CLASSIFICATION AND DEFINITIONS OF CROSS-COUNTRY VEHICLES
(BASED ON FIA REGULATIONS – APPENDIX J – ARTICLE 281)

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ART. 1 CLASSIFICATION

1.1 Categories and groups

The vehicles used in Cross-Country rallies are divided up into the following categories and groups:

Category I
Group T2 Series Cross-Country Cars

Category II
Group T1 Modified Cross-Country Cars
Group T3 Improved Cross-Country Cars

Category III
Group T4 Cross-Country Trucks

1.2 Cubic capacity classes

The cars are divided up into the following classes according to their cubic capacity:

1.	up to	500 cm^3			
2.	over	500 cm^3	and up to	600 cm^3	
3.	over	600 cm^3	and up to	700 cm^3	
4.	over	700 cm^3	and up to	850 cm^3	
5.	over	850 cm^3	and up to	1000 cm^3	
6.	over	1000 cm^3	and up to	1150 cm^3	
7.	over	1150 cm^3	and up to	1400 cm^3	
8.	over	1400 cm^3	and up to	1600 cm^3	
9.	over	1600 cm^3	and up to	2000 cm^3	
10.	over	2000 cm^3	and up to	2500 cm^3	
11.	over	2500 cm^3	and up to	3000 cm^3	
12.	over	3000 cm^3	and up to	3500 cm^3	
13.	over	3500 cm^3	and up to	4000 cm^3	
14.	over	4000 cm^3	and up to	4500 cm^3	
15.	over	4500 cm^3	and up to	5000 cm^3	
16.	over	5000 cm^3	and up to	5500 cm^3	
17.	over	5500 cm^3	and up to	6000 cm^3	
18.	Over	6000 cm^3			

Unless otherwise specified in special provisions imposed by the FMSCI/FIA for a certain category of competitions, the organisers are not bound to include all the above-mentioned classes in the Supplementary Regulations and, furthermore, they are free to group two or more consecutive classes, according to the particular circumstances of their competitions.

No class can be subdivided.

ART. 2 DEFINITIONS

2.1 General Conditions

2.1.1 Series Production cars (Category I)

Cars of which the production of a certain number of identical examples (see definition of this word hereinafter) within a certain period of time has been verified at the request of the manufacturer, and which are destined for normal sale to the public (see this expression).
Cars must be sold in accordance with the homologation form. These cars have a maximum of six wheels and a minimum of four driven wheels.

2.1.2 Competition cars (Category II)

Cars built singly and intended solely for competition.

2.1.3 Trucks (Category III)

Trucks are considered to mean vehicles with a gross weight exceeding 3500 kg, with a maximum of eight wheels and a minimum of four driven wheels.

2.1.4 Mechanical components

All those necessary for the propulsion, suspension, steering and braking as well as all accessories whether moving or not which are necessary for their normal working.

2.1.5 Identical vehicles

Vehicles belonging to the same production series and which have the same mechanical components and same chassis (even though this chassis may be an integral part of the bodywork in the case of a monocoque construction).

2.1.6 Model of vehicle

Vehicles belonging to a production-series distinguishable by a specific conception and external general lines of the bodywork and by an identical mechanical construction of the engine and the transmission to the wheels, with the same wheelbase and the same cubic capacity.

2.1.7 Normal sale

Means the distribution of cars to individual purchasers through the normal commercial channels of the manufacturer.

2.1.8 Homologation

Is the official certification made by the FMSCI/FIA that a minimum number of cars or trucks of a specific model has been made on series- production terms to justify classification in Series Cross-Country Cars (Group T2) or Cross-Country Trucks (Group T4) of these regulations.

Application for homologation must be submitted to the FMSCI/FIA by the ASN of the country in which the vehicle is manufactured and must entail the drawing up of a homologation form (see below).
It must be established in accordance with the special regulations called "Homologation Regulations", laid down by the FIA.
Homologation of a series-produced car becomes null and void 7 years after the date on which the series-production of the said model has been stopped (series-production under 10 % of the minimum production of the group considered).

2.1.9 Homologation forms

All cars or trucks recognised by the FMSCI/FIA are the subject of a descriptive form called homologation form on which must be entered all data enabling identification of the said model.

This homologation form defines the series as indicated by the manufacturer.
According to the group in which the competitors race, the modification limits allowed in international competition for the series are stated in Appendix J.
The presentation of the latest version of the applicable homologation forms is compulsory upon request by the scrutineers at any time during the competition.
In case of non-presentation, the penalty may go as far as to refuse the participation of the competitor in the competition.
The form presented must imperatively be printed :
Either on FIA stamped/watermarked paper
Or on stamped/watermarked paper from an ASN only if the manufacturer is of the same nationality as the ASN concerned.
Should the date for the coming into force of a homologation form fall during a competition, this form is valid for that competition throughout the duration of the said competition.
Should any doubt remain after the checking of a model of car or truck against its homologation form, the scrutineers must refer either to the maintenance booklet published for the use of the make's distributors or to the general catalogue in which are listed all spare parts.
In the case of a lack of sufficient accurate documentation, scrutineers may carry out direct Scrutineering by comparison with an identical part available from a concessionaire or from a series vehicle of the same type.
It is be up to the competitor to obtain the homologation concerning his car from his ASN.

Description :

A form breaks down in the following way :
A basic form giving a description of the basic model.
At a later stage, a certain number of additional sheets describing "homologation extensions", which can be "variants", or "errata" or "evolutions".

a. Variants (VF, VP, VO)

b.

These are either supply variants (VF) (two suppliers providing the same part for the manufacturer and the client does not have the possibility of choice), or production variants (VP) (supplied on request and available from dealers), or options variants (VO) (supplied on specific request).

c. Erratum (ER)

Replaces and cancels an incorrect piece of information previously supplied by the constructor on a form.

d. Evolution of the type (ET)

Characterises modifications made on a permanent basis to the basic model (complete cessation of the production of the car in its original form).

Use

1) Variants (VF,VO)

The competitor may use any variant or any part of a variant as he wishes, only on condition that all the technical data of the vehicle, so designed, conforms to that described on the homologation form applicable to the car, or expressly allowed by Appendix J.

For example, the fitting of a brake calliper as defined on a variant form is only possible if the dimensions of the brake linings, etc. obtained in this way, are indicated on a form applicable to the car in question.

2) Evolution of the type (ET)

The car must comply with a given stage of evolution (independent of the date when it left the factory), and thus an evolution must be wholly applied or not at all.
Besides, from the moment a competitor has chosen a particular evolution, all the previous evolutions must be applied, except where they are incompatible.
For example, if two brake evolutions happen one after another, only that corresponding to the date of the stage of evolution of the car may be used.

2.1.10 Materials – Definitions

See Article 251-2.1.11.
~~X Based Alloy (e.g. Ni based alloy)~~
~~X must be the most abundant element in the alloy on a % w/w basis. The minimum possible weight percent of the element X must always be greater than the maximum possible of the sum of each of the other individual elements present in the alloy.~~

~~X-Y based alloy (e.g. Al-Cu based alloy) X must be the most abundant element.~~
~~In addition, element Y must be the second highest constituent (%w/w) after X in the alloy.~~
~~The minimum possible sum of the weight percentages of the elements X and Y must always be greater than the maximum possible percentage of the sum of each of the other individual elements present in the alloy.~~

~~Intermetallic materials (e.g. TiAl, NiAl, FeAl, Cu3Au, NiCo)~~
~~These are materials where the material is based upon intermetallic phases, i.e. the matrix of the material consists of more than 50%v/v intermetallic phase(s).~~
~~An intermetallic phase is a solid solution between two or more metals exhibiting either partly ionic or covalent, or metallic bonding with a long range order, in a narrow range of composition around the stoichiometric proportion.~~

~~Composite materials~~
~~Material formed from several distinct components, the association of which provides the whole with properties which none of the components taken separately possesses.~~
~~More specifically, these are materials where a matrix material is reinforced by either a continuous or discontinuous phase.~~
~~The matrix can be metallic, ceramic, polymeric or glass based.~~

~~The reinforcement can be present as long fibres (continuous reinforcement) or short fibres, whiskers and particles (discontinuous reinforcement).~~

~~Metal Matrix Composites (MMCs)~~
~~These are composite materials with a metallic matrix containing a phase of more than 2%v/v which is not soluble in the liquid phase of the metallic matrix.~~
~~The 2%v/v is to be understood : "at the lowest temperature of the matrix liquid phase".~~

~~Ceramic materials (e.g. but not restricted to Al2O3, SiC, B4C, Ti5Si3, SiO2, Si3N4)~~
~~Inorganic, non-metallic material made from compounds of a metal and a non-metal.~~
~~Ceramic material may be crystalline or partly crystalline.~~

~~It is formed by a fused mass, which solidifies as it cools, or which is formed and matured at the same time, or subsequently, by the action of heat.~~

2.2 Dimensions

Perimeter of the car seen from above
The car as presented on the starting grid for the competition in question (applicable to Groups T1, T3 and T2).

2.3 Engine

2.3.1 Cylinder capacity

Volume V generated in cylinder(s) by the upward or downward movement of the piston(s).
$V = 0.7854 \times b^2 \times s \times n$
where : b = bore
s = stroke
n = number of cylinders

2.3.2 Supercharging

Increasing the pressure of the charge of the fuel/air mixture in the combustion chamber (over the pressure induced by normal
atmospheric pressure, ram effect and dynamic effects in the intake and/or exhaust systems) by any means whatsoever.

The injection of fuel under pressure is not considered to be supercharging (see Article 3.1 of the General Prescriptions).

2.3.3 Cylinder block

The crankcase and the cylinders.

2.3.4 Intake manifold

In the case of a carburettor induction system
Part collecting the air/fuel mixture from the carburettor(s) and extending to the cylinder head intake ports.

In the case of an injection induction system
Part situated between the valve of the device regulating the air intake and extending cylinder head intake ports.

In the case of a diesel engine
Part collecting the air at the air filter outlet and extending to the cylinder head intake ports.

In the case of a supercharged diesel engine
Part situated between the outlet of the last exchanger(s) and extending to the cylinder head(s) intake ports.

2.3.5 Exhaust manifold

Part collecting together the gases from the cylinder head and extending to the first gasket separating it from the rest of the exhaust system.

2.3.6 For engines with a turbocharger, the exhaust begins after the turbocharger.

2.3.7 Oil sump

The elements bolted below and to the cylinder block which contain and control the lubricating oil of the engine.

2.3.8 Exchanger

Mechanical part allowing the exchange of calories between two fluids.
For specific exchangers, the first-named fluid is the fluid to be cooled and the second-named fluid is the fluid that allows this cooling.

E.g. Oil/Water Exchanger (the oil is cooled by the water).

2.3.9 Radiator

This is a specific exchanger allowing liquid to be cooled by air. Liquid/Air Exchanger.

2.3.10 Intercooler or Supercharging Exchanger

This is an exchanger, situated between the compressor and the engine, allowing the compressed air to be cooled by a fluid. Air/Fluid Exchanger.

2.4 Running Gear

The running gear is made up of all parts of the vehicle which are totally or partially suspended.

2.4.1 Wheel

Flange and rim.
By complete wheel is meant flange, rim and tyre.

2.4.2 Friction surface of the brakes

Surface swept by the linings on the drum, or the pads on both sides of the disc when the wheel achieves a complete revolution.

2.4.3 McPherson suspension

Any suspension system in which a telescopic strut, not necessarily providing the springing and/or damping action, but incorporating the stub axle, is anchored on the body or chassis through a single attachment point at its top end, and is pivoted at its bottom end either on a transverse wishbone locating it transversally and longitudinally, or on a single transverse link located longitudinally by an antiroll bar, or by a tie rod.

2.4.4 Closed loop electronic control system

Electronically controlled system in which an actual value (controlled variable) is continuously monitored, the feedback signal is compared with a desired value (reference variable) and the system is then automatically adjusted according to the result of this comparison.

2.5 Chassis - Bodywork

2.5.1 Chassis

The overall structure of the car around which are assembled the mechanical components and the bodywork including any structural part of the said structure.

2.5.2 Bodywork

Externally :
All the entirely suspended parts of the car licked by the air stream.

Internally : Cockpit and boot.
Bodywork is differentiated as follows :

Completely closed bodywork

Completely open bodywork

Convertible bodywork with the hood in either supple (drop-head)
or rigid (hard-top) material

Truck bodywork composed of the cabin and the load-bearing bodywork (if applicable)

2.5.3 Seat

Equipment made of one base and one backrest.

Backrest
Surface measured upwards from the base of a normally seated person's spine.

Seat basis
Surface measured from the base of the same person's spine towards the front.

2.5.4 Luggage compartment

Any volume distinct from the cockpit and the engine compartment inside the vehicle.
This volume is limited in length by the fixed structure provided for by the manufacturer and/or by the rear of the seats and/or, if this is possible, reclined at a maximum angle of 15° to the rear.
This volume is limited in height by the fixed structure and/or by the detachable partition provided for by the manufacturer, or in the absence of these, by the horizontal plane passing through the lowest point of the windscreen.

2.5.5 Load-bearing bodywork

Part of the bodywork of a truck allocated to contain goods.

It may be made from flexible and/or rigid materials, and may have several openings.

2.5.6 Cockpit

Structural inner volume which accommodates the driver and the passenger(s).

2.5.7 Bonnet

Outer part of the bodywork which opens to give access to the engine.

2.5.8 Fenders

A fender is considered to be the area defined according to Drawing
251-1 and to Drawing XIII-A1 (or XIII) of the Group T2 homologation form (if applicable).
See Article 251-2.5.7.

Car

A fender is considered to be the area defined according to Drawing
251-1 and to Drawing XIII-A1 (or XIII) of the Group T2 homologation form (if applicable).
See Article 251-2.5.7.

Truck

Front mudguard
The area limited by the inner face of the complete wheel and by the part of the bodywork (included and/or added) limited by the upper edge of the front bumper at the front, and by the part situated at least at the same level than that of the front bumper at the rear.

Mud flaps are not part of the mudguard. Rear mudguard
The area limited by the inner face of the innermost complete wheel and by the part covering the tyres over at least 60° on both sides of the vertical axis.
The upper horizontal part may be the bottom of the load-bearing bodywork.
Mud flaps are not part of the mudguard.

2.5.9 Engine compartment

Volume defined by the fixed or detachable chassis and bodywork panels surrounding the engine.
The transmission tunnel is not part of the engine compartment.

2.5.10 Bodyshell

Structure made up of bodywork parts and having the functions of a chassis.

2.15.11 Cow-catcher

Part designed to protect the front of the vehicle, the headlights and the radiators.

2.5.12 Main structure

FIA-homologated vehicle
Volume contained within the bodywork and situated :
In frontal projection, within the outermost side members and cross members of the original shell and/or chassis
In lower longitudinal projection, within and above the original bodywork parts forming the shell, chassis or chassis shell

In upper longitudinal projection, below the projection of the original shell or bodywork without boot or bonnet lids, tailgate or doors.

Non-homologated vehicle
Volume contained within the bodywork and situated :

In vertical projection, in length, between the planes passing through the outer edges of the wheels and in width between the planes passing through the centre of the complete wheels with a tolerance of 3 %, on condition that these planes pass through the shell or chassis shell, tubular or semi-tubular
If this is not the case, the maximum width is defined by the vertical projections of the parts of the structure receiving the suspension loads
In longitudinal projection, the volume is defined in its lower part by the longitudinal projections of the lower parts of the structure receiving the suspension loads, and in its upper part, at the front, by the planes passing through the highest points of the front safety rollbar and the highest points of the structure receiving the suspension loads or, alternatively, the upper edges of the front wheels.
To the rear it is defined by the planes passing through the highest points of the main safety rollbar and the highest points of the structure receiving the suspension loads or, alternatively, the upper edges of the rear wheels.
Between the main and front rollbars, it is defined by the planes joining their upper parts.

2.5.13 Louvres

Combination of inclined slats arranged within the perimeter of an opening that conceal an object situated behind them when looked at perpendicularly to the surface of the opening.

2.6 Electrical system

Headlight
Any signal the focus of which creates an in-depth luminous beam directed towards the front.

2.7 Fuel tank

Any container holding fuel likely to flow by means of lines towards the main tank or the engine.

2.8 Automatic Gearbox

This is made up of a hydrodynamic torque converter, a box with epicyclic gears equipped with clutches and multi-disc brakes and having a fixed number of reduction gears, and a gear change control. The gear change can be achieved automatically without disconnecting the engine and gearbox, and thus without interrupting the engine torque transmission.

Gearboxes with continually variable transmission are considered as automatic gearboxes with the particularity of having an infinite number of reduction ratios.

ART. 3 SPECIFIC DEFINITIONS FOR ELECTRICALLY-POWERED VEHICLES

See Article 251-3.

MODIFICATIONS APPLICABLE ON 01.01.2019

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2.3 Engine

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2.3.10 Intercooler or Supercharging Exchanger

This is an exchanger, situated between the compressor and the engine, allowing the compressed air to be cooled by a fluid. Air/Fluid Exchanger.

2.3.11 Seals for mechanical parts

Device that helps join parts together by preventing leakage.

2.3.11.a Static seal

The only function of a static seal is to ensure the sealing of at least two parts, fixed in relation to each other.
The distance between the faces of the parts separated by the seal must be less than or equal to 5 mm.

2.3.11.b Dynamic seal

Seal required to prevent leakage in between parts in relative motion one to the other.

~~MODIFICATIONS APPLICABLE ON 01.01.2020~~

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