

1.0 GENERAL INFORMATION RELATIVE TO THIS SCHEDULE

- 1.1 This Schedule shall be read in its entirety and shall take precedence over Appendix Two Schedule A of the 'National Sporting Code' except where an item is not specifically covered within Schedule SS2000, in which case Appendix Two Schedule A will apply.
- 1.2 All text changes from the previous issue of this Schedule are highlighted such. Text changes for grammatical and/or formatting reasons are not highlighted.
- 1.3 Only vehicles approved by the NZ SS2000 Register as being compliant to the technical regulations as detailed hereinafter are eligible to compete in the Series.
- 1.4 All vehicles competing in Events to which these regulations apply shall have a valid MotorSport NZ logbook.
- 1.5 **TECHNICAL ELIGIBILITY AND SAFETY EQUIPMENT ENQUIRY:** Where any doubt may exist in understanding any regulation contained within this Schedule it will be understood that it is the Competitors obligation to enquire as to the correct interpretation. All technical eligibility and/or safety equipment enquiry shall be submitted in writing to:
- (1) The Series Scrutineer, as detailed in the Series Articles, then to
 - (2) The MotorSport NZ Technical Manager
- All enquiries should detail the article in question and the specific subject matter.
 - A written reply will always be given to a written enquiry.
 - On matters of technical eligibility and/or safety compliance, a verbal statement will have no validity.
- 1.6 The SS2000 Register's appointed Series Scrutineer shall inspect all competing vehicles prior to the commencement of the Series, and a notation shall be made in the vehicle's MotorSport NZ logbook confirming the inspection has been performed.

2.0 DEFINITIONS

- 2.1 Definition of terms used within this Schedule shall be referenced from the National Sporting Code, Appendix Two Schedule A and as detailed below:

'Competing weight' means the minimum weight of the competing car in Race trim. It may be measured at any time during the qualifying sessions and/or races, on the official scales of the meeting.

'Non standard' means those components which are not "standard".

'Race trim' means the condition in which the car competes, and shall include all fluids, ballasts and the driver.

'Space-frame' means a tubular structure with a light weight body where all the stresses are absorbed by the tubular chassis and none by the body.

'Standard' means the component/s as originally optioned or fitted to the make, model and type of car by the original manufacturer at the time of the initial sale.

'Stock unibody' means the vehicle manufacturer's assembly or structure to which all suspension subframes and mechanical components attach.

“Wheel arch flares” are defined as any body work extension or modification that increase’s the overall width on the vehicle body work allowing for a wider track.

Note: For clarification of this definition, “wide body kits” are recognised as flares and stretching the original steel wheel arch’s outwards is recognised as flares.

3.0 ELIGIBLE VEHICLES

3.1 All vehicles shall be a ‘Series Production vehicle’ of ‘closed vehicle’ unitary construction.

3.2 The SS2000 Register Race Series has eight race classes as follows;

- 0 – 1600 cc (normally aspirated)
- 1601 – 2000 cc (normally aspirated)
- Rotary Class (12A normally aspirated)
- Open Class (See Article 4).
- 0 – 1600 cc Honda Challenge
- 1601 – 2000 cc Honda Challenge
- Open Class Honda Challenge

3.3 **Class Eligibility:**

(1) 0-1600cc Class, 1601-2000cc Class and Rotary Class

- Any normally aspirated engine up to a maximum capacity of 2000cc

(2) Open Class (vehicles utilising any of the following)

- Four Stroke engines to a maximum size of 2000cc and fitted with a single turbo.
- Vehicles with four wheel drive.
- Vehicles with four wheel steering.
- Vehicles with anti-lock / pulsed braking systems.
- 13B normally aspirated.

Note 1: Includes a rotary equivalence factor of 1.8

Note 2: Turbo rotary engine vehicles will not be eligible.

3.4 **Honda Challenge:** All Honda vehicles only, built since 1988 and shall remain Honda powered. Vehicles shall be prepared in accordance with the SS2000 Technical Regulations except where specifically altered for Honda Challenge vehicles.

4.0 RACE WEIGHTS

4.1 Competing vehicles shall respect their minimum racing weight at all times during the competition. The racing weight is the complete weight of the vehicle in ‘race trim’. This may be measured at any time, upon the directive of the Series Scrutineer or his designated assistant, during the Meeting, on the official weigh scales of the Meeting.

4.2 The minimum race weights are as follows:

(1) Normally Aspirated Four-Stroke Engines:

- 2 valve per cylinder engines = engine capacity x 0.40
e.g. 2v 1300cc = 520kg; 2v 1600cc = 640kg; 2v 2000cc = 800kg
- 3+ valves per cylinder engines = engine capacity x 0.45
e.g. 4v 1300cc = 585kg; 4v 1600cc = 720kg; 4v 2000cc = 900kg

(2) 12A Rotary Engines:

- For Rotary engines: 12A pp rotaries = 1050 kg
- 12A Pro 7 Series I & 11 rotaries = 1000kg

(3) Open Class:

- 0-1850cc = 980kg
- 1851-2000cc = 1180kg
- 13B non-turbo rotaries = 1180kg
- Pro 7 Series IV & V = 1075kg

(4) Honda Challenge:

- (a) **0-1600cc and 1601-2000cc Classes:** As per Article 5.2(1) above, for vehicles using DOT rated tyres. An additional 50kg weight penalty shall be applied if using racing slick tyres.
- (b) **Open Class:**
- (i) **Forced Induction:** As per Article 5.2(3) above if forced induction or turbocharged vehicles using DOT rated tyres.
- (ii) **Naturally aspirated:** As per Article 5.2(1) above for vehicles using DOT rated tyres. Naturally aspirated Open Class vehicles using racing slick tyres shall have an additional 50kg weight penalty applied.

5.0 SAFETY EQUIPMENT REQUIREMENTS

5.1 The following safety equipment **shall** be fitted to the competing vehicle in full compliance with Schedule A requirements;

5.1.1 A safety cage (rollcage), and

5.1.2 A competition seat offset from the centre-line of the vehicle, and

5.1.3 A safety harness, and

5.1.4 A fire extinguisher.

6.0 BODYSHELL, VEHICLE EXTERIOR and SUB-FRAMES

6.1 Bodywork may be manufactured from lightweight materials.

- 6.2** The vehicles side profile shall remain Standard with the exception of the front spoiler, rear spoiler, side skirts and wing.
- 6.3** An air opening that is directly above the engine intake system (carburettor/s, or injection etc) may be fitted to the engine cover provided it is no more than 100mm above the Standard panel.
- 6.4** Front and rear spoilers/wings are permitted. Front spoilers may include the front bumper. Front spoiler under trays are authorised and may extend back to the front suspension crossmember (in line with the front axle centre-line). This is the only form of under tray authorised.
- 6.4.1** **Rear undertrays** are permitted, providing it does not extend further forward than the rear axle centre line and no more than 50mm beyond the vehicles rearmost body panel. This undertray may not extend laterally past the maximum bodysheel width measured on the rear axle centre-line
- 6.5** Wheel arch flares not exceeding 125mm width per side overall may be fitted. The measurement is to be taken from the outermost point of the Standard mudguard. These wheel arch flares may be flared into doors provided they do not cover more than 50% of the door skin.
- 6.6** Side skirt panels may be fitted but must not extend higher than the bottom of the door openings or lower than the bottom of the doorsills. This does not include chassis rails if they extend lower than the doorsills. The use of under trays, except as allowed in Article 7.4 and Article 7.4.1, fairings or other aids to aerodynamic form are not permitted.
- 6.7** All Non Standard parts able to be easily removed from the front and rear of the vehicle, excepting glass, must have the same dimensions as Standard.
- 6.8** Vehicles with a Standard transverse engine orientation may be changed to longitudinal or visa versa.
- 6.9** Ducting for the purpose of the flow of cooling air for brakes and radiators is free, provided that such ducting does not alter the profile of the vehicle and further providing that such ducting does not directly or indirectly assist or improve aerodynamic or ground effects. Ducting of radiator air through an opening/hole in the bonnet is permitted
- 6.10** Windows are free provided Schedule A compliance is maintained.
- 6.11** **Honda challenge** vehicles must comply with the following:
- (1) 0-1600cc and 1601-2000cc Classes;**
 - No wheel arch flares, and
 - Laminated Glass front screen.
 - (2) Open Class;**
 - Wheel arch flares are permitted as specified in Article 7.5 above, and
 - Laminated Glass front screen.

7.0 VEHICLE INTERIOR

- 7.1** All interior fittings are free provided compliance with Schedule A is maintained.

8.0 CHASSIS

8.1 SS2000 vehicles must use an approved Stock Unibody chassis, which may be modified provided that no Space Frame is used in its construction, other than a rollcage complying with Schedule A. This assembly / structure consists of at least the following sheet steel pressings welded together in their Standard position;

- door pillars,
- sills,
- front and rear inner guards.

8.1.1 Inner Guards may only be altered to cater for permitted suspension modifications.

8.1.2 Chassis rails and floor pan must remain in sheet steel but can be modified or moved a maximum of 100mm.

8.2 The floor pan rearward of the front of the rear seat can be removed and/or replaced with a different material.

8.3 The chassis rails rearward of the rear axle centre line may be removed.

8.4 The gearbox tunnel/cover may be modified.

8.5 Front firewall may be moved provided one of the following criteria is satisfied:

- (1) The firewall may be moved up to 305 mm from its Standard position with the engine remaining on the same side of the firewall as Standard, or
- (2) The engine may be set back so that the forward most engine spark plug is up to 5% of the overall wheelbase behind a line drawn through the front axle line.

Note: *In the case of rear engine cars, the opposite applies.*

8.6 **Honda Challenge:** vehicles must comply with the following;

- **0-1600cc and 1601-2000cc Classes;** the engine must be in the standard position.
- **Open Class;** the engine may be in a non-standard position.

9.0 ENGINE SPECIFICATIONS

9.1 **Engine - Four-Stroke Engines:**

9.1.1 **Type and Manufacturer:** Free, as are the ancillary engine components.

9.1.2 **Cylinder Block:** The block is free, provided that it remains a Standard unit. The block may be re-bored to a maximum of 4% over the vehicle category capacity.

9.1.3 **Cylinder Head:** The head/s are free provided they remain a Standard unit/s.

9.1.4 The engine placement shall remain, as per Standard, either forward of the Vehicles wheelbase centre line or rearward of the vehicles wheelbase centre line.

9.1.5 **Exhaust System:** The Exhaust system is free

9.2 Engine – 12a Rotary Engines:

9.2.1 The engine end, centre and rotor housings must remain factory Mazda original parts; modification and all other internal engine components are free.

Note: *An equivalence factor of 1.8 shall be applied to all rotary engines.*

9.2.2 **Lubrication system:** is free provided that a catch tank in compliance with Schedule A is installed.

9.2.3 **Cooling system:** is free provided compliance with Schedule A is maintained.

9.2.4 **Exhaust system:** is free, respecting the provisions of Schedule A.

10.0 ENGINE FORCED INDUCTION

10.1 **Turbocharged Cars:** Shall respect a maximum boost pressure of 16 PSI at any time during competition. The NZ SS2000 Register data-monitor system, or any other device, may be utilised by the Series Scrutineer at any time to record the Boost pressure for compliance purposes.

10.2 A connection port supplied by the Register may be required to be fitted to the intake tract between the throttle plate/s and intake manifold. This will be at least 50 mm downstream of the throttle plate/s, for the purpose of fitting boost level monitoring equipment.

10.3 At the conclusion of any official qualifying practice and/or races the vehicle may be requested to be placed in Parc Fermé for the purpose of reading boost level monitoring equipment. If any Competitor is found to have exceeded the maximum allowable boost during any official qualifying practice and/or races, the Series Scrutineer will lodge a technical breach report with the Clerk of the Course.

11.0 FUEL SYSTEM

11.1 Four-Stroke Engines:

11.1.1 **Fuel and air systems for four stroke engines:** all modifications are free, providing compliance with Schedule A is maintained.

11.2 12a Rotary Engines:

11.2.1 Fuel and air systems for 12a rotary engines:

The carburettors or fuel injection permitted are as follows:

- (1) 1 x twin choke carburettor or fuel injection throttle body with a maximum throttle bore of 48.0 mm id and a maximum choke bore of 40.0 mm id; or
- (2) 1 x Nikki 4-barrel carburettor or fuel injection throttle body as fitted to the production car with a maximum primary choke bore of 26.6 mm id and a maximum secondary choke bore of 32.0 mm id.

All other carburettor modifications are free, including the manifolds.

12.0 TRANSMISSION

- 12.1 The transmission is free, provided that a working clutch and gearbox assembly, having a minimum of two forward and one reverse gear, is maintained. The placement shall remain, as per Standard manufacture, either forward of the vehicles wheelbase centre line or rearward of the vehicles wheelbase centre line.
- 12.2 Changes to the final drive are not permitted via the cockpit.
- 12.3 **Honda Challenge;**
- Transmissions ratios may be altered by substituting OEM style Honda parts. Dog gears and sequential shifters are excluded.
 - Transmission casing must remain stock.
 - Any final drive ratio may be used provided it fits inside the stock differential housing.
 - Any LSD is permitted.

13.0 ELECTRICAL SYSTEM

- 13.1 Free, provided that two operational rear brake lights are installed in their Standard locations and compliance with Schedule A is maintained.
- 13.1.1 Additionally, all competing vehicles shall be fitted with a fully operational additional rear LED high stop brake light. This shall be centre mounted at the top of the rear window or in such a position so as to be clearly visible from the rear.
- 13.2 **Honda Challenge: ECUs** are free, including the use of additional controllers and / or "piggybacks".

14.0 SUSPENSION

- 14.1 Free in compliance with Schedule A and providing the overall wheelbase may not be increased by more than 4% from the Standard vehicle specification.

15.0 BRAKING SYSTEM

- 15.1 Free provided compliance with Schedule A is maintained.

16.0 STEERING

- 16.1 Free provided compliance with Schedule A is maintained.

17.0 ROAD WHEELS and TYRES

- 17.1 The maximum wheel and tyre combination width shall be 292mm (11.5 inches). The maximum width shall be measured with the wheel / tyre assembly mounted on the vehicle whilst in race trim.
- 17.2 Open Class vehicles are restricted to DOT approved road tyres to a maximum width of 255mm.
- 17.3 The maximum wheel rim (bead) diameter size is free for all classes.



17.4 In accordance with Schedule A, DOT approved road tyres must have a minimum tread groove depth of 1.5mm as defined by the manufacturer's tread depth indicators within all grooves around the entire circumference of the tyres road contact surface.

17.5 Honda Challenge;

- (1) Front wheel drive wheel rim size maximum is 17" x 8".
- (2) Rear wheel drive wheel rim size maximum is 17" x 9.5".
- (3) **Tyres:** DOT Approved. Weight penalty for slicks additional 50kg.

