

7-JUN-11



2011
RULE BOOK
OPEN-WHEEL MODIFIED

www.delawarespeedway.com

OPEN WHEEL MODIFIED RULES

1.AIR CLEANER

1. Only round air cleaner element. Minimum 12 inches.
2. Maximum 14 inches diameter by a maximum 4.5 inches high will be permitted.
3. All air shall be filtered through element. Top of air cleaner must be solid, no holes. No forward air ducting allowed.
4. Air cleaner base must be mounted directly to carburetor.
5. 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.BATTERY

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

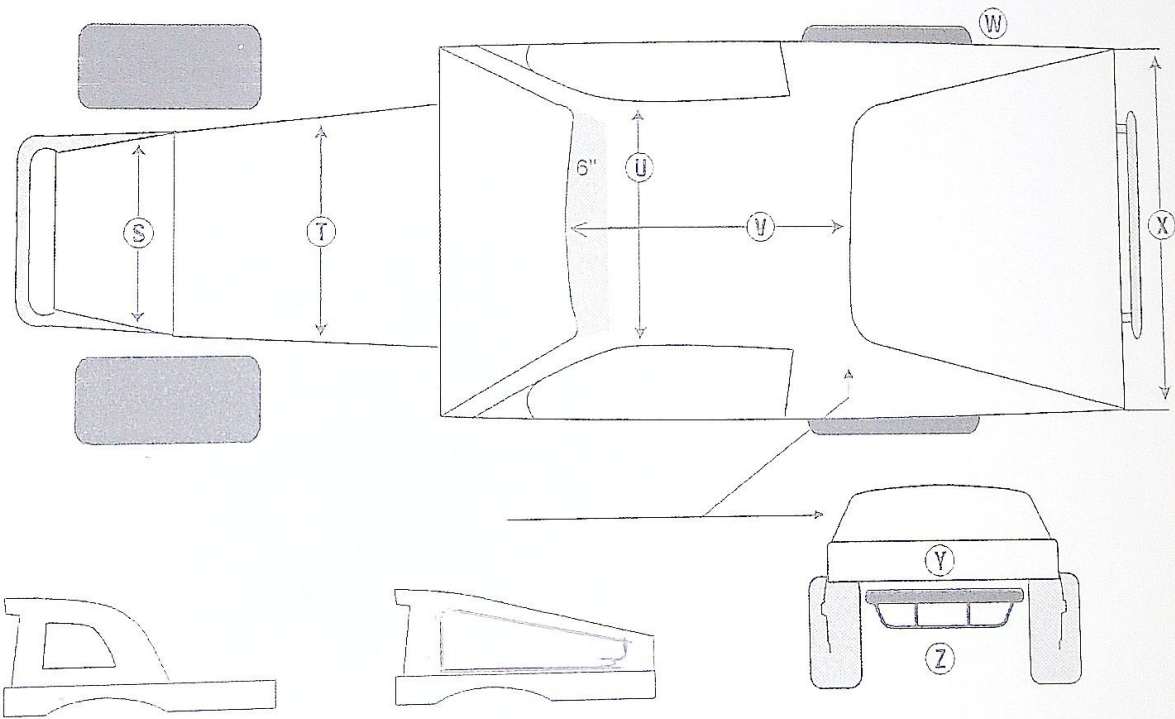
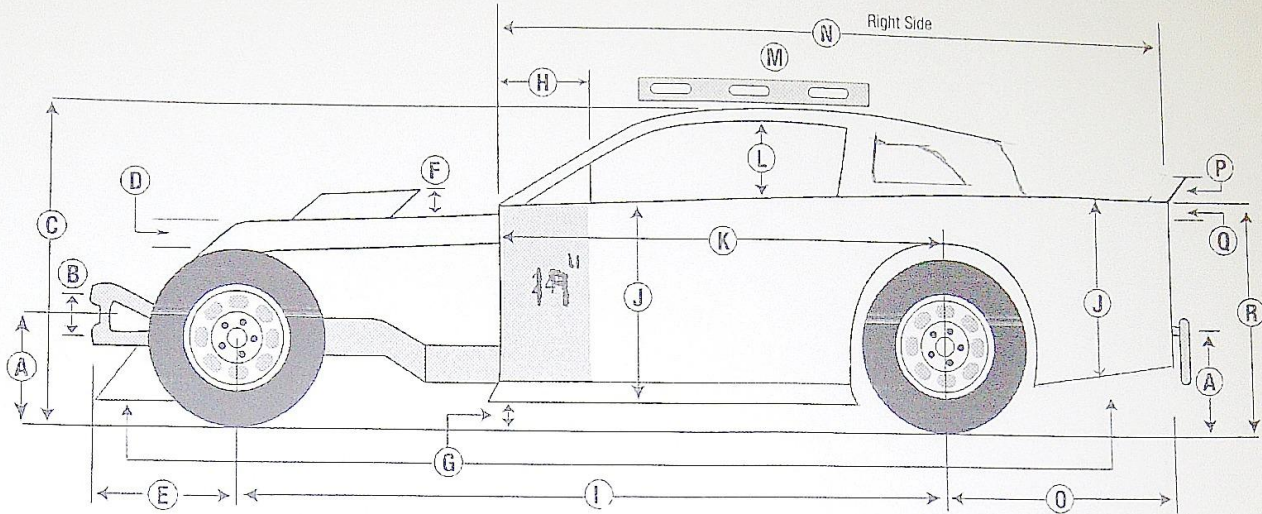
4.BELLHOUSING

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

5.BODY STYLE

1. Body material maybe fiberglass, aluminum, or steel.
2. Sail Panels:
 - a) Approved Larry Knott sail panel with window opening of min 8" by Min 12, attached at rear quarter panel 3" inches above the base of the spoiler. Window opening must remain open.
 - b) Must attach at rear of roof, must run straight down and attach to rear of quarter panel at base of spoiler, must angle inward from quarter panel to roof line. Window opening min 8" high X 20" Long, window opening must remain open.

(see diagram on next page)



- (A) 20" Max. – 16" Min. (Ground to center of bumper front & rear)
- (B) 6.5" Min. (Center to center)
- (C) 52" Max. – 44" Min.
- (D) 4" Max. Hood sides – 3" Max. Rake in hood.
- (E) 42" Max. (Bumper & Nose)
- (F) 6" Max. (Scoop/Deflector)
- (G) 4" Min. (without driver)
- (H) 19" Max. (Same both sides)

- (I) 108"
- (J) 29" Max. – 22" Min.
- (K) 72" Max. Or not past back of block, right side. Left side may extend forward to cover foot box if necessary.
- (L) 18" Max. – 12" Min. Opening, both sides.
- (M) With 4' level, must have 2" gradual clearance at rear and no more than 5" at front
- (N) 120" Max. – 106" Min.
- (O) 45" Max. – 34" Min.
- (P) Refer to sail panel rule as noted above.
- (Q) Interior slope is **6" Maximum**. Front to rear and flat across. If flat at front half of interior you have used up 50% of your 6" so from behind the driver to the rear you only have 3" of slope. Top of interior must be flush with the top of the doors and quarter panels.
- (R) 38" Max. – 32" Min.
- (S) No wider then front fame horns however 24" Min.
- (T) 66" Max. – 24" Min. No narrower than radiator
- (U) 10 sq. feet.
- (V) 10 sq. Feet.
- (W) All tires must be partially or completely outside of the body, and be visable from the front, rear, and top.
- (X) 66" Max. – 53" Min.
- (Y) Minimum 8" panel and must follow contour of rear quarter panel.
- (Z) Aluminum "I" beam or tubular steel rear bumpers allowed must have rounded nerf bars that follow quarter panel and connect back to frame on both sides.

6.BUMPERS

1. May be fabricated. Tubing size 1 1/4" minimum.
2. Bumper must be able to support car when lifted with a wrecker.
3. Bumpers must not be higher than 20 inches to top and not lower than 8 inches.
4. Rear bumpers must be within 2 inches of body and not exceed wheel track width.
5. Front bumper may measure a maximum of 48 inches across the front and must be on center line.
6. Steel flat stock or molded bumpers allowed, maximum 6 inches in height.

7.SIDE NERF BARS

1. May be fabricated from maximum 1 3/4" O.D. round or square tubing.
2. Must not extend past width of tires.
3. Maximum of 2 bars allowed.
4. No plate or channel material allowed.
5. No aluminum allowed.

8.WINDSHIELD

1. Required minimum 1/8 inch thickness of lexan.

2. Minimum of two interior support beams (No Plastic) no more than 1 inch wide and 1 inch deep to follow contour of inside windshield are mandatory.
3. No unapproved markings allowed on windshield.
4. No tinting allowed.

If bullet-style windshield is used, center window bar is required with maximum 2" x 2" steel mesh on right-hand side and hood must be sealed to firewall.

9. BRAKES

1. Brakes must 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 1¼" thick and made of magnetic steel.
3. Rear brake rotors must be a minimum of ¾" thick and made of magnetic steel.
4. Dual master cylinders and brake pedal of any type is permitted.
5. Adjustable balance bar that is adjustable from the driver's seat is allowed.
6. No holes allowed in brake rotor or pad surface.
7. No brake returns or coolers allowed.
8. No floating rotors allowed.

10. CHASSIS AND SUSPENSION

1. Chassis must be fabricated from no less than 3 X 2 by 0.095 box tubing.
2. Chassis built with factory production frames that are at a point no further than 36" (thirty six inches) from the rear end housing may use 2 X 2 box tubing.
3. Minimum chassis width is 46" (forty six inches).
4. Spring adjuster (load bolts) may be incorporated in the chassis.
5. Minimum ground clearance is 4" at the lowest point in the frame, and measured without the driver.
6. Clearance at cross member must be 3-1/2" minimum.
7. Fuel cell container or rear cell guard must maintain a minimum ground clearance of 8" (eight) with the driver at the minimum frame height.
8. An approved tubular front clip is acceptable with 1970-1981 camaro lower arm pick up points.
9. Upper halo must be a minimum of 30" (thirty inches) to a maximum of 40" (forty inches) Halo height is 36" (thirty six inches) plus/minus 1" (one inch)
10. No chassis bump stops allowed.

10-1 Control Arms:

1. Front Upper control Arms: Any stock or aftermarket tubular upper control arm is allowed. Aluminum hex shafts are allowed. Only magnetic steel front upper control arms allowed.
2. Lower front control arms: Approved tubular steel aftermarket control arms accepted. All control arms and mounting hardware must be made of magnetic steel.
3. Rear Control Arms: maximum allowed from mounting hole centre to mounting hole centre is 30". Steel rod ends, rubber bushing style, or steel heim ends allowed. No hydraulic or spring devices allowed.

10-2 Springs:

1. Coil spring suspension permitted on front with coil springs, front minimum five inches, rear minimum four and one half.
2. Coil eliminators are allowed.
3. Aftermarket coils permitted on front and rear.
4. Coil springs must be magnetic steel. Rear suspension may be leaf or coil.
5. Plastic or fiber leaf not permitted.
6. NO COIL OVERS ALLOWED.

10-3Sway Bars:

1. Sway bars front and rear are optional and may be equipped with heim-ends at the connecting points.

10-4Shocks:

1. One shock per corner allowed.
2. Approved steel body race shocks allowed.
3. Retail value of \$150.00 CDN maximum per shock.
4. No external adjustments, no air or aluminum shocks allowed.
5. Dyno and or rebuilding at the speedway without the express written consent of the race director is strictly prohibited.
6. Bump Stops: External and or internal shock bump stops will not be allowed.

NOTE: The use of bump stops be it shock (internal and or external) and or chassis will not be allowed. Violation of this will result in both a fine and the loss of championship points.

10-5 Steering and Hubs:

1. Steering components, steering box, and spindles must be magnetic steel.
2. No aluminum spindles allowed. Only magnetic steel spindles allowed.
3. Steel steering arms only
4. Hubs 5 X 5 bolt pattern.
5. Stock or aftermarket rack and pinion steering allowed.
6. Wheel studs must protrude through nut. Both Stud and wheel nut must be magnetic steel.
7. Magnetic Steel heim ends must be used for tie rod ends. 5/8" inch minimum.

10-6Steering and Hubs (two-piece steel optional):

1. Steering components, steering box and spindles must be O.E.M.-type and in stock locations for frame being used.
2. Centre link to be O.E.M. or approved HOWE Racing Enterprises Part # 23396 or Linken Manufacturing Part # LM105.
3. Aftermarket magnetic steel front spindles of equal kingpin inclination and steering arm lengths optional.
4. Front hubs may be drilled for larger studs or relocated or an approved aftermarket steel hub can be used.
5. Maximum bolt circle 5" by 5".
6. Rack and pinion steering optional.
7. Wheel stud must protrude through wheel nut.
8. Steel heim ends can be used for tie rods.

10-7Upper rear end link:

1. NO coil spring, or hydraulic device allowed.
2. Damper device & mounting of damper will be allowed.
3. May run a separate 9010 rated shock.

11. CLUTCH AND FLYWHEEL

1. Clutch disc minimum diameter is 9"(nine inches)
2. Aluminum pressure plates allowed however must use steel face.
3. Minimum weight of the flywheel will be 13 Lbs (thirteen pounds)
4. When using the 602 crate motor, a 5 ½" clutch is allowed.

12 COOLING SYSTEM

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

13. DRIVE LINE

1. Drive shaft and universals must be similar to standard production type.
2. Steel, 360 degree retainer loops, ¼" inch thick by 2 inches wide, must be positioned at the front and rear of the drive shaft within 12 inches of the universal joint.
3. Aluminum or fiber driveshafts are prohibited.
4. Magnetic steel driveshafts must be painted white.

14. ENGINE LOCATION

Engine location will be measured from the centre line of the rear axle assembly to the back of the engine block.

WHEEL BASE
108"

ENGINE LOCATION
72" minimum

Engine height minimum 11" measured from the ground to the centerline of crankshaft with frame set of 4". Engine offset must be within 2 inches of centre line of front cross member. Engine mounts or motor plate types are optional.

15. EXHAUST SYSTEM

1. Under chassis or cross over headers allowed.
2. 180 degree type headers are not allowed.(primary tubes crossing over to the opposite collector)
3. Maximum primary tube of 1 3/4" and maximum collector of 3" are allowed.
4. Crate iron lung magnetic steel headers allowed.
5. Maximum of 1 3" balance tube between the left and right header system.

Option A: Exhaust system must exit out the right side of the vehicle in front of the rear wheels but behind the driver.

Option B exhausts can exit both sides, outside of the body in front of the driver.

15-1. MUFFLERS

1. Muffler(s) must be removable for inspection, and must remain unaltered in appearance.
2. A decibel reading of 92db or less at 100 feet will be strictly enforced.

16. FUEL

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

17. FUEL CELL

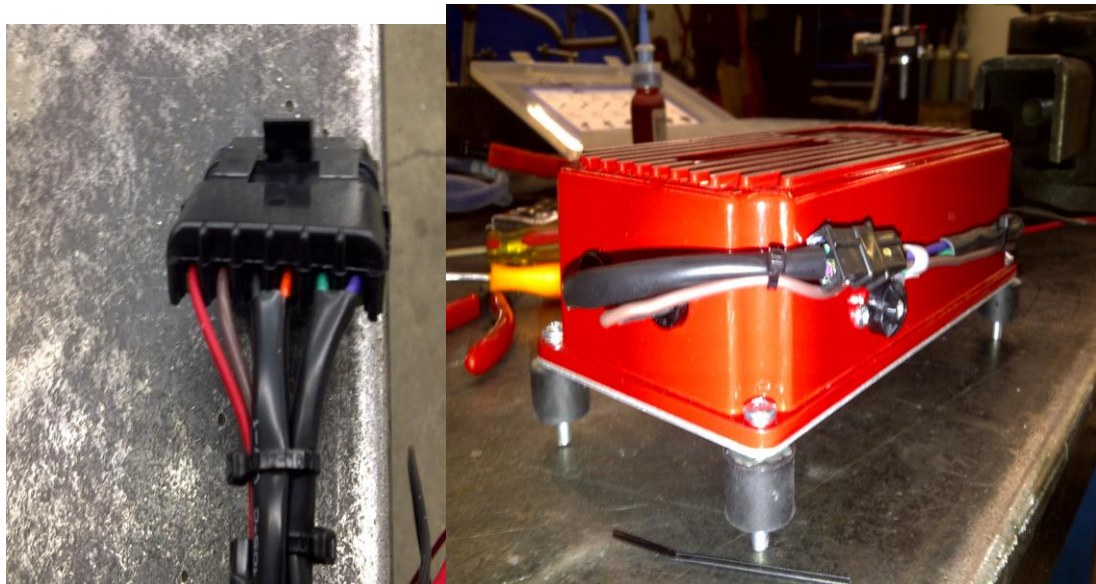
1. Bladder type cell is highly recommended.
2. 22 US gallons is the maximum allowable cell.
3. Fuel cell is to be mounted behind the rear axle and between the frame rails.
4. The fuel cell and or cell guard will be no lower than 8" from the ground while at the minimum ride height with the driver in the vehicle.
5. Minimum 22 gauge magnetic steel is to be used for the fuel cell case.
6. Filler and vent system tubing to be the shortest distance between the filler cap and the cell.
7. Filler cap assemblies must be grounded to the chassis to prevent static build up.

18. FUEL LINE

1. Must be a single AN-8 max armored/Kevlar hose.
2. Line must run through the cab it will run inside of a steel tube, the tube will be painted a contrasting color (either red or yellow) to that of the car.
3. The steel tube will extend at least 2 "inches beyond the firewall.
4. The steel tube in addition to the contrasting color will be labeled "Fuel Line Do Not Cut".

19. IGNITION

1. Car must be self starting.
2. Ignition on/off switch must be mounted in the centerline of the car and clearly labeled so that the ignition can be turned off from outside of either side of the car in the event of an emergency.
3. 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 d) fan switch if equipped with an electric fan.
4. All cars must have MSD 6A or 6AL mounted on the right side of the dash within 6" on the 'A' post.
5. An operational rev chip must be accessible through the passenger window.
6. **ALL MSD WIRING TO REMAIN OPEN FOR INSPECTION. ALL WIRING MUST USE WEATHER PAK CONNECTOR 6 AND 2 PIN AT THE MSD MODULE, AND 2 PIN AT THE DISTRIBUTOR. MALE CONNECTORS ARE REQUIRED ON THE BOX AND DISTRIBUTOR. 4 PIN CONNECTOR IS REQUIRED AND MUST BE ACCESSABLE ON THE REAR OF THE TACHOMETER.**
7. 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.
- 8.
9. All build engine cars will have an operational 7000 rev chip installed.
10. All create engines will have an operational 6400 rev chip installed.
11. Only 1 MSD box, one coil, and one wiring harness per vehicle.
12. Stock type distributor, a DUI, or MSD distributor allowed.
13. No other electrical devices are allowed anywhere on the vehicle.
14. All 6AL, 6ALN 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





20. INTERIOR

1. Interior of car can be only constructed of minimum 22 gauge magnetic steel or aluminum.
2. CLUTCH AND BRAKE PEDALS - Must be located in standard position on left side of transmission and Drive shaft tunnel.
3. B) DASH - Car must have a fabricated dash in driver's compartment.
4. FIREWALL - Firewall must be constructed of no less than 22 gauge steel. A foot box may be fabricated on left side. Driver's compartment must be totally sealed from engine & race track.
5. FLOOR - Drivers area floor which extends from drive shaft tunnel to left side roll cage and from behind drivers seat, in line with rear roll cage main hoop continuing into drivers foot box may not be
6. Positioned below frame rail and must be constructed of no less than 3/16" magnetic steel intrusion plate.
7. HEAD REST - Approved padded headrest is mandatory and must be securely mounted.
8. INSTRUMENTS - Oil pressure and heat gauge mandatory.
9. SEAT: Aluminum racing seat is mandatory, containment seat is highly recommended. All seats must bolt securely so the seat will not shift upon impact. Minimum of 6, 3/8" or larger bolts are required to anchor the seat. **NEWLY BUILT CARS REQUIRE A CONTAINMENT SEAT.**
10. MIRROR:
 - a. Mirror is optional, however if used it must be in the stock location and a maximum size is 3' X 10".
 - b. If either a full containment seat and or a head/neck support restraint system is used a 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" maybe installed. The left side mirror may not extend or protrude outside the vehicle.
11. SHIFTER - Conventional type shifter. Double rods permissible. Shifter must have boot or cover at all times.

12. STEERING WHEEL - Removable racing steering wheel with quick release metal hub are mandatory. Steering wheel pad is mandatory.

21. PAINT AND LETTERING

1. A detailed professional quality 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 plastic/fiberglass material visible.
2. A minimum 20" high and 3" stroke number is required on quarter panels behind rear wheel opening. A 30" high (minimum) 3" stroke (minimum) number must be facing outward on roof, readable from right side. All cars are required to have a management assigned number; however, management reserves the right to specify number changes to prevent duplication. Management reserves the right to approve or disapprove commercial or editorial messages appearing on competing cars.

Note: Delaware Speedway retains the right to specify type, size, and location of all contingency decals.

22.RADIOS

1. Approved 1-way radio receiver mandatory. Must receive frequency UHF 451.7125

23 REAR AXLE

1. Rear axle ring and pinion may be any gear ratio.
2. Differential O.E.M. carriers or spools permitted only.
3. Maximum bolt circle is 5 x 5".
4. Only all-steel full floating rear end assemblies permitted (including hub).
5. Steel aftermarket spools are permitted.
6. NO cambered rear axle assemblies allowed.
7. No limited slip devices allowed.

24.ROLL CAGE

1. Steel roll cage must be constructed of no less than 1-3/4" O.D. 0.095.
2. Must have 4 door bars on drivers side with top bar not exceeding 19" +/- 1" from top of rail.
3. Roof hoops must measure no less than 30 inches, maximum 40 inches O.D. across (left to right).
4. Halo height 36" +/- 1" from the top of the rail to the top of the halo.
5. Rear hoops must extend over drivers head and attach to main frame rails.
6. Right side door bars must at least form an X with top bar running from front to back 19" +/- 1" from top of roof.
7. Roll bars in driver's immediate area must be padded.
8. All bars running rearward and forward of roll cage assemble may be constructed of tubing of no less than 1-1/4" O.D.

25.SAFETY

25-1APPAREL

1. Drivers are required to wear full coverage, one or two piece Nomex 111 or Nomex, P.B.I, Kevlar Blend Material.

2. Fire retardant gloves and socks are mandatory. Fire-retardant under garments strongly recommended.
3. Driver's helmet must conform to SA 2005 standards; SA 2010 highly recommended and have a certification sticker visible inside the helmet.
4. It is highly recommended that drivers wear eye protection designed for auto racing.

25-2 BELTS AND HARNESS

1. A quick release SFI approved 5-point harness of no less than 3" in width, and a 2" width anti-submarine harness in good condition is mandatory.
2. Shoulder harness must be mounted and secured at the drivers shoulder height.
3. Belts must be securely fastened to the frame, cross member , or roll cage by means of a suitable reinforces mounting, in such a manner that all fittings are in direct line with the direction of pull.
4. No inertia reel allowed.
5. under no circumstance will bolts inserted through the webbing be accepted.
6. Belts may not be older than 3 years of the manufacture date as noted on the SFI label.
7. All belts, hardware, and mounting is subject to inspection.

25-3 FIRE CONTROL

1. Approved on board fire system is mandatory.
2. A minimum two nozzle system must be used, one optional nozzle under the hood and the other in the greenhouse protecting the driver.

25-4 WINDOW NET

1. An approved nylon mesh net must be installed in driver's side window opening.
2. Net size must be at least 16" X 18".
3. Net must be installed so it is tight.
4. Window net anchors must be attached to roll bars, not body.
5. Window nets must be quick release type.
6. Net must be permanently anchored at the bottom and release at the top.
7. Management highly recommends wide mesh nets.

26. 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. Monetary fine, loss of championship points, and loss of tire if found to be using illegal tires.
5. Tire inventory rule will apply as noted below
 - a. All teams will be allowed to submit a starting inventory of up to 6 tires
 - a. Teams will be allowed to add one tire to their inventory for each event they compete in.
 - b. All racing and qualifying is to be done on inventoried tires.
 - c. 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.
 - d. 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.
 - e. All damage claims are to be made immediately after the incident and failure to comply will result in the claim being denied.
 - f. All tire inventory sheets are due prior to the start of the racing program. Failure to submit the paperwork will result in disciplinary action.
 - g. Any tire suspected of malicious damage and or doping will be impounded by the speedway for further testing.

- h. Any tire deemed suspect shall be confiscated by the speedway and the offending team will face further disciplinary action up to and including suspension.

27. TRANSMISSION (MANUAL)

1. Transmission must be 3 or 4 speed.
2. Must have reverse gear.
3. Transmission must be stock with no internal lightening of parts, not altering of shift patterns and or ratios, and original brass syncro's must be installed.

28. TRANSMISSION (AUTO)

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

For visiting competitors. If your vehicle has either a lock up convertor and or direct drive coupler they will be allowed to run however a weight handicap will be applied by the technical committee. It is the responsibility of the driver to notify the technical team of this prior to any on track activity.

29. WEIGHT

	Min. Weight	Frame Height	Max. RPM
With Crate Engine #88958602 (350 hp)	2525 lbs.	4.0"	6400
With Crate Engine (approved 400 hp)	2700 lbs.	4.0"	6400
With Built Engine (Option B 2 barrel)	2725 lbs.	4.0"	7000
With Built Engine (Option C 4 barrel)	2700 lbs.	4.0"	7000

1. 58% left-side weight.
2. Car weight to be measured with driver.
3. Ground clearance will be without the driver.

Allowance of 1% of total weight will be allowed on events of 50 laps or more. Management 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 on 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.

31. WHEELS

1. 15" diameter steel racing wheels with a maximum width of 8" measured from bead seat to bead seat will be allowed.
2. Max. Bolt cir. 5 x 5".
3. NO LIGHT WEIGHT WHEELS.
4. Threads must protrude the wheel nut with the tire and wheel assembly properly torqued.

32. WHEEL BASE

1. All cars will maintain a minimum wheelbase of 108" plus or minus 1/2".
2. Wheel track width will be a maximum of 80" measured from outside of tire budge measured at spindle height.

ENGINE OPTIONS

OPTION A: CRATE ENGINE

Only approved, sealed, unaltered engines. No changes, substitutions or modifications to 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.

Approved engines are:

- Chevrolet 350/350hp Circle Track Crate Engine Part # 88958602
- Chevrolet 350/400 Limited Late Model Crate Engine Part # 88958604
- Ford Part 347 Sealed Crate Engine # M-6007-D347SR
- Dodge 360 Crate Engine Part # P5007958
- **NO ASA ENGINES ALLOWED!**

1. All three makes to use Holley carburetor part # 80541-1 (650 CFM) unaltered.
2. Must bolt to intake with no spacer.
3. All four barrel engines carburetor gasket thickness of 0.065"
4. A carb spacer of 1 inch is allowed on the 602 crate motor.

Note: **Engine parity between makes is being investigated.**

33. OPTION B: BUILT 2bb1 ENGINE

NOTE: THIS WILL BE DISCONTINUED AT THE END OF THE 2011 RACING SEASON. REFER TO OPTION C.

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.

ENGINE	MAXIMUM OVERBORE	MAXIMUM DISPLACEMENT
CHEVROLET 305-350	.060	360 cu.in
DODGE 318-360	.060	371 cu.in
FORD 351(Windsor only)	.060	362 cu.in

A) BLOCK ASSEMBLY: Must be production with standard external measurements in all respects with the exception of the permissible overbore. No aluminum blocks permitted. Stock production lifter bore must be maintained. Sleeving of lifter bores permitted to a maximum of 4. Deburring of block and parts permitted. Balancing optional. Pistons must be O.E.M. or cross reference to O.E.M. (ex. T.R.W part# cross reference to GM part#). O.E.M. rods allowed or the following Eagle part #'s will be optional: Chevrolet 327 and 350 – Eagle part #CRS5700B3D 5.70 length, Dodge – Eagle part #CRS6123C3D, Ford – Eagle part #CRS5956F3D. No GM 6" rod allowed. Deburring of stock rods permissible. Stock identification marks must be retained. Crankshaft and harmonic balancer must be stock O.E.M production. Top of block to piston clearance may be .00 deck. No roller or roller tip rockers allowed.

B) CAMSHAFT: Optional solid or hydraulic cam allowed. Camshaft must be driven the same as approved production engine. Gear drive not allowed. Solid or hydraulic valve lifters optional. Roller tappets, mushroom valve lifters and any type of mechanical assistance exerting a force to assist in closing the lifter and/or push rod, commonly known as "Rev Kits" will not be permitted. Only flat tappet straight barrel lifters permitted. Rocker arms and push rods must be stock O.E.M production or stud mount trunion—type roller-tip rockers are optional. Chevrolet and Dodge must use a 1.5 to 1 ratio. Ford must use a 1.6 to 1 ratio. No exotic materials or titanium.

C) CARBURATION: One two barrel Holley 500CFM part #0-4412 or HP Equivalent. No modifications. Jets and power valve may be changed. Accelerator pump discharge nozzles may be changed utilizing straight type only. Spacer/adaptor thickness to be no thicker than 1 1/4" and to include gaskets. (i.e. Distance from bottom of carburetor to top of intake manifold where carb sits no taller than 1 1/4" including gaskets.)

D) CYLINDER HEADS: Only stock O.E.M cast iron heads allowed. Absolutely no deburring, grinding, or polishing of intake or exhaust ports allowed. Chevrolet engines are restricted to 1 15/16" intake valve diameter and 1 1/2" exhaust valve diameter. (All other engines must be stock for year and engine model used). Chevrolet engines are restricted to 64 c.c. minimum chamber volume. Guide plates allowed. Maximum valve spring diameter 1.225 (Chevrolet). Composition gaskets of no less than .039 compressed thickness must be used on all cylinder heads. Ford and Chrysler cylinder heads are restricted to 64 CC. Note: No camelback heads.

E) DISTRIBUTOR: Stock type distributor and stock coil allowed. Refer to stock definition in the general rules section for further clarification. MSD distributor and or MSD 6A or 6AL box optional. The box must be mounted on the right side of the dash, out of the drivers reach, and the rev chip must be accessible through the right hand side of the vehicle. 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.

- A claim rule of \$200.00 will be mandated on all MSD modules (6A or 6AL).

F) FUEL PUMP: Stock type mechanical pump only. Absolutely no electric fuel pumps. No plastic or glass fuel filters allowed.

G) INTAKE MANIFOLD: Approved aluminum intakes allowed. No grinding or coating of any type permitted internally or externally. An Edelbrock aluminum intake manifold is optional. Chevrolet engines – Edelbrock part #7101 or #7116. Dodge engines – Edelbrock part #1776 or Mopar part #P4876335. Ford engines – Edelbrock part #7181. No modifications. As produced by manufacturer only.

NOTE: The carburetor adapter to be used with Edelbrock intakes is Canton Racing Products part #85-060, unaltered as produced or equivalent (i.e., Bicknell # BRP 376 / Wilson # 044111).

H) OIL PAN AND LUBRICATION: Any oil is permissible. Oil pressure may be regulated at discretion of owner or driver. Wet sump systems only. No external oil pump(s)(aftermarket) allowed. No external reservoir tanks permitted. Modifying of oil pan for greater volume of oil permitted. Steel oil pans only. Oil pan must not be lower than cross member or frame rails of race car. Any approved oil filters and breather caps may be used.

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.

34.OPTION C: BUILT ENGINE 4BBL OPTION FOR 2011AND BEYOND

MAKE OF CAR	ENGINE	MAXIMUM OVERBORE
Chevrolet	350	.060
Dodge	360	.060
Small block Ford	347/351	.060

- a) CYLINDER BLOCK ASSEMBLY (Short Block)
- 2) 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.
- 3) The engine block must retain all engine dimensions with the exception of the maximum allowable overbore and the surfacing of the engine block deck.
- 4) Angle cutting of the engine block will not be permitted.
- 5) Aluminum blocks will not be permitted.
- 6) Only iron cylinder sleeves may be used to repair.
- 7) Must maintain stock lifter bore: Dodge .904 inch, Ford .875 inch, Chevrolet .842 inch.
- 8) Repair sleeving of lifter bores permitted to a maximum of 4.
- 9) Deburring of block permitted. Excessive grinding or lightening not allowed.
- 10) Crankshaft must be of stock type and weight. (Plus or minus 5%) No lightening, knife edging or polishing allowed. Balancing okay.
- 11) Harmonic balancer stock iron elastamer-type only. No aftermarket or aluminum. Must maintain stock dimensions and weight.
- 12) 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.
- 13) Must use OE-type insert bearings? No rollers.
- 14) Piston. Cast or forged with three ring pistons with all rings in place. Must not protrude through deck. No light weight pistons.
- 15) Head Gasket. Any composite gasket allowed. **MUST MAINTAIN 9.5-1 COMPRESSION RATIO MAXIMUM**. To be determined by tech officials.

B) CAMSHAFT

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

C) CARBURETOR

- 1) All three makes to use Holley carburetor part # 80541-1 (650 CFM), or Holley #4777
- 2) A one inch carburetor spacer is allowed.

D) CYLINDER HEADS

- 1) Only 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) No aluminum heads.
- 5) Must use OE-type valve spring and retainers maximum diameter 1.494" plus/minus 0.020.
- 6) Roller rockers allowed. Guide plates on Ford and GM optional. Shafts mandatory on Chrysler. Titanium exotic metals not allowed.
- 7) Stud girdles allowed.

F) INTAKE MANIFOLD

- 1) Chevrolet engines may use Edelbrock part #2101, 2116, 2701, and 2716. Dodge engines may use Edelbrock part ##2176. Ford engines may use Edelbrock part #2181. Manifold must remain stock and unaltered. No port matching, grinding, acid dipping or porting...

G) 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 crank shaft numbers can be inspected.

PULLEYS

- 1) Aftermarket V-belt pulleys allowed (5/16th" minimum thickness).

WATER PUMP

- 1) Aluminum water pumps are allowed. Must be V-belt drive.

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.

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.