

SCHEDULE TA2

2025-2026 TECHNICAL REGULATIONS

PREAMBLE

The TA2NZ class is designed to provide competitors with a cost effective, high performance racing class for TA2 vehicles that highlights driver skill. The TA2NZ class prides itself on competing in vehicles with identical technical specifications as detailed in these Technical Regulations to ensure mechanical parity and no advantage to any one competitor.

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

1. GENERAL INFORMATION RELATIVE TO THIS SCHEDULE

- 1.1 These Technical Regulations must be read in conjunction with the MotorSport New Zealand National Sporting Code (NSC), MotorSport New Zealand Manual Schedule A, 2025-26 TA2NZ Championship Articles, and Event Supplementary Regulations.
- 1.2 Text changes (to the previously issued Schedule) shall be highlighted such, although text changes for grammatical and formatting reasons will not be highlighted.
- 1.3 These Technical Regulations govern the TA2 New Zealand Championship ("TA2NZ") and establish a clear, consistent technical standard for MotorSport New Zealand Appointed Officials, including the Championship Scrutineer, to apply.
- 1.4 MotorSport New Zealand is responsible for the control of the TA2NZ Championship Technical Regulations and their interpretations. All enquiries relative to these regulations shall be directed to the Championship Scrutineer.

- 1.5** By participating in this Championship, competitors and vehicle owners agree to be governed by these Technical Regulations and accept any penalties that may be imposed for any breach of these Technical Regulations.
- 1.6** All TA2 vehicles shall be manufactured by Howe Racing, supplied and delivered by NZ TA2 Racing Ltd (henceforth referred to as TA2NZ) or by PBR Distributions Pty Ltd (known from 28 January 2025 onwards as HCC Pty Ltd*), and only these vehicles are eligible to compete in the TA2NZ Championship.
- *Note:** For the purpose of this document, PBR Distributions Pty Ltd and HCC Pty Ltd are considered as one entity, but may be referred to throughout this document by either name.
- 1.6.1** The overriding philosophy in respect to the eligibility of any area of TA2 vehicles will always defer to the manufacturer's standards/specifications.
- 1.6.2** If you are unsure if a modification or repair you are considering performing complies with these Technical Regulations, it is your responsibility to seek advice from TA2NZ or the Championship Scrutineer prior to commencing the work.
- 1.7** MotorSport New Zealand reserves the right to amend any regulations as necessary for safety and fair competition due to force majeure or any event which is outside MotorSport New Zealand's or the TA2NZ Championship's reasonable control.

2. DEFINITIONS

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

'Control Part' or **'Controlled part'** means a specific part intended for use on the TA2 vehicle that is fully controlled in respect of its specification, application and supply, and where specified shall be fitted (refer to Article 15.1.1).

'Free' (part) or **'Unregulated'** means that the original part as well as its function may be removed or replaced with a new part on the condition that the new part has no additional function relative to the original part.

'Standard' or **'as supplied'** means as the original specification as supplied by the manufacturer and distributed through TA2NZ or PBR Distributions Pty Ltd or HCC Pty Ltd.

3. GENERAL SPECIFICATIONS

3.1 TA2NZ RACE VEHICLE SPECIFICATIONS

Minimum Ride Height	65mm
Wheelbase	2640mm plus or minus 10mm (i.e. minimum 2630mm, maximum 2650mm)
Wheel Track Front	2000mm plus or minus 25mm (outside of tyre to outside of tyre)
Wheel Track Rear	2000mm plus or minus 25mm (outside of tyre to outside of tyre)
Minimum Weight Dry	1250kg (including driver)
Minimum Weight Wet	1250kg (including driver and wet tyres)

3.2 ENGINE AND TRANSMISSION LOCATION

Engine and transmission location must remain unmodified. All engines must remain mounted to original mounting points in the chassis.

3.3 DRIVER POSITION

The driver must sit to the left of the center line. No portion of the driver's seat or restraint system can cross the center line of the vehicle. The driver's position is set by the manufacturer and only front and back adjustment is allowed.

3.4 FUEL

3.4.1 Fuel Cell Size: 22Gal / 84ltr

3.4.2 Only the use of commercially available 98 Octane BP Ultimate/Caltex Vortex/Mobil Synergy Supreme fuel is permitted. Blending or mixing of additives with the standard pump fuel is prohibited. Fuel may be checked by the Championship Scrutineer via the fuel check valve or by direct drainage from the tank at any time during a Championship TA2NZ Race event.

3.5 OFFICIAL SEALS

The definitive text is detailed in Appendix Two, Schedule A of the current MotorSport New Zealand Manual.

4. SAFETY

4.1 Vehicles must comply with MotorSport New Zealand Manual Schedule A at all times.

4.2 It is the Driver's responsibility to keep informed of current regulations and any changes to those regulations.

4.2.1 TA2NZ will, where possible, inform all registered drivers of any updates or changes to the regulations.

4.3 All drivers' restraints (safety harness) must be in compliance with MotorSport New Zealand Manual Schedule A, Article 4.4. FIA 8853-2016 is the minimum requirement for safety harnesses.

4.4 The safety harness must be presented within the expiry date as marked on the harness by the manufacturer.

4.5 Seats are a Control Part and must be one of the following Racetech models:

- RT4119HRW
- RT4119WHR
- RT4119THR
- RT4119WTHR

4.6 Racetech window nets must be fitted to the driver's window opening and restrained for all on-track activities. Window nets must be in compliance with MotorSport New Zealand Manual Schedule A at all times.

4.6.1 Window nets must carry the current SFI or FIA markings.

4.6.2 Window nets over five years of age will not be approved, regardless of their condition.

- 4.7 On board fire suppression systems are highly recommended.
- 4.8 Fire extinguishers must remain compliant with the relevant extinguisher system standard (i.e., SFI 17.1 On Board Fire Suppression Systems) and service requirements as per MotorSport New Zealand Manual Schedule A, Article 4.8.

5. CHASSIS

- 5.1 The Howe TA2 or PBR approved chassis must be used.
- 5.2 Only vehicles purchased via TA2NZ or HCC Pty Ltd will be eligible to compete in sanctioned TA2NZ Events.
- 5.3 Strictly no modifications are to be made to the chassis/frame under any circumstances.
- 5.4 Additional mounts may be fitted with prior written approval from TA2NZ.
- 5.5 Chassis must remain in good order and provide the driver with protection in case of an accident.
- 5.5.1 Significant damage to a major chassis member must be repaired or replaced to the highest standards and meet the satisfaction of the Championship Scrutineer in line with MotorSport New Zealand Manual Schedule A Article 3.4(8).
- 5.5.2 Vehicles involved in a major accident may be subject to further inspection prior to being allowed to compete at future Championship Rounds.
- 5.6 Any modification to suspension pick-up points, engine mounting points or mounting plates will be treated as a deliberate breach and penalties applied.
- 5.7 **Added weight** must be in block form. No single block can weigh more than fifteen(15) kilograms. Any weight used must be within the chassis rails side to side, within the center line of the front and rear wheels and be directly bolted to the chassis plates provided.
- 5.7.1 No movable weight is allowed.
- 5.7.2 No weight trays other than those provided on the chassis by Howe are allowed.
- 5.7.3 All added weight blocks must be a bright colour and have the vehicle chassis and/or vehicle race number clearly marked on every weight.
- 5.7.4 Weight must be attached via positive means to the satisfaction of the Championship Scrutineer (1/2" UNC High Tensile Bolts with Nylock Nuts).
- 5.7.5 No added weight in the driver's compartment is allowed.
- 5.7.6 Any TA2NZ vehicle that has added weight fall off during a Championship Round may be subject to a penalty as per MotorSport New Zealand Manual Schedule P, Article 2A.2.

6. BODY

- 6.1 All replacement body panels must be supplied by TA2 and be of Five Star or PBR-TA2 make.

- 6.2** Repairs to body panels must not change the shape of the panels to aid in aerodynamic performance.
- 6.3** The cowl panel (below windscreen) must remain unchanged – all engine intake air or cooling air must come through the front bumper grille sections and hood vents only.
- 6.4 GRILLE**
- 6.4.1** Grille inserts are permitted, however, must be a TA2 spec part supplied by TA2NZ. A maximum of only two(2) grille inserts allowed and must be located within Grille airbox frontal area. Bumper sections may not be modified;
- 6.4.2** Grilles must retain the original profile as viewed from the top, sides, and front; and
- 6.4.3** Grille mesh is to be of steel or stainless steel construction and the profile of the mesh must remain constant from left to right and top to bottom, no modification of the mesh is permitted. Taping of the grille mesh and overlaying of the mesh is not permitted.
- 6.5** Quarter panels must remain unmodified other than repairs to damage.
- 6.6** Rear boot/trunk must remain unmodified other than repairs.
- 6.7** Rear wing mounts are to remain unmodified.
- 6.8** Optional inner front guard rain fenders may be fitted in wet conditions.
- Note:** 'Wet conditions' as determined by the use of wet weather tyres.
- 6.9 HOODS**
- 6.9.1** Hoods must remain unmodified; and
- 6.9.2** Additional fasteners are permitted on the hood section (respecting Article 13.10.1).
- 6.10** Internal tinwork should remain unchanged from the original standard design, providing it provides the driver with safe insulation from the driveline and engine bay area.
- 6.10.1** A positive firewall is required on all four sides of the driver.
- 6.10.2** The floor must remain minimum 1/8" magnetic steel plate.
- 6.10.3** Tin work must be of neat appearance and have no sharp edges.
- 6.11** Windscreens must be fitted, and
- (a)** The front windscreen must be TA2 spec/Five Star clear sheet and have no holes other than the mounting holes;
 - (b)** All replacement windscreens must be TA2 spec/Five Star screens only;
 - (c)** The rear windscreens must be TA2 spec/Five Star screen only;
 - (d)** Windscreen protectors are permitted (TA2NZ Part No. TA2-TEAR OFF); and

- (e) Front windscreen demister/heaters are permitted in compliance with MotorSport New Zealand Manual Schedule A Part One Article 5.11(3).

6.12 AERODYNAMICS

- 6.12.1** The Standard factory front splitter is permitted (Part No. FS81001-41851) or alternate material can be used only if approved by TA2NZ. All splitter/undertrays are required to be no longer than 620mm deep with a 5mm tolerance and must follow without protruding past the profile of the further most point of the front bumper and air dam.
- 6.12.2** A distance from the center line of the front cross member to the back edge of the splitter/undertray is to be no less than:
- (i) 355mm on the Dodge;
 - (ii) 345mm on the Camaro and Mustang.
- 6.12.3** Splitter/Undertray thickness is to be no thicker than 9mm and no thinner than 6mm.
- 6.12.4** The allowance of wear strips to the front underside edge of the front bumper is permitted but, must be no wider than 50mm and no thicker than 9mm and is not to protrude outside of the nose profile.
- 6.12.5** The profile must remain as standard. No additional aerodynamic aids are to be attached to any section of the standard supplied body.
- 6.12.6** The front splitter/undertray must be flat and not stepped or curved.
- 6.12.7** The front splitter must be mounted in its factory location.
- 6.12.8** The front splitter must be no lower than the straight line prescribed between the bottom of the chassis rails and the front cross member lower section.
- 6.12.9** The front splitter must be no higher than 19mm above the straight line prescribed between the bottom of the chassis rails and the front cross member lower section.

6.12.10 A variation of a maximum of 13mm (rake) is permitted from the front leading edge (at 0) to the rear trailing edge of the splitter/undertray (at 13mm). Wear strips are not considered when measuring splitter/undertray height. At no point will it be permitted for the splitter/undertray to be any lower than the lowest point of the bottom of the chassis. See photo immediately below:



6.12.11 Taping of any body panel gaps is not permitted.

6.12.12 Manipulation of body panels, beyond their relaxed state, is not permitted.

6.12.13 All support struts, both internal and external, must not be loosened, adjusted or manipulated in any way so as to create a change to the body shape of the vehicle.

6.12.14 While in motion, all body panels including windscreens must retain the relaxed shape.

6.13 REAR WING

6.13.1 TA2NZ Spec Rear Wing must be fitted and unmodified.

6.13.2 TA2NZ Spec Rear Wing hardware and mounts must not be modified.

6.13.3 No packers or shims can alter the standard TA2NZ spec wing.

6.13.4 No other aerodynamic aids are permitted on the wing.

6.13.5 Only standard TA2NZ wing end plates are permitted.

6.14 NACA ducts as provided by TA2NZ or air inlet ducts may be fitted in the side window openings. These may provide air to the driver or as a means of windscreen demisting.

- 6.14.1** This air **MUST NOT** be forced into the engine compartment.
- 6.14.2** Ducts must in no way impede the driver's ability to remove themselves from the vehicle in the case of an emergency.
- 6.15** Side mirrors are to be standard and must always be fitted.
- 6.16** An internal rear-view mirror is required.
- 6.17** Aerials and antennas may be fitted to the roof or boot/trunk.
- 6.18** Internal and external cameras are permitted; these must be fastened securely and will be checked by the Championship Scrutineer.
- 6.19** TA2NZ spec front and rear tow straps must be fitted.
- 6.19.1** Tow straps must be easily accessible and clearly marked.

7. ENGINE

- 7.1** Only TA2NZ LS3 supplied engines are permitted.
- 7.1.1** All engines must be purchased through TA2NZ.
 - (a)** All engines come complete and are sealed for even performance, integrity, and identification.
 - (b)** No modifications to the components of the engine are permitted, other than as mentioned in these Regulations.
 - (c)** Replacement components not identical to their supplier and part number are not to be used unless specific permission is granted in writing from TA2NZ.
- 7.2** Throttle must have a minimum of two return springs that positively return throttle to its idle position.
- 7.2.1** Improved throttle pedal assembly is permissible however, must be TA2 Spec (Part No. 52350) plus the addition of a throttle pedal support plate (Part No. TA2-0112).
- 7.2.2** Pedal pads may be modified to suit the driver's preference. To allow the throttle pedal height to be adjusted to suit the driver's preference, the throttle stops thread length may be modified, to lengthen or shorten the stop, by the addition of or removal of thread. This can be done to both the pedal height stop (engine bay side), and the pedal travel stop (cockpit side).
- 7.3** Fuel pump must remain the original type, mounting position and unmodified (255 LPM).
- 7.3.1** K&N Filter elements are permitted.
- 7.4** Only the TA2NZ supplied airbox is permitted, the filter location must remain unchanged, and all engine intake air must pass by the inlet air filter and throttle body.
- 7.4.1** No other inlet air to the engine is permitted.

- 7.5** Exhaust manifold including muffler and exit location must remain standard.
- 7.6** Extractor header pipes are Control Parts. No modification to these parts is permitted.
- 7.7** Noise augers or turn downs are not permitted unless directed by TA2NZ.
- 7.8** Exhaust tips may be extended but must not protrude more than 10mm past the stainless steel exhaust outlet door plate.
- 7.9** Rocker cover type and design is unregulated, provided they maintain the only purpose they were designed for.
- 7.10** The water pump must be crankshaft belt driven as standard.
- 7.11** An engine crankshaft-belt driven alternator must be fitted, and the alternator must be operational.
- 7.12** The engine must be able to start under its own power at any time if requested by the TA2 Championship Scrutineer.
- 7.13** The starter motor position is fixed.
- 7.14** Spark plugs are unregulated.
- 7.15** Coolant pipes are to be as standard TA2 Spec.
- 7.16** The radiator and oil cooler type and position are fixed. Only Controlled part TA2 units purchased via TA2NZ are permitted.
- 7.17** If there is no bleed valve on the right hand side of the fuel rail, a fuel sample point must be installed in the same location as indicated in the pictures immediately below. The valve must be fitted to the fuel rail where the fuel pressure sensor is installed.
(a) The valve is a Control Part (TA2NZ Part No. XARO15631).



- 7.18** Thermo fans are to remain as supplied and retained in the 'as standard' location.
- 7.19** The Control Part TA2 ECM units must be used. Strictly no modifications to, or tampering with, this part will be tolerated.
- 7.19.1** The Championship Scrutineer can, at any time, check the operation of the rev limiter. All ECM rev limiters are set to 6500rpm with no tolerance.

- 7.19.2** TA2NZ, in conjunction with the Championship Scrutineer, reserves the right to test all or any ECM at any TA2 round.
- 7.19.3** At the direction of TA2NZ and the Championship Scrutineer, an ECM Unit owned by TA2NZ may be supplied and the competitor directed to Race or Qualify using the TA2NZ supplied unit.
- 7.19.4** Refusal to replace the ECM at the direction of the Championship Scrutineer will be treated as a material breach of the Technical Regulations and penalties will apply.
- 7.19.5** TA2NZ in conjunction with the Championship Scrutineer reserves the right to swap ECMs from vehicle to vehicle.
- 7.20** Engine repairs and/or rebuilding are only to be completed by the appointed TA2NZ Contractor.
- 7.20.1** Engine rebuilding will be at cost to the competitor. Engines are built to meet the required horsepower window set by TA2NZ.
- 7.20.2** If any engine has metal in the filter and/or is not performing correctly or is making abnormal noises, the engine must be removed from the vehicle by the Entrant, and TA2NZ may supply a sealed TA2 rebuilt or new engine.
- (a)** The engine will be sent for repair (at Entrant's cost), and a report will be provided to the owner regarding the failure of that engine.
 - (b)** If economical, the engine will be repaired, dyno checked and sealed.
 - (c)** If the engine is uneconomical to repair, a new engine may be ordered to replace TA2NZ stock.
 - (d)** Any engine that is deemed uneconomical to repair will be returned (at Entrant's cost) to the Entrant in as-is condition.
 - (e)** The replacement engine will remain the property of TA2NZ until all costs are paid in full.
- 7.20.3** The correct engine servicing schedule must be adhered to on all TA2NZ rebuilt engines.
- 7.21** Any engine found to have missing or broken seals will be deemed illegal until the seal is replaced at the discretion of the TA2NZ Championship Scrutineer.
- 7.22** These engine regulations are in place to protect the integrity and cost effectiveness of TA2NZ. Any breach of the engine rules will be dealt with by the Championship Scrutineer and penalties will apply as per MotorSport New Zealand Manual Schedule P.

Note: If you are unsure of a modification or wish to make a repair **that requires the removal of an engine seal**, the Championship Scrutineer's written permission must be obtained in the first instance.

8. DRIVELINE

8.1 TRANSMISSION

- 8.1.1 Only the Controlled TA2NZ sealed transmissions are eligible. TA2NZ Spec G-Force Transmission G-101a is to be used. Ratio as follows:

Gear	Ratio
1 st	1.93:1
2 nd	1.44:1
3 rd	1.17:1
4 th	1.00:1

- 8.1.2 There is an optional Gear Set upgrade now available as follows. The change includes new parts specifically for 2nd and 3rd gear, a new half shaft and gear assembly process, spacers, and plates to facilitate the changes. There is a very slight gear ratio change as a result:

Gear	Ratio
1 st	1.93:1
2 nd	1.45:1
3 rd	1.154:1
4 th	1.00:1

- 8.1.3 The optional Holinger RD4 TA2 Set Spec Ratio Transmission as supplied by Holinger Engineering ratios are as follows:

Gear	Ratio
1 st	1.926:1
2 nd	1.463:1
3 rd	1.187:1
4 th	1.000:1

- 8.1.4 The gear shifter must remain as supplied. The HT4000 shift lever can be changed to suit the driver's preference.
- 8.1.5 The shift must remain H in pattern and mechanical, to be operated by linkages and gear shifting only via positive means from the driver's seat.
- 8.1.6 Transmissions must always retain an operational reverse gear.
- 8.1.7 Transmission repairs can be performed by a suitably qualified person but must be checked and sealed by a Representative of TA2NZ or the Championship Scrutineer. Remanufactured transmissions are available via TA2NZ.
- 8.1.8 Transmission must remain mounted to the engine by standard TA2 spec bell housing.
- 8.1.9 A Transmission Pump and Cooler is permitted (Part No. TIL40-524), or complete Transmission Cooler Kit (Part No. TA2-0031).

8.2 CLUTCH AND BELL HOUSING

- 8.2.1 Clutch and pressure plate must be single or triple plate design TA2NZ spec or as the listed option in the TA2/PBR Options Upgrade list as per Section 14.0 in the Technical Regulations.
- 8.2.2 Clutch operation is to be via internal slave cylinder.
- 8.2.3 Clutch master cylinder is to remain as standard.

- 8.2.4** Original flywheel is a spec part only available via TA2NZ (Part No.12571611), and is a Control Part.
- 8.2.5** TA2 spec upgraded clutch kits are permitted (Part No. TA2-CLUTCH UPDATE includes a replacement steel flywheel).
- 8.2.6** Clutch and flywheel options are also listed in the TA2/PBR Options Upgrade list as per Section 14 for the Holinger Gearbox.
- 8.3 DRIVESHAFT**
- 8.3.1** The driveshaft must be one piece and of same dimensions as the factory fitted drive shaft (Part No.244000).
- 8.3.2** Driveshaft must not be aluminum or composite.
- 8.3.3** Yokes are unregulated – the size option is 1310 or 1350.
- 8.3.4** Universal joints are unregulated but must be a four-roller conventional commercially available type joint.
- 8.4 DIFFERENTIAL**
- 8.4.1** Axles must remain unmodified from the original supplied type or as listed in Appendix One. No machining or drilling is permitted.
- 8.4.2** Differential spec ratio is 4.11:1. Any secondary gear set ratio is allowed.
- 8.4.3** No camber or toe adjustable hubs are permitted.
- 8.4.4** No method of adjusting rear wheel camber is permitted.
- (a) Maximum** of one(1) degree of camber per side +/- .025 degrees vertical (rear) is allowed.
- (b) Maximum total overall** camber of three(3)mm of toe +/- horizontal is allowed.

9. BRAKES

- 9.1** The brake package fitted to the TA2 vehicle must remain the same specifications, supplied as standard, with the allowance of the option of Wilwood master cylinders.
- | | |
|-------------------|------------|
| Part No. MC 1 1/8 | 1-1/8 bore |
| Part No. MC 7/8 | 7/8 bore |
| Part No. MC 1 | 1" bore |
- 9.1.1** The application of cylinder sizes is at the discretion of the individual.
- 9.2** Howe Pro brake pedal option is permitted (1.6-1.7 ratio) (Part No. 52696).
Wilwood brake option is permitted (Part No. WW340-16377).
- 9.3** Brake duct box openings are to remain as standard and in factory positions, as measured below:
- (a)** Mustang/Camaro: 255mm +/- 5mm wide 120mm +/- 5mm high.
- (b)** Dodge: 210mm +/- 5mm wide 120 +/- 5mm high and 255mm diagonally from bottom to top corners.

- 9.4** Relocation of duct grille mesh from front of box to middle of box is permitted.
- 9.4.1** The mesh profile is free and to be of steel or stainless steel construction.
- 9.4.2** The profile of the mesh must remain constant from left to right and top to bottom.
- 9.4.3** Rectangular profile of the mesh is acceptable. Overlaying of the mesh is not permitted.
- 9.4.4** Taping of the mesh will only be allowed during adverse weather conditions and is only to be ONE strip to a maximum of 50 mm (2 inches) wide tape to the bottom of the grille opening.
- 9.5** Brake duct box upgrades for Dodge bodied vehicles are permissible (Part No.TA2-0034).
- 9.6** Front rotors are a Control Part (Wilwood brand, see Appendix One for Part No.).
- 9.7** Rear rotors are a Control Part (Wilwood brand, see Appendix One for Part No.).
- 9.8** Brake calipers are a Control Part:
- (a)** Wilwood front caliper Part No. WW120-13948 Right, Part No. WW120-13949 Left (GN6).
 - (b)** Wilwood rear caliper Part No. WW120-13263 Right, Part No. WW120-13264 Left (Superlite 4).
 - (c)** No caliper spacers are permitted.
- 9.9** Brake pads are a Control Part. Only TA2 Competition Spec Circo pads must be used during qualifying and races as supplied by TA2NZ.
- 9.10** Cutting or modifying of brake pads is not permitted.
- 9.11** Master cylinder size must be of either Howe or Wilwood TA2NZ spec and must remain unmodified (refer to Article 9.1).
- 9.12** Brake bias adjuster must be a Howe unit and remain in original location (Part no. 52620).
- 9.13** Brake line material and size is unregulated.
- 9.14** All four-wheel brakes must always be operational.
- 9.15** Line lock devices are not permitted.
- 9.16** Bracing or modification of front or rear caliper mounts is not permitted.
- 9.17** Brake bias gauges are unregulated.
- 9.18** Removal of the brake fans is permitted.
- 9.19** Upgraded front rotor cooling hose is permitted however, must be TA2 spec kit (Part no. TA2-0032 4" cooling hose upgrade).

10. SUSPENSION AND STEERING

10.1 FRONT SUSPENSION

- 10.1.1** No modification that changes the geometry or action of any suspension component or a modification that changes the arc, STI, KPI, or motion ratio is permitted.
- 10.1.1.1** Suspension geometry may only be adjusted within the limits of standard spec supplied equipment of the TA2NZ Spec TA2 vehicle.
- 10.1.1.2** No alternate ball joints, pins or spindle slugs are permitted other than standard spec supply.
- 10.1.2** Upper control arms must remain unmodified and TA2NZ spec only including ball joints and pins.
- 10.1.3** Upper control arm bolts: A minimum of one thread protrusion of the bolt is required to ensure adequate locking engagement.
- Note:** The A-arms attach to the chassis with two ½'-inch x 2.5-inch bolts, Grade 5 or 8. It is important to use the torque specs that match the bolt grade and the thread to produce the right amount of bolt stretch: Grade 5 coarse 57ftlbs/Grade 8 coarse 80ftlbs.
- 10.1.4** Upright (stub axle) must remain as standard and unmodified including spindle slug.
- 10.1.5** Lower control arms must remain standard and unmodified including ball joints and pins.
- 10.1.6** Caster bar (radius rod) must remain unmodified.
- 10.1.7** All chassis mounts must fit within the original measurements (+/- 3.0mm).
- 10.1.8** Any Howe spec shims are permissible on the top arm to facilitate desired wheel alignment specifications however, the factory length bolt of 2½-inch must be retained.
- 10.1.9** Shock absorbers (shocks) are to be the Control Part Penske 7500 Series single adjustable only.
- 10.1.10** All shocks must be supplied and serviced by TA2NZ. They will be set to the Control specification and individually sealed with serial numbers. No other modifications are permitted.
- (a)** No additional external method of adjusting bump or rebound characteristics will be permitted and no other modifications allowed.
 - (b)** No external nitrogen canisters are permitted.
 - (c)** There is an allowance for coil over adjusting sleeve (silicone hose that fits over the coil over body threaded section and secured via hose clamp to prevent adjuster from rotating). The sole purpose of this is to reduce the damage to the coil over body threaded section from adjuster ring locking screw.
- 10.1.11** Bump stops and extension limiters are not permitted.

- 10.1.12** Front ride height measurement reference location as per photo immediately below is to be no less than 65mm (measured on either the left hand or right hand side of the vehicle) with the vehicle in race trim at the completion of any qualifying and or racing sessions with a maximum 36psi of tyre pressure and at a competition race weight of no less than 1250kg (see Article 3.1).

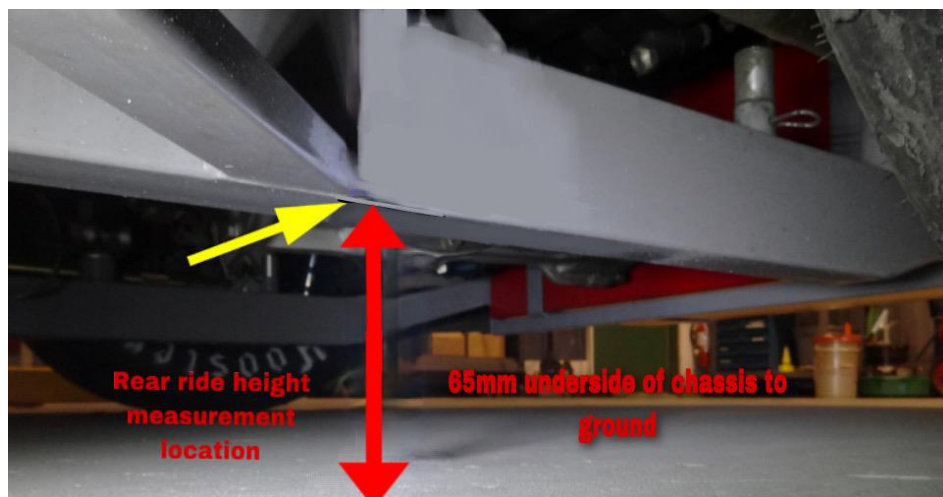


- 10.1.13** Coil spring must remain in its original location and must be Hypercoil brand only, purchased via TA2NZ.
- 10.1.14** Coil spring range: Front 350-750lb, Rear 200-500lb.
- 10.1.15** One spring plus one helper **or** tender spring is permitted per wheel. The helper or tender spring is optional. Helper or tender springs are permitted, providing they remain fully bound (compressed) when weight of vehicle at normal ride height is applied.
- 10.1.16** Heim Joints are unregulated.
- 10.1.17** Springs can be tested and must be within 10% of the rating shown on spring.
- 10.1.18** Only Howe branded TA2NZ spec upper and lower ball joints are permitted.
- 10.1.19** The front sway bar must always remain connected as delivered by the factory and in all conditions.
- 10.1.20** Only the factory marked and supplied 250 or 170 front sway bars are permitted, and the surface must remain unmodified.

10.2 REAR SUSPENSION

- 10.2.1** No modification to the differential mounts' location or chassis to differential mounts location is permitted.
- 10.2.1.1** Any modification to the position of these mounts, pick up points, or mounting holes in these mounts is strictly prohibited.
- 10.2.2** Differential housing must be as standard and suspension locations are to remain in as standard positions.

- 10.2.3** All differential mounting points must match CAD drawings available from TA2NZ upon request.
- 10.2.4** The upper and lower trailing arms must be steel. Aluminum or carbon is not permitted.
- 10.2.5** Watts linkage are to be as standard, and factory supplied only.
- 10.2.6** Pinion angles are unregulated.
- 10.2.7** No remote adjusters for sway bars, pan-hard bars, watts linkage or rear end top link are permitted.
- 10.2.8** Shock absorbers ('shocks') are Penske 7500 Series single adjustable only.
- 10.2.9** All shocks must be supplied and serviced by TA2NZ. They will be set to the Control specification and individually sealed with serial numbers. No tampering with or modifications to the shocks are permitted.
- (a)** No additional external method of adjusting bump or rebound characteristics will be permitted.
 - (b)** No external nitrogen canisters are permitted.
 - (c)** There is an allowance for coil over adjusting sleeve (silicone hose that fits over the coil over body threaded section and secured via hose clamp to prevent adjuster from rotating). The sole purpose of this is to reduce the damage to the coil over body threaded section from adjuster ring locking screw.
- 10.2.10** Bump stops and extension limiters are not permitted.
- 10.2.11** One spring plus one helper **or** tender spring is permitted per wheel. The helper or tender spring is optional. Helper or tender springs are permitted, providing they remain fully bound (compressed) when weight of vehicle at normal ride height is applied.
- 10.2.12** Rear ride height measurement reference location as per photo immediately below is to be no less than 65mm (measured on either the left hand or right hand side of the vehicle) at the completion of any qualifying and or racing sessions with a maximum of 36psi of tyre pressure and at a competition race weight of no less than 1250kg (see Article 3.1).



- 10.2.13** It is permissible to disconnect or remove the rear sway bar.
- 10.2.14** If the rear sway bar is used it must be the factory supplied sway bar, including mounting hardware, and cannot be modified in any way.
- 10.2.15** Heating and bending of the standard sway bar is not permitted.
- 10.2.16** The bottom hole in the 3rd link front chassis plate is a global addition to the late model (metallic grey) chassis and use of this hole is **not** permitted. Only the top and 2nd holes are permitted to be used for suspension set up as per photo immediately below:



10.3 STEERING

- 10.3.1** TA2 spec Woodward 18.25" rack only. No modifications are allowed.
- 10.3.1.1** Torsion bar changes are permitted.
- 10.3.2** The steering column may be **adjusted** to suit driver's preference, but modification, lengthening, or shortening the steering column is not permitted. There is ample adjustment with the standard steering column to cater for multiple driving positions.
- 10.3.3** Side steering rods must be of standard supply and must be of aluminum construction and be original fitment. No welding or joining is permitted.
- 10.3.4** Power steering lines and pump outlet fittings are free.
- 10.3.5** The power steering pump must remain belt driven from the front of the engine crankshaft, and as supplied by TA2NZ.
- 10.3.6** No modification to the steering geometry is permitted.
- 10.3.7** Steering wheels may be substituted with a similar size "D" shape wheels.
- 10.3.8** Steering wheel buttons are permitted with the purpose of controlling electrical functions (e.g. radio, dash, lights).

11. ELECTRICAL AND DATA COLLECTION

11.1 ELECTRICAL

- 11.1.1** Battery must be a dry cell race type 12 volt.
 - 11.1.1.1** The battery must remain in the original location within 50mm in any direction.
- 11.1.2** The wiring loom must remain as supplied.
- 11.1.3** The TA2NZ specification MoTeC loom must remain as supplied.
- 11.1.4** Switch gear is free, and the ignition “On/Off” and “Start” button must be clearly marked.
- 11.1.5** Gauges or electronic MoTeC C125/C127 dash is permitted.
- 11.1.6** A track timer is permitted but with no analogue or CAN inputs.
- 11.1.7** The MoTeC dash inputs may be substituted with a maximum of seven(7) available.
 - 11.1.7.1** Sensors may be added for brake pressure, steering angle, rear wheel speed (one sensor only), engine, and throttle position.
- 11.1.8** Alternator upgrade (Part No. TA2-0020) to install TA2NZ E1170 alternator is permitted.
- 11.1.9** The master switch, located to the left-hand side of the steering wheel, must be fitted and operational.
 - 11.1.9.1** The master switch location must be clearly marked by a symbol showing a red spark in a white edged blue triangle of minimum edge length 150mm, which is fitted forward on the driver door.
 - 11.1.9.2** An additional external isolator switch must be fitted as per MotorSport New Zealand Manual Schedule A, Article 5.4.
- 11.2 DATA COLLECTION**
 - 11.2.1** Data Collection is allowed through MoTeC dash, MoTeC Camera and V.Box Camera, only via the standard channels
 - 11.2.2** Vehicle-to-pits telemetry is prohibited.
 - 11.2.3** The Championship Scrutineer or their representative may download any data for inspection at any time. Data must remain available to the Championship Scrutineer or their representative until the conclusion of the Event.

11.3 TRANSPONDER

- 11.3.1 Timing device must be fitted on the **Driver's** side, next to the clutch master cylinder. Most TA2 rounds will use MyLaps transponders, which can be purchased from TA2NZ or hired on track.



12. WHEELS AND TYRES

12.1 WHEELS

- 12.1.1 Only the Controlled 15-inch x 10-inch Bassett Steel wheels are permitted (Part No. TA2WHEEL) with 5-inch offset.
- 12.1.2 Wheel spacers or alterations to offset are prohibited.
- 12.1.3 Wheels may be coated, painted, or chromed.
- 12.1.4 Wheels must be in good condition as determined by the Championship Scrutineer.
- 12.1.5 All wheel weights must be covered with race tape.
- 12.1.6 Steel wheel nuts must be used as supplied by TA2NZ.
- 12.1.7 Entrants must clearly mark each wheel with the corresponding vehicle number.

12.2 TYRES

Tyre	Size	Type	Compound	Wheel Diameter
Dry	27.0/10.0 x 15	Bias Ply	DS2560	15-inch
Wet	27.0/10.0 x 15	Bias Ply	DS2561	15-inch
Intermediate	27.0/10.0 x 15	Bias Ply	Intermediate	15-inch

- 12.2.1 The Control Tyre Goodyear Eagle slicks DS2560 supplied by TA2NZ are the only slick tyres permitted.
- 12.2.2 The Control Tyre Goodyear wet DS2561 supplied by TA2NZ are the only wet tyres permitted.

- 12.2.3** The Control Tyre Hoosier HSWET supplied by TA2NZ can be only used as an intermediate tyre.
- 12.2.4** The use of any device that controls, regulates, or monitors tyre pressure during Qualifying or Races is prohibited.
- 12.2.5** Goodyear recommend that any green tyre must have a minimum tyre pressure of 27psi with no weaving as part of the initial bed in process to prolong durability.
- 12.2.6** Any damaged tyre must be surrendered to the Championship Scrutineer to remove reference to the bar code from the competitor's allowance before any other tyre is marked as a replacement.
 - 12.2.6.1** No replacement tyres should offer a performance gain.
- 12.2.7** If due to a vehicle sale, vehicle write off, new vehicle purchased mid-season, or changed circumstances, the tyre regulations applied to any vehicle entry any time after Round 1 will be at the discretion and direction of the Championship Scrutineer.

13. BOLTS AND FASTENERS

- 13.1** Bolts should remain the same specifications as supplied by TA2NZ. If replacement is required of any bolt, it must be like-for-like with the original as supplied by TA2NZ.
- 13.2** Any bolt that could influence steering or braking must remain unmodified.
- 13.3** All damaged or bent bolts and/or nuts must be replaced.
- 13.4** Lightening of any fasteners is not permitted.
- 13.5** Pop rivets, where used, may be replaced with another fastening means.
- 13.6** Rivets may be coloured.
- 13.7** Dzuz fasteners may be replaced or upgraded.
- 13.8** Quick-release fasteners are prohibited on all sides of the driver's protection firewalls.
- 13.9** Race tape or similar may be used in the case of on-track damage but the prolonged use of race tape is discouraged.
- 13.10** Hood pins may be upgraded or changed but must not form any type of aerodynamic aid.
 - 13.10.1** The hood must have a minimum of eight fastening points.

14. IDENTIFICATION AND MARKINGS

- 14.1** Race numbers will be assigned as per the Championship Articles:
- (a)** Race numbers must be displayed clearly on both sides of the vehicle and be at least 280mm in height.
 - (b)** Race numbers should be as large and bold as possible to imitate the American style of NASVEHICLE racing.
 - (c)** Race numbers must also be displayed in Dayglo Yellow on the R/H top corner of the windscreen, and be at least 100mm in height.
- Note:** Ensure room is allocated for the sponsors windscreen banner (approx. 180mm in height).
- 14.2** Branding or decals that make the vehicle appear as a certain model of its shape (i.e. "Mustang Supersnake") is permissible and encouraged.

15. CONTROL PARTS

15.1 CONTROL PARTS

- 15.1.1** All suspension and Control Parts fitted **must be or have been** purchased through TA2NZ, even if these parts are available from a normal or specialised retail outlet.
- 15.1.2** The Control Parts are listed in Appendix One.
- 15.1.3** Control parts must not be modified in any way unless otherwise outlined in these Technical Regulations.

Appendix One: TA2NZ CONTROLLED PARTS & UPGRADES

Part Number	Part
As supplied and numbered by TA2NZ	Howe Racing Chassis
As supplied, sealed and numbered by TA2NZ	New Complete LS Engine
As supplied, sealed and numbered by TA2NZ	Electronic Control Module (ECM)
PWRTA2	PWR Radiator
TA2 - RACK	Woodward Power Steering Rack
G101A-PBR or G101A-LT-PBR	Gearbox (sealed)
TA2-0023	Heavy duty clutch kit (red cover including steel flywheel)
TG REAR	Tiger Quick Change Rear End
2213407	Upper Control Arm (front)
229921R	Lower Control Arm (RH front)
229921L	Lower Control Arm (LH front)
R3314	Steering Arm
30618	Caster Rod
22410	Lower Ball Joints
22320	Upper Ball Joints
2329610	Outer Tie Rod End Stud
23248	Outer Tie Rod End Housing
23285	Inner Tie Rod End
2373134	Front Sway Bar 170

Part Number	Part description
23732	Front Sway Bar 250
34611W	Front Up-right R/H (stub)
34611LW	Front Up-right L/H (stub)
36569	Front Hub
36568	Rear Hub
Linear rate only Part No. HY10B0-Spring Rates	Hyperco Coil Springs F&R
PK7500-TA2-F	Penske Shock Absorber Front
PK7500-TA2-R	Penske Shock Absorber Rear
30799	Watts Link Assembly
31994	Trailing Arm Assembly
TA2 TG	Detroit Locker
TG2430 or HC2430	Locker Spring
TG3001-34 or RP300M-34 or RPEN26-34	Axle L&R
TA2 RF ROTOR	Brake Rotor Wilwood RHF
TA2 LF ROTOR	Brake Rotor Wilwood LHF
TA2 RR ROTOR	Brake Rotor Wilwood RHR
TA2 LR ROTOR	Brake Rotor Wilwood LHR
WW120-13948	Brake Caliper – Wilwood RHF
WW120-13949	Brake Caliper – Wilwood LHF

Part Number	Part
WW120-13263	Brake Caliper – Wilwood RHR
WW120-13264	Brake Caliper – Wilwood LHR
MB1812-20-M207.TA2 or BED-M207	Brake Pads Circo HD Front TA2 Competition Spec
MB2690-20-S83.TA2 or BED-S83	Brake Pads Circo Rear TA2 Competition Spec
52625	Brake Bias Adjuster
TA2 - WHEEL	Basset Rim
D 2560	Goodyear Eagle Slick Tyres
D 2561	Goodyear Eagle Wet Tyres
TA2NZ approved	All Body Panels
63343	Windscreen Camaro
63343	Windscreen Mustang
63343	Windscreen Challenger
61243	Windscreen Camaro Rear
61243	Windscreen Mustang Rear
61243	Windscreen Challenger Rear
XARO15631	Fuel sample valve
TA2 RAD	Howe Radiator 19 x 28
TA2-0119	Windscreen Demister Front
TA2-CHRO	Driveshaft with upgraded Chrome Moly Slip Yoke
32680	Howe Shifter Boot

Part Number	Part description
30799DET1	Watts Link Chassis Bracket (allows lower bar angle)
524358	Remote Clutch Reservoir Conversion
52350	Improved Accelerator Pedal
52359	TA2 Pedal Stop Accelerator
524373	Aluminium Master Cylinder Cap (replaces plastic cap)
B96100 & B96101	Steel Perforated Rock Guards (replaces plastic part)
ED02H SOLID	Solid Centre Clutch Disc
G101A-LT-PBR	G101A Gearbox with Large Tooth Gears
MOTEC LOGGING	Computer Programming
MOTEC TPS	TPS Extension Kit
MOTEC 18037	C127 Race Display Screen 7"
PWOTA2	PWR Engine Oil Cooler - 280 x 279 x 37mm (32 Row)
RP300M-34	Axle 300M Billet 34"
RPEN26-34	Axle EN26 Billet 34"
TA2-0009	Brake Pressure Gauge Kit (brake bias display)
TA2-0020	Alternator 110-amp (replaces power master part)
TA2-0026	Mid Gearbox Skid Plate
TA2-0031	Transmission Cooler Pump Kit
TA2-0032	4" Brake Cooling Duct Kit
TA2-0033-C	Grill Inserts for Upper Nose - Camaro (additional grill opening for cooling)

Part Number	Part
TA2-0033-M	Grill Inserts for Upper Nose - Mustang (additional grill opening for cooling)
TA2-0033	Grill Inserts for Challenger (additional grill opening for cooling)
TBA	Challenger Bonnet Vents
TBA	Challenger Quarter Windows
TA2-0046	Holley Valve Cover (Red, Black or Orange)
TA2-0047	PWR Oil Cooler with 9" Skew Blade Fan
TA2-0049	Pinion Bearing Spacer
TA2-0051-MC/C	Camaro One Piece Nose Cone
TA2-0051-MC/M	Mustang One Piece Nose Cone
TA2-0051-MC/D	Challenger One Piece Nose Cone
CAMARO UPPER NOSE	2 piece Camaro Upper Nose Fronts
MUSTANG UPPER NOSE	2 piece Mustang upper nose fronts
CAM/MUST	Uni lower nose fronts
TA2-0057	Splitter Wear Blocks CAM/MUS
TA2-0057D	Splitter Wear Blocks Challenger
TA2-0057-LONG	Splitter Wear Blocks LONG CAM/MUS
TA2-0072 (Holley)	Engine Valve Cover (Holley) Breather Kit
TA2-0072(STD)	Engine Valve Cover Breather Kit
TA2-0076	Fibreglass Air Box Assembly
TA2-0108-OVAL	Early Camaro Front Air Duct Oval

Part Number	Part description
TA2-0108-ROUND	Front Air Duct Round
TA2-0107	Air Duct Intake Pipe Fitting
TA2-0111MUS/LH	Mustang LH QTR Window Duct
TA2-0111-MUS/RH	Mustang RH QTR Window Duct
TA2-0111CAM/LH	Camaro LH QTR Window Duct
TA2-0111CAM/RH	Camaro RH QTR Window Duct
TA2-0112	Throttle Pedal Support Bracket
TA2-0119	Windscreen Demister Front
MC 3/4	Wilwood Brake Master Cylinder 3/4"
MC 7/8	Wilwood Brake Master Cylinder 7/8"
MC 1	Wilwood Brake Master Cylinder 1"
MC 1 1/8	Wilwood Brake Master Cylinder 1 1/8"
TA2 RAINGUARD	Inner Guard Rain Fenders
WW340-16377	Pro Brake Pedal
PWO14 ROW	14 row Transmission Cooler
TA2-0077	Gearbox Interior Duct for 14 row Transmission Cooler
22312X	Upper Steel Ball Joint Cap
22415X	Lower Steel Ball Joint Cap
GFLT592024	Gearbox – Half Shaft (H/S)
GSRM2918	Gearbox – 1 st Gear Set

Part Number	Part description
GSRL2420	Gearbox – 2 nd Gear Set
GSRL2324	Gearbox – 3 rd Gear Set
GSR031B	Gearbox – Spacer
GF2314	Gearbox – Shifter Plates – Long
TG2709	Billet Drive Yoke – 1310 or 1350 Billet Steel
RD4	Holinger TA2 Set Spec Ratios
TA2 - CLUTCH	Triple plate clutch
TA2 CLUTCH DISC	Clutch Disc Set
TA2 FLYWHEEL	Flywheel- 215mm 168T
60440	Hydraulic release bearing



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