



THE 2011 BTRDA® CLUBMANS' RALLYCROSS CHAMPIONSHIP

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SR.1. GENERAL REGULATIONS

SR.1.1. TITLE AND JURISDICTIONS

1.1.1. The 2011 BTRDA® Clubman's Rallycross Championship is organised, promoted and administered by BTRDA®, in accordance with the General Regulations of The Royal Automobile Club Motor Sports Association (MSA) (incorporating the provisions of the International Sporting Code of the FIA) and these Championship Regulations.

1.1.2. The 2011 BTRDA® Clubman's Rallycross Championship is a championship for different categories of rallycross vehicles competing at the same event.

1.1.3. The Championship is registered with the MSA and have been given a Championship Permit Number: tba the MSA Championship Grade is D

1.1.4. Qualifying rounds will be run at National B status.

1.1.5. Not used.

1.1.6. The Organisers reserve the right to carry out necessary or required changes to these regulations which are due to "force majeure", or for safety reasons, or if requested by the authorities, by means of Official Bulletins.

SR.1.2. OFFICIALS

1.2.1. Championship Coordinator
Andy Bedford
8 Papist Hall Mews
High St
Barrow upon Humber
DN19 7AA
Tel no: 07866 651633
Email: andrewjbedford@btopenworld.com

1.2.2. Licensed Eligibility Scrutineer
Dave Newton
6 Hereford Street
Newport
Gwent
NP19 8DT
Tel no: 07814 595132

1.2.3. The Championship Stewards will be comprised of a panel of any three of the following:

Rod Parkin, Mike Broad, David Walton, Mike Sones.
Any three of the Stewards may make a decision.
Replacement Stewards may be co-opted to cover force majeure situations.

SR.1.3. COMPETITOR ELIGIBILITY

1.3.1. Drivers and Entrants must be members of the British Trials and Rally Drivers Association (BTRDA®), be registered for The 2011 BTRDA® Clubman's Rallycross Championship. Competitors must be in possession of a valid National B or higher competition licence or be a professional driver in possession of a valid Licence (featuring an E.U. flag) and medical, issued by the ASN of a member country of the European Union.

1.3.1.1 The Championship is only open to BTRDA® star graded drivers, up to and including 4 stars.

1.3.1.2. Entrants must be fully paid up valid membership card holding members of LHMC and in possession of a valid 2011 MSA Entrants Licences.

1.3.1.3. Competitors in the Junior class must Junior

Rallycross drivers as defined in N5.5.3 only.

1.3.1.3. A competitor shall not take time off school to participate in motor sport without the prior written approval of their school. If participation in the Championship requires absence from school, Drivers in full time school education are required to have the approval of their head teacher and a letter stating such approval from his/her school in order to fulfil registration for the Championship.

1.3.2. Acceptance of registration is entirely at the discretion of the Championship Organisers.

SR.1.4. REGISTRATION

1.4.1. The Registration fee for the Championship will be £27 (not including BTRDA Membership) and should be requested on the 2011 BTRDA® annual membership form. It should be clearly understood that all competitors and entrants agree to be bound by the rules and regulations contained in the Championship regulations and those stipulated by the organisers, promoters and the MSA.

1.4.2. Where a car is entered for **The 2011 BTRDA® Clubman's Rallycross Championship**, by someone other than the Driver, it will be necessary for that Entrant (who must be in possession of a valid 2011 MSA Entrants Licence) to complete the Registration Form along with, and nominating, their Driver.

1.4.3. A Parent or Guardian must countersign a BTRDA® membership form submitted by a Driver who is a Minor.

1.4.5. Applications for registrations open immediately on publication of these Regulations and close prior to the penultimate event in The 2011 BTRDA® Clubman's Rallycross Championship.

1.4.6. No Club organising an event in the Championship, will accept event entries unless the Competitor has previously registered in the championship.

SR.1.5. CHAMPIONSHIP EVENTS

1.5.1. The 2011 BTRDA® Clubman's Rallycross Championship will consist of the events as set out in the calendar below:

	Date	Venue	Organising Club
1.	17 April 2011	Blyton	MDA
2.	7 May 2011	Blyton	LHMC
3.	19 June 2011	Blyton	MDA
4.	31 July 2011	Blyton	MDA
5.	14 August 2011	Blyton	MDA
6.	28/29 August 2011	Lydden	LHMC
7.	18 September 2011	Knockhill	LHMC
8.	16 October 2011	Mallory Park	LHMC

1.5.2 The Organisers further reserve the right to cancel, postpone, change or substitute events if necessary due to exceptional unforeseeable conditions, and are not liable for any damages so incurred as a result.

SR.1.6. CHAMPIONSHIP POINTS SCORING

1.6.1. The 2011 BTRDA® Clubman's Rallycross Championship, will consist of eight point scoring events, and is a Drivers' championship.

1.6.2. Points will be awarded to the finalists and other qualifiers in each class at each qualifying event in the championship as follows:

If 3 or more starters in a class:

1st	- 30 pts	13th	- 12 pts
2nd	- 27 pts	14th	- 11 pts
3rd	- 25 pts	15th	- 10 pts
4th	- 23 pts	16th	- 9 pts
5th	- 21 pts	17th	- 8 pts
6th	- 19 pts	18th	- 7 pts
7th	- 18 pts	19th	- 6 pts
8th	- 17 pts	20th	- 5 pts
9th	- 16 pts	21st	- 4 pts
10th	- 15 pts	22nd	- 3 pts
11th	- 14 pts	23rd	- 2 pts
12th	- 13 pts	24th	- 1 pt

If 2 starters:

1 st	- 24 pts	2 nd	- 21 pts
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If 1 starter:

1 st	- 18 pts
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If a dead heat is declared, all the Drivers concerned will score full points for that place. Should any final not be run, competitors will score full championship points based on their qualifying positions

1.6.2.1 The final round of the Championship shall count for double points.

1.6.2.2 The 2011 BTRDA® Clubman's Rallycross Champion will be the competitor scoring the highest number of points, in a single class, at the maximum number of rounds organised less one round.

1.6.2.3 Class Champions – the champion of each class will be the competitor scoring the highest number of points from the maximum number of rounds organised less one round.

1.6.2.4 If the number of events reduced for any reason, then the number of scores to count will also reduce.

1.6.2.5 If the number of entries for any individual class be less than four by the standard closing date, individual event organisers may:

- amalgamate with the next highest, or appropriate class; or
- cancel the class.

1.6.2.5.1 In the event of a class being cancelled:

a) no class points will be awarded and the provisions of 1.6.2.4 invoked.

b) overall championship points will be awarded to any drivers entered on aggregate. (e.g. if two drivers are entered the points for 1st and 2nd will be added to together and each driver awarded equal points i.e. 22.5)

1.6.3. In the event of a tie between two or more Competitors, the greater number of first placed finishes achieved by the Competitors involved in the tie will be used.

Should a tie still exist, it will be resolved:

i) By taking into account the greater number of second places achieved; then third places etc. etc.

ii) By taking into account the number of competitors (i.e. event finishers) beaten during the season by each Competitor.

1.6.4. All Championship events will score maximum points regardless of distance (see SR.1.6.2.)

1.6.5. A change of car, within the same category is allowed during the Championship

1.6.6. No 'spare' or reserve cars are permitted.

1.6.7. In order to score points all cars and Drivers competing in the Championship will be required to display and wear Championship Sponsors' decals and badges in the nominated position on clothing and vehicle (See SR. 5.7. and SR.6.1.4.3.).

1.6.8. Five championship points will be deducted for any driver failing to comply with SR5.7.1.

1.6.9. The Championship Organisers reserve the right to enter a guest car(s) into any Championship event. Any such entries will be ineligible for championship points, and will not be required to register for the championship.

SR. 1.7. AWARDS

1.7.1. All Championship awards are to be provided by the BTRDA® and associated sponsors

1.7.2. All trophies will be presented to the Driver(s).

1.7.3. Trophies will be presented at each event to drivers as follows:

1st, 2nd and 3rd in each category – a trophy

1.7.4. End of season awards are Trophies and will be presented as follows (see also SR1.6.3):

a) The **2011 BTRDA® Rallycross Champion - The Dave Fuell Trophy and an award**

b) 1st in SuperModified Class overall any capacity: class awards and an award

c) 1st SuperModified up to 1600cc: The BWB Trophy and an award.

d) 1st SuperModified over 1601cc and up to 2100cc: The Betteridge Trophy and an award

e) 1st SuperModified over 2101cc: A trophy

f) 1st in Stock Hatch: The Bill Skermer Trophy

g) 1st in Minicross: The Jehu Trophy

h) 1st in Junior Rallycross Class: The Star of Tomorrow Trophy

i) 1st SuperModified in Modified 2000: The Motospeed Trophy and an award

2nd in each class: a trophy. (Subject to there being at least three registered contenders).

3rd in each class: a trophy. (Subject to there being at least six registered contenders).

The John Mackley Trophy and an award will be presented at the discretion of the BTRDA® Rallycross Committee to a championship entrant who is deemed to be the best newcomer of the year.

An award will be presented at the discretion of the BTRDA® Rallycross Committee to a championship entrant who is deemed to have the Best Presented Car throughout the whole championship year.

Championship trophies and awards will only be presented upon each driver starting at least three events.

With the exception of the John Mackley trophy, and

best prepared car, no member may take more than one award.

The Andy Sargent Trophy, presented to the event organising club which, in the opinion of the BTRDA®, organised the best event of the qualifying rounds.

Championship Trophies may be retained for a period of nine months from the date of the official presentation providing the recipient or their nominee collects them at the BTRDA® Annual Awards function.

1.7.5. The Championship organising club will endeavour to obtain sponsored awards or bonuses during the series and reserves the right to introduce same at any time without any obligation to distribute such awards retrospectively.

1.7.6. In the event of any Provisional Results or Championship Points Tables being revised after any provisional awards presentations and such revisions affecting the distribution of any awards, the Competitors concerned must return such awards to the BTRDA® or organising club in good condition within 7 days.

1.7.7. Entertainment Tax liability

In accordance with current Government legislation, the Organisers of each round are legally obliged to withhold tax at the basic rate on all payments to non-UK resident sportsmen/women. That is, those persons who do not have a normal permanent residence in the U.K. The U.K. does not include the Isle of Man, Channel Islands or Eire. This means that, as the organiser, the organising club is required to deduct tax at the current rate applicable from such payments they may make to non-UK residents. Under certain circumstances, it may be possible for competitors to enter into an agreement with the Inland Revenue to limit the tax withheld. Any application for such an arrangement must be made in writing and not later than 30 days before the payment is due.

For further information contact: - HM Revenue & Customs, Foreign Entertainers Unit, Centre for Non-Residents, St Johns House, Merton Road, Merseyside L69 9BB Tel: 0151 472 6488 Fax: 0151 472 6483

SR.2. JUDICIAL PROCEDURES

SR.2.1. SPORTING DISPUTES

2.1.1. Appeals on the Sporting Regulations and their application by the Championship Coordinator that arise during the season will be settled by the Championship Stewards in accordance with MSA Regulations (C6.5 refers).

2.1.2. Any Regulation clarifications necessary during the year will be notified in writing to all registered Competitors in an Official Bulletin.

2.1.3. Championship Officials, or the Event Senior Clerk of the Course reserves the right to request an enquiry by the championship Stewards on viewing official video footage after an event which may suggest a breach of driving standards or regulations and which was not investigated during the event. Penalties may include those specified in GR C2.1.1. individual event bans, loss of event awards and/or end of season awards, loss of championship points or exclusion from the Championship. The Championship Stewards' judgment will be subject only to the Right

of Appeal to the MSA.

2.1.3.1. The Clerk of Course reserves the right to delay any investigation into driving standards until he has the opportunity to view video evidence from the officially nominated event TV production company.

2.1.5. Contact and driving standards: Contact and manoeuvres liable to hinder other drivers such as premature direction changes on the straight. Crowding of cars towards the inside or outside of the curve, or any other abnormal change of direction, and avoidable contact are strictly prohibited.

2.1.6. Following correct course. A circuit diagram may be available in the paddock office at each event.

2.1.7. Any competitor who leaves the circuit such that all four wheels are off the course may incur a time penalty or may be considered as having retired from the heat or final at the point at which they left the course whether or not an advantage is gained. Competitors may only return to the course when it is safe to do so and in a safe manner, acknowledging other competitors

2.1.8. Competitors who touch any course markers may incur a time penalty, or may be considered to have retired from that heat or Final at the point at which they touched the course marker.

2.1.9. Any competitor who is penalised in accordance with section 2.1.6 to 2.1.8 will not have their competition licence endorsed.

2.1.10. Any competitor who is excluded from the event for any driving offence will lose all championship points for that event and must count the result of that/those events, among those contributing to his/her championship score.

SR.2.2. TECHNICAL DISPUTES

2.2.1. The Organisers and the Championship Eligibility Scrutineer reserve the right to check, seal and/or remove any suspect part for more detailed examination.

If any irregularity is found, all costs will be borne by the Competitor.

SR.3. EVENTS & PROCEDURES

SR.3.1. ENTRIES

3.1.1. The Championship and event organisers will issue Supplementary Regulations/Entry Forms to all registered Competitors in sufficient time for entries to be made prior to the published entry dates for each Championship round.

SR.3.3. PRACTICE

3.3.1. The minimum period of practice to be provided is to be as specified in the MSA Regulations N5.2. Should any practice session be disrupted, or a competitor does not complete the session the Clerk of the Course shall not be obliged to resume the session or re-run sessions to achieve the championship criteria and the decision of the Clerk of the Course shall be final.

3.3.2. Cars will start singly at intervals determined by the Chief Start Line Official, 3.3.3. Competitors must practice (See SR. 3.3.1.) in the car to be raced.

3.4.1. The Clerk of the Course and/or Stewards of the Meeting shall have the right to exclude any

driver whose practice times or driving are considered to be unsatisfactory

SR.3.4. QUALIFICATION HEATS

3.4.1.1. The heat formats, grid positions in the heats and procedures and qualifying procedures for the finals may be amended by Supplementary Regulations, Final Instructions or other Official Bulletins.

3.4.2. Heat Formats and Procedures

- a) A maximum of 3 Qualifying Heats will be run at each round of **The 2011 BTRDA® Clubman's Rallycross Championship**, the minimum will be one.
- b) Qualifying Heats will normally be run in the following order: Junior, Minicross, Stock Hatch and SuperModified. Competitors in each category will qualify only within their own category.
- c) All categories will start Heats in a 3-2-3-2-3 formation. Unless advised otherwise in event supplementary regulations
- d) The number of laps comprising a Heat will be advised in the SRs or final instructions for each event in the 2011 BTRDA® Clubman's Rallycross Championship, but may be changed at the discretion of the clerk of the course.
- e) The grids will be predetermined and will allow cars up to the maximum allowed by the track licence.

3.4.3. Heat Points

- a) Heat Points, which will contribute to final qualifying positions only, will be allocated as follows:
Fastest 1 pt; 2nd Fastest 2 pts and so on
- b) Competitors who do not record a total race time for any Heat will be allocated 80 points, those who did not start will be allocated 90 points and those who are excluded will be allocated 95 points.
- c) Only those drivers having completed two Heats out of three (or 1 if only two heats are run) and having been credited with at least two times (or one if two heats are run) will be admitted to the Finals.
- d) Grids for Finals will be determined by either:
 - (i) Adding together the two lowest points scores when 3 Heats are run **OR**
 - (ii) The single lowest score when 2 or less heats are run
- e) Where competitors have equal points scores at the end of Qualifying Heats then any tie(s) will be resolved as follows:
 - (i) The fastest individual heat time
 - (ii) The lowest score in Heat 3
 - (iii) The lowest score in Heat 2
 - (iv) The lowest score in heat 1

3.4.4. The Organisers reserve the right to amend grid formation whilst cars are being formed up on the Dummy Grid. Some heats may be amalgamated.

SR.3.5. FINALS

3.5.1. Whenever possible the event organisers will

provide Finals for each class at each Championship event for all competitors who meet the criteria for qualification for a final the opportunity to race in a final.

3.5.2. All Category A Finals will be for the highest qualifiers, plus the winner of the B Final. The B Final will be for the next highest qualifiers. The number of competitors admitted to the final will be announced in final instructions or other official bulletin. The number of cars admitted will be up to the maximum stated on the track licence.

3.5.4. The number of laps they complete and the time taken to complete that number of laps as recorded by the Official Time Keepers will classify competitors who retire from a Final; parts of laps uncompleted will be ignored.

SR.3.6. OTHER GENERAL EVENT PROCEDURES

3.6.2. Competitors will miss their qualifying heat/final if they are not ready on the Dummy Grid when cars are released and will not be placed in a later race.

3.6.3. No more than 2 members of support crew are allowed to enter the pit lane during qualifying or race session.

3.7.5.5. Only event officials and drivers will be permitted in the start area, unless otherwise instructed by the Clerk of Course.

SR.3.7. STARTS

Unless modified by the Organising Club's Standing Regulations, the following regulations shall apply:

3.7.1. The use of tyre heating/heat retention devices on the Dummy Grid and Start Line is prohibited.

3.7.2. Any drivers unable to start the heat or final are required to indicate their situation as per MSA regulation Q12.13.2.

3.7.4. A five second board will be used to indicate that the grid is complete. Race starts will be by one of the following three:

a) The red lights will be switched on five seconds after the board is withdrawn; **the extinguishing of the red lights, which will be between a minimum of one and a maximum of 4 seconds, is the signal to start the race.**

b) The red (or Green) lights will be "flashed" on at least five seconds after the board is withdrawn. The signal to start will be the lights being turned ON.

c) In the event of any starting lights failure the starter will revert to the use of the National flag. In the event of an aborted start the amber lights will be switched on.

3.7.5. False starts

3.7.5.1. Where available electronic beams will be used in conjunction with starting lights. The beams will be considered as a judge of fact.

3.7.5.2. The competitor(s) who jump the start will be placed on an additional row at the back of the published grid for subsequent attempts at the start. Any competitor who jumps the start for a second time will not be allowed to start, and the next reserve (if available) may be brought onto the grid.

3.7.5.3. The Clerk of Course may order a complete restart if he considers there to have been a faulty

start.

3.7.5.4. In the event of the electronic equipment failing, a judge of fact, who will be named, will adjudicate on all starts. This may include instances where the lights do not lock, but a jump-start is evident.

SR.3.8. RACE STOPS

3.8.1. Should the need arise to stop any race or practice, red lights will be switched on at the start line and red flags will be displayed at the start line and at all marshal signalling points around the circuit. Cars may not enter the pits unless directed to do so. Any car so doing will be deemed to have retired and will take no further part in that race/final.

3.8.3. Any qualifying heat that has to be stopped before completing its full distance will be rerun over the full distance, from the original grid.

3.8.4 Any final that has to be stopped may only be re-run if the leader has completed less than half the distance.

SR.3.13. TIMING

3.13.1 Competitor identification and timing at all events requires every competing car to be fitted with an AMB TranX 260, or in approved cases, an AMB TranX 160 Transponder. Cars fitted with other makes or types of transponder will not be included in any practice or race results.

It is the responsibility of each competitor to:

- Fit an AMB TranX 260 Transponder in the location approved for the type/class of car.
- Provide the unique 7 digit Identification Number of the Transponder being used on the Entry Form for each event
- Ensure the transponder is secure and in good working condition for every practice, heat and final
- Notify the Secretary of the Meeting of any change of transponder being used.
- Replace any transponder damaged, lost or inoperative.

Any competitor starting a practice, heat or final with an inoperative transponder will not be timed until the defect has been rectified or a replacement transponder has been fitted.

Any competitor starting a practice, heat or final using a transponder registered to another competitor will not be timed until the Secretary of the Meeting has been informed of all changes relating to the use of that transponder.

Where one car is double entered, each competitor must register on their Entry Form, and use an individual transponder and competition number for each practice, heat and final.

3.13.2 Any additional personal timing equipment must not be located within 10m of the official timing control line at any event.

SR.4. PENALTIES

SR.4.1. INFRINGEMENTS

4.1.1. Technical infringements arising from post Qualifying Scrutineering or Judicial Action: Minimum Penalty; The provisions of MSA Regulations: C3.3..

4.1.2. Arising from post event Scrutineering or Judicial Action: Minimum Penalty; The provisions of

MSA Regulations: C3.5.1. (a) and (b).

For infringements deemed to be of a more serious nature the Clerk of the Course and/or Stewards of the Meeting are to invoke the provisions of Regulation C3.5.1. (c).

4.1.3. Deliberate or repeated Technical Infringements will be referred to the Championship Stewards for consideration of exclusion from the Championship of the Car, Driver or Entrant.

4.2. Infringements of non-technical MSA Regulations and the Sporting Regulations issued for the Championship in accordance with the 2011 MSA Judicial Procedure Regulations; any such penalties may affect a competitor's eligibility for Championship points and awards.

4.4. Any breach of driving standards will be dealt with firmly. Video evidence from the official nominated TV Production Company, or footage from any other proven source, may be utilized as evidence.

4.4.1. If it appears from any evidence that there may have been actions by a competitor or a member of his team considered to have bought the Championship into disrepute, the championship Co-Ordinator will be entitled to request that the Championship Stewards consider the inception of an enquiry into the matter. Penalties may include individual event bans, loss of event awards and or end of season awards, loss of Championship points or exclusion from the Championship. The Championship Stewards judgement will be subject only to the right of appeal to the MSA.

SR.5. TECHNICAL REGULATIONS

SR 5.1. General Description: The BTRDA® Clubman's Rallycross Championship is open to Drivers of SuperModified (including Modified 2000), Stock Hatch, Minicross and Junior Rallycross cars as detailed below, and complying with MSA Rallycross Regulations N6 except where amended, "Super1600" and "Touring Cars" Rallycross Cars complying with FIA Appendix J article 279 (N.B. Forced induction engines are subject to an equivalency factor of 1:7)

5.2 Category Description:

5.2.1. SuperModified: FIA Super1600, FIA Touring Cars plus two-wheel drive cars complying with MSA Yearbook N6 and complying with the 2011 Technical Regulations published by BTRDA®.

There will be four sub-divisions within the class with awards decided by the highest finisher within the overall SuperModified classification.

a) SuperModified up to 1600cc

b) SuperModified Over 1601cc and up to 2100cc

c) SuperModified Over 2100cc

d) Modified 2000 As defined in the 2011 Technical Regulations published by BTRDA®.

5.2.2. Stock Hatch As defined in the 2011 Technical Regulations published by BTRDA®.

5.2.3. Minicross. As defined in the 2011 Minicross Technical Regulations as published by the Minicross Driver's Association.

5.2.4. Junior Rallycross: As defined in the 2011 Junior Minicross Technical Regulations as published by the Minicross Drivers Association or complying

with GR 7.1 in entirety.

SR.5.3. NUMBERS & CHAMPIONSHIP IDENTIFICATION

5.3.1. Both car and Driver must meet requirements of livery during all practice, qualifying and finals in **The 2011 BTRDA® Clubman's Rallycross Championship.**

5.3.2. Note the particular requirements of SR.6.

5.3.5. To ensure conformity Competition Numbers must conform to J4.1.

SR.5.7. Paddock Regulations.

5.7.1. Each team shall provide a ground sheet which the competition vehicle must be parked on throughout servicing.

5.7.2. Waste oil, tyres and other consumables must only be disposed of in the specifically provided waste receptacles at the venues (NOT general waste bins), or if not provided be taken home.

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SR.6. APPENDIX 1

SR.6.1. COMMERCIAL UNDERTAKINGS

The following commercial undertakings are not subject to the judicial procedures of either the championship stewards and/or the MSA/MSA

- 6.1.1.** Enquiries concerning the commercial aspects of the championship should be addressed to the BTRDA® Chairman in writing.
- 6.1.2.** The championship title and associated logo styles may only be used with the prior written approval of the BTRDA®.
- 6.1.3.** Competitors are advised that, unless requested otherwise, their information will be stored in a computer retrieval system and may be used for publicity purposes.
- 6.1.4.** Entry into the championship is conditional upon each competitor:
- 6.1.4.1.** Providing free of charge to the Championship Organisers advertising places on their cars and clothing as specified.
- 6.1.4.2.** Accepting without reservation or recourse the surrender of his/her rights (if any) for TV filming and broadcast of footage collated during the series, which may be used at the Championship Organisers' and Sponsors' discretion.
- 6.1.4.3.** Complying with the Championship Organisers and Sponsors requirements on podium procedures, including a requirement to wear Championship Sponsors publicity material and clothing in preference to the competitor's own sponsor.
- 6.1.4.4.** Co-operating with requests for publicity sessions throughout the season.
- 6.1.5.** All cars must carry the Championship, and event, Sponsors' decals and panels in the correct locations, without alteration and without interference, as defined in Championship bulletins. Failure to do so will forfeit Championship points for that event
- 6.1.6.** At the start of each round in **The 2011 BTRDA® Clubman's Rallycross Championship**. Cars must be clean and in good order. **The Championship Organisers reserve the right to forbid cars not meeting this requirement from taking part.**
- 6.1.6.1.** Presentation of all race and support vehicles in the paddock is by direction of the Championship Coordinator or circuit organisers. The space allocated is only to be used for race car preparation and team catering. It is forbidden to use this space for guest hospitality or private vehicle parking.
- 6.1.7.** No commercial on-board cameras will be permitted except under the control of the BTRDA or the Championship Organisers' nominated TV production company in respect of material to be transmitted on television.
- 6.1.8.** **The 2011 BTRDA® Clubman's Rallycross Championship** has exclusive broadcast, cable, satellite, video, internet and mobile phone picture and data rights and rights to all other mediums to film and record the participation of the Driver, Entrant, Sponsor, and any other team members in

the events and activities throughout the championship and to licence, assign or otherwise deal with such rights and/or film and recording and distribution.

6.1.9. Any Competitor advised by the Championship Organisers that they are to carry official on-board television cameras, must have the approved championship logo on the dashboard, visible to the official on-board camera. The decision for the positioning of this Logo rests solely with the Championship Organisers and Promoters.

No other publicity material visible to an on-board camera, on the car will be allowed.

6.1.10. Competitors are reminded that no tobacco (or associated product) advertising, either on the cars or Driver overalls is permitted. Additionally any products that are not permitted to be advertised on UK terrestrial television are also prohibited. Livery designs must be submitted to the Championship Office for approval prior to commencement of such work; any design or display, which may conflict with the aims and aspirations of **The 2011 BTRDA® Clubman's Rallycross Championship**, will be rejected.

6.1.11. No advertising or statement on the car or on Drivers' race clothing is allowed which may be considered offensive to the Championship Organisers or their Sponsors and individual Event Organisers.

6.1.12. All drivers, entrants, registered competitors and teams by virtue of entering the Championship hereby authorise the Championship to use and license the use of images and representations of the teams' vehicles competing in the Championship including (in so far as the same appears on vehicles participating in the Championship) and, subject to specific agreement, the team's logo for the purpose of producing merchandise and electronic media exploiting the reputation of the Championship

6.1.13. All Drivers required for Podium Presentations at each meeting, should attend, wearing race overalls, without delay. Failure to do so may mean forfeiture of any championship awards/points at that round.

6.1.14. No commercial displays or sales are permitted at any circuit without the express written permission of the Circuit Owner and/or the Championship Organisers.

SR7 APPENDIX 2

SR.7.1. CHAMPIONSHIP CONTACTS

BTRDA®

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DE13 7HA

Membership Secretary:

Mrs L Cox
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Championship Web Site

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Deputy Championship Co-Ordinator:

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BTRDA Stock Hatch (inc Hot Hatch) Technical Regulations

2011 Draft v2.1

5.5.1 INTRODUCTION.

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can make a modification you should work on the principle that you cannot.

5.5.1.a Stock Hatch cars are 2-wheel drive four seater hatchbacks.

The Stock Hatch Car Class is for hatchback cars that are, or have been available on general sale to the public in the UK and, in a) and b) below are at least 3 years old. Competitors must be able to produce proof of date of registration.

HOMOLOGATION SPECIALS ARE NOT PERMITTED

5.5.1.b The cars permitted are: -

- a) Cars with engine capacities up to 1600cc having no more than 2 valves per cylinder.
- b) Cars with engine capacities up to 1400cc, which may have more than two valves per cylinder having fixed valve timing.
- c) Cars with engine capacities up to 1600cc having more than two valves per cylinder.

5.5.1.c Hot Hatch

The cars permitted are:

Any Stock Hatch vehicle that must meet the definition of a Series Production Car since 31 December 2001, as defined in MSA Nomenclature and Definitions (2011 MSA Blue Book, Section B on page 62) and be 1600cc and have more than two valves per cylinder. Competitors must be able to produce proof of the age requirement for the make and model of vehicle.

5.5.2 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS.

5.5.2.a Cars must comply with the Technical Regulations published by the Organisers for the event throughout official practice, qualifying heats and finals.

5.5.2.b All cars must comply fully with the current MSA Yearbook regulations J and Technical regulations N6.1. to 6.14.3. and these supplementary regulations.

5.5.2.c No approved modification may give rise to an unapproved one.

5.5.2.d The use of magnesium alloy sheet is not permitted. Titanium sheet may only be used for heat shields.

5.5.3 SAFETY REQUIREMENTS.

5.5.3.a Minimum, Comply with current MSA Yearbook regulation N6.11 to 6.12.6. inclusive.

5.5.3.b Provided that the front bulkhead is not penetrated and that no part of the cage extends rearwards beyond the rear shock-absorber mounting points, optional bars as per K Appendix 2 Drawings 5 & 6 and 7 & 12 are permitted.

5.5.3.b(a) Optional bars as K Appendix 2 drawing 11 may be fitted.

5.5.3.c A Competition Seat with headrest is mandatory in accordance with K2.2, K2.3 and K13.

5.5.3.d Currently FIA Homologated Seat Belts are mandatory, with two separate fixing points for the shoulder straps.

5.5.3.e From a 'race ready' position with seat belts fastened, the driver must be able to vacate the car in 5 seconds.

5.5.3.f A fire extinguisher MUST be fitted; the minimum specification must be to current MSA Regulations. (K3.1.2. (b) or (c) not necessarily plumbed in)

5.5.4 CHASSIS and BODYWORK.

5.5.4.a The standard body shell MAY NOT be strengthened except for the following: -

- i) The fitting of the roll cage as 5.5.3.a & b
- ii) The reinforcing of the standard suspension mounting points may NOT extend to more than a radius of 100mm from the centre of the suspension point.
- iii) To prolong the life of the body shell it is permitted to carry out seam welding.

5.5.4.b The exterior of the car MUST remain as standard including mirrors, door handles and bumpers, although it is permitted to remove body mouldings, badges and the radio aerial. It is permitted to fit guards to engine sump and fuel tank. Any guards may protect but NOT strengthen.

It is NOT permitted to reinforce the bumpers or their mountings.

5.5.4.c Glass sunroofs MUST be replaced as per MSA Yearbook Regulation Q19.14.6.

5.5.4.d. The side and rear window glass must be replaced with Perspex having a minimum thickness of 4mm.

Consideration MUST be given to driver's compartment ventilation and for this purpose only, it is permitted to cut a maximum of 4 X 2-inch diameter holes in each of the rear side and tailgate windows. A vent hole may also be added to the driver's door large enough to accept the driver arm.

5.5.4.e The interior of the car MUST have the roof lining, carpets and all the seats, apart from the driver's (See 5.5.3.c), removed. It is also required that any audio equipment, spare wheel, tools and standard seat belts be removed. It is permitted to remove the door trim panels and the window regulators (the windows must then be fixed to prevent them opening). It is recommended that trim panels are replaced by aluminium or Kevlar panels.

5.5.4.f An interior mirror of a minimum of 50 sq. cm. MUST be fitted. The original dashboard MUST be retained although instruments may be replaced. Dashboard may be modified to allow fitment of roll cage.

5.5.5 ENGINE.

5.5.5.a The engine and gearbox must be as originally fitted as original equipment to the car and be in the original location.

5.5.5.b Pistons must be unmodified standard production or approved replacement pistons subject to a maximum oversize of +0.5mm. (even if this increases the capacity beyond 1400/1600) Competition pistons are prohibited. Stroke must comply with Manufacturer's original specification. Material may be removed from the skirt area only for balancing purposes. In this case ONE piston must remain unmodified.

5.5.5.c Lightening of crankshaft or con rods is prohibited. Balancing may be carried out by pin drilling only.

5.5.5.d Camshaft must be standard as originally supplied for type of engine used. It may not be machined or reprofiled. Original timing gear must be used. Offset keys or adjustable vernier drives may not be used, unless fitted to the original engine.

5.5.5.e Cylinder head must be standard as originally fitted to the type of engine used. No gas flowing or polishing is allowed. The original terrain must be visible in the inlet & exhaust ports and in combustion chambers. Heads may be skimmed for maintenance purposes only and may not be less than Manufacturer's minimum dimension.

5.5.5.f Competition flywheels are not permitted. The standard unit may not be lightened or machined.

5.5.5.g It is permitted to baffle the standard sump and modify the oil pick up pipe. Dry sumping is not allowed.

5.5.5.h It is permitted to fit an oil cooler within the engine compartment.

5.5.5.i It is permitted to remove/replace the original air filter and filter housing with a performance filter or induction kit. Where engine breather pipes cannot be refitted to the induction system, breather pipes must go to a breather catch tank of adequate size.

It is permitted to change carburettor jets or injectors. It is NOT permitted to modify the inlet manifold system including the throttle mechanism, carburettor, fuel pressure regulators, and throttle body apart from fitting an additional external throttle spring

5.5.5.j The standard ignition/engine management system MUST be retained but it is permitted to fit a modified "chip". Rev. limiters may be fitted or removed. Spark plugs and ignition leads are free. It is NOT permitted to add additional ignition systems.

3D management systems are not permitted.

5.5.5.k All water radiator and hoses are free but the original radiator location MUST be retained. Heater may be removed and pipe work blanked off or linked together in the engine compartment.

5.5.5.l To allow for scrutineers seals at least two adjacent sump bolts and two adjacent rocker/cam cover bolts must have suitable sized holes drilled.

5.5.6 TRANSMISSION.

5.5.6.a The standard gearbox casing and all internals MUST be retained. Gear ratios & final drive ratios must be the same as originally supplied for that model of car. Torque bias and limited slip differentials are not permitted even if fitted as original equipment.

5.5.6.b Torque bias and limited slip differentials must be replaced by a normal differential with the correct ratio.

5.5.6.c Any form of traction control or launch control is not permitted.

5.5.6.d Standard drive shafts must be retained.

5.5.6.e The clutch drive plate and cover may be up rated by a standard pattern type. It must fit without any modification to the flywheel. Friction material is free providing it is to the original configuration.

5.5.7 SUSPENSION and STEERING.

5.5.7.a It is permitted to fit non-standard shock absorbers and springs provided that they mount onto the body at the standard suspension mounting points. Any shock absorber units may only have a single

method of damping adjustment. Multi-adjustable and/or remote reservoir types are prohibited

5.5.7.b The ride height may be altered. Adjustable spring platforms are permitted

5.5.7.c It is permitted to fit up rated bushes to the suspension (No rose type joints permitted)

5.5.7.d It is permitted to fit, remove or up rate anti-roll bars. (No rose type joints permitted)

5.5.7.e It is not permitted to have adjustable suspension geometry. I.E. Camber, Caster unless fitted as standard to the original car, the car MUST retain the type of suspension fitted as original equipment.

Camber must at all times be no more than 1 degree more or less than the original manufacturers specified figure. Competitors must be able to provide manufacturers data to prove the original camber of their car.

5.5.7.f Strut braces are permitted and their design and material are free, but they must not connect to any part of the front bulkhead.

5.5.7.g The steering lock must be removed

5.5.8 BRAKES.

5.5.8.a The standard braking system must be retained.

5.5.8.b Friction material is free.

5.5.8.c Standard pattern after market ferrous discs and drums may be used.

5.5.8.d It is not permitted to use cross-drilled or grooved brake discs/drums.

5.5.8.e Brake lines may be re-routed. It is recommended that flexible braided brake lines be installed.

5.5.8.f It is permitted to replace/add a brake pressure-limiting valve. Any such valve must not be able to be adjusted by the driver while driving the car. It must comply with MSA Yearbook Regulation N6.8.2.

5.5.8.g It is permitted to remove or deform brake back plates and add additional ducting to aid brake cooling.

5.5.9 WHEELS.

5.5.9.a Wheels MUST retain standard diameter and offset and be of maximum rim width of 5.5", unless the standard rim width of the model is greater. Non-standard wheels may be fitted but standard diameter and offset must be retained.

5.5.9.a(1) Where a control tyre of correct dimension is not made, the organisers may, at their discretion authorise a wheel with a different diameter and/or width.

5.5.9.b The length of the wheel stud or wheel bolt is free. Wheel fixings are free but must match the wheels.

5.5.10 TYRES.

5.5.10.a List 1A or 1B unless specified in Championship Regulations.

5.5.10.b Tyres must be road legal in every respect.

5.5.10.c The use of tyre heating/heat retention devices, tyre treatments and compounds are prohibited.

5.5.10.d No alteration to the tyre from the manufacturer's specification is permitted.

5.5.10.e Re-cutting, re-grooving or in any way modifying the tread pattern is not permitted.

5.5.10.f All the manufacturer's data must be clearly visible. Buffing of the sidewalls to remove data is prohibited.

5.5.11 ELECTRICS.

BTRDA Stock Hatch Technical Regulations

5.5.11.a The type of battery is free but it must retain the original manufacturer's location and be secured.

5.5.11.b The battery must be capable of repeatedly starting the engine.

5.5.11.c It is recommended that all lights are removed and similar shaped covers are fitted to the resulting holes.

5.5.11.d Two high-level brake lights MUST be fitted to the inside of the rear window in accordance with the MSA yearbook regulation N6.7.2.

5.5.11.e A high intensity rear light must be fitted in accordance with MSA Yearbook regulations K5.

5.5.11.f Both charging and starting circuits must be as standard and function efficiently.

5.5.12 WEIGHT.

5.5.12.1 A minimum weight, including driver, is set for individual makes and models of eligible cars.

When a make/model is entered for which a minimum weight is not specified in these regulations the weight will be 900kg and assessed at first event at which the car participates. The organisers reserve the right to alter the weight during the first event.

The specified minimum weights will be regularly reviewed. Any adjustments will be published by championship bulletin a minimum of 7 days prior to the next championship round.

5.5.12.2

Cars complying to 5.5.1.b (a) and (b)

Austin Rover	Kg
Metro 1.4 Gti	830
Citroen	
Saxo VTR	880
Ford	
XR2i	860
MG	
ZR (on 16" wheels only)	900
Peugeot	
205 Gti	875
205 xs	875
106 XSI	875
Renault	
Clio 1.4 16v	880
Rover	
214	900
Suzuki	
Swift Gti (Mk1)	720
Vauxhall	
Nova 1.6	805
Corsa	860
Volkswagen	
Golf Gti 1.6	845
Lupo	900
Polo GT	800

Cars complying to 5.5.1.b (c)

	Kg
Citroen	
Saxo VTS	900
C2	900
Ford	
Fiesta	900
Peugeot	
106	900
Volkswagen	
Lupo	900

5.5.13 FUEL TANK and FUEL.

5.5.13.a The fuel pump, filter and fuel lines are free.

5.5.13.b Cold start systems may be disconnected or removed.

5.5.13.c Only Pump Fuel as defined in section B of the MSA yearbook is permitted

5.5.13.d The original fuel tank may be replaced by another provided it is located in the original location

5.5.13.e If the fuel tank is located inside the car, a safety, currently FIA homologated FT3 type must be fitted if the standard tank is not used.

5.5.13.f An alloy fuel tank, maximum capacity 5 litres, fitted with fuel tank foam may be fitted inside the engine compartment.

5.5.13.g Fuel Pressure regulators must be standard.

5.5.14 EXHAUST and SILENCING.

5.5.14.a The standard exhaust manifold MUST be retained.

5.5.14.b The exhaust system beyond the existing manifold is free but it MUST exit from the rear of the car

5.5.14.c Exhaust gas recirculatory systems may be removed.



BTRDA SuperModified Technical Regulations

2011 Final

5.3.1 INTRODUCTION.

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can make a modification you should work on the principle that you cannot.

5.3.1.a Class open to cars of rigid construction complying with FIA Division One-A, FIA Division Two, plus two-wheel drive cars not eligible in Supercar but complying with the following regulations and having 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.

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

5.3.1.c Mass produced non-homologated vehicles may be accepted

5.3.1.d Rallycross vehicles complying with these regulations.

5.3.2 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS.

5.3.2.a Cars must comply with the Technical Regulations published by the Organisers for **The Quaife MSA British Rallycross Championship** throughout official practice, qualifying heats and finals. (See SR.4.)

5.3.2.b All cars must comply fully with the current MSA Yearbook regulations J Common Regulations for Competitors: Vehicles and Rallycross Technical N.6.1 to N.6.14.3. inclusive and these supplementary regulations.

5.3.2.c No approved modification may give rise to an unapproved one.

5.3.2.d The use of magnesium alloy sheet is not permitted. Titanium sheet may only be used for heat shields.

5.3.3 SAFETY REQUIREMENTS.

5.3.3.a Minimum, Comply with current MSA Yearbook regulation N6.11 to 6.12.6 inclusive. In addition:

5.3.3.b Roll over structure to K Appendix 2 Drawing 9 are mandatory

5.3.3.c A currently FIA homologated competition seat and mountings are mandatory

5.3.3.d Currently FIA homologated Seat Belts are mandatory. With two separate fixing points for the shoulder straps.

5.3.3.e From a 'race ready' position with seat belts fastened, the driver must be able to vacate the car in 5 seconds.

5.3.3.f A fire extinguisher MUST be fitted; the minimum specification must be to current MSA

Regulations. (K3.1.2. (b) or (c) not necessarily plumbed in)

5.3.4 CHASSIS and BODYWORK.

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

5.3.4.b Have any undertray provided with drainage holes to prevent accumulation of liquids.

5.3.4.c 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.

5.3.4.d Have an operative windscreen wiper and washer system.

5.3.4.e A wire mesh stone guard adequately affixed to the bodywork and with a minimum matrix of 1in is permitted with any type of windscreen.

5.3.4.f 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.

5.3.4.g Have a bulkhead separating the cockpit from the engine compartment. It must retain its original material and place, 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 forward most point of the Screen aperture.

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

5.3.4.i 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.

5.3.4.j Have internal bonnet locks removed and external positive locking fasteners fitted.

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

5.3.4.l 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

5.3.4.m Under no circumstances can any part of the bodywork or the suspended parts of the car be below a horizontal plane passing 40mm above the ground, the car being in normal race trim with the driver strapped into the seat

5.3.4.n Aerodynamic devices - Front

Material and shape are free but must:

- i) Be made from a material that is not less than 2mm and not more than 5mm thick.
- ii) Not protrude beyond the vertical projection of the front bumper of the homologated car.
- iii) Be contained within the vertical plane passing through the axis of the front wheels and the horizontal plane passing through the lowest point of the door opening.

5.3.4.o Aerodynamic devices – Rear

Material and shape are free but must:

- i) Be made from a material that is not less than 2mm and not more than 5mm thick.
- ii) Must be contained entirely within the frontal projection of the car without its rear view mirrors and within the plan of the car seen from above.

5.3.4.p 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.

5.3.5 ENGINE.

5.3.5.a 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.

5.3.5.a (i) Specialist competition engines, as defined in blue book Nomenclature and Definitions are also permitted. (N6.3.1. refers)

5.3.5.b The engine must be located within the original engine compartment.

5.3.5.c Twin-engine configurations are not permitted unless mass produced in that form.

5.3.5.d Have catch tanks fitted.

5.3.5.e 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).

5.3.6 TRANSMISSION.

5.3.6.a Transmission is free other than as below.

5.3.6.b 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.

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

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

5.3.6.e Electronically controlled systems are prohibited.

5.3.7 SUSPENSION and STEERING

5.3.7.a Suspension is free other than as below.

5.3.7.b 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.

5.3.7.c Have steering column locks rendered inoperative

5.3.8 BRAKES.

5.3.8.a Brakes are free other than as below.

5.3.8.b 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).

5.3.8.c 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.

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.

5.3.8.d Brake balance adjusters must not be capable of adjustment during running if they contravene (b).

5.3.8.e Anti-lock devices are prohibited.

5.3.8.f Brake discs must be of ferrous material.

5.3.9 WHEELS.

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

5.3.9.b Have all nuts securing road wheels, excepting those of centre-lock type, of steel and in thread contact over a minimum length of 11/2 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.

5.3.10 TYRES.

5.3.10a Free subject to 5.3.9.a above, subject to Championship regulations.

5.3.10.b Hand-cutting is permitted but only for the purpose of introducing additional grooves no deeper than those moulded into a new tyre. Hand cutting in order to increase the depth of existing moulded grooves is prohibited.

5.3.11 ELECTRICS.

5.3.11.a All lights may be removed

5.3.11.b 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.

5.3.11.c Generators are optional but the self starter system must be operable at all times.

5.3.11.d 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.

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

5.3.11.f A red rear warning light complying with current MSA Yearbook regulation K5. Must be fitted

5.3.12 WEIGHT

The minimum weight for all vehicles including driver wearing full race apparel is: 600Kg

5.3.13 FUEL TANK and FUEL

5.3.13.a Be equipped with an effective method of stopping the full supply that can be operated by the driver when normally seated with seat belts secured

5.3.13.b Either Pump fuel as defined in 2010 MSA Blue Book "The Terminology" or FIA 2010 Appendix J Article 252, Article 9 maybe used.

5.3.13.c Cars must be equipped with the facility to enable a fuel sample to be taken. For fuel injected cars the facility must be a dry break fuel sampling coupling, approved by the FIA. Competitors to carry and make available a 300mm minimum length of hose to which, where necessary, the appropriate mating part is to be attached.

5.3.13.d Have sufficient fuel for a fuel test present at any time during the meeting to comply with the fuel sampling requirements as laid down in the MSA year book D34.1 Procedure for fuel testing.

5.3.14 EXHAUST and SILENCING

5.3.14.a Comply with current MSA Yearbook Regulations J5.16 and J5.17

5.3.15 Telemetry / Voice communications

5.3.15a Any form of wireless data transmission between the vehicle and any person and/or equipment (other than that required by the time keepers) is prohibited while the car is on the track.

Data transmission through a temporary physical connection is allowed in the paddock only.



BTRDA Modified 2000 Technical Regulations

2011 Final v1

5.4.1 INTRODUCTION.

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can make a modification you should work on the principle that you cannot.

5.4.1.a The class is for 2 wheel drive cars up to 2-litre capacity with limited modifications. Forced induction and turbo charging is prohibited.

All vehicles must meet the definition of a series production car as set in MSA Nomenclature and Definitions (Blue Book, Section B on Page 62)

HOMOLOGATION SPECIALS ARE NOT PERMITTED

5.4.2 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS.

5.4.2.a Cars must comply with the Technical Regulations throughout official practice, qualifying heats and finals.

5.4.2.b All cars must comply fully with the current MSA Yearbook regulations J and Technical regulations N.6.1. to 6.14.3. inclusive and these supplementary regulations.

5.4.2.c No approved modification may give rise to an unapproved one.

5.4.2.d The use of magnesium alloy sheet is not permitted. Titanium sheet may only be used for heat shields.

5.4.3 SAFETY REQUIREMENTS.

5.4.3.a Minimum, Comply with current MSA Yearbook regulation N.6.11 to 6.12.6. inclusive.

5.4.3.b Provided that the front bulkhead is not penetrated and that no part of the cage extends rearwards beyond the rear shock-absorber mounting points, optional bars as per K.1.2.3. and K Appendix 2 drawing 11 are permitted.

5.4.3.c A Competition Seat with headrest is mandatory in accordance with K.2.2., K.2.3. and K13.

5.4.3.d Currently FIA Homologated Seat Belts are mandatory, with two separate fixings for the shoulder straps.

5.4.3.e From a 'race ready' position with seat belts fastened, the driver must be able to vacate the car in 5 seconds.

5.4.3.f A fire extinguisher MUST be fitted; the minimum specification must be to current MSA Regulations. (K3.1.2 (b) or (c) not necessarily plumbed in)

5.4.4 CHASSIS and BODYWORK.

5.4.4.a The standard body shell MAY NOT be strengthened except for the following: -

- i) The fitting of the roll cage as 5.4.3.a & b
- ii) The reinforcing of the standard suspension mounting points may NOT extend to more than a

radius of 100mm from the centre of the suspension point.

iii) To prolong the life of the body shell it is permitted to carry out seam welding.

5.4.4.b The exterior of the car MUST remain as standard including mirrors, door handles and bumpers, although it is permitted to remove body mouldings, badges and the radio aerial. It is permitted to fit guards to engine sump and fuel tank. Any guards may protect but NOT strengthen.

It is NOT permitted to reinforce the bumpers or their mountings.

5.4.4.c Glass sunroofs MUST be replaced as per MSA Yearbook Regulation Q19.14.6.

5.4.4.d. The side and rear window glass must be replaced with Perspex having a minimum thickness of 4mm.

Consideration MUST be given to driver's compartment ventilation and for this purpose only, it is permitted to cut a maximum of 4 X 2-inch diameter holes in each of the rear side and tailgate windows. A vent hole may also be added to the driver's door large enough to accept the driver arm.

5.4.4.e The interior of the car MUST have the roof lining, carpets and all the seats, apart from the driver's (See 5.4.3.c), removed. It is also required that any audio equipment, spare wheel, tools and standard seat belts be removed. It is permitted to remove the door trim panels and the window regulators (the windows must then be fixed to prevent them opening). It is recommended that trim panels are replaced by aluminium or Kevlar panels.

5.4.4.f An interior mirror of a minimum of 50 sq. cm. MUST be fitted. The original dashboard MUST be retained although instruments may be replaced. Dashboard may be modified to allow fitment of roll cage.

5.4.5 ENGINE.

5.4.5.a The engine and gearbox must be as originally fitted as original equipment to the car and be in the original location.

5.4.5.b Pistons must be unmodified standard production or approved replacement pistons subject to a maximum oversize of +0.5mm. (even if this increases the capacity beyond 2000) Competition pistons are prohibited. Stroke must comply with Manufacturer's original specification. Material may be removed from the skirt area only for balancing purposes. In this case ONE piston must remain unmodified.

5.4.5.c Lightening of crankshaft or con rods is prohibited. Balancing may be carried out by pin drilling only.

5.4.5.d Camshaft must be standard as originally supplied for type of engine used. It may not be machined or reprofiled. Original timing gear must be used. Offset keys or adjustable vernier drives may not be used, unless fitted to the original engine.

5.4.5.e Cylinder head must be standard as originally fitted to the type of engine used. No gas flowing or polishing is allowed. The original terrain must be visible in the inlet & exhaust ports and in combustion chambers. Heads may be skimmed for maintenance purposes only and may not be less than Manufacturer's minimum dimension.

5.4.5.f Competition flywheels are not permitted. The standard unit may not be lightened or machined.

5.4.5.g It is permitted to baffle the standard sump and modify the oil pick up pipe. Dry sumping is not allowed.

5.4.5.h It is permitted to fit an oil cooler within the engine compartment.

5.4.5.i It is permitted to remove/replace the original air filter and filter housing with a performance filter or induction kit. Where engine breather pipes cannot be refitted to the induction system, breather pipes must go to a breather catch tank of adequate size. It is permitted to change carburettor jets or injectors. It is NOT permitted to modify the inlet manifold system including the throttle mechanism, carburettor, fuel pressure regulators, and throttle body apart from fitting an additional external throttle spring

5.4.5.j The standard ignition/engine management system may be replaced. If aftermarket unit is used the BTRDA may impose a weight penalty to equalise performance.

If standard unit retained it is permitted to fit a modified "chip". Rev. limiters may be fitted or removed. Spark plugs and ignition leads are free. It is NOT permitted to add additional ignition systems.

5.4.5.k All water radiator and hoses are free but the original radiator location MUST be retained. Heater may be removed and pipe work blanked off or linked together in the engine compartment.

5.4.6 TRANSMISSION.

5.4.6.a The standard gearbox casing and all internals MUST be retained. Gear ratios & final drive ratios must be the same as originally supplied for that model of car.

5.4.6.b Torque bias and limited slip differentials are allowed.

5.4.6.c Any form of traction control is not permitted.

5.4.6.d Standard drive shafts must be retained.

5.4.6.e The clutch drive plate and cover may be up rated by a standard pattern type. It must fit without any modification to the flywheel. Friction material is free providing it is to the original configuration.

5.4.7 SUSPENSION and STEERING.

5.4.7.a It is permitted to fit non-standard shock absorbers and springs provided that they mount onto the body at the standard suspension mounting points. Any shock absorber units may only have a single method of damping adjustment. Multi-adjustable and/or remote reservoir types are prohibited

5.4.7.b The ride height may be altered. Adjustable spring platforms are permitted

5.4.7.c It is permitted to fit up rated bushes to the suspension (No rose type joints permitted)

5.4.7.d It is permitted to fit, remove or up rate anti-roll bars. (No rose type joints permitted)

5.4.7.e It is not permitted to have adjustable suspension geometry. I.E. Camber, Caster unless fitted as standard to the original car, the car MUST retain the type of suspension fitted as original equipment. Camber must at all times be no more than 1 degree more or less than the original manufacturers specified figure. Competitors must be able to provide manufacturers data to prove the original camber of their car.

5.4.7.f Strut braces are permitted and their design and material are free, but they must not connect to any part of the front bulkhead.

5.4.7.g The steering lock must be removed

5.4.8 BRAKES.

5.4.8.a The standard braking system must be retained.

5.4.8.b Friction material is free.

5.4.8.c Standard pattern after market ferrous discs and drums may be used.

5.4.8.d It is permitted to use cross-drilled or grooved brake discs/drums.

5.4.8.e Brake lines may be re-routed. It is recommended that flexible braided brake lines be installed.

5.4.8.f It is permitted to replace/add a brake pressure-limiting valve. Any such valve must not be able to be adjusted by the driver while driving the car. It must comply with MSA Yearbook Regulation N6.8.2.

5.4.8.g It is permitted to remove or deform brake back plates and add additional ducting to aid brake cooling.

5.4.9 WHEELS.

5.4.9.a Wheels MUST retain standard diameter and offset and be of maximum rim width of 5.5", unless the standard rim width of the model is greater. Non-standard wheels may be fitted but standard diameter and offset must be retained.

5.4.9.b The length of the wheel stud or wheel bolt is free. Wheel fixings are free but must match the wheels.

5.4.10 TYRES.

5.4.10.a Tyres are free.

5.4.11 ELECTRICS.

5.4.11.a The type of battery is free but it must retain the original manufacturer's location and be secured.

5.4.11.b The battery must be capable of repeatedly starting the engine.

5.4.11.c It is recommended that all lights are removed and similar shaped covers are fitted to the resulting holes.

5.4.11.d Two high-level brake lights MUST be fitted to the inside of the rear window in accordance with the MSA yearbook regulation N6.7.2.

5.4.11.e A high intensity rear light must be fitted in accordance with MSA Yearbook regulations K5.

5.4.11.f Both charging and starting circuits must be as standard and function efficiently.

5.4.12 WEIGHT.

5.4.12.1 The minimum weight, including driver, is 920kg.

As the class is aimed at inexpensive and competitive racing BTRDA reserves the right to equalise performance by imposing additional weight on specific vehicles. Only a maximum of 30kg may be added at any time. Where this regulation is enforced the weight established will be published in a Championship Bulletin issued prior to the next event..

5.4.13 FUEL TANK and FUEL.

5.4.13.a The fuel pump, filter and fuel lines are free.

5.4.13.b Cold start systems may be disconnected or removed.

5.4.13.c Only Pump Fuel as defined in section B of the MSA yearbook is permitted

5.4.13.d The original fuel tank may be replaced by another provided it is located in the original location

5.4.13.e If the fuel tank is located inside the car, a safety, currently FIA homologated FT3 type must be fitted if the standard tank is not used.

5.4.13.f An alloy fuel tank, maximum capacity 5 litres, fitted with fuel tank foam may be fitted inside the engine compartment.

5.4.14 EXHAUST and SILENCING.

5.4.14.a The standard exhaust manifold **MUST** be retained.

5.4.14.b The exhaust system beyond the existing manifold is free but it **MUST** exit from the rear of the car

5.4.14.c Exhaust gas recirculatory systems may be removed.

2011 MDA Minicross

Vehicle Regulations

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PUBLISHED 2011 MDA Minicross Vehicle Regulations

The Following M.S.A. Vehicle & Technical Regulations apply:-

All the following references, relate to the MSA 2011, Competitors and Officials Yearbook (MSA Bluebook)

Section : C complete. J 1.1 and J 5.20.13

Section : K 1. to K 1.8 (excluding K 1.6.2, K 1.6.3, K 1.6.4, 1.6.6, and 1.7., K 2.2 complete. K 3.1.1. (Table 3, page 171), plus K 3.4. complete. K 5. complete. K 8.1, K 8.2, K 8.5. K 9. complete, except K 9.1.1 and K 9.1.2., K 10 complete. K 14.3.

Section : J 5.13.4. (Table on page 64). N 6.1 – N 6.14.3. Q 19.1.3

PLEASE READ THESE REGULATIONS THOROUGHLY. IF IN DOUBT ASK.

1. SAFETY

- 1.1 A full roll cage with one diagonal brace to Drawings 5 or 6, (page 173), and door bar protection complying with drawing 9 (page 174) and sections K 1, to K1.8 (excluding K 1.6.2, K 1.6.3, K 1.6.4, 1.6.6, and 1.7). is the mandatory minimum; an additional bar may be fitted to the rear diagonals for the fitting of seat belts, this bar will be a minimum of 40 x 2 mm or 38 x 2.5 mm.
- 1.2 A fire extinguisher with a minimum capacity of 1.75 litres AFFF is the mandatory minimum. Refer to K 3.1.1 (Table 3, page 171), plus K 3.4. complete.
- 1.3 Front windscreen to be laminated glass or a minimum of 4 mm polycarbonate. An operative windscreen wiper/washer system is required. A rear screen and side windows are mandatory. Consideration **MUST** be given to driver's compartment ventilation for this purpose only, it is permitted to cut a maximum of 4 x 50 mm diameter holes in each rear side and or tailgate windows. A vented hole may also be added to the driver's window large enough to accept the driver's arm.
- 1.4 Seat Belts. Refer to K 2.1.complete (except K 2.1.1., 3 point not allowed) 4 point is mandatory minimum. Anchor points must not rely solely on the large washers supplied with many seat belts but **MUST** be reinforced over a suitable area to give the sufficient strength.
- 1.5 A competition seat with a built-in headrest is mandatory. Refer K 2.2 complete.
- 1.6 An ignition cut-off switch having positive on/off positions clearly marked, must be fitted in a position to be operable by the driver when normally seated. It must also isolate the fuel pump(s). A spark proof master cut-off switch must be fitted externally below the windscreen and be readily accessible whatever the attitude of the vehicle following an accident. The switch must be clearly marked with a red spark on a white edged blue triangle and On/Off positions clearly marked.
- 1.7 The front bulkhead **MUST** be effectively fire proofed, so as to seal off the drivers compartment from fire within the engine compartment. Tape is not considered acceptable. Refer J 5.2.2.
- 1.8 Crash Helmet. Refer K 10 complete. All drivers must wear an approved visor or goggles if the car driven, has a laminated glass windscreen. We strongly recommend that drivers wear a neck brace.
- 1.9 Overalls. Refer K 9. complete, except K 9.1.1 and K 9.1.2.
- 1.10 Vehicles must be equipped with a positive method of throttle closing in the event of a linkage failure, by means of an external spring to the throttle spindle. A secondary throttle return spring is strongly recommended.

2. Body Work and General

- 2.1 The outward appearance of the car must remain unaltered. Body shell to be standard Rover Mini Saloon shell only but excluding the Clubman shell. No material may be removed from the car which would substantially lighten it or detract from the vehicle's strength other than for the fitment of a one piece front as detailed in 2.3. Lightening or modification to the bulkheads, doors (see also 2.8), Roof Panel, Floor Panel,

wings or any other body panel is prohibited, excepting longitudinal and transverse strengthening which is allowed within the driver's compartment only. 1" square box or 1.25" tubing can be used. Angle iron will not be permitted except longitudinally along the centre tunnel. The 'A' panels may be gusseted with maximum 1.6 mm (16swg) sheet metal. The front bulkhead between the engine compartment and driver may be modified to accept an air box, the maximum dimensions of which shall be those of a standard Mini battery box, mounted horizontally, with a centre line corresponding to that of the speedometer aperture. The rear side pockets may be removed down to the level of the floor together with the unsupported part of the rear seat pan. If not used, battery box may be removed and floor area plated over. **Original profile of boot floor must be retained.** De-seamed body shells will be permitted provided the Scrutineers are satisfied with the welding. No frontal reinforcement or any form of nudge bar will be allowed. Bumpers must be removed. The bumper mounting lip must either be removed or covered with a protective material (any other method that will ensure that the edge is not sharp will also be allowed)

2.2 Lightweight or fibreglass boot and bonnet may be used provided they are securely fixed.

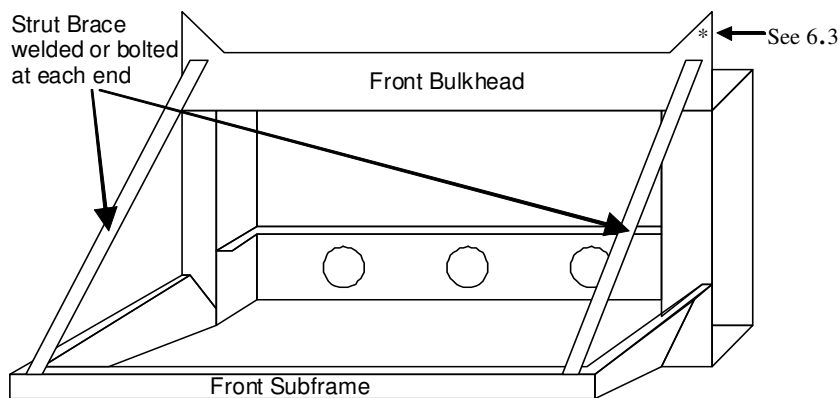
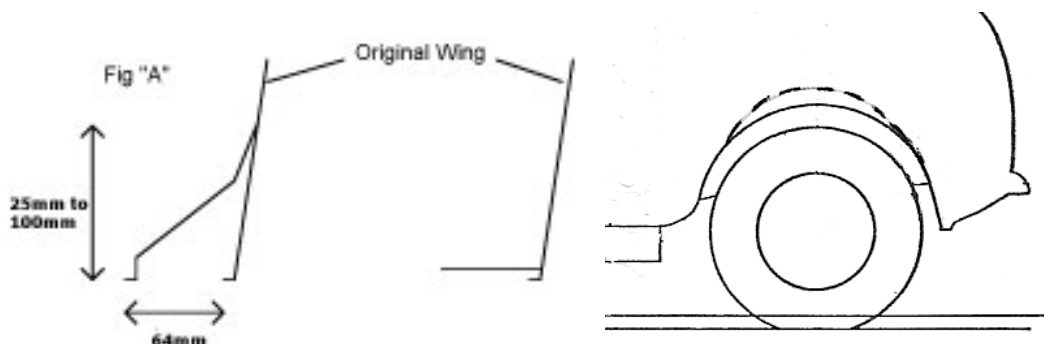


Fig. 2.3

2.3 A detachable one piece front (front panel, wings etc.) of fibreglass or metal may be used provided it is securely attached to the body and subframe. A panel of maximum thickness 2.0mm (14swg) may be fitted to the rear of the front valance no wider than the width of the front subframe to support the detachable front. Fixings at the front of the subframe to be by two individual vertical pins. Brackets to be made from sheet material 2.0mm thickness and to form a box section. Such fronts must retain the appearance of the original body. Inner wings may be removed subject to fitment of strut braces as detailed (Fig 2.3)

2.4 In order to ensure that the tyre does not extend beyond the bodywork, additions to the wheel arches are permitted, but must not extend by more than 64mm horizontally from the original line of the arch, when measured immediately above the centreline of the axle - Refer to Figure A. Also the additions should extend vertically by between 25mm and 100mm and blend into the original wheel arch. The new arch is to cover the tyre around an arc of 120 degrees. Straight horizontal extensions of the type shown in Figure B are not permitted. The original front wheel arch profile must remain in place, that is, no metal may be removed. It is permissible to raise the outer rear wheel arch to a line level with the top of the inner arch (Figure C). Plastic wheel arch additions of the type sold by Rover dealers and accessory dealers are preferred. **ANY SHARP EDGES MUST BE PROTECTED BY PLASTIC OR SIMILAR MATERIAL.**



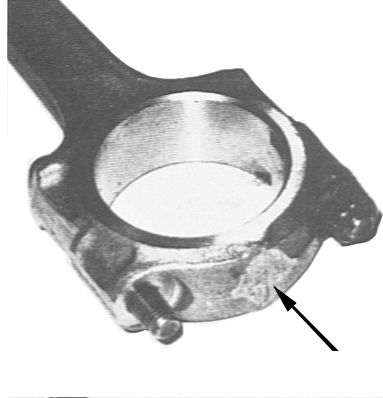
- 2.5 Rear valences may be removed.
- 2.6 When a non-detachable front is retained part of the inner wing panel on the offside front may be removed to facilitate easier removal of the clutch, provided the rigidity and strength of the inner wing is not impaired.
- 2.7 All lights must be removed and the apertures blanked off.
- 2.8 All interior trim must be removed, including floor covering, head linings, passenger seats, padding, door panels and the like. Metal door pockets or internal panels may be removed provided the doors are suitably strengthened.
- 2.9 All cars must be fitted with one internal rear view mirror of at least 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 the event of an accident. External mirrors are allowed.
- 2.10 All cars must be fitted with towing eyes front and rear which must not protrude beyond the limits of the body. Their position should be marked clearly in a contrasting colour other than black or white.
- 2.11 Non standard petrol tanks may be used if securely fitted to the boot floor. Fibreglass or plastic materials are prohibited. Spill trays must be fitted to prevent spillage into the boot area during refuelling.
- 2.12 Door handles must be retained, if the early type of moving door handles are used they must point rearwards.
- 2.13 The exhaust outlet must be below the level of the floor and to the rear of the driver. The exhaust tail pipe is to terminate outside the bodywork periphery in plan view, not beneath.
- 2.14 An effective silencer must be fitted to the vehicle at all times in accordance with Section J appendix 1 - Chart 5.18 - section F.
- 2.15 Choice of steering wheel is free.
- 2.16 The standard steering column must be retained and the steering locks must be rendered inoperative.
- 2.17 Instruments are open to free choice.
- 2.18 A sump guard may be fitted, but **MUST NOT** protrude beyond the bodywork.
- 2.19 Radiators must remain within the engine compartment. Electric fans are permissible.
- 2.20 Competition numbers will be black, minimum height of 230mm with a width of 38mm placed on the sponsors background supplied by the MDA. It is also necessary for the competition number to be repeated on the nearside front of the roof.
- 2.21 The drivers name is to appear using 75mm high white self adhesive letters in both rear side windows.
- 2.22 Provision should be made for fitting of Sponsors decals as defined in Championship regulations. Decals will be supplied by the Championship organisers. Cars not complying to this regulation will not be awarded Championship points.
- 2.23 Mudflaps are to be fitted behind all four wheels, extending to a minimum of 38mm either side of the tyre tread and to a maximum of 76mm above the ground.

NOTE: Throughout this section, the words 'standard' and 'production' refer specifically to items manufactured by the Rover Group (or under its other previous names) and OEM suppliers and no other manufacturer.

3. Engine and Gearbox

- 3.1 A standard Mini / Metro 1275 cylinder block is mandatory. Bore 70.61 mm (2.78") stroke 81.28 mm (3.2"). The block may be planed.

- 3.2** Maximum permitted overbore is 1.52 mm (0.060"). Modifications to the cylinder block which are designed to provide clearance for valves (e.g. pocketing) are not permitted. Machining for a main bearing centre strap is allowed. Drilling of the block to accept a further head studs is allowed (eleven bolt fixing). Drilling into oil pick-up gallery to facilitate the fitment of external oil pre-filter system is permitted. Dry sumping is not permitted. **No other machining or drilling of cylinder block is allowed.**
- 3.3** A production crankshaft with standard stroke 81.28 mm (3.2") is mandatory. Balancing is permitted by means of "Pin Drilling" that is holes up to 6.35 mm (0.25"). Machining the crankshaft in any other way to reduce weight or any other benefit is not permitted. Polishing is not permitted. Crankshaft dampers are permitted.
- 3.4** Pistons must be unmodified Mini/Metro production or approved replacement pistons subject to maximum oversize 1.52mm (0.060"). Forged or Race / Competition orientated pistons are forbidden.



- 3.5** Standard connecting rods must be used. Connecting rods may only be modified by the removal of metal from the cap area to balance. See Diagram 3.4a. **No other machining or drilling allowed.**
- 3.6** A control camshaft must be purchased from the MDA. All camshafts are numbered and recorded. The price for 2011 is £74.00. Camshaft lobes must not be re-profiled or retimed in any way. The camshaft must retain the standard method of valve train mechanism. Timing of the cam is free. Offset keys or adjustable Duplex chain or toothed belt camshaft drive is permissible.
- 3.7** Alloy competition flywheels are not permitted. A steel replacement or the standard unit, may be lightened by machining and or drilling.
- 3.8** A standard Mini / Metro 1275 cylinder head is mandatory. Head gasket is free. Rough casting marks must be seen on both inlet and exhaust ports and in the combustion chamber. No gas flowing or polishing is allowed. The cylinder head may be drilled to accept a further head stud (eleven bolt fixing). Valve seat inserts may be fitted. The only machining allowed is to; a) block mating surface to raise compression ratio. b) valve seats for routine maintenance which may have two clearly defined angles cut, the standard one at 45° and a lower one at 60°. Radiused valve seats and any widening of the throats is not permitted.
- 3.9** Rocker gear may be either standard production items with or without offset bushes or 1.5:1 forged or roller rocker assemblies providing a maximum valve lift of 0.415" is not exceeded.
- 3.10** Valves are to be standard and vertical with a maximum size of 35.71 mm (1.407") inlet, and 29.4 mm (1.156") exhaust. Valve springs are open to free choice. Valve guides must remain unmodified. After market guides may be fitted. Valve centres may not be moved.
- 3.11** Exhaust and inlet manifolds are open to free choice.
- 3.12** Carburation must be by one of the following:-
 a) Any single S.U. carburettor with a maximum throat diameter of 1.5" which may be modified.
 b) A standard single 1.75" S.U. carburettor, to which the only permitted changes are to the needle, piston spring, jet and mixture enrichment device.

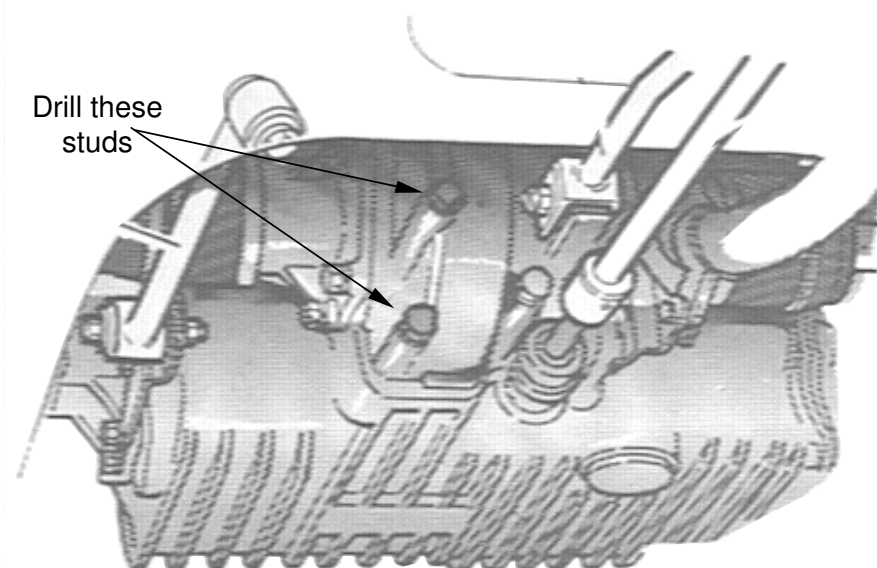
In both cases, the principal of operation of the carburettor must remain unchanged, including the butterfly and piston. Air filters or ram pipes are open to free choice.

- 3.13 The ignition system must use a standard Mini distributor using points for switching of the low tension circuit or a standard A+ distributor using its' electronic trigger for switching of the low tension circuit. It is permissible to replace points with an electronic trigger using either Lumenition Magnetric or Aldon Ignitor (not Ignitor 2). Ignition advance and retard must only be controlled by "bob-weights" and springs, with or without vacuum means. Any other form of electronic management / control to modify ignition advance/retard is not permitted.
- 3.14 Spark plugs are open to free choice.
- 3.15 The ignition system may be protected from mud and water with card, plastic or a sheet metal deflector not exceeding 18 cm x 18 cm in area, with a maximum thickness of 0.8 mm. Corrugation of the deflector is not permissible. Any additional material (including the deflector) placed in the area in front of the distributor, that is not part of the vehicles bodywork, must be seen to deflect under hand pressure. Consideration as to whether the deflector or its mountings are armourment is at the discretion of the Scrutineer.
- 3.16 Fuel pump(s) are open to free choice, but are not to be located in the passenger compartment / interior of the car.
- 3.17 Superchargers, turbo-chargers, injection of nitrous oxide or water are not permitted.
- 3.18 Fuel: Petrol as defined as 'Pump fuel' J5.13.4. (Table on page 64).
- 3.19 Gearbox and final ratios are free within the range of standard production parts of the "A" series engine and gearbox. No other parts are permitted. Five speed gearbox conversions are not permitted.
- 3.20 Standard transfer gears must be used.
- 3.21 Locked or limited slip differentials or any other device intended to give a similar effect is not permitted.
- 3.21.1 After market conversions to stronger differential pins are allowed as is the conversion to quad pin set-ups as long as 3.21 is adhered to.
- 3.22 The clutch is free as long as the same number of driven plates as the production item are retained. The backplate is free within the range of standard Rover Cars parts. The diaphragm is free.
- 3.23 Water pumps are free. When mounted inside the car they must be sealed to prevent spillage into the driver compartment.
- 3.24 Engine mountings are free. Additional engine steady bars may be fitted.

4. Suspension and Brakes

- 4.1 Standard mini front and rear subframes must be used and may be strengthened. Flexible subframe mountings may be replaced with solid equivalents. Suspension parts must be standard Mini, retaining rubber suspensions, standard top arms and standard rear swinging arms. Standard suspension bushes may be replaced with uprated competition equivalents. Rear rubber cones may be softened. Negative camber bottom arms are permitted. Front tie rods are free choice. Adjustment is permitted to front and rear track (providing 2.4 is complied with), caster and camber angles. Rose jointed components are prohibited.
- 4.2 There is free choice of brake linings and drums provided that the tyre does not protrude beyond the top edge of the wheel arch, including extensions. Brakes must be operative on all four wheels. Hand brakes must be operable and be of sufficient efficiency to hold the car on a slight gradient. A TANDEM brake system is preferable so that in the event of a failure of one system, braking is maintained on at least 2 wheels on the vehicle. Brake bias valves are permitted but must not be capable of adjustment from the drivers seat.
- 4.3 Mini Cooper and Cooper 'S' brakes may be used as long as the vehicle complies with 2.4. It is permissible to modify callipers & discs designed for 12" wheels to fit inside 10" wheels providing modification does not compromise safety. Drilled & grooved discs are permissible.
- 4.4 Power braking is not permitted.

- 4.5 The ride height may be altered provided adequate clearance exists between tyres and body. 'Hi-Lo' type suspension units are permitted.
- 4.6 Dampers are open to free choice. Coil spring / damper units are prohibited.
- 4.7 Anti roll bars may be fitted.
- 4.8 10" diameter Mini road wheels with a 6" maximum width are permitted providing they are acceptable to the scrutineer and section 2.4 is complied with (damaged alloy wheels will not be accepted.) Cooper 'S' and reverse rim Cooper wheels are allowable. Banded or welded wheels are not permitted. Wheel nuts must match the wheel used.
- 4.9 Yokohama Tyres A008 control tyre is mandatory.
- 4.10 Up to 0.375" wheel spacers are permitted provided they are one piece not laminated and bear on the full wheel hub area. Spacers may not be used with Cooper 'S' discs and drums or any other drum with a built in spacer.
- 5.0 **Electrical Equipment**
- 5.1 Each car must be fitted with two RED brake lights, of the anti crash type as used in fog, with a minimum of 21 Watt bulbs fitted. The lights should be a minimum of 12" apart on the rear parcel shelf or HIGHER and clearly visible from behind when the foot brake is applied.
- 5.2 A 'poor visibility' light should be fitted according to Refer K5.
- 5.3 The use of a dynamo, alternator or generator is open to free choice.
- 5.4 A battery and self starter must be fitted and in working order and not of a temporary nature. The battery may be located either in the boot or in the passenger compartment. The battery earth lead must be coloured yellow. Battery terminals **MUST** be covered with insulating material. Insulating tape will not be permitted. **Battery must be securely mounted to the vehicle.** If mounted within the passenger compartment, battery must be fitted in a sealed non-conductive battery box.
6. **Eligibility Checks**
- 6.1 Random eligibility checks maybe made at any meeting and engine / gearbox assemblies checked or sealed for subsequent checking. The Minicross Drivers Association will reimburse Scrutineers travelling expenses when a sealed engine / gearbox assembly is subsequently checked and found legal. All other expenses to be borne by the Entrant / Competitor. If the engine / gearbox assembly is found to be illegal all expenses must be covered by the Entrant / Competitor. (Refer:- Judicial, section C). Random fuel check will be made.



6.2 Sealing of engine / gearbox assemblies shall only be by means of wire and official M.S.A. numbered seals and / or paint. All cars **MUST** have following studs, nuts and bolts drilled to enable seals to be affixed. Drillings must be of at least *3mm* diameter. Failure of to have the following drilled is deemed to be a breach of vehicle eligibility.

Clutch Cover – The heads of two adjacent bolts on the top/front.

Cylinder Head – The centre front and one adjacent stud.

Rocker Cover – Both retaining screws.

Differential – Refer to studs as per drawing.

Carburettor – Any 2 fixing studs to the inlet manifold.

Drivers may, if they wish, elect at their own expense to have the above items sealed by and Eligibility Scrutineer during assembly. A sealing certificate would then be issued for the vehicle. Providing the original seals are in place, and the original certificate is produced at any subsequent eligibility inspection, the need for further stripping will be removed.

6.3 MSA vehicle log books are required in accordance with Section J 2.1 – J 2.1.5.

6.4 The triangulation panel adjacent to the left hand front subframe top mounting **MUST** be drilled on the angled flange with a 2mm diameter hole. Refer to figure 2.3. An MSA numbered seal will be fitted, and the number recorded in the vehicle log book.

6.5 Non production of the Vehicle Log Book will be deemed a breach of vehicle eligibility

IMPORTANT SAFETY CHANGES

Please pay particular attention to the sections on Fire Extinguishers, Seats and their Fixings, Harnesses and Helmets. The regulations covering these may have changed from last year in the MSA Competitors Yearbook.

**2011 MDA Junior
Vehicle Regulations**

Published Copy

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Section : J 1.1 and J 5.20.13

Section : K 1. to K 1.8 (excluding K 1.6.2,K 1.6.3, K 1.6.4, 1.6.6, and 1.7., K 2.2 complete. K 3.1.1. (Table 3, page 171), plus K 3.4. complete. K 5. complete. K 8.1, K 8.2, K 8.5. K 9. complete, except K 9.1.1 and K 9.1.2., K 10 complete. K 14.3.

Section : J 5.13.4. (Table on page 64). N 6.1 – N 6.14.3. Q 19.1.3

PLEASE READ THESE REGULATIONS THOROUGHLY. IF IN DOUBT ASK.

1. SAFETY

- 1.1 A full roll cage with one diagonal brace to Drawings 5 or 6, (page 173), and door bar protection complying with drawing 9 (page 174) and sections K 1, to K 1.8 (excluding K 1.6.2, K 1.6.3, K 1.6.4, 1.6.6, and 1.7). is the mandatory minimum; an additional bar may be fitted to the rear diagonals for the fitting of seat belts, this bar will be a minimum of 40 x 2 mm or 38 x 2.5 mm.
- 1.2 A fire extinguisher with a minimum capacity of 1.75 litres AFFF is the mandatory minimum. Refer to K 3.1.1 (Table 3,page171), plus K 3.4. complete.
- 1.3 Front windscreen to be laminated glass or a minimum of 4 mm polycarbonate. An operative windscreen wiper/washer system is required. A rear screen and side windows are mandatory. Consideration **MUST** be given to driver's compartment ventilation for this purpose only, it is permitted to cut a maximum of 4 x 50 mm diameter holes in each rear side and or tailgate windows. A vented hole may also be added to the driver's window large enough to accept the driver's arm.
- 1.4 Seat Belts. Refer to K 2.1.complete (except K 2.1.1, and K 2.1.2., 3 and 4 point not allowed) 5 point is mandatory minimum. Anchor points must not rely solely on the large washers supplied with many seat belts but **MUST** be reinforced over a suitable area to give the sufficient strength.
- 1.5 A competition seat with a built-in headrest is mandatory. Refer K 2.2 complete.
- 1.6 An ignition cut-off switch having positive on/off positions clearly marked, must be fitted in a position to be operable by the driver when normally seated. It must also isolate the fuel pump(s). A spark proof master cut-off switch must be fitted externally below the windscreen and be readily accessible whatever the attitude of the vehicle following an accident. The switch must be clearly marked with a red spark on a white edged blue triangle and On/Off positions clearly marked.
- 1.7 The front bulkhead **MUST** be effectively fire proofed, so as to seal off the drivers compartment from fire within the engine compartment. Tape is not considered acceptable. Refer J 5.2.2.
- 1.8 Crash Helmet. Refer K 10 complete. All drivers must wear an approved visor or goggles if the car driven has a laminated glass windscreen. We strongly recommend any form of head restraint.
- 1.9 Overalls. Refer K9. complete, except K9.1.1 and K9.1.2.
- 1.10 Vehicles must be equipped with a positive method of throttle closing in the event of a linkage failure, by means of an external spring to the throttle spindle. A secondary throttle return spring is strongly recommended.
- 1.10 Competitors are strongly advised to wear flame resistant gloves, balaclavas and underwear. Plastic shoes (such as trainers) should be avoided.

2. Body Work and General

2.1 The outward appearance of the car must remain unaltered. Body shell to be a standard Mini Saloon Shell only but excluding the Clubman Shell. No material may be removed from the car which would substantially lighten it or detract from the vehicle's strength other than for the fitment of a one piece front as detailed in 2.3. Lightening or modification to the bulkheads, doors (see also 2.8), Roof Panel, Floor Panel, wings or any other body panel is prohibited, excepting longitudinal and transverse strengthening which is allowed within the driver's compartment only. 1" square box or 1.25" tubing can be used. Angle iron will not be permitted except longitudinally along the centre tunnel. The 'A' panels may be gusseted with maximum 1.6 mm (16swg) sheet metal. The front bulkhead between the engine compartment and driver may be modified to accept an air box, the maximum dimensions of which shall be those of a standard Mini battery box, mounted horizontally, with a centre line corresponding to that of the speedometer aperture. The rear side pockets may be removed down to the level of the floor together with the unsupported part of the rear seat pan. If not used, battery box may be removed and floor area plated over. **Original profile of boot floor must be retained.** Deseamed bodysells will be permitted provided the Scrutineers are satisfied with the welding. No frontal reinforcement or any form of nudge bar will be allowed. Bumpers must be removed. The bumper mounting lip must either be removed or covered with a protective material (any other method that will ensure that the edge is not sharp will also be allowed)

2.2 Lightweight or fibreglass boot and bonner may be uses provided they securely fixed.

2.3 A detachable one piece front (front panel, wings etc.) of fibreglass or metal may be used provided it is securely attached to the body and subframe. A panel of maximum thickness 2.0 mm (14swg) may be fitted to the rear of the front valance no wider than the width of the front subframe to support the detachable front. Fixings at the front of the subframe to be by two individual pins which may not protrude forward from the bodywork. Brackets to be made from sheet material 2.0 mm thickness and to form a box section. Such fronts must retain the appearance of the original body. Inner wings may be removed subject to fitment of strut braces as detailed (Fig 2.3)

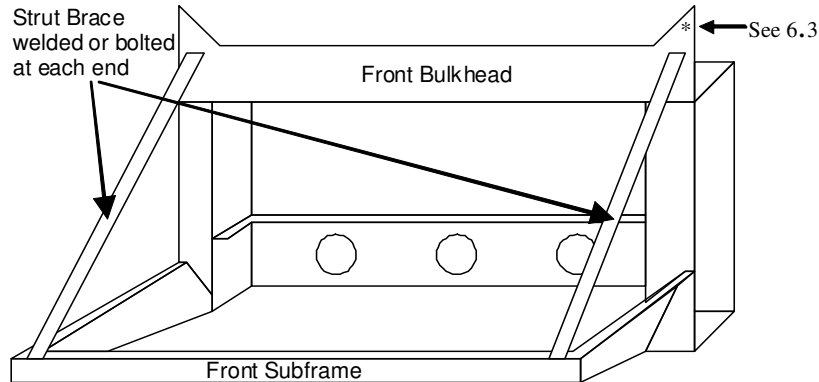
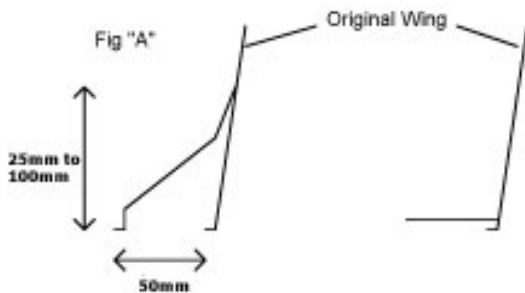


Fig. 2.3

2.4 In Order to ensure that the tyre does not extend beyond the bodywork, additions to the wheel arches are permitted, but must not extend by more than 50mm inches horizontally from the original line of the arch, when measured immediately above the centreline of the axle – refer to Fugyre A. Also the additions should extend vertically by 25mm and 100mm and blend into the original wheel arch. The new arch is to cover the tyre around an arc of 120 degrees. Straight horizontal extensions of the type shown in figure B are not permitted. The original wheel arch profile must remain in place, that is no metal may be removed. Plastic wheel arch additions of the type sold by Rover dealers and accessory dealers are preferred.
ANY SHARP EDGES MUST BE PROTECTED BY PLASTIC OR SIMILAR MATERIAL

2.5 Rear valences may be removed.



2.6 When no-detachable front is retained part of the inner wing panel on the offside front may be removed to facilitate easier removal of the clutch, provided the rigidity and strength of the inner wing is not impaired.

2.7 All lights must be removed and apertures blanked off.

2.8 All interior trim must be removed, including floor covering, head linings, passenger seats, padding, door panels and the like. Metal door pockets or internal panels may be removed provided the doors are suitably strengthened.

2.9 All cars must be fitted with one internal rear view mirror of at least 50 Sq. 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 the event of an accident. External mirrors are allowed.

2.10 All cars must be fitted with towing eyes front and rear which must not protrude beyond the limits of the body. Their position should be marked clearly in contrasting colour other than black and white.

2.11 Non standard petrol tanks may be used if securely fitted to the boot floor. Fibreglass or plastic materials are prohibited. Spill trays must be fitted to prevent spillage into the boot area during refuelling.

2.12 Door handles must be retained, if the early type of moving door handles are used they must point rearwards.

2.13 The exhaust outlet must be below the level of the floor and to the rear of the driver. The exhaust tail pipe is to terminate outside the bodywork periphery in plan view, not beneath.

2.14 The effective silencer must be fitted to the vehicle at all times in accordance with Section J appendix 1 - Chart 5.18 - section F.

2.15 Choice of Steering is Free.

2.16 The standard steering column must be retained and the steering locks must be rendered inoperative.

2.17 Instruments are open to free choice.

2.18 A sump guard may be fitted, but **MUST NOT** protrude beyond the bodywork.

2.19 Radiators must remain within the engine compartment. Auxiliary radiators may be connected to the heater outlets. Electric fans are permissible.

2.20 Competition numbers will be black, minimum height of 230 mm with a 38 mm placed on the sponsors background supplied by MDA. It is also necessary for the competition number to be repeated on the nearside front of the roof

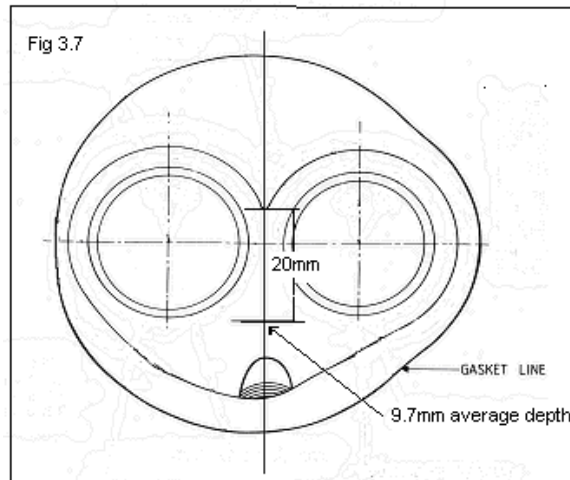
2.21 The driver name is to appear using 75mm high white self adhesive letters in both rear side windows.

- 2.22** Provision should be made for fitting of Sponsors decals as defined in Championship Regulations. Decals will be supplied by the MDA. Cars not complying to this regulation will not be awarded Championship Points.
- 2.23** Minimum weight of car including driver must not be less than 640 Kg. In addition minimum weight of car **excluding** driver must not be less than 570 Kg.
- 2.24.1** Mudflaps are to be fitted behind all four wheels extending to a minimum of 38mm with side of the tyre tread and to a maximum of 76mm above the ground.

NOTE: Throughout this section, the words 'standard' and 'production' refer specifically to items manufactured by the Rover Group (or under its other previous names) and OEM suppliers and no other manufacturer.

3. Engine and Transmission.

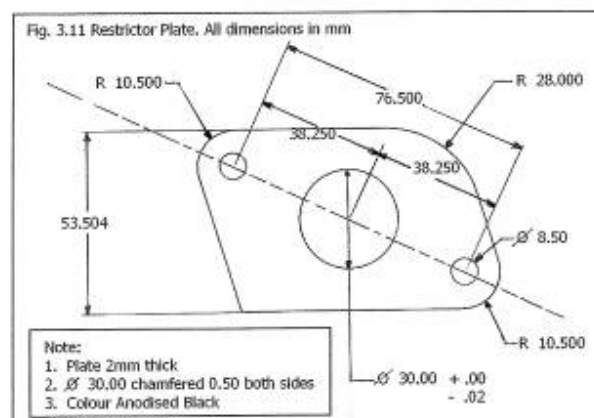
- 3.1** A standard Mini / Metro 99H 998cc cylinder block is mandatory. Bore 64.59 mm (2.543") Stroke 76.2 mm (3.0"). Maximum permitted overbore is 1.02 mm (0.040"). Modifications to the cylinder block which are designed to provide clearance for valves (e.g. pocketing) or gas sealing rings are not permitted. Machining for a main bearing centre strap is allowed. The block may be surface ground but the pistons at top dead centre must be level with top of block or down the bore. Drilling into the oil pick-up gallery to facilitate the fitment of external oil pre-filter system is permitted. Dry sumping is not permitted. **No other machining or drilling of cylinder block is allowed**
- 3.2** A standard production crankshaft with standard stroke 76.2 mm (3.0") is mandatory. Machining the crankshaft in any way to reduce weight or to balance or for any other benefit is not permitted. Polishing is not permitted. Crankshaft dampers are permitted.
- 3.3** Pistons must be unmodified Mini / Metro production or equivalent replacement pistons subject to maximum oversize 1.02 mm (0.040"). Pistons must have all rings in place. Forged or Race / Competition orientated pistons are forbidden.
- 3.4** Standard connecting rods must be used. Connecting rods may not be modified, lightened, balanced or machined in any way.
- 3.5** A control camshaft must be purchased from the MDA. All camshafts are numbered and recorded. The price for 2011 is £74.00. Camshaft lobes must not be re-profiled or retimed in any way. The camshaft must retain the standard method of drive train mechanism. Off-set woodruff keys may not be used.
- 3.6** A standard Rover flywheel is mandatory and may not be lightened or modified in any way. Steel or alloy competition flywheels are not permitted.
- 3.7** A standard Rover Mini / Metro 99H cylinder head, part No.CAM4810 is mandatory. Head gasket thickness must be standard, but manufacturer is free. Rough casting marks must be seen on both inlet and exhaust ports and in the combustion chamber. No gas flowing or polishing is allowed. Valve seat inserts may be fitted. The only machining allowed is to; a) block mating surface to raise compression ratio. b) valve seats for routine maintenance which may have two clearly defined angles cut, the standard one at 45° and a lower one at 60°. Radius valve seats and any widening of the throats is not permitted. The minimum average (of the four chambers) combustion chamber depth is 9.7mm, measured as shown in Fig.3.7. It is accepted that these depths vary hence the use of the average.



- 3.7.1** Rocker gear must be from any production “A” series engine and unmodified. Offset bushes and / or posts are not allowed. High lift rockers are not allowed. Welding of the top edge of the presses steel items is allowed.
- 3.8** Valves are to be standard and vertical with a maximum of 27.89 mm (1.098”) inlet, and 25.53 mm (1.005”) exhaust. Only single valve springs permitted. Valve guides must remain unmodified. After market guides may be fitted. Valve centres may not be moved.
- 3.9** Standard one piece cast iron inlet / exhaust manifold in mandatory and must not be modified. Twin outlet exhaust manifolds are not permitted. Exhaust systems are free but must comply with Section J appendix 1 - Chart 5.18, section F.
- 3.10** Carburation must be by any single S.U. carburettor with a maximum throat diameter of 1.5”. The throat, piston and butterfly may not be modified or machined. The principal of operation of the carburettor must remain unchanged, including the butterfly and piston. Air filters are open to free choice. Ram pipe may not be fitted.

A 3mm diameter hole must be drilled through the threaded end of the carburettor mounting stud.

A restrictor with internal diameter of 30 mm (Fig. 3.11) will be supplied by the MDA for fitment between the carburettor and inlet manifold. Restrictor must be fitted in the presence of an MSA Scruitneer and sealed to manifold with an MSA numbered seal. **Any modification to the restrictor is illegal.**



Carburettors may Only be mounted in the following manner:

- 1 Gasket mating to manifold MDA Restrictor
- 1 Gasket between Restrictor and Spacer
- 1 Original Rover Spacer of 9/16" (13.5 mm) max. thickness
- 1 Gasket between Spacer & Cable mounting bracket
- 1 Gasket between Cable mounting bracket & Carburettor

Spacer may not be machined, bored, sleeved or modified in any way.

- 3.12** The ignition system must use a standard Mini distributor using points for switching of the low tension circuit or a standard A+ distributor using it's electronic trigger for switching of the low tension circuit. It is permissible to replace points with an electronic trigger using either Lumination Magnetric or Aldon Ignitor (**not Ignitor 2**). Ignition advance and retard must only be controlled by "bob-weights" and springs, with or without vacuum means. Any form of electronic management / control to modify ignition advance / retard is not permitted. Distributor contact breakers must be connected directly to negative terminal of ignition coil.

Rev limiters, launch controls, full throttle gearchange control or any form of traction control or driver aids are not allowed

- 3.15** Spark plugs are open to free choice.

- 3.14** The ignition system may be protected from mud and water with card, plastic or a sheet metal deflector not exceeding 18 cm x 18 cm in area, with a maximum thickness of 0.8 mm. Corrugation of the deflector is not permissible. Any additional material (including the deflector) placed in the area in front of the distributor, that is not part of the vehicle bodywork, must be seen to deflect under hand pressure. Consideration as to whether the deflector or it's mountings are reinforcement is at the discretion of the Scrutineer.

- 3.15** Fuel pump(s) are open free to choice, but are not to be located in the passenger compartment / interior of the car

- 3.16** Superchargers, turbo-chargers, injection of nitrous oxide or water are not permitted. Air may be ducted to the rear of the engine compartment, but ducting must terminate at least 6" (150mm) from any air filter system. There must no more that one duct with a maximum diameter of 3" (75mm)

- 3.17** Fuel: Petrol as defined as 'Pump fuel' J5.13.4. (Table on page 64).

- 3.18** Standard A+ gearbox must be used with the following gear sets.

1 st Motion Shaft	17 teeth, laygear 30
1 st Gear	15 teeth, driving 31
2 nd Gear	21 teeth, driving 26
3 rd Gear	26 teeth, driving 21

No other parts are permitted. Straight cut gears or five speed gearbox conversions are not permitted.

- 3.19** Standard gears with 1:1 ration must be used

- 3.20** Final drive ration to be 3.44:1. Locked or Limited slip differentials or any other device intended to give a similar effect is not permitted

- 3.21** After Market conversions to stronger differential pins are allowed.

- 3.22** The clutch is free as long as the same number of driven plates as the production item are retained. The backplate is free within the range of standard Rover Car Parts. The diaphragm is free.

3.23 Standard mechanical water pumps must be retained

3.24 Engine mountings are free. Additional engine steady bars may be fitted

4. **Suspension and Brakes**

4.1 Standard mini front and rear subframes must be used and may be strengthened. Flexible subframe mountings may be replaced with solid equivalents. Suspension parts must be standard Mini, retaining rubber suspensions, standard top arms and standard rear swinging arms. Standard suspension bushes may be replaced with uprated competition equivalents. Rear rubber cones may be softened. Negative camber bottom arms are permitted. Front tie rods are free choice. Adjustment is permitted to front and rear camber angles. Rose jointed components are prohibited.

4.2 There is free choice of brake linings and drums provided that the tyre does not protrude beyond the top edge of the wheel arch, including extensions. Brakes must be operative on all four wheels. An effective handbrake is obligatory. A TANDEM brake system is preferable so that in the event of a failure of one system, braking is maintained on at least 2 wheels on the vehicle. Brake bias valves are permitted but must not be capable of adjustment from the drivers seat.

4.3 Mini Cooper and Cooper 'S' brakes may be used as long as the vehicle complies with 4.8. Discs must be standard or standard replacement and unmodified. Drilled or grooved discs are not permitted.

4.4 Power braking is not permitted.

4.5 The ride height may be altered provided adequate clearance exists between tyres and body. 'Hi-Lo' type suspension units are permitted.

4.6 Dampers are open to free choice. Coil spring / Damper units are prohibited.

4.7 Anti roll bars may not be fitted.

4.8 Standard 4.5" x 12" steel wheels or 5.0" x 12" aluminium wheels are mandatory. Damaged aluminium wheels will not be accepted. Banded or welded wheels are not permitted. Wheel nuts must match the wheel used. Ensure regulation 2.4 complies.

4.9 Yokohama Tyres A048R control tyre mandatory.

4.10 Wheel Spacers are Prohibited.

5.0 **Electrical Equipment**

5.1 Each car must be fitted with two RED brake lights, of the anti crash type as used in fog, with a minimum of 21 Watt bulbs fitted. The lights should be a minimum of 12" apart on the rear parcel shelf or HIGHER and clearly visible from behind when the foot brake is applied.

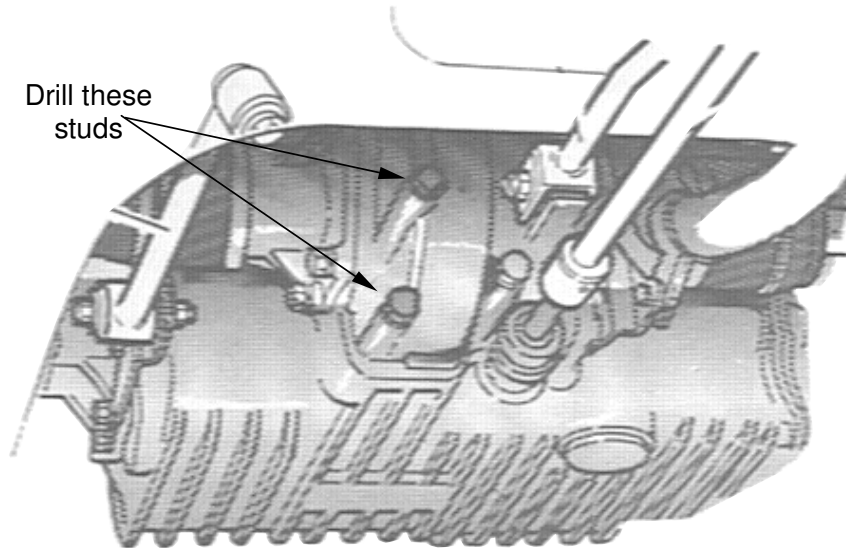
5.2 A 'poor visibility' light should be fitted according to Refer K5.

5.3 The use of a functioning dynamo, alternator or generator is mandatory.

5.4 A battery and self starter must be fitted and in working order and not of a temporary nature. The battery may be located either in the boot in the original battery box or in the passenger compartment. The battery earth lead must be coloured yellow. Battery terminals **MUST** be covered with insulating material. Insulating tape will not be permitted. **Battery must be securely mounted to the vehicle.** If mounted within the passenger compartment, battery must be fitted in a sealed non-conductive battery box.

6. Eligibility Checks

- 6.1 Random eligibility checks may be made at any meeting and engine / gearbox assemblies checked or sealed for subsequent checking. The Minicross Drivers Association will reimburse Scrutineers travelling expenses when a sealed engine / gearbox assembly is subsequently checked and found legal. All other expenses to be borne by the Entrant / Competitor. If the engine / gearbox assembly is found to be illegal all expenses must be covered by the Entrant / Competitor. (Refer:- Judicial, section C). Random fuel check will be made.



- 6.2 Sealing of engine / gearbox assemblies shall only be by means of wire and official M.S.A. numbered seals and / or paint. All cars **MUST** have following studs, nuts and bolts drilled to enable seals to be affixed. Drillings must be of at least 3mm diameter. Failure of to have the following drilled is deemed to be a breach of vehicle eligibility.

- Clutch Cover** – The heads of two adjacent bolts on the top/front.
- Rocker Cover** – Both retaining screws.
- Differential** – Refer to studs as per drawing.
- Carburettor** – Any 2 fixing studs to the inlet manifold.

Drivers may, if they wish, elect at their own expense to have the above items sealed by and Eligibility Scrutineer during assembly. A sealing certificate would then be issued for the vehicle. Providing the original seals are in place, and the original certificate is produced at any subsequent eligibility inspection, the need for further stripping will be removed.

- 6.3 MSA vehicle log books are required in accordance with Section J 2.1 – J 2.1.5.
- 6.4 The triangulation panel adjacent to the left hand front subframe top mounting **MUST** be drilled on the angled flange with a 2mm diameter hole. Refer to figure 2.3. An MSA numbered seal will be fitted, and the number recorded in the vehicle log book.
- 6.5 Non production of the Vehicle Log Book will be deemed a breach of vehicle eligibility

IMPORTANT SAFETY CHANGES

Please pay particular attention to the sections on Fire Extinguishers, Seats and their Fixings, Harnesses and Helmets. The regulations covering these may have changed from last year in the MSA Competitors Yearbook.