

# 2010 RULE BOOK NEXT GENERATION ENDURO

# www.delawarespeedway.com NEXT-GENERATION ENDURO DIVISION RULES

### **GENERAL**

The word stock shall be defined as follows:

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 Any deviation to the above mentioned rule shall be superseded by written updates and duly noted in the specific sub-section of the rules and in accordance with the rules.

Any driver, car owner, chief mechanic who refuses a claim will surrender all prize money and points for that race and may subject themselves to an immediate and indefinite suspension and or fine.

### **VEHICLE ELIGIBILITY:**

The Delaware Speedway Next-Generation Enduro Series is designed to be a safety conscious, lower cost, entry level racing class aimed at providing a place to enjoy the challenge of endurance racing and provide an introduction to race vehicle preparation. Endurance racing places emphasis on having fun and completing the most laps possible and having a running vehicle at the end of a challenging event. Next-Generation Enduro is seen as a stepping stone to regular weekly racing.

- Eight Cylinder: Open to any make of Automobile with a wheel base of 108" or more as factory listed for that year/model. Ford products Zephyr, Fairmont, T-Bird and Cougar with 105" wheel base are allowed provided a complete four-point roll cage is installed.
- 2. Six & Four cylinder cars: Open to Six and Four cylinder cars with a minimum of wheelbase of 105".
- 3. Small trucks allowed (ie. Ford Ranger, GM S-10 & 15 / Sanoma, Dodge Dakota, Toyota Tacoma, Small Mazdas etc. **MUST BE APPROVED BEFORE CONSTRUCTION**).
- 4. Station wagons allowed, MUST BE APPROVED BEFORE CONSTRUCTION.
- 5. 1982 to 2002 Camaro and Firebird with complete four-point roll cage installed and rear window glass removed and rear firewall installed (to protect fuel cell) allowed.
- 6. Convertibles will not be allowed.
- 7. "Compact cars" are not permitted - however would be welcomed in the Chaos Car division.
- 8. Any suspected chassis modification (cutting coils) and engine modification will be disallowed from competition. (No question).
- 9. For vehicles that exist outside these wheelbase rules, the vehicle MAY be allowed, but only if permission is granted by race director (519) 652-5068 Ext 203 BEFORE VEHICLE IS PREPARED.
- 2. **BATTERY:** Must be securely fastened. (If mounted in the interior of the car, battery must be fastened securely to the floor behind driver's seat. Battery must be covered. Cover must be fastened independent of the battery hold down.

Battery must be held down with a minimum of 2 5/16<sup>th</sup> bolts. REMEMBER – Batteries are heavy and full of acid. In the event of an accident, insecure batteries could severely injure a driver.

- 3. **BODY AND APPEARANCE:** OE trunk hinges can be replaced. Body must be stock appearing and in stock position on frame. All chrome moldings, ornaments, door handles, glass, taillights, headlights or plastic components must be removed, except grille and windshield. All doors must be welded or bolted. Original wheel arches must be retained. The tech committee may reject cars that are considered improperly prepared. No sheet metal screws or aluminum nailed rivets please! All body panels and or parts must be constructed of magnetic steel.
- 4. **BUMPERS:** Stock bumpers originally installed on that year/model of car only in stock position. No cutting of bumpers.

### 5. CHASSIS & SUSPENSION:

- 1. All suspension parts are to be stock (see definition of stock) with no modifying.
- 2. Coil springs, leaf springs and/or torsion bars must be identical left to right.
- 3. Sway bar links must be identical left to right.
- 4. Maximum 1 1/4" shims in upper control arm.
- 5. All suspension parts, stock or approved aftermarket must be equal side to side.
- 6. Ride heights will be monitored and a minimum will be applied for 2010

## 6. ENGINE AND DRIVELINE (V8, V6, In-Line 6, & In-Line 4):

- Any stock type factory produced engine can be used in those manufactured vehicles.
- Any stock type factory produced transmission may used in those manufactured vehicles.
- Older engines to newer cars, a newer car to older engines as long as make integrity is adhered to.
- All internal engine parts must be stock to that particular make and model.
- No kick out or racing oil pans allowed. ( crate motor except)
- No guide plates
- OEM stock fuel injection may be used with aluminum intake manifold if original equipment on make and model.
- Only one stock OEM carburetor (two-barrel or four-barrel) with choke mechanism retained is permitted on OEM stock cast iron intake manifold only.
- One out-of-the-box stock 4412 Holley two barrel choke horn must remain. Choke mechanism may be removed
  with one approved carburetor spacer. Maximum thickness 1 and ¼ inches on stock OEM two barrel intake
  manifold.
- OEM stock definition of engine specs are: Max compression ratio 9.0 to 1; Minimum engine vacuum 17 inches HG at 1,000 rpm or less; No grinding, porting or modifying of any component.
- All vehicles must have a minimum of two throttle return springs.

Transmission oil coolers are allowed but NOT in the drivers cab. Oil coolers MUST be mounted ahead of firewall. If crate engine is used, same rules as Truck class except no headers apply. Note: No welded rear axle assemblies. Mini spool (magnetic steel only) is allowed. Drive shaft to be painted white.

# 7. ENGINE CLAIM:

- a) \$900.00 cash claim on all engines. \$100.00 goes to management for pulling engines (\$50 each engine).
- b) Claim does not include: flywheel, carburetor, starter, motor mounts, senders & switches, fan & pulleys, water pump, fuel pump, distributor & wiring, & exhaust manifolds.

- c) Top 5 finishers are subject to engine claim by any driver finishing a minimum of 50% of designated feature-race laps. Engines must be same make (i.e., SB Chev for SB Chev, BB Ford for BB Ford, etc.). Carbureted engine for carbureted engine, fuel-injected engine for fuel-injected engine. Crate engine for crate engine. Driver making claim must have an engine in good operating condition (to be determined by technical Official in charge). Multiple claims on same engine will go to qualified driver finishing furthest back.
- d) Claims must be made within 5 minutes of end of race (checker flag), and claimed engine must be completely removed within 1 hour from the time claim is made and driver agrees to exchange claimed engine.
- e) Claims must be made to Official in charge. Driver making claim must drive his or her car immediately after race under its own power to claiming area. The driver making the claim must have an engine in good working condition & will submit \$900.00 cash. \$800.00 will go directly to the driver whose engine is being claimed. Both drivers will then exchange engines.
- f) Only driver may claim an engine, and only driver can agree to exchange. First exchange or no exchange by driver being claimed is binding.
- g) Refusal to exchange engines forfeits all cash, points and contingency winnings, any trophies earned and will result in car being disqualified and the field will move up to take its place (i.e., first-place finisher refuses, second-place finisher will be the winner). Any driver refusing to exchange engines may be subject to a fine.
- h) Any driver found to be claiming an engine for anyone other than him or herself or is found to be abusing the claim rule (determined at the discretion of Official in charge) may be suspended and/or fined.
- i) All engines must be removed from car and sealed at the track. Driver making claim must have engine in for next race.

### 8. EXHAUST SYSTEM:

- 1. Stock type mufflers mandatory.
- 2. Exhaust pipe must exit behind driver and in front of rear wheel well.
- No headers.
- 4. Muffler inlets and outlets may not be in a direct line (e.g. straight through not permitted).
- 5. maximum pipe size is 2 ¼ OD. (two and one quarter inches outside diameter)
- 9. **FENDER SPLASH PANS**: Front inner fenders may be removed or trimmed, front rad cradle must be retained. All manufactured body panels and or parts must be constructed of magnetic steel.
- 10. **FIREWALLS:** All holes in firewall must be filled.

### 11. FUEL PUMP:

- a) Carburetor equipped stock mechanical pump only. Absolutely no electric fuel pumps permitted.
- b) Factory fuel injection must retain fuel pump system as originally equipped or use a fuel cell designed for use with EFI that includes a fuel pump.
- c) No plastic or glass fuel filters allowed.
- d) If fuel line passes through vehicle, it must run through a conduit that is in contrasting colour to the interior of the car (i.e., red or yellow). All fuel lines must be stock, or approved steel, or high pressure line.
- 12. **FLOOR:** All holes in floor must be covered.

### 1 GAS TANK:

- (a) Gas tank is to be securely mounted in the trunk compartment behind rear firewall, forward, as near as possible to the rear axle housing and no lower than the centre of the real axle housing or stock trunk floor when full of fuel. Must be totally concealed from the driver. Parcel shelf and panel behind rear seat back rest to be completely sealed with minimum 22 gauge metal. Fuel filler to be enclosed within the trunk area, not protruding through parcel shelf or trunk lid. A foam-filled fuel cell is mandatory for carbureted vehicles.
- (b) For OE fuel-injected vehicles, if a stock-type tank is used and is mounted between the axles under the vehicle it must have a skid plate mounted underneath (minimum 22 gauge steel) - the fuel filler must be in the trunk, separated from the driver by a firewall (minimum 22 gauge steel

Note: If plastic fuel cell / tank is used, no plastic should be visible above, side or below vehicle.

If the integrity of fuel tank mounting is in question (at the discretion of Officials in charge), vehicle will be parked for the remainder of the event. Acceptable fuel tank mounting is either bolted-in steel or welded steel brackets.

- 14. **GRILL**: Grills must be full stock production for the body used.
- 15. **HOOD:** Full stock hood and bracing must be retained. Hood must stay up on its own.
- 16. **INTERIOR:** All interior of car that is flammable (plastic and fabric) must be removed, except for driver's seat. All metal inner quarter panels must be retained. Excessive torching of interior will not be allowed.
- 17. **LETTERING:** Numbers will be assigned by the track officials at the time of entry. Doors and roof must be clear of any lettering other than numbers.
- 18. **RADIATORS:** Larger rads permissible only if they fit in stock rad cradle. No anti-freeze allowed in cooling system.
- 19. **MIRRORS:** Optional, no exterior mirrors. Mirror must be in stock location. A side mirror mounted to the 'A' post inside the plane of the vehicle is allowed if either a full containment seat, and or a head/neck restraint support system is used. The side mirror shall be no lager than 2 ½ ( two and one half) in diameter.
- 20. **ROLL BARS:** Minimum size of tubing or pipe allowed is 1 1/2" O.D 0.95 thickness. No front rad hoop allowed. Rear support bars may run from roll cage to rear of frame section (full rear hoop). No "X"ing of rollbars allowed. Front support bars may only run from roll cage to rear of front frame kick-up. Roll bar padding in driver's area is mandatory.
- 21. SAFETY EQUIPMENT: All safety equipment must be inspected and approved by Delaware Speedway officials prior to the vehicle going on to the race track.
  - a) Belts: Four-point safety belts and shoulder harnesses are mandatory. Five-point harness is highly recommended.
  - b) Helmets: Full face sa 2005 highly recomended.
  - c) Fire Suit: Minimum SFI 1 Nomex single-layer fire suits are mandatory.
  - d) Gloves and Footwear: Fire retardant gloves are mandatory. Leather shoe or boot or fire-retardant race shoe mandatory. No nylon sneakers.
  - e) Window Net: Driver's side window net is mandatory.
  - f) On/Off switch must be clearly marked and be seen from outside the vehicle.

- 22. **SEATS:** All seats must be SECURELY fastened! Bucket seat may be used. Race seats highly recommended. On fold-down type seats the back must be securely anchored to prevent pitching forward.
- 23. **TIRES:** All tires must be radial D.O.T. approved for street use. Maximum size tire P235 in either 70 or 75 series. Only one tire size difference allowed from side to side or front to rear. All tires are subject to approval of official in charge.
- 24. **TRUNK:** Full stock lid and bracing must be retained. A quick hold-down release for fast trunk entry must be devised.

### 25. WHEELS:

- 1. Stock passenger or D.O.T. approved steel wheels only, maximum width of 7" measured from bead seat to bead seat will be allowed.
- 2. All wheels must be either 14" or 15" diameter. One 7" safety wheel in right front location is permitted.
- 3. No chrome Rev or mag wheels allowed.
- 4. No balance weights on outside of wheels.
- 5. Aftermarket larger racing-type wheel studs & wheel nuts HIGHLY RECOMMENDED.
- 6. No wheel spacers allowed
- 7. On 6 cyl or less, any stock wheel is allowed
- 26. **CAMBER:** Maximum amount of shims equal to 1-1/4" maximum OR camber as measured will be a maximum of 4 degrees from 0.

### 27. MINIMUM VEHICLE WEIGHT:

- V8 Must be over 3250 lbs with driver at end of race.
- Multiple winners will have over all weight added with a reduction of left side weight.
- Six & Four Cyls no minimum weight at this time.

# THE RULES OF THE RACE

- 1. The line up for the race will be determined by practice speeds for that particular day. If a particular vehicle does not practice then the head scorer will revert to archived lap times from a previous practice session.
- 2. The race may started with three cars abreast.
- 3. Cars must hold their position until green flag is displayed.
- 4. Yellow flag will not be used. If there are cars with breakdowns or cars in accidents, the other cars must avoid them while continuing the race
- 5. The red flag will be displayed if the track is blocked and racing can not continue. All cars must stop. The race will be restarted with the cars in the same position as before the red flag.
- 6. Cars will be allowed to enter the pits for repair and re-enter the racing surface only when official indicates it is safe to do so.
- 7. The starter will indicate with rolled and crossed flags the midpoint of the race. The white flag will indicate the leader is on the last lap.
- 8. Each entry must have one transponder. (can be rented at track, refer to transponder agreement in the general rules)
- 9. If you wish to retain the same car number from race to race you may do so by purchasing a license at the beginning of the year.
- 10. In order to be eligible for year-end points fund and other awards (to be announced), drivers must have a registered car number for the balance of the season. Registration forms are available at the Delaware Speedway office.

- 11. If Delaware Speedway Officials remove a vehicle from the racing surface, the vehicle may return to competition in that race with a penalty.
- 12. **Break-out:** During the feature race any vehicle that breaks a predetermined time per second lap time will have one half of the payout for that particular event held back until the completion of the next scheduled event that this teams participates in. In addition to the hold back, for each lap under the predetermined lap the competitor run will result in a one lap penalty. ( 4 lap under predetermined time will result in a 4 lap penalty of the next event and all monies withheld will be returned at that time)
- 13. **MULTIPLE RACE WINNERS:** If any driver wins back-to-back or multiple events in a season a weight penalty or Wicker Bill handicap will apply of 50 lbs per win starting at the second win. In addition to the added overall weight, a reduction of left side weight will also apply.
- 14. **OBSTACLES**: During the event if a car is deemed to be in a reasonable position it will be left there. BEFORE/DURING the event the speedway reserves the right to place obstacles on the speedway in a reasonable position.

# **POINTS**

Feature race winner receives 200 points. From 199 points for second position, the scores will decrease by one point for each position on down through the feature finish. Points will be awarded only to drivers with registered numbers. Cars will be awarded points based on their final feature finishing position. Heat race winners receive 100 points following same procedure as above.

# **ENDURO POINT FUND RULES**

- 1. Delaware Speedway Enduro points will be awarded to the car number. Delaware Speedway point fund money will be awarded to the registered car owner or registered recipient based upon performance in owner's point standings.
- 2. Qualifying for an event (not necessarily feature) is defined as an active attempt to run the event (e.g. paying entry fee, signing in at track pit gate and having an operable, legal race car that has passed tech inspection in the track pit area).
- 3. To receive championship points, a driver and car must take the starting green flag. Any driver racing a car in an Enduro race may have a Delaware Speedway-registered relief driver, but relief driver receives no points. Relief drivers must be pre-approved by Delaware Speedway and have same safety equipment as primary driver.
- 4. In case of any ties, except first place, money and points for the tied position shall be pooled and divided equally among contestants involved in the tie. In all cases of ties for Delaware Speedway Enduro Championship (First place only) ties will be broken by using the greatest number of firsts in feature events counting toward that championship, and if a tie still exists, seconds, thirds, etc. will be considered, until the tie is broken.
- 5. Any and all penalties associated with purse monies and fines for competitor infractions, will be added to the year-end point fund, less 20% for administration fees.
- 6. Division Title Sponsor decals must be displayed on all cars competing in any Enduro event. No exceptions.

**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.