

2009
GRIMLEY JUNIOR MINI ROD
REGULATIONS

THIS IS A NON CONTACT FORMULA

BASIS:

- 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. Fibreglass replacement panels, bolt-on goodies, additional tuning gear etc. are not allowed unless expressly deemed otherwise in the following rules
- 2) Front suspension and steering may be altered, shock absorbers free. However, a supplementary shock absorber may be fitted to each side (may be coil-over type).and top mount may be repositioned. Negative camber allowed, and driveshafts may be lengthened. 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 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 free, 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) Replacement driver's seats, i.e. bucket type are allowed. 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" steel wheels only, max of 6" wide. Max tyre size 165 wide. Only road legal tyres allowed, slide over stud wheel spacers not allowed. During 2009 as a trial period only 13" diameter wheels x 6J may be used but must have larger diameter wheel studs still fitted to Mini hubs.
- 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 harness, properly constructed, shall be fitted and fixed in at least 4 positions to secure anchorage points low down and separate to the seat mountings.
- 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 exhaust manifolds must be used, fitted with standard exhaust system or silencer to Laws AX891 or Simpson ORC225 specification, with a standard mini flange to manifold.
- 13) Brakes must be effective on all Four wheels. Mini 1000 front disc brakes **are** permitted. A pair of Mini 1000 spaced rear drums is permitted. A hand brake must be fitted and in working order. A brake servo. may be fitted.
- 14) Petrol tanks shall be removed and replaced with a steel tank of 10 litres maximum capacity fitted with an anti-spill device as per sketch 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.

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.

Only the standard type distributor may be used.

The advance may be altered and you may lock the base plate.

No electronic ignition systems or sport coils allowed.

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 (See also diagram 1).

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 (see diagram1). 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 serviceable dry powder fire extinguisher minimum 1kg. must be properly clipped (not taped) inside the car within easy reach and removable by the driver with dial to indicate condition.
- 21) 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.
- 22) 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.
- 23) A FOOTPLATE CAN BE FITTED AS OPTIONAL.
- 24) No locked diffs. or l.s.d.
- 25) A plate 300mm wide x maximum 3mm thick may be fitted to driver's door.
- 26) A clearly marked ignition cut/off switch must be fitted on rear outside quarter panel.
- 27) A 150mm hole must be cut in the bonnet local to the carburettor.
- 28) All drivers must wear a neck brace.**
- 29) 2 rear brake lamp (RED) must be fitted and working, or centre strip light
- 30) Drivers name to be displayed on a 1.50mm wide panel fitted across top of front screen aperture.
- 31) A driver's window net must be fitted, made of cloth and quick release.
- 32) All drivers **must wear fire retardant overalls** when racing and a Class A/Approved helmet with visor or goggles. All drivers must wear gloves and are advised to wear a fire retardant balaclava...
- 33) Driver's age is to be 12 to 16 years old. If driver becomes 16 partway through racing season they may complete the full season in Junior Mini Rods providing they have previously raced in that year.
- 34) A responsible adult must be present at a Race Meeting with a Junior Mini Driver.
- 35) The Drivers age must be painted on the Boot.**
- 36) At the end of each Novice Junior Mini Championship, the seasons top five points scorers will progress onto other formulas for the following season.

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. **It is the responsibility of the driver to prove to the promotion that the part is legal by way of written proof of where the part originated. This must be done within seven days; otherwise the part(s) in question will be deemed to be illegal and will result in immediate suspension from racing and referral for disciplinary action.**