

As at Mar 26, 2010

2010 Hong Kong Touring Car Championship

(Super Production 2,000cc Class)

TECHNICAL REGULATIONS



香港汽車會

HONG KONG AUTOMOBILE ASSOCIATION

Est. 1918

Introduction

The following Technical Regulations govern the 2010 Hong Kong Touring Car Championship (Super Production class). *IN CASE OF DOUBT THE ENGLISH TEXT PREVAILS.*

Notice 1:

Cars running to full 2010 WTCC Super 2000 rules will be eligible for entry as a separate class for qualification of entry into the 2010 WTCC China Round Macau Guia Race – subject to slot availability from the WTCC Organizer – or points can be transferred for entry into the 2010 Macau Cup race subject to use of a suitable, eligible, vehicle as laid down in the 2010 Macau GP Supplementary Regulations.

Notice 2:

To encourage different makes into the HTCC, there will be a reduction in minimum weight of 30kg for vehicles not made by Honda/Acura. For example, a non-Honda front wheel drive car will run a 1080kgs minimum weight. This shall not apply to factory prepared race cars. (e.g. BMW Motorsport) The panel of stewards reserves the right to amend this weight adjustment at any time as it sees fit.

Notice 3:

These regulations apply only to the HTCC 2010 and may not be applicable to the 2010 Macau GP. The Macau GP Supplementary Regulations covering the eligibility of cars for the Macau Cup Race are normally published in September each year.

ARTICLE 1 GENERAL RULES

- 1.1.1 Although the organizer will try to maintain these regulations without changes for the year 2010, the organizing committee reserves the right to make amendments when it is deemed necessary.
- 1.1.2 REGULATIONS ARE SET OUT IN ACCORDANCE WITH THE INSTRUCTIONS OF THE ORGANISORS AND IT SHOULD BE CLEARLY UNDERSTOOD THAT IF THE FOLLOWING TEXTS DO NOT CLEARLY SPECIFY THAT YOU CAN DO IT, YOU MUST WORK ON THE ASSUMPTION THAT YOU CANNOT.
- 1.1.3 The Series Organising Committee reserves the right to amend the weight figure for equality purposes. Variations in the interpretation of these technical regulations will be equalized by the addition or reduction of weight. The Committee shall give 7 day's advance notice if changes are to be made.

ARTICLE 2 HOMOLOGATION

At least 2500 fully identical units must have been produced in 12 consecutive months and homologated by the FIA in Production Cars (Group N).

Supply Variants (VF) homologated in Touring Cars (Group A) are also valid in Production Cars (Grp N).

All Production Variants (VP) are valid in Super Production Cars (Group SP).

Option Variants (VO) of the Touring Cars (Group A) form, without a minimum production, shall not be valid in Super Production Cars (Group SP), unless they refer to:

- fuel tank;
- safety rollcage;
- seat supports and anchorages;
- safety harness mounting points;
- 2/4-door versions.

The use of tanks homologated in VO on the Touring Car (Group A) form must be carried out under the conditions of Article 5.9.2 of the Touring Car (Group A) regulations, and Article 254.6.8.

Option Variants (VO) of the Production Cars (Group N) form, without a minimum production, shall not be valid in Super Production Cars (Group SP).

Evolutions of the type (ET), kit variants (VK) and sporting evolutions (ES) homologated in Group A are not valid in Production Cars (Group N), neither in Super Production.

Nevertheless, evolutions of the type and the sporting evolutions homologated in Group A as from 01.01.97 are valid in Group N.

Cars must be Homologated and listed as per Appendix J of the 2010 FIA Sporting Code.

The following un-homologated cars are also accepted by the organisers:

Honda Accord CL7.

Honda DC 5.

Toyota Altezza.

Cars not listed as Homologated in Appendix J 2010, or on the un-homologated list above, may, at the discretion of the Organiser, be granted entry.

ARTICLE 3 SAFETY PRESCRIPTIONS

The safety prescriptions for Group N cars, as specified in Article 253 of Appendix J, are applicable.

3.1 Additional fasteners

Two additional safety fasteners must be fitted for each of the bonnet and boot lids.

The original locking mechanisms must be rendered inoperative or removed.

3.2 Driver's seat

The original driver's seat must be replaced by an FIA-homologated competition bucket seat (8855/1999 standard) with five (5) passages for the safety harness straps.

The limit for use of a seat is 5 years from the date of manufacture indicated on the mandatory label.

An extension of 2 further years may be authorised by the manufacturer and must be indicated by an additional label.

The seat must be mounted by means of at least four (4) M8 bolts of at least 10.9 quality.

Seat attachments homologated on a safety cage homologation extension form are authorised and recommended.

The original seat mountings may be removed.

The use of the competition seat mountings homologated with the bucket seat is recommended.

3.3 Safety harness

A safety harness equipped with a turn buckle release system and having a minimum of five (5) anchorage points, homologated by the FIA in accordance with Article 253.6 of Appendix J, is compulsory.

3.4 Rollover structure

A rollcage complying with Article 253.8 of Appendix J is compulsory.

Protective padding must comply with article 253-8.3.5

3.5 Extinguishers-extinguishing systems

Fire extinguishing equipment must comply with regulations as laid down under Article 253 7.2 or 7.3 of the Appendix J.

3.6 Protective nets

3.6.1 A protective net on the driver's window is compulsory.

It must meet the following specifications :

The net must be made up of woven strips at least 19 mm (3/4") wide.

The meshes must be a minimum of 25 x 25 mm and a maximum of 60 x 60 mm. The woven strips must be non-flammable and sewn together at each point of crossing.

The net must not be of a temporary nature.

3.6.2 Fixation :

The net must be attached either to the driver's door or to the rollcage, above the driver's window, and be affixed by means of a rapid release system.

It must be possible to detach the net with one hand.

A push button release system is authorised provided that it respects the prescriptions of this article.

The push buttons must be visible from the outside, be of a contrasting colour and be marked "press".

For the attachment of the net or of its rollcage support, only screw-in connections are authorised.

No modifications to the rollcage are authorised.

ARTICLE 4 GENERAL TECHNICAL REQUIREMENT

4.1.1 Accepted cars must be mass-produced, series production Touring cars, have at least 4 seats and 2,3,4 or 5 doors, in accordance with the dimensions defined by the FIA for Touring Cars (Group A).

4.1.2 To be eligible to enter, cars must be identifiable series-production models and must race with an Engine based on that fitted to the original production model.

4.1.3 No supply of optional variants are permitted. No evolutions of type or sporting variants, or cars recognized by the organizers as GT cars are permitted.

4.1.4 All or any modification not expressly permitted by these regulations is forbidden. A permitted modification may not give rise to a forbidden modification.

4.1.5 Modifications and additions may only be made within the framework of these regulations. The only other work which may be carried out on the car is that necessary for its normal servicing, or for the replacement of parts worn out through use or accident. Parts worn through use or accident may only be replaced by an original, standard, new part or a proprietary part identical in all other respects to the original, to the satisfaction of the Series Organizers.

4.1.6 On the complete car, any nut, bolt or screw may be replaced by another nut, bolt or screw, provided that the material, diameter and thread of the original production part is respected. Unless otherwise allowed under these regulations.

4.1.7 Articles 251, 252 and 253 of Appendix J to the FIA International Sporting Code apply, but the Regulations published in this document will have precedence.

4.1.8 The Series Scrutineer (or his nominated deputy) has at all times the right to refuse to allow a car to participate in an Event, if in his opinion and in consultation with another Event Official of the Series, the preparation or the modifications permitted by these Regulations are not carried out in such a manner to make the car race worthy.

4.1.9 At the start of each event, practice or race, all cars must be clean and in good order. The Organizers reserve the right to forbid cars not meeting this requirement from taking part.

4.2 Chassis

4.2.1 Reference to the bodywork in these regulations includes chassis or body-shell.

4.2.2 It is permitted to fit an on-board pneumatic system but the compressed air bottle

must not be carried in the car.

4.3 Bodywork

4.3.1 Exterior body work.

4.3.1.1 Only those aerodynamic devices which are permanently mounted on the bodywork and which are a production standard for normal road use in the region (Asia Pacific) are permitted. The organizers will be the sole arbiters in any dispute concerning the eligibility of aerodynamic devices.

4.3.1.2 It is permitted to bend inwards the metal edges of the wheel arches, or to shorten the inner edges of plastic (non-metallic) wheel arches.

4.3.1.3 Sound-deadening material and plastic liners may be removed from the wheel-arch area. Plastic parts in the wheel-arch area may be replaced with aluminum ones of the same shape.

4.3.1.4 Insulating or corrosion protection material may be removed.

4.3.1.5 Exterior decorative trim parts may be removed. All parts that follow the outer contours of the bodywork and that measure less than 25 mm in any direction are considered as trim items.

4.3.1.6 Bumper mountings are free, provided that the bodywork and the shape and the position of the bumper mountings are not altered.

4.3.1.7 Production openings in the bodywork such as fog lamps may be used as air intakes. As long as the production apertures are not modified, it is permitted to fasten ducting to them.

4.3.1.8 It is not permitted to add an undertray.

4.3.1.9 The front screen wiper blades may be replaced. Any rear screen wiper blade and wiper motor fitted may be removed.

4.3.1.10 Left and right door mirrors must be fitted. Rear-view mirrors are free, provided that their surface area is of at least 90-cm sq.

4.3.1.11 It is permitted to reinforce the suspended parts provided that the material used follows the original shape and is directly contact with the area concerned.

4.3.1.12 It is permitted to strengthen the whole body by welding or by the addition of material. This means that for example it is permitted to add a second suspension strut turret over the original by welding. When adding material, the principle must be borne in mind that any added material must follow the contours of the original and must be in contact with it. "Suspended parts" means those parts, which are sprung by means of the suspension, i.e. all elements, which lie behind the pivot point of the suspension parts.

4.4.1 Interior bodywork.

4.4.2 Front passenger seat and the rear seats must be removed, and the driver's seat must be exchanged for an FIA approved racing seat.

4.4.3 The inner door panels and the inner side panels may not be removed.

4.4.4 Electric windows may be replaced by manual windows. The lifting mechanism of the rear door windows is free.

4.4.5 Accessories that have no effect on the performance of the car are permitted. These accessories may not have any effect, even indirectly on the performance of the engine, steering, transmission, braking or road holding. It is permitted to alter the direction of the heating system piping within the driver's cockpit.

4.4.6 Air conditioning system may be removed.

4.4.7 It is permitted to use either a left hand or a right hand drive version.

4.4.8 The spare wheel must be removed.

4.4.9 The function of all controls must be as foreseen by the manufacturer. It is permitted to make foot controls more easily usable by adding an additional block to the brake pedal.

The following in particular are permitted:-

- a. Additional measuring instruments, gauges, etc, provided that their fitment does not create a danger.
 - b. The horn may be removed.
 - c. The handbrake mechanism is free, and may be modified to provide instant release (fly off) or removed entirely.
 - d. Seat mountings are free provided that they respect the provisions of Art. 253.16 of Appendix J of the FIA Yearbook.
 - e. It is permitted to add extra compartments to the glove box or in the doors.
 - f. The steering wheel is free. The steering column lock must be rendered inoperative.
 - g. It is permitted to remove any non-structural panels situated below the dashboard. Instrumentation is free. It is permitted to remove the part of the center console that does not contain heating controls or instruments.
 - h. Unused mounting bolts and brackets, which are protruding from the basic bodywork, may be removed, except that part of any bracket actually fixed to and flush with the bodywork must remain.
- 4.4.10 It is permitted to remove the carpet and sound deadening material from the boot. It is permitted to remove sound deadening material from under the bonnet. It is permitted to remove an engine (noise proofing) capsule. In both cases the weather-strip must remain in its original position.

ARTICLE 5 ENGINE

5.1 Cylinder capacity

The cylinder capacity must not exceed 2000 cm³.

The engine must be as per manufacturer's stock engine.

5.2 Ignition

The make and type of the spark plugs and ignition coils, rev limiter and leads are free.

The ignition components in the electronic control unit are free.

5.3 Cooling system

The thermostat is free, as is the control system and the temperature at which the fan cuts in.

The radiator cap and its locking system are free.

Provided that they are fitted in the original location without any modification to the bodywork, the radiator and its attachments are free, as are the screens and the air cooling lines upstream of the radiator.

The original expansion chambers may be replaced by others provided that the capacity of the new chambers does not exceed 2 litres and that they are placed in the engine compartment.

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.

However, this freedom does not allow for the suppression of systems, such as, for example, the heating system, the preheating of the manifold or the preheating of the feed system.

The internal diameter of these lines may be more than, but under no circumstances less than, that of the original.

The radiator fans are free.

The oil radiators and their connections are free, provided that they do not give rise to any modifications to the bodywork and are situated within the perimeter of the bodywork.

5.3.1 Heating system: The original heating apparatus may be replaced by another.

The water feed of the internal heating device may be blocked off in order to prevent the spraying of water in the event of an accident, if an electric or similar demisting system is available.

5.4 Fuel and air feed

The original injection system must be retained.

The electronic injection control unit is free.

Only the original intake system comprising a maximum of two (2) throttle valves is authorised.

Variable intake systems are prohibited. If the vehicle is originally equipped with such a system, it must be removed or rendered inoperative.

The accelerator cable may be doubled or replaced by another.

Only a direct mechanical linkage between the throttle pedal and the throttle valve control is permitted.

If an electric throttle is homologated on the basic car, it must be rendered inoperative; a new pedal may be installed.

The flow rate of the injectors is free, but their original number, operating principle and position must be retained.

The sensors and actuators of the electronic control unit are free.

The design and production of the sound wheel for the sensors are free, as is the modification of any existing wheel.

None of these authorised modifications may have an effect on the quantity of air reaching the engine.

With regard to the engine rev (r.p.m.) signals and their transfer, only the engine speed signals may be transmitted and connected to the engine control unit.

5.5 Air filter

All the combustive air reaching the engine must pass through an air filter box.

The air lines upstream of the air filter box are free and the air lines downstream of the air filter box towards the throttles are free.

The air filter box is free under the following conditions:

- One air intake only, of a max. diameter of 80 mm or a maximum surface of 50 cm² is authorised.

This surface must be measured in at least one plane between the air intake and the air filter box.

- There must be a filtering cartridge in the box.

This cartridge is free as long as it filters the dust particles;

- All the air admitted to the engine must pass through this air filter;

- One air outlet only is authorised.

- The use of fibreglass-based composite material is authorised, provided that it is fire-resistant.

The position of installation of the air filter box in the engine compartment is free.

5.6 Lubrication

The oil sump may be reinforced through the addition of material on its external surface only, and on condition that the type of material added is identical to that of the sump and that it follows its shape.

The fitting of baffles in the oil sump is authorised.

An oil deflector may be fitted between the plane of the oil sump gasket and the engine block, provided that the distance separating the planes of their joints is not increased by more than 6 mm.

If the original engine has an oil deflector, it may be removed.

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.

This flow may be greater than the original one.

The filter, or the cartridge, is free provided that it is interchangeable with the original filter or cartridge.

The pump filter is free but the number must remain original.

The oil gauge is free, but must be present at all times and have no other function.

An air/oil separator may be mounted outside the engine (min. 1 litre) in accordance with drawing n° 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.

In order to allow the fitting of lubrication temperature sensors (gearboxes, differential casing, etc.), holes or threaded orifices of a max. diameter of 14 mm may be made in the respective casings.

The oil lines in the engine block and the cylinder head may be completely or partly blocked off through the addition of removable elements without welding or gluing.

5.6.1 Oil pump

The driving ratio and the internal parts are free.

The flow rate may be increased relative to the original part.

The housing and the position of the pump inside the housing must be original, but the inside of the housing may be machined.

5.7 Cylinder head

The intake and outlet ports in the cylinder head, as well as the ports in the inlet manifold, may be machined in conformity with Article 255-5 of Appendix J, as long as the dimensions on the homologation form are respected. The valve seats as well as the valve guides are free, but the respective axes must remain unchanged.

5.7.1 Compression ratio

Free. The cylinder head may be planed.

5.7.2 Camshaft

Free. V-Tech: Free.

5.7.3 Balancing shafts:

If the original engine includes balancing shafts, these and their drive systems may be removed.

5.7.4 Belt and chains:

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.

5.7.5 Valve springs are free provided that no machining of the cylinder head or spring retainers is required.

5.8 Flywheel

The minimum weight of the flywheel is 5,000g, or otherwise, be as that if the standard production car is lighter.

The original flywheel may be lightened to comply with the authorised weight through the removal of material only, provided that the original flywheel may still be identified.

The starter crown may not differ from the original.

If the original vehicle is fitted with a double type flywheel, this flywheel may be replaced by a single flywheel, provided that the starter crown keeps the same characteristics as the original one (number of teeth, head and foot diameter, width of the teeth).

In all cases, the external diameter of the friction disc of the clutch mechanism must not be less than 183mm.

5.9 Engine and gearbox mountings

The elastic components of the engine mountings may be replaced by others, regardless of their material; provided that they have the same dimensions as the original ones and that the position of the engine and of the gearbox remains unchanged.

5.10 Materials

The use of titanium, ceramics, magnesium, or composite or reinforced fibre materials is

prohibited, unless it corresponds exactly to the original material.

The use of fire-resistant, fibreglass-based composite material is authorised only for deflectors and air ducts for radiators and engine.

For these parts, the use of carbon or kevlar is also authorised on condition that only one layer of fabric is used and is affixed to the visible face of the part.

- 5.11 Engine Speed (RPM)
Free.

ARTICLE 6 SUSPENSION & STEERING

6.1 Front axle

6.1.1 The production suspension mounting bushes may be changed for other bushes (e.g. silent blocks for harder rubber, aluminum bushes, spherical bearings). The new mounting points and pivot points of the suspension may be moved up to a maximum of 20 mm from the original mounting and pivot points. The production suspension parts may not, with the exception of the addition of the circlip grooves, be modified. This means that, after removing the suspension mounting elements, the production suspension mounting elements (e.g. the production silent blocks) must be able to be reinserted in working order in the respective suspension parts.

6.1.2 The suspension joints (ball joints on the wheel hub side of control arms or suspension arms) may be replaced. The position of the new rotation points may vary spatially by a maximum of 20mm, with regard to the rotation point of the original production suspension joint.

6.1.3 The steering track rods must remain as production; their joints at the wheel hub end are free.

6.1.4 The top mounts of a combined spring/damper unit (MacPherson strut) on the front axle are free, provided that the production mounting points on the bodywork are retained and that each is mounted no further than 20 mm from the standard mounting points. Modifications to the bodywork are not permitted, except to add up to 3 holes with a maximum diameter of 10.5 mm in the strut turret in order to mount the MacPherson strut.

It is permitted to use these mounting points on the wheel housing for the suspension strut as a means to adjust the camber of the front axle.

6.2 Rear Axle

6.2.1 The production suspension mounting elements may be changed for other elements (e.g. silent blocks for harder rubber, aluminum bushing, spherical bearings). The new mounting points and pivot points of the suspension may be moved up to a maximum of 20mm from the original mounting and pivot points. The production suspension parts may not, with the exception of the addition of circlip grooves, be modified. This means that, after removing the suspension mounting elements, the production suspension mounting elements (e.g. the production silent blocks) must be able to be reinserted in working order in the respective suspension parts.

6.2.2 Multi-link rear axles: It is permitted to elongate existing holes in the suspension arms and/or suspension mounting support structures (sub-frames, axle-carriers) up to a maximum of 10mm in both directions. The production suspension arms may be modified to permit camber and track adjustment.

6.2.3 Single-link axles: The production suspension arms may be modified to permit camber and track adjustment. But the arrangement of spring and damper, and the distance from the pivot point of the suspension arm to the wheel hub center, must remain as production.

6.2.4 Rear axles in general: The modifications permitted for the rear axle does not permit modifications to the bodywork.

6.3 General

6.3.1 Suspension geometry is free unless otherwise stated.

6.3.2 It is freely permitted to exchange the production anti-roll bars for others, providing these are mounted in the production locations. Anti-roll bars must be made of steel, and may not be adjustable from the cockpit.

6.3.3 Track is free. wheel spacers are permitted, as long as the conditions of Article 2.3 and 2.4 wheels and Tyres are respected.

6.3.4 Strengthening of the suspension and its mounting points is permitted by the addition of material, subject to these regulations:

6.3.4.1 The production wheel bearings may be exchanged for stronger bearings of the same type with the same dimensions as production bearing (outer and inner diameters and width).

6.3.4.2 The production suspension bushes on the chassis and/or the suspension sub-frame may be exchanged for others (e.g. silent blocks of harder rubber, metal bushes, plastic bushes, etc.). But the position of the sub-frame or the mounting support structure must be maintained when measured in all three dimensions in an unloaded condition in relation to the production vehicle. It is prohibited to modify in any way the bodywork, the chassis/the suspension sub-frame or the original mounting points. That means that it must be possible at all times to refit the original suspension bushes to the chassis/sub-frame, and refit the chassis/sub-frame to the bodywork, in its production location.

6.4 Springs

6.4.1 Coil springs: Coil springs are free, providing they respect the following conditions. The number is free, providing the springs are co-axial and that the type of spring corresponds to the production spring. Spring seats may be adjustable, if the adjustable element is a part of the spring seat, and is separate from the suspension arm and the bodywork.

6.4.2 Leaf springs: The length, width and thickness and the vertical curvature of leaf springs is free.

6.4.3 Torsion bar springs: The type and diameter of torsion bar springs is free, provided they are made of steel, up to a maximum of +20% greater than the standard production unit.

6.4.4 It is permitted to install a device(s) to prevent dislodgment of the springs from their locations.

6.5 Dampers

6.5.1 Dampers are free; but must respect the number, type (telescopic, lever arm) working principle, (hydraulic, friction) and mounting points of the production vehicle.

6.5.2 Providing that the damper has no guiding or load bearing function, a solid bush may be replaced by a spherical bearing, or another joint (e.g. a stiffer rubber or an aluminum sleeve).

6.5.3 Gas filled dampers are considered to have the same working principle as hydraulic dampers.

6.5.4 If it is necessary when replacing the damping element of a MacPherson strut or a similar suspension device, to replace the whole suspension strut, the replacement must be mechanically equivalent and use the same mounting points as the original production unit. In MacPherson suspension, the shape, dimension and material of the spring seats is free, and they may be adjustable.

6.5.5 In the case of a hydropneumatic suspension, the volume, shape and material of the spheres may be changed, but not their number.

6.6 Reinforcements

6.6.1 Reinforcement bars may be fitted on the suspension mounting points of the same axle, on the body shell or chassis, on each side of the car's longitudinal axis, on condition that they are removable and attached by means of bolts. The distance between a

suspension attachment point and an anchorage point of the bar may not be greater than 100mm, unless the bar is a transversal strut homologated with the roll bar, and unless there is an upper bar attached to a MacPherson suspension or similar. In order to attach the transversal strut, it is permitted to make three holes with a maximum diameter of 8.5mm each in the chassis, on each side of the same axle.

- 6.6.2 In the latter case, the maximum distance between an anchorage point of the bar and upper articulation point will be 150mm.
- 6.6.3 Mounting eyes for the reinforcement bar (transverse strut) may be welded to the bodywork.
- 6.6.4 The reinforcement bar may not be mounted on the body shell or the mechanical parts unless as specified in 6.6.1 and 6.6.3 above.

ARTICLE 7 TRANSMISSION

7.1 Gearbox.

- 7.1.1 The standard production gearbox casing must be used. The internals of the gearbox are otherwise free (except that only steel components are allowed) The reverse gear must be included and capable of being operated by the driver when strapped in the driving seat.
- 7.1.2 No automatic gearbox of any kind or sequential transmissions are permitted.
- 7.1.3 The gearbox mountings are free, providing the number remains the same and installation of the gearbox is not altered.
- 7.1.4 Gearbox and differential oil coolers are permitted. To this end it is permitted to create a maximum of two holes in the gearbox. These holes may only be used for the inlet and outlet connections to the oil cooling circulatory system.
- 7.1.5 The production bearings of the production gearshift linkage may be replaced freely by other bearings. The gearshift shall be direct linkage, "H" pattern and its production fixing points to the bodywork, sub-frame, and gearbox, etc., may not be altered.
- 7.1.6 The standard production gear lever may be extended and the gear lever must enter the cockpit through its original production aperture, which must not be modified.
- 7.1.7 The maximum number of engageable forward gears as per original production
- 7.1.8 The gear ratio is free.

7.2 Clutch

- 7.2.1 *The clutch disc is free, with the exception of the number.

Carbon discs are prohibited.

The pressure assembly is free, provided that the following points are not modified:

- Original type;
- Operating principle;
- Original spring tyre.

The external diameter of the pressure plate may be smaller than the original but not greater. The number of fixation bolts and their position on the flywheel are free. The control system of the clutch is free, but it must remain as the same type of the original. An automatic tightening device on the clutch control may be replaced by a mechanical device and vice-versa. The clutch stop is free.

- 7.2.2 The clutch cable is free.

7.3 Differential

- 7.3.1 The final drive ratio is free.

- 7.3.2 It is freely permitted to install a limited slip differential in the production drive axle housing. Cars fitted as standard with electronic traction control must have this disabled by removal of the management system and its sensors. Any device, which artificially limits the engine speed/power, below the peak of the engine power curve, is prohibited.

7.4 Driveshafts

- 7.4.1 The driveshafts between the differential and the wheels are free, providing that their

material is steel and the production constant velocity joints on the wheel side are used.

ARTICLE 8 ELECTRICAL SYSTEM

8.1 Cabling

8.1.1 The engine-wiring loom is free. In other respects the wiring system is free, provided that the provisions that follow are respected.

8.2 Battery

8.2.1 The manufacturer and capacity of the battery are free. It must be possible to start the engine at all times by means of the on-board battery. The battery must be securely fixed and covered so that leaks and short-circuiting is not possible. If the battery is not located in its production location, it must be secured to the bodywork by means of a metallic seat and two bolted, metal straps covered with insulation. The bolts used must have a minimum diameter of 10mm. Between each bolt and the metal work there must be an underlay of at least 3mm thickness and 20mm sq. surface area.

8.2.2 The battery must be housed in a leak proof container with a cover that is fastened in place. Its location is free, and may be re-located in the passenger area, provided that it is behind the front seats. In this case, the cover must have a breather that is vented to the outside of the passenger area.

8.3 Alternator

8.3.1 The alternator may be replaced by a more powerful unit.

8.4 Lighting

8.4.1 The original lighting with the exception of fog lamps must be retained, and must be functional at all times during the event. The headlamp glass may be taped at the bottom and the top. However a 4-cm wide parallel strip, symmetrical to the headlight bulb, must be left uncovered across the whole width of the headlamp.

8.4.2 Fog lamps may be removed. The resulting apertures may be used as described in Articles 1.7.1.7. Otherwise they may be blanked over.

8.5 Fuses

8.5.1 It is permitted to add additional fuses to the electrical system.

8.6 Telemetry

8.6.1 No type of data transmission from the moving vehicle is permitted. Impulse senders for lap timing devices are permitted, as long as these are not connected to the engine management system. On board data acquisition systems are permitted.

ARTICLE 9 BRAKING SYSTEM

9.1 The front brakes are free, provided that they are fixed on the original mounting points of the production brake system and that it respects the following restrictions:-

- A maximum of 4 brake pistons per wheel is permitted.
- The brake disc must be made of a metallic, iron based material. Carbon composite materials are not permitted.
- Liquid cooling is not permitted.

9.2 The rear brake calipers may be replaced but must not have more than two pistons per wheel.

9.3 The following apply to whole brake system:-

9.3.1 It is permitted to replace the production brake master cylinder, but the mounting point must not be altered.

9.3.2 Brake linings and their fixings are free.

9.3.3 It is permitted to fit a brake balance bar or a proportional valve to vary front and rear brake force distribution.

9.3.4 It is permitted to remove or disable a brake servo system.

- 9.3.5 Cars with ABS systems must have the ABS control unit removed. It is further permitted to remove all elements of the ABS system provided that Art253.4 of Appendix J of the FIA Year Book is respected.
- 9.3.6 It is permitted to relocate brake lines, provided that Art 253.3 of Appendix J of the FIA Year Book is respected. It is permitted to replace the production brake lines with aviation standard lines. The arrangement of the dual brake circuits is free.
- 9.3.7 It is permitted to install an air duct per brake with a maximum inner diameter of 10cm at the mouth. This inner diameter must be maintained over at least 66% of the length of the brake duct.
- 9.3.7.1 It is permitted to use apertures in the production bodywork such as mounting point for fog lamps, as inlets for brake cooling ducts. If there are no apertures in the production bodywork, it is permitted to add two circular openings with a diameter consistent with the air duct's external diameter in the front bumper. Under bumper air ducts are allowed.
- 9.3.7.2 Brake shields may be removed or their shape altered.

ARTICLE 10 WHEELS

- 10.1 The maximum dimensions of the wheels are 9" width x 17" diameter and must fit in tyre size (235/620R17) provided by the organiser.
Furthermore the brakes must comply with Appendix J Article 261 (Article 12 – Brakes) in its entirety.
Wheel fixations by bolts may be freely changed to fixations by pins and nuts provided that the number of fixation points and the diameter of the threaded parts remain unchanged.
The uppermost half of the complete wheel (wheel and tyre) must be hidden by the wheel arch when viewed from above.

ARTICLE 11 TYRES

- 11.1 Racing/slick for dry weather use and hand grooving dry weather slick tyres is not permitted.
- 11.2 The grooved wet weather tyre may only be used when the track is damp/wet.
- 11.3 Dry/slick tyres and Grooved/wet tyres may not be mixed on a racecar. Wet tyres may only be fitted on all four wheels, and then only in damp/wet conditions.

ARTICLE 12 MINIMUM WEIGHT

- 12.1 The minimum weight of the car including the driver and his full equipment, is:
- 1,110 kg for a front-wheel drive car
- 1,140 kg for a rear-wheel drive car
These minimum weights must be respected at all times during the event, in particular when the car crosses the finish line.
- 12.2 It is permitted to complete the weight of the car by one or several ballast, provided that they are strong and unitary blocks, fixed by means of tools with the possibility of affixing seals, and placed on the floor of the cockpit or the luggage compartment, visible and sealed by the Scrutineers.
The ballast must be attached to the shell/ the chassis via 8.8 class bolts, with a minimum diameter of 8 mm and counterplates, according to drawing 253-52.
- 12.3 The minimum area of contact between shell/chassis and counterplate is 40 cm² for each fixing point.
- 12.4 For 1800c.c., a 50kg weight discount is allowed.

ARTICLE 13 FUEL/FUEL SYSTEM

- 13.1 Fuel tank
13.1.1 The standard fuel tank is acceptable and no modification is allowed.

- 13.1.2 Safety tanks complying with FIA specification are allowed, installed either in the boot or the production location.
- 13.1.3 The location of the filler is free, except it is not permitted to locate on a glass surface and it may not stand proud of the bodywork.
- 13.1.4 The total capacity of the entire fuel system including tank must be no greater than 100 litres.
- 13.1.5 The connection between the filler and the fuel tank must be fireproof and leak proof, as must be the breather from the fuel tank. In the case of a fuel tank installed in the luggage area of a hatchback car, it must be enclosed in a fireproof and leak proof casing; in all other cases there must be a fireproof and leak proof bulkhead installed between the passenger area and the boot.
- 13.1.6 Aviation standard fuel lines must be used, otherwise fuel lines are free, providing they respect the provisions of Art. 253.3 of Appendix J of the FIA Year Book.
- 13.2 Fuel pumps
 - 13.2.1 Type is free but only two additional fuel pumps (over the number fitted to the production model) are permitted.
- 13.3 Fuel and combustion materials
 - 13.3.1 Only commercially available 98 Octane unleaded petrol is permitted with no other additive.
 - 13.3.2 Any modification of the prescribed fuel is forbidden. It is therefore prohibited to add or to remove any substance whatsoever, or to alter its concentration. It is forbidden to mix the prescribed fuel with another.
 - 13.3.3 The only permitted combustion material in addition to the fuel is air drawn from the surrounding natural environment.

ARTICLE 14 EXHAUST SYSTEM

- 14.1 The exhaust system is free downstream of the cylinder head provided the prescribed sound level is not exceeded.
- 14.2 The maximum permitted noise level is Free.
 - 14.2.1 The exhaust pipe outlet must be situated at the rear of the car and must point rearwards, between the rear wheels and must also be situated no more than 10cm inboard of, nor protruding beyond, the rearmost point of the car.

ARTICLE 15 NUMBERS AND CHAMPIONSHIP DECALS

- 15.1 Permanent championship numbers for the year will be allocated at the sole discretion of the Series Organisers.
- 15.2.1 Competitors must supply, at their own cost, the Driver's Surname on both side rear windows of the competing vehicle and on the rear screen so it is visible from behind. Helvetica Bold Style lettering must be used in white pre spaced vinyl without background, with height of 100mm. Upper case letters must be used for the first letter of the surname, all other letters in lower case.

ARTICLE 16 ENGINE CHANGE

- 16.1 Engine changes are allowed, subject to approval from the Stewards.
- 16.2 Any engine change after qualifying must be approved by the Stewards and the car concerned shall start at the back of the grid.
- 16.3 All removed engines must be presented to the chief scrutineer for inspection with the seals fully intact.

ELIGIBLE VEHICLES

a) Super Production Touring Car Race is for Super 2000 and Diesel 2000 cars as defined by FIA applicable Technical Regulations (Articles 263 and 263D of Appendix J). Plus the Super Production cars as defined by Article 261 of the Appendix J. The Honda DC5 cars homologated by AAMC (Homologation form No.ACMC-01-05 SP) and Honda Civic Type R FD2 cars homologated by AAMC (Homologation Form No. SP-5716-AAMC) as of National Super Production are also accepted. Vehicles other than the above will also be accepted upon the approval by the organiser. The Super Production Cars that complying with FIA–ISC, Article 261 of Appendix J with the following exceptions:

Article 5	The minimum weight for Honda DC-2 is 1050 kg.	
Article 7.1	Crankshaft, Connecting rods & Pistons	- Free
Article 7.2	Engine Speed (RPM)	- Free
Article 7.7.1	Compression Ratio	- Free
Article 7.7.2	Camshaft - Free (but not the number of camshafts) Valve lift V-Tech variable camshaft system	- Free - Free - Free
Article 7.8	Flywheel Complying with FIA– ISC, Appendix J – Article 261 Art.7.8 with minimum weight of 4000g.	
Article 7.9	Exhaust System Noise	- Free -Free
Article 8.1	Gearbox The production gearbox original HOUSING, must be retained, the gear RATIOS and the number of forward gears (5 or 6 gears) are FREE and it must have ONE engageable reverse gear in working condition. Sequential gearboxes are accepted with additional 30kg of weight must be imposed.	
Article 8.2	Clutch Complying with FIA– ISC, Appendix J – Article 263 Art. 8.2	
Article 8.3	Differential The final drive ratio is free provided that the original housing is retained.	
Article 10.1	Complete wheel The maximum dimensions of the 4 rims+flanges are 9" x 17" with no weight limitation. They must fit in tyre size (235/620R17) provided by the organiser. The upper part of the complete wheel (flange + rim + tyre), located vertically over the wheel hub centre, must be covered by the bodywork when measured vertically.	

Article 11

Ground Clearance

No part of the car or its suspended parts must be less than 80 mm from the ground.

This check shall be carried out on one or several flat surfaces defined by the Chief Scrutineer, at any time during the event. If this check is carried out on a car taken from the parc fermé, the pressure of the tyres must be 1.6 bars minimum. No system for changing ground clearance when the car is in motion is allowed.

Article 12

Brake

complying with FIA– ISC, Appendix J – Article 263 Art. 12

~ END ~