

## **3.4 TRIAL GROUP O (ORIGINAL VEHICLES)**

### **3.4.1 General information**

Modification of the vehicle is forbidden unless specifically allowed and only the permitted changes are allowed. The car must follow the manufacturer's conditions, like EU regulations or main importer regulations. All accessories and all special equipment, which can be supplied with the vehicle purchase, are allowed if no restrictions are present.

Only diesel or standard petrol is allowed as fuel. Beyond this the following regulations apply:

### **3.4.2 Frame/body**

#### **3.4.2.1 Frame/chassie/wheelbase**

Original.

#### **3.4.2.2 Body**

Original. Sill protection is allowed other body protection is not allowed, body parts can only be replaced by original body parts or similar in the same material. All body parts must be firmly attached in their original fastening spots with original or similar fastening hardware.

#### **3.4.2.3 Dimension / Vehicle outline**

The dimensions must correspond to the manufacturer data.

The vehicle outline may not be changed with masking tape or other measures.

#### **3.4.2.4 Window/window frame/mirror**

Windscreen frame may not be removed or folded down. If a windscreen is used it must consist of laminated glass, Lexan/Polycarbonate 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.

#### **3.4.2.5 Body lift**

Not allowed.

#### **3.4.2.6 Bumper**

The bumpers may not be removed. The plastic bumper corners may be removed if they are removable in original. In the case of partly or totally damaged bumpers during the section, they must be repaired before the next section. No additional bumper protection is allowed.

#### **3.4.2.7 Floor / firewall / transmission tunnel**

Original.

#### **3.4.2.8 Passenger area**

Original.

Floor mat and headliner may be removed, otherwise no changes allowed.

#### **3.4.2.9 Seats**

The seats for the driver/co-driver must be well secured. Seats must have head restraints that covers at least 2/3 height of the helmet. Co-driver's seat must be present. Its allowed to replace the original seats with racing seats with the possibility for 4-point harness.

**3.4.2.10 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 cm<sup>2</sup> 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, and in case of removal of passenger airbag, the hole in the dash-panel from the airbag must be covered.

**3.4.2.11 Rollcage**

A six-point rollcage is mandatory. The rollcage must consist of a Basic structure according to 3.2.6.4, backstays, diagonal member 3.2.6.6 and roof reinforcement 3.2.6.7.

Outside rollcage is allowed but, but additional tubes cannot in any way protect the body parts except sills. See 3.2.6 for more info.

**3.4.2.12 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.

**3.4.2.13 Body attachment**

Hardtop, tarpaulin with linkages inclusive all locked mounting plates, tailgate, rear seats, spare wheel, spare wheel handle, mirror and mirror handle, door and back windows may be removed. Edgeways mouldings, side turn signal, door handles and the original doors must be present. Original doors can be reduced to half doors. Interior door panel must be present. Material free, however not paper, cardboard, fabric or similar.

Vehicles delivered without doors must likewise be equipped with at least half doors. It's the driver's responsibility to prove that the vehicle is delivered without doors, otherwise the original doors must be used. The material must be splinter-proof, for example wood, metal, Lexan, and the material must not be transparent.

Definition for half doors with vehicles without serial doors:

There must be a cover available, which prevents feet or legs from falling out when the vehicle is tilted. This cover must have at least the height of the belt line of the vehicle. In addition, the cover must have at least the height of the highest point of the unloaded seat. The cover can be made to be opened. The door 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. Belt line is defined as follows: In front the line of the bonnet. For open vehicles back and side, the side above the wall. For closed vehicles, if no open version exists, the bottom edge of the side window, and the back window.

**3.4.2.14 Fluid tubes**

Original.

**3.4.2.15 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.

**3.4.2.16 Undershield**

Undershield is optional.

**3.4.3 Suspension****3.4.3.1 Spring**

The type of springs must correspond to its original technical specification.

**3.4.3.2 Spring pendants**

Original. Revolver shackles is not allowed.

**3.4.3.3 Shock absorber**

Shock absorbers are free of choice, however the number of shock absorbers, the working principle, and the fastening points must remain identical to its original design. Gas-pressure shock absorbers are to be regarded from the work principle as hydraulic shock absorbers.

Adjustable shock absorbers are forbidden.

**3.4.3.4 Bump stop**

Original.

**3.4.3.5 Level control**

A serial level control may be inserted while maintaining the original work version.

**3.4.3.6 Torsion stick / Stabilizer bar**

Stabilizer must be present in original form and function.

**3.4.4 Steering****3.4.4.1 Steering**

The steering stop screws are optional.

**3.4.5 Brake****3.4.5.1 Brake**

Vehicles with drum brakes may be reequipped at the front axle with disc brakes.

The serial track width must be kept.

Brake tubes and brake hoses must be in original, and well secured in original way. Plastic stripes are not allowed.

**3.4.5.2 Parking brake/emergency brake**

The parking brake must be maintained in the original, and in good condition. [It's allowed to relocate / modify the parking brake handle if it's not reachable with 4/6-point harness.](#)

It is allowed to move a foot operated parking brake pedal sideways to allow mounting of a 6-point rollcage. The parking/emergency brake must be able to slow down the vehicle in case of failure of the regular brakes. See 3.2.5 for test procedure.

**3.4.5.3 Steering brake**

Not allowed.

**3.4.6 Wheels****3.4.6.1 Tire**

The maximum size of tires is 825 x 275 mm.

Max depth of the tire pattern is 16 mm, measure point is in the middle of the profile. The maximum of allowed tire types are Mud-terrain-profiles (MT-Profile). Not allowed are competitions tires like "Alligator", "Bronco Dirt Devil", "Greenway Diamond Back", spikes and chains. The mounting of dual tires is not permitted. If there are doubts about the profile, the Eurotrial Committee must decide. (so far refused tires see ANNEX 3.2 and 3.3).

#### **3.4.6.2 Rim**

Only serial motor vehicle type – bounded rim sizes may be used. (Diameter, width, and insertion-depth). Cars that normally are distributed with tires smaller than 205 R 16 or 6.50 / 16 are allowed to use these sizes with rims ET 20-25.

Spare wheels and/or tires can be removed.

#### **3.4.6.3 Wings**

Original.

#### **3.4.7 Engine**

##### **3.4.7.1 Engine**

Engine must correspond to it's original technical specification.

##### **3.4.7.2 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).

##### **3.4.7.3 Cooling**

Original.

##### **3.4.7.4 Fuel tank / fuel pipe**

The original tank must be kept in its outer form and in its function in original place. Protection plates are allowed.

##### **7.4.7.5 Exhaust**

After the last serial muffler the exhaust system is free of choice. 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)

#### **3.4.8 Drivetrain**

##### **3.4.8.1 Gearbox**

Gearboxes and gearbox ratio must correspond to original specifications.

Vehicles with automatic gearboxes must be secured so that the engine only can be started in "Neutral" and/or "Park".

##### **3.4.8.2 Axle/axle ratio**

Axles and axle ratio must correspond to original specifications.

All kinds of portal-axles will be forbidden from 2019. Even if it's original equipment.

##### **3.4.8.3 Diff-lock**

The use of the differential lock and how one handles it for the rear drive axle is free of choice. Further differential locks are permitted, if these are serial specific locks. The component that makes this work must also be serial specific. The same applies to electronic driving assistance.

#### **3.4.8.4 Disconnect of axle / drive system**

The disengagement of drive axles is not permitted, unless it corresponds to the series. Remanufacturing to 2WD Low is not permitted.

### **3.4.9 Electric**

#### **3.4.9.1 Battery**

The battery must be securely fastened in its original place.

The positive battery terminal has to be covered to prevent contact to other metal parts.

#### **3.4.9.2 Main circuit breaker**

A main circuit breaker is **mandatory recommended**. 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 off"-solenoid must have a "stop the engine"-wire installed along with the main circuit breaker.

#### **3.4.9.3 Lights**

It's mandatory to keep the appearance of original headlights and taillights and they must correspond to their original form, meaning that they can be replaced with painted copies made from plastic with identical dimensions as original. It is allowed to replace bumper-mounted front and rear lights with copies made of plastic or painted metal.

#### **3.4.9.4 Electronic support**

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