

6.0 Vehicle Classification

6.1 General

6.1(a)

Competitors are advised that the TTRC reserves the right to check the specifications of any vehicle without the vehicle being officially protested.

Please remember that the spirit of the regulations is the main criteria when enforcing these regulations.

6.1(b) Power to Weight Rating (Pwr)

Cars will be classified based on their power to weight rating (PWR). The PWR for standard cars shall be determined by dividing a metric Tonne (1000 kg) by the vehicle quoted empty curb weight in kilograms then multiplying by its horsepower BHP-SAE net.

6.1(c) Engine Power

If a vehicle BHP cannot be satisfactorily established in the judgement of the competition secretary, then such vehicles will be required to have their BHP assessed by using a G-Tech Performance Meter. This assessment will be made by at least two independent scrutineers appointed by the competition secretary and the average of their assessment be applied. The scrutineers shall have absolute discretion when carrying out their tasks, and their decision will be final.

6.1(d) Vehicle Weight

If the manufacturers curb weight cannot be satisfactorily ascertained, then such cars will be weighed under the supervision of the competition secretary on a scale designated by the competition secretary.

The car must be presented with its gas tank full and with only one spare tyre and one set of standard tools.

6.1(e) Group Merging - General

Any Group 1 car may enter in Groups 1, 2 or 3 and any Group 2 car may enter in Groups 2 or 3. Competitors must ensure that when a vehicle is entered in Group 2 or 3 the vehicle must conform to the safety regulations listed in Appendix A for that Group.

6.1(f) Group Merging - Stage Rallies

Three cars shall constitute a Group/Class. When a Group/Class is still not subscribed even after merging upwards the competitor (s) will be allowed to merge into the next Group above. When the competitor (s) merges into the Group above the vehicle (s) will then be classified under the cubic capacity (Cc) regulations for that Group. Competitors will only be allowed to merge up to Group 3. Any Group 1 vehicle merging upwards must still comply with all Group 1 trim and the same applies to a Group 2 vehicle, which may merge to Group 3.

For a Group to be subscribed, the competitors are only required to start the first special stage. To be classified as finishers the competitors must complete two-thirds of the total stages of the rally.

6.1(g) Fuel

The following Fuels are approved for use by the TTRC – Pump Gas, Diesel, Race Fuel

Race Fuels Approved:

- Shell Turbo Rally (Unleaded FIA Spec Fuel)
- Shell WR (Unleaded FIA Spec Fuel)
- VP – Street Blaze 103 (Unleaded)
- VP – Motorsport 109 (Unleaded)
- VP - Racing Fuel C12 (Non-oygenated)
- VP – Racing Fuel C16 (Non-oygenated)
- VP – Racing Fuel Q16
- All Sunoco Equivalents to the above fuels

Any competitor being scrutineered for compliance on this list, will on request declare which fuel is being used. This is subject to a sample at anytime by the Scrutineer and tested accordingly. Any competitor who wishes to use a fuel not stated above shall send an application in writing to the TTRC (no less than 7 days prior to an event) for consideration. The use of methanol as a fuel or for water injection or any other purpose is NOT allowed.

6.1(h) Safety

See Appendix A.

6.1(i) Exhaust Noise

The check which is done by the TTRC for exhaust noise is as follows: 1/2 meter from the end of the tail pipe at an angle of 45 degrees @ 4500 rpm under no load to a maximum of 108 dB's on 'A' scale (slow). (THIS IS COVERED ABOVE.)

6.1(j) 4WD Four - Wheel Drive Vehicles

Two classes have been provided to facilitate unmodified & modified 4WD cars, Group 2, Class N and Group 3 Class A. No 2WD car shall be eligible to enter in these Groups/Classes and, therefore, cannot be merged into them. Where a 4WD Class or Group S is not subscribed and no merging is possible, then the 4WD or Group S car(s) in question will compete against all other competitors and score points accordingly.

6.2 Free Of Penalty in All Groups

6.2(a) Engine

- a. Blueprinting of engine is allowed as is balancing (i.e. weight matching, not lightening) of reciprocating and rotating components.
- b. Machining of the following items to within manufacturer's specifications for engine rebuilding/maintenance - cylinder head, cylinder block, crankshaft, valves, valve seats. Up to a 0.040" oversize re-bore will be allowed. After-market pistons must comply with manufacturers' engine specifications - i.e. weight, ring size and number of rings. Compression ratio must remain within plus or minus 10% of standard.
- c. The material in the elastic part of the engine mountings is unrestricted.
- d. Cooling fans may be added - original may be removed or relocated
Cooling fans may be added but not removed.
- e. Radiators, providing they remain in the same general location.
- f. The engine cooling system thermostat is unrestricted as well as the temperature at which the fan operates. Thermostats may be removed completely.
- g. The removal of air-conditioner compressor belts.
- h. The fitting of oil coolers and pressurized oil reservoirs.
- i. Exhausts are free beyond the manifold, however silencing must be maintained as per rule 5.2.3. exhaust dB limit.
- j. Recognized replacement consumables are free i.e. air filter elements, spark plugs, points, condensers, lubricants, oil filters, ht. and lt. leads, clutches (not competition units), fuel lines & hoses (if safety considerations are met and fuel volume/pressure limits are not exceeded), distributor caps & rotors, brake hoses & pipes, engine hoses & pipes, engine bearings (not competition units), piston rings (not competition units), gaskets and seals.
- k. Speed limiting/warning devices may be disabled, in the presence of the chief scrutineer or his representative, providing this can be achieved without affecting any other engine management component function.

6.2(b) Transmission

- a. Must be as listed in the vehicle manufacturers' brochure/option package for the particular model of car entered.

6.2(c) Suspension, Steering & Chassis

- a. The main spring material and dimensions are unrestricted but not their type (coil, leaf, torsion bar, rubber etc.) or number (this shall not preclude altering the number of leaves in a leaf spring). The spring seats may be relocated or be adjustable along the spring axis. When presented for scrutineering and during competition, however, any adjustment mechanism must be either welded or suitably bonded/fixed in place by such permanent means as to satisfy the officials that adjustment is no longer possible.
- b. Shock absorbers/dampers are unrestricted but not their number, type (telescopic, arm etc.), system of operation (hydraulic, friction, mixed etc.) or mounting points.
- c. The material in the elastic part of McPherson/Chapman strut upper turret mount/bush is unrestricted as long as the design of the mount/bush is not changed and no metallic material is used to replace elastic material.
- d. Strut tower braces will be allowed for the front and rear strut/shock absorber towers. All braces must be above the wheel centre line at ride height.

6.2(d) Wheels & Tyres

- a. Replacement of wheel rims, whether steel or alloy is allowed. Wheel rim diameter may be changed if not offered as an option in the original brochure. If this is done, the fitted wheel diameter (wheel rim with fitted and correctly inflated tyre) must not be less than the overall diameter of the original standard wheel with OEM tyre. Up to a maximum of 6" width is permitted or as offered as standard or an option by the manufacturer.
- b. Spacers are free but track width must not be more than 2" wider than standard.
- c. All wheel rims fitted to the vehicle must be the same diameter.

6.2(e) Braking System

- a. Brake pad and brake lining material is unrestricted as well as their mountings (riveted, bonded etc.) provided that the contact surface of the brakes is not increased.
- b. The fitting of brake servos.
- c. Anti-lock braking systems may be disabled in the presence of the chief scrutineer or his representative, providing this can be achieved without affecting any other function.

6.2(f) Bodywork & Interior

- a. The removal of carpets, floor mats and all other flammable materials.
- b. Fitting of non-standard front seats and steering wheels providing they are able to satisfy the scrutineer's safety requirements. No go-kart type seats will be allowed.
- c. Fitting of additional instruments.
- d. The removal of the spare tyre, jack and wheel tool.
- e. Rear seats may be removed if a 4-point or greater roll-cage is fitted.
- f. The absence of breakable & detachable trim, internal & external, up to a maximum of 5Kgs.
- g. Sump and tank shields are unrestricted.

6.2(g) Electrical System

- a. The fitting of two spot lights for road rallies provided that the tops of these lights are not above the level of the bonnet at its highest point and they are wired so that they will go out when the headlights are dipped. Additional lights may be allowed for special stage rallies on closed roads.
- b. The fitting of an additional reversing light provided that this is wired through the reverse switch and will go out as soon as reverse gear is disengaged or has an illuminated warning switch.
- c. The battery make, cables and location are free provided it is a safe and secure position external of Driver's and Navigator's cockpit area. The battery must be contained in an approved battery box and its position verified and approved by the Chief Scrutineer. Battery capacity may be increased.
- d. Generators may be replaced by alternators and vice versa. Either one may be replaced by a unit of higher power/output.

6.3 GROUPS AND CLASSES

Cars will be divided into four Groups - Groups 1, 2, 3 and S. Cars in Group 1 will be classified according to power to weight ratio. Cars in Groups 2 and 3 will be divided into classes as follows:

GROUP 1 -

CLASS 1 - Less than 80 BHP/Tonne

CLASS 2 - 80 BHP/Tonne to less than 100 BHP/Tonne

CLASS 3 - 100 BHP/Tonne to less than 120 BHP/Tonne

CLASS 4 - 120 BHP/Tonne to less than 140 BHP/Tonne

GROUP 2 -

CLASS 1 - 0 to 1400 Cc's.

CLASS 2 - 1401 to 1600 Cc's

CLASS 3 - 1601 to 2000 Cc's

CLASS 4 - 2001 Cc's and upwards

CLASS N - Standard production 4WD cars

GROUP 3 -

CLASS 1 - 0 to 1600 Cc's

CLASS 2 - 1601 Cc's and upwards

CLASS A - Modified 4WD cars

Rotary engines cc equivalent = 2 x swept volume

Example – (12A = 2292 Cc's) (13B = 2608 Cc's)

Weight Factors

- For a conventional 2 or 3 valve per cylinder engine - 0.70 Lb./Cc
- For a conventional 4 and up valve per cylinder engine - 0.85 Lb./Cc
- For Rotary engines - 12A 1820 Lbs. minimum, 13B 2050 Lbs. minimum.

GROUP S -

Weight Factors

- For a conventional 2 or 3 valve per cylinder engine - 0.50 Lb./Cc
- For a conventional 4 and up valve per cylinder engine - 0.70 Lb./Cc
- For Rotary engines - 12A 1500 Lbs. minimum, 13B 1700 Lbs. minimum.

6.4 Group 1

- a. Cars will be classified based on their specification as presented at scrutineering, except as it relates to engine bhp and manufacturer's weight information, which will be ascertained as outlined below.
- b. Cars in Group 1 shall be classified according to their power to weight ratio, using the calculation method as stated previously.
- c. Only locally available standard production tyres will be allowed in this Group. No tampering with tyres is allowed including grooving or application of chemicals. See Appendix B for the list of legal tyres for tarmac and loose, for Group 1. Competitors are advised that if they would like to use a tyre in Group 1 which is not listed in Appendix B then the Classification & Regulations Committee should be provided with all the relevant details of the tyre for consideration for possible inclusion in the list. This list will be updated as necessary and there will be a 6-month waiting period before any newly approved tyre can be used.
- d. The Committee reserves the right to weigh and classify any car. Cars may not be lightened in any way other than the allowances made under "free of penalty in all groups".
- e. Overall height will be taken from the "B" pillar (or centre pillar) and must not be less than 1.5 inches lower than manufacturer's stated overall height (see brochure). This 1.5 inch will include tyre sizes and tyre wear and will be taken with tyres inflated to manufacturer's recommended tyre pressure.

6.5 Group 2

6.5(a) Engine

- a. Change of engine is allowed and the car will be classified according to the size in Cc's of the engine fitted. Engines used must retain the same number of cylinders and configuration i.e. in-line 4 cylinder for in-line 4 cylinder. All engines must be production car engines.
- b. No Nitrous Oxide injection is allowed.
- c. The block, crankshaft and connecting rods must be standard production items for the engine chosen. The block may be bored by up to 1 mm and be classified according to original cubic capacity, or be bored/sleeved more than 1 mm and be classified according to its actual cubic capacity. Bearings, bolts, gaskets, seals, oil pump and oil pump pick-up are unrestricted.
- d. Alternative pistons may be used provided they comply with original manufacturer's general specification - i.e. weight (5% tolerance) and number of rings. Compression ratio is free and machining of the piston is allowed.
- e. The head fitted must be the production head used by the manufacturer for the block utilized and oriented in the same way. Machining, porting and polishing of the head is allowed. Valve springs, guides, lash caps, seats and collets are free. The valve head diameter must remain standard but the shape and material may be altered.
- f. It is permitted to close any unused apertures in the cylinder head and block where these may be redundant.
- g. Camshafts, their material, timing, type and dimensions of the pulleys, chains and belts are free. The camshaft followers, shims, rockers and push rods are free. Cars fitted with four or more valves per cylinder engines with non-standard cams will be moved up one Class (e.g. a twin-cam 16-valve 1300cc engine with modified camshafts will run in Class 2 - 1401 - 1600cc). Standard cams must be retained for four or more valves per cylinder engines over 2000cc. Under 1000cc multi-valve engines remain in Class 1.
- h. Exhaust manifolds and exhaust systems are unrestricted.
- i. Only original manufacturers' standard flywheels may be used but these can be machined.
- j. Non-standard clutch discs and pressure plates are allowed.
- k. Crankshaft doweling and flywheel bolts are unrestricted.
- l. Forced induction systems are unrestricted.

Engines with forced induction will have 50% added to the cubic capacity; this calculated capacity will determine which Class the car will run in.

- m. Engine management systems and electronics (ignition, fuelling etc.) are unrestricted.
- n. Dry-sumping is not allowed, however, modifications to engine wet-sump are unrestricted.
- o. Rotary engines competing in this Group will have 100% added to their measured cc's to determine the Class in which they will compete. No bridge or peripheral porting allowed. No competition gear sets allowed. All engine seals must be standard.
- p. Cooling fans are unrestricted.
- q. Intake manifold, carburettors and fuel injection are unrestricted.

6.5(b) Transmission

- a. Standard production gearboxes must be used and must fit the chosen engine without alteration to, or replacement of, the bell housing, use of adapter plates or alterations to the block.
- b. In the case of RWD cars the rear axle must be the original axle supplied with the body shell used or, if changed, the axle supplied by the manufacturer for the engine used. Differential units and final drive gears fitted to FWD gearboxes must do so without alteration to, or machining of, the gearbox casing.
- c. Limited-slip and welded differentials are allowed.
- d. Final-drive ratios are unrestricted.
- e. Drive shafts, universal joints and C.V. joints are unrestricted.
- f. External gear selection mechanisms are unrestricted as long as the standard shift pattern is retained.

6.5(c) Suspension, Steering & Chassis

- a. The position of the rotational axis of the mounting points of the suspension to the wheel uprights/axles and to the bodyshell (or chassis) must remain unchanged - this shall not preclude the use of strut top mounts that allow for camber/castor adjustment and fit without alterations to the bodyshell. All suspension members must retain their original function (except in e.).
- b. The suspension mounts may be modified by using different bushing material, brackets, bolts or rose-joints.

- c. The main spring material and dimensions are unrestricted but not their type (coil, leaf, torsion bar, rubber etc.). The spring seats may be relocated or be adjustable along the original spring axis. A spring may be replaced with two or more springs of the same type, concentric or in series, provided that they can be fitted without any modifications to the mounting points other than those specified in this article.
- d. Shock absorbers and struts are unrestricted but not their number, type (telescopic, arm etc.), system of operation (hydraulic, friction, mixed etc.) or mounting points.
- e. Anti-roll bars may be replaced (provided that their mounting points remain the same), added (where there was none before or to supplement an existing anti-roll bar) or removed entirely.
- f. Panhard rods and anti-tramp bars may be added but not by way of moving, or removing, any original suspension member (other than in e.).
- g. Ride height may be altered but not by way of altering the suspension mounting points.
- h. Steering mechanisms and their mountings are unrestricted.
- i. Wheel hubs/uprights may be modified or changed to facilitate the fitting of different brakes, bearings, driveshafts, struts etc. where allowed.

6.5(d) Wheels & Tyres

- a. Maximum wheel rim width of eight (8) inches is allowed. Diameter is optional up to a maximum of 2 inches over standard. Maximum wheel diameter is eighteen (18) inches.
- b. Only tyres listed in Appendix B and C are legal for use in Group 2. No tampering with tyres is allowed including grooving or application of chemicals. Competitors are advised that if they would like to use a tyre in Group 2 which is not listed in Appendix B or C then the Classification & Regulations Committee should be provided with all the relevant details of the tyre for consideration for possible inclusion in the list. This list will be updated as necessary, there will be a 6-month waiting period before any newly approved tyre can be used.
- c. Track width will be limited to 4" over standard.

6.5(e) Braking System

- a. Brakes are unrestricted except for brake discs which are only limited in their diameter. Front brake disc diameter can only be increased by one inch over standard. Rear discs cannot be any larger than maximum allowed front diameter.

6.5(f) Bodywork & Interior

- a. The cars may not be lightened in any way other than the allowances made under “free of penalty in all groups”.
- b. Fender extensions are allowed provided that no more metal than is necessary to install the extensions is removed and the modifications to the wheel arches/fenders are carried out in such a way as to maintain the structural integrity of the vehicle. Where the rear outer wings/fenders are cut to allow greater wheel clearance the inner wheel-arch must be re-welded (no fiberglass panels) to the outer wings/fender with fabricated panel etc. Inner wheel arches may not be altered other than to extend them to be re-welded to the outer wing (no fabricated tubs).
- c. Roll cages must be fitted as per Appendix A, item 4.
- d. Firewall may not be moved or altered. To facilitate the fitting of a roll cage, holes may be made in the bulkhead to allow the passage of roll cage bars. These holes must be completely resealed to prevent the passage of flames or liquids. Beating, not cutting, of firewall is permitted to facilitate fitting of engine ancillaries (e.g. Carburetors).
- e. No after-market aerodynamic devices allowed.
- f. The location of the battery and reservoirs/tanks (not fuel) may be changed.
- g. The re-location of the original fuel tank is permitted only if an approved Certified Fuel Cell, is used. The original fuel tank is not must be removed.

6.5(g) Class N

Only standard production 4WD cars may be entered in this class and must meet the 2009 FIA Group N regulations (last update 3rd November, 2009) (LATEST UPDATE) in their entirety with the exception of the homologation requirements.

6.6 Group 3

6.6(a) Weight

- a. In each Class all cars will meet or exceed an official minimum weight as raced rallied but without fuel. It is not the intention of these rules to allow tubular frame (or the like) chassis to compete in this Group.
- b. In consideration of safety, the following is a guideline to lightening and preparation of Group 3 vehicles. The original roof and A, B and C pillars must be retained. Lightening by drilling holes may be considered provided strength is not compromised. Forward bulkhead cannot be lightened but only modified to facilitate fitting of engine ancillaries. The bulkhead must be airtight between engine and passenger compartment. The same applies to rear engine vehicles. The floor in the area between the forward bulkhead and forward of the "B" pillar cannot be lightened, however it may be modified to attach seats, roll cages, exhaust etc. All other panels can be lightened or substituted. The passenger compartment must be maintained so that stones etc. cannot enter the passenger compartment from below or from wheel arch area. See Appendix A for further details.

6.6(b) Engine

- a. Engines must retain production car blocks and remain in the same general location and in the same mode (i.e. transverse or longitudinal etc) as the production vehicle.
- b. 50% will be added to the cubic capacity of forced induction engines concerning the calculation vehicle weights.
- c. Forced induction Rotary engine cars must weigh 2366 Lbs. for 12A engines and 2665 Lbs. for 13B engines. No after-market forced induction will be allowed on rotary engines.

6.6(c) Transmission

- a. Gearboxes shall be unrestricted.

6.6(d) Suspension, Steering and Chassis

- a. Suspension shall be unrestricted.

6.6(e) Wheels and Tyres

a. Maximum rim width is 10 inches. Diameter unrestricted up to a maximum of eighteen (18) inches.

6.6(f) Braking System

a. Brakes shall be unrestricted.

6.6(g) Bodywork and Interior

a. The silhouette of the vehicle as seen from the side elevation above wheel centres must be maintained except for the bonnet and trunk/tailgate.

b. Aerodynamic devices, such as spoilers, skirts etc. will be allowed subject to the regulations.

1) Front spoilers/splitter may be added below the plane of the front wheel hubs, within the perimeter contour of the coachwork as viewed from above, however it can extend forward up to a maximum of 9" ahead of the original bodywork. The underside of the front spoiler may be shrouded or covered with a plate.

2) Skirts fitted between the front and rear wheels may not extend beyond the outer edge of the wheels or wheel arches, whichever is greater.

3) Rear wings/spoilers may have a maximum area of 780 sq. inches, including lips, tabs and side plates, and be no wider than 74". The wing must fit within the contour of the car as seen from above. The top most part of the wing must be no more than 6" above the highest point of the roof. These wings must be attached to the tailgate/trunk lid or "C" pillar. Only in the absence of a tailgate/trunk lid may the wing be fixed to the rear bodywork.

c. Door bars must be fitted to the roll cage where driver/navigator door is lightened; bars must be the same size and thickness as roll cage.

6.6(h) Electrical System

Electrical system shall be unrestricted.

6.6(i) Class A

Only 4WD cars may be entered in this class and must meet the 1999 FIA Group A regulations (last update 1st November 1999) (LATEST UPDATE) in their entirety with the exception of the homologation requirements.

6.7 Group S

Will consist of any entirely locally fabricated chassis or production-car based four-wheeled vehicle with four-wheel brakes, which complies with the following regulations:

4WD vehicles will not be allowed in this group.

6.7(a) Engine

- a. Engines must use production blocks.
- b. Forced induction will incur a 50% increase to the cc's of the engine used.

Please note that the weight per cc of any car using forced induction will be based on the corrected cc's of the engine as outlined above. In addition forced induction will incur a cumulative percent increase in cc's i.e. PLUS 50 % for forced induction.

6.7(b) Transmission

- a. Transmission and final-drive shall be unrestricted.

6.7(c) Suspension, Steering & Chassis

- a. All welded joints must be seen to be free of cracks and slag.

6.7(d) Wheels & Tyres

- a. Maximum rim width is 8 inches. Diameter unrestricted up to a maximum of eighteen (18) inches.
- b. See Appendix B and C for a list of legal tyres in this Group.

6.7(e) Braking System

- a. All four wheels must be observed to be locking.
- b. There must be a functioning handbrake.

6.7(f) Bodywork & Interior

- a. All parts of the car must be securely attached e.g. batteries must be bolted to the frame and they must be completely covered.
- b. Fuel tanks must be properly secured to the frame of the car. See safety regulations.

- c. A firewall constructed of non-combustible material must be provided between the driver and the engine and transmission unit. See safety regulations.
- d. All open top vehicles must carry a roll cage capable of supporting the vehicle without the driver's head coming into contact with a line drawn from the highest to the lowest point of the vehicle. All roll cages must be at least 1.5 inches outside diameter seamless steel pipe. If galvanized pipe is used the minimum outside diameter must be 1.75 inches.
- e. All vehicles must have full-harness seat belts and arm restraints for both driver and navigator where applicable.
- f. Aerodynamic devices are allowed subject to the safety regulations.

6.8 Appendix A - SAFETY

6.8(a)

All cars must carry a working fire extinguisher or extinguishers (two) of a total minimum weight of 5 Lbs. of CO₂, Lite Water or dry powder and they must have a readable gauge. "Plumed in" systems should be mounted such that they can be activated from inside the car by the driver/navigator while belted in the seat or from outside the car from a location clearly marked by an "E" in red. Handheld extinguishers should be securely mounted with a quick-detachable system and should be accessible while seated but not necessarily with the seat belts on. They may be mounted on the floor in front of or behind the front seats. If mounted behind, the only acceptable area is between the seats in the region of the transmission tunnel.

6.8(b)

Master cut out switches must be fitted to all cars competing in Groups 2,3 and S. It is also recommended in Group 1. The switch must be fitted such that both the driver and someone from outside the vehicle can operate the said switch. A Red Flash in a Blue Triangle should identify location of switch or pull knob.

6.8(c)

Vehicles fitted with certified standard fuel tanks mounted inside the trunk must have the trunk area hermetically sealed from the passenger compartment regardless of whether the rear seat is removed or not, or must use a safety/bag type fuel cell. All fuel tanks must have exterior venting.

6.8(d)

All cars competing in any speed event or all-stage rally, must be fitted with a six-point roll cage with the exception of Group 1, where a four-point roll cage shall be sufficient, and Group 1, Classes 1 and 2 where a roll cage is not compulsory, providing item 19 of this section is complied with. Groups 2, 3 and S must have a minimum of a 6 point roll cage with diagonal fitted. All soft top vehicles must have a full roll cage manufactured by a recognized manufacturer of roll cages or be locally fabricated using 1.5 inch diameter seamless steel

tubing of 0.090 inch minimum thickness for the main structure and 1.25 inch diameter steel tubing of 0.090 inch minimum thickness for the secondary braces. The Safety Committee must check all locally fabricated structures. Only aluminium alloy roll cages manufactured by a recognized roll cage manufacturer are allowed, and the Safety Committee must approve any alterations to these cages. Cars competing in navigational rallies only (excluding stages) do not require roll cages.

6.8(e)

Front safety windscreens must be maintained in all cars except Group S. If cars are fitted with non-laminated windscreens then visors/goggles will be required for driver/navigator.

6.8(f)

Any vehicle damaged during a speed event must be re-scrutineered before the vehicle will be allowed to compete again. Cars damaged during a rally are to be checked at the next stop over if they are able to continue to compete in the rally. It is the competitors' responsibility to inform the Clerk of the Course that his vehicle was damaged and needs to be re-scrutineered, under the penalty of exclusion from the event.

6.8(g)

Full harness belts with three or more mounting points are mandatory for stage rallies and speed events. They must be fixed to original seat belt fixtures, the roll cage structure or, where attached to the sheet metal of the car, must have a steel backing plate of at least 4 inches square and 3/16" thick.

6.8(h)

The use of Approved Competition seats is mandatory in all Groups 2 & 3 cars. Seat fixture must be either to original pick-up points, or where bolted to the floor, must be reinforced with 4 inch square steel backing plate with a minimum thickness of 3/16".

6.8(i)

All cars must be fitted with front and rear towing eyes to be used if the car can be moved freely. Their location must be clearly identified with either a red arrow (painted or tape) or the eye itself must be painted or taped in yellow, red or orange (Day-Glo).

6.8(j)

All doors must remain unlocked during event or practice.

Where driver's window is not up or is unavailable either safety net or arm restraints must be used.

All cars must be fitted with at least one effective working rear view mirror.

6.8(k)

Cars must be fitted with proper crankcase ventilation systems where excess oil is re-circulated to either sump or intake manifold. Cars not fitted as above must be fitted with a metal oil catch tank of minimum 0.5 gallon capacity, fitted with either an inspection tube or an oil return to the sump. All engine breathers must be run into a catch tank. Dry sump system must have the vent for the dry sump tank run into a catch tank first and then vented out of the passenger/trunk compartment. Oil hoses must be high-temperature hoses and properly clamped.

6.8(l)

Any vehicle using Nitrous Oxide must use a kit supplied by an approved manufacturer of such systems. All lines must be steel braided aircraft quality and be securely attached to the vehicle. Tank must have a safety blow-off valve and if fitted inside the passenger compartment must be fitted with a dump tube running outside the compartment. The tank must also be fitted such that it cannot become detached in the event of an accident.

6.8(m)

All fuel lines must be clamped and secured. Fuel or oil lines running through passenger compartment must be approved quality for particular use and must be properly secured to floor and panels.

6.8(n)

No wood-rimmed steering wheels are allowed.

All competitors competing in speed events and stage rallies must wear a minimum of single layer Nomex racing suit with the exception of Group 1, Class 1 and 2 only, where it shall be optional but highly recommended.

6.8(o)

Helmets should meet no less than SNELL 85 90 or BS 6658 type A or AR rating. Competitors should ensure that the helmet is kept in good condition. Helmets found with scratches/dents may be deemed unsafe by the scrutineers.

6.8(p)

Entrants in Group 1, Classes 1 and 2, may compete without a roll cage or Nomex suits as detailed before in this section, but only provided that none of the modifications listed under "The Following Will Be Allowed Free of Penalty in All Groups" item 2.1 g, 2.3 a, 2.3 c, 2.3 d and 2.6 a are made to the vehicle. If any of the modifications are carried out, then the vehicle must be fitted with a roll cage as per those regulations and the competitors must wear Nomex suits. Competitors are advised that it is not the intention of these rules to allow any competitor in any championship to compete without roll cages or Nomex suits, but it is a special provision to allow first time competitors or irregular entrants to take part in events.

6.8(q)

Wheels/tyres cannot extend beyond the fender/wheel arch bodywork (except Group 1, which is already restricted by limits on track width and bodywork alterations). This will be interpreted to mean that the top 1/3 of the wheel circumference must be covered by the fender/wheel arch when viewed from above (plan view) with the front wheels in the straight-ahead position.