3.7 TRIAL GROUP PM "PROMODIFIED"

3.7.1 General information

Vehicles should have 2 axles and 4wd. The construction of the chassis is free. Use of equipment that are not written in this rules and that will make the vehicle more competitive is forbidden. Only diesel or ordinary petrol is allowed as fuel. Beyond this the following regulations apply:

3.7.2 Frame/body

3.7.2.1 Frame/chassie/wheelbase

Optional.

3.7.2.2 Body

The body work must minimum consist of a bonnet (hood), front wings, body sides and rear wings. Body material is optional. The front of the car must retain a mask or face with appearance of lights. For dimensions se point 3.7.2.3.

3.7.2.3 Dimension / Vehicle outline

The body has to be minimum from middle of front axle to the middle of rear axle, and from the inside wheels of right side to inside wheels of left side see drawing. It's not allowed to make attachment to the body just to make it wider or longer. Single seaters is not allowed, two seats side by side should be fit inside the body. The body has to be minimum the allowed size from the bottom of the body to at least the beltline.

3.7.2.4 Window/window frame/mirror

The windscreen and the windscreen frame including its fastening parts may be removed. In case a windscreen is used it must consist of laminated glass, Lexan/Polycarbonat or Makrolon. Plexiglas is forbidden. Windscreens should not have damages, for safety reasons. Should damage occur the windscreen must be approved by technical control.
Mirrors of all kinds are allowed.

3.7.2.5 Body lift

Bodylift is permitted. This must be rigid.

3.7.2.6 Bumper

Optional.

3.7.2.7 Floor / firewall / transmission tunnel

A floor plate made out of minimum 2mm thick Aluminum or 1 mm thick steel has to be installed in case the original floor plate is not existing. Changes of the firewall and the transmission tunnel are allowed.

3.7.2.8 Passenger area

A protective wall must be present to protect driver and co-driver from engine, oil cooler, radiator and to prevent fire or fluid from spreading into the passenger area.

3.7.2.9 Seats

Seat of racing type with the possibility for 4 point harness must be present. The seats for the driver/codriver must be well secured, and if the seat is adjustable it should have a locking device at both sides. Seats must have head restraints that covers at least 2/3 height of the helmet. Codrivers seat must be present.

3.7.2.10 Harness

Harness must at least be of type 4-point belts or so-called suspender belts (y-belts) or more, and they must be well attached to the body and/or rollcage according to harness manufacturer's specifications. The harness must be in good condition and may not be modified. If new mounting points are created in the body, a steel reinforcement plate with a surface area of at least 40 cm2 and a thickness of at least 3 mm must be used. The passengers must be buckled at all time in the section during driving or rescue. The belt system used is to be put on according to its regulation and may not be manipulated. Vehicles with active airbag or belt restrain systems must be marked at both doors with the “Airbag”-symbol. It´s allowed to remove the airbags.

3.7.2.11 Rollcage

A sixpoint rollcage is mandatory. The rollcage must consist of a Basic structure according to 3.2.6.4, doorbar 3.2.6.5, backstays, diagonal member 3.2.6.6 and roof reinforcement 3.2.6.7. There must be a space of at least five cm from inside the tubes in the rollcage to the drivers/codrivers shoulder arm in a normal position. If not, the car must be fitted with side nets to prevent injury to the driver/co-driver.

External rollcage is allowed.

See 3.2.6 for more info.

3.7.2.12 Protective netting / Armstraps

Protection nets or armstraps must be used. Net must cover the door/window area so the arm/hand cannot come outside the car. This also applies to armstraps. If arm straps are used they must open together with the harness.

3.7.2.13 Body attachment

Hardtop, tarpaulin with linkages inclusive all locked mounting plates, tailgate, rear seats, spare wheel, spare wheel handle, mirror and mirror handle , side and back windows, side turn signals, door handles and doors may be removed. If doors are present, interior door panel must be present. Material free, however not paper, cardboard, fabric or similar. Doors/netdoors must be able to open from the outside, or have a marking on the outside that shows where the opening is on the inside of the door.

3.7.2.14 Fluid tubes

A protection of the fluid tubes for the fuel -, oil-, and brake hoses outside of the body must be provided against damages. (stones, corrosion, mechanical breaks etc..). Inside the body the tubes must be protected from any fire risk. If the series arrangement is maintained, no additional protection is necessary. If no serial tank is used there must be an anti-return valve inside the breather.

3.7.2.15 Towing eye/hook

There must be either one towing eye or hook in the front and in the back with an inside diameter of at least 50 mm. They must be firmly embodied, easily accessible and have to be painted red, yellow or orange, so that the body of the vehicle contrast with the towing eye/hook.

3.7.2.16 Undershield
Undershield is optional.

3.7.3 Suspension
3.7.3.1 Spring
Active suspensions, hydraulic or air are forbidden, otherwise optional.

3.7.3.2 Spring pendants
Longer spring pendants are permitted.

3.7.3.3 Shock absorber
Optional. Air shocks allowed.
Shock absorbers with external reservoir and/or filling valves for gas or oil, must have supplementary protection to prevent oil or gas spurting on to driver, codriver or officials in case of damage in case of a rollover.

3.7.3.4 Bump stop
Optional.

3.7.3.5 Level control
Not allowed.

3.7.3.6 Torsion stick / Stabilizer bar
Optional.

3.7.4 Steering
3.7.4.1 Steering
Rear-wheel steering or frame-steering is not allowed, otherwise free. Only the driver are allowed to steer the vehicle in a section.

3.7.5 Brake
3.7.5.1 Brake
The brake assembly is optional, but there must be at least one brake at each wheel.
The braking force distribution for parking brakes or operating brakes at axles must be equal.
The serial braking force distribution between both axles must not be changed. Brake hoses or brake tubes have to be protected thoroughly, and brake hoses must be secured with metal fasteners.
Plastic stripes are not allowed.
Single wheel brakes are allowed.

3.7.5.2 Parking brake/emergency brake
A well functional parking brake must be present**,** operating on the brakes of one and the same axle, or the driveshaft of one axle. The control system of the parking brake can be operated hydraulically or mechanically, and it must be mechanically independent of the main system.
The control system of the parking brake must be possible to engage with one hand or one foot, and it must automatically remain locked when engaged.
The vehicle must also be fitted with an emergency brakesystem. The emergency brake system can be shared with the parking brake, or be a total separate system, and it must be able to slow down the vehicle in case of failure of regular brakes. If the vehicle is equiped with a inline cutting-brakesystem

of the "American" type, where each wheel is able to brake individually without using the foot brake pedal and it´s associated brake master cylinder, the brake system is approved as emergency brake system despite that brake lines, hoses and calipers are shared with the main brake system. See 3.2.5 for test procedure.

3.7.5.3 Steering brake
Optional. Only the driver is allowed to operate the steering brakes.

3.7.6 Wheels
3.7.6.1 Tire
Rubber tires filled with air, otherwise optional. The maximum height of tires is 1000mm. Spikes, chains and dual tires are not permitted.

3.7.6.2 Rim
Optional. Track widening/wheel spacers are allowed.
All kinds of bead lock system (internal and external) is allowed.

3.7.6.3 Wings
1/3 of the tire track (profile area) must be covered with a wing. If this is not the case, this can be achieved in form of flared wings. The wing must cover the tire from the sill and 90 degrees of the tires radius.
The material of the flared wings must be made out of solid and not transparent material.

3.7.7 Engine
3.7.7.1 Engine
Optional.
NOX-injections are not allowed.

3.7.7.2 Mixture preparation
If there is a defect with the gas control it must be ensured that the engine goes on idling (e.g.: by a spring at throttle valve shaft).

3.7.7.3 Cooling
Optional. Radiator must not be placed in the passenger area. If the radiator is placed behind the passenger area, it must be covered with protective walls to prevent hot water from reaching driver/codriver at any angle. Even if the car has rolled over. The radiator, waterhoses and waterpipes should be securely fastened, and if water pipes and hoses go through the passenger area, they must be well protected to prevent the driver and codriver from scalding or burning. All tubes under the vehicle containing hot fluid (above 50° C) must be well protected, or painted bright red to warn the marshalls from scalding or burning in case of a roll-over.

3.7.7.4 Fueltank / fuelpipe
The fuel tank is optional. Fuel tank of racing type is recommended. It must be firmly joined in a sufficiently protected position and installed to the vehicle. It must not be in the passenger compartment. The fuel tank must be separated from the passenger compartment by a fireproof guard. The fuel tank has to be leak proof in any position of the car or the fuel tank.

3.7.7.5 Exhaust

Optional, but the exhaust opening from the side or from above must be behind the middle of the wheelbase, and all pipes that may be touched from outside the vehicle must be covered with thermal protection. Exhaust pipes may not exceed laterally over the body. The rear of the exhaust system must be designed so that it´s possible to make a control of vehicle noise without problem. Noise limitation: The volume of the exhaust system may reach max. 98+2 decibel (DMSB near field measuring method)

3.7.8 Drivetrain

3.7.8.1 Gearbox

Optional, but no “Hydrostat engines”.
Vehicles with automatic gearboxes must be secured so that the engine only can be started in “Neutral” and/or “Park”.

3.7.8.2 Axle/axle ratio

Optional.

3.7.8.3 Diff-lock

Optional.

3.7.8.4 Disconnect of axle / drive system

Optional.

3.7.9 Electric

3.7.9.1 Battery

Optional. Electrical cables should be well protected.
The positive battery terminal has to be covered to prevent contact to other metal parts.

3.7.9.2 Main circuit breaker

A main circuit breaker is mandatory. The main circuit breaker must cut all electrical circuits, battery, alternator or dynamo, lights, ignition, electrical controls, etc. and must also stop the engine. The main circuit breaker must be installed on the driver’s side in front of the windshield. It must be reachable from the inside and from the outside. It must have a noticeably marked on/off position. Diesel engines which do not have an electrical "turn of"-solenoid must have a "stop the engine"-wire installed along with the main circuit breaker.

3.7.9.3 Lights

It is mandatory to keep the appearance of original headlights in the front of the vehicle. Either by using original lights or they can be painted, printed or made as a sticker. Otherwise optional.

3.7.9.4 Electronic support

It is not allowed to use electronic support like radios, cameras and sensors.