. type systems are authorised if original. They may be rendered inoperative.
325-3		The pulleys / gearing / pinions fitted on the camshafts are free. If the original engine is fitted with automatic belt (or chain) tensioners, it is permitted to lock them in a given position by means of a mechanical device. The belt tension rollers are free, but their number must be identical to the original. The material and profile of the timing belt are free. The number of teeth must be identical to the original.
325-f0	Poussoirs / Culbuteurs	Tappets / Rocker arms

325-f2		Homologated in VR5.
326-0	Distribution	Timing
326-1		The timing is free. If the original timing includes an automatic play recovery system, this may be neutralised mechanically and play compensation discs may be used. The oil inlets may be blocked. The plugs used must have no function other than that of blocking the ducts.
326-2		The valve play compensation discs between the valve buckets and stems are free.
327-a0	Système d'admission	Intake system
327-a1		Variable geometry intake is prohibited. If the series-produced car is equipped with one, it has to be deactivated. Intake manifold: must be homologated in VR5. The connection between the intake and the exhaust manifold is not allowed, even if it fitted on the series engine. The FIA boost control system with a maximum boost pressure of 2,5 bar *must be used. *subject to additional tests
327-d0	Soupapes d'admission	Intake valves
327-d1		Original or homologated in VR5 The cotters and guides are not subject to any restriction: it is permitted to add spacers under the springs.
327-d2	Commande d'accélérateur	Accelerator / Throttle control
327-d3		Free with its sleeve stop.
327-d6	Filtre à air	Air filter
327-d7		The air filter, its box and the plenum chamber are free but must remain in the engine compartment. If the air intake ventilating the driving compartment is in the same zone as the air intake for the engine, this zone must be isolated from the air filter unit, in case of fire. The air intake may be fitted with a grill. Anti-pollution components may be removed, provided that this does not result in an increase in the quantity of air admitted. The air filter housing and the air ducts may be made from composite material. For the housing, the material must be fire-retardant.
327-d8	Boîtier papillon	Throttle valve housing
327-d9b		Components of the injection system which control the quantity of fuel entering the combustion chamber may be modified, but not the diameter of the throttle valve opening.
327-d10		The throttle unit must be homologated in VR5.
327-h0	Ressort de soupape d'admission	Intake valve spring

327-h1		Free.
327-h2	Coupelle de ressort de soupape d'admission	Intake valve spring cup
327-h3		Free.
328-d0	Soupape d'échappement	Exhaust valve
328-d1		Original or homologated in VR5 The cotters and guides are not subject to any restriction: it is permitted to add spacers under the springs.
328-h0	Ressort de soupape d'échappement	Exhaust valve spring
328-h1		Free.
328-h2	Coupelle de ressort de soupape d'échappement	Exhaust valve spring cup
328-h3		Free.
328-p0	Collecteur d'échappement	Exhaust manifold
328-p0b		The exhaust manifold must be homologated in VR5.
328-p2	Système d'échappement	Exhaust system
328-p3a		Free downstream of the turbocharger. The thickness of the tubes used for the exhaust system must be greater than or equal to 0.9 mm, measured in the uncurved parts. The section of these tubes must be equivalent to that of a tube with an maximum interior diameter of 70 mm. 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. Only one pipe may be present at the exit, unless the original part is used. The rear exhaust exit position is free. The cut out in the rear bumper must be homologated in VR5. 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. A silencer is a section of the exhaust system that serves to reduce the exhaust noise level of the vehicle.
328-p4		Additional parts for the mounting of the exhaust are authorised.
328-p6	Convertisseur catalytique	Catalytic converter
328-p7		It must be either series (coming from the homologated model produced in a quantity of more than 2500 units) or taken from the technical list n°8.
328-p7b		The catalytic converter core should be situated at least 150mm before the end of the exhaust pipe.
329-0	Arbres d'équilibrage	Balancing shafts
329-0		Any modification must be homologated in VR5

330-0	Allumage	Ignition
330-1		Freedom for the make and type of the spark plugs and for the HT cables. Cars must be fitted with an engine rev. limiter, maximum engine revs being limited to 7500 rpm.
331-0	Refroidissement d'eau moteur	Engine water cooling
331-01		The water pump must be homologated in VR5.
331-02		The radiator must be homologated in VR5. It must be mounted in the original location; the fixings are free, as well as the water lines and screens.
331-03		The fitting of a water catch tank is allowed. The original expansion chamber may be replaced with another, provided that the capacity of the new chamber does not exceed 2 litres and that it is placed in the engine compartment. The radiator cap and its locking system are free. The thermostat is free, as is the control system of the electric fan(s) and the temperature at which it (or they) cuts in. The liquid cooling lines external to the engine block and their accessories are free. Lines of a different material and/or diameter may be used. At any time, the maximum distance between the rear face of the radiator core and the rearmost part of the cooling fan blades is 150 mm. A duct may be fitted between the radiator core and the cooling fan.
333-a0	Lubrification / Système d'huile	Lubrication / Oil system
333-a1		Radiator, oil/water exchanger, lines, thermostat and pump strainers (including the number) are free (without modifying the bodywork). The oil radiator cannot be situated outside the bodywork. Open type sump breather: 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. This must have a capacity of 1litres. This container shall either be made of translucent plastic or include a transparent panel. Air/oil separator: an air/oil separator may be mounted outside the engine (maximum capacity 1 litre), in accordance with Drawing 255-3. The oil must flow from the oil catch tank towards the engine by the force of gravity alone. The vapours must be re-aspirated by the engine via the intake system. Fan: a fan may be fitted for cooling the engine oil, but must have no aerodynamic effect.
333-a2		Oil gauge: 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.
333-a3		Oil filter: the filter is free, provided that it is interchangeable with the original filter. 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 series oil line may be replaced with another. In order to allow the fitting of oil cooler and temperature and/or pressure sensor connections, the oil filter support may be machined or replaced. An adapter between the oil filter and the oil filter housing, or between the oil filter support and the engine block, is permitted. This adapter may also have oil cooling and temperature and/or pressure sensor connections.
333-b0	Carter d'huile et pompe à huile	Oil sump and oil pump

333-b1		The oil sump must be homologated in VR5. Its sole function must be that of containing oil. The number of mounting points must not exceed the original. Dry sump is not allowed.
333-b2		Baffles: the fitting of baffles in the oil sump is authorised.
333-b3		An oil deflector may be fitted between the planes of the oil sump gasket and engine block. The series deflector may be replaced, provided that the distance between the oil sump seal surface and that of the engine block is increased by no more than 6 mm.
333-b4		Oil pump must be homologated in VR5. Oil pump: the drive system of the oil pump must be homologated in VR5. The flow rate may be increased relative to the original. Its cover, if any, as well as their position inside the oil sump must remain original, but the inside of the housing and its cover may be machined. The fitting of an oil pump chain tensioner is permitted. The drive system of the oil pump is free. The oil pressure regulation system may be modified.
333-b5		Oil pressure accumulator: Must be original or homologated in VR5.
400-1	CIRCUIT DE CARBURANT / FUEL CIRCUIT	
401-a0	Réservoir de carburant	Fuel tank
401-a1		The fuel tank must be homologated in the VR5 extension. Only this tank may be used (without any modification). Its location must be that specified in the VR5 extension. A liquid-proof shield between the tank and the occupants is mandatory. It is mandatory that refuelling must only be carried out by means of a fast connector. A leak-proof cover in order to allow the checking of the validity expiry date of the fuel tank should be available as described in article 253-14.3.
402-a0	Circuit de carburant	Fuel circuit
		<p><u>Petrol lines</u> The petrol lines must be of aviation quality. The installation of petrol lines is free provided that the prescriptions of Article 253-3 of Appendix J are respected.</p> <p><u>Fuel pumps (except high pressure pumps)</u> Fuel pumps (including their number) are free provided that they are installed inside the fuel tank. Petrol filters with a maximum unit capacity of 0.5 l may be added to the fuel feed circuit.</p> <p><u>Fuel bleed port</u> When a fuel bleed port is imposed by the regulations, it must be mounted on the low pressure part of the fuel circuit.</p> <p><u>Petrol gauges:</u> A maximum of 2 petrol gauges is allowed.</p> <p>It is allowed to install a radiator in the fuel circuit (maximum capacity: 1 litre). The radiator should not be located in the cockpit or in the boot.</p>

500-1		EQUIPEMENT ELECTRIQUE / ELECTRICAL EQUIPMENT
500-01		Electric cable assembly: free.
500-02		Additional measuring instruments, such as speedometers, etc. may be installed or replaced, and possibly have different functions. Such installations must not involve any risk. However, the driver should be able to see the speed of the car when driving. Fuses may be added to the electrical system. The fuse boxes may be moved or removed.
500-03		The horn may be changed and/or an additional one added within reach of the passenger. The horn is not compulsory on closed roads.
501-bat0	Batterie	Battery
501-bat1		If in the cockpit: - The battery must be situated behind the driver or codriver seats (the new location of the battery must be homologated in VR5). - The battery must be a dry battery. Each battery must be securely fixed and protected electrically by a cover which covers it completely. Should the battery be moved from its original position, it must be attached to the body using a metal seat and two metal clamps with an insulating covering, fixed to the floor by bolts and nuts. The make, capacity and cables of the battery are free. The nominal voltage must be the same or lower than that of the standard production car. The minimum weight of the battery is 8 kg
501-bat2		A power take-off connected to the battery is permitted in the cockpit.
502-alt0	Alternateur / Générateur / Démarreur	Alternator / Generator / Starter
502-alt1		They must be retained. The alternator must be homologated in VR5. The alternator / starter must be homologated in VR5. The mountings are free provided that the location complies with the VR5 homologation extension. The starter motor is free and his position must be homologated in VR5. The origin of the starter motor should be from a standard car.
502-alt1c		A dynamo may not be replaced with an alternator, and vice-versa.
503-écl0	Système d'éclairage	Lighting system
503-écl1		A maximum of 6 additional headlights are authorised, including the corresponding relays, on condition that this is accepted by the laws of the country. If the series fog lamps are kept, they will be counted as additional headlights. They may not be housed within the bodywork. Headlights and other front exterior lights must always exist in pairs. The original headlights may be rendered inoperative and covered with adhesive tape. If they are independent of the headlights, the original fog lights may be removed (see Article 803-a2b). Diurnal lights (daytime lights) may be replaced with the substitute part homologated in VR5. 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. Lateral indicator lights (as well as their location) must be retained if fitted on the standard production car.
503-écl2		The fitting of a reverse light is authorised, provided that it will switch on only when the reverse gear is engaged and that police regulations are respected.
600-0	TRANSMISSION / TRANSMISSION	
602-b0	Embrayage	Clutch
602-b1		Clutch mechanism must be homologated in VR5. Clutch disc: free but it must be of the cerametallic type.
602-b4		Clutch control must be homologated in VR5.
603-0	Supports de boite de vitesses	Gearbox mountings
603-01		Gearbox mountings must be homologated in VR5.
603-02		In these conditions, the material of the elastic part may be replaced.
603-b0	Boite de vitesses et différentiel arrière	Gearbox and rear differential
603-b1		The gearbox must be homologated in VR5. The number of teeth and the homologated ratios must be retained.
603-d0	Commande de boite de vitesses	Gearbox control
603-d1		The gearbox control (sequential linkage) must be homologated in VR5.
603-h0	Refroidissement de boite de vitesses	Gearbox cooling
603-h1		Lubrication device and oil cooling system: must be homologated in VR5.
605-a0	Couple final	Final drive
605-a1		Final drive: must be homologated in VR5. Only the final drive ratio (pinion/crown assembly) homologated in VR5 are authorised.
605-d0	<u>Différentiel (avant et arrière)</u>	<u>Differential (front and rear)</u>
605-d1		Mechanical type limited slip differential: must be homologated in VR5.
605-d2		"Mechanical limited slip differential" means any system which works purely mechanically, i.e. without the help of a hydraulic or electric system.
606-c0	Arbres de transmission transversaux et longitudinaux	Transverse and longitudinal transmission shafts
606-c1		Must be homologated in VR5.
700-a0	ESSIEUX-SUSPENSIONS (AVANT ET ARRIERE) / FRONT AND REAR AXLES-SUSPENSIONS	
700-a1		All the suspension parts homologated in the VR5 extension must be used without any

		<p>modifications.</p> <p>a) Linkages The joints may be of a different material from the original ones (e.g. harder silent blocks, aluminium, Uniball joints, etc.). The position of the rotational axles of the mounting points of the suspension to the wheel uprights and to the shell (or chassis) must remain unchanged in relation to those homologated in VR5 extension.</p> <p>b) 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 will 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.</p> <p>c) The reinforcement of anchorage points with additional material is authorised on condition that material following the original shape and in contact with it is used. The suspension reinforcements must not create hollow sections and must not allow two separate parts to be joined together to form one.</p>
700-a3		<p>Upper suspension points. The upper suspension points must be homologated in the VR5 Variant.</p>
702-0	Ressorts	Springs
702-1		<p>The main and helper spring dimensions are free (but not the type). The spring seats may be made adjustable even if this includes the adjunction of material. The material of the main and helper spring must be steel alloy. 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.</p>
706-a0	Barres anti-roulis	ar Anti-roll bars
706-a1		<p>Anti-roll bars that can be adjusted from the cockpit are prohibited. The anti-roll bars, together with their anchorage points, must be homologated in the VR5 extension. Under no circumstances may the anti-roll bars be connected to one another. The anti-roll bars must be of a purely mechanical type (no part that is of a hydraulic type may be connected to the anti-roll bar or to one of its components).</p>
707	Amortisseurs	Shock absorbers
707-b		<p>Shock absorbers. Only one shock absorber per wheel is authorised. Only shock absorbers and McPherson strut assembly homologated in the VR5 Variant may be used. Under no circumstances may the shock absorbers be connected to one another. The checking of the operating principle of the shock absorbers will 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 will be considered as hydraulic shock absorbers.</p>

		<p>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.</p> <p>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.</p> <p>Water cooling systems are forbidden.</p> <p>Changes to the spring and shock absorber settings from the cockpit are prohibited.</p>
800-a0	TRAIN ROULANT / RUNNING GEAR	
801-a0	Roues	Wheels
801-a1		<p>- Complete wheels are free provided that they may be housed within the original homologated bodywork; this means that the upper part of the complete wheel, located vertically over the wheel hub centre, must be covered by the bodywork when measured vertically.</p> <p>Wheel fixations by bolts may be freely changed to fixations by pins and nuts.</p> <p>The use of tyres intended for motorcycles is forbidden.</p> <p>Under no circumstances may the "rims / tyres" assembly exceed a width of 9" and a diameter of 650 mm.</p> <p>- Rims must imperatively be made from cast material.</p> <p>* For gravel rallies, only 6.5" x 15" or 7" x 15" rims are authorised, the material of the rims is free (provided that it is cast) and the minimum weight of a 6.5" x 15" or 7" x 15" rim is 8.6 kg.</p> <p>* If specified in the Supplementary Regulations of the event (such as snow Rallies), the maximum dimension of the rims is 5.5" x 16".</p> <p>* For asphalt rallies, only 8" x 18" rims are authorised, the material of the 8" x 18" rims is free (provided that it is cast) and the minimum weight of an 8" x 18" rim is 8.9 kg.</p> <p>- The fitting of air extractors on the wheels is prohibited.</p> <p>- The use of any device allowing a tyre to conserve its performances with a pressure equal to or lower than atmospheric pressure is prohibited. The inside of the tyre (the space included between the rim and the inside of the tyre) may only be filled with air.</p> <p>-At least one spare wheel is compulsory. However if there are any, they must be securely fixed, and not installed in the space reserved for the occupants of the vehicle. No exterior modification of the bodywork must result from this installation.</p>
803-a0	Système de freinage	Braking system
		<p>Only the brake discs, callipers, handbrake and pedals homologated in the VR5 variant may be used (without any modifications).</p> <p><u>Brake linings</u></p> <p>Brake linings are free, as well as their mountings (riveted, bonded, etc.) provided that the contact surface of the brakes is not increased.</p> <p>A device for scraping away the mud which collects on the brake discs and / or the wheels may be added.</p>
803-a1		Brake lines may be changed for aviation type lines.
803-c1	Maitre-cylindre	Master cylinder
		Master cylinders must be homologated in the VO/VR5 Variant.
803-c3	Servo-frein, limiteur d'effort de freinage, system antiblocage (limiteurs de pression)	Brake servos, braking effort limiters, anti-lock braking systems (pressure limiters)
		In the case of a car fitted with servo-assisted brakes, this device may be disconnected, removed or replaced with the kit homologated in VR5. The same applies for anti-lock braking

		systems. If the anti-lock braking system (ABS) is disconnected or removed, the use of one or more mechanical rear braking distributor(s) homologated by the manufacturer in the VR5 Variant is authorised.
803-v1	Etriers Avant et Arrière	Front and Rear Callipers
		It is permitted to add a spring in the bore of the callipers and dust covers of the callipers.
804-a0	Système de direction	Steering system
804-a1		Steering mechanism (housing and rack): Only parts homologated in the VR5 extension may be used (without any modification).
804-a2		The driving pulleys and the position of the hydraulic power steering pump are free. The lines linking the power steering pump to the steering rack may be replaced with lines conforming to Article 253-3.2.
804-a4	Biellettes de direction	Steering rods
		Only parts homologated in the VR5 extension may be used (without any modification).
804-c0	Volant de direction	Steering wheel
		The steering wheel is free. The locking system of the anti-theft steering lock may be rendered inoperative. The quick release mechanism is compulsory and must consist of a flange concentric to the steering wheel axis, coloured yellow through anodisation or any other durable yellow coating, and installed on the steering column behind the steering wheel. The release must be operated by pulling the flange along the steering wheel axis.
804-c1	Colonne de direction	Steering column
		Only parts homologated in the VR5 extension may be used (without any modification).
900-a0	CARROSSERIE - COQUE / BODYWORK - BODYSHELL	
900-a0		Only parts authorised by the present regulations and/or parts mentioned in the "modifications / lightening of the body" VO may be removed. TIG type welds are prohibited for the body shell and roll cage.
900-a1	Extérieur	Exterior
		- Additional openings on the engine bonnet must be homologated and must be fitted with wire netting with a mesh of maximum 10 mm. - Air ducts (without any modification of the homologated openings) may be added on the following conditions: * The air may be authorized only to cool the auxiliaries. * A single duct per auxiliary is authorized. * The maximum inner section of each duct must be that of a circular section of 102 mm diameter. - Strengthening of the suspended parts of the chassis and bodywork through the addition of parts and/or material is allowed under the following conditions: The shape of the reinforcing part/material must follow the surface of the part to be reinforced,

		<p>having a shape similar to it and the following maximum thickness measured from the surface of the original part:</p> <ul style="list-style-type: none"> - 4 mm for steel parts, - 12 mm for aluminium alloy parts. <p>For bodywork parts, the reinforcing part/material must be on the area not visible from the outside.</p> <p>Stiffening ribs are allowed but the making of hollow sections is forbidden.</p> <p>The reinforcing part/material must not have any other function than that of a reinforcement and its thickness must be constant.</p> <ul style="list-style-type: none"> - Hubcaps must be removed. - It is permitted to fold back the steel edges or reduce the plastic edges of the wings if they protrude inside the wheel housing. <ul style="list-style-type: none"> - The plastic soundproofing parts may be removed from the interior of the wheel arches. - The soundproofing material or the material for the prevention of corrosion may be removed. These elements made from synthetic materials may be changed for aluminium or plastic elements of the same shape. - The removal of external decorative strips, following the contour of the car and less than 55 mm high, is authorised. <ul style="list-style-type: none"> - 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. - Any locking system may be used for the cap of the petrol tank. <ul style="list-style-type: none"> - The jacking points may be strengthened, moved and increased in number. These modifications are limited exclusively to the jacking points. <p>The jack must be operated exclusively by hand (either by the driver, or by the co-driver), i.e. without the help of a system equipped with a hydraulic, pneumatic or electric energy source.</p> <p>The wheel gun must not allow the removal of more than one nut at a time.</p>
900-d0	Vérins	Jacks
900-d1		<p>The jacking points may be strengthened, moved and increased in number. These modifications are limited exclusively to the anchorage points of the jack.</p> <p>The jack must be operated exclusively by hand (either by the driver, or by the co-driver), i.e. without the help of a system equipped with a hydraulic, pneumatic or electric energy source.</p> <p>The wheel gun must not allow the removal of more than one nut at a time.</p>
900-e	Protection sous caisse	Underbody protection
900-e1		<p>The fitting of underbody protections is authorised only in rallies, 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, steering, exhaust, and extinguisher bottles.</p> <p>Underbody protections may extend the whole width of the underside part of the front bumper only in front of the front wheel axis.</p> <p>These protections must be made from either aluminium alloy or steel and have a minimum thickness of 3 mm.</p> <p>The fuel tank protections may be made from several layers of Kevlar, carbon fibre or fibreglass.</p> <p>Side panel protection: The use of Kevlar and fibreglass is authorised. It may include several layers of Kevlar.</p> <p>Plastic protection parts fitted under the body (licked by the air flow) may be removed.</p>

900-f	Largeur hors-tout	Overall width
		The maximum width of the VR5 car is 1820 mm.
900-a1	Intérieur	Interior
901-a		<u>Safety cage :</u> Safety cage must be homologated in VO/VR5 by FIA. The homologation number of the safety cage must be specified on the VR5 form.
901-a2		<u>Seats :</u> Only seats of Type FIA 8862/2009 are authorised. The material of the driver's and co-driver's seats is free but the weight of the bare shell (seat without foam or supports) must be greater than 7 kg. - 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 seat without the headrest, and if the headrest is incorporated into the seat, by the rearmost point of the driver's shoulders. - The rear seats may be removed. The harness fixings must be those homologated in VO/VR5 by the FIA. 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 rear seats may be removed.
901-a3		<u>Seats supports and mountings :</u> Seat support and anchorages: original or homologated in VO/VR5. The original seat supports may be removed.
901-a4		<u>Safety belts :</u> A safety harness having a minimum of six (6) mounting points, homologated by the FIA in accordance with Article 253-6 of Appendix J, is mandatory. The rear seat safety belts may be removed.
901-access0	Accessoires intérieurs additionnels	Additional interior accessories
901-access1		Extinguishers – Extinguishing systems: automatic extinguishers, homologated and in compliance with Article 253-7 of Appendix J, are mandatory. Manual extinguisher: see article 253.7 of Appendix J.
901-access3		Accessories: all those which have no influence on the car's behaviour, for example equipment which improves the aesthetics or comfort of the car interior (lighting, heating, radio, etc.), are allowed. 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. In no case may these accessories increase the engine power or influence the steering, transmission, brakes or road-holding, even in an indirect fashion.
901-access4		Glove compartment: additional compartments may be added to the glove compartment and additional pockets in the doors, provided that they use the original panels. Rear shelf: it is permitted to remove the movable rear shelf in two-volume cars.

901-access5b		The trim situated below the dashboard and which is not a part of it may be removed. It is permitted to remove the part of the central console which contains neither the heating nor the instruments (according to the Drawing 255-7). The dashboard hump(s) may be modified but the modification must be homologated in VR5. Supplementary panels for instruments and/or switches may be in composite material. The dashboard homologated in VR5 may be used.
901-access6		The original heating system may be replaced with a different unit. The internal heating system water supply may be closed off to prevent the spraying of water in case of accident, if an electric or similar demisting system is present. The heating unit may be removed completely or partially if an electrically heated windscreen is present (heating elements or electric fan). The air supply components are thus free. The air outlets must conform to the series production model and may not be modified.
901-access7		The air conditioning compressor may be removed. The modification must be homologated in VR5. The following parts of the air conditioning system may be removed: condenser and auxiliary fan, fluid tank, evaporator and evaporator fan, expansion valve, as well as all pipes, connections, contact switches, sensors and actuators necessary for the functioning of the system. If certain elements are common with the heating system, they must be retained.
901-access8		Floor: carpets are free and may thus be removed.
901-access9		Soundproofing materials and trim: other soundproofing materials and trim, except for those mentioned under the Articles (Doors) and (Dashboard), may be removed. Insulating material may be added to the existing bulkheads to protect the passengers from fire.
901-access10		<u>Doors – Side trim:</u> it is permitted to remove the soundproofing material from the doors, provided that this does not modify the shape of the doors. The centralised door locking systems may be rendered inoperative or may be removed. The safety foam and door panels homologated in VR5 must be used.
901-access11		Sunroof / Roof hatch: original or homologated in VR5.
902-access0	Accessoires extérieurs additionnels	Additional exterior accessories
902-access1		Windscreen wiper mechanism: must be standard. The headlight washer device may be dismantled. <u>Windscreen washer tank:</u> The capacity of the windscreen washer tank is free, and the tank may be moved inside the cockpit in accordance with Article 252-7.3, or inside the boot or the engine bay. The changing of the front and rear windscreen wiper blades is authorised. The rear windscreen wiper mechanism may be removed. The pumps, lines and nozzles are free.
902-access3		Windscreen: only series windscreens and windscreens homologated in VO/VR5 may be used.

		Additional safety fastenings for the windscreen and the side windows may be fitted, provided that they do not improve the aerodynamic qualities of the car.
902-access4		The bumper mountings are free and may be in composite material, as long as the bodywork and the shape and position of the bumpers remain unchanged.