

**A. ORGANISATION**

**The organisers of all Autocross or Clubcross events must comply with the Common Regulations for Organisers (Section B) and the following:**

**1.** Permits for Autocross and/or Clubcross events are issued at the sole discretion of the MSA, and are subject to prior approval of the track details.

**1.1.** A club will only be allowed to organise an Autocross of up to National 'B' status, unless the MSA has specifically approved an application for higher status.

**1.1.2.** A Club will only be allowed to organise a Clubcross at Clubmans permit status.

**Track Criteria**

**1.2.** The necessity for a Track Licence will be waived subject to approval of the track plan.

**1.2.1.** Track Plan. A plan of the proposed course must be submitted to the MSA for approval with the application for permit. This plan must be on a sheet of A4 or larger paper and must include the following information:

**1.2.2.** The name of the Organising Club, date of the event and the name of the venue.

**1.2.3.** Length of course per lap.

**1.2.4.** Length of longest straight.

**1.2.5.** Position of the Start/Finish line, and direction of travel.

**1.2.6.** Minimum width of course.

**1.2.7.** Position of paddock and spectator enclosures and distances from course.

**1.2.8.** Type of fencing surrounding enclosures. A post and rope fence is the minimum permitted.

**1.2.9.** Position and type of protective barriers.

**1.2.10.** Distance from the course to all boundary lines.

**1.2.11.** Type of boundaries (i.e. hedge, fence, wire; if latter, mesh, plain or barbed).

**1.2.12.** Type of course markers.

**1.2.13.** Number of Judges required to ensure that all course markers can be overseen by a Judge.

**1.2.14.** Siting of Timekeeper.

**1.2.15.** Siting of flag marshals.

**1.2.16.** Siting of fire, emergency and first-aid equipment.

**1.2.17.** Siting of ambulance.

**1.2.18.** Number of cars it is proposed to start consecutively [see 1.6].

**1.3.1.** The course should not include any straight exceeding 200m in length, such a straight to be followed by a corner of at least 90° off-setting the course from its original line by at least twice the width of the track.

**1.3.2.** The start line should be situated not less than 100m from the first corner.

**1.3.3.** The finish line should be situated so as not to allow competing cars to be driven in a straight line from the course to the paddock. Bales must protect the spectator and paddock areas where this entrance to the paddock is less than 30m from such enclosures.

**1.3.4.** The paddock and any spectator enclosures should not be less than 30m from the course where there is no barrier designed to halt a competing car between these enclosures and the course. Where there is a barrier, not less than 25m all the way round corners and 20m alongside straights. The minimum acceptable barrier will be two rows of straw bales or equivalent, placed approximately half-way between the course and the enclosures. The rows of bales must be approximately 3m apart and if each row is not continuous, any gaps must not exceed the length of a bale.

**1.3.5.** Any cars parked in enclosures must be at least 10m from the front of the enclosure.

**1.3.6.** Any natural hazard, such as trees, ditches and fences shall not be less than 20m from the course, or, in the case of any strand or barbed wire fence, not less than 30m from the course, though where hazards on the inside of the course are protected by straw bales or the equivalent, a 10m clearance from the track is sufficient.

**1.3.7.** Straw bales must not be used as course markers.

**1.3.8.** Clubcross courses must comply with 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.3.6 and 1.3.7.

**1.3.9.** The maximum length of a Clubcross course must not exceed 800 metres.

**1.3.10.** The maximum length of any straight on a Clubcross course must not exceed 100 metres, such a straight to be followed by a corner of at least 90° off-setting the course from its original line by at least twice the width of the course.

**1.4. Organisation**

**1.4.1.** The course shall be defined by penalty markers placed on both sides of the course. The number of such penalty markers shall be kept to the minimum necessary to ensure that cars keep to the course. All penalty markers shall be supervised by a Judge who shall be situated in a place of safety. Other markers may be used as freely as desired in order to show the outline of the course. Penalty markers should be at least twice the height and of a different colour from these other markers.

**1.4.2.** There shall be an adequate supply of spare markers and sufficient officials to ensure that any marker that is displaced is immediately reinstated.

**1.4.3.** The course must not be changed once practice has commenced, except that the Stewards have the power to allow minor changes that are desirable for the safety of competitors. Such a change should be made at an appropriate time when all competitors will

have an equal number of runs on the modified course. It is necessary to inform competitors of such changes and to give them the opportunity to inspect and comment upon the modifications.

**1.4.4.** No communication system, other than visual, is mandatory.

**1.4.5.** At each corner on the course, there should be at least one flag marshal and one fire marshal with an extinguisher of an adequate size and type to cope with a petrol or electrical fire. The MSA recommends all extinguishers to be of a capacity relative to the 20lb (9kg) dry powder type that is generally available.

**1.4.6.** In the paddock, at least one extinguisher, one blanket and a pair of fire resistant gloves should be available.

**1.4.7.** Only red flags will be issued to marshals for signalling purposes.

**1.4.8.** If a heat is stopped by means of a red flag, it will be re-run. Any car which had not started, or which had retired from that heat, may not take part in the re-run.

**1.4.9.** The appropriate local hospital authorities shall be notified as to the date and time of the event, including practice.

**1.4.10.** MSA Timekeepers and Scrutineers, appropriate to the grade of the event, must be appointed.

**1.4.11.** It is strongly recommended that a breakdown vehicle capable of lifting at least two wheels of a competing car off the ground, is in attendance.

**1.4.12.** Clubcross events shall not be timed to an accuracy of less than one second. Timing should be by hand held watches. An MSA licensed Timekeeper is recommended.

**1.4.13.** Clubcross cars must be scrutineered for basic safety. An MSA licensed Scrutineer is recommended.

### **1.5. Practice and Starts**

**1.5.1.** All competitors must receive the following opportunity for practice:

(a) Where competitors are required to walk the course before competitive runs commence, or are allowed to drive over it at non-competitive speeds, two practice laps.

(b) In all other cases, three practice laps.

**1.5.2.** The SRs will specify:

(a) The starting signal.

(b) The method of timing.

(c) When timing commences.

**1.5.3.** Cars will be started in groups from a standing start, with the engines running.

**1.5.4.** The finish line must be clearly indicated.

**1.5.5.** There will be no practice runs in Clubcross, all runs counting towards competition.

**1.5.6.** All Clubcross Competitors will be given the opportunity to walk the course prior to competing.

### **1.6. Number of Starters**

**1.6.1.** If the course is less than 10m in width, two cars may be started consecutively, the

second car being started when the first has gained a lead of not less than 200m or one-third of a lap, whichever is the lesser.

**1.6.2.** If the course is less than 10m in width, and not less than 600m in length, three cars may run consecutively so long as they are started not less than 200m apart.

**1.6.3.** If the course is not less than 10m in width at any point and 600m in length, two cars may be started simultaneously and a second pair started when the slower car of the first pair is at least 300m from the start line.

**1.6.4.** If the course is not less than 14m wide at any point and 1200m in length, two cars may be started simultaneously and a second pair when the slower car of the first pair is at least 300m from the start line. A third pair may be started when the slower car of the second pair is at least 200m from the start line.

**1.6.5.** If the course is not less than 15m wide at any point, and the course is over 600m in length, four cars may be started simultaneously.

**1.6.6.** The starting of cars consecutively at 200m intervals is subject to reasonable conditions of visibility. In severe dusty conditions where visibility may be impaired, cars should be started at a greater interval, or singly, so that there is no possibility of one competitor being in a position to overtake another.

**1.6.7.** In the interests of accurate time-keeping, and because of the difficulty of correctly lining up vehicles on a soft surface, vehicle actuated starts are not permitted on non-metalled surfaces.

**1.6.8.** Only one car may run at a time in Clubcross events.

### **1.7. Team Relays**

In Autocross relay events where the cars of more than one team are on the course, all cars other than the first to start shall be placed in a safe position on the inside of the course with their drivers aboard. All cars finishing, except the last car of a team, shall do so by crossing a special line adjacent to but outside the course proper and shall then halt in a specified position and the driver remain aboard until instructed by an official to remove the car to the paddock.

As soon as the front wheels of a finishing car cross the special line an official will indicate by means of a green flag that the next car of the team may proceed.

All drivers joining the course shall do so with due regard to other competitors already on the course.

### **Medical and Rescue Requirements**

**1.8. AMBULANCE AND STAFF.** The Organisers in conjunction with the Chief Medical Officer will ensure that during practice sessions and competition the following are in attendance:

**1.8.1.** Adequate first-aid staff (e.g. members of St. John Ambulance Association, British Red Cross Society or St. Andrew Ambulance Association).

**1.8.2.** Ambulances should be equipped with basic resuscitation equipment and, if possible, a Casualty Immobiliser for handling a patient over difficult terrain. These ambulances to be reserved for use in connection with casualties arising from the competition.

**1.8.3.** It is important that the ambulance be so equipped that essential equipment does not have to be taken from any Rescue Vehicle which must, at all times, remain on the course – fully operational.

**1.9.** The minimum requirements are as follows:  
One Doctor (or MSA registered paramedic) [S 4.1.1, 4.1.2], and one ambulance.

**1.10.** The Clerk of the Course shall have under his control either a licensed Rescue Vehicle or at least one emergency vehicle equipped with:

- Grappling hooks.
- Bolt cutters.
- Pipe cutters capable of severing chassis tubes.
- Tinsnips.
- Hacksaws complete with quantity of blades.
- Pad saw complete with quantity of blades.
- Spanners.
- Fire resistant blanket.
- Industrial gloves.

**1.11. Awards**

The top value of awards retained or benefits accruing to any competitor shall not exceed the following:  
Clubman and National 'B', £250.00.  
National 'A' and International, no limit.

**2. Off-Road Racing**

**2.1.1.** Off-Road racing which includes Minicross etc., may only take place on a circuit complying with regulations available from the MSA on request.

**2.1.2.** The maximum number of vehicles that can start will be limited to 12.

**2.1.3.** Events must comply with the provision of Section 3 as applicable and particularly in relation to medical requirements.

**2.1.4.** Vehicle regulations will be as laid down by the organising clubs, and approved by the MSA.

**2.1.5.** Competitors must comply with Sections E and L, and the Regulations issued for the event.

**2.1.6.** Vehicles must remain in the paddock when not competing. They must not be driven in the paddock, or at any time off the track, at a speed in excess of 5mph. They must not be driven into the spectators' enclosure at any time.

**ORGANISATION RALLYCROSS**  
**The Organisers of all Rallycross events must comply with the Common Regulations for Organisers (Section B) and the following:**

**3.** Permits for Rallycross events are issued at the sole discretion of the MSA.

**3.1.1.** The venue must have a valid Track Licence for Rallycross.

**3.1.2.** A club will only be allowed to organise events of up to National 'B' status, unless the MSA have specifically approved an application for higher status.

**Track Criteria**

**3.2.** New circuits will have to comply with the FIA Criteria for Rallycross Circuits.

**3.3. Practice and Starts**

**3.3.1.** All competitors must receive the following opportunity for practice: Three practice laps.

**3.3.2.** The SRs will specify:

- (a) The starting signal.
- (b) The method of timing.
- (c) When timing commences.
- (d) The method of allocating starting positions.

**3.3.3.** Cars will be started from a standing start, with the engines running.

**3.3.4.** The finish line must be clearly indicated.

**3.4.** Flag signals in accordance with J16.1 (a), (e), (f), (g), (h), (j), (l), (m) & (n) may be used as appropriate, with the same meanings and restrictions as in racing.

**3.4.1.** The Yellow flag gives warning of an incident, but only prohibits overtaking until the incident is passed.

**3.4.2.** If a heat or final is stopped by means of a Red flag, it may be re-run at the discretion of the Clerk of the Course. Any car which did not start in, or which had retired from, that heat or final when the Red flag is displayed, may not take part in the re-run.

**Medical and Rescue Requirements**

**3.5. AMBULANCE AND STAFF.** The Organisers in conjunction with the Chief Medical Officer will ensure that during practice sessions and competition the following are in attendance:

**3.5.1.** Adequate first-aid staff (e.g. members of St. John Ambulance Association, British Red Cross Society or St. Andrew Ambulance Association).

**3.5.2.** Ambulances should be equipped with basic resuscitation equipment and, if possible, a Casualty Immobiliser for handling a patient over difficult terrain. These ambulances to be reserved for use in connection with casualties arising from the competition.

**3.5.3.** It is important that the ambulance be so equipped that essential equipment does not have to be taken from any Rescue Vehicle which must, at all times, remain on the course – fully operational.

**3.6.** The minimum requirements are as follows:

**3.6.1.** Rallycross, including practice – one Doctor, one ambulance and one licensed Rescue Unit with licensed crew.

**Note.** An MSA registered paramedic [S 4.1.1, 4.1.2] may replace either the Doctor in the rescue crew or the other Doctor.

**3.6.2.** Minicross, including practice – one Doctor or MSA licensed Paramedic, one ambulance and either one licensed Rescue unit with licensed crew, or one emergency vehicle equipped as in 1.10.

**Note.** Where Minicross is organised within a Rallycross meeting the medical and rescue requirements stipulated for Rallycross also apply to the Minicross event within that meeting.

**3.7. Clerk of the Course Licence.** The Clerk of the Course for a Rallycross must hold a valid CofC licence issued by the MSA.

**3.7.1.** Upgrading, see Section AA in Officials' Yearbook.

## B. COMPETITORS

**Competitors in all Autocross, Clubcross or Rallycross events must comply with the Common Regulations for Competitors (Section E) and the following:**

**\*4.1.1.** Cars must be presented for scrutiny and practice at the times specified in the SRs. Any Scrutineering Ticket relating to a previous event must be removed before presentation of the car for scrutineering.

**4.1.2.** Any competitor not reporting as instructed, may be fined, excluded or may forfeit any claim to a favourable starting position.

**4.1.3.** Cars competing in Autocross must comply with Technical Regulations 5 & 6. Cars competing in Clubcross must comply with the whole of 6.13.

**4.1.4.** Cars competing in Rallycross must comply with Technical Regulations 5 & 7.

**4.1.5.** Classes must be specified in the SRs.

**4.1.6.** In conjunction with signing-on, the following items must be produced for approval:

A Competition Licence valid for the event [see Table in Section E].

**4.1.7.** (i) Competitors must declare on their entry form whether or not they have ever held a valid RTA licence.

(ii) Competitors aged 16 years or over who have never held a valid RTA licence must produce proof of having competed as a driver in three minicross or clubcross events or three other MSA permitted events (such as Kart Race, Autotest, Production Car Trial), or show proof of having completed an approved driving course at a Race or Rally school recognised by the MSA.

(iii) Competitors aged 14 years or over may compete in Minicross (grid size to be a maximum of four cars) and Clubcross. In the case of Minicross new competitors will have to drive observed laps prior to practice and in the case of Clubcross drive observed laps prior to the competition in order to satisfy the Clerk of the Course that they are competent to take part. Observed laps are not required if the competitor can provide the Clerk of the Course with proof of having competed as a driver in three other MSA permitted events.

## 4.2. Licence Upgrading Criteria Autocross

**4.2.1.** See Table in Section E.

## Rallycross

**4.2.2.** See E 2.15.8.

## Scrutineering

**4.4.1.** No car may be driven in the event until it has been approved by an MSA Scrutineer at the meeting.

**4.4.2.** If after approval any car is dismantled or modified in a manner which may affect its safety or eligibility, it is involved in any incident which is likely to have a similar effect, or any aerodynamic device is added or removed, it shall be represented for approval.

**4.4.3.** The entrant shall be responsible for seeking such fresh approval.

**4.4.4.** Any car involved in an incident which is unable to proceed shall not be touched by any person other than officials without the specific approval of the Clerk of the Course.

Furthermore, the driver concerned may not drive again without the approval of the Medical Officer in Charge.

## 4.5. Drivers

**4.5.1.** A driver shall throughout the competition wear, properly fastened and positioned,  
(a) A crash helmet to the standard specified in the current regulations, which fits properly and is in a serviceable condition and bearing an MSA approval sticker [see Q 10].

(b) Goggles or visor of splinterproof material (unless in a closed car with a full size windscreen in use).

(c) Flame Resistant Overalls which shall cover arms, legs and torso up to the neck. The use of flame resistant balaclava, socks, shoes and underwear is strongly recommended [Q 9].

**4.5.2.** All the above items must be produced for inspection and approval at Scrutineering.

**4.5.3.** Drivers in Rallycross must conform with the Medical Requirements specified in E 2.9.6.

**4.5.4.** Only the driver may be in a car during the competition or practice.

**4.5.5.** In an Autocross, the same car may not be entered to compete for the same award more than twice, whereas in a Clubcross it may be entered four times. In all cases it must be driven by different drivers.

**4.5.6.** Cars will be identified by means of a Competition number, allocated by the organisers, and displayed as specified in the Technical Regulations [E 11.3.11]. The colour may be varied for the different categories.

**4.5.7.** If a driver has not previously competed over the course within the preceding four weeks, he must complete at least one observed practice lap in the car to be raced.

#### **4.6. Results – Autocross**

**4.6.1.** Each driver shall be given two runs in the same car in each class entered, the faster run to count for the results, *unless the SRs specify otherwise.*

**4.6.2.** As between two competitors the more meritorious performance will be that of the competitor who has covered the course in a lesser time.

**4.6.3.** A competitor's time will be credited only if:

- (a) All four wheels of the car are on the course when it crosses the finish line.
- (b) The run is made during the period provided for cars in the appropriate class and not more than the appropriate number of timed runs have been made.
- (c) At events where more than one car starts simultaneously, the competitor has correctly complied with the starting signal.
- (d) The vehicle completes the correct course without outside assistance.

**4.6.4.** To be classified as a finisher in the competition a competitor must have completed at least one timed run.

**4.6.5.** Only an equal number of runs for all competitors in the same class will be counted. In the event of a tie between two or more competitors, the results of the next fastest run recorded by the competitors concerned shall be compared, and so on.

**4.6.6.** If through his own error a driver fails to record a time he shall not be entitled to a re-run.

**4.6.7.** In other circumstances (e.g. baulking) a re-run may be granted by the Clerk of the Course who may order that any penalties incurred in the initial run are applied to the re-run.

**4.6.8.** Where the boundaries of a course are defined by penalty markers [see 1.4.1] the following penalties shall apply:

- (a) If a car strikes a penalty marker, five seconds is added to the car's time for each marker touched.
- (b) If all four wheels of a car cross a straight line between any two markers, no time is recorded, and in addition the car shall stop and not proceed until instructed to do so by an

official. Furthermore, failure to stop may be deemed as reckless driving.

#### **4.7. Results – Rallycross**

**\*4.7.1.** The SRs will specify the method by which a winner is found.

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

- (a) False Starts.
- (b) Not following correct course, or touching marker.
- (c) Baulking or Contact.
- (d) Noise.

#### **4.9. Results – Clubcross**

**4.9.1.** Competitors will be given the opportunity of a minimum of two runs, the aggregate time of the two runs counting for the results. If more than two runs are permitted then the time for the worst run will be ignored and the aggregate of the remaining runs will count for the results. The maximum number of runs shall not exceed 6.

**4.9.2.** All competitors must have the opportunity of an equal number of runs to count towards the results.

### **C. TECHNICAL**

**In addition to complying with E12, all vehicles competing in Autocross or Rallycross must comply with the following as appropriate.**

## **5. AUTOCROSS AND RALLYCROSS VEHICLES**

### **5.1. Description**

**5.1.1.** Racing Cars are prohibited.

### **5.2. Body**

**5.2.1.** If bumpers are removed, both must be removed, and all supports must also be removed. It is prohibited to reinforce the front apron.

**5.2.2.** Have any undertray provided with drainage holes to prevent accumulation of liquids.

### **5.3. Wheels**

**5.3.1.** At the start of each heat or race, be fitted with mudflaps behind all four wheels extending to a minimum of 3.8cm either side of the tyre tread and to a maximum of 7.6cm above the ground.

**5.3.2.** Have all nuts securing roadwheels, excepting those of centre-lock type, of steel and in thread contact over a minimum length of 1½ bolt/stud diameters. Extended or composite wheel bolts/studs are prohibited. Safety wheel nuts to prevent wheels pulling over the standard nuts are strongly recommended.

### **5.4. Oil Systems**

**5.4.1.** Have any oil tank which is situated outside the chassis or main structure of the vehicle suitably covered with a protective coating (e.g. GRP).

**5.5. Fuel Systems.** Be equipped with an effective method of stopping fuel supply operable by the driver when normally seated, with seat belts secured.

**5.6. Electrical Systems**

**5.6.1.** Be equipped with an ignition cut-off switch having positive ON-OFF position clearly marked, and which must be operable by the driver when normally seated with seat belts secured. It must also isolate electric fuel pumps.

**5.6.2.** Have any forward facing lamps of more than 32sq.cm surface area adequately protected in case of glass breakage.

**5.7. Safety**

**5.7.1.** If a Closed Car have a means of access on either side of the passenger compartment operable from inside and outside and sufficient in size to remove the occupant without impedence by door locking devices.

**5.8.** The following parts of E 12 remain unmodified by this section:

**Chassis Seating Suspension  
Steering Cooling Weight/Ballast  
Exhausts Protecting Bulkheads.**

**5.9. Miscellaneous**

**5.9.1.** Be fitted with at least one mirror of minimum surface area 50sq.cm securely mounted and positioned to give a clear view to the rear. The edges of the mirror must be protected by a suitable cover to reduce the possibility of injury in event of an accident.

**5.9.2.** Where advertising is allowed on windscreens not obscure the driver's vision nor reduce the minimum unobstructed vertical height to less than 25cm.

**5.9.3.** Be presented at Scrutineering with all steering mechanism, suspension linkages and flexible brake lines in clean condition.

**5.9.4.** If a closed car have an operative windscreen wiper and washer system.

**5.9.5.** Four wheel steering is permitted *unless SRs state to the contrary.*

**6. AUTOCROSS VEHICLES**

**6.1.** Vehicles will be classified as follows *unless otherwise stated in SRs:*

- A Economy 'Standard' Production Saloon Cars.
- B Rally Cars up to 1650cc.
- C Rally Cars over 1650cc.
- D Cars up to 1650cc, engine over driven wheels.
- E Cars up to 1650cc, front engine, rear wheel drive.
- F Cars over 1650cc, not eligible elsewhere.
- G Specials, (including Four Wheel Drive vehicles, for which there is a time handicap of 5%).

All classes – Any engine with more than 2 valves per cylinder will run in the next higher capacity class.

**6.2. Description**

Cars which have never been homologated, but

which comply with K 37.1.2 and K 37.2 will be eligible for classes B or C.

**6.2.1.** Except for Classes A, B or C modifications are free within Vehicle Regulations.

**6.2.2.** Class A cars must comply with the following requirements:

- (a) The complete body shell, doors, windows, boot or tailgate must be in production material, with no modification or lightening.
- (b) No torque biasing, locked differentials or traction control devices are permitted.
- (c) Interior trim and lights may be removed.
- (d) Original number of seats must be retained, but the specification of the driver's or front passenger's seat may be changed.
- (e) Wheel sizes must be as manufacturer's specification.
- (f) No wheel spacers are permitted.
- (g) Suspension operation must be as manufacturer's specification.
- (h) No four wheel drive system is permitted.
- (i) Standard engine block (which may be bored out) for that model of car, with standard inlet and exhaust manifold. Maximum of two chokes unless the car is fitted as standard with more than two chokes. Fuel injection permitted if standard on that particular model.
- (j) A Roll over bar or roll cage may be fitted.
- (k) The manufacturer's original gearbox and axle must be in their original positions, but modifications are free.
- (l) Cars need not be taxed or insured.

**6.2.3. Rally Cars:** In the case of road rally cars these must be taxed and comply with K 22. In the case of stage rally cars these must comply with K 37.1.1 or K 37.1.2, and K 37.2. Stage cars need not be taxed but in both cases a current MoT must be produced where applicable. Any forward facing lights must comply with 5.6.2. Tyres must comply with 6.7.

**6.3. Body (including Aerodynamics)**

**6.3.1.** Be fitted with a laminated glass or a Polycarbonate windscreen or have a 1in matrix wire mesh fitted over the whole of the windscreen aperture. Toughened glass windscreens will only be acceptable in a road car and then only if the vehicle runs singly. Where windscreens are removed, rear windows must also be removed. For open vehicles approved goggles/visors must be worn at all times.

**6.3.2.** If fitted with non-standard or lightened doors have an internal horizontal safety bar across the door(s) aperture below the line of the window and at a suitable height to protect the driver, this must not be integral with the door.

**6.3.3.** Have any cover over the passenger's compartment alongside the driver composed of foldable material, except where the driver/passenger compartment is separated by a stress-bearing solid chassis member as part of the original design.

**6.3.4.** Except for Class G the silhouette as seen in side elevation must remain unaltered above the wheel hub centres of the original car, except for the engine bonnet/cover the shape of which is free.

**6.3.5.** In Classes D to F the following are permitted:

- (i) One piece lightweight bonnet wing assemblies may be fitted providing adequate bracing is provided to replace lost strength.
- (ii) Lightweight engine bonnet cover, boot lid and doors may be fitted.
- (iii) All non-stress-bearing internal components may be removed.

Cars more extensively lightened than (i), (ii), (iii) must be fitted with full roll-over bars to requirements nos. Q 1.5.1.

#### **6.4. Engine**

See E 12.4.2.

#### **6.5. Brakes**

Be equipped with brakes which comply with Statutory Requirements as to the construction of Motor Vehicles, or if there is no mechanical system available for applying braking effort to at least two wheels, there must be two hydraulic systems so that in event of failure of one system, braking is maintained on at least two wheels.

- (i) Vehicles constructed after 1930 must have brakes on all wheels.
- (ii) The braking system on all vehicles must be capable of demonstrating its efficiency without impairing the driver's control when tested immediately prior to an event.
- (iii) It must be possible under all conditions, running or stationary, for 25% minimum braking effort to be applied by the driver through the braking system to each axle.
- (iv) Brake balance adjusters must not be available for adjustment during running if they contravene (iii).

#### **6.6. Wheels**

**6.6.1.** Have any spare wheel securely fastened in position (a spare need not be carried *unless specified in SRs*).

#### **6.7. Tyres**

**6.7.1.** Only tyres for use on the public highway by cars or light commercial vehicles are permitted. Slicks or any tyres that have been wholly or partly hand-cut are not allowed *unless the SRs state otherwise*.

#### **6.8. Transmission**

**6.8.1.** If fitted with front wheel drive have an effective differential action between the driving wheels.

**6.8.2.** Reverse Gear is optional in Autocross Specials (Class G).

#### **6.9. Oil Systems**

**6.9.1.** If a rear engine vehicle, no part of the oil tank may be located to the rear of the gearbox casing.

#### **6.10. Electrical Systems**

**6.10.1.** Be permitted to remove all LAMPS.

**6.10.2.** Generators are optional.

#### **6.11. Silencing**

Comply with the silencing levels, E 12.17.

#### **6.12. Safety**

**6.12.1.** Safety Criteria, Q 2.1.1; 3.1.2

(not necessarily plumbed in) are mandatory. Q 1.5.1; 2.1.2; 8, are strongly recommended.

#### **6.13. Clubcross Vehicles**

**6.13.1.** Only the following categories of vehicle are allowed to compete in Clubcross.

- (a) Economy "Standard" Production Saloons
- (b) Road Saloon Cars
- (c) Minicross Cars

**6.13.2.** Cars in category (a) must comply with 6.2.2 and 6.13.5 to 6.13.8.

**6.13.3.** Cars in category (b) must be fully road legal, carry a valid tax disc, have a valid MOT certificate (if applicable) and must compete in road legal condition and comply with 6.13.5 to 6.13.8.

**6.13.4.** Cars in category (c) must comply with the Minicross regulations and with 6.13.8.

**6.13.5.** The maximum engine capacity permitted in categories (a) or (b) is 2000cc.

**6.13.6.** Forced induction is prohibited.

**6.13.7.** 4 wheel drive is prohibited.

**6.13.8.** The only tyres permitted are of Highway pattern (i.e. not off-road, on/off-road or winter pattern).

### **7. RALLYCROSS VEHICLES**

#### **7.1. Vehicles will be classified as detailed in the SRs.**

**7.2.1.** Be of rigid construction complying with the following regulations and have been homologated in Group N, A or B of FIA Appendix 'J' or in groups 1, 2, 3 or 4 of 1981 FIA Appendix 'J' although homologation may have lapsed.

**7.2.2.** Cars complying with current FIA Appendix 'M' regulations, in their entirety, are also permitted although homologation may have lapsed.

**\*7.2.3.** Mass produced non-homologated vehicles may be accepted for up to National 'A' events.

**7.2.4.** Rallycross vehicles complying with specific regulations approved by the MSA.

#### **7.3. Body (including Aerodynamics)**

**7.3.1.** Have a windscreen of either laminated glass or polycarbonate of the required thickness. No apertures will be permitted in windscreens. All drivers must wear approved goggles or visor unless the car is fitted with polycarbonate windscreen.

**7.3.2.** A wire mesh stoneguard adequately affixed to the bodywork and with a minimum matrix of 1in is permitted with any type of windscreen.

**7.3.3.** When viewed from above wheels must be covered by rigid material at all times. The outside shape of the original coachwork must be retained except as concerns the wings.

**7.3.4.** Have a bulkhead separating the cockpit from the engine compartment. It must retain its original material, place and shape, measured in respect of the relevant standard car. Installing components up against or passing through this bulkhead is however permitted, providing it does not protrude into the cockpit more than 20cm (as measured perpendicularly to the bulkhead). This will be measured at the point of intrusion, and parallel to the ground. If this is to include the engine, the cam/valve cover may not extend further back than the forwardmost point of the windscreen aperture when viewed directly from above. For scrutineering purposes a 13mm diameter hole must be drilled at the forwardmost point of the Screen aperture.

**7.3.5.** Deleted.

**7.3.6.** Openings may be made in the bonnet or boot lid for ventilation, providing they do not make mechanical components visible.

**7.3.7.** Bumpers, if fitted, must both be as originally fitted to the mass produced vehicle. The supports must also be as originally fitted to the mass produced vehicle. No reinforcing of bumpers or supports is permitted.

#### **7.4. Engine**

**7.4.1.** The engine is free but the block must be from a mass produced engine, although production may have lapsed, and must have the same number of cylinders as the original mass produced engine for that car. The engine must be located within the original engine compartment. Twin engine configurations are not permitted unless mass produced in that form.

#### **7.5. Brakes**

Brakes are free, but an effective handbrake is obligatory. The handbrake may be modified for fly-off operation. There must be at least two hydraulic systems so that, in the event of failure of one system braking is maintained on at least two wheels (not on the same side).

(i) The braking system on all vehicles must be capable of demonstrating its efficiency without impairing the driver's control when tested immediately prior to an event.

(ii) It must be possible under all conditions, running or stationary, for 25% minimum braking effort to be applied by the driver through the braking system to each axle.

(iii) Brake balance adjusters must not be capable of adjustment during running if they contravene (ii).

(iv) Anti-lock devices are prohibited.

(v) Brake discs are free, subject to them being of ferrous material.

#### **7.6. Wheels**

**7.6.1.** Have maximum wheel width on all cars of 25cm (wheel width = flange + rim + tyre).

#### **7.7. Transmission**

**7.7.1.** Transmission is free.

**\*7.7.2.** The SRs may require Four Wheel Drive vehicles to be subjected to some form of handicap (not necessarily a delayed start handicap).

**7.7.3.** The clutch and its control are free, but automatic operation of the clutch is prohibited, unless fitted by the manufacturer to that body style. The clutch must be operated by the driver's feet, unless an alternative method of operation is fitted by the manufacturer to that body style.

Gear selection mechanism must be mechanically operated. Electronic, hydraulic or pneumatic mechanisms are prohibited, unless fitted by the manufacturer to that body style.

The final drive assembly, differentials, propshafts and driveshafts are free.

Electronically controlled systems are prohibited.

#### **7.8. Oil Systems**

**7.8.1.** Have catch tanks fitted.

#### **7.9. Electrical Systems**

**7.9.1.** All lights may be removed, but all cars must be equipped with two rear lights of the anti-crash type as used in fog with minimum of 15 watts each and illuminated area of 60sq.cm. These must work with or replace the car brake light system at all times and must be between 115cm and 150cm above the ground and must be clearly visible from behind.

**7.9.2.** Generators are optional but the self starter system must be operable at all times.

#### **7.10. Silencing**

Comply with Silencing Levels E 12.17.

#### **7.11. Safety**

**7.11.1.** Comply with Safety Criteria Q 1.5.1 drawing number Q5, Q6 or Q8 with longitudinal strut (as shown in drawing Q9) mandatory, Q 2.1.2 (FIA homologated and with four separate fixing points), Q 3.1.2 (not necessarily plumbed in), Q 5, Q 8, Q 13.

#### **7.12. Miscellaneous**

**7.12.1.** Have internal bonnet locks removed and external positive locking fasteners fitted.

**7.12.2.** Have steering column locks rendered inoperative.

**7.12.3.** Have towing eyes of adequate strength and size fitted front and rear. These should be painted a contrasting bright colour.

**7.12.4.** Active suspension and any system which allows control of the spring flexibility, shock absorption or trim height when the car is moving, are prohibited unless fitted by the manufacturer to that body style.

**7.12.5** MSA or FIA Log Books are required at all Rallycross events.