TECHNICAL REGULATIONS - SCHEDULE F GOVERNING THE 2026-27 FORMULA FORD CHAMPIONSHIP & ACCREDITED SERIES

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PREAMBLE

These Regulations are written in terms of authorisation; therefore, what is not expressly authorised hereinafter is prohibited.

The Technical Regulations detailed hereinafter have evolved from the international regulations and have been tailored to the racing requirements of New Zealand, but in essence have not changed the philosophy of the class – additional safety features have been added over the years together with sleeker bodywork and repositioned radiators. The Ford Kent 1600GT cross-flow engine has been the mainstay of the class and despite its age and humble origins has proven its worth. The tyres are a 'control' racing tyre made by Yokohama.

The spirit of Formula Ford Racing and these Regulations focus on driving skills rather than technological advancements as such, it is expected that all Competitors and engine builders keep costs of running and maintaining a car within reasonable bounds.

These Regulations govern the technical requirements for MotorSport New Zealand Formula Ford competitions. North Island Formula Ford and South Island Formula Ford have the responsibility for the review of the Formula Ford Technical Regulations and compiling remits for submission to MotorSport New Zealand Inc. for approval and ratification. These Regulations remain the property of MotorSport New Zealand Inc.

OFFICIAL RECORD OF AMENDMENTS

MotorSport New Zealand may amend or clarify these Technical Regulations by issuing Amendments, authorised by the Chief Executive Officer or their representative.

All Amendments issued during the season are recorded in the table below:

Amendment Number	Issue/Effective Date	Article Reference	Subject/Notes
T001	26/10/26	2.11	New article in General Information that has been deleted from the start of numerous other Articles for consistency and subsequent renumbering.
T001	26/10/26	3.2	New dot point Article to provide further clarity
T001	26/10/26	6	The entire Article has been restructured to provide greater clarity
T001	26/10/26	9.15.2	Additional wording added to provide greater clarity
T001	26/10/26	17.1.1-17.1.6	Multiple wording changes and clarifications throughout the Article
T001	26/10/26	17.4.1(1)	New article added to provide greater clarity
T001	26/10/26	24	The entire Article has been restructured and additional wording to provide greater clarity
T001	26/10/26	25.2	The entire Article has been restructured and additional wording to provide greater clarity
T002	02/11/26	17.1.3 (4)	Article cross reference updated with correct number
T002	02/11/26	17.1.5 (4)	Article cross reference updated with correct number
T002	02/11/26	25.1	Article heading updated to better reflect contents
T002	02/11/26	25.3	Article 25.3 deleted and subsequent renumbering

1. DEFINITIONS

In these Technical Regulations, terms and expressions have the meanings set out in the National Sporting Code and, where applicable, as defined below:

"Aftermarket" (engine part) means a catalogued, off the shelf component sourced from another manufacturer to that of the subject engine which may be fitted without making any additional modification to the engine or the part.

"Class One Car" means models first manufactured after 31 December 1999 in compliance with these Technical Regulations for Class One cars.

"Class Two Car" means models first manufactured after 31 December 1992 and prior to 1 January 2000, in compliance with these Technical Regulations specific for Class Two cars, Any Van Diemen Stealth, regardless of year of manufacture or modification, is included in Class Two. A Competitor may nominate their Class Two stealth to run in Class One and forfeit all Class Two points and prizes. A car will be deemed to be a Stealth with the agreement of the NIFF and SIFF Committees, MotorSport New Zealand and the owner. Any disagreement will be resolved by MotorSport New Zealand and the decision will be final.

"Class Three Car" means models manufactured prior to 1 January 1993 in compliance with these Technical Regulations specific for Class Three cars. These cars can run either a cast iron or Aluminium cylinder head.

"Composite" means a material formed from several distinct components the association of which provides the whole with properties which none of the components separately possess.

"Control Part" means parts that are fully controlled in respect to their specification and application. If a modification is authorised to a Control Part it will be clearly detailed in the applicable Article. All Control Parts must be supplied by the MotorSport New Zealand appointed Control Part supplier, nominated agent or through the MotorSport New Zealand Technical Department.

"Direct Replacement" (engine part) means a component sourced from another manufacturer, to that of the original manufacturer, which is a 'direct' replacement in level of duty, function and design to the component it replaces, and can be fitted without making any additional modifications to the part or any other component.

"Flywheel / Clutch Assembly" (relative to Articles 17.4.1 and 17.4.2) means 'all the rotating components affixed to the rear of the engine crankshaft excepting the spigot bush/bearing'.

"Ford Motor Company or FoMoCo" means the Ford Motor Company Limited.

"Formula Ford" means a single-seater race car built to the specifications of these Technical Regulations.

"Free" (part) means that the original part as well as its function may be removed or replaced with a new part on condition that the new part has no additional function relative to the original part and can be fitted without making any modifications to any other components.

"NIFF" means the North Island Formula Ford Accredited Race Series.

"Protective Clothing" means overalls, underwear, balaclava, socks, shoes and gloves.

"Race Trim" means the condition the car competes in and includes the Driver, all safety items, all vehicle fluids and any ballast necessary to maintain weight compliance.

"Reclaimed" means returned to the manufacturer's original specification.

"Scrutineer" means the relevant Series or Championship Scrutineer as appointed in the relevant Sporting Regulations.

"SIFF" means the South Island Formula Ford Accredited Race Series.

"Standard" (engine part) means as supplied and/or manufactured by FoMoCo for the Kent 1600GT engine.

"Stress bearing panels" means sheet metal affixed to the frame by welding, bonding or rivets or bolts or screws, which have centres closer than 152.40mm.

2. GENERAL INFORMATION

2.1 All enquiries regarding to these Regulations must be directed to the relevant appointed Championship Scrutineer or Series Scrutineer who will, if necessary, consult with MotorSport New Zealand and NIFF and SIFF.

2.1.1 Where any doubt may exist in understanding any regulation contained within this, it is the Competitors obligation to enquire as to the correct interpretation. All enquiries shall be submitted by email detailing the regulation in question and the specific subject matter. This enquiry must be made to the relevant Scrutineer who will then consult, if necessary, with MotorSport New Zealand and NIFF and SIFF. A written reply from MotorSport New Zealand or the Scrutineer will always be given to a written enquiry.

2.2 On matters of technical eligibility or safety compliance, a verbal statement or agreement will have no validity.

2.3 This Schedule must be read in its entirety and will take precedence over the National Sporting Code Appendix Two Schedule A except where an item is a matter of safety. Where a non-safety matter is not in these regulations, the current Appendix Two Schedule A will apply.

2.4 All text changes from the previous issue of these Technical Regulations are highlighted such. Text changes for grammatical and/or formatting reasons are not highlighted.

2.5 All competing cars must have a valid MotorSport New Zealand vehicle logbook, and visiting cars must have a valid logbook or passport from their ASN.

2.6 Telemetry devices are strictly prohibited, except devices whose sole function is to provide lap timing and those authorised within these Technical Regulations.

2.7 The use of titanium material is specifically prohibited. Additionally, the use of ceramic material in the transmission, driveline and wheel bearings is specifically prohibited.

2.8 Damaged threads may be Reclaimed by the use of a threaded insert so long as the original hole centre is maintained.

2.9 All chassis/body dimensions are referenced in Appendix One of these Technical Regulations.

2.10 Any form of launch control, including supplementary brake systems, is strictly prohibited.

2.11 These Technical Regulations are written in terms of authorisation; therefore, what is not expressly authorised is prohibited.

2.12 During 2026-27 an Engine Declaration Form (EDF) is being introduced into the NIFF Accredited Series and NZ Formula Ford Championship. It is highly recommended that the Competitor submit an EDF to the relevant Scrutineer at their respective first round.

2.13 We strongly recommend that engines are built by the appointed Category Engine Builder (CEB) for the 2028 NZFF Championship onwards. Any long engine built by the CEB will be supplied with an EDF.

2.14 From the 2027-28 season onwards the Engine Declaration Form will be mandatory in the NIFF Accredited Series and NZ Formula Ford Championship.

3. IDENTIFICATION, OFFICIAL SEALS, SEALING REQUIREMENTS

3.1 Official seals: The definitive text is detailed in National Sporting Code Appendix Two Schedule A.

3.1.1 It is the Competitor's responsibility to ensure that a metal engine ID tag (Type "C" Seal) is fitted to the engine/s (maximum of two (2) at any one time) used during the Series or Championship. Provision for attaching 'engine ID tags' to the engine block in an accessible location is the Competitor's responsibility. The engine ID tags must not be removed without the express permission of the Series Scrutineer or Championship Scrutineer.

3.2 Additionally, official seals may be applied as follows:

All cars may have official seals applied to the following components, and/or any additional engine or components, at any time during the Series or Championship, at the sole discretion of the relevant Scrutineer:

- In the locations identified in Appendix Five of these Technical Regulations.
- Two adjacent **cylinder head** bolts or cylinder head bolt to head casting flange
- Two adjacent **engine to bell-housing** adaptor bolts
- Two adjacent **inlet manifold to cylinder head** bolts or bolt to casting flange
- Two adjacent carburettor to inlet manifold bolts / studs
- Two adjacent transaxle **differential cover** bolts / studs or cover flange
- The rear section of the Inlet manifold adjacent to the Cylinder Head face
- The engine block through the web below number 4 exhaust, near the bell housing bolt
- Two adjacent timing cover bolts.

3.2.1 In entering the Accredited Series or Championship, all Drivers/Entrants agree to submit their vehicle for scrutineering, including eligibility and safety audit inspections, as and when required by the relevant Scrutineer.

(a) Any costs incurred during disassembly of components will be met and accepted by the Competitor. The Scrutineer will not be liable for any loss or damage to any vehicle, equipment, or any impounded components under their direct or indirect control while removing, transporting, or securing any vehicle or component prior to, or after any technical inspection.

(b) All due care will be taken and a written receipt for any vehicle or components will be given to the Competitor or their representative where the vehicle or component is to be impounded to be removed for technical inspections at a later date or time.

(c) Any inspections will be carried out in a timely manner and the Competitor or their representatives will be given a written report covering the findings of the inspection when requested.

(d) Any delay in inspection, testing or return of vehicles or components will be communicated to the Competitor as soon as is practical to do so.

(e) Any costs, such as labour, cleaning products, testing by an independent third party or freight costs will be the sole responsibility of the Competitor. Any costs involved must be paid within seven days of completion of the inspection report.

3.2.2 Any sealed component(s) presented for inspection at any time up to 30 days after the completion of the final Race of the final Round, refer to Article 3.4 below, that are deemed to have had seal(s) removed, broken or otherwise tampered with will be deemed illegal. The infringement will be reported to the Clerk of the Course (or other appropriate authority) in the form of a Technical Report, with a recommendation that a hearing should be held, and that any applicable penalty(s) imposed cover the entire period for which the seal was applied.

3.2.3 Any inadvertent damage to any seals must be reported to the relevant Scrutineer by the Competitor or their representative without delay.

3.3 All the components and locations detailed in Article 3.2 above must be pre-drilled with 3mm holes ready for sealing prior to the first Round of the Championship or Series. It is the Competitor's responsibility to ensure that these assemblies have bolts / studs / flanges pre-drilled to enable wire seals to be affixed as and when required.

3.4 It is the Competitor's responsibility to ensure that all applied seals, as detailed in the vehicle logbook, remain intact for the duration of their application period. A category 'C' seal remains valid from date of application to 30 days after the last Round of the Series.

3.5 Should a Competitor require a Category 'C' seal to be removed for maintenance purposes, prior authorisation must be requested in writing and written approval must be granted before the seal is removed.

3.6 All requests to be submitted in writing to the relevant Scrutineer. A text message is permissible but it must be followed up by email or written request. Upon approval, written confirmation of 'PERMISSION GRANTED' to remove the specified seal will always be given by the relevant Scrutineer or on their behalf by the MotorSport New Zealand Technical Department. This record must be kept by the Competitor and produced upon request of an Official.

3.7 Where a request to remove a Category 'C' seal is received outside of a Round of the Championship or Series and a technical inspection is deemed necessary, MotorSport New Zealand reserves the right to apply a surcharge to cover any expenses incurred by its volunteer Officials in conducting the inspection.

4. SAFETY EQUIPMENT AND ITEMS

4.1 Helmets, Frontal Head Restraints and Protective Clothing must be worn in compliance with National Sporting Code Schedule A Part One.

4.2 Gloves must be of a colour which contrasts with the predominant colour of the car, so that the Driver can clearly draw the attention of the race starter in case of difficulties.

4.3 Roll protection must comply with the provisions of FIA Appendix J. Two rollbars must be incorporated, the first being positioned in front (front rollbar) of the steering wheel, not more than 250.00mm forward of, and at least as high as the top of the steering wheel rim. The second (rear rollbar) must be at least 500.00mm behind the first and high enough for a line extended from the top of this bar to the top of the front rollbar to pass 50.00mm over the Driver's helmet. This will be measured as if the Driver is ready to race. The rear rollbar must have a minimum height of 920.00mm measured from the base of the seat and a minimum width of 330.00mm (measured between the two vertical bars at a height of 600.00mm above the seat base). There must be at least one rearward brace (same diameter as the rollbar) extending from the top of the rear rollbar at an angle not exceeding 60.00° with the horizontal. If two rear braces are fitted the tube diameter may be reduced to a minimum of 20.00mm. Schedule A homologation for the rollbar is not mandatory when competing under this Schedule.

Note: For Class Three cars where there is no front rollbar, the helmet clearance line will be taken to a substantial forward chassis structure.

4.4 Any chassis originally manufactured with front and side crash structures must retain those structures.

4.5 Safety harness:

4.5.1 Either an FIA8853-98 (5-year validity) or FIA8853-2016 (5-year validity) six strap harness must be installed in full compliance with Schedule A. The validity dates must be respected.

4.6 Any head restraints/padding fitted along the top inner edge of the cockpit opening must be removable without the use of tools.

4.7 **Rain/rear light:** A red LED light (with a minimum of 50.00mm diameter of lighting surface, or a minimum of fifteen (15) high intensity LEDs) shall be mounted (as high as possible) facing rearwards as close to the car's centreline with operation from the cockpit. When viewed from the rear, the light must not be obstructed by any part of the vehicle. The operation of the rain light is mandatory when the Session and/or Race is declared 'WET'.

4.8 **Circuit breaker:** An operational electrical switch, easily reached from inside as well as outside the car capable of breaking all circuits that keep the engine running must be fitted. The location of the switch must be indicated by a 'blue triangle/spark symbol' situated on the outside of the car.

4.9 The **fire extinguisher** must be installed in compliance with National Sporting Code Schedule A.

4.10 **Service fluids** (fuel, oil, coolant, and brake) running through the cockpit must be carried in metal tubing or metal braided hoses with any connections of a threaded (industry quality) type. Engine oil and water pipes must not run through the cockpit of Class One cars.

4.11 All Drivers must be able to egress their vehicle from a fully belted in condition in full race equipment in less than seven (7) seconds. This test may be conducted at any time during a Round.

5. FUEL

5.1 **Fuel type:** Must be commercially available fuel from a New Zealand Service Station forecourt pump on current sale being either;

5.1.1 Unleaded 91 Octane (RON) regular grade petrol; or

5.1.2 Unleaded 95 Octane (RON) regular grade petrol; or

5.1.3 Unleaded 98 Octane (RON) premium grade petrol.

5.2 Additives of any kind, specification, chemical description or composition must not be added to the fuel, nor may a blend of two or more fuels be used.

6. RACING WEIGHT

6.1 The minimum weight of a vehicle in Race Trim must be:

6.1.1 All vehicles contesting the National Championship: 510.00kg

6.1.2 All vehicles contesting an Accredited Series:

(1) Classes One, Two and Three: 510.00kg

(2) Historic Class: 495.00kg

6.2 The vehicle in Race Trim may be measured at any time during a Round on the official weigh scales.

6.3 Ballast may be used to achieve the minimum weight.

6.3.1 Each 5kg unit of Ballast must be securely attached to the chassis using the minimum of an 8.8 class bolt with a minimum diameter of 8mm for each fixing point.

7. CHASSIS

7.1 All applicable chassis dimensions are referenced in Appendix One of these Technical Regulations.

7.2 The chassis must be of tubular construction with no stress bearing panels except bulkheads and the undertray.

7.2.1 The curvature of the undertray shall not exceed 25.40mm.

7.2.2 The engine cannot be utilised in any way as a stress-bearing panel.

7.2.3 Monocoque construction is specifically prohibited.

7.3 The use of stabilised materials and Composite materials incorporating carbon and/or Kevlar material are prohibited except in the area of the cockpit provided it is original specification bodywork as supplied by the original vehicle manufacturer.

7.4 The cockpit opening dimensions shall respect the following dimensions:

7.4.1 Minimum overall opening length: 600.00mm

7.4.2 Minimum parallel opening length: 300.00mm

7.4.3 Minimum cockpit opening width for pre-31 December 1995 chassis: 380.00mm

7.4.4 Minimum cockpit opening width for post-31 December 1995 chassis: 450.00mm

7.4.5 For chassis' constructed between 1 January 1987 and 1 January 1995, the internal cross-sectional area of the cockpit (from the sole of the Driver's feet to behind their seat) must nowhere be less than 700.00^{cm2} with a minimum width of 250.00mm maintained for the whole length of the cockpit.

(1) The only intrusion permitted into the cross-sectional area is the steering column.

7.5 The Driver's feet (normal seated position with pedal not depressed) must be located behind an (imaginary) line drawn through the front wheel axis.

7.5.1 Class Three cars are exempt from this Article 7.5.

7.6 No fluids may pass through the chassis members/tubes.

8. BODYWORK

8.1 All applicable bodywork dimensions are referenced in Appendix One of these Technical Regulations.

8.1.1 **Class One and Class Two cars:** The maximum height of the bodywork (excluding rollbar) must be measured/checked in Race Trim.

8.1.2 **Class Three cars:** No part of the bodywork/engine cover must extend more than 600.00mm behind the centreline of the rear axles. The maximum height of the bodywork (excluding rollbar) must not exceed 800.00mm (at any point) above the lowest point of the entirely sprung structure of the car except for air-boxes solely supplying air to the carburettor which must not exceed 1100.00mm.

8.1.3 No part of the car, except for the tyres, may be closer to the ground than 40.00mm. This measurement will be checked on the official measuring pad/area, taken with the car in Race Trim and with the road wheels pointing straight ahead. Class Three car's rear uprights are exempt from this rule.

(1) Where inadvertent failure or on-track damage can be quantifiably attributed by the relevant Scrutineer as cause for ride height non-compliance, that Scrutineer will have complete discretion as to reporting an infringement.

8.1.4 Indicative checking of ride height may take place prior to any official session and/or Race.

8.2 Aerofoils, nose fins, spoilers of any type, or any device designed to aerodynamically augment downforce on the vehicle are prohibited. Side pod bases or floor must not protrude out from the sides or the rear of the side pods.

8.3 **Class One and Class Two cars:** The engine cover must not extend rearwards past the rearmost point of the gearbox casing. The shape of the engine cover must not include any reflex curves and no flat surfaces are permitted within 15.00° of the horizontal. The lower rear bodywork (located below the road wheel centre line) is only permitted alongside and beneath the engine and must only extend from behind the cockpit to a line drawn through the rear road wheel axis. Any suspension member or fairing of any kind must not be incorporated within the lower rear bodywork.

9. KENT ENGINE – GENERAL

Kent Engine Moratorium:
The Ford Kent engine as detailed in these Technical Regulations will remain the power-plant for NZ Formula Ford Championship until the completion of the 2027-28 season. Both NIFF and SIFF Accredited Series will retain the Ford Kent engine until the completion of the 2028-29 season.

9.1 The Ford Kent 1600GT cross-flow engine as fitted to the Cortina, Capri, and Escort is the only authorised engine. The Ghia version of the engine is not permitted.

9.2 Engines must be mounted upright and aligned fore and aft in the chassis.

9.3 Only genuine FoMoCo engine parts may be used, unless specified otherwise hereinafter. Where applicable, part numbers are detailed in the relevant article.

9.3.1 The MotorSport New Zealand Technical Department in conjunction with NIFF and SIFF may, upon written application, accept Direct Replacement parts of the specified part numbers. Where accepted, these parts will be detailed in an Amendment.

9.4 Addition of any material, be it metal, plastic or Composite, by any means, be it welding, bonding, encapsulation or encasement, to any component is prohibited except as detailed in Article 9.4.1.

9.4.1 Specific repair of castings is authorised, providing material, weight, size, form and function is retained, subject to the process outlined in Article 9.4.2.

9.4.2 For repairs of castings, prior application must be made in writing to the relevant Scrutineer, who will consult with the MotorSport New Zealand Technical Department. The component will be inspected by the relevant Scrutineer, or the MotorSport New Zealand Technical Department, who may approve in writing, the repair being undertaken, and the nature of the repair. Any repairs once completed must be inspected by the relevant Scrutineer the MotorSport New Zealand Technical Department, who will provide details in writing of the component, the repair, and the component identification to MotorSport New Zealand who will maintain a record of the repairs.

9.5 All engine gaskets and seals are Free, except where specified otherwise hereinafter.

9.6 Drive pulleys and drive belts on the front of the engine are Free.

9.7 A mechanical tachometer drive is authorised and the timing cover may be modified to accommodate its fitment.

9.8 Fitment of an alternator/generator is optional.

9.9 The use of non-Standard replacement fasteners (nuts, bolts, screws, studs and washers) is authorised. Bolts can be substituted for studs providing they are like for like. The use of thread locking compound is authorised.

9.10 The crankshaft bearing shells, conrod big end bearing shells and camshaft bearing shells may be substituted with commercially available non-genuine FoMoCo parts.

9.10.1 Where the 711M6010/16K block is used, it is authorised to use the FoMoCo crankshaft thrust washers Part Number 2T2167.

9.11 Balancing of reciprocating and rotating parts is authorised, but only by the removal of metal from the locations so provided by the manufacturer, unless stated otherwise under the applicable Article.

9.12 Any process of component cleaning is permitted, provided the original surface finish is not affected in any way.

9.13 A liquid cooling system is mandatory. The water pump must be belt driven by the crankshaft and remain in its original position. The radiator is unrestricted provided, if housed in/or incorporating a cowl air scoop/deflector, it remains compliant with the bodywork dimensions.

9.14 The lubrication system is Free, except that the oil-pump must be a 2-stage gerotor pump mechanically driven as per the Standard pump. A dry sump system is authorised. The block may be drilled for lubrication of the skew gears. Oil coolers are unrestricted.

9.14.1 The lubrication system, external to the engine is Free. Existing Standard production oilways, linings and oil grooves may be enlarged or reduced but no additional ones are permitted.

9.14.2 The use of a front mounted dry sump pump is permitted on Historic Class Three cars providing it mounts onto the timing cover and is mechanically driven.

9.14.3 A single crankshaft scraper plate and/or windage tray may be installed but it must remain in contact with the engine sump.

9.15 The ignition distributor make is Free, providing the original drive and location is retained, the low-tension ignition circuit is triggered from within the distributor body and the high-tension ignition circuit is distributed from the distributor unit. It is not permitted to fit or use any other components to trigger, time, or distribute the ignition current. The ignition timing may only be varied by mechanical means (weights and springs) from within the distributor body and a 90.00 degree firing angle must be maintained. The electrical wiring from the distributor to the ignition coil must be separate from all other wiring.

9.15.1 The distributor cap, high tension leads may be freely sourced.

9.15.2 **Spark plugs** must be used complete as supplied from the original manufacturer with no modifications, unless otherwise permitted below.

- **(1)** Only the electrode gap may be adjusted.
- **(2)** Indexing can only be achieved by the addition of washers.
- **(3)** Only Sparkplugs from the following list are approved for use:
  - **(a)** NGK BCP8ES, NGK BCP7ES, NGK BCP6ES or NGK BKR7E
  - **(b)** NGK BCPR6ES, NGK BCPR7ES & NGK BCPR8ES
  - **(c)** Autolite AR3933 or 3933
  - **(d)** Autolite AR3934 or 3934
  - **(e)** Denso IK27

9.15.3 An electronic rev-limiter may be fitted but it must not interrupt the wiring from the distributor to the ignition coil.

9.15.4 Only one ignition coil is authorised which may be freely sourced. A second (spare) ignition coil may be mounted but only one coil shall be electrically connected at any time.

9.15.5 A pointer may be mounted to the engine to facilitate ignition timing.

9.16 The exhaust system including the exhaust manifold is unrestricted, except a muffler must be fitted and is subject to compliance with the dimension requirements of Appendix One of these Technical Regulations and noise emission as detailed in National Sporting Code Schedule A Part One.

9.17 An operable starter motor is mandatory (either inertia or pre-engaged type) capable of starting the engine (from an on-board energy source) operated by the Driver when normally seated.

10. KENT ENGINE – CYLINDER HEAD ASSEMBLY

10.1 This Article 10 applies to all cylinder head types. The cylinder head must be either:

- The FoMoCo cast iron unit from a Kent 1600cc GT cross-flow engine;
- The FoMoCo cast iron unit from a Kent 1600cc (non GT) cross-flow engine; or
- An aluminium cylinder head, as supplied by Ivey Engines, Portland, Oregon, USA is authorised (previously supplied by Pearce Manifolds USA).

10.2 Washers may be installed under the cylinder head mounting fasteners.

10.3 Two engine-block-to-head dowels must be fitted in their original positions. Both dowels must be concentric and parallel and must locate in both the engine block and cylinder head surfaces. The location and size of the dowel holes in the cylinder block and cylinder head must remain as Standard.

The following part numbers for the dowels are authorised to be used:

- FoMoCo Original Part No 130853ES, 1657690, 1472277, E840273-S
- Burton Power Part No FP509
- Pegasus Auto Racing Supplies Part No 161-55
- Direct Replacement dowels may be used

10.4 The cylinder head gasket shall comply with the following dimensions:

- Minimum diameter of cylinder aperture: 82.50mm
- Minimum compressed thickness: 0.80mm

10.5 Valve guides and/or valve seats may be Reclaimed to original specification and must comply with Articles 10.11 and 10.11.1.

10.6 Aftermarket valve springs are authorised provided they are steel and only one spring per valve is used. Aftermarket valve spring retainers are authorised, provided they are of ferrous material. The addition of shims is authorised as is the machining of the head casting directly under the spring seat.

10.7 The fitting of valve stem (oil control) seals is authorised.

10.8 The rockers, tappets, pedestals and (rocker) shaft must remain Standard. An alternative replacement rocker shaft, Pegasus 162-46 with 2X 1/8 NPT end plugs, is authorised.

10.8.1 The rocker (valve stem) contact pad may be re-contoured provided the maximum specified lift is not exceeded. The rocker pedestal may be shimmed to a maximum shim thickness of 2.00mm (with a parallel strip of steel) to compensate for surfacing of the cylinder head and/or block.

10.8.2 The pushrod must not be modified or shortened.

10.8.3 The rocker shaft pedestal must not be modified

10.9 The maximum valve lift (measured at the spring cap with zero tappet clearance) is 8.95mm for both inlet and exhaust valves.
The maximum cam lift at the top of the pushrod is 5.890mm for both inlet and exhaust. These measurements must be respected at all times irrespective of temperature.

10.9.1 The following checking procedure shall be applied to valve lift:

- The rocker to valve stem clearance must be eliminated using the rocker adjuster and the following procedure:
  - **i.** Valves will be numbered 1 to 8 with valve one being in cylinder No. 1.
  - **ii.** With cylinder 1, valve 1 (exhaust) fully open, set the lash on cylinder 4, valve 8 (exhaust).
  - **iii.** With cylinder 1, valve 2 (inlet) fully open, set lash on cylinder 4 valve 7 (inlet).
  - **iv.** Continue this process to complete the desired number of cylinders.
  - **v.** The sum of the fully open valve number and the valve number having the lash set must always equal 9.
- Measurement must be performed on the spring cap parallel to the valve stem and in-line with the centre line of the rocker arm.
- Where any engine valves, up to a maximum of two, are found to have lift in excess of that permitted, then the lift on all four inlet valves or all four exhaust valves is to be added together and divided by four. The resultant average lift figure may not exceed that permitted for the relevant valve. If more than two valves are measured as having excessive lift, then the foregoing does not apply, and the lift will be deemed ineligible.

10.10 The cylinder head to block face of the cylinder head may be Reclaimed by machining the entire gasket and chamber face parallel and in the same plane to the original face. It is not authorised to machine the cylinder head manifold (mating) faces, nor the pedestal mounting faces or rocker cover face.

10.11 The **inlet valves** must be either Standard marked FoMoCo, FORD, FFI or Ivey 13248. No re-profiling or polishing is authorised however, re-facing of the valve seat face is permitted to the original 45.00° seat angle. Specifications are as follows:

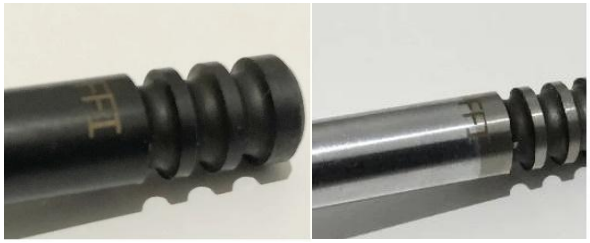
- Maximum inlet valve head face diameter: 39.70mm
- Overall inlet valve length: 110.90 +/- 0.50mm
- Maximum protrusion of valve head from cylinder head face: 1.20mm
- If there is any doubt as to the legality of the protrusion, then it must be re-measured with all carbon removed from the valve head and adjacent cylinder head surface.

Note: No machining of the valve head diameter is permitted.

10.11.1 The **exhaust valves** must be either Standard marked FoMoCo, FORD, FFI or Ivey 13249. No re-profiling or polishing is authorised however, re-facing of the valve seat face is permitted to the original 45.00° seat angle. Specifications are as follows:

- Maximum exhaust valve head face diameter: 34.050mm
- Overall exhaust valve length: 110.60 +/- 0.50mm
- Maximum protrusion of valve head from cylinder head face: 1.20mm
- If there is any doubt as to the legality of the protrusion, then it must be re-measured with all carbon removed from the valve head and adjacent cylinder head surface.

Note: No machining of the valve head diameter is permitted.



examples of FFI exhaust and inlet valve marking

10.11.2 The fitted valves (both inlet and exhaust) 'distance apart at centres' are:

- Cast iron cylinder head: 39.10mm +/- 0.50mm
- Aluminium cylinder head: 40.30mm +/- 0.50mm

10.12 The cylinder head inlet and exhaust ports may be reshaped by the removal of metal providing the diameter of the ports (at the manifold faces) remain as follows:

- Inlet port (measured external to chamfer) maximum dimension: 36.70mm
- Exhaust port (cast iron head) maximum dimension: 31.00mm
- Exhaust port (aluminium head) maximum dimension: 31.00mm

Note: The addition of material to the ports is prohibited, except as authorised in Article 9.4.1.

10.12.1 Where fitted valve seat inserts must respect a minimum internal diameter of:

- Inlet valve insert: 33.00mm
- Exhaust valve insert: 27.00mm

10.13 The Standard **rocker cover** may have the original oil filler sealed and a breather adapter fitted. An Aftermarket rocker cover is authorised.

11. KENT ENGINE – INDUCTION SYSTEM

11.1 The **carburettor** must be a Weber 32/36 DGV or DGAV Series with the following specifications:

- Main venturi maximum diameter: primary choke: 26.00mm
  secondary choke: 27.00mm
- Outlet (inlet manifold face): primary: 32.08mm nominal
  secondary: 36.08mm nominal

Note: Aftermarket copy carburettors are not permitted.

11.2 The carburettor outlet to the inlet manifold must remain Standard, and no polishing or re-profiling is permitted.

11.2.1 The following are the only modifications authorised to the subject carburettor:

(a) Change of jets and fitment of accelerator pump twin-jet.

(b) Removal of cold start device and diffuser bar.

(c) Fitment of internal/external anti-fuel surge tubes.

(d) Removal of seals on emission control carburettors.

(e) Blocking the power enrichment circuit, modify or remove the diaphragm, and/or removing or blocking the power jet.

(f) Fitment of a roll-pin between the carburettor body and the venturi bridges.

(g) Fitment of Aftermarket throttle plate (butterfly) attachment screws.

(h) Fitment of an Aftermarket float.

(i) Fuel inlet pipe with a screw fitting to replace 'press fit' type pipe is mandatory.

(j) The carburettor throttle shaft housing can be Reclaimed with either a bearing or a brass sleeve for the sole purpose of locating the Standard throttle shaft in the original position.

11.3 The carburettor to inlet manifold spacer (Part No. FF1) and gaskets (Part No. FF2) are controlled parts. Enlargement of the mounting holes in these parts including the carburettor base is permitted temporarily to improve ease of fitment of the components.

The modifications will be permitted until the introduction of the new control Formula Ford inlet manifold at which time it will be reviewed.

There must be only one spacer and two (2) gaskets fitted to the inlet manifold.

The Control Part suppliers for the carburettor spacer and gaskets are:

North Island Formula Ford Inc.		**South Island Formula Ford Club Inc.**	
Name:	Shane Drake	Name:	Mark Elder
Phone:	027 473 9406	Phone:	021 104 0698
Email:	ceo@chicane.co.nz	Email:	mark.elder@cdhb.health.nz

11.4 The carburettor throttle mechanism must remain Standard with the original progressive linkage system fitted and operational. There must be a mechanical connection to the Driver's foot pedal.

11.5 For Class One and Class Two cars the only inlet manifold that is permitted is the Control Part inlet manifold (Part No. FF1600), complete with serial number and mounting face engraving as supplied originally by the Control Part supplier. Class Three cars are also permitted to use the FF1600 inlet manifold.

The Control Part supplier for the inlet manifold is:

Bryan Hartley Engines and Motorsport

Address: 26 Domain Street, Palmerston North 4410

Phone: 06 355 5070

(1) The engraved logo on the carburettor mounting face must remain recognisable.

(2) Each inlet manifold will be identified by a serial number.

(3) The combined internal volume of the plenum and runners shall be between 590.00cc and 625.00cc measured between the cylinder head mounting face and the carburettor mounting face and excluding gaskets and any spacers.

(4) It is the Competitor's responsibility to ensure the inlet manifold complies with these requirements at all times.

11.5.1 It is specifically forbidden to modify, alter, change, reclaim, or paint the 'inlet manifold'; however, it is permissible to carry out localised machining of the exterior of the inlet manifold for the sole purpose of:

(1) Reclaiming the inlet manifold to cylinder head face by machining it collinear to the original face providing the internal volume remains in compliance with Article 11.5(3) and the face remains at 90.00° to the carburettor mounting face.

(2) Machining and threading of the three throttle linkage bracket bosses for the sole purpose of aligning the throttle linkage system and throttle position sensor bracket to the carburettor throttle shaft.

(3) Easing of the inlet manifold to cylinder head mounting holes to allow fitment of the manifold.

(4) External localised machining of the inlet manifold for the sole purpose of providing minimum clearance to chassis and other external engine related components.

(5) Reclaiming the threads of the manifold to carburettor stud holes and throttle linkage mounting bosses.

(6) The drilling of a 3.00mm hole at the rear of the inlet manifold adjacent to the cylinder head mounting face to allow fitment of official seals.

(7) At no point shall any machining penetrate the internal tract of the inlet manifold.

Note: Refer to Appendix Three of these Technical Regulations for the inlet manifold image.

11.5.2 For Class Three cars, where the FoMoCo Inlet Manifold is used, it must remain Standard, except that it is permissible to machine the carburettor mounting surface to horizontal.

11.6 The inlet manifold to cylinder head gasket must be singular with maximum thickness of 1.0mm.

11.7 The Standard air cleaner assembly as fitted by the manufacturer may be replaced with an Aftermarket filter, and trumpets may be fitted.

11.8 Specifically prohibited are the following;

(1) To reduce by any means the intake air temperature.

(2) Fitment of any form of water injection.

(3) Modification of the venturi (chokes), in any way, shape or form.

12. KENT ENGINE – CAMSHAFT

12.1 For Class One and Class Two cars the camshaft is a Control Part and must be fitted to the subject engine.

12.1.1 The Control Part supplier for the camshaft is:

Kelford Cams
Address: 11-15 Kennaway Rd, Woolston, Christchurch 8022
Phone: 03 929 0725
Fax: 03 381 0721
Email: team@kelford.co.nz

12.1.2 Kelford Cams will either supply a new camshaft or re-profile a customer's unit to the control specification, being an identical specification and coating for all camshafts supplied under these Technical Regulations. All camshafts will be subject to a computer check of all lobes with a footprint recorded identifying each individual camshaft unit. An identification number and a Kelford Cams insignia will be applied to all (certified) Control Part camshafts. It is the Competitor's sole responsibility to ensure compliance with this Article.

12.2 Class Three cars must use the Control Part camshaft as detailed in Article 12.1.2 when contesting the Championship. When contesting an Accredited Series, they may also use the series production camshaft for the 1600GT Kent engine (Part No. 771M 6250BA), or use a camshaft with identical specifications/dimensions to that of the 1600GT Kent camshaft (refer to Article 12.2.1 below). Tuftriding or Parkerising is permitted. Shot peening, shot blasting or polishing is prohibited.

12.2.1 Class Three alternative camshaft specifications;

(1) Inlet lobe dimension – heel to toe: 33.29mm +/- 0.10mm

(2) Exhaust lobe dimension – heel to toe: 33.32mm +/- 0.10mm

(3) Lobe base circle radius : 13.72mm +/- 0.50mm

12.3 The use of a direct-replacement single row timing chain and drive sprockets is authorised as is the Rollmaster P/N CS3140 double row timing chain and gear set, the Burton Kit FP217K and the Crow Cams CS41500. All parts must be ferrous material.

12.3.1 The timing chain tensioner assembly may be removed.

12.4 Offset dowels for the camshaft/sprocket location are authorised.

12.5 The cam followers may be Aftermarket parts provided they are ferrous material.

13. KENT ENGINE – CYLINDER BLOCK

13.1 The cylinder block must be the cast iron FoMoCo Kent 1600GT unit or the Ford Performance Parts unit from the subject engine identified by the following numbers cast into the side face: 711M-6015BA, or AX-831C6015R34, or 711M6010/16K.

13.2 Cast iron cylinder liners may be fitted as a means of repair; to Standard production dimensions. The liners may be machine-bored and blended to align with the base of the cylinder bore. Offset boring is prohibited.

13.3 Localised machining of the cylinder block is authorised to facilitate fitment of a dry sump system.

13.4 The crankcase breather may be modified; however, all crankcase breathers must discharge into a catch tank.

13.5 The cylinder block (to cylinder head) face may be only machined parallel to the parting face of the main bearing caps.

13.6 Internal/external painting of the cylinder block is authorised.

13.7 For Class One and Class Two cars and Class Three cars built after 30 June 1980, the maximum bore diameter must be 81.15mm, and the maximum stroke must be 77.60mm.

13.8 For Class Three cars built prior to 1 July 1980, the cylinder block may be re-bored to a maximum of 1.00 mm oversize to accommodate oversize pistons.

13.9 All Class Three cars are permitted to run 0.005” oversized pistons. This would make the piston a maximum diameter of 81.0895mm with a maximum bore size of 81.277mm.

13.10 It is permitted to dowel the rear crank seal housing and machine the seal housing to allow external removal and fitment of the seal.

14. KENT ENGINE – PISTONS

14.1 All piston diameters must not exceed 80.9625mm (3.1875 inches). Class Three cars using +.005” pistons must not exceed 81.0895mm (3.1925 inches)

Only the following part numbers are authorised:

- CP forged pistons, Standard size (Part No. FF-1600 and FF-1600-C) marked with batch number and logo as originally supplied by Ivey Engines, Portland, Oregon. Markings and logo must remain completely visible at all times.
- 711M-6l02MB
- AE-20552 with casting number 7082875
- Part number 9096468 with casting identification AE #2791

- 9096466 casting number 80V87 Mahle
- Teikin with casting number 080245

14.1.1 Piston compression height must be not less than 43.30mm as detailed in Appendix Four of these Technical Regulations.

14.2 Pistons may be machined as follows solely for the purposes stated:

- Piston bowl and valve relief solely to achieve correct volume (refer to Article 14.5)
- Gudgeon pin bosses solely to achieve balance (refer to Article 14.1 markings and logos)
- Top of and underside of piston crown solely to achieve piston weight and deck height, and
- Solely applicable to 711M-6102MB, the top ring groove solely to enable ring fitment.

Note: It is specifically prohibited to drill gas reliefs in the piston crown. This means to machine from the piston crown or bowl into the ring groove.

14.3 Piston weight must include the following:

- Piston
- Piston Rings
- Gudgeon Pin
- Ferrous Gudgeon Pin Retainers such as Circlips or Spiral, or Spiro Locks

The minimum complete piston weight (including piston, rings, gudgeon pin and ferrous gudgeon pin retainers) is 515.00 grams. The individual gudgeon pin weight must respect a maximum of 123.00 grams when weighed separately.

Note: Minimum weight to be checked with components in a clean dry condition.

14.4 All piston rings must be fitted to pistons; Aftermarket replacements are authorised compliant as follows:

- Compression rings must be one piece with conventional plain gaps.
- The top ring may be chromium plated or molybdenum-faced.
- Oil control rings must be either one piece or ‘Apex’ type 3-piece.
- Spacers are not permitted in the ring grooves.
- Gas ported rings are not permitted.

14.5 The minimum combustion chamber volume in the piston crown must be 41.00cc with the piston at TDC in the cylinder with no account taken for the volume down to the top ring. The equipment and method of checking the volume is as follows:

- Burette;
- Checking fluid (50/50 mix Kerosene and Dextron III Grade ATF);
- Transparent flat plate (with filling / air bleed holes) and grease (for sealing).

Measurement must be performed at ambient temperature after a twenty-minute cool down period. Carbon may be removed from the top of the piston using a non-abrasive process only. With piston at BDC apply a light smear of general-purpose grease around the cylinder wall. Raise the piston to TDC. Wipe away excess grease. Seal the flat plate to the gasket face of the cylinder block with a light smear of general-purpose grease. Fill piston chamber from burette to establish volume.

14.6 The pistons must not protrude above the cylinder block (to cylinder head) face when at TDC (at ambient temperature).

14.7 Class Three cars built prior to 1 July 1980 only may utilise Standard size pistons as detailed in Article 14.1 above or Direct Replacement pistons to a maximum over size of 1.00mm.

15. KENT ENGINE – CONNECTING RODS

15.1 The connecting rods must be either Standard FoMoCo units from the subject engine or SCAT connecting rods (Part No. 2-4925-2082-812-635).

15.2 Machining is permitted to remove metal from the balancing bosses on the big end cap and at the little end to achieve balance and minimum weight.

15.3 For the sole purpose of providing clearance between the camshaft and the con-rod, it is permissible to remove metal from the SCAT con-rod adjacent to the big-end bolts on both sides to match the profile of the FoMoCo part. Metal shall be removed by milling. No polishing is permitted.

15.4 The minimum weight of each rod (including bolts, any washers, and small end bearing) is 635.00 grams.

15.4.1 The Minimum weight shall be checked with all components in a clean dry condition.

15.5 Polishing of the connecting rods is prohibited.

15.6 The big end cavity may be resized, and the little end bush may be replaced providing the length between the centre axis of both bores remains Standard. No offsetting is allowed.

16. KENT ENGINE – CRANKSHAFT

16.1 The crankshaft must be the Standard FoMoCo unit from the subject engine or a SCAT (cast steel) crankshaft (Part No. SC9-F1600). The only permitted modifications are detailed herewith in Article 16.

16.2 For balancing purposes only, localised machining of the outer (larger) circumference of the counterweights or the outer face of the inner (smaller) circumference of the big end surfaces only is authorised.

16.3 Tuftriding, shot peening and/or shot blasting of the crankshaft are permitted. Polishing of the crankshaft is strictly prohibited.

16.4 The crankshaft may be machined on the bearing friction surfaces in accordance with normal reconditioning procedures, provided the stroke remains Standard (77.60mm ± 0.10mm). Oversize and undersize bearings, including brand line components of an equivalent type are authorised.

16.5 It is not permitted to alter the number of bearings or fit bearings less than Standard production width.

17. FLYWHEEL AND CLUTCH

17.1 The Control Part Flywheel or the Standard Flywheel from the subject engine are authorised as follows:

17.1.1 The Control Part Flywheel, when used, must be manufactured and/or supplied by the MotorSport New Zealand nominated agent being either;

Company:	**Tork Precision Engineering Ltd**	**Precision Engineering Ltd**
Name:	Anthony Tork	
Address:	Unit A, 13-15 Collard Place, Henderson, Auckland.	9B Airborne Road, Albany, Auckland.
Phone:	09 835 4038	09 415 3264

Email: anthony@torks.co.nz precision@ihug.co.nz

17.1.2 The Control Flywheel:

(1) is available in 254.00mm or 258.00mm diameters.

(2) may only be used providing it is clearly identifiable by the MotorSport New Zealand logo.

17.1.3 The only modifications authorised to the Control Part Flywheels are spot machining for the sole purpose of balancing, and reclaiming of the clutch plate friction surface provided the Flywheel and Clutch Assembly remains within the minimum weight parameters defined in Article 17.4.1. It may be machined for the following purposes:

(1) Re-facing of the clutch plate mating surface. It is permitted to have a 0.50mm step for the sole purpose of aiding the clamping of the clutch cover;

(2) Balancing;

(3) Enabling fitment of the ring gear;

(4) Achieving weight requirement for combined Flywheel/Clutch Assembly (refer to Article 17.4.1) Refer to Appendix Two of these Technical Regulations.

17.1.4 Only for the Spectrum chassis manufactured prior to 1 January 2006, additionally, a 215.00mm diameter Flywheel may be manufactured from the OEM Flywheel but must respect the drawing in Appendix Two of these Technical Regulations.

(1) The Flywheel diameter is measured at the ring gear mounting not the overall Flywheel diameter.

17.1.5 The Standard Flywheel must be from the subject engine (refer to Appendix Two of these Technical Regulations for the compliance picture). It may be machined for the following purposes:

(1) Re-facing of the clutch plate mating face

(2) Balancing

(3) Enabling fitment of the ring-gear

(4) Achieving weight requirement for combined Flywheel/Clutch Assembly (refer to Article 17.4.2)

17.1.6 The ring-gear may be freely sourced provided it can be directly fitted to the Flywheel and respects Article 17.4.

17.2 An Aftermarket Clutch Assembly (being the driven plate and pressure plate) is authorised. The Clutch Assembly and release bearing may be freely sourced provided Article 17.4 is respected at all times.

17.2.1 The pressure plate assembly is to be of a conventional single diaphragm spring construction.

17.2.2 Only a single driven plate is permitted. It must only have organic material full circle friction faces and must be of a sprung centre construction. Sintered, Ceremetallic (Cerametallic) friction faces are not permitted.

17.2.3 Racing type clutches are prohibited.

17.3 Aftermarket Flywheel to crankshaft mounting bolts and the fitment of a single parallel locating dowel is authorised. It is not permitted to alter the crankshaft in any way to fit these parts.

17.4 The following Flywheel and Clutch Assembly weights must be respected at all times.

17.4.1 The Control Part Flywheel and Clutch Assembly must weigh no less than 10.50kg.

(1) Machining of the Control Flywheel to achieve the minimum weight shall only be permitted within the arrowed area defined by the photo in Appendix Two of these Technical Regulations.

17.4.2 The Standard Flywheel and Clutch Assembly must weigh no less than 10.50kg. It is strongly recommended that machining to achieve the minimum weight is only performed to the Flywheel within the area defined by the diagram and photo in Appendix Two of these Technical Regulations.

17.4.3 The 215mm Spectrum Flywheel weight will be reviewed ahead of the publication of the 2027-28 Technical Regulations.

18. TRANSMISSION

18.1 The gearbox must contain no more than four forward gears and must include an operable reverse gear, capable of being engaged by the Driver whilst normally seated.

18.2 Gear selection must be by mechanical means only. Automatic and/or sequential gearboxes / gear selection is specifically prohibited.

18.3 The gearbox ratios are Free.

18.4 The final drive ratio is Free.

18.5 Torque biasing and/or limited slip and/or locked differentials are strictly prohibited. Non-ferrous differential components are prohibited, save for the Hewland plastic thrust washer (Part No. HC8-214-5R). Differentials must be a mass-produced unit commercially available to the general market.

18.6 Rear wheel drive configuration only is authorised.

19. SUSPENSION

19.1 All parts of the suspension except dampers must be of steel/ferrous material, with the exception of bell cranks, tracking or alignment arms, hubs, hub adaptors, hub carriers, bearings and bushes, spring caps, abutment nuts and anti-rollbar links.

19.1.1 Suspension members may not be fabricated or installed in a form that will produce aerodynamic downforce on the vehicle.

19.1.2 The use of Composites for load bearing components is prohibited.

19.2 Dampers must be from an industry recognised commercial manufacturer and be commercially available to the general market.

19.2.1 A maximum number of four individual damper units are fitted, i.e. no more than two damper units for the front suspension and no more than two damper units for the rear suspension or as specified below relative to Class.

19.2.2 The same damper units must be used for the duration of each Series/Championship Round. 'B' type seals may be applied under the direction of the Series Scrutineer, that prevent disassembly of the unit during the Round and the numbers recorded in the vehicle logbook and the register. Where a damper may become damaged during a Round a damper may be repaired or replaced only with the express permission of the Series Scrutineer.

19.2.3 Class One, Class Two and Class Three cars: Dampers as manufactured by a known original manufacturer with a maximum of two external adjusters are permitted. There will be one compression adjuster and one rebound adjuster. These adjusters are exclusive of the spring platforms and gas pressure. Dampers that were originally manufactured with three or more external adjusters are not permitted. This includes those dampers that have been modified to remove, disable or cover the additional adjusters.

19.2.4 Historic cars built after 30 June 1980: Damper units with a maximum of two external adjusters are permitted. These adjusters are exclusive of the spring platforms and gas pressure.

19.2.5 Historic built before 1 July 1980: Single external adjuster (or non-adjustable damper units) are permitted for adjusting the internal 'valving' of the damper unit. Specifically prohibited are separate/remote reservoirs for fluid or gas.

19.3 No Driver-operated ride height or active/reactive suspension control is permitted, including sway bar controls.

20. BRAKES

20.1 Brake components may be freely sourced, provided that the calipers, pistons and discs are of a ferrous material.

20.2 The use of Composites for load bearing components is prohibited.

20.3 Any form of Driver operated 'park brake' is prohibited.

20.4 A Driver operated mechanical brake bias device is permitted

21. STEERING

21.1 Steering components may be freely sourced.

21.2 Specifically prohibited are rear wheel and/or four-wheel steering and Composites for load bearing components.

22. WHEELS

22.1 Aluminium alloy or steel wheels are permitted on the following conditions;

22.1.1 They are production type (produced in significant numbers);

22.1.2 They are of one-piece construction (aluminium wheels only);

22.1.3 They are modified only by the manufacturer for the sole purpose of achieving brake calliper clearance; and

21.1.4 Wheels must comply with National Sporting Code Appendix Two Schedule A Article 4.9 in all respects.

21.1.5 It is recommended:

(1) that wheels are crack tested at least once per season; and

(2) that all wheels are thoroughly inspected between events for cracks and deterioration.

22.1 Class One, Class Two and Class Three

22.2.1 Cars must have wheels of the following dimensions:

(1) Diameter: 13.00 inch

(2) Rim Width: 5.50 inch maximum

22.3 Class Three cars

22.3.1 Cars that are using Avon tyres and are not part of an Accredited Series or the Championship may have wheels of the following dimensions:

(1) Diameter: 13.00 inch

(2) Rim Width: Front: 5.50 inch maximum

Rear: 7.00 inch maximum

22.4 Only one (1) spacer per wheel up to a maximum thickness of 25.00mm is authorised as outlined in National Sporting Code Schedule A Part One 4.9 Wheels and Tyres (1) Wheel Requirements (c).

23. TYRES

23.1 Authorised Tyres:

23.1.1 All classes running in an Accredited Series or Championship must run the following tyres:

(1) Yokohama A048 Front size: 185/60/13 SOFT K9729
Rear size: 205/60/13 SOFT K9730

23.1.2 Historic cars running in an Accredited Series or Championship must run either of the following tyres:

(1) Avon ACB9 Front size: 5.0/22.0-13 ACB9 FF A46 – 17680M
Rear size: 6.5/23.0-13 ACB9 FF A46 – 17681M

(2) Avon ACB9 Front size: 5.0/22.0-13 ACB9 FF A25 – 7267
Rear size: 6.5/23.0-13 ACB9 FF A25-7290M

23.1.3 Compound:

(1) Competitors must run a matched set of tyres, meaning the same blend in each tyre front and rear.

23.2 Tyre condition and depth of tread:

23.2.1 Prior to the start of any official timed Practice, Qualifying or Race, the minimum depth of tread measured alongside the treadwear indicators must be at least 1.00mm.

(1) Isolated flat spots may not render the tyre ineligible unless deemed unsafe for competition.

(2) The original tread pattern must always remain visible on any tyre.

23.3 Tyre modification:

23.3.1 The following modifications/treatments are specifically prohibited:

(1) Hand cut tread grooves

(2) Filing, buffing, or any other alteration of the tyre tread surface (contact surface)

(3) Tyre warmers, chemical treatments or any means of artificially enhancing tyre performance.

24. FUEL SYSTEM

24.1 Fuel tank

24.1.1 Preferably a FIA compliant safety fuel cell of maximum 41.00 litres capacity must be installed within the chassis frame.

24.1.2 The fuel tank shall be isolated from the cockpit (Driver's space) within a separate sealed compartment.

24.1.3 The fuel tank must incorporate the following features:

(1) A filler that does not protrude beyond the bodywork with a positive locking/sealing cap; and

(2) A breather with the vent mounted above the actual tank incorporating a one-way rollover/breather valve to prevent fuel spillage in a rollover situation.

24.2 Fuel Pump:

24.2.1 Only one (1) fuel pump may be fitted to a vehicle at any time.

24.2.2 The mechanical fuel pump may be removed.

(1) Where the mechanical fuel pump is removed, a suitable blanking plate shall be fitted for the sole purpose of sealing the factory cylinder block orifice for the mechanical pump.

24.2.3 The engine mounted fuel pump may be replaced by an electrically operated type.

(1) The replacement electronically operated fuel pump shall be installed in the fuel supply line and adequately mounted.

(2) This fuel pump must have a failsafe shutoff fitted.

(3) This fuel pump must be wired into the car's electrical shut off switch.

24.3 Fuel lines running through the cockpit must be metal or metal braided tubing with any connections of a threaded (industry quality) type.

24.4 A 'Jiffy-tite' 3000 series quick-disconnect coupling may be installed in the fuel supply line between the fuel pump and carburettor (female connector pump side) for the purpose of taking fuel for compliance checking.

24.5 One inline fuel regulator may be fitted. One inline fuel filter may be fitted.

24.6 It is mandatory that the fuel inlet and exit pipes, of the fuel pump, are modified with a screw fitting to replace 'press fit' type pipe.

25. DATA LOGGING & CAMERAS

25.1 Class One, ~~and~~ Class Two and Class Three vehicles ~~cars~~:

25.1.1 Electronic dashboards and data logging equipment are permitted, however only the following data acquisition sensors are permitted to be fitted to a vehicle:

(1) 1 x Engine speed (RPM)

(2) 1 x Lambda

(3) 1 x Oil pressure

(4) 1 x Steering angle

(5) 1 x Oil temperature

(6) 1 x G-force

(7) 1 x Water temperature

(8) 1 x GPS transducer

(9) 1 x Front wheel speed

(10) 2 x Camera

(11) 1 x Fuel Pressure Sensor

(12) 1 x Box/ambient temperature

(13) 1 x Battery voltage

(14) 1 x Brake Pressure sensor (Front)

(15) 1 x Water pressure

(16) 1 x Brake Pressure sensor (Rear)

(17) 1 x Infra-red (lap timing) beacon

(18) 1 x Engine throttle position

25.2 Class One Cars – Championship Only

25.2.1 It is mandatory for Class One cars contesting the National Championship to have one (1) engine throttle position sensor and a minimum of one (1) brake pressure sensor.

25.2.2 It is then Competitors responsibility to ensure these sensors are fully operational at all times during each Meeting.

25.2.3 It is then Competitors responsibility to ensure these sensors record to an onboard device from which the data may be downloaded at any time during an Event by the relevant Championship or Series Scrutineer. Failure to do so will be considered a breach of these Technical Regulations.

~~**25.3 Class Three cars:**~~

~~**25.3.1** Electronic dashboards and data logging equipment are prohibited.~~

~~**25.3.2** A standalone lap timer is authorised.~~

25.3 In Car Cameras

25.3.1 A maximum of two (2) cameras, excluding TV cameras, may be mounted to the vehicle provided the following requirements are met:

(1) They are of an appropriate type and size.

(2) They are securely mounted using a mechanical means of attachment sufficiently robust to withstand vibration and stresses.

(3) Suction mounts are not to be the sole method of attachment. A restraining system e.g. a tether, must be fitted to all mounts.

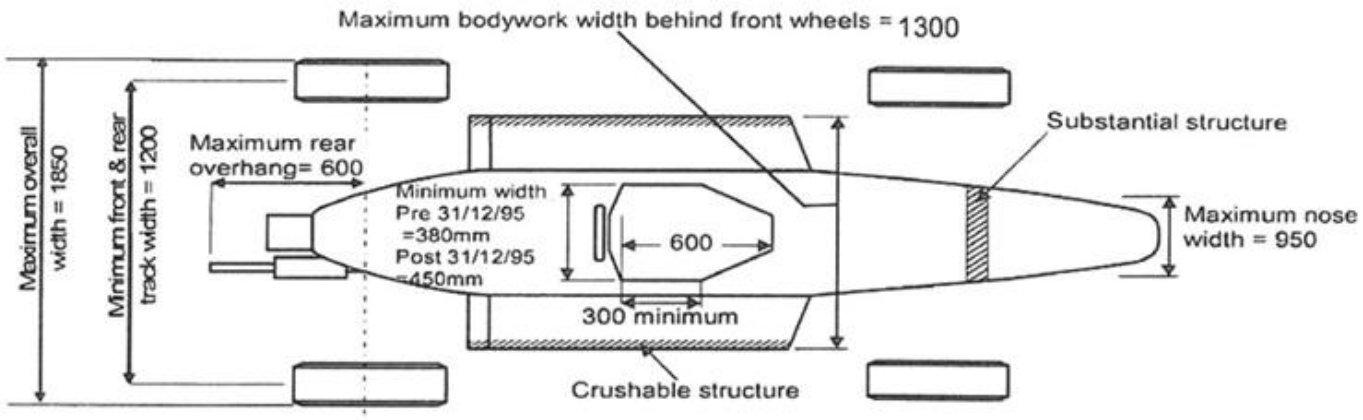
(4) Cameras and their installation are always subject to the satisfaction of the relevant Scrutineer.

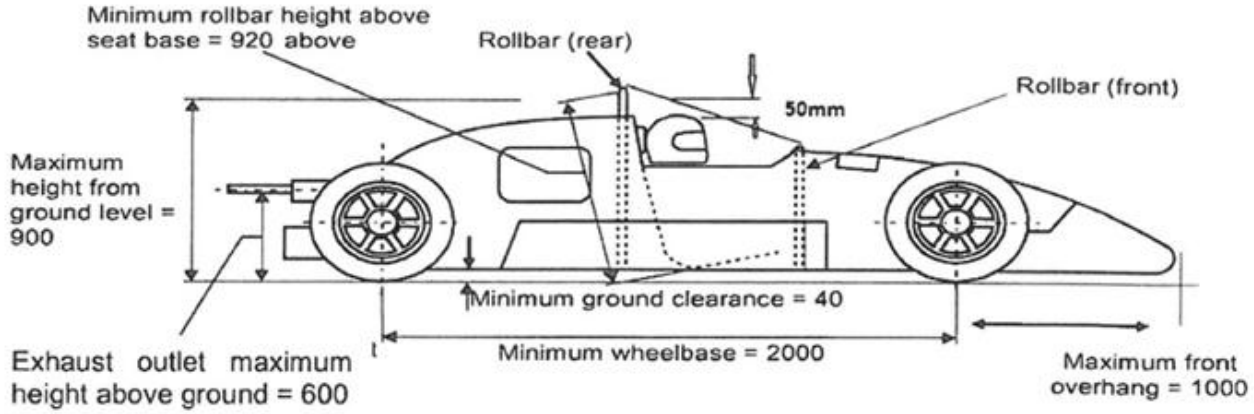
(5) Cameras are not permitted to be mounted on Helmets unless the Helmet has been homologated for camera use.

APPENDIX ONE: DIMENSIONS

DIMENSION LIMITS - FORMULA FORD 1600

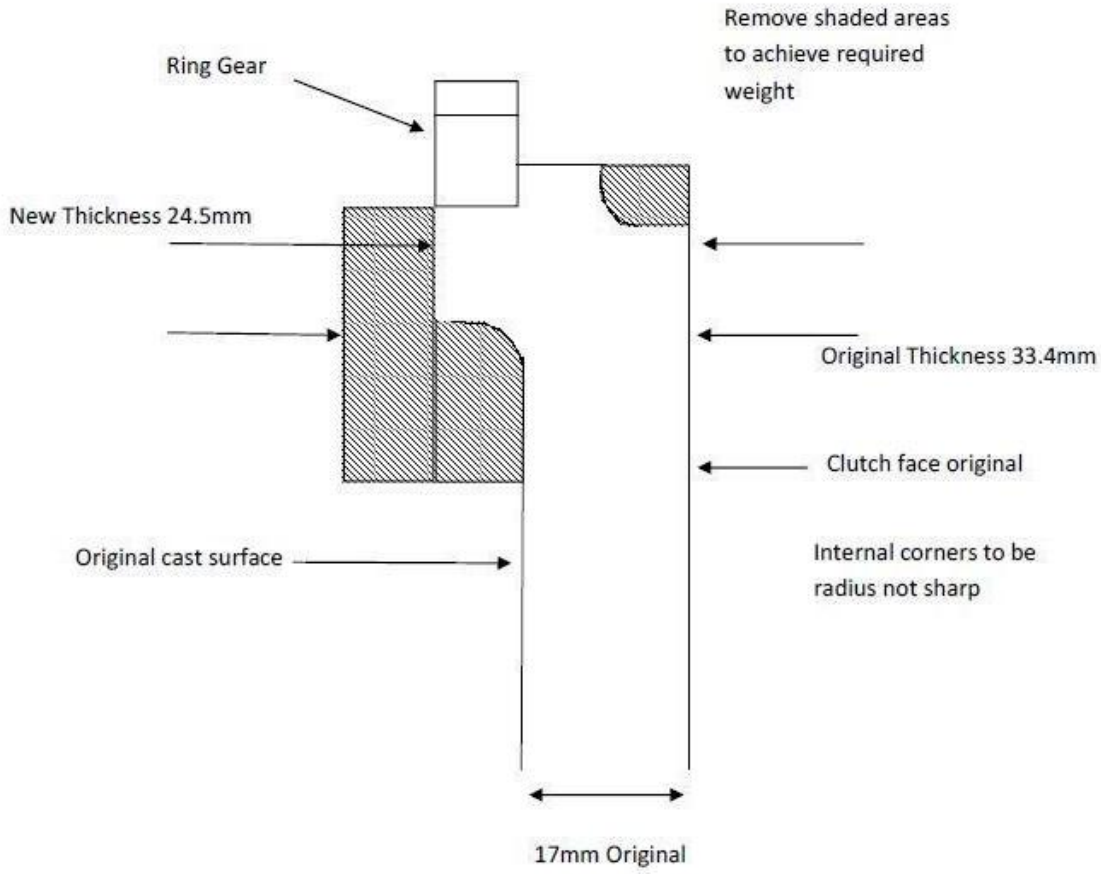
All dimensions are in millimeters unless stated





APPENDIX TWO: AUTHORISED FLYWHEEL





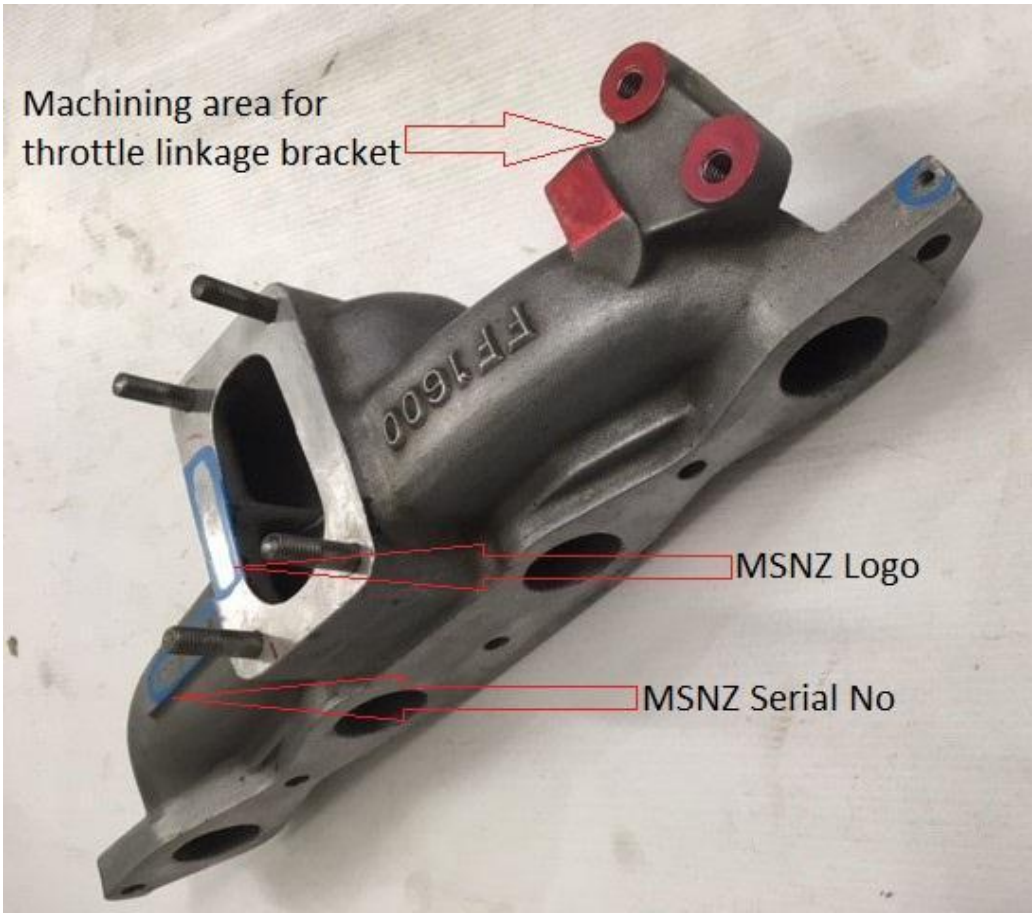
Amount removed will vary depending on fly wheel and cover used

F-1600 Area to machine to achieve new proposed min weight

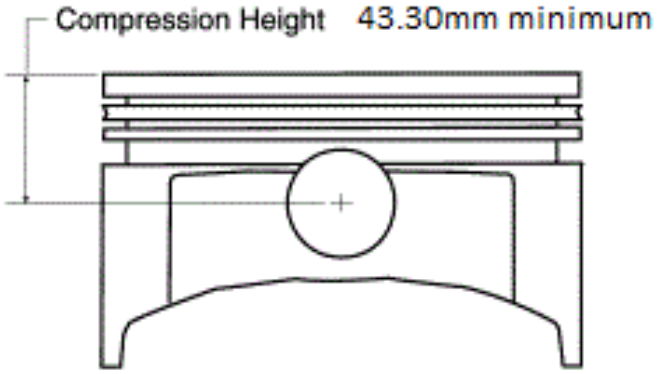

Motorsport NZ



APPENDIX THREE: INLET MANIFOLD



APPENDIX FOUR: PISTON COMPRESSION HEIGHT



APPENDIX FIVE: REQUIRED SEAL LOCATIONS

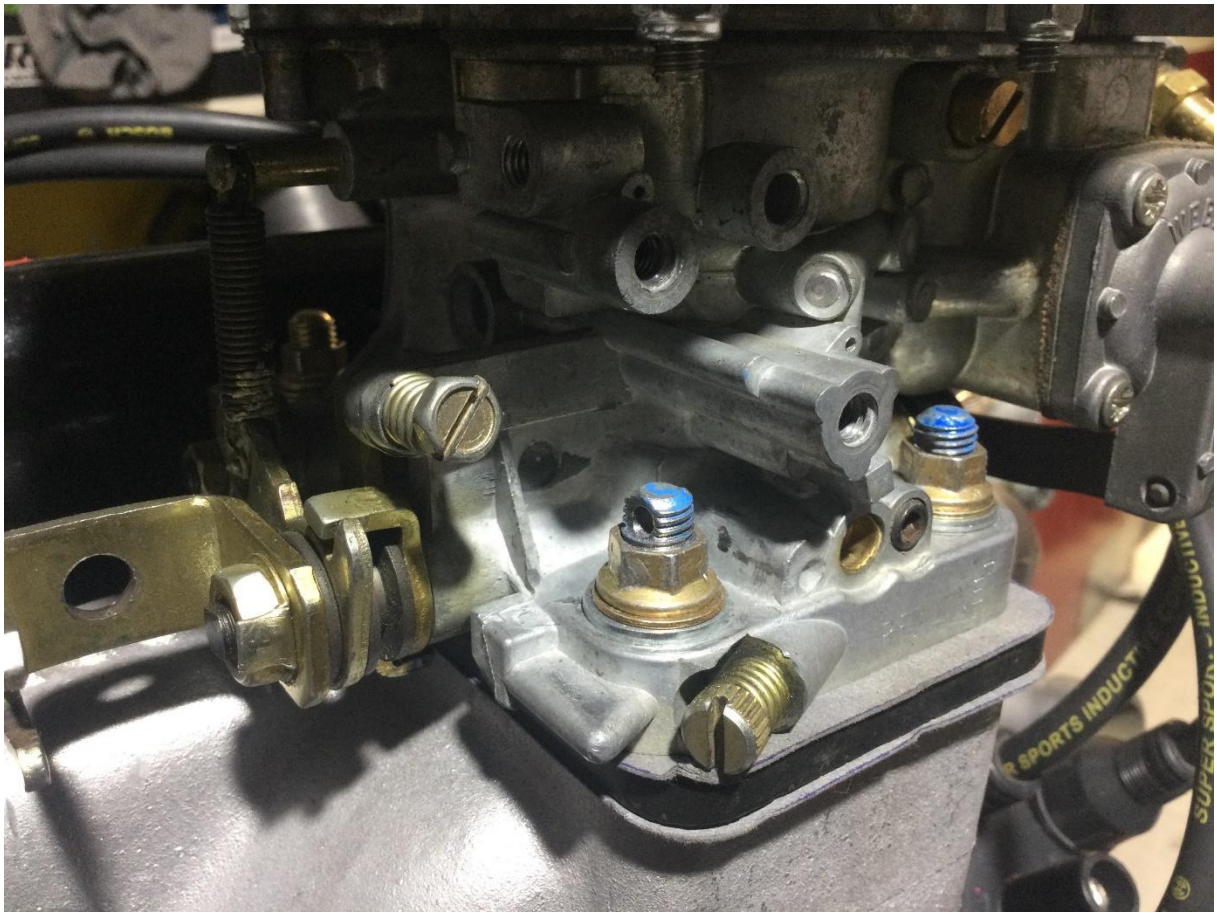
Block ID Seal:



Head Seal and Inlet Manifold:



Carburettor Seal:



Timing Cover Seal:

