

Article 252 – 2012

Splošni predpisi za vozila iz proizvodnje (Skupina N), turistična vozila (Skupina A), vozila velikega turizma (Skupina B)

General Prescriptions for Production Cars (Group N), Touring Cars (Group A), Grand Touring Cars (Group B)

ČLEN 1: SPLOŠNO

1.1 SPREMEMBE

Prepovedane so vse spremembe, razen če niso izrecno dovoljene s posebnim pravilnikom skupine, v kateri vozilo nastopa, ali s splošnimi predpisi ali določene s poglavjem "Varnostna oprema". Sestavine vozila morajo ohraniti svoje prvotno delovanje.

1.2 Uporaba splošnih predpisov

Splošni predpisi morajo biti upoštevani, kadar podrobna navodila za Vozila iz proizvodnje (Skupina N), Turistična vozila (Skupina A) ali Vozila velikega turizma (Skupina B) ne predvidevajo bolj natančnih predpisov.

1.3 Material

Uporaba materiala, ki ima modul elastičnosti večji od 40 Gpa/g/cm³ je prepovedana, razen za čepe, prevleke izpuha, spoje vodne črpalke, zavorne ploščice, prevleke batov zavornih cilindrov, kotaleče elemente ležajev (kroglice, iglice, valjčki), elektronske komponente in senzorje, dele ki so lažji od 20 gramov ter vse prevleke z debelino manj ali enako 10 mikronov.

Uporaba kovinskih materialov, ki imajo mejo elastičnosti večji od 30 Gpa/g/cm³ ali katerih natezna trdnost je večja od 0,24 Mpa/kg/cm³ za neželezne in večja od 0,30 Mpa/kg/cm³ za železne materiale (80% železa) je prepovedana za izdelavo vseh delov, ki so prosti ali homologirani kot VO (variant option).

Ti-6Al-4V ASTM grade 5 tip titanove zlitine (5.5<Al<6.75, C max. 0.10, 3.5<V<4.5, 87.6<Ti<91) je dovoljen, razen za določene dele, za katere je titan izrecno prepovedan.

Noben vrteči se del turbinskega polnilnika ali podobnega tlačnega sistema (razen kotaleči se deli ležajev) ne sme biti izdelan iz keramičnega materiala ali prevlečen z keramiko.

Prepoved ne zadeva dele, ki so homologirani pri standardnem vozilu.

Uporaba pločevine iz magnezijeve zlitine z debelino manj kot 3 mm je prepovedana.

1.4 Dolžnost vsakega tekmovalca je, da v vsakem trenutku tekme dokaže tehničnim komisarjem in žiriji tekmovanja, da je njegovo vozilo v skladu s pravilnikom.

1.5 Poškodovane navoje se lahko popravi z novim navojem, vendar z enakim notranjim premerom (tipa "helicoil").

1.6 Vsako vozilo skupine A, homologirano po 01.01.1999, z izjemo kit variant, ki tekmuje v rallyju, ne sme biti širše od 1800 mm.

Vozila skupine N lahko tekmujejo v njihovi popolni verziji.

1.7 Prosti deli

'Prosti' pomeni, da je originalni del, kot tudi njegovo funkcijo, dovoljeno odstraniti ali nadomestiti z novim delom, pod pogojem, da novi del nima dodatnih funkcij v primerjavi z originalnim delom.

ARTICLE 1 : GENERAL REMARKS

1.1 Modifications

All modifications are forbidden unless expressly authorised by the regulations specific to the group in which the car is entered or by the general prescriptions below or imposed under the chapter "Safety Equipment".

The components of the car must retain their original function.

1.2 Application of the general prescriptions

The general prescriptions must be observed in the event that the specifications of Production Cars (Group N), Touring Cars (Group A), Grand Touring Cars (Group B) do not lay down a more strict prescription.

1.3 Material

The use of a material which has a specific yield modulus greater than 40 Gpa/g/cm³ is forbidden, with the exception of plugs, exhaust coatings, water pump turbo joints, brake pads, brake calliper piston coatings, rolling elements of bearings (balls, needles, rollers), electronic components and sensors, parts weighing less than 20 g and all coatings with a thickness less than or equal to 10 microns.

The use of a metallic material which has a specific yield modulus greater than 30 Gpa/g/cm³ or of which the maximum specific UTS is greater than 0.24 Mpa/kg/m³ for non-ferrous material and 0.30 Mpa/kg/m³ for ferrous materials (i.e. 80% iron) is forbidden for the making of all the parts that are free or homologated as an Option Variant.

Ti-6Al-4V ASTM grade 5 type titanium alloy (5.5< Al <6.75, C max 0.10, 3.5 <V< 4.5, 87.6<ti<.91) is authorised, except for certain parts for which titanium is expressly forbidden.

No turning part of a turbocharger or of any equivalent supercharging system (except the rolling parts of the bearings) may be made from ceramic material or have a ceramic coating.

These restrictions do not concern the parts homologated with the standard vehicle.

The use of magnesium alloy sheet metal with a thickness less than 3 mm is prohibited.

1.4 It is the duty of each competitor to satisfy the Scrutineers and the Stewards of the meeting that his automobile complies with these regulations in their entirety at all times during the event.

1.5 Damaged threads can be repaired by screwing on a new thread with the same interior diameter ("helicoil" type).

1.6 Any Group A car, homologated after 01.01.99, with the exception of kit variants, and competing in rallies must not be wider than 1800 mm.

Group N cars may compete in their integral version.

1.7 "Free" part

"Free" means that the original part, as well as its function(s), may be removed or replaced with a new part, on condition that the new part has no additional function relative to the original part.

ČLEN 2: DIMENZIJE IN TEŽE**2.1 Oddaljenost od tal**

Noben del vozila se ne sme dotikati tal, kadar sta izpraznjeni obe pnevmatiki na isti strani.

Ta preizkus se napravi na ravni ploskvi v tekmovalnih pogojih (voznik(i) v vozilu).

2.2 Balast

Dovoljeno je dopolniti težo vozila z eno ali več utežmi, pri pogoju, da gre za enotne, trdne kose, pritrjene z napravami, katere se lahko pečati, nameščenimi na podu prostora za voznika in potnike, vidnimi in zaplombiranimi s strani tehničnih komisarjev.

Uporaba: turistična vozila (Skupina A), vozila velikega turizma (Skupina B) in vozila skupine R. Nobeno obtežilo ni dovoljeno v vozilih iz proizvodnje (Skupina N).

Vendar je pri rallyu dovoljeno prevažati orodje in dele za zamenjavo, ki ustrezajo vozilu, v voznikovem prostoru in/ali v motornem prostoru in/ali v prtljažniku, pod pogoji predvidenimi v členu 253.

ČLEN 3: MOTOR**3.1 Turbo polnjenje**

V primeru turbo polnjenja bo običajna prostornina povečana s faktorjem 1,7 za bencinske motorje in s faktorjem 1,5 za dizelske motorje in vozilo bo uvrščeno v razred, kateri ustreza nadomestni prostornini, ki je rezultat tega množenja.

Vozilo se v vseh ozirih obravnava tako, kot da je tako povečana prostornina motorja njegova resnična prostornina.

To izrecno velja za njegovo uvrstitev v razrede po prostornini, njegove notranje razsežnosti, najmanjše število sedežev, njegovo najmanjšo težo itd.

3.2 Obrazec za enakovrednost med motorjem z nihajočimi bati ter motorjem z vrtečim batom (tipa, ki ga štiti patent NSU-Wankel)

Enakovredna prostornina je enaka prostornini, določeni z razliko med največjo in najmanjšo prostornino delovnega prekata.

3.3 Obrazec za enakovrednost med motorjem z nihajočimi bati in turbinskim motorjem

Obrazec je:

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

S = prehodna ploskev - izražena v cm² - zraka z visokim tlakom pri izhodu lopatic statorja (ali pri izhodu lopatic prve stopnje, če ima stator več stopenj).

Ta ploskev je najmanjša ploščina, merjena med stoječimi lopaticami prve stopnje visokotlačne turbine.

V primeru, da je kot odprtine teh lopatic spremenljiv, se vzame njihova največja odprtina, ki tako določa največjo ploščino pri določljivem prerezu prehodne ploskve S.

Prerez prehoda je enak zmnožku iz višine (v cm) krat širina (v cm), krat število lopatic.

R = Razmerje tlakov med kompresorjem motorja in turbino. Dobimo ga, če med seboj pomnožimo ustrezne vrednosti za vsako stopnjo, kot je prikazano tu dalje.

Osnovni kompresor s podzvočno hitrostjo: 1,15 na stopnjo

Osnovni kompresor z nadzvočno hitrostjo: 1,5 na stopnjo

Radialni kompresor: 4,25 na stopnjo

Primer za kompresor z eno radialno stopnjo in 6 osnovnimi, podzvočnimi stopnjami:

4,25 x 1,15 x 1,15 x 1,15 x 1,15 x 1,15 x 1,15 ali 4,25x(1,15)⁶.

C = Prostornina, enakovredna motorju z nihajočimi bati, izražena v cm³.

3.4 Prepovedan je vsak motor, v katerega je gorivo vbrizgano in gori za izpušno odprtino.

3.5 Enakovrednost med motorji z nihajočimi bati in motorji novih tipov

FIA si pridržuje pravico, da napravi spremembe na osnovi izvedenih primerjav motorjev klasičnega tipa in motorjev novega tipa. Izdala bo predhodno obvestilo dve leti prej, s 1. januarjem, ki sledi sprejeti odločitvi.

3.6 Izpušni sistem in glušnik

Četudi posebni predpisi dovoljujejo neki skupini zamenjavo izvornih glušnikov, morajo vozila, ki se udeležujejo dirke na javnih cestah,

ARTICLE 2: DIMENSIONS AND WEIGHT**2.1 Ground clearance**

No part of the car must touch the ground when all the tyres on one side are deflated.

This test shall be carried out on a flat surface under race conditions (occupants on board).

2.2 Ballast

It is permitted to complete the weight of the car by one or several ballasts provided that they are strong and unitary blocks, fixed by means of tools with the possibility to fix seals, placed on the floor of the cockpit, visible and sealed by the scrutineers.

Application: Touring Cars (Group A), Grand Touring Cars (Group B) and Group R cars. No kind of ballast is authorised in Production Cars (Group N).

In rallies, however, the carrying of tools and spare parts for the car in the cockpit and/or inside the engine bay and/or inside the boot only will be allowed under the conditions laid down in Article 253.

ARTICLE 3: ENGINE**3.1 Supercharging**

In case of supercharging, the nominal cylinder-capacity will be multiplied by 1.7 for petrol engines and by 1.5 for diesel engine, and the car will pass into the class corresponding to the fictive volume thus obtained.

The car will be treated in all respects as if its cylinder-capacity thus increased were its real capacity.

This shall particularly be the case for assigning the car to its cylinder-capacity class, its interior dimensions, its minimum number of places, its minimum weight, etc.

3.2 Equivalence formula between reciprocating piston and rotary engines (of the type covered by the NSU Wankel patents)

The equivalent cubic capacity is equal to the volume determined by the difference between the maximum and minimum capacities of the combustion chamber.

3.3 Equivalence formula between reciprocating piston and turbine engines

The formula is the following:

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

S = High pressure nozzle area - expressed in square centimetres by which is meant the area of the airflow 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 area between the fixed blades of the high-pressure turbine first stage.

In cases where the first stage turbine stator blades are adjustable, they must be opened to their greatest extent.

The area of the high-pressure nozzle is thus the product of the height (expressed in cm) by the width (expressed in cm) and by the number of blades.

R = The pressure ratio is the ratio of the compressor of the turbine engine.

It is obtained by multiplying together the 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 subsonic stages will be designated to have a pressure ratio of:

4.25 x 1.15 x 1.15 x 1.15 x 1.15 x 1.15 x 1.15 or 4.25 x (1.15)⁶.

C = Equivalent cubic capacity for reciprocating piston engines in cm³.

3.4 All engines into which fuel is injected and burned downstream of an exhaust port are prohibited.

3.5 Equivalencies between reciprocating piston engines and new types of engines

The FIA reserves the right to make modifications on the basis of comparisons established between classic engines and new types of engines, by giving a two-year notice from the 1st January following the decision taken.

3.6 Exhaust system and silencer

Even when the specific provisions for a group allow the replacement of the original silencer, the cars competing in an

imeti vedno izpušni glušnik v skladu s prometnimi predpisi države(v), po kateri(h) vozijo med dirko.

Če niso omejitve države, v kateri se odvija rally, nižje, velja za rally vozila omejitev hrupa na odprtih cestah največ 103 dB(A) pri 3500 vrtljajih motorja za bencinske motorje in pri 2500 vrtljajih za dizelske motorje.

Odprtine izpušnih cevi morajo biti največ 45 cm in najmanj 10 cm od tal.

Zadnji del izpuha mora biti v notranjosti obsega vozila in manj kot 10 cm od tega obsega in za navpično ravnino, ki gre skozi sredino medosne razdalje.

Poleg tega mora biti predvidena učinkovita zaščita, da vroče cevi ne morejo povzročiti opeklin.

Izpušna naprava ne sme imeti začasnega značaja.

Izpušni plini smejo izhajati samo na skrajnem koncu naprave.

Deli šasije ne smejo biti uporabljeni za odstranjevanje izpušnih plinov.

Katalizatorski izpuh:

V primeru, da je en model vozila homologiran v dveh možnih primerkih (katalizatorski izpuh in drugačen), morajo biti vozila v skladu z enim ali drugim primerkom. Izključena je kombinacija med tema dvema primerkoma.

Vsa vozila opremljena s kit-om (VK- WRC – S2000-Rallye) morajo imeti homologiran katalizator.

Za vse skupine velja, da morajo biti vozila opremljena z originalnim ali homologiranim katalizatorjem, če je ta obvezen v državi v kateri je vozilo registrirano, razen v primeru, da katalizator ni obvezen v državi organizatorici tekmovanja in se ga lahko zato odstrani.

Prepovedana je kakršnakoli sprememba homologiranega katalizatorja.

Kopija izvirnega homologacijskega dokumenta mora biti posredovana tehničnim komisarjem na vsakem tekmovanju.

3.7 Vžig vozila

Zaganjač z energijskim virom v vozilu, električnim ali drugim, mora biti možno vključiti vozniku, sedečemu za krmilom.

3.8 Valji

Motorje, ki nimajo srajčk, je možno popravljati z dodatkom materiala, toda ne delov.

ČLEN 4: PRENOSNI MEHANIZEM

Vsa vozila morajo imeti menjalnik z obvezno prestavo za vožnjo nazaj, ki deluje, ko vozilo štarta na dirki in katero lahko vklopi voznik v normalnem sedečem položaju.

ČLEN 5: OBESJE

Prepovedani so deli obes, ki so delno ali v celoti iz kompozitnega materiala.

ČLEN 6: KOLESA

Prepovedana so kolesa, ki so delno ali v celoti iz kompozitnih materialov.

Merjenje širine koles:

merjenje širine kolesa se opravi, ko je kolo nameščeno na vozilu in počiva na tleh, vozilo pripravljeno za vožnjo z voznikom v njem. Meri se v poljubni točki pnevmatike, razen na delu, ki se dotika tal.

Ko je več gum nameščenih kot del enega celotnega kolesa, morajo te upoštevati največje dimenzije, predvidene za skupino, v kateri se uporabljajo (glej člene 255-5.4 in 256-5).

ČLEN 7: KAROSERIJA/ŠASIJA/ŠKOLJKA

7.1 Vozila s spremenljivo karoserijo morajo biti v vseh točkah v skladu s predpisi za vozila z odprto karoserijo.

Vozila s trdo zložitveno streho morajo voziti z zaprto streho in ustrezno zaklenjeno.

7.2 Najmanjše notranje dimenzije

Če sprememba, dovoljena z Dodatkom "J", zadeva eno dimenzijo,

open-road event shall always be equipped with an exhaust silencer complying with the traffic regulations of the country(ies) through which the event is run.

For all cars used in Rallies and unless the limits imposed by the local authorities are lower, the noise level on the open road must not exceed 103 dB(A) for an engine rotation speed of 3500 rpm for petrol engines and 2500 rpm for diesel engines.

The orifices of the exhaust pipes shall be placed at a maximum of 45 cm and a minimum of 10 cm from the ground.

The exit of the exhaust pipe must be situated within the perimeter of the car and less than 10 cm from this perimeter, and aft of the vertical plane passing through the centre of the wheelbase.

Moreover, adequate protection must be provided in order to prevent heated pipes from causing burns.

The exhaust system must not be provisional.

Exhaust gas may only exit at the end of the system.

Parts of the chassis must not be used to evacuate exhaust gasses.

Catalytic exhausts:

Should two possible versions of one car model be homologated (catalytic and other exhaust), the cars must comply with one or other version, any combination of the two versions being prohibited.

All cars equipped with a kit (VK – WRC – S2000-Rally) must be fitted with a homologated catalytic exhaust.

For all groups, all cars must be fitted with an original or homologated catalytic exhaust if this is obligatory in the country in which they are registered, unless the catalytic exhaust is not obligatory in the organising country, in which case it may be removed.

No modifications to a homologated catalytic converter are allowed.

An authentic copy of the homologation document must be presented to the scrutineers for the event.

3.7 Starting on board the vehicle

Starter with electric or other source of energy on board operable by the driver when seated in the seat.

3.8 Cylinders

For non-sleeved engines, it will be possible to repair the cylinders by adding material, but not parts.

ARTICLE 4 : TRANSMISSION

All cars must be fitted with a gearbox including a reverse gear which must be in working order when the car starts the event, and be able to be operated by the driver when he is normally seated.

ARTICLE 5 : SUSPENSION

Suspension parts made partially or entirely from composite materials are prohibited.

ARTICLE 6 : WHEELS

Wheels made partially or entirely from composite materials are prohibited.

Measuring wheel width:

The width is to be measured with the wheel mounted on the car, on the ground, the vehicle in race condition, driver aboard, at any point along the circumference of the tyre, except in the area in contact with the ground.

When multiple tyres are fitted as part of a complete wheel, the latter must comply with the maximum dimensions for the Group in which these tyres are used (see Articles 255-5.4 and 256-5).

ARTICLE 7 : BODYWORK / CHASSIS / BODYSHELL

7.1 Convertible vehicles must comply in all respects with the specifications applying to open cars.

In addition, cars with a rigid retractable roof must be driven exclusively with the roof closed and locked up.

7.2 Minimum inside dimensions

ki je vnešana v homologacijski listini, ta dimenzija ne more biti vzeta kot činitelj za potrditev tega vozila.

7.3 Prostor za voznika in potnike

Zamenjava strani voznikovega sedeža je mogoča pri pogoju, da sta izvorno vozilo in modificirano vozilo ekvivalentni po mehanski plati ter so uporabljene deli dobavljivi s strani proizvajalca za tako zamenjavo za določen model.

Volanski drog lahko poteka samo skozi originalno odprtino, ki jo predvidi proizvajalec.

Za vozila Super 1600, Super 2000 in WRC, je zamenjava strani voznikovega sedeža možna samo s kompletnim volanskim mehanizmom, ki je homologiran kot option variant v homologaciji s strani proizvajalca.

Odprtina skozi katero prehaja volanski drog, mora biti prav tako homologirana s tem sistemom.

V voznikov prostor je dovoljeno nameščati le: rezervna kolesa, orodje, nadomestne dele, zaščitno opremo, opremo za medsebojno sporočanje, balast (če je dovoljeno), posodo za tekočino za umivanje stekla (samo: turistična vozila (Skupina A) in vozila velikega turizma (Skupina B)).

Vsi rezervni deli in orodje morajo biti pritrjeni ali za voznikovim/sovoznikovim sedežem ali pod voznikovim/sovoznikovim sedežem.

Prostor in sedež potnika odprtega vozila nikakor ne smeta biti pokrita.

Zabojčki, v katerih so čelade in orodje v prostoru za voznika in potnika, morajo biti iz negorljive snovi, katera v slučaju ognja ne oddaja strupenih par.

Originalna pritrditev zračnih mehov se lahko odstrani brez spremembe videza karoserije.

7.4 Vse plošče karoserije in šasije/školjke vozila morajo biti vedno iz istega materiala kot je pri prvotnem homologiranem vozilu ter imeti isto debelino kot prvotno homologirano.

Vsakršna kemična obdelava je prepovedana.

7.5 Pritrditev in zaščita žarometov

Dovoljeno je napraviti spredaj odprtine v karoserijo za podporo žarometov, omejitev je samo pritrditev.

V rallyu se lahko namestijo na žaromete prožne zaščite, ki ne odbijajo svetlobe; segati ne smejo naprej več kot 10 cm od stekla žarometov.

7.6 Vsak predmet, ki je nevaren (vnetljive snovi itd.), mora biti odstranjen iz prostora za voznika.

7.7 Zavesice (samo za rally)

Možna je namestitev prečnih zavesic glede na spodaj navedeno.

Če so prečne zavesice obvezne, mora biti ta zahteva navedena v dodatnem pravilniku.

V vsakem primeru, smejo biti prečne zavesice nameščene pod naslednjimi pogoji:

- biti morajo iz prožnega materiala;
- pokrivati morajo najmanj širino vsakega kolesa, toda najmanj ena tretjina širine vozila (glej sliko 252-6) mora biti prosta za zadnjimi in sprednjimi kolesi;

If a modification authorised by Appendix J affects a dimension stated on the homologation form this dimension may not be retained as an eligibility criterion for the car.

7.3 Cockpit

Inversion of the driving side is possible, on condition that the original car and the modified car are mechanically equivalent and that the parts used are provided by the manufacturer for such a conversion for the family concerned.

In particular, the steering column must pass through the bodyshell only via the hole made for that purpose by the manufacturer for the family concerned.

For Super 1600, Super 2000 and WRC cars, the inversion of the driving side will be obtained by a complete steering system homologated in option variant by the manufacturer.

The hole allowing the passage of the steering column through the bodyshell must be homologated with this system.

Only the following accessories may be installed in the cockpit: spare wheels, tools, spare parts, safety equipment, communication equipment, ballast (if permitted), windscreen washer water container (Touring Cars (Group A) and Grand Touring Cars (Group B) only).

All spare parts and tools must be fixed either behind the driver's and/or co-driver's seats or underneath the driver's and/or co-driver's seats.

The passenger area and seat of an open car must in no way be covered.

Containers for helmets and tools situated in the cockpit must be made of non-inflammable material and they must not, in case of fire, give off toxic vapours.

The original fitting of the air bags may be removed, without modifying the appearance of the bodywork.

7.4 All bodywork and chassis / bodyshell panels of the vehicle must be at all times of the same material as those of the original homologated car and must be of the same material thickness as that of the original homologated car.

All chemical treatments are forbidden.

7.5 Headlamp mounting and protection

The boring of holes in the front bodywork for light brackets is authorised, limited solely to mountings.

In rallies, non-reflecting protectors made from flexible material may be mounted on the headlamps; they must not protrude forwards beyond the headlamp glass by more than 10 cm.

7.6 Any object of a dangerous nature (inflammable products, etc.) must be carried outside the cockpit.

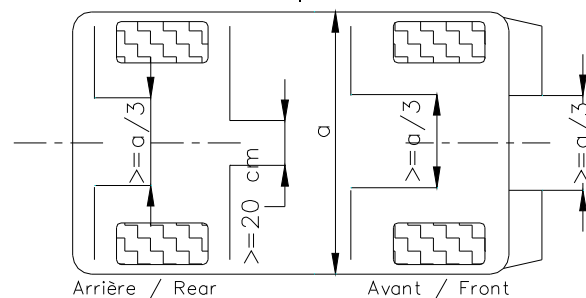
7.7 Mud flaps (in Rallies only)

It is possible to fit transverse mud flaps in conformity with the article below.

If transverse mud flaps are mandatory, this requirement must be mentioned in the supplementary regulations of the event.

In any case, transverse mud flaps are accepted under the following conditions:

- They must be made from flexible material.
- They must cover at least the width of each wheel, but at least one third of the width of the car (see Drawing 252-6) must be free behind the front wheels and the rear wheels.



252-6

- najmanj 20 cm razmaka mora biti med desno in levo zavesico pred zadnjima kolesoma;
- spodnji rob teh zavesic sme biti največ 10 cm od tal, ko vozilo stoji, brez osebe v njem;
- zgoraj in glede na celotno višino kolesa, mora pokrivati vsaj ¼ širine kolesa (gledano od zadaj),

- There must be a gap of at least 20 cm between the right and left mud flaps in front of the rear wheels.
- The bottom of these mud flaps must be no more than 10 cm from the ground when the car is stopped, with nobody on board.
- Above and over the entire height of the tyre, at least 3/4 of the width of the tyre must be covered (seen from behind).

-te zavesice ne smejo v navpični projekciji segati iz karoserije.

Na sprednji strani vozila se lahko namestijo zavesice proti brizgom iz prožnega materiala, če to dopušča ali zahteva posebni pravilnik dirke.

Ne smejo segati čez celotno širino vozila, ne presežati več kot za 10 cm svoje prvotne dolžine in najmanj ena tretjina širine vozila mora biti prosta pred sprednjimi kolesi.

ČLEN 8: ELEKTRIČNA NAPRAVA

8.1 Razsvetljava

Meglenke se lahko zamenjajo z drugimi lučmi in obratno, če je prvotna namestitvev ista.

8.2 Alternator in zaganjač alternatorja

Prihrditev alternatorja in zaganjača alternatorja je poljubna.

8.3 Trobilo

Samo v rally-ju: nivo glasnosti, ki ga proizvaja trobilo, mora presežati ali biti enak 97dB v časovnem intervalu 3 sekund merjeno na razdalji 7 metrov pred vozilom.

ČLEN 9: GORIVO - GORILNO SREDSTVO

9.1 Gorivo mora biti trgovske vrste iz oskrbovalne črpalke, brez drugih dodatkov kot mazalnega proizvoda v običajni prodaji. Gorivo mora ustrezati naslednjim zahtevam:

- 102.0 RON in 90.0 MON največ, 95.0 RON in 85.0 MON najmanj za neosvinčeno gorivo.

- 100.0 RON in 92.0 MON največ, 97.0 RON in 86.0 MON najmanj za osvinčeno gorivo.

Meri se po standardnih ASTM D 2699-86 in D 2700-86.

- Gostota med 720 in 785 kg/m³ pri 15°C (merjeno po ASTM D 4052).

- Za maksimalno 2,8 % (ali 3,7 % če vsebuje svinca manj kot 0,013 g/l) kisika in 0,5 % dušika (utežni procenti) sta največji dovoljeni količini, ostanek goriva sestavljajo izključno hidrokarbonati, ki ne vsebujejo kakega dodatka za povečanje moči.

Ugotavljanje dušika se opravlja po normi ASTM D 3228, ugotavljanje kisika pa z osnovno analizo z dopustnim odstopanjem 0,2 %.

- Največja količina peroksida in nitrooksidnih sestavin: 100 ppm (ASTM D 3703, ali če ni možno po tej, se ugotavlja po UOP 33-82).

- Največja količina svinca: 0,40 g/l ali norma države, v kateri je tekma, če je ta norma manjša (ASTM D 3341 ali D 3237).

- Največja količina benzena: 5 % (prostorninski odstotek) (ASTM D 3606).

- Napetost pare Reid največja: 900 hPa (ASTM D 323).

- Celotna izparjena količina pri 70°C: od 10 % do 47 % (ASTM D 86).

- Celotna izparjena količina pri 100°C: od 30 % do 70 % (ASTM D 86).

- Celotna izparjena količina pri 180°C: najmanj 85 % (ASTM D 86).

- Skrajna točka vrelišča: 225°C (ASTM D 86).

- Destilacijski ostanek, največ 2 % (prost.) (ASTM D 86).

Gorivo se sprejme ali odkloni po standardu ASTM D 3244 z zanesljivostjo 95 %.

Za vozila s katalizatorjem je uporaba osvinčenega goriva prepovedana.

Če krajevno dosegljivo gorivo ni zadostne kvalitete za uporabo tekmovalcev, mora ASN - države organizatorja zaprositi FIA za pregled, da dovoli uporabo goriva, ki ne ustreza zgoraj določenim lastnostim.

9.2 Diesel

Za diesel motorje mora biti gorivo plinsko olje, odgovarjajoče naslednji specifikaciji:

- stopnja hidrokarbona, % pri teži 90.0 min.

- specifična teža, kg/m³ 860 max.

- število cetanov (ASTM D 613) 55 max.

- izračunano število cetanov 55 max.

(ASTM D 976-80)

- vsebnost žvepla 50 mg/kg max.

(pr-EN-ISO/DIS 14596), po direktivi 98/70/CE

- In vertical projection, these mud flaps must not protrude beyond the bodywork.

Mud flaps to prevent splashing towards the front, made from flexible material, may be installed at the front of the vehicle, if the supplementary regulations of the event authorise them or impose them.

They must not protrude beyond the overall width of the vehicle, or beyond the original overall length by more than 10 cm, and at least one third of the width of the car must be free in front of the front wheels.

ARTICLE 8 : ELECTRICAL SYSTEM

8.1 Lighting

A fog light may be changed for another light, and vice versa, provided that the original mounting remains the same.

8.2 Alternators and Alternator-starters

The mounting of the alternators and alternator-starters are free.

8.3 Horn

In rallies only, the noise level produced by the horn must be greater than or equal to 97 dB during at least 3 seconds, measured 7m in front of the vehicle.

ARTICLE 9 : FUEL - COMBUSTIVE

9.1 The fuel must be commercial petrol which comes from a service station pump, without any additive other than that of a lubricant on current sale. The fuel must comply with the following specifications:

- 102.0 RON and 90.0 MON maximum, 95.0 RON and 85.0 MON minimum for unleaded fuel.

- 100.0 RON and 92.0 MON maximum, 97.0 RON and 86.0 MON minimum for leaded fuel.

The measurements will be made according to the standards ASTM D 2699-86 and D 2700-86.

- Density between 720 and 785 kg/m³ at 15°C (measured according to ASTM D 4052).

- A maximum of 2.8 % oxygen (or 3.7 % if the lead content is less than 0.013 g/l) and 0.5 % nitrogen by weight, the remainder of the fuel consisting exclusively of hydrocarbons and not containing any power-boosting additives.

The measuring of the nitrogen content will be carried out according to the standard ASTM D 3228 and that of the oxygen content by elemental analysis with a tolerance of 0.2 %.

- Maximum content of peroxides and nitrooxide compounds: 100 ppm (ASTM D 3703 or in the case of impossibility UOP 33-82).

- Maximum lead content: 0.40 g/l or the standard of the country of the event if it is lower (ASTM D 3341 or D 3237).

- Maximum benzene content: 5 % in volume (ASTM D 3606).

- Maximum Reid vapour pressure: 900 hPa (ASTM D 323).

- Distillation at 70°C: 10 % to 47 % (ASTM D 86).

- Distillation at 100°C: 30 % to 70 % (ASTM D 86).

- Distillation at 180° C: 85 % minimum (ASTM D 86).

- Maximum final boiling point: 225°C (ASTM D 86).

- Maximum residue: 2 % volume (ASTM D 86).

The fuel being accepted or rejected according to the standard ASTM D 3244 with a confidence limit of 95 %.

For vehicles with a catalytic converter, leaded petrol is forbidden.

If the fuel available locally for the event is not of a sufficient quality for use by competitors, the ASN of the organising country must ask the FIA for a waiver in order to enable the use of fuel not corresponding to the characteristics defined above.

9.2 Diesel

For Diesel engines, the fuel must be gas oil corresponding to the following specifications:

- Hydrocarbon level, % by weight 90.0 min.

- Density, kg/m³ 860 max.

- Cetane number (ASTM D 613) 55 max.

- Calculated cetane number 55 max.

(ASTM D 976-80)

- Sulphur content 50 mg/kg max.

(pr-EN-ISO/DIS 14596), according to directive 98/70/CE

9.3 Oksidacijsko sredstvo

Kar zadeva gorilno sredstvo, se sme primešati gorivu samo zrak.

9.4 Postopek oskrbovanja z gorivom

Standardizirani priključek:

- V primeru osrednje naprave, ki jo nudi dirkališče ali tekmovalci, mora biti polnilna cev opremljena z neprepustnim priključkom, ki se tesno prilega na standardiziran priključek, nameščen na vozilu (skladno z načrtom 252-5; notranji premer D ne sme presežati 50 mm).

- Vsa vozila morajo biti opremljena s polnilnim priključkom skladnim s to skico.

Ta neprepustni polnilni priključek mora delovati po načelu prostega teka, zato ne sme vsebovati nobene zadrževalne naprave, ki bi ga držala v odprtem stanju (kroglice, zatiči itd.)

- Vstopne odprtine za zrak morajo biti opremljene z nepovratnimi poklopci in ventili za zapiranje, zasnovanimi tako kot pri običajnih polnilnih priključkih ter enakega premera.

Med polnjenjem mora biti vstopna odprtina za zrak s primernim priključkom povezana ali z glavnim oskrbovalnim rezervoarjem ali s prosojno prenosno posodo s prostornino najmanj 20 l, ki je opremljena z zapiralno napravo, da je popolnoma neprepustna.

9.3 Oxydant

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

9.4 Refuelling procedure

Standardised coupling :

- In case of a centralised system provided by the circuit or a system provided by the competitors, the refuelling hose shall be provided with a leak-proof coupling to fit the standardised filler mounted on the car (in accordance with Drawing 252-5; the interior diameter D must not exceed 50 mm).

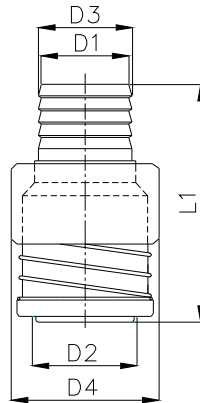
- All cars must be provided with a fuel filler complying with this diagram.

This leak-proof fitting must comply with the dead man principle and must not therefore incorporate any retaining device when in an open position (spring-loaded, bayonet, etc.).

- The air vent(s) must be equipped with non return and closing valves having the same closing system as that of the standard filler and having the same diameter.

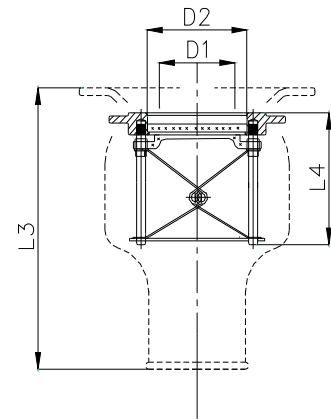
During refuelling the outlets of the air-vents must be connected with the appropriate coupling either to the main supply-tank or to a transparent portable container with a minimum capacity of 20 litres provided with a closing system rendering it completely leak-proof.

	D1	D2	D3	D4	L1
PP20M	2.0"	2.5"	2.25"	3.7"	6.3"
PP20MR	1.5"	2.5"	1.75"	3.7"	6.3"
PF20MS	1.5"	2.5"		3.7"	6.9"
PP15M	1.5"	2.0"	1.75"	3.3"	5.7"
PF30M	1.25"	1.65"	1.45"	2.68"	4.64"
PF40M	1.25"	1.65"	1.45"	2.68"	4.64"
PP125M	1.25"	1.75"	1.5"	2.9"	5.1"



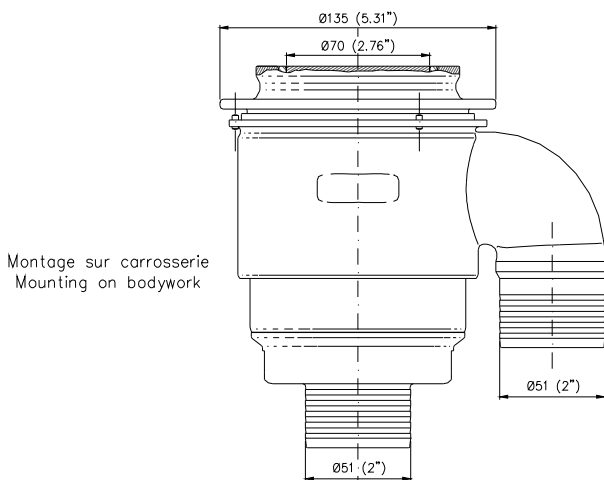
Prise male / Push pull series male

	D1	D2	L3	L4
PP20F	2.0"	2.5"	6.75"	3.25"
PP20FR	2.0"	2.5"	6.75"	3.25"
PF31F	1.75"	2.12"	5.3"	3"
PF41F	1.75"	2.12"	5.7"	3.38"
PP15F	1.5"	2.0"	6.75"	3.25"
PP125F	1.25"	1.75"	6.25"	3.1"



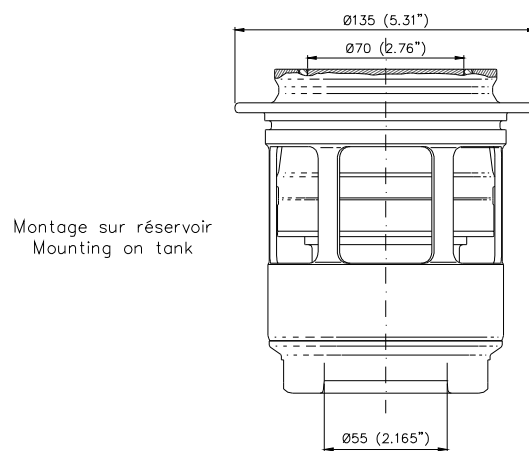
Prise femelle / Push pull series female

252-5 (Version A)



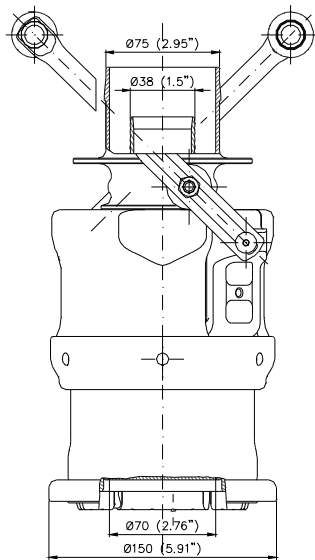
Montage sur carrosserie
Mounting on bodywork

Accoupleur femelle

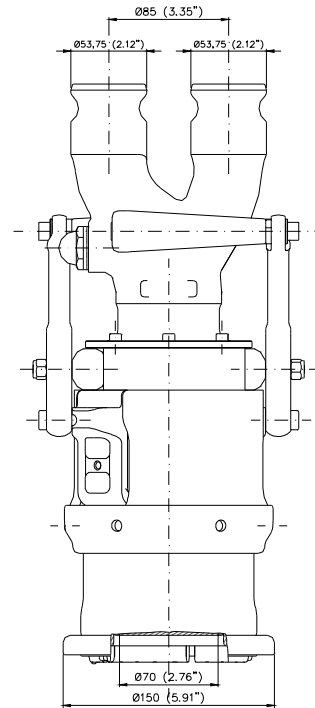


Montage sur réservoir
Mounting on tank

Female coupling



Coaxial
Accoupleur mâle



Parallèle / Parallel
Male coupling

252-5 (Version B)

Posode za odvajanje plinov morajo biti prazne v začetku polnjenja.

V primeru, da dirkališče ne more nuditi tekmovalcem osrednje naprave za polnjenje, se ti oskrbujejo na zgornji način.

Na noben način ne sme biti višina rezervnega goriva, ki ga uporabljajo, višja kot 3 m nad površino steze na kraju polnjenja. To velja za celoten čas prireditve.

Posode za odvajanje plinov morajo biti v skladu z eno od slik 252-1 ali 252-2.

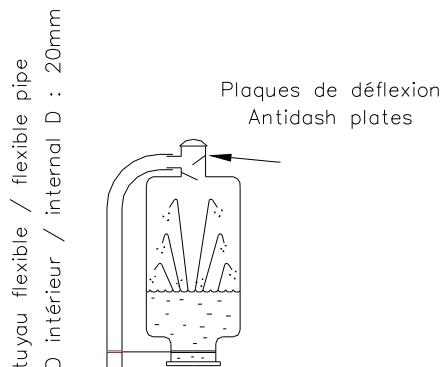
The venting catch tanks must be empty at the beginning of the refuelling operation.

In the cases where the circuits are unable to provide the entrants with a centralised system, they will have to refuel according to the above procedure.

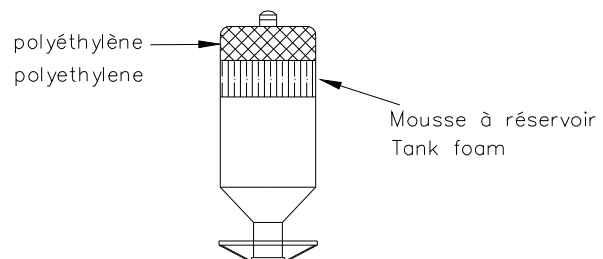
The level of the reserve tank may in no case be more than 3 metres above the level of the track where the refuelling is effected.

This applies to the whole duration of the event.

The overflow bottles must conform to one of the Drawings 252-1 or 252-2.



252-1



252-2

Zaloga goriva, kot vsi kovinski deli polnilne naprave, od priključka nad merilcem pretoka do rezervoarja in njegove podpore, morajo biti električno ozemljeni.

Priporoča se naslednji postopek:

1. Vsako stojno mesto mora biti opremljeno z dvema ozemljitvenima vodoma, kot pri letalih.
2. Napajalna naprava (vključujoč stolp, rezervoar, cev, oblogo, zaklopke in posodo za odvajanje plinov) mora biti priključena na enega teh ozemljitvenih vodov ves čas trajanja tekme.
3. Vozilo mora biti ozemljeno, vsaj začasno, z drugim vodom, čim se ustavi na tem mestu.
4. Na cev z gorivom se ne sme nihče priključevati, dokler nista izpolnjena pogoja 2 in 3.

The reserve tank and all metal parts of the refuelling system from the coupling over the flow meter up to the tank and its rack must be connected electrically to the earth.

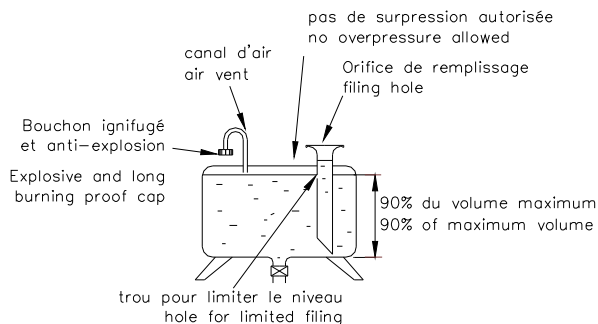
The application of the following is recommended:

1. Each pit should be equipped with two aircraft type grounding connections.
2. The refuelling system (including tower, tank, hose, nozzle, valves and vent bottle) should be connected to one of the above grounding connections for the entire duration of the race.
3. The car should be connected, at least momentarily, to the other grounding connection as soon as it stops in the pit.
4. No fuel hose connection (fill or vent) unless and until conditions

5. Vse osebjce, zadolženo za gorivo, mora nositi zaščitno antistatično obleko.

Posoda za gorivo je lahko:

- posoda iz gume tipa FT3 1999, FT3.5 ali FT5, od odobrenega proizvajalca, ali
- posoda v skladu z eno od slik 252-3 ali 252-4.



252-3

Uporaba: Za turistična vozila (Skupina A), vozila velikega turizma (Skupina B), je treba upoštevati splošne predpise prvenstev FIA.

9.5 Zračenje posod za gorivo

Dovoljeno je opremiti posodo z zračnikom, ki izstopa na strehi vozila.

9.6 Namestitev posod FT3 1999, FT3.5 ali FT5

Posodo FT3 1999, FT3.5 ali FT5 lahko namestimo ali na prvotnem mestu ali v prtljažniku.

Predvidena mora biti izpustna odprtina morebitnega razlitega goriva v prostoru, kjer je posoda.

Mesto in velikost polnilnega priključka, kot poklopca za zapiranje, se lahko spremeni pri pogoju, da nova naprava ne štrli izven karoserije in popolnoma preprečuje iztek goriva v enega od notranjih prostorov vozila.

Če je polnilni priključek v vozilu, mora biti ločen od prostora za voznika z neprepustno zaščito.

ČLEN 10: ZAVORE

Prepovedani so karbonski zavorni koluti.

ČLEN 11: AKUMULACIJA ENERGIJE

Skupna količina pridobljene energije shranjene v vozilu ne sme preseči 200kJ; ta energija se lahko ponovno uporabi vendar ne sme preseči 10kJ s pomočjo maksimalno 1kW.

ČLEN 12: HLAJENJE

Razen izključno za namen hlajenja voznika je prepovedano med celotno prireditvijo prevažati in/ali uporabljati kakršnokoli trdno, tekočo ali plinasto snov tako znotraj kot tudi zunaj vozila.

Prevod :

Aleš Zrinski & Janez Flerin

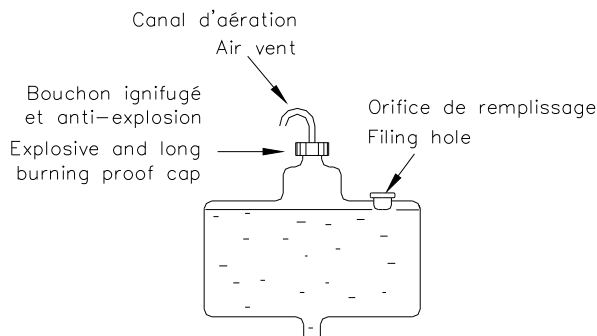
Copyright © 2002-2011

2 and 3 have been fulfilled.

5. All fuel-handling pit crew members should wear non-static protective clothing.

The refuelling tank may be one of the following:

- models made of rubber, of the type FT3 1999, FT3.5 or FT5, built by an approved manufacturer, or
- tanks conforming to one of the Drawings 252-3 or 252-4.



252-4

Application: For Touring Cars (Group A), Grand Touring Cars (Group B), refer to the general prescriptions of the FIA Championships.

9.5 Tank ventilation

It is authorised to equip a tank with ventilation exiting through the car roof.

9.6 Installation of the FT3 1999, FT3.5 or FT5 tank

The FT3 1999, FT3.5 or FT5 tank may be placed either in the original location of the tank or in the luggage compartment.

There must be an orifice to evacuate any fuel which may have spread into the tank compartment.

The position and the dimension of the filler hole as well as that of the cap may be changed as long as the new installation does not protrude beyond the bodywork and guarantees that no fuel shall leak into one of the interior compartments of the car.

If the filler hole is situated inside the car, it must be separated from the cockpit by a liquid-tight protection.

ARTICLE 10 : BRAKES

Carbon brake discs are forbidden.

ARTICLE 11 : ENERGY STORAGE

The total quantity of recuperated energy stocked in the car must not exceed 200 kJ; this energy may be re-used without exceeding 10 kJ by means of 1kW maximum.

ARTICLE 12 : COOLING

Except for the sole purpose of cooling the driver, the transporting and/or use of any solid, liquid or gas cooling agent, whether inside or outside the car, is prohibited at all times throughout the event.

SPREMEMBE VELJAVNE OD 01.01.2012

MODIFICATIONS APPLICABLES ON 01.01.2012