

# MX-5 HERITAGE CUP

## SERIES ARTICLES GOVERNING:

### *THE 2025 'MX-5 HERITAGE CUP' RACE SERIES*

#### **PREAMBLE:**

These articles govern the MX-5 Heritage Cup Race Series for Mazda MX-5s. The series aims to promote and grow MX-5 racing in the South Island using the same successful 'Winter Series' formula that is run by the Manawatu Car Club. These articles are to govern the building and racing of low-cost Mk1 1600cc Mazda MX-5 sports cars in the South Island, whilst providing uniformity across the country, with the aim of growing both island's grid numbers in the respective series.

The MX-5 Heritage Cup Race Series is held in accordance with the MotorSport NZ National Sporting Code and the standing and supplementary regulations applicable to and issued by the organisers of each Round of the Series.

These articles and technical regulations are to be read in conjunction with:

- The MotorSport NZ National Sporting Code (NSC) and its applicable Appendices and Schedules; and
- The Event Supplementary Regulations issued by each Inviting Club.

#### **1. INTERPRETATION**

**1.1** In these Series Articles, as the context may require:

- (a) Expressions used in these Series Articles which are defined in the NSC shall have the meaning given to them in the NSC; and
- (b) The following expressions shall have the meanings set out:

**"Article"** means an Article of these Series Articles unless the context otherwise requires;

**"Inviting Club"** means the Motorsport NZ member club organising a meeting and/or event which is a Round of the Series; and

**"MX-5 Racing"** means MX5 Racing Incorporated;

**"NSC"** means the National Sporting Code issued by MotorSport NZ from time to time; and

**"Round"** means a meeting or event consisting of a number of races that qualify for points as part of the MX-5 Heritage Cup Race Series;

**"Series"** means the 2024 MX-5 Heritage Cup Race Series, being a series of events the results of which are aggregated to form a final result; and

**"Technical Regulations"** means the regulations in Article 15.

- 1.2** In the event of any inconsistency, ambiguity or contradiction:
- (a) Between any provision of the NSC (on the one hand) and these Series Articles (on the other hand), the NSC shall prevail;
  - (b) Between any provision of the Supplementary Regulations of a Round (on the one hand) and these Series Articles (on the other hand), these Series Articles shall prevail; and
  - (c) Between any of these Series Articles, the correct interpretation will be determined by the Series Coordinator, issuing a Series Bulletin emailed or handed to each driver and entrant, construing the Series Articles as a whole according to their purpose and intention so as to give them reasonable efficacy and a workable construction to give effect to the Objectives set out in Article 2.

**2. OBJECTIVES**

To promote, foster and launch this low cost, competitive and well-proven class of racing into the South Island, by the introduction of an inter-island series.

With rounds down south over Summer, and in the north during Winter, the aim is to boost grid numbers in both islands' series, by adopting the same rules and articles for both islands.

**3. ELIGIBILITY**

- 3.1** All drivers must be financial members of a Motorsport NZ affiliated club.
- 3.2** All drivers must hold a C1 Grade Competition licence or higher and if the Entrant is other than the Driver, an Entrants Licence is required in the name of the Entrant.
- 3.3** Eligibility shall be for vehicles complying with the Technical Regulations.
- 3.4** By entering the Series, all Competitors/Entrants inter alia agree to submit their vehicle(s) for eligibility/safety scrutineering inspections as and when required by the Series Scrutineer, and/or a MotorSport NZ licensed Technical Officer. Any costs incurred during dis-assembly and for subsequent re-assembly shall be met by the Competitor/Entrant.
- 3.5** Official Series Seals may be applied by the Series Scrutineer, at any time, to components and/or assemblies of components in compliance with NSC Appendix Two, Schedule A, Article 3.7. Any seals applied shall be clearly detailed in the vehicle's Motorsport NZ Logbook.

**4. SERIES STRUCTURE**

The Series shall comprise the following Rounds:

Round	Date	Venue	Inviting Club
1	15/16 February 2025	Teretonga Park Raceway: Invercargill	Southland Sports Car Club
2	1 March 2025	Levels Raceway: Timaru	South Canterbury Car Club
3	15/16 March 2025	Teretonga Park Raceway: Invercargill	Southland Sports Car Club
4	22/23 March 2025	Ruapuna Raceway: Christchurch	Canterbury Car Club

MX-5 Racing reserves the right to cancel or amend any Rounds due to force majeure without affecting in any way the award of any title.

## 5. SERIES PERSONNEL

The following personnel, and/or their assistant/s have the responsibilities and authorities set out:

### 5.1 Series Coordinator:

**Name:** Sam Murray  
**Phone No:** 029 770 5451  
**Email:** [mx5heritagecup@gmail.com](mailto:mx5heritagecup@gmail.com)

Who shall have the authority of a series coordinator set out in the NSC and who shall be responsible for and authorized on behalf of MX-5 Racing to:

- (a) Liaise with the Inviting Clubs on all matters pertaining to these Articles; and
- (b) Liaise with drivers and entrants on all matters pertaining to these Articles; and
- (c) Ensure correct placement of decals on vehicles contesting the Series; and
- (d) Attend Stewards' meetings if required.

The Series Coordinator may appoint a Series Secretary to assist with the administrative duties in connection with the Series.

### 5.2 Series Secretary & PR representative:

**Name:** Richard Bosselman  
**Phone No:** 021 770 909  
**Email:** [richard@motoringnz.com](mailto:richard@motoringnz.com)

Who shall have the authority of a series coordinator set out in the NSC and who shall be responsible for and authorized on behalf of MX-5 Racing to:

- (a) Deal with all administrative matters pertaining to the Series; and
- (b) Record and publish all Series points schedules; and
- (c) Provide the Inviting Clubs with grid positions where these differ from those detailed in Appendix four Schedule Z, Article 6.1. and
- (d) Produce and distribute promotional content for the series.

### 5.3 Series Scrutineering Team:

**Name:** Benny Yan  
**Phone No:** 022 436 2916  
**Email:** [garage5nz@gmail.com](mailto:garage5nz@gmail.com)

**Name:** Shane Hayter  
**Phone No:** 022 303 6836  
**Email:** [shane.hayter79@gmail.com](mailto:shane.hayter79@gmail.com)

**Name:** Sam Murray  
**Phone No:** 029 770 5451  
**Email:** [mx5heritagecup@gmail.com](mailto:mx5heritagecup@gmail.com)

Who, jointly shall have the duties and authority of a Series Scrutineer as set out in the NSC and who shall be responsible for and authorized on behalf of MX-5 Racing to:

- (a) Appoint appropriate additional scrutineers to assist with inspections; and
- (b) Deal with all technical matters pertaining to the Series; and
- (c) Affix seals as and when determined appropriate; and
- (d) Inspect any competing vehicle in order to ascertain compliance with the Technical Regulations; and

- (e) Assist competitors with technical inquires relative to the Technical Regulations; and
- (f) Liaise with Event Officials and Series Coordinators on any technical conformity issue for the class.
- (g) Be a Round Judge of Fact on the matters contemplated by the NSC.

**6. SERIES ENTRY**

- 6.1 Entry into the Series shall be made on the official **MX-5 Heritage Cup Series** entry form. By entering the series all competitors/entrants agree to comply with these Articles and the NSC.
- 6.2 Entry to each Round of the Series (separate to the Series Entry) shall be made to the Inviting Club for the Round, on their official meeting entry form.
- 6.3 MX-5 Racing / Manawatu Car Club will allocate a permanent number to each competitor for the Series. All numbers on competing vehicles must comply with the prescriptions of NSC Appendix Two; schedule A, article 6.2 – Competition Numbers.
- 6.4 **Condition of Entry:**
  - (a) The Competitor/Entrant, by entering the Series is deemed to have accepted and agreed to comply with these Articles (including as they may be amended from time to time), and shall at all times be responsible for their competing vehicle with respect to safety requirements under NSC Schedule A, and the Technical Regulations.
  - (b) The Competitor/Entrant, by entering the series is deemed to have accepted and agreed to comply with any specific requirements of the official Series sponsor/s as detailed in these Articles (including as they may be amended from time to time).
  - (c) MX-5 Racing reserves the right to accept or decline entries into the series as per NSC Art. 21.

**7. POINTS STRUCTURE**

- 7.1 There shall be one points system applied to all results of the Series. Points will be recorded and published by the Series Coordinator and will be allocated to all eligible competitors in the Series on their overall finishing positions in each race at each Round of the Series.
- 7.2 The points will be allocated as follows:

1st	75	11th	30	21st	10
2nd	67	12th	28	22nd	9
3rd	60	13th	26	23rd	8
4th	54	14th	24	24th	7
5th	49	15th	22	25th	6
6th	45	16th	20	26th	5
7th	42	17th	18	27th	4
8th	39	18th	16	28th	3
9th	36	19th	14	29th	2
10th	33	20th	12	30th	1

## **8. AWARDS**

**8.1** Points will be recorded and published by the Series Coordinator and will be allocated to drivers based on their overall finishing positions in each race, at each Round of the Series. The MX-5 Heritage Cup Series Championship which will be awarded to the driver who has gained the highest aggregate of points.

**8.2** In the event that, at the conclusion of the Series, two (2) or more drivers have an equal number of points (i.e. a tie), the driver achieving the higher position shall be determined using the following method:

- (a)** The greater number of first placings obtained and progressing down the finishing positions in all Rounds of the Series. If an equal result is still obtained, then;
- (b)** The greater number of pole positions obtained and progressing down the qualifying positions in all qualifying sessions for all Rounds of the Series. If an equal result is still obtained, then;
- (c)** The number of the outright fastest race laps achieved in each race and progressing down the fastest laps in each race in all Rounds of the series. If an equal result is still obtained, then;
- (d)** The Series Coordinator, at his sole discretion, shall determine the winner, or may declare those still tied to be equal winners.

**8.3** Any disputes concerning the allocation of points will be decided by the Series Coordinator. Any queries or challenges concerning points allocations must be submitted in writing to the Series Coordinator within five (5) days of the first publication of the points in dispute. All points classifications will be considered final 10 days after the end of the last Round of the Series and subject only to any ongoing protest or appeal concerning the classification of a race, from that point on, no further amendments or corrections will be made.

Awards will be presented at the conclusion of each Round as follows:

- Round Winner MX-5 Heritage Cup Series
- Second place and
- Third place
- Fastest Lap of the Round

**8.4** Awards will be presented following the final Round of the Series as follows:

- Overall MX-5 Heritage Cup Series Champion
- Second place and
- Third place

## **9. ROUND FORMATS**

### **9.1 MX-5 Heritage Cup Series**

MX-5s will race in their own grid at each Round of the Series, provided there is an entry of at least 12 cars for the Round.

- (a) Round 1: Teretonga Park (ESTIMATED)**  
*Qualifying.* 1 x 10 or 15 minute session  
*Race 1.* 8 laps scratch based on qualifying results.  
*Race 2.* 8 laps scratch based on the finish order of Race 1 before penalties  
*Race 3.* 8 laps Reverse Grid Based on the finish order of Race 2 before penalties  
*Race 4.* 8 laps Marble Draw
- (b) Round 2: Levels Raceway (ESTIMATED)**  
*Qualifying.* 1 x 10 or 15 minute session  
*Race 1.* 8 laps scratch based on qualifying results.  
*Race 2.* 8 laps scratch based on the finish order of Race 1 before penalties  
*Race 3.* 8 laps Reverse Grid Based on fastest lap achieved in Race 2  
*Race 4.* 8 laps Marble Draw
- (c) Round 3: Teretonga Park (ESTIMATED)**  
*Qualifying.* 1 x 10 or 15 minute  
*Race 1.* 8 laps scratch based on qualifying results.  
*Race 2.* 8 laps Reverse Grid Based on the finish order of Race 1 before penalties  
*Race 3.* 8 laps Reverse Grid Based on fastest lap achieved in Race 2  
*Race 4.* 8 laps Marble Draw
- (d) Round 4: Euromarque - Ruapuna**  
*Qualifying.* 1 x 10 or 15 minute  
*Race 1.* 8 laps scratch based on qualifying results.  
*Race 2.* 8 laps Reverse Grid Based on the finish order of Race 1 before penalties  
*Race 3.* 8 laps Scratch Based on points gained in Race 1 and Race

## **10. TIMEKEEPING**

- 10.1** The Inviting Club shall provide the timing system for each event.
- 10.2** If AMB Timing is used and a transponder is hired, it is the responsibility of the competitor to install it in accordance with NSC Schedule A, look after the equipment with due care and return it at the end of the event. Any damage or loss is the responsibility of the competitor.

## **11. BREACH OF TECHNICAL REGULATIONS**

- 11.1** In the case of a breach or breaches of any of the **Technical Regulations**, penalties shall be applied by the Series Coordinator by way of loss of points for race/races as determined appropriate by the Series Coordinator. Subject to any rights of protest or appeal as to the findings of the Clerk of the Course or the Stewards of the Meeting, the Series Coordinator's decision is final.

## 12. PARC FERMÉ

- 12.1 At the conclusion of any qualifying session or race, drivers, when directed by the Series Scrutineer or his assistant(s), must drive their competing vehicle directly (without any team personnel/crew intervention) from the track to the designated Parc Fermé. The location of Parc Fermé will be notified on the official event notice board.
- 12.2 The Series Scrutineer may authorise entry of team personnel into Parc Fermé for the purposes of vehicle eligibility inspections.

## 13. DECALS

- 13.1 All Competitors must ensure that their competing vehicle and apparel have the specified spaces reserved for the Series Register and the Series Sponsors at all Rounds including;
- Position B7: Windscreen banner.
  - Positions A1, A2 and A3 – on both front guards / doors
- 13.2 One set of decals shall be provided free, and replacements will be charged to competitors.
- 13.3 Car identification shall be shown in accordance with NSC Schedule A Article 6.2 (1) as follows:
- The car number shall be shown on the doors;
  - The car number and driver's name shall be shown on the left side of the windscreen;

## 14. TELEVISION AND IN-CAR CAMERAS

- 14.1 All in-car camera installations shall be subject to inspection and approval by the Series Scrutineer and/or Chief Scrutineer of the meeting.
- 14.2 Competitors are encouraged to use in-car cameras for collecting series footage and make this available to the Series Coordinator for promotional purposes.
- 14.3 Any in-car camera footage should be made available to the Clerk of the Course or the Series Coordinator on request.

## 15. TECHNICAL REGULATIONS

### PREAMBLE

The overlying philosophy of these Technical Regulations is as follows:

- Have simple and straightforward technical regulations along the lines of "it must remain standard unless specifically stated otherwise"; Efforts to bend, find or take advantage of loopholes in the Technical Regulations are liable to be determined as not in the spirit of the Series and/or bringing MX-5 Racing into disrepute.  
These Technical Regulations shall be interpreted on the basis that if a modification is not specifically permitted, then it is not allowed.
- To minimize compliance costs and ensure the Series emphasizes driver ability rather than mechanical advantage;
- To control the Series to provide fair competition for all;
- To meet the objectives of the Series;

## 15.1 GENERAL

- (a) These Technical Regulations shall be read in their entirety and shall take precedence over Appendix 2 Schedule A of the NSC except where an item is not specifically covered, in which case NSC Appendix 2 Schedule A will apply.
- (b) “OEM” means Original Equipment Manufacturer and includes Mazda factory-supplied original components;
- (c) All competing vehicles to which these regulations apply shall have a valid MotorSport NZ logbook.
- (d) Where any doubt may exist in understanding any of these Technical Regulations, it will be the competitor’s obligation to enquire as to the correct interpretation as follows:
  - All technical eligibility and/or safety equipment enquiries shall be submitted in writing to the Series Scrutineer.
  - A written reply will be provided.
  - On matters of technical eligibility and/or safety compliance, no oral statement will have any validity.

## 15.2 ELIGIBLE VEHICLES

The only vehicles eligible to compete shall be the series production NA6CE model Mazda MX-5 built between 1989 and 1993 with a 1600cc engine. All vehicles should be of sound construction and good mechanical condition.

## 15.3 MINIMUM RACE WEIGHT

- (a) **Minimum Racing Weight** shall be **960kg** in racing trim including the driver.
- (b) All race vehicles shall respect the minimum racing weight at all times for the duration of each Round.
- (c) The Racing Weight may be measured at any time during or at the conclusion of any qualifying session and/or race on the official scales of the event/meeting.
- (d) Any ballast required to respect the minimum racing weight shall be securely bolted to the chassis in compliance with NSC Schedule A.

## 15.4 SAFETY EQUIPMENT REQUIREMENTS

The following safety equipment **must** be fitted to the competing car:

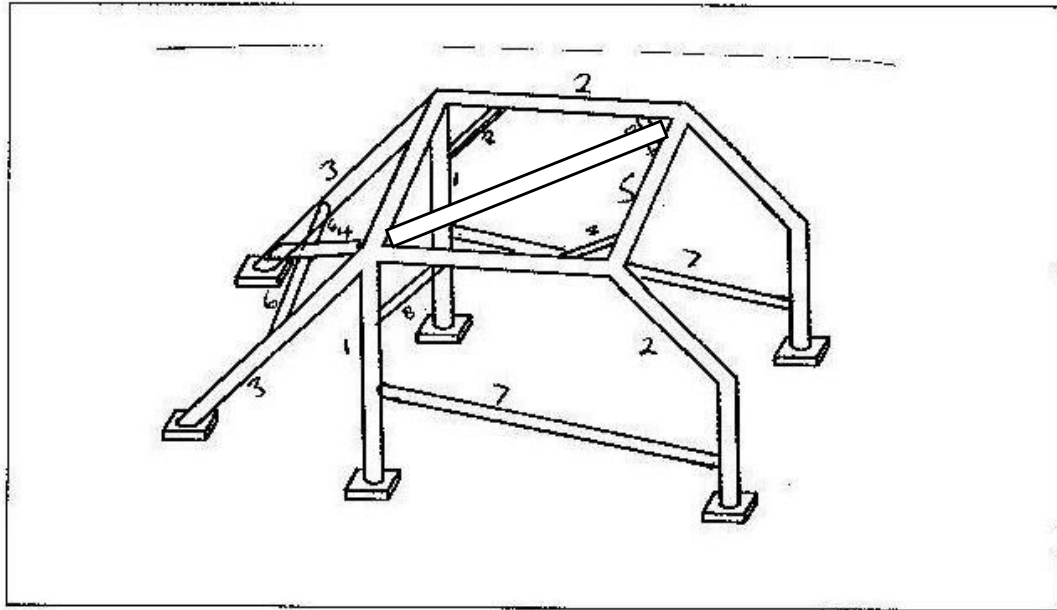
- (a) A roll cage installed in full compliance with NSC Schedule A. The roll cage design is free but must include the following minimum members:
  - (i) Main Hoop;
  - (ii) Diagonal on main hoop from rear mount to above driver’s head;
  - (iii) Minimum of a single door intrusion bar on each side positioned as close to the door covering as possible;
  - (iv) Minimum of a single bar in the centre of the roof; and
  - (v) Horizontal seat belt mounting bar.

Material must be MSNZ-Q29 steel only. ASME 4130 Alloy (Chrome Moly) is not permitted.

Refer to diagram below for typical standard roll-cage design (see over)



**SECTION 3 - SAFETY CAGE / ROLLBAR DRAWING** (Refer instruction 3)



- (b) A competition seat, safety harness and fire extinguisher must be installed in full compliance with NSC Schedule A
- (c) A driver's window net must be installed and must comply with NSC Appendix Two Schedule A 4.5(1) as follows:
- (i) Window nets must close the window aperture to the steering wheel, and
  - (ii) Be to an SFI standard or FIA requirements having the following characteristics:
    - Minimum width of the strips: 19mm,
    - Minimum size of the meshes: 25 x 25mm,
    - Maximum size of the meshes: 60 x 60mm, and
  - (iii) Must incorporate a 'quick release' system operable from both inside and outside the vehicle.

**15.5 FUEL**

- (a) Only MotorSport NZ approved, unleaded fuels currently **commercially available from a New Zealand service station forecourt pump may be used**. These include unleaded 91 octane (RON), unleaded 95 octane (RON), unleaded 98 octane (RON) any 100+ octane (RON) unleaded and E10\* 98 Octane (\*10% Ethanol Blend).
- (b) Avgas (Aviation fuel), any unleaded Race gas, E85 (Ethanol blend) and any octane boosting/additive products, or fuels other than the ones listed above are illegal and may not be used.
- (c) All competitors agree to permit fuel samples being taken from their vehicles for compliance testing purposes.

## 15.6 CHASSIS

- (a) No modifications are permitted, other than for the purpose of fitting a rollcage and seats.
- (b) Seam welding is not permitted.
- (c) All vehicles must be in an open condition with the soft top or hood removed.
- (d) Bolts, nuts and fasteners may be replaced with equivalent replacements.

## 15.7 BODYSHELL and VEHICLE EXTERIOR

- (a) All bodywork must be in a tidy condition in accordance with NSC Schedule A clause 5.8.
- (b) No front spoiler may be fitted.
- (c) A rear spoiler may be fitted, provided it conforms in size and shape with any of the factory optional spoilers.
- (d) All body panels shall be the OEM supplied units or aftermarket equivalents. Alternative materials such as fiberglass or carbon fibre are prohibited.
- (e) Wheel arch inner lips may be folded to provide tyre clearance, provided the outer guard shape is not altered.
- (f) Removal of the following parts is permitted:
  - Wheel arch inner plastic linings.
  - Underbody plastic protection.
  - Antenna provided the hole is covered
  - Lamps / reflectors fitted to the front guards provided the holes are covered.
  - Body underseal.
  - Any unused fittings and brackets.
- (g) Headlights may be removed, along with opening mechanisms and frames, but both standard headlight covers must remain, be fixed securely and remain flush with the surrounding body panels. The left-hand headlight cover may be replaced by a 'Mike Shaw Fibreglass' or similar induction unit.
- (h) Front Park/Indicator lights may be removed and replaced with lens covers. These must be securely fitted and occupy the same aperture as the original unit. The left side Park/Indicator light assembly may be removed for induction purposes.
- (i) The main door glass windows, excluding the quarter lights may be removed. Window winders and runners may also be removed.
- (j) The use of tape or any other means to cover body panel gaps is not permitted, unless absolutely necessary for a temporary repair following damage.
- (k) It is not permitted to modify the exterior bodywork to channel or duct additional air beneath the car or into the radiator or engine air intake.
- (l) Any protrusions through the firewall shall be covered with suitable rubber fittings or solid panels.
- (m) Exterior mirrors shall remain standard and operational.
- (n) Fuel filler lid and boot release mechanisms may be modified or removed.
- (o) It is recommended that the original bonnet and boot catches be removed and replaced by competition bonnet pins or catches.

## 15.8 INTERIOR

- (a) With the exception of the dashboard assembly and inner door cards, all interior trim and unused brackets may be removed, provided it complies with NSC Schedule A. Any sharp edges must be covered.
- (b) The OEM complete dashboard assembly including the steel support frame must remain in the standard location but may be modified for the installation of the roll cage. The radio/heater control panels may be removed provided any holes are covered.
- (c) The driver's seat must be replaced with a competition seat in accordance with NSC Schedule A. The factory seat rails and support brackets may be modified, reinforced or removed to facilitate replacement seat mounting provided they perform no other function. The transmission tunnel may be modified for the sole purpose of fitting a competition seat.
- (d) The passenger seat may be removed as per paragraph (c) above.
- (e) Instruments and switches may be removed, replaced or supplemented.
- (f) The steering lock assembly shall be removed for Dedicated Motorsport Vehicles and optional for all other vehicles. A replacement steering wheel is permitted in compliance with NSC Schedule A.
- (g) Air conditioning, heater, blower and associated plumbing/fittings may be removed.
- (h) Both doors must retain the original interior door cards. The interior door armrest may be removed to allow for fitting of the roll cage. The standard interior and exterior door catches must be retained and in working condition.
- (i) Anti-slip/alternative pads may be fitted to the pedals and a heel plate added.
- (j) An internal rear-view mirror must be fitted.
- (k) The factory spare wheel and associated tool kit must be removed.

## 15.9 ENGINE

- (a) The only permitted engine is the Mazda B6 engine with a bore of 78mm and a stroke of 83.60mm.
- (b) Head skimming is free. Cylinder block decking is prohibited.
- (c) Maximum overbore permitted is +0.50mm
- (d) Machining, polishing, drilling and lightening or adding material to engine components is prohibited other than the absolute minimum necessary to allow for recovery of damaged or worn components or balancing during assembly.
- (e) It is permitted to use aftermarket replacement pistons and rings provided they meet OEM form and dimensions, including weight.
- (f) Porting, polishing or any modification of the inlet or exhaust ports of the cylinder heads is prohibited, other than machining of valve seats during assembly.
- (g) OEM camshafts and cam pulleys must be used and may not be modified. The use of vernier cam pulleys is prohibited. Offset camshaft drive pins are prohibited. Only the OEM or equivalent 145-tooth x 22mm cambelt is permitted. Only the OEM or equivalent cambelt tensioner and OEM or equivalent cambelt idler pulley may be used and only in the stock location.
- (h) The cam cover may be altered, and the plastic cam belt cover may be removed to expose the cam wheels and belt.
- (i) Only OEM or equivalent unmodified inlet and exhaust valves, valve springs, retainers

and hydraulic lifters may be used.

#### **15.10 ENGINE ANCILLIARIES**

- (a) Only genuine Mazda or equivalent pattern aftermarket engine mounts may be used. The engine and gearbox must remain in the original location.
- (b) The OEM flywheel must be used. Lightening of the OEM flywheel is prohibited, however it is permitted to remove material to reface clutch area to a minimum weight of 7.85kg.
- (c) Clutch disc and pressure plate are free, provided they follow the pattern and diameter of an OEM clutch, they mount to the OEM flywheel using the production mounting points and use the OEM or equivalent release bearing and slave cylinder.
- (d) The radiator is free provided it respects the standard core surface area and mount in the standard location.
- (e) The thermostat is free and may be removed, provided the original OEM housing is retained.
- (f) The cooling fan(s) may be removed or replaced.
- (g) The original emission, ISC (idle speed control) equipment and associated plumbing may be removed.

#### **15.11 INDUCTION SYSTEM**

- (a) The Air Flow Meter shall be the original unit and must not be adjusted from original factory-supplied specifications. The unit must not be opened and the top cover and original sealant must remain in place. The Series will hold a number of air flow meters. Upon request of the Series Scrutineer, the competitor must remove their air flow meter and fit a unit supplied by the Series Scrutineer or a unit from another competitor's car. The swapping of air flow meters may be ordered at any time by the Series Scrutineer. Competitors will be allowed one test/practice session to ensure the replacement air flow meter is working correctly.
- (b) The OEM intake duct components and baffle must be used from the throttle body directly to the intake of the standard Air Flow Meter. All components upstream of the Air Flow Meter are free.
- (c) The complete inlet manifold system must remain as the factory original with no modifications.
- (d) Air intake cooling: Any artificial lowering of the atmospheric temperature is strictly prohibited.

#### **15.12 FUEL SYSTEM**

- (a) An OEM or equivalent fuel pump is permitted provided it is located in the original position.
- (b) Fuel filters are free.
- (c) The fuel tank vent system may be modified to prevent potential spillage of fuel.
- (d) Any device or system that alters the temperature or pressure of the fuel is prohibited.
- (e) Only the OEM MX-5 fuel injector, blue 13.8 ohms 205cc, Denso part number 195500-1970 may be used.

#### **15.13 EXHAUST SYSTEMS**

- (a) The OEM front exhaust manifold must remain and be fitted with the standard operational O<sup>2</sup> sensor. It is permitted to remove material from inside of the exhaust manifold to a depth of 10mm to align the head-to-manifold ports. Should such removal result in weakness or leakage, it is permitted to locally repair the area by the addition of material to the outside of the manifold only.

- (b) The exhaust pipe rearward of the exhaust manifold is free provided a maximum outside pipe diameter (OD) of 60mm is respected and the exit is in the original location.
- (c) The catalytic converter and rear O<sup>2</sup> sensor may be removed.
- (d) The rear muffler may be replaced by a 'bullet' style muffler only, provided noise is in compliance with NSC Schedule A.

#### 15.14 IGNITION SYSTEM

- (a) Spark plugs and high-tension leads are free, but the ignition coil and layout must remain as per original.
- (b) Ignition timing is free.
- (c) The ECU shall be the original unit and must not be modified. No alteration to wiring nor additional 'piggy-back' devices may be fitted that may alter the functionality or performance of the ECU, air flow meter, ignition timing or fuel injection. The ECU may be relocated to the front bulkhead under the dash area. MX-5 Racing will hold a number of ECUs. Upon request of the Series Scrutineer the competitor is required to remove their ECU and fit a unit supplied by MX-5 Racing or a unit from another competitor's car. The swapping of ECUs may be ordered at any time by the Series Scrutineer. Competitors will be allowed a test/practice session to ensure the replacement ECU is working correctly.

#### 15.15 ELECTRICS

- (a) The taillights and brake lamps must remain in place and fully functional at all times. Higher wattage bulbs are recommended.
- (b) The battery and its location is free. Battery terminals must be covered.
- (c) The battery and starter motor must be capable of at least 3 repetitive starts.
- (d) Redundant wiring, fuses, relays and connectors may be removed.
- (e) The OEM ignition switch may be removed and replaced with aftermarket switches.
- (f) An externally mounted circuit breaker may be fitted.
- (g) A rear LED rain light must be fitted in accordance with NSC Schedule A.

#### 15.16 SUSPENSION

- (a) Any single-action damping adjustable shocks with height adjustable spring platforms are permitted. The following option is recommended:
  - GAZ Gold Professional.
- (b) Springs are free.
- (c) Suspension bushings must be OEM or the equivalent polyurethane bush.
- (d) Suspension pickup points must remain as standard.
- (e) It is permitted to detach but not remove the front and/or rear anti-roll bars.
- (f) The only permitted anti roll bars are the OEM supplied bars:
  - Nominal Front Diameter 19.2mm
  - Nominal Rear Diameter 12.5mm.
- (g) OEM or replica braces may be added to the rear subframe. Replica mounts may be added to the rear subframe for the sole purpose of mounting the braces.

### 15.17 TRANSMISSIONS

- (a) The OEM 5 speed gearbox only shall be used. The only permitted transmission and final drive ratios are:

**Gearbox Ratios –**

1 <sup>st</sup>	3.136 : 1
2 <sup>nd</sup>	1.888 : 1
3 <sup>rd</sup>	1.333 : 1
4 <sup>th</sup>	1.000 : 1
5 <sup>th</sup>	0.814 : 1

**Final Drive Ratio – 4.300:1**

- (b) It is prohibited to modify the transmission in any way that will alter the operation of any of the internal components.
- (c) The conversion from an automatic transmission to an OEM manual 5 speed gearbox and any modification to facilitate such conversion is permitted provided it is solely for that purpose. Any parts required in the conversion shall be OEM as from a manual MX-5.
- (d) The differential shall be either the unmodified OEM “open” or “viscous” LSD (VLSD) unit. Any other type of limited slip differential or locked diff is prohibited.
- (e) Diff mounting bushes must be OEM or equivalent polyurethane bush.
- (f) Any shift knob may be used, including a short shift lever.

### 15.18 BRAKES

- (a) Brake pads are free.
- (b) Brake lines and hoses are free, provided NSC Schedule A compliance is maintained. Steel braided flexible hoses are recommended.
- (c) Brake rotors are free provided they are ferrous and respect the original diameter and thickness. Slots, grooves and cross drilling are not permitted.
- (d) The OEM brake calipers must be used in the original locations.
- (e) Steel backing plates may be modified or removed. Any form of fabricated brake ducting is prohibited.
- (f) Vehicles fitted with anti-lock braking systems must have those disabled or removed.
- (g) The handbrake must remain standard and functioning.
- (h) An aftermarket or adjustable brake bias valve is not permitted.

### 15.19 WHEELS and STEERING

- (a) Manual or power steering may be used provided the ratio remains standard. It is permitted to convert a power steering rack to manual. Unused power steering components and fittings may be removed.
- (b) Wheels are free to a maximum size of 15”x7” and must fit within the standard arches.
- (c) Wheel spacers are prohibited, and the OEM wheel studs must be used.

## 15.20 TYRES

- (a) The only tyre permitted to be used is the **Hankook Ventus RS4 195-50-R15** and it must have a minimum tread depth in accordance with NSC Schedule A 4.9 (3) (b).
- (b) All tyres must have a minimum tread groove depth of 1.5mm as defined by the manufacturer's tread depth indicators within all grooves around the entire circumference of the tyre's road contact surface.
- (c) Tyre treatments/modifications are specifically prohibited including (but not limited to):
  - Hand cut tread grooves;
  - Tyre warmers;
  - Chemical treatments or any means to artificially enhance tyre performance.

## 15.21 OFFICIAL SEALS

- (a) **Provision for fitment of seals:** All vehicles shall have provisions for wire seals to be affixed to the following positions. Accordingly, a 3.0mm 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:
  - Engine and head joint;
  - Gearbox side – two adjoining bolts; and
  - Final drive head – two adjoining bolts.
- (b) A competitor's vehicle may have seals fitted for the duration of the Series by or at the direction of the Series Scrutineer/s.
- (c) Removal of seals: Official Seals shall not be tampered with, broken or removed during the Series or within 30 days of the final Round unless written permission is requested and obtained from the Series Scrutineer/s.

**MX-5**  
**HERITAGE CUP**