

## Specific Regulations for Trials (T)



## Specific Regulations for Trials

*Page*

350	Organisers' Regulations
351	Competitors' Regulations
355	Technical Regulations
361	<b>Appendix 1: Charts and Drawings</b>

### Organisers' Regulations

**1.** A Permit for the organisation of a Trial is issued at the sole discretion of Motorsport UK.

**1.1.** A Club will only be allowed to run events up to National B status, unless Motorsport UK has specifically approved an application for National A status.

**1.2.** \*Wherever possible for Car Trials or Sporting Trials, the use of road sections should be avoided. The Specific Regulations (SRs) should clearly state if the Public Highway is to be used. Any part of an event that takes place on the Public Highway must comply with the Motor Vehicles (Competitions and Trials) Regulations and will require public relations work to be undertaken as specified in R.3.

**1.2.1.** Organisers intending to use any Forestry Commission property for events must liaise with the Motorsport UK Forestry Liaison Officer at least 3 months before the event.

**1.2.2.** No contact should be made with Forest District before receiving approval from the Motorsport UK or its appointed Forestry Liaison Officer.

**1.3.** Special attention should be paid to the following:

**1.3.1.** Every practicable precaution must be taken to avoid depositing mud or soil on the Public Highway when leaving private property.

**1.3.2.** Warning notices as required by D.31.1 must be displayed.

**1.3.3.** The entry in Sporting or Car Trials should be split into groups of equal number, which should start from different observed sections simultaneously.

**1.3.4.** The beginning and end of observed sections must be marked by signs.

**1.3.5.** The starts of sections should be reasonably flat and wide so that all Competitors can at least enter the section.

**1.3.6.** The layout of sections should take account of the location of possible failure points and, particularly for Sporting Trials, safe exit routes.

**1.3.7.** The layout of sections should ensure that areas can be marshalled by the minimum possible number of Officials.

**1.3.8.** Sections should if possible be of sufficient width to allow a choice of route and at no point be less than 4m wide, with a 14m turning circle between 'walls' for Car Trials.

**1.3.9.** Sections should be of a winding nature so as to place a premium on driving skill, although the radius of all corners must be adequate for all cars entered.

**1.3.10.** The use of trees or natural hazards as course boundaries should be avoided where possible.

**1.3.11.** Stakes should not be placed against trees.

**1.3.12.** If possible, alternative routes should be planned in case of a change of weather conditions and to accommodate all types of cars eligible.

**1.3.13.** It is recommended that sections be laid out using a minimum of 13 pairs of marker stakes (see diagram page 341) of a minimum height of 1m and with colour coding to clearly identify each side of the route.

**1.3.14.** Metal rod markers should not be used.

**1.3.15.** Markers should be placed to avoid the likelihood of Competitors putting four wheels out between markers and where they are unlikely to be moved by bushes or branches.

**1.3.16.** Clearly visible sub-section numbers should have a minimum figure height of 50mm.

**1.3.17.** If sub-section numbers are not placed on both sides of the route, they should be on the right-hand side, with the corresponding guide markers on the left-hand side.

**1.3.18.** Sub-section markers should be closely grouped in areas of expected failure.

**1.3.19.** The Organisers of events on a single site, particularly in Sporting Trials, should have a First Aid Kit (including an eye bath) on-site at a clearly identified location.

**1.3.20.** Organisers should be aware of the nearest hospital and the best route to get to it in case of incident.

**1.3.21.** When Competitors under 17 years of age are allowed to compete, organisers should note the information in 4 (H.7).

**1.3.22.** Organisers may at any convenient time after the start of the competition require Competitors in some or all Classes to increase or decrease the minimum permitted tyre pressure by a maximum of 5lb/sq in. This decision must be advised to Competitors in writing and sufficient time must be allowed for them to comply.

**1.3.23.** No person under the age of 14 can act as a marshal or assistant marshal unless under the constant supervision of a marshal over 18 years old.

**1.3.24.** At single site events a medium sized spill kit must be available at each section or group of adjacent sections. At events which utilize the public highway each vehicle must carry a small spill kit.

### Classic Reliability Trials (8)

**2.1.** Classic Reliability Trials must meet the requirements of 1 above (with the exception of 1.3.12 and 1.3.13) and the following additional requirements:

**2.1.1.** Any time schedule on the public highway or any part of the route must not exceed:

Motorways	60mph
Trunk and A-roads	30mph
B-roads	26 2/3 mph (daylight), 20mph (darkness)
All other roads	20mph (daylight), 15mph (darkness)
All heavily populated areas	15mph

**2.1.2.** When Time Controls are less than 20 miles apart (except start and finish controls where the length of the route is 20 miles or less), the time schedule on the public highway must not exceed an average speed of 15mph.

**2.1.3.** The Route Card must show both time and mileage between individual points so that changes in Permitted average speeds are apparent.

**2.1.4.** \*Any maps required by Competitors must be notified in the SRs.

**2.1.5.** Observed sections may not be more than a quarter of a mile long, and no special time schedule may be applied from start to finish of a section more than 100yds long (an Observed Test).

**2.2.** Organisers must:

**2.2.1.** Ensure the status of any tracks along the route is verified.

**2.2.2.** Where it is proposed to use or cross any Footpath, Bridleway or Restricted Byway:

**2.2.3.** Obtain the agreement of the Landowner and the Highway Authority (unless the route is already on a road of higher status).

**2.2.4.** Notify the Police (clarifying the nature of the event).

**2.2.5.** Notify the National Parks (if appropriate).

**2.2.6.** Deleted.

**2.2.7.** Ensure a Liaison Officer is appointed to deal with the above matters and resolve any difficulties.

**2.2.8.** Check vehicles for sound before the Start and along the route. These checks should be manned by experienced Driving Standards Observers. Noisy cars must be stopped if necessary.

**2.2.9.** Locate any Holding Controls so as to avoid public nuisance.

**2.2.10.** Draw to the attention of Competitors any sensitive areas in the vicinity of the route.

**2.2.11.** Brief all Marshals and ensure they are readily identified.

**2.2.12.** Appoint and brief a Chief Official, who should be clearly identified, for each observed section to ensure that the Trial is seen not to unduly inconvenience members of the public.

**2.2.13.** The Chief Official must have a working knowledge of the Rights of Use of the section.

**2.2.14.** Organisers should notify the appropriate Parish Council.

**2.3.** Organisers should issue instructions on the sensible use of the roads, including:

**2.3.1.** Closing of gates etc.

**2.3.2.** Clearing of roads at end of sections.

**2.3.3.** Following the 'Country Code', adding that failure to observe the Code may lead to disciplinary action.

**2.4.** SRs and Final Instructions to Competitors in events using Footpaths, Bridleways and Restricted Byways should include the following statement:

*This event is routed along and/or across public rights of way. Competitors must exercise caution and reduce their speed accordingly near other path users. Be especially careful near horses. Slow down, stop and switch off your engine if necessary.*

## Competitors' Regulations

### Eligibility

**3.1.** \*Competitors must report at the start and for scrutineering at the times stated in the SRs.

**3.1.1.** Any Competitor reporting late may be fined, disqualified or may forfeit any claim to a favourable starting position.

**3.1.2.** At the Start each Competitor, any Passengers and the vehicle must all be checked for eligibility.

**3.1.3.** Deleted.

**3.1.4.** Deleted.

**3.1.5.** Drivers in Clubman events must produce a valid Club Membership Card (note D4.5.4). Drivers in National B and above status events, must produce a valid Competition Licence as detailed in Section H.

**3.1.6.** Passengers at National B events must produce a valid Club Membership Card.

**3.2.** Cars competing in Sporting Trials must comply with Technical Regulations 9 and 12 or 13 as appropriate.

**3.2.1.** Cars competing in Car Trials must comply with Technical Regulations 9 and 11, except that in Clubman events the Organisers may state in the SRs that any or all of the following Car Trials Technical Regulations have been replaced by the equivalent Classic Trials Regulations: 11.9.1, 11.9.4, 11.9.5, 11.12, 11.13, 11.14.1 and 11.14.3.

**3.2.2.** Cars competing in Classic Trials must comply with Technical Regulations 9 and 10.

### The Crew

**4.1.** *During all Observed Sections and tests the seat alongside the Driver must be occupied in accordance with the requirements below (except as specified in 4.1.8):*

**4.1.1.** Passengers must be properly seated, i.e. both the Passenger and the seat back must be upright and facing forward. In Sporting Trials the passenger's hips must be located within the cockpit and on or in front of the rear axle line.

**4.1.2.** Where the Driver is over 17 years old and holds a full RTA Licence, the Passenger must fulfil the minimum age requirement of 4.1.5.

**Note:** Throughout these sections an asterisk(\*) indicates a requirement for additional information to be printed in the Supplementary Regulations (SRs).

*Text shown in Italics indicate a Regulation which may be amended in the SRs.*

**4.1.3.** In Car Trials, entries may be accepted from Drivers aged 14, 15 or 16, or from Drivers of 17 or over who do not hold a full RTA Licence. In such cases the Driver must be accompanied by a Passenger who holds a full RTA Licence and is experienced as a Driver of Car Trials or Sporting Trials and who must produce a valid Club Membership Card.

**4.1.4.** In Sporting Trials, entries may be accepted from Drivers aged 16, or from Drivers of 17 or over who do not hold a full RTA Licence. These Drivers must be accompanied by a Passenger who holds a full RTA Licence and is experienced as a Driver in Sporting Trials and who must produce a valid Club Membership Card.

**4.1.5.** Minimum Passenger ages are as follows:

Sporting Trials	14
Classic Reliability Trials	
Open or	14
Convertible cars	
Saloons or hardtop cars	12
Car Trials	12

**4.1.6.** Additionally the rear seats of saloon cars can be occupied by the number of people for whom they were designed. Passengers who occupy the rear seats of the vehicle must not be less than 2 years of age, any child under 12 years of age or 135cm in height must be seated using an approved 'child restraint'.

**4.1.7.** Passengers under 16 years old will not be considered as Competitors for the purpose of Licences or Club membership, and will not be required to sign on. They will, however, be required to produce a letter of consent from a parent or guardian at signing-on, and this letter must be retained by the Organisers.

**4.1.8.** In Classic Reliability Trials, passengers are not required to occupy the front seat where suitable rear seats are available, unless the SRs state otherwise. All passengers in a vehicle with a soft-top or no roof must be at least 14 years of age. However, in Class 8 only one Passenger is allowed, who must occupy the seat alongside the Driver.

**4.1.9.** Members of the crew at the Start cannot be varied during an event, except with Official approval.

**4.1.10.** The same Driver must drive throughout any Competition.

**4.1.11.** 'Bouncing' will be Permitted only within the confines of the seating compartment, and then only so long as no portion of either the Driver's or Passenger's body, other than arms and hands, is placed outside the sides of the car or behind the seat they are occupying.

## Numbers

**5.1.** Numbers will be allocated by ballot within Classes.

**5.1.1.** Number cards will be issued at the Start and must be displayed on each car throughout the Competition.

**5.1.2.** \*In Classic Reliability Trials, unless the SRs state otherwise, numbers will be allocated by the Organisers.

**5.2.** Competitors will start in numerical order.

**5.2.1.** In Car Trials unless SRs state otherwise, at some convenient break after approximately half the Observed Sections have been attempted, the running order will be reversed within each Class. Competitors will remain

in the correct running order unless instructed otherwise by an Official.

**5.2.2.** Number cards must be removed at the Finish or if a Competitor retires.

## Observed Sections and Route

**6.1.** Details of observed sections and tests (if any) must be issued at the Start and the onus of following the correct route will rest with the Competitor.

**6.1.1.** Any signs displayed, other than in an observed section, will be a supplementary aid without mandatory authority.

**6.2.** \*There will be no time schedule to be maintained during the event (except in Classic Reliability Trials) unless the SRs specify otherwise.

**6.2.1.** Competitors will proceed from point to point with as little delay as possible and any Competitor suspected of loitering may be ordered to proceed by an Official.

**6.2.2.** Competitors arriving at a test or an Observed Section more than 20 minutes after the preceding Competitor may be refused permission to attempt that test or observed section.

**6.2.3.** No unauthorised assistance is allowed and cars must complete the course under their own power.

**6.2.4.** No case of force majeure will be taken into consideration.

**6.2.5.** The SRs will specify the location of the finish.

**6.3.** Before attempting an observed section, vehicles must be brought to rest with a leading front wheel hub vertically over the Start line, as indicated by Officials, and the Driver must not proceed until instructed to do so.

**6.3.1.** It is permissible to start the car when only one hub is on the line and the car is askew, providing the other hub has not crossed the line.

**6.3.2.** Competitors must attempt to negotiate observed sections non-stop, unless the SRs specify otherwise.

**6.3.3.** Failure of a car to maintain unassisted forward motion in the direction of the course will be regarded as failure to comply with this requirement.

**6.3.4.** The point of failure will be at a vertical line from the centre of the hub of the front wheel which is the furthest from the start of the section. See Appendix 1, Drawing number 6.

**6.3.5.** Observed sections may be divided into subsections.

**6.3.6.** In such cases signs will indicate the beginning and end of the sub-sections.

**6.3.7.** A vehicle will be deemed to have entered an observed section or subsection when a vertical line from the leading front wheel hub centre has passed any marker indicating the beginning of the section.

**6.3.8.** A car will be considered to have left an observed section or sub-section when a vertical line from the leading front wheel hub centre has passed any marker indicating the end of the section.

**6.3.9.** Failure to proceed, for whatever reason, from the starting position into an observed section when instructed to do so will be regarded as failure in that section.

**6.3.10.** Any failure in a particular sub-section will constitute failure in all subsequent sub-sections.

**6.3.11.** The Start line will indicate the greatest penalty and the Finish line zero penalty.

**6.4.** A Competitor will also be considered to have failed to negotiate an observed section non-stop if:

**6.4.1.** Any part of their vehicle or its occupants touch a marker.

**6.4.2.** All four wheels are positioned outside the boundary of the course at the same time. The boundary is represented by a straight line drawn from course marker to course marker along the direction of the course.

**6.4.3.** The point of failure will be considered to be that at which any marker is first struck, or the point at which the boundary of the course is first crossed by all wheels of the competing vehicle.

**6.4.4.** Should this point of failure coincide with the division between two sub-sections, the marks lost will be those appropriate to failure in whichever of the two sub-sections provides the greater penalty.

**6.4.5.** All markers are deemed live and those markers that are not in the sequence being negotiated by the competitor shall be considered as indicating the section's boundary, unless deemed otherwise on a particular section by the Clerk of the Course. In such cases the penalty recorded shall be that of the part of the section between gates and not necessarily the value of the marker touched.

## Results

**7.1.** Judges may be appointed to adjudicate on:

**7.1.1.** Conforming with the correct route on the course.

**7.1.2.** Touching markers.

**7.1.3.** Failure to proceed non-stop when required.

**7.1.4.** Conformity with regulation 4.

**7.1.5.** Noise.

**7.1.6.** Time of arrival/departure at observed section, test, control or check.

**7.1.7.** Unauthorised smoking.

**7.1.8.** Unauthorised assistance or servicing.

**7.2.** Performances on any observed section or test may be ignored at the Organiser's discretion, even though there have been successful attempts to negotiate the section or test.

**7.2.1.** If this discretion is exercised, no performance on the section or the test in question will be taken into account when compiling the results.

**7.3.**

- (a) Classic Reliability Trials. To be classified as a finisher, a Competitor, being the car and crew entered, must have attempted at least 75% of the total number of observed sections and arrive at the Finish under its own power within 20 minutes of the time of arrival of the preceding vehicle.
- (b) Car and Sporting Car Trials. To be classified as a finisher a Competitor must have attempted at least 75% of the sections and hand in his score card to the Secretary of the Meeting within 20 minutes of the preceding competitor.

**7.3.1.** Competitors start with zero marks.

**7.3.2.** The Competitor incurring the least penalty, or best Index of Performance, will be the winner, and so on.

**7.3.3.** Except in Classic Reliability Trials, each Competitor will be provided with a results card which must be produced on demand by Officials to mark at each section.

**7.3.4.** \*In calculating Class positions the actual number of marks lost by each Competitor is the deciding factor. However, where an overall best performance (irrespective of Class) is required, an Index of Performance will be established for each Class by taking the average performance of the best 50% of finishers (or if there is an odd number of finishers, the total plus one) in the respective Class.

**7.3.5.** To be classified as a finisher for index purposes only, a Competitor must have attempted all sections.

**7.3.6.** Competitors' marks lost are then expressed as a percentage of this index.

**7.3.7.** In Classic Reliability Trials where an overall best performance is required (irrespective of Class), the SRs must specify whether actual marks lost or Index of Performance will apply.

**7.4.** In the event that the best 50% of finishers (as defined in 7.3.4) represents in less than five Competitors, scores equivalent to that of the Class winner must be added to the results of the Class a sufficient number of times so that the average for the Class can be based on five scores.

**7.4.1.** In the event of one or more Competitors finishing with a total score of zero for the whole event, a notional penalty of one mark will be added to the total score of ALL finishers before calculating the Index of Performance.

**7.4.2.** Ties will be resolved by comparing the number of penalties lost by each Competitor on each section, the winner being the Competitor who has the greater number of low penalties. Should this method not resolve the tie, the Organisers may resort to the 'furthest, cleanest' principle, starting from the first hill.

**7.5.** \*Penalty marks will be incurred as follows, unless otherwise stated in the SRs:

	<i>Marks Lost</i>
Each minute late in reporting at a Start:	5
a) Each minute late in reporting at the Start or Re-Start	5
b) Failing in observed section not divided into sub-sections	6
c) Failing in observed section which includes a stop and Re-Start type test	6
d) Failing in an observed section which is divided into sub-sections. The penalty for failure will decrease in proportion to the number of sub-sections negotiated non-stop	12
e) Failing in observed section which includes a stop and Re-Start type test. (The penalty for failure will decrease according to the position of the test within the section)	12

- f) Not attempting, or being ready to attempt, an observed section, sub-section or test when instructed so to do 12
- g) Not complying with a reasonable instruction by an Official for which a penalty is not otherwise stipulated, provided warning of the penalty is given 12
- h) Driver and/or Passengers not seated in accordance with 4. 12
- i) Each minute early or late arriving at or departing from a time control, 1 mark/min subject to penalty-free time allowance of plus or minus five minutes (max 12)
- j) Causing undue noise at any point 12
- k) Offence under R.13 (k) (I) 12
- l) Additional penalty. 8.10 refers 12
- m) For second offence under (j), (k) or (l) Disqualification
- n) Varying ballast during event (per offence) 50
- o) Running with tyre pressure lower than that Permitted by Technical Regulations 50

## Classic Reliability Trials (2)

**8.1.** \*The SRs must specify the following, which are additional to and take precedence over 4.1 - 7.5.

**8.1.1.** Any public roads which are to be part of the route.

**8.1.2.** Any observed sections or tests on public roads.

**8.1.3.** The method of detailing the route and any maps required.

**8.1.4.** Any time schedule.

**8.1.5.** The time interval between cars at the Start.

**8.1.6.** The method of resolving ties.

**8.1.7.** The boundaries of observed sections which must be indicated by natural hazards, flags or posts.

**8.1.8.** The Start or Re-Start Line in an observed section or test which may be varied for each Class.

**8.1.9.** Any signs displayed, except during an observed section, test or quiet zone, will be considered as supplementary aid without mandatory authority unless otherwise specified in the SRs. The mandatory marking for quiet zones does not preclude the Competitor's responsibility to take necessary action should the sign not be in position.

**8.2.** No private road must be used by Competitors unless specific permission to do so is given in the Road Book or Route Card.

**8.2.1.** Competitors must visit controls, checks, observed sections and tests in the order set out in the Road Book or Route Card, unless otherwise specified.

**8.2.2.** A control or check is considered to extend for 50 metres around the actual point at which Officials are making records, unless clearly visible signs are displayed to define a different area.

**8.3.** Judges may be appointed to adjudicate on:

**8.3.1.** Stopping at Stop and Give Way signs.

**8.3.2.** Unauthorised use of auxiliary lights.

**8.3.3.** Unauthorised possession of radio equipment.

**8.3.4.** Contravention of Out of Bound areas.

**8.4.** Driving Standards Observers may be appointed to adjudicate on:

**8.4.1.** Excessive vehicle sound (observed during the event).

**8.4.2.** Excessive speed.

**8.4.3.** Driving in a manner likely to bring Motor Sport into disrepute.

**8.4.4.** Inconsiderate parking or waiting.

**8.5.** The Official in charge of any control or check may decline to mark or may withhold a Competitor's Road Book, Route Card or Time Card if the car concerned has suffered damage to the exhaust system, resulting in excessive sound.

**8.5.1.** \*The Organisers may establish a check at any point to observe maintenance of a set speed, time schedule or route, provided the intention to do so is stated in the SRs and Competitors are given information to enable them to comply.

**8.5.2.** \*The SRs must specify the exact procedure to be followed on each section where there is a stop and Re-Start test. Unless the SRs specify otherwise, a stop and Re-Start must take place at either a line to be stopped astride, or in a designated zone within which at least two wheels must be placed. When the car, as judged by a Marshal, is completely at rest, it must re-start in a forwards direction only. Any rearward movement of the vehicle will incur a penalty.

## Timing

**8.6.** Standard Time is the time of day a notional Competitor (number zero) would be due at any Control or Check.

**8.6.1.** Scheduled Time is the actual time of day each Competitor is required to be at any specified point. Schedule Time can be calculated for any point for any Competitor by adding that Competitor's competition number multiplied by the time interval between Competitors at the Start to the Standard Time at that point.

**8.6.2.** Target Time is the time specified for covering the distance between any two consecutive controls or checks.

**8.6.3.** Due Time is the time of day a Competitor is due at any control or check, inclusive of any previous lateness.

**8.7.** All Official clocks or watches must be set to GMT/BST time so that a Competitor can always verify the accuracy of a timepiece.

**8.7.1.** Competitors will be timed by the Official timepieces in the charge of Officials.

**8.7.2.** The onus of presenting the Road Book or Route or Time Card rests with the Competitor.

**8.7.3.** When Scheduled Time is used, a Competitor late at one control or check may be an equivalent amount late at succeeding controls or checks without incurring further penalty. This is termed 'penalty free lateness'.

**8.7.4.** When Target Time is used, each period of time must be treated individually and no penalties thereby incurred are carried forward. Nevertheless, whichever system of timing is used, a Competitor will be considered not to have reported at a control or check if more than 30 minutes past Due Time, unless the SRs specify a shorter period.

**8.8.** Competitors delayed under the instructions of a bona fide Official of the event may claim an Official delay allowance free of penalty.

**8.8.1.** \*The Organisers may require any Competitor who is late to reduce this lateness by either foregoing or reducing the period of time provided for remaining at a control or Official halt, so long as an instruction to this effect is given in the SRs or Official Instructions for the event.

**8.9.** Competitors can themselves reduce lateness without penalty as follows, unless either forbidden to do so by the SRs or if, by doing so, they breach 8.10.

**8.9.1.** When Target Times are used, by covering the distance between any two or more points in a time less than the Target Time, so long as they do not report at a control or check before the Scheduled Time.

**8.9.2.** When Scheduled Time is used, by reporting at a control or check following one at which a penalty was applied for lateness, at any time not earlier than Scheduled Time.

**8.10.** A Competitor found to have travelled a distance greater than four miles between two consecutive time controls in less than three-quarters of the time specified by the valid Official time schedule will be penalised in accordance with 7.5(i) and (j).

**8.11.** No oral instruction to Competitors during an event will be valid if it affects the route, the time schedule, the layout or the performance of an observed section or test.

**8.11.1.** Any such instruction must be displayed as an Official notice or issued in writing to each Competitor.

**8.12.** Any Competitor driving at an excessive speed, in a reckless manner or in a manner likely to bring Motor Sport into disrepute, or convicted of any driving offence committed during an event, may be disqualified.

**8.13.** Competitors must declare in writing to the Organisers at the Finish whether during the competition they have been involved in any incident or accident involving or causing damage to other persons or property.

**8.14.** Penalty marks will be incurred as per 7.5.

## Technical Regulations

**9.** In addition to complying with Section J and the appropriate sections relating to their category of Trial, all vehicles competing in Classic Reliability Trials, Car Trials or Sporting Trials must meet the following Regulations:

### Body (Including Aerodynamics)

**9.1.** All vehicles (except for Sporting Trials) must be equipped with an effective windscreen or aero-type screen

**9.1.1.** The body overhang of non-production cars must not exceed one-fifth of the overall car length at the front, and one-third at the rear. Overhang is measured from the line of the road wheel centres

**9.1.2.** For production cars, any extensions must not exceed the overhang proportions of a non-production car. Any additional spare wheel carrier should be fitted as close as possible to the body. Production cars need not comply with J.5.2 in respect of bonnets.

**9.1.3.** With the exception of cars of periods A to D all cars must be equipped on all wheels with mudguards which present no sharp edges and cover the complete wheel (flange+rim+tyre) around an arc of 120 degrees. This minimum coverage must:

- a) be achieved with a continuous surface of rigid material. The rear tyre must not be visible when viewed from above
- b) extend forward ahead of the axle line
- c) extend downward behind the wheel
- d) extend downward behind the driven wheel to a point no more than 150mm above the axle centre line.

### Seating

**9.2.** Vehicles must be equipped with two fixed seats for Driver and Passenger, the rearmost part of which must not be behind the rear wheel axis.

### Wheels

**9.3.** Duplicated driving wheels are not Permitted unless specified in the SRs.

**9.3.1.** Competitors must carry a spare wheel and tyre as a replacement for one wheel on the car.

### Transmission

**9.4.** Be fitted with non-torque biasing differential in full and free operation between the driving wheels unless:

**9.4.1.** A differential was not fitted by the manufacturer.

**9.4.2.** The vehicle is restricted to running in a nominated Class or Formula.

**9.5.** Vehicles must be two-wheel drive only, unless SRs allow four-wheel drive.

**9.5.1.** Four-wheel drive vehicles operating in two-wheel drive mode are not eligible, unless Permitted by SRs.

### Silencing

**9.6.** Silencing must comply with noise levels specified in J.5.17.

### Safety

**9.7.** If using a non-standard car, the fitting of a safety roll-over bar as specified in the safety requirements section of K.1.6.1 is recommended.

### Miscellaneous

**9.8.** Other than Section J and in the following sections, there are no special requirements under Vehicle Regulations for: Chassis/Engines, Suspension, Brakes, Steering, Cooling Oil Systems, Fuel Systems, Electrical Systems, Weight/Ballast, Exhausts.

**9.8.1.** \*The vehicle must comply with statutory regulations as to construction and use and lighting of vehicles (particularly regarding brakes, lighting, tyres, warning devices, rear view mirrors, wings, silencers, speedometers and windscreens) unless the SRs state otherwise.

**9.8.2.** Where fitted with forced induction, a coefficient of 1.4 must be applied.

**9.8.3.** Deleted.

**9.8.4.** Battery powered vehicles may compete in appropriate classes in Car Trials and Classic Reliability Trials, (excluding Sporting Car Trials), subject to SRs.

**Classic Reliability Trial Vehicles**

10. Classic Reliability Trial Vehicles will be classified as follows, unless otherwise stated in the SRs:

<i>Class</i>	<i>Description</i>
1	Front-engined, front wheel drive production cars (except vehicles in Class 6)
2	Production cars built prior to 1941 and the following: MG TC, Morgan 4-4 Series I, HRG 1100 & 1500, and Ford models (upright models to 1959) E04A, E494A, E4930A/B, E93A, E493A and 103E
3	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 or 6)
5 (b)	Vehicles built from pre-1941 components (except vehicles in Class 2) and satisfying the tyre regulations in 10.11
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
7 (a)	Production cars modified beyond Permitted limits
7 (b)	Rear-engined production cars fitted with torque biasing differentials as standard equipment
7 (c)	Front-engined 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) and/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-engined 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 less than 90in (228.6cm)

10.1. A current MoT certificate, where appropriate, must be produced at the scrutineers request.

**Safety**

10.2. All vehicles must comply with Construction and Use Regulations and be fitted with safety belts if appropriate. Where fitted, seat belts must be worn on the public highway. Fire extinguishers to a level of safety specified in K.3.1.1 are mandatory and which are accessible to the crew.

**Chassis/Body**

10.3. Chassis/body structures must comply with definitions of a Saloon, Closed, Sports or Touring car as applicable. In particular vehicles must:

10.3.1. Retain their original wheelbase. Any alteration to the wheelbase of a production car (except in Class 2) will transfer the car to Class 8.

10.3.2. Be equipped with the same number of seats as intended by the manufacturer.

10.3.3. Have the forward and rearward bulkheads of the engine compartment in their original positions.

10.3.4. Retain the engine cover, boot lid and wings, although the material may be changed.

10.4. The weight distribution of the vehicle may be altered by the addition of ballast.

10.4.1. The position of the battery, spare wheel and fuel tank may be changed but any further modifications will cause the vehicle to be reclassified to Class 7.

10.4.2. In Classes 1 to 7 any ballast, tool or other boxes must be positioned within the body shell or the bumpers, firmly secured and not visible, protruding or varied during events (10.5).

10.4.3. A luggage box within the planview of the car may be included in an accepted specification for a car in Class 7(c).

10.5. The silhouette of vehicles in Classes 1 to 6, as seen from the side, must be unaltered except for the engine cover and bumpers. Bumpers may be removed, but if retained must be in the original manufacturer's position.

10.5.1. In Class 2 vehicles the chassis must be that of the original manufacturer for the vehicle, although a change in bodywork is permitted providing it is in keeping with the period.

10.5.2. To be eligible for Class 7, the chassis/floor pan of the original car (between wheel centres) must be retained.

**Engine**

10.6. The engine must comply with J.5.4.

10.6.1. There are no restrictions on engine tuning, providing the cylinder block is of the same manufacture and configuration as the original.

10.6.2. The make, type and number of carburettors is unrestricted.

10.6.3. The position of the engine mountings in the chassis may not be altered. Any further modifications will cause the vehicle to be reclassified to Class 7.

10.6.4. No part of the external exhaust system may be more than one metre above the ground.

**Brakes**

10.7. Vehicles must not have separate braking for individual driven wheels (fiddle brakes).

**Suspension**

10.8. Springs and shock absorbers may be changed and additional springs and shock absorbers fitted.

10.8.1. Anti-tramp and anti-roll bars, Panhard Rods and Watts Linkages are permitted.

10.8.2. Except for Classes 7(a) and 8, the original springing system and spring mounting points must be retained in operational use, eg leaf spring systems



must retain at least the minimum number of leaves specified by the manufacturer and must not be replaced by coil or other springing systems.

### Wheels and Tyres

**10.9.** Wheels of up to the standard diameter must be used, except for Classes 5(b), 7(a) and 8 where wheel diameter is free.

**10.9.1.** In Class 8, the maximum tyre section must be 185.

**10.9.2.** In all Classes 1 to 8 (except Class 2) the maximum permitted difference between front and rear tyres must be two sections.

**10.9.3.** No tyre may be smaller than that recommended by the car manufacturer.

**10.9.4.** Standard tyres must be used, with the exception of Michelin XRN, Pirelli P7, Uniband Rally Steel, Goodyear All Weather Steel Radial, Goodyear Ultra Grip, Goodyear Ultra Grip II, and Sterling (ATS) All Seasons Remould. All types of Grip, Town & Country, M&S or All Seasons patterns are prohibited.

**10.10.** In all Classes, spare wheels must be firmly secured by a permanent fixing.

**10.10.1.** Not more than two spare wheels may be carried externally, and these must be fitted as close as possible to the bodywork (excluding bumpers).

**10.10.2.** No part of the spare wheel(s) may be mounted externally in front of the windscreen or on the roof.

**10.10.3.** Cars with an external rear-mounted spare wheel in the manufacturer's standard position may add a second spare wheel, mounted flush with the original wheel, with no spacer.

**10.10.4.** The spare wheel(s) or mounting(s) may not extend rearwards more than 200mm from a vertical line passing through the rearmost part of the original bodywork (excluding bumpers), or more than 100mm beyond the rearmost part of the original bumper position for the model of vehicle, whichever creates the lesser protrusion. An alternative maximum dimension, not exceeding 400mm, may be included in an accepted specification for a car in Class 7(c).

**10.10.5.** In all cases, wheels fitted in the manufacturer's original position and number, are acceptable.

**10.11.** Class 2 vehicles must use cross-ply tyres (which need not be listed in Lists I or II but which must not be of Grip, Town & Country, Dual Purpose or M&S pattern), with the rolling radius to remain as original on vehicles. Class 2 vehicles must also be:

**10.11.1.** Fitted with tyres up to 6.00 section maximum if engine capacity is up to and including 1999cc.

**10.11.2.** Fitted with tyres up to 7.50 section maximum if engine capacity is over 1999cc.

### Transmission

**10.12.** It is not Permitted to change the gearbox or transaxle casing (except in Class 7(a) or 8).

**10.12.1.** Original gear ratios may be changed.

**10.12.2.** It is not Permitted to fit limited slip, torque biasing, locked or lockable differentials other than as provided for in Classes 6 and 7(b) as standard equipment.

**10.12.3.** The rear axle casing must not be modified,

except for cars in Classes 7 and 8 and those cars in Classes 1 and 3 to 6 whose model and mark type was originally manufactured before 1955.

**10.12.4.** Cars may fit replacement differentials, crown wheels and pinions provided the differential action remains free operating.

### Electrical Systems

**10.13.** Vehicles must have a maximum of four forward facing beams in addition to side and indicator lights.

**10.13.1.** Auxiliary lights should not be used in non-competitive sections except in fog or falling snow as permitted by law.

**10.13.2.** All lights must be fitted and used in accordance with the Motor Vehicle Lighting Regulations.

### Miscellaneous

**10.14.** Any car which has been improved within the manufacturer's specification for the range will be considered as a production car.

**10.14.1.** The fitting of a safety roll-over bar is recommended.

**10.14.2.** The fitting of sump, chassis and exhaust under body guards and proprietary tow bars is permitted.

**10.14.3.** The footbrake, clutch and accelerator pedals must all be in their original positions.

**10.14.4.** Silencing of vehicles must be to the levels specified in J.5.17, with engines running at three quarters maximum rpm.

**10.14.5.** For vehicles in Class 2 (pre-1941) any mechanical modification, as permitted by 6, must be compatible with the period.

## Car Trials Formula

**11.** Classes are free but must be stated in the SRs. The following are suggested.

**11.1. Class 1: 2WD Series Production Cars carrying no ballast.**

**11.1.1.** Two Wheel Drive Series Production Cars, first registered on or after 1.1.98 taxed for road use, carrying no ballast, no modifications and driven to the venue.

**11.1.2.** The original carburettors, or fuel injection system including the throttle body and plenum chamber, including the air filter system must be retained.

**11.1.3.** It is permitted to replace the air filter element within the original housing.

**11.1.4.** It is permitted to fit a sump guard weighing not more than 10kg.

**11.1.5.** Wheels and tyres may be altered in accordance with 11.12.

**11.2. Class 2: FWD Series Production Cars.**

**11.2.1.** Front Wheel Drive Series Production Cars not eligible for Class 1.

**11.3. Class 3: RWD Series Production Cars.**

**11.3.1.** Rear Wheel Drive Series Production Cars not eligible for Class 1.

**11.4. Class 4: Modified Series Production Cars and Kit Cars.** This Class covers:

**11.4.1.** Series Production cars modified beyond Regulation 11.1 to 11.3 and modified up to the limits specified in 10 (Classes 1-6)

**11.4.2.** Front-engined Kit cars to approved Motorsport UK specification

**11.4.3.** Front-engined Kit cars modified beyond Car Trials Regulations and modified up to the limits specified in 10 Class 7(c) (ACTC approved specification).

**11.5. Class 5: 4WD Series Production Cars.**

**11.5.1.** Four Wheel Drive Series Production Cars of monocoque construction, taxed for road use, carrying no ballast, unmodified, and driven to the venue.

**11.5.2.** Where fitted with a dual range transmission, only high range may be used.

**11.5.3.** Competitors are reminded of the requirements of 11.8.3 to 11.8.6.

**11.5.4.** The original carburettors, or fuel injection system including the throttle body and plenum chamber, including the air filter system must be retained.

**11.5.5.** It is permitted to replace the air filter element within the original housing.

**11.5.6.** Wheels and tyres may be altered in accordance with 11.12.

## General

**11.6.** \*Any car fitted with a torque biasing differential or any other form of traction control as catalogued for that car will have tyre pressures set at 4 psi above the specified Class pressure.

**11.6.1.** Cars with an overall length of 166 inches and over in Classes 1 and 2 above may reduce tyre pressures by not more than 4 psi, subject to an absolute minimum pressure of 10 psi.

**11.6.2.** An Official handbook as issued by the vehicle manufacturer, showing the specification normally sold on the UK market, must be produced on demand.

**11.6.3.** Optional or alternative equipment as listed in the manufacturer's handbook may be fitted, with the exception of gear and differential ratios.

**11.6.4.** Special tuning and competition catalogues etc are not acceptable as manufacturer's handbooks.

## Safety

**11.7.** Vehicles must comply with Construction and Use Regulations, and be fitted with safety belts if appropriate. The following are recommended:

**11.7.1.** Safety roll-over bar to safety criteria K.1.6.1 and 1.6.2.

**11.7.2.** The wearing of seat belts is optional when fitted to the vehicle.

**11.7.3.** Fire extinguishers to safety criteria K.3.1.1.

## Chassis/Body

**11.8.** Vehicles should not have any chassis or body alterations except:

**11.8.1.** Bodywork ahead of and below the centre line of the front wheels and behind and below the centre line of the rear wheels may be removed

**11.8.2.** Panels to the front and rear of the centre line of the front and rear wheels respectively may be replaced by panels from any model in the same family of cars.

**11.8.3.** The weight distribution of the vehicle may be altered by the addition of ballast, which must be positioned within the body shell or bumpers, firmly secured and not visible or protruding.

**11.8.4.** Ballast must not be varied during an event.

**11.8.5.** The fitting of sump, chassis and exhaust under body guards is permitted.

**11.8.6.** External mirrors may be removed.

## Engine

**11.9.** Engine tuning is Permitted within the following limitations:

**11.9.1.** The cylinder head and block must remain as originally supplied by the manufacturer as standard for that model.

**11.9.2.** If the Class structure suggested in 11.1 to 11.5 is used, carburettors, inlet and exhaust manifolds must remain as originally supplied by the manufacturer as standard for that model (except for Classes 2, 3 & 4).

**11.9.3.** Fuel injection and/or forced induction are prohibited unless offered by the manufacturer as standard or optional equipment for that model.

**11.9.4.** The stroke of the crankshaft may not be altered.

**11.9.5.** Cylinders may be re-bored to a maximum of +0.060in.

## Brakes

**11.10.** Vehicles must not have separate braking of individual driven wheels (fiddle brakes) but it is permitted to increase the braking power of the vehicle.

## Springs and Shock Absorbers

**11.11.** Spring and shock absorber mounting points must be retained unaltered, though the springs and shock absorbers themselves may be changed and anti-roll bars and anti-tramp bars added.

## Wheel and Tyres

**11.12.** It is permitted to replace standard wheels provided they can be fitted without altering the hubs or anything attached to them.

**11.12.5.** Tyre sizes and aspect ratios are free, providing they are compatible with Construction and Use Regulations for the vehicle concerned.

**11.12.6.** Use of the following tyres is prohibited:

- a) those having any of the following patterns, inscriptions or manufacturers' designations: 'All Seasons', 'Grip', 'Snow', 'Special Use', 'Town & Country', 'Mud & Snow', 'M+S', 'M.S.', 'M&S' or the Three Peaks Mountain Snowflake symbol;
- b) those constructed primarily for off-road use;
- c) those having additional grooves intentionally cut into the tread pattern [post manufacture].
- d) Goodyear All Weather Steel Radial, Goodyear Vector, Pirelli P7, Michelin XRN or Uniband Rally Steel.

**11.12.6.1.** Tyres must comply with regulation L2.1.

**11.12.7.** Spare wheels and tyres must be carried in the same numbers and mounting position(s) as provided by the manufacturer.

**11.12.8.** On the driven wheels only, use minimum tyre pressures as specified in the SRs.

## Transmission

**11.13.** If the Class structure suggested in 11.1 to 11.5 is used, only gear and axle ratios as stated in the Official manufacturer's handbook for the model and year of manufacture can be used, except for vehicles in Class 4.

**11.13.1.** Where components are changed to alter gear ratios as provided for above, they must be readily interchangeable and from the same car manufacturer.

## Miscellaneous

**11.14.** All vehicles must:

**11.14.1.** Have bumpers fitted, when originally supplied for the vehicle

**11.14.2.** Be allowed to use proprietary accessories available for the vehicle

**11.14.3.** Not use alloy or plastic panels unless fitted as original equipment

**11.14.4.** If the Class structure recommended in 11.1 to 11.5 is used, rear seats must be fitted in the same way as originally supplied (except in Class 4).

## National Trials Car Formula

**12.1.** The National Trials Car Formula involves four wheel vehicles complying with all Technical Regulations except J.5.2.2, J.5.2.3, J.5.2.4, J.5.2.6, J.5.20.4, J.5.20.6, J.5.20.7, J.5.20.8, J.5.20.9, 9.1 and 9.8 and Period Vehicle Waivers. Vehicles can be divided into two classes, up to 850cc and over 850cc up to 1650cc.

## Safety

**12.2.** Safety Criteria K.8 is mandatory. The switch must be located on the off side rear of the car and be rearward facing. See Drawing 12.2. K.1.6.4(b) is recommended.

## Chassis

**12.3.** Chassis construction is free, but permitted wheelbase and width dimensions are shown in the Appendix 1, Chart 12.3.

**12.3.1.** Vehicle engines must be located with the centre of the foremost original manufacturer's sparking plug orifice not more than one-fifth of the wheelbase behind the centre line of the front wheel hubs where the only operative water radiator is mounted in front of the engine, or one-eighth if no radiator is fitted in front of the engine (tolerance 1cm).

## Body

**12.4.** The bodywork must be of adequate strength and proper construction to provide a compartment for Driver and Passenger. It must meet the following criteria:

**12.4.1.** The front and rear overhangs must be as specified in the Chart 12.3.

**12.4.2.** It must be equipped with fixed seats for a Driver and one adult Passenger, and have seat backs not less than 30.5cm measured from the uncompressed base seat cushions along the angle of the seat back.

**12.4.3.** The rearmost portion of the seats (without cushions) at this 30.5cm height must not be behind a line through the vertical axis of the rear hubs.

**12.4.4.** All Passenger handles must be of rigid construction, securely anchored and neither flexible nor adjustable.

**12.4.5.** No handle must be capable of touching the ground in the event of a roll-over and all handles must

be sited so that in the event of the car hitting a solid object, handles are protected from contact with the object by the chassis.

**12.4.6.** Any handle forward of the centre line of the rear axle must be fixed in accordance to dimension E as detailed in Chart 12.3.

**12.4.7.** Rear mudguards must be of adequate strength to protect Driver and Passenger from wheels and tyres.

**12.4.8.** Rear mudguards must cover the full length of the tyre in plan view at the top of the wheel and must extend outwards to within 5cm of the outside edge of the tyre wall.

**12.4.9.** Front mudguards must cover the full width of the tyre over an arc of 90° and extend rearward to not more than 10° above the horizontal line through the front hub.

## Engine

**12.5.** Vehicles must use a single four-stroke production car engine not exceeding 1650cc and comply with J.5.4. Modifications are free.

## Suspension

**12.6.** Any form of suspension can be used. For minimum track front and rear details, see Chart 12.3.

## Steering

**12.7.** Any form of connection from steering wheel to the front wheels is permitted.

**12.7.1.** The position of the two swivel axes must not vary whilst steering.

**12.7.2.** Four-wheel steering is not permitted.

## Brakes

**12.8.** Vehicles must be fitted with operative and effective front and rear brakes.

**12.8.1.** Independent rear braking is permitted, but no self-compensating controls are permitted on the rear brakes, which must be single leading-shoe drum brakes or disc brakes.

## Wheels and Tyres

**12.9.** Wheel rims must not exceed a width of 11.43cm (4.5in) measured between the bead flanges, nor a diameter of 15in for driven wheels.

**12.9.1.** Tyre security devices are permitted in the rims.

**12.9.2.** Wheels should not carry any chains, spikes or non-skid attachments.

**12.9.3.** Tyres must be of a maximum size 165x15 on driving wheels and must be selected from Tyre List III (Section L). Vehicles fitted with tyres that have previously been included in Tyre List III may compete for class awards only and may not be included in the overall classification.

**12.9.4.** Vehicles must carry one spare only, which must be a driving wheel as fitted on the car, fitted with any listed tyre. It is not permitted to add ballast to the spare wheel.

**12.9.5.** Motorcycle tyres on non-driving wheels are permitted.

**12.9.6.** Minimum tyre pressure 2psi.

## Transmissions

**12.10.** Vehicles must be equipped with a differential gear which divides torque equally between the driving wheels.

**12.10.1.** Vehicles should not use any locked or lockable torque biasing or limited slip differentials, or any other

automatic device which is designed to achieve the same result.

**12.10.2.** Any clutch/torque converter attached to the engine flywheel must be bolted directly to the engine crankshaft.

**12.10.3.** Gearboxes and transmissions with a sequential shift are prohibited.

## Weight

**12.11.** Free.

## Miscellaneous

**12.12.** Vehicles can have a starter motor mounted on either engine block or clutch cover and must comply with the silencing levels specified in J.5.17.

**12.12.1.** All measurements must be in accordance with these regulations when the car is unladen on a level horizontal surface.

## 750 Motor Club Trials Formula

**13.1.** Full details of this Formula are available from the 750 Motor Club Ltd, The Conservatory Suite, Donington Park, Castle Donington, Derby DE74 2RP. Tel: 01332 814548.

## HST Car Formula

**14.** Cars must be prepared in the spirit of the period. The organisers of a historic sporting trial reserve the right to disqualify any car that has a specification, component or modification (other than permitted specification modifications) that would not have been used in period. In all cases the onus of proving a specification, component or modification as being in period rests with the competitor who must submit the required documentary evidence.

## HSTA Car Formula

**14.1.** The Historic sporting Trials Car Formula involves four wheel vehicles complying with all Technical Regulations except J5.2.2, J5.2.3, J5.2.4, J5.2.6, J5.2.0.4, J5.2.0.6, J5.2.0.7, J5.2.0.8, J5.2.0.9, 9.1, and 9.8 including Period Vehicle Waivers (E to G) and Regulations 12 except 12.3, 12.4.6, 12.5, 12.6, 12.7, 12.9 and 12.9.3 but including 12.3.1.

In the following regulations, the term "Ford Sidevalve" refers to components from the following models: E04A, E494A, E4930A/B, E93A, E493A, E83W, 100E and 103E. The term "period" refers to the Historic Class for cars manufactured between 1/1/1931-31/12/70 and for cars in the Post Historic class those manufactured between 1/1/1971 - 31/12/1978.

## Classes

Vehicles will be divided into two classes, Historic (1/1/1931 - 31/12/1970) and Post-Historic (1/1/1971 - 31/12/1978) according to their technical construction in the following regulations.

## Chassis

**14.2.** Must be of period design, constructed of steel tube and complying with the wheel base and track dimensions shown in Appendix 1 Chart 12.3.

## Body

**14.3.** The chassis must be covered by an open body of period design constructed from Aluminium, Steel or Fibreglass.

## Engine

**14.4.** Only the following engines are permitted:

Historic Class: Ford Sidevalve, BMC A Series up to 948cc, Austin 7, Reliant 600/700/750 OHV, Reliant 750 Sidevalve. A Maximum of 60 thou overbore is permitted, the stroke must be standard and the camshaft and valves must be in original position.

Post-Historic Class: In addition to Historic Class approved engines, BMC A Series, Hillman Imp, Renault 16, Ford Kent Series (pre Crossflow and Crossflow) to a maximum of 1650cc.

**14.4.1.** At least one period European Carburettor must be fitted and in operation.

**14.4.2.** Forced induction is not permitted unless originally fitted to the vehicle.

**14.4.3.** Ignition systems must use a period distributor but the use of a contact breaker is not mandatory. Ignition mapping or any form of engine management system is not permitted.

## Suspension

**14.5.** Historic Class vehicles must use transverse leaf front suspension. Otherwise, vehicles must be fitted with period leaf or coil spring systems. Only steel bodied dampers are permitted. Gas, remote reservoir or double adjustable dampers are not permitted. Independent suspension is not permitted.

## Front Axle

**14.6.** Historic class vehicles must be fitted with the front axle beam from an Austin 7 or Ford Sidevalve. Post Historic Class vehicles must be fitted with a steel front axle beam of period design. Cars in the Historic class must use a period steering box.

## Brakes

**14.7.** Disc brakes are not permitted.

## Wheels and Tyres

**14.8.1.** In Historic Class a control tyre specified in SRs must be used on the driving wheels. Front wheels must bolt onto the brake/hub.

**14.8.2.** In Post Historic rear wheels must comply with T12.9 and the tyre on the driving wheels must be selected from current or previous versions of Tyre List III or be of both cross-ply construction and 16-18" in diameter.

## Gearbox

**14.9.** Historic class vehicles must be fitted with a gearbox from a series production car of period. The casing and gear ratio may not be modified other than the fitment of a Ford 100E input shaft to a Ford 8 gearbox. The gearbox must be bolted directly to the engine.

## Rear Axle

**14.10.** Vehicles must use a live rear axle from a period series production car.

## Miscellaneous

**14.11.** Fuel must be Gasoline/Petrol, as defined in Nomenclature and Definitions.

**14.11.1.** The lowest overall forward gear ratio is 23:1.

**14.11.2.** There is no minimum weight.

**14.11.3.** No ballast may be carried.

**14.11.4.** Electric Water Pumps and cooling fans are permitted.

**14.11.5.** The fitting of a generator is optional.

## Appendix 1: Charts and Drawings

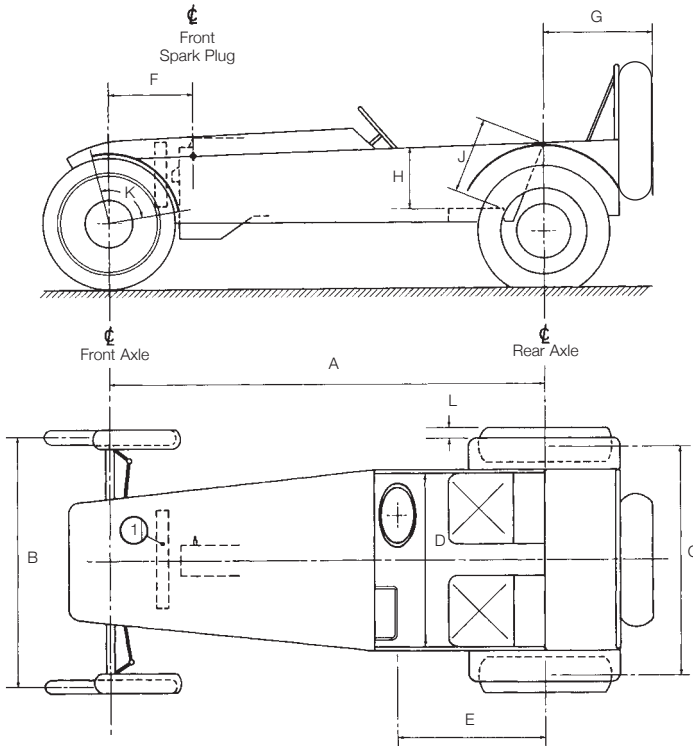
### Chart 12.3

National Trials Car Formula dimensions (in mm) for Under and Over 850cc Classes.

		Class	
		Under 850cc	Over 850cc
A	Minimum wheelbase	1905	1981
B	Minimum front track measured on C/L of tyre's contact patch	1117	1117
C	Minimum rear track measured on C/L of tyre's contact patch	1117	1117
D	Minimum cockpit width	813	813
E	Minimum to Passenger handle	635	635
F	Maximum front axle to no. 1 plug (tolerance 10mm)	1/5 of wheelbase	1/5 of wheelbase
G	Maximum rear overhang	1/3 of wheelbase	1/3 of wheelbase
H	Minimum height side to seat	152	152
J	Minimum seat back height	305	305
K	Minimum front mudguard arc	90°	90°
L	Maximum rear mudguard from tyre edge	51	51

Note ① Radiator in front of engine, if water-cooled.

### NATIONAL TRIALS CAR FORMULA DIMENSIONS



Drawing number 6

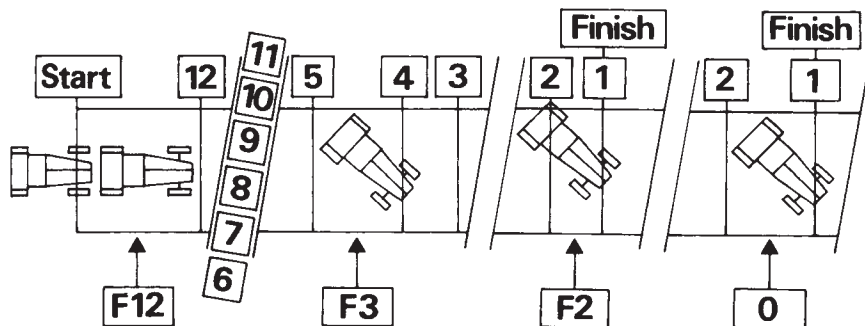


Diagram illustrating the application of 6. The lower figures preceded by F indicate the correct penalties for a car stopping in the position shown.

Drawing number 12.2

