

## 2019 TECHNICAL REGULATIONS UK

Anything which is not explicitly authorized in:

- these regulations,
- the 2019 edition of the FORMULA NORDIC Reglemente
- the 2014 v1.1 edition of the FORMULA NORDIC User Manual,
- the 2014 UK edition of the FORMULA NORDIC Nomenclature,
- the Technical Updates pertaining to the FORMULA NORDIC, distributed by [WestCoast Racing AB \(hereinafter referred as to WCR\)](#) in 2019,

**IS STRICTLY FORBIDDEN.**

All these documents shall be handed to each competitor signed up the 2019 FORMULA NORDIC championship at their request.

**IMPORTANT:** Competitors must ensure that any member of their technical team who is liable to work on the team's cars is provided with all the necessary technical documents to perform work on the FORMULA NORDIC in the spirit of these regulations. Lack of familiarity with a technical document published by [WCR](#) during the season will not be accepted as a defending argument.

The driver and Competitor will be held responsible for the technical compliance of their vehicle at all times.

Only the size, weight, pressure and capacity measurement instruments used by Scrutineers can confirm the measured values. These values may not be contested. These instruments will be made available to Competitors for 2019 FORMULA NORDIC events to take their own measurements or to calibrate their measuring instruments.

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## ARTICLE 1 – DEFINITIONS

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### 1.1 - FORMULA NORDIC car

Automobile designed only for speed events on a circuit or a closed route. Only FORMULA NORDIC cars marketed by [WCR \(in cooperation with Svenska Bilsportförbundet, Racingutskottet\)](#) and compliant with these Technical Regulations, as well as the 2014 UK edition of the Nomenclature, will be authorized to take part in the 2019 FORMULA NORDIC championship.

### 1.2 - Bodywork

All entirely-sprung parts of the FORMULA NORDIC car in contact with the external air system, except for the roll structures and those parts incontestably associated with the mechanical functioning of the engine, the transmission and the running gear.

Radiators are considered as part of the bodywork.

### 1.3 – Tyres

New tyre: tyre which has not been used, supplied by the distributor selected by the organizer for the event in question (or [WCR](#) practice session).

Registered tyre: tyre that has previously been registered for an event, group tests or official practice sessions, irrespective of having been used or not.

### 1.4 - Event

An event will be made up of the qualifying sessions and race(s).

An event begins with the start of preliminary Scrutineering and ends with the opening of the Parc Fermé period at the end of the last race.

### 1.5 - Minimum weight

The weight of the FORMULA NORDIC car at any moment of an event, without fuel or driver.

### 1.6 – Racing weight

The weight of the FORMULA NORDIC car in running order, with the driver and his/her race equipment on board, with the remaining fuel in the tank. Article 1.5 still applies.

### 1.7 - Cockpit

The section which houses the driver.

### 1.8 - Survival cell

The continuous closed structure containing the fuel tank and cockpit.

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## **1.9 - Telemetry**

Data transmission between a FORMULA NORDIC car in movement and an independent unit.

### **1.10 - Data acquisition system**

On-board vehicle data recording system. This system is connected to a computer in order to retrieve and analyze recorded data.

### **1.11 - Cockpit protection**

Non-structural elements situated in the cockpit whose only purpose is to increase driver comfort and safety. Any equipment of this type must be fire resistant and be able to be removed quickly, without tools.

### **1.12 - Camera**

According to "Tävlingsreglemente [SBF](#) Mästerskapsracing 2019".

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## **ARTICLE 2 - REGULATIONS**

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No car may take part in an event until it has first been approved by the Scrutineers.

At any time during an event, FORMULA NORDIC/SBF Scrutineers may:

- a)** check the compliance of a car,
- b)** require a car to be dismantled by the Competitor to make sure that the conditions of eligibility or compliance are fully satisfied,
- c)** insist that a Competitor provides them with any sample, part or component that they deem to be necessary.

At the end of each qualifying practice session or at the finish of each race, cars will be placed under Parc Fermé rules and must be available for scrutineering. A Team manager is required to be present, nearby but outside the Parc Fermé, during Scrutineering. Any intervention in the Parc Fermé (including tyre pressure tests by a team member) is subject to the approval of and under the control of a FORMULA NORDIC/SBF Scrutineer.

Scrutineering shall be carried out by duly appointed officials who alone are authorized to give instructions to the Competitors.

The Organizers of the FORMULA NORDIC championship will publish the Scrutineers' conclusions, regarding technical compliance checks carried out on the cars, after each event. These results will not include specific numerical data except where a car is adjudged to be non-compliant with the Technical Regulations.

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## **2.1 - Role of the ASN and WCR**

The technical regulations applying to the FORMULA NORDIC are issued by WCR in agreement with the ASN.

## **2.2 - Publication date for amendments**

Throughout the year, WCR, in agreement with the ASN, will publish any changes to these regulations.

Changes made for safety reasons can come into effect without prior notice.

## **2.3 – Permanent compliance with the regulations**

FORMULA NORDIC cars must comply with these regulations in their entirety, throughout an event. Competitors must ensure that their cars respect compliance and safety conditions at all times, throughout an event.

Presenting a car for preliminary Scrutineering will be considered as an implicit statement that the car is in compliance with the regulations.

**Note:** preliminary Scrutineering is mainly focused on the eligibility of cars for their participation in an event in terms of safety. Any potential observation made by the Scrutineers on racing and technical regulations is provided for information purposes; restoring the vehicle to a state of compliance is a requirement to be able to take part in qualifying practice sessions and races.

## **2.4 – Seals**

The engine must be sealed at all times. Supplementary components may be sealed at any moment of an event. These seals must stay intact until authorization from the FORMULA NORDIC/SBF Scrutineers is given to remove them.

The state of the seals is the responsibility of the Competitor. Any absence or damage will automatically result in a penalty that can extend to exclusion from the championship.

Any missing or damaged seal will be considered non-compliant with the technical regulations.

The presence of seals is just a presumption of conformity. As part of Scrutineering, the sealed parts may be completely removed and if any non-compliance is observed, the presence of seals will not be accepted as an argument for defence.

## **2.5 - Measurements**

All size measurements (geometric) must be taken when the car is stationary on a flat, horizontal and hard surface.

All height measurements will be made when the car is in normal racing condition.

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## 2.6 - Technical passport

The FORMULA NORDIC/SBF Scrutineers in charge of the championship will fill out a technical passport during preliminary scrutineering at the time of the vehicle's first participation in said Championship.

Remarks added to this passport must be signed by a representative or the Competitor at each event.

This passport will remain at the disposal of the Scrutineers, but may be handed to the Competitor on request.

## 2.7 - Principles of the technical regulations

Scrutineering may consist of comparing the part to be checked against the same new genuine FORMULA NORDIC part.

Some parts are identified by specific markings (hologram or engraving). These markings guarantee that the relevant parts are genuine and must be used. Any relevant part which does not feature these markings will be considered to be technically non-compliant.

|                     |  |
|---------------------|--|
| <b>CATEGORY "A"</b> | No modifications are authorized. The parts classified in this category must be the genuine parts designed for the FORMULA NORDIC, and remain in their original positions and fulfil the functions for which they were originally intended.   |
| <b>CATEGORY "B"</b> | Parts in category "A" which are subject to specific requirements. Only the modifications or requirements indicated in the regulations or in the 2014 UK edition of the FORMULA NORDIC Nomenclature are authorized.   |
| <b>CATEGORY "C"</b> | The parts classed in this category are considered to be unrestricted, on the express condition that the original function is not bypassed and that no supplementary functions are added. They must be present in their original locations. Adapted parts are permitted, but must be submitted for approval to the FORMULA NORDIC/SBF Scrutineers prior to their use. |

The set of items or subassemblies that make up a part or assembly are deemed to belong to the same category as the part or assembly in question.

All the parts that are not represented in the nomenclature systematically belong to category "A" unless otherwise indicated.

The illustrations of the parts shown are intended to aid and facilitate understanding of the nomenclature. These drawings are under no circumstances to be used as a basis for comparison with the genuine parts of the vehicle.



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Note: Any addition of parts or assembly of parts that do not feature in the nomenclature must be approved by FORMULA NORDIC/SBF technical delegate.

### **Fastenings (nuts and bolts) and ball joints**

Fastenings and ball joints belong to category "C" unless otherwise stated in the nomenclature.

Being classified in category "C", they are unrestricted, provided they comply with the following criteria:

- the original diameters,
- the original thread pitch,
- The material used must be steel, and be of equal or superior quality to that used on the original part; other materials are forbidden (e.g.: titanium)

All types of fastenings (bolts, nuts, and studs) are authorized, except in specific cases mentioned in the nomenclature.

To ensure the screws are tightened, the use of safety wire is authorized.

Screws used for adjustments to the set-up of a component belong to category "A" unless otherwise stated in the nomenclature.

### **Washers**

They belong to category "C" unless otherwise stated in the nomenclature and may be removed.

The addition of washers is authorized only for mechanical assemblies.

Washers may not be used to adjust the settings unless specified otherwise in the parts list.

### **Electrical wiring harness**

All electrical wiring harnesses must be genuine. The wiring harnesses may be protected by non-retractable sheathes.

### **Protective covers**

The addition of any kind of protective cover to the vehicle's mechanical components is authorized unless specified otherwise in these regulations. The protective covers must only be used to protect the components to which they are affixed.

For the purposes of driver comfort, protective covers may be added to the driver cell. It must be possible to remove them rapidly without the need for tools.

### **Bodywork**

All external parts of the bodywork must be painted and/or decorated with adhesive strips.

Repairs to bodywork components and their mountings are authorized only for the purposes of ensuring the correct assembly and adjustment of bodywork components.

Such modifications must be approved by the FORMULA NORDIC/SBF Scrutineers.

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## 2.8 - Repairs

Any spare part used must observe the same criteria as outlined above, relative to the category that the replaced part comes under. Parts classed in category "A" or "B" must be genuine RENAULT SPORT parts and appear in the 2016 edition of the FORMULA NORDIC spare parts catalogue.

**The driver and his Competitor will be held responsible for the permanent compliance of their car and any spare parts used on it; they must therefore assure themselves of their technical compliance before use.**

Any work on the car must be carried out in accordance with methods defined by the various technical documents issued by RENAULT SPORT/ WCR and with these Regulations, in order to keep the original vehicle configuration.

**Where it should prove impossible to fit any given genuine part in place of the part being replaced without modification, this part should not under ANY CIRCUMSTANCES be used, and should be exchanged at the FORMULA NORDIC´S racing spare parts shop, after having informed the FORMULA NORDIC/ASN Scrutineer.**

During an event, any car that, having been approved by the Scrutineers, undergoes repairs or modification whose nature may affect its safety or technical compliance or which is involved in an accident with similar consequences must be presented again to the Scrutineers by the Competitor for a new approval.

## 2.9- Bulletin of Mandatory updates

Always make sure you have all the mandatory updates on your car from the list of bulletins up to date 2019.

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## ARTICLE 3 - CHASSIS and BODYWORK

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### 3.1 - Authorized modifications

- 3.1.1 The elements making up the bodywork may be repaired without changing the shape or weight.
- 3.1.2 The front crash-box may be repaired according to the procedure indicated in the FORMULA NORDIC User Manual (2014 v1.1 edition).
- 3.1.3 Adhesive tape may be put on the bodywork but only on fastening elements or other vulnerable leading or trailing edges. In all circumstances, the only purpose of adhesive tape must be to protect the element onto which it has been applied. It must not in any circumstance join various bodywork elements.

Only the modifications described in the FORMULA NORDIC nomenclature (2014 UK edition) are authorized.

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### **3.2 - Survival cell**

- 3.2.1 Any repairs to the survival cell or to the front protector must be carried out by the manufacturer or its designated representative.
- 3.2.2 Any repairs to the survival cell or to the front protector must be declared in writing by the Competitor to the FORMULA NORDIC/SBF Scrutineers. They will be recorded on the vehicle's technical passport and checked by a FORMULA NORDIC/SBF Scrutineer.
- 3.2.3 The car will not be allowed to take part in a subsequent event if this is ruled out by the notes on the technical passport.

### **3.3 - Bodywork and dimensions**

Bodywork parts must keep:

- Their original dimensions
- Their original mountings
- Their original locations

### **3.4 – Identification of the bodywork**

The presence of bodywork component identification holograms is mandatory at all times.

The driver and competitor are responsible for the state of the identification marks. They must be visible.

### **3.5 – Ground-facing bodywork**

3.5.1 Undertray panels.

The undertray panels may be surfaces which come in contact with the ground. The minimum thickness of the two undertray panels is 4 mm thick. This shall be checked along the median line of the panels by drilling a hole of a maximum of 10 mm in diameter at least 7 cm from the ends of the panel.

### **3.6 - Aerodynamic influence**

Use of the genuine wing profiles is mandatory. Their setup must be compliant with the possibilities stated in the FORMULA NORDIC User Manual (2014 v1.1 edition).

Any individual part of the car which affects its aerodynamic performance:

- must be tightly fixed onto a totally suspended part of the car (tightly fixed means it should have no freedom of movement);
- must remain immobile in relation to the suspended part of the car.

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## **ARTICLE 4 – WEIGHT**

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### **4.1 - Minimum weight**

The minimum weight of the car is 490 kg (four hundred and ninety kilograms). This weight applies to the FORMULA NORDIC in accordance with article 1.5.

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## 4.2 – Racing weight

The minimum weight of FORMULA NORDIC cars, driver and his/her full equipment, must be no less than 567 kg (five hundred and sixty-seven kilograms).

This weight applies to FORMULA NORDIC cars that have just taken part in a qualifying session or a race.

## 4.3 - Ballast

If ballast is required to achieve the minimum weight, this must be in the form of official ballast plates (1kg, 2kg, 5 kg and 10kg).

Ballast can be used up to a limit of 20 kg as long as it is fixed in such a way that tools are required to remove it.

Its location on the vehicle is indicated in the FORMULA NORDIC User Manual (2014 v1.1 edition).

It must be possible to apply seals to the ballast, should this be deemed necessary by the FORMULA NORDIC/SBF Scrutineers.

If the FORMULA NORDIC car carries ballast in order to meet the weight required by the regulations, a MANDATORY declaration must be made by the Competitor about this ballast to the FORMULA NORDIC/SBF Scrutineers in charge of the championship.

## 4.4 - Additions during the race and qualifying

Without specific authorization from the FORMULA NORDIC/SBF Scrutineer, the addition, during qualifying sessions and the race, of any liquid or other material whatsoever, is forbidden until the end of the Parc Fermé period.

## 4.5 - Weight checks

Weight checks can be performed at any time during an event, with the driver on board and the remaining liquid in the tanks (on the understanding that it is forbidden to add any oil, fuel, other liquids or extinguishing fluid before weighing).

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## ARTICLE 5 - ENGINE

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### 5.1 – Authorized engine

Only the RENAULT SPORT type K4MRS engine is authorized.

Only one engine may be used in the same FORMULA NORDIC car during a race; the replacement of the engine is only authorized in the following circumstances:

- engine failure observed by a **WCR** representative.
- engine breakage.

If the bodyshell is replaced, only the engine initially registered for the shell being replaced may be used.

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Any replacement of the engine must be declared by the Competitor to the Scrutineers. They alone will be authorized to provide written approval for the replacement.

Any engine that is replaced without the approval of the FORMULA NORDIC/SBF Scrutineer shall be considered to be technically non-compliant.

Only engines with FORMULA NORDIC/SBF 2019 seals will be allowed to be used in the 2019 championship.

Any engine not sealed or whose origin is unknown or different to that stated above, or where one or more seals are missing, will not under any circumstance be allowed to be used in the 2019 championship and will be considered to be technically non-compliant.

The state of the seals and their presence are the responsibility of the driver and Competitor. Any engine not sealed shall be considered to be technically non-compliant.

## **5.2 - Maintenance of the RENAULT SPORT K4MRS engine**

The FORMULA NORDIC K4MRS engine is sealed when delivered. All repairs or servicing of the engine must be performed by Ultra Motors AB in Södertälje who is the only approved engine partner.

## **5.3 – Exhaust system**

Use of the Exhaust Muffler and Pipe V2014 ref: G04-06C002V3 (n°2) + Catalyser Collar V2014 G04-06C008V1 exhaust system is mandatory.

5.3.1 - 2014 exhaust support fitting update  
MANDATORY FROM AUGUST 11<sup>th</sup> 2014: BT\_2014\_FR16\_4\_UK

## **5.4 - Engine removal and allocation**

~~Any driver that has obtained three wins, be they consecutive or otherwise, with the same engine, must change it for the following two events. A permutation with the engine of another vehicle is authorized.~~

WCR reserves the right to extend the requirement to change engine based on criteria which may be as follows:

- Championship standings,
- Race results at the previous events.

This change must be made before the next event (under no circumstances during the course of an event).

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## **ARTICLE 6 – FUEL FEED SYSTEM**

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### **6.1 - Fuel tank**

Use of the genuine FORMULA NORDIC fuel tank is mandatory.

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Reminder of FIA regulations :

Rubber bladders must bear a code showing the name of the manufacturer, the specifications under which the tank was made and the date of manufacture.

No rubber bladder must be used more than five years after the manufacture date, unless it has been re-certified by the manufacturer for a maximum extension period of two years.

## **6.2 – Fittings and pipes**

Use of the genuine FORMULA NORDIC fittings and pipes is mandatory.

## **6.3 – Fuel line protection**

MANDATORY FROM SEPTEMBER 11<sup>th</sup> 2015: BT\_2015\_FR16\_2\_UK

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## **ARTICLE 7 – LUBRICATION SYSTEM**

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Use of the genuine FORMULA NORDIC lubrication system and peripheral equipment is mandatory.

The oil filter must be a genuine RENAULT part.

### **7.1 – Oil catch tank**

The lubrication system features a fresh air vent, which must lead to the FORMULA NORDIC catch tank located in the clutch casing.

### **7.2 - Oil refilling**

No additional oil may be added during qualifying sessions and the races.

### **7.3 – Lubricant pipes**

Use of genuine FORMULA NORDIC fittings and pipes is mandatory.

### **7.4 - Engine lubricant**

The use of the following engine oil:

**ELF HTX825 10W60 or ELF HTX860 10W60**

is mandatory.

### **Lubricant sampling**

The Competitor must take all necessary precautions for it to be always possible to take a lubricant sample from the oil sump of the engine, necessary for analysis during the entire duration of the event.

Three samples will be taken and stored in three new containers:

- 
- sample 1 will be sent to the analysis laboratory.
  - sample 2 will be sent to the Competitor;
  - sample 3 will be sent for a potential second expert opinion, and kept by the organizers of the 2019 championship.

Containers will be identified and sealed by the FORMULA NORDIC/SBF Scrutineers in the presence of the competitor, or his/her representative.

The origin, transportation or storage of samples 1 and 3 shall not be contested.

Testing of the lubricant sample will be performed by a specialist analysis laboratory.

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## **ARTICLE 8 - ELECTRICAL SYSTEMS**

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### **8.1 - Starter**

Use of the genuine FORMULA NORDIC starter is mandatory. It must be possible for the driver to operate it when sitting behind the wheel and with his/her safety belts buckled.

### **8.2 – Starting the engine**

Engine ignition can be performed either on the starting grid or in the pitlane using an external battery connected to a plug on the vehicle provided specially for this purpose.

### **8.3 - Battery**

Use of the genuine battery is mandatory.

It must be fastened in the originally designated position.

Insulation of the positive terminal is mandatory.

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## **ARTICLE 9 - TRANSMISSION**

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### **9.1 - Gearbox type:**

Use of the genuine gearbox is mandatory.

### **9.2 - Reverse Gear**

All cars must have a properly-functioning reverse gear that can be selected at any moment during the event by the driver when he/she is seated in the normal driving position with the engine running.

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### **9.3 – Repairs to the gearbox**

Repairs to the gearbox must be performed in accordance with the FORMULA NORDIC User Manual (2014 v1.1 edition), issued to each Competitor during his/her registration for the Championship.

### **9.4 - Gearbox lubricant**

The use of the following gearbox oil:

**ELF HTX755 80W140**

is mandatory.

### **Lubricant sampling**

The Competitor must take all necessary precautions for it to be always possible to take a lubricant sample from the oil sump of the gearbox, necessary for analysis during the entire duration of the event.

Three samples will be taken and stored in three new containers:

- sample 1 will be sent to the analysis laboratory.
- sample 2 will be sent to the Competitor;
- sample 3 will be sent for a potential second expert opinion, and kept by the organizers of the 2019 championship.

Containers will be identified and sealed by the FORMULA NORDIC/SBF Scrutineers in the presence of the competitor, or his/her representative.

The origin, transportation or storage of samples 1 and 3 shall not be contested.

Testing of the lubricant sample will be performed by a specialist analysis laboratory.

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## **ARTICLE 10 - SUSPENSION AND STEERING SYSTEMS**

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Only the modifications and settings described in the FORMULA NORDIC User Manual (2014 v1.1 edition) are authorized.

### **10.1 – Chrome-plating of suspension components**

Chrome-plating of steel suspension components is forbidden.

### **10.2 – Suspension arm**

Use of genuine FORMULA NORDIC suspension components is mandatory.

### **10.3 - Steering**

Use of genuine FORMULA NORDIC steering components is mandatory.



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## 10.4 – Stop

Use of all types of stops is strictly prohibited on the suspension rod.

## 10.5 - Wheel stud locking system

MANDATORY FROM AUGUST 30<sup>th</sup>, 2014: BT\_2014\_FR16\_5\_UK

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## ARTICLE 11 – BRAKES

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### 11.1 – Air intakes

The fitting of cooling systems on the front and rear brakes is forbidden (air pipes, scoops, extractors on the wheels, etc).

### 11.2 – Brake pads

Use of genuine FORMULA NORDIC brake pads is mandatory.

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## ARTICLE 12 - WHEELS AND TYRES

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### 12.1 – Dimensions

Wheels must be the genuine FORMULA NORDIC wheels.

#### Dimensions:

- Width of the front wheels: 8 inches
- Width of the rear wheels: 10 inches
- Diameter: 13 inches.

The addition of aerodynamic components or air extractors is forbidden.

### 12.2 – Tyres

Michelin tyres with the following characteristics are mandatory:

|       | Types       |             | Dimensions   |
|-------|-------------|-------------|--------------|
|       | Slick       | Wet         | Slick / Rain |
| Front | <u>S412</u> | <u>P412</u> | 20/54-13     |
| Rear  | <u>S412</u> | <u>P412</u> | 22/54-13     |

All modifications to the tyres (recutting, retreading or surface treatments of any kind) are prohibited.

The use of overpressure valves is prohibited.

Only atmospheric air may be used to inflate the tyres.

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## ARTICLE 13 - COCKPIT

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### 13.1 - Authorized modifications

- 13.1.1 The pedal covers may be modified for the comfort of the driver.
- 13.1.2 The use of a moulded seat is permitted.
- 13.1.3 The cockpit may be fitted with drinking equipment for the driver.

### 13.2 - Steering wheel

Use of the genuine steering wheel is mandatory.

### 13.3 – Driver position

The driver must be seated in the car in such a manner that a straight line drawn from the top of the first roll structure (roll over protection hoop) to the second one (cockpit frame above the dashboard) clears his/her helmet by a minimum of 70 mm and his/her steering wheel by 50 mm.

### 13.4 – Cockpit sealing

MANDATORY FROM AUGUST 11<sup>th</sup> 2014: BT\_2014\_FR16\_4\_UK

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## ARTICLE 14 – SAFETY EQUIPMENT

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### 14.1 - Fire Extinguisher

Use of the genuine FORMULA NORDIC fire extinguisher and peripheral equipment is mandatory.

- 14.1.1 - The following information must be clearly shown on each extinguisher:
  - capacity,
  - type of extinguishant,
  - weight or volume of the extinguishant,
  - date the container was last checked, which must not be more than two years after the date of filling, or the date of the last check.

Any extinguisher on which the above information cannot be read will be refused.

- 14.1.2 - The extinguisher's activation system, combined with a circuit-breaker, must be marked with a red letter "E" inside a white circle with red border, at least 6 cm in diameter.

### 14.2 - Master switch

Use of the genuine FORMULA NORDIC master switch and peripheral equipment is mandatory.

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The master switch control handle must be situated close to the base of the main safety structure and be marked with a red lightning symbol in a blue triangle with a white border.

### **14.3 – Rear-view mirrors**

Use of genuine FORMULA NORDIC rear-view mirrors is mandatory.

All cars must be fitted with two rear-view mirrors, giving the driver rear visibility on both sides of the car.

### **14.4 – Safety belts**

Use of genuine FORMULA NORDIC safety belts is mandatory.

The genuine attachment points to the bodyshell must be used.

It is mandatory to wear two shoulder straps, an abdominal strap and two straps between the legs.

The driver and Competitor are responsible for the condition of the safety belts.

FORMULA NORDIC/SBF Scrutineers reserve the right to remove homologation labels from the straps in the event of a serious collision which could impair their original level of safety.

In accordance with FIA regulations, each of the straps making up the safety harness must be identified by a homologation label affixed by the manufacturer. All straps featuring a harness must have the same homologation number.

All straps must be valid.

If there is a missing homologation label, a mix of straps with different homologation numbers, illegible homologation labels or whose validity deadline has passed, the harness must be immediately replaced. The car may only take to the track once it has fulfilled this requirement.

### **14.5 – Rear red light**

Use of the genuine FORMULA NORDIC rear red light is mandatory.

### **14.6 - HANS® system**

Use of the HANS® system is mandatory for all competitors and drivers in the 2019 championship.

### **14.7 - Wheel retention**

The FORMULA NORDIC cars are fitted as standard with:

- a system to retain the central wheel nut should it become loose.

The wheel retention systems must be operational at all times.

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## **14.8 – Safety Kit**

MANDATORY FROM MAY 1<sup>th</sup> 2015: BT\_2015\_FR16\_1\_UK

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## **ARTICLE 15 – FUEL**

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### **15.1 - Fuel**

#### 15.1.1 Checks

Checks will be made by comparing the fuel taken from the Competitor's car and the sample taken from the distribution point.

Any mix with another fuel or additive is forbidden.

#### 15.1.2 Sampling procedure

According to "Tävlingsreglemente [SBF](#) Mästerskapsracing 2019".

### **15.2 – Fuel on board**

15.2.1 - It is forbidden to store any fuel on board the car at a temperature of more than 10°C below the ambient temperature.

15.2.2 – It is forbidden to use a specific device, on board the car or not, to reduce the temperature of fuel below the ambient temperature.

15.2.3 – The nominal fuel pressure must be 3.5 bars +/- 0.2 bar.

### **15.3 - Oxidant**

Only air may be mixed with the fuel as an oxidant.

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## **ARTICLE 16 – ELECTRONIC SYSTEMS**

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### **16.1 – Electronic engine control unit**

Use of the genuine FORMULA NORDIC electronic engine control unit is mandatory.

The electronic engine control unit must be equipped with the latest version of the RENAULT SPORT-homologated cartography and software.

Any intervention on the ECU is strictly forbidden.

The location of the ECU must be that indicated in the FORMULA NORDIC User Manual (2014 v1.1 edition).

### **Drawing of lots**

Beginning with the Championship's second event, the Electronic Control Units (ECUs) used on the cars of the first 15 drivers in the provisional overall classification may be distributed by the drawing of lots. Once their working order

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has been verified, the 15 removed ECUs will then be randomly redistributed by a FORMULA NORDIC/SBF Scrutineer, prior to the event's 1st private practice sessions.

Vehicles must keep the ECU allocated to them by the draw throughout the event. Failure to comply with this rule will be considered a technical non-compliance.

Competitors and drivers will be responsible for the ECU used on their vehicle throughout the event. The ECU must be returned in good working order; otherwise, the vehicle's original ECU will be given to the owner of the damaged ECU.

ECUs will be returned to their owners after the final race of the event by a FORMULA NORDIC/SBF Scrutineer.

The organizers reserve the right to change the drawing of lots to more or fewer cars.

## **16.2 – Data acquisition system**

Only the FORMULA NORDIC optional data acquisition system is authorized. It must be compliant with the description in the FORMULA NORDIC User Manual (2014 v1.1 edition).

Any intervention on the data acquisition system is strictly forbidden. A memory-card must always be present in the data acquisition system.

The positioning of the data acquisition system must be that indicated in the FORMULA NORDIC User Manual (2014 v1.1 edition).

The FORMULA NORDIC/SBF Scrutineers have free access to the information recorded in the data acquisition system. They may use the results for purposes of technical compliance checks and following on-track incidents.

FORMULA NORDIC/SBF Scrutineers reserve the right to install an optional FORMULA NORDIC data acquisition system on any car(s) of their choice which may not be equipped with one.

## **16.3 - Telemetry**

The following are forbidden during qualifying practice and race sessions:

- all telemetry systems and electrical equipment.

## **16.4 - Dashboard**

Use of the genuine FORMULA NORDIC dashboard is mandatory.

## **16.5 – Radio systems**

According to "Tävlingsreglemente [SBF](#) Mästerskapsracing 2019".

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## **ARTICLE 17 - TIMING TRANSPONDER**

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### **17.1 - Presence of a timing transponder**

All cars must carry a timing transponder supplied by the official timekeepers. This transponder must be installed in strict compliance with the FORMULA NORDIC instructions on the left side of the engine and connected at all times during testing, official practice sessions and races.

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## **ARTICLE 18 - BINDING TEXT**

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The binding text for these technical regulations and the 2014 UK FORMULA NORDIC nomenclature is the English version, which will be used in the event of any controversy over their interpretation.