

OSCAAR
HOT ROD
SERIES



REVISED MAY 10th 2017

OSCAAR HOT ROD SERIES

ALL INFO FOR GENERAL RULES, QUALIFYING/ RACE PROCEDURE

Post-Race Tech Procedures

- *Following each heat race the top three finishers are required to report to the tech area.
- *Following a feature event, the top 5 drivers must report immediately to the tech area. Under no circumstances will a driver go to their pit first. Doing so will result in an automatic disqualification and loss of any money and points for the event.
- *The OSCAAR Tech Director reserves the right to do tech procedures on any car following the feature event.
- *Any driver not co-operating with the OSCAAR Tech Director will be disqualified, resulting **in a loss of money and points for the event.**

As this is a new series with such a wide variation of chassis' and combinations being used OSCAAR reserves the right to make adjustments to any rule or to any car in order to keep competition equal. After this season is complete OSCAAR will make all final adjustments and lock in a rules package for a 3 year period.

Frame

- *Any full **Perimeter** chassis may be used. Right and left frame rails should be an equal distance from the frame centreline, there will be a 1" tolerance allowed.
- *No Offset chassis allowed.
- *Stock or Tube Clip, chassis allowed. See below for weight penalties.
- *Rear frame sections may have 2"x3" replacement tubing from top of kick-up rearward.
- *Uni-Body cars are allowed and must have the front and rear frame rails tied together by welding 2" x 3" X .095 wall tubing sections to make the connection.
- *Frame ride height must be a minimum of 5" measured with the driver out of the car.
- *Minimum wheelbase is 108".
- ***NO AFTERMARKET OR FABRICATED STRUT CARS ALLOWED.**

Roll Cage

- *No offset cages.
- *A 4 point racing roll cage is mandatory.
- *Front hoop must attach to the main cage forward to the front frame rails.
- *Rear hoop must extend over drivers head and attach to the rear frame rails.
- *4 bars on driver's door and 3 bars on passengers door or right side door bars must at least form an "X" with top bar running from front to back.

- *A fabricated plate must be installed on the outside of the driver's door bars, minimum thickness .100".
- *A "Petty" bar recommended running from center of cage to upper right front halo.
- *Upper roof halo must be minimum 32" wide.
- *No part of the roll cage may project outside the exterior sheet metal.
- *Cage must be constructed of 1 3/4" minimum outside diameter by .095" wall thickness round steel tubing.
- **Left leg protection bar must be installed.****
- *Foot box must be constructed of a minimum 12 gauge sheet steel.
- *No square tubing, channel or angle iron will be allowed in the construction of the roll cage or bracing.

Body

- *Car must be North American, steel body, year range 1949-1974.
- *Evans Bros. Fiberglass Bodies 55 -57 Chev parts will be allowed. With this roof you MUST add a piece of 14 gauge aluminum from the centre of the cage halo over the drivers head to the left side bar and must run from the front to rear of the halo.
- *Must have chrome or steel bumpers.
- *Front bumper may have "nerf bar" welded to the top to help protect the grill area. It can be 2" wider on each side of the grill and must be 2" lower than the front edge of the hood.
- *No pickup trucks, convertibles or front wheel drive cars.
- *Body to have a minimum 4 inches of ground clearance.
- *Must have stock roof, grill, tail and the rest of the body panels can be fabricated from 22 gauge sheet **steel**, but must retain stock appearance.
- *No aluminum body panels.**
- *Fiberglass racing style hoods may be used.
- *No cowl induction hoods allowed.**
- *No offset bodies allowed.
- *Aluminum side skirts are allowed along each side of the body and cannot be wider than 6".
- *Bodies must be complete at beginning of each race event.
- *Roof minimum 45 inches in height, measured 10 inches back from windshield.
- *Roof may be chopped or modified to fit the chassis but MUST retain stock appearance.
- *NO laid back windshields, NO "fast back" rear windows or "lead sled" type modifications.
- *The side window opening must have a minimum 13" opening.
- ***Lexan** Windshields are mandatory to fit complete windshield opening and must have a minimum of 2 center braces and 4 safety clips –2 at top of window and 2 at bottom of window.
- *The top 6" of windshield must be kept clear for division sponsor.
- *All cars must be neat and painted.
- *Numbers must be on both door panels and the roof in large (min. 18") letters in a colour that clearly contrasts the paint. NO suffix or prefix letters allowed. ie: 99 - good and 99X - no good!
- *Original wheel arches may be removed/trimmed for tire clearance.
- *Wheels may stick out maximum of 2" from the body and measured from the tire bulge at spindle height.
- *Fender flares may be added to cover the tread area only.

- *Rear spoiler allowed but may not extend beyond rear edge of rear deck panel and must follow the contour of the deck lid. Maximum 5" high by the width of rear deck.
- *Bracing of rear spoiler is allowed by using approved struts only.
- ***NO** side pods.
- *Rub rails allowed, maximum 2" wide steel, aluminum or Lexan that can match the tire bulge from front to back. Carriage bolts only to fasten the steel or aluminum rub rails, rivets for Lexan. No sharp edges.
- *Cars must be presentable in appearance for each race.

Driver/ Cockpit Devices

- *Traction Control – No operator controlled, radio controlled, computer controlled or automatic traction control devices or ignition retard devices.
- * No chassis or suspension adjustment devices inside cockpit.
- * Brake bias adjustment device is permitted.
- *Standard, Convex or multi panel rear view mirror is mandatory.
- *One left side mirror is allowed, no larger than 3" round and must not be any farther out the then the scrub rail.

Interior

- *Interior of car can only be constructed of minimum 22 gauge steel or aluminum.
- *All roll bars in driver's area must be padded.
- *All flammable materials are not allowed in or around the driver's area.
- *Front and rear firewalls must be complete.
- *Any holes or openings must be covered with sheet metal or aluminum.

Helmet

- *An approved racing safety helmet conforming to Snell SA2010 standard is minimum requirement for 2016. **Snell SA2015 highly recommended. Full Face helmet recommended.**
- *Head and Neck Restraint optional for 2016 but will be mandatory for 2017.

Fire Suit

- *Driver's fire suit SFI3.2A/1 is mandatory. Recommended SFI3.2A/5.
- *Driver and suit must maintain clean looking appearance.
- *Fireproof gloves are mandatory.
- *Fireproof neck collar, balaclava, underwear, socks, and shoes are recommended.
- *No nylon shoes allowed.

Belts &Harness

- *A quick release SFI approved 5 point harness of no less than 3 inches in width and in good condition is mandatory.
- *Belts must have date tag attached and must not be any older than 3 years (manufacturer's date). In 2016—all belts must be dated 2014 or newer.

*Belts must be securely fastened to the frame, cross member or roll cage with a minimum of 7/16th inch grade 8 bolts and locknuts, in such a manner that all fittings are in a direct line with the direction of the pull, as per manufacturer's instructions.

*All belts and mounting are subject to technical inspection.

Fire Control

*Cars must have a 2 1/2 lb. minimum fire extinguisher with either steel or aluminum head and mounted in a steel bracket and must be bolted down within the driver's reach with seat belts fastened.

*On Board fire extinguisher is acceptable and must be a 5lb bottle and to have 2 nozzles in the cockpit area.

*Fire extinguisher must be new or serviced and inspected each year and dated no later than January 1st of the current year.

Radios

***NO** 2 way radios are permitted.

*Raceivers only.

Seat

*Aluminum racing seat mandatory

*Seat must be bolted securely with minimum diameter of 3/8 inches or larger with large steel plate washers in 4 points attached to the roll bar or frame only.

*Full upper body head and shoulder containment seat is highly recommended.

Window Net

*An approved nylon mesh net is mandatory, installed in driver's side window opening.

*Window net anchors must be attached to the roll bars, not to the body.

*Window nets must be quick release type.

*Window net must be permanently anchored at the bottom and release at the top.

Front Suspension

*Spring diameter 5" minimum, must be conventional coil springs only.

***One** Lower control arms can modified + or - 1" from stock length.

*Load bolts allowed.

*Spindles must be Impala style, Oldsmobile 2 piece or Howe cast only with welded steering arm.

*Any sway bar is allowed.

Shocks

*Steel body racing shocks only, non re-buildable.

*Preferred shock is PRO WB Series Single Valve.

***FOR THIS YEAR WE WILL BE ALLOWING THE FOLLOWING:** This will allow us to pick the best possible shock when the rules are locked in for 2017 and beyond.

*AFCO Series 10, 12, or 14.

*Koni Series 30.

Steering

- *Stock appearing steel steering box.
- *Steel Rod/Heim ends allowed – minimum 5/8”.
- *Adjustable centre link allowed.
- *Steering rod to steering box must have collapsible shaft or multiple u-joints.
- *Any bolts in steering must be minimum grade 8 bolt.
- *Steering wheel must be mounted with a quick disconnect hub and have centre padding.
- *NO RACK AND PINION STEERING.
- *NO DELPHI STEERING BOX.

Hubs

- *5 x 5 hubs only
- *Must use 5/8” wheel studs.

Rear Suspension

- *3 link, 4 link or leaf springs allowed.
- *Trailing arms and upper link maximum 30”.
- *Solid steel 3rd link with heim joints no absorbers.
- *Spring diameter to be 5” minimum conventional coil springs only.
- *4 link allowed adjustable upper arms +/- 1”. Rear upper control arms can be manufactured (1”x 2” or 2”x 2”) steel tubing or adjustable steel rods with minimum 5/8” steel heims no longer than stock length.
- *Upper control arms on tube chassis cars must be no longer than 30”.**
- *Lower control arms on tube chassis cars must be no longer than 30”.**
- *TRUCK ARMS ARE ALLOWED.**
- *3 link with panhard bar. 30” lower arm length. Upper arm cannot be longer than lower arms.
- *NO BIRD CAGES**

Rear Ends

- *FORD 9” Rear ends with drum or disc brakes allowed.
- *FORD 9” Full floaters allowed.
- *DODGE 8 ¾” Rear ends allowed.
- *GM 12 Bolt Rear ends allowed.
- *Quick Change rear ends allowed and must have a 10” ring gear, no thermal coatings, steel tubes only.
- *RACING AXELS ARE MANDATORY.**
- *No aluminum tubes.
- *Full spool or mini spool only - No Gold Tracs, limited slip devices or post units.
- *No cambered rear ends.

Brakes

- *All four wheels must have working brakes.

- *Rotors are to be magnetic steel only and no drilling of rotors.
- *Front rotors –min. 1 inch and rear min. .750 thickness.
- *Brake calipers must be magnetic steel with single piston.

Ignition

- *Car must be self-starting.
- *Ignition on/off switch must be mounted to the right side dash of the car and clearly labelled so that the ignition can be turned off from outside of the car in the event of an emergency.
- *The only switches allowed are: a) Master on/off mounted in the center of the car. b) Push button start switch. c) Ignition power, and off. d) Fan switch if equipped with an electric fan.
- *Stock type distributor, a DUI, or MSD distributor allowed.
- *Only 1 MSD box, one coil, and one wiring harness per vehicle.
- *MSD Blaster 2 or SS coils allowed.
- *ALL MSD WIRING TO REMAIN OPEN FOR INSPECTION. ALL WIRING MUST USE WEATHER PAK CONNECTOR 6 AND 2 PIN AT THE MSD MODULE, 2 PIN AT THE DISTRIBUTOR. MALE CONNECTORS ARE REQUIRED ON THE BOX AND DISTRIBUTOR. A 4 PIN CONNECTOR IS REQUIRED AND MUST BE ACCESSIBLE ON THE REAR OF THE TACHOMETER.
- *An operational rev chip must be accessible through the passenger window.
- *Soft touch rev control part 8728 must be mounted on the right hand side of the dash (same as ignition box) if a stock distributor and stock module are used.
- *All built engine cars will have an operational 6800 rev chip installed.
- *All crate engines will have an operational 6400 rev chip installed.
- *All 6AL, 6ALN wiring to be standard:
 - *Red wire/ignition switch
 - *Use a brown wire/tach output
 - *Black wire/coil negative
 - *Orange wire/coil positive
 - *Green wire/dist. Negative
 - *Purple wire/dist. Positive
- *Connectors to be within 12 inches of the 6AL or 6ALN box.
- *Battery pos. and neg. May be hard wired to master disconnect and chassis ground.
- **Anyone caught tampering with chips or rev limiter will be automatically disqualified.**

Battery

- *One 12 volt Battery only, AMG type batteries preferred.
- *Battery must be anchored securely and outside of the driver's compartment by a firewall, located ahead of the rear end, no lower than the bottom of the frame rail and in between the frame rails.
- *A battery disconnect switch is mandatory and should be located on the left side of the rear tail panel within reach of track official or safety crew member and clearly marked on and off.

Weight Location

- *Weight must be securely fastened to the chassis and mounted no lower than frame rails.

*No weight to be added rearward of fuel cell.

*All added weight must be **painted white** and clearly **identified with car number** on each piece.

Wheels & Tires

*15 inch diameter steel racing wheels with a maximum width of 8" to 10" measured from bead seat to bead seat.

*Tires for 2016 –Mandatory Spec Tire: American Racer, available for Grisdale Racing Products.

*Altering tires by treatment (softeners, etc.) is illegal. Durometer and/or other devices will be used to check tires.

*4 new tires allowed opening night and then only used OSCAAR branded tires can be used.

Track Width

*Wheel track width will be a maximum of 80 inches measured from outside of tire bulge at spindle height.

Engine Height

*Engine height will be a minimum of 12 inches measured from ground to center of crankshaft.

*Engine Location: # 1 Spark plug of engine must be in line or ahead of upper ball joint and centred in the frame. Crossmember may be altered to achieve this.

Crate Engine Options

*Approved crate engine is Chevrolet 350/350hp Circle Track Crate Engine Part #88958602.

*No changes, substitutions or modifications to engine.

***ALL NEW CRATE ENGINES MUST BE SEALED USING 3 SEALS, ONE ON EACH SIDE OF THE INTAKE AND ONE ON THE TIMING COVER. ONLY OSCAAR APPROVED SEALS ARE ALLOWED.**

*You are allowed to replace the oil pan, pick up tube and timing chain.

*Metric Clip cars can use CANTON PAN 11-122T with CANTON 20-042 pick up tube.

*Tube Clip cars can use CHAMP PAN CP100LTRB with CHAMP 1012SB pick up tube.

*Timing Chains can be replaced with CLOYES 9-1100 double roller chain and gear set, or equivalent.

*In order to qualify for the OSCAAR crate engine program the new engine needs to be shipped directly from the dealership to one of the 2 approved engine builders or you must have a representative from OSCAAR pick up the engine with you and deliver it to one of the 2 approved engine builders. Engine builders info is listed at the back of the rule book.

*Any tampering, alterations, or violations with respect to the crate engine program will result in the immediate suspension of the driver, car owner, and chief mechanic for a minimum of 1 year (365 days) from the date of the infraction.

*Further monetary fines and reduction of points will be assessed by the technical committee.

*The tampered engine which must be removed at the team's expense will be impounded at both the team's expense and risk until the ruling is finalized.

***OSCAAR reserves the right to destroy all tampered-with parts.**

*If an OSCAAR sealed crate engine is damaged or fails, and needs to be repaired it must go to either one of the approved OSCAAR HOT ROD Series engine specialists so the repairs are made to the crate spec and then re-sealed.

Built Engine Definition:

*Parts available from your local dealer through ordinary parts catalogue may be accepted as stock.

*Parts ordered through dealer performance catalogues will not necessarily be considered legal.

* ANY Crate Engine that has been rebuilt will be considered to be a built engine.

Engine Maximum Overbore Displacement

*CHEVROLET –305-350 060 360 cu. In.

*DODGE –318-360 060 371 cu. In.

*FORD –351 (Windsor only) 060 362 cu. In. Cylinder Block Assembly (Short Block)

*Steel Block only, aftermarket engine blocks not permitted.

*The engine block must retain all factory engine dimensions, with the exception of the maximum overbore and the surfacing of the engine block deck.

*Must maintain stock lifter bore: Dodge .904 inch, Chevrolet .842 inches. Repair sleeving of lifter bores permitted to a maximum of 4.

*Crankshaft must be stock OEM-type and must have factory I.D. numbers that are legible

*Oil pan must have 1" removable plug in left front to inspect crankshaft part number

***No lightening or knife edging of crankshaft**

*Connecting rods must be magnetic steel only.

*Stock type, flat top or dished three ring pistons with all rings installed.

*Compression ratio on all makes 9.5:1 or lower.

However, due to measuring variations with the equipment, a whistle of 9.9:1 will be deemed legal. If on an engine teardown, the engine exceeds 9.5:1 compression, based on exact measurements performed, the engine will be declared illegal.

Cylinder Heads

*Cast iron OEM style heads only, must be stock valve angle for manufacturer.

*VORTEC heads are allowed only on a GM 88958602 engine.

*DART 10021070 heads are allowed.

*No angle plug heads will be allowed.

*NO acid dipping, angle milling, polishing, porting or port matching of heads to intake or exhaust. **NO** hollow, sodium or titanium valves allowed.

*Valves stem size 11/32 inch on Ford and Chevrolet heads. Chrysler heads must use 3/8" valve stems. Valves 1.94 intake and 1.6 exhaust.

*CHRYSLER MAGNUM heads are allowed.

*FORD may use DART 13311181 heads.

*Ford and Chrysler must use OEM stock valve stem size.

*All Dodge and Ford heads must be approved by Tech.

- *Must use OEM type valve springs and retainers.
- *Maximum spring diameter must be stock size for the engine used.
- *Roller rockers and stud girdles allowed.
- *Screw in studs or pinning of studs is allowed.

Camshaft

- *Flat tappet hydraulic valve lifters and camshaft only.
- *Roller rockers and stud girdles allowed. Screw in studs or pinning of studs is allowed.
- *Guide plates allowed.
- *Shaft rockers allowed on Chrysler - factory type only
- ***NO** roller or mushroom lifters.
- ***NO** aluminum, ceramic, titanium or exotic metals allowed.

Intake Manifold

- *Manifold must remain stock and unaltered as produced by manufacturer.
- *Water crossover cooling lines allowed.
- ***NO** acid dipping, grinding, porting, port matching, turtles or modifications allowed.
- *Chevrolet engines –Part #2101 (newer style only) or 2701 Vortec Performer Part #2116, Edelbrock Performer intake only.
- *Ford engines –Part #2665, 2750 or 2181 Edelbrock Performer intake.
- *Dodge engines –Part #2176, Edelbrock Performer intake or Mopar part #P4876335.

Oil Pan and Lubrication

- *Magnetic steel oil pans only.
- *Wet sump systems only.
- ***NO** external oil pump(s) (aftermarket) or external reservoir tanks allowed.

Carburetor

- *One stock 4412 –500CFM old style, metering block numbers 5924, 5925 & 10570 Holley factory produced 2 barrel carburetor.
- *Only changes allowed are jets, power valve, removal of choke parts and filling in of choke rod holes.
- *Two throttle return springs and stop are mandatory.
- *May use 1" spacer.
- *No venturies in or below the spacer
- *Distance from bottom of carburetor to top of intake manifold where carburetor sits, to measure no taller than 1 1/4" including gaskets.
- *Must have air cleaner, maximum 16" x 5"
- *Air cleaner base must attach directly to carb, no spacers or hats

Cooling System

- ***NO ANTIFREEZE** allowed in the cooling system.
- *Mechanical fans must be shrouded for protection.

- *Must have overflow container or surge tank – recommended to have surge pressure blow off tube located at right side of windshield in sight of driver
- *No electric water pumps allowed.

Driveshaft

- *Drive shaft must be steel.
- *Drive shaft must be painted white.
- *Steel 360 degree retainer hoops, a minimum of 1/4 inch thick x 2 inches wide, must be positioned at the front and rear of shaft within 12 inches of each U-joint.

Exhaust System

- *Headers allowed.
- *Maximum 1 3/4" diameter tubing from header flange to collector and the maximum size of the collector 3 1/2"
- *Exhaust system must either exit outside of body and to be turned either downward and out OR exit under car on right side and behind driver and turned downward.
- *Mufflers are mandatory.
- *Muffler(s) used must remain unaltered and must meet track decibel reading.

Fuel Line

- *A single AN-8 (1/2 inch) steel, armored or Kevlar braided fuel line is mandatory, and must be securely fastened under floor.
- *NO NEOPRENE OR COPPER LINES allowed.**
- *NO PLASTIC OR GLASS FUEL FILTERS.**
- **If fuel line runs through interior of car (cab), it must run through a steel tube painted either red or yellow and marked "FUEL LINE" in contrast to your car interior.

Fuel Pump

- *Stock type mechanical fuel pump only.

Fuel Cell

- *Maximum 22 U.S. gallons allowed.
- * The fuel cell must be separated from the driver's compartment by an all metal firewall.
- *Fuel cell is to be securely mounted in the trunk area centered between the frame rails and no lower than the centre line of the rear axel.
- *Minimum of two straps to secure fuel cell (straps must be steel and a minimum of 1"x 1/8" flat strap or equivalent).
- *A minimum of 20 gauge steel is to be used for fuel cell case.
- *Must have a rear hoop bar for protection.
- *If no vent line, cap must have a check valve.
- *Fuel cell cap must be tethered to the car.
- *There must be a fuel shut-off valve in working order and clearly marked ON and OFF, mounted on the right side tin kit or dash and accessible by track or safety officials.**

Transmission (Manual)

- *OEM Transmission only - must be 3 or 4 speed cast iron only.
- *Must have reverse gear and all forward gears must be operational.
- *Transmission must be unaltered and as produced by the OEM manufacturer.**

Clutch and Flywheel

- *Stock O.E.M. type friction disc minimum diameter to be 10".
- *Steel pressure plates only allowed.
- *Stock style clutch disc, but can be solid racing disc.
- *Total clutch weight to be determined (24 lbs).
- *Flywheel must not weigh less than 13 pounds.
- *Only steel ring gears.

Bellhousing

- *Steel bellhousing only.
- *Starter mounting position must remain stock (same as on standard production bellhousing).
- *Inspection hole must be in the bellhousing and be large enough to permit inspection of flywheel and pressure plate.

Transmission (Auto)

- *Automatic 2 or 3 speed transmissions and may be strengthened.
- *Modifications to shifting patterns are permitted, provided full shift pattern is retained. Scatter shield is highly recommended with automatic transmission.
- *Stock-type 10" working torque with a minimum weight of 25 lbs wet.
- *Stall test will be conducted in both forward and reverse gears.
- *Transmission oil coolers are mandatory but must not be mounted inside driver's compartment and must be contained inside the body of the car.

Weight

- *Weight for 4 link with Crate engine and driver = 3050 lbs.
- *52% left side weight for all cars.
- *48% rear weight for all cars.
- *No topping up with fuel after the feature.
- *When adding ballast, a) it must be in blocks of no less than 5 pounds. b) bolted securely, painted white, to have car number painted on them. c) must have a minimum of 5" ground clearance and be secured with minimum two 1/2" bolts.

Weight Penalties

+/- from 3050lbs

- *4 Link cars with built engine will be 3125lbs
- *Leaf Spring cars will be 3100lbs
- *Leaf Spring cars with built engine will be 3175lbs
- *Tube Chassis 3 link cars will be 3175lbs

* Tube Chassis 3 link cars with built engine will be 3250lbs

Claim Rule

In order to keep the cost fair for everyone and in hopes that nobody will run up a large budget in this series we have created a claim rule for the engine only. Any car registered can have it's engine claimed.

NO CLAIM CAN BE MADE UNTIL AFTER THE SECOND EVENT IN THE SEASON.

Any current series driver wanting to make a claim must do the following:

- 1. Claimant must be present at the tech shed, within 15 minutes of the race ending, no more than 15 minutes will be allowed.**
- 2. Claimant must have cash or certified cheque to make full payment.**
- 3. Claimant must take that claimed engine that night.**
- 4. Claimant is mandated to run the "Claimed" engine for the next 2 events.**
- 5. After the 2 races, that "Claimed" engine, is now available again for claiming.**
- 6. Claimant must have participated in all OSCAAR HOT ROD SERIES races.**
- 7. Any participant not following these Claim rules will be suspended for the remainder of the season or within the last 2 events of the current year the suspension will include the following season.**

BASE claim is \$5000.00

Removal of engine by owner mandatory add \$300.00

With double roller timing chain add \$300.00

With 7" Oil Pan Champ Style add \$600.00

With MSD Distributor or equivalent add \$300.00

Our goal is to keep this series affordable for all and to have a capped budget of \$12,500.00 for a complete racecar!

OSCAAR HOT ROD SERIES CRATE ENGINE SPECIALIST

Bill Howard, Howard Race Engines, 36 Ellen St., Barrie, ON. 705-721-7518

Hal Norry, Engines from Hal, 126 Malcolm Rd. Unit 5, Guelph, ON. 519-767-1532

These 2 engines builder will be the only accepted shops to seal the crate engines for this division. Any other seals from any other source will not be recognized and will need to meet the built engine specifications.