

Appendix 24 to Classification and Technical Requirements

Drift car requirements

TABLE OF CONTENTS

1. General requirements to DC1 and DC2 class cars	1
2. Instructions for DC1 class cars	20
3. Instructions for DC2 class cars	22
4. Instructions for DC3 class cars	24

CHAPTER 1.

General requirements to DC1 and DC2 class cars.

1. Safety requirements.

1.1 Safety cage.

All cars shall be equipped with a safety cage that meets the following requirements:

Manufacturer and manufacturing standards	Required documents
Fabricated by a manufacturer certified by RAF (or other ASN member of the FIA) in accordance with the requirements of Article 253.8 or 269.10 of the current Appendix J to the FIA International Sporting Code.	Certificate of the manufacturer in the form approved by the RAF (ASN)
Fabricated by a manufacturer certified by RAF (or other ASN member of the FIA) in accordance with the homologation of the RAF (or other ASN) before 01.01.2014.	Certificate of the manufacturer in the form approved by the RAF (ASN)
Fabricated by a manufacturer certified by RAF (or other ASN member of the FIA) in accordance with the RAF homologation (or other ASN) between 01.01.2014 and 01.07.2015.	Certificate of the manufacturer in the form approved by the RAF (ASN)
Fabricated by a manufacturer certified by RAF (or other ASN member of the FIA) in accordance with the RAF homologation (or other ASN) after 01.07.2015.	Manufacturer's certificate of the form approved by the FIA on special RAF (ASN) paper and certified by the RAF (ASN)
Fabricated independently before 31.12.2021 in accordance with the requirements of Article 253.8 of Appendix J to the FIA International Sporting Code as amended 2020 (maximum mandatory configuration)	A RAF sticker should be pasted on the frame, a corresponding entry should be made in the STP.

It is allowed to use safety cages that at the time of fabrication that do not have windscreen pillar reinforcement (clause 8.3.2.1.4 Art. 253 Appendix J to the FIA ISC, Fig. 253-15) on the cars with the entry in the Sports Technical Passport on participation in the drift competition not later than 31.12.2016. This reinforcement is highlighted by dark color in Figure 1.

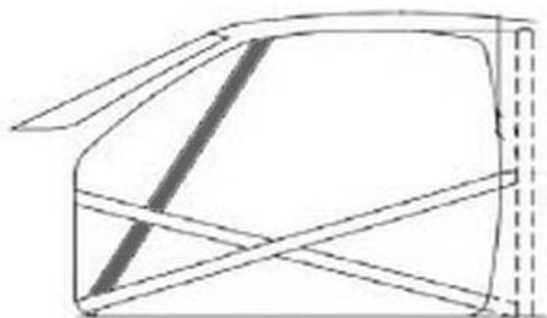


Figure 1.

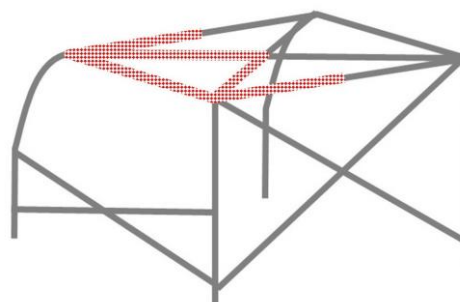


Figure 2.

In places where the Pilot's helmet can come into contact with the safety cage, it is required to install roll bar padding that meets FIA 8857-2001 Type A standard (See Technical Sheet No. 23 "FIA homologated roll bar padding") or SFI 45.1, 45.2. It is recommended to install padding on all the frame elements highlighted in red in Figure 2. The padding should be securely fixed from shifting and turning (for example, with double-sided adhesive tape).

From 01.01.22, all newly commissioned safety cages must be manufactured and installed only by a certified RAF (other ASN) manufacturer and must have a certificate of the form established by the FIA.

1.2 Seat attachment.

Seat supports and their anchorage points shall comply with the requirements of Article 253-16 of Appendix J to the FIA ISC. For FIA 8862-2009 standard seats the seat supports shall be homologated with the seat or with the car.

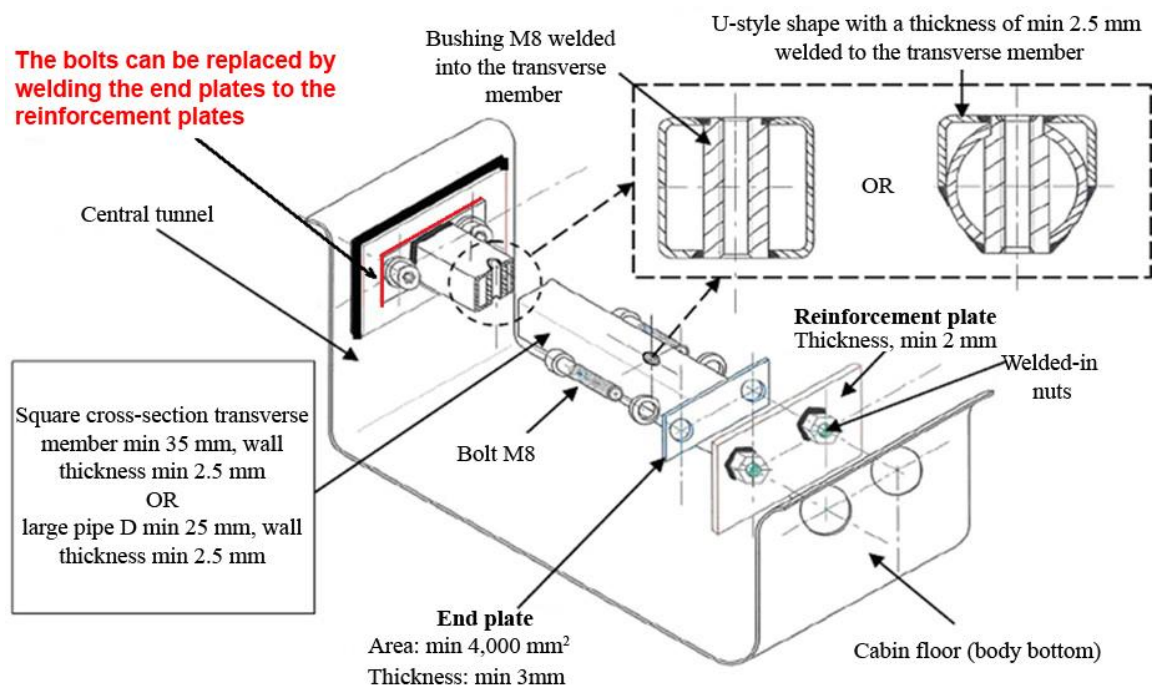


Figure 3.

If the seats are attached to transverse members, these cross members shall be attached in accordance with the requirements of Article 253-16.2, Figure 3, or welded to the body. The pipes shall be welded along the entire perimeter to the reinforcing plates with an area of at least 4,000 mm² (each) and a thickness of at least 3 mm, in turn welded along the entire perimeter to the body. All welding seams shall be of high quality, they shall not be ground, puttied, etc.

Seamless round steel pipes with minimum size 35x2.5 or square pipes with a minimum size of 35x35x2.5 mm shall be used. The groin straps of the seat belts can also be attached to these pipes. In this case round pipes with the minimum size of 38x2.5 mm or 40x2 mm shall be used. In the anchorage points of the seat supports the pipes shall have local reinforcements in the form of welded bushings and support pads in accordance with Figure 3.

Bolts of a strength category not lower than 10.9 shall be used to secure the seats and their supports. It is mandatory to use reinforcing washers with a thickness of at least 2 mm, a size of at least 2.5 diameters of the mounting bolt and at least the size of the hole in the fixed fastener.

It is also allowed to install the seats on the original anchorage points (provided that the anchorage points of the rear supports are located at the distance of the width of the seat). In this case, the anchorage points shall be reinforced with a steel plate with a thickness of at least 2 mm and a width of at least 50 mm. The counterplate shall be welded around the perimeter and through the holes (Figure 4). The minimum area of contact between support, shell/chassis and counterplate is 4,000 mm² for each mounting point.

If quick release systems are used, they must be capable of withstanding vertical and horizontal forces of 18000 N, applied non-simultaneously.

It is allowed to mount the seat to the floor, while all mounting points must have steel reinforcement plates with a minimum thickness of 3 mm and a minimum area of 4,000 mm² on both sides, as shown in Figure 5.

The minimum thickness of the supports and counterplates is 3 mm for steel and 5 mm for aluminum alloy materials. The minimum longitudinal dimension of each support is 6 cm. The mounting points of the rear supports shall be located at the distance of the width of the seat.

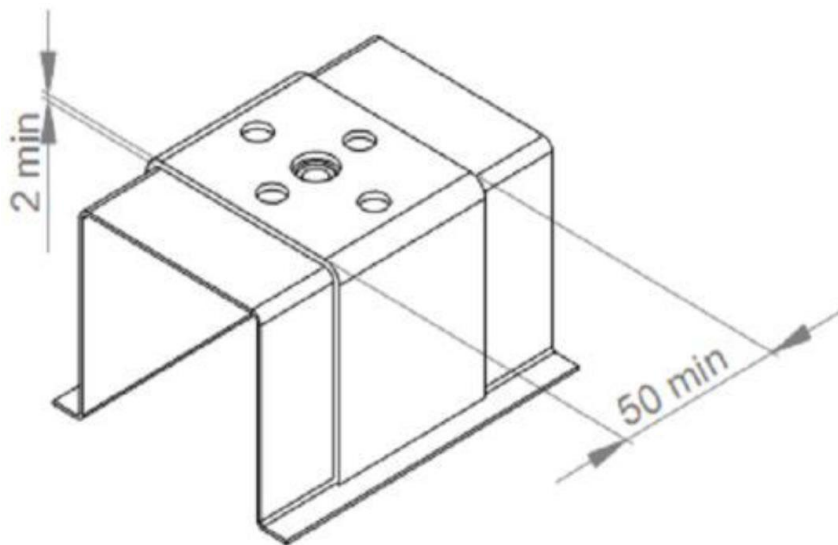


Figure 4.

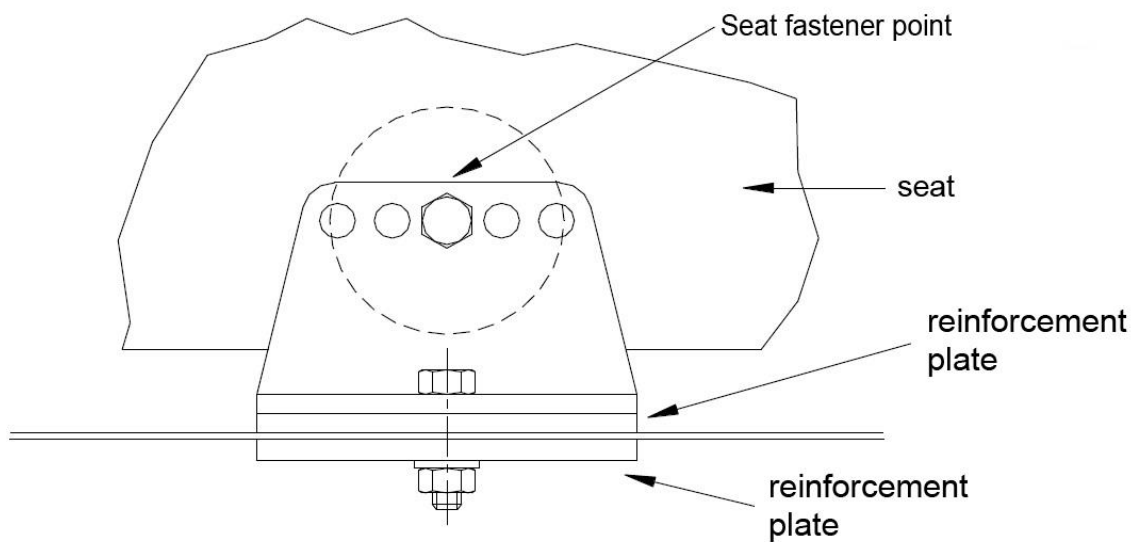


Figure 5.

1.3 Interior.

The interior of the car shall be separated from the engine compartment and fuel tank, including its filling pipe and neck, by partitions impervious to liquids and flames, made of a flame-retardant material.

It is forbidden to place containers with any liquids in the interior, with the exception of the water supply system for the pilot and those described in these Technical Requirements.

1.4 General circuit breaker (master switch)

It is mandatory to use spark-proof circuit breaker of electrical equipment. The switch must de-energize all electrical circuits of the car. Access to this switch must be provided to the pilot sitting normally in his seat and wearing seat belts. It is mandatory to use a functioning external triggering system of the circuit breaker of the electrical equipment. The external drive of the switch must be installed under the windshield. If the hood is raised at the base of the windshield and/or does not have a seal isolating the engine compartment, then the external drive must be placed on the body panel under the rear window, or on the side surface of the rear roof pole. The minimum necessary modification of the body is allowed for its placement. The external triggering system of the circuit breaker will be marked by a red spark in a white-edged blue triangle. Each edge of the triangle should be at least 120 mm long (Figure 6).

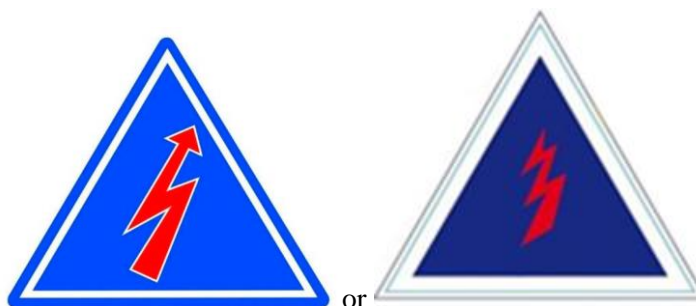


Figure 6.

1.5 Bumpers, bumper reinforcement (bash bars) and their fastening.

The car must have front and rear bumpers, as well as their safety structures. The factory members must be fixed to the mounting points provided by the manufacturer. Non-original safety structures (bash bars) must be made of steel pipe with a diameter of 25-44 mm with a wall thickness of 1.6-3.2 mm, must be bolted to the spars, 4 bolts of 10 mm, with a strength of at least 8.8, on each side or welded and must be horizontal (+/- 10 degrees) (Figure 7). The pipes must remain full throughout; they must be located at a minimum distance from the outer shell of the bumper.

It is allowed to place additional attachment points for the outer shell of the bumper, fenders, headlights, attachments, the material and construction are free, but they should not form dangerous, sharp corners.

Bash bars, the design of which does not meet these requirements, can only be used in agreement with the technical commissioner and the organizer of the competition.

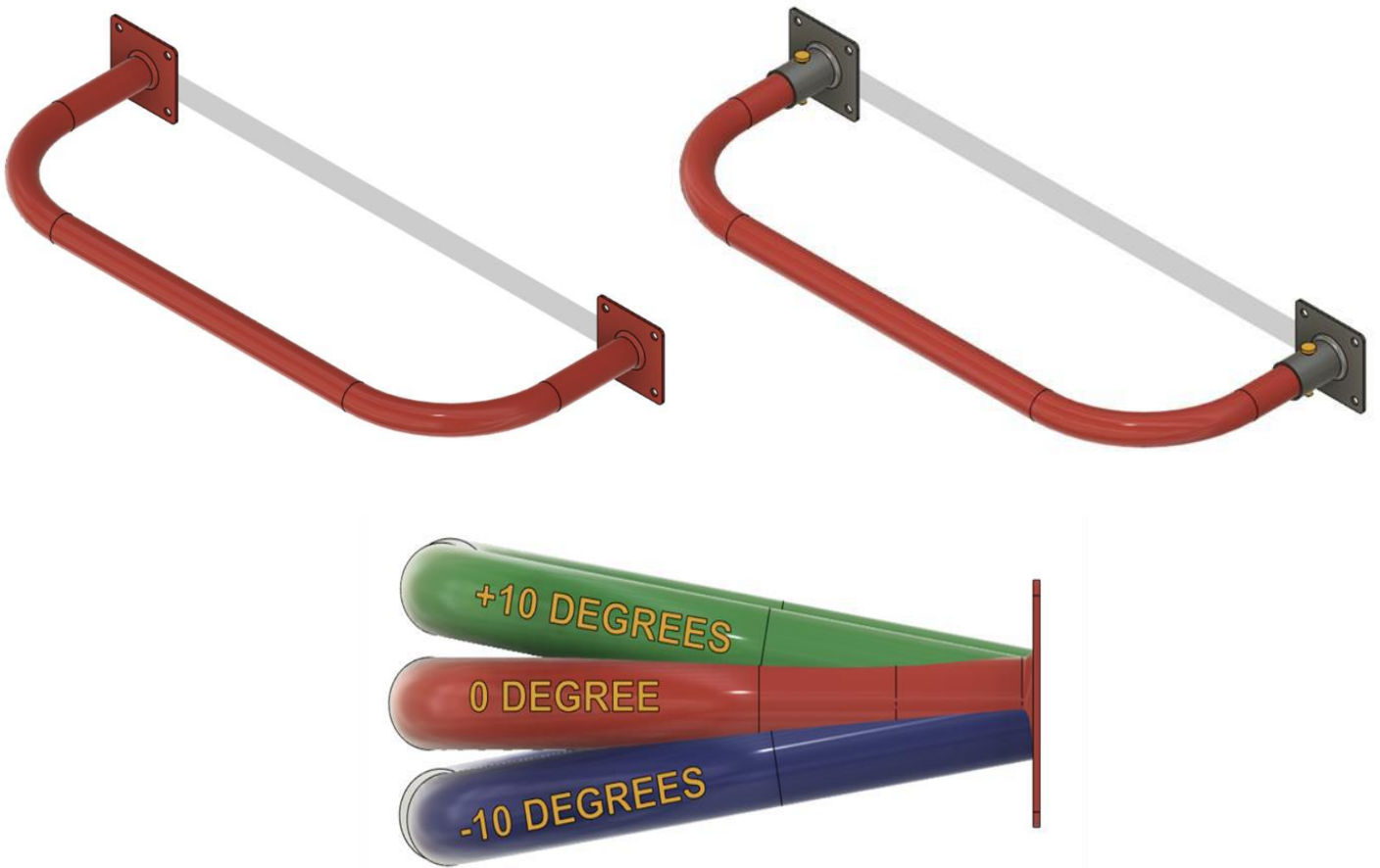


Figure 7.

1.6 Miscellaneous.

No leakage of any liquids or fuels and lubricants from the car is allowed in any position.

2. Permitted changes to the body and chassis of the car.

2.1 The location of the motor shield must be original. Modifications to firewall and transmission tunnel must be done with 0.8 mm steel in conformity with following dimensions (see Figure 8):

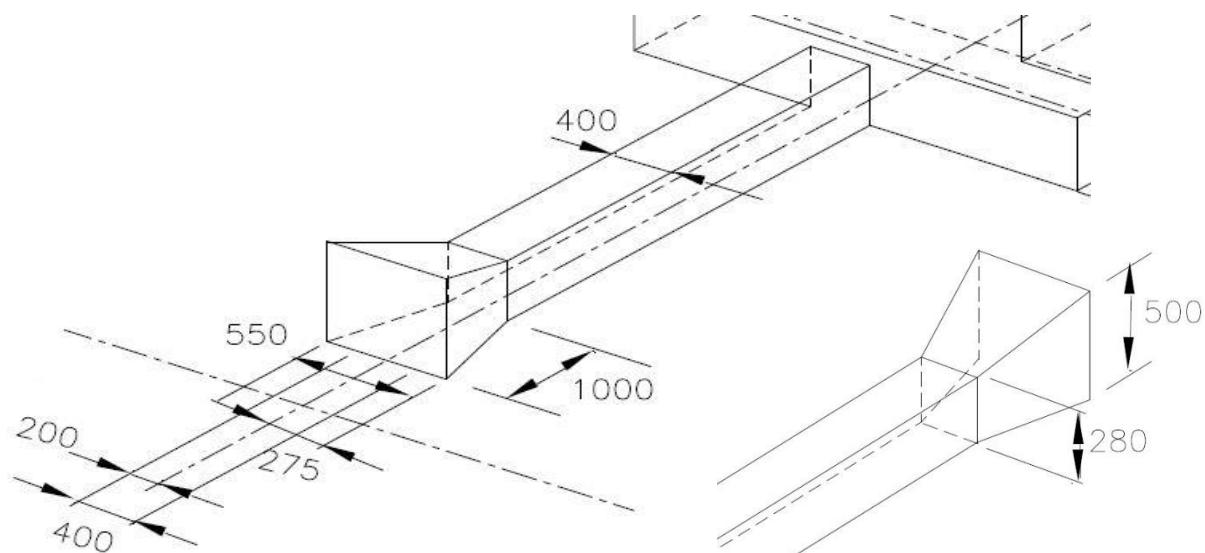


Figure 8.

Modifications to firewall and transmission tunnel are not limited to cars participating to RDS and RDS GP competitions up to 2018 (including 2018) with appropriate mark in technical Sports Technical Passport. Material: sheet steel with a minimum thickness of 0.8 mm.

In any case, the motor shield and the tunnel must be impervious to fire and liquids.

2.2 Mechanisms of opening: closing the doors have to be serviceable and meet a serial factory design, at the same time the handle opening a door inside can be modified. (In that case, the handle of opening of a door outside has to be highlighted with contrast color). The original lock of a bonnet and luggage compartment should be removed. In this case, at least two external metal clamps should be installed symmetrically relative to the longitudinal axis of the car preventing spontaneous opening of a bonnet. It is allowed to change the design and location of the hood and trunk hinges, but at the same time their number must be at least 2, and they must be located symmetrically to the longitudinal axis of the car. The bonnet and luggage compartment door hinges can be completely removed, in this case no less than four external metal fastenings should be provided.

2.3 The internal skin of doors can be replaced with sheets made of flame-retardant material (minimum thickness: metal - 0.5 mm, carbon/kevlar -1 mm, plastic -2 mm) preventing contact with internal mechanisms and parts. Internal ceiling cover can be removed.

2.4 It is forbidden to remove and lighten the supporting body elements. It is allowed to add suspension fasteners and subframes to the strength members of the body. It is allowed to make minimum modifications in them for this.

2.5 Modification (including change for unsupported structure ensuring the rigidity of the body) of a part of the strength members of a body is allowed (rear and forward side members) in accordance with Figure 9 (a part outside the axes A1-A1 and A2-A2):

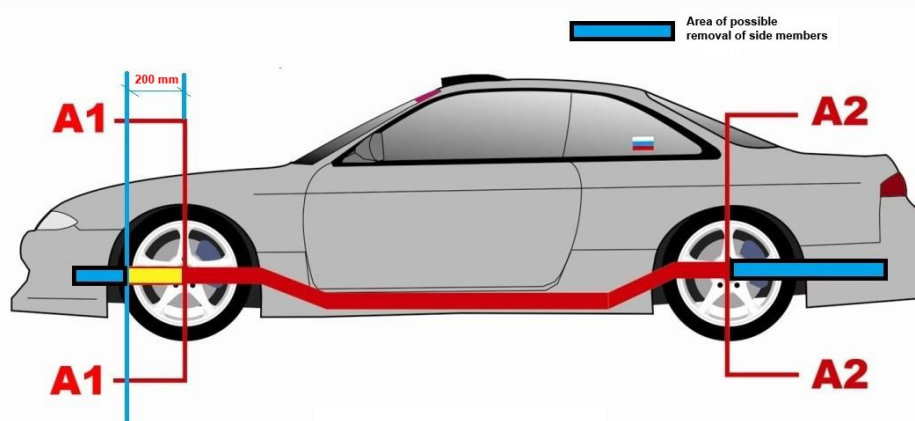


Figure 9.

2.6 It is allowed to replace the external body panels (front and rear fenders, roof), as well as doors, hood covers and trunk covers made of plastic, carbon fiber or other composite materials. If there are air intake openings in the replaced bonnet, they must be completely closed, when viewed from above, by the air intake or casing. If any rotating elements of the engine protrude beyond the hood, they must be completely covered with a rigid casing.

2.7 The windshield must be multi-layered (such as "triplex"). It is possible to use windshield made of polycarbonate, specially shop-fabricated for a specific car. The method of attachment the windshield must be of factory type for each specific car.

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 remove the standard glass lifting device, provided that the glass is replaced with another one made of polycarbonate.

2.9 The original side and rear windows made of glass should be covered with a protective film that prevents the formation of fragments during destruction. It is allowed to use tinted film, while from a distance of 5 m the pilot and the interior of the car should be visible.

2.10 All lights located in the front, as well as the rear lights, must be factory-made and must be in good condition. Rear lights and front lights must have the original shape and location. While the car is on the road – the low beam of the main headlights and the red marker light of the rear lights must be permanently switched on. The use of strobe lights, flashing headlights is prohibited. Headlights should ensure illumination of the road in the dark for safe driving at any speed. If the car's headlights are made of glass, then they must be additionally covered with a transparent film that does not allow fragments to fly apart 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 covered with a film that simulates the headlight. It is allowed to use instead of the factory-made front headlight(s) for this car model, a mockup of the original headlights(s) made of plastic or fiberglass with factory-made low-beam and/or high-beam modules installed in them. Such modified headlights must be appropriately configured and must ensure the road lighting required for public roads.

2.11 At the top view on the car, wheels have to be effectively closed by mudguards while the working surface of a wheel can protrude in the upper point but not more than 20% of the width of the tire indicated on the marking.

2.12 The wheel arches (over mudguards) must be attached using a tool or with special glue (attachment using a double-sided tape is prohibited), any cracks and gaps between the wheel arch (over mudguards) and the body is not allowed.

2.13 It is allowed to replace exterior mirrors of a rear view with non-original. The absence of rear-view mirrors and/or the installation of a rear-view camera is allowed. Reflective elements made of glass should be sealed with a transparent film that excludes the formation of fragments during destruction.

2.14 Rear wings and spoilers are additional elements of a body, and their design is not limited. Rear wings must be safely attached to car. Use of quick release attachments 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 track bed in case of destruction of the main attachment.

2.15 Towing eyes.

- Towing eyes have to be provided In front and the back of the car. They must be strong, easily accessible, have a closed shape and a cylinder with a diameter of at least 60 mm must pass freely through them, 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.
- 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.

2.16 It is allowed to install hatches and other elements of air intake or air removal from the interior with a cross-section of no more than 1,250 mm² in the roof of the car.

2.17 No 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).

2.18 The weight of the car ready to race including pilot fully equipped is no less than 850 kg and no more than 1,500 kg. It is allowed to fix a ballast to increase the car weight. It must be located inside the car

and attached to the floor. The ballast must be made of solid metal blocks attached to the body with through bolts or studs with a diameter of at least 12 mm with counterplates. The area of each counterplate must be at least 4,000 mm², the thickness must be at least 3 mm. There must be 2 mounting points per every 20 kg of ballast, but not less than 2. It should be possible to lead seal the ballast.

2.19 The location of wires and pipelines between the frame and body panels is prohibited.

3. Engine and its systems.

One any serially (with a manufacturer part number) produced internal combustion engine, both gasoline and diesel is allowed. Admission of electric cars is possible only if it is agreed by the Technical Commissioner and the organizer. Hybrid plants are prohibited.

3.1 Exhaust system.

The exhaust system is not limited. All vehicles must have an exhaust gas system installed from the engine. The exhaust system must be metal. All components of system have to be reliably fixed to a body or to a frame of the car.

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 mudguards). The end of the pipes directed sideways should be located in the base of the car.

The direction of the exhaust gas flow cannot be directed towards the wheels or non-metallic parts of the car (bumper, sill pads, etc.).

The exhaust pipe must not pass through the driver's compartment and any panels of its body, except for the passage of this pipe through a specially made tunnel in the sill and spar. This tunnel must have a round shape and be made of the metal over the entire length, its properties and thickness (minimum) must be identical to properties and thickness of sills and spars. It has to be welded to the sill or spar, and must not protrude outside 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 said tunnel must not be located on the Pilot's side.

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

3.2 Intake system.

The intake system is not limited. Air intake from the driver's 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. This system must be located outside the car and equipped with a device that prevents fuel leakage in any position of the vehicle, even when overturning.

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

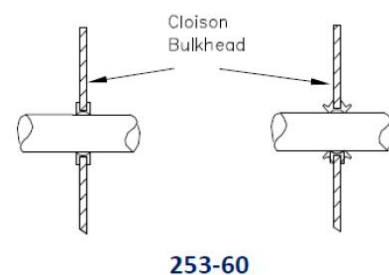
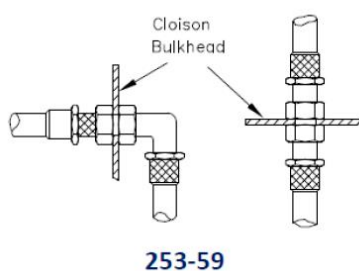
The fuel tank and its filler neck must be separated from the interior by a rigid casing (required for two-volume vehicles) or a rigid partition that is impermeable to liquid and fire.

The tank must be securely fastened, according to the manufacturer's instructions, or with at least 2 steel strips with a minimum size of 20*0.8 mm. All brackets to which the tank is attached must be welded to the body. If the tank is installed in the factory location, it must be fixed by the factory method.

It is allowed to use an additional catch tank, with a volume of not more than 3 liters. It must be securely attached in the immediate vicinity of the main tank. All connected fittings and fuel lines must be of the aircraft type.

The number, brand and location of fuel pumps are not limited. When fuel pumps are located inside the interior, it is necessary to enclose them in an airtight container that is impermeable to liquid and fire.

It is allowed to place fuel lines in the interior, but they must be metal or aircraft-type and must not have connectors in the interior, except for threaded connections at the points of passage through the floor or body panels (Fig. 253-59, 253-60 of Appendix J Article 253 clauses 3.1-3.2).



It is forbidden to place the fuel line in the immediate vicinity of the driveshaft.

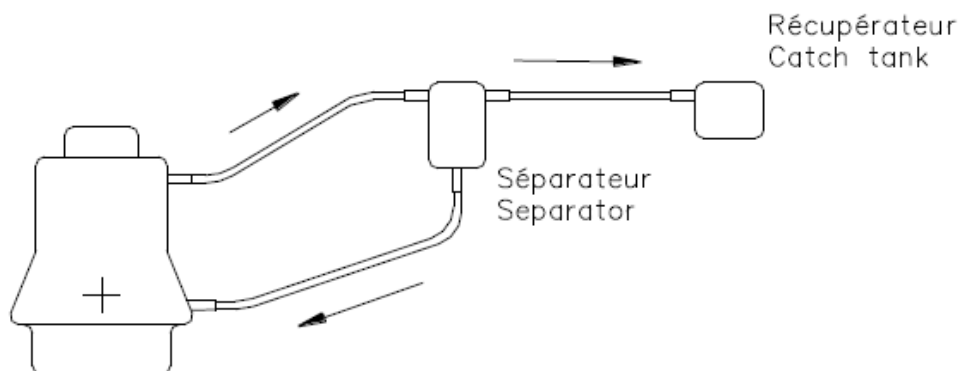
In any case, all elements of the fuel system must be separated from the exhaust system by non-flammable bulkheads.

3.5 Crankcase lubrication and ventilation system.

The lubrication system is not limited, including with a dry crankcase. For access of cooling air it is allowed to make the necessary holes in the body, which must be closed with a metal mesh. Oil lines must be metal or aircraft-type in a metal braid and must be separated from the interior. If the oil tank is

installed outside the engine compartment, it must be separated from the interior by a metal casing that is impermeable to liquid and flame.

It is allowed to use an open crankcase ventilation system. This system must be equipped with a separator (Fig. 255-3), with a maximum volume of 1 liter. The oil from the oil collector must flow into the engine only under the gravity. All gases must be discharged into a tank that prevents liquid leakage at any position of the vehicle, with a capacity of at least 2 liters, made of translucent plastic or including a transparent panel, securely fixed in the engine compartment. Do not install a crankcase gas vent tank near the elements of the exhaust system.



255-3

The internal combustion engine oil dipstick must be secured to avoid squeezing of oil through the dipstick tube.

3.6 Nitrous oxide (N₂O).

It is recommended to purchase complete systems from a recognized manufacturer. The applicable safety rules are listed below.

The nitrogen supply lines should be located outside the interior, except when the cylinder(s) is(are) installed in the passenger compartment, in which case the line should be drawn outside the passenger compartment as close as possible to the cylinder outlet. In places where the lines pass through the flywheel area, they must be placed in a casing made of steel pipes with a wall thickness of at least 3 mm. It is necessary to use a high-pressure hose designed for a minimum of 10.5 MPa.

Installation of the cylinder: the cylinders must be installed outside the engine compartment. Cylinders that are located inside the passenger compartment must be installed using metal brackets attached to the structural element of the vehicle and equipped with a bypass valve for ventilation of the passenger compartment, brought out into the atmosphere. In the case of a longitudinal arrangement, it is necessary to have a thrust bracket that prevents the movement of the cylinder.

Cylinders must be equipped with opening/closing valves. It is not allowed to use cylinder closing systems using special wrenches. The cylinders used must be designed for the storage of nitrous oxide.

Electrical appliances that are used to increase the temperature of nitrous oxide cylinders must be manufactured specifically for this purpose by an industrial manufacturer and must not be modified in any way. The system must be installed in strict compliance with the manufacturer's instructions.

Switching: both solenoids must operate from a common switch, and the system must provide for the possibility of switching off using three different options:

- 1) when closing the throttle;
- 2) by a special actuating switch that supplies power to the solenoids;
- 3) an ordinary ignition key or a common switch of electrical equipment (master switch).

Marking: all vehicles that use nitrous oxide must have special markings placed on both sides of the vehicle in an area that is protected from damage. The markings should look like in Figure 10.

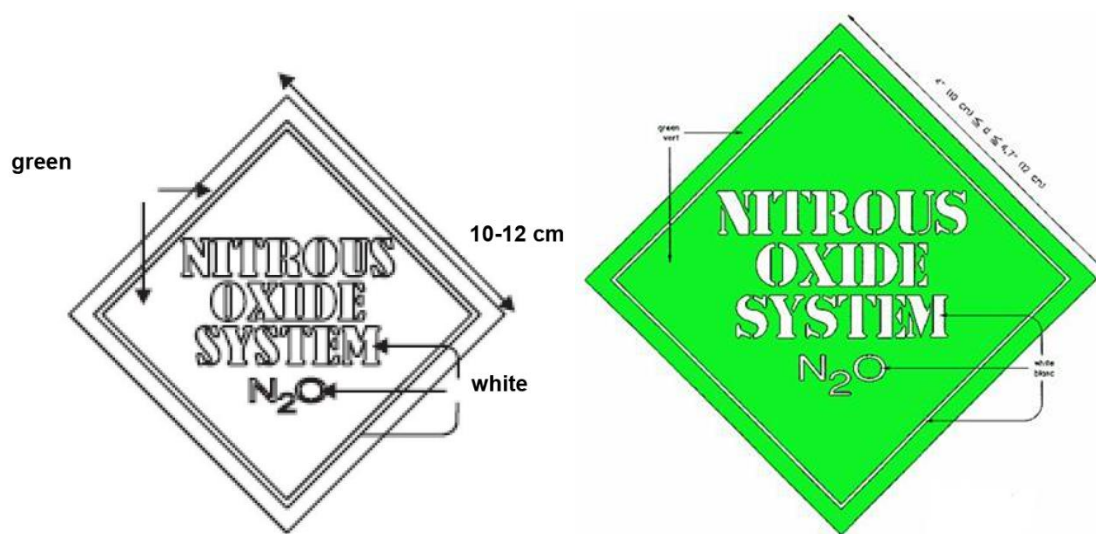


Figure 10.

3.7 Pressure charging.

Any type of superchargers is allowed.

The intercooler, the principle of its operation (air-to-air, air-to-coolant, air-to-ice) and its location are not limited within the outer contour of the body. The location of the intercooler in the interior is prohibited.

3.8 Cooling system.

Elements of the cooling system are free.

In the case of installation of a cooling radiator in the luggage compartment of the car, the air for its cooling must not be bled from the interior (cockpit) of the car, and should be separated from the interior by a screen that is not permeable to liquid.

in the case the pipelines pass through the interior, they must be metal or aircraft-type, solid without connections and must have a protective screen that is not permeable to liquid, completely separating the pipeline from the interior.

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

Only water is allowed to be used as a coolant in the cooling system. The use of special anti-wear and anti-corrosion additives is allowed. The use of antifreeze is prohibited.

4. Steering.

4.1 It is allowed to install any steering wheel with a closed rim, except those made or having elements made of wood.

4.2 The steering mechanism is not limited. It is allowed to replace the hydraulic power steering with electric power steering and vice versa.

4.3 It is allowed to install the hub-adaptor of the steering wheel, made of a single metal blank which is attached to the steering shaft in the original way, with a maximum length of 200 mm. Quick-release steering wheel attachment is allowed. The quick release mechanism must include a ring that is concentrically located and mounted on the steering column under the steering wheel, anodized in yellow or having any other durable yellow coating. The connection must be released by moving this ring along the axis of the steering column towards the steering wheel.

4.4 The mechanical locking device of the ignition switch must be removed.

4.5 The vertical angle of the steering column can be changed.

4.6 The steering column adjustment mechanism must be modified in such a way that the adjustment can only be made with the help of a tool.

4.7 It is mandatory to securely lock all threaded steering system connections.

5. Braking system.

5.1 The presence of a functioning braking system is mandatory.

5.2 When the brake lines are located inside the cockpit and pass through the bulkheads both between the engine compartment and the cockpit, and between the cockpit and the luggage compartment it is allowed to make the minimum necessary holes. At the same time, possible gaps in the holes must be tightly and securely sealed. If brake lines pass through the cockpit the lines must be made of metal tubes or aircraft type hoses, with external metal reinforcement.

5.3 Original rubber brake hoses can also be replaced with flexible aircraft type hoses, and appropriate adapters must be used to attach them.

5.4 The protective covers of the brake discs can be removed.

5.5 Liquid cooling of the brakes is prohibited.

5.6 In any case, brake mechanisms must be used, as well as factory-made brake discs or drums.

5.7 It is allowed to install a hydraulic handbrake that acts on any axis.

5.8 It is allowed to install tanks with brake fluid in the cockpit. They must have a total volume of no more than 0.5 liters and have a design that excludes spillage, even when the car is turned over.

6. Transmission.

6.1 Transmission is not limited.

6.2 It is allowed to make the necessary modifications to the design of the car, to change the type of drive from front/full to rear, in compliance with the current Technical Requirements.

6.3 Changing the drive type using electronic devices (all-wheel drive controllers) is prohibited.

6.4 The clutch mechanism must be engaged only by the physical force of the pilot.

6.5 The cardan trap loop must be installed at a distance of no more than 150 mm from the center of the front crosspiece. They must be made of steel tape with a minimum width of 50 mm and a thickness of 6.5 mm or of steel pipe with a minimum diameter of 20 and a wall thickness of 1.5 mm, Figure 11.

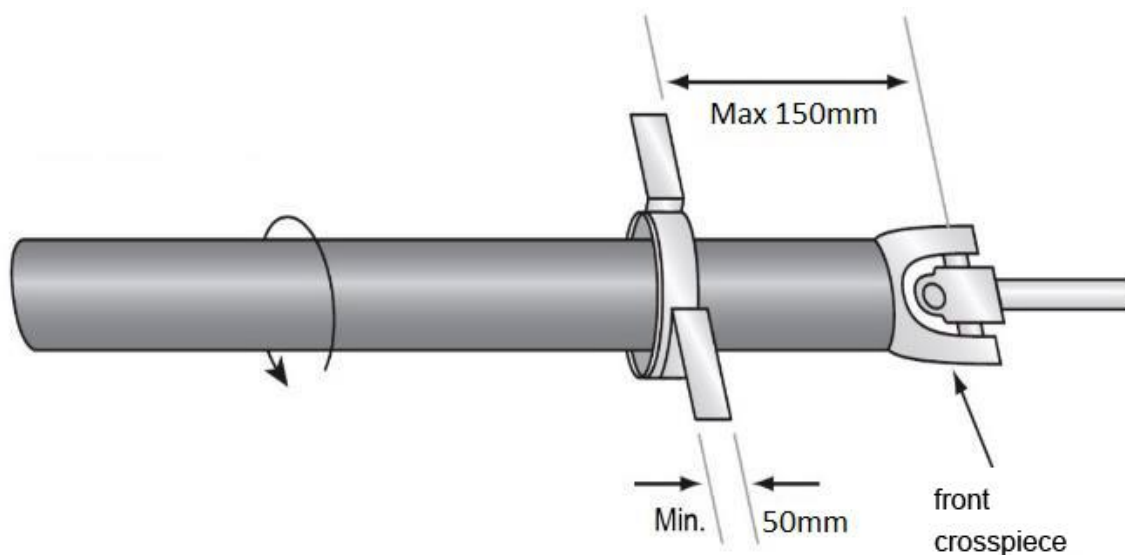


Figure 11.

7. Tires.

7.1 In the drift competition, it is allowed to use any automobile tires, except studded ones, the tread pattern of which was created in an industrial (factory) way during the manufacture of the tire itself, without visible damage and deformations.

7.2 Any chemical treatment of tires is prohibited

7.3 Tire heaters are not allowed.

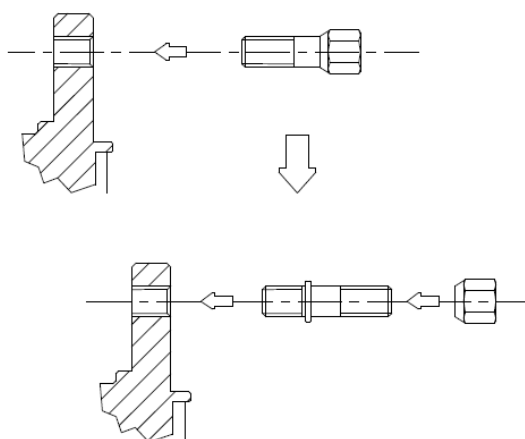
7.4 It is forbidden to use tires that are damaged or worn so that the cord is exposed.

8. Wheel disks.

8.1 The wheel disk design is not limited, but they must be made of metal.

8.2 Disks made of magnesium or magnesium-based alloys are prohibited.

8.3 All wheels must be securely fastened with wheel bolts or nuts. Wheels fixations by bolts may be changed to fixations by pins and nuts provided that the connecting dimensions are respected (Fig. 254-1). In this case, the threaded part of the pin must protrude for at least the diameter of the pin. The bolts must be screwed into the hub at least to the full depth of the threaded hole of the hub. All wheel pins must not be damaged in any way. The pins should not protrude beyond the outer plane of the wheel.



254-1

8.4 Decorative wheel trim must be removed.

8.5 To increase the track, it is allowed to use spacers, which are required to ensure the alignment of the wheel relative to the hub.

8.6 All wheels must have a radial stripe with a width of at least 30 mm and a length equal to the radius of the disk, if the width of the wheel spokes is less than 30 mm, the stripe must be on two adjacent spokes, or must have rim sector with a minimum length of 100 mm, in a color that contrasts with the color of the disk. The stripe must be present in all qualifying races. The stripe can be applied in any way to ensure its presence throughout the competition.

9. Electrical equipment.

9.1 It is allowed to relocate the battery from the standard location. The battery can be placed in the interior or in the luggage compartment of the car in the space between the spars, as far as possible from the rear bumper.

9.2 In any case, the battery must be securely attached. To do this, it is recommended to reinforce the original battery attachment. At the same time, modifications to the body are allowed, such as: drilling additional mounting holes in the battery pad, as well as welding additional eyelets to secure the battery.

9.3 In the case of such relocation the battery should be attached to the body using a metal socket (flanged pad) and two metal clips with the size at least 20 x 0.8 mm, with insulation coating, attached to the base using bolts or pins with a minimum diameter of 10 mm, with counterplates between each bolt or pin, with a minimum thickness of 3 mm and an area of 2,000 mm², located on the back side of the body panel, (Figure 12). A hole must be made in the plates to inspect their thickness. A battery containing a liquid electrolyte must be covered with a dielectric casing that is impermeable to liquid, fixed independently of the battery, and have ventilation that extends beyond the body. If the battery is a dry battery, the battery and its terminals must be covered with a solid cover made of dielectric material. It is allowed to lay power wires inside the car. They must be securely attached to the body panels. It is allowed to drill holes in each bulkhead to lay the power wires through the bulkheads between the luggage compartment, interior and engine compartment. The gaps in these holes must be sealed. Contact of wires with sharp edges of holes is not allowed.

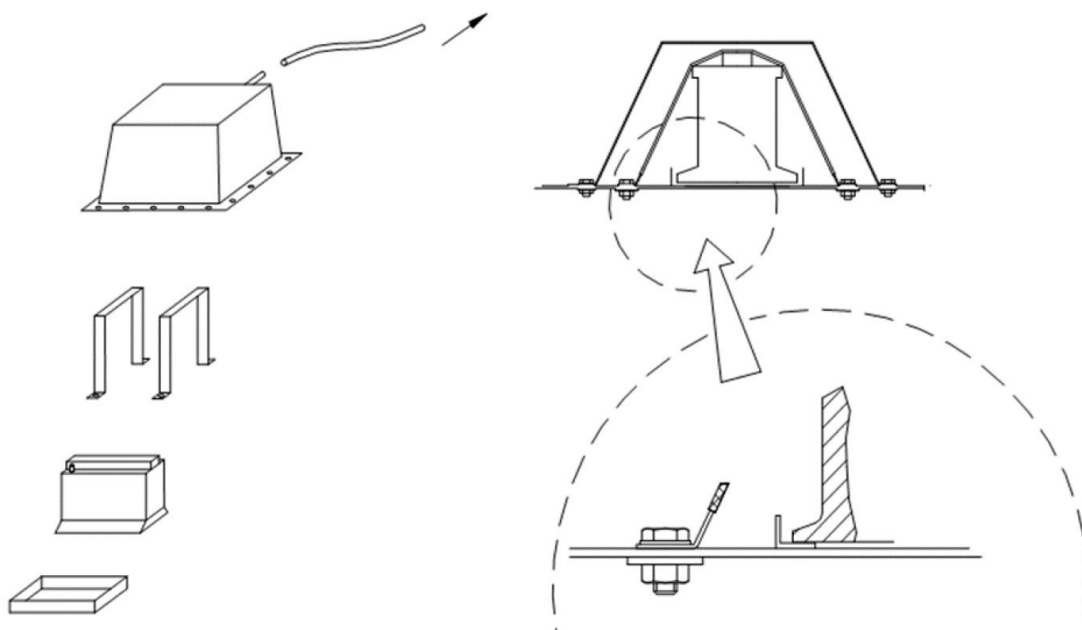


Figure 12.

9.4 The necessary modifications of harnesses for connecting the general circuit breaker of electrical equipment are allowed.

9.5 The bundles of wires located in the interior must be enclosed in protective shells that prevent their damage.

9.6 Holes in the body for the passage of bundles of wires should have a rubber trim that tightly covers the passing bundle of wires.

9.7 The purpose of all electrical switches and selectors installed in the cockpit (toggle switches, buttons, etc.) must be indicated either by an inscription or by a readable pictogram.

9.8 Any electronic and/or mechanical pilot assistance systems are prohibited. Traction and torque control systems, any electronic vehicle position control systems (stability control system, ABS, etc.). The speed sensors on the wheels and drive shafts, the steering wheel position sensor and any other steering controllers, the gimbal speed sensor must be removed.

10. Suspension.

10.1 All cars must have suspension. At least one shock absorber on each wheel is compulsory.

10.2 Elastic elements (springs, torsion bars, leaf springs, etc.) are not limited.

10.3 Bump stops are not limited.

10.4 It is allowed to replace all elastic suspension joints with more rigid ones.

10.5 Shock absorbers and their supports are not limited.

10.6 Stabilizer bars are not limited.

10.7 Remote control systems changing the characteristics of shock absorbers and stabilizer bars are prohibited.

CHAPTER 2.

Instructions for DC1 class cars.

1. Pilot's seat.

The original pilot's seat, as well as the front passenger's seat, if installed, must be replaced with a sports anatomical seat homologated in accordance with the requirements of the FIA (FIA Standard 8855/1999, 8862-2009, or 8855-2021) or the RAF (Appendix 15 to the Classification and Technical Requirements). The use of the seat must meet the requirements of Article 253-16 of Appendix J to the FIA ISC.

2. Safety belts.

In the car, each seat must be equipped with safety belts that have at least 6 points of attachment to the body. Safety belts must comply with the requirements of Appendix 15 to the Classification and Technical Requirements, except for clause 2.1. Loose straps are not allowed and must be secured. Seat belts must be secured in accordance with the requirements of Article 253-6 of Appendix J to the FIA ISC and the manufacturer's instructions.

3. Extinguishing system.

The car must be equipped with a extinguishing system that meets the requirements of Article 253 clause 7.2 of Appendix J to the FIA ISC or Appendix 6 to the Classification and Technical Requirements. The extinguishing system must be installed according to the manufacturer's instructions. The minimum amount of extinguishing agent in the system is 4 kg. The minimum number and location of injectors: two in the engine compartment, one in the cabin, directed at the pilot's feet and one in the fuel tank compartment. The external control drive of the fire extinguishing system can be combined with the external drive of the main switch of electrical equipment, or located in close proximity to it.

4. Side glazing and the protective net.

It is mandatory to use a doorway safety net or a pilot's arm restraint system SFI 3.3. The net, when viewed from the side, should extend from the center of the steering wheel to the seat back.

The net must be made of braided strips with a minimum width of 19 mm (3/4 inch). The minimum size of the net holes should be 25x25 mm, and the maximum size should be 60x60 mm. The braided strips should be made of flame-retardant material, stitched together at each intersection point. The net must be temporary; it must be attached to the safety cage above the side window of the pilot and must be removed using quick-release connection even in case of a rollover of the car. It should be possible to detach the net with one hand. Fasteners must be marked by a bright color (orange, yellow, red).

The absence of glass on the front and/or rear doors is allowed. In this case, the pilot must use a closed helmet with a visor that completely covers the face. The visor must be completely closed during the race.

5. Fuel system

The original fuel tank must be replaced with a safe one according to FIA 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 luggage compartment, between the rear wheel arches, near or above the rear axle beam, or in a standard location.

6. Body

Cars with a modified engine shield that do not comply with clause 2.1 will not be allowed to participate from 2024.

CHAPTER 3.

Instructions for DC2 class cars.

1. Pilot's seat.

The original pilot's seat, as well as the front passenger's seat, if installed, must be replaced with a factory-made hard sports seat. The back of such a seat should be solid, reaching the height of the level of the crown of the racer. It is recommended to install a sports seat for closed cars, homologated in accordance with the requirements of the FIA (FIA standard 8855/1999, 8862-2009, 8855-2021), SFI (not lower than 39.2) or RAF (Appendix 15 to the Classification and Technical Requirements). It is allowed to use seats with an expired expiration date specified by the manufacturer, if they are not damaged.

2. Safety belts.

Safety belts must comply with the requirements of Appendix 15 to the Classification and Technical Requirements, except for clause 2.1. In the car, each seat must be equipped with safety belts consisting of at least two shoulder and waist straps that have at least 4 points of attachment to the body. Loose straps are not allowed and must be secured. The use of 6-point safety belts is recommended. The use of 4-point belts will be prohibited from 2023.

3. Extinguishing system.

The car must be equipped with a extinguishing system that meets the requirements of Article 253 clause 7.2 of Appendix J to the FIA ISC or Appendix 6 to the Classification and Technical Requirements. The extinguishing system must be installed according to the manufacturer's instructions. The minimum amount of extinguishing agent in the system is 4 kg. The minimum number and location of injectors: two in the engine compartment, one in the cabin, directed at the pilot's feet and one in the fuel tank compartment. The external control drive of the fire extinguishing system can be combined with the external drive of the main switch of electrical equipment, or located in close proximity to it.

4. Side glazing and the protective net.

The absence of glass on the front and/or rear doors is allowed. In this case, the pilot must use a closed helmet with a visor that completely covers the face. The visor must be completely closed during the race. It is mandatory to use a doorway safety net or a pilot's arm restraint system SFI 3.3.

The net, when viewed from the side, should extend from the center of the steering wheel to the seat back. The net must be made of braided strips with a minimum width of 19 mm (3/4 inch). The minimum size of the net holes should be 25x25 mm, and the maximum size should be 60x60 mm. The braided strips should be made of flame-retardant material, stitched together at each intersection point. The net must be temporary; it must be attached to the safety cage above the side window of the pilot and must be removed using quick-release connection even in case of a rollover of the car. It should be possible to detach the net with one hand. Fasteners must be marked by a bright color (orange, yellow, red).

5. Fuel system

It is allowed to replace the original fuel tank with an individual or factory-made tank. If the factory location of the tank is under the floor of the car, outside of its base, such a tank must be replaced and relocated. The tank must be installed inside the body, in the safe area of the luggage compartment, between the rear wheel arches, near or above the rear axle beam, or in a standard location. It is recommended to install a safety tank according to FIA specifications FT3-1999, FT3.5-1999, FT5-1999 or SFI 28.1 and higher.

CHAPTER 4.

Instructions for DC3 class cars.

Vehicles equipped with a safety cage must comply with the requirements of Chapters 1 and 3. The use of safety cages that do not meet the requirements of clause 1 of Chapter 1 of this document can be described by the competition regulations.

The requirements described below apply only to vehicles that are not equipped with a safety cage. The general requirements described in Chapter 1 of this document apply only if explicitly stated below.

1. Safety

No parts of the load-bearing structure of the car can be changed, except as described below, including the bumper mounting points, bumper mounts, the bumpers themselves and their internal amplifiers. No non-removable internal and external body panels can be changed, except for the explicitly permitted changes described below.

2. Body

Removable exterior body panels: front fenders, hood, trunk lid can be changed to non-original ones, including from other materials. It is allowed to expand the wings, including the installation of expanders, while part of the original wing under the extension can be removed. It is allowed to change the inner part of the arches of the front wheels, to organize an increased eversion of the wheels. It is allowed to organize additional mounting points for the installation of non-original transmission subframes and/or rear suspension. It is allowed to install spoilers and antiwings. All external lighting devices with glass reflectors, as well as reflective elements of exterior rear-view mirrors should be covered with a transparent film to prevent the formation of fragments in case of their destruction.

3. Interior

The interior must be separated from the engine compartment, as well as from the luggage compartment, if a fuel tank is installed there, by sealed partitions impervious to liquid and flame. No tanks and pipelines with liquids may be located in the interior, except as expressly permitted by these requirements. It is allowed to remove the front passenger, rear seat, rear door cards, ceiling trim, trunk upholstery. The windshield must be multi-layered, factory-made. The side windows should be pasted on the inside with a protective film that excludes formation of fragments. It is allowed to replace the side windows with polycarbonate, with a minimum thickness of 3 mm, in this case the window lifter mechanism can be blocked or removed. The pilot's seat must be factory-made, it is allowed to install a seat from another serial production car. The seat must be installed at the factory mounting points. Safety belts are factory-made, it is allowed to use factory-made belts designed for motor sports and having the appropriate EC certificate ("club belts"). It is allowed to install a rigid sports-type chair, in this case it must comply with

clause 1 of Chapter 3, and its fastening must comply with clause 1.2 of Chapter 1, and seat belts must comply with clause 2 of Chapter 3 of this document.

4. Engine and its systems

Enhancement of engine is not limited. It is allowed to replace the engine with a non-original one, including from another manufacturer, while maintaining its location and mounting points. The exhaust system must comply with clause 3.1 of Chapter 1 of this document. It is allowed to transfer the cooling radiator, while it must be located inside the body, and its location, including air ducts, must be separated from the car interior by a sealed partition capable of withstanding the effects of high temperature coolant. At the same time, no parts or pipelines of the cooling system can be located in the cabin. The fuel tank must be factory installed in a regular place. It is allowed to install factory-made universal tanks, such a tank must be fixed in the trunk with 2 steel belts, with a minimum width of 20 mm and a thickness of 0.8 mm, as close as possible to the rear axle, between the wheel arches. The luggage compartment, in this case, should be separated from the passenger compartment by a sealed partition impervious to flame and liquid. The fuel system must be equipped with a ventilation system brought out of the car and equipped with a valve that prevents spillage of fuel. Fuel pipelines must be original and located in the original location. It is allowed to replace pipelines with all-metal ones or with an aviation-type hose in a metal braid. Anti-overflow tanks are prohibited.

5. Transmission

The engine torque should only be transmitted to the rear wheels. Flywheel, clutch, gearbox, are not limited. The clutch drive is only mechanical, driven by the physical strength of the pilot. The type of gearbox is manual with search selection. It is allowed to change the type of drive from full or front to rear. Electronic torque distribution systems between axles are prohibited.

6. Suspension

Levers, springs, shock absorbers, hinges are free. The factory mounting points of the levers arranged on the body, must be preserved. It is allowed to install/replace subframes, for this it is allowed to organize additional mounting points on the body.

7. Steering

Steering must comply with clause 4 of Chapter 1 of this document.

8. Brake system

The brakes must be factory-made, they can be replaced with similar parts from any mass-produced cars. The number of brake circuits is not less than 2. It is allowed to remove the vacuum booster, ABS system. It is allowed to be equipped with a brake force regulator, it can be located in the interior. The handbrake can be equipped with a hydraulic drive, for this it is allowed to install a hydraulic cylinder and an

expansion tank in the cabin, with a capacity of no more than 100 ml, with a lid that excludes the flow of liquid at any position of the car, as well as the organization of pipelines, they must be either all-metal or aviation-type hoses in a metal braid. The handbrake lock can be deactivated or removed. The use of a floor pedal assembly is prohibited.

9. Electric equipment

It is allowed to relocate the battery from its original location. In this case, its location and mounting in a new place must comply with the requirements of clause 9.3 of Chapter 1 of this document, and it is also necessary to equip the car with a central switch of electrical equipment with an external drive that meets the requirements of clause 1.4 of Chapter 1 of this document.