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Appendix "J"

to the International Sporting Code 1975

Classification, definition and specifications of cars

Specifications in Italics are interpretations or explanations given by the CSI since the introduction of the present Appendix "J" in 1966

Warning: Present Appendix J is only valid until 31.12.75. The new Appendix J enforced as from 1.1.76 will include fundamental alterations which will be published as from the month of December 1974 in the FIA sporting bulletin.

TITLE I

CLASSIFICATION OF CARS

Art. 251.—**Categories and groups:** cars competing in events shall be distributed into the following categories and groups:

Category A: recognized production cars (numbers between brackets are those of the required minimum production in 12 consecutive months).

- Group 1 : series-production touring cars (5,000).
- Group 2 : special touring cars (1,000).
- Group 3 : series-production grand touring cars (1,000).
- Group 4 : special grand touring cars (500).

Category B: experimental competition cars.

- Group 5 : sports cars.

Category C: racing cars.

- Group 7 : two-seater racing cars.
- Group 8 : International formula racing cars.
- Group 9 : "formule libre" racing cars.

TITLE II

DEFINITIONS AND GENERAL PRESCRIPTIONS

Art. 252.—**Definitions a) Recognized production cars:** cars of which the series-production of a certain number of identical (see definition of this word hereafter) cars, has been completed within a certain period of time, and which are meant for the normal sale (see below) to the individual purchaser. This period of time is of 12 consecutive months. The checking of the existing minimum production enables the ACN to apply to the FIA for recognition (see this word below).

NB: The period of time during which the minimal production of cars of Group 4 (500) has to be reached is 24 consecutive months.

b) Experimental competition cars: cars which have nothing or which have no more to do with a series-production vehicle, either that only one of the type has

been built, or that the number of units which has been built is inferior to what is required for the group for which the minimum number of units annually produced is the smallest, or that although they originate from a series-production car, they have been modified or equipped with new accessories to the point that their series-production nature has been lost.

c) Racing cars: cars manufactured solely for speed races on a circuit or a closed course. These cars are generally defined by the international racing formulae the specifications of which are fixed by the FIA for a certain period of time. Racing cars not being defined by any international formula are said to be "formule libre" and their specifications must in that case be set out in the supplementary regulations of the event.

d) Identical: by "identical" cars are meant cars belonging to one and the same fabrication series and which have the same coachwork (outside and inside), same mechanical components and same chassis (even though this chassis may be amalgamated with the coachwork in case of a unitary construction).

"Mechanical components" include all parts for the propulsion, suspension, steering and braking system and all accessories whether moving or not which are necessary for their normal functioning (such as for instance, electric accessories).

By chassis is meant the structure of the car which holds mechanical components and coachwork together, and includes any structural part which is located below the horizontal plane passing through the centre of the wheel hubs.

e) Minimum production: this minimum production, different for each group of cars, applies to cars which are identical, the manufacturing of which has been fully completed within a period of 12 consecutive months. (24 for Group 4.)

By "minimum series" should be understood only a number of entirely finished cars, eg, cars in running condition and ready for delivery to the purchasers.

f) Normal sale: means the distribution of cars to individual purchasers through the normal commercial channels of the manufacturer.

g) Recognition: is the official certification made by the FIA that a minimum number of cars of a specific model has been made on series-production terms to justify classification in group 1, 2, 3 or 4 of these regulations. Application for recognition shall be submitted to the FIA by the ACN of the country in which the vehicle is manufactured and shall entail the drawing up of a recognition form (see below). It must be established in accordance with the special regulations, called "Regulations for Recognition", laid down by the FIA, and a manufacturer wishing to obtain the recognition of his model(s) must undertake to abide by their prescriptions. Recognition will only be granted to car-models which were still in production on January 1st 1973 or the production of which was started after that date. Recognition of a series-produced car will become void 5 years after the date on which the series-production of the said model has been stopped.

Recognition of a model may only be valid for one group. The transferring of a previously recognized model from one group to another will therefore nullify the effect of the said previous recognition.

Definitive abandonment of the series-production

As from the moment when the annual production decreases below 10% of the minimum production of the group concerned, series-production is considered abandoned.

Definition of the term "model of car"

By "model of car" is meant all the cars belonging to a production series distinguishable by a specific conception and specific external general lines of the coachwork

and by an identical mechanical conception of the engine and the transmission to the wheels.

A model of car may exist in several variants (for example, different power or engine cylinder-capacity), which may possibly be the subject of separate recognitions.

However, taking the Art. 252g as a basis, it must be pointed out that, if the Sub-Commission for Recognitions has the possibility, for practical reasons, to authorize the recognition of certain variants of a same car-model in different Groups of cars, the principle of a simultaneous recognition of variants of a same model in Groups 1 and 2 (Touring Cars) on the one hand, and in Groups 3 and 4 (Grand Touring) on the other hand, remains forbidden.

h) Recognition forms: all cars recognized by the FIA shall be the subject of a descriptive form called recognition form on which shall be entered all data enabling identification of the said model.

To this effect only the standard recognition forms and standard additional form for "normal evolution of the type" and "variant" approved by the FIA shall be used by all ACNs.

The production of the forms at scrutineering and/or at the start may be required by the promoters who will be entitled to refuse the participation of the entrant in the event in case of non-production.

In case of any doubt remaining after the checking of a model of car against its recognition form, the scrutineers would have to 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 case of lack of enough accurate documentation, scrutineers may carry out direct scrutineering by comparison with a similar part available from a concessionaire.

It will rest with the competitor to obtain the recognition form and, if need be, the additional forms concerning his car, from the ACN of the manufacturing country of the vehicle.

In case of a normal evolution of the type, the model used will have to conform exactly to one of the models preceding or following the evolution.

Whenever the scrutinizing of a car shows the complete compliance of it with its recognition form, inasmuch as is required for the group in which it is admitted, there is no need to worry about its year of fabrication.

Therefore, the chassis and engine numbers which may be mentioned on the recognition form are not to be taken into consideration.

Manufacturing tolerances:

Provided the tolerances comply with the tolerances allowed by the FIA, it will not be necessary to mention individual tolerances on the recognition form any more. Should any tolerance exceed the allowed ones, due explanations should be provided by the manufacturers for consideration by the Sub-Commission for Recognitions.

Tolerance scale:

1) Tolerances for all machining, excepting bore and stroke: $\pm 0.2\%$. (Articles 156, 158, 159, 181, 196, 215, 216, 225, 262, 263 and also the orifices appearing on page 8 of the recognition form.)

2) Article 146: Tolerance $\pm 0.5\%$.

3) Unfinished castings: $+4\%$ -2% .

4) Cam-lift: $+1\%$ (Articles 182, 197, 255).

- 5) Weight (Articles 160 to 164): +7% -3%.
- 6) Width of the car at front and rear axles: +1% -0.3%.
- 7) Wheelbase (Article 1): ±0.5%.

i) **Cylinder-capacity classes**: the cars shall be distributed into the following 13 classes, according to their cylinder-capacity:

1.	Cylinder-capacity inferior or equal to	500 cc							
2.	Cylinder-capacity exceeding	500 cc	and inferior or equal to	600 cc					
3.	"	"	"	600 cc	"	"	"	"	700 cc
4.	"	"	"	700 cc	"	"	"	"	850 cc
5.	"	"	"	850 cc	"	"	"	"	1,000 cc
6.	"	"	"	1,000 cc	"	"	"	"	1,150 cc
7.	"	"	"	1,150 cc	"	"	"	"	1,300 cc
8.	"	"	"	1,300 cc	"	"	"	"	1,600 cc
9.	"	"	"	1,600 cc	"	"	"	"	2,000 cc
10.	"	"	"	2,000 cc	"	"	"	"	2,500 cc
11.	"	"	"	2,500 cc	"	"	"	"	3,000 cc
12.	"	"	"	3,000 cc	"	"	"	"	5,000 cc
13.	"	"	"	5,000 cc					

Regulations intended for specific events may provide one or several sub-divisions of class 13. There shall be no sub-division of the other classes.

The above mentioned classification will apply only to non-supercharged engines.

Unless otherwise specified in special provisions set up by the FIA for a certain category of events, the organizers 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 events.

j) **Formulae of equivalence between reciprocating piston engines and special engines.**

Rotary piston engines: cars with rotary piston engines covered by the NSU-Wankel patents will be admitted on the basis of a piston displacement equivalence. This equivalence is twice the volume determined by the difference between the maximum and minimum capacity of the working-chamber.

Turbine engines: cars propelled by a turbine engine will be admitted on the basis of a formula of equivalence with regard to alternating piston engines. This formula is the following:

$$A = \frac{C \times 0.09625}{(3.10 \times R) - 7.63}$$

A = High-pressure nozzle area—expressed in square centimetres by which is meant the area of the air-flow at the exit from the stator blades (or at the exit from the first stage if the stator has several stages). Measurement is done by taking the minimum area between the fixed blades of the high pressure turbine first stage. In cases where the first stage turbine stator blades are adjustable, they will open to their greatest extent to present the greatest area for the determination of area "A".

The area of the high pressure nozzle is thus the product—expressed in square centimetres—of height by width and by the number of vane spaces.

C = Cylinder-capacity of reciprocating piston engine expressed in cubic centimetres.

R= The pressure ratio i.e. the ratio of the compressor of the turbine engine. This pressure ratio is obtained by multiplying together a value for each stage of the compressor, as indicated hereafter:

Subsonic axial compressor=1.15 per stage.

Trans-sonic axial compressor=1.5 per stage.

Radial compressor=4.25 per stage.

Thus a compressor with one radial and six axial stages will be designated to have a pressure ratio of:

$$4.25 \times 1.15 \times 1.15 \times 1.15 \times 1.15 \times 1.15 \times 1.15 \text{ or } 4.25 \times 1.15^6.$$

The CSI reserve their right to modify the basis of comparison established between conventional type engines and new type engines, while giving a previous notice of one year to start from January 1st, following the date on which the decision was made.

k) Coachwork: by coachwork is meant:

- externally: all parts of the car licked by the air-stream and situated above a plane passing through the centre of the wheel hubs.
- internally: all visible parts of the passenger compartment.

Coachworks are differentiated as follows:

- 1) completely closed coachworks,
- 2) completely open coachworks,
- 3) convertible coachworks: with a hood in either supple (drop-head) or rigid (hard-top) material.

l) Use of aerodynamic devices on cars of groups 5, 7 and international racing formulae: in interpreting Art 252(l), shall definitely be considered as coachwork all external parts of the car which extend above the highest point of either the front or rear wheels (with tyres) with the exception of units definitely associated with the functioning of the engine or transmission and the anti-roll bar.

Any specific part of the car which has an aerodynamic influence on the stability of the vehicle must be mounted on the entirely sprung part of the car and shall be firmly fixed whilst the car is in motion.

Neither the safety roll bar, nor any of the units associated with the functioning of the engine or transmission shall have an aerodynamic effect by creating a vertical thrust.

All external projections swinging in a horizontal plane shall have a minimum radius of 1.5 cm. The leading edge of any aerofoil fixed to the front of the car shall not be sharp.

m) Towing-eye: all cars, with the exception of formula cars, will be equipped with a rear and front towing-eye, for all events without any distinction.

This towing-eye will only be used in case the car can move freely, and it must be avoided to use it to lift the car.

Art. 253.—Prescriptions common to all cars of categories A and B.

a) Chassis, ground-clearance, steering lock: no part of the car should touch ground when one of its tyres is deflated.

The maximum steering radius shall be 6.75 m which means that the car must be able to make a complete turn in both directions without the wheels going beyond two parallel lines drawn on the ground 13.50 m apart.