

Agreed  
Drift Committee of the  
Russian Automobile  
Federation

Agreed  
Committee of Sporting Machinery of the  
Russian Automobile Federation

Approved  
Sports Council of the Russian  
Automobile Federation

## **Appendix 24 to KiTT.**

### **Drift car specifications.**

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### General requirements.

## 1. Safety requirements.

### 1.1 Safety Cell.

All participants' vehicles must be equipped with a safety cell that meets the following requirements:

Who is a manufacturer and according to what requirements it is made	What documents are required
Manufactured by a RAF certified (or other ASN member of the FIA) manufacturer in accordance with the requirements of Article 253.8 of this Annex "J" to the FIA MSC	Manufacturer's Certificate according to RAF (ASN) regulations
Manufactured by a RAF certified (or other ASN – member of the FIA) manufacturer in accordance with the RAF homologation (other ASN) until January 1, 2014.	Manufacturer's Certificate according to the RAF (ASN) regulations
Manufactured by a RAF certified (or other ASN – member of the FIA) manufacturer in accordance with the RAF homologation (other ASN) from January 1, 2014 until July 1, 2015.	Manufacturer's certificate according to FIA regulations
Manufactured by a RAF certified (or other ASN – member of the FIA) manufacturer in accordance with the RAF homologation (other ASN) after July 1, 2015.	Manufacturer's certificate according to FIA regulations on official RAF paper (ASN) and certified by the RAF (ASN)

Manufactured independently in accordance with the requirements of Article 253.8 of this Annex "J" to the FIA MSC (maximum mandatory configuration)	Not required. At each competition, the decision on admission is made by the Technical Commissioner.
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The vehicles with a mark in STP about participation in the drift competition not later than December 31, 2016, may be equipped with the safety cell that complied, at time of manufacture, with the requirements of current Annex 14 to KiTT, without windscreen pillar boosters (cl. 8.3.2.1.4, art. 253 of Appendix J to MSK FIA, fig. 253-15). This booster is highlighted in dark color in Figure 1.

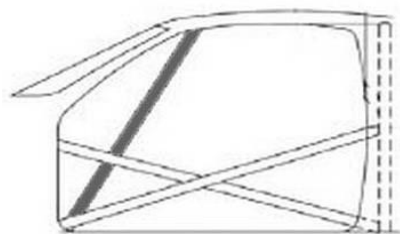


Figure 1.

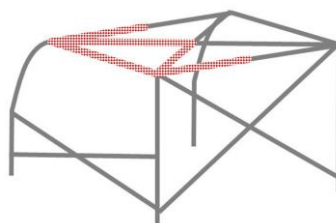


Figure 2.

In places where the Pilot's helmet can contact with the safety cell and highlighted in red in Figure 2, it is prescribed to install protective linings that meet the FIA 8857-2001 Type A standard (See technical datasheet No. 23 "FIA homologated linings for safety cells") or SFI 45.1, 45.2. The linings must be securely fixed from shifting and turning (for example, with double-sided adhesive tape).

From January 1, 2022 the safety cells on the newly-built vehicles, made according to the requirements of art. Nos. 253, 269 of Annex J to MSK FIA, shall be constructed and installed only by the RAF certified (other ASN) manufacturer and have a certificate made on special paper according to FIA regulations.

## 1.2 Seat Fixation.

Seat brackets and their attachment points must comply with the requirements of article 253-16 of Appendix J to the FIA MSC. For FIA 8862-2009 standard seats, the seat brackets must be homologated with the seat or with the vehicle.

If the seats are attached to transverse pipes, these pipes must be fixed in accordance with the requirements of article 253-16.2, or welded to the body. The pipes must be welded along the entire perimeter to the reinforcing plates with an area of at least 4,000 mm<sup>2</sup>(each) and a thickness of at least 3 mm, in turn welded along the entire perimeter to the body (Fig. 3). All welding seams must be of high quality, their cleaning and priming, etc. are forbidden.

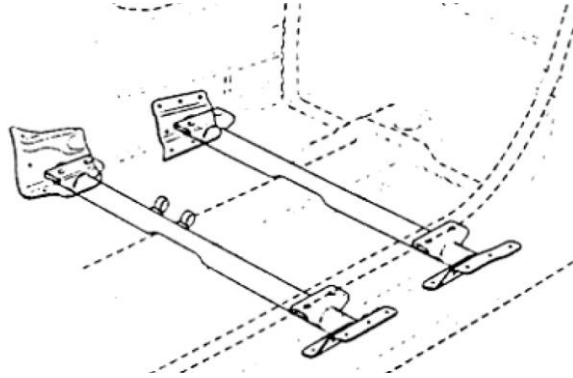


Figure 3

Seamless round steel pipes with dimensions of at least 35x2.5 or square pipes with a minimum size of 35x35x2.5 mm should be used. The groin straps of the seat belts can also be attached to these pipes. In this case, round pipes with the dimensions of at least 38x2.5 mm or 40x2 mm should be used. In the places where the seat brackets are attached, the pipes must have local reinforcements in the form of welded bushings and support platforms in accordance with Figure 4.

Bolts of a strength grade not lower than 10.9 must be used to secure the seats and their brackets. It is mandatory to use reinforcing washers with a thickness of at least 2 mm, with a size of at least 2.5 diameters of the mounting bolt and not less than the size of the hole in the fixed bracing element.

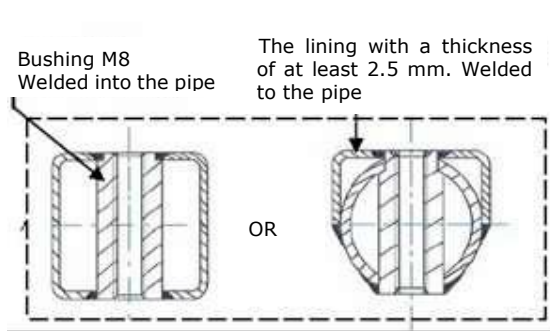


Figure 4

To install the seats, the minimum necessary modifications of the original floor braces are allowed. It is also allowed to install the seats on the original attachment points (provided that the mounting points of the rear supports are located at a distance of the seat width). In this case, the mounting points must be reinforced with a steel plate with a thickness of at least 2 mm and a width of at least 50 mm. The reinforcement plate must be welded around the perimeter and through the holes (Fig. 5). The minimum contact area between the support, body/chassis and the reinforcement plate is 4000 mm<sup>2</sup>, for each mounting point.

If the quick release systems are used, they must be able to withstand vertical and horizontal loads of 18,000 N that are not applied simultaneously.

The minimum thickness of supports and reinforcement plates is 3 mm for steel, and 5 mm for aluminum alloy materials. The minimum longitudinal size of each support is 6 cm. The mounting points of the rear supports must be located at a distance of the seat width.

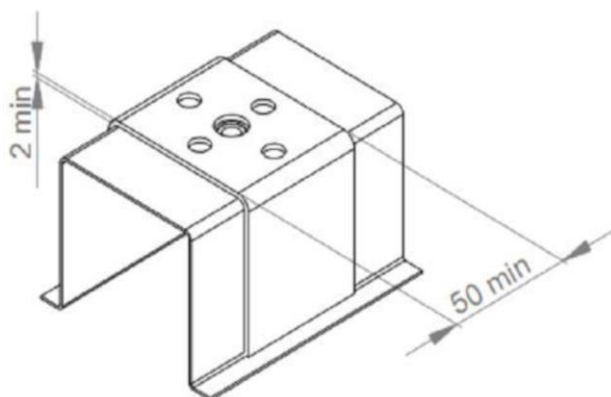


Figure 5

The seats cannot be fixed to the floor.

### 1.3 Passenger Compartment.

The passenger compartment of the vehicle must be separated from the engine compartment and fuel tank, including its filling pipe and neck, by liquid-proof and fire-proof partitions made of flame-resistant material.

It is forbidden to place containers with any liquids in the passenger compartment, with the exception of the water supply system tank for the pilot and those described in these TS.

### 1.4 Main switch of electrical equipment (mass).

It is mandatory to use the main switch of electrical equipment, which excludes the spark generation. The switch must simultaneously open all electrical circuits, battery, generator, headlights, beep, ignition, other electrical appliances, etc. The pilot sitting normally in its seat and wearing seat belts shall be provided with the access to this switch. It is mandatory to use a functioning external drive of the electrical equipment switch. The external drive of the switch must be installed under the windshield. If the hood is raised at the base of the windshield and does not have a seal that isolates the engine compartment, it must be installed on the body panel under the rear window, or on the side surface of the rear roof rack. The minimum necessary modification of the body is allowed for its placement. The external drive of the switch must be marked with a red lightning in a blue triangle with white edging. Each edge of the triangle must be at least 120 mm long (Figure 6).

Добавлено примечание ([AB1]): If a vehicle has a motor in front and a hood raised at the windshield, in case of flame development, it will be on fire. In drag, in this case, only in the back of the car.



Figure 6

### 1.5 Miscellaneous.

The leakage of any liquids or fuels and lubricants from the car, in any position, is prohibited.

## 2. Permitted changes to the car body.

2.1 The location of the engine tunnel must be original. At the same time, it is allowed to modify the engine tunnel with the use of sheet steel with a thickness of at least 0.8 mm, subject to the following dimensions (see Figure 7):

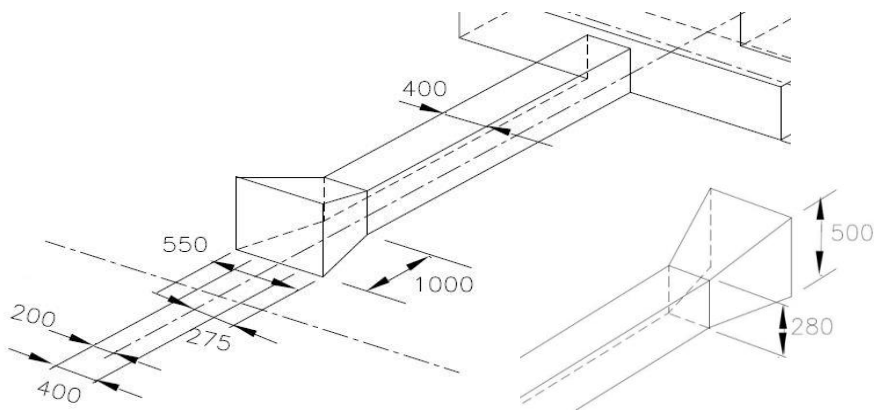


Figure 7.

For the vehicles that participated in RDS and RDS GP competitions up to and including 2018 and have the corresponding mark in STP, the modification of the motor shield and tunnel shall not be limited.

2.2 The mechanisms for opening and locking the doors must be in good working condition and comply with the serial factory design, while the internal door opening handle can be modified (in this case, the handle must be highlighted in a contrasting color). The original hood and trunk lock must be removed, and at least two external metal latches must be installed instead, located symmetrically relative to the longitudinal axis of the vehicle, preventing spontaneous opening of the hood and trunk when moving. It is allowed to

change the design and location of the hood and trunk hinges, but they must be at least 2, and they must be located symmetrically to the longitudinal axis of the vehicle. It is allowed to remove the hinges of the hood and trunk lid, at the same time it is necessary to have at least 4 external metal fasteners.

2.3 Internal door panels can be replaced with the panels made of sheet flame-resistant material (with thickness of at least: metal – 0.5 mm, carbon/kevlar – 1 mm, plastic – 2 mm) excluding the contact of the pilot with internal parts and mechanisms. The ceiling panels can be removed.

2.4 It is forbidden to remove or lighten the load-bearing elements. For the organization of the drive to the rear axle, it is allowed to change the motor shield and the central tunnel according to clause 2.1 of these TS. It is allowed to add suspension mounting elements and subframes to the power elements of the body, for this purpose the minimum necessary change is allowed.

2.5 It is allowed to change (which includes replacement with a free structure that provides the body rigidity) the parts of power elements of the body (rear and front spars), in accordance with figure 8 (part located outside a1-a1 and a2-a2 axes):

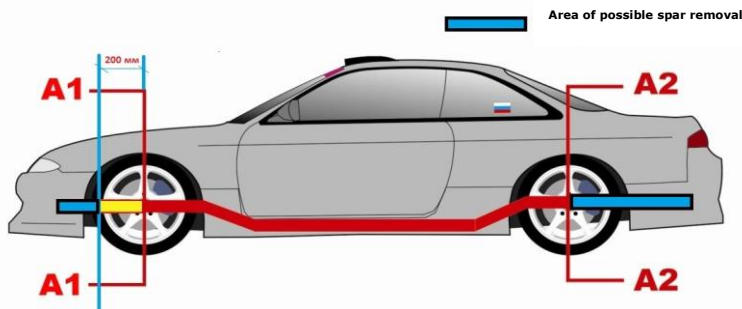


Figure 8.

2.6 It is allowed to replace any standard hinged body panels with lightweight ones (made of plastic, carbon or other composite materials). If there are air intake openings in the replaced hood, they must be completely closed, when looking from above, by the air intake or casing. This air intake (casing) must be made of a material similar in properties to the material of the hood and securely attached to it.

2.7 The windshield must be multi-layered (such as "triplex"). It is possible to use windshield made of polycarbonate, factory-made for a specific vehicle. The method of mounting the windshield must correspond to the factory one for each specific vehicle.

2.8 It is allowed to install side and rear windows made of polycarbonate with a minimum thickness of 3 mm, they must be securely fastened. In case of damage (cracks, significant

chips) they must be replaced. It is allowed to install sliding vents for air ventilation in the side windows made of polycarbonate with a size of no more than 250x350 mm. It is allowed to dismantle the standard glass lifting device, provided that the glass is replaced with another one made of polycarbonate.

2.9 The original side windows must be covered with a protective film. It is allowed to use tinted film, while from a distance of 5 m the pilot and the interior of the vehicle should be visible.

2.10 All lighting devices located in the front, as well as the rear lights, must be factory-made and in good working condition. Rear lights and front lights must have the original shape and location. While the vehicle moves on the road, the low beam of the main headlights and the red marker light of the rear lights must be switched on constantly. Replacement of the main (low-beam) lamps of the front headlights and rear lights with strobe lights is prohibited. The headlights should provide illumination of the road in the dark for safe driving at any speed. If the vehicle's headlights are made of glass, they must be additionally pasted with a transparent film that prevents fragments from flying in case of their destruction. It is allowed to replace the headlights with a false panel, identical in shape to the standard headlight, with a factory-made low-beam and/or high-beam module installed in it, for the installation of which it is allowed to make holes in this panel. The panel itself must be painted or pasted with a film that imitates the headlight. It is allowed to use the imitation of the original headlights made of plastic or fiberglass with factory-made low-beam and/or high-beam modules installed in them instead of the factory-made front headlights for this vehicle model. Such modified headlights must be appropriately configured and provide the road lighting required for public roads.

2.11 The absence of one or more external elements of the body, such as the front and rear fenders, hood, trunk lid, doors, windows, bumpers, is not allowed in qualifying races. In case of damage or destruction, partial or complete, of these elements during the pair races and the inability to replace them, it is allowed to continue the races without them, in which case the decision on the admission of the vehicle is made by the race manager. During training races, driving without bumpers and attachable sills is allowed.

2.12 The wheels of the vehicle, when looking from above, must be covered with wings, while the protrusion of the working surface of the wheel, at its upper point, is allowed, but not more than 20% of the width of the tire indicated on the label.

2.13 The wheel arches (wing extenders) must be mounted with a tool or with special glue (mounting using a double-sided tape is prohibited), the presence of cracks and gaps between the wheel arch (wing expander) and the body is not allowed.

Добавлено примечание ([AB2]): By whom?  
When?

2.14 Exterior wing mirrors are free. The absence of wing mirrors and/or the installation of a rear camera is allowed.

2.15 Rear wings and spoilers are additional elements of the body, and their design is not limited. The rear wing must be attached to the vehicle using tools. The use of quick-release devices is prohibited. The rear wing must be additionally attached to the vehicle by a steel cable with a diameter of at least 3 mm in such a way as to prevent the rear wing from dragging along the road bed in case of destruction of the main attachment.

2.16 Towing Eyes.

- Towing devices must be provided at the front and rear of the vehicle. They must be rigid, easily accessible, have a closed shape and a cylinder with a diameter of at least 60 mm must pass freely through them; they must be painted in a bright (yellow, orange, red) color and not protrude beyond the perimeter of the car visible from above by more than 20 mm.
- If the vehicle does not have standard towing eyes, they must be installed at the front and rear and secured using tools or welding. If the towing eyes are removable (screw-in threaded), they must be changed or replaced with other eyes fixed using tools or welding. Their design is optional, but they must withstand a towing capacity of at least 5000 N.
- The location of the towing devices must be marked on the body with arrows of a bright color contrasting with the color of the body with a size of at least 100\*50 mm.

2.17 It is allowed to install hatches and other elements of air intake or air removal from the passenger compartment with a cross-section of no more than 125,000 mm<sup>2</sup> in the roof of the vehicle.

2.18 Neither part of the vehicle, with the exception of the rims and/or tires, should touch the asphalt, even when air is released from all tires located on one side of the vehicle (left or right).

2.19 The weight of the vehicle ready to start, with the pilot in full gear, must be at least 850 kg, and no more than 1500 kg. It is allowed to increase the weight of the car with the installation of ballast. The ballast should be located inside the passenger compartment and fixed only to the floor. The ballast must be made of solid metal blocks fixed to the body with through bolts or studs with a diameter of at least 12 mm with reinforcement plates. The area of each plate must be at least 4000 m<sup>2</sup>, the thickness must be at least 3 mm. The number of attachment points is 2 for every 20 kg of ballast, but not less than 2. It should be possible to seal the ballast.



### 3. Engine and Its Systems.

One commercial (has a catalog number of the manufacturer) internal combustion engine, either gasoline or diesel, is allowed. Electric vehicles are allowed only in agreement with the Technical Commissioner and the Organizer. Hybrid installations are prohibited.

#### 3.1 Exhaust System.

The release system is not limited. All vehicles must have an engine exhaust system installed. The exhaust system must be metal. All components of the exhaust system must be securely connected to each other, as well as to the body or frame of the vehicle.

The end pipe of the exhaust system must be brought back or sideways of the car, while the exhaust must be directed to the ground at an angle of at least 45 degrees from the horizontal. The end of the exhaust pipe should not protrude beyond the perimeter of the body (vertical projection on the bumpers, sills and wings). The end of the pipes directed sideways should be located in the base of the vehicle.

It is not allowed to lay the exhaust pipe through the passenger compartment of the vehicle and any panels of its body, except for the output of this pipe through a purpose-made tunnel in the sill and side member. Such a tunnel must have a round shape and be made for the entire length of the metal, in its properties and thickness (minimum) identical to that of which the sills of the side members are made. It has to be welded to the sill or side member, and may not extend beyond it. The inner diameter of this tunnel must exceed the outer diameter of the exhaust pipe as much as necessary to avoid their contact with each other. The specified tunnel must not be located on the Pilot's side.

It is not allowed to place the combustible objects and materials (for example, a gas tank) near the end of the exhaust system.

#### 3.2 Intake System.

The intake system is free. Air intake from the car passenger compartment is prohibited.

#### 3.3 Fuel.

Only liquid hydrocarbon fuel is allowed: gasoline, diesel fuel. It is allowed to use alcohol as fuel additive, but not more than 85% of the volume.

#### 3.4 Fuel System

The fuel system must be equipped with a ventilation system. Such system must be brought out of the car and equipped with a device which prevents fuel leakage in any position of the car, even upon its roll-over.

If the fuel tank and/or filler neck are located inside the car body, there should be a hole with a diameter of 15 to 50 mm in the floor to drain fuel spilled during refuelling into a space outside the car.

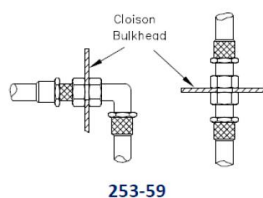
The fuel tank and its filler neck must be separated from the passenger compartment by a rigid casing (which is mandatory for two-box cars) or by a rigid partition that are liquid- and fireproof.

The tank shall be securely fixed, according to the manufacturer's instructions, with steel straps, at least 2, with a minimum size of 20\*0.8 mm. All brackets fixing the tank must be welded to the car body. If the tank is installed in the place specified by the factory, it must be fixed by the factory method.

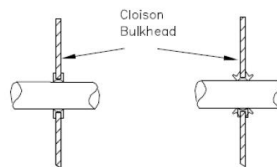
An additional anti-drainage tank with a capacity of not more than 3 liters can be used. It should be securely fixed in the immediate proximity to the main tank. All connected fittings and fuel pipes must be of aircraft type.

There are no limitations for the number, label and location of fuel pumps. In the course of placement of fuel pumps inside the passenger compartment they must be placed in a sealed container which is liquid- and fireproof.

Fuel pipes can be placed in the passenger compartment but they must be metal or of aircraft type and they must not have connectors in the passenger compartment, except for threaded joints at the points of passage through the floor or body panels (Fig. 253-59, 253-60, Appendix J, article 253, sub-cl. 3.1-3.2).



253-59



253-60

It is prohibited to place the fuel pipe in the immediate proximity to the cardan shaft.

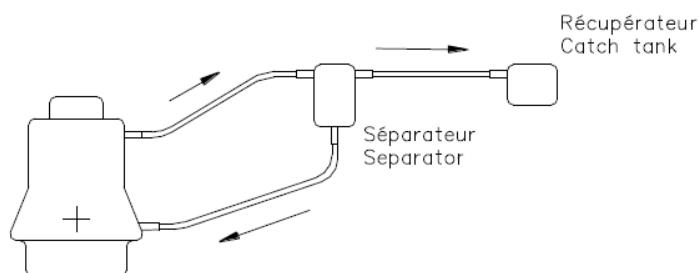
In any case, all elements of the fuel system must be separated from the exhaust system by incombustible partitions.

### 3.5 Crankcase Lubrication and Ventilation System

The lubrication system is free, even with a dry sump engine. For cooling air passage, some holes can be made in the car body, and such holes must be covered with a metal mesh. Oil lines should be metal or of aircraft type with a metal braid and they should be separated from the passenger compartment. If the oil tank is installed outside the engine room, it must be separated from the passenger compartment with a metal liquid- and fireproof casing.

An open crankcase ventilation system can be used. Such system must be equipped with a separator (Fig. 255-3) with a maximum capacity of 1 liter. Oil from the oil pan should

be drained into the engine by action of gravity only. All gases must be extracted into a tank that excludes liquid leakages in any position of the car, with a capacity of at least 2 liters, made of semi-transparent plastic or including a transparent panel, securely fixed in the engine compartment. It is prohibited to install the crankcase ventilation tank near the elements of the exhaust system.



255-3

The ICE oil level dipstick must be securely fixed to prevent oil squeezing through the dipstick tube.

### 3.6 Nitrous Oxide (N<sub>2</sub>O).

It is recommended to purchase fully packaged systems from a reputable manufacturer. The applicable safety rules are provided below.

The nitrogen supply mains should be located outside the pilot compartment, unless the cylinder(s) is (are) installed in the passenger compartment, in which case the main should be routed outside the passenger compartment as close as possible to the cylinder outlet. In the points where the mains pass through the flywheel area, they must be encased into steel pipes with a wall thickness of at least 3 mm. A high-pressure hose for at least 10.5 MPa must be used.

Mounting the cylinder: cylinders must be installed outside the engine compartment. The cylinders inside the passenger compartment must be installed using metal brackets fixed to the vehicle structural element and equipped with a bypass valve for ventilation of the passenger compartment which is discharged outside into the atmosphere. In case of linear location, a retainer bracket shall be fixed to prevent the cylinder from moving.

The cylinders must be provided with open/close valves. Cylinder closing systems with special keys may not be used. The operated cylinders must be specially made for storage of nitrous oxide.

Electrical devices which are applied to raise the temperature of nitrous oxide cylinders must be specially made for this purpose by an industrial manufacturer and they may not be altered in any way. The system shall be installed in strict compliance with the manufacturer's instructions.

Switching: both solenoids must be connected to a common switch and the system must be switchable by three different means:

- 1) when closing the throttle plate;
- 2) by a special control switch that supplies power to solenoids;
- 3) by an ordinary ignition key or a master switch for electrical equipment ("mass").

Signs: all vehicles that use nitrous oxide must be provided with a special sign on both sides of the vehicle in an area which is protected from damages. The signs should be as shown in Figure 9.

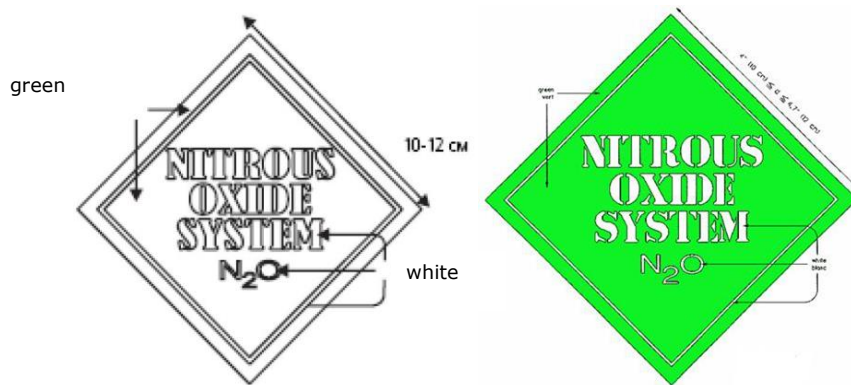


Figure 9

### 3.7 Pressure Charging

Pressure charges of all types are permitted.

Intercooler, the principle of its operation (air-to-air, air-cooling agent, air-ice) and its location are not limited within the car body outline. Intercooler may not be placed in the passenger compartment.

### 3.8 Cooling System

The cooling system elements are free.

If a cooling radiator is installed in the luggage compartment of a vehicle, the air for its cooling may not be taken from the passenger compartment (cockpit) of the vehicle and it should be separated from the passenger compartment by a liquid-proof screen.

If the pipelines pass through the passenger compartment, they must be metal or of aircraft type, one-piece without connections, and they must be covered with a liquid-proof screen which completely separates the pipeline from the passenger compartment.

All connections (fittings, spoke nipples) of pipes and hoses must be securely fixed to non-removable vehicle body parts.

Only cooling fluid consisting of water or a mixture of water and special antiwear and anticorrosion additives can be used as a coolant in the cooling system.

## 4. Steering

- 4.1 It is allowed to install any steering wheel with closed rim, with the exception of that made of wood or having elements made of wood.
- 4.2 Steering mechanism is free. It is allowed to replace hydraulic power steering with electric power steering and vice versa.
- 4.3 It is allowed to install steering wheel boss adapter made of monolithic metal blank that is attached to a steering shaft by original way, with maximum length of 200 mm. Quick-detachable fastening of a steering wheel is allowed. Quick release mechanism shall include a ring concentrically located and installed on a steering column under a steering wheel, yellow colour anodized or having any other durable yellow coating. Release must be performed by moving this ring along the axis of a steering column towards a steering wheel.
- 4.4 Mechanical interlocking device of ignition switch must be removed.
- 4.5 Vertical angle of steering column installation can be changed.
- 4.6 Mechanism of adjustment of a steering column must be retrofitted in such a way that adjustment is possible only using a tool.
- 4.7 Safe locking of all thread connections of steering control is mandatory.

## 5. Braking System

- 5.1 Availability of braking system on all vehicles taking part in competitions is mandatory.
- 5.2 If brake lines are located in a passenger compartment, then in order for them to move through partitions (both between an engine compartment and a cabin, and between a cabin and a trunk) it is allowed to make minimum required holes. At that, any possible clearances in holes must be hermetically and safely sealed. If brake lines are located in a passenger compartment, they must be made of metal tubes or hoses of aircraft type with external metal reinforcement.
- 5.3 Original rubber brake hoses may also be replaced with flexible hoses of aircraft type, which connection must be done using relevant adapters.
- 5.4 Protective casings of brake discs may be removed.
- 5.5 Liquid cooling of brakes is forbidden.

5.6 In any case it is necessary to use factory made braking mechanisms, as well as braking discs or drums.

5.7 It is allowed to install parking brake with hydraulic actuator affecting any axis.

5.8 It is allowed to install tanks with brake fluid in a passenger compartment. At the same time, their overall volume must not exceed 0.5 litres and their design must exclude spillage, even in case of rollover of a vehicle.

## 6. Transmission

6.1 Transmission is free.

6.2 It is allowed to make necessary changes to a vehicle's design in order to change the type of a drive from FWD/4WD to RWD on condition of compliance with current TS.

6.3 Change of a drive type using electronic devices (4WD controllers) is forbidden.

6.4 Clutch mechanism must be actuated only using manual power of a pilot.

## 7. Tyres

7.1 Drift competition allows using only vehicle tyres certified for use on public highways, which tread pattern is created industrially (at a factory) during the process of manufacturing of a tyre itself and has no visible damage and deformations, with the exclusion of studded tyres.

7.2 Any chemical treatment of tyres is forbidden.

7.3 Tyre warmers are forbidden.

7.4 It is forbidden to use tyres that are damaged or worn to the extent when tyre cord is visible.

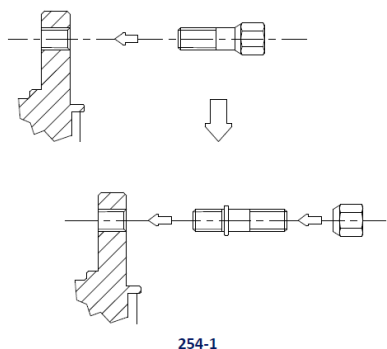
## 8. Wheel Disks

8.1 Wheel disks are free in terms of their design, but they must be made of metal.

8.2 Disks made of magnesium or its alloys are forbidden.

8.3 All wheels must be securely fixed with wheel bolts or nuts. Wheels fixture with bolts may be replaced with dowels and nuts fixture provided mounting dimensions of wheel disks and bosses remain unchanged (Figure 254-1). In this case protrusion of threaded part of a dowel must be equal to at least one diameter of a dowel. Bolts must be screwed into a

dowel at least to the whole depth of a threaded hole of a dowel. All wheel dowels must not be damaged in any way. Dowels must not extend beyond the external disk plane.



8.4 Wheel covers must be removed.

8.5 For the purpose of track extension it is allowed to use spacers that must ensure wheel alignment with respect to a dowel.

8.6 All wheel disks must have radial strips of a colour that is contrast to the colour of a disk, with width of at least 30 mm and length equal to the disk radius; if the width of a wheel arm is less than 30 mm, the strip must be on two adjacent wheel arms. The strip must be present during all classified runs. The strip may be of PVC material and be glued down or be painted, and must remain in place during the whole competition.

## 9. Electric Equipment

9.1 It is allowed to move a battery from its standard location. A battery may be located in a passenger compartment or in a trunk of a vehicle between side members and as far as possible from a rear bumper.

9.2 In any case a battery must be safely fastened. For that purpose it is recommended to strengthen the original fixture of a battery. At that, the following vehicle body modifications are allowed: drilling of additional fixation holes in a battery bench, as well as welding of additional eye rings for battery fixation.

9.3 In case of such moving, a battery must be fastened to a vehicle body using metal socket (a bay with flanged edges) and two metal staples of at least 20 x 0.8 mm with insulation coating, attached to the base using bolts or dowels with diameter of at least 10 mm with reinforcement plates between each bolt or dowel at least 3 mm thick and with area of at least 2000 mm<sup>2</sup>, located on the back side of a vehicle body panel (Figure 10). A hole must be made in plates in order to control their thickness. A battery containing liquid electrolyte

Добавлено примечание ([AB3]): A picture needs to be inserted.

must be covered with dielectric liquid-proof casing, fixed separately from a battery and be equipped with ventilation with outlet outside the vehicle body. If a battery is dry, then the battery and its terminals must be covered with solid cover made of dielectric material. It is allowed to lay power cables inside a vehicle. They must be securely fixed on a vehicle body panels. In order to lay them through partitions between a trunk, a passenger compartment and an engine compartment, it is allowed to drill holes in each partition. Clearances in these holes must be sealed. Cables must not be in contact with sharp edges of holes.

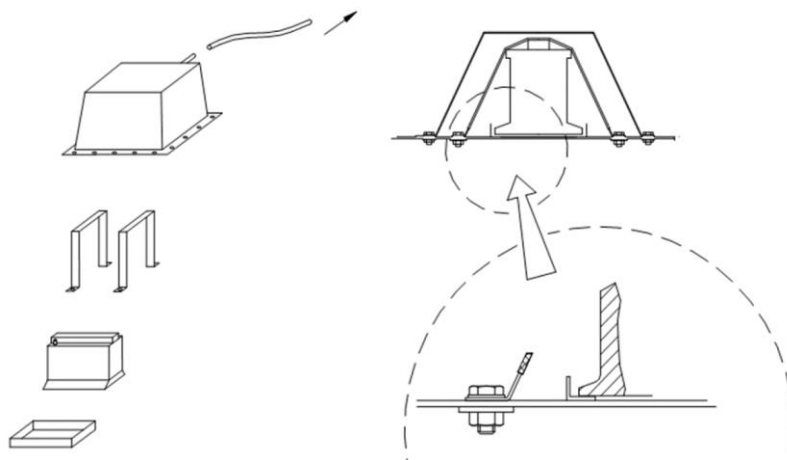


Figure 10

- 9.4 The necessary modifications of the harnesses are allowed to connect the main switch of electrical equipment.
- 9.5 The conductor bundles located in the passenger compartment must be enclosed in protecting covers which prevent their damage.
- 9.6 The openings in the body for conductor bundles must have a rubber edging which tightly enwraps the bundles.
- 9.7 The purpose of all electrical switches installed in passenger compartment (toggle switchers, buttons, etc.) must be marked with an inscription or a readable pictogram.
- 9.8 Any electronic and/or mechanical pilot aid systems are prohibited. Traction control systems and torque control systems, any electronic positional checking systems (electronic stability control, ABS, etc.). Speed sensors on the wheels and driver shafts, steering wheel position detectors and any other steering controllers, driveshaft rotation sensor must be removed.



## 10. Suspension.

- 10.1 All vehicles must be equipped with suspension. At least one shock absorber must be provided on each wheel.
- 10.2 Elastic elements (springs, torsion bars, bearing springs) are free.
- 10.3 Jounce bumpers of the suspension are free.
- 10.4 All elastic suspension joints may be replaced for more hard ones.
- 10.5 Shock absorbers and shock mounts are free.
- 10.6 Stabilizer bars are free.
- 10.7 Shock absorbers and stabilizer bars remote adjustment systems are forbidden.

## Instructions for DC1 vehicles

### 1. Pilot's Seat

Original pilot's seat, as well as the front seat, if any, must be replaced by a sport ergonomic seat in compliance with the requirements of FIA (FIA Standard 8855/1999 or 8862-2009 is recommended) or the Russian Automobile Federation (Appendix 15 to KiTT). The use of the seat must comply with the requirements of Article 253-16 of Appendix J to ISC FIA.

### 2. Safety Belts

Safety belts must be installed for each seat in the vehicle; these safety belts must have at least 6 points of attachment to the body. Safety belts must comply with the requirements of Appendix 15 to KiTT, except for clause 2.1. Loose belts straps are not allowed and must be fixed. Safety belts must be secured in accordance with the requirements of article 253-6 of Appendix J to ISC FIA and the manufacturer's instructions.

### 3. Fire-fighting System

The vehicle must be equipped with a fire-fighting system compliant with the requirements of article 253, cl. 7.2 of Appendix J to ISC FIA or Appendix 6 to KiTT. The fire-fighting system must be installed in accordance with the manufacturer's instructions. The minimum amount of fire suppressant in the system shall be 4 kg. The external actuator of the fire-fighting system may be combined with the external actuator of the main switch of electrical equipment, or be in close proximity to it.

MAG fire-fighting system is allowed to be used in the engine compartment and to protect the fuel tank from fire. It is prohibited to place MAG fire-extinguishing aerosol generators in the passenger compartment.

### 4. Side glazing and protecting net.

It is mandatory to use a doorway protective net or a SFI 3.3 pilot's hands retainer system. As viewed from the side, the net must extend from the center of the steering wheel to the seat back.

The net must be made of woven strips with a width of at least 19 mm (3/4 inches). The minimum mesh must be 25x25 mm, the maximum one – 60x60 mm. The woven strips must be made of a flame-resistant material, sewn together in each crossing point. The net should not be temporary, it must be fastened to the safety cage above the pilot's side window and must be removable using a quick-disconnect coupling even in case of vehicle roll-over. The possibility must be provided to detach the net with one hand. Fasteners should be marked with a bright color (orange, yellow, red).

It is allowed to use a net of the FIA 8863-2013 or SFI 37.1 standard instead of ribbon type screens.

There may be no glass in front and/or rear doors. In this case, the Pilot must use a closed helmet with a vizor that completely covers the face. The vizor must be fully closed during a run.

## 5. Fuel System

The original fuel tank must be replaced with a safe one in compliance with specifications FIA FT3-1999, FT3.5-1999, FT5-1999 or SFI 28.1 and higher. The tank must be installed inside the body, in the safe area of the trunk between the rear wheel arches, near or above the rear axle beam, or in a standard location.

It is allowed to place the anti-drainage tank in the engine room.

## Instructions for DC2 vehicles

### 1. Pilot's Seat

The original pilot's seat, as well as the front passenger's seat, if any, must be replaced by a factory-built sports rigid seat. Such a seat must have a solid back, and a height must reach the top of the sportsman's head. It is recommended to install a sports seat for closed vehicles, homologated in accordance with the FIA requirements (FIA 8855/1999, 8862-2009 standard), SFI (at least 39.2) or Russian Automobile Federation (Appendix 15 to KiTT) The use of expired seats is allowed, with the date specified by the manufacturer, if it has no visible damages and the service life does not exceed 10 years.

### 2. Safety Belts

Safety belts must comply with the requirements of Appendix 15 to KiTT, except for clause 2.1. Safety belts must be installed for each seat in the vehicle; these belts must consist of at least two shoulder straps and one belt strap with at least 4 points of attachment to the body. Loose belts straps are not allowed and must be fixed.

### 3. Fire-fighting System

It is recommended to equip the vehicle with a fire-fighting system compliant with the requirements of article 253, cl. 7.2 of Appendix J to ISC FIA or Appendix 6 to KiTT. The fire-fighting system must be installed in accordance with the manufacturer's instructions. The minimum amount of fire suppressant in the system shall be 4 kg. The external actuator of the fire-fighting system may be combined with the external actuator of the main switch of electrical equipment, or be in close proximity to it.

MAG fire-fighting system is allowed to be used in the engine compartment and to protect the fuel tank from fire. It is prohibited to place MAG fire-extinguishing aerosol generators in the passenger compartment.

### 4. Side glazing and protecting net.

There may be no glass in front and/or rear doors. In this case, the Pilot must use a closed helmet with a vizor that completely covers the face. The vizor must be fully closed during a run. It is also mandatory to use a doorway protective net or a SFI 3.3 pilot's hands retainer system.

As viewed from the side, the net must extend from the center of the steering wheel to the seat back. The net must be made of woven strips with a width of at least 19 mm (3/4

inches). The minimum mesh must be 25x25 mm, the maximum one – 60x60 mm. The woven strips must be made of a flame-resistant material, sewn together in each crossing point. The net should not be temporary, it must be fastened to the safety cage above the pilot's side window and must be removable using a quick-disconnect coupling even in case of vehicle roll-over. The possibility must be provided to detach the net with one hand. Fasteners should be marked with a bright color (orange, yellow, red).

It is allowed to use a net of the FIA 8863-2013 or SFI 37.1 standard instead of ribbon type screens.

#### 5. Fuel System

It is allowed to replace the original fuel tank with a tailor-made or factory-built tank. It is recommended to install a safe tank in compliance with specifications FIA FT3-1999, FT3.5-1999, FT5-1999 or SFI 28.1 and higher.

It is allowed to place the anti-drainage tank in the engine room provided the vehicle is equipped with a fire-fighting system.

## Instructions for DC3 Vehicles

To be published later.