TECHNICAL REGULATIONS SCHEDULE SMC GOVERNING THE 2026 - 2027 SUPER MINI CHALLENGE SERIES

CONTENTS

PART A General Conditions applicable to all classes

PART B Technical Regulations applicable to all classes, comprising:

- Section One: Technical Regulations applicable to Mini Seven Class
- Section Two: Technical Regulations applicable to Mini Miglia NZ Class
- Section Three: Technical Regulations applicable to Super Class
- Section Four: Technical Regulations applicable to Open Class

PREAMBLE

~~In the spirit of these Regulations, competitors and constructors are expected to assist in maintaining the cost of 'Mini Racing' within reasonable bounds.~~

~~Additionally, all persons connected with the administration of this Technical Schedule, and with participation in competitions under this Technical Schedule, are expected to abide by the spirit and intent of these Regulations. This implies that all such persons associated with the 'Super Mini Challenge' Series are expected to assist in keeping the cost of 'Mini Racing' within reasonable bounds.~~

MotorSport New Zealand Inc hereby declares the following Technical Regulations to be those governing a Competition for Drivers in the Super Mini Challenge Accredited Race Series.

These Technical Regulations are at all times to be read in conjunction with:

- The MotorSport New Zealand National Sporting Code (NSC) and its appropriate Appendices and Schedules, specifically Schedule Z being the Standing Regulations applicable to all Races;
- The Sporting Regulations; and
- The Event Supplementary Regulations.

The Series is held under a MotorSport New Zealand Sanctioning Permit No: **269026**

COMPETITOR RECORD OF AMENDMENTS

~~Use this table to keep a record of all official 'Manual/Series Amendments' issued during the season relative to this Schedule.~~

MotorSport New Zealand may issue amendments to these Sporting Regulations or Technical Regulations authorised by the Chief Executive Officer or their representative.

All amendments issued during the season are recorded in the table below:

Amendment Number	Issue/Effective Date	Article Reference	Subject/Notes

PART A
GENERAL CONDITIONS APPLICABLE TO ALL CLASSES

1.0 GENERAL INFORMATION

1.1 These Technical Regulations shall be read in conjunction with in Appendix Two, Schedule A of the MotorSport New Zealand Manual.

1.1.1 Where an item is not specifically covered in these Technical Regulations, the requirements of Appendix Two Schedule A of the MSNZ Manual will apply.

1.2 The authoritative source of these Technical Regulations is available at motorsport.org.nz under the sporting tab.

1.3 All text changes from the previous issue of these Technical Regulations ~~this Schedule~~ are highlighted such. Text changes for grammatical and/or formatting reasons are not highlighted.

1.4 These Technical Regulations shall be interpreted on the basis that if a modification is not specifically permitted, then it is not allowed. The limits of the permitted modifications are specified herein after.

1.5 Any modifications or additions to the originally manufactured standard production vehicle, or any parts thereof that are not specifically defined hereinafter by these Technical Regulations, ~~or subsequent MotorSport New Zealand documents amending these Regulations,~~ are strictly prohibited and will render a vehicle ineligible.

1.6 All ~~cars~~ vehicles competing in Events to which these Technical Regulations apply shall have a valid MotorSport New Zealand logbook.

1.7 Technical Eligibility and Safety Equipment Enquiry:

1.7.1 Where any doubt may exist in understanding any Regulation contained within these Technical Regulations ~~this Schedule~~ it will be understood that it is the Competitors obligation to enquire as to the correct interpretation. All technical eligibility and/or safety equipment enquiry shall be submitted in writing to:

(1) The Series Scrutineer as detailed in the Sporting Regulations ~~Series Articles~~; then to

(2) The MotorSport New Zealand Technical Manager

1.7.2 All enquiries should detail the article in question and the specific subject matter.

1.7.3 A written reply will always be given to a written enquiry.

1.7.4 On matters of technical eligibility and/or safety compliance, a verbal statement will have no validity.

2.0 DEFINITIONS

~~Definition of terms used within this Schedule shall be referenced from the National Sporting Code, Appendix Two Schedule A and as detailed below:~~

In these Technical Regulations terms and expressions shall have the meanings set out in the National Sporting Code and, where applicable, as defined below:

'Article(s)' means a numbered provision within these Regulations or within the National Sporting Code, as identified by its number (and sub-number, where applicable). Article headings/titles are included for ease of reference only. References to an Article include all sub-clauses of that Article unless otherwise stated.

'BMW Mini' means the BMW Mini Cooper S - type R53, in accordance with German Homologation No. DA-02 and DN-02 as documented in the vehicles original DMSB logbook and originally complying with MotorSport New Zealand Schedule MC issued for the 2009-2010 season.

'Club' means the Mini Racing Drivers Club of N.Z Super Mini Challenge Incorporated.

'Direct replacement part' means a catalogued, off the shelf component sourced from another manufacturer to the vehicle manufacturer, which is identical in level of duty, function and design to the component it replaces, that may be fitted without making modification to the original car; and

'Modification' is defined as any change authorised within these Technical Regulations.

'National Sporting Code' and **'NSC'** means the current MotorSport New Zealand National Sporting Code and its Appendices and Schedules, which set out the fundamental rules and principles governing the organisation and conduct of Events, and to which all Regulations are subject.

'Original' means, the manufacturer specifications, as supplied when new and without modification in accordance with the Parts Reference Manual.

'Parts Reference Manual' means the official manufacturer's publication adopted to determine part eligibility under these Regulations.

'Race Trim' means the condition in which the car competes and shall include all fluids and the driver including their safety apparel and equipment.

'Regulation(s)' means a formal body of rules, or any distinct set of provisions within such a body, approved by MotorSport New Zealand, governing any aspect of a Series or Championship.

'Round' means a MotorSport New Zealand permitted event forming part of the Championship at which Drivers may earn points towards the Series

'Series' means the Super Mini Challenge Race Series for vehicles complying with Technical Regulations - Schedule SMC.

'Service item' is defined as consumable parts such as: drive belts, oil filter, air cleaner elements, fluids etc.

3.0 ELIGIBLE VEHICLES

3.1 Class 1 – Class 3 Eligible Vehicles:

3.1.1 Authorised to take part in competitions under Class 1, Class 2 and Class 3 Regulations shall be Mini Saloons as manufactured by BLMC (UK), its subsidiary companies and franchise dealers. BLMC is the given and accepted name of the manufacturer of the Mini motor vehicle although the Club acknowledges previous and subsequent company names.

3.1.2 The only Mini saloons eligible are those assembled as standard steel saloon bodyshells in right-hand drive configuration, and includes Riley Elf, Wolseley Hornet and Mini Clubman variants.

3.1.3 Eligible vehicles will retain their original bodyshell and running gear but may be subject to modifications, substitutions, and/or additions as specifically detailed within the applicable section of these Technical Regulations (where the vehicle deems classification).

3.2 Class 4 Eligible Vehicles:

3.2.1 Authorised to take part in competitions under Class 4 Regulations shall be:

(1) Mini Saloons as manufactured by BLMC (UK), its subsidiary companies and franchise dealers; and

(2) BMW Mini; and

(3) By invitation of the Club only, non-BLMC Variant vehicles, such as De Joux.

3.3 Decals as provided by the Club for the purpose of promoting the Series and/ or Sponsor must be affixed to the vehicle in the positions designated for them, as per Series Articles.

~~4.0 RACE CLASSES~~

~~**4.1** The Super Mini Challenge has four distinct classes as follows.~~

- ~~**Class 1: Mini Seven;** being cars in compliance with Schedule SMC, Part B, Section One, Technical Regulations applicable to Mini Seven Class.~~
- ~~**Class 2: Mini Miglia NZ;** being cars in compliance with Schedule SMC, Part B, Section Two, Technical Regulations applicable to Mini Miglia NZ Class.~~
- ~~**Class 3: Super Class;** being cars in compliance with Schedule SMC, Part B, Section Three, Technical Regulations applicable to Super Mini Class.~~
- ~~**Class 4: Open Class;** being cars in compliance with Schedule SMC, Part B, Section Four, Technical Regulations applicable to Open Mini Class.~~

4.0 WEIGHTS

4.1 The minimum ~~racing~~ weight of each vehicle in Race Trim shall be: ~~respect the following~~.

4.1.1 Mini 7: 650.00kg

4.1.2 Mini Miglia NZ: 670.00kg

4.1.3 Super Mini Class: N/A

4.1.4 Mini Open Class: N/A

4.2 ~~The racing weight shall be checked in 'race trim'. It~~ The minimum weight may be measured at any time during ~~the competition~~ an Event at any Round of the Series~~, including qualifying session(s),~~ on the Official scales designated by the Series Coordinator ~~for the class~~ and/or Meeting on the Official Noticeboard.

5.0 SAFETY EQUIPMENT REQUIREMENTS

5.1 Each vehicle shall be fitted with a MotorSport New Zealand type approved safety cage.

5.1.1 A certificate for this safety cage must be contained in the MotorSport New Zealand vehicle logbook.

5.1.2 One or more longitudinal members, side intrusion, shall be fitted on the driver's side of the safety cage ~~rollcage~~.

5.1.3 Fitment of side intrusion ~~bar(s)~~ to the passenger's side of the safety cage ~~rollcage~~ is highly recommended.

5.1.4 The entire ~~rollcage~~ safety cage shall be contained within the Driver's compartment (cockpit).
~~All vehicles shall have roll protection installed in the form of a rollcage that is homologated by MotorSport New Zealand with the appropriate certificate contained in the vehicle's logbook. Roll protection homologation by MotorSport New Zealand is mandatory.~~

5.2 All ~~other~~ safety equipment ~~and driver apparel~~ shall comply with Appendix Two Schedule A of the MSNZ Manual ~~requirements~~.

6.0 FUEL

6.1 ~~**Fuel:**~~ The only fuels authorised for use ~~in competing vehicles~~ at any Round of this Series is detailed in ~~as per~~ Appendix Two, Schedule A, Article 3.9 Fuel of the MSNZ Manual.

6.2 Additives of any kind, specification or chemical composition shall not be added to the fuel. ~~nor may a~~

6.3 It is not permitted to blend of two or more fuels ~~be used~~.

7.0 TYRES

7.1 Only such tyres as specified by the Club from time to time may be used.

7.1.1 The tyres authorised for each Class in the Series are detailed within the appropriate section of these Regulations.

7.2 Tyre modification and/or treatment:

7.2.1 The following modifications and/or treatments are specifically prohibited:

(1) Hand cut tread grooves;

(2) Filing, buffing, or any other modifications to the tyre tread or tyre sidewall; and

(3) Tyre warmers, chemical treatments or any means to artificially enhance tyre performance.

8.0 PARTS ELIGIBILITY

8.1 ~~**Parts Eligibility:**~~ Where there is doubt as to the eligibility of any ~~component~~ part, the part in question shall be compared with a standard part obtained from the manufacturers franchise agent, as referenced in the Parts Reference Manual, and

8.1.1 Unless specified otherwise in these Technical Regulations ~~this Schedule~~, these shall be the only parts eligible to be fitted to a vehicle.

8.1.2 Part eligibility shall always remain with the Competitor to prove.

8.2 Fasteners, studs, bearings, gaskets and/or bushings, not manufactured by BLMC, although direct replacements for, and of the same material and physical dimensions as the original part, are authorised.

8.2.1 Modification of any fastener to permit lock wiring is authorised.

8.2.2 'Nyloc' nuts may be freely fitted in place of nuts and spring washers.

8.2.3 Cylinder head stud washers may be substituted or deleted.

8.3 The use of titanium fasteners is strictly prohibited.

8.4 The use of needle roller or ball bearings in any position where not originally fitted by the manufacturer is specifically prohibited.

9.0 TIMING TRANSPONDERS

9.1 For all vehicles except~~ing~~ BMW Minis, the timing transponder shall be mounted securely onto the vehicle, in accordance with manufacturer's installation instructions.

9.1.1 No part of the timing transponder unit, major or minor, shall be forward of a nominal vertical datum plane at 90 degrees to the front subframe top plane.

9.1.2 The datum plane shall be 200mm forward of the intersection of the front subframe top plane and the suspension tower, as displayed in *Figure 1* below. ~~per the following diagram~~.

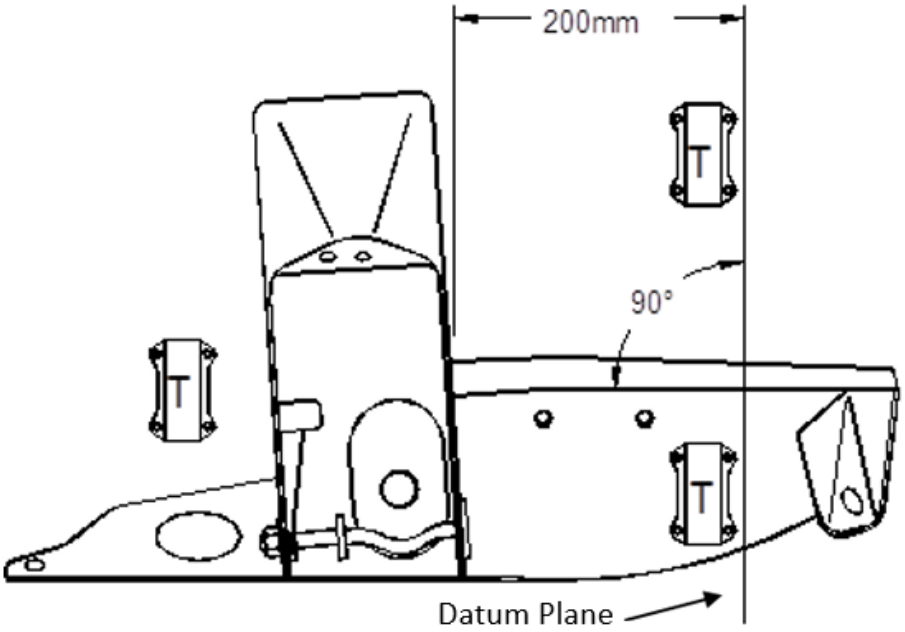
9.1.3 The vertical centre-line axis of the timing transponder unit must not face forward of true plumb (vertical), independent of the position of mounting.

9.1.4 BMW Minis shall comply with the requirements of Appendix Two Schedule A, Part One, Article 6.3 (1) of the MSNZ Manual.

9.2 ~~Note:~~ Only one (1) transponder unit is permitted to be fitted to a vehicle ~~to be used~~.

9.2.1 The three (3) transponder units are shown to indicate freedom of mounting position provided this is behind the datum plane.

Figure 1 - Timing Transponder locations



PART B - SECTION ONE
TECHNICAL REGULATIONS APPLICABLE TO THE MINI SEVEN CLASS

1.0 AUTHORISED MODIFICATIONS

1.1 The original bodyshell and running gear shall remain standard, unless expressly allowed herein.

1.1.1 The only modifications permitted are those contained in these Technical Regulations ~~this Schedule~~.

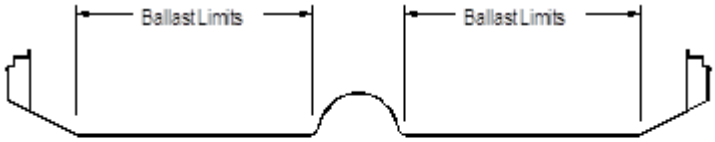
1.1.2 Any effort to accommodate any secondary modification is not permitted.

1.2 Vehicles must remain absolutely standard as per the manufacturer's specifications in every respect major and minor both in bodyshell and running gear, excepting as detailed herein.

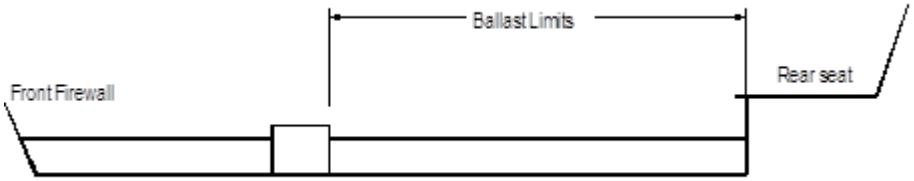
1.3 The addition of ballast to achieve minimum ~~racing~~ weight is authorised provided it is securely fixed to the rear floor in compliance with Appendix Two Schedule A of the MSNZ Manual.

1.3.1 All ballast to be located within the boundaries of the rear horizontal floor panel as displayed in *Figure 2* ~~per the diagram~~ below:

Figure 2 – Ballast location Boundaries



Rear Floor cross section



Floor Pan side view

2.0 BODYSHELL AND VEHICLE EXTERIOR

2.1 The bodyshell is to remain exactly as per the Manufacturer's specifications and all embellishments (badges, chrome bright work, bumpers, headlight surrounds, etc.) are required to be in position.

2.1.1 Fibreglass bumpers are permitted.

2.1.2 Any replacement bumper must respect the original silhouette.

2.1.3 The standard steel front, mudguards – grille mount, forward of the A pillar seam weld may be replaced with a removable fibreglass unit.

(1) The inner guards may be modified or removed.

(2) The replacement unit must respect the original silhouette.

(3) The bonnet must comply with the provisions of Article 2.6 below

~~**2.2** The minimum racing weight for **Mini 7 Class** vehicles is **650.00kg**. Refer Part A, Article 5.1.~~

2.2 The outer wheel arches, front and rear may be modified only to the extent necessary for the clearance of tyres.

2.2.1 The inner wheel arch (rear) may be modified for tyre clearance provided that the maximum height (of the inner wheel arch) is not increased and any modifications may not alter the original factory inner guard seam lines or the position of the rear bulkhead and parcel tray.

2.2.2 The bulkhead may have the small triangular shaped pieces at its outer ends removed or bent up to enable ‘tubbing’ of the rear guards.

2.3 The front valance, from the front subframe mount point to the front wheel arch junction may be modified or removed to allow for brake ventilation.

2.3.1 Ducting systems to carry cooling air to the front brakes may be fitted in this area providing that no visible part of the system protrudes beyond the original panel contour.

2.4 The bonnet latch crossmember and support stay may be modified or removed.

2.5 The grille may be altered to allow easy removal and may be spaced forward 25.00mm from its original position to clear oil coolers, etc.

2.6 Bonnet latching device and bonnet hinges, including hinge fixings on the bonnet and bodyshell, may be removed.

2.6.1 A Fibreglass bonnet may be fitted.

2.6.2 This must be attached by no fewer than four (4) securing devices.

2.6.3 Any replacement bonnet must respect the original silhouette.

2.7 Wheel arch flares must be fitted where tyre tread protrudes beyond the original guard cover, ~~as per~~ Appendix Two Schedule A of the MSNZ Manual.

2.7.1 Zak Speed type flares or Monza type flares are expressly forbidden.

2.8 Trim strips shall conform to at least that as fitted to the basic Mini model,

2.8.1 Additional trim is optional.

2.8.2 The plastic side trim must cover the body seam between the wheel arches.

2.9 A flat protective plate may be added to the firewall below the box section in order to protect the driver from flywheel disintegration.

2.9.1 The maximum dimensions of the flat protective plate 200.00mm x 200.00mm.

2.10 Any Mini boot lid may be used.

2.10.1 The number plate carrier, hinges and light assembly may be removed.

2.10.2 Model or name badges must be fitted.

2.10.3 Boot lid hinge pins may be replaced by an 'R' clip or similar.

2.10.4 The inner support frame may be removed.

2.10.5 A fibreglass boot lid may be fitted.

(1) This must be attached by no fewer than three (3) securing devices.

(2) If fitted the original boot lid hinges may be removed.

2.11 Bodyshells may be seam welded.

2.12 Bodyshell tags originally used for holding brake lines, fuel lines, hydrolastic lines and electrical wiring, etc, may be removed.

2.13 Additional jacking points may be added to the sills provided that any protrusion is not beyond the original body seam between the wheel arches.

2.14 The parcel tray on the doors of Mk1/Mk2 Mini may be removed when the safety cage impedes the fitting and closing of the door.

2.14.1 The steel inner door skin of a Mk3 or later model Mini may be removed only in the area originally covered by the manufacturer's 'door card' upholstery lining.

2.14.2 Removed door skin material shall be replaced by a suitable one-piece panel covering the aperture, in compliance with Appendix Two Schedule A of the MSNZ Manual.

2.15 Windows:

2.15.1 The front windscreen shall be of laminated glass.

2.15.2 The side and rear windows may be substituted with transparent plastic glazing of 4.50mm minimum thickness and must be mounted in rubber mouldings and/or the original frame.

2.15.3 Ventilation holes of no larger than 38.00mm diameter and no greater number than six (6) per panel may be incorporated in the plastic glazing solely for ventilation purposes.

2.15.4 Where a one-piece fixed driver's window is used, a hole may be cut to enable hand signalling.

2.15.5 On models fitted with wind-up windows, the winding mechanism may be removed.

2.17 Engine Compartments:

2.17.1 The bulkhead separating the engine compartment from the driver's compartment must be made fireproof.

2.17.2 Material may be removed from the bulkhead panel to allow for fitment of a metal 'Air Box' for the purposes of accommodating the carburettor and air cleaner.

(1) Using the bulkhead cross member (on which the master cylinders are mounted) as a source of datum, the height and depth of such an 'Air Box' shall be established.

(2) The height datum plane shall be through the top surface of the cross member, at the mountings for brake and clutch master cylinders (for either LHD or RHD configurations).

(3) The depth datum plane shall be through centrelines of the brake master cylinder holes on either side of the car (for either LHD or RHD configurations).

2.17.3 No part of the 'Air Box' shall exceed the following;

(1) Lower than a point 15.00mm above the height datum plane.

(2) Higher than a point 210.00mm above the height datum plane.

(3) Deeper than a point 27.00mm rearward of the depth datum plane.

(4) Forward of the original bulkhead panel.

(5) Wider than 300.00mm.

(6) ~~Note:~~ The above dimensions are for the inside of the 'Air Box' and it is accepted that mounting flanges (which must be on the engine side of the bulkhead) can exceed these dimensions, but the opening made in the bulkhead panel cannot exceed the dimensions by more than 40.00mm vertically or horizontally.

2.17.4 The inner guards may be modified to allow camshaft access, mounting of electric fan, radiators and cowl.

2.17.5 The upstanding lip at the base of the grille may be flattened for mounting an oil cooler, but not removed.

2.17.6 Any device designed to direct air from the grille or any other place, to the carburettor is not permitted.

2.17.7 Engine and gearbox mounts may be modified, substituted or supplemented but must not move the engine from its original position in the front subframe.

2.17.8 The make and type of clutch master cylinder, clutch slave cylinder and clutch pipe and hose is free, providing that it may be attached to the standard mini mountings.

2.18 Boot Compartment:

2.18.1 The bulkhead separating the boot compartment from the driver's compartment must be made fireproof.

2.18.2 The fuel tank must be securely fastened and may be modified to clear the shock absorber turrets.

2.18.3 The fuel tank hold-down strap must be positioned to the right-hand side of the tank seam.

2.18.4 The original fuel tank may be substituted with an alternative fuel tank, which when fitted, must remain securely mounted in the boot compartment.

(1) To facilitate safe mounting, the boot floor may be suitably strengthened.

(2) Material can only be added to achieve this.

(3) The original fuel filler hole in the body may be covered or filled.

(4) Fuel tank type and installation will be subject to safety approval by the Series Scrutineer.

2.18.5 A new boot compartment wheel well area may be fabricated with a steel panel of equivalent thickness and must be welded to the body shell.

(1) The lowest part must not exceed the original.

3.0 VEHICLE INTERIOR

3.1 All interior trim and seating may be removed.

3.2 A competition seat shall be fitted in compliance with Appendix Two Schedule A of the MSNZ Manual and may be re-positioned, provided that no part of the seat base extends over the centre line of the vehicle.

3.3 Instrumentation, switches and their positioning are free, excepting the mounting of electrical switches on any part of the door panel.

3.4 A non-standard steering wheel in accordance with Appendix Two Schedule A Article 4.11(d) of the MSNZ Manual may be fitted and the outer column cover may be removed.

3.4.1 The steering shaft may be modified or replaced by a similar component of different manufacture and mounting of the steering shaft is free.

3.4.2 A maximum of two (2) universal joints may be used in order to realign the steering shaft.

3.5 An access hole of maximum dimensions 200.00mm x 200.00mm may be cut in the left side of the rear seatback to afford access to the shock absorber, but this hole must be covered by a fireproof panel at all times.

3.6 The rear side pockets and seat base overhang may be removed or freely modified.

3.7 If a horizontal transverse bar is incorporated between the ~~rollcage~~ safety cage front legs (at the same height as the parcel shelf) then the entire parcel shelf may be removed.

3.8 The pedals (clutch, brake and accelerator) may be modified to enable them to be comfortably positioned and the pedal pads made adjustable for the driver.

3.8.1 An additional stop may be fitted under the accelerator pedal.

3.9 The standard pedal box assembly (clutch, brake and accelerator) may be substituted with an aftermarket assembly provided the mountings originate from the standard position and the pedals operate in the same manner as original, i.e. pedals must be pendant mounted, no floor mounting permitted.

3.9.1 The fore and aft position of the pedal pivot point must not deviate more than 30.00mm from standard.

3.9.2 The make and type of master cylinders, clutch slave cylinder, plumbing and associated mountings shall be free.

(1) This assembly must still operate in accordance with Appendix Two Schedule A of the MSNZ Manual.

3.9.3 If the provisions of Article 10.4 regarding a dual brake system and removal of the hand brake assembly are applied, then the type of master cylinder(s) is specified as being two separate cylinders and not a single tandem type cylinder.

4.0 ENGINE SPECIFICATIONS

4.1 850cc Engine:

4.1.1 Only BLMC manufactured A-Series 848cc engines and gearbox units (AD015 and AD020) are authorised.

(1) All components of these units must not be substituted except as permitted below, but may be balanced, lightened, polished or reshaped.

4.1.2 The use of needle-roller bearings in any position where not originally fitted by the manufacturer is prohibited.

4.1.3 These Articles govern all subsequent authorised modifications.

4.1.4 Cylinder Block:

(1) Maximum bore size 64.59mm.

(2) A rebore or sleeving of the cylinder bores in such a manner as to obtain an offset between the centre line of the cylinder bores and the longitudinal line of the crankshaft is expressly forbidden.

(3) Offset boring using liners to achieve any offset (as opposed to longitudinal as stated) or moving of bores from standard spacing is prohibited except that:

(a) Non sleeved blocks are free.

(b) Blocks with a maximum of two sleeves (providing all four bores are in line) will be deemed to be in the non-sleeved category.

(c) Sleeved blocks may have a maximum of 0.254mm offset.

(d) The minimum distance between bores 1 and 2 and between bores 3 and 4 shall be 6.35mm.

(e) The surface of the block may be machined to adjust piston deck height.

- This surface must remain completely flat and perpendicular to the cylinder bore.
- Cylinder 0 rings may be machined and fitted into the block face.
- It is permitted to cut valve pockets in the block surface.

(f) The camshaft bearing bores may be enlarged to permit fitment of cam bearings, where such are not provided as standard equipment.

4.1.5 Crankshaft:

(1) The standard crankshaft or competition crankshaft Part No. C.AEG515 are the only units permitted, and these may be freely modified.

(2) ~~However,~~ Modifications which will result in a change of cc rating of the engine are prohibited.

(3) The maximum stroke is 68.58mm.

(4) Crankshaft dampers are free.

(5) Crankshaft bearings and thrust washers are free but must remain the same type as in standard manufacture (i.e. needle roller races are not permitted).

(6) Crankshaft pulleys are free.

4.1.6 Connecting Rods:

(1) Shall be as fitted as standard equipment to BLMC A-Series 848cc, 998cc or 1098cc models.

(2) These may be freely modified, however, big-end centre to little-end centre distance must remain unaltered.

(3) Little-end bushings are free, as shall be the method of gudgeon pin retention.

4.1.7 Pistons and Rings:

(1) Any pistons may be used providing they meet the following requirements:

(a) Piston crown shape must be flat or concave and said crown must NOT protrude above the cylinder block surface when the piston is at T.D.C. in a fully assembled engine.

(b) Gudgeon pins are free; however, their diameter must remain as per the standard model.

(c) A tolerance of +/- 0.13mm is permitted to allow replacement over-size gudgeon pins to be used if necessary.

(d) The gudgeon pin centre line must remain within 0.305mm of the piston centre line.

(e) The minimum weight of a piston, excluding rings, gudgeon and gudgeon retaining devices shall be 170.00 grams.

(f) Piston rings are free.

4.1.8 Flywheel and Clutch:

(1) The standard or up-rated replacement flywheel, ring gear, pressure plate and diaphragm may be lightened, reshaped and balanced.

(2) The minimum weight of the complete assembly (flywheel including ring gear, pressure plate, diaphragm, drive straps and bolts and washers, flywheel bolt and keyed washer) but not including the clutch driven plate, shall be seven (7.00) kg.

(3) The clutch driven plate is free.

4.1.9 Camshaft and Timing Gears:

(1) All camshafts shall be A-Series units of BLMC manufacture.

(2) All camshafts are to be ground to the Mini Seven Association of NZ Inc. specifications by Kelford Cams, 11-15 Kennaway Rd, Woolston, Christchurch.

(3) Such camshafts are to be logged with the Secretary of the Mini Seven Association of NZ Inc.

4.1.10 Any A-Series timing chain assembly including duplex chains and gears may be used and such gears may be freely modified.

(1) The use of aftermarket vernier timing gears or similar to adjust cam timing is permitted.

(2) Cam timing must NOT be variable when the engine is running.

(3) Camshaft bearings are free, subject to provisions of Article 4.1.1 and 4.1.2.

4.1.11 Cylinder head and valves:

(1) BLMC A-Series cylinder heads having the casting number 2A629, 12A1456, 12G202 or CAM4810 are the only authorised units.

(2) These may be freely modified subject to the following conditions:

(a) Where such modifications result in the requirement other than standard parts to be fitted (e.g. larger valves, valve springs, guides, etc.) such will be permitted.

(b) The valves must remain in their original location, i.e. valve guide centre to centre distance must remain as standard and valve stems must remain perpendicular to the cylinder head face.

(c) The minimum distance from the top of the inlet ports to the rocker cover face is 13.98mm.

(d) Material of any kind may be added to the head only for the purpose of repair (i.e. oil galleries may be brazed and re-drilled or piped and intrusion of ports into water jackets or pushrod cavities may be rectified).

(e) The onus of proof of legality in regard of this rule is the Competitor's/Driver's responsibility.

4.1.12 Minimum capacity of each combustion chamber with valves and spark plugs fitted as per competition shall be 21.00cc.

(1) This is measured excluding head gasket. Carbon shall be removed from chamber prior to measuring.

(2) Measuring Fluid (50/50 mix of Kerosene and Dexron III type ATF) shall be used.

4.1.13 The cylinder head surface may be surface ground or milled to achieve the required chamber capacity, however this surface must remain completely and uniformly flat and perpendicular to the original valve guide axis.

4.1.14 A standard BLMC cylinder head gasket must be used.

4.1.15 The original casting identification number must not be removed from the cylinder head.

4.1.16 The maximum valve lift shall be 10.16mm.

4.2 1000cc Engine:

4.2.1 Only BLMC manufactured A-Series 998cc engines and gearbox units (AD015 and AD020) are authorised.

(1) Components may only be substituted as authorised herein.

4.2.2 Cylinder block:

(1) Maximum bore size 65.75mm.

(2) Only cast-iron cylinder sleeves may be fitted.

(3) A rebore or sleeving of the cylinder bores in such a manner as to obtain an offset between the centre line of the cylinder bores and the longitudinal line of the crankshaft is expressly forbidden.

(4) Offset boring using liners to achieve any offset (as opposed to longitudinal as stated) or moving of bores from standard spacing is prohibited except that:

(a) Minimum distance between bores 1 and 2 and between bores 3 and 4 shall be 4.50mm.

(b) The cylinders shall be perpendicular to the top and bottom faces of the block.

(c) Maximum offset of cylinder bores along the crankshaft centreline is 0.254mm.

(d) The surface of the block may be machined to adjust piston deck height.

- Cylinder O-rings may be machined and fitted into the block face.
- It is permitted to cut valve pockets in the block surface.

(e) The water jacket holes in the block where the block meets the head may be blocked and/or machined to align with the water passage holes in the head.

(f) Oil galleries may be reshaped

4.2.3 Crankshaft:

(1) The standard crankshaft, Part No. 8G2733 or 12A1451 must be used.

(2) Heat-treating, shot peening, shot blasting and bead blasting are permitted.

(3) Spot machining to achieve balance and cross drilling and reshaping of oil ways is permitted.

(4) Minimum crankshaft weight is 9.75kg and maximum stroke 76.30mm.

(5) Polishing and reshaping are prohibited.

(6) The size and type of pulley or damper/pulley is free.

4.2.4 Connecting rods:

(1) Standard connecting rods, bearing the casting number 12G124 or 12G127 must be used.

(2) Machining is permitted for balancing purposes and to achieve minimum of 650.00 grams (which includes the bolts and small end bushing).

(3) Heat treating and shot peening, shot blasting, bead blasting are permitted.

(4) Big-end to little-end centre distance must remain unaltered.

(5) Little-end bushings are free.

4.2.5 Pistons and rings:

(1) Any pistons may be used providing they meet the following requirements:

(a) Piston crown shape must be flat or concave and said crown must not protrude above the cylinder block surface when the piston is at T.D.C. in a fully assembled engine.

(b) A minimum combustion volume in each cylinder with piston at T.D.C. will be 4.00cc, including valve pockets, with no allowance for volume from the top of piston to top ring as this must be sealed with grease for checking purposes.

- Carbon must be removed prior to measuring.
- Measuring fluid (50/50 mix of Kerosene and Dexron III type ATF) will be used.
- The dish in a concave piston shall remain in the centre.
- The piston crown must remain square to the cylinder bore.

(c) Gudgeon pins are free; however, their diameter must remain as per the standard model.

- A tolerance of +0.13mm is permitted to allow replacement over-size gudgeon pins to be used if necessary.
- The gudgeon pin centre line must remain within 2.80mm of the piston centre line.
- The method of gudgeon pin retention shall be free.

(d) The minimum weight of a piston, excluding rings, gudgeon and gudgeon retaining devices shall be 185.00 grams.

(e) Ring grooves to be 1.70mm minimum width, from the piston outside diameter to ring groove base diameter.

(f) Piston rings to have a minimum face width of 1.57mm.

- The top compression ring and secondary ring to be of one-piece manufacture and used as intended by the manufacturer. Oil control ring is free.

4.2.6 Flywheel and clutch:

(1) The standard or up-rated replacement flywheel, ring gear, pressure plate and diaphragm may be lightened, reshaped, and balanced.

(2) The minimum weight of the complete assembly (flywheel including ring gear, pressure plate, diaphragm, drive straps and bolts and washers, flywheel bolt and keyed washer) but not including the clutch driven plate, shall be 7.00kg.

(3) The clutch driven plate is free.

4.2.7 Camshaft and timing gears:

(1) All camshafts shall be A-Series units of BLMC manufacture.

(2) All camshafts are to be ground to the Mini Seven Association of NZ Inc. specifications by Kelford Cams, 11-15 Kennaway Rd, Woolston, Christchurch.

(3) This camshaft is known as an F11 grind and lightening and polishing is prohibited.

4.2.8 Any A-Series timing chain assembly including duplex chains and gears may be used and such gears may be modified.

(1) The use of after-market vernier timing gears or stepped keys to adjust cam timing is permitted. Cam timing must NOT be variable when the engine is running.

(2) The original timing cover may be modified to allow adjustment of cam timing in position.

(3) The fitting of a timing pointer is permitted.

4.2.9 Camshaft bearings are free, subject to provisions of Article 4.1.1 and 4.1.2.

4.2.10 An oil relief hole may be drilled in the side of the cam follower.

4.2.11 Cylinder head and valves:

(1) Only the Rover Sport standard 1275 cylinder head is authorised.

(2) This head shall be part number STR0999 having a casting number of 12G940 and shall be logged with and identified by the Mini Seven Association of NZ Inc.

(3) The 12G940 casting number must not be removed.

4.2.12 Modification by any means to the combustion chambers, inlet or exhaust ports, valve throats, or valve guide bosses is specifically prohibited with exception for the equalisation of the chamber volume, then Article 4.2.13 shall apply.

4.2.13 The minimum capacity of any combustion chamber shall be 21.00cc.

(1) This is to be measured with the spark plugs and valves fitted as per competition but excluding the head gasket.

(a) Carbon must be removed prior to measuring.

(b) Measuring Fluid (50/50 mis of Kerosene and Dexron III type ATF shall be used.

(2) A maximum of three (3) combustion chambers may be machined to achieve the required capacity, however metal may only be removed within a radius of 17.00mm from the spark plug centreline.

4.2.14 The cylinder head shall remain standard except as detailed below:

(1) Valve guides may be replaced with different material providing their size, concentricity, shape and position remain as standard.

(a) The installation of valve guide K liner type inserts is permitted.

(2) Valves are free subject to:

(a) the stem diameter being 7.15mm +0.00mm / -0.20mm; and

(b) Inlet valve maximum head diameter shall be 33.50mm; and

(c) Exhaust valve maximum head diameter shall be 29.50mm.

(3) Valve seats may be re-cut with a maximum of three (3) straight angles, however no angle can exceed 70.00 degrees as measured from the head gasket face.

(a) The exhaust valve seat insert may be replaced to original dimensions.

(b) It is permissible that a maximum of only two inlet valve seats may be reclaimed by the fitment of a valve seat insert provided that the seat height is within the range of the other two inlet seats and that the internal profile and dimensions remain unchanged from that of the other two seats.

(4) Valve springs and retainers are free. Valve spring seat may be modified accordingly.

(5) The cylinder head surface may be machined to maintain a minimum combustion chamber volume of 21.00cc, however this surface must remain completely and uniformly flat and perpendicular to the original valve guide axis.

(6) Dowels may be fitted to cylinder head for inlet and exhaust manifold alignment provided that such dowels comply with provisions of Article 4.3.4 below.

(7) It is permitted to machine the water outlet provision at the rear of the head to facilitate the use of this water outlet.

(8) The underside of the cylinder head thermostat housing may be relieved to provide clearance for the water pump pulley.

(9) The spark plug seats on the cylinder head may be machined to achieve uniformity of combustion chamber volume.

4.2.15 A standard BLMC A-Series 1275cc cylinder head gasket must be used.

(1) Minimum compressed thickness at the fire ring shall be 0.90mm.

(2) A 1275 gasket with extra reinforced coolant holes may be used.

4.2.16 The maximum valve lift shall be 9.80mm.

4.3 ~~ENGINE SPECIFICATIONS:~~ 850CC and 1000CC

4.3.1 Rocker Cover and Rocker Assembly:

(1) Non-standard rocker covers are permitted.

(2) Any BLMC 'A' Series rocker assembly may be used and may be freely modified provided that the valve lift does not exceed that previously specified.

4.3.2 Inlet and Exhaust Manifolds:

(1) Exhaust manifolds are free provided that no parts intrude into the exhaust port of the cylinder head.

(2) Exhaust tailpipes are free but must comply with Appendix Two Schedule A of the MSNZ Manual and may exit through the rear valance.

(3) Metal may be removed to allow fitment but must be limited to a maximum of 1.5 times the diameter of the tail pipes.

4.3.3 Inlet manifolds are free but the maximum length inclusive of gaskets, 'O' rings, etc, must not exceed 165mm.

(1) This is measured square from the cylinder head face to the furthest point of the carburettor mounting face.

4.3.4 For manifold to cylinder head alignment purposes it is permissible that dowels up to 6.00mm in diameter may be used.

(1) For inlet manifolds it is permitted to fit a locating ring into the recess provided in the cylinder head port, however no part of this ring nor inlet manifold shall protrude into the port past the factory recess provided in the cylinder head port.

4.3.5 Main Bearing Caps:

(1) Main bearing caps may be modified, reinforced, or replaced.

4.3.6 Oil Pump:

(1) May be substituted or modified provided its position of mounting and drive remains unchanged.

(2) The oil pressure relief valve plunger may be substituted with a steel ball and operation of the oil pressure relief valve may be made adjustable.

4.3.7 Oil Filter:

(1) The standard oil filter mounting may be modified or substituted provided the location remains unchanged, and an aftermarket filter element may be fitted.

4.3.8 Carburettors:

(1) The following types of carburettor are the only ones permitted and may be used only in the quantity as listed below:

(a) 1x Weber DCOE 45, or

(b) 1x Dellorto DHLA 45.

4.3.9 A single air cleaner assembly must be fitted, and such fitment shall be directly to the carburettor and must be contained within the air box, refer Article 2.17.1, 2.17.2 and 2.17.3.

(1) The air cleaner assembly comprises principally of a single air filter and two end plates.

(2) There is no given size for this assembly and the end plates, one of which must be blank, are free.

(3) ~~However,~~ K&N is the only permitted filter that may be used and no modification to this part is permitted.

(4) Ram tubes or air horns are free and must be fitted within the air cleaner assembly.

4.3.10 The maximum internal diameter of the primary venturi is to be 36.00mm and the internals of the carburettor must conform to the Manufacturer's specifications major and minor.

(1) The external dimensions of the carburettor must remain unchanged.

4.3.11 Engine stabilisers:

(1) Engine stabiliser bars may be freely modified or substituted, and additional units may be added.

(2) These, when fitted, may not be used to move the natural position of the engine.

(3) The stabiliser bar connecting the engine block to the firewall must have a centre length of no more than 6.500 inches (165.10mm) and all mounting points of this bar must remain in their standard positions.

4.3.12 Engine sealing:

(1) All engines must have provision for Scrutineers wire seals.

(2) A 3.00mm hole is to be drilled in each of the following components:

(a) Two adjacent cylinder head studs.

(b) Two adjacent clutch cover bolts.

(c) Two adjacent timing cover bolts.

(d) Two adjacent differential housing studs.

5.0 FUEL SYSTEM

5.1 Fuel pump type, number and location are free except that they may not be located in the Driver's compartment.

5.2 It is permitted to pass metallic pipes or metal-braided rubber fuel lines through the passenger compartment, provided they do not pass through a dangerous location e.g. beside seat legs or beneath driver's feet.

5.3 Fuel filters may be fitted.

5.4 All fuel lines must be securely located.

5.4.1 Fuel lines must be constructed of material of specific quality for this use, in compliance with Appendix Two Schedule A of the MSNZ Manual.

6.0 COOLING SYSTEM

6.1 The original BLMC Mini Radiator set up and location must be used, however the type of radiator may be that as fitted to any of the Mini series and/or 1100/1300 series.

6.1.1 The radiator mounting and cowl may be freely modified or substituted providing that any cowling does not extend in any plane more than 100.00mm from the radiator core.

6.1.2 Auxiliary Radiators may be incorporated in the existing system.

6.1.3 Oil Coolers may be fitted.

6.1.4 Any cowling fitted to auxiliary radiator and/or oil cooler may not extend in any plane more than 100.00mm from that radiator/cooler core.

6.2 Thermostat and cooling fan may be substituted, modified or deleted.

6.3 A BLMC or pattern water pump may be modified but must remain mounted in its original position.

6.3.1 The water pump pulley size and type shall be free.

6.3.2 In addition, an electric water pump may be added to the cooling system.

7.0 TRANSMISSION, GEARBOX AND DIFFERENTIAL

7.1 Transmission:

7.1.1 The angle and pitch of teeth on all gears are to remain as per BLMC specifications.

7.1.2 Any modifications to the physical dimensions of the transmission and final drive gears is prohibited except for 4th gear teeth which may be machined for ease of assembly only.

7.2 Gearbox:

7.2.1 The standard gearbox casing shall be retained.

7.2.2 The number of ratios shall be limited to four forward and one reverse.

7.2.3 The original type of synchromesh may be retained (baulk ring) or replaced with dog engagement gears.

7.2.4 Parts may be made locally or repaired providing the parts fit without modification to the gearbox casing.

7.2.5 Welding of gears is permitted for repair only.

7.2.6 Straight-cut close ratio gear sets may be used.

7.2.7 Straight-cut drop gears are not permitted.

7.2.8 A protective plate may be fitted internally between the engine and the gearbox.

7.2.9 The fitting of a magnetic oil trap and a central oil pickup pipe is permitted.

7.2.10 The alloy attachment flange of the case may be removed to ease fitment and removal of the central oil pickup pipe.

7.3 Differential unit:

7.3.1 Limited-slip or locked differentials are specifically prohibited.

7.3.2 The standard differential unit may be fitted with a competition differential pin and use of bushes is permitted in standard profile spider gears only, providing that such modification does not give the effect of limited slip or locked differential, which is strictly prohibited.

7.3.3 A cover is allowed to be fitted to the carrier to hold oil from being centrifuged away from these parts at high speed.

7.3.4 No straight-cut crown wheel and pinion gears will be permitted. A BLMC A-Series 1100/1300 or Cooper 'S' differential housing, or complete casing may be fitted.

7.3.5 The following BLMC final drive ratios only may be used for 850cc race engines:

(1) 4.133 to 1, or

(2) 4.267 to 1, or

(3) 4.333 to 1.

7.3.6 Any BLMC final drive ratio may be used with 1000cc race engines with 4.133 to 1 being the lowest permissible ratio.

7.3.7 Commercially available cross pin, four planet gear, differential units are permitted to be fitted.

7.4 Gear change mechanisms:

7.4.1 A standard Mini mechanism must be used and may be freely modified.

7.4.2 Its mounting and location are free.

7.4.3 Gearshift tunnel material may be removed locally in order to fit said mechanism.

7.5 Driveshaft joints:

7.5.1 The driveshaft joints shall be free ~~from restriction~~.

8.0 ELECTRICAL SYSTEM

8.1 Electrical components other than those listed below may be disconnected or removed or relocated or replaced or modified provided that the exterior fittings remain in place as per original fitment.

8.2 The following elements of the electrical system must be fitted and be in working order.

8.2.1 A battery must be fitted.

(1) It is permissible to relocate the battery providing that the relocation conforms with Appendix Two Schedule A of the MSNZ Manual.

(2) The existing battery box may be removed, and the resultant hole must be covered.

8.2.2 Headlamps must be fitted however the lamp unit (sealed or semi-sealed) may be replaced by fibreglass, plastic or similar replicas but the rest of the lamp assembly remains unaltered with exception of wiring and inner lamp retainer which may be removed.

8.2.3 Park lamps and tail lamps must be fitted as per standard, given the provision of Article 8.1; however, brake lights must be in working order and must not be capable of being disabled.

8.2.4 Wiper assembly must be fitted.

(1) The minimum provisions shall be a working wiper assembly on the Driver's side of the vehicle.

8.2.5 It is permitted to modify the distributor assembly, to modify or delete vacuum unit, modify base plate, modify advance curve and to substitute cap, rotor, points and condenser with equivalent components.

(1) It is permitted to remove points and condenser and to fit a single, non-mappable, electronic ignition system providing that the only triggering function is located within the distributor. Programmable or mappable ignition systems are strictly prohibited.

9.0 SUSPENSION

9.1 Both rubber cone (dry) and hydrolastic (wet) subframes are authorised.

9.1.1 When using Mk1, Mk2, or Mk3 bodyshells it is permissible not to fit spacer between front subframe tower and bodyshell.

9.1.2 When using Mk4 and onwards bodyshells it is permissible to solid mount front subframes.

9.1.3 The only modification allowed to front subframes is the bending up of the rear lip to allow easy fitment of an extractor exhaust manifold.

9.2 Rubber mountings at the points where the rear subframe connects to the bodyshell may be replaced by solid mountings of the same dimensions.

9.2.1 The Swing arm mounting points on the rear subframe may be modified in such a manner to allow the rear wheel camber and toe-in to be adjusted.

9.2.2 The rear subframe rearmost beam may be boxed or strengthened to provide a jacking point.

9.3 Seam welding of subframes is permitted. Bump and droop stops are free.

9.4 Only rubber suspension cones are eligible for use.

9.4.1 Suspension cones shall remain standard as per manufacturers specifications.

9.4.2 Aftermarket rubber cones may be used.

9.4.3 Suspension trumpets may be modified or substituted to enable easy ride height adjustment.

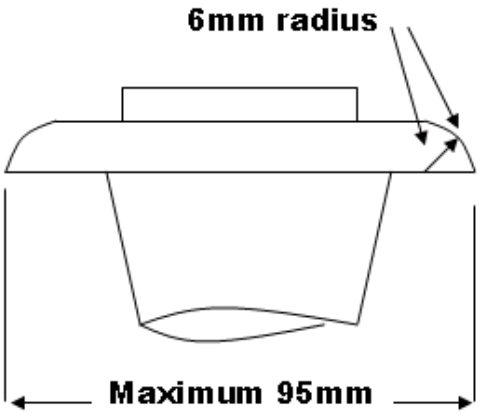
9.4.4 Where the cone meets the trumpet compressed, the edge radius must remain as displayed in *Figure 3* below ~~per the Diagram~~ and outside diameter of the trumpet must not exceed the maximum diameter as displayed in *Figure 3* ~~per Diagram~~ below.

9.4.5 The lower suspension arm (track control arm) may be modified, or replaced with a steel substitute, for the fitting of a spherical bearing (rose-joint) to enable camber adjustment, but all joints must mount on the original BLMC suspension mounting points and in the same position.

9.4.6 The radius arm may be modified or replaced with a steel substitute, to permit adjustment of caster.

(1) A spherical bearing (rose-joint) or similar may be incorporated and the flexible bushings removed to achieve this purpose, however no modification to the sub frame or to the mounting point is permitted.

Figure 3



9.5 Shock absorbers:

9.5.1 Are free provided they meet the following criteria:

(1) Maximum of two external adjusters.

(2) No external reservoirs or accumulators.

(3) Maximum body diameter of 45mm.

9.5.2 The upper, front and rear shock absorber mounting is free provided that there is no alteration of shock absorber action in any plane over standard shock absorber action.

9.6 Sway bars:

9.6.1 The fitting of sway bars and associated mounting hardware is permitted.

9.7 Wheel bearings:

9.7.1 The fitting of any wheel bearing which does not require machining of other related components is permitted.

9.7.2 Wheel bearing spacers may be shortened or deleted to enable adjustment of wheel bearing play.

10.0 BRAKING SYSTEM

10.1 The original drum braking system is authorised.

10.1.1 The front brakes may be either twin-leading or single-leading shoe.

10.1.2 It is permissible to replace standard brake drums with those as fitted to rear of Cooper ‘S’ and 1275 GT or after-market aluminium alloy brake drums.

10.1.3 Components of the braking system may be modified to increase efficiency and/or cooling effect, provided such modifications do not result in a dangerous loss of strength (i.e. backing plates may be drilled in moderation for cooling).

10.2 The original front drum brakes may be replaced with standard 7.50” Cooper ‘S’ disc brake and upright (hub) assemblies, or any ferrous locally modified production disc brake units.

10.2.1 Such ‘other’ disc brakes shall be solid, fixed non-ventilated discs with a single two-piston fixed caliper or single one-piston sliding caliper per side and must fit within a standard alloy wheel and attach to a standard mini upright (hub).

10.2.2 Pad friction material is free.

10.3 The foot brake and pedal box assembly may be modified, but must be fitted in accordance with Appendix Two Schedule A of the MSNZ Manual.

10.3.1 The make and type of master cylinders are free.

10.3.2 Brake pipes may be repositioned, and/or replaced with braided lines.

10.3.3 It is permitted to pass metallic pipes or metal-braided lines through the passenger compartment.

10.3.4 No modification to the bodyshell is permitted.

10.3.5 The rear pressure-limiting valve may be modified or substituted to decrease rear brake pressure and may be repositioned.

10.3.6 The pedals may be modified to enable them to be comfortably positioned and the pedal pads made adjustable for the driver.

10.4 On single circuit service brake systems the handbrake assembly must be fully operational and in good working order at all times, however the handbrake lever and cables may be modified and repositioned.

10.4.1 Where a dual circuit service brake system is used it is permitted to remove the handbrake assembly.

11.0 WHEELS, TRACK AND TYRES

11.1 Any 10.00" diameter steel or one-piece aluminium wheel with a maximum bead width of 6.00" is authorised.

11.2 Wheels produced prior to 1961 are not permitted for safety reasons.

11.3 The use of standard Mini wheel rims is allowed for wet weather tyres only.

11.4 The weight of each alloy wheel to be a minimum of 3.00kg with nuts.

11.5 A measurement taken between the outer most points on each wheel rim of each axle shall not exceed 1520.00mm for the front and 1474.00mm for the rear.

11.5.1 Such measurement of the front track width shall be made with the wheels positioned straight ahead.

11.6 A wheel spacer, to a maximum of 25.00mm, may be fitted at the front and/or rear, providing that the given maximum track width above is not exceeded.

11.6.1 Where such fitting requires longer studs, then these must be fitted.

11.7 TYRES:

11.7.1 ~~Only such tyres as specified by the Club from time to time are authorised. For the current season these are:~~

The only tyres permitted to be fitted to a vehicle during any Meeting are as follows:

(1) Dry Weather Tyre: Hoosier 155/450/10 Slick tyres, Compound R75

(2) Wet Weather Tyre: Any road legal radial Treaded tyres.

(3) Dry or Wet Weather Tyres: American Racer 18.0/6.0 10GT

SECTION TWO
TECHNICAL REGULATIONS APPLICABLE TO MINI MIGLIA NZ CLASS

1.0 GENERAL INFORMATION RELATIVE TO THIS CLASS

1.1 These specifications detailed herewith in Section Two shall be read in conjunction with and shall take precedence over Section One of these Technical Regulations ~~this Schedule~~.

1.2 This Section Two details the authorised specifications for the Mini Miglia NZ Class.

2.0 BODYSHELL AND VEHICLE EXTERIOR

2.1 The bodyshell is to remain exactly as per the Manufacturer's specifications and all embellishments (chrome bright-work, bumpers, headlight surrounds, etc.) are required to be in position.

2.1.1 Model or name badges are optional.

2.2 A complete steel or fibreglass removable front assembly, replica fibreglass bonnet, boot, bumpers and rear valance may be fitted.

2.2.1 Inner guard panels may be removed or modified to clear coolers etc.

2.2.2 The bumpers, grille and lights are to be fitted as per Schedule SMC – Section One.

2.2.3 Where a removable front is fitted a maximum of two (2) extra brace bars may be fitted from front subframe to bulkhead box section.

~~The minimum racing weight for Mini Miglia NZ Class vehicles is 670.00kg – refer Part A, Article 5.1.~~

3.0 ENGINE SPECIFICATIONS

3.1 Engine – Mini MIGLIA NZ:

3.1.1 Only BLMC manufactured A-Series 1275cc and 1300cc engines and gearbox units will be permitted.

3.1.2 All engine components shall not be substituted except where specifically authorised within this article.

3.1.3 Engine parts may be balanced.

3.2 Cylinder block shall be a cast iron BLMC A-Series block.

3.2.1 The internals of the block are free.

3.3 Maximum crankshaft stroke 81.33mm. Maximum Bore 73.50mm.

3.4 The engine capacity shall be between 1275cc – 1380cc.

3.5 No titanium or ceramic materials are authorised, excepting the use of titanium valve retainers.

3.6 Alternator is optional and free.

3.7 Starter motor is free, however must retain original ring gear diameter.

3.8 Crankshaft pulley/damper and ancillary drive belts are free.

3.9 Camshaft and Timing Gears:

3.9.1 All camshafts shall be of BLMC manufacture or similar, but may be reground to any profile, however valve lift must not exceed 10.16mm (0.400”), measured as raced or qualified.

(1) A cool down period of thirty (30) minutes shall be allowed before measurement of valve lift.

3.9.2 Any A-series timing chain assembly including duplex chains and gears may be used and such gears may be freely modified.

(1) The use of aftermarket vernier timing gears or similar to adjust cam timing is permitted.

(2) Cam timing must not be variable when the engine is running.

(3) Oversize camshaft followers are permitted.

3.10 Rocker Cover and Rocker Assembly:

3.10.1 Non-standard rocker covers are permitted.

3.10.2 Any A-series rocker assembly may be used and may be freely modified provided that the valve lift does not exceed that previously specified.

3.11 Cylinder Head and Valves:

3.11.1 The cylinder head shall be a BLMC five(5) port cast iron A-Series production unit.

(1) The original casting identification number must not be removed from the cylinder head.

3.11.2 Modification to the cylinder head is free subject to the following:

(1) Where such modifications result in the requirement of other than standard parts to be fitted (eg. larger valves, valve springs, guides, etc) such will be permitted.

(2) The valves must remain in their original location, i.e. valve guide centre-to-centre distance must remain as standard and valve stems must remain perpendicular to the cylinder head face.

(a) 'Offset' or inclined valves and any deliberate 'repairing' i.e. filling ports or valve throats with weld or epoxy, will not be permitted.

(3) The cylinder head surface may be surface ground or milled to achieve the required chamber capacity, however this surface must remain completely and uniformly flat and perpendicular to the original valve guide axis.

3.12 Inlet and Exhaust Manifolds:

3.12.1 These are free provided that no part intrudes into the inlet or exhaust port and the prescriptions as detailed under Articles 3.13 - 3.13.3 are met.

3.12.2 The maximum length of the inlet manifold is to be 165mm.

(1) This is measured square from the cylinder head mounting face to the furthest point of the carburettor mounting face.

3.12.3 This measurement is inclusive of all gaskets, O-Rings etc.

3.13 Carburettors:

3.13.1 The following types of carburettor are the only ones permitted and may be used only in the quantity as listed:

(1) 1x Weber DCOE 45, or

(2) 1x Dellorto DHLA 45.

3.13.2 A commercially available air filter of manufacturer's design specifically for the above carburettors must be always used.

(1) No modification to this part is permitted.

(2) Ram tubes or Air horns are free.

3.13.3 The maximum internal diameter of the primary venturi is to be 36.00mm and the internals of the carburettor must conform to the manufacturer's specifications major and minor.

(1) The external dimensions of the carburettor must remain unchanged.

3.13.4 Ducting of air toward the carburettor from the grille space only shall be permitted.

(1) Bulkhead may be removed to allow fitment of carburettor and filter, into a cold air box of unrestricted size provided the new bulkhead/fire wall does not protrude into the Driver's compartment beyond the vertical plane in line with the front edge of the door openings.

(2) Entry of any such ducted air shall be from the Engine Bay space only.

3.14 Oil Pump and Filter:

3.14.1 The oil pump may be substituted or modified provided its position of mounting and drive remains unchanged.

3.14.2 The pressure relief valve plunger may be substituted by a steel ball and the valve made adjustable.

3.14.3 The oil filter shall be a type and position as fitted to standard BLMC manual transmission Minis.

4.0 COOLING SYSTEM

4.1 Position, size and number of radiators are free and modification as necessary to panel work is permitted.

4.2 A BLMC or pattern water pump may be modified, replaced or supplemented by an electric water pump. Where a mechanical water pump is used it must remain mounted in its original position.

4.2.1 The water pump pulley shall be free.

4.2.2 Cooling system entry to the cylinder block must be via the original water pump orifice.

5.0 TRANSMISSION, GEARBOX AND DIFFERENTIAL

5.1 Transmission:

5.1.1 Straight cut drop gears are permitted (1:1 ratio only).

5.1.2 The use of manufactured steel flywheels and/or backing plates is authorised.

5.1.3 The clutch housing and cover may be drilled to improve clutch cooling.

5.2 Differential Units:

5.2.1 The following BLMC final drive ratios only may be used for Mini MIGLIA NZ class race engines:

(1) 3.444 to 1, or

(2) 3.647 to 1, or

(3) 3.765 to 1.

6.0 SUSPENSION

6.1 Competition non-metallic cones may be used in place of the standard rubber cones.

7.0 BRAKING SYSTEM

7.1 Front Brakes:

7.1.1 Free, except no more than four (4) brake pistons per wheel, and must fit within a standard alloy wheel.

7.1.2 Titanium or magnesium caliper components are not permitted.

7.1.3 Rotors must be ferrous but are free in diameter and may be solid or vented, slotted and/or cross drilled.

7.2 Rear Brakes:

7.2.1 Aluminium finned drums may be used.

8.0 WHEELS, TRACK AND TYRES

8.1 Tyres:

8.1.1 ~~Only such tyres as approved by the Club are authorised for use. These are currently as follows:~~
The only tyres permitted to be fitted to a vehicle during any Meeting are as follows:

(1)	Dry Weather Tyre:	Hoosier 155/450/10 Slick tyres, Compound R75 or Dunlop 160/490-10 Slick tyres, compounds 269,764 and 770
(2)	Wet Weather Tyre:	Any road legal radial Treaded tyres.
(3)	Dry or Wet Weather Tyres:	American Racer 18.0/6.0 10GT

SECTION THREE
TECHNICAL REGULATIONS APPLICABLE TO SUPER MINI CLASS

1.0 GENERAL INFORMATION RELATIVE TO THIS CLASS

1.1 Section Three ~~Articles 2 – 4~~ details the authorised specifications for the ~~BLMC~~ Super Mini Class vehicles.

1.2 The specifications detailed ~~herewith~~ in this Section Three shall be read in conjunction with Part A of ~~this Schedule~~ these Technical Regulations with the exception of Part A Articles 1.3 and 1.4 which do not apply to this Class.

2.0 BODYSHELL AND VEHICLE EXTERIOR

2.1 The bodyshell must be an original BLMC steel monocoque bodyshell.

2.1.1 The front section, forward of the A pillar to wheel arch junction body seam, may be made removable or replaced with a removable front assembly, provided the original appearance is retained.

2.2 Replica bonnet, front guards, boot lid, bumpers and rear valance may be fitted.

2.2.1 The bonnet shape may be altered to allow for induction components.

2.2.2 The original mini shape must be retained as far as possible with the alteration being only that required for the mechanical clearance around induction components while still complying with Appendix Two Schedule A of the MSNZ Manual.

2.3 No part of the vehicle shall extend forward any more than 1.00” from the original front bumper line.

2.3.1 No part of the vehicle shall extend rearward any more than 1.00” from the original rear bumper line.

2.3.2 No part of the vehicle shall extend any higher than 1.00” above the original roof line.

3.0 ENGINE SPECIFICATIONS

3.1 Engine:

3.1.1 A BLMC A-Series engine block, gearbox, differential and clutch housing must be used.

3.1.2 They must be mounted in the original position and driving the front wheels only.

3.2 Cylinder Head:

3.2.1 Any cylinder head may be used.

3.3 Forced air induction is prohibited.

4.0 WHEELS AND TYRES

4.1 Wheels:

4.1.1 The only permitted rim size is 10.00” diameter.

4.2 Tyres:

4.2.1 Tyres are free, providing they respect~~ing~~ the provisions of Appendix Two, Schedule A of the MSNZ Manual.

SECTION FOUR
TECHNICAL REGULATIONS APPLICABLE TO THE MINI OPEN CLASS

1.0 GENERAL INFORMATION RELATIVE TO THIS CLASS

1.1 Section Four ~~Articles 2 – 4~~ details the authorised specifications for the BLMC and BMW Mini Open Class vehicles.

1.2 The specifications detailed ~~herewith~~ in this Section Four shall be read in conjunction with Part A of ~~this Schedule~~ these Technical Regulations with the exception of Part A Articles 1.3 and 1.4 which do not apply to this Class.

2.0 BODYSHELL AND VEHICLE EXTERIOR

2.1 The bodyshell must be an original BLMC or BMW Mini steel monocoque bodyshell.

2.1.1 The front section, forward of the A-pillar to wheel arch junction body seam, may be made removable or replaced with a removable front assembly, provided that the original appearance is retained.

2.2 Replica bonnet, front guards, boot lid, bumpers, door panels and rear valance may be fitted.

2.2.1 The bonnet shape may be altered to allow for Open Class engine components.

(1) The original mini shape must be retained as far as possible with the alteration being only that required for mechanical clearance around engine components while still complying with Appendix Two Schedule A of the MSNZ Manual.

3.0 ENGINE SPECIFICATIONS

3.1 The engine shall be of no more than four (4) cylinders, however it shall be transverse mounted in either the front or rear of the vehicle ~~car~~.

3.2 The vehicle shall only be two-wheel drive and the driven wheels will be at the same end of the vehicle as the engine.

4.0 WHEELS AND TYRES

4.1 Wheels and Tyres are free, providing they respect the provisions of Appendix Two, Schedule A of the MSNZ Manual.