

Crimond Hot Saloon Rules – 2011

Revision 2012.02 updated by B Barrack Approved by Crimond committee 11 January/2012

This formula is **NON CONTACT** with cars prepared to a professional racing appearance; this standard is required to be kept throughout the racing season.

1. **ELIGIBLE CARS:** Any front engined, front or rear wheel drive, four or five seat car with an all steel production shell and of a model introduced for sale in the UK six (6) years prior to the current race year, i.e. for 2012 season cars prior to January 2006 are permitted. Front wheel drive body shells **may** be converted to rear wheel drive but rear wheel drive body shells **cannot** be converted to front wheel drive. Cars with four wheel drive or fitted with limited slip differential are **NOT PERMITTED.**

2. **BODYWORK:** Doors, wings, bonnet, boot lid/hatch back door and all main structures must be in place and in a **PRESENTABLE CONDITION** at the start of each meeting. Cars with tatty, dented and badly battered panels will not be passed by scrutineering.

Doors, boot lid/hatch back may have inner structural stiffeners removed but all doors **must** be welded or bolted shut. The bonnet may have inner structural stiffeners removed and front shortened by 100mm (4") with the cut off section welded in place. No other alterations to bonnet permitted. Bonnet, boot lid or hatch back may be retained with 20mm (3/4") maximum dia. pins but length must not extend more than 20mm (3/4").

Steel Bumpers (front & rear) **must** be removed but plastic bumpers may be retained. Two (2) extra 10mm (3/8") max bolts with 50mm (2") o/d repair washers may be used anywhere on the bumper to fix it to the car. Original front and rear panels should be retained where possible but if required may be replaced with a manufactured 1.2mm max thickness sheet steel panel. Only **one** panel thickness is permitted, i.e. original or replacement only not **both.**

Headlamp and grille apertures may be filled in with 1.2mm max steel sheet but grille must include a minimum of 4 holes 50mm (2") diameter.

Wheel arches to a maximum of 40mm (1.5") protrusion beyond widest part of original wings may be fitted. A sheet metal skirt, 0.8mm thick max, between front and rear arch is permitted but must be no wider than arch extensions.

A strut brace, strut to strut and/or struts to bulkhead are permitted. A 40mm (1.5") max angle brace between chassis legs, which can be formed into a U shape for radiator mounting, is permitted but must be no closer than 150mm (6") to front of car.

3. **ENGINES & TRANSMISSIONS:** Unless stated otherwise both engine & gearbox must remain standard to the original specification for the particular combination used. **NO modification of any sort permitted** NO mixing of pistons/rods/cranks/cylinder heads/valves from various models.

- 3A. **CARBURETTOR & AIR FILTER:** Any standard carburettor is permitted but must fit to standard inlet manifold used **without** modification, e.g. no re-drilling of holes or adaptor plates, and must have originally been fitted to manufacturers engine used, e.g. Ford carb on ford engine or Volkswagen carb on Volkswagen engine. Carb jets may be changed. Air filters can be removed and/or replaced with sports type filter, i.e. K&N or Pipercross. Fuel pumps may be replaced with electric type.

3B. ENGINE: Cubic Capacity is free and both carburettor and fuel injection type engines are allowed **but** both must run with carburettors only, no fuel injection systems allowed. Engines that were originally fitted with, either one single or one twin choke down draft carburettor, or one or two single side draft carburettors or the Mazda rotary engine fitted with four barrel down draft carburettor are permitted. Engines with variable valve timing are permitted but only if the control is altered so that it is switched ON at all times. This control **must** be hard wired into the cars main ignition/electrical system, **NO** separate ECU control boxes or on-off switch allowed. Drivers **cannot** switch or adjust control of valve timing during a race.

Re-grinding of crank and re-boring of block to manufacturers limits allowed. A maximum of 0.5mm (20 thou) may be skimmed from cylinder head.

3C. ENGINE POSITION: On RWD cars the engine (and gearbox) may be moved back. All cars must have a firewall/bulkhead separating driver from engine/gearbox.

3D. CYLINDER HEAD & INLET MANIFOLD: A fuel injection cylinder head may only be used if inlet manifold from standard manufacturers same type engine fits to cylinder head **without** modification, e.g. no drilling of new stud holes, welding up of existing stud holes, closing or opening of inlet or water transfer ports in either manifold or head. Standard inlet manifold gaskets **must** be used; no custom cut or home made gaskets permitted.

3E. IGNITION SYSTEM: Electronic ignition is permitted **only** if fitted as standard to particular engine used.

3F. EXHAUST: Exhaust manifold must be standard part available to engine used. Exhaust system may pass through interior of car but **must** be covered. If exhaust exits at rear of car it must be below bumper level.

3G GEARBOX: Any standard production gearbox permitted but must be from same manufacturer as engine, e.g. Ford engine = Ford gearbox, Fiat engine = Fiat gearbox.

4. **REAR AXLE:** May be replaced with stronger one of same design only, live axle may **not** be replaced with axle of independent configurations and vice versa. When car has been converted from FWD to RWD, any standard live or independent production axle configuration may be used. If live axle fitted, coil or leaf springs may be used, maximum of four links only permitted.

5. **DIFFERENTIAL:** Ratios are free but must be from manufacturers range and may be welded or free. Limited slip differentials are **not** permitted.

6. **SUSPENSION:** To remain as original concept apart from permitted negative camber, positive camber is permitted on N/S front wheel only. Suspension arms and links may be manufactured **and made adjustable**, but NO rose joints permitted. Coil or leaf spring rates are free. Cars can be lowered by adjusting torsion bars, cutting coil springs, fitting lowering blocks or using threaded adjusters. **Spring platforms and shock absorber mounting points can be made adjustable.** A total of only two extra non-adjustable shock absorbers may be fitted. Standard coil over units e.g. BMW – Triumph may be used on the rear only.

7. **BRAKES:** Brakes must operate efficiently on all four wheels, drums may be replaced with discs and a servo may be fitted.

8. **WHEELS & TYRES:** Widening of wheels is **not** permitted, but wheels from any other standard car may be fitted provided they fit without

modification to wheel or hub. After market wheels, e.g. Weller, and alloy wheels are permitted but no racing, rally or circuit types allowed. Maximum wheel width 150mm (6"). **Only ROAD LEGAL** tyres permitted, to a Maximum width of 185. Scrutineer's decision on allowable tyres will be final. If in doubt check first.

9. **ROLL CAGE:** A full steel four post, minimum, roll cage must be fitted, minimum size, 33 x 3 mm tube or 40 x 2.5 mm box section. **Where the roll cage contacts the floor/sill area, a 100mm square plate must be welded and or bolted to the floor/sill area.** When bolted, there must be a minimum of 4x10mm bolts with suitably large washer plates underneath the vehicle. A 6mm inspection hole must be drilled at base of upright to allow thickness check. A minimum of two (2) drivers' door protection bars must be fitted between roll cage uprights, a minimum of two (2) passenger door protection bars must also be fitted between roll cage uprights. A horizontal cross brace must be fitted mid-way between floor and shoulder height, minimum size 30mmx3 round, or 40x40x2.5 box. **The brace should be fitted to the main cage uprights, or if this is not possible, the door bars.** The main roll cage must be within passenger compartment. Horizontal extensions, maximum size 25mm (1") box or tube; from front uprights to top of suspension struts are allowed. A rear extension frame from roll cage into boot area is permitted, maximum size 25mm (1") box or tube; to a minimum of 150 mm (6") of all panel surfaces and must be welded or bolted to floor. Horizontal cross braces are permitted. Extra bars may be added to main roll cage at the driver's discretion.

10. **FUEL TANK:** Maximum capacity 2 gallons with metal screw type cap drawing fuel from top and fitted with leak proof vent system to prevent fuel escape during full or partial inversion of the car, one-way valve recommended. The tank must be boxed in if fitted inside the passenger compartment or behind a firewall if positioned in the safe area behind the driver.

11. **RADIATORS:** All radiators or cooling containers must be located within the engine compartment forward of the front bulkhead/firewall. Radiators are free but must have an overflow pipe terminating no more than 450mm (18") from ground.

12. **BATTERY:** Can be located in passenger compartment but must be fixed securely and covered to prevent leakage. Fitting of master switch on R.N.S. of car compulsory. If electric fuel pump fitted a control switch within reach of the driver when strapped in must be fitted.

13. **BRAKE LIGHTS:** A minimum of two working brake lights must be fitted inside rear window aperture.

14. **WEIGHT LIMITS:** Cars must weigh (in full race condition) between **680kg minimum and 850kgs maximum.**

15. **DRIVERS:** Once out of white grade, drivers cannot drop below Yellow in second and subsequent seasons.

16. **GENERAL:** Components which can be altered or re-positioned are: power units, rear axle, wheels, fuel tank, radiator, seat and any other component which requires moving to facilitate engine/gearbox transplants.

Cars that are / have been racing in any other class at Crimond are not eligible.