



# 2020 TRUCK RULE BOOK

## 1. GENERAL:

The word **stock** shall be defined as any part for that particular make, model, and year as found in the manufacturer's catalogue. Unless specifically noted all **stock parts** shall be mounted in both the **stock location** and **stock position** as engineered by the manufacturer. In addition to the location and mounting, only parts identified in the manufacturer's catalogue for that particular make, model, and year shall be eligible. Any deviation to the above mentioned rule shall be superseded by written updates and duly noted in the specific subsection of the rules and in accordance with the rules

## 2. AIR CLEANER:

No cowl induction system allowed. No high velocity or stack type air cleaner. Maximum air cleaner size 14" x 4-1/2". Must have solid air cleaner top.

1. All air boxes, and/or extensions from the air cleaner as described above shall maintain a minimum of five(5) inches between any part of the firewall and any part of the air cleaner and/or air box assembly. There shall be no sealing devices anywhere on the air cleaner and/or air box with the exception of the gasket between the carburetor and air cleaner.
2. The height of the add-on devices (air box, cowl, and deflectors) shall not exceed the height of the air cleaner installed on the vehicle when measured with reference to the carburetor center line.

## 3. APPEARANCE:

1. Entries must be presentable in racing events.
2. All body panels must be painted.
3. Entries considered improperly prepared may be rejected at any event.
4. No battered trucks.

## 4. BATTERY:

Must be anchored securely in a steel battery box located between the centerline of the rear axle and the rear of the cab. Minimum two 5/16" mounting bolts. 12 VOLT electrical system only.

## 5. BODY:

1. Open to G.M.C., Chevrolet, Dodge, Toyota, Nissan, and Ford full-size pickup trucks from 1967 to current model year inclusive.
2. Only standard cabs and straight side boxes are allowed. (Step side boxes not allowed.)
3. Unless otherwise stated all body panels must be constructed on magnetic steel.
4. In 2020, 5 Star replacement front fenders, hood and front nose will be allowed..
5. Box, body and chassis must be of the same make and year model. Body must be straight, sound, stock appearing and in stock position on frame.
6. Body and box must be securely mounted to frame. Box ribs may be notched to allow character line alignment. Hood seams must stay original. Body repair or replacement panels must be made of steel minimum 22 gauge thickness.
7. Removal of box side inner metal allowed... Floor of box bed may be replaced with minimum 22 gauge magnetic steel sheet metal.
8. Side and rear support bars in the box are permitted, must be no larger than 1" OD, and no more than two vertical and two horizontal bars will be allowed in the box. Rear wheel tubs must be stock appearing. All bracing must be constructed of magnetic steel.
9. Box bed covers are mandatory. Box bed covers must be fabricated of magnetic steel sheet metal minimum 22 gauge thickness.
10. Box bed covers must be securely fastened and must incorporate a two foot (2 X 2) square door constructed of 22 gauge magnetic steel located on the top of bed cover for inspection of the fuel cell and inner box.
11. Rear spoilers may be used and a single plane sheet metal style, and or lexan allowed. Maximum 6" at any angle when measured from the top of the box at any point on the box side to side. The spoiler can be no wider than the box, must be securely fastened, and if made of lexan a minimum of three (left, center, and right) support brackets must be used.
12. Front valances must not protrude outside the plan of the front tire.
13. All bracing must be made of magnetic steel, no aluminum bracing allowed anywhere on the vehicle.
14. Front firewall must be original and in original location, with all holes filled.
15. Floor must be stock, complete and in original position from the front firewall to the rear of the cab. All holes must be covered with minimum 22 gauge magnetic steel.
16. A minimum of two interior steel support beams no more than 1" wide and 1" deep to follow contour of windshield are mandatory. You may paint the upper 7" of the windshield or 3" of rear window black.
17. Hood:

- A. Full stock hood and bracing must be retained..
- B. If aftermarket parts are used, it must be 5 Star replacement hood, fenders and front bumper. (Contact tech staff for approved body parts)
- C. No exterior hood hinges, must have front hood pins.
- D. Hood scoops are not allowed.

**6. Brakes:**

- 1. Four wheel hydraulic brakes are required.
- 2. Factory disc brakes allowed on the year and models available.
- 3. Must use stock-type brake rotors – no drilled or grooved aftermarket brake rotors permitted.
- 4. Brake bias is allowed however the adjustment must be at the master cylinder, and not accessible by the driver or while the vehicle is in motion.
- 5. Master cylinder must be stock type in the stock location. Pedal assemblies must be stock and in stock location.

**7. Bumpers (front bumpers):**

- 1. Bumpers are mandatory.
- 2. Stock-appearing bumpers in stock location.
- 3. Metal guards extending from bumper to body panel and riveted in place may be used to prevent bumper gouging. Width of bumper may be shortened to conform to body.
- 4. All bumper support bars must be less than 1" in diameter, and be approved by the tech committee.
- 5. The purpose of the support bar is to maintain stock position of the bumper and not to increase the strength and or to be used as a ram.
- 6. Bumper mounts may be fabricated and reinforced.
- 7. Note: Approved aftermarket front nose and rear tail pieces including bumpers are allowed as long as they are stock appearing. Make/model of noses may be interchanged ex: Chev on Ford, Dodge on Chev, Ford on Dodge, etc.

**8. Bumpers (rear bumpers):**

- 1. Rear step bumpers are NOT allowed.
- 2. Stamped steel O.E.M. bumpers allowed.
- 3. Stamped steel O.E.M. front bumper may be used on rear. Width of bumper may be shortened to conform to body. One 2" x 0.125" x 3" OR Two 2" x 0.125" x 2" HSS tube in stock position.
- 6. mbliies must be stock and in stock location.

**9. Chassis/Suspension/Steering:**

- 1. All suspension/steering parts are to be stock or OEM-type replacement.
- 2. No modifying and/or repositioning of lower control arms.
- 3. Coil springs and sway bars may be interchanged providing they fit original

mounting as intended for that model year.

4. Only truck spindles are allowed and must be the same make (gm on gm), and same side to side (spindles must be of equal king pin inclination and Ackerman left & right).
5. Front upper control arm mounts may be altered for camber only, however they must remain in stock location.
6. Tubular upper control arms allowed, any length any offset, not necessary same length side to side.
7. Load bolts are NOT allowed. One Spring spacers is allowed between the coils.
8. Rear axle spring perches may be changed to allow underslung to become overslung and visa versa.
9. Rear spring shackle mount may be altered to obtain ride height.
10. Shackle lengths may not be altered, and must be the same left to right as well as front to rear.
11. May use fabricated stabilizer links, hiems allowed..
12. Shocks must be in stock location, but top mount may be altered to correct shock alignment.
13. No alteration of the lower shock mounts is permitted.
14. Shock absorbers (one per wheel), must be non-externally adjustable sealed steel with stock-type mounts, and no altering of shock and/or painting allowed. \$125.00 Canadian maximum per shock. Shock must have fixed ends and not be re-buildable.
15. No rod end or ball mounts.
16. No bump stop devices allowed on the vehicles.
17. No offset chassis' allowed.
18. Hubs may be drilled for larger wheel studs and bolt circle may be altered but not to exceed 5 x 5 1/2" bolt circle.
19. Wheel stud threads must protrude through wheel nut while in the installed position.

**20. Front Suspension – 1973 – 1987 / 2000 & Later GM Trucks**

- A. Right side lower control arm inner mounting bolts may be moved to the right a maximum of 1".
- B. Original holes must remain in frame.
- C. Right side spindle may be re-drilled a maximum of 1" out board to relocate the upper ball joint.

**10. Frame:**

1. Frames must be half-ton truck frame for make and model used.
2. Frame rails may be reinforced on or inside frame rail.
3. No altering of front clip section height to the rest of the frame.

**11. Mirrors:**

1. Must be mounted in center, stock location and at least  $\frac{1}{2}$  of the reflective surface must be on the right side of the vehicle's center line.
2. If either a full containment seat and or a head/neck support restraint system is used an optional left side mirror that is no larger than 4" maybe installed.
3. The left side mirror may not extend or protrude outside the vehicle.

**12. Paint/Lettering:**

1. All trucks must be neatly and brightly painted.
2. Numbers, assigned by the track, must be painted on both sides of car and roof (readable from right side) in a colour offering distinct contrast to colour of the car.
3. Numbers must be a minimum of 20" high and 3" wide. Numbers must be legible (subject to approval of Head scorer.)

**13. Radios:**

1. Approved 1-way radio receiver mandatory. Must receive frequency UHF 451.7125
2. Two- way radio communication strictly prohibited!

**14. Roll Cage:**

1. A full perimeter cage must be used. 1-3/4" OD x .095" tubing must be used.
2. Rear upright support bars extending through the rear window may not extend rearward more than 18" past the centerline of the rear axle.
3. A front hoop may be incorporated but may not extend past any body lines or the grille area. Front hoop must be in board of the front tires.
4. Side bars are compulsory. A minimum of 4 bars on the left side and 3 bars on the right side must extend into the doors within 1" from the outside door panel. All other roll cage bars must be within 3" of the body measured from the centerline of the tubing.
5. Top door bars must be within one (1) inch of the top of door panel with the remaining bars equally spaced to the frame.
6. Frame brackets made from adequate material may be added and gusseted to the outside of the frame rails to provide vertical mounts for roll cage upright tubes. Behind rear wheels any rear hoop must be in line with the frame. No excessive reinforcement in the rear area of the truck.
7. Body support bars are permitted however all support bars must  $\frac{3}{4}$ " in diameter or less, and must be attached to either of the hoops in such a manner to provide only support and not additional strength. All support bars outside of the front and/or rear hoops are subject to the approval of the tech committee and any bar deemed to be that of a "rub bar" must be removed.

8. All roll bars must be constructed of 1 3/4 X 0.95 magnetic steel.
9. A rear lower crash bar should be installed under the rear bumper to stop a car from driving under the rear and reaching the rear shackles.

## 15. Safety:

### 1. Fire Control:

- a. Race cars must have an approved fire extinguisher, with a recharge slip dated back no older than January of the current race season.
- b. Fire extinguisher must be mounted on the right side and within reach of the driver when seat belts are fastened, and in an approved mounting bracket.
- c. On-board fire suppression system highly recommended

2. **Helmet & Driver Apparel:** Drivers are required to wear full coverage; one or two piece Nomex multi-layered fire suits which are S.F.I. rated. Fire retardant undergarments are mandatory with a single-layered suit. Fire retardant gloves and shoes are mandatory. Drivers are required to wear a full face helmet that conforms to Snell SA2015 or higher SA standards and have a certification sticker visible inside the helmet. Head/Neck Restraint highly recommended

3. **Belts and Harness:** A quick-release 5-point belt (shoulder and lap) of no less than 2" in width, and 2" width anti-submarine harness in good condition are mandatory. Shoulder harnesses must be mounted and secured at the driver's shoulder height. Belts must be securely fastened to the frame, cross-member or roll cage by means of a suitable reinforced mounting, in such a manner that all fittings are in direct line with the direction of pull. Belts may not be any older than 3 years (manufacturer's date). All belts and mounting will be subject to inspection.

4. **Window Net:** An approved nylon ribbon type net must be installed in the driver's side window opening. Net sizing must be at least 16" x 18". Net must be installed so it is tight. Window net anchors must be attached to roll bars, not body. Window net must be quick-release type. Net must be permanently anchored at the bottom and release at the top. Lever-latch releases are highly recommended.

5. **Roll Bar Padding:** All roll bars in driver's area must be covered with approved roll bar padding. No sharp edges, intrusions or bare metal near driver. The definition of all bars is any bar that can be touched by any extremity while sitting in the seat.

### 6. Seats and Headrest:

- a. Approved aluminum bucket seat is mandatory. NO home-made seats allowed. Seats must be bolted or secured solid so that the seat will not shift or loosen on impact.

- b. All retainer bolts (minimum of 6) must be min. 3/8".
- c. Seat must completely to the left of the centerline of the car and inside the frame rail.
- d. An approved padded headrest is mandatory and must be securely mounted.
- e. Head and shoulder containment seat highly recommended.
- f. Any driver under 18 years of age MUST use an approved Head/Neck Restraint system.

#### **16. Steering Wheel & Column:**

- 1. Steering shaft must have a minimum of two (2) u-joints phased and installed properly.
- 2. Collapsible column section is highly recommended.
- 3. Steering wheel must use an approved quick-release mechanism and must have a steering wheel pad installed.

#### **17. Tires:**

See "TIRE PROGRAM IN RULE BOOK"

All tires are subject to approval of official in charge.

- 1. No altering tire compound or softness.

#### **18. Wheels:**

- 1. 15" diameter wheels. Maximum width is measured from bead seat to bead seat. Rim width is specified in Tire Program Rule book.
- 2. Any offset allowed, Minimum offset allowed is 3" and maximum is 5"
- 3. Maximum of one half inch spacer is allowed per wheel.
- 4. Racing wheels are allowed providing the shell thickness is .125" minimum.

### **Weights/Heights**

#### **19. WEIGHT**

- 1. Truck will be weighed with the driver sitting in the driver's seat.
- 2. Lead ballast weight added must be double-bolted, painted white in block form and weigh no less than 10 lbs. Truck number to be clearly marked on each piece. No weights to be mounted lower than the lower frame rail. No water, gas, and/or oil will be allowed to be added to a vehicle after an event to make the minimum weight.
- 3. Any weight added to the truck behind the rear axle assembly shall be bolted to or encased in the stock frame(see definition of stock), mounted no lower than the top of the rear axle tube, and no closer to the innermost position of

the rear bumper by 12" ( twelve inches).

4. If stacked or bolted weight exceeds 30lbs it must be bolted to and contained in an approved weight tray.
5. Maximum total rear weight 48%.

	<b>Standard Transmission (total)</b>	<b>Automatic Transmission (total)</b>	<b>Left Side</b>
<b>Crate Engine</b>	<b>3200 lbs</b>	<b>3200 lbs</b>	<b>55 %</b>
<b>Built Engine</b>	<b>3300 lbs</b>	<b>3300 lbs</b>	<b>54 %</b>

## **20. Heights:**

1. Minimum ground clearance on any part of the vehicle is 5 inches, excluding the tires. One crew member will be allowed one lift maximum in order to pass the minimum height rule after an event. ONE LIFT ONLY !
2. Minimum roof height of 62 inches when measured 10" inches back from the windshield, and 10" inches from each door sill. The lowest point of the roof shall be the spot for the official roof height to be recorded. Roof heights will be measured with the tires at minimum 20lbs.
3. Roof contour may not be altered to meet minimum height.
4. All ground clearances and roof heights are measured with the driver in the vehicle and tires pressures set at a minimum of 20lbs.

## **21. Engine Mounting/Location:**

1. Engine must be stock V8 or approved location.
2. Engine mounts may be stock-type solid mounts.
3. A minimum crankshaft height will apply (will be higher than 12 inches).
4. **GM Trucks – 2000 & Later – Accepted Modifications Engine Location.**
  - A. Number 1 spark plug in line with the ball joint.

## **22. WHEELBASE -TRACK WIDTH.**

All trucks must retain the stock wheelbase and tread width for the body used, as per manufacturer's nominal specifications. Variance may not exceed one inch (1") on wheelbase. Rear tread width must be within ½ inch of front tread width (wheel spacers may be used to obtain proper tread width) Maximum tread width measured at the bulge of the tire at 20 pounds with zero toe is 72 inches. **(possible adjustment)**

## **Engine/Drivetrain,etc**

## **23. Carburetor:**



One Holley 500 CFM Two Barrel Part #0-4412-S or HP equivalent. Main metering jets and power valve may be changed for tuning. Choke components may be removed. Accelerator pump discharge nozzles may be changes utilizing straight type only. NO other modifications may be made and all parts are to remain stock. No grinding, cutting, polishing, acid dipping or modifying of parts. Carburetor subject to "go, no go" gauge test.

1. No screens allowed in and or under the carburetor. No altering of the intake manifold with respect to the fuel atomization is allowed.
2. Two throttle returns springs mandatory. One spring pulling in each direction.
3. CARBURETOR ADAPTER: Adapter May only use two 1/8" maximum gaskets The adapter to be used is Canton Racing Products part #85-060 or #85-060A or, Bicknell #BRP375 or Wilson #041111). No tapered bore adapters.

#### **24. Cooling system:**

1. Radiators must be in stock location. Aluminum radiators allowed.
2. Large rads are permissible only if they are safely installed in a rad cradle.
3. Rad must include liquid overflow container minimum of 1 liter mounted ahead of the engine firewall. WATER ONLY permitted in cooling system.
4. The overflow tube must exit the body at the base of the windshield.
5. WATER PUMP -- Stock O.E.M. water pumps only. All GM engines must use a cast iron water pump. NO antifreeze allowed in the cooling system.
6. Must use stock-type v-belt drive. Stock serpentine belts are allowed. No aftermarket serpentine belts allowed. SEE STOCK DEFINITION FOR FURTHER CLARIFICATION.
7. Electric fans optional with wiring exposed for inspection.

#### **25. Clutch and Flywheel:**

1. Stock O.E.M. type friction disc steel clutch units utilizing dampening springs only.
2. NO triple disc, NO double disc.
3. NO extensively modified stock units allowed.
4. NO turned, NO drilled, NO aluminum, NO special speed equipment flywheels permitted.
5. Clutch disc diameter minimum 10 inches. If hydraulic clutch is utilized only one slave cylinder is allowed.
6. Flywheel may not weigh less than 13 lbs. Clutch and pressure plate assembly may not weigh less than 17 lbs.
7. Must have an NHRA steel bellhousing, Sema 6.1 flywheel shield or scatter shield of 1/4" magnetic steel.

8. An inspection hole of no less than one (1") inch in diameter must be drilled in the bellhousing to allow for flywheel and clutch assembly inspection.

**26. Driveline:**

1. Drive shaft and universals MUST be stock steel standard production.
2. Steel, 360-degree retainer loops, 1/4 inch thick x 2 inches wide, must be positioned at the front and rear of shaft, and within 12 inches of each U- joint.
3. Drive shaft must be painted white.
4. Minimum driveshaft OD is 3 inches.
5. All driveshafts must be constructed of magnetic steel.
6. No light weight material allowed.

**27. Exhaust System:**

1. Only stock, cast iron or approved manifolds maximum outlet diameter 2-1/2" permitted / headers allowed. (short OE style or same as super stock)
2. Exhaust pipes must extend back under truck, and exit behind driver and outside of sheet metal and away from fuel tank.
3. Exhausts system will be a minimum of 2 ¼" or a maximum of 2 ½" and will consist of 2 exhaust pipes, 2 mufflers and one or 2 tail pipes. If other than 2 ¼ OD pipe is used front to back then a minimum of 2 feet of 2" OD exhaust pipe is required to be installed between the header and muffler inlet.
4. Balance tube between exhaust pipes is optional.
5. A decibel reading of 92 or less at a 100 foot distance will be strictly enforced.
6. Any transition pieces must be immediate (within 6 inches of exiting or entering component). No tapered reducers allowed. No merge collectors or "X" pipes.

**28. Fuel System:**

1. Stock-appearing mechanical pump only. Absolutely no electric fuel pumps. No plastic or glass fuel filters allowed.
2. The gasoline shall not be blended with alcohols, ethers, or other oxygenates and it shall not be blended with aniline or its derivatives, nitro compounds or other nitrogen containing compounds. Unleaded fuel only. 5.0% oxygen content Max.
3. Safety cell mandatory, and the cell must be contained in a magnetic steel container constructed of no less than 22 gauge magnetic steel.
4. Must be located between the frame rails between the rear of cab and ahead of the rear axle housing, no lower than the bottom of the side frame rail.
5. Only high pressure neoprene line and or braided/kevlar fuel line will be allowed.
6. Line must run through cab, and must run through a steel conduit. This conduit shall be painted a contrasting colour of the car, and will extend beyond each firewall by two (2) inches. The conduit in addition to the colour will also be labeled " **FUEL LINE DO NOT CUT**"
7. In-Line fuel Safety Check Valve MANDATORY. Ex. Part # OBERG

FILTERS SV-0828 FUEL SAFETY CHECK VALVE.

**29. Ignition System:**

***Any tampering, alterations, or violations with respect to the ignition box and related components will result in severe penalties from Delaware Speedway. All penalties will be at the discretion of Delaware Speedway officials. The tampered components, 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. The speedway reserves the right to destroy all tampered with parts.***

1. Car must be self-starting.
2. Ignition "on/off" switch must be mounted in the centerline of the vehicle and clearly labeled in such a manner that the engine can be turned off from outside of vehicle in the event of an emergency.
3. The only switches allowed are:
  - a. Master on/off mounted in the centre of the car.
  - b. Push button start switch.
  - c. Ignition power other than master on/off. If an electric fan is used one additional two pole switch is allowed.
4. All cars must have MSD soft touch rev control part #8728 installed on right- hand side of dash, out of the driver's reach within 6" of right-hand A-post bar. An operational 6000 rpm chip must be installed on all crate engines and 5800 on all built engines. All MSD and ignition wiring to remain open and clearly visible for inspection.
5. GM weather pack connector must be installed within 6" (six inches) of the MSD box.
6. Stock-type distributor & module for make and model or GM HEI-type distributor from DUI optional.
7. All vehicles will operate using a conventional twelve (12V) volt electrical system
8. No other electrical devices are allowed anywhere on the vehicle.
9. If an alternator is used, it must be engine driven, and mounted on the front of the engine.

**30. Rear Axle Assembly:**

1. Wheel bolt pattern must be the same as front end.
2. No locker type rear axles.
3. No light weight components allowed.
4. No Cambered rear ends allowed.
5. Integral type rear end with horseshoe clips holding the axles in may be tack welded to prevent fall out. C clip eliminator kit may be used on rear axle assembly.

6. A 9" in. floater rear end complete with disc brakes will be allowed. When the floater is used minimum of .810" brake rotors must be used.
7. Full spool only. Max 6 holes permitted in spool housing (excluding ring gear bolts holes) Magnetic steel only. No scalloped spools.

EX. Strange Engineering D1552



### **31. Transmission (Automatic):**

Modifications to shifting patterns are permitted, provided full shift pattern is retained. Scatter shield is highly recommended with automatic transmission.

1. Stock-type working torque converter must be retained, and will measure a minimum 10 inches to a maximum of 12".
2. Must have approved shifter (NO RODS).
3. Transmission oil coolers are mandatory but must not be mounted inside the driver's compartment and must be contained inside the body of the truck.
4. NO lockup torque converters, electronic or hydraulically operated.
5. NO overdrive or automatic overdrive transmissions allowed.
6. Transmission must be 2 or 3 speed automatic only.
7. A torque converter stall test to check torque converter will be performed in forward and reverse gears.
8. Minimum torque converter weight of 28 lbs wet applies

### **32. Transmission (Manual):**

Transmission must be manual transmission (Stock), 3 or 4 speed. All gears must be operational, including reverse.

1. Transmission must be stock with no internal lightening of parts, not altering of shift patterns and or ratios, and original brass synchros must be installed.

### **ENGINE OPTIONS:**

***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. The speedway reserves the right to destroy all tampered with parts***

**33. Option A: GM "602" Crate Engine:**

1. GM 602 may be used in any approved make or model of car in competition. If at any time when the engine is being repaired and or the oil pan is removed an inspection plug of 1 ¼" must be installed prior to the engine being re-sealed either by an approved Delaware speedway vendor or the Speedway itself.
2. Only approved, sealed, unaltered engines.
3. No changes, substitutions or modifications to engine.
4. All Chevrolet crate engines to be purchased from dealer approved by Delaware Speedway.
5. New and repaired crate engines must be sealed by a Delaware Speedway approved engine builder.
6. It is the competitor's responsibility to have paperwork of where the engine was purchased and competitors will be held accountable for alterations to engine.
7. Approved engine part replacement: A double roller timing chain set may be installed by an approved Delaware Speedway Engine repair facility. The timing chain set must be installed to factory timing settings. Engine must be sealed by Delaware Speedway approved engine repair facility. Engine seals must be obtained from Tech Director.

**34. Option B: Built Engine:**

1. No interchange of engine between makes (i.e., must be a Ford engine in Ford, Chev in Chev and Dodge in Dodge etc.).

<b>MAKE OF CAR</b>	<b>ENGINE</b>	<b>MAXIMUM OVERBORE</b>	<b>MAXIMUM DISPLACEMENT</b>
Chev	350 Cu In	.045	358 Cu In
Dodge	360 Cu In	.045	368 Cu In
Ford	351 Cu In	.045	360 Cu In

**34.1 Cylinder Block:**

1. All engine blocks must be product of the manufacturer of the make for the engine being used in competition. Aftermarket engine blocks will not be permitted.
2. The engine block must retain all engine dimensions with the exception of the maximum allowable overbore and the surfacing of the engine block deck.

3. Angle cutting of the engine block will not be permitted.
4. Aluminum blocks will not be permitted.
5. Only iron cylinder sleeves may be used to repair.
6. Must maintain stock lifter bore: Dodge .904 inch, Ford .875 inch, Chevrolet .842 inch.
7. Repair sleeving of lifter bores permitted to a maximum of 4.
8. Deburring of block permitted. Excessive grinding, lightening, polishing, painting or coating internally, screening or vent stacking is not allowed.
9. Crankshaft must be stock OEM-type. Must have factory I.D. numbers that are legible through inspection hole in oil pan (except Chrysler). Only standard magnetic steel or cast-iron production design crankshafts will be permitted. No lightening, knife edging or polishing allowed. Balancing okay.
10. Harmonic balancer stock iron elastomer-type only. No aftermarket or aluminum. Must maintain stock dimensions and weight.
11. Connecting rods. Stock-type I-Beam rods only of stock length for manufacturer: General Motors 5.7 inches, Ford 5.956 inches, Chrysler 6.125 inches. Must be magnetic steel, iron or powdered metal. No titanium, aluminum, stainless or exotics.
12. Must use OE-type insert bearings. No rollers.
13. Piston. Stock-type or flat-top three ring pistons with all rings in place. Must use stock pin and mounting (i.e., pressed fit if equipped). Must not protrude through deck.
14. Head Gasket: Any composite gasket allowed. **MUST MAINTAIN 9 .5:1 COMPRESSION RATIO MAXIMUM.** To be determined by tech officials.

### **34.2 Camshaft:**

1. Mandatory flat tappet hydraulic camshafts. Maximum valve lift .500 inch measured at valve with zero lash.
2. No mushroom lifters. No rocker rollers.
3. Must use stock-type timing chain and gears.
4. Must use manufacturer's firing order.

### **34.3 Cylinder Heads:**

1. Only stock O.E.M. cast iron heads allowed. Absolutely no deburring, grinding, acid dipping, acid porting or polishing of intake or exhaust ports allowed.
2. Must use 11/32" stem. No undercut valves. No hollow valves. No titanium. No Sodium.
3. Maximum valve size: General Motors 1.94" intake and 1.50" exhaust, Ford and Chrysler 1.94" intake and 1.60" exhaust
4. Must use OE-type valve spring and retainers. Maximum diameter 1.255" for standard spring 1.310 for beehive spring).
5. Stock rockers, pushrods and valve train to be used. Guide plates on Ford and

GM optional. Shafts mandatory on Chrysler. No aluminum, titanium exotic metals allowed.

6. Ford may use Windsor Jr. 180 #053030 or stock iron heads.
7. No GM camelback or angle plug heads. No aluminum heads. GM MAY USE ENGINEQUEST CH350C OR RHS 12407 or Dart Iron Eagle S/S165.

#### **34.4 Intake Manifold:**

1. Chevrolet engines must use Edelbrock part#7101 or #7116 or GM part # 12366573 or STOCK cast iron 2BBL intake manifold (NO marine intake manifolds)
2. Dodge Engines must use Edelbrock part # 7176 or mopar part #P4876335 or STOCK cast iron intake manifold
3. Ford engines must use Edelbrock part# 7181 or STOCK cast iron intake manifold
4. Manifold must remain stock and unaltered. No port matching, grinding, acid dipping or porting.
5. Two adjacent intake bolts on each side of manifold must be drilled for sealing.
6. No foreign materials allowed that will alter the atomization of the fuel.

#### **34.5 Oil Pan:**

1. Option 1: Any O.E.M. factory production oil pan permitted. No altering of stock oil pan permitted. Windage tray may be used. Oil filter must be directly attached to block. Minimum ground clearance must be retained.
2. Option 2: Aftermarket racing-type kickout oil pan permitted. The oil pan must be wet-sump type and must be manufactured using a production-type pan with only a wet sump reservoir added to the bottom. All bolt holes and bolt hole flanges must be visible. Kickouts will not be permitted between the bolt-on flanges and the top of the added sump. Spacers other than sealing gaskets will not be permitted between the oil pan side rails and the engine block surface. Must be made of magnetic steel only.
3. 1-1/4"-inch NPT inspection hole mandatory or oil pan may be subject to removal for inspection. Inspection hole must be located so crankshaft numbers can be inspected.

**NOTE: Interpretation of these rules will be solely up to the judgment of the officials in charge of the area in question. DELAWARE SPEEDWAY reserves the right to impound non-complying components with no compensation to the owner(s). Noncompliance with the specifications outlined herein may subject violating teams to disqualification, loss of points and moneys and/or fine.**

**NOTE: IF IT DOESN'T SAY YOU CAN DO IT, ASK THE TECH DIRECTOR  
ALL DECISIONS BY PIT STEWARDS, CHIEF TECHNICAL INSPECTOR OR  
DELAWARE SPEEDWAY EXECUTIVE COMMITTEE MEMBERS WILL BE FINAL.  
ALL RULES SUBJECT TO INTERPRETATION BY DELAWARE SPEEDWAY**

**OFFICIALS. RULE BOOKS WILL BE ISSUED TO MEMBERS. ALL EQUIPMENT NOT GOVERNED BY THE AFOREMENTIONED RULES ARE TO BE SUBMITTED TO DELAWARE SPEEDWAY, NOT LESS THAN 30 DAYS PRIOR TO THE DATE OF INTENDED USAGE. NO EQUIPMENT WILL BE CONSIDERED APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION UNOBSERVED. RULES APPLY TO ALL RACE EVENTS.**

**DELAWARE SPEEDWAY RESERVES THE RIGHT TO CHANGE ANY RULES**

**For all tech related questions, please contact Darryl Timmermans –  
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