### <u>APPENDIX 5 (b)</u> 2024 SCOTTISH MINI COOPER S R53 CUP <u>TECHNICAL REGULATIONS</u>

### 5.1 **INTRODUCTION:**

The following Technical Regulations are set out in accordance with the <u>ASN</u> specified format and it should be clearly understood that if the following texts do not clearly specify that you can do it you <u>must</u> work on the principle that you cannot. All competitors are advised to read <u>Chapters 7, 8, 9 and 12</u> of the <u>National Competition</u> <u>Rules</u>.

- 5.1.1 Cars must comply with these Technical Regulations throughout Official Practice, Timed Practice, Qualifying and <u>Races</u>.
- 5.1.2 Standard is a part, the specification, features, location and method of operation of a part are as provided when new by the motor manufacturer for the model and date of Car as shown on the Entry form. No modifications permitted beyond the repair or adjustment processes specified by the manufacturer. Checking will be by comparison to parts supplied by BMW, or any of its nominated dealers or suppliers.
- 5.1.3 It is the Competitor's responsibility to ensure their car complies with <u>the</u> Technical Regulations in <u>NCR Chapters 7 and 12</u> as appropriate and the Supplementary Regulations (Official Documents) throughout the Event.

#### 5.2 **GENERAL DESCRIPTION:**

5.2.1 Eligibility:- Only R53 (2001 – 2006 model year) MINI Cooper S cars are eligible. The R56 MINI (2007 model year on) is not eligible. R50 (2001-2006) MINI Cooper shell may be used.

# 5.3 **SAFETY REQUIREMENTS:**

- 5.3.1 <u>NCR Chapter 7 & 9</u> Safety Regulations apply as relevant.
- 5.3.2 <u>ROPS: Chapter 7 App.3 Art.1-66 & Art.91-93</u>; <u>Chapter 7 App.13</u> (<u>Diagram 14</u> with optional bracing tubes as per <u>App.13 diagrams</u> only, and compulsory strut with upper joint on drivers side).
- 5.3.2.1 A 6 point bolt in cage with door bars is mandatory. This must consist of a minimum of one main rear section with cross over diagonal, two separate front leg sections along with upper windscreen bar and both door bars. All sections above are to be bolted together (as per 2003 and 2004 built cars). The fitment of the cage to the chassis of the Car is to be bolted, not welded, and the cage must only contact the chassis at the six mounting points. A fitting kit with captive nuts may be welded for the fitment of the 6 main legs provided these comply with the exceptions in <u>Art.</u> 5.5.3 <u>of these</u> <u>Technical Regulations</u>. The use of eyelets for seat belt mountings can be used instead of bolts but only one per leg mounting is permissible. No additional welding, mounting points or bars may be used. The above information is for guidance only and full safety Regulations can be found in NCR Chapter 7 App.3.
- 5.3.3 Fuel & Fuel Systems: NCR Chapter 7 App.4.



# 5.3.4 Electrical Systems: NCR Chapter 7 App.5.

- 5.3.5 Fire Extingusher Systems: NCR Chapter 7 App.6: Fire extinguishers must be an FIA homologated standard Fire Extinguisher Systems in Competition Cars (1999) or FIA Standard 8865-2015 and be serviced by the manufacturer or their agent within the preceding 24 months.
- 5.3.6 Seats, Harnesses & Headrests: NCR Chapter 7 App.7. Three Point Harnesses (Art. 30) are not permitted. All harness straps must be adjusted so that in use the harness buckle is located on the Driver's body only in the area between the top of the thigh and the top of the pelvic girdle and must not be located any higher on the abdomen.
- 5.3.7 Personal Safety Equipment: NCR Chapter 9. Minimum standards as detailed in Chapter 12 App.12 Art.6.

# 5.4 **GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS:**

- 5.4.1 Components may be refurbished by way of painting or powder coating.
- 5.4.2 Prior to competing in <u>this</u> Scottish MINI Cooper S R53 Cup the <u>Car</u> must undergo a Safety Scrutineering inspection which will be undertaken by the <u>Organiser's</u> Chief Scrutineer, Championship Eligibility Scrutineer or their appointed deputies, unless the <u>Car</u> competed in the same condition in the <u>preceding year</u> Championship. Additionally all <u>Cars</u> must undergo a Safety Scrutineering inspection at least every 4 events. Any <u>Car</u> involved in a <u>contact Incident</u>, or having been modified in any way, <u>must</u> be represented to the Scrutineers for further examination (<u>NCR Chapter 7</u> <u>App.12 Art.5</u>) <u>unless notified to the contrary by a Championship or Event Official</u>. A record of inspections will be maintained by the Championship Organiser. The Event Organiser may select Cars for pre-Event safety inspections, the method of selection and times/locations for inspection will be notified in the <u>Event Official Documents</u>.

# 5.5 CHASSIS:

- 5.5.1 The chassis must remain standard. Reinforcing, removing or adding material to the chassis is not permitted with the following exceptions:
- 5.5.2 All original "spot" welded seams attaching both front chassis legs to the bulkhead and both front suspension turrets may be "stitch" welded; this is defined by approx.
  25-30mm of weld then 25-30mm gap of no welding. 'Seam" welding, continuous welding along the seam, is not permitted.
- 5.5.2.1 It is permitted to trim the metal surrounding the OEM hole in the front suspension turrets, to enable suspension adjustment.
- 5.5.3 Mounting plates and brackets may be welded to the floor for "bolt in" roll cage fitment. All welding for these plates and brackets and the original seams may be "seam welded", continuously welded, within 200mm of the centre line of the corresponding "leg" of the roll cage. No welding permitted outwith this 200mm limit.



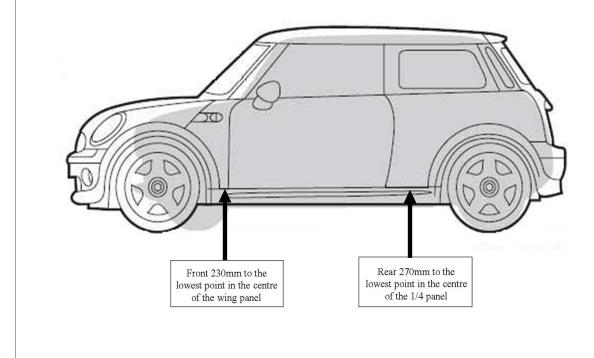
- 5.5.4 Flat bar or plates may be welded or bolted to the floor directly under the Driver's seat to provide secure seat mounting points.
- 5.5.5 If fitted with a sunroof, this must be made of steel and securely fixed in the closed position by at least two additional fixings.

### 5.6 **BODYWORK:**

- 5.6.1 INTERIOR:
- 5.6.1.1 The Driver's seat must be replaced with a competition alternative which must comply with <u>NCR Chapter 7 App.7 Art.8-24</u>.
- 5.6.1.2 The Driver's and passenger air bag units, SRS control unit and side impact sensors may be removed completely.
- 5.6.1.3 It is permitted for throttle, brake and clutch pedal extensions to be added to aid foot control provided it does not enhance performance.
- 5.6.1.4 The standard steering wheel may be replaced with a competition alternative.
- 5.6.1.5 The main dashboard must remain, however it is permissible to remove the following:-- Lower dashboard shelves / glovebox.
  - In car entertainment system and all speakers.
  - Headlining, insulation, sound deadening and carpets.
  - Sun visors.
  - All interior plastic trim.
  - Rear windscreen wiper, arm and mechanism/motor assembly.
  - All original seat belt mountings front and rear.
  - Any non-structural mounting brackets; e.g. rear seat backing mounting brackets,
  - SRS ECU mounting, etc may be removed.
  - Rear parcel shelf.
  - Emergency tool kit.
  - Passenger front seat and rear seats.
- 5.6.1.6 The heating and ventilation matrix, blower fan and ducting behind the dash board must remain in its entirety. It is permitted to remove the OEM plastic under-carpet ducting.
- 5.6.1.7 Drivers window door net This is Mandatory suitable FIA or EU specification netting must be installed in the window opening attached to the bodyshell or roll cage, to act as a restraint to stop the Drivers arms or head inadvertently emerging from the <u>Car</u>.
- 5.6.1.8 Interior Mirror must be fitted but size is free.
- 5.6.1.9 A footplate may be added to Drivers / passenger footwell.
- 5.6.1.10 Dash Flocking permitted.
- 5.6.1.11 Interior may be painted.
- Page 3 of 14 Issue 1 8th April 2024



- 5.6.1.12 It is permitted for handbrake extensions to be added to aid control.
- 5.6.2 EXTERIOR: General The bodywork/exterior must be standard in all respects except for amendments specified in these regulations.
- 5.6.2.1 Rear Tailgate:- retaining pins/straps must be fitted and the electric catch must be removed.
- 5.6.3 The bonnet must have catches removed and bonnet retaining pins and/or straps fitted (<u>NCR Chapter 12 App.13 Art.16</u>).
- 5.6.3.1 The standard steel bonnet may be replaced with a fibre glass replacement. This must be identical to a standard bonnet in dimensions and fitting. Its construction must be robust.
- 5.6.3.2 Under bonnet sound proofing may be removed.
- 5.6.4 Ground Clearance:- The minimum ride height for all chassis will be front 230mm, rear 270mm with the Driver normally seated. See diagram below for measurement datum points (from edge of metal wing to ground).



- 5.6.5 Colour scheme of cars is free.
- 5.6.6 MINI ONE, Cooper, Cooper S or 'Aero' style front and rear bumpers may be used.
- 5.6.7 MINI ONE, Cooper, Cooper S or 'Aero' style side skirts may be used.

Page 4 of 14 - Issue 1 - 8th April 2024



- 5.6.8 The Rear Wing Assembly is mandatory and must be fitted in the style of the MINI GP wing. These can be purchased from various suppliers including Orranje & GP Garage.
- 5.6.9 Two Towing Eyes must be fitted front and rear, and must be of the wire rope type complying with <u>NCR Chapter 12 App.13 Art.4</u>. They must be bolted to the front and rear crash structures in accordance with <u>NCR Chapter 12 App.13 Art.3</u>, have a minimum internal diameter of 60mm, and be in a contrasting colour (eg red, orange or yellow) and must be clearly <u>marked with an arrow and the word "tow".</u>
- 5.6.10 It is permitted to drill extra cooling holes in the front radiator shield (MINI Part No.51711174299) to a maximum diameter of 28mm in the prescribed way.
- 5.6.11 The front plastic panel supporting the radiator (BMW Part No.51647200799) may be removed and replaced with metal brackets, and / or Metal plates to support the radiator. These brackets must be mounted in the same position as the original plastic panel, between the front bumper crash bar (BMW Part No.51111494431) and the front chassis legs, and must hold the radiator securely.

The radiator must be within 25mm of the mounting position of the original plastic panel, and these brackets MAY NOT incorporate any additional cold air feeds or deflectors to either the engine bay or front brakes

Material from the existing/original plastic front panel may be removed providing the radiator is still securely attached. No material or scoops may be added.

### 5.7 ENGINE:

- 5.7.1 The engine assembly: W11B16 unit from Mini Cooper S R53 2001-2006 or Cabriolet S 2005-2008 and must have the cylinder head, engine block, and sump as supplied by BMW and be "as cast" and completely standard in every respect. Internal and auxiliary engine components may be replaced by parts of alternative manufacture which have similar design, shape, dimension, and performance, subject only to the following exceptions:
- 5.7.1.1 The cylinder head may be resurfaced on the head gasket mating surface only. This must not reduce the cylinder head thickness, measured from the head gasket mating surface to the rocker cover gasket mating surface, to less than 96.80mm at any point OR reduce any one of the cylinders" head combustion chamber volume to less than 32.00cc, measured with the standard spark plug fitted.
- 5.7.1.2 Engines may be sealed by the Championship Organiser or their nominated agent at any time during the <u>Championship</u> and for the duration of the <u>Championship</u>. To allow an ASN Eligibility Scrutineer the option for an engine to be sealed prior to inspection, 2 bolts at the front of the cam/rocket cover and 2 bolts on the sump must be cross drilled or replaced by Competitor supplied drilled bolts. These bolts may be wired together and sealed by the Scrutineer. Seals must not be broken under any circumstances. If seals are broken the engine will be ineligible unless a full internal inspection is carried out by the Organiser or their nominated agent. The inspection will be at the Competitor's cost. Additional <u>ASN</u> seals may be fitted to engines at anytime. It is strictly forbidden for a Competitor or <u>their</u> agent to remove or tamper

Page 5 of 14 – Issue 1 – 8th April 2024



with the <u>ASN</u> seals. Should these seals be damaged or removed for whatever reason except under the direction of the Eligibility Scrutineer the Car must not be used in <u>any part of the</u> Competition until the Eligibility Scrutineer has inspected the engine and refitted the correct seals.

- 5.7.1.3 The <u>ASN</u> Eligibility Scrutineer may require that the engine be removed and/or stripped for inspection and compared with the standard parts held for this purpose or supplied by BMW. The cost of this and any subsequent rebuild will be borne by the Competitor. All instances of broken seals will be logged and reported to <u>the</u> Championship Stewards via the Championship Co-ordinator.
- 5.7.2 Spark Plugs are free but it is recommended to run a colder grade than standard.
- 5.7.3 Air supply: The Induction kit should be as supplied by RAMAIR and fitted in accordance to their instructions (RAMAIR Part No. JSK 107)
- 5.7.4 Engine control system: ECU's must be sent to PerformanceTek Racing Ltd. (Tel. 0141 611 9601 / 07708 755528 E-mail sales@performancetek.co.uk) for programming.
- 5.7.5 Cooling system. Coolant Expansion tank free, but pipework must remain unaltered.
- 5.7.6 Engine mounts may be fitted with <u>uprated or</u> polyurethane <u>bushes. No solid mounts</u> are permitted.
- 5.7.7 It is permitted to fit an engine breather catch can.
- 5.7.8 Supercharger: Only original equipment Eaton M45 superchargers may be fitted; 2002-2004 model years Part No. 7540124 2004-2006 model years Part No. 7526657
- 5.7.8.1 11% KAVS R53 MINI Cooper S Reduced Supercharger Pulley Upgrade Kit must be fitted (Orranje Performance part no.Sku: KAVS-SC)

# 5.8 **SUSPENSION:**

- 5.8.1 Competitors may only use the following approved suspension;
- 5.8.1.1 Leda suspension supplied by Leda (Tel. 01522 788362 E-mail info@leda.com) to Scottish Mini Cooper S Cup specification: Spring rates are free.
- 5.8.1.2 YellowSpeed suspension supplied by PerformanceTek Racing (Tel. 0141 611 9601 / 07708 755528 E-mail sales@performancetek.co.uk) to Scottish Mini Cooper S Cup specification: Spring rates are free.
- 5.8.1.3 AST suspension supplied by AST UK (Tel. 0843 218 2436 E-mail info@ast-suspension.co.uk) to Scottish MINI Cooper S Cup specification: Spring rates are free.



- 5.8.2 All suspension kits may be sealed by the Eligibility Scrutineer or deputy, who will have examples of sets for comparison. A camber & castor adjustable top mount kit may be fitted but must be supplied as part of suspension kit.
- 5.8.3 Negative wheel camber angles, measured with driver seated, must not exceed:-Front = 4.5 degrees (negative); Rear = 3 degrees (negative).
- 5.8.4 "Facelift" MINIs (2004 models onwards) came with camber adjustable rear trailing arms and "pre-facelift" cars may be fitted with the later style trailing arms to allow this feature. Rear Alloy trailing arms from BMW Mini R56 (2007-2010) may be fitted. with required R56 wheel bearings and bolts.
- 5.8.5 Front control arm rear carrier mounting bolts, inner ball joint mounting bolts, and steering rack mounting bolts may be replaced with bolts and nuts.
- 5.8.6 Adjustable rear anti roll bar supplied by Whiteline must be fitted and is mandatory. It must be connected to the trailing arm drop link at both ends and be operational at all times.
- 5.8.7 The OEM Cooper S front anti-roll bar diameter is 24mm and must remain standard in all aspects and must be connected to the damper mounted drop links at both ends and be operational at all times. It is permitted to replace the standard front anti-roll bar bushes with polyurethane bushes. A tolerance of +3mm/-0mm will be allowed for painting or powder coating the anti roll bar, at the scrutineer's request it may be required to buff back the coating to allow for accurate measurement.
- 5.8.8 It is permitted to fit a front strut brace; this must only attach the chassis at the strut top mounting holes and no other point.
- 5.8.9 It is permitted to fit a polyurethane bush in place of the standard bush to the rear of the front lower wishbone. No other modifications to this wishbone are permitted. This means the specification of the rubber can be changed to polyurethane and an offset bush is therefore NOT permitted. The optional support kit for this bush is permitted.
- 5.8.10 Front suspension Leda units supplied from 2012 onwards use a firmer material for the bump stop than that originally supplied. To ensure safe spring compression the front bump stop may be reduced to a minimum length of 30mm.
- 5.8.11 It is permitted to elongate rear trailing arm mounting bracket holes to allow realignment of rear suspension to Manufactures tolerances.
- 5.8.12 Where rubber bushes were fitted as original equipment, it is permitted to fit a polyurethane bush in place of the standard bush. This must provide a similar function to the original equipment part. No solid mounts, rose joints or similar are permitted.
- 5.8.13 It is permitted to modify the chassis strut mounting to allow access to the camber adjusting fixing.

#### 5.9 **TRANSMISSION:**

5.9.1 Clutch:- The clutch may be replaced with an uprated competition specification.

Page 7 of 14 – Issue 1 – 8th April 2024



- 5.9.2 Gearbox:- Mini Cooper S R53 2001-2006 gearbox with standard ratios must be used: 2002-2004 model years Part No. 7575494 2004-2006 model years Part No. 7574849
- 5.9.2.1 Dual mass flywheel may be changed to a single mass flywheel using conversion kit by Valeo part number 835024 or performance clutch kit supplied by Competition Clutch part number 3050-2100
- 5.9.2.2 M Factory limited slip diff may be fitted, these diffs must be supplied by the designated diff supplier, PerformanceTek Racing Ltd. (Tel. 0141 611 9601 / 07708 755528 E-mail sales@performancetek.co.uk)
- 5.9.3 Lubrication:- Gear oil type is free.
- 5.9.4 Gear ratios:- The gear ratios must remain standard and gears must remain standard and helical cut (with the exception of reverse which is straight cut as standard). These ratios are as follows:

Gearbox Part No. 7575494	Gear	Ratio		Gearbox Part No. 7574849	Gear	Ratio
	1st	11.425			1st	12.789
	2nd	7.181			2nd	7.793
	3rd	5.397			3rd	5.651
	4th	4.407			4th	4.615
	5th	3.656			5th	3.828
	6th	2.986			6th	3.126

- 5.9.5 Selection:- The gear stick assembly (BMW Part No. 25117542693 or BMW Part No. 25117515463) may be modified to incorporate a "short shift" function. No other modifications to the selection mechanism are permitted other than both gear linkage cables may be rerouted inside the Car, this also includes the gearshift selector assembly which may also be inside the Car. No sequential shift modification permitted.
- 5.9.6 Driveshafts:- The driveshafts must remain standard in all respects, with no modifications, additions or deletions permitted except the following:
- 5.9.6.1 It is permitted to extend the cup on the end of the right hand, inner shaft by up to 20mm by adding material.
- 5.9.6.2 Driveshaft length may be increased or decreased by 25mm when compared with a standard unit.
- 5.9.7 Heavy duty gearbox mount may be fitted.



### 5.10 **ELECTRICS**:

- 5.10.1 Exterior Lighting:- Only the rear lighting must be operative, with the exception that working headlamps are optional and maybe replaced with full size aluminium or fibreglass blanking plates to the same dimension as the glass headlamp. These plates may not have additional holes in them and must be securely located. Working front sidelights are also optional, and maybe replaced with full size solid blanking plates made from aluminium or fibreglass, which must be securely located with no additional vents in them.
- 5.10.2 One FIA specification high intensity LED rear light must be fitted in the centre line of the rear screen. It must be clearly visible, fitted at the bottom of the screen outside the car.
- 5.10.3 Starting battery:-
- 5.10.3.1 The original battery may be removed and replaced with a lightweight racing battery. This battery must be capable of repetitive starts.
- 5.10.3.4 Starting battery location:- The original battery box may be removed, and all plastic scuttle panels on the bulkhead may be removed; if this is done the battery must be securely mounted within the cockpit, the fitting of which must comply with <u>NCR</u>. <u>Chapter 7 App.5 Art.6</u>. If this change is made, the air intake on the bulkhead for the heating and ventilation system will also have to be covered by a fireproof material to conform to firewall safety regulations.
- 5.10.4 Alternator: The alternator must remain standard, fitted and operational at all times. No modifications permitted. The connector on the wiring loom may be changed to allow fitment of two types of alternators, but this loom modification must not allow any performance advantage.
- 5.10.5 Front windscreen wiper motor assembly:– This must remain standard and must park in the position as intended by the manufacturer, i.e. not vertical.
- 5.10.6 Data logging is permissible, provided the data is stored "on board" during Practice, Timed Practice, Qualifying or Races, and not transmitted from the <u>Car</u>.
- 5.10.7 Power isolation:- External circuit breakers must be fitted in accordance with NCR <u>Chapter 7 App.5 Art.13-18</u>. It is permissible to fit either electric or mechanically activated switches. In either case, parts of the wiring may be added or deleted to allow fitment, but these modifications must not improve performance.
- 5.10.8 Push button start:- It is permitted to install a push button start system.
- 5.10.9 Body Control Unit:- Any auxiliary circuit controlled by the body control unit (BC1 unit); wipers, lighting, etc, may be by passed and controlled separately by additional switches in the event of control unit failure. This must not improve the <u>Cars</u> performance.
- 5.10.10 It is permitted to have additional gauges or warning lights for oil pressure, and / or water temperature.

Page 9 of 14 - Issue 1 - 8th April 2024



- 5.10.10.1 Gear shift indicator may be fitted.
- 5.10.11 Interior wiring is free and any unnecessary wiring mat be removed, but any additional wiring must not be connected to the engine ECU wiring, and must not be performance enhancing in any way.

### 5.11 **BRAKES:**

- 5.11.1 Mini Cooper S R56 Gen 2 2007-2010 Front 296mm Discs and Callipers must be fitted. Rear discs must remain standard size and dimensions.
- 5.11.2 Front disc selection is Free (e.g. std-Vented/Grooved/Drilled)
- 5.11.3 Brake pads must be Mintex 2816 F4R, supplied by Wheels Around.
- 5.11.4 Brake pipes:– the brake pipes may be replaced with braided brake hoses.
- 5.11.5 Brake cooling:- It is permitted to fit ducting from the front fog light aperture to assist in cooling the front brakes. The front fog light aperture may be extended but no new additional holes can be made. Additional cold air feeds and/or deflectors to either the engine bay or front brakes are permitted. It is permitted to remove stone guards from the discs (BMW Part No. 34116754927 left and 34116754928 right).
- 5.11.6 ABS system:- The ABS system must remain standard and fitted. No modification to the operation of the valve block assembly, control unit or wheel speed sensors are permitted, with the exception of the following:
- 5.11.6.1 The ABS system may be disabled if desired by removing the system fuse found in the interior fuse box. This fuse must either be fitted or removed before an event, i.e. there should be no facility for the ABS system to be activated or deactivated by the driver during Practice, Timed Practice, Qualifying or Races.
- 5.11.7 Rear callipers:- Mini Cooper S R56 Gen 2 2007-2010 Rear Disks and Callipers must be fitted.
- 5.11.8 Brake fluid:- Brake fluid type and make is free, (but it is recommended to use DOT4 or DOT5 brake fluid, and to change fluid before each Event).
- 5.11.9 Brake lines may be rerouted inside the Car.
- 5.11.10 It is permitted to securely wrap ABS sensors with heat reflective material.
- 5.11.11 Brake pedal extension permitted as per 5.6.1.3

# 5.12 WHEELS / STEERING:

5.12.1 Eligibility:- All four rims must be the specially modified Team Dynamics Pro Race 1.2 size 15 x 7 or Pro Race LT - 15 x 7 – ET 40 – 4x100 – 56.1 These are only available from Ronnie Thom at Wheels Around (Tel. 01764 662897 / 07711 577148 E-mail. ronnie@wheelsaround.com).

Page 10 of 14 – Issue 1 – 8th April 2024



5.12.2 It is permissible to replace the wheel bolts with a conversion to studs and nuts but any replacement must be compatible with the rim detailed in <u>Art.</u> 5.12.1

# 5.13 **TYRES:**

5.13.1 The intention of these Regulations is:

(i) To contain costs by limiting the number of tyres which can be purchased on behalf of any one Competitor during the <u>Championship</u>.

(ii) To limit the number of tyres used per Competitor per Event,

(iii) To prohibit the use of any method of raising the temperature of tyres by adding heat artificially.

(iv) To prohibit the application of any material to alter the standard performance of the tyres.

(iv) Any attempt whatsoever to circumvent these intentions or any fraudulent attempt to deface, re-mark, counterfeit, or otherwise circumvent the unique tyre numbering system will automatically be the subject of a report to the <u>Stewards</u>.

- 5.13.2 The only permitted dry tyres for use in the Scottish MINI Cooper S (R53) Cup are YOKOHAMA Race Slicks <u>190/580R15 A005 N3282</u>. These tyres must be supplied by the designated tyre supplier, Wheels Around. The tyres will be marked accordingly to certify that they have been supplied by Wheels Around.
- 5.13.2.1 The maximum number of dry tyres available to each Car <u>during the</u> Championship (i.e. 6 <u>Events</u>, excluding Practice) will be 16 new tyres. For each <u>Event</u> that a Driver does not compete the maximum number of dry tyres will be reduced by 2 tyres (i.e. if a Driver joins the <u>Championship</u> at the third <u>Event they</u> will only have a maximum of 14 new dry tyres available if <u>they</u> complete the remainder of the <u>Championship</u>. Likewise if a Driver joins the season at the first meeting and then misses two <u>Events</u> their maximum new dry tyres available would be 12 if <u>they</u> complete the remainder of the <u>Championship</u>.

The maximum number of tyres available to each Car for use during each Championship <u>Event</u> will be limited to 6 new tyres. Thus, a total of 6 tyres must be presented at scrutineering (4 on the car, 2 spares) for registration with the Eligibility Scrutineer. Bar-coding and/or permanent paint and/or serial numbering will be used to control tyre use. It is the Competitor's responsibility to ensure that all tyres are marked before use.

The only permitted wet tyres for use in the Scottish MINI Cooper S R53 Cup are YOKOHAMA (WET) <u>190/580R15 A006G N2148</u>. These tyres do not have to be included as part of the 6 tyres that are presented at scrutineering. These tyres must be supplied by the designated tyre supplier, Wheels Around. The number of wet specification tyres for use in the Scottish Mini Cooper S R53 Cup is not restricted. It shall be the sole responsibility of the Competitor to judge whether the Track is wet enough to justify the use of wet weather (treaded) tyres.

The Clerk of the Course will not judge whether the Track is wet enough to justify the use of wet weather (treaded) tyres.

Bar-coding and / or permanent paint marking will be used to control tyre use. It is the Competitor's responsibility to ensure that all tyres are marked before use and logged by the Licenced Eligibility Scrutineer.



- Only in exceptional cases where, in the judgement of an ASN licenced Scrutineer, 5.13.2.2 damage to a maximum of 2 (two) nominated tyres makes further participation in the Event impossible, nominated 'used' front and/or rear tyres may be substituted. A 'used' tyre is defined as a tyre that has been nominated at a previous **Event** and has been recorded as such by the Licenced Eligibility Scrutineer. The substitution may only be authorised by an ASN licenced Scrutineer. The only exception to this is the first Event of the year. If, during the first Event of the year, damage to a maximum of 2 (two) nominated tyres makes further participation in the Event impossible, two new tyres may be substituted. These new tyres will be deducted from the total allocation of 16 tyres for the Championship. The substitution may only be authorised by an ASN licenced Scrutineer In very exceptional cases where, in the judgement of an ASN licenced Scrutineer, damage to tyres through no fault of the Competitor makes further participation in the Event impossible and all previously nominated tyres are not usable, additional tyres above the total allocation for the Championship, may be purchased. However, for every additional tyre purchased, the Competitor will incur a nine (9) Championship point deduction. It is the Competitor's responsibility to notify the ASN licenced Eligibility Scrutineer of their intention to exceed the tyre allocation prior to any Qualifying sessions or Races. Only the Championship Organiser has the authority to alter the tyre allocation. If, through force majeure, the total tyre allocation needs to be altered at any point
- 5.13.2.3 It is not permitted to use any means to artificially raise the temperature of tyres above ambient at any time prior to or during any event, other than by the natural addition of

heat resulting from permitted driving on the circuit.

throughout the Championship, Competitors will be notified in an Official Document.

5.13.2.4 Tyres must only be used in the standard condition as supplied by the manufacturer. The application of any material (liquid, solid or gas) to any part(s) of the tyre, is therefore forbidden. The only exceptions are the use of a mixture of pure domestic water and household detergent or the lubricant applied to the tyre bead for fitting purposes. The Championship Organiser reserves the right to take samples of tyres / tyre material at any time for laboratory analysis.

It is not permitted to remove debris / rubber pick-up from the tyre surface by the use of a tool and / or heat gun

Any tyre protection covers used at any time within the confines of the Circuit, must be of a temporary construction and must be capable of being used many times. Pressure regulation valves are forbidden.

# 5.13.2.5 TYRE NOMINATION:

Each Competitor must record on the Tyre Nomination Form, the serial numbers of the 6 dry tyres which he/she intends to use <u>during</u> the Event. The Form must be signed by the Competitor and submitted to the <u>ASN</u> licenced Eligibility Scrutineer before the first <u>Qualifying session</u>. The <u>ASN</u> licenced Eligibility Scrutineer or his appointed representative will sign for receipt and return the back copy. The onus is on the Competitor to ensure that the completed form is deposited with the <u>ASN</u> licenced Eligibility Scrutineer and appointed representative before the first <u>Qualifying session</u>. Failure to do so will be the subject of a report to the <u>Championship</u> <u>Stewards</u>.



Competitors joining the Championship part way through the <u>Championship</u> are able to nominate 6 new tyres at the first <u>Event that</u> they compete in, then can nominate a further 2 new tyres at each subsequent Event they enter.

- 5.13.2.6 During Qualifying and Races, only tyres nominated and wet weather (treaded) tyres may be kept in the pits.
- 5.13.2.7 During the Event, checks will be made by the <u>ASN</u> Licenced Eligibility Scrutineer or <u>their</u> appointed representative to ensure compliance between the tyres used and serial numbers recorded on the nomination form. At the end of <u>each Qualifying</u> <u>session and Race</u> all <u>classified</u> Cars may be checked for compliance with this tyre regulation. Non-compliance at any time during the Event will be the subject of a report <u>by the ASN Licenced Eligibility Scrutineerr acting through the Championship Coordinator</u> to the <u>Championship Stewards</u>.
- 5.13.2.8 At the <u>ASN licenced</u> Scrutineer's discretion, the 6 dry tyres for the Event, listed on the Tyre Nomination Form may be retained at the end of <u>Qualifying</u> and Race(s) until a minimum of 30 minutes prior to next time that the tyres are required to be used.
- 5.13.3 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.

### 5.14 WEIGHTS:

- 5.14.1 Minimum weight:- The minimum weight for the Car and Driver combined before, during or after Practice, Timed Practice, Qualifying or Race(s) must be no less than 1120 kilograms.
- 5.14.2 Ballast:- Any ballast carried must be securely fixed <u>in accordance with NCR Chapter</u> <u>7 App.2 Art.64</u> and be capable of being sealed (<u>NCR Chapter 7 App.2 Art.65</u>), location of ballast <u>in accordance with NCR Chapter 7, App.2 Art.66</u> (passenger location).

#### 5.15 **FUEL TANK/FUEL:**

- 5.15.1 Fuel System:- The Fuel system must be standard in all respects, no modifications permissible with the exception of <u>Art.</u> 5.15.4 <u>of these Technical Regulations</u>.
- 5.15.2 Fuel:- Only Pump Fuel as defined in <u>NCR Chapter 8 App.1 Art.7</u> may be used.
- 5.15.3 Fuel Testing:- At the end of Timed Practice/Qualifying or Races, there must be at least 3 litres of Fuel from the Tank of the competing Car made available to the scrutineers for analysis. Compliance with minimum weight for the Car will be taken before the fuel is removed.
- 5.15.4 Sampling:– It is mandatory to fit a dry break coupling in the pressured fuel line to allow safe sampling/draining of the fuel tank.



### 5.16 **SILENCING:**

- 5.16.1 Sound Limit:- All vehicles must be silenced to meet <u>the requirements of NCR</u> <u>Chapter 7 App.8</u>.
- 5.16.2 It is permitted to replace the standard exhaust manifold and catalyser assembly with a performance tubular manifold and 100CPI race cat supplied by Maniflow. The exhaust system from the cat flange back is free.
- 5.16.3 Exhaust manifold may be wrapped with suitable material.

#### 5.17 **NUMBERS and CHAMPIONSHIP DECALS:**

- 5.17.1 All cars must be identified by <u>ASN</u> specification numbers to <u>NCR Chapter 12 App.4</u> <u>Art.40-45</u>. In addition the competition number must be displayed in the upper right of the rear window to the same specification <u>as detailed in NCR Chapter 12 App.4</u> <u>Art.45c-f</u>.
- 5.17.2 Sponsors' decals must be carried on each Car if requested by the Organiser. Specific locations on the <u>Car</u> are reserved for Championship sponsors; locations are as stipulated in the diagrams, which will be supplied. One set of decals will be supplied free of charge by the Championship Organiser. <u>The Championship</u> <u>Organiser reserves the right to charge for replacement decals.</u>
- 5.17.3 Driver Names: Competitors will be responsible for providing Driver's Name decals; these must be applied to the rear side windows in a position to be advised in an Official Document.

