SCHEDULE M

NEXEN Tyre Mazda Racing Series New Zealand

TECHNICAL REGULATIONS
2025-2026

Incorporating Schedules RX©, P7P©, and RX8©

PREAMBLE

In the spirit of the Regulations, competitors and constructors are expected to assist in maintaining the cost of Mazda racing within reasonable bounds. To ensure that the total emphasis of the Class is on developing Driver skill by creating an environment which focuses on the importance of chassis tuning and race craft as opposed to technical advantage.

'Pro 7 Plus' is designed to provide a more technical formula than the Pro7 Series One car while still maintaining one make production car derived racing within a reasonable budget The New Zealand Mazda Racing Series has an express desire to be in harmony with the MotorSport New Zealand 2015 blueprint. Pro7 Plus is considered an important part of maintaining the fleet age criteria contained therein.

RX8 was a new Schedule introduced from the 2013/2014 season designed to allow for the future progression of the Class using the same philosophy and ideals as Pro7 racing has maintained. The core ideals of RX8 racing are low entry costs and minimal and regulated modifications designed to place the emphasis on Driver skill above financial advantage. RX8 racing under the Pro7 umbrella is expected to be developed over time to achieve parity with the Pro7 Plus cars.

COMPETITOR RECORD OF AMENDMENTS ISSUED TO THIS SCHEDULE

Use this table to keep a record of all official 'Amendments' issued during the season relative to this Schedule;

Amendment Number	Issue/Effective Date	Regulation Reference	Subject/Notes
T001	19 12 2025	Art D11.8	Second option for ABS bypass

CONTENTS

PART A
General Conditions applicable to all Classes

A1.0 GENERAL INFORMATION RELATIVE TO THIS SCHEDULE

A1.1 All text changes from the previous issue of this Schedule are highlighted such. Text changes for grammatical and/or formatting reasons are not highlighted.

A1.2 Any modifications or additions to the originally manufactured standard production vehicle, or any parts thereof that are not specifically defined hereinafter by these regulations, or subsequent MotorSport New Zealand documents amending these regulations, are strictly prohibited and will render a vehicle ineligible.

The only work that may be carried out on the vehicle is that necessary for its normal servicing, or for the replacement of parts worn through use or accident, solely using parts allowed for under this Schedule.

A1.3 These Regulations shall be interpreted on the basis that if a modification is not specifically permitted, then it is not allowed. The limits of the permitted modifications are specified herein after.

A1.4 All vehicles competing in Events to which these Regulations apply shall have a valid MotorSport New Zealand logbook.

A1.5 **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 Competitor's 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 New Zealand Technical Manager:

A1.5.1 All enquiries should detail the article in question and the specific subject matter.

A1.5.2 A written reply will always be given to a written enquiry.

A1.5.3 On matters of technical eligibility and/or safety compliance, a verbal statement will have no validity.

A2.0 DEFINITIONS

A2.1 Definition of terms used within this Schedule shall be referenced from the National Sporting Code, Appendix Two Schedule A and as detailed below:

'Aftermarket part' means any readily available over the counter part that can be fitted without modification beyond that required to ensure that it complies with the specification of the original part it replaces.

'Control Part' means parts that are fully controlled in respect to their specification and application. No modification is authorised to a Control Part unless it is specifically within these Technical Regulations. All Control Parts shall be supplied by the New Zealand Mazda Racing Series Inc. appointed Control Part supplier, as detailed in these Technical Regulations.

‘Direct replacement’ means a component sourced from another similar Mazda model which is identical in level of; duty, function, and design to the component it replaces and can be fitted without making any additional modifications to the component or any other part.

‘General Parts Reference Catalogue’ means the official Mazda publication adopted to determine part/component intended for use under these regulations.

‘Historic’ means Series 1 RX7 cars,

‘Modification’ means any change authorised within this technical eligibility Schedule.

‘Normal Servicing’ means work performed whereby systems and/or parts of the race car are restored to their same working order and to the same standard as when the system and/or parts were new.

‘original’ means the Manufacturer specification, as supplied when new and without modification in accordance with the reference parts manual.

‘Race-trim’ means the condition in which the car competes and shall include all fluids and the driver and any safety apparel.

‘Repair’ means any servicing carried out to restore, recondition or otherwise maintain any part that was worn or ceased to be efficient.

‘RX7 Plus’ and **‘P7P’** means Series 4 FC3S and Series 6 FD3S model RX7 cars.

‘RX8’ means Mazda RX8 Cars complying with the Type S Series 1 specification.

‘Service item’ means consumable parts such as drive belts, oil filter, air cleaner elements, fluids etc.

‘Standard’ means the component parts as originally fitted to the make/model represented, by the original Manufacturer at the time of initial sale.

‘Undertray” means a device fitted under the vehicle that can play a role in the vehicle’s aerodynamics.

‘Cross Drilling’ means a hole or recess in the friction surface of the Brake Disc that continues through the entire thickness of the material.

‘Scraper Groove’ means a machined groove applied to the friction surface of the Brake Disc that has a measurable depth throughout its length.

‘Gas Relief’ means any machined groove or indentation in the Brake Disc friction surface that has a measurable depth throughout and does not continue through the entire thickness of the material.

A3.0 ELIGIBLE VEHICLES

A3.1 **Eligible Vehicles:** Authorised to take part in competitions under these Regulations shall be Mazda RX7 or Mazda RX8 vehicles as follows:

(1) **Schedule RX:** Mazda RX7 Series 1 cars only, with the following chassis/body manufacture model numbers:

- SA22C numbers 100001 to 650000.

(2) **Mazda RX7** Turbo FC3S Series 4 and FD3S Series 6 Cars as catalogued and specified by the designated reference manual and;

(a) Excluding any limited production special purpose models such as Homologation models or special market unique versions.

(b) Turbo chargers and associated plumbing and relative fittings shall be removed.

(c) Parts from evolved models of the original series including body shells are permitted provided they are identical to those in the General Parts Reference Catalogue relative to the original model.

(d) Unless otherwise stated in these rules, Series 4 parts are not eligible to be fitted to a Series 6 and Series 6 parts are not eligible to be fitted to Series 4.

(3) **Schedule RX8:** All Production Type S Mazda RX8 cars shall be eligible, excluding any limited production special purpose models such as homologation models or special market unique versions. This specifically excludes the Sprint R and Mazdaspeed versions with 19" wheels.

(a) Parts from 6-speed vehicles may be used providing they are Factory original specification. Direct replacement parts from other Series 1 RX8's may also be used and only specifically noted parts from Series 2 RX8's may be used.

A3.2 Bodywork shall remain original apart from permitted modifications and/or additions as detailed herein after.

A3.3 Left-hand drive vehicles and/or parts from left-hand drive vehicles are forbidden, unless specifically authorised hereinafter.

A3.4 Only parts and components manufactured for Series Production vehicles are deemed acceptable. Unless specifically noted, 'competition' parts whether they are a Mazda part or an aftermarket part, are strictly prohibited.

A4.0 GENERAL CONDITIONS

A4.1 **Control Parts:** being parts that are fully controlled in respect of their specification and application; these parts can only be sourced from the listed suppliers unless no specific supplier is stated in which case the supplier is free but not the stated specification of the part. Any modification of a Control Part is prohibited unless stated in these articles.

A4.2 **Materials prohibited:** The use of Titanium, and Magnesium, is prohibited unless Mazda used these materials in the original parts. The use of these materials as a minority part of any alloy is permitted. The use of Asbestos is prohibited.

A4.3 **Painting/coatings/abrasives:** No substitute painting or coatings are permitted on parts that are associated with the motor or transmission except if identical in composition to that originally used on the component when new. The use of abrasive finishers or die grinders is not permitted to reclaim fouled components.

A4.4 **Parts eligibility:** Where there is doubt as to the eligibility of any component the part shall be compared with the original part in the General Parts Reference Catalogue, and unless otherwise specified this shall be the only part eligible.

A4.5 **Parts eligibility responsibility:** It shall at all times remain the Competitor's responsibility to prove eligibility.

A4.6 **Superseded parts:** No part that is superseded by another part from any supplier including Mazda shall be automatically eligible, unless otherwise specified.

A4.7 **Component description:** Where interpretation of a component description is required, the official Mazda workshop/parts publications shall be used as follows:

- Series 6 Reference: Mazda Parts catalogue #efini RX-7 1993
- Series 4 Reference: 1985 Mazda Japanese turbo RX7 Parts Manual Reference #AJFA 01
- RX8 Reference: RX8 parts manual reference ABFA07.

A4.8 **Deleted components:** Where permission has been given to delete specific items from the vehicle, permission is also given to block, blank, fill, or plug the corresponding component to enable it to function in its new specification.

A4.9 **Telemetry:** Unless specifically allowed all forms of data transmission or telemetry are expressly forbidden. In-car lap timers are permitted for Pro 7 Plus, RX8 Class and Pro 7 (Series 1) cars. For all classes, track supplied lap timing transponders are permitted and must be fitted when required to be.

A4.9.1 **Two Way Radio:** Two-way radios are authorised for use, the sole purpose of which is to provide voice communication between the driver of the vehicle and the crew. This device must not be capable of any other function other than voice communication.

A4.9.2 **Radio Receiver:** A radio receiver may be securely attached either on the Competitor or inside the vehicle cockpit for race control instruction where required.

A5.0 OFFICIAL SEALS

A5.1 Provision for fitment of official seals: All vehicles shall have provision for wire seals to be affixed to the following bolts. Accordingly, a 2.5mm hole shall be pre-drilled in readily accessible positions in such a manner that the relevant part cannot be removed without breaking the affixed seal.

(1) Inlet manifold and RX8 Engine: two front bolts that are used to bolt the inlet manifold to the engine may be sealed in such a manner that neither the inlet manifold nor the adapter plates can be removed without breaking the seal as per Diagram 5.1.1 below.

(2) RX7 Plus and Historic Engine "through bolts" beneath flywheel inspection plate: two top bolts.

(3) Gearbox side: two adjoining bolts.

(4) Final drive assembly: two adjoining bolts as per Diagram A5.1.4 below.

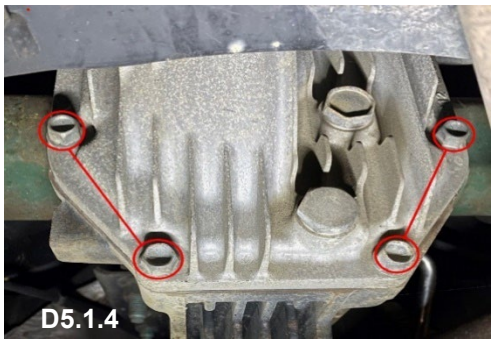
(5) For RX7 Plus: the throttle body and the inlet manifold shall have holes drilled in such a position that they cannot be separated without the seal being broken.

A5.2 All vehicles may have seals fitted on the inlet manifold, engine, gearbox and final drive head at any time during the season at the discretion of the Series Scrutineer.

A5.3 **Removal of official seals:** Official ('C' Type) seals shall not be tampered with, broken or removed during the Series or within 30 days after the final Round of the Series, unless written permission is obtained from the Series Scrutineer. Any sealed component removed from the vehicle shall be immediately forfeited to the Series Scrutineer/Coordinator upon request. Prior to competing in any Race, or official Qualifying of the Series, all Competitors shall present their cars to the Series Scrutineer, where seals are not fitted in accordance with Article 5.1 above.

Note: For additional information on official seals refer to Appendix Two, Schedule A, Part One, Article 3.7 of the current MotorSport New Zealand Manual.

D5.1.1


D5.1.4

A6.0 RACE WEIGHTS

A6.1 All vehicles shall respect their minimum racing weight at all times during the competition.

A6.2 The racing weight may be measured at any time during the Qualifying sessions and/or Races, on the official scales of the Event/Meeting.

A6.3 The official scales of the Meeting will be advised at each Round of the Series on the Official Notice Board.

A6.4 Minimum racing weights shall respect the following;

- Schedule RX: 1025kg
- Schedule P7P: 1125kg
- Schedule RX8: 1250kg

A6.5 The racing weight is the weight of the vehicle, in Race trim, at the time of weighing.

A6.6 Any ballast required to respect the minimum racing weight shall be firmly bolted exclusively in the cockpit either side of the transmission tunnel, between the firewall and the step behind the front seats and in compliance with Schedule A.

A7.0 SAFETY EQUIPMENT REQUIREMENTS

A7.1 The following safety equipment shall be fitted to the competing car:

A7.1.1 A safety cage shall be installed, in full compliance with Schedule A requirements.

Note: Additional roll protection requirements are detailed in individual Schedules RX, P7P and RX8.

A7.1.2 A competition seat, a safety harness, and a fire extinguisher shall be installed, in full compliance with Schedule A.

A7.1.3 An effective windscreen demister shall be fitted.

A7.2 A window net is highly recommended.

A7.3 Towing eyes must conform to Schedule A and be within the perimeter of the vehicle as viewed from above.

A8.0 FUEL

A8.1 The only fuel that shall be used at any Round of the Series is:

(1) **Schedule RX:** Unleaded 91 Octane (RON) petrol as commercially available from retail service station forecourt pumps throughout New Zealand and comply with the Fuel Specification Chart detailed in Schedule A Part 2 of the current MotorSport New Zealand Manual.

(2) **Schedule P7P**: Unleaded 91 octane (RON), Unleaded 95 octane (RON), Unleaded 98 octane (RON premium or E10 98 octane (10% Ethanol blend) petrol as commercially available from retail service station forecourt pumps throughout New Zealand and comply with the Fuel Specification Chart detailed in Schedule A Part 2 of the current Motorsport New Zealand Manual.

(3) **Schedule RX8 Cars:** Unleaded 95 Octane (RON), or Unleaded 98 Octane (RON premium), E10 98 Octane (10% Ethanol blend) petrol as commercially available from retail service station forecourt pumps throughout New Zealand and comply with the Fuel Specification Chart detailed in Schedule A Part 2 of the current MotorSport New Zealand Manual.

A8.2 All Competitors upon entering the Series agree to fuel samples being taken for compliance purposes.

A8.3 Additives: The addition of two-stroke lubrication oil is the only additive permitted.

A9.0 TYRES

A9.1 Only such tyres as specified by the Club from time to time may be used. The tyres authorised for each Class in the Series are detailed within the appropriate section of these regulations.

A9.2 The following tyre modifications/treatments are specifically prohibited:

- Hand cut tread grooves, and
- Tyre warmers, chemical treatments or any means to artificially enhance tyre performance.

END PART A

Part B
Schedule RX
Technical Regulations applicable to Series 1 Cars

B1.0 SAFETY EQUIPMENT REQUIREMENTS

B1.1 Roll protection shall be installed in accordance with Schedule A. It shall be contained entirely between the front and rear axle centrelines unless the design and construction pre-date this Schedule A requirement and MotorSport New Zealand have approved the design in Homologation as being acceptable. Additionally, where a door is lightened in any way, a side intrusion bar shall be incorporated into the design.

B1.2 Both front roll bar legs may have a single bar added longitudinally to the corresponding strut-tower provided they pass through the original wiring loom holes which may be sealed using plates measuring no more than 120mm x 90mm x 3mm thick.

B2.0 BODYSHELL AND VEHICLE EXTERIOR

B2.1 All **bodywork** including any subsequent race day damage shall be presented to a tradesman standard at the start of each Round of the Series.

B2.2 **Door mirrors** shall be fitted to both sides. **Guard mirrors** shall be removed.

B2.3 A Pro7 Control Part **front spoiler** from one of the following suppliers shall be used;

- Foxton Reinforced Plastics
- Rotorua Fibreglass Industries
- RX7 RONZ (STH ISL CLUB)

(1) A maximum of two straps, not exceeding 25mm in width, may be fitted solely to support the spoiler lower lip.

(2) Mounting of the spoiler is free.

(3) Air splitters are prohibited but a flat undertray may be attached to the underside of the spoiler to no more than 50mm from the leading edge of the forward lip of the front spoiler and to the forward lip of the engine cross member. A flat undertray is defined as a cut piece of metal or similar material that when removed must lay flat, however may have a curve when fitted, due to oil cooler size and spoiler position. The sole purpose of the undertray is that of directing air through the radiator and oil cooler. Maximum allowable width at any point of such undertray is 800mm.

(4) Repairs to and strengthening of the front spoiler using non-metallic matting and resin is permitted providing it is done on the inside surface and retains the original shape and appearance. No moulding returns are allowable on the front spoiler moulding.

(5) It may be painted.

B2.4 A Pro7 Control Part **rear spoiler** from one of the following suppliers shall be used;

- Foxton Reinforced Plastics
- McStripes and Signs

(1) Mounting of the spoiler is free.

(2) It may be painted.

B2.5 **Wheel arch**: To prevent the tyre rubbing and without altering the external shape of the guards, the wheel arch inner lip edges may be folded or removed in order to clear the tyre.

B2.6 **Guard flares** shall be fitted and must follow the wheel arch contour.

B2.7 Removal of the following parts is permitted:

- Body side mouldings (dent protector strips)
- Wheel arch inner plastic linings (spray protectors)
- Lower radiator plastic grille (in front valance)
- Indicator lamps fitted to the front guard and rear number plate lamps provided the holes are then covered with a solid panel
- Body underseal
- External door locks
- All unused fittings and brackets.

B2.8 **Fibreglass replica parts** may substitute the following items providing they are identical in size, shape and appearance to the part they replace:

- Rear bumpers including end caps
- Front guards
- Front centre panel and headlamp covers
- Lower front panel
- Left and right-side doors.

B2.9 The following parts from Series 2 and Series 3, Model SA22c Mazda RX7's may be used:

- Front guards
- Front centre panel and headlamp covers
- Windscreen/wiper scuttle panel
- Bonnet
- Doors
- Rear bumper
- Tail lamps/lenses provided they are used as matching pairs and any bodywork is limited solely for fitment.

B2.10 **Bonnet pins** must be fitted to the rear corners (opening end) of the bonnet and the original catch and mechanism must be removed.

B2.11 **Sunroof**: If fitted, a metal sunroof must remain closed during competition. Glass sunroofs must be removed, and the hole filled using a metal panel and sealed.

B2.12 **Jacking points**: A maximum of three(3) jacking points per side may be inserted into the door sills by way of a simple tube secured by rectangular or round fixing plates welded to both inner and outer surfaces of the sills. The modification may only be for the purpose of jacking the vehicle and shall not directly connect to the safety cage or increase the structural integrity of the vehicle.

B2.13 The **windscreen** shall be of laminated construction.

B2.14 **Door glass**: Both may be substituted for a plastic material, clear and free of scratching, provided they fit within the original frame. Holes or scoops may be added for the purpose of venting. The window winder mechanisms may be removed.

B3.0 VEHICLE INTERIOR

B3.1 With the exception of the dashboard assembly, all **interior trim** may be removed. All sharp edges must be covered.

B3.2 The **dashboard** with glove box lid must remain in place and may be modified for the fitment of roll protection. The dashboard facia and glovebox lid may be substituted for a fibreglass replica. The centre square vents may be removed provided the holes are covered with solid panels.

B3.3 **Instruments** and **switches** including recall tachometers are free.

B3.4 An internal **rear-view mirror** shall be fitted.

B3.5 The **steering lock** assembly shall be removed. A replacement **steering wheel** is permitted.

B3.5.1 At all times no part of the steering wheel may protrude more than 100mm from the end of the original steering column shaft when measured in the same plane as the end of the original steering wheel.

B3.6 The **Driver's seat** shall be replaced with a competition seat. The floor may be modified at the Driver's side of the transmission tunnel provided it becomes no lower than the chassis rail.

Note: NZMRS highly recommends that a 'winged' competition seat with wraparound integral head restraint be fitted.

B3.7 **Pedal pads/heel plate**: Anti-slip pads may be fitted over each pedal and a heel plate added beneath the pedals.

B3.8 **Throttle stop**: An additional stop may be fitted under the accelerator pedal.

B3.9 **Cockpit sealing**: All parts of the fuel system shall be isolated from the Cockpit, in particular the two holes on the left-hand side of the luggage area, adjacent to the filler pipe.

B3.10 The **spare wheel and tools** shall be removed.

B4.0 ENGINE SPECIFICATIONS

B4.1 The **12A rotary engine** (Wankel type RE), as fitted to Series 1 Mazda RX7 Model SA22C, shall be used. In-line two rotor, enclosed in housings.

B4.1.1 **Front and rear rotor housings** shall be:

(a) Either 14mm or 18mm or 20mm exhaust ports. The 20mm exhaust port housing shall be Mazda Part No. N210, or

(b) New or used 13B housings from:

- RX7 Series 4 Turbo, Mazda Part No. front N332-10B10 and rear N332-10B50B, or
- RX7 Series 5 Turbo, Mazda Part No. front N318-10B10A and rear N318-10B50C

The 13B housings detailed above are permitted to be modified by way of machining down both side faces of the housing to the same width as the 12A Part No. N210 housing, 70mm +0.05mm to -010mm. O-ring grooves may be machined into the side faces of the modified housings for the sole purpose of installing water seals and oil O-rings between the housing and the side plates. Spark plug ledges may be removed. Welding across the top on each side of the housing from the Mazda label to the point where the intake manifold mounts up is allowed for the sole purpose of supporting the machining of the water seal groove. No other parts of the housing are allowed to be welded. Cosmo housings are not permitted.

B4.1.2 **Front and rear end plates/housings** shall be standard Mazda housings featuring a small/standard timed/inlet port with inlet track dimensions complying with Diagram 10.1D as provided Diagram 4.1D below. Compliance with the timed/inlet port specification shall be by the Class's port template gauge. The use of Mazda housing Part No.'s N201-10-300A, 8981-10-200B or similar 'wide' inlet track housings, or any 'tall port' housing is strictly prohibited. O-ring grooves may be machined into the faces of the plates/housings for the sole purpose of installing water seals and oil O-rings between the end plates and rotor housings when 13B rotor housings are used.

B4.1.3 **Centre plate/housing** shall be a standard Mazda housing featuring a small/standard timed/inlet port with inlet track dimensions complying with Diagram 4.1D as provided Diagram 4.1D below. Compliance with the timed/inlet port specification shall be by the Class's port template gauge. Note the use of Mazda housing Part No. 8341-10-400 or similar tall port housings is strictly prohibited. O-ring grooves may be machined into the faces of the plate/housing for the sole purpose of installing water seals and oil O-rings between the rotor housing and the centre plate / housing when 13B rotor housings are used.

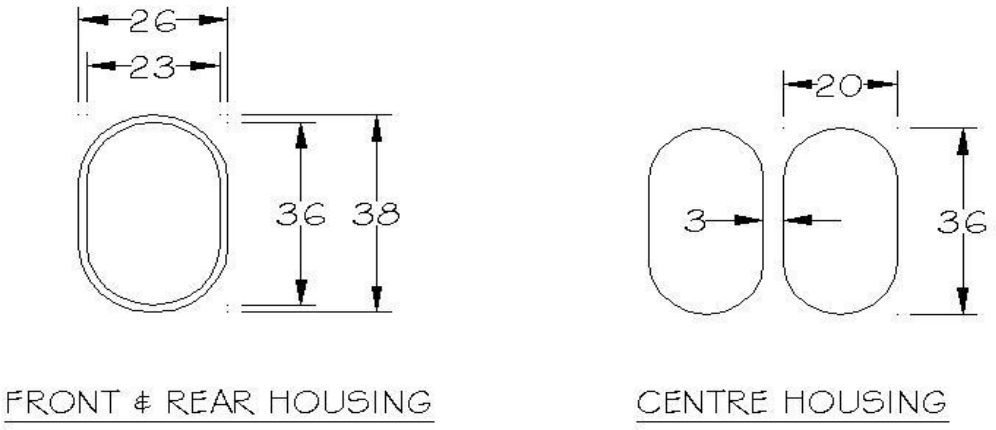


Diagram 4.1D: Front, rear and centre housing inlet track, nominal dimensions in millimetres. The dimension 26mm to 23mm and 38mm to 36mm alludes to the chamfer that exists in the inlet track at the manifold side of the housings.

B4.1.4 **Front, rear and centre plate**/housing sealing faces may be reclaimed. All housings are to be as manufactured and any form of modification is prohibited, including grinding, polishing, bead blasting, spark eroding, etching etc.

B4.2 **Rotor apex seals**, corner seals, side seals, associated springs, O-rings and gaskets are free provided no special machining to allow installation is required. The use of Ceramic Apex seals is prohibited.

B4.3.1 **Rotor housing exhaust ports**: The exhaust inserts may be removed and the smaller (emission) exhaust ports may be plugged. Exhaust inserts if utilised must be the standard Mazda RX7 Series 1 inserts, the emission holes may be plugged on 12A housings. Exhaust inserts must be used on modified 13B housings and must be the Mazda Factory exhaust insert for that housing. The exhaust inserts on 12A housings if opened up in accordance with Article B4.3.2 must be the Factory standard Series 4 and Series 5 inserts and may be used. It is allowable to machine down the outer ring to suit fitment to the 12A housing.

B4.3.2 It is permissible to open 12A exhaust ports no larger than Factory standard 13B Series 4 and Series 5 exhaust ports as per Diagram 4.3E:

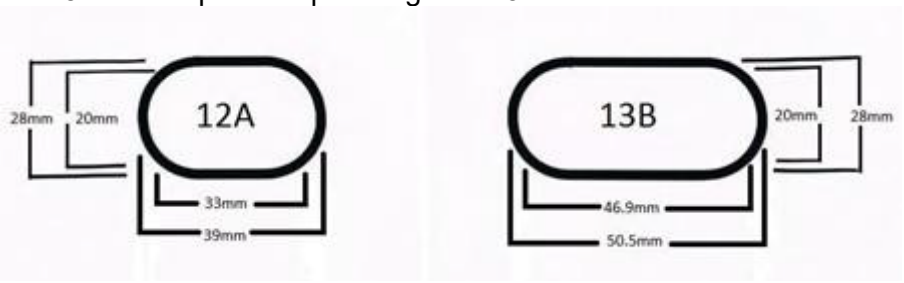


Diagram 4.3E: 12A and 13B exhaust ports, nominal dimensions in millimetres. The dimension 33mm to 39mm, 20mm to 28mm, and 46.9mm to 50.5mm show the chamfer that exists from the apex seal sealing surface face in the housing to the aperture before stainless steel exhaust sleeve, which is to be no deeper than 2mm. NIMRRA template is available.

B4.4 **Oil injection pump** and attachments may be removed and replaced with a blanking device.

B4.5 The Standard **oil pump** may be substituted with a 12A RX7 high-volume competition oil pump or an original RX-7 13B-oil pump.

B4.6 **Flywheel and adapted counterweight** is free provided that it is of steel or cast-iron material.

B4.7 The **clutch** shall be of a single plate diaphragm type. Make and lining material are free, provided no modification to any associated parts, other than the flywheel, is required.

B4.7.1 The outside diameter of the clutch plate shall be 218mm (+ or – 5mm). Pressure plate is free provided that it is entirely of steel or cast-iron material.

B4.8 **Balancing** of the flywheel, clutch assembly, and rotors is permitted provided material is not added. Minimum rotor weight including bearing and inner gear shall be 4580gm per rotor. Balancing of the counterweights by the addition of material is permitted provided that such work is accomplished only on the outer balance web of the counterweight.

Note: It is considered unsafe to remove excess material from the clutch pressure plate.

B4.9 **Drive pulleys**: Vee-belt pulleys are free. Multi rib (PK) or conventional belts are allowable. Toothed belts and pulleys are not allowable.

B4.10 **Flexible oil hoses** may be substituted for higher specification hose provided the same length and capacity as the original hose/s is maintained (refer also Schedule A).

B4.11 The original **oil cooler** may be substituted. The substitute oil cooler must:

(1) Be fitted in the same position as the original (beneath the radiator);

(2) Be made from similar materials as the original (i.e. aluminium); and

(3) Shall not exceed 600mm long x 155mm high x 85mm deep excluding mounting brackets and hose fitting standoffs.

B4.12 **Engine mounts** must remain standard. The engine shall measure 347mm + or – 5mm from the top of the front lip of the engine cross member to the centre of the water pump pulley (assuming always that the front lip is horizontal). This measurement is taken in a vertically straight line from the centre of the water pump pulley shaft to the engine cross member front upper lip surface.

B4.13 The **exhaust** system from the exit of the engine exhaust ports is free, provided compliance with Schedule A is maintained.

B5.0 ENGINE INDUCTION

B5.1 The **cold air box** and the filter type is free. A single pipe of not more than 104mm ID for ducting cold air to the air box, may protrude forward of the radiator via the right-hand side radiator cowl. A hole may be cut in the right-hand side radiator cowling for the sole purpose of accommodating such pipe work. It is specifically prohibited to use ice, or any other substance capable of artificially lowering the atmospheric temperature, or the induction charge by any other method.

Note: refer also to carburettor Article 5.3. At no time shall any object or fitting protrude into the intake area of the top of the carburettor other than the central shaft and nut assembly.

B5.2 **Inlet manifold** shall remain as cast. The water galleries between the manifold shall be blocked with a suitable plug. Any additional modification in any form is specifically prohibited, including painting, polishing or buffing. Only one inlet manifold gasket (manifold to engine block) may be utilised. The maximum thickness of such gasket is to be 1.5mm. Flexible-sealing materials such as RTV may be used to substitute the original gasket material.

B5.3 The original Manufacturer's Nikki **carburettor** shall be retained to which **ONLY** the following modifications may be made:

- Venturi sleeves may be machined oversize or substituted, provided that they are of aluminium material and remain the same height and external diameter as the original sleeves.
- The secondary venturi may be changed from vacuum to mechanical operation.
- The starting (choke) mechanism and attachments may be removed.
- Float bowl vent tubes may be removed, and the holes plugged. The float bowl centre vent must remain original and unaltered in any way.
- The extended support section on double and triple venturi may be removed.
- Linkages are free.
- Jets are free.
- Float levels are free.
- Anti-pollution equipment mounted to the outside of the carburettor, and which may be removed without dismantling the carburettor, may be removed. Additionally, the sprung loaded de-enrichment poppet's and springs, contained in the top air horn assembly may be removed or cut off.
- Throttle shafts must remain standard, no machining or removal of material to reduce the cross-sectional area is allowed.
- Screws, nuts, washers, gaskets, seals etc are free unless specifically noted in the rule.

- Carburettor to inlet manifold phenolic heat insulation block (fits between the carburettor throttle body and the top of the inlet manifold) must remain standard and may not be altered, machined, polished or added to in any way. A gasket may be fitted to each side of the block. Thickness of the block with a gasket fitted on each side is to be 15.2mm + or – 1mm. The exhaust shield may be removed from the block and the pollution holes may be blocked. Only one block may be fitted.

- At no time shall any object or fitting protrude into the intake area of the top of the carburettor other than the central shaft and nut assembly.

  Note: The intent of this rule is to prohibit the use of air induction devices such as trumpets/air velocity stacks that protrude into the actual carburettor.

- The Float Needle Seating Boss shall be Mazda part Number NK 567 and it shall remain standard. The Float Needle Boss hole diameter in the seat shall be no larger than 2.0mm.

B6.0 FUEL SYSTEM

B6.1 **Fuel pump**/s is free provided the mounting is outside of the cockpit. Additionally, a pressure regulator and gauge may be fitted.

B6.2 **Fuel line**/s are free, provided a total maximum of 3/8” bore size is not exceeded.

B6.3 **Fuel filters** shall be metal type units.

B6.4 The **fuel tank vent system** may be modified to prevent spillage overboard of fuel. Such modification if it encroaches inside the driver compartment must be constructed of approved materials specified in Schedule A. The fuel tank vent system may protrude up into the B-pillar provided it also complies with Schedule A.

B6.5 **Fuel chillers**, being any device or additive that reduces the normal atmospheric temperature of the day, or any device that otherwise chills the fuel, is forbidden.

Note: For the avoidance of doubt, it is specifically prohibited to add ice or any other substance capable of lowering the atmospheric temperature of the air entering the engine.

B7.0 COOLING SYSTEM

B7.1 The **radiator** may be of two or three cores, provided that the original header tanks and mounting points are retained. Aluminium core radiators are specifically prohibited.

B7.2 The **thermostat** is free and may be removed and replaced by a flow restrictor. The circulation port below the thermostat hole may be plugged.

B7.3 The **cooling fan** is free.

B8.0 TRANSMISSION, GEARBOX and DIFFERENTIAL

B8.1 **Manual gearboxes**:

- Manual gearboxes from the SA22C Series 1, 2, 3, 12A Turbo RX7 and Mazda Cosmo 12A 5-speed gearboxes as supplied by the Manufacturer with Factory gears. Parts may be interchanged between these gearboxes providing no machining is required.

- Mazda MX 5 “NA” type “M” manual 5-speed gearboxes as supplied by the Manufacturer with Factory gears are permitted under the following conditions:

B8.1.1 Ratio mixing in the gearbox is not permitted nor is the utilisation of MX5 gears in other gearboxes. Refer Article B8.1.4 to qualify the permitted ratio sets.

B8.1.2 The original chassis rear gearbox mounting point and gearbox bracket must be used, no modification is permitted.

B8.1.3 The modification of the MX5 gearbox solely for the purpose of fitting to the car is permitted by carrying out any or all of the following:

- Shortening of the MX5 input shaft by machining.
- Using a RX 7 Series 1, 2, 3, 12A turbo or Cosmo 12A Bell housing.
- Using a RX 7 Series 1, 2, 3, 12A turbo or Cosmo 12A Tail housing.
- Using a RX 7 Series 1, 2, 3, 12A turbo or Cosmo 12A clutch fork.
- The Mazda MX5 NA type M gearbox tailshaft housing, remote shifter housing and associated linkages may be used. Modifications are restricted to:
  (a) Removal of the MX5 mounting block casting.

  (b) A rear mount block shall be fabricated and attached to the tailshaft housing in the same location as the Series 3 mount block.

  (c) The original gearbox rear rubber mount assembly must be able to be fitted without modification of the gearbox crossmember (refer also Article B8.1.2).

  Note: These are Series Production gearboxes.

B8.1.4 **Gear ratios** as per the following chart are authorised:

	Series 1	Series 2	Series 3	12A Turbo	MX5
1st	3.674	3.674	3.622	3.622	3.136
2nd	2.217	2.217	2.186	2.186	1.888
3rd	1.432	1.432	1.419	1.419	1.330
4th	1.000	1.000	1.000	1.000	1.000
5th	0.852	0.852	0.858	0.791	0.814

B8.1.5 **Remote change** mechanisms may be modified, or the tunnel aperture may be modified locally solely to enable fitment.

B8.1.6 **Selector forks** may be repaired to original specification. In addition, a wear pad may be added to the centre of the fork arch to provide extra support.

B8.1.7 **Bell housing**: A scatter shield/blanket may be used for the sole purpose of preventing debris penetrating the cockpit in the case of flywheel, or clutch assembly failure provided original chassis dynamics are maintained.

B8.2 **Gear lever** length and stem shape is free, however the use of a quick shift gear lever is not permitted.

B8.3 **Final drive ratio** shall be 3.90 (43 teeth on crown wheel, 11 teeth on pinion or 39 teeth on crown wheel and 10 teeth on pinion).

B8.3.1 **Locked/limited differentials** are specifically prohibited. No rear wheel, upon being individually suspended shall fail to rotate from 10.00 o'clock to 8.00 o'clock and from 2.00 o'clock to 4.00 o'clock (in both directions) after having a 5kg weight strapped or attached to the outside circumference of the tyre tread at a position horizontal of the hub centre line. The gearbox shall be in neutral and the brakes released.

B8.3.2 **Carrier spider gear**: The locator pin may be locked or permanently fix in place.

B8.3.3 **Oil baffles** may be fitted.

B8.3.4 **Axle housing**: A Series 2 RX 7 rear axle housing assembly with Series 2 RX7 disc brakes may be used. If fitted with double row wheel bearings these may be retained provided no modification is necessary to do so.

B9.0 ELECTRICAL SYSTEM

B9.1 IGNITION SYSTEM:

B9.1.1 **Spark plugs** and **HT leads** are free but not their number.

B9.1.2 **Ignition coils**: A maximum of two(2) oil filled cylindrical units is permitted, provided they are mounted in the original position. The ballast resistors may be removed.

B9.1.3 The **ignition distributor** may be modified for timing purposes provided that the central shaft is not locked. Transistorised/electronic ignition systems are specifically prohibited.

B9.2 ELECTRICAL SYSTEM:

B9.2.1 **Wiring harness** is free.

B9.2.2 **Headlights**: The glass units and operating mechanisms may be removed provided that the original headlight cover panels are retained fixed in the original down position.

B9.2.3 The **windscreen wiper** may be removed from the left-hand side.

B9.2.4 The original type **alternator** may be replaced with an internally regulated alternator provided the unit's original function is maintained.

B9.2.5 The **battery** shall be fitted capable of starting the engine at all times. The battery shall be an automotive wet cell type. Lightweight dry cell batteries are specifically **not** authorised. The battery shall be securely mounted and have the live terminal covered.

B9.2.6 An externally mounted **circuit breaker** must be fitted in accordance with Schedule A.

B9.2.7 A Hella matrix P/N 5237 or similar style LED high stop **brake light** shall be fitted centrally to the top of the rear screen.

B9.2.8 At least one LED **rain light** must be fitted in compliance with Schedule A.

B10.0 SUSPENSION

B10.1 **Suspension location points** shall not be modified from the original Manufacturer positions.

B10.2 **Rubber bushing** may be substituted for solid or Nolathane/Urethane material. The exception is the moulding rubber bushing contained in the Front Suspension upper shock mount Top Hat plates (refer Article B10.4).

B10.3 **Shock absorbers** shall be Control Part KYB Twin tube gas identified by the following part numbers;

- Front: 363003
- Rear: KG4644A, or
  343020, or
  553043

Note: The rears will only be available using whichever is the current part number at time of purchase, the numbers stated are international part numbers but remain the same item.

B10.4 **Coil springs** are free but not their number. The upper front spring retainer plates are free provided the replacements are non-adjustable and solely for the purpose of retaining and locating the spring. The front original Series 1 shock upper mount shall be used and shall not be modified in any way. The original lower spring mount on the strut tube may be removed and a threaded sleeve added, with suitable adjustable platforms for the spring location.

B10.5 **Sway bars (anti roll bars)**: Replacement sway bars are permitted provided they are attached using the original vehicle mounting points and no adjustment can be performed from the Cockpit.

Note: The castor-arm bracket sway bar enclosing hole may be cut open.

B10.6 **Strut brace** may be fitted connecting between the top of the front strut towers but must not attach to the vehicle bulkhead or firewall.

B10.7 **Front track control arms**: The inner end of the front track control arm may be modified to accept an adjustable (rose) joint to facilitate camber adjustment. The control arm mounting holes in the front cross-member may be enlarged to accept up to 5/8-inch bolts. The minimum distance allowed between the centres of the front track control arms is to be 610mm. The control arm mounting holes must remain on the same horizontal plane as the original holes (i.e. must not alter height of hole centre from original). No other modification of the cross-member is allowed. Left-hand and right-hand track control arms may be interchanged.

B10.8 **Bump stops** may be removed.

B10.9 **Front track width**: The front track measurement shall not exceed 1805mm. It shall be measured on the official flat pad, using the Series go/no-go gauge placed on the ground vertically in line with the hub centre against the side wall of each front tyre.

B10.10 **Rear track width**: The rear track measurement shall not exceed 1710mm. It shall be measured on the official flat pad, using the Series go/no-go gauge placed on the ground vertically in line with the hub centre against the side wall of each rear tyre.

B11.0 BRAKING SYSTEM

B11.1 **Front brake rotors** may be substituted providing they do not exceed a maximum diameter 257mm and are of ferrous material. Modification to the rotor hub to facilitate substitute rotor fitment is permitted. Scraper grooves and/or gas reliefs may be added to the rubbing surface. Cross drilling is specifically not permitted.

B11.2 **Front calipers** shall remain original. The caliper slider may be re-drilled solely to facilitate relocation of its mounting position to within a maximum of 12.5mm from the original location, to provide an increase in the rubbing surface to a maximum of 25mm. The front calliper slider may be modified to reduce or remove the segment adjacent to the wheel hub if it interferes with the installation of alternative wheel hubs. If the segment is removed, material may be welded in place of the removed segment, provided the cross-sectional area of the replacement material does not exceed that of the original segment.

B11.3 **Front brake backing/protection plates** may be removed.

B11.4 **Rear brake drums**: Holes may be drilled in the wheel hub mounting face solely for venting purposes.

B11.5 **Rear brake backing/protection plates** may be removed or modified solely for venting purposes. Alternative retainers may be used to secure rear brake shoes to the backing plate.

B11.6 **Rear disc brake assembly** may be used to replace the original rear drum brake assembly.

B11.7 **Rear brake rotors** shall have a maximum diameter of 257mm and be of ferrous material one-piece top-hat design, modifications solely to enable mounting are permitted. Scraper grooves and/or gas reliefs may be added to the rubbing surface. Cross drilling is specifically not permitted.

B11.8 **Rear calipers** shall be of a single piston (maximum OD 50.5mm) sliding type and may be mounted either side of the axle centre line. Only one caliper per wheel is permitted. Mounting brackets are free.

B11.9 **Rear brake bias valve** may be fitted.

B11.10 The **handbrake mechanism** may be removed or disabled.

B11.11 A **hydraulic handbrake** may be installed providing it operates totally independently from the service brake.

B11.12 **Brake lines and hoses** are free but they shall comply with Schedule A requirement.

B11.13 **Friction material** is free.

B11.14 **Brake cooling**: A single brake cooling duct may be installed for each wheel.

B11.14.1 Any air duct shall be attached to the rear portion of the air duct aperture in the front spoiler. Such ducting shall not protrude forward through the air duct aperture. Ducted air for the rear brakes shall be supplied from underneath the vehicle.

B12.0 STEERING

B12.1 **Steering arms**: Competition steering arms Part No.'s 435232301 and 435232311 are specifically prohibited. The original steering arm adjusting links may be replaced.

Note: At all times the vehicle must comply with Article B12.2.

B12.2 **Front wheel alignment** is free, providing the complete wheel/tyre assembly is housed within the vehicle's bodywork; this means the upper part of the complete wheel/tyre assembly that is located vertically over the wheel hub centre, must be covered by the bodywork as per Schedule A.

B13.0 ROAD WHEELS AND HUBS

B13.1 Wheel diameter shall be 13-inch x 7-inch wide. The wheels shall be one piece and cast from aluminium alloy. Make and design is otherwise free.

B13.2 Wheel **spacers** are permitted and if used shall comply with Schedule A.

B13.3 Wheel **fixations** may be substituted from bolts to studs with nuts.

B13.4 **Front hubs** may be replaced with a non-original type provided the original wheel stud pitch is retained and is solely of ferrous material.

B14.0 TYRES

B14.1 Any 205-60-13 DOT rated tyre for retail sale in New Zealand is allowed. Any race specific compounds or slicks are strictly prohibited. All four(4) tyres must of the same specification/type. These must conform to wear limits specified in NSC Schedule A.

END PART B

Part C
Schedule P7P
Technical Regulations applicable to Series 4 and Series 6 Cars

C1.0 SAFETY EQUIPMENT REQUIREMENTS

C1.1 Roll protection shall be installed in accordance with Schedule A and shall include two side intrusion bars on the Driver's side. It is recommended these be in accordance with Schedule A, Diagram 5.4(f)(i).

C2.0 BODYSHELL and VEHICLE EXTERIOR

C2.1 All **bodywork**, including any subsequent race damage, shall be presented to a tradesman standard at the start of each round of the series.

C2.2 **Door mirrors** shall be fitted to both sides. Aftermarket part mirrors are permitted and shall be fitted in the same location as the original. Each rear-view mirror must have a reflecting surface of at least 90cm²

C2.3 **Front Spoiler**:

(1) Only those front spoilers as detailed below may be used:

- Series 4: #S4FV-1 Available through NIMRRA.
- Series 6: #S6FV-1 Available through NIMRRA, or
- Series 6: may use the original Factory front bumper provided no modifications are made to it other than the removal of indicators and park lights.

If the NIMRRA control spoiler is used the following shall apply:

(2) **Original front bumper**, it's mounting system, and indicators shall be removed to enable fitment of the Control Part front spoiler.

(3) **Mounting of the spoiler** must comply with Schedule A. Mounting must not involve reinforcing the impact strength of the spoiler, therefore the use of bars, rails or other structures that could be deemed beyond that required to support the spoiler are not allowed.

(4) It is permitted to cut open the original **park/indicator lamp** areas on the front spoiler. Apertures on the spoiler may be used to duct cold air.

(5) **Air splitters** are prohibited, but a flat undertray may be fitted from the front of the front spoiler to the front of the engine sub frame and shall comply with Schedule A.

(6) **Repairs** and strengthening of the front spoiler by the use of non-metallic matting and resin is permitted providing it is done on the inside surface and retains the original shape and appearance.

C2.4 **Rear Spoiler:**

(1) Only those rear spoilers as detailed below may be used:

- Series 4: #S4RV-1 Available through NIMRRA
- Series 6: #S6RV-1 Available through NIMRRA, or
- Series 6: may use the original Factory rear spoiler, provided no modification is made.

(2) **Mounting:** The brackets/mounts supplied upon purchase with the spoiler shall be the only type used to mount the spoiler in accordance with Schedule A.

C2.5 The **wheel arch** inner lip edges may be folded inwards to provide tyre clearance provided the guard outer surface and shape remains original.

C2.6 **Automatic-manual transmission conversions**: To allow manual gearbox conversions, the gearbox mounting system solely for that purpose is free, however the engine must remain in the original position.

C2.7 Removal of the following parts is authorised:

- All decorative side mouldings, except Series 6 front guard vent bezels
- Wheel arch inner plastic linings
- Front and rear-guard indicator lamps providing the holes are blanked or covered
- Front plastic undertray
- Front guards, forward most mounting brackets that are bolted/spot-welded on
- All unused fittings and brackets
- Body underseal
- External door security locks and barrels, excluding door openers
- Rear number plate garnish panel and lights
- Rear wiper mechanism
- Front left-hand wiper arm and the right-hand wiper arm may be modified to fit on the left-hand side of the car (modification to the left-hand wiper spindle to achieve this is also acceptable)
- Rear hatch gas struts
- Fuel filler flap provided the hole is filled in a tradesman-like manner.

C2.8 **Fibreglass replica parts** may substitute the following items providing they are identical in size, shape and appearance to the part they replace:

- Headlight panels
- Rear outer bumper shell
- Bonnet
- Front guards
- Front doors
- Rear hatch frame

C2.9 Series 4 cars may use the following parts from a Series 5:

- The entire bodyshell
- Aluminium bonnet
- Tail lamps provided they are fitted as a matching pair.

C2.10 **Bonnet and rear hatch**:

(1) Lock pins shall be fitted in accordance with Schedule A and the original bonnet and rear hatch catch mechanism shall be removed.

(2) The fitting of an air intake scoop to the bonnet is permissible or the original Series 4 Turbo scoop maybe used. If fitted, the maximum size of such scoop shall be a maximum of 405mm wide at any point and 32mm high measured at the rear of the scoop. The rear outer edge of the scoop is to be positioned 590mm forward of the rear lip of the bonnet. The scoop is to be positioned on the bonnet left of the centre line and shall measure 135mm to the right of the centre line and 270mm to the left of the centre line.

(3) The bonnet and rear hatch may be lightened in lieu of fitting aluminium or fibreglass replica parts. Such lightening must comply with Schedule A.

C2.11 **Sunroof**: Where fitted may be removed. If fitted, a metal sunroof must remain closed during competition. If glass, the sunroof must be removed, and the hole filled using a metal panel and sealed.

C2.12 **Jacking points**: A maximum of three transverse jack sockets per side may be fitted in the body shell door sills finishing flush with the outer face of the sill.

C2.13 The **windscreen** shall be of laminated construction.

C2.14 **Door glass** and/or **rear hatch** may be substituted with plastic material provided they fit within the original frame. Holes or "NACA' style ventilation ducts may be added for the sole function of providing air into the Cockpit. The window winder mechanisms and door side intrusion bars may be removed in accordance with Schedule A.

C3.0 VEHICLE INTERIOR

C3.1 **Interior trim and fittings** except the dashboard assembly, may be removed, and if replaced must comply with Schedule A.

C3.2 **Dashboard**:

- The metal frame may be removed.
- The dashboard including the instrument panel must remain as fitted by the Manufacturer, however the instrument cluster (gauges) may be removed provided that the space left by its removal is covered or used for alternate instrumentation as allowed for in these rules.
- Instruments and switches, including lap timers and recall tachometers, are free.

C3.3 An aftermarket internal **rear-view mirror** may be fitted.

C3.4 The **steering lock** assembly shall be removed. A replacement **steering wheel** and fitting kit is authorised. It is permitted to modify the upper end of the steering column to fit a quick release steering wheel.

C3.5 The **Driver's seat** shall be replaced with a competition seat. To allow the seat to be mounted, the floor may be modified at the drivers' side of the transmission tunnel and the floor beneath the seat.

Note: NZMRS highly recommends that a 'winged' competition seat with wraparound integral head restraint be fitted.

C3.6 **Pedal pads/heel plate**: Anti slip pads may be fitted over each pedal and a heel plate added beneath the pedals. To enable automatic to manual transmission conversion a Series 4 or Series 6 Series Production clutch pedal shall be added. Competition style pedal boxes are forbidden.

C3.7 **Throttle stop**: An additional stop may be fitted under the accelerator pedal.

C3.8 An additional **clutch stop** may be fitted under the pedal solely for the purpose of eliminating overthrow of hydraulic release bearing.

C4.0 ENGINE SPECIFICATIONS

C4.1 **Series 6 original engine**: The 13B rotary engine (Wankel type RE), In line two rotor enclosed in housings, as fitted to Series 6 Mazda RX7 Turbo FD3S models, minus turbo and associated plumbing and fittings, shall be used in both Series 4 and Series 6 cars:

C4.1.1 **Front and rear rotor housing**: N3Y2 10S70 and, or N3Y2 10S80, and may have the external spark plug ledge removed.

C4.1.2 **Centre housing**: N3A1 10D00B. This housing may be drilled and tapped to accept mountings for Series 4 car installation.

C4.1.3 **Front end housing**: N3F1 10C00.

C4.1.4 **Rear end housing**: N3YC 10C50 Manual.

C4.1.5 All housing sealing faces may be reclaimed.

C4.1.6 Nuts and bolts may be locked.

C4.1.7 The end and centre housings may have the external surface painted for cosmetic purposes only. The use of coatings such as HPC is not permitted. The use of bead blasting, etching, spark eroding etc. is not permitted.

C4.2 **Series 4 conversion** to use Series 6 engine: Series 4 cars shall use the Series 6 engine as detailed in Article C4.1. To facilitate the fitment of the Series 6 engine in the Series 4 chassis, the following modifications as detailed hereafter including parts as described shall be used;

- Series 6 engine centre plate may be drilled and tapped to accept the Series 4 engine mountings.
- Fuel rail may be altered solely to clear the thermostat housing. Refer also Article C6.1.1.
- Oil sump pan shall be from Series 4
- Front engine cover shall be from Series 4
- Crank angle sensor shall be from Series 4
- Water pump shall be from Series 4

C4.3 Nuts, bolts, and fasteners are free. Gaskets are not to exceed specifications and/or dimensions stated in these Regulations but are otherwise free.

C4.4 The Class Control Part **engine rotor** shall be Mazda RX7 Series 6 rotors. The Part No. for both front and rear is N3YA 11 B10. The minimum weight for these rotors shall be 4290.0grams inclusive of gear ring and bearing shell. Only that machining required to achieve engine balancing is permitted (refer also Article C4.9).

C4.5 **Stationary gears** may be substituted with 13B stationary gears from any original Mazda, Series Production road cars, including Mazda RX8 stationary gears. The oil gallery port in the RX8 stationary gear may be machined only enough to allow it to align properly with the corresponding oil gallery port in the end plate housing.

C4.6 **Counterweights** may be from any original Mazda Series Production road cars.

C4.7 **Eccentric shafts** shall be original either Series 4 or Series 6, the oil galleries may be modified, and the oil temperature control valve may be removed or modified, the ball control valves may be modified to increase the rotor oil feed. Competition shafts and Renesis (RX8) shafts are not permitted.

C4.8 **Rotor apex seals** shall not be ceramic but otherwise are free. Side seals, corner seals and springs are free.

C4.9 **Balancing** is authorised for the following components:

- The counterweights, flywheel, clutch assembly and eccentric shaft.
- The rotors provided the balancing is performed on their end faces within an area 35mm from the centre of the corner seal.

C4.10 **Flywheel**: Aluminium or composite materials are forbidden. Weight is free.

C4.11 **Clutch** make and lining material free provided no modification to any associated part is required. The standard 13B Clutch Assembly may be substituted for a twin plate competition-type clutch**.** The use of a hydraulically operated push type clutch is permitted (refer also Article C3.8)

C4.12 **Automatic oil injection pump** may be removed and replaced by a blanking device.

C4.13 **Oil pump** shall remain original Series 4 or Series 6.

C4.13.1 Oil pressure relief valve settings are free. Dry sumps are prohibited.

C4.13.2 Oil cooler and its location are free.

C4.13.3 Flexible oil hoses are free, provided Schedule A compliance is maintained.

C4.13.4 Oil filler neck may be modified solely to facilitate cold air box fitment.

C4.14 **Engine mounts**: Rubber may be substituted but engine must remain in the original position.

C4.15 **Drive pulleys and belts** are free.

C4.16 **Exhaust system** from the external face of the rotor housing is free, provided compliance with Schedule A is maintained.

C5.0 ENGINE INDUCTION

C5.1 **Cold air box** and filter type is free but any form of mechanical forced induction including turbo and or super charging is prohibited. It is specifically prohibited to use ice, or any other substance capable of artificially lowering the atmospheric temperature, or the induction charge by any other method.

C5.2 The engine **air intake system** comprises the components upstream of the forward mounting face of the throttle body.

C5.2.1 No part of the air intake system may protrude into the throttle body beyond the forward mounting face except for any attachment fittings which may thread into existing mounting holes in the throttle body.

C5.2.2 Air intake system construction upstream of the throttle body is free.

C5.3 The **engine inlet manifold system** comprises the lower Series 6 manifold, the upper Series 6 or the upper Series 4 manifold section, gaskets and seals, and the Series 6 throttle body adapter plate. No modification of the engine inlet manifold system is permitted unless specified below.

C5.3.1 The lower Series 6 manifold section may be modified to enable it to match to the Series 4 upper manifold. To accomplish this, it is permissible to machine the ports in the Series 6 manifold, to align them with the Series 4 upper manifold ports, to a depth of not more than 90mm, measured from the upper mounting face. Any machining work shall not include the adding of material. Breaches of the manifold walls and the like cannot be repaired.

C5.3.2 The flange joining boltholes in the upper Series 4 section may be slotted to allow alignment of the manifold sections.

C5.3.3 Locating dowels not exceeding 20mm in length and 10mm in diameter may be used to locate the Series 6 lower manifold and the Series 4 upper manifold. The dowels must perform no other function than to locate the two sections. The lower Series 6 manifold and the upper Series 4 manifold may have holes drilled to accept the locating dowels.

C5.3.4 The gasket used between the Series 6 lower manifold and the Series 4 upper manifold is described as the plenum gasket. An original Series 4 plenum gasket shall be used and must conform to the following dimensions:

- Primary port opening 34.4mm and secondary port opening 40.5mm.
- Outside of these specifications the gasket may only be modified to facilitate fitment over the slotted flange joining bolt holes and any locating dowels.

C5.3.5 The Series 4 upper manifold section may be modified to allow fitment of a Series 6 throttle body in accordance with these specifications;

(1) The Series 6 throttle body shall be mated to the Series 4 upper manifold section by use of an adapter plate.

(2) The adapter plate is free in its design but must not measure more than 13mm in thickness.

(3) Modification of the manifold is limited to inlet end and is limited to:

- Drilling and threading attachment bolts/stud holes;
- The centre section between the bottom two ports at the throttle body end of the Series 4 manifold may be opened up to form a common port opening;
- The top port must remain as a single port; and
- The ports at the throttle body end of this manifold may be matched to the adapter plate.

(4) The under surface and exterior of the Series 4 upper manifold may be machined solely for the purpose of providing clearance for the primary fuel injectors and plugs. Such machining is limited to the area immediately adjacent to the injectors.

(5) Nuts, bolts, fasteners, and gaskets are not to exceed Factory specifications and/or dimensions stated, otherwise free.

(6) The upper Series 6 inlet manifold secondary damper butterflies may be removed and the holes in the housing may be plugged.

C5.4 RX7 Series 6 **throttle body** shall be used. No modification of the throttle body is permitted unless specified below.

(1) The throttle body gasket is to measure no more than 3mm.

(2) Butterfly or throttle linkages are free.

(3) Drilling and threading of mountings holes for the adapter plate as allowed for in Article C5.3.5(1) and (2) above.

C5.5 The **Engine Management System** used shall be the Link P7PLEMG3, P7PLEMV5 or the P7PLEMG4. This shall be a controlled NIMRRA version and shall be subject to spontaneous technical checking. Functions of the engine management system shall specifically exclude traction control and launch control. Data logging may be enabled and/or digital dashes with a logging function may also be used.

C5.6 Removal of the following **emission control** Control Parts and their associated plumbing is permitted:

- The air pump.
- The solenoid block.
- The emission control computer.
- The air valves on the manifold.
- The carbon filter tanks.
- The vacuum lines.

C6.0 FUEL SYSTEM

C6.1 **Fuel Injection System**: The original RX7 Series 6 fuel injection components shall be used and unless specified here shall not be modified. These include fuel rails, injectors, and retainers. The fuel injection system components must be mounted as per Manufacturer's original fitment.

C6.1.1 The fuel rails may be modified only for the purpose of fitment of aftermarket hoses and associated fittings and to facilitate adaptation to Series 4 vehicles as permitted in Article C4.2.

C6.1.2 Fuel lines, hoses and fastenings attached to the fuel rails are free provided the specifications detailed in this Article 6 are not exceeded.

C6.2 The original **fuel pump**/s may be replaced or removed or relocated and are free, provided they comply with Schedule A. Additionally, a pressure regulator and gauge and a swirl pot may be fitted.

C6.3 **Fuel lines** shall comply with Schedule A.

C6.4 **Fuel/air chillers**, being any device or additive that reduces the normal atmospheric temperature of the day, or any device that otherwise chills the fuel or air, is forbidden.

Note: For the avoidance of doubt, it is specifically prohibited to add ice or any other substance capable of lowering the atmospheric temperature of the fuel or air entering the engine.

C6.5 **Fuel filters** shall be metal type units. Location is free provided they are not in the cockpit.

C6.6 The original **fuel tank** may be replaced in accordance with Schedule A providing it occupies an area within the boot floor, which may be modified for this purpose, and locate between the rear chassis rails no further forward than the position of the original tank location.

C7.0 COOLING SYSTEM

C7.1 The **radiator**, radiator hoses, hose fittings, mounting, including panelling for ducting and location is free.

C7.2 The **thermostat** and its housing and water inlet pipe is free.

C7.3 The **cooling fan** is free.

C8.0 TRANSMISSION, GEARBOX and DIFFERENTIAL

C8.1 **Manual gearboxes only** from any original Mazda RX7 FC3S Series 4 or FD3S Series 6 or RX8 SE3P 5-speed Series 1 are the only permitted units. All parts may be interchanged between these gearboxes providing no machining is required and the ratios remain standard.

Note: These gearboxes are from Mazda manufactured Series Production road cars.

C8.2 **Gear ratios** as per the following chart are authorised:

	Series 4 FC3S		Series 6 FD3S	RX8 SE3P Series 1
	Non-turbo	**Turbo**	**Turbo**	**Non-turbo**
1st	3.48	3.48	3.48	3.483
2nd	2.00	2.02	2.02	2.015
3rd	1.37	1.39	1.39	1.391
4th	1.00	1.00	1.00	1.000
5th	0.71	0.76	0.76	0.806

C8.2.1 **Selector forks** may be repaired to original specification. In addition, a wear pad may be added to the centre of the fork arch to provide extra support.

C8.2.2 **Bell housing**: A scatter shield/blanket or steel halo ring may be used for the sole purpose of preventing debris penetrating the cockpit in the case of flywheel, or clutch assembly failure, provided the original chassis dynamics are maintained.

C8.3 The **conversion** from an automatic transmission to manual gearbox and any modification to facilitate such conversion is permitted provided it is solely for that purpose. It should be noted that some associated components may be required to enable this conversion (starter motors, eccentric shafts, etc).

C8.4 **Gear lever** and stem shape is free. A 5th gear only block out plate is permitted and if used must be mounted using gear lever attachment bolts. Quick shifter kits are not permitted.

C8.5 **Final drive ratio** shall be 4.10 (41 teeth on crown wheel, 10 teeth on pinion), or 3.91 (43 teeth on crown wheel, 11 teeth on pinion).

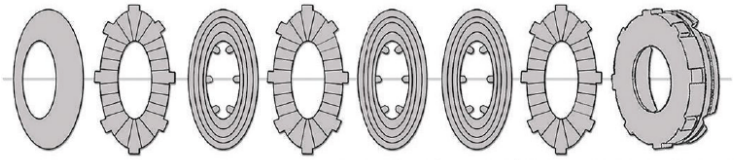
Note: Some later model cars come fitted with different final drive ratios, these are not permitted.

C8.5.1 **Limited slip differential (LSD)**: An original Mazda RX7 Direct Replacement OEM Limited Slip Differential or the Control Part KAAZ 1.5 way LSD supplied by Manon Racing Products NZ are the only permitted final drive units that are to be used. The Mazda RX7 OEM LSD shall not be modified in any way. The KAAZ 1.5 way Control Part LSD must meet the following conditions;

- The Control Part Kaaz 1.5 way LSD shall be installed with locking plates configured to the 65% engage locking setting (refer to Diagram C8.5). It is the Competitor's responsibility to ensure the LSD is correctly configured;
- Super Q – WPC treatment or similar friction reducing surface treatments are not permitted;
- No change or adjustment to the LSD 65% engage locking setting is permitted; and
- The differential housing rear cover plate shall have two adjacent attachment bolt heads drilled with 2.5mm minimum diameter holes for sealing by the Series Scrutineer. The lower two right-hand or left-hand bolts are recommended for drilling as per Diagram C8.6:

C8.5 & D8.5

Example of 65% locking plate configuration (stacking).



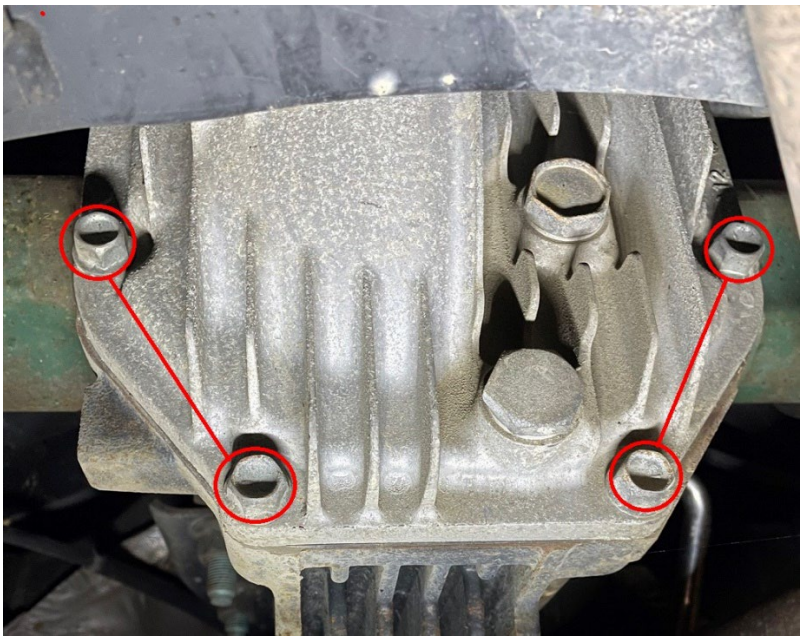


Diagram C8.6

C8.5.2 The only shimming adjustment permitted on the differential is adjustment of the diff carrier side bearing backlash preload shims.

C8.5.3 **Differential housing rear cover plate** may be replaced with a Club approved extended housing cover plate, for better cooling efficiency: https://www.rhdjapan.com/revolution-extra-capacity-differential-cover-rx-8-se3p.html

C8.5.4 If the Control Part differential external housing seal has been approved to be broken for differential maintenance and checking, then the onus is on the competitor to comply with Article C8.5.1 and arrange new seal to be applied at the commencement or during the next available Round. If differential torque tests are found to be outside of normal tolerances, the Series Scrutineer may request that the differential be removed and checked by authorised personnel whenever suitable time allows.

C8.5.5 Control Part LSD with external differential housing cover plate sealed shall not be disassembled without written permission from the Series Scrutineer at any time including after 30 days post final Round of the Series. If no differential external housing seal has been applied, maintenance may be carried out at any time.

C8.6 **Mounting bushes** may be substituted by a stiffer material or spherical balls.

C8.7 The **harmonic balancer** may be removed.

C8.8 **Power frame**: It is permitted to weld braces to Series 6 power frame for the sole purpose of preventing cracking of the power frame.

C9.0 ELECTRICAL SYSTEM

C9.1 IGNITION SYSTEM:

C9.1.1 **Spark plugs and HT leads** are free.

C9.1.2 **Ignition coils** are free.

C9.1.3 **Ignition (fuel injection vehicles)** shall be controlled by the NIMRRA Control Part ECU computer (as detailed in Article C5.5), the ignition coil igniters are free.

C9.2 ELECTRICAL SYSTEM:

C9.2.1 The **wiring harness** is free including fuses, relays and associated connectors.

C9.2.2 **Headlights**: The glass units and operating mechanisms may be removed provided that the original headlight cover panels are retained and fixed in their original down position.

C9.2.3 The **alternator** shall remain original and full function is maintained.

C9.2.4 A **battery** shall be fitted and be capable of starting the engine. The location is free providing it complies with Schedule A.

C9.2.5 An externally mounted **circuit breaker** must be fitted in accordance with Schedule A.

C9.2.6 A Hella matrix P/N 5237 or similar style LED high stop **brake light** shall be fitted centrally to the top of the rear screen.

C9.2.7 The following electronic **sensors** are prohibited, except for one(1) front wheel speed sensor which is permitted.

- Any form of ground speed sensor;
- Wheel speed sensor;
- Ride height sensor;
- Any form of suspension and steering angle monitoring sensor; and
- Any other form of sensor that does not directly relate to fuel or ignition management.

C9.2.8 Beacons and their receivers are permitted for the sole use of lap timing both onboard and external.

C9.2.9 At least one LED **rain light** must be fitted in compliance with Schedule A.

C10.0 SUSPENSION

C10.1 **Suspension location points**: All mounting points shall not be modified from the original Manufacturer positions unless otherwise specified. The hole in the top of the front and rear shock absorber towers may be enlarged for the sole purpose of fitting the control shock mounting.

(1) **Series 4**: Front suspension locating points may be relocated for the sole purpose of providing sufficient camber/caster adjustment.

(2) **Series 6**: Front suspension top wishbone bolt holes may be slotted in the horizontal plane to increase negative camber and/or castor. This may only be accomplished provided that no modification of the top wishbone assembly, the inner guard structure, or any other modification of the mounting brackets is required other than is allowed herein. Front castor and or camber adjustment slots also rear camber adjustment slots may be slotted an additional 10mm on the same plane as the original. Corresponding locking and/or aligning devices may also move to the new location.

C10.2 Series 6 rear sub frames: Early model Series 6 cars may have original later model Series 6 rear sub frame stiffeners fitted.

C10.3 Control suspension-mounting parts:

(1) Series 4 front camber plate adjusters: Only the NIMRRA supplied Control Part shall be used. The nuts, bolts and washers are free. The control plate may have mounting holes drilled and tapped into it.

(2) Series 6: The Control Part mounting parts kit shall be used.

C10.4 Rubber bushing may be substituted for solid or Nolathane/Urethane material, including in the shock absorbers.

C10.5 Shock absorbers: The Control Part, NIMRRA supplied items as listed here shall be used:

(1) Series 4: Contesting the 2008-2009 Season, or having a Logbook valid prior to the 2007-2008 Season may, until such time that replacement shock absorbers are required, use front and rear shock absorbers as stipulated below provided they are used in 'part number pairs' at all times, i.e. both front shock absorbers must be of identical part number and both rear shock absorbers must be of identical part number.

- **Front:** KYB Twin Tube Gas, Part No. 334129 and 334130, or KYB Twin tube Gas adjustable Part No GSKYB-FA

- **Rear:** KYB Part No.551059, or KYB Twin tube Gas adjustable Part No. GSKYB-RA

(2) Series 4 KONI: All Series 4 cars not covered by Article C10.5(1) above shall use the Koni suspension conversion as detailed hereafter;

The Koni conversion as described below is an exchange kit manufactured from donor OEM or KYB suspension legs

(a) Front shock 8641-1200-SPORTNZ: Supplied by Stocks to the following specifications;

- KONI Series 4 inserts fitted into either OEM or KYB struts with droop limiters fitted to reduce open shaft length. OEM spring seat removed, and threaded tubes machined out to 51mm ID and fitted complete with threaded tube, spring seat, locking nut, top spring seat, de-aerating washer and bump stop.

(b) Rear shocks 8041-1111-SPORT: Supplied by Stocks to the following specifications;

- KONI Series 4 or R32 with droop limiters fitted to reduce open shaft length and alloy adaptor tubes fitted to locate threaded tubes complete with alloy adaptor tube, threaded tube, spring seat, locking nut, top spring seat, de-aerating washer and bump stop.

(c) **Front Camber Plates**: Slotted adj. plate K2012 milled to rectangular OEM Series 4 dimensions:

- Slide plate K2015
- Bearing K2017
- Circlip K2018

(3) **Series 6 vehicles**: It is permissible to use either:

(a) **Control Part Koni shock absorber:** It is permissible for the Control Part Koni shock absorber piston spear shaft to be shortened by a maximum of 20mm provided that this work is completed by the Class Control Parts Supplier, George Stock & Co Ltd.

- Front right: Koni Part No. 8041-1169R-SPORTNZ
- Front left: Koni Part No. 8041-1169L-SPORTNZ
- Rear both: Koni Part No. 8041-1170-SPORTNZ.

(i) **Coil springs** are free with Koni shocks, but not their number. It is permissible to fit keeper springs, one per corner which must compress flat when vehicle is on ground (not on jacks).

(b) Class **Control Part Fortune Auto 500 shock absorber** as supplied by Manon Racing:

- Front both: Part No. FA500PRO7-S6F
- Rear both: Part No. FA500PRO7-S6R

(i) Rear shocks only, it is permissible to partially or fully weld the top hat portion to the lower section of threaded, screw together shocks only to prevent separation.

(ii) All shock absorbers are sealed units and are sealed. The seals must remain intact to be used in the vehicle. The shock absorbers may not be serviced or modified and be installed and run as supplied.

(iii) The Series Scrutineer may fit a further seal or seals at their discretion. It is the competitor's responsibility to ensure the seals are in place at all times.

(iv) **Coil springs** are a Control Part and shall be supplied by Manon Racing (with shock absorbers). 10kg front and 8kg rear. These may not be modified in any way and must be fitted as supplied.

C10.6 The NIMRRA Control Part front and rear springs **platform adjusters** shall be fitted, or alternatively, circlip retaining groove adjusters on Control Part Koni shock absorbers.

C10.7 **Sway bars (anti roll bars)**:

(1) The construction of the front and rear sway bars is free except that any adjustment of the bars shall not be able to be performed from within the Driver's compartment.

(2) Attachment of the Sway Bars to the chassis rail shall respect the following:

(a) The transverse axis of the sway bar longitudinally shall be the same as the original Manufacturer location.

(b) If the original Manufacturer mounts (captive nuts) cannot be used a suitable attachment may be fabricated and welded to the chassis. This attachment shall respect Article C10.7(2)(a) above and shall serve no other function apart from providing a mounting surface for sway bar fitment.

(c) The original Manufacturer's mounting bracket may be modified or a new bracket fabricated to facilitate mounting the sway bar. The sole function of this bracket shall be as per the Manufacturer's original bracket. That is, facilitate mounting of the sway bar and for locating the lower portion of the radiator.

(d) The fabrication of the sway bar mounts and brackets shall not have the effect of altering the structural integrity of the chassis.

C10.8 **Strut brace** may be fitted connecting between the top of the front strut towers and may be braced back to the firewall**.** The rear struts may have a brace added provided it connects directly between the strut towers.

C10.9 **Control arms** shall remain as per original fitment.

C10.10 **Rear camber adjustment** for **Series 4** vehicles: Rear camber adjustment may be achieved by the following:

(1) The fitment of an adjustable sub-link on the rear crossmember/subframe; and/or
(2) By the fitment of adjustable sub links on the rear trailing member inboard arm.
(3) Apart from the permitted modifications all other suspension arms, suspension links, control arms, and ball joints are to remain original.

C10.11 **Bump stops** may be removed, modified, replaced and/or added.

C10.12 **Ride height** is free provided no unsuspended part of the car touches the ground when all of the tyres on one side of the car are deflated.

C11.0 BRAKING SYSTEM

C11.1 **Brake rotors** may be substituted provided they are of ferrous material. Scraper grooves and or gas reliefs may be added to the rubbing surface. Cross drilling is specifically forbidden. Front and rear rotors shall have a maximum diameter of 298mm (modification of original hubs and brake components to allow substitute rotors to be fitted is allowable.)

C11.2 **Brake calipers**: the Series 4 brake caliper may be modified for the sole purpose of facilitating fitment of larger brake disc rotors. Such modification is restricted to the mounting lugs only. Mounting of the brake calipers is otherwise free providing the mounting position relative to the axle centreline is retained i.e. the caliper must remain either behind or in front of the axle as per original configuration.

C11.3 **Brake rotor protection plates** may be removed or modified solely for venting purposes.

C11.4 A single **brake cooling** duct may be installed for each wheel.

C11.4.1 Any air duct shall be attached to the rear portion of the air duct aperture in the front spoiler. Such ducting shall not protrude forward through the air duct aperture.

C11.4.2 All ducted air for the rear brakes shall be supplied from underneath the vehicle.

C11.5 **Brake lines and hoses** are free, providing Schedule A compliance is maintained.

C11.6 **Brake bias valve** may be fitted.

C11.7 **Handbrake mechanism** may be removed or disabled.

C11.8 **Friction material** is free.

C11.9 **ABS**, if fitted, shall be removed in its entirety.

C12.0 STEERING

C12.1 **Passive rear steering**:

(1) **Series 4** vehicles: May be disabled and toe eliminator bushes may be fitted (also refer Article C10.4).

(2) **Series 6** vehicles: It is permissible to replace rear Factory toe arms with aftermarket toe arms provided they mount and serve the same purpose as Factory arms.

C12.2 **Steering arms** shall remain original.

C12.3 **Wheel alignment** is free, providing the complete wheel/tyre assembly is housed within the vehicle's bodywork in accordance with Schedule A.

C12.4 **Power steering**:

(1) The removal of all power steering components is permitted;
(2) Re-valving of the steering is permitted; and
(3) The steering ratio must remain as original.

C12.5 **Adjustable steering column**: The adjustment may be locked.

C13.0 ROAD WHEELS

C13.1 The make and design of **wheels** is free, but the dimension shall be 16x8 inches or 17x8 inches.

C13.2 Wheel **spacers** are permitted and if used shall comply with Schedule A.

C13.3 Wheel **fixations** may be substituted provided the original stud pattern is retained.

C14.0 TYRES

C14.1 Control Tyres shall be Nexen NFera SUR4G 225/50ZR16 92W or 225/45/17 94Y. All four(4) tyres must be of the same specification/type. These must conform to wear limits specified in NSC Schedule A. Refer to Article D14.2 which also applies.

END PART C

Part D
Schedule RX8
Technical Regulations applicable to RX8 Cars

D1.0 SAFETY EQUIPMENT REQUIREMENTS

D1.1 **Roll protection** shall be installed in accordance with Appendix Two, Schedule A and shall include two side intrusion bars on the Driver's side. It is recommended these be in accordance with Appendix Two, Schedule A, Diagram 5.4(f)(i).

D2.0 BODY SHELL AND VEHICLE EXTERIOR

D2.1 All **bodywork** including any subsequent race damage shall be presented to a tradesman-standard at the start of each Round of the Series.

D2.2 **Door Mirrors**: original Factory mirrors must be fit to both sides. The electric operation of these may be disconnected and may be removed.

D2.3 **Front Spoiler**:

(1) Original Factory front spoiler/bumper from Series 1 or Series 2 may be used with Factory attachments. If the Series 2 Factory bumper is used, it is permitted to also use the Series 2 Factory front guards with Factory attachments. A Control Part front bumper sourced from one of the following Control Part Suppliers is also authorised provided it is not modified in any way. Localised repairs are permitted providing the shape and dimensions remain as original.

(a) Mike Shaw Fibreglass
17 Perlco Place
Te Rapa
Hamilton
Phone: 07 850 5882

(b) Aerotech Christchurch
Graham Marley
Phone: 022 043 1239 or 03 384 3629

(2) The Factory front pedestrian impact bolt-on bar may be removed and not be modified. If removed must be removed in its entirety.

(3) Original Factory **mounting** shall be used.

(4) **Air splitters** are prohibited, the original Factory undertray and sides may be used, or an aluminium or ACM panel undertray (the base of which must be flat), and sides may be fabricated with the same attachment points as the original may be used. The front of the undertray may extend the length of the front edge of the bumper to provide support but shall not protrude forward of the bumper edge. The rear of the tray should not exceed 800mm and the rearward projection (length) of undertray must not exceed more than 35mm rearward of the centerline of the engine subframe undertray attachment holes.

(5) Head lamps and side park/indicator lamps may be removed and replaced with a blanking panel provided the original front shape is retained.

(6) **Repairs** and strengthening of the front spoiler by the use of non-metallic matting and resin is permitted provided it is done on the inside surface and retains the original shape and appearance.

D2.4 **Rear spoiler:** A single blade aluminium rear wing with an overall width of 1400mm must be used. The spoiler and mounts are a Control Part and shall be sourced from NIMRRA. End plates shall be a maximum size of 300mm x 200mm and be flat.

D2.5 The **wheel arch** inner lip edges may be folded inwards to provide tyre clearance provided the guard outer surface and shape remains original.

D2.6 **Automatic-manual transmission conversions**: To allow manual gearbox conversions, only the RX8 Factory original Mazda parts are to be used.

D2.7 **Removal** of the following parts is authorised:

- All decorative side mouldings, except front guard vent bezels.
- Wheel arch inner plastic linings.
- Front and rear guard indicator lamps providing the holes are blanked or covered.
- Front plastic under tray.
- All unused fittings and brackets.
- Body underseal.
- External door security locks and barrels, excluding door openers. Inner door handles may be modified and latches to be original and unmodified. All doors must operate as original.
- Rear number plate garnish panel and lights.
- Rear wiper mechanism.
- Front left-hand wiper arm and the right-hand wiper arm maybe be modified to fit on the left-hand side of the vehicle (modification to the left-hand wiper spindle to achieve this is also acceptable).
- Rear hatch gas struts.
- Front and rear number plate garnish panels and any associated lights/fittings.
- Cutting or modifying the rear bumper exhaust shroud(s) for the sole purpose of preventing melting from the exhaust pipe.
- Rear door opening operation must be maintained however it is permissible to replace the internal latch with a “Rip Cord” system.

D2.8 **Fibreglass replica parts** may substitute the following items providing they are identical in size, shape and appearance to the part they replace:

- Headlight cover panels.
- Rear outer bumper shell.
- Front guards.

D2.9 **Bonnet and rear hatch:**

(1) Lock pins shall be fitted in accordance with Schedule A.

(2) The bonnet and rear hatch may be lightened. Such lightening must comply with Appendix Two, Schedule A.

(3) Bonnet vents: MRP Bonnet Vent (small size: 200mm x 360mm) may be fitted. These must be placed in the position defined by the template supplied by Club and conform with Schedule A.

D2.10 **Sunroof**: Where fitted may be removed. If fitted, a metal sunroof must remain closed during competition. If glass, the sunroof must be removed, and the hole filled using a metal panel and sealed.

D2.11 **Jacking Points**: A maximum of three transverse jack sockets per side may be fitted in the body shell door sills finishing flush with the outer face of the sill.

D2.12 The **windscreen** shall be of laminated construction.

D2.13 The **door glass and/or rear window** may be substituted with plastic material provided they fit within the original frame and comply with Schedule A. Holes or 'NACA' style ventilation ducts may be added for the sole function of providing air into the cockpit. The window winder mechanisms, internal door panelling and door side intrusion bars may be removed in accordance with Schedule A.

D3.0 VEHICLE INTERIOR

D3.1 **Interior trim and fittings**, except the dashboard assembly, may be removed, and if replaced must comply with Schedule A.

D3.2 **Dashboard**:

- The metal frame may be removed.
- The dashboard including the instrument panel must remain as fitted by the Manufacturer, however the centre console stereo/air conditioning panel may be removed provided that the space left by its removal is covered or used for alternate instrumentation as allowed for in these rules.
- Instruments and switches, including lap timers and recall tachometers, are free. It is advisable to fit an aftermarket oil pressure and water temperature gauge.

D3.3 An aftermarket internal **rear-view mirror** may be fitted.

D3.4 The **steering lock** assembly shall be removed. A replacement **steering wheel** and fitting kit is authorised. It is permitted to modify the upper end of the steering column to fit a quick release steering wheel.

D3.5 The **Driver's seat** shall be replaced with a competition seat. To allow the seat to be mounted, the floor may be modified at the drivers' side of the transmission tunnel and the floor beneath the seat. The brace(s) behind the gearbox that spans the transmission tunnel may be removed.

Note: NZMRS highly recommends that a 'winged' competition seat with wraparound integral head restraint be fitted.

D3.6 **Pedal pads/heel plate**: Anti-slip pads may be fitted over each pedal and a heel plate added beneath the pedals providing a minimal distance between pedal plates of 40mm is maintained when in a static position. Competition style pedal boxes are forbidden.

D3.7 **Throttle stop**: An additional stop may be fitted under the accelerator pedal.

D3.8 The angled **rear seat brace** fitted between the rear seat and boot cavity may be removed to allow fitment of the safety cage.

D4.0 ENGINE SPECIFICATIONS

D4.1 **RX8 original engine**: The 13B rotary engine (Wankel type RSP), In line two rotor enclosed in housings, as fitted to MAZDA RX8 Renesis 6-speed high output engines.

D4.1.1 **Rotor Housings**: N3H1 10B10A front and rear. These may have the external sparkplug ledge removed.

D4.1.2 **Centre Housing**: N3H3 10D00.

D4.1.3 **Front End Housing**: N3H3 10C00.

D4.1.4 **Rear End Housing**: N3H3 10C50 Manual or N3M2 10C50 Automatic.

D4.1.5 All housing sealing faces may be reclaimed.

D4.1.6 Nuts and bolts may be locked.

D4.1.7 The end and centre housings may have the external surface painted for cosmetic purposes only. The use of coatings such as HPC is not permitted. The use of bead blasting, etching, spark eroding etc. is not permitted.

D4.2 Nuts, bolts, and fasteners are free. Gaskets are not to exceed original Factory specifications and/or dimensions and any others stated in these Regulations but are otherwise free.

D4.3 Mazda RX8 Rotors (Part No.'s N3Z1 11B10C (Front) and N3Z1 11B50C (Rear)). All such rotors shall comply with the following:

- The minimum weight shall be 4200grams, inclusive of ring gear and bearing shell.
- Any machining may only be the minimum required to achieve engine balancing and must be in compliance with Article D4.8.

D4.4 Mazda RX8 **stationary gears** only may be used.

D4.5 **Counterweights** may be from any original Mazda RX8 Series Production road car.

D4.6 **Eccentric shafts** shall be original RX8. Competition shafts are not permitted.

D4.7 **Rotor apex seals** shall not be ceramic but otherwise are free. Side seals, corner seals and springs are free.

D4.8 **Balancing** is authorised for the following components:

- The counterweights, flywheel, clutch assembly and eccentric shaft.
- The rotors from any internal side faces including inner webbing vanes. No parts of the bearing shell and/or compression faces may be altered.

D4.9 **Flywheel**: Aluminium or composite materials are forbidden. Weight is free

D4.10 **Clutch**:

- Make and lining material free provided no modification to any associated part is required.
- The standard Renesis 13B Clutch Assembly may be substituted for a single plate or twin plate competition type Clutch. Recommended size 7¼ inch.
- The Factory standard release fork mechanism must remain in operation for its intended use.
- Release bearing is free.
- An additional clutch stop may be fitted under the pedal solely for the purpose of eliminating excessive clutch pedal travel for aftermarket clutches.
- A direct replacement manufactured braided clutch hose is allowable.

D4.11 **Automatic oil injection pump** must be retained and operational.

D4.12 **Oil pump** shall remain Factory original RX8 N3H1 14100.

D4.12.1 **Oil pressure relief valve** settings are free. Dry sumps are prohibited.

D4.12.2 **Oil cooler** shall remain Factory twin or single or be replaced by aftermarket oil coolers provided the surface area (finned area) is no more than 1300cm^2 combined. The location is to remain as per the Factory fitment. Oil cooler brackets may be fabricated to enable the attachment of aftermarket oil coolers provided they serve no other purpose.

D4.12.3 Oil Filter: It is permissible to fit a sandwich plate between the oil filter housing and the oil filter for the sole purpose of attaching gauges/sensors (refer Article D3.2).

D4.12.4 Flexible oil hoses are free, providing Appendix Two, Schedule A compliance is maintained.

D4.13 Engine mounts: Rubber may be substituted but engine must remain in the original position.

D4.14 Drive pulleys and belts are free. It is advisable to fit an underdriven water pump pulley to avoid cavitation at high RPM.

D4.15 Exhaust system from the rear of the three(3) bolt Factory header pipe flange rearward is free, provided it exits at the rear of the vehicle and compliance with Schedule A is maintained. The secondary O_2 sensor to the cat exhaust may be removed.

D5.0 ENGINE INDUCTION

D5.1 Cold air box: The original Factory airbox containing the air filter shall be retained and unaltered. The internal air fins must remain in place. The plastic mounting box underneath the air box itself may have holes cut through it for the sole purpose of airflow, or may be removed entirely. The filter may be replaced with an aftermarket panel filter provided the size and fitment is the same. The two brackets on the rear of the Factory air box used to hold the engine cover may be removed. The Factory engine cover may also be removed. Ducting of intake air forward of the Factory air box inlet is free. The Factory front pedestrian impact bolt-on bar may be removed.

Any form of mechanical forced induction including turbo and/or super charging is prohibited. It is specifically prohibited to use ice, or any other substance capable of artificially lowering the atmospheric temperature, or the induction charge by any other method.

D5.2 Engine Inlet Manifold System: The engine inlet manifold system must remain Factory original. No modification of the engine inlet manifold is permitted.

D5.3 Engine Management System: The Engine Management System used shall be the Factory original Series one ECU with no additional systems.

ECU tuning may be performed by anyone with MazdaEdit software only, provided that the following is maintained:

- The rev limit maximum cut-off is set at no more than 9000 RPM in the ECU. The O2 sensor and dash warning light may be removed or disconnected.
- It is not permitted, at any time, to use Launch Control and Flat Shift programming or mapping of the ECU.
- Bluetooth, wi-fi or wired units may be plugged into the OBD2 port to enable data logging to a laptop, tablet or mobile phone, provided the requirements of Article D9.2.8 are respected and there are no ECU technical checks required.
- The Competitor must retain remotely, a copy of their ECU map that can be accessed upon request by the Series Scrutineer for viewing at any stage during a race meeting. The Series Scrutineer may, at their discretion, either install this ECU map, or instruct that it is installed into a Competitor's ECU under supervision of the Series Scrutineer .
- At any time prior to or post Qualifying and or Racing, the Series Scrutineer may require dongle or data logger-fitment (prior) or download (post) from OBD2 port for compliance checks, or by any other means requested. Failure to comply may result in receiving a Penalty.
- All other ECU MazdaEdit tuning not listed above may be carried out as per tuner's preferences.

D5.4 Removal of the following **emission control** Control Parts and their associated plumbing is permitted:

- The air pump.
- The solenoid block.
- The emission control computer.
- The air valves on the manifold.
- The carbon filter tanks.
- The vacuum lines.

D6.0 FUEL SYSTEM

D6.1 **Fuel injection system**: The original RX8 fuel injection components shall be used and unless specified here shall not be modified. These include fuel rails, injectors, and retainers. The fuel injection system components must be mounted as per Manufacturer's original fitment.

D6.2 Fuel lines, hoses and fastenings attached to the fuel rails are free provided the specifications detailed in this Article D6 are not exceeded.

D6.3 The original Factory **fuel pump/s**, must be retained and operational, except that the original fuel pumps may be replaced with the Series 2 fuel pump 2008-2011, Mazda Part No. N3R1 13350 or its superseded part number. A secondary Factory fuel pump may be inserted to the Driver's side in the fuel tank to replace the float level device. All plumbing or pipes associated with the second pump must be contained inside the fuel tank. Aftermarket fuel pumps are not permitted.

The secondary fuel pump must be installed and plumbed to conform to Schedule A. The original electrical connections may be replaced. The secondary pump must be powered by a separate fused power feed and not connected to the main pump feed.

The secondary pump must only be used to transfer fuel from the Driver's side of the fuel tank to the passenger side of the fuel tank. The secondary pump must not be used to supply fuel directly to the engine or to increase fuel flow or pressure to the engine.

D6.4 **Fuel lines** shall comply with Appendix Two, Schedule A.

D6.5 **Fuel chillers**, being any device or additive that reduces the normal atmospheric temperature of the day, or any device that otherwise chills the fuel, is forbidden.

Note: For the avoidance of doubt, it is specifically prohibited to add ice or any other substance capable of lowering the atmospheric temperature of the air entering the engine.

D6.6 The original **fuel tank** must be retained, however it is permissible to fit up to two(2) additional fuel connector fittings to the original fuel tank. These additional fuel fittings must be blanked. The fuel tank inspection covers plastic fasteners must be removed and replaced with metal riv nuts (8mm recommended).

D7.0 COOLING SYSTEM

D7.1 **Radiator** hoses and hose fittings are free. The mounting location(s) shall be the Factory original points. Aftermarket radiators are permitted provided their size, including top and bottom tank, does not exceed 675mm x 470mm x 100mm.

D7.1.1 Aluminium or similar ducting panels solely for the purpose of directing through the radiator are permitted to replace the Factory plastic panelling.

D7.1.2 Unused holes on the top plastic trim can be sealed with race tape and/or the top plastic trim panel can be removed and replaced with the same size and shape aluminium panel.

D7.1.3 A curved panel no more than 200mm forward of the radiator, mounted to the undertray floor to the bottom edge of the radiator core may be attached.

D7.2 **Thermostat** is free, but the housing shall be the original Factory part.

D7.3 **Cooling fan** is free.

D7.4 **Plastic overflow tank** may be replaced by an aftermarket tank solely for the original purpose.

D7.5 The Factory standard Series 1 RX8 **water pump** is to be used. The shape of the impellor is free and may be replaced with aftermarket part.

D7.6 The **coolant hose** from the rear engine plate can be re-routed to bypass the throttle body provided it connects directly to the thermostat housing.

D8.0 TRANSMISSION, GEARBOX and DIFFERENTIAL

D8.1 **Manual gearboxes only:** Factory Mazda RX8 6-speed are the only permitted units. No parts shall be interchanged between two different types and no machining is allowed except for those permitted outlined in the next clause.

Gearbox longevity modifications are allowed and may only be performed by Torks Engineering Ltd. The only allowable modifications are outlined in Appendix One of these Regulations.

D8.2 **Gear ratios** as per the following are authorised:

1st	3.760
2nd	2.269
3rd	1.539 or 1.65 (on American assembled gearboxes)
4th	1.18
5th	1.0
6th	0.843

D8.2 **Bell housing**: A scatter shield/blanket or steel halo ring may be used for the sole purpose of preventing debris penetrating the cockpit in the case of flywheel, or clutch assembly failure, provided the original chassis dynamics are maintained.

D8.3 The **conversion** from an automatic transmission to manual gearbox and any modification to facilitate such conversion is permitted provided it is solely for that purpose. It should be noted that some associated components may be required to enable this conversion (starter motors, eccentric shafts, etc). Any parts required in the conversion from automatic to manual shall be Factory original as from a manual RX8.

D8.4 The **gear lever** shall remain Factory original. The plastic knob on top may be replaced by an aftermarket item and the nylon lower ball shift collar may be replaced with an aftermarket part. Quick shifter kits are not permitted.

D8.4.1 Syncro Saver Plates, sourced from the Club may be installed to the gearbox lever tower for the sole purpose of preventing ‘over selection’ of gears. The gearbox must maintain full functionality including the selection of all gears.

D8.5 **Final drive ratio** shall be 4.44, as fitted to 6-speed Series 1 vehicles.

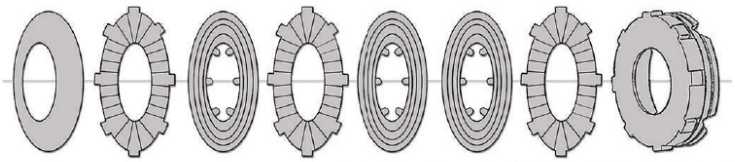
Note: some later model vehicles come fitted with different final drive ratios, these are not permitted. Mazdaspeed low ratio 4.88 differentials are also not permitted.

D8.5.1 **Limited slip differential (LSD):** An original Mazda RX8 Direct Replacement OEM Limited Slip Differential or the Control Part KAAZ 1.5 way LSD supplied by Manon Racing Products NZ are the only permitted final drive units that are to be used. The Mazda RX8 OEM LSD shall not be modified in any way. The KAAZ 1.5 way Control Part LSD must meet the following conditions;

- The Control Part Kaaz 1.5 way LSD shall be installed with locking plates configured to the 65% engage locking setting (refer to Diagram D8.5). It is the Competitor's responsibility to ensure the LSD is correctly configured;
- Super Q - WPC treatment or similar friction reducing surface treatments are not permitted;
- No change or adjustment to the LSD 65% engage locking setting is permitted; and
- The differential housing rear cover plate shall have two adjacent attachment bolt heads drilled with 2.5mm minimum diameter holes for sealing by the Series Scrutineer. The lower two right-hand or left-hand bolts are recommended for drilling as per diagram D8.6.

C8.5 & D8.5

Example of 65% locking plate configuration (stacking).



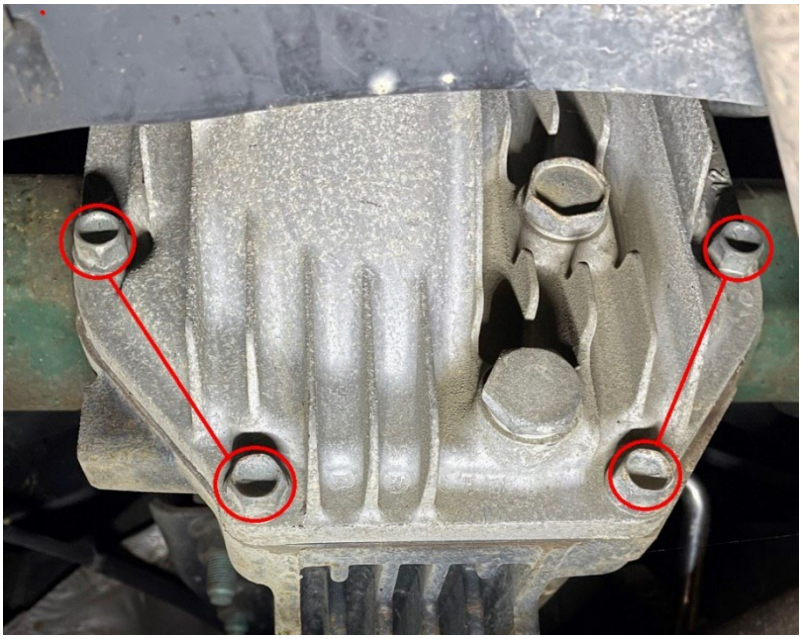


Diagram D8.6

D8.5.2 The only shimming adjustment permitted on the differential is adjustment of the diff carrier side bearing backlash preload shims. A solid spacer may be used to correctly shim the pinion in place of the crush tube.

D8.5.3 The differential housing rear cover plate may be replaced with a Club approved extended housing cover plate for better cooling efficiency: https://www.rhdjapan.com/revolution-extra-capacity-differential-cover-rx-8-se3p.html

D8.5.4 If the Control Part differential external housing seal has been approved to be broken for differential maintenance and checking, then the onus is on the Competitor to comply with Article D8.5.1 and arrange new seal to be applied at the commencement or during the next available Round. If differential torque tests are found to be outside of normal tolerances, the Series Scrutineer may request that the diff be removed and checked by authorised personnel whenever suitable time allows.

D8.5.5 Control Part LSD with external differential housing cover plate sealed shall not be disassembled without written permission from the Series Scrutineer at any time including after 30 days post final Round of the Series. If no differential external housing seal has been applied, maintenance may be carried out at any time.

D8.6 **Mounting bushes** may be substituted by a stiffer material or spherical balls.

D8.7 The **harmonic balancer** may be removed.

D9.0 ELECTRICAL SYSTEM

D9.1 IGNITION SYSTEM:

D9.1.1 **Spark plugs and HT leads** are free.

D9.1.2 **Ignition coils** and their locations are free.

D9.1.3 **Ignition and fuel injection** shall be controlled by the original Factory ECU computer (as detailed in Article D5.3). The ignition coil igniters are free.

D9.2 ELECTRICAL SYSTEM:

D9.2.1 **Wiring harness:** The original Mazda RX8 wiring loom must be used excepting any unneeded wiring and switches may be removed. Additional fuses, relays, and associated wiring may be used. Original wiring may be replaced provided it only performs its original function.

D9.2.2 The glass **headlight** units may be removed provided that the cover panels retain the same external shape as the original Factory units. These covers shall accommodate Class decals as described in the Series Articles Article 15.1.

D9.2.3 The **alternator** shall remain original and full function is maintained, except that an aftermarket pulley may replace the original pulley.

D9.2.4 The **starter motor** shall be Part No. N3H1 18400A or N3H1 18400 or subsequent superseded part number with no modification to mounting points allowed other than a spacer may be fitted between the starter motor and the bell housing although not recommended.

D9.2.5 A **battery** shall be fitted and be capable of starting the engine. The location is free providing it complies with Appendix Two Schedule A.

D9.2.6 An externally mounted **circuit breaker** must be fitted in accordance with Appendix Two Schedule A.

D9.2.7 The central high stop **brake light** must remain in operation. The Factory original may be retained, or alternatively, a Hella matrix P/N 5237 or similar style LED high stop brake light may be fitted centrally to the top of the rear screen.

D9.2.8 The Factory ABS **sensors** shall remain fitted. Any other electronic non-Factory sensors are prohibited, including:

- Any form of ground speed sensor,
- Wheel speed sensor,
- Ride height sensor,
- Any form of suspension and steering angle monitoring sensor, and
- Any other form of sensor that does not directly relate to fuel or ignition management.

Gauges and their associated sensors are free, i.e. oil and coolant pressure, and temperature.

D9.2.9 Beacons and their receivers are permitted for the sole use of lap timing both onboard and external.

D9.2.10 At least one(1) LED **rain light** must be fitted in compliance with Appendix Two, Schedule A.

D10.0 SUSPENSION

D10.1 **Suspension location points:** All mounting points shall not be modified from the original Manufacturer positions unless otherwise specified.

D10.1.1 Front suspension top wishbone bolt holes may be slotted in the horizontal plane to increase negative camber and/or castor, or offset bushes may be used. This may only be accomplished provided that no modification of the top of the wishbone assembly, the inner guard structure, or any modification of the mounting brackets is required other than is allowed herein.

Front castor and/or camber adjustment slots may be slotted an additional ten(10) mm on the same plane or the original. Corresponding locking and/or aligning devices may also move to the new location. It is allowable to remove material from the holding bracket attached to the chassis and/or the top arm for the sole purpose of achieving ten(10) mm movement. Offset bushes may also be used.

D10.2 To achieve more **rear camber** it is permissible to slot in the horizontal plane the rear bottom camber adjustment arm mounting hole in the subframe and to make replacement camber offset washers with increased hole offset. The original Factory washer locating tags shall be retained. Offset bushes may also be used.

D10.3 **Rubber Bushing:** May be substituted for solid or Nolathane/Urethane material.

D10.4 **Shock absorbers:**

(1) **Fortune Auto 500 Series:** being the Control Part shock absorber supplied by Manon Racing

- **Front both:** Fortune Auto 500 Series part # FA500PRO7-RX8F
- **Rear both:** Fortune Auto 500 Series part # FA500PRO7-RX8R

Rear shocks only: It is allowable to partial or fully weld the top hat portion to lower section of threaded screw together shocks only, for rear shock absorber safety.

All shock absorbers are sealed units with seals attached before supply. The Shock absorber may not be serviced or modified and must be installed and run as supplied.

The Series Scrutineer may fit a further seal or seals at their discretion. It is the competitor's responsibility to ensure the seals are in place at all times.

D10.5 **Coil springs** are a Control Part and shall be supplied by Mannon Racing (with shock absorbers) 10kg front and 8kg rear. These may not be modified in any way and must be installed as supplied.

D10.6 The front and rear **sway bars (anti-roll bars)** and mounts must be the original Factory items. Sway bars may be disconnected, and the rear sway bar may be removed. The end links may be replaced with aftermarket externally adjustable links.

D10.7 **Strut brace** may be fitted connecting between the top of the front strut towers and back to the fire wall.

D10.8 **Control arms:** Original Series 1 and Series 2 front lower control arms may be fitted (refer also Article 10.11).

D10.9 **Bump Stops** may be removed, modified, replaced and/or added.

D10.10 **Ride height** is free provided no unsuspended part of the car touches the ground when all of the tyres on one side of the car are deflated.

D10.11 **Front lower arm "safety brackets"** must be installed on both sides of the car. These safety brackets are available from the Club.

D10.12 The Factory rear **toe arms** may be replaced with Hardrace rear toe arms (Part No. 6721) or replaced with Club supplied rear toe arms to be purchased through the Club.

D11.0 BRAKING SYSTEM

D11.1 **Brake rotors** are a controlled part from Disc Brake Australia available through wholesalers nationwide.

- Front Rotor Part No. DBA42550S (slotted) 326mm
- Rear rotor Part No. DBA42551S (slotted) or DBA42551 (non slotted).
- Any modification, cross drilling etc of the rotors is prohibited.

D11.2 Factory original **brake calipers** must be used. No modification is allowable. Race brake pads may be fitted.

D11.3 **Brake rotor protection plates** may be removed or modified solely for venting purposes.

D11.4 A single **brake cooling** duct may be installed for each wheel.

D11.4.1 Any air duct shall be attached to the rear portion of the air duct aperture in the front spoiler/bumper. Such ducting shall not protrude forward through the air duct aperture.

D11.4.2 All ducted air for the rear brakes shall be supplied from underneath the vehicle.

D11.5 **Brake lines and hoses** are free, provided Appendix Two, Schedule A compliance is maintained. Fitment of a brake bias valve to the rear brake line is permitted. The valve may be a rotary valve or lever action style and may be fitted in the cabin or in the engine bay attached to the firewall.

D11.6 The **handbrake mechanism** may be removed or disabled.

D11.7 **Friction material** is free.

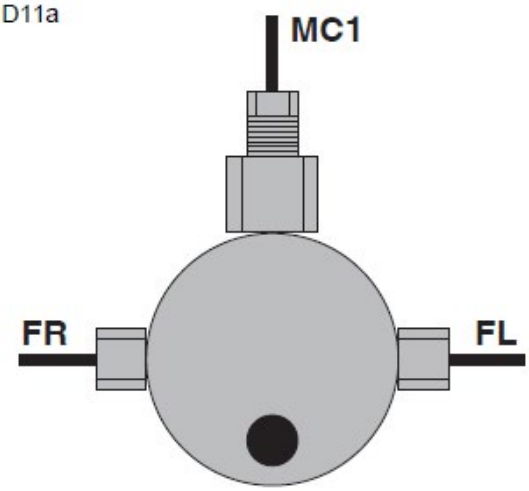
D11.8 The ABS braking system must be disabled by bypassing the ABS unit and removing the ABS fuse. The ABS unit itself must stay in the original location and remain plugged in as Factory for the PCM to operate normally.

Two ABS bypass unit options are available:

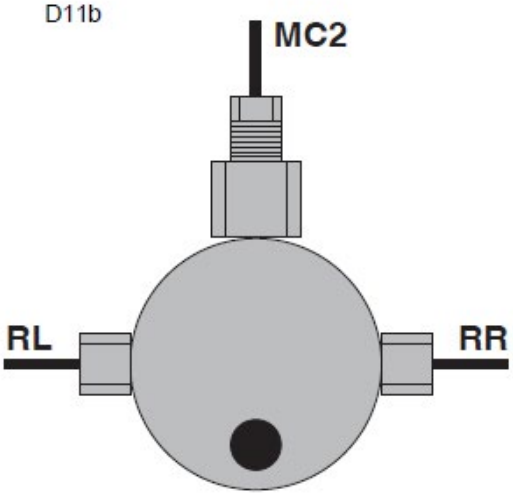
Option 1: The ABS delete tee kit is a Control Part supplied by the Club. If this option is used, it must be fitted in accordance with the diagrams below (refer Article D11a, D11b and D11c).

Option 2: The ABS delete manifold block is a Control Part supplied by Torks Precision Engineering. If this option is used, it must be fitted in accordance with the diagrams below (refer Article D11d, D11e and D11f).

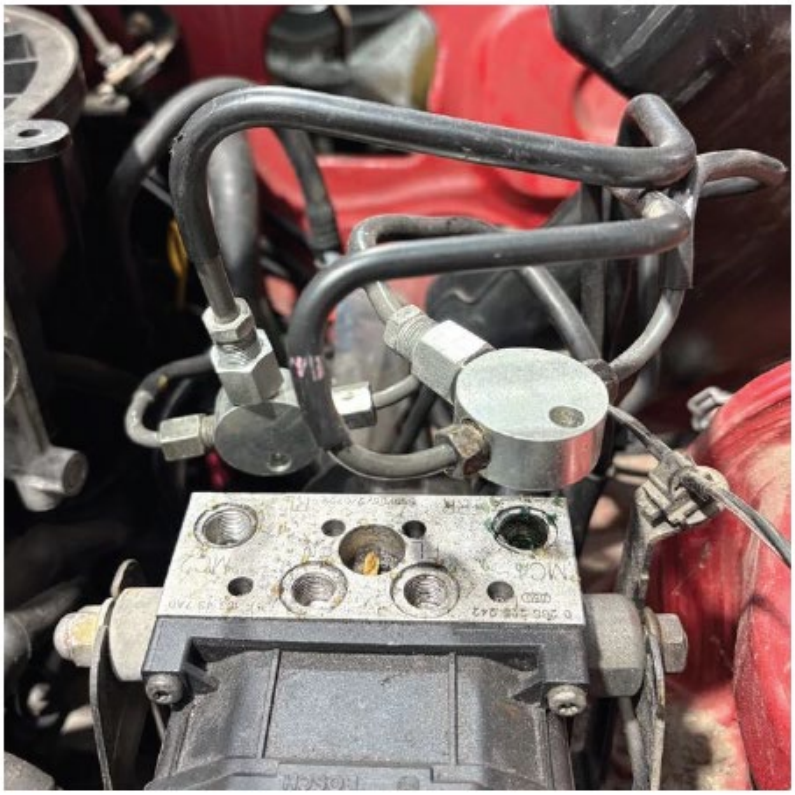
D11a



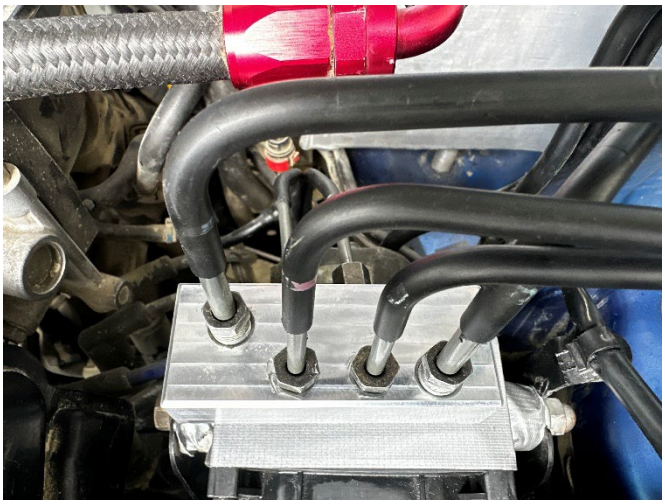
D11b



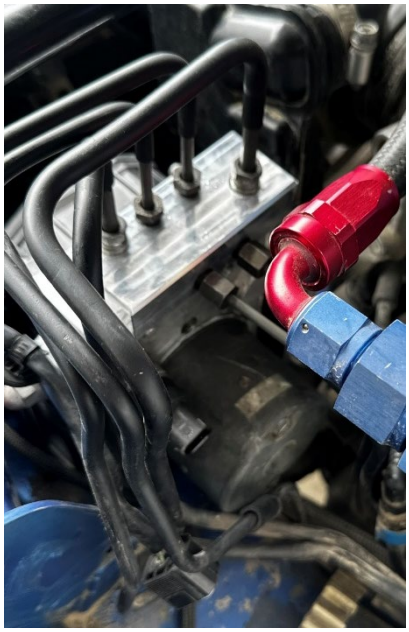
D11c



D11d



D11e



D11f

D12.0 STEERING

D12.1 **Steering arms** shall remain original.

D12.2 **Wheel alignment** is free, provided that the complete wheel/tyre assembly is housed within the vehicle Bodywork in accordance with Appendix Two, Schedule A.

D12.3 **Power steering:**

(1) The power steering components must remain Factory original, and

(2) The steering ratio must remain as original.

D12.4 **Adjustable steering column:** The adjustment may be locked.

D13.0 ROAD WHEELS

D13.1 The make and design of **wheels** is free; however, the dimension shall be 17x8inches. (refer Article D13.3). A popular choice is the DTM Gravity-II https://www.dtm.co.nz/wheel-range/wheel/WEBW-DTMGRAVIT2 usually available through the Club at a discounted price.

D13.2 **Wheel spacers** are permitted and must conform to Schedule A also refer Article D13.3.

D13.3 Maximum **track width** front and rear shall not exceed 1810mm, to be measured on the Official flat pad, using the Series ‘go/no-go’ gauge placed on the ground vertically in line with the hub centre against the side wall of each tyre. Tyre pressures before measuring shall be no lower than 20psi.

D14.0 TYRES

D14.1 Control Part **tyres** shall be Nexen NFera SUR4G 225/45ZR17 94Y. All four(4) tyres must be of the same specification/type. These must conform to wear limits specified in NSC Appendix Two, Schedule A.

D14.2 Any used or roaded Nexen NFera SUR4 235/45ZR17 94Y that the competitor has previously run, maybe used until the first round of the National Series.

The Series Scrutineer may mark the tyres. If marked, it is the competitor’s responsibility to ensure markings are legible at all times. Specific tyre marking times will be notified prior to each event.

A competitor must start all official seasons with all four(4) tyres the same specification, size and type.

APPENDIX ONE

TORKS
PRECISION ENGINEERING

Mazda RX8 Racing Series Gearbox Modifications

There are 4 parts to durability modifications. Initially Torks recommend doing all mods but for future recons potentially Just clip on bronze skirt required.

1. Control wear on aluminium selector forks
    a. Machine fork 1-2 & 3-4
    b. Clip on manufactured bronze skirt

2. Increase size of 4th gear thrust washer on cluster shaft.
    a. Machine thrust washer groove to root of cluster shaft.
    b. Replace washer with custom larger washer.

3. Increase pressure to syncros.
    a. Machine 1-2 & 3-4 selector ring ball catch detents

4. Enhance lube system.
    a. Drill holes radial holes in 1st, 2nd, 3rd, & 4th gear.

(Torks also manufacture custom circlips to get clearances within suggested tolerance)

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END PART D