

## SCOTIA SPEEDWORLD 2010 LIGHTNING CAR RULES

***Note: 2010 Rule changes are bold italic.***

### **DISCLAIMER**

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum requirements for such events. These rules shall govern the conditions of all events, and by participating in these events, participants are deemed to have complied with all of these rules. **NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH, THESE RULES AND/OR REGULATIONS.** They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official. The Race Director shall be empowered to permit minor deviations from any of the specifications herein or to impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. **NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATIONS OF SPECIFICATIONS.** Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

### **INTENT**

- Scotia Speedworld officials will attempt to maintain a competitive field of cars while controlling the costs associated with fielding a car. Competitors will be discouraged from investing in any non-safety related items. Situations may arise where the intent rule is referenced. The division is open to any driver.
- The lightning division is limited to drivers who have never won a main feature in any division considered to be higher than Thunder, or Thunder drivers with not more than 3 wins in a season.
- Driver's who, in the opinion of officials, "dominate" this division may be asked to move to another division for the following season.

### **APPROVED MODELS**

- **Any four-cylinder, single camshaft, non-turbo charged car with a maximum wheel base of 104.1" and a complete stock body, frame and suspension. Serial numbers must remain readable on all cars. Cars may be front or rear wheel drive, with a standard or an automatic transmission.**
- Car rules are the same as Thunder except there will be no Honda's or Volkswagens allowed. Subaru's will be allowed but will be monitored. All other makes with a maximum 1.8 throttle body fuel injection will be allowed. The following models with a maximum 2.2 (standard performance) will be allowed: Tempo, Topaz, Sundance, Spirit, Acclaim, Omni, Cavalier, Sunbird, Firefly. Dodge Neon maximum 2.0 SOHC (standard performance) is allowed. Should one particular make or model start to dominate, and it appears to be a superior car, not just exceptional driving ability, that model may have to move to Thunder.

### **BODY/BUMPERS**

- All glass, headlights and taillights must be removed except windshield.
- Driver's door must be welded and/or bolted shut. Drivers' side doorplate mandatory (see door protection on page 2).
- Passenger door must be welded or bolted shut. Window openings will remain stock size.
- Inner panels stay.
- Only the stock glass windshield is permitted. Window openings may not be closed in or redesigned.
- One stock inside mirror, to the right of the driver, with a maximum glass area of 24 sq. in., measured at the widest points, is allowed. No concave, convex, or exterior mirrors are allowed.
- All cars must begin each race with a complete body (hood, doors, fenders, trunk, etc.) unless damaged in practice and/or O.K.'d by Pit Steward.
- Stock front and rear bumpers must remain or be replaced by a maximum 2" (in any direction) pipe or tubing. Replacement bumpers must be welded to stock mounts and must remain at least 2" inside existing body or extend a maximum of 6" from the center of the stock mount, whichever is the lesser.
- Tow hooks are required front and rear. They must be attached to any solid structure. Three or four links of chain welded to the bumper mounts is sufficient.
- No added weight or ballast allowed. ***(The track reserves the right to impose a minimum weight requirement rule at any time. Teams will be given adequate time to meet requirements.)***

### **INTERIOR**

- Stock dash, gearshift, pedals and front seat must remain. Seat may not have any material added to its structure that changes the original dimensions. Stock steering shaft and steering wheel must remain. Aftermarket oil pressure and heat gauges are allowed. Roof insulation, floor covering and bottom of rear seat must be removed. Seat must be ***bolted or chained*** to cross bar to prevent back of seat from going forward or backward. Aluminum racing seats are allowed but

must be mounted to original seat brackets and backs must be bolted to the shoulder height cross pipe of roll bar.

## EXHAUST

- A single stock sized exhaust pipe (Minimum 2.5' or have stock bolt bracket for resonator following stock pattern) must be attached to the stock manifold and remain the same size until it exits. Exhaust must point away from fuel tank.

## FLOOR

- Stock floorboards must remain. All holes must be covered with stock thickness metal and follow original contour.

## GAS TANK

- If original gas tank is ahead of the back of the rear wheels, it must remain and be used. If original tank is located behind rear wheels, a smaller tank (maximum 10 gallons), with stock fittings, will be securely installed with metal straps/brackets in trunk, as close to the back of the back seat as possible, with filler inside trunk (***this method is recommended for all trunk style cars***). Hatchbacks or station wagons must have tank ahead of the back of the rear wheels in stock location under floor. ***It is recommended that fuel lines be run under the floor and not through the driver's compartment.***

## ENGINE, DRIVETRAIN AND COMPONENTS

- Engine, transmission (automatic or standard), and rear end must remain stock. No interchanging parts. Compression ratio will remain as produced for base model only. Other makes and models are subject to similar restrictions at the discretion of officials. If you are unsure, please call before building. The following models with a maximum 2.2 (standard performance) will be allowed: Tempo, Topaz, Sundance, Spirit, Acclaim, Omni, Cavalier, Sunbird, Firefly. Should one particular make or model start to dominate, and it appears to be a superior car, not just exceptional driving ability, that model may have to move to Thunder.
- Stock carburetor/fuel injection system for make and model only. Stock air intake systems. No K&N (or similar) filters. Stock filter must remain but paper can be hulled.
- All steering components, shocks, struts, etc. must remain stock for vehicle. Wheelbase must remain the same on both sides. No tolerance. Ride height will remain the same side-to-side, front to back. Camber on all four wheels will be no more than 1.5° (+/-) post race. Stock four-wheel brakes. Starting and charging systems must be operational. Alternators must remain and be operating. Stock will be interpreted to mean regular sedan models, not sport, GT, Rally, or any other special edition or performance enhanced models. No alterations of any kind.
- Cars considered by Scotia Speedworld officials to have altered components could be subject to rejection or disqualification based on the decision of officials. Any car that requires bracing or reinforcing to remain in competition may no longer be allowed to compete.

## HOOD

- Full stock hood, bracing, and hinges must remain. Hinges may be disconnected but must remain. Only the latch may be removed and a tie-down or pins (one on each corner O.K.) used. All insulation under hood must be removed. No scoops or air dams. The battery can be located anywhere ahead of the front firewall and under hood or mounted to the passenger side floor as close to the front firewall as possible and inside a marine case. The battery must be securely fastened.

## TRUNK

- Full stock trunk, bracing, and hinges must remain. Rear hatch must remain. It can be bolted shut but must be able to be unbolted if requested by officials to verify complete original remains except for latch and gas shocks. Gas shocks must be removed from hatch. Floor must remain. Repair of floor O.K. with stock thickness metal. Must follow original contour. A quick hold-down release for fast trunk entry must be devised.

## RADIATORS

- Radiators must fit in stock radiator cradle. No antifreeze or other cooling additives allowed. Water only.

## NUMBERS

- Numbers for this division will start at 100 and go to 199. Should a car permanently transfer to the Thunder class it would have to get a double-digit number available for that class.
- Numbers must be 18" high on both doors and roof, and readable from the grandstands. Recommend white numbers on a dark surface or dark on white or day glow. No gold, silver, gray, metal flake or trick numbers allowed. Also require a 6" white number on the top passenger side corner of the windshield. Any numbers deemed difficult to score by the officials, the driver will be informed and expected to make necessary changes. Failure to do so could result in a refusal by officials to honor any scoring concerns about the effected car. Anyone requesting a number should call **Rob Bowness at 864-1256** weekdays between 7:00 p.m. and 10:00 p.m.

## TIRES AND WHEELS

- 12, or 13-inch 70, 75, 78, or 80 series radial tires only. Any metric tire size up to P185-70 X 12 or 13 may be used. North American models may run up to P195-70 X 14. No LT or anything other than "P" type allowed. All four tires must be same identical size. Sizes must be readable. Scotia Speedworld reserves the right to restrict tires with respect to price and availability to all competitors. Scotia Speedworld officials may claim any tire at any time, for \$30. Tires will be part of the car claim. Cars are expected to race on used tires. The intent of the tire claim is to prevent people from buying new tires or to eliminate any unusual tires. Some entries could be limited to smaller sizes.
- Stock passenger wheels (unmodified) only. Wheels must be stock size (width, height, and offset) for car. All 4 wheels must be same. Maximum wheel width is 6". No aluminum, chrome or chrome reverses wheels. Aftermarket nuts recommended on both front wheels.
- No chemical treating of tires (i.e. Compound Altering / Tire Softening). Tires will be subject to durometer testing. Failure to comply will lead to penalties/suspension.

## BRAKES

- Car must have 4 wheel brakes
- No air ducts allowed

## SAFETY

- Seat belts must be worn whenever car is on the racetrack. Belts must be in good condition and not less than 1-1/2 inches wide. A lap belt and shoulder belt is required.
- A minimum four-point harness is mandatory. Lap belts must be bolted to original seat belt mounts. Shoulder belts must be fastened to the roll bar at shoulder height. All belts must have seat belt mounts and fasteners. No tying, riveting, or any other method other than proper attachment is acceptable. Drivers are responsible to insure all safety equipment is in good condition and securely installed.
- Drivers' side window net, with quick release from top, is mandatory.
- Helmets must be worn whenever car is on racetrack. **Full-faced helmets are mandatory.** Helmet must be DOT approved: Recommend Snell approval. Helmets must be free of cracks and must accompany car at time of inspection.
- Helmet supporting neck collars are recommended.
- A securely mounted, easily removed (quick release) fire extinguisher is required, within easy reach of the driver. It must have a recharge slip dated no earlier than January first of the current year, or an unbroken seal.
- Long sleeve, cotton or denim pants and shirts are mandatory whenever car is on racetrack. Driver's suits or one-piece cotton coveralls with long sleeves are recommended.

## DOOR PROTECTION

- A driver's side doorplate is required. It will be a minimum **3/16"** steel plate (at least 16" wide) if contoured (rolled, not cut and re-welded) with body, installed on the outside of the driver's door. Non-contoured plate must be minimum 3/16" thick. The center of the plate must follow an imaginary line drawn from the top edge of the front and rear bumpers. It must extend ahead and behind the door and be bolted through the doorframes ("A" and "B" pillars) with a minimum of four carriage bolts. Bottom of plate should be a close to the rocker panel as possible. Plate should follow the contour of the body and must be painted the same color as the car.

## ROLL BAR

- Roll bar will consist of a single hoop (minimum 1.66" diameter, .090 thickness) directly behind the driver running from one side of the car to the other, welded to the inner rocker panels on both sides. A one-foot square steel plate, minimum 1/8" thick, must be welded to the cross pipe (roof bar) and four carriage bolts should bolt the roll bar to the roof of the car or two carriage bolts straight through the roll bar and roof of the car.
- Roll bar must have one cross pipe welded from side to side (between the uprights) at shoulder level with driver in position. Seat must be securely attached to roll bar (cross pipe) to prevent forward or backward pitching. Cross pipe must extend to metal inner panel ("B" pillar) of the car and must be bolted (Carriage heads on outside through a plate welded to the cross pipe on the inside or directly through the "B" pillar of the car and roll bar) or welded to the "B" pillar. A second crossbar can run between the two uprights within two inches of the hump, not fastened anywhere except to the two uprights. One forward brace (straight or rolled) may come off both uprights (maximum 18" from the floor to the top of the bar) and be welded to the rocker panel not further forward than the front of the door (A pillar).
- ***A four point roll cage made of seamless 1.66" diameter .095 wall thickness roll bars is optional for 2010. The roll cage shall consist of 4 (four) vertical upright bars connected at the top on all sides. A shoulder height crossbar must support the rear vertical uprights. 3 (three) horizontal bars are required on the left side door area and 2 (two) on the right side. (These are minimum numbers). Driver's side door bar openings must be filled in with 1/8"***

**steel plate. A bar at dash height across the front uprights is recommended. Bars may be mounted to the rear edge of the top halo and extend to the rear strut towers. 1/8<sup>th</sup> steel plates or other approved method must be used to mount to the cage to the body. Roll cage must run the full width of the frame, rocker panel to rocker panel. Cars with this roll cage are not required to use the exterior doorplate. Driver's door only inner panel may be cut out to fit roll cage door bars. \*see example below**



#### **CLAIM RULE**

- **The track has the right to claim any car at any time. One driver cannot claim another drivers' car. The intent of the claim rule is to prevent an individual from deliberately increasing the cost to compete.**
- **The entire amount of \$200(engine) or \$500(car) in cash (Canadian) shall be paid directly to the driver of the car being claimed.**
- **Claim does not include: fire extinguisher, seat belts, window net, aluminum racing seat, battery, aftermarket wheel nuts.**
- **Claim does include: entire car (or engine) as it came off the racetrack, except for the items listed in (B) above.**
- **Refusal to sell forfeits all cash and contingency winnings for that event, any trophies earned that day, plus all points earned that season to date, and a fine equal to the amount of the claim must be paid before the driver or car races at any future Scotia Speedworld event in any division.**
- **Refusal to sell also imposes a 14 day or two-event suspension from competition at Scotia Speedworld, whichever is the greater.**
- **Reinstatement will be considered, as time permits, following an application in writing, after the suspension period above, by the claimee who refused the claim. Certain conditions could be required as part of the reinstatement.**

#### **Miscellaneous**

- Should the Thunder division be less than 25 cars on any given night, the top finishers from the Lightning Main feature would advance to the rear of the Thunder Main feature.
- Thunder drivers can race in the Lightning division provided they use a Lightning car. One car cannot be used to race in two divisions on the same night unless it advances through qualifying as described above.

#### **Technical Questions**

- **Competitors can contact Lawrence Hopper at 456-2489 for any technical questions.**