



Mini Challenge

Rules and Regulation

Season 2026

2026 Category Managers:

Steve Turner (Category Manager)

Hope Branch (Category Administrator)

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A. CALENDAR

The *Mini Challenge* series will be conducted across at least 3 *South Australian State Motor Racing* events, and where applicable one interstate round per annum.

Once finalised, the calendar of events will be available at:

<https://www.ssasa.org.au/>

VEHICLES ELIGIBILITY

All post 2000 Mini variants are eligible to compete under the listed classes (refer below). A pre 2000 Mini may also be eligible to enter, subject to approval by the Category Manager and the EO, and being placed into an appropriate class.

Cars shall comply with the 3D Sports Sedan regulations (linked below), save for the specific exceptions outlined in these Mini Challenge Regulations.

[Circuit Race Appendix \(motorsport.org.au\)](https://www.motorsport.org.au/circuit-race/appendix)

The eligibility of vehicles to run with Mini Challenge shall be determined by the Chief Scrutineer in conjunction with the EO. Provided the Chief Scrutineer accepts the compliance of the entry, the vehicle will be placed into the class best describing that vehicle.

B. VEHICLE CLASSES

The following classes shall apply, subject to the rules and regulations provided below:

- **Open** – full freedom in accordance with the 3D Sport Sedan Regulations.
- **Modified** – limited Modifications.
- **Modern Challenge** – a parity class of modified R53 Minis.

All Classes

1. All vehicles shall be run on fuels that are permitted under Schedule G of the Motorsport Australia Manual, unless further restrictions apply under specific classes described below.
2. Open and Modified Class vehicles may have a Mini Challenge rear wing installed that protrudes above the roof line, as used in the 2007 Mini Challenge Series in Australia¹. A reasonable “look-a-like” alternative may also be approved for Stewards or Scrutineers with advice from the EO. If you are considering a specific rear wing that is not yet approved, please see the EO prior to purchasing. Any wing that is above the roof line **and** deemed to provide a performance advantage over the Mini Challenge wing, in the opinion of the EO, will not be allowed.
3. Minimum Racing weights listed under these regulations include driver and are applicable at all times during the event.

Open Class

1. Cars in this class may have all modifications allowed under the 3D Sports Sedan regulations, [link above](#).

Modified Class

1. The Modified Class will be for vehicles fitted with factory engine combinations (including turbo or supercharger), or a naturally aspirated engine swap with swept capacity of less than 2.0L.
2. Modifications to a vehicle in this class shall comply with the following table. If not listed in the following table, components shall be considered free and can be removed, replaced or modified:

¹ Note, this regulation is at variance with the 3D Sport Sedans regulations which would otherwise limit the height of rear wings to no higher than roof line.

	R53 Mini	R56 Mini	F56 Mini
Vehicle Construction	Floorpan construction, as defined under the 3D Sports Sedan regulations		
Engine Location	Engine shall remain in the factory location and may not be set back any further than the factory firewall. No modifications shall be made to the firewall.		
“Mini” derivative Engine / Gearbox Configuration	Factory engine arrangement shall be used. The block, swept capacity, turbocharger/supercharger shall be retained. An increase in boost level may be achieved through increasing overdrive of the supercharger or custom tune for turbo vehicles. Gearbox casings shall remain factory, but internal parts may be replaced with aftermarket components		Factory engine and gearbox arrangement shall be used, with internal components remaining factory. An OEM factory automatic transmission may be used provided both the gearbox and shifter mechanism are not modified from factory fitment
Bore and Compression Ratio	Compression ratio will be free, oversized piston of up to and no more than 1mm may be used	An oversize piston and bore of 1mm may be used, but shall retain the standard Cooper S compression ratio or below	
Camshafts	Free	Factory R56 Cooper S or JCW camshafts only	Factory F56 Cooper S only
Cylinder Heads	Modified R53 factory head allowed including larger valves	Unmodified factory R56 Cooper S or JCW cylinder heads	Factory F56 Cooper S only
“NA” Swap Engine / Gearbox Configuration	Engine block, head and gearbox casings shall remain a mass produced “factory” item. Internals may be replaced with aftermarket components, no limitations on specifications such as compression ratio.		
Forced Induction	No modifications shall be made to the factory supercharger or turbo charger. There shall be no changes to the internal components or any “flow” work conducted on the components.		
ECU & Tune	Free		Must remain factory fitment Cooper S item, flash tune free
Fuel	Free	98 Octane Premium Unleaded fuel only	
Wheels	No Larger than Diameter: 18” Width: 8”		

Modern Challenge

The rules applicable to the Modern Challenge class of competition are provided as Appendix A.

C. COMPETITION NUMBERS

Competition numbers must be registered with a SA Sport Sedans.

D. CHAMPIONSHIP POINTS AND CLASS WINNERS

Class Winners

1. To field a class (as described above), at a given race meeting there must be a minimum of 3 cars in that class. Failing 3 cars entering, the cars in that class will be moved to the next fastest class, for that event.
2. For each class of competition, points will be awarded using the South Australia Motor Racing Championship Series points system.
3. For each round a class winner will be awarded, based on the highest points total in that class, summed across the races for that race meeting.
4. Championship Class Winners will be determined at the end of the season, based on each drivers accumulated points total, summed across the championship races. For the purposes of Championship points, item 1 above will be disregarded, and each car/driver will be awarded points within their class.
5. Trophies will be awarded for 1st, 2nd and 3rd places, provided there are at least 4 cars which have entered the class over multiple events throughout the season, otherwise only first place will be awarded.

2026 Mini Challenge Champion

1. The overall Mini Challenge Champion will be determined at the end of the season, and will be the driver that accumulated the highest points total, summed across the championship events.

E. RACING CODE OF CONDUCT

Mini Challenge has been developed to foster safe and competitive racing, in an environment which affords sportsmanlike behaviour, and demonstrates consideration to new racers.

The Championship encourages competitive racing, and as such it is recognised that racing incidents may occur. However, repeated transgressions and overly aggressive driving, will not be tolerated by anyone. Penalties will be at the discretion of the stewards with advice or consultation from the category management team.

The following area expected of competitors:

1. Sportsmanlike behaviour. Competitors are expected to drive competitively and safely, showing due respect for others' machinery and person.
2. Vehicle contact is strongly discouraged, and all possible actions to conduct passing manoeuvres in a clean manner are to be taken.
3. All entrants are required to be aware of and show consideration for other competitors and use their mirrors appropriately. If a car is attempting to pass, the leading car is allowed to defend their position according to the Motorsport Australia *National Competition Rules* (NCRs) however it is expected that as soon as there is vehicle overlap, both cars allow at least one car width for their competitor on the entry and exit of the corner respectively.

F. ADDITIONAL RULES

All competitors must first and foremost comply with all Rules and Regulations, the racetrack operator and the event promoter or owner. In particular, they must take note of and comply with those rules and regulations relating to competitor licensing and conduct, vehicle preparation and presentation, and the competition rules found on the **Motorsport Australia website (namely, the *Motorsport Australia Manual*, the *Circuit Racing Standing Regulations*, and the *National Competition Rules*)**.

G. IN THE EVENT OF A RACING INCIDENT:

1. Any competitor who has been involved in contact or any other incident must immediately report to the DSO/Category Manager. If you have an issue with a competitor, you are not to approach them aggressively. If the matter can't be resolved with a handshake and an apology the matter must be taken for resolution to the Clerk of the Course and Event Stewards within 30 minutes of the end of your session.
2. It is highly recommended that all competitors have at least one forward facing camera in your vehicle working at all times while on track. The DSO/Category Manager will require all video footage of any incident that occurs to be presented. And made available to the Clerk of the Course or Delegate. This might come from the cars directly involved or be obtained from other competitors. If

H. SANCTIONS

1. If the Clerk of the Course and Stewards in conjunction with the DSO (where applicable) deem it to be an isolated and minor racing incident, it may be that no action will be taken although a warning may be issued and recorded.
2. If a competitor is repeatedly involved in such incidents, they will be dealt with by the Stewards in accordance with the Motorsport Australia Code of Conduct. As stated in the CRSR.
3. Penalties may only be applied by the Stewards of the event on the recommendations of the Clerk of the Course.

APPENDIX A: MODERN CHALLENGE RULE-SET

General

1. Eligible cars are R50 & R53 Minis, either Mini Cooper or Mini Cooper S.
2. Unless expressly covered in these regulations, all parts used, including mechanical and/or bodywork related, should remain factory OEM, as fitted to the car from new in Australia, and no parts shall be removed, added or modified unless expressly stated under this Appendix.
 - a. MECHANICALLY IDENTICAL COMPONENT (a) (b) (c) A component which performs exclusively the original function/s in the same manner as foreseen by the manufacturer and which permits the attachment of any secondary components in the original manner and without modification of that component. The following list details the components that are permitted to be replaced with a Mechanically Identical Component in which case supply of such a component is not restricted:
 - i. Decorative trim, including grill inserts
 - ii. Electric motors for accessory components
 - iii. Window opening mechanisms
 - iv. Windscreen wiper arms and motor/s
 - v. Tail lamp assemblies Indicator lamp assemblies
 - vi. Radiator and heater hoses
 - b. The following list details the components that are permitted to be replaced with a Mechanically Identical Component which must be of the same material as the original (i.e. steel for steel, glass for glass) in which case supply of such a component is not restricted:
 - i. Window glazing Body panels
 - c. Commercially available product. A commercially available product is one which is or was produced in quantities greater than 100 and is sold new to be owned outright to any person without ongoing charges for its use (i.e., not rented or leased). The product must currently be available or have been available and in stock as the complete product. The product must be or have been stocked by a supplier and be able to be purchased outright by any person.
3. For clarity, if you see or interpret these rules to be ambiguous and/or questionable, it is expected that you will seek the guidance of the EO and/or Category Manager and will not take unreasonable advantage of questionable interpretation. You may be posed questions regarding your vehicle at scrutiny and you will be expected to answer truthfully and disclose all modifications when asked.
4. No JCW (John Cooper Works) or GP (Grand Prix) components (potentially performance enhancing parts) shall be fitted unless that specific item is allowed to be replaced with a “free” replacement in these regulations.
5. Registration plates, registration plate mountings may be removed.
6. Sound deadening of all types may be removed.
7. Under body drip trays, spray guards and the like may be removed.
8. Original bonnet and boot latches may be removed, provided no part of the body is cut or drilled.
9. Holes may be drilled for fasteners and bonnet/boot latches only. Their size must be the minimum necessary for their purpose.
10. No fixed metal may be removed from the car unless required for safe installation of the roll cage.
11. Unused nuts, bolts, clips and bolt on brackets may be removed, provided it is without cutting or drilling of any bodywork.

12. Air conditioning components may be removed.
13. Rear window wiper and water spray components may be removed. Any hole remaining in the rear windscreen shall be suitably filled.
14. A car with sunroof may have the associated components removed, and the hole covered safely and securely, per the Motorsport Australia Manual regulations (as per 3D Sports Sedans).
15. The factory OEM rear wing may be removed, replaced. The only accepted replacement will be the aftermarket "Aliexpress style" Rear Wing as shown in Figure 1.

Figure 1 Modern Challenge Class - Accepted Rear Wing



Engines:

16. The engine must remain factory bore and stroke, except where damage to a bore has occurred. A maximum of 0.5mm oversize bore and piston is permitted in this case.
17. The internal rotating assembly components may be modified as follows:
 - a. Crank may be machined and balanced but must be a factory OEM fitted item.
18. Connecting rods must be a factory OEM fitted item, or commercially available product. Pistons must be a factory OEM fitted item, or commercially available product. Bearings must be a factory OEM fitted item, or commercially available product. The head components may be modified as follows:
 - a. The head may be reconditioned. There shall be no porting, polishing, or removal of material, reconditioning of the valve seat with a multi angle valve seat cut, the head face, the cam shaft journals, the sparkplug threads, valve stem and seals, will be allowed to OEM equivalent specification.
 - b. The valves on intake and exhaust must be a factory OEM fitted item, a commercially available product, and must not be modified.
 - c. The valve springs and retainers must be a factory OEM fitted item or commercially available product and must not be modified.
19. Compression ratio must be retained at 8.5:1 or less.
20. Sump baffling to prevent oil surge is accepted.
21. The following Cam Shaft options may be used
 - a. Standard R53 Cooper S item, factory OEM fitted, and must not be modified
 - b. Cat Cams MINI Cooper S Camshaft R50 R52 R53 1302469 Sport
[Cat Cams MINI Cooper S Camshaft R50 R52 R53 1302469 Sport \(1302469\) - Orranje Performance Ltd](#)
 - c. Newman Camshafts MINI Cooper S R50 R52 R53 "272/400 PH3/4"
[Newman Camshafts MINI Cooper S R50 R52 R53 | Orranje \(BMW/I\) | Mini Cooper S Engine Parts1 - Orranje Performance Ltd](#)
22. The cam shaft and crank sprockets, and timing chain must be a factory OEM fitted item, commercially available product, and must not be modified. Fitting shall be using the standard timing markings, slots and pins, without any modification.

23. Spark plugs are free (recommended colder for change in Supercharger Pulley, refer below).

Driveline

24. Clutch, flywheel, differential, and driveshafts are free.

Intake and Supercharger

25. A reduction supercharger pulley and an aftermarket Harmonic Balancer may be fitted with no more than 17% of total overdrive (in comparison to standard R53 variants).
A combination such as 15% supercharger and 2% crank pulleys is accepted (where the arithmetic summation is no more than 17%).
26. Diverter valve is free.
27. Air filter is free and intake piping/air-box free up to the supercharger inlet, with the exception of a factory un-modified throttle body to be used, installed in the factory location.
28. Intercooler is free, provided it is installed in the factory location (top mount), and the original cast aluminium inlet and outlet boots are used. The factory intercooler mounting brackets may be removed, the over intercooler and under bonnet mounted ducting may be modified or removed.

Engine Bay

29. An after-market oil cooler may be fitted using a take-off plate fitted to the rear of the oil filter housing (replacement of the factory heat exchanger). The parts are free, however no metal is to be removed from the vehicle to allow fitment of any components other than for drilling fastener holes. Their size must be the minimum necessary for their purpose.
30. The water/coolant section of the heat exchanger may be removed and the coolant lines "looped" back on themselves.
31. Plastic inner guard liners may be removed or modified, and the plastic radiator support panel may be modified by the minimum amount required to allow the passage of brake cooling ducts and oil cooler lines.
32. Parts such as radiator hoses, radiators, coolant expansion tanks, and oil catch cans (which do not offer a performance advantage) may be replaced with aftermarket items where required. If you have doubt, consult with the EO prior to fitment or removal of components.

Engine and Body Control

33. A control ECU tune will be provided for the factory R53 ECU. The tune may be checked by the EO at any time during events. The cost will be \$100, for financial members of Mini Challenge (via SA Sport Sedans).
34. Alternatively, a Link ECU may be fitted, and operated with a control tune loaded at all times. The tune may be checked by the EO at any time between races during events. No Motorsport features such as Launch Control or Traction Control aids are to be available for competitors use.
35. Competitors are recommended to confirm the safe use of control tunes via dynamometer testing at a reputable tuner and if there are any parameters that require changing to ensure safe operation, then the competitor shall discuss options with the EO before making adjustments. Any expense incurred to do so will be at the cost of the competitor.
36. Control tunes shall start with a 7000rpm rev limit, and be adjusted subject to Balance of Performance clause below

Exhaust

37. Exhaust & mountings are free, headers/extractors must be a commercially available product, exhaust must exit via the rear of the vehicle.

Fuelling

38. Bosch 380cc injectors (part number 0280158315) are required when being provided the control ECU tune. Alternately, a Bosch injector of up to a 550cc is accepted, noting that it will be the responsibility of the competitor to ensure the tuner is notified of the fuel injector size and scales the tune appropriately (and tests the rescaled tune).
39. The injector wiring harness may be modified or repined for the correct injector plugs, or the use of the following wiring harness adapters is also acceptable:
[Bosch Harness - USCAR Injector \(Wired\) - Raceworks](#)
40. An aftermarket fuel pump that fits the factory hangar and operates through the factory filter system, siphon system, supply and transfer lines and vacuum adjusted pressure system is acceptable. No pump shall be fitted outside of the factory R53 Cooper S hanger, and no modifications shall be made to the system, save for what is expressly covered in these regulations (a simple swap of the pump). The system shall not increase the available fuel pressure to the injectors beyond what is expected from a simple swap of the OEM pump to a new aftermarket fuel pump. The specification for the replacement pump shall be of approximately 265L/Hr at 40psi. Options to this specification include but are not limited to the DW65v, or Lohen R53 Mini upgraded fuel pump. Pumps that exceed the specification of these options shall be confirmed to be acceptable replacements with the EO.
41. Engines will be operated on 100%, 98 octane pump fuel.

Suspension and Mounts

42. Elastomeric bushes may be used throughout the vehicle, including aftermarket brands such as Nolathane or SuperPro. No solid metal, rose jointed, spherical or similar mounts may be used.
43. Either factory R53 Cooper S shock absorbers and Springs may be used, or one of the following control coilover and adjustable strut top packages may be fitted:
[BC Racing Coilover Kit BR-RH fits Mini COOPER RE16 / R53 02 - 06](#) – Pillow Mount (F&R)
[BC Racing Coilover Kit BR-RA fits Mini COOPER RE16 / R53 02 - 06](#) – Pillow Mount (F) Rubber (R)
[BC Racing Coilover Kit BR-RS fits Mini COOPER RE16 / R53 02 - 06](#) – Rubber Mount (F&R)
44. The rear control arm shall remain R53 Cooper S, but after-market rear toe/camber arms may be fitted, which may be adjustable. The arms shall be of steel construction
45. Plates may be fitted to prevent mushrooming of the front strut towers. These may be either between the strut top and the strut tower, with a thickness of no more than 5mm, or above the strut tower with no restriction in thickness (such as the Craven Speed “Strut Top Defender”)
46. A strut brace may be fitted between the strut towers, however it must go directly from strut top to strut top, and must not reinforce or be joined to any other part of the vehicle, such as the fire wall.

Brakes

47. All brake components are free, with the following limitations:
- Brake rotors remain cast iron in the friction area (an aluminium hat is accepted)
 - Brake ducting shall only be supplied fresh air through the standard sized fog light holes in the R53 bumper. No metal shall be removed to allow for passage of air/ducting, but as noted above, the radiator support panel and the inner guard liners may be modified.
48. The R53 Cooper S rear trailing arms may be modified by the minimum clearance required to fit R56 rear calipers and handbrake cables. Modifications to the control arm that exceed those needed to fit the R56 brake components are not acceptable

Wheels, Tyres and Mountings

49. Wheels, tyres and mountings (studs/bolts/nuts) are free, with the following limitations:
- a. Wheel spacers may be used, but shall be no thicker than 15mm
 - b. Wheels must be no larger than 17" diameter and 7.5" width. The use of ROH RF7 wheels to these specifications is promoted by Mini Challenge and reduced pricing can be arranged through the Category Managers
 - c. Tyres must be no larger than 225/45R17 in size, and one of the following tread patterns/tread wear:
 - i. Rubbercraft
 - ii. Toyo Proxes R888r
 - iii. Nankang AR1
 - d. A maximum of 2 new tyres shall be permitted for use at each round, with the exception of new competitors at their first race meeting who may use 4 new tyres
 - e. Competitors are strongly encouraged to purchase tyres through Tyrepower Blackwood where preferential pricing has been arranged (but it is not compulsory).
 - f. If a competitor encounters issues with tyre availability, please notify the Category Manager no less than 30 days prior to the event, and a suitable replacement will be nominated for all competitors to choose from

Interior

50. Dashboard and instrument cluster must remain in factory location but may be modified for minimum clearance as required to fit roll cage or additional gauges
51. The glove box and trims under the dashboard may be removed
52. All heater and air conditioning components may be removed
53. Airbag components including control units may be removed
54. Sound system components may be removed
55. Door cards may be removed, but shall be replaced with a suitable material per Motorsport Australia manual
56. All factory seating and seat belts may be removed (suitable racing items are free)
57. Roof lining and interior lighting may be removed
58. Any additional cloth/plastic/fabric trim items may be removed (except the dashboard, as nominated above)
59. Rearview mirror is free
60. Steering wheel and boss are free
61. Shifter mechanism is free, provided it retains a H-Pattern operation
62. Batteries are free, but must be located centrally in the boot of the vehicle (as close as possible to the R53 Cooper S factory location). A suitable isolator must be fitted per the Motorsport Australia Manual.
63. The vehicle wiring loom may be modified as required for fitment of battery isolator and obsolete wiring may be removed provided it is only the portions servicing the sound system, air conditioning, airbag systems, rear wiper and sprayer assembly, sunroof, cigarette lighter and internal lighting circuits.

Minimum Weight

64. A racing weight of 1150kg will apply.
65. Where required, additional weight will be mounted safely to the passenger footwell per the Motorsport Australia Manual found here:
[2025-schedule-a---each-automobile-\(except-a-superkart\)-in-any-competition.pdf](https://motorsport.org.au/2025-schedule-a---each-automobile-(except-a-superkart)-in-any-competition.pdf)
 [\(motorsport.org.au\)](https://motorsport.org.au)

Balance of Performance (BOP)

66. Where it is deemed necessary to provide close racing in the Modern Challenge Class, BOP Adjustment will be enforced to stand-out competitors, initially through Success Ballast and then a Rev Limit adjustment if required. The BOP adjustments will be made based on the following criteria:
- a. If any driver wins three consecutive races at either a single race meeting or across more than one race meeting, they will be required to carry the following BOP Adjustment by the beginning of the next race meeting
 - b. A 20kg penalty will be levied to the competitor once three consecutive races have been won. The competitor shall arrive at the next race meeting with the applicable ballast fixed to their vehicle in accordance with the Motorsport Australia Manual linked above.
 - c. Where ballast is applied to a vehicle, the applicable minimum weight will also be increased by that value. For example, the series leader will be required to carry at least 20kg of ballast, **AND** their minimum weight will become 1170kg.
 - d. If the series leader continues to win 3 more consecutive races a reduction in rev limit of 250rpm will be applied, the competitor will need to arrive at the following race meeting with the rev limit applied
 - e. As an example if a competitor wins 6 consecutive races the balance of performance will be a racing weight of 1170kg **and** a rev limit of 6750.
 - f. The balance of performance adjustment will be removed when a competitor finishes outside the top 3 for 3 consecutive races, this BOP adjustment may be removed immediately.