

WARTON STOCK CAR CLUB MINISTOX RULES

- The drivers shall be in the age group 11 years to 15 years inclusive. All drivers will finish on the day of their 16th birthday. All drivers shall obtain a licence to race, issued by Warton Stock Car Club. All drivers, male or female, shall be children of a member. Birth certificates must be produced.
- All cars shall race in a clockwise direction.
- The body must retain its original appearance.
- No aerofoils are permitted.
- The minimum weight of the car shall be 712kgs.
- An engine restrictor that is supplied by the Club **MUST** be fitted, must remain as issued and remains the property of the club.
- A novice driver **MUST** paint the rear boot lid with 3" vertical stripes alternating black and white. Experienced drivers must not treat novice drivers aggressively when they are displaying black and white stripes. This is irrespective of roof colour. The stripes will be removed according to experience and at the discretion of the parent or the clerk of the course.
- Drivers must wear racing overalls and gloves type clothing of flame retardant Proban or higher specification material and this must be maintained in a clean and tidy manner. NB: If wet weather clothing is used this must be worn **IN ADDITION TO AND NOT INSTEAD** of the regulation flame retardant overall type clothing described above. Neck braces must be worn.
- Each driver is only permitted one car per meeting and each car is only permitted one driver per meeting.
- Fin plates must be fitted above the roof line & be bolted securely to the car. Fin plate numbers must be clear & legible. Black on white or white on black is highly recommended, if you have different types and if the lap scorers cannot make out the number, you won't be scored during a race.
- If it is not covered in the below rulings, then it cannot be done.
Any questions raised will be circulated to all the members in the class and the rule amended where necessary for the following year.
- All cars must display the roof colour on the roof at the front, minimum 100mmx50mm.
- All references to parts below are all BMC Type & pre-2000 mini, pre1994 metro parts that are readily available & off the shelf.
- Drivers may only use enough force to push a car off its line. Deliberate or forceful fencing is not allowed. No spinning of a car to the outside of the track is allowed.
- Side swiping is not allowed. The driver must be with the car when it is presented for scrutineering. The responsible adult (preferably the parent/guardian) must accompany the car and driver at scrutineering and at the pit gate line up for EVERY race they enter.
- Cars must be scrutineered before practice.
- Cars and engines will be checked on a random basis.
- Drivers are reminded scrutineer checks can be carried out at any time.

Chassis Construction

- 1) Mini Saloon, Clubman, B.M.C Type are acceptable, Fiberglass body shells are permitted if they are flame resistant, be full & represent the same as a steel shell.

- 2) If a steel shell is used, the doors & boot must be welded in. The body including the bonnet must remain of original appearance, with the allowance of a fire extinguisher hole, (to be a minimum of 27mm) bonnet scoop & raised area in the bonnet for the radiator is permitted. Both doors must not be cut down of either the fiberglass or steel shells.
- 3) The cab sides must be at least 4" \pm 1" above the side rails & be consistent through the length of the side of the car, the cab sides must not be any higher than 1" above the main/side rails.
- 4) All cars are to weigh a minimum of 712kg without the driver, if your car is found to be underweight you cannot race until the issue is corrected, the car can be checked post-race and after the race and must still be minimum weight on either. Bolt in ballast is NOT permitted, additional weight should be evenly distributed throughout the chassis with additional cross bracings.
- 5) The car's interior & exterior must have all original combustible materials removed. 1 rear view mirror must be fitted inside the cab, you can also put 2 small side mirrors on, one each side, but must be within the maximum width (64") by at least. All external lights and fittings, including chrome strips, handles and wheel embellishers must be removed, small lights can be put on the roof, i.e., LEDs, a maximum of 3.
- 6) The car will have a full metal (steel) floor fitted, from the rear of the front bulkhead location to the front of the rear sub frame location & is to be at least the full width of the original mini floor, the floor is to be securely welded, bolted, or riveted in position & is to be at least the original thickness of the original mini floor, which is 0.8-0.9mm.
- 7) A four-post roll cage; the roll cage to be constructed from steel and will consist of either two side to side hoops, two front to rear hoops or similar configuration, with a screen hoop & a hoop over the driver's head (welded joints are permissible if box section is used, extra braces or gussets must be welded in)
 - There must be two bars of roll cage material in the top of the roll cage, they must be a minimum of 9" apart when measured internally.
 - A 3mm thick steel plate must be welded between these bars and it will be a minimum of 12" long & be fitted above the driver's head.
 - The roll cage must be an all-steel construction & be made from the following materials.
 - 34mm round tube x 4.5mm wall thickness
 - 38mm round tube x 3.5mm wall thickness
 - 40mm square section x 3.0mm wall thickness
 - 42.4mm round tube x 3mm wall thickness
 - 43.4mm round tube x 3.2mm wall thickness
 - 50.5mm round tube x 3mm wall thickness
 - Tolerances for the cage material size & thickness \pm 0.5mm on tube diameter & \pm 0.5mm on material thickness
 - Where round tube is used, it must be at least 38mm diameter for the main roll cage, 34mm round tube may only be used as secondary bracing & strengthening to the main roll cage.
 - The upright posts of the whole roll cage must be welded to the under carriage/floor box section structure.
 - Extra braces, gussets & connecting bars can be fitted at the constructor's discretion.
 - There will be at least 1 diagonal cross brace or 2 side to side cross braces in the rear hoop.
- 8) Metal, steel, or alloy side plates are to be fitted to both sides of the car & run from the side rail height to the top of the sill bar, it must run the full length of the floor as stated in rule 6, the side plates are to be secured either by way of riveting, welding, or bolting in a way they will not come loose.
- 9) The front bumper must be flat faced/vertical in construction & run parallel to the width of the bonnet (it doesn't have to touch the body work) the bumper depth should be 12" minimum & 16" maximum. The front bumper should be made from square & rectangle box section minimum of 25mm x 50mm & maximum of 50mm x 50mm. Round tube minimum 1.5" to a maximum of 2", all material is to be 3mm thick with a tolerance of \pm 0.5mm material thickness, fence protecting posts can be fitted & are optional, these are to be fitted to the corners of the

front bumper, be made from a minimum of 25x50x3mm to maximum of 40x40x3mm section with interconnecting bracings, they must terminate before the front roll cage post & have a gap between when viewed from the front. (Fence protecting posts are not included in the bumper depth measurement)

- 10) The rear bumper must be flat faced/vertical in construction & run parallel to the width of the boot (it doesn't have to touch the body work), the bumper depth should be 12" minimum & 16" maximum. The front bumper should be made from square & rectangle box section minimum of 25mm x 50mm & maximum of 50mm x 50mm, round tube minimum 1.5" to a maximum of 2", all material is to be 3mm thick with a tolerance of ± 0.5 mm material thickness, fence protecting posts can be fitted & are optional, these are to be fitted to the corners of the rear bumper, be made from minimum 25x50x3mm to maximum of 40x40x3mm section with interconnecting bracings, they must terminate before the front of the rear wheel. (Fence protecting posts are not included in the bumper depth measurement)
- 11) Minimum ride height 2" measured at the sump guard, front lowest point of the rear subframe/chassis (if the rear suspensions have been fabricated) to be checked on the racing surface with the driver in the car using a piece of 2"x1" box section. This must pass under the cars lowest points front & rear, if it doesn't clear the car the driver will forfeit the results accumulated on that day & must be corrected before it can continue to race.
- 12) The external side rails should fasten to the rear face of the front bumper & the front face of the rear bumper with a minimum of 40x40mm box section or 38mm tube at an angle on each corner, front and back.
- 13) The external rail must be attached to the inner chassis rails using additional cross bracings to add additional strength, minimum of 25mm x 25mm box section & a maximum of 40mm x 40mm, tube can be used if it is within the above-described parameters. All have a minimum wall thickness of 3mm with a -0.5 mm tolerance, with a minimum of 6 on each side.
- 14) Standard bulkheads are optional & can be fabricated for ease of access but **must be** sealed in case of any engine bay fires, except for the steering column hole.
- 15) No manufactured or formed curved arches are allowed on the external side rail over the top side of wheels, wheel protectors can be put on the side of the external rail but cannot exceed the maximum width of 64", the wheel protectors must be fitted neatly and have no catch points. If the chassis is at the maximum width all wheels/tyres must be within the external rail.
- 16) All sharp edges to be removed from bumpers & side rail.
- 17) Steel mesh fitted over the full front windscreen opening 40mm x 40mm minimum, larger mesh size can be used, but small mesh must be on the top in front of the driver.
- 18) All cars to have towing hoops front and rear, clearly marked up for the tractor to hook onto.
- 19) All welding must be carried out by a competent welder & must reach a level that satisfies the scrutineers.
- 20) Sharp edges and/or protrusions must be removed.
- 21) The driver's seat – a competition seat or bucket type seat must be used. The seat must be securely bolted to the floor. If the seat is not central netting must be fitted over the driver's side door window.
- 22) A full headrest must be securely fitted to the roll cage at the correct height. It must be no more than 1" away from the driver's helmet when strapped in. Two bars and a plate must be above the driver's head, The plate must be minimum 3mm thick be 12"x 12" minimum.
- 23) A full harness must be five points fixing of 3" wide, shall be fitted. 2" may be used on smaller drivers.
- 24) The battery must be enclosed in a wood, metal or plastic box, the terminals suitably protected. A spill proof cover should be fitted. The box will be securely fixed to the floor.
- 25) Padding is to be placed on all the interior bars and the steering column where in the event of an accident a driver could hit with their arms and legs.

Subframe's/Suspension/hubs

- 1) The front subframe must be a Mini Pre 2000, it can be seam welded for additional strength, tie bar mounts can be reinforced, it must remain to its original build dimensions, the rear of the subframe can be cut away for additional access, it is not permissible to mount the subframe in any other position than of it being fastened into its standard position, no angles, offset or askew positions, it is to fit central to the under chassis rails (if under chassis rails are used) , each of rails must go under the flat part on the bottom of the subframe, just below where the bottom arm mounts.
- 2) The engine must remain in its original position of manufacture and must be front wheel drive.
- 3) Engine mountings are free and extra engines steadier's can be added.
- 4) Adjustable high-low suspension is allowed with rubber doughnuts front and rear.
- 5) Single adjustment shockers can be used front & rear.
- 6) Top arms are to be Mini only (pre-2000) and are not to be lengthened or shortened in any way, the top arm shocker mount can be drilled out to accept a stronger shocker bolt. The top arm must remain in the original manufactures position.
- 7) Bottom arms can be adjustable, these must be made from steel & retain their original mounting position in the subframe, they must be readily available to all competitors. original standard-length arms maybe cut, and their lengths altered to suit camber change but cannot deviate from their original design in any other way.
- 8) Front hubs are to be mini (pre-2000) or metro (pre-1994) & cannot be fabricated, Mini drum type hubs can be used.
- 9) Top & bottom ball joints are to be of standard type & operation.
- 10) Front drive flanges can be either mini or metro, it is permissible to re drill them to suit a larger bolts & not for lightening.
- 11) The use of aluminium parts is not permitted, the only exception is brake callipers, shock absorbers & Hi/Low tops.
- 12) Standard rear subframes are only to be used, the rear arms cannot be lengthened or shortened in anyway, the rear arm must remain in its original mounting position **NO SPACERS** can be added to move the arm out. Negative camber brackets are permitted, they can be homemade or off the shelf, but the rear arm back mounting position must be in the original place.
- 13) The use of anti-roll bars is not permitted.

Steering/Wheels/tyres

- 1) Standard length Mini steering and Moggy racks are allowed, no quick racks permitted.
- 2) Steering arms, only off the shelf mini arms are permitted, these are not to be modified in anyway.
- 3) Steering column is free, but it is recommended to fit a removeable steering wheel to minimise damage to the car should it be necessary to cut out the driver in the case of an accident.
- 4) 10" or 12" diameter wheels with a maximum of 6" width, but within the 64" frame width restriction. Original or aftermarket wheels are permitted. It is NOT permissible to use split rim types. Wheel back depths & offsets are to be within 1" across each axle.

- 5) It is permitted to carry out wheel repairs if it is to a professional standard providing it meets the above requirements.
- 6) Wheel spacers are allowed up to a maximum of 20mm difference across the same axle.
- 7) Yokohama A008 70 10". Yokohama A539 12" tyres may be used. Competition, soft compound, slick or dual-purpose tyres or tyres less than 70 profile are not allowed. A00SR/032R will not be allowed.

Brakes

- 1) All cars must be fitted with a working braking system, these are to work on all four wheels, compensator valves/bias valves may be used. Ap 4 pot metro brakes (per 1994) are allowed, all readily available mini (pre-2000) brakes can be used with a maximum of 4 pots per calliper, including Alloy & 1 calliper per wheel. No modification to hubs to accommodate brake callipers is allowed. The use of brake servos, standard/race master cylinder's is permitted.
- 2) Brake disc maximum size of 8.4" vented & solid discs on the front are allowed.
- 3) Rear Mini brake Drums only, with or without spacers.
- 4) Pedals may be standard, fabricated, or bespoke including master cylinders, adjustable bias is allowed either by reducing valve or twin cylinder setup. Pedals must be orientated as single pedals for clutch, brake, and throttle.
- 5) Standard and braided hoses are permitted.

Fuel tank/lines/pump/carburettor

- 1) The original petrol tank must be removed & replaced with a metal, steel or alloy tank fitted with a metal screw cap with a maximum capacity of 2 gallon.
- 2) The fuel lines must be of metal type or braided, with a maximum of 6 rubber joints secured with jubilee type clips. The rubber hose is to be a maximum of 6" in length, it is to be routed away from all electrical cables, they must be securely fastened, one fuel filter is permitted in the fuel line. Any carburettor fitted with an overflow facility must have an overflow pipe directing away from hot areas.
- 3) A fuel on off tap must be fitted within easy reach of the driver when strapped in, the fuel line will be a metal type or braided hose, plastic or rubber joints will not be more than 6". All joints are to be leak proof & secured with jubilee type clips.
- 4) A one-way safety valve must be fitted in line with the fuel tank breather pipe, this must be in working order, modification or tampering with the one-way safety valve is not permitted.
- 5) Any fuel pump is allowed, either mechanical or electric.
- 6) Fuel line must be kept separate from the battery lead, at least 500mm apart.
- 7) Only standard Mini 1000cc 1-and-a-half-inch carburettor (HS4) with a single outlet exhaust is allowed with a **TWO BOLT** fixing. No modification to the carburettor allowed. Jets and needles are free. Air cleaners **MUST** be bolted to the carburettor, Stub stacks are allowed, no trumpets or extensions allowed.

Engine & Gearbox Specification

- 1) **An engine restrictor that is supplied by the Club MUST be fitted, must remain as issued and remains the property of the club.**

- 2) **All engines will be 1000cc Standard 'A' plus to the following regs: Anyone found racing or attempting to race an illegal engine or bending the rules may be banned and will forfeit any points and trophies. (Each case will be heard on an individual basis).**
- 3) A normal bore of 64.59mm plus 0.040" maximum oversize allowed. A standard stroke of 76.2mm (original CC998).
- 4) Pistons must be standard 998 replacement type, with all rings in place. No Cooper or 'D' top pistons. Only standard replacement rings are allowed (no competition or total seal rings allowed).
- 5) You may not lighten, balance or stress relieve the pistons, con rods, or crank shaft.
- 6) The top of the block may be machined, pistons may not be machined and must be level with or below the surface of the block. The block may be bored or sleeved back to standard and rebored or line bored. No other alteration allowed.
- 7) The head must be standard Mini 1000 casting and may be **MACHINE FLAT NO OTHER MACHINING IS ALLOWED.** All oil ways and galleries must remain unmodified and must not be ground into.
- 8) Valves must be standard or replacement Mini 1000. No rim flows or competition valves. No machining to valves. Valves of standard length and standard valve head size of 27.89 or 1.0937" inlet and 25.53 or 1" exhaust. Valve seat angles are free, but there must be no machining or fettling past the valve seat on the valve or the head. Standard valve spring top and Colette must be retained. Any single or double valve spring that fits without the need for machining may be used. The combustion chambers and ports may not be modified in any way and must not have any material added or removed, replacement valve seats may be fitted, but must be level with the bottom of the combustion chamber. Head gaskets are free.
- Inlet and exhaust manifolds must be of the original type (No 12G787) with no external alterations. Porting and cleaning inside manifold only are permitted. The exhaust of the manifold MUST remain 1" bore. No spacers between flanges and head are allowed. Three branch manifolds are not allowed.
- 9) **No modifications to increase air flow through the restrictor is allowed e.g., drilling, enlarging the main hole, cones to aid airflow. Restrictors must be placed in line with the carburettor and inlet manifold. All air must pass through the centre hole of the restrictor.**
- 10) Gearbox must be standard with 4 forward and 1 reverse gear. Straight cut gears are not allowed in gear box primary or drop box gears. The correct ratios must be in the correct place in the gearbox. The gears must also be whole and not cut/machined down.
- 11) Only standard conventional operation differentials are allowed. Ratios may be interchanged. The following diffs are not allowed, Limited slip diffs, worm drive, torque, APT, locked or welded.
- 12) An exhaust pipe that reaches at least the front of the rear subframe must be fitted. There is no size on the exhaust from the manifold back, it must have a working silencer and not blow any fumes in the cab.
- 13) Any camshaft that is made for a Mini or Metro may be used that fits without additional modification to the engine or components. Cam followers, push rods and rockers must be standard Mini 998. **VERNIER TIMING GEAR IS ALLOWED**, Standard timing chain, tensioner and gears can be used. Offset Woodruff Keys may be used.
- 14) Distributors – must provide a spark to the engine, these are open to modification, mappable ignition is not permitted, bob weights and springs are free. The distributor timing curve can be modified & the vacuum take off can be removed. The use of electronic ignition is allowed either internal to the distributor or externally. No other modifications are permitted.
- 15) All oil ways and galleries must remain unmodified. Oil pickup pipe may be repositioned. Compact oil filters are allowed.

- 16) Only standard Mini 1000cc 1-and-a-half-inch carburettor (HS4) with a single outlet exhaust is allowed with a **TWO BOLT** fixing. No modification to the carburettor allowed. Jets and needles are free. Air cleaners **MUST** be bolted to the carburettor. Stub stacks are allowed, no trumpets or extensions allowed.
- 17) Solid engine mountings allowed, and engine stabilisers may be fitted.
- 18) Lightened fly wheels in any form are not allowed, including the back plate. A 50mm hole must be machined in the engine end cover in a convenient location for checking the flywheel. The clutch may be verto or standard.
- 19) Oil coolers are allowed but not remote oil filters.
- 20) Any radiator is permitted providing it fits within engine bay, extra radiators can be added, all within the engine bay.
- 21) Water pumps can be standard or electric but must be in the original manufacture position.
- 22) It is permitted to use uprated engine bolts/studs i.e., ARP. Titanium fasteners are not permitted.
 - The use of ceramic or any surface coating and treatment is not allowed on any components. External coatings of components for aesthetics purposes are permitted.
 - Only Standard fuel available from at least 300 fuel suppliers' forecourts is permitted.
 - All switches must be marked up with on/off, **an extra pull cord marked up with KILL SWITCH must be within easy reach of the marshal.**
 - A full 3" harness (minimum of 5 point) small drivers can use 2" shall be fitted unless a neck restraint system device is used, the harness should be fitted following the manufactures instructions.

Other rules

- 1) **The committee/scrutineers can and will check any car without notice on the day of racing, i.e., heads/carbs removed, if anything is found not to comply with the above rules the driver can receive disciplinary action and/or suspension. If you don't agree with the rules don't race in the class.**
- 2) **You do have the right to appeal any decisions, but the committee/scrutineer's decision is final.**

ANY CONTRAVENTION OF THE ABOVE RULES CAN RESULT IN THE DRIVER RECEIVING DISCIPLINARY ACTION AND/OR SUSPENSION.

THE ABOVE RULES WILL BE AMENDED, OMITTED OR ADDED TO AT THE DISCRETION OF THE CLUB COMMITTEE/SCRUTINEERS, THIS WILL BE DISCUSSED WITH THE CLASS AND VOTED ON, WITH THE EXCEPTION OF ANY MUST HAVE SAFETY RULES.

THE LICENCES ISSUED BY THE CLUB ARE FOR WARTON ONLY, THEY ARE NOT TRANSFERABLE.

THE RULE BOOK IS WRITTEN IN GOOD FAITH, ANY OMISSIONS THAT LEAD TO AMBIGUITY THE DEFAULT POSITION IS IT REPRESENTS A STANDARD FACTORY TYPE COMPONENT.

DELIBERATE MISINTERPRETATION OF THE RULES WILL BE DEEMED A BREACH.

ALL CARS TO BE BUILT AND DEVELOPED IN 'THE SPIRIT OF THE CLASS', WITH THE AIM OF CARS BEING EVENLY MATCHED AND BUILT. IF IT IS FELT MODIFICATIONS GO BEYOND 'THE SPIRIT' YOU WILL BE ASKED TO BRING YOUR CAR BACK IN LINE WITH THE REST OF THE CLASS.

IF THE RULES DO NOT SPECIFY THAT YOU CAN, THEN TAKE IT THAT YOU CAN'T, IF YOU ARE NOT SURE ABOUT ANY RULE ASK THE SCRUTINEERS, DO NOT JUST GO AHEAD AND DO IT.

ALL THE AMENDMENTS FROM THE 2022 AGM THAT WERE DUE TO COME IN 2023 ARE INCLUDED IN THIS RULE BOOK.
THIS FULL RULE BOOK WILL NEED VOTED ON AT THIS YEAR'S AGM.