

**SCOTIA SPEEDWORLD THUNDER CAR RULES 2017**

**Note: Rule changes are bolded.**

**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.

**1. INTENT**

- 1.1. 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.

**2. APPROVED MODELS**

- 2.1. Any four-cylinder, single camshaft, non-turbo charged car with a maximum wheelbase 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.
  - 2.1.1. Honda Civic models 1988-1991 Hatchback and sedans permitted.
  - 2.1.2. Honda Civic models 1991-1995, hatchback, coupes and sedans permitted.
  - 2.1.3. Honda Civic models 1996- 2000 American and Canadian CX, DX and LX with the 1.6 D16y7 only.
    - 2.1.3.1. 2 door hatchback, 4 door sedans and 2 door coupe.
    - 2.1.3.2. 5 speed or 4 speed automatics. No CVT transmissions.
    - 2.1.3.3. No swapping newer powertrains to older models.

**3. BODY**

- 3.1. All glass, headlights and taillights must be removed except windshield.
- 3.2. Driver's door must be welded and/or bolted shut. (See door protection Section 17).
- 3.3. Passenger door must be welded or bolted shut. Window openings will remain stock size.
- 3.4. Inner panels stay.
- 3.5. Stock glass windshield is permitted. Lexan windshields are also permitted but proof of Lexan must be presented to officials. Window openings may not be closed in or redesigned.
- 3.6. 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.
- 3.7. 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.)

**4. BRAKES**

- 4.1. Car must have properly working stock 4 wheel brakes.
- 4.2. No air ducts allowed.

**5. BUMPERS**

- 5.1. 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.
- 5.2. 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.

## 6. CLAIM RULE

- 6.1. 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.
- 6.2. The entire amount of \$250(engine) or \$750(car) in cash (Canadian) shall be paid directly to the driver of the car being claimed.
- 6.3. Claim does not include: fire extinguisher, seat belts, window net, aluminum racing seat, battery, aftermarket wheel nuts.
- 6.4. Claim does include: entire car (or engine) as it came off the racetrack, except for the items listed in (20.3) above.
- 6.5. 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.
- 6.6. Refusal to sell also imposes a 14-day or two-event suspension from competition at Scotia Speedworld, whichever is the greater.
- 6.7. Reinstatement will be considered, as time permits, following an application in writing, after the suspension period above, by the claimer who refused the claim. Certain conditions could be required as part of the re-instatement.

## 7. DRIVETRAIN AND COMPONENTS

- 7.1. All steering components, shocks, struts, etc. must remain stock for vehicle. Wheelbase must remain the same on both sides. No tolerance. **Ride height is minimum of 5.5"**, must remain the same side-to-side, front to back. 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.
- 7.2. Camber on all four wheels will be no more than 1.5 degrees (+/-), except the right front which is permitted to be 3.0 degrees (+/-) post-race.
- 7.3. 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.

## 8. ENGINE

- 8.1. Engine, transmission (automatic or standard), and rear end must remain stock.
- 8.2. No 4-speed Honda manual transmissions allowed. No interchanging parts.
- 8.3. Compression ratio will remain as produced for base model only. Example: (Maximum compression ratio as follows: Honda – 9.2:1, Volkswagen – 8.2:1, Subaru – 9.5:1.
- 8.4. Maximum engine sizes as follows: Volkswagen 1.8 litre, Honda Civic 1.5 litre, and Subaru 1.8 litre.
- 8.5. Honda 1.5 multi-port engines from model years 1992-1995 are permitted as follows:
  - 8.5.1. In 1992-1995 Honda Civic Models.
    - 8.5.1.1. This combination must carry 25 pounds of weight.
  - 8.5.2. In 1988-1991 Honda Civic Models.
    - 8.5.2.1. This combination must carry 50 pounds of weight.
- 8.6. Honda 1.6 D16y7 only.
  - 8.6.1. In 1996-2000 Honda Civic models 1996- 2000 American and Canadian CX, DX and LX
- 8.7. Honda 1.5 throttle body engines may be placed in 1992-1995 Honda Civic Models without a weight penalty.
- 8.8. Automatic transmission car throttle bodies are not permitted in a manual transmission car and vice versa.
- 8.9. Weight is to be lead and place inside mid car, immediately to the right of the hump.
- 8.10. Weight is to be painted white with the car number identified in 2 inch black number(s)
- 8.11. Weight is to be fastened to a ¼ inch plate and then to the floor with grade 8 bolts.
- 8.12. Other makes and models are subject to similar restrictions at the discretion of officials. If you are unsure, please call before building. Stock carburetor/fuel injection system for make and model only. Fuel injected ASIAN entries (Toyota, Nissan, Subaru, etc.) must have throttle bodied fuel injection only. German fuel injected entries (VW, etc.) will be monitored and subject to performance evaluations.
- 8.13. Flywheels must weigh a minimum of 16 lbs.
- 8.14. Stock air intake systems. No K&N (or similar) filters. Stock filter must remain but paper can be hulled.

## 9. EXHAUST

- 9.1. 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.

#### 10. FLOOR

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

#### 11. GAS TANK

- 11.1. If original gas tank is ahead of the back of the rear wheels, it must remain and be used. It is mandatory that a safety chain be installed under the tank running front to back to catch the tank in case the original straps break. 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. Hatchbacks or station wagons must have tank ahead of the back of the rear wheels in stock location under floor. It is mandatory that fuel lines be run under the floor and not through the driver's compartment.

#### 12. HOOD

- 12.1. 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 must be located anywhere ahead of the front firewall and under hood. The battery must be securely fastened.

#### 13. INTERIOR

- 13.1. Gearshift, pedals and front seat must remain.  
13.2. **Aluminum racing seat is mandatory and must be mounted to original seat brackets and backs must be bolted to the shoulder height cross pipe.**  
13.3. **A removable steering wheel is permitted to allow entry and exit to the seat.**  
13.4. Aftermarket oil pressure and heat gauges are permitted.  
13.5. Roof insulation, floor covering and bottom of rear seat must be removed.

#### 14. LISTENING DEVICES

- 14.1. Scanners or Raceceivers are mandatory.  
14.2. Scanners will only be set to track frequency. Frequency will be posted on the line up board at drivers meeting.  
14.3. Scanners must be mounted out of driver's reach while buckled in seat.  
14.4. No two-way communication, listen only.

#### 15. MIRROR

- 15.1. One stock windshield mirror Permitted  
15.2. One driver side mirror permitted. Maximum measurement of 4 inches at any given spot and must be mounted fully inside the body.

#### 16. MISC.

- 16.1. Should the Thunder division be less than 25 cars on any given night, the top finishers from the Lightning Main feature may advance to the rear of the Thunder Main feature.  
16.2. 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.

#### 17. NUMBERS

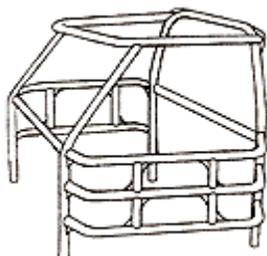
- 17.1. Numbers must be 18" high on both doors and roof, and readable from the grandstands. Recommend white numbers on a dark surface or dark on white or day glow. No gold, silver, gray, metal flake or trick numbers allowed. Also require a 6" white number on the top passenger side corner of the windshield. 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 **Marilyn Mason at 481-2514** Monday to Friday between **8:30 a.m.** and **4:00 p.m.**

#### 18. RADIATORS

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

## 19. ROLL CAGE

- 19.1. A four-point roll cage made of seamless 1.66" diameter .095 wall thickness roll bars is mandatory. 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 and may be extended to the rear of the car but cannot be cross-braced. 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.



19.2.

## 20. SAFETY

- 20.1. Seat belts must be worn whenever car is on the racetrack.
- 20.2. 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.
- 20.3. Drivers' side window net, with quick release from top, is mandatory.
- 20.4. Helmets must be worn whenever car is on racetrack.
- 20.5. **Full-faced helmets are mandatory. Helmet must be Snell SA or SAH, 2010 or newer. Helmets must be free of cracks and must accompany car at time of technical inspection.**
- 20.6. A SFI Head & Neck Restraint is recommended.
- 20.7. 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. Brackett securing fire extinguisher must be metal. No plastic brackets.
- 20.8. Driver must wear a SFI fire rated driver's suit.
- 20.9. Driver must wear SFI fire rated driver's gloves.
- 20.10. A "kill switch" must be installed in the center of the dash. This "kill switch" when turned to off position must shut the engine off.
- 20.11.

## 21. TIRES AND WHEELS

- 21.1. Used Legend Car tires 2015 and older will be the Spec tire for the division. Teams will buy tires from Legend Teams.
- 21.2. Stock passenger wheels (unmodified) only. Wheels must be stock size (width, height, and offset) for car. Volkswagen wheels are permitted. 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.
- 21.3. No chemical treating of tires (i.e. Compound Altering / Tire Softening). Tires will be subject to durometer testing. **Durometer readings under 62 will lead to penalties/suspension.**

## 22. TRUNK

- 22.1. 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.

**Technical Questions**

- *Competitors can contact Lawrence Hopper at 456-2489 for any technical questions.*
- ***We endeavor to make the rules as explicit as we can. If it doesn't say you are permitted to do something, then you are not permitted to do it.***