

2021 JUNIOR MINISTOX REGULATIONS

DEFINITION: THIS IS A NON-CONTACT FORMULA

- 1) Any steel bodied two wheel drive 1000cc MINI SALOON in standard form as listed in Glasses Guide may be used and must be complete with all doors, wings, boot and bonnet. Ex Brisca Mini shell may be used. Fibreglass replacement panels, bolt-on goodies, additional tuning gear etc. are not allowed unless expressly deemed otherwise in the following rules
- 2) Front and rear suspension must be KYB 44 200 1 standard. Negative camber allowed, and driveshafts may be lengthened by 20mm, cups on both sides by 30mm. Rear suspension may be altered to rigid axle type and may be mounted off strengthening bars, an additional transverse bar; maximum 40mm x 40mm box, only standard suspension may be used. **NO** rose joints on suspension parts. section may be incorporated to facilitate mountings. Note: Incorporation of roll cage members is allowed.
- 3) Steering column may be altered to suit driver. Smaller sports steering wheel may be fitted. Sump guard may be fitted.
- 4) A standard 1000cc carburettor and manifold must be used with the restrictor plate fitted between a standard sandwich plate and inlet manifold. The restrictor plate obtained from Race Control must not be altered or added to in any way. Plate will be checked at the discretion of Race Control. Air filters are free, but no modified air intakes are allowed. No reducers allowed to be fitted between the carb and the air filter.
- 5) Battery may be repositioned but must be securely mounted in a sealed metal box and covered with rubber or similar to protect the driver from acid spillage.
- 6) Bucket seats are compulsory. It is recommended that the seat be positioned towards the car centre if possible. (If a steel seat is to be used, it must be of a safe standard and pass scrutineering) Must have head restraint fitted behind drivers seat. Seat must be fixed at shoulder height to roll bar and bolted to floor.
- 7) 10" **OR** 12" wheels only, all 4 wheels must be the same size, max of 6" wide. Max tyre size 165 wide. Only road legal tyres allowed, slide over stud wheel spacers not allowed.
- 8) Seat belt mounting must be fitted in a 4" x 4" plate and must be securely welded when not using manufacturers notes.
- 9) A full 3" harness, properly constructed, shall be fitted and fixed in 5 positions, including the crutch strap to secure anchorage points low down and separate to the seat mountings. If using a HANS device a 2" top strap must be used, the rest of the harness must be 3".
- 10) All internal trim, passenger seats, windows, lights, wheel balance weights/trim, tow balls and fitting brackets, any loose items, external trim and wing mirrors must be removed. All broken glass etc. cleared from inside car prior to arrival at circuit. A full fire-wall between driver and engine bay is compulsory.
- 11) All doors must be securely fastened shut, preferably by bolting or welding.
- 12) Standard 1000cc exhaust manifolds must be used, fitted with standard 1000cc silencer system with a standard 1000cc mini flange to manifold. Exhaust may be altered to fit around framework, but nothing added to it.
- 13) Brakes must be effective on all Four wheels. Mini 1000 front disc brakes are permitted. A pair of Mini 1000 spacered rear drums is permitted. A hand brake must be fitted and in working order. A brake servo may be fitted. **NO** Aluminium parts are permitted.
- 14) Petrol tanks shall be removed and replaced with a steel tank of 10 litres maximum capacity fitted with a non return valve (metal) in the overflow and securely fitted within the bodywork. All petrol pipes must be made of metal. Connections only may be of non-metallic hose, maximum length 8", a fuel cut/off tap must be fitted and within easy reach of driver and clearly marked. Electric fuel pumps may be used with a pressure regulator, both must be fitted between the rear suspension turrets and behind a fire-wall. Drainage holes in the floor around the fuel tank are compulsory.
- 15) **ENGINE AND GEARBOX:**

A standard 998cc gearbox and drop gears must be used, but differential ratio is free. No locked diffs. or limited slip diffs.
A 32mm hole must be drilled in the bell housing above the starter motor, exposing the flywheel for inspection.
After market gear sticks may be fitted.
The regulations for the 1000cc engine are as follows:
A nominal bore of 64.59mm plus 1.5mm oversize allowed. A standard stroke of 76.2mm (original cc 998)
Pistons must be standard 998 replacement type, with all rings in place.
Only standard replacement rings are allowed (No competition or total seals allowed)
The block may be surface ground, but the piston must be level or down the bore.
The block may be rebored or sleeved back to standard and rebored or line bored.
No other alterations allowed.
The head must be standard Mini 1000 casting with only the following casting numbers allowed:- 2A628,2A629,12A1456 or CAM 480 and may be surfaced ground to a minimum thickness measured between the top and bottom machines faces 2,700thou.
Valves must be standard or replacement Mini 1000.
Valves of standard length and standard valve head size of 27.79 inlet, and 25.43 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 collets must be retained.
Any single 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.
Only the standard replacement gasket allowed.
Any camshaft may be used that fits without additional modifications to the engine or components.
Cam followers, push rods and rockers must be standard Mini 998 cast or pressed steel.
NO VERNIER PULLEYS ALLOWED.
You may use off-set woodruff keys.
Standard timing chain and tensioner must be used.

Distributor may be replaced with standard electronic.
The advance may be altered and you may lock the base plate.
You may not lighten, balance or stress relieve the pistons, con rods, crank shaft or fly wheel.
All oil ways and galleries must remain unmodified.
Oil pickup pipe may be repositioned.
No oil coolers or remote oil filters allowed.
Compact oil filters are allowed.
Solid engine mounts are allowed.

16) Only standard 2 bolt fixing Mini 1000 1 ½"SU carburettor and manifolds allowed.

17) ROLL CAGE:

Roll cages properly constructed from 50mm x 50mm box or 50mm O/D tube, maximum 6mm thick, (Minimum size 40mm x 40mm box, 40mm O/D tube x 3mm thick) Having a minimum of 4 and maximum of 6 down bars must be fitted. One down bar must be positioned to protect the drivers front screen pillar. All down bars must have 100mm square x 3mm thick base plate which must be welded or bolted to the floor. No part of the roll cage shall extend beyond the centre line of rear axle or forward of the bulkhead. A further roof brace member may be added, fitted centrally, running front of roll cage to rear, or alternatively a 3mm thick base plate may be fitted to prevent the roof from being pushed down. Roll cages must be constructed as to form an integral part of the strengthening bars. No part of roll cage shall protrude outside of vehicle bodywork. A support bar 25mm x 25mm box only on each side of front sub frame from top of turret and to front of sub frame (welded to sub frame only and not to any other panel of the car.) may be fitted. A corner plate may be fitted near side on front corner of bars. No more than 3mm thick and cannot go more than 125mm around corner. There must be a support bar/head restraint fitted behind driver's seat.

STRENGTHENING:

The following strengthening must be fitted to all cars. All strengthening must be properly constructed with special attention paid to internal bars, i.e. Fix on outside of roll cage. All strengthening shall be from 2" x 1" box section 3.16 thick (50 x 30 x 3.6mm) or 40mm x 40mm box section.

Front bumper comprising 2 horizontal bars and a maximum of 4 uprights. The outer upright may project upwards and have an additional brace to form a nudge bar on the near side corner.

Side rails, one full length bar each side connecting front and rear bumper, 2 chicken bars fixed inside car to roll cage on drivers side.

Ends of all bumpers may be rounded or altered to fit inside of 3" radius curve as diagram 2, such as no sharp ends on outside edges.

A further 2 full length rails connecting front and rear bumper and passing underneath the car body, 50mm x 25mm box.

One full length rail, each side, from front bumper through engine compartment to roll cage and on through boot to rear bumper. This is to be further connected to the outer side rails in at least 4 places along its length with same material.

Diagonals from lower point on bumpers to outside rail on all corners.

One horizontal diagonal each side rearward of rear sub frame mounting from side of car to middle.

Additional outer bars must be fitted. These should run parallel with the sill and diagonally along each wheel arch over front and rear.

An optional door plate may be fitted inside the car.

- 18) Racing number must be clearly displayed on both sides of a white roof fin with black figures 200mm high, 25mm wide. Illegible numbers will be disregarded by lap scorers.
- 19) Roof must be painted to clearly identify driver's grade colour.
- 20) A metal upright min. size 20mm square must be welded or bolted into the windscreen aperture, one third of the way across from the driver's side. Wire mesh may be fitted on driver's side.
- 21) All cars must be fitted with a roof plate above the drivers head. This plate must be fully seam welded to the roll cage and must cover at least ½ the width of the roof. This metal must be minimum of 3mm plate.
- 22) A FOOTPLATE CAN BE FITTED AS OPTIONAL.
- 23) No locked diffs. or l.s.d.
- 24) A plate 300mm wide x maximum 3mm thick may be fitted to driver's door.
- 25) A clearly marked ignition cut/off switch must be fitted on rear outside quarter panel.
- 26) A 150mm hole must be cut in the bonnet local to the carburettor.
- 27) All drivers **MUST** wear a neck brace.
- 28) 2 rear brake lamp (RED) must be fitted and working, or centre strip light
- 29) Drivers name to be displayed on a 1.50mm wide panel fitted across top of front screen aperture.
- 30) A driver's window net must be fitted, made of cloth and quick release.
- 31) All drivers must wear fire retardant overalls, gloves and a fire retardant balaclava. Helmets must be of a minimum standard - BS6658 type A/FR, FIA8860-2004, Snell SA2005, SFI Foundation 31.1A, SFI Foundation 31.2A. The E2205 European Standard helmet may be used in fibreglass or Tri-composite form only. It is important that the helmet fits the driver correctly, goggles and visors must be shatterproof. Neck braces must be used, and must come under the chin and not attach to harness.
- 32) **HANS devices are recommended and will be compulsory by end of 2021 season.**
- 33) Drivers will be checked at the pit gate with helmet, proban overalls and gloves, and neck brace on, strapped into their car so as the marshal can check the driver is positioned correctly and safely in their seat.
- 32) Driver's age is to be 10 to 16 years old. If driver becomes 16 partway through racing season they may complete the full season in Junior Mini providing they have previously raced in that year.
- 33) A responsible adult must be present at a Race Meeting with a Junior Mini Driver.
- 34) The Drivers age must be painted on the Boot.

N.B. Drivers are reminded that scrutineer checks can be carried out at any time, and most certainly on all official Championships. If parts are suspected of being illegal make sure you leave them with the promotion if you do not agree. If you refuse it will automatically make the parts illegal.

