CANADIAN AUTOMOBILE SPORT CLUBS
ONTARIO REGION

Appendix O, Section C - Formula 1600

Effective April 28, 2021

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Appendix O, Section C - Formula 1600

These regulations are intended to assist in the conduct of Competitions and to further general safety. They are a guide and in no way guarantee against injury or death to participants, spectators or others. No express or implied warranties of safety or fitness for a particular purpose shall be intended or result from publication or compliance with these regulations. By applying for a competition licence and/or by entering a competition event, all participants are deemed to have understood and accepted these terms, including that motorsport is inherently dangerous and it is each participant's obligation to meet and maintain compliance with all regulations to reduce the risk of death or injury to self or others, recognizing that such risk is inherent to the sport and cannot be completely eliminated.

***Red bold, italics text* indicates significant changes or amendments.**

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APPENDIX O, SECTION C - FORMULA 1600

1 DEFINITIONS

1.1.1 Formula 1600 is a single-seat, open-wheel racing Car using either a standard Ford 1600 "crossflow" pushrod, normally aspirated engine with a 2-venturi carburettor or a Honda Fit 1500 (L15A7) engine.

1.1.2 Cars shall comply with the CASC-OR Race Regulations as well as the Regulations herein.

1.1.3 There shall be two groups of Cars designated F1600 A and F1600 B.

a) F1600 A: chassis built in 1995 and later, or any car with a Honda Fit engine.

b) F1600 B: chassis built in 1994 and earlier.

Note; The entrant of a “B” class car may elect to run in the “A” class should they so desire. However, once a car/driver combination has raced in a specific class in any single season it must remain in that class for the entire season.

Note: Effective January 1, 2017, cars that have been altered in design and/or updated to later specs MAY be classified as “A” Class cars based on criteria to be established by the Series.

2 CHASSIS

2.1.1 The chassis shall be of steel space frame construction.

2.1.2 Monocoque-type structures are prohibited.

2.1.3 Stabilized (honeycomb) or composite (carbon fibre or Kevlar) materials are not permitted, except as specifically authorized herein.

2.1.4 The use of titanium is prohibited.

2.1.5 The chassis shall incorporate a roll cage. Forward-facing braces protecting the Driver's legs and feet shall extend from the front roll hoop to the front bulkhead. (The front bulkhead is defined as the furthest forward transverse section of the main frame.) The minimum main roll hoop height shall be 920mm.

2.1.6 The soles of the Driver's feet shall not extend beyond the front edge of the wheel rims (in normal position, i.e., pedals not depressed) and shall remain behind the front bulkhead.

2.1.7 The lower main frame rails shall be a minimum of 250mm (9.84in) apart (inside dimension) from the front bulkhead to the rear roll hoop.

2.1.8 Any nose box must be a crushable structure, securely attached to the front bulkhead, with a minimum cross section of 20000 sq. mm (31 sq. in.), 400mm (15.75in) forward of the clutch and brake pedals (not depressed) constructed of a minimum of 18 gauge 6061-T4 or equivalent aluminum.

Radiators may be incorporated in this structure.

2.1.9 The area between the upper and lower main chassis tubes from the front roll hoop bulkhead to the rear roll hoop bulkhead shall be protected by one of the following methods to prevent the intrusion of objects into the cockpit:

a) Panel(s), minimum of either 1.52mm (0.060in) heat-treated aluminum (6061-T6 or equivalent) or 18 gauge steel, attached to the outside of the main frame tubes.

b) Reinforced bodywork, consisting as a minimum, of a double layer of 5 oz., bi-directional, laminated Kevlar material incorporated only into this area of the body.

For either method, fasteners shall be no closer than 152.40mm (6in) centres. The material used for chassis braces in this area shall be at least equivalent to the roll hoop brace material.

2.1.10 Sheet materials attached to the chassis by welding, bonding, or by rivets or threaded fasteners which are located closer than 152.40mm (6in) centres, are defined as stress-bearing panels. Composite or stabilized materials shall not be used for stress-bearing panels.

2.1.11 A stress-bearing floor pan/undertray, minimum of 1.52mm (0.060in) heat-treated aluminum or 18 gauge steel, is required from the front bulkhead to the rear roll hoop bulkhead. Its curvature shall not exceed 25.4mm (1in).

2.1.12 The mountings for brake and clutch pedals and cylinders (front bulkhead), instruments, (front roll hoop bulkhead), and rear roll hoop bulkhead (behind the Driver) may also be stress-bearing panels. No other stress-bearing panels are permitted.

2.1.13 The firewall portion of the rear roll hoop bulkhead (panel) shall extend the full width of the cockpit and be at least equal to the top of the carburettor in vertical height.

2.1.14 Forward-facing air ducts may be installed for the purpose of delivering air directly to the engine area.

2.1.15 Air duct openings may be located within the cockpit provided the firewall is extended to prevent flame and debris from reaching the Driver. (Any shape may be used to form firewall extension.)

All firewall inlets shall prohibit passage of flame and debris.

2.1.16 Brackets for mounting components, such as the engine, transmission, suspension pickups, instruments, clutch and brake components, and body panels may be non-ferrous, of any shape, and fastened to the frame in any manner.

2.1.17 The use of Magnesium for bulkheads is prohibited.

2.1.18 The floor/undertray, including all sprung parts, of the car shall lie on one plane with a tolerance of 5mm (0.200in) The area of this "flat bottom" is measured from rearward of the vertical plane tangent to the rear of the complete front wheels (including mounted tires) to the fore of the vertical plane tangent to the fore of the complete rear wheels (including mounted tires).

The tolerance of +/- 5mm is allowed to cover any possible manufacturing problem and not to permit designs against the spirit of the "flat bottom" rule.

The periphery of the surface formed by these parts may be curved upwards with a maximum radius of 50mm (1.97in).

2.1.19 No part having an aerodynamic influence and no part of the bodywork may be located below the geometrical plane produced by the "flat bottom" surface.

2.1.20 No transverse, longitudinal, or other flexible, retractable, pivoting, or sliding device bridging the gap between the body and the road surface is permissible.

2.1.21 Dimensions:

a) Minimum wheelbase is 2000mm (78.800in).

b) Minimum Track is 1200mm (47.280in).

c) Total overall maximum width is 1850mm (72.89in).

3 BODYWORK

3.1.1 The bodywork opening giving access to the cockpit shall have the following minimal dimensions:

a) Length: 600mm (23.622in)

b) Width: 450mm (17.717in)

This width extends over a length of 300mm (11.811in) minimum. This minimal rectangular opening may exist anywhere forward of the bracing and required padding will not be considered in these dimensions.

3.1.2 The driver's seat shall be capable of being entered without the manipulation or removal of any part or panel except the steering wheel.

3.1.3 Maximum width of bodywork/coachwork behind front wheels is 1300mm (51.18in).

3.1.4 No part of the bodywork shall extend more than 1000mm (39in) behind the centreline of the rear axle.

Those cars which extend their tails to this length may not extend their exhaust pipes more than 600mm behind the rear axle centreline.

3.1.5 Bodywork shall not increase in width behind the centreline of the rear axle in any horizontal section.

3.1.6 There shall be no forward-facing gaps or openings in the bodywork with the exception of those necessary for engine cooling, engine air inlet, shock, or brake cooling.

3.1.7 All bodywork shall be firmly attached to the chassis.

3.1.8 Wings and other airfoil devices which create aerodynamic downforce are prohibited.

3.1.9 Any part of the car which has an influence on the aerodynamic stability of the vehicle shall be firmly attached with no provisions for adjustment to vary downforce, except that a single rear spoiler, which may be capable of adjustment, is permitted. Cockpit adjustment is not permitted. This spoiler shall be no wider than the surface to which it is attached, and there shall be no gap between the spoiler and the body surface to which it is attached.

3.1.10 No part of the bodywork or rear spoiler shall exceed the height of a horizontal plane 900mm (35.4in) above the ground, with the Car as qualified or raced, with Driver aboard. The engine air box and on-board video cameras are not included in this height restriction.

3.1.11 Air may not be ducted through any part of the bodywork for the purpose of providing aerodynamic downforce on the car. All ducted air for heat exchangers (water/oil) shall pass through those heat exchangers. Diffuser undertrays or venturi tunnels are prohibited.

3.1.12 Fuel filler necks, caps, or lids shall not protrude beyond the bodywork of the Car.

3.1.13 Fuel tank air vents shall be located at least 250mm (9.84in) behind the rear of the cockpit opening.

3.1.14 Carbon fibre is not permitted. Kevlar is permitted only where specifically stated herein.

4 SUSPENSION

4.1 DEFINITION

Suspension is defined as the system of springs, shock absorbers, control arms, links, etc., supporting the vehicle on its axles. Sway bars, sway bar links, steering components, etc., are not classified as suspension.

4.2 CONSTRUCTION

4.2.1 All suspension components shall be of steel or ferrous material, with the exception of hubs, hub adapters, hub carriers, bearings, spring caps, abutment nuts, anti-rollbar links, shock absorber caps and nuts, bell cranks, and bushings. Front and rear hub carriers shall be of steel or aluminum alloy for Cars manufactured after 1/1/83. Springs shall be steel.

4.2.2 Titanium and composite material using carbon and/or Kevlar is prohibited.

4.2.3 Control arms and all associated items which attach directly to the chassis members shall be boxed in or captured to prevent intrusion into the cockpit.

4.2.4 Shock absorbers are free. Aluminum casings are permitted.

4.2.5 Spoilers, fairings, or other devices which may exert downforce, shall not be attached to suspension members.

4.2.6 Suspension members shall not be constructed in the form of an airfoil cross section. Suspension members shall be symmetrical about the horizontal axis. Brake lines may be attached to the suspension members.

5 BRAKES

5.1.1 Brakes are unrestricted, except that calipers shall be cast iron, or two-piston aluminum. Aluminum calipers shall have a maximum piston diameter of 2.00in. Rotors are restricted to ferrous material.

5.1.2 Forward facing brake-cooling ducts may be installed but shall serve no other function or purpose.

6 WHEELS

6.1.1 Wheels are unrestricted, except that:

a) Material shall be metal.

b) Diameter shall be 330.20mm (13in).

c) Rim width shall not exceed 139.70 mm (5.5in).

d) Wheel covers, wheel fans, or any device to fair in the wheels are prohibited.

7 WEIGHT

7.1.1 Weights as practiced, qualified or raced, with Driver and required safety equipment are as follows:

a) 1075 lbs. for cars with outboard suspension

b) 1100 lbs. for cars with inboard/outboard suspension combination

c) 1125 lbs. for cars with inboard suspension

8 TIRES

8.1.1 Toyo Proxes R888R tires shall be used.

8.1.2 Tire sizes shall be

a) Front tire size: 185/60 R13

b) Rear tire size: 205/60 R13

8.1.3 Additional hand cutting or grooving is not permitted. Rain tires are not permitted.

8.1.4 Tire Limit for A Class cars

a) Any Toyo Proxes R888R tire may be used during official practice and warm up sessions.

b) Tires that are used for qualifying will be marked at the end of the qualifying session and these tires must be used for all races for that event by the car-driver combination who qualified the car. ***In the event a driver changes car,*** that events marked tires, used by the driver, must transfer to his/her newly entered car. Marking of tires will be performed at impound. It is the driver's responsibility to ensure their tires are marked prior to leaving the impound area.

c) Tires may be checked for the official mark at ***any time and/or at*** post-race technical inspection. ***If tires are not marked, the driver will be disqualified from the results of that session.***

d) If ***one or more tires are*** damaged and need to be replaced, ***a CASC-OR and/or Toyo Tire F1600 Championship Series technical delegate shall*** examine the tire***(s)*** and determine if tire***(s) should be replaced***. The replacement tire***(s)*** will be marked prior to the next officially timed session at the current event.

i. If 2 or more new or previously marked tires are used the driver shall start the next session at the back of his/her class

ii. ***If one new or previously marked tire is used the driver will maintain his/her grid position without penalty.***

e) In the event of rain, a Series Official ***in conjunction with*** the Clerk will declare a rain race at least 30 minutes prior to the 3-minute board for that session. Drivers/teams may choose any Toyo Proxes R888R tire (open tire rule) to run in the race declared a rain race. ***If subsequent race(s) at that event are dry, the driver/car must use the original marked tires from qualifying session.***

f) If a driver misses the qualifying session, it is his/her responsibility to ensure the technical delegate marks the tires prior to his/her first on track session post qualifying.

9 FUEL

9.1 PERMITTED FUEL

Permitted fuel is herein defined as gasoline fuel meeting specified dielectric constant (D.C.) standards and not containing any prohibited substance. The D.C. of gasoline shall be measured by one of the following fuel test meters:

a) Precision Fuel Testing G-01 fuel analyzer

b) Kavlico FT-K01 fuel tester

c) Digatron DT47-FT fuel tester.

The dielectric constant shall not exceed the following values:

a) 15 when using the G-01 or FT-K01 meters

b) 166 when using the DT47-FT

9.2 FUEL ACQUISITION

It is recommended that all cars be equipped with an accessible sampling port/valve/device located in a fuel line between the fuel tank or fuel cell and the carburettors or fuel injection system or in an unused carburettor port to allow safe acquisition of a fuel sample. If possible the port/valve/device should be located outside the engine compartment. The sampling port/valve/device shall be installed and used by the competitor to obtain the sample without fuel leaking, spraying or squirting. Siphoning of fuel directly from the fuel tank or fuel cell or removing a hose or line is not allowed.

Competitors shall provide all the necessary and appropriate tools to obtain a fuel sample.

10 FORD ENGINES

10.1 GENERAL PROVISIONS

10.1.1 The engine shall be standard Ford 1600 GT pushrod "crossflow" as installed in the following Cars:

a) Original Version: Cortina 1600 GT (through 1970 model)

b) Uprated version: Cortina 1600 GT (1971)

Components shall not be interchanged between the original and uprated versions of the engine unless specifically authorized. Regulations contained herein apply to both versions of the engine unless specifically stated otherwise.

10.1.2 Engines built to current SCCA specifications shall be eligible.

10.1.3 The engine shall not be altered, modified, or changed in any respect unless specifically authorized herein.

10.1.4 The gasket face of the cylinder head may be resurfaced provided the maximum compression ratio is not exceeded and the minimum depth of the combustion chamber is maintained.

10.1.5 Valve guides are unrestricted provided the position of the valve is not changed. Standard replacement valves, with oversize stems, may be used as normal repair/maintenance procedures. Specifications, under "Valves" herein shall be observed. It is permitted to re-cut or replace valve seats. Valve seat angles are unrestricted.

10.1.6 Exhaust emission control, air pumps, and associated lines and nozzles shall be completely removed. When these air nozzles are removed from a cylinder head, the holes shall be completely plugged.

10.1.7 Balancing of all moving parts of the engine is permitted provided that such balancing does not remove more material than is necessary to achieve such balance. It is permitted to polish parts of the engine providing the contour of the part is not altered and can be recognized as the original part.

10.1.8 Maximum compression ratio:

a) 10.0 to 1 -- Original engine

b) 9.3 to 1 -- Uprated engine

The following specifications are used in determining compression ratio:

Uprated:

- maximum bore size: 3.200 in
- Minimum cylinder volume at top dead centre: 42.0 cc
- Maximum valve protrusion from head surface: 0.040 in

Original:

- 1.64cc - volume top ring to top of piston
- 5.60cc - volume of head gasket

Minimum unswept volume per cylinder:

- Original engine with standard pistons: 44.4cc
- Original engine with 0.030in o/s pistons: 45.1cc

The compression ratio shall be checked using official CASC-OR procedure.

10.1.9 Pocketing of piston valve reliefs is allowed to a maximum of 0.050 in. to obtain the minimum combustion chamber volume.

10.1.10 Engine Seal Requirements

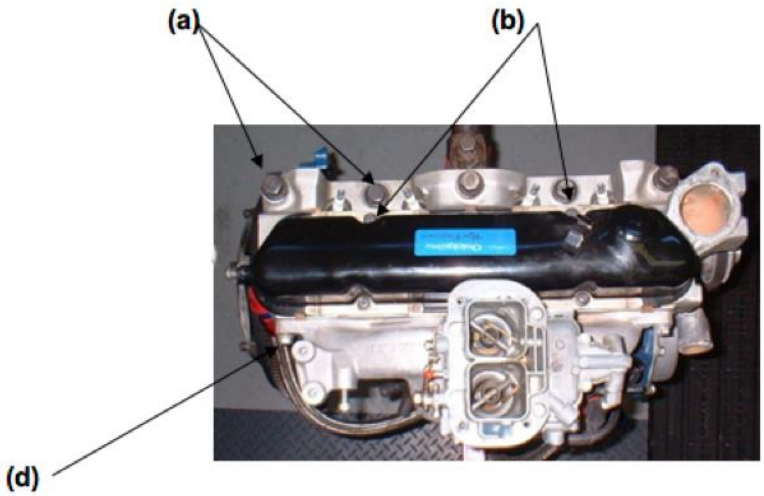
Holes of 1/16 inch minimum diameter shall be drilled through the following bolts for sealing purposes.

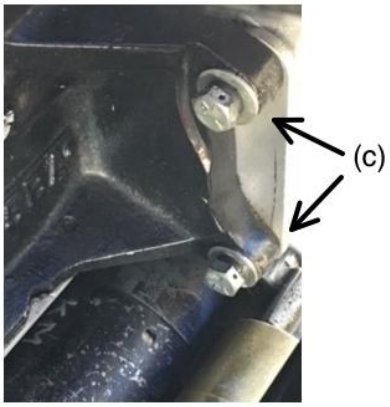
(a) The two (2) rear exposed head bolts, engine left.

(b) The two (2) rocker cover bolts, engine left.

(c) Two (2) bolts fastening the bellhousing adaptor plate to rear of engine block on the left side (exhaust side).

(d) One (1) rear intake manifold bolt.





10.2 ENGINE BLOCK

10.2.1 Bore: May be enlarged for clearance between cylinder and piston.

10.2.2 Cylinder liners may be fitted.

10.2.3 The top surface of the block may be milled or surface ground to obtain the maximum compression ratio specified herein.

10.2.4 Any steel centre main bearing cap may be used. The oil pump mounting face on the block may be machined for the purpose of fitting an oil pump.

10.2.5 The 1600 Pinto block, No. DIFZ-6010-C, may be used as a replacement for the Cortina GT block; Standard Pinto tappets, No. DORY 6500A and DIFZ 6500A may also be used when this block is used as a Cortina GT replacement. Fiesta block and crankshaft are permitted.

The Ford Racing Block, part number M-6010-16K, is permitted as a replacement part.

10.3 CYLINDER HEAD

10.3.1 Ports may be reshaped by the removal of metal as long as the port diameter at the manifold face of the head does not exceed the following dimensions:

Uprated engine:

a) Inlet: 1.50in

b) Exhaust: 1.20in

Original engine:

a) Inlet: 1.50in

b) Exhaust: 1.20in

Minimum combustion chamber depth: 0.115in

Maximum combustion chamber length: 3.15in

Minimum volume per cylinder combustion chamber: 7.8cc

10.3.2 Reshaping of the original engine combustion chamber is prohibited.

10.3.3 The standard head gasket shall be used. Head gaskets may be interchanged between the original and uprated versions of the engine. In addition to the standard Ford gasket, Payen head gaskets, part number BJ200 and AH-750, and Fel-pro head gasket, part number 8360PT-1, may be used.

10.3.4 Ford Pinto cylinder head part No. DORY 6049B is permitted on the Cortina GT engine.

10.3.5 Aluminum cylinder head, part #99003.845, manufactured by Pierce Manifolds, may be substituted for the original cast iron head provided that all measurements and specifications remain the same.

10.3.6 Welding is permitted on the alloy cylinder head only for repair of damaged areas. The addition of material for the purpose of reshaping inlet or exhaust ports is strictly prohibited.

10.4 INTAKE MANIFOLD

10.4.1 The ports may be reshaped by the removal of metal as long as the following dimensions are maintained:

Maximum Size at head face:

	Original Engine	Uprated Engine
Cyl. 1&4:	1.480in x 1.280in	1.340in
Cyl. 2&3:	1.250in	1.340in

For maximum dimensions at carburettor flange, see Figure 1.

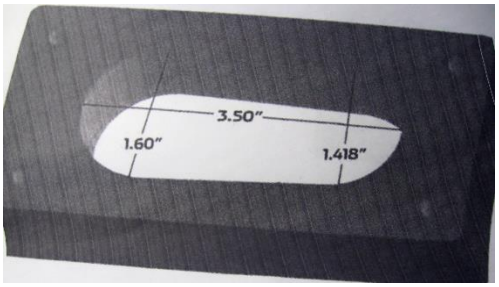


Figure 1 - Carburettor Flange

10.4.2 The carburettor face of the inlet manifold may be machined to the horizontal to compensate for fore/aft tilt of the carburettor.

10.4.3 The diameter of the ports on the uprated engine may exceed the above listed dimensions if the casting bore is untouched and in its original state at the gasket face.

10.4.4 The water passages in the inlet manifold may be plugged.

10.4.5 In addition to the stock Ford intake gasket, Payen intake gasket, part number JA613 may be used.

10.5 PISTONS

10.5.1 Piston Standards

a) Standard or 0.005in oversize pistons may be used in the uprated engine.

b) Standard, 0.015in oversize, or 0.030in oversize pistons may be used in the original engine.

c) Standard size AE pistons part No. 18649, casting No. 18634, standard size AE pistons, part number 20552, casting number 20548A, standard size CP pistons, part number 81-2 FF1600, or CP oversize pistons, part number 81-2 FF1600+5, may be used.

d) Alternate pistons, part number AE-M717D, casting number 711M6110 may also be used.

10.5.2 The following dimensions and weights shall be observed:

		Original Engine	Uprated Engine
a)	Maximum diameter:		
i.	Standard:	3.189in	3.187in
ii.	0.015in o/s:	3.204in	Not permitted
iii.	0.030in o/s:	3.219in	Not permitted
iv.	0.005in o/s		3.192in
b)	Depth of bowl:	0.500in (+/-0.005)	0.470in
c)	Minimum volume of bowl:	31.50cc	
d)	Maximum diameter of bowl:	2.28in	AE 2.44in
			CP 2.50in
e)	Centreline of wrist pin to crown:	1.737in +/-0.002in	1.737 +/-0.002in
f)	Overall height:	3.30in	AE 3.30in
			CP 2.80in
g)	Minimum weight - w/rings, pin & clips:	525 grams	515 grams
h)	Weight of pin:	115 +/- 2 grams	

10.5.3 Piston rings are unrestricted provided that:

a) One oil control and two compression rings are used.

b) No modification is made to the piston for the installation of rings.

c) Pocketing of the piston valve reliefs is allowed up to a maximum of 0.050in to obtain the maximum combustion chamber volume.

10.6 VALVES

10.6.1 The following specifications shall be observed:

		Original Engine	Uprated Engine
a)	Distance apart at centres:	1.540in +/-0.020in	1.540in +/-0.020in
b)	Max. diameter:		

i.	Inlet:	1.502in	1.560in
ii.	Exhaust:	1.252in	1.340in

c) Overall Length:

i.	Inlet:	4.280in +/-0.006in	4.367in +/-0.020in
ii.	Exhaust:	4.260in +/-0.006in	4.355in +/-0.020in

10.6.2 AE intake valve #V34524 and AE exhaust valve #V34525 are permitted.

10.6.3 Reshaping of valves is specifically prohibited.

10.6.4 Steel or aluminum rocker shaft pedestals may be substituted for the original provided that they have the same hole and centreline dimensions as the original Ford pedestal.

10.7 CAMSHAFT

10.7.1 Regrinding of the camshaft lobes is permitted, providing they are ground to meet the Ford and SCCA profile. The following specifications are provided for checking purposes:

a) Lift at top of pushrod:

i. Inlet: 0.231in +/- 0.002in maximum

ii. Exhaust: 0.232in +/- 0.002in maximum

b) Lift at top of spring cap (zero tappet setting).

i. Inlet: 0.356in maximum

ii. Exhaust: 0.358in maximum

10.7.2 Re-contouring of the valve stem contact pad of the rocker arm is permitted, provided the maximum lift at the spring cap is not exceeded.

10.7.3 Offset camshaft/sprocket dowels are permitted.

10.7.4 Camshaft profile and lobe centres shall be checked using the official CASC-OR procedure.

10.7.5 The Elgin Formula Ford Blueprint camshaft manufactured by Elgin may be used.

10.8 VALVE SPRINGS

10.8.1 Valve springs and valve spring shims are unrestricted provided that:

a) No more than one spring shall be used per valve.

b) The standard spring cap and retainers shall be used. The standard cap diameter is 27.84mm (1.096in) maximum.

c) Springs shall be made of steel.

10.9 PUSHRODS

10.9.1 Original Engine

a) Minimum stem diameter: 0.25in

b) Overall length: 7.64in minimum

c) Minimum weight: 50 grams

10.10 CONNECTING RODS

10.10.1 Both engines: minimum weight including cap, bolts, and small end bush, but not big end bearing shells is 630 grams.

10.11 CRANKSHAFT

10.11.1 Minimum weight:

a) Original engine: 23 lbs. 8 oz.

b) Uprated engine: 24 lbs. 8 oz.

10.11.2 Stroke (at piston): 3.056in +/- 0.004in

10.11.3 Crankshaft pulley is unrestricted.

10.11.4 Either crankshaft may be used in either engine.

10.11.5 The crankshaft may be shot peened.

10.11.6 An alternate crankshaft may be used providing it is cast steel and all measurements and specifications remain the same as the original crankshaft.

10.12 FLYWHEEL/CLUTCH

10.12.1 The minimum weight of the flywheel and ring gear, excluding all other components, shall be 15.5 lbs.

10.12.2 The flywheel may be machined to achieve the minimum allowed weight provided the part can be identified as the original. Flywheel locating dowels are permitted.

10.12.3 The standard Ford Pinto 1600 flywheel may be used. JAE flywheel, part number JAE 1600, may be used.

10.12.4 The flywheel clutch face may be machined to accept a racing clutch outer ring.

10.12.5 Clutches

a) Single plate racing clutches may be substituted for the production-based road clutch.

b) Carbon fibre and carbon/carbon clutches are not permitted.

c) Any ring gear or component inserted into the flywheel face to obtain full friction surface for the clutch disc shall not be weighed when determining the 15.5 lbs. flywheel ring/gear weight.

10.13 CARBURETTOR

10.13.1 Weber carburettor, with the swaged fuel inlet fitting, shall be modified by drilling and tapping the carburettor body for a threaded fitting.

10.13.2 SPECIFICATIONS:

a) Original Engine:

i. Weber 32 DFM or DFD or Holley 5200

ii. Venturi Diameter: Primary: 26mm

Secondary: 27mm

b) Uprated (Kent) Engine:

i. Weber 32/36 DGV or Holley 5200

ii. Venturi diameter: Primary: 26mm

Secondary: 27mm

10.13.3 The following modifications and changes are allowed:

a) The fitting of any jets (including accelerator pump discharge nozzle) which may be fitted without modification to the carburettor body.

b) Modification or substitution of external throttle linkage.

c) The fitting of internal and/or external anti-surge pipes.

d) The removal of the air cleaner.

e) The fitting of a velocity stack (intake air horn).

f) The removal of the choke butterflies and linkage.

g) An alternate carburettor gasket provided it is the same thickness as the original gasket.

10.14 FUEL PUMP

Unrestricted

10.15 EXHAUST MANIFOLD

Unrestricted

10.16 LUBRICATION SYSTEM

10.16.1 Oil pump and sump: Unrestricted

10.16.2 Dry sump system is permitted.

10.17 COOLING SYSTEM

10.17.1 Radiator, fan and water pump are unrestricted.

10.17.2 Pump/fan/generator drive belts are unrestricted.

11 ELECTRICAL EQUIPMENT - FORD ENGINES

11.1 DISTRIBUTOR

11.1.1 Distributor is free provided the original drive and location is retained.

11.1.2 The distributor is defined as the component that triggers the LT current and distributes the HT current.

11.1.3 The ignition timing may only be varied by vacuum and/or mechanical means.

11.1.4 It is prohibited to use any other method or component to trigger, distribute, or time the ignition.

11.1.5 The vacuum advance mechanism may be removed, and the distributor advance plate may be secured by soldering or welding or by suitable fasteners. The advance curve and advance springs are unrestricted.

11.1.6 The only means to trigger the ignition are, one set of mechanical breaker points or a magnetic or optical trigger that serves no other purpose. The trigger shall be located in the distributor and no other external trigger components may be used.

11.1.7 Only a standard, unamplified ignition coil may be used. Electronic ignition is prohibited.

11.2 GENERATORS AND ALTERNATOR

11.2.1 Generators and alternator are not required.

12 MISCELLANEOUS PROVISIONS

12.1.1 The timing chain/sprocket cover may be altered or replaced.

12.1.2 The use of the following non-standard replacement parts is permitted provided their use does not result in any unauthorized modification of any other component:

a) Fasteners.

b) Gaskets, except the following:

i. head gasket

ii. carburettor to inlet manifold gasket

iii. inlet manifold to head gasket.

c) Washers.

d) Seals.

e) Connecting rod, crankshaft, and camshaft bearings of the same size and type as original. Normal oversize/undersize bearings are permitted. This does not allow reducing the bearing surface area by reducing the width of standard bearings.

f) Spark plugs.

12.1.3 Mechanical tachometer drive is permitted.

12.1.4 The crankcase breather may be altered or removed.

12.1.5 The rocker cover may be altered to provide for crankcase ventilation, and the filler cap may be altered or replaced.

12.1.6 Valve or rocker covers may be substituted, provided that the replacement cover affords no additional function than that of the original stock cover.

12.1.7 Water pump, fan, and generator/alternator pulley(s) are unrestricted.

12.1.8 The crankshaft and main bearing caps may be treated with salt-bath nitriding covered under SAE specification AMS 2755A (tuftriding, etc.).

12.1.9 The use of any oil or lubricants is permitted.

13 TRANSMISSION

13.1.1 Any transmission with not more than four forward gears and an operational reverse, capable of selection by the driver in a normal seated position, is permissible.

13.1.2 Ratios are free.

13.1.3 The use of automatic and/or sequential gearboxes is prohibited.

13.1.4 Electronically assisted gear change mechanisms and electronically controlled differentials are prohibited.

13.1.5 Gearboxes with shafts that are transverse to the longitudinal axis of the chassis are prohibited. The sole exceptions are the gearbox final drive (crown wheel) shaft axis and final drive shafts (half shafts). All change gears shall be located in the case aft of the final drive.

13.1.6 Rear-wheel drive only is permitted.

13.1.7 The final drive ratio is free.

13.1.8 Torque biasing, limited slip, and locked differentials are prohibited.

13.1.9 The differential shall not be modified in any way to limit its normal function.

13.1.10 An aluminum differential carrier is permitted.

13.1.11 The use of titanium is prohibited.

14 EXHAUST OUTLETS

14.1.1 Exhaust outlets shall not extend more than 600mm (23.6in) behind the centreline of the rear axle and shall be positioned no more than 600mm (23.6in) from the ground.

14.1.2 All exhaust outlets shall terminate outside the bodywork.

15 CARS BUILT PRIOR TO JANUARY 1, 1986

15.1.1 The following specifications are for cars built prior to January 1, 1986 and for technical inspection only. No Cars are to be built to these specifications.

15.1.2 Structure

a) For safety reasons, the undertray, shall be a stress-bearing panel. Its curvature shall not exceed one inch.

b) The mountings for brake and clutch pedals and cylinders, and for the instrument panel and the bulkhead (panel) behind the Driver may be stress-bearing.

c) No other stress-bearing panels are permitted.

d) Brackets for mounting components, such as the engine, transmission, suspension pick-ups, instruments, clutch, and brake components, and body panels may be non-ferrous, of any shape, and fastened to the frame in any manner.

e) Gussets are defined as of steel, fastened to a maximum of two members, and are specifically permitted.

f) The firewall portion of the bulkhead (panel) shall extend the full width of the cockpit and be as high as the top of the carburettor. Forward facing air ducts may be installed for the purpose of delivering air directly to the engine area. Air duct openings may be located within the cockpit provided the firewall is extended to prevent flame and debris from reaching the Driver. (Any shape may be used to form firewall extension.) All firewall inlets shall prohibit passage of flame and debris.

15.1.3 SUSPENSION AND RUNNING GEAR

a) Suspension is defined as the system of springs, shock absorbers, A-arms, links, etc., supporting the vehicle on its axles. Sway bars, sway bar links, steering rack housings, steering links, etc., are not classified as suspension or running gear for this application.

b) All components shall be of steel, with the exception of hubs, hub adapters, rear hub carriers, and bearings and bushings. Front hub carrier material shall be of steel or aluminum alloy. The materials for front and rear hub carriers on Cars manufactured after 1/1/83 will be only steel or aluminum alloy.

c) Springs shall be made of steel only.

d) Design of shock absorbers (‘dampers’) is unrestricted. Casing material shall be steel or aluminum.

e) All components which are not defined as chassis/frame, suspension or running gear are unrestricted, unless otherwise restricted by the Regulations. Titanium is prohibited.

15.1.4 BODYWORK

a) Bodywork is defined thus: internally: all visible parts of the passenger compartment.

b) The bodywork opening giving access to the cockpit shall have the following minimal dimensions:

i. Length: 60cm (23.622 inches);

ii. Width: 45cm (17.172 inches).

This width extends over a length of (11.811 inches) minimum. This minimal rectangular opening may exist anywhere forward of the firewall. Forward facing roll bar/cage bracing and required padding will not be considered in these dimensions.

c) The Driver's seat shall be capable of being entered without the manipulation or removal of any part or panel except the steering wheel.

d) Bodywork, including fuel tanks, shall not exceed a maximum width of 95cm (37.4 inches).

e) No part of the bodywork and aerodynamic devices shall exceed the height of a horizontal plane 90cm (35.4 inches) above the ground. The safety roll bar/roll cage and engine air box are not included in this height restriction. Measurements are to be made in any condition, Driver on board.

f) No part of the bodywork shall extend more than 100cm (39 inches) behind the centreline of the rear axles.

g) Any specific part of the Car which has an aerodynamic influence on the stability of the vehicle shall be firmly fixed with no provisions for adjustment to vary downforce.

h) Side-mounted radiators (behind the front wheels) may extend beyond the 95cm (37.4 inches) limitation, but not beyond a vertical plane passing through the centrelines of the front and rear tires.

Any portion of a radiator that extends beyond the 95cm (37.4 inches) limitation cannot be covered with any type of shrouding. Radiators mounted in front of the front wheels are considered front- mounted and cannot exceed the 95cm (37.4 inches) limitation.

i) Wings and other airfoil devices which have the principal effect of creating aerodynamic down-thrust are prohibited. Airfoil: Any device or part of a Car (excepting normal and conventionally styled bodywork) which has a principal effect of creating aerodynamic downforce.

Within this definition may be included forward facing gaps or openings in the bodywork, but shall not include spoilers in the form of raised surfaces, continuous with the body surface, and not wider than the body surface.

j) It is the intent of these rules to minimize the use of "ground effects" to achieve aerodynamic downforce on the vehicle. Thus, for the full width of the body between the front and rear axles, the lower surface (surface licked by the airstream) shall not exceed 2.54cm (1 inch) deviation from the horizontal in any longitudinal section through that surface. (This is not to be interpreted as requiring a floor pan beneath the motor, transaxle, transmission, or final drive housing.) No aerodynamic devices (e.g., skirts, body sides, etc.) may extend more than 1cm (0.394 inches) below the lower surface of the tub or chassis floor to the rear of the front axle. Seat buckets or other protrusions shall not circumvent this rule. It is not permitted to duct air through any part of the bodywork for the purpose of providing aerodynamic downforce on the Car. All ducted air for heat exchangers (water/oil) shall pass through those heat exchangers.

k) Fuel filler necks, caps, or lids shall not protrude beyond the bodywork of the Car.

l) Fuel tank air vents shall be located at least 25cm (9.843 inches) to the rear of the cockpit.

16 HONDA FIT 1500 (L15A7) ENGINE AS USED IN FORMULA 1600.

16.1 GENERAL

16.1.1 No modifications to this engine are allowed except where specifically authorized within these rules. This includes, but is not limited to, all fuel injection and engine management components, electrical, cooling, and lubrication systems. All systems are subject to test procedures and shall conform to OEM specifications as stated in the Honda Fit factory service manual, Honda PN61/TK600 and all superseding years, or as specified in these rules.

16.1.2 Permitted engine maintenance includes the replacement, but not modification, of external engine and engine systems parts.

16.1.3 All rubber fluid lines may be replaced with braided metal or fabric covered (Aeroquip type) lines. Hose clamps may be installed on the rubber oil lines.

16.1.4 No balancing, lightening, polishing or other modification of moving parts of the engine is permitted.

16.1.5 Only stock Honda manufactured gaskets and seals as specified in the Honda Fit factory service manual are permitted (including, but not limited to, head gasket, intake runner gaskets and O-rings, restrictor plate gasket, and intake and exhaust gaskets).

16.1.6 For all Honda part numbers in these specifications, superseding part numbers are considered equivalent.

16.2 BLOCK

16.2.1 The only permitted cylinder block is Honda PN: 11000-RP3-810

16.2.2 Honing of cylinders is permitted to a maximum diameter of 73.065mm (2.8766 inches). Fitting of cylinder sleeves is prohibited. Re-boring to over size is prohibited.

16.2.3 Block shall use stock main bearings caps, girdle and hardware as supplied.

16.2.4 Minimum deck height from crank centreline: 220.00mm (8.661 inches)

16.3 CRANKSHAFT

16.3.1 The stock Honda Fit crankshaft, Honda PN: 13310-RB-1-000, shall be used with no modifications allowed.

16.3.2 Minimum weight: 12,564.51 grams (27.7 lbs). No pilot bearing, pulsar or hardware.

16.3.3 Maximum stroke at piston: 89.5mm (3.526 inches).

16.3.4 Main and rod bearings shall not be modified in any way. OEM bearings shall be used from within the standard range as allowed in the Honda Fit factory service manual.

16.3.5 The crank pulsar shall not be altered in any way

16.3.6 The crank pulley/balancer shall not be altered or modified in any way.

a) Minimum weight: 1769.01 grams (3.90 lbs)

b) Honda PN: 13810-RB0-003

16.4 CONNECTING RODS

16.4.1 Stock Honda Fit connecting rod shall be used PN: 13320-RB1-000.

16.4.2 Minimum connecting rod weight with cap and bolts: 280.0 grams (9.88 ounces)

16.4.3 Maximum connecting rod length centre to centre: 149.05mm (5.868 inches)

16.5 PISTONS

16.5.1 Honda Fit OEM standard size pistons, PN: 13010-RB1-000, ***or Honda Fit OEM 0.25mm oversize pistons, PN: 13020-RB7- Z00, may be used***.

16.5.2 Piston dimensions and weights:

a) Maximum standard piston diameter, measured at a point 16mm from the bottom of the skirt: ***73.240mm (2.8834 inches)***.

b) Centreline of wrist pin to crown maximum: 26.21mm (1.032 inches).

c) Maximum overall height from skirt to crown edge: 47.80mm (1.882 inches)

d) Minimum weight: 198.0 grams (6.984 ounces)

e) Minimum weight of piston pin: 66 grams (2.25 ounces)

f) Combined minimum weight of piston, piston pin and connecting rod: 543.5 grams (18.85 ounces).

16.5.3 Piston Rings

Piston rings shall be as used in the Fit engine. Two compression rings and one 3-piece oil control ring shall be used.

a) The standard ring pack is PN 13011-RB1-004 (Riken) or 13011-RB1-006 (Nippon) ***or the oversize ring pack, PN 13021-RB7-Z01 (Riken) or 13021-RB7-Z02 (Nippon), may be used***.

b) No modification of the piston is permitted for the installation of rings.

c) Ring groove widths.

i. Top ring groove: 1.04mm (0.0409 inches) +/- 0.01mm

ii. Middle ring groove: 1.02mm (0.04016 inches) +/-0.01mm

iii. Oil ring groove: 2.00 mm (0.07874 inches) +/-0.01mm

d) Ring gaps shall be from 0.152 to 0.610 mm (0.006 to 0.024 inches)

16.6 CYLINDER HEAD

16.6.1 The only permitted cylinder heads are Honda PN: 122000-RB0-G00 (US Spec) and 12200-RB0-000 (Japan Spec).

16.6.2 The gasket face of the cylinder head may be resurfaced provided the maximum compression ratio is not exceeded or to a service limit of 0.2mm (0.008 inches) based on a height of 120mm (4.72 inches).

16.6.3 The original head shall not be ported, polished, or machined. The original casting shall not be modified in any way or polished.

16.6.4 Head gasket shall be stock Honda Fit PN: 12251-RB0-004. Minimum compressed thickness of 0.76mm +/- 0.05mm. (0.030" +/- 0.002")

16.6.5 Cylinder head breather restrictor shall be used as supplied by HPD, unmodified, PN: 15262-F21S-A200.

16.7 CAMSHAFT

16.7.1 The only permitted camshaft is PN: 14110-RB1-J00. It shall not be modified in any way.

16.7.2 The CMP pulse (cam trigger) plate shall be as supplied, Honda PN 14221-RB0-003.

16.7.3 The camshaft and crankshaft sprockets shall be as supplied, Honda PN's: 14211-RB0-J00 and 13621-RB0-003, respectively. Cam timing shall not be altered. The timing shall be installed as specified in the Honda Fit factory service manual. The timing chain/sprocket cover and crankshaft pulley may not be altered. With the engine at TDC (no. 1 cylinder), the "UP" mark on the camshaft sprocket shall be at the top and the TDC grooves on the camshaft sprocket shall line up with the top edge of the cylinder head.

a) Timing chain Honda PN: 14401-RB1-003

b) Case assy, chain (sprocket cover) PH: 14410-RB1-000

c) Pulley comp, crankshaft, PN: 13810-RB0-003

d) Cam timing at lobe centres: (at 1mm after opening to 1mm before closing). (0.040")

Exhaust: 119 degrees +/- 1.0 degree.

Intake VTEC on: 111 degrees +/- 1.0 degree

16.7.4 Camshaft profile and lobe centres shall be checked using the official CASC checking procedure.

16.7.5 Cam lobe heights: Intake, Primary: 35.240mm (1.387"), secondary: 36.200mm (1.425"), exhaust 35.490mm (1.397")

16.7.6 Valve lift measured at the retainer:

a) Exhaust: 9.20mm (0.362”)

b) Intake VTEC off: 8.68mm (0.342”)

c) Intake VTEC on: 9.90mm (0.390”)

16.7.7 Valve rockers shall not be modified in any way.

Honda PN: 1460-RB1-010 Arm Assy, rocker.

16.7.8 The VTEC system shall be stock. The VTEC activation valve shall be stock. The HPD ECU will activate the VTEC at 5200 RPM. Honda PN: 15810RB0-G01.

16.7.9 All cars must have a functioning tachometer. In the event that the tachometer does not work during a technical inspection, the Toyo Tires F1600 Championship technical representative reserves the right to use the series tachometer, attached to the HPD wiring harness tachometer output wire, to complete the test.

16.8 VALVES

OEM valves shall be as used in the FIT.

16.8.1 Dimensions:

a) Inlet PN: 14711-RB0-000 Exhaust PN: 14721-RB0-000

b) Maximum diameter: Inlet 28.15mm (1.108”) Exhaust 23.15mm (0.911”)

c) Maximum overall length: Inlet 119.15mm (4.691”) Exhaust 117.85mm (4.640”)

d) Minimum stem diameter: Inlet 5.45mm (0.215”) Exhaust 5.42mm (0.213”)

16.8.2 Valve location or angle shall not be altered.

16.8.3 Reshaping of the valves is strictly prohibited.

16.8.4 Valve guides may be replaced provided the position of the valve is not changed and the replacement guides are Honda OEM parts.

Inlet guide PN: 12204-PJ7-305 (over size)

Exhaust guide PN: 12205-PJ7-305 (over size)

16.8.5 It is permitted to replace or re-cut valve seats provided the valve seat angles are stock Honda three angle cut per the Honda Fit factory manual.

16.8.6 Valve stem installed height shall be per the Honda Fit factory service manual:

Intake maximum: 46.8mm (1.843 inches)

Exhaust maximum: 46.9mm (1.846 inches)

16.8.7 Valve stem seals shall be Honda OEM parts

Honda PN: 12210-P1-004 seal A.

Honda PN: 12211-PZ1-003 or PN: 12211-PZ1-004 seal B

16.9 VALVE SPRINGS

16.9.1 Valve springs are Honda OEM as specified in the Honda Fit factory service manual.

a) Intake PN: 14761-RB1-003, free length: 48.55mm (1.911 inches)

b) Exhaust PN: 14762-RB1-007, free length: 54.52mm (2.146 inches)

16.9.2 Valve spring shims are not permitted.

16.10 COMPRESSION RATIO

16.10.1 The maximum compression ratio is 10.55 to 1 utilizing Honda Fit factory service manual limits. Carbon may be removed for checking.

16.11 INTAKE MANIFOLD AND FUEL SYSTEM

16.11.1 The lower manifold shall be stock Honda Fit parts. It is not permitted to add or remove material. No coating is permitted on the exterior or interior of the manifold. Honda PN: 17100-RB1-000

16.11.2 The upper manifold, air box, and throttle body assembly shall be used as delivered by HPD. External throttle return springs are unrestricted.

Air filters are unrestricted. All air entering the engine shall pass through the air filter prior to entering the throttle body and restrictor plate. No devices such as, but not limited to, air horn(s), trumpet(s), bell mouth(s), velocity stack(s), vortex generators and/or turning vanes are permitted inside the air filter or between the air filter and the throttle body.

16.11.3 All gaskets and sensors utilized on the inlet manifold from head to throttle body shall be Honda Fit OEM or HPD supplied.

a) Gasket Intake manifold PN: 17105-RB0-004, Honda Fit OEM

b) Gasket, EGR chamber cover PN: 17146-RB0-004, Honda Fit OEM

c) Gasket Intake port PN: 17115-RB0-007, Honda Fit OEM

d) Gasket Restrictor PN: 17399-F21S-A200, (2 required) HPD.

16.11.4 The fuel rail shall be as supplied by HPD. Injectors shall be stock Honda Fit OEM parts (PN: 16450-RNA-A01). The fuel pressure regulator may be the unit supplied by HPD or any alternate as long as the fuel pressure regulator serves no additional purpose.

16.11.5 Air Inlet

All Honda engines must run an HPD supplied air inlet restrictor of 30.5 mm, which shall be installed within the intake system. Inlet restrictors shall not be modified in any way. The specified value shall not be exceeded in any measurement or the diameter. The restrictor position must be mounted in the HPD specified position. The restrictor centerline or shape shall not be altered in any way.

16.12 FUEL PUMP

16.12.1 Fuel pump is unrestricted.

16.13 EXHAUST MANIFOLD

16.13.1 The exhaust manifold shall be as supplied by HPD. HPD PN: 18150-F21S-A200 OR HPD PN: 181850-F21S-B200.

16.13.2 The exhaust manifold exit may be shortened within HPD specified limits to direct the tail pipe as necessary. The exhaust pipe shall maintain a 50.8 mm (2 inch) outside diameter from the manifold edit to its outlet and shall meet 14.1.1 and 14.1.2.

16.13.3 Exhaust coatings, wraps and heat shields may be used to control engine bay temperatures and protect other components.

16.14 LUBRICATION SYSTEM

16.14.1 The oil pan shall be as supplied by HPD. No modifications are permitted.

16.14.2 Oil feed pump shall be stock Honda Fit. No modifications are permitted. Oil pressure may be adjusted for wear.

a) The oil pressure sensor location shall be as supplied by HPD.

b) It is recommended that oil pressure be maintained at the factory service manual specification.

16.14.3 The scavenge pump shall be as supplied from HPD. No modifications are permitted.

a) Rotor length: 25.4mm (1.000 inches)

b) Rotor Outside Diameter: 44.400mm (1.748 inches)

16.14.4 Scavenge drive pulleys shall be as supplied by HPD. Drive belt manufacture is unrestricted provided the belt type and dimensions are as specified by HPD.

16.14.5 Hose routing and filter system are unrestricted.

16.15 COOLING SYSTEM

16.15.1 Water pump and water pump pulley shall be stock Honda Fit parts. No modifications are permitted.

Honda PN: 19200-RB0-003 Pump, water.

Honda PN: 19224-RB0-000 pulley, water pump

16.15.2 The water inlet and outlet at engine shall be as supplied by HPD. The thermostat is unrestricted provided the housing is not modified. The thermostat bypass may be plugged.

16.15.3 Drive belt manufacture is unrestricted provided it is designed for use with Honda Fit crank pulley.

16.15.4 Radiator is unrestricted.

16.16 ELECTRICAL EQUIPMENT

16.16.1 The ECU and engine electrical harness shall be as supplied by HPD. No modifications are permitted.

a) The LC1 ECU supplied by HPD is permitted effective January 1st, 2021 and must be used with a corresponding lambda sensor supplied by HPD.

b) The LC1 ECU may be used with an LC1-specific chassis harness supplied by HPD or with a current chassis harness using an adapter supplied by HPD.

c) The current E1 ECU is no longer available, but competitors may continue to use existing E1 ECUs provided that they are functioning as intended. The E1 ECU must remain sealed and unmodified.

16.16.2 The ECU will be a sealed unit supplied by HPD. The ECU maps and inputs shall not be modified. The ECU is capable of being swapped in the case of a protest.

16.16.3 CASC-OR and/or Toyo Tires ***F***1600 Championship Series ***technical delegate*** reserves the right to replace the ECU with ***the series owned*** HPD Fit ECU at any time.

16.16.4 Ignition coils shall be stock Honda Fit, PN: 30520-RB0-003. No modifications are permitted.

16.16.5 All sensors related to engine operating parameters and/or supplied by HPD shall be used. These sensors, their locations and mounts, and their wiring harness leads may not be altered or “piggy backed”. Any sensors required for analog type gauges shall be in addition to the HPD supplied sensors.

16.16.6 The alternator shall be stock Honda Fit PN: 31100-RB0-004 or HPD PN: 3100-F21S-A200. The alternator drive pulley shall be stock. Alternator connections shall be through the HPD engine harness only. The alternator shall not be disabled and shall be accessible to CASC-OR officials.

16.16.7 An LED light must be connected to the HPD diagnostic port and be visible on the dash.

16.17 FLYWHEEL

16.17.1 The stock Honda Fit flywheel shall be used. No modifications are permitted except for normal resurfacing for clutch wear.

a) Stock Honda flywheel PN: 22100-RB0-005

b) Minimum weight with ring gear: 6531.73 grams (14.4 lbs)

16.17.2 The stock Honda Fit clutch shall be used. No modifications are permitted.

a) Honda PN: 22300-RB0-005

b) Minimum weight without friction disc: 3175.15 grams (7.0 lbs)

The stock Honda friction disc shall be used. No modifications are permitted.

a) Honda PN: 22200-RB0-005

b) Weight of new friction disk: 952.54 grams (2.1 lbs)

16.18 MISCELLANEOUS

16.18.1 All emission control devices shall be removed and blocked off by the blanking plate provided by HPD, except the VTEC activation valve. The VTEC activation valve shall be retained, and it shall be functioning.

16.18.2 Shell V-Power 91 unleaded pump fuel shall be used.

16.18.3 The use of the following non-standard replacement parts is permitted provided their use does not result in any unauthorized modification of any other component.

a) Fasteners- nuts, bolts, screw, washers, studs, etc. Head bolts, rod bolts, flywheel bolts, and crank pulley bolt must be provided by Honda and HPD.

b) Gaskets and seals, except those specified in the above rules.

c) Spark plugs.

d) Mechanical tachometer and analog gauges.

e) Oil and lubricants are unrestricted. HPD strongly recommends the use of oil and lubricants as described in the Honda Fit factory service manual.

f) The oil filler cap may be removed or plugged.

16.18.4 The following gear ratios must be used for Canadian Tire Motorsport Park

Cars with 13 36 R&P

1st 2.00 – 2.188

2nd 1.737 – 1.833

3rd 1.421 - 1.500

4th 1.190 – 1.261

Cars with 10 31 R&P

1st 1.803 – 2.000

2nd 1.500 – 1.600

3rd 1.261 – 1.340

4th 1.040 – 1.125

17 COMPLIANCE

17.1.1 By entering an event an entrant/driver agrees to co-operate with Series Officials in all matters of technical compliance.

17.1.2 By entering an event all drivers, entrants and team principals agree to share any and all on-board data and/or recordings with Series Officials on demand.

17.1.3 Any data so shared shall be kept private and confidential and used by Series Officials solely for determinations of a technical nature.

17.1.4 Recordings, including video, shall be made available to Series Officials for use in resolving driving issues. Additionally, these recordings shall be preserved and kept available for the period necessary to resolve any inquiries, protests or appeals resulting from the competition involved.

18 PROCEDURES

18.1.1 Competitors are not permitted to stop in pit lane after the chequered flag has been displayed after qualifying or race sessions. It is mandatory that all cars report to impound following qualifying and all races.

18.1.2 Cars shall not return to the paddock during a qualifying or race session without first obtaining permission from a Series Official at impound.

18.1.3 Computers or other programming devices shall not be connected to any car during or after any qualifying or race session without first obtaining permission from a Series Official.

18.1.4 Series Officials shall be given access to download any recorded data following qualifying, race, or any other timed session.

18.1.5 Cars required to report to impound shall not be connected to a computer or other programming device nor download data in any way until released from impound. Cars not required to report to impound may download data after returning to the paddock.

18.1.6 Testing is prohibited at a track for a period of 30 days prior to a Toyo Tires ***F***1600 Championship event. ***Exception***: It is permitted to enter a Promoter or CASC sanctioned ***organized race event within the 30 days or any Promotor or CASC sanctioned*** test day ***that is*** attached to ***a Toyo Tires F1600 Championship*** event.