

25-MAY-11



2011
RULE BOOK
LATE MODEL

www.delawarespeedway.com

LATE MODEL DIVISION RULES

Only approved sedans are eligible for use. Engine MUST correspond with body used. e.g. GM to GM, with the exception that Chev crate engine can be used with any body style.

Approved Models (ABC Bodies):
Chevrolet Monte Carlo/ Impala SS
Pontiac Grand Prix
Ford Taurus & Fusion
Dodge Charger
Toyota Camry

NO CARBON FIBER OR TITANIUM ANYWHERE ON THE RACE CAR.

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

CAR MAKE AND CORRESPONDING WHEELBASE

ABC Body 105" minimum wheelbase

All vehicles will conform to the ABC body rules and templates. Vehicle roof height will be measured with the driver in the vehicle, and minimum tolerances will be enforced both before and after events. Tire pressure will be set at 20lbs for roof height measurement.

LATE MODEL CLASS REQUIREMENT

1. AIR CLEANER

1. Filter element diameter 14" maximum, height maximum 4-1/2".
2. All air shall be filtered through element. Top of air cleaner must be solid, no holes.
3. Cowl induction will be acceptable, the front of the cowl must seal to the back of the hood when the hood closes. A rectangular opening maximum 20 inches long by 3 inches wide may be removed from the sheet metal at the center of the cowl.
4. No forward mounted air ducting allowed.
5. Air cleaner base must mount directly to carb, a thin gasket will be allowed.
6. NO high velocity or stack type air cleaner assembly.
7. Air cleaner must fit under hood without raising or distorting hood contour.
8. No high performance air flow enhancing air cleaners allowed.

2. APPEARANCE

1. Race cars must be presentable in appearance at all times.
2. Cars that are considered improperly prepared may be rejected by tech committee at any event (NO BATTERED CARS).
3. Corresponding manufacturer's headlight and grill decals mandatory.

3. BATTERY

1. Must be anchored securely and separated from driver by a firewall. Minimum two 5/16" mounting bolts.

4. BELLHOUSING (CLUTCH HOUSING)

1. Approved steel clutch housing mandatory.
2. Starter mounting position must remain same as on standard production bellhousing.
3. Inspection hole must be minimum 2" on bottom of bellhousing.

5. BODY

1. **ABC Body** – As per 2004 and up approved Body Configuration Official rule book.
2. No carbon fiber components
3. 5"X 60" spoiler maximum as per ABC rules.

6. BRAKES

1. Brakes may be single piston caliper (piston must be magnetic steel), and all four must be in good working order.
2. Front brake rotors must be a minimum of 1 ¼-inch thick and made of magnetic steel.
3. Rear brake rotors must be a minimum of ¾-inch thick and made of steel.
4. Dual master cylinders and brake pedal of any type permitted.
5. Adjustable balance bar that is adjustable from driver's seat is permitted.
6. No holes allowed in brake rotor and pad surface.
7. No brake returns or coolers allowed. No floating rotors allowed.
8. Four piston calipers allowed, max \$400.00 Cdn per wheel however a weight penalty will apply.

7. CHASSIS

1. **Options on front clip:** Approved front fabricated frame sections. Fabricated (tube clip with 1971 to 1981 Camaro lower pickup points and or conventional late model strut type front fabricated frame sections are allowed.
2. **Underslung-style chassis** Perimeter chassis. Zero offset. Upper and lower A-arm configuration. Front clip and main frame 2" x 3" x .095" minimum. Chassis width 60" maximum, 54" minimum. Rear clip 2" x 3" x .083" minimum. Four-point roll cage 1-3/4" x .095" DOM minimum. Minimum cage height 40" from the bottom of the rail to the top of the cage. Minimum four left-side horizontal door bars. Minimum height 22" to top of frame. Minimum length for door bars 42" centre to centre. Door bars to be plated with minimum 16 gauge metal. Width of halo to be no less than 46" outside to outside. Length of halo to be 30" minimum. Leg protection bar mandatory. Roll cage structure shall be braced to front frame stub with a hoop section surrounding the engine compartment, and rearward with diagonal members connecting to rear frame section.
3. Driver to be protected from left-rear trailing arm intrusion by 1/8" plate, 12" x 12".
4. Chassis will be subject to Delaware Speedway certification.

8. SUSPENSION

1. Front Upper Control Arms: Any stock or aftermarket tubular Upper Control Arms. Magnetic steel only.
2. Lower Front Control Arms: O.E.M. type or approved tubular steel aftermarket control arms accepted. Left lower control arms may be modified/shortened by 1-1/2 inch maximum. All control arms and mounting hardware must be steel.
3. Rear Control Arms: Must be maximum of 30" from mounting hole centre to mounting hole centre. Steel solid rod ends, rubber bushing style or steel heim ends allowed. No hydraulic or spring devices allowed.
4. Upper Rear End Link: Maximum length 30" mounting hole centre to mounting hole centre. No coil, spring or hydraulic device allowed. Steel heim ends allowed. Approved damper device allowed (9010 shock).
5. **Springs:** Aftermarket coils permitted front & rear. Non-metallic spring spacers are allowed between coil windings. Magnetic steel springs only.
6. **Sway Bars/Panhard Bar:** Sway bars and panhard bars front and rear are optional and may be equipped with steel heim-ends at the connecting points.

7. **Shocks:** Only one shock per corner permitted. Approved steel-bodied gas race shocks only. Retail value \$150 CDN maximum per shock. No external adjustments, remote, air or aluminum shocks. No dynoing or rebuilding at the speedway without the express written consent of Race Director.
8. **Bump stops of any kind will not be allowed:** External or internal shock bumpers will not be allowed. No chassis bump stops allowed. Violation will result in fine and loss of championship points.
9. **Steering and Hubs:** Steering components, steering box and spindles must be magnetic steel (NO ALUMINUM SPINDLES ALLOWED). Steel Steering arms only. Hubs with a 5 x 5" bolt pattern. Wide five hub optional. Stock or aftermarket. Rack and pinion steering allowed. Any magnetic steel spindle allowed. Wheel stud threads must protrude through magnetic wheel nut. MAGNETIC Steel heim ends must be used for tie rods (5/8-inch minimum).
10. **Towing Loops:** Each rear frame rail must have a 3" inside diameter tow loop (strong enough to lift the car) securely fastened as far rearward as possible extending above the trunk floor.

9. CLUTCH AND FLYWHEEL

1. Crate and spec engines may use either a stock-type clutch with minimum 13 lb flywheel with a minimum 9 inch diameter single friction disc and pressure plate.
2. May also use a **triple** disc of a 5.5 inch minimum diameter and flex plate or a **twin** disc of minimum 7.25 inch diameter.
3. All cars must have magnetic steel bellhousing and starter in stock location.
4. No carbon fiber or extensively modified units.

10. COOLING SYSTEM

1. Radiator must remain stock in appearance and remain in standard position.
2. Radiator dust screens permitted.
3. Radiator must include liquid over flow can (minimum capacity 1 liter) mounted ahead of engine firewall.
4. Over flow vent must exit the vehicle at the base of the windshield
5. Fan shroud cannot extend more than 1" behind blades.
6. No anti freeze allowed in the cooling system.

11. DRIVE LINE

1. Drive shaft and universals must be similar to standard production type.
2. Steel, 360-degree retainer loops, 1/4 inch thick by 2 inches wide, must be positioned at the front and rear of shaft, and within 12 inches of each U-joint.
3. Aluminum or fiber drive shafts are prohibited.
4. Magnetic steel drive shaft must be painted white.

12. ENGINE

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

WHEELBASE
105"

MAKE
All

ENGINE LOCATION
Number one spark plug in line with the upper ball joint

1. IF ENGINE IS SET BACK MINIMUM ½" TO A MAX 4" ADD 25LBS TO TOTAL WEIGHT
2. Engine height minimum 11.5" measured from the ground to the centerline of crankshaft with frame set at 4". The centre of the crankshaft must be within 1/2" of the centerline of the chassis.

13. EXHAUST SYSTEM

- A) Under chassis or cross over headers allowed 180 degree type headers are disallowed. (Primary tubes crossing over to opposite collector.) Maximum primary tube size of 1 3/4" and maximum 3" collector allowed. Crate iron lung magnetic steel headers allowed. Only 1 maximum 3" balance tube between the right and left header system is allowed. (*Magnaflow Cross over Part #10792 approved*). Exhaust system must exit the right-hand side of the car in front of rear wheels. Must not be any higher than 12" from the ground and must not be any farther forward than 30" from the centre of the rear axle. Magnetic steel only (no stainless).
- B) MUFFLERS: mufflers must be removable for inspection, and must remain unaltered in appearance. A decibel reading of 92db or less at 100 feet will be enforced.

14. FUEL

1. Delaware Speedway approved pump gas only. No additives. Fuel will be subject to testing.

15. FUEL CELL

1. Bladder-type cell mandatory.
2. 22 U.S. gallons maximum size allowed.
3. Fuel cell is to be mounted in the trunk area behind firewall area between the frame rails.
4. The fuel cell and or cell guard will be no lower than 10" from the ground while at the minimum frame height.
5. Fuel cell must be complete with safety flap foam and check vent assembly vented to the outside of the car.
6. A minimum of 22 gauge magnetic steel is to be used for Fuel Cell case.
7. Dry break system allowed. If used, filler system to be located on the left side rear quarter panel behind the rear wheel FIRMLY supported from within.
8. Filler and vent system tubing to be the shortest distance between the filler cap and the cell.
9. Filler cap assemblies must be grounded to the chassis for the prevention of static build-up.
10. Max 11 gal approved refueling container allowed.

16. FUEL LINE

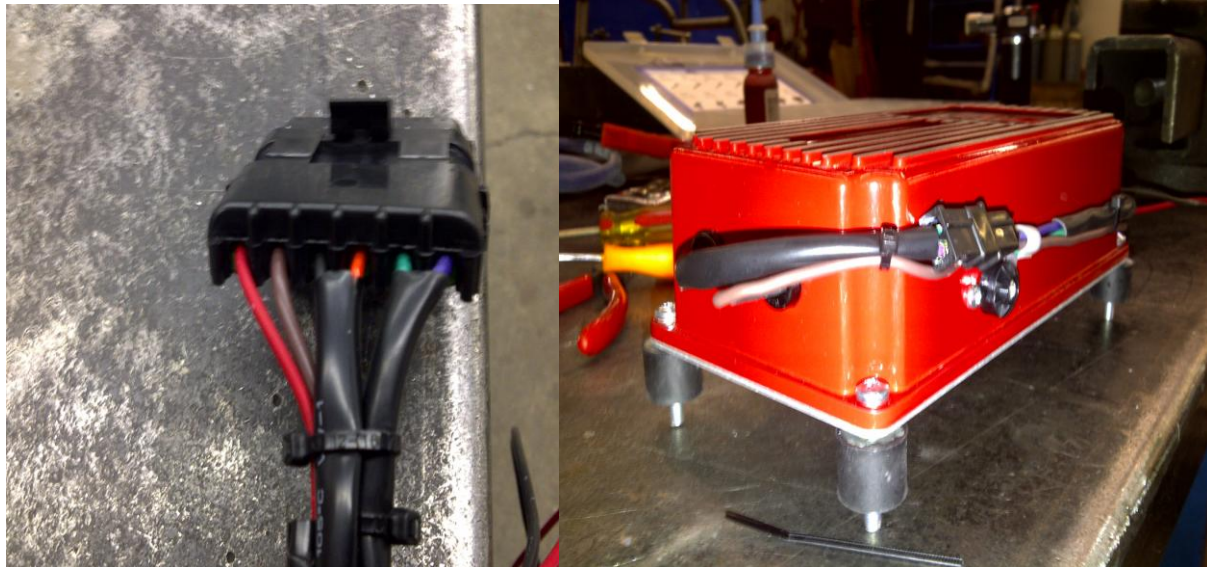
1. Must be a single AN-8 Max Armored/Kevlar Hose.
2. Line must run through cab and must run through a steel tube and painted either yellow or red in direct contrast to the colour of the car. The conduit will extend at least 2 inches beyond each firewall.
3. The conduit in the car in addition to being painted in the contrasting colour will also be labeled" Fuel line, Do Not Cut".

17. IGNITION

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 (d) fan switch (if so equipped with an electrical fan)(e) one accessory switch which must be identified.
4. All cars must have MSD 6AL or 6ALN mounted on the right side of the dash within 6" (six inches) of the 'A' post. The operational rev chip must be accessible through the passenger window
5. **All MSD wiring to remain open for inspection. All wiring must use weather pak connector 6 and 2 pin at msd box, and 2 pin at the distributor. Male connectors are required on the box and distributor. 4 pin connector required and must be accessible on the rear of the tachometer See pictures and notes below.**
6. All spec engine cars will have a 7000 rev chip installed.
7. All crate engines will have a 6400 rev chip installed.
8. Only one (1) MSD box, one coil, and one wiring harness per vehicle.
9. All MSD boxes must have a plug in type rev chip, and be accessible through the right window of the car.
10. Stock-type distributor & module for make and model or GM HEI-type distributor from DUI optional or stock type MSD distributor.
11. No other electrical devices are allowed anywhere on the vehicle.

12. All 6AL wiring to be standard:

- a. Red wire/ ignition switch
- b. Use a brown wire/ tach output
- c. Black wire/ coil negative
- d. Orange wire/ coil positive
- e. Green wire/ dist. Negative
- f. Purple wire/ dist. Positive
- g. Connectors to be within 12 inches of the 6AL or 6ALN box.
- h. Battery pos. and neg. may be hard wired to master disconnect and chassis ground



18. INTERIOR

1. Sheet metal surrounding driver must be 22-gauge magnetic steel, including front firewall. Right-side floor, front dash, rear package tray and crush panels can be minimum .045" aluminum. Interior must be complete with no visible holes.
2. **Dash:** Car must have a fabricated full dash from left to right. All gauges must be installed directly in front of driver and on a vertical plane of dash. No part of dash shall continue to floor panel.
3. **Steering Wheel:** Removable racing steering wheel with quick release metal hub is mandatory. Steering wheel pad mandatory. Collapsible column recommended.
4. **Shifter:** Conventional-type shifter or rods. Shifter must have boot or cover at all times. Shifter boot must have a wire wrap sealing the top of the boot to the shifter.
5. **Seat:** Approved aluminum containment seat mandatory. Aluminum seats must be bolted or secured solid, so that seat will not shift or loosen on impact. A minimum 6 seat bolts, min .3/8 inch or larger will anchor the seat. Seat must be completely to the left of the centerline of the car and inside frame.

19. Mirror:

1. 3" X 14" mirror mounted in the stock location is permitted. In addition to the larger mirror, an optional left side mirror that is no larger than 4" may be installed.
2. The left side mirror may not extend or protrude outside the vehicle.

20. PAINTING AND LETTERING

A) A detailed, professional-quality paint job is mandatory on all cars. Car base colour and number should be of high contrast for maximum number visibility. All body components must be painted with no "patch" panel or unpainted original body material visible.

B) A minimum 20" high, 3" wide number is required on centre of both front doors of car. A 30" high (minimum) 3" wide (minimum) roof number must be read from right side of the car. A number must be placed on the front of the car, below the left headlight cover. All cars are required to have an assigned number; however, Delaware Speedway reserves the right to specify number changes to prevent duplications. Delaware Speedway reserves the right to approve or disapprove commercial or editorial messages appearing on competing cars.

NOTE: Both front fenders and doors of car shall be completely free of lettering, numbers and/or decals. Delaware Speedway retains the right to specify type, size and location of all decals on front fenders and doors (see diagram).

21. RADIOS

1. 2-way radios are mandatory.
2. It is highly recommended that race teams monitor the race control frequency to assist in positioning their cars on the race track, failure to do so may result in forfeit of restart position.
3. All radio frequencies **MUST** be registered with the speedway.

22. REAR AXLE

1. Rear axle ring and pinion may be of any gear ratio. Full floating quick-change or 9-inch permitted. A rear gear rule will be implemented.
2. Rear differential housing must be centered in car. Aftermarket spools are permitted. No cambered rear axle assemblies allowed. No limited slip or posi-traction devices permitted.
3. Magnetic steel axle shaft assemblies only. For inter-track activity, aluminum axle tubes are acceptable.

23. SAFETY

1. **Helmet and Apparel:** Drivers are required to wear full coverage; one or two piece Nomex multi-layered firesuits which are S.F.I. rated. Fire retardant undergarments are mandatory with a single-layered suit. Fire retardant gloves and shoes are mandatory. Driver helmets must conform to Snell SA2005 or higher SA standards and have a certification sticker visible inside the helmet. SA-2010 highly recommended. It is highly recommended that drivers wear eye protection designed for auto racing.
2. **Head and Shoulder Restraint Seat:** Approved head and neck restraint system which meets SFI specification is mandatory.
3. **Belts and Harness:** A quick-release 5-point belt (shoulder and lap) of no less than 3" 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. No inertia reels allowed and under no circumstances are bolts inserted through belt webbing accepted for mounting. Belts may not be any older than 3 years (manufacturer's date). All belts and mounting will be subject to inspection.
4. **Fire Control:** Approved on-board fire systems mandatory. A minimum of a two nozzle system must be used with one optional nozzle under the hood and the other in the greenhouse protecting the driver
5. **Window Net:** An approved nylon mesh net must be installed in 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. Wide mesh nets and lever-latch releases are highly recommended.
6. **Roll Bar Padding:** All roll bars within driver's area must be covered with approved roll bar padding. No sharp edges, intrusions or bare metal near driver.

24. TIRES

1. Only approved tires permitted.
2. Altering tires by treatment (softeners, etc.) is illegal.
3. Durometer and/or other devices will be used to check tires.
4. A fine and loss of tires will result if found illegal.
5. Tire inventory rule will apply as noted below
 - a. All teams registered for the championship will be allowed to submit a starting inventory of 8 tires on opening night. (May 6, 2011)
 - b. Visiting teams and or team on a limited schedule, and teams racing for the first time after opening night will be allowed a starting inventory of 6 tires.
 - c. Teams will be allowed to add one tire for each event they compete in.
 - d. All racing and qualifying is to be done on inventoried tires.
 - e. Only inventoried tires are allowed in the pit area once the race program has begun. Start of the race program shall be defined as the playing of the national anthems.
 - f. Any tire damaged in competition at Delaware speedway where the remaining tread depth is greater than 3/32" may be replaced at the discretion of the technical official in charge.
 - g. All damage claims are to be made immediately after the incident and failure to comply will result in the claim being denied.
 - h. All tire inventory sheets are due prior to the start of the racing program. Failure to submit the paperwork will result in disciplinary action.
 - i. Any tire suspected of malicious damage and or doping will be impounded by the speedway for further testing.
 - j. Any tire deemed suspect shall be confiscated by the speedway and the offending team will face further disciplinary action up to and including suspension.

25. TRACTION CONTROL

1. No traction control devices allowed.
2. No on-board computer analysis or timing equipment at any time during competition.
3. Violators will be suspended

26. TRANSMISSIONS (Manual)

1. Transmission must remain stock appearing O.E.M. 4 speed with all forward gears working as originally produced. No less than 123 third gear ratio
2. Must have reverse gear.
3. Must retain brass synchronizer ring.
4. Two-speed oval track Richmond transmissions allowed (T-10 case). No less than 123 ratio.

27. TRANSMISSIONS (Auto)

1. No Automatic transmissions allowed.

28. WEIGHT & HEIGHTS

1. All cars weight and height to be measure with the driver.

	Weight	Ride Height	Left-Side Weight
Crate Engine (400 hp)	2750 lbs	4"	57%
Built Engine	2825	4"	57%
ASA	2825	4"	57%
ACT	2700 (using act rules)		

2. Handicaps:

- a) Four Piston Calipers add 25lbs
- b) Straight rail chassis add 25lbs and 56% left side weight.
- c) ½ -4" engine set back add 25lbs.

29. Intertrack Competition Weights & Information

Delaware Speedway strongly encourages inter-track competition. For the most updated information on rules and handicaps or if your vehicle type is not listed, contact Race Director *Ron Sheridan* (519) 652-5068 Ext 203. The following weights have been approved to facilitate competitive racing:

1. Cars equipped with straight rail chassis, add 25 lbs total weight. The weight must be mounted on the right side rail and the car will maintain 56% left side weight.
2. Cars equipped with any multi-piston calipers (max 4 pistons), add 25 lbs total weight.
3. Any car equipped with a legal (by Delaware Speedway or home track rulebook) engine setback of .5" to 4" add 25 lbs. to total weight.
4. For Limited Late Model (LLM) Cars equipped with 602 crate & 4v, total weight may be 2625 lbs.
5. For ACT Legal cars with ACT Crate & 4v, total weight may be 2700lbs.
6. For ASA-Type USA Late Models adds 75 pounds total weight.

Allowance of 1% of total weight (i.e. 1% of minimum specified pre-race weight) will be allowed on events of 50 laps or more.

Rear weight may not exceed 50%. Delaware Speedway reserves the right to increase or decrease the weight of the race car to equal competition if necessary.

30. WEIGHT LOCATION

1. Weight must be bolted in no lower than frame rails in block form, no less than 10 lb. pieces.
2. No weight to be added rearward of fuel cell.
3. All ballast weight must be either fastened to or encased within the frame rail.
4. All added weight must be double bolted and painted white, with car number clearly marked on each piece.
5. Loss of add-on weight will result in a severe penalty up to and including expulsion.
6. If stacked or bolted weight exceeds 30 lbs it must be bolted into an approved weight tray.

31. WHEELS

1. No aluminum wheels. 15" diameter steel racing wheels maximum width of 10" measured from bead seat to bead seat will be allowed.
2. Wheel stud threads must protrude through nuts with.
3. Bleeder or pop-off valve devices are not permitted.

32. WHEELBASE-TRACK WIDTH

1. Wheelbase must not exceed 1/2" from one side to the other.
2. Track width 80" maximum (105" wheelbase car) measured from outside to outside of tire sidewall measured at spindle height at 20 lbs. of air pressure.

ENGINE OPTIONS

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33.OPTION 1: CRATE ENGINE

1. Only approved, sealed, unaltered engines. No changes, substitutions or modifications to engine. NO external oil regulators. Only minimum amount of external lines will be allowed.
2. No repair or disassembly of a sealed crate engine is permitted without the written consent of Delaware Speedway Race Director.

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Approved engines are:

400 HP Chevrolet 350/400 Limited Late Model Crate Engine Part # 88958604
ASA Chev crate TBA 2010 (1.6 rocker) sealed crate engine.
ASA Ford Mcgonigle Sealed Crate Engine Part # ASA425LM
ASA Ford 347 Sealed Crate Engine Part # M-6007-D347SR
400 HP Dodge 360 Crate Engine Part # P5007958

Notes:

- Engine parity between makes is currently being investigated.

All three makes to use Holley carburetor Part #80541-1, unaltered as per two-barrel rule. Must have rev chip installed (6,400 rpm maximum).

5.5" minimum clutch disc diameter for all crate engines.

Flex Plate Allowed.

Crate engine must use damper supplied by manufacturer.

34. OPTION 2: SPEC ENGINE

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

MAKE OF CAR	ENGINE	MAXIMUM OVERBORE	MAXIMUM DISPLACEMENT
Chev	350	.060	.360
Dodge	360	.060	.371
Small block Ford	351	.060	.362

A) CYLINDER BLOCK ASSEMBLY (Short 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-type lifter bore. Flat tappet cams only.
7. Repair sleeving of lifter bores permitted.
8. Deburring of block permitted. Excessive grinding, lightening, polishing or coating internally is not allowed.
9. Crankshaft must be stock OEM-type. Only standard magnetic steel or cast-iron production design crankshafts will be permitted. No lightening, knife edging or polishing allowed. Balancing okay. Must maintain stock stroke and dimensions and minimum 50 lb weight. No Honda or exotic journal sizes.
10. Harmonic balancer stock iron elastamer-type or aftermarket. Must be magnetic steel or iron. No aluminum.
11. Connecting rods. Stock-type, I-Beam or H-Beam acceptable. Maximum length for manufacturer: General Motors and Ford 6.0 inches, Chrysler 6.125 inches. Must be magnetic steel, iron or powdered metal. No titanium, aluminum, stainless steel or exotics.
12. Must use insert-type engine bearings only. No rollers.
13. Piston. Stock-type or flat-top three ring pistons with all rings in place. Must not protrude through deck. Only magnetic piston pins maintaining a minimum diameter .927 inch (option for Ford .912 inch minimum) will be permitted.
14. Head Gasket. Any composite gasket allowed. **MUST MAINTAIN 10.5-1 COMPRESSION RATIO MAXIMUM.** To be determined by tech officials.

B) CAMSHAFT

1. Mandatory flat tappet camshafts (no rollers). Maximum valve lift .550 inch measured at valve with zero lash. No mushroom lifters. No rollers. No rev kits. Must use stock-type timing chain and gears.
2. Cams with excessively steep ramping and high overlap will not be allowed.
3. Must use manufacturer's firing order.

C) CARBURETOR

1. 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 changed utilizing straight type only. NO other modifications may be made. Two throttle return springs mandatory. No grinding, cutting, polishing, acid dipping or modifying of parts. Carburetor subject to "go, no go" gauge test.
2. CARBURETOR ADAPTER: Adapter plate and gaskets may not exceed 1-1/4" (i.e. the distance from the bottom of the carburetor to the top of the intake manifold where the carburetor sits no taller than 1-1/4" including gaskets). No modifying or grinding or porting of adapters.

D) CYLINDER HEADS

1. Brodix spec cylinder head. Cylinder head can be purchased complete or bare.
 - i. General Motors 64 cc, part # SP CH Delaware-CN
 - ii. Ford 64 cc part # SP FO Delaware-CN
 - iii. Chrysler 66 cc part # SP MO Delaware-CN
2. Maximum valve spring diameter 1.550 inch.
3. Must use magnetic steel retainers and locks.
4. Maximum valve diameter 2.080" intake and 1.600" exhaust.
5. Chrysler may use shaft-type rockers. General Motors and Ford must use pedestal mount rockers. Roller rockers allowed. No stud girdles.
6. Valve seats and guides are to remain as manufactured and in their cast positions
7. Valve angles are to remain as manufactured within one degree. The original seat centre locations as provided by the head manufacturer may not be altered.
8. No tapering or reshaping of valve guides will be allowed.
9. Valve stem 11/32" only. May have slight undercut (maximum .020"). No hollow, sodium-filled stem valves. No titanium or exotic metals in valve train.
10. Cylinder heads may not be angle milled more than one degree. A minimum combustion chamber volume to be authorized by speedway in the case of a cylinder head repair having to be made.
11. No use of any substance that may change or alter the shape or size of ports or combustion chambers is allowed.
12. Spec cylinder head serial numbers must remain on the head and may not be defaced or altered in any way.
13. ABSOLUTELY NO MODIFICATIONS, GRINDING, PORTING, POLISHING, ACID IN ANY WAY, SHAPE OR FORM WILL BE ALLOWED.

Note: If major cylinder head repair is required (i.e., welding) it must be sent back to Brodix for repair and re-verification.

E) DISTRIBUTOR

1. Option 1: Stock OE-type ignition. Soft touch rev control must be used. Part # 8728
2. Option 2: An MSD-style ignition system will be allowed, however cars must use a single ignition system. Only one ignition box, one coil and one wiring system allowed. All ignition boxes must be mounted in the dashboard area on the right side of the centerline of the car out of reach of the driver. MSD box must be a 6A or 6AL (only one MSD box allowed in car) all MSD boxes must have a plug-in type rev chips and be accessible through right window of car. Delaware Speedway officials reserve the right to exchange any competitor's ignition box at any time.
3. 7000 rev chip (maximum) mandatory for both options.

F) INTAKE MANIFOLD

1. Chevrolet engines may use Edelbrock part #7101 or #7116. Dodge engines may use Edelbrock part #7176 or Mopar #P4876335 or P5007381. Ford engines may use Edelbrock part #7181. Manifold must remain stock and unaltered. No port matching, grinding, acid dipping or porting.
2. Two adjacent intake bolts on each side of manifold must be drilled for sealing.
3. Aftermarket mechanical fuel pump only. Absolutely no electric pumps. No plastic or glass fuel filters allowed.

OIL PAN

1. Oiling system must use internal wet-sump type pump with stock-type drive.
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 crank shaft numbers can be inspected.

H) WATER PUMP

1. Aluminum water pumps are allowed. Must have rubber drive belt. Aftermarket V-Belt pulleys allowed.

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.

DELAWARE SPEEDWAY RESERVES THE RIGHT TO IMPOUND ANY CAR FOR INSPECTION. REFUSAL TO COMPLY WITH REQUEST MAY END IN EXPULSION OF DRIVER AND/OR OWNER, FINE OR PENALTY AND/OR SUSPENSION.

ALL DECISIONS BY PIT STEWARDS, CHIEF TECHNICAL INSPECTOR OR DELAWARE SPEEDWAY EXECUTIVE COMMITTEE MEMBERS WILL BE FINAL.

ALL RULES SUBJECT TO INTERPRETATION BY 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.