

This 2006 version (Jan 06) of the Technical Regulations is for information only and may be subject to change when published in the Supplementary Regulations.

Minor revisions for 2006 are shown in red text.

Endurance Road Rallying is a formula for standard production cars which must conform to the specifications set out in the Motor Sports Association 'Blue Book' section K22.21. The following Technical Regulations clarify how these are to be applied for the 2006 Lombard Rally.

## A.1 DEFINITIONS

The term 'car' will mean a unitary construction motor vehicle designed to carry four or more persons. The term 'model' refers to all the variants of the same family of cars. The terms 'standard' and 'original' will mean conforming to the showroom specification of the actual model of car entered as it was produced and sold to the general public through the manufacturer's usual dealer outlets. The Organisers will have absolute discretion in identifying separate models.

## A.2 CAR SPECIFICATION

All cars and their components, e.g. engine numbers, must conform to their vehicle registration document and the statutory vehicle regulations. Cars must be in completely standard condition except for the specified modifications detailed in these regulations. All other modifications are prohibited and will be penalised up to exclusion from the event. All components and equipment, and every measurement and dimension must conform precisely to the manufacturer's published standard specification for the particular model of car entered. Entrants must supply the Organisers with any vehicle documentation as required.

## A.3 COMPONENT PARTS

Every part or component of the car must be a standard production item identifiable as the manufacturer's listed and numbered part, except where alternative components are specifically permitted by these Regulations. No standard part may be machined, lightened or polished unless specifically permitted within these Regulations.

## A.4 SAFETY EQUIPMENT

It is mandatory that all cars be equipped with:

An AFFF fire extinguisher of at least 1.75 litres. This must be within easy reach of both occupants inside the car and be securely mounted in quick release brackets bolted to the car. If a plumbed-in system is fitted, an additional hand-held AFFF extinguisher, as above, must also be fitted.

Seat belts to at least MSA Blue Book Q 2.1 and Q 2.1.2 specification (full harness, 4 point fixing).

Rollover protection to at least MSA Blue Book Q1 specification (single hoop and 2 back stays).

Front windscreen of laminated glass.

Mud flaps for all four wheels.

First aid kit, warning triangle, tow rope and SOS/OK Board.

## A.5 BODY (exterior)

Cars must have bodywork that represents the manufacturer's original profile, as in standard or

manufacturer's optional extra form. All bodywork panels must be of the material provided as standard by the car manufacturer. Front and rear bumpers must be retained and be of the same material and dimensions as those fitted by the manufacturer. The fitting of additional wheel arch extensions is prohibited. Cars may not be lightened from the manufacturer's standard production weight. Strengthening of the bodyshell is permitted. De-mountable strut brace(s) may be fitted. Detachable sump guards, transmission, fuel tank and silencing system protection plates may be fitted. Bonnet, door and rear door/hatch locks may be changed and additional catches fitted. **In the interests of safety self locking door mechanisms should be disabled.** Sunroofs are acceptable.

#### **A.6 BODY (interior)**

All major internal trim must remain as originally supplied by the manufacturer. The exceptions are:- full harness belts must be fitted; a roll cage must be fitted; the steering wheel may be replaced; the front seats may be replaced; rear seats may have their backs folded down and securely fastened (or cut only where necessary to allow the fitting of the roll cage and seat belts); parcel shelves may be removed; trim and carpets behind the rear seats in the boot space may be removed; inside door panels may be reshaped to accommodate roll cage door bars or substituted by an alternative panel from a model variant; safety air bags may be removed or disabled; additional instruments, switches and controls may be fitted providing the layout of the original components is not changed; interior accessories may be added to improve comfort, convenience or safety, provided they do not affect the performance of the car. The glass areas of the car must not be rendered opaque except for the sunstrip area.

#### **A.7 ENGINE & TRANSMISSION**

The engine must in all respects conform to that originally fitted by the manufacturer for the model of car. No part may be machined, balanced, lightened, polished or otherwise modified in any way except for a service reground crankshaft and/or cylinder re-bore which does not exceed 1.5mm (60 thou) or does not exceed the engine capacity class limits by more than 2.5%. Engine and gearbox mountings may be modified or replaced provided there is no alteration to the engine and gearbox or their position within the car. Additional engine braces are allowed provided they utilise existing attachment points on the engine and a strengthening plate may be attached to the base of the sump pan. Dry-sump lubrication is not permitted. Forced induction is not permitted. Carburettor engines may have only the standard, maximum two carburettor chokes (two single or one double.) Fuel injection engines must retain the standard injection system complete with plenum chamber and throttle body unmodified. Air intake trunking, to the air filter, is free. Air filters and elements are free, but must be fitted to ensure the vehicle complies with MSA noise regulations (see A.8 below).

All component parts of the gearbox and transmission must remain as standard **for the model of car entered** and be unmodified except the clutch friction material which is free. **The use of a limited-slip or torque-biasing differential is prohibited.**

#### **A.8 EXHAUST SYSTEM**

The original exhaust manifold must be retained as standard but the dimensions and routing of the exhaust system after the exit of the manifold may be modified provided any originally fitted catalytic converter is retained. Additional straps and brackets may be fitted to the exhaust system. Noise levels must comply with the MSA noise limits for road rallies which requires the vehicle to produce no more than 74 dB(A) at 2/3 maximum rpm, when measured at an 8.0m distance from the centre of the car.

#### **A.9 ELECTRICAL SYSTEM**

The wiring loom and ignition and engine management system may be modified. The battery may be changed and its mountings strengthened but its position must remain as standard.

## **A.10 LIGHTING SYSTEM**

Vehicles may have a maximum of four forward facing beams, as well as side & indicator lights. A headlamp provides the main beam and dipped functions. An auxiliary lamp provides a beam other than that provided by the headlamp.

A headlamp may consist of a single reflector with a dual filament bulb, or separate reflectors, each with single filament bulbs providing the functions of main beam and dipped beam separately. These will be considered as the equivalent of a single, dual filament headlamp unit **and as a single beam.**

Lamp units comprising two reflectors, where one reflector is fitted with a dual filament bulb, will be considered to be a combined headlamp and auxiliary lamp. In this instance therefore, additional auxiliary lamps may not be fitted.

Auxiliary lights using gas discharge technology are not permitted. Gas discharge headlamps may not be retrofitted. Light pods are not permitted.

Where more than four beams are fitted as standard, only four may be used and the rest must be rendered unusable for the duration of the event.

No external navigation or marshals' lights are permitted. No reversing lights other than those fitted by the manufacturers are permitted.

## **A.11 FUEL SYSTEM**

Alternative fuel pump(s) may be used. Fuel lines may be changed without restriction but must be protected by a fireproof covering where they pass through the interior. The fuel tank may be changed.

## **A.12 COOLING SYSTEM**

The position of the water radiator must remain unchanged but the core construction and mountings may be changed.

## **A.13 BRAKING SYSTEM**

All brake components must be as standard except for the friction material of brake pads and linings and the brake fluid. Hydraulically operated parking brakes are not permitted. Anti-lock braking systems may be removed or disabled. Hydraulic brake lines may be changed and stone protection added.

## **A.14 SUSPENSION & STEERING**

**The type, mounting method and position of all suspension components shall be as specified by the manufacturer. The shock absorbers may be of any make and may be uprated from standard. Adjustable spring platform struts are permitted but remote reservoirs are not.** Springs are free but must retain their original location. Bushes may be changed for similar polymer materials but rose-joints or similar metal joints are prohibited. Power assisted steering systems may be removed. Steering and track control arms may be changed or strengthened provided the operating dimensions remain as standard. Wishbone pans may be strengthened but the operating dimensions must remain as original. The geometry of the suspension must not be altered.

## **A.15 WHEELS & TYRES**

The **only** type of tyre to be used throughout the event is **from** the 'Road Plus' range, as supplied by Colway. **The tread pattern may not be altered. Only in the case of an emergency can another type of tyre be purchased from a retail outlet in order to remain in the event.** This action must be

reported to the Chief Scrutineer at the end of the Leg. Failure to do so may result in penalties as detailed in Article 4.2 and 14.2. It is the intention that additional Colway 'Road Plus' tyres be available for purchase at the end of each Leg. The choice of road wheel is free provided that the wheel-tyre combination fits within the standard unmodified wheel arch. The number of wheels and or tyres carried in the car is free and they must be securely fastened in position. **This also applies to any tools and spare parts carried in the car.**

*If you have any queries contact the Chief Scrutineer, Peter Elliott, before the event*

*01388 833778, [peterselliott@yahoo.co.uk](mailto:peterselliott@yahoo.co.uk)*

*If you need tyres contact Colway Motorsport in plenty of time to ensure your supply.*

*0191 384 6319 or [www.colwaytyres.co.uk](http://www.colwaytyres.co.uk)*