C1 RACING CLUB TECHNICAL REGULATIONS - 2018

5 INTRODUCTION

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can do it you should work on the principle that you cannot. For the benefit of all competitors this approach will be strictly enforced. For the purposes of these regulations, modification means any change in the design, material, shape, dimension and / or surface finish of any component except for basic manufacturing processes, normal wear and published service or repair procedures.

Where it is deemed appropriate by the C1 Series Organisers, financial penalties may be applied to any transgressions of these rules. Serious or persistent transgression could result in a competitor not been allowed to enter any future races.

The C1 Series Organisers reserve the right to accept or decline entries without stated justification.

6 GENERAL DESCRIPTION

The following regulations are for competitors participating in standard production pre 30 April 2014 Citroen C1 998cc 3 door saloon vehicles in the Sponsor C1 Challenge race series. The class was conceived as a low cost form of motorsport. It is intended as a racing formula for the continued use and enjoyment of the C1 where driving skills and car control are of paramount importance and where technical development is strictly prohibited.

7 SAFETY REQUIREMENTS

- 7.1 The following Articles of MSA Appendix K Safety Criteria Regulations will apply: K1, K1.2.1, K1.3.1 4, K5, K6, K8, K9, K10, K13 & K14.
- 7.2 A plumbed in fire extinguisher that complies with MSA Regulations is mandatory (Q19.14.7.).(4 litre minimum recommended.) The driver's activation pull cable shall be mounted on the centre console.
- 7.3 For cars racing before January 1st 2017 a steel roll cage complying with the MSA Yearbook must be installed. The roll cage must be fitted with door bars to both sides of the car at hip level. For cars first raced after January 1st 2017 the roll cage must be a Safety Devices standard bolt in cage in one of the following 3 configurations:

Configuration 1	
SD Part Number	Description
RBC052 3SSU	Front roll cage with windscreen reinforcement bar for unique single door bars, no roof cross.
RBC052 5SSU	Rear roll cage, single fixed diagonal for single door bars, no roof cross.
RBC052 DSUN	Unique single door bar, near side (left hand side).
RBC052 DSUO	Unique single door bar, off side (right hand side).
RBC052 SB	Rear strut brace/harness mount.
Configuration 2	
SD Part Number	Description
RBC052 3SXU	Front roll cage with windscreen reinforcement bar for unique single door bars, with roof cross diagonals.
RBC052 5XSU	Rear roll cage, single fixed diagonal for single door bars and roof cross.

RBC052 DSUN	Unique single door bar, near side (left hand side).
RBC052 DSUO	Unique single door bar, off side (right hand side).
DD 6050 CD	Described by the second second

RBC052 SB Rear strut brace/harness mount.

Configuration 3	
SD Part Number	Description
RBC052 3SXX	Front roll cage with windscreen reinforcement bar for cross door bars and roof cross.
RBC052 5SXX	Rear roll cage, cross diagonal, lower backstays, for roof cross and cross door bars.
RBC052 DXUN	Cross door bar, near side (left hand side).
RBC052 DXUO	Cross door bar, off side (right hand side).
RBC052 SB	Rear strut brace/harness mount.

Padding dangerous points of the roll-bar with MSA compliant padding is recommended in order to prevent injury.

- 7.4 Rear harness straps are to be mounted on a roll cage harness bar to conform to MSA and seat harness manufacturers regulations.
- 7.5 FiA homologated seat belts are mandatory (Q19.14.2). Particular attention should be given to seat belt angles and anchorage. See FIA 253-42.
- 7.6 It is mandatory to use a harness with a minimum of 5 fixing points, where at least one fixing point is designed to prevent the driver from sliding forward and under the lap straps. Harnesses must be suitable for use with a Frontal Head Restraint (FHR) device and be properly installed in the car in accordance with the manufacturer's installation instructions. Installation guidance can also be found in the FiA publication 'Guide for the use of HANS® in international motor sport'.

8 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that a modification can be made to the car, then that modification is not permitted. The fact that some modifications are mentioned as prohibited does not imply that others are allowed. If any doubt exists about the legality or acceptability of any modification, then please request clarification from the Eligibility Scrutineer or the C1 Series Organisers **prior** to any work being undertaken.

8.1 **DEFINITION OF TERMS**

8.1.1 **STANDARD**: The word 'standard' used within these technical regulations as a description of components is to be interpreted as per 'Standard Part' defined in Section B – Nomenclature & definitions in the MSA Blue Book. Checking will be by comparison to spare parts supplied by the manufacturer's official agent, comparison to standard parts or by any other means necessary to ensure compliance.

Standard Part: 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.

8.1.2 **STANDARD PATTERN:** The phrase 'standard pattern' used within these technical regulations as a description of components is to be interpreted as per 'Standard Pattern Part' defined in Section B – Nomenclature & definitions in the MSA Blue Book. Checking will be by comparison to standard pattern part or any other means necessary to ensure compliance.

Standard Pattern Part: A replacement part that has a similar form shape and features as the standard part and is made using similar materials and manufacturing processes e.g. a standard part

manufactured by a non-original equipment supplier that is fully interchangeable with the standard part.

- 8.1.3 **COMPONENTS:** The phrase 'component' used within these technical regulations shall be considered to be ANY individual part or assembly of parts used in the construction of the vehicle.
- 8.2 The car must be of sound construction, in good mechanical condition and well maintained in accordance with MSA General Technical Regulations (Sections J & Q) as appropriate. It must have a current MOT certificate. It must be presented in good order. All inspection areas e.g. engine, gearbox, suspension components, etc. must be in a clean condition.
- 8.3 All cars must have a championship log book and this must be presented at Scrutineering at every race meeting. These will be filled in and updated throughout the year. Defects need to be rectified on a timescale to be agreed with the Scrutineer and/or the C1 Series Organisers.
- 8.4 The C1 Series Organisers reserve the right to require any competitor to remove any part, or assembly of parts, from the car to be compared and checked against a standard or pattern part or assembly of parts. The C1 Series Organisers will, where appropriate, supply a replacement permitted part or assembly of parts which must be used until the Organisers determine the legality of the parts that have been removed. Any non-compliance will be dealt with under normal MSA technical rules for infringement. Additional fines to those applied by the MSA may be applied by the organisers for infringements. The competitor will be liable for all costs relating to the exchange parts.
- 8.5 The C1 Series Organisers reserve the right to exchange any part or assembly of parts on the car for standard ones at any time during a race meeting on any competing car.

9 CHASSIS

- 9.1 A standard Citroen C1 3 door vehicle must be used. LHD or RHD is permitted.
- 9.2 No part of the monocoque shell shall be removed, modified or added to. For the avoidance of doubt this includes any welding to stiffen or otherwise modify the shell.

10 BODYWORK

10.1 **GENERAL**

- 10.1.1 It shall be the intention, at all times, to preserve a standard external appearance to the cars.
- 10.1.2 It is permitted to apply paint, decals, stickers or wraps to the car with the exception that the areas reserved for sponsorship are not covered (see 20.1.3).
- 10.1.3 All doors must be fitted with original lock fittings and operating mechanisms, and must be kept unlocked during any practice or competition. If the vehicle is fitted with central locking, the central locking fuse (Fuse F2 second one down on RHS of instrument housing) must be removed. The rear hatch key operated release mechanism on a non-central locking car may be replaced by the push button mechanism from a central locking car.

10.2 **INTERIOR**

- 10.2.1 No part of the interior which is an integral part of the monocoque shell may be removed, modified or added to except the drilling of 12 x 25mm holes in the sills to accommodate the welded roll cage feet.
- 10.2.2 The cups spot welded to the top of the suspension towers must be removed to accommodate the roll cage backstay feet.

- 10.2.3 The front bulkhead must comply with the requirements of the MSA Yearbook. Two holes may be drilled to allow the cable pulls to pass through. Two holes may be drilled to allow the battery to master switch cables to pass through. These 4 holes must be fitted with grommets and ensure the fire protection integrity of the bulkhead. A further hole may be drilled to accommodate the fire extinguisher pipe.
- 10.2.4 Interior trim, fittings, courtesy light and passenger seats may be removed except as specified below. The dashboard must remain fitted with the radio, all heater controls, lights and switches must remain fully operational as intended by the manufacturer. A close fitting slot cut-out in the dashboard is permitted to facilitate the fitting of the roll cage. The centre console and handbrake surround must also be fitted.
- 10.2.5 The internal door trims may be replaced by panels supplied by the C1 Series Organiser. If these are not used, the standard internal door trims must be fitted but may be modified to facilitate clearance around the roll cage door bars.
- 10.2.6 The standard driver's seat shall be replaced with a racing seat approved to FIA 8855-1999 as a minimum and must be fitted in the manufacturers intended position using the original seat fixing points.
- 10.2.7 Adjustable seat rails may be fitted. They must comply with MSA regulation K.2.2.1.
- 10.2.8 It must be possible to refit the passenger seat without moving or removing anything other than the ballast tray.
- The original pedal box with original pedals must be fitted in its original position, using the standard mountings. It is permissible to add extension plates to the pedals. The maximum size of the pedal extensions is 120mm high x 80mm wide x 4mm thick. These must be attached directly to the pedals. The use of spacers between the pedals and plates is prohibited.
- 10.2.10 An aluminium floor plate of maximum dimensions 650mm x 500mm x 3mm may be installed to the driver's side foot well. A foot rest may be fitted to this plate on the left hand side. Ballast must not be fitted underneath this plate.
- 10.2.11 If a rev counter is not fitted as standard equipment, a standard Citroen C1, Peugeot 107 or Toyota Aygo rev counter may be fitted.
- 10.2.12 An Aim Solo or Solo 2 GPS lap timer (CLSolo-K1) may be fitted. If fitted this shall get its power from either the cigarette lighter socket or from the master switch, no other power source is permitted. The fitting of any other additional instrumentation, data loggers, or switches and wiring is not permitted including battery powered or removable devices.
- Ducts, no longer than 300mm and 75mm or less in diameter, may be fitted to the driver and passenger dashboard air vents to aid driver ventilation.

10.3 **EXTERIOR**

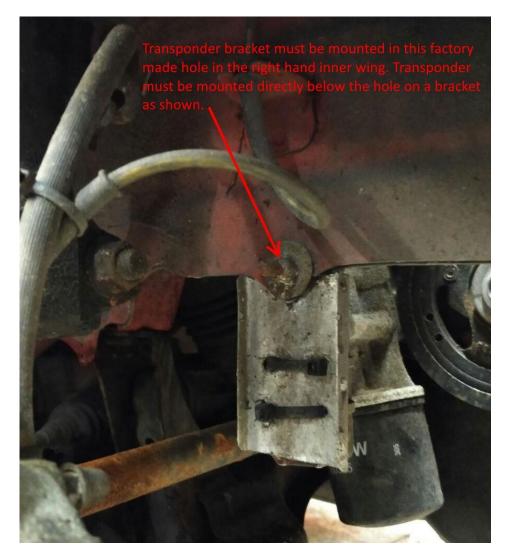
- 10.3.1 No panel may be cut, drilled or in any other way modified other than those detailed in these regulations.
- 10.3.2 3 rear view mirrors must be fitted as a minimum (1 interior and 2 exterior). A wide angle interior mirror is recommended. External mirrors must all be standard unmodified C1 mirror assemblies fitted in the manufacturers intended position.
- All mirrors must provide a view to the rear of the car and must not be adjusted to provide an aerodynamic advantage.
- 10.3.4 Transparent coloured film may be fitted to rear view mirrors to reduce glare. This must not reduce the effectiveness of the rear view mirrors in daylight.

- All elements of the standard front and rear bumper assemblies must be present. The front bumper may have a slot cut into it on each side to facilitate the fitting of the optional spot lights detailed below in 14.2.2. It may also have a slot cut into it on each side to facilitate fitting wire tow straps under MSA regulation Q. 19.1.3(b).
- 10.3.6 The bonnet must be secured by one of the following mechanisms:
 - The standard bonnet catch
 - The standard bonnet catch and 2 locking pins or straps conforming to MSA regulation 0.19.2.6.
 - 2 locking pins or straps conforming to MSA regulation Q.19.2.6.

If the standard catch is retained the standard bonnet release cable and lever must be replaced by a pull cable mounted on the left hand side of the scuttle in front of the windscreen, and identified with a suitable sticker.

It is permissible to drill 2 holes through the bonnet and engine bay front cross member to install bonnet pins. It is permissible to drill a maximum of 4 holes of maximum diameter 6mm in the bonnet outer skin and 4 holes of maximum diameter 6mm in the bumper to install bonnet straps.

- 10.3.7 The windscreen must be of HPR laminated glass.
- 10.3.8 The standard toughened glass side and rear windows must be retained.
- 10.3.9 Clear window film between $50\mu m$ and $100\mu m$ must be fitted to the inside of all side and rear windows.
- 10.3.10 The standard window winding mechanism (electric or manual) must be retained and must be fully operational.
- 10.3.11 All body panels must be standard or standard pattern parts.
- 10.3.12 The mandatory TSL lap timing transponder must be fitted to the front inner wing in the position shown below:



See 14.1.2 for wiring regulations.

- 10.3.13 Extra fasteners and strengthening plates (maximum size 1mm thick x 30mm x 80mm) may be fitted, one plate to each side front and/or rear, to the outside of the junction between the front wings and the front bumper and/or the outside of the junction between the rear quarter and the rear bumper. Alternatively, front bumper to wing bracket attachment may be reinforced using a single washer and fastener.
- 10.3.14 A mandatory guard supplied by the C1 Series Organisers must be fitted to the underside of the floor pan to protect the brake and fuel pipes as they exit the engine bay.
- 10.3.15 The lower (metal) and upper (plastic) scuttle trays below the windscreen may be modified in the following ways:
 - A hole (maximum diameter 32mm) may be drilled in the lower scuttle tray immediately above each front strut to allow an allen key to be inserted into the top of the strut shaft.
 The holes must have closed grommets fitted to maintain the fire protection of the scuttle tray.
 - Up to 3 holes may be drilled in the lower scuttle tray to allow pull cables to pass through. Sealing grommets must be fitted to these holes to maintain the fire protection of the scuttle tray.
 - Up to 3 holes may be made in the upper scuttle tray to allow pull cable handle fittings to be mounted. A reinforcing plate may be used on the underside of the scuttle tray to strengthen it. One pull cable must operate the bonnet catch, one to operate the fire

extinguisher and one to operate the master cut-out switch. All handles must be marked with stickers on the bonnet.

- Extra fasteners and a plastic plate (maximum dimensions 2.5mm x 30mm x 125mm) may be fitted over the joint between the left and right halves of the plastic scuttle tray.
- 10.3.16 Sound deadening materials may be removed from the engine bay and underside of the bonnet.
- 10.3.17 Front wheel arch liners may be removed. However, it is recommended that they remain in place to protect the auxiliary belt from stones.

10.4 **SILHOUETTE**

10.4.1 The original silhouette must be maintained, except the variation caused by the fitment of the C1 Series Organisers approved front driving lights (see 14.2.2) and/or the fitting of wire towing straps in accordance with MSA regulation Q.19.1.3(b).

10.5 **GROUND CLEARANCE**

- 10.5.1 Ground clearance must comply with the requirements of the MSA Yearbook. For the purposes of this regulation bottom front strut brace and exhaust are considered to be part of the car and are subject to the same ground clearance rules.
- 10.5.2 The minimum height of the car will be measured without driver from the ground to the highest part of the front and rear wheel arches and must conform to the minimum measurements in the following table:

Suspension type	Front height	Rear height
Gaz Adjustable Shock Absorbers	570mm	590mm
Bilstein B12 Sport Kit	560mm	580mm
Apex lowering springs	550mm	580mm

11 ENGINE

11.1 GENERAL ENGINE REGULATIONS

The engine must be a standard 3 cylinder Citroen, Peugeot or Toyota unit, engine type code 1KR-FE, not exceeding 998cc. No engine modifications are allowed whatsoever. The fitting of standard pattern parts is not allowed unless expressly allowed in the following regulations.

11.2 CAMSHAFT

No modifications to the standard camshaft are allowed whatsoever.

11.3 CRANKSHAFT

No modifications to the standard crankshaft are allowed whatsoever.

11.4 FLYWHEEL

No modifications to the standard flywheel are allowed whatsoever.

11.5 **CLUTCH**

The standard or standard pattern Citroen clutch and pressure plate must be used.

11.6 **CYLINDER DIMENSIONS**

No modifications to the standard cylinder block are allowed whatsoever.

11.7 **CYLINDER HEADS**

No modifications to the standard cylinder heads are allowed whatsoever.

11.8 VALVE GEAR

No modifications to the standard valve gear are allowed whatsoever.

11.9 **PISTONS**

No modifications to the standard pistons are allowed whatsoever.

11.10 **LUBRICATION SYSTEM**

No modifications to the standard lubrication system are allowed whatsoever.

11.11 ENGINE INSPECTION SEAL

Should it be necessary for an engine to be inspected, 2 bolts at the front of the sump and 2 bolts at the front of the rocker cover will be replaced by club supplied drilled bolts. The 2 sump bolts will be wired together and sealed by the Eligibility Scrutineer. The 2 rocker cover bolts will be wired together and sealed by the Eligibility Scrutineer. The engine will be made available for inspection as prescribed by MSA rules.

The following photographs show the location of the sump and rocker cover bolts:



11.12 **AIR CONDITIONING**

If fitted as standard the air conditioning compressor and associated pipework may be removed.

11.13 LOCATION

The engine must be located in the manufacturer's original position by the manufacturer's intended method.

11.14 COOLING SYSTEMS

- 11.14.1 No modifications to the standard cooling system are allowed whatsoever.
- 11.14.2 The water pump must be a standard or standard pattern part, must not be modified in any way and the impellor must be present and working as the manufacturer intended.
- 11.14.3 The auxiliary belt must have all 6 ribs present. Only the following part numbers from the specified suppliers may be used:

Citroen	EuroCarParts	GSF	Andrew Page
5750 QJ	202772925	134RE0600	6PK853
5750 QK			

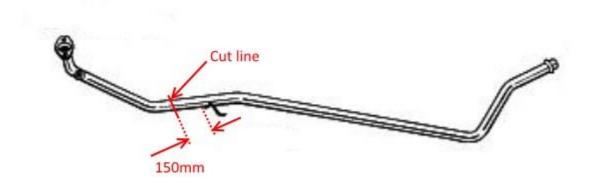
11.15 **INDUCTION SYSTEMS**

No modifications to the standard induction system are allowed whatsoever. This includes that the use of standard or standard pattern air filters is mandatory. The use of free flow type filters is not permitted. Only the following part numbers from the specified suppliers may be used:

Citroen	EuroCarParts	GSF	Andrew Page
1444 XA	Bosch 502820047 or	122PC0921 (Mann)	C2610 (Mann)
	Mann 502820049 or		
	Crossland 502820048		

11.16 **EXHAUST SYSTEMS**

- 11.16.1 No modifications to the standard exhaust system are allowed except as specified here. Catalytic converter removal is not permitted.
- 11.16.2 A slip joint may be fitted to the horizontal section of the front exhaust pipe to enable the engine to be removed without needing to remove the whole exhaust pipe and fuel tank guard. The exhaust pipe must be cut 150mm forwards from the exhaust hanger bracket as shown below.



The overall length of the exhaust centre pipe must not be altered. You may either use a Universal Exhaust Pipe Sleeve Clamp as shown below or make a slip joint.



If using a Sleeve Clamp it must be no more than 100mm long and the correct diameter for the exhaust pipe to ensure a complete seal.

Universal Exhaust Pipe Sleeve Clamp

If using a slip joint, the outer tube of the slip joint must be no longer than 100mm. The internal diameter must be a snug fit over the exhaust pipe and it must be welded completely around its circumference to the rear section of the exhaust pipe. The sliding portion of the joint must be 50mm long.

11.16.3 Only the following part numbers from the specified suppliers may be used:

Part	Citroen	EuroCarParts	GSF	Andrew Page
Catalytic Converter	0342 L5 or 0342 K8	724540520	215PC1489	BM91263H
Centre pipe	1717 CY	706540181	220PC0050	CN548K
Rear silencer	1730 JF or 1730 HO	705730271	252PC0099	CN549J

11.17 **IGNITION SYSTEMS**

11.17.1 No modifications or additions to the standard ignition system are allowed whatsoever. The Engine Management Systems (ECU) must be totally standard.

- 11.17.2 It is mandatory to use spark plugs with the following part numbers; Denso K20HR-U11, NGK LFR6C-11, Bosch FR8 SC+ or Bosch FR7 SE.
- 11.18 FUEL DELIVERY SYSTEMS
- 11.18.1 The manufacturer's entire fuel delivery system must be retained unmodified.
- 11.18.2 The use of alternative fuel pumps or pressure regulation equipment is prohibited.

11.19 **PROHIBITED MODIFICATIONS**

With the exception of the items detailed it is expressly forbidden to machine, mill, grind, polish, weld, modify or otherwise adapt parts in any way whatsoever.

12 SUSPENSIONS

12.1 PERMITTED MODIFICATIONS

- 12.1.1 For the 2018 race season and beyond Gaz dampers and springs as supplied by the C1 Series Organisers in 2016 will be allowed to be used on those cars they were originally supplied for. No other cars may use Gaz dampers and springs.
- 12.1.2 Adjustable ride height is permitted when Gaz dampers are used, but not when other dampers and springs are used. The ground clearance specified in 10.5.2 must always be satisfied.
- Dampers must be either standard or standard pattern fitment. Only the following part numbers from the specified suppliers may be used:

Part	Citroen	EuroCarParts	GSF	Bilstein
Front left strut	5202 SA	635540342	455PC0941	22-235459
Front right strut	5202 SC	635540392	455PC0951	22-235466
Rear damper	5206 EG	635540285	513PC0580	19-235479

- 12.1.4 No modifications to dampers is allowed. No more than one bump stop rubber may be fitted to each shock absorber.
- 12.1.5 If Gaz dampers are being used, they must be fitted with coil-over springs supplied by the C1 Series Organisers. For those cars using dampers from the list in 12.1.3 the following springs must be used. For cars using Bilstein dampers, they may use Bilstein, standard or Apex springs.

Part	Citroen	EuroCarParts	Bilstein	Apex
Front spring	5002 HN	974540151	10 22 009 01 22	70.4200
Rear spring	5102 N6	974540151	10-22-008-01-22	70-4200

- 12.1.6 Upper and/or lower front strut braces are permitted.
- 12.1.7 C1 Series Organisers supplied lower front wishbones may be used.
- 12.1.8 Rear wheel geometry may be adjusted by the use of shims fitted between the rear suspension cross member and the wheel bearing hub assembly. Standard bolts must be used and one bolt position must have no shims. The maximum camber allowed is -3.5°.
- 12.1.9 No other modifications are allowed.

12.2 **PROHIBITED MODIFICATIONS**

12.2.1 No modifications to the suspension, mounting points, rubber bushes, shock absorbers, springs or wheel alignment geometry are allowed other than from the consequences of changes by those specified in 12.1.1 to 12.1.9.

13 TRANSMISSIONS

- 13.1 The transmission must be the standard OEM fitment with type code C550 or C553. It must be housed (in the case of clutch and gear train) within the standard alloy OEM gearbox housing/bell housing and mounted in the manufacturer's intended position.
- 13.2 One of the following standard Citroen C1 gearboxes must be used without modification of any kind:

	C550 (2005 - Sept2010)	C553 (Sept2010 - May2014)
First	3.545	3.545
Second	1.913	1.913
Third	1.310	1.161
Fourth	0.973	0.973
Fifth	0.804	0.804
Diff	3.550	4.294

13.3 It is not permitted to mix components from each gearbox type. Specifically, the gear ratios in the C550 gearbox must be used with the 3.550 differential and the gear ratios in the C553 gearbox must be used with the 4.294 differential.

13.4 **PERMITTED MODIFICATIONS**

- 13.4.1 C1 series organiser supplied extended drive shafts must be used when C1 series organiser supplied wishbones are fitted.
- 13.4.2 You may use any of the permitted gearboxes in any of the permitted cars.
- 13.5 No other modifications or changes are allowed to the transmission assemblies or components.

14 ELECTRICS

14.1 **GENERAL**

The standard C1 electrical system must be retained. It is not permissible to modify the wiring loom or its ancillaries except for the following:

- Air bag firing mechanism must be removed.
- Wires for the additional optional front spot lights as defined in 14.2.3.
- Wires for optional identification lights as defined in 14.2.4.
- Modification to reverse light wiring to convert to rain light as defined in 14.3.
- The fitment of a Master Switch circuit breaker. This shall be mounted on the centre console within the confines of 2 vertical planes which are defined by the external faces of the centre console and a horizontal plane at the level of the bottom of the heater controls.
- One side of the secondary switch labelled Z or 2 on the back of the master cut-out switch must be introduced into the blue wire from the ignition switch multi cable connector.
- 14.1.1 Power for cameras must be taken from the cigarette lighter socket. It is permissible to fit a cigarette lighter socket multi way adaptor.
- 14.1.2 The positive feed to the transponder should be taken from the blue wire on the back of the ignition switch multi cable connector.

14.2 **EXTERIOR LIGHTING**

14.2.1 All standard lights (front and rear side lights, 3 brake lights, front and rear indicators, dip and main beam headlights) must all be present and working.

- 14.2.2 Standard or standard pattern light units must be used. HID, LED and upgraded H4 bulbs are permitted.
- One pair of C1 Series Organiser supplied or Masai (SKU 8-REC-4-LED-40W-Com-6012) LED spot lights may be fitted using the mandatory fitting bracket supplied by the C1 Series Organisers. The spot lights will be fed from a fused relay that is operated by an input from the main beam light wires behind the left hand side headlight unit. The spot lights will activate at the same time as the standard main beam bulbs and no additional or independent operation is permitted. Additional internal switches are not allowed.
- 14.2.4 Identification lights are permitted. Power must supplied by the side light circuit. The identification lights will activate at the same time as the standard side lights and no additional or independent operation is permitted. Additional internal switches are not allowed.

14.3 RAIN LIGHT

- 14.3.1 The reversing light must be converted to a red bulb and illuminate simultaneously with the rear fog light to act as an MSA compliant rain light as defined in K.5.1. No additional rain lights are permitted.
- 14.3.2 Additional wiring may be fitted to link the rear fog light to the reversing light or the links in the reversing light fitting may be altered so the reversing light is illuminated when the rear fog light circuit is active.

14.4 BATTERIES

14.4.1 The 12 volt battery must be equivalent in size, weight and amp hours as the original manufacturer's battery, fitted in the standard position and must be firmly secured.

14.5 **ALTERNATOR**

- 14.5.1 A functioning standard OEM specification alternator must be fitted. No modifications are allowed to the alternator, its drive mechanism or electrical circuits.
- 14.5.2 The auxiliary belt must have sufficient tension to make the alternator function as intended by the manufacturer.

14.6 WINDSCREEN WIPERS

14.6.1 Standard or standard pattern front and rear windscreen wipers and washers must be fitted and fully operational. The front wiper blade must be at least 650mm long. No modifications are allowed to the windscreen wiper blade, windscreen wiper mechanism or windscreen washer system.

15 BRAKES

- 15.1 Mintex MDB2743-1144 brake pads supplied by the C1 Series Organisers must be used.
- 15.2 The ABS system must be operational at all times. Permanent or temporary disabling of the ABS system is prohibited.
- 15.3 Standard or standard pattern brake discs must be used. Brake discs with any friction surface grooves, holes, slots or other performance enhancing features are prohibited.
- 15.4 It is not permissible to modify the brake pipes. Standard rubber brake hoses may be replaced by braided hoses.
- 15.5 The standard handbrake must remain in the manufacturers intended position and be fully operational.

16 WHEELS / STEERING

- Other than the extended track rod kit available from C1 Series Organisers no modifications of any kind are allowed to the steering system.
- 16.2 The standard steering wheel may be used. An MSA approved alternative steering wheel and either quick release or fixed boss is permitted.
- 16.3 The standard horn must be fitted, working and operated from the steering wheel.
- The passenger airbag must be completely removed, the steering wheel air bag will be completely removed when fitting an alternative steering wheel but when retaining the standard steering wheel the explosive charge must be removed to completely disable the airbag but retain the function of the horn operation.
- 16.5 Wheel spacers are not permitted.
- 16.6 Standard wheel bolts must be used, wheel studs are not permitted.
- 16.7 Standard offset OE 4.5J x 14ET39 steel Citroen C1 wheels must be used.

17 TYRES

17.1 SPECIFICATIONS

- 17.1.1 The permitted size is 155-55 X 14
- 17.1.2 All tyres must have a tread depth of at least 1.00mm across 75% of the tread when the car is presented at pre-race scrutineering and in the forming up area before racing.
- 17.1.3 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.
- 17.1.4 Tyre planing/shaving is permitted.

17.2 **NOMINATED MANUFACTURER**

17.2.1 All tyres used in practice and competition must be Nankang AS1 of the standard production compound and branded with the C1 Series Organiser's mark on the sidewall.

18 WEIGHT

- 18.1 Cars must have a minimum weight of 910kg, inclusive of driver at all times during qualifying and races.
- 18.2 If ballast is required it must be fitted to the upper face of a tray supplied by the C1 Series Organisers The tray must be attached to the 4 passenger seat mounting points using 3 x OEM seat mounting bolts and one drilled cap screw supplied by the C1 Series Organisers. The ballast must be bolted to the tray with 4 x M8 bolts, one of which must be drilled for a sealing wire. This bolt will be wired to the drilled cap screw once the correct amount of ballast has been applied to the tray to bring the car and driver to the minimum weight.

19 FUEL TANK / FUEL

19.1 **FUEL TANK**

- 19.1.1 The fuel tank must be a Citroen C1 standard production item with a maximum capacity of 35 litres fitted in the manufacturer's original position.
- 19.1.2 Modifications to the fuel tank, sender unit, fuel pump and pressure regulator are not permitted.

19.1.3	panel may have mechanical fasteners fitted to replace the standard adhesive.
19.2	FILLER CAP
19.2.1	A filler cap must be fitted that complies with Section K14.1.2 of the MSA Yearbook. The standard lockable filler cap may be replaced by a non-lockable one supplied by the C1 Series Organisers.
19.3	TANK GUARD
19.3.1	A fuel tank guard supplied by the C1 Series Organisers must be fitted in the location specified.
19.4	FUEL
19.4.1	Only petrol as defined in Section B Nomenclature & Definitions, Pump Fuel a) section of the MSA Yearbook for the current year and complying with, BSEN228 may be used. The use of additives is prohibited.