

f) Safety belts: the car shall be provided with a safety belt in conformity with Art. 269. The wearing of this belt is compulsory.

g) Exhaust system: the exhaust system shall terminate behind the driver and passenger seats.

h) Firewall and floor: cars shall have an adequate firewall to prevent the passage of flame from the engine compartment or under the car to the cockpit. Openings in the firewall for the passage of engine controls, wires, and lines shall be of the minimum size necessary.

The floor of the cockpit shall be constructed to protect the driver by preventing the entry of gravel, oil, water, and debris from the road and engine. Bottom panels or belly panels shall be adequately vented to prevent the accumulation of liquid.

i) Bulkheads and tanks: no part of any fuel, oil or water tank shall be exposed to any part of the driver and passenger compartment. Fuel tanks shall be vented to prevent the accumulation of fumes and to prevent fumes from passing into the driver or engine compartment.

Fuel tanks shall be isolated by means of bulkheads so that in case of spillage, leakage or a failure of the tank the fuel will not pass into the driver or engine compartment or around any part of the exhaust system.

Batteries shall be fully enclosed.

j) Closed cars: adequate ventilation shall be provided to prevent the accumulation of fumes inside the car.

k) Safety fuel tanks: The same prescriptions as those applying for Group 5 (see Art. 269).

TITLE X

SINGLE-SEATER RACING CARS—INTERNATIONAL FORMULAE (Group 8)

Art. 293.—Formula No. 1.

Validity: from the 1st January 1966 to 31st December 1975.

Engines with reciprocating pistons:

a) engine cylinder-capacity without supercharging: inferior or equal to 3,000 cc;

b) engine cylinder-capacity with supercharging: inferior or equal to 1,500 cc.

Number of cylinders: max 12.

Turbine engine

Utilization authorized on the basis of the Equivalence Formula given under Art. 252 j).

Minimum weight, without ballast: 550 kg.

Art. 294.—Formula No. 2.

Validity: from 1st January 1972 to 31st December 1975.

Reciprocating piston-engines: engine cylinder-capacity inferior or equal to 2,000 cc.

Supercharging forbidden.

Minimum weight without ballast:

Cars equipped with a 4 cylinder engine: 450 kg

" " " " 6 " " : 475 kg

" " " " more than 6 cylinders: 500 kg.

The engine (including engine-block and cylinder-head) must be derived from an engine equipping a model of car for which the FIA has ascertained a series-production of at least 1,000 units.

Modifications allowed on the original pieces of the engine are those provided for Group 2 (Special Touring Cars). However, all freedom is left for the crankshaft and the connecting rods. The maximum cylinder-capacity authorized—2,000 cc—can be obtained by modifying the original bore and/or stroke.

Consequently, sleeving of an engine block is authorized, even if originally no sleeves are fitted.

Gearbox: five gears maximum, not including the reverse gear.

The propulsion will be ensured by two wheels maximum.

Art. 295.—Formula No. 3.

Validity: as from 1st January 1971 to 31st December 1974. Reciprocating piston engines only.

Maximum cylinder-capacity: 1,600 cc.

The maximum cylinder capacity may be obtained by increasing or reducing either the bore or stroke or both dimensions.

Maximum number of cylinders: 4.

The engine block and cylinder head castings, machining completed, must be those of an engine equipping a car model of which the FIA has ascertained the series production of at least 5,000 units yearly.

The original engine block and cylinder head may be modified freely by removal of material to the exclusion of any addition of material. However, it is permitted to sleeve an engine block that originally is not fitted with sleeves.

The type of crankshaft bearings may not be modified (the replacement of a plain bearing by a roller bearing is therefore forbidden).

The induction system is free but it must compulsorily be fitted with a throttling flange of 3 mm in length and with a parallel hole of 21.5 mm diameter. Through this throttling flange all the air feeding the engine must pass.

The throttling flange must compulsorily be made of metal or metallic alloy.

The material of the air-box is free, provided it is not a porous material.

It is prescribed that the entire inlet system including manifolds, injectors, air-box and restrictor must fit into a box of 1 m long, 50 cm wide and 50 cm high. It will also be prescribed that the inlet system may be removed from the engine as one unit with the cylinder head.

The CSI reserves its right, after the experience obtained, to modify the dimensions of the throttling flange with a shorter previous notice than the two regular years.

No supercharging device is allowed even if a series-production one was fitted on the original engine.

The other original parts of the engine may be replaced or modified without restriction.

Other mechanical elements: the gearbox and differential casings must be those of a car manufactured in at least 5,000 units in 12 consecutive months, of a model recognized by the FIA, but not necessarily the model from which the engine has been taken. The gearbox may not have more than 5 forward speeds, plus a reverse gear.

Complete freedom is left as regards the ratios. The use of a limited slip differential is allowed.

Dimensions: minimum wheelbase	200 cm
minimum track	120 cm
maximum rim width	10 inches

Tyre restrictions

The tread-width of F3 tyres is limited to a nominal value of 8 inches, plus a certain tolerance to compensate for tyre wear. This tolerance is provided for in the drawing on page 226 representing the measuring gauge to be used during scrutineering.

Checking may be done at any moment of the race and practice.

The measuring gauge being applied horizontally and without exercising pressure, to the tyre tread, points A and B (see drawing) must be in contact with the tread.

At the limit points C and D (see drawing) are in contact with the tyre shoulder but points A and B must remain in contact with the tyre tread.

If a competitor uses tyre of dimensions evidently smaller than 8 inches, points A and B will naturally not touch the tyre tread simultaneously, but the checking will then not be necessary.

Minimum weight, without ballast: 440 kg.

Certificate of origin: any Formula 3 car showing up at the start of an event shall be supplied with a certificate established by the manufacturer and ratified by the National Sporting Authority, specifying the origin of the basic elements of the vehicle.

Vacuum tightness control apparatus of the induction system for F3 engines:

The control apparatus described hereafter represents the ultimate method of verification of the vacuum tightness of F3 induction systems, without the possibility of appeal. All F3 organizers will have to put such an apparatus at the disposal of the scrutineers for verification purposes both before and after the race.

The apparatus aims to create artificially a vacuum in the induction system and includes:

- a membrane suction-pump, with a nominal output of 25 to 28 litres/minute, and capable of obtaining a vacuum of 55 to 65 cm Hg for zero airflow.
- a rubber tubular stop perfectly adjusted to the flange.
- a vacuum-gauge connected to the piping between the rubber stop and the suction-pump.

The procedure to be respected for the checking is the following:

- a) Rotate the engine into such a position that, in each cylinder, at least one of the valves is closed.
- b) Open the injection slide or the carburettor butterflies.
- c) Check on the vacuum-gauge that the suction-pump creates in the induction system a depression superior or equal to 15 cm Hg.
- d) If the condition a) cannot be met, disconnect the rocker-arms or remove the camshaft in order to shut all inlet valves. If one or several valves have been damaged during the event, the entrant may repair them under the steward's control before undergoing the testing procedure. In these last cases, the minimum vacuum to be obtained shall be 20 cm Hg, instead of 15.

An example of this device is given on page 226.

For all further information, please contact the CSI Secretariat (8 place de la Concorde, Paris 8e France).

Art. 296.—Prescriptions and definitions applicable to racing cars of the 3 international formulae.

a) Minimum weight: the minimum weight is that of the car in running order i.e. with all lubrication and cooling liquids but without fuel.

The ballast which is prohibited is that of a removable type. It is therefore permissible to complete the weight of the car through one or several ballasts incorporated to the materials of the car provided that solid and unitary blocks are used, and that they are fixed by means of a tool and offer the opportunity of being sealed on should the officials entrusted with the scrutineering of the car deem it necessary.

b) The construction of the vehicle must be symmetrical i.e. when the car is lifted laterally and weighed, the half weight on either side must be equal to half the overall weight, a margin of + or — 5% being allowed for the said half weight. To verify the above, the weighing must be done with all tanks full (fuel, water, oil) and a driver, weighing at least 75 kilos normally sitting at the steering-wheel (or a ballast of the same weight occupying the same place).

c) Reverse gear: all vehicles must have a gearbox including a reverse gear, which must be in working order when the car starts the events and able to be operated by the driver when normally in his seat.

d) Compulsory automatic starter with electrical or other source of energy carried aboard the car and able to be controlled by the driver when normally in his seat.

e) Driver's seat liable to be occupied or left without it being necessary to open a door or remove a panel. Sitting at his steering-wheel the driver must be facing the road.

Moreover, the cockpit must be so conceived that the maximum time necessary for the driver to get in or out does not exceed 5 seconds.

f) Safety harness: Cars must be equipped with a "six-point" safety harness, i.e. a harness made of two shoulder straps, one abdominal strap and two crutch straps. The wearing of this harness is compulsory.

g) Coachwork: no part of the coachwork, with the exception of the safety roll bar, shall exceed in height a horizontal plane, 80 cm above the lowest point of the entirely sprung structure of the car.

In other words, a car with its wheels and the mobile suspension elements removed, but without regard to the roll-over bar, must pass between two parallel planes separated by 80 cm.

Formulae 1 and 2

Behind the front wheels, the coachwork shall not exceed a maximum width of 110 cm.

The coachwork ahead of the front wheels may be extended to an overall maximum width of 150 cm.

Nevertheless, any part of the coachwork ahead of the front wheels, exceeding an overall width of 110 cm, shall not extend above the height of the front wheel rims.

Formula 3

Behind the front wheels, the coachwork must not exceed a maximum width of 95 cm (nevertheless, the present exception provided for in Appendix J for lateral fuel tanks remains valid).

The coachwork ahead of the front wheels may be extended to an overall maximum width of 135 cm.