



Chapter 17

Trials

CHAPTER 17 TRIALS

This Chapter must be read in conjunction with [Chapters 1-11](#) as appropriate.

This Chapter is separated into the following appendices:

- [App. 1](#) Organisers Regulations
- [App. 2](#) Competitors Regulations
- [App. 3](#) Technical Regulations - Classic Reliability Trials Formula
- [App. 4](#) Technical Regulations - Car Trials Formula
- [App. 5](#) Technical Regulations - National Trials Car Formula
- [App. 6](#) Technical Regulations - Historic Sporting Trials Car Formula
- [App. 7](#) Charts and Diagrams

CHAPTER 17 TRIALS

Appendix 1 - Organisers Regulations

Note: * indicates that additional information must be provided in the **Official Documents** for the **Event**.

1. General

- 1.1. A **Permit** for the organisation of a **Trial** is issued at the sole discretion of the **ASN**.
- 1.2. A **Club** will only be allowed to run **Events** up to **Interclub** status unless the **ASN** has specifically approved an application for **National** status.
- 1.3. **Organisers** intending to use any Forestry Commission property for **Events** must liaise with the **ASN Forestry Liaison Officer** at least 3 months before the **Event**.
- 1.4. No contact should be made with Forest District before receiving approval from the **ASN** or its appointed **Forestry Liaison Officer**.
- 1.5. Special attention should be paid to the following:
 - a. Every practicable precaution must be taken to avoid depositing mud or soil on the Public Highway when leaving private property.
 - b. Warning notices as required by **Ch.3 App.3** must be displayed.
 - c. The beginning and end of observed sections must be marked by signs.
 - d. The starts of sections should be reasonably flat and wide so that all **Competitors** can at least enter the section.
 - e. The layout of sections should ensure that areas can be marshalled by the minimum possible number of **Officials**.
 - f. 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.
 - g. If possible alternative routes should be planned in case of a change of weather conditions and to provide varied routes within sections for different classes.
 - h. Metal rod markers should not be used.
 - i. 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.
 - j. Clearly visible sub-section numbers should have a minimum figure height of 50mm.
 - k. Sub-section markers should be closely grouped in areas of expected failure.
 - l. **Organisers** should be aware of the nearest hospital and the best route to get to it in case of incident.
 - m. When **Competitors** under 17 years of age are allowed to compete **Organisers** should note the information in **App.2 'Crew'** and **Ch.6 Art.9** regarding Minimum Ages.
 - n. 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.
 - o. At single site **Events** a **Medium sized Spill Kit** must be available at each section or group of adjacent sections.
 - p. At **Events** which utilise the public highway each **Vehicle** must carry a **Small Spill Kit** as defined in **Ch.1 App.1**.

2. Classic Reliability Trials

- 2.1. In addition to [Arts 1.1–1.6](#) above **Organisers** of **Classic Trials** must:
- Locate any **Holding Controls** so as to avoid public nuisance.
 - Draw to the attention of **Competitors** any sensitive areas in the vicinity of the route.
 - Brief all **Marshals** and ensure they are readily identified.
 - 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.
 - Ensure that the **Chief Official** has a working knowledge of the **Rights of Use** of the section.
- 2.2. *The **Official Documents** must specify the following which are additional to and take precedence over [App. 2 Arts 2–5.4](#)
- Any public roads which are to be part of the route.
 - Any observed sections or tests on public roads.
 - The method of detailing the route and any maps required.
 - Any time schedule.
 - The time interval between cars at the **Start**.
 - The method of resolving ties.
 - The boundaries of observed sections which must be indicated by natural hazards flags or posts.
 - The start or re-start line in an observed section or test which may be varied for each **Class**.
- 2.3. 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 **Official Documents**. The mandatory marking for quiet zones does not preclude the **Competitor's** responsibility to take necessary action should the sign not be in position.
- 2.4. Judges may be appointed to adjudicate on:
- Stopping at Stop and Give Way signs.
 - Unauthorised use of auxiliary lights.
 - Unauthorised possession of radio equipment.
 - Contravention of **Out of Bound** areas.
- 2.5. **Driving Standards Observers** may be appointed to adjudicate on:
- Excessive vehicle sound (observed during the **Event**).
 - Excessive speed.
 - Driving in a manner likely to bring Motorsport into disrepute.
 - Inconsiderate parking or waiting.
- 2.6. No private road must be used by **Competitors** unless specific permission to do so is given in the **Road Book** or **Route Card**.
- 2.7. **Competitors** must visit controls checks observed sections and tests in the order set out in the **Road Book** or **Route Card** unless otherwise specified.
- 2.8. **Organisers** should notify the appropriate Parish Councils.
- 2.9. **Organisers** should issue instructions on the sensible use of the roads, including:
- Closing of gates etc.

- b. Clearing of roads at end of sections.
 - c. Following the 'Country Code' adding that that failure to observe the **Code** may lead to disciplinary action.
- 2.10. *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 **Official Documents** and **Competitors** are given information to enable them to comply.
- 2.11. **Official Documents** 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."
- 2.12. The **Specific Regulations** 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 [Art.2.12.1](#), [2.12.2](#) and [App 7 Chart 2](#).
- 2.12.1 Public Relations work must be undertaken by **Organisers** on all **Events** using the **Public Highway** in accordance with the current legislation and as follows:
- a. Consult with the **Route Liaison Officers** before starting PR work. If the **RLO** requires additional PR work in sensitive areas this must be undertaken.
 - b. Be diplomatic positive and clear about the legal aspects of route authorisation.
 - c. If the **Event** is run in England or Wales do not intimate that it is authorised by the Police.
 - d. Avoid asking for 'authorisation' or 'permission' from house-holders – it invites unnecessary difficulties.
 - e. All PR work must be by responsible members of the **Organising Club** or of a **Local Club**.
 - f. The work should be completed to allow enough time to undertake a re-route should this prove necessary.
 - g. All PR letters must be checked by the **RLO** and must indicate who is the **Organiser** (with a contact address including email and phone number) the date of the **Event** in which direction it is travelling and the approximate time of passing.
 - h. Special consideration should be given to householders with pets or livestock.
- 2.12.2 Where an **Organiser** is intending to publish a guide to the route or specific locations for spectators to see the Event ensure that:
- a. Householders within 500m of any specifically advised location have been effectively PR'd without difficulty and these areas are marshalled.
 - b. The information issued contains warnings of locations that spectators must avoid (blackspots, sensitive areas etc).
 - c. Ensure that each PR crew prepares reports on each visit and these are available to the **Clerk of the Course** and the **Stewards** on the day of the **Event** and to the **RLO** on request.
 - d. Special note must be made about problem areas for the benefit of future **Events** and these reports must be passed on to **RLOs**.

2.13. Any time schedule on the **Public Highway** or any part of the route must not exceed:

	Daylight	Darkness
Motorways	60mph	
Trunk and A-roads	30mph	
B-roads	26 $\frac{2}{3}$ mph	20mph
All other roads	20 mph	15mph
All heavily populated areas	15 mph	

- 2.14. When **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.
- 2.15. The **Route Card** must show both time and mileage between individual points so that changes in **Permitted** average speeds are apparent.
- 2.16. *Any maps required by **Competitors** must be notified in the **Official Documents**.
- 2.17. **Organisers** must ensure the status of any **Tracks** along the route is verified and stated in the Route Book.
- 2.18. Where it is proposed to use or cross any **Footpath**, **Bridleway** or **Restricted Byway** the **Organiser** must:
- Obtain the agreement of the Landowner and the Highway Authority (unless the route is already on a road of higher status).
 - Notify the Police (clarifying the nature of the **Event**).
 - Notify the National Parks (if appropriate).
 - Ensure a **Liaison Officer** is appointed to deal with the above matters and resolve any difficulties.
- 2.19. No oral instruction to **Competitors** during an **Event** will be valid if it affects any of the route or the time schedule or the layout or the performance of an observed section or test.
- 2.20. Any such instruction to vary the elements referred to at [Art.2.19](#) above must be displayed as an **Official Notice** or issued in writing to each **Competitor**.
- 2.21. 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.
- 2.22. **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.
- 2.23. 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).
- 2.24. The layout of sections should take account of the location of possible failure points.
- 2.25. *The **Official Documents** must specify the exact procedure to be followed on each section where there is a stop and Re-Start test. Unless the **Official Documents** 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 forward direction only. Any rearward movement of the **Vehicle** will incur a penalty.
- 2.26. Sections should if possible be of sufficient width to allow a choice of route.
- 2.27. Sub-section numbers should be placed on the right-hand side.
- 2.28. The **Organisers** of **Events** on a single site should have a **First Aid Kit** on-site at a clearly identified location.
- 2.29. Penalty marks will be incurred in accordance with [App.2 Art.5.4](#).
- 2.30. Check **Vehicles** for sound before the **Start** or along the route. These checks should be manned by experienced **Driving Standards Observers**. Noisy **Vehicles** must be stopped if necessary and be reported to the **Clerk of the Course**.

3. Car Trials

In addition to [Arts 1.1–1.6](#) above **Organisers** of **Car Trials** must:

- 3.1. Wherever possible the use of road sections should be avoided. If road sections are used then [Arts.2.6](#) and [2.9–2.22](#) apply.
- 3.2. *The entry in may be split into class groups of roughly equal number, which should start from different observed sections simultaneously.
- 3.3. The layout of sections should take account of the location of possible failure points and safe exit routes.
- 3.4. Sections should if possible be of sufficient width to allow a choice of route and at no point be less than 4m wide.
- 3.5. The use of trees or natural hazards as course boundaries should be avoided where possible.
- 3.6. Stakes should not be placed against trees.
- 3.7. It is recommended that sections be laid out using a minimum of 13 pairs of marker stakes of a minimum height of 1m and with colour coding to clearly identify each side of the route. (see diagram in [App 7 Drawing 2](#)). Additional markers may be used to clarify different routes for different classes or to clarify [Art.1.6.g](#).
- 3.8. *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.
- 3.9. **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.
- 3.10. The Organisers of Events on a single site should have a First Aid Kit on-site at a clearly identified location.
- 3.11. A minor proportion (up to 30%) of the sections can be timed but any time penalties must be related using a published formula to points lost on a section, which shall be published in the **Official Documents**.
- 3.12. Timed sections must be a maximum of 200m long and the maximum time allowed for the section shall be stated in the **Official Documents**.
- 3.13. The **Official Documents** must specify the starting Signal, the method of timing and when timing commences.
- 3.14. No Competitor exceeding the specified average speed ([App.2 Art.12.8](#)) should gain any advantage nor be penalised.
- 3.15. Competitors must not receive any award for equalling or improving upon the target time or achieving the fastest times or least penalties for such sections.

4. Sporting Trials

- 4.1. In addition to [Arts 1.1–1.6](#) above **Organisers** of **Sporting Trials** must:
- 4.2. Road sections should not be used.
- 4.3. The entry in should be split into groups of equal number, which should start from different observed sections simultaneously.
- 4.4. The layout of sections should take account of the location of possible failure points and safe exit routes.
- 4.5. Sections should if possible be of sufficient width to allow a choice of route.
- 4.6. The use of trees or natural hazards as course boundaries should be avoided where possible.
- 4.7. Stakes should not be placed against trees.
- 4.8. It is recommended that sections be laid out using a minimum of 13 pairs of marker stakes of a minimum height of 1m and with colour coding to clearly identify each side of the route. (see diagram in [App.7 Drawing 2](#)). Additional markers of other colours may be used to clarify [Art.1.6.g](#).

- 4.9. *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.
- 4.10. There should be a **First Aid Kit** (including an eye bath) on-site at a clearly identified location.
- 4.11. **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.

5. Historic Sporting Trials

- 5.1. In addition to [Arts 1.1–1.6](#) above **Organisers of Historic Sporting Trials** must:
 - 5.2. *The use of road sections should be avoided. If road sections are used then **Arts.2.6** and **2.9-2.22** apply.
- 5.3. *The entry in should be split into class groups of roughly equal number which should start from different observed sections simultaneously.
- 5.4. The layout of sections should take account of the location of possible failure points and safe exit routes.
- 5.5. Sections should if possible be of sufficient width to allow a choice of route.
- 5.6. The use of trees or natural hazards as **Course** boundaries should be avoided where possible.
- 5.7. Stakes should not be placed against trees.
- 5.8. It is recommended that sections be laid out using a minimum of 13 pairs of marker stakes of a minimum height of 1m and with colour coding to clearly identify each side of the route. (see diagram in [App 7 Drawing 2](#)). Additional markers may be used to clarify different routes for different classes or to clarify [Art.1.6.g](#).
- 5.9. *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.
- 5.10. **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.
- 5.11. There should be a First Aid Kit (including an eye bath) on-site at a clearly identified location.

CHAPTER 17 TRIALS

Appendix 2 - Competitors Regulations

Note: * indicates that additional information must be provided in the **Official Documents** for the **Event**.

1. Eligibility

- 1.1. ***Competitors** must report at the start and for scrutineering at the times stated in the **Official Documents**.
- 1.2. Any **Competitor** reporting late may be fined disqualified or may forfeit any claim to a favourable starting position.
- 1.3. At the **Start** each **Competitor** any **Passengers** and the **Vehicle** must all be checked for eligibility.
- 1.4. **Drivers** and **Passengers** must produce a valid **Club Membership Card** and **Competition Licence** as detailed in [Ch.6](#)
- 1.5. **Passengers** under 18 years old will not be considered as **Competitors** for the purpose of **Club Membership**.

2. The Crew

- 2.1. The same Driver must drive throughout any Competition unless otherwise stated in the **Official Documents**.
- 2.2. '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.

3. Numbers

- 3.1. Competition Numbers will be issued at the **Start** and must be displayed on each car throughout the **Competition**.
- 3.2. Numbers will be allocated by the **Organisers**.
- 3.3. **Competitors** will start in numerical order.
- 3.4. Numbers must be removed at the **Finish** or if a **Competitor** retires.

4. Observed Sections and Route

- 4.1. 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**.
- 4.2. Any signs displayed other than in an observed section will be a supplementary aid without mandatory authority.
- 4.3. *There will be no time schedule to be maintained during the **Event** unless the **Official Documents** specify otherwise.
- 4.4. **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**.
- 4.5. **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.
- 4.6. No unauthorised assistance is allowed and cars must complete the course under their own power.
- 4.7. No case of force majeure will be taken into consideration.
- 4.8. 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.
- 4.9. It is permissible to start the **Vehicle** when only one hub is on the line and the car is askew providing the

other hub has not crossed the line.

- 4.10. **Competitors** must attempt to negotiate observed sections non-stop unless the **Official Documents** specify otherwise.
- 4.11. Failure of a **Vehicle** to maintain unassisted forward motion in the direction of the **Course** will be regarded as failure to comply with this requirement.
- 4.12. 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 [App 7 Drawing 2](#).
- 4.13. Observed sections may be divided into subsections. In such cases signs will indicate the beginning and end of the sub-sections.
- 4.14. 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.
- 4.15. A **Vehicle** 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.
- 4.16. 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.
- 4.17. The start line will indicate the greatest penalty and the Finish line zero penalty.

5. Results

- 5.1. Judges may be appointed to adjudicate on:
 - a. Conforming with the correct route on the course.
 - b. Touching markers.
 - c. Failure to proceed non-stop when required.
 - d. Conformity with [Arts.7](#), [11](#) or [15](#) below.
 - e. Noise.
 - f. Time of arrival/departure at observed section test control or check.
 - g. Unauthorised smoking.
 - h. Unauthorised assistance or servicing.
- 5.2. 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. If this discretion is exercised no performance on the section or the test in question will be taken into account when compiling the results. This discretion may be for a **Class** or a number of **Classes**.
- 5.3. **Competitors** start with zero marks.

5.4. *Penalty marks will be incurred as follows unless otherwise stated in the **Official Documents**:

	Marks Lost
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 not divided into sub-sections 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 Art.2.2 above	12
i. Causing undue noise at any point	12
j. Breach of any statutory requirement concerning the use of a motor Vehicle during the Event	12
k. For second offence under (i) or (j)	Event Disqualification
l. Varying ballast during Event (per offence)	50

Classic Trials

6. Eligibility

6.1. Competing **Vehicles** must comply with [App. 3](#).

7. The Crew

- 7.1. **Passengers** must be properly seated i.e. both the **Passenger** and the seat back must be upright and facing forward.
- 7.2. Where the **Driver** is over 17 years old and holds a full RTA **Licence** the **Passenger** must fulfil the minimum age requirement below.
- | | |
|-------------------------------------|----|
| Open or Convertible Vehicles | 14 |
| Saloons or hardtop Vehicles | 12 |
- 7.3. If [Art.2.1](#) is varied entries may be accepted from **Drivers** aged 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 **Classic Trials** to the satisfaction of the **Clerk of the Course**. Any such **Driver** may only attempt sections wholly on private land.
- 7.4. 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'.
- 7.5. **Passengers** aged between 2 and 12 years old will be signed on by their parent or guardian.

- 7.6. **Passengers** are not required to occupy the front seat where suitable rear seats are available unless the **Official Documents** 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**.
- 7.7. Members of the crew at the Start cannot be varied during an **Event** except with Official approval.

8. Observed Sections and Route

- 8.1. *The **Official Documents** including the **Route Book** will specify whether sub-section signs are penalty markers as per [Arts.12.2-12.4](#).
- 8.2. A **Competitor** will also be considered to have failed to negotiate an observed section non-stop if 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, or by natural obstacles preventing such a straight line.
- 8.3. 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.
- 8.4. 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**.

9. Results

- 9.1. *The **Competitor** incurring the least **Penalty** will be the winner and so on.

Car Trials

10. Eligibility

- 10.1. Competing **Vehicles** must comply with [Appendix. 4](#) except that in **Clubman Events** the **Organisers** may state in the **Official Documents** that any or all of the following **Car Trials Technical Regulations** have been replaced by the equivalent **Classic Trials Regulations** at [App.4 Arts.5.1.a., d., e. and 8.2, 9.4, 10.1.a. and c..](#)

11. The Crew

- 11.1. During all Observed Sections and tests the seat alongside the Driver must be occupied unless otherwise stated in the Official Documents.
- 11.2. If a **Passenger** is carried they must be properly seated i.e. both the **Passenger** and the seat back must be upright and facing forward and:
- Where the **Driver** is over 17 years old and holds a full RTA **Licence** the **Passenger** must be of at least 12 years of age.
 - 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** to the satisfaction of the **Clerk of the Course**.
- 11.3. 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'.
- 11.4. **Passengers** aged between 2 and 12 years old will be signed on by their parent or guardian.
- 11.5. Members of the crew at the **Start** cannot be varied during an **Event** except with **Official** approval.

12. Observed Sections

- 12.1. Unless the **Official Documents** 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**.
- 12.2. A **Competitor** will also be considered to have failed to negotiate an observed section non-stop if:
 - a. Any part of their **Vehicle** or its occupants touch a marker.
 - b. 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**.
- 12.3. 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**.
- 12.4. 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.
- 12.5. 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.
- 12.6. To be classified as a finisher a **Competitor** must have attempted at least 75% of the sections and hand in their score card to the Secretary of the **Event** within 20 minutes of the preceding **Competitor**.
- 12.7. At the **Organisers'** discretion a minority (up to 30%) of the **Observed Sections** may be timed if provided for in the **Official Documents**. The following conditions shall apply:
- 12.8. Only those sections which the **Organisers** anticipate will be completed without penalty by the majority of **Competitors** may be timed.
 - a. Any such timed section must be less than 200m long.
 - b. No **Sub-Sections** of an arduous or demanding nature can be used.
 - c. The maximum time allowed for each timed section must be stated in the **Official Instructions** prior to the commencement of the Test.
 - d. The maximum time allowed for each timed section must not require any **Competitor** to exceed 15mph or 30 seconds per 200m.

13. Results

- 13.1. Each **Competitor** will be provided with a results card which must be produced on demand by **Officials** to mark at each section unless otherwise stated in the **Official Documents**.
- 13.2. *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.
- 13.3. To be classified as a finisher for index purposes only a **Competitor** must have attempted all sections. **Competitors'** marks lost are then expressed as a percentage of this index.
- 13.4. In the **Event** that the best 50% of finishers (as defined in [Art.13.2](#) above) represents less than five **Competitors** then 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.
- 13.5. In the **Event** of one or more **Competitors** finishing with a total score of zero for the whole **Event** then a notional penalty of one mark will be added to the total score of ALL finishers before calculating the **Index**

of Performance.

- 13.6. 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 Hill One.

Sporting Trials and Historic Sporting Trials

14. Eligibility

- 14.1. Cars must comply with [App.5](#) or [App.6](#) or 750MC Trials Formula as appropriate.

15. The Crew

- 15.1. During all **Observed Sections** and tests the seat alongside the **Driver** must be occupied by a **Passenger** who must be properly seated i.e. both the **Passenger** and the seat back must be upright and facing forward. The **Passenger's** hips must be located within the cockpit and on or in front of the rear axle line (Penalty as per [Art.5.4.h](#)).
- 15.2. Where the **Driver** is over 17 years old and holds a full RTA **Licence** the **Passenger** must be of at least 14 years of age.
- 15.3. 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**.
- 15.4. Members of the crew at the **Start** cannot be varied during an **Event** except with **Official** approval.

16. Observed Sections

- 16.1. A **Competitor** will also be considered to have failed to negotiate an **Observed Section** non-stop if:
- a. Any part of their **Vehicle** or its occupants touch a marker.
 - b. 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.
- 16.2. 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**.
- 16.3. 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.
- 16.4. 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.
- 16.5. To be classified as a finisher a **Competitor** must have attempted at least 75% of the sections and hand in their score card to the **Event Secretary** within 20 minutes of the preceding **Competitor**.

17. Results

- 17.1. *The **Competitor** incurring the least penalty will be the winner and so on.
- 17.2. Each **Competitor** will be provided with a results card which must be produced to the **Officials** to mark at each section.
- 17.3. 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 Hill One.

CHAPTER 17 TRIALS

Appendix 3 - Technical Regulations – Classic Reliability Trial Vehicles

Note: (1) * indicates that additional information must be provided in the **Official Documents**

Note: (2) This Appendix must be read in conjunction with [App. 2](#) and [Ch.7](#)

1. General

- 1.1. **Classic Reliability Trial Vehicles** will be classified as follows unless otherwise stated in the **Official Documents**:

Class	Description
1	Front-engined, front wheel drive production Vehicles (including those fitted with Torque Biasing/Limited Slip Differentials).
2	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. Dellow Mk 1,2,3 & Bucklers Mk 5&6, Pre 1941 Cars holding a current VSCC Buff Form, Non- production cars built from pre-1941 components individually approved.
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, 6 and 90). (b) Vehicles in full HST Historic Class specification with fiddle brakes disabled. (c) Non-production cars built mainly from pre-1941 components (except Vehicles approved for Class 2) individually approved. Such Vehicles may include some post war components including BMC A-Series engines up to 948cc, Reliant OHV engines, A Series Rear Axles, Ford 105E Series Back Axles, Tubular Frame Chassis. These Vehicles must have at least one operational European carburettor and run on tyres satisfying Art 7.13 (Crossplies). (d) Production cars eligible for Class 2 , but running on radial tyres.
6	(a) Rear-engined, rear wheel drive production cars (except Vehicles in Class 4). (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. (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. (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 .
8	(a) Non production cars. (b) Rear-engined cars (except Vehicles in Classes 4, 6, and 7). (c) Front-engined cars manufactured on a limited basis (except those in Class 7) including those which: (i) Have the rearmost part of the front seat cushion(s) rearward of any part of the rear tyres, or (ii) Have a wheelbase less than 90in (228.6cm)
90	Suzuki X90 Vehicles having the original engine block.

- 1.2. A current MOT certificate where appropriate must be produced at the **Scrutineers'** request.

2. Safety

- 2.1. 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**.
- 2.2. Handheld fire extinguishers to a level of safety specified in [Ch.7 App.6 Art.3](#) are mandatory and which are accessible to the crew (note a 1.75ltr minimum for AFFF or 2x1ltr AFFF or 2x1kg Powder is permitted).

3. Chassis / Body

- 3.1. **Chassis/body** structures must comply with definitions of a **Saloon, Closed, Sports** or **Touring Car** as applicable.
- 3.2. In particular **Vehicles** must:
 - a. Be equipped with an effective windscreen or aero-type screen.
 - b. 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.
 - c. 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 and satisfy [Arts.7.9–7.12](#) Production cars need not comply with [Ch.7 App.2 Art.6](#) in respect of bonnets.
 - d. Retain their original wheelbase. Any alteration to the wheelbase of a production car (except in **Class 2**) will transfer the car to **Class 8**.
 - e. Be equipped with the same number of seats as intended by the manufacturer.
 - f. Have the forward and rearward bulkheads of the engine compartment in their original positions.
 - g. Retain the engine cover boot lid and wings although the material may be changed.
- 3.3. 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.
- 3.4. **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.
- 3.5. The weight distribution of the **Vehicle** may be altered by the addition of **Ballast**.
- 3.6. 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(a)**.
- 3.7. In **Classes 1 to 7 and 90** 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** (see [Art.3.10](#)).
- 3.8. A luggage box within the plan view of the car may be included in an accepted specification for a car in **Class 7(c)**.
- 3.9. The silhouette of **Vehicles** in **Classes 1 to 6 and 90** as seen from the side must be unaltered except for the engine cover, spare wheels and bumpers. Bumpers may be removed but if retained must be in the original manufacturer's position.
- 3.10. 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.
- 3.11. To be eligible for **Class 7(a)** the chassis/floor pan of the original car (between wheel centres) must be

retained.

4. Engine

- 4.1. The engine must comply with **Ch.7 App.2 Art.8** regarding positive throttle closure by external springs unless exempt due to the use of original standard manufacturer fitted electronic throttle control.
- 4.2. If forced induction is used, the coefficient will be 1.4:1.
- 4.3. There are no restrictions on engine tuning providing the cylinder block is of the same manufacture and configuration as the original.
- 4.4. The make type and number of carburettors is unrestricted.
- 4.5. 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(a)**.
- 4.6. No part of the external exhaust system may be more than one metre above the ground.

5. Brakes

- 5.1. **Vehicles** must not have separate braking for individual driven wheels (fiddle brakes).

6. Suspension

- 6.1. Springs and shock absorbers may be changed and additional springs and shock absorbers fitted.
- 6.2. Anti-tramp and anti-roll bars Panhard Rods and Watts Linkages are permitted.
- 6.3. 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.

7. Wheels and Tyres

- 7.1. Duplicated driving wheels are not Permitted unless specified in the **Official Documents**.
- 7.2. **Competitors** must carry a spare wheel and tyre as a replacement for one wheel on the **Vehicle**.
- 7.3. Wheels of up to the standard diameter must be used except for **Classes 5(c)** **7(a)** and **8** where wheel diameter is free.
- 7.4. In **Class 8** the maximum tyre section must be 185mm.
- 7.5. In all **Classes 1** to **8** and **90** (except **Class 2**) the maximum permitted difference between front and rear tyres must be two sections.
- 7.6. No tyre may be smaller than that recommended by the car manufacturer.
- 7.7. Standard tyres must be used and all types of Grip and Town & Country block patterns are prohibited. Radial tyres with a maximum tread gap exceeding 8mm are prohibited. A tyre will be deemed to have a block gap not exceeding 8mm if when fitted to a rim and inflated to 25psi an 8mm round bar will stick in the gap when horizontal. Purely circumferential gaps may be ignored.
- 7.8. In all **Classes** spare wheels must be firmly secured by a permanent fixing.
- 7.9. Not more than two spare wheels may be carried externally and these must be fitted as close as possible to the bodywork (excluding bumpers).
- 7.10. No part of the spare wheel(s) may be mounted externally in front of the windscreen unless in the manufacturer's standard position or on the roof.
- 7.11. **Vehicles** 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.

- 7.12. 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)**.
- 7.13. **Class 2 Vehicles** must use cross-ply tyres (which need not be listed in **Ch.8 App.4 Lists 1 or 2** but which must not be of Grip Town & Country or Dual Purpose pattern).

8. Transmission

- 8.1. Be fitted with non-torque biasing differential in full and free operation between the driving wheels unless:
- A differential was not fitted by the manufacturer.
 - The **Vehicle** is restricted to running in a nominated **Class** or **Formula**.
- 8.2. **Vehicles** must be two-wheel drive only unless the Official Documents of the Event allow four-wheel drive.
- 8.2.1 Four-wheel drive vehicles operating in two-wheel drive mode are not eligible, unless Permitted by the Official Documents.
- 8.3. It is not permitted to change the gearbox or transaxle casing (except in **Class 7(a)** or **8**) or **Vehicles** running to an accepted specification.
- 8.4. Original gear ratios may be changed.
- 8.5. It is not permitted to fit limited slip torque biasing locked or lockable differentials other than as provided for in **6** and **7(b)** as standard equipment.
- 8.6. The rear axle casing must not be modified except for cars in **Classes 7(a)** and **8** and those cars in **Classes 1** and **3** to **6** whose model and mark type was originally manufactured before 1955.
- 8.7. **Vehicles** may fit replacement differentials crown wheels and pinions provided the differential action remains free operating.

9. Electrical Systems

- 9.1. **Vehicles** must have a maximum of four forward facing beams in addition to side and indicator lights.
- 9.2. Auxiliary lights should not be used in non-competitive sections except in fog or falling snow as permitted by law.
- 9.3. All lights must be fitted and used in accordance with the **Motor Vehicle Lighting Regulations**.

10. Miscellaneous

- 10.1. Other than **Ch.7:** 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.
- 10.2. Auxiliary lamps unless fitted as standard equipment using gas discharge or LED technology are not permitted and gas discharge or LED headlamp units may not be retro fitted.
- 10.3. Any car which has been improved within the manufacturer's specification for the range will be considered as a production car.
- 10.4. The fitting of a safety roll-over bar is recommended.
- 10.5. The fitting of sump chassis and exhaust under-body guards and proprietary tow bars is permitted.
- 10.6. The footbrake clutch and accelerator pedals must all be in their original positions.
- 10.7. Silencing of **Vehicles** must be to the levels specified in **Ch.7 App.8 Art.2** with engines running at three quarters maximum rpm.

- 10.8. For **Vehicles** in **Class 2** (pre-1941) any mechanical modification as permitted by **Art.4** must be compatible with the period.
- 10.9. Rearward vision whilst properly seated within the confines of the **Vehicle's** bodywork or ROPS must be possible. **Vehicles** with solid rear bulkheads or an obstructed view along the centreline of the longitudinal axis must be fitted with either external rear view mirrors or a reversing camera. Mirrors and/or cameras must be operational during competition.
- 10.10. Exhaust Catalytic Converters are required per **Ch.7 App.8 Art.1.8** except where a **Vehicle** does not require a catalytic converter in accordance with UK Government legislation.
- 10.11. Battery powered **Vehicles** may compete in appropriate classes in **Car Trials** and **Classic Reliability Trials**, (excluding **Sporting Car Trials**), subject to the **Official Documents** of the **Event**.

CHAPTER 17 TRIALS

Appendix 4 - Technical Regulations – Car Trials Formula

Note: (1) * indicates that additional information must be provided in the **Official Documents**

Note: (2) This Appendix must be read in conjunction with [App.2](#) and [Ch.7](#)

1. Classes:

1.1. ***Classes** are free but must be stated in the **Official Documents**. The following are suggested.

1.2. **CLASS A FWD SERIES PRODUCTION CARS CARRYING NO BALLAST**

Front wheel drive cars of any age, carrying no ballast and having no modifications except as follows:

- a. the fitting of under body protection weighing no more than 10kg (including fittings)
- b. the replacement of wheels in accordance with [Art.8.2 below](#)
- c. the replacement of tyres in accordance with [Art.8.3 below](#)

Minimum tyre pressures on driven wheels:

up to 1200 cc: 12 psi

up to 1400 cc: 14 psi

over 1400 cc: 16 psi

1.3. **CLASS S NEW UNMODIFIED FWD SERIES PRODUCTION CARS CARRYING NO BALLAST**

Standard front wheel drive cars first registered on or after 1 January 2009*, taxed for road use, carrying no ballast and having no modifications except as follows:

- a. the fitting of under-body protection weighing no more than 10kg (including fittings);
- b. the replacement of wheels in accordance with [Art.8.2 below](#)
- c. the replacement of tyres in accordance with [Art.8.3 below](#)

Minimum tyre pressures on driven wheels:

up to 1200 cc: 12 psi

up to 1400 cc: 14 psi

over 1400 cc: 16 psi

* 2009 will be retained for the years 2024, 2025 & 2026 after which it will be reviewed.

1.4. **CLASS B FWD SERIES PRODUCTION CARS**

Permitted modifications in accordance with [Arts.2.1–10.5 below](#).

Minimum tyre pressures on driven wheels:

up to 1200cc: 12 psi

up to 1400cc: 14 psi

over 1400cc: 16 psi

1.5. **CLASS C 1990 ONWARDS RWD SERIES PRODUCTION CARS AND SPORTS CARS**

Rear wheel drive Series Production Cars and Sports Cars first registered on or after 1 January 1990.

Permitted modifications in accordance with [Arts.2.1–10.5 below](#). Minimum tyre pressures on driven wheels:

Front engined: 14 psi

Mid/rear engined: 20 psi

1.6. **CLASS D SERIES PRODUCTION CARS NOT ELIGIBLE FOR ANY OTHER CLASS AND KIT CARS**

a. **RWD SERIES PRODUCTION CARS**

Permitted modifications in accordance with [Arts.2.1–10.5](#). Minimum tyre pressures on driven wheels:

FE Sports Cars up to 1800cc: 16 psi

FE Saloon Cars up to 1800cc: 14 psi

RE Cars up to 1000cc: 22 psi

FE Sports Cars over 1800cc: 22 psi

FE Saloon Cars over 1800cc: 20 psi

RE Cars over 1000cc: 26 psi

b. **MODIFIED SERIES PRODUCTION CARS AND KIT CARS****

Cars (not eligible for Classes A,B or C) complying with [App.3 Art.1](#) Classes 1-6 and 7(b) and front engined Kit Cars modified beyond Car Trials Formula regulations and up to the limits specified in [App.3 Art.1](#) Class 7(c), and with the ACTC approved specification readily available for inspection. [App.3 Art.1.2](#) does not apply as MoT is not required when off road. The Car Trials Wheel and Tyres regulations [Art.8.2–8.3](#) must be complied with. Minimum tyre pressures on driven wheels:

FWD Cars: 16 psi

FE Kits Cars: 24 psi

FE RWD Cars: 22 psi

RE Cars: 26 psi

Compliance shall not extend to [App.3 Art.7.1](#) or [Art.8.2 below](#) i.e. only wheels of the sizes detailed in their ACTC specification may be used. In all other cases of rule compliance **Classic Reliability Trial Vehicles' regulations will prevail.

2. General

- 2.1. *Any car fitted with a torque biasing differential or any other form of traction control as catalogued for that car may have tyre pressures set at 4psi above the specified **Class** pressure.
- 2.2. Cars with an overall length of 166 inches and over in **Classes** A and B above may reduce tyre pressures by not more than 4 psi subject to an absolute minimum pressure of 10 psi.
- 2.3. Optional or alternative equipment as listed by the manufacturer may be fitted with the exception of gear and differential ratios.
- 2.4. Special tuning and competition catalogues etc. are not acceptable as manufacturer's handbooks.

3. Safety

- 3.1. **Vehicles** must comply with Construction and Use Regulations and be fitted with safety belts if appropriate. The following are recommended:
 - a. Safety roll-over bar to safety criteria [Ch.7 App.3 Art.22](#) and [Art.23](#).
 - b. The wearing of seat belts is optional when fitted to the vehicle..
 - c. Handheld fire extinguishers to safety criteria [Ch.7 App.6 Art.3](#) (note a 1.75ltr minimum for AFFF or 2 x 1ltr AFFF or 2 x 1Kg Powder is permitted).

4. Chassis/Body

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

- a. In **Classes** B-D 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.
- b. 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.
- c. In **Classes** B-D 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.
- d. **Ballast** must not be varied during an **Event**.
- e. The fitting of sump chassis and exhaust under-body guards is permitted.
- f. External mirrors may be removed.

4.2. In particular **Vehicles** must:

- a. Be equipped with an effective windscreen or aero-type screen.
- b. 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.
- c. 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 **Ch.7 App.2 Art.6** in respect of bonnets.

4.3. 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.

4.4. **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.

5. Engine

5.1. Engine tuning is permitted within the following limitations:

- a. The cylinder head and block must remain as originally supplied by the manufacturer as standard for that model.
- b. If the **Class** structure suggested in **Arts.1.1–1.6** above is used then except for **Classes** B and C the carburettors and inlet and exhaust manifolds must remain as originally supplied by the manufacturer as standard for that model.
- c. Fuel injection and/or forced induction are prohibited unless offered by the manufacturer as standard or optional equipment for that model.
- d. Stroke of the crankshaft may not be altered.
- e. Cylinders may be re-bored to a maximum of +0.060in.

5.2. If forced induction is used, the coefficient will be 1.4:1

6. Brakes

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

7. Springs and Shock Absorbers

- 7.1. Spring and shock absorber mounting points must be retained unaltered. In **Classes** B-D the springs and shock absorbers themselves may be changed and anti-roll bars and anti-tramp bars added.

8. Wheel and Tyres

- 8.1. Duplicated driving wheels are not permitted unless specified in the **Official Documents**.
- 8.2. It is permitted to replace standard wheels provided they can be fitted without altering the hubs or anything attached to them.
- 8.3. Tyre sizes and aspect ratios are free providing they are compatible with Construction and Use Regulations for the **Vehicle** concerned.
- 8.4. 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.
- 8.5. Tyres with sidewall markings removed are prohibited in all Events unless they are correctly marked 'Retread' or 'Remould'.
- 8.6. Spare wheels and tyres must only be carried in the same numbers and mounting position(s) as provided by the manufacturer.
- 8.7. On the driven wheels only use minimum tyre pressures as specified in the **Official Documents**.

9. Transmission

- 9.1. Be fitted with non-torque biasing differential in full and free operation between the driving wheels unless:
- a. A differential was not fitted by the manufacturer.
 - b. The **Vehicle** is restricted to running in a nominated **Class** or **Formula**.
- 9.2. **Vehicles** must be two-wheel drive only unless the **Official Documents** allow four-wheel drive.
- 9.3. Four-wheel drive **Vehicles** operating in two-wheel drive mode are not eligible unless Permitted by the **Official Documents**.
- 9.4. If the **Class** structure suggested in [Arts.1.1–1.6](#) above is used then only gear and axle ratios as stated in the Official manufacturer's datasheet for the model and year of manufacture can be used except for **Vehicles** in **Class** D(b)
- 9.5. *Where components are changed to alter gear ratios as provided for above they must be readily interchangeable and from the same car manufacturer.

10. Miscellaneous

- 10.1. All **Vehicles** must:
 - a. Have bumpers fitted when originally supplied for the **Vehicle** except **Vehicles** in **Class D(b)**
 - b. Be allowed to use proprietary accessories available for the **Vehicle**
 - c. Not use alloy or plastic panels unless fitted as original equipment
- 10.2. If the **Class** structure recommended in [Arts.1.1–1.6](#) above is used then rear seats must be fitted in the same way as originally supplied.
- 10.3. Battery powered **Vehicles** may compete in appropriate **Classes** subject to the Official Documents of the Event.
- 10.4. Other than [Ch.7:](#) and in the previous 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.
- 10.5. Exhaust Catalytic Converters are required per [Ch.7 App.8 Art.1.8](#) except where a **Vehicle** does not require a catalytic converter in accordance with UK Government legislation.

CHAPTER 17 TRIALS

Appendix 5 - Technical Regulations – National Trials Car Formula

Note: (1) * indicates that additional information must be provided in the **Official Documents**

1. Eligibility

- 1.1. The **National Trials Car Formula** involves four-wheel **Vehicles** complying with all **Technical Regulations** except:
 - a. [Ch.7 App.2 Arts.6.5–6.9 and Arts.22.4 - 22.9.](#)
 - b. **Period Vehicle Waivers.**
- 1.2. **Vehicles** can be divided into two classes up to 850cc and over 850cc up to 1650cc.
- 1.3. Details of 750 Motor Club Trials Formula should be obtained from:
750 Motor Club, Donington Park Circuit, Melbourne Road, Castle Donington, Derby, DE74 2BN
Tel: 01332 814548.

2. Safety

- 2.1. An electrical cut out switch per [Ch.7 App.5 Art.5](#) is mandatory. The switch must be located on the offside rear of the car and be rearward facing - see [App. 7 Drawing 1](#). [Ch.7 App.3 Art.25.2](#) is recommended.

3. Chassis

- 3.1. **Chassis** construction is free but permitted wheelbase and width dimensions are shown in the [App. 7 Chart 1](#).
- 3.2. **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).

4. Body

- 4.1. There is no requirement for a windscreen or aero-type screen.
- 4.2. The bodywork must be of adequate strength and proper construction to provide a compartment for Driver and Passenger. It must meet the following criteria:
 - a. The front and rear overhangs must be as specified in [App. 7 Chart 1](#).
 - b. 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.
 - c. 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.
- 4.3. All Passenger handles must be of rigid construction securely anchored and neither flexible nor adjustable.
- 4.4. 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 the handles are protected from contact with the object by the chassis.

- 4.5. Any handle forward of the centre line of the rear axle must be fixed in accordance with dimension E as detailed in [App. 7 Chart 1](#).
- 4.6. Rear mudguards must be of adequate strength to protect Driver and Passenger from wheels and tyres.
- 4.7. 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.
- 4.8. 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.

5. Engine

- 5.1. **Vehicles** must use a single four-stroke production car engine not exceeding 1650cc. If forced induction is used, the coefficient will be 1.4:1 and the engine must comply with [Ch.7 App.2 Art.8](#) regarding positive throttle closure by external springs unless exempt due to the use of original standard manufacturer fitted electronic throttle control.
- 5.2. Modifications are free.

6. Suspension

- 6.1. Any form of suspension can be used. For minimum track front and rear details see [App. 7 Chart 1](#).

7. Steering

- 7.1. Any form of connection from steering wheel to the front wheels is permitted.
- 7.2. The position of the two swivel axes must not vary whilst steering.
- 7.3. Four-wheel steering is not permitted.

8. Brakes

- 8.1. **Vehicles** must be fitted with operative and effective front and rear brakes.
- 8.2. 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.

9. Wheels and Tyres

- 9.1. **Duplicated driving wheels are not permitted.**
- 9.2. Wheel rims must not exceed a width of 11.43cm (4.5in) measured between the bead flanges nor a diameter of 15inches for driven wheels.
- 9.3. Tyre security devices are permitted in the rims.
- 9.4. Wheels should not carry any chains spikes or non-skid attachments.
- 9.5. Tyres must be of a maximum size 165mm x 15inches on driven wheels and must be selected from [Ch.8 App.4 Tyre List 3](#).
- 9.6. **Vehicles** fitted with tyres that have previously been included in [Ch.8 App.4 Tyre List 3](#) may compete for class awards only and may not be included in the overall classification.
- 9.7. **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.
- 9.8. Motorcycle tyres on non-driven wheels are permitted.
- 9.9. Minimum tyre pressure 2psi.

10. Transmission

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

- 10.2. **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.
- 10.3. Any clutch/torque converter attached to the engine flywheel must be bolted directly to the engine crankshaft.
- 10.4. Gearboxes and transmissions with a sequential shift are prohibited.

11. Weight

- 11.1. Free.

12. Miscellaneous

- 12.1. **Vehicles** can have a starter motor mounted on either engine block or clutch cover.
- 12.2. **Vehicles** must comply with the silencing levels specified in [Ch.7 App.8 Art.2](#).
- 12.3. All measurements must be in accordance with these regulations when the car is unladen on a level horizontal surface.
- 12.4. Other than [Ch.7](#) and in the previous Articles of this Appendix there are no special requirements under **Vehicle Regulations** for: Chassis/Engines Suspension Brakes Steering Cooling Oil Systems Fuel Systems Electrical Systems Weight/Ballast Exhausts.

CHAPTER 17 TRIALS

Appendix 6 - Technical Regulations – Historic Sporting Trial Car Formula (HST)

Note: (1) * indicates that additional information must be provided in the **Official Documents**

1. General

- 1.1. **Vehicles** must be prepared in the spirit of the period. 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.
- 1.2. The Organisers of a **Historic Sporting Trials** 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.
- 1.3. 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.

2. Eligibility

- 2.1. The **Historic Sporting Trials Car Formula** involves four-wheel **Vehicles** complying with all **Ch.7 Technical Regulations** except:
 - a. **Ch.7 App.2 Arts.6.5–6.9** and **22.4–22.9**
 - b. **Period Vehicle Waivers** (E to G)
- 2.2. In the following **Regulations**:
 - a. The term “Ford Sidevalve” refers to components from the following models: E04A, E494A, E4930A/B, E93A, E493A, E83W, 100E and 103E.
 - b. 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.

3. Classes

- 3.1. **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.

4. Chassis

- 4.1. Must be of period design, constructed of steel tube and complying with the wheelbase and track dimensions shown in **App.7 Chart 1**.
- 4.2. **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).

5. Body

- 5.1. The **Chassis** must be covered by an open body of period design constructed from Aluminum, Steel or Fibreglass.
- 5.2. The bodywork must be of adequate strength and proper construction to provide a compartment for **Driver** and **Passenger**. It must meet the following criteria:
 - a. The front and rear overhangs must be as specified in **App.7 Chart 1**.

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Maserati A6G 2000 correctly sporting Pirelli's Stella Bianca on Borrani wheels

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- b. 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.
- c. 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.
- d. All Passenger handles must be of rigid construction securely anchored and neither flexible nor adjustable.
- e. 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 the handles are protected from contact with the object by the chassis.
- f. Rear mudguards must be of adequate strength to protect **Driver** and **Passenger** from wheels and tyres.
 - i. 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.
 - ii. 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.

6. Engine

6.1. Only the following engines are permitted in **Historic Class**:

- a. Ford Sidevalve.
- b. BMC A Series up to 948cc
- c. Austin 7
- d. Reliant 600/700/750 OHV
- e. Reliant 750 Sidevalve.

6.1.1 Maximum of 60 thou overbore is permitted, the stroke must be standard and the camshaft and valves must be in original position.

6.2. **Post Historic Class** must use a period engine of up to 1650cc.

6.3. At least one period European Carburetor must be fitted and in operation

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

6.5. Ignition systems must use a period distributor but the use of a contact breaker is not mandatory.

6.6. Ignition mapping or any form of engine management system is not permitted.

6.7. Electric Water Pumps and cooling fans are permitted.

6.8. The fitting of a generator is optional.

7. Gearbox

7.1. **Historic Class Vehicles** must be:

- a. Fitted with a gearbox from a series production car of period. the casing and gear ratios may not be modified other than the fitment of a Ford 100E input shaft to a Ford 8 gearbox.
- b. The gearbox must be bolted directly to the engine.

8. Suspension

8.1. **Historic Class Vehicles** must use transverse leaf front suspension unless the vehicle was manufactured in period using coil over dampers with the lower mountings on or close to the king pins. Otherwise **Vehicles** must be fitted with period leaf or coil spring systems.



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- 8.2. Only steel bodied dampers are permitted.
- 8.3. Gas, remote reservoir or double adjustable dampers are not permitted.
- 8.4. Independent suspension is not permitted.

9. Front Axle

- 9.1. **Historic Class Vehicles** must be fitted with the front axle beam from an Austin 7 or Ford Sidevalve.
- 9.2. **Post Historic Class Vehicles** must be fitted with a steel front axle beam of period design.

10. Steering

- 10.1. Cars in the **Historic Class** must use a period steering box.
- 10.2. The position of the two swivel axles must not vary whilst steering.
- 10.3. Four-wheel steering is not permitted.

11. Rear Axle

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

12. Transmission

- 12.1. **Vehicles** must be equipped with a differential gear which divides torque equally between the driving wheels.
- 12.2. **Vehicles must 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.**
- 12.3. Any clutch/torque converter attached to the engine flywheel must be bolted directly to the engine crankshaft.
- 12.4. Gearboxes and transmissions with a sequential shift are prohibited.

13. Brakes

- 13.1. Disc brakes are not permitted.
- 13.2. **Vehicles** must be fitted with operative and effective front and rear brakes.
- 13.3. Independent rear braking is permitted but no self-compensating controls are permitted on the rear brakes which must be single leading-shoe drum brakes.

14. Wheels and Tyres

- 14.1. Tyre security devices are permitted in the rims.
- 14.2. **Wheels must not carry any chains, spikes or non-skid attachments.**
- 14.3. **Vehicles** must carry one spare only which must be a driven wheel as fitted on the car fitted with any permitted tyre
- 14.4. It is not permitted to add **Ballast** to the spare wheel.
- 14.5. Motorcycle tyres on non-driving wheels are permitted. Minimum tyre pressure 2psi.
- 14.6. In **Historic Class** a control tyre specified in the **Official Documents** must be used on the driven wheels. Front wheels must bolt onto the brake/hub.
- 14.7. In **Post Historic** the rear wheels rims must not exceed a width of 11.43cm (4.5in) measured between the bead flanges nor a diameter of 15in.
- 14.8. Tyres must be of a maximum size 165mm x 15in on driving wheels and must be selected from **Ch.8 App.4 Tyre List 3** or previous lists.

15. Weight

- 15.1. Free.

16. Miscellaneous

- 16.1. **Vehicles** can have a starter motor mounted on either engine block or clutch cover.
- 16.2. **Vehicles** must comply with the silencing levels specified in [Chapter. 7 App.8 Art.2.](#)
- 16.3. All measurements must be in accordance with these **Regulations** when the car is unladen on a level horizontal surface.
- 16.4. Fuel must be Gasoline / Petrol as defined in [Ch.1 App.1.](#)
- 16.5. The lowest overall forward gear ratio is 23:1.
- 16.6. No **Ballast** may be carried.

CHAPTER 17 TRIALS

Appendix 7 - Charts and Diagrams

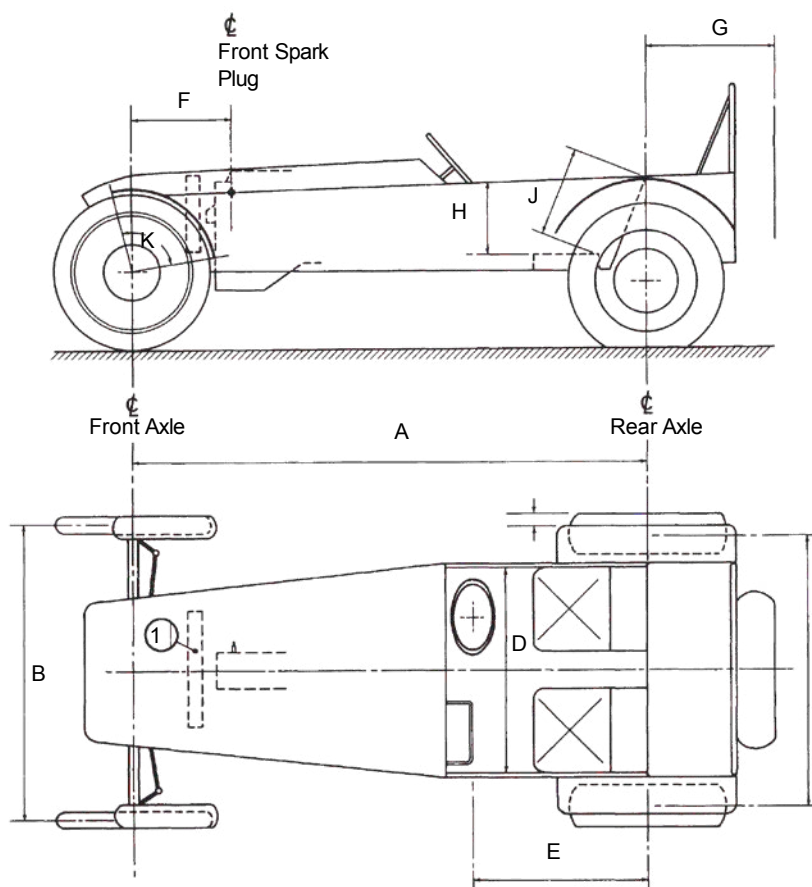
Chart 1

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

Under 850cc		Class	
		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

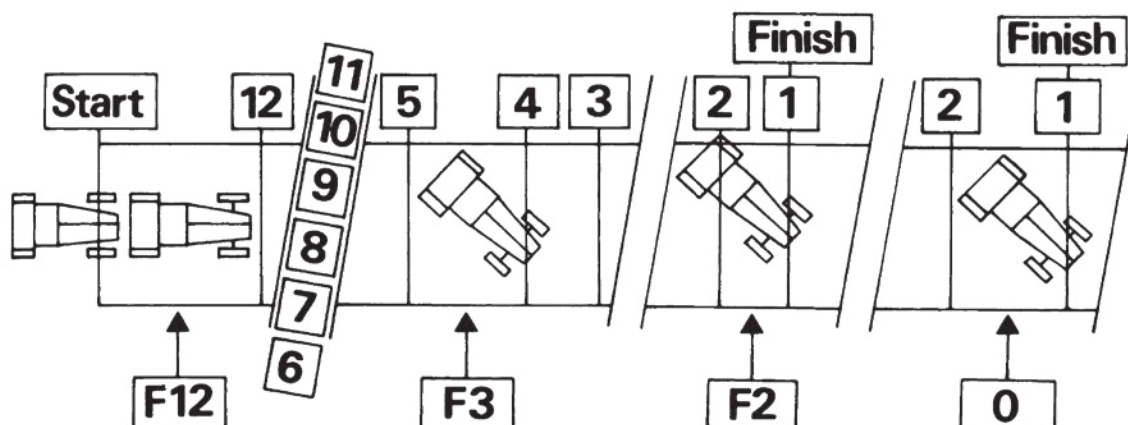
Note: CD Radiator in front of engine, if water-cooled.

NATIONAL TRIALS CAR FORMULA DIMENSIONS



Drawing 2

Diagram illustrating the application of [App.2 Art.4.12](#). The lower figures preceded by F indicate the correct penalties for a car stopping in the position shown.



Drawing 1

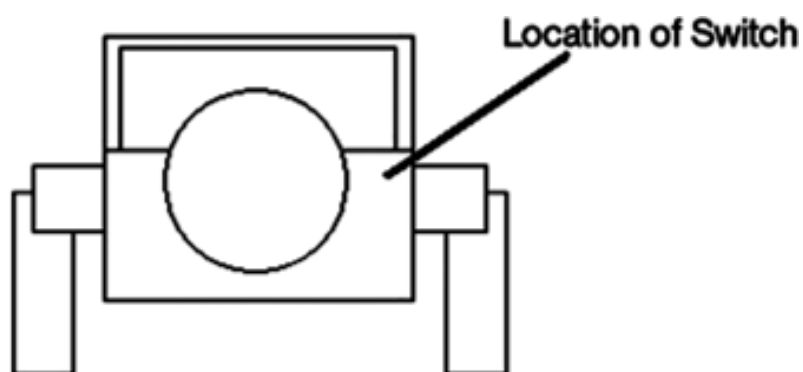


Chart 2
PR Requirements

CODE	PR REQUIREMENTS
A	Personal visit to an adult member of household within 100m.
B	Letter to each householder within 100m.
C	Public notice.
D	Personally visit and obtain signature from an adult member of any household within 500m of any point where competitors are required to stop (i.e. any control or clue point).
E	Consult RLO.
F	Personal visit to an adult member of household within 150m.
G	If timed to the second, not pass through any area which has in excess of 20 occupied dwellings within 300m radius of the route, unless written agreement is given by all of the householders within that area and the Motorsport UK has given its permission.
H	Letter to each householder within 100m, unless the RLO agrees to a lesser requirement.

ALL EVENTS TRAVERSING THE PUBLIC HIGHWAY

Permit	Section	Road Type	Time	PR Requirement
ROAD RALLY (inc. HISTORIC)	STANDARD (timed to second) inc.	All Classes (see 10.2)	23.59 to 1 hour after sunrise	A(G) D
	STANDARD (time to minute)	All Classes	24 hour	B D
	REGULARITY	A & B Habitation	22.00 to 07.00	C D
		Yellow/White UCR/Private	24 hour	H D
		A & B Habitation	07.00 to 22.00	E D
		White/UCR/ Private	24 hour	B D
	TRANSPORT & NEUTRAL	Yellow Habitation	22.00 to 07.00	E D
		A, B & (Yellow 07.00 to 22.00)	24 hour	C D
ECONOMY, NAVIGATIONAL & 12 CAR RALLIES (All types) VINTAGE (22.00 to 07.00)	STANDARD & REGULARITY	A & B Habitation	22.00 to 07.00	C D
		A & B Habitation	07.00 to 22.00	E D
		Yellow/White UCR/Private	24 hour	H D
		White/UCR Private	24 hour	B D
	TRANSPORT & NEUTRAL	Yellow	22.00 to 08.00	E D
		A, B, Habitation & (Yellow 07.00 to 22.00)	24 hour	E D
VINTAGE (07.00 to 22.00)	ALL	ALL	07.00 to 22.00	C D

VETERAN	ALL	ALL	24 hour	C	D
NAV. SCATTERS	ALL	ALL	24 hour	E	D
TREASURE HUNTS TOURING ASSMS.	ALL	ALL	24 hour	E	D
SPECIAL STAGE RALLIES including SINGLE VENUE STAGE RALLIES	ROAD	A & B, Habitation	22.00 to 07.00	C	D
		Yellow	22.00 to 07.00	B	D
		White/UCR/ Private	24 hour	B	D
		A, B, Yellow Habitation	07.00 to 22.00	E	D
	ACCESS/EGRESS To/From STAGE To PUBLIC HIGHWAY	ALL	24 hour	F	E
	SPECIAL STAGE	Private or Roads Closed by appropriate Legislation	24 hour	F	
CLASSIC TRIALS and ALL OTHER EVENTS USING THE PUBLIC HIGHWAY		White/UCR/ Private	24 hour	B	D
		Yellow	22.00 to 07.00	B	D
		A, B, Habitation & (Yellow 07.00 to 22.00)	24 hour	C	D

Chart 3
All Events on the Public Highway

Requirements for All Events on the Public Highway
No regular assistance organised in advance may be used by Competitors.
No assistance may be expected from the Organisers.
Competitors are responsible for ensuring that they are supplied with fuel, oil, water, etc, even though the Organisers may advise on where these supplies may be obtained.
A car may not be moved other than by its own power except: (a) By a ferry. (b) By outside means for a minimum distance necessary to extricate it from difficulty. (c) By gravity. (d) By its crew. (e) By Official assistance/recovery.
Competitors are strongly advised to carry a First Aid Kit, high visibility vests or jackets and, where appropriate, a torch.
The use of in-car cameras on the Public Highway is permitted on Observed Sections only. In all other Sections on the Public Highway the use of in-car cameras is prohibited.