

PAN DELTA SUPER RACING FESTIVAL

2019

CIRCUIT HERO ONE

TECHNICAL REGULATIONS

1. ELIGIBLE VEHICLES

1.1 Class A : 2.0T, TCR race car; Min. weight without driver: DSG Gearbox 1165kg / Sequential Gearbox 1200kg.

Class B: 3000cc-5000cc , Min. weight without driver: 1280kg

Class C: 2000cc-3500cc, turbocharged engine, two wheels drive.

1.2 Turbo or supercharged petrol engines will be multiplied by 1.7

1.3 The race committee reserves the rights to:

- a) Accept/refuse a car
- b) Reclassify a car in the interest of competition

2. BODYWORK

2.1 Doors, Bonnet and Boot lids Operation

- a) Doors - Must be possible to open all doors from outside (original handles) and the front doors from the inside. Controls for opening the rear door from inside may be removed.
- b) All doors, bonnet and boot lids must be possible to open from outside without use of tools.

2.2 Interior door panels

The front and rear door panels may be removed, can be replaced with composite materials.

2.3 Windscreen and Windows

The Windscreen must be made of laminated glass.

The remainder of the side windows and the rear window may be replaced with polycarbonate, the minimum thickness is 4mm.

If originally the rear door windows have no frame, a frame may be added to the door in order to secure the polycarbonate window.

The internal face of side and rear glass windows as well as that of glass rear-view mirrors must be covered with a transparent and colourless plastic safety film with a maximum thickness of 100 microns in order to avoid the shattering and spraying of glass in event of an accident. It must be fitted in a manner that facilitates checking.

3. EXHAUST SYSTEM

The exhaust system is free, provided that the prescribed sound levels of 110 dB (A) at 5500 r.p.m. measured in conformity with the FIA noise-measuring method are not exceeded.

4. FUEL CELL AND FUEL FEED SYSTEM

Either the original manufactured petrol tank or the FIA Approved Safety Fuel Tanks will be allowed.

The original manufactured petrol tank is acceptable and modification is not allowed.

Alternatively Safety Fuel Tanks complying with the “FIA Appendix J to the International Sporting Code Art.263-4” as following is allowed.

FT3 1999, FT3.5 or FT5 fuel cells meeting FIA Art253 specifications are compulsory.

It is recommended that the FT3 1999, FT3.5 or FT5 tank be filled with MIL-B-83054 type safety foam. They must be placed in the luggage compartment or in their original location, and no part may be situated rearward of the complete rear wheels.

Changed of the position of the tanks may not give rise to any lightening or reinforcement other than as provided for under Article 255-5.7.1 of the FIA prescriptions, but the opening remaining after the removal of the original tank may be closed by the installation of a panel.

For sprint races (without refuelling), the filling of the tank must be carried out in conformity with Article 253 of Appendix J.

The location of the filler hole is free, apart from in the window panels, and they must not protrude beyond the perimeter of the bodywork.

If the filler hole is not used, it must be sealed.

An original carbon filter in the tank air vent, as well as its control unit, may be removed.

An auxiliary tank of a maximum capacity of one litre is authorised. It must be situated in the same place as the main tank.

The total capacity of all the tanks may not exceed 100 litres.

The connections of the filler holes and the tank ventilation holes must be shielded by a fireproof and liquid-proof protective device

If the petrol tank is located in the luggage compartment of a car with a tailgate, the tank must be shielded by a fireproof and liquid-proof protective device.

This new assembly must not generate an aerodynamic surface or protrude further below the vehicle than the original tank.

If the petrol tank or a pump is located in the luggage compartment, there must be a fireproof and liquid-proof bulkhead between the cockpit and the luggage compartment.

In case of a fuel tank being fitted below the floor of the car, it must be contained in close-fitting flameproof housing that adds no aerodynamic advantage and has no other mechanical function.

This housing must include a crushable structure on all external surfaces.

The crushable structure must be a honeycomb sandwich construction based on a fire-resistant core of a minimum crushing strength of 18N/cm^2 (25lb/in^2).

The use of aramid fibre is allowed.

The sandwich construction must include two skins of 1.5 mm thickness having a tensile strength of minimum 225N/mm^2 (14 tons/in^2).

The minimum thickness of the sandwich construction must be 1 cm.

The opening remaining after the removal of the original tank may be closed by the installation of a panel of identical dimensions.

4.1 Petrol lines

The petrol lines must be of aviation quality.

The installation of petrol lines is free provided that the prescriptions of Article 253-3 of Appendix J are respected.

4.2 Petrol pumps

Free; three other petrol pumps in addition are authorised.

The pumps must be separated from the cockpit by a fireproof and liquid-proof protective device.

4.3 Fuel sampling

All Cars must be fitted with a self-sealing connector that can be used by the scrutineers to obtain fuel from the tank. The connector from those listed on FIA Technical List number 05. – ‘connectors for taking fuel samples’. The Team must also supply the pipe for the scrutineers to take a sample.

5. ELECTRICAL SYSTEM

5.1 Cables

The electric cable assembly of the engine is free.

5.2 Battery

In accordance with Appendix J, Article 253- 5.8.3), apply in full.

Make and type of battery:

- The make, capacity and cables of the battery (ies) are free.

The nominal voltage must be the same or lower than that of the standard production car.
The number of batteries laid down by the manufacturer must be retained.

Location of the battery(ies):

Its location is free.

- **The battery must be of the dry type if it is not in the engine compartment.**

If installed in the cockpit:

- The battery must be situated behind the base of the driver's or co-driver's seat.

Battery fixing:

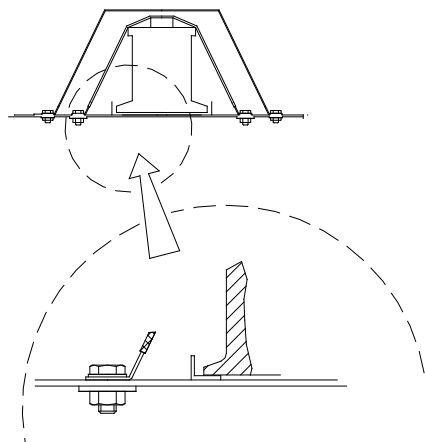
Each battery must be securely fixed and the positive terminal must be protected.

Should the battery be moved from its original position, it must be attached to the body using a metal seat and two metal clamps with an insulating covering fixed to the floor by bolts and nuts.

For attaching these clamps, the use of metallic bolts with a diameter of at least 10 mm is recommended, and under each bolt, a counterplate at least 3 mm thick and with a surface of at least 20 cm² beneath the metal of the bodywork. (See Drawing 255-11)

Wet battery:

A wet battery must be covered by a leak proof plastic box, attached independently of the battery.



Drawing 255-11

6. TRANSMISSION

6.1 Gearbox

The gearbox is FREE. The use of Sequentially Controlled gearbox is AUTHORISED.
A reverse gear must always be present and selectable by the driver sitting in his seat with harness attached.

7. SUSPENSION

The suspension is free provided that the suspension parts made partially or entirely from composite materials are prohibited.

8. BRAKES

The brakes are free.
The brake discs must be made from ferrous metallic material.

9. WHEELS AND TYRES

The upper part of the complete wheel (rim + tyre), located vertically over the wheel hub centre must be covered by the bodywork when measured vertically.
In all other respects the wheels are free provided that they are made of cast aluminium and in a single unit. The complete wheel definition does not permit the wheel to be wider than the tyre or protrude outside the tyre profile.

Tyres sizes are free.

Tyres: Organizer's designated brand must be used.

10. SAFETY REQUIREMENTS

The FIA Articles 253 of Appendix J to the International Sporting Code remains applicable, but the articles set out in the present regulations have predominance.

10.1 Driver's equipments

Must comply with the FIA's safety requirements.

10.2 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.

10.3 Driver's seat

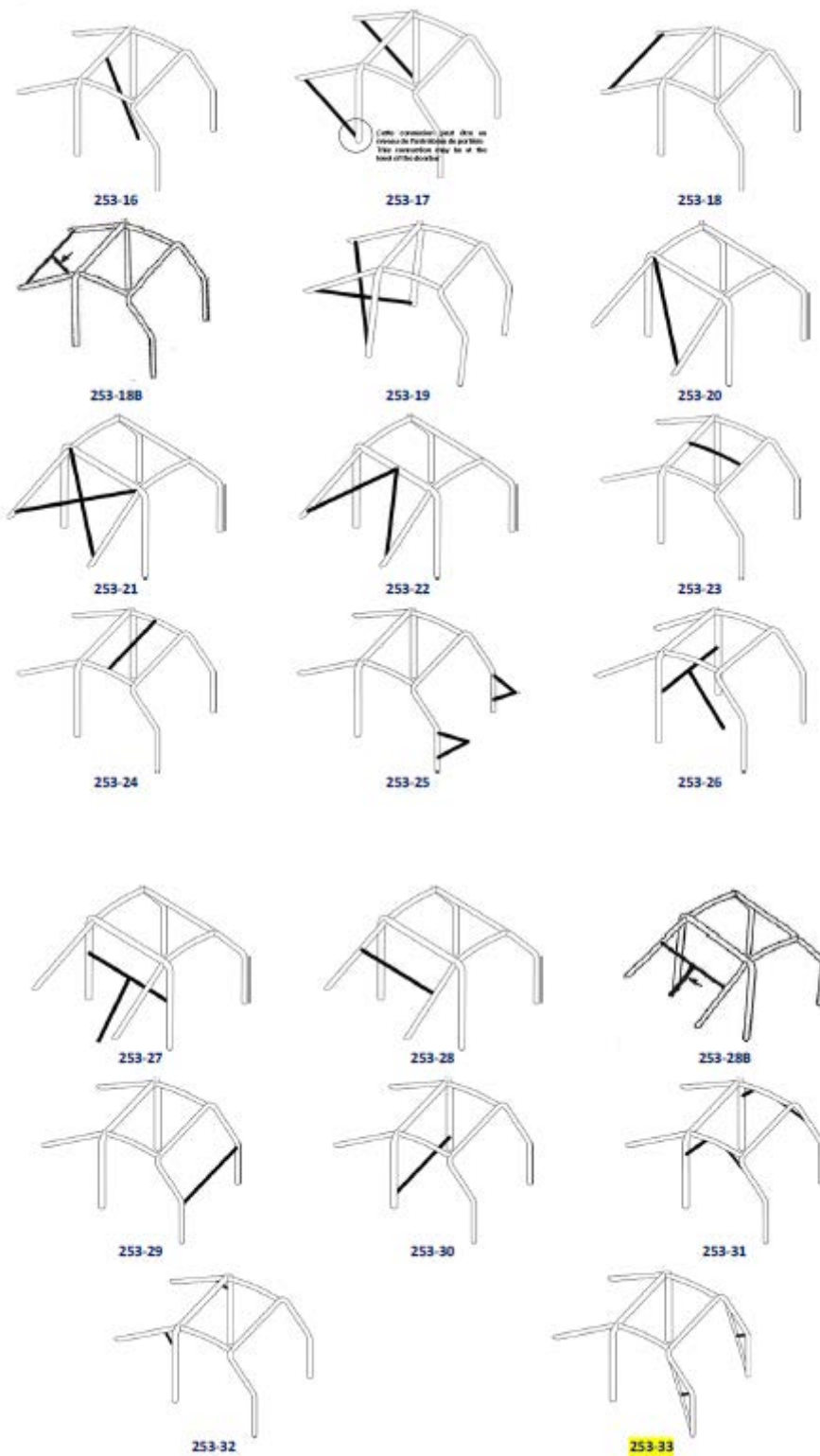
The original driver's seat must be replaced by a FIA-homologated competition bucket seat in accordance with Article 253 – 16 of Appendix J, is compulsory.

10.4 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.

10.5 Safety cage

A safety cage complying with FIA Article 253-8 of Appendix J is compulsory.
All safety cage tubes situated within a perimeter of 50 cm around the driver's head, this measurement being taken with the driver sitting in the driver's seat with his harness fastened. It is recommended to be equipped with protective padding complying with FIA Article 253-8.3.5.



10.6 Extinguishers – extinguishing systems

Hand – operated extinguishers homologated in accordance with FIA article 253-7.3 of Appendix J, of a minimum capacity of four (4) kgs are compulsory.

It is recommended that automatic extinguishers, homologated in accordance with FIA Article 253-.27 of Appendix J.

10.7 General Circuit Breaker

FIA article 253-13 of Appendix J

The general circuit breaker must cut all electrical circuits, battery, alternator or dynamo, lights, hooters, ignition, electrical controls, etc. and must also stop the engine.

It must be a spark-proof model, and must be accessible from inside and outside the car.

As for the outside, the triggering system of the circuit breaker must compulsorily be situated at the lower part of the windscreen mountings for closed cars. It must be marked by a red spark in a white-edged blue triangle with a base of at least 12 cm.

This outside triggering system only concerns closed cars.

10.8 Protective nets

FIA article 253-11 of Appendix J

Nets

The use of nets affixed to the safety cage is compulsory. These nets must have the following characteristics:

Minimum width of the strips : 19 mm

Minimum size of the meshes : 25 x 25 mm

Maximum size of the meshes: 60 x 60 mm

And must close up the window opening to the centre of the steering wheel.

10.9 Towing Eye

All cars must be equipped with a rear and front towing – eye for all competitions. can not beyond the perimeter of the bodywork.

This towing – eye will only be used if the car can move freely. It must be clearly visible and painted in yellow , red or orange.

10.10 Steering

The steering lock must be dismantled and the column adjusting system must be locked.

10.11 Water Tanks

Water tanks, lines and hoses are not permitted in the cockpit.

10.12 Chassis

If modification is made to the chassis, it has to be able to restore to the original chassis components. For the safety of modified components, the Chief Scrutineer shall make the final decision.

11. SUCCESS BALLAST WEIGHT

For Class A only

The minimum weight for class A: car in sequential gearbox is 1200kg while car in DSG gearbox is 1165kg.

Success ballast weight will be applied to the car in the following Event according to the classification on the previous event and the scale below. Success ballast weight will be accumulated. The success ballast weight will be added to the weight of the car in the previous event it participated. For the second event of the season, success ballast weight will be added to the minimum weight of the car

If a driver does not compete in the following Event, he will carry the ballast at the first following Event in which he takes part.

Classification	weight
1 st place	+30kg
2 nd place	+20kg
3 rd place	+10kg
4 th place	+0kg
5 th place	+0kg
6 th place	-10kg
7 th place	-20kg
8 th place	-30kg
10kg decrement from 6 th place downward	

Ballast must be carried out in conformity with Appendix J. and must be fixed in the cockpit.
The organizer reserves the right to adjust the plan accordingly.

12. ENGINE CHANGE

Refers to article 46 of Sporting Regulations.

13. INTERPRATION

The final text of these Technical Regulations shall be the Chinese version which will be used should any dispute arise as to their interpretation.