ACTC CLASSIC TRIALS SERIES - RULES AND REGULATIONS Appendix A1 - General Technical Requirements for Cars

(This version, effective from 1st January 2014, supercedes all previous versions)

A1.1 General

All vehicles shall comply with the relevant parts of Regulations J and T of the current edition of the MSA Competitors' and Officials' Yearbook, except as modified below, and the current Construction and Use Regulations. Regulations individually identified in these Rules are cross-referenced to the 2013 Yearbook but shall be read in conjunction with the equivalent clause in the current Yearbook. The ACTC imposes additional regulations as follows:

A1.2 Vehicle classes

A1.2.1 Effective date: 1st January 2014.

MSA Regulation(s): T.10.

Commentary: (i) It is considered appropriate to provide additional guidance for cars in classes 2 and 5(b). (ii) Classes 6(b) and 7(b) are modified to cover the situation where all vehicles within a particular model range are fitted with torque biasing differentials or traction control as standard and it is not therefore possible to substitute a free differential from another model within the range. (iii) The clarification of front-engined and rear-engined is needed to define appropriate classes for cars generally referred to as mid-engined MSA Regulation T10 is reproduced below in full with the ACTC revisions shown in **bold text**.

Classic Reliability Trials Vehicles will be classified as follows unless otherwise stated in SRs.

- 1 Front-engined, front wheel drive production cars (except vehicles in Class 6).
- Production cars built prior to 1941, and the following: MG TC, Morgan 4-4 Series 1, HRG 1100 and 1500, and Ford models (upright models to 1959) E04A, E494A, E4930A/B, E93A, E493A, and 103E. **The ACTC publishes Guidelines for Class 2 cars**.
- Front-engined, rear wheel drive, production saloons (except vehicles in Class 6).
- 4 Rear-engined, rear wheel drive production saloons up to and including 1300cc (except vehicles in Class 7).
- 5(a) Front-engined production sports cars (except vehicles in Classes 1 and 6).
- Vehicles built from pre1941 components (except vehicles in Class 2) and satisfying the tyre regulations in *T.10.11*. **The ACTC publishes Guidelines for Class 5(b) cars**.
- 6(a) Rear-engined, rear wheel drive production cars (except vehicles in Class 4).
- 6(b) Front-engined production cars fitted with torque biasing differentials as standard equipment, or any other form of traction control as standard equipment, throughout that model range and unavailable without it from stock.
- 7(a) Production cars modified beyond Permitted limits.
- 7(b) Rear-engined production cars fitted with torque biasing differentials as standard equipment, or any other form of traction control as standard equipment, throughout that model range and unavailable without it from stock.
- 7(c) Front engine cars manufactured on a limited basis conforming to an accepted specification. Where modified beyond the accepted specification these cars will be classified in Class 8. These cars comply with either or both of 7 (c) (i) or 7 (c) (ii) below.
- 7(c) (i) Have the rearmost part of the front seat cushion(s) forward of any part of the rear tyres.
- 7(c) (ii) Have a wheelbase of 90in (228.6cm) or greater.
- 8(a) Non production cars.
- 8(b) Rear-engined cars (except vehicles in Classes 4, 6, and 7).
- 8(c) Front engine cars manufactured on a limited basis (except those in Class 7) including those which:
- 8(c) (i) Have the rearmost part of the front seat cushion(s) rearward of any part of the rear tyres, or
- 8(c) (ii) Have a wheelbase of less than 90in (228.6cm).

For the purposes of these regulations the terms front-engined and rear-engined are considered to be relative to the position of the driver.

A1.2.2 Effective date: 1st January 2002.

MSA Regulation(s): T.10.

Commentary: Regulation T.10 states that there should be an "accepted specification". This ACTC regulation describes the ACTC processes to comply with this regulation.

Class 7(c): The term 'cars manufactured on a limited basis' refers to cars more commonly known as 'kit cars'. The ACTC publishes 'Accepted Specification' sheets for the Class 7 vehicles listed below. Anyone contemplating using a 'kit car' which does not appear on the current list is advised to contact the Class 7 Co-Ordinator who can make arrangements for the vehicle specification to be submitted to the ACTC Technical Panel. Manufacturers and Owners Clubs may also submit cars for consideration.

Allard J1 Buckler Mks 5 and 6 and Type 53

Burlington Arrow Dellow Mks 1 to 3 (sidevalve and to original spec)

Dutton Melos, Phaeton Series 4, Sierra Estate Fergus Mosquito J C Midge Jago Geep

Liege Marlin Roadster T, M and TM versions

NG TA and NG TF Racecorp
Rickman Ranger R.L.T. Husky

Siva Edwardian Ranger Spartan Roadster Mks 1 to 6

Teal 35 Tempest 850

Vincent Brookland and Vincent MPH YKC Roadster, conforming to Marlin specification

A1.2.3 *Effective date:* 1st *October 2003.*

MSA Regulation(s): T.10.

Commentary: The MSA Regulations refer only to Class 7. This ACTC regulation clarifies how ACTC interprets the three named paragraphs for the three sub-divisions of Class 7.

References to Class 7 in MSA Competitors' and Officials' Yearbook paragraphs T.10.5.2, T.10.6.3, and T.10.12.3 shall refer to cars in Class 7(a). Modifications to cars in Classes 7(b) & 7(c) beyond that specified in those paragraphs will transfer the car to Class 8.

A1.2.4 *Effective date: Effective 1st January 2014.*

MSA Regulation(s): T.10.

Commentary: The MSA no longer defines a Production Car and ACTC considers the MSA definition of Series Production Car is too onerous to apply to the existing ACTC Vehicle Classes.

A production car, which includes production saloons and production sports cars, is any car which is or has been on general catalogued sale as a completed road going vehicle and is or was available through normal retail dealer outlets. A production car, or variants or copies thereof, must not at any time have been available as a kit car. The ACTC reserves the absolute right to reclassify any make or model of car, although meeting the above criteria, into a non-production or modified class.

A1.3 Vehicle Class identification discs

A1.2.3 *Effective date: Prior to 1st January 2000.*

MSA Regulation(s): T.10.

Commentary: This ACTC regulation ensures that standardised means of class identification are used.

Every vehicle must display a coloured disc, 100mm in diameter, as follows:

Blue Classes 1 and 2.
White Classes 3, 4 and 5.
Yellow Classes 6 and 7.

Red Class 8.

The class number must be displayed in the centre of the disc using a motorcycle number plate-sized numeral.

On vehicles with full height windscreens the disc should be mounted centrally at the top of the screen in that area where the forward vision is already obscured by the rear view mirror. On vehicles with a small or no windscreen, the disc should be mounted on a flat vertical surface adjacent to the competition number. If this results in the disc being mounted on a background of a similar colour to itself, then the disc must be mounted on a white rectangle measuring 155mm x 105mm (The size of a standard competition number). Discs are generally supplied by the organisers, the class number numerals must be supplied by the competitor.

A1.4 Safety

A1.4.1 Effective date: 1st May 2009. MSA Regulation(s): T.10.2.

Commentary: This ACTC Regulations is added to encourage competitors to use one of the modern gas substitutes for the now banned Halon, or a larger quantity of AFFF than 1.75 litres. The approved gas substitutes are nearly as effective as Halon whilst AFFF, particularly in such small quantities, is not very effective in car fires.

The minimum requirement is for a hand operated extinguisher or extinguishers having a total capacity of 1.75 litres AFFF. Competitors should be aware that this is a minimum standard, only intended to facilitate safe exit from the vehicle, and may wish to consider carrying extinguisher(s) with improved capability, either by increasing the quantity of AFFF or by using one of the FIA/MSA approved gas extinguishants.

Any extinguisher exceeding the minimum performance standard and using an approved extinguishant, will be accepted at scrutineering.

Approved extinguishants homologated by the FIA. (Published by courtesy of FIA/MSA):

Foam: AFFF (Minimum quantity 1.75litres).

Gas: FX G-TEC, Viro 3 or Zero 360 (Minimum quantity 2kg).

A1.5 Tyre sizes

A1.5.1 *Effective date: Prior to 1st January 2000.*

MSA Regulation(s): T.10.9.2.

Commentary: MSA Regulation T.10.9.2 states "In all classes 1-8 (except Class 2) the maximum permitted difference between front and rear tyres must be two sections." To allow the mixing of crossply and radial tyres the following table defines which sizes compare with which.

| Cushion | Radial | High Pressure |
|---------|--------|---------------|
| 5.20 | 145 | 4.50/5.00 |
| 5.60 | 155 | 5.50 |
| 5.90 | 165 | 6.00 |
| | 175 | 6.50 |
| | 185 | 7.00/7.50 |
| | | |

In the High Pressure system, 4.50 has been bracketed with 5.00 to allow older cars to retain their original 4.50 front tyres and use a 165x15 radial on the rear. The 0.25 and 0.75 sizes are ignored, and competitors may use these tyres to the higher or lower size whichever is to their advantage. Similarly dual rated tyres, e.g. 6.00/6.50 sizes, may also be used as the size which suits the competitor. For Class 2, refer also to the ACTC Guidelines for Class 2 Cars.

A1.6 Tyre tread patterns

A1.6.1 Effective date: 1st January 2002. MSA Regulation(s): T.10.9.4.

Commentary: It was considered necessary to clarify that the regulations applied equally to front and rear tyres.

Tyres used must be of a normal road pattern. Rules A1.6.2 and A1.6.3 apply to the tyres fitted to both front and rear wheels.

A1.6.2 Effective date: 1st January 2002.

MSA Regulation(s): T.10.9.4.

Commentary: The MSA is not prepared to take responsibility for maintaining a "White List" of tyres.

The ACTC publishes a regularly updated Tyre List. Only those tyres shown as acceptable on the Tyre List, current on the date of the Event, are permitted. Any competitor wishing to use a tyre not listed must apply to the ACTC Technical Panel for approval not less than 28 days prior to the date of the Event.

A1.6.3 *Effective date: 1st January 2002.*

MSA Regulation(s): T.10.9.2.

Commentary: This ACTC regulation allows the immediate addition of tyres to the "Black List" without waiting for the MSA to amend Regulation T.10.9.2.

The following tyres are unacceptable: All tyres listed in MSA Regulation T.10.9.4 and all tyres listed as unacceptable on the ACTC Tyre List .

A1.7 Transmission

A1.7.1 *Effective date:* 1st *November* 2004.

MSA Regulation(s): T.10.12.2.

Commentary: ACTC additions to Regulation T.10.12.2 are shown in **bold text**. ACTC wishes to emphasise that all forms of traction control are not permitted.

It is not Permitted to fit limited slip, torque biasing, locked or lockable differentials, **or any other form of traction control (unless disabled for the duration of the event)**, other than as provided for in Classes 6 and 7(b) as standard equipment.

A1.7.2 *Effective date:* 1st *June 2010.*

MSA Regulation(s): T.10.12.

Commentary: This relaxation of an MSA Regulation was in response to a request from competitors who were finding it increasingly difficult to source the original gearboxes. It was not considered to provide any competitive advantage.

The fitting of the Ford Type 9 gearbox as used in the Ford Sierra range, in both four and five speed versions, is acceptable for Ford Escorts Mk1 and 2.

A1.7.3 *Effective date:* 1st *June 2010.*

MSA Regulation(s): T.10.12.3.

Commentary: ACTC wishes to clarify the MSA term "modified".

It is permitted to add material to the rear axle casing (e.g. to create mounting brackets and similar as permitted by T.10.8) but not to remove material.

A1.8 Chassis/Body

A1.8.1 Effective date: Effective 1st January 2014.

MSA Regulation(s): T.10.3.4.

Commentary: This ACTC Regulation formalises what has been standard accepted practice for many years.

For hatchback cars, the rear tailgate is considered as the boot lid for the purposes of this regulation.

A1.9 Engine

A1.9.1 *Effective date: Effective 1st January 2014.*

MSA Regulation(s): T.10.6.1.

Commentary: This ACTC Regulation formalises what has been standard accepted practice for many

years.

In this regulation, the configuration is considered to refer to the layout of the cylinders within the block (such as Flat 4, Inline 6, Vee 8, etc.) and whether the camshaft and/or valves are, or are not, located within the block.

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