

2012 Thunder Car Rules

The purpose of this division is to provide an inexpensive way for a beginner to get into stock car racing.

1. All thunder cars must be strictly stock for make and model of car.
2. Top five may be weighed immediately after the feature.
3. Inspections may be made at anytime at the discretion of track officials.

SAFETY EQUIPMENT

- 1) SFI-approved full fire suit is required.
- 2) Fire retardant gloves and shoes are mandatory.
- 3) Neck brace or head and neck restraint system is recommended.
- 4) Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window.
- 5) Snell-rated SA2000, SA2005 or SA2010 helmet required.
- 6) Minimum three inch wide SFI-approved five point safety belt assembly required (Y-type shoulder harness not allowed), must be mounted securely to roll cage, recommended to be no more than two years old. It is the responsibility of the driver, not the officials or the track to ensure that his/her seat belt restraint system and all components are SFI approved, correctly installed, maintained and properly used .
- 7) Kill switch required within easy reach of driver and must be clearly marked 'OFF' and 'ON'.
- 8) Roll bar padding required in driver compartment (Fire retardant recommended).
- 9) Cars must have fire extinguisher in reach of the driver.

BODY

1. The stock steel unaltered floor pan, stock front firewall will be used only. Stock wheel wells must be retained in rear.
2. No holes in the hood, roof or trunk lid. Hood will be kept in place at all times. All stock sheet metal will be mounted on car at all times.
3. All doors and body panels will be welded together.
4. A complete firewall must seal trunk from drivers compartment. 16 Ga. Sheet metal min.
5. The only modifications to the floor pan, firewall or trunk floor are for repair of rust areas or to install fuel cell in trunk. All holes in driver's compartment must be covered with minimum of 16Ga. Sheet metal.
 - *Fuel cell will be mounted in trunk area, between frame rails. Stock gas tank will be removed.
 - *Fuel cell must be above center line of differential housing or 12" above ground, whichever is higher.
 - *Max. 22 Gal. fuel cell.
6. Trunk floor may be cut to accommodate fuel cell. Minimum of 2-12 GA. 1 ½" safety straps.
7. No spoilers allowed.
8. Aftermarket nose and tail panel permitted.
9. Stock style bumper only if nose and tailpiece are not used. Bumper will be securely attached in place in stock location welded to frame rails. No front or rear bumper shocks allowed.
10. Ballast will be allowed, but must be bolted to frame or to cross member rails. All ballast will be painted white with number of car in contrasting color.
11. No Uni Bodies.

WEIGHT

1. 3200 LBS with 500cfm 4412 two barrel carburetor
2. 3400 LBS with OEM four barrel carburetor

WINDSHIELD AND GLASS

1. All glass, headlights, tail lights must be removed prior to arrival at the track.
2. No broken glass shall be in the car. Car must be swept clean.
3. Full 3/8" bars minimum, in front of driver. 4 bars minimum. 3/8 solid bars with wire mesh.

ENGINE/BLOCK

1. Engine block will be stock O.E.M. small block passenger car, for make and model of car.
 - *No 400+ engines. 350 C.I. Small block only for make and model of car. 350 C.I. Ford, 360 C.I. Chrysler
 - *Block numbers will be checked. All blocks will have legible numbers
2. Stock from carburetor oil pan.
3. Aftermarket air filter permitted.
4. Engine will be mounted in stock O.E.M. position.
5. Stock rear transmission mounts only, with stock transmission mount cross member, bolted to frame.
6. Must idle stock - 850 RPM maximum
7. No engine swapping between make and model of car
8. No external vacuum canisters.
9. The maximum engine over bore permitted will be .040 on the 360 Chrysler engine. On Chevrolet, Ford and 340 Chrysler, the maximum over bore permitted will be .060.
 - * 1. Chevrolet engines will be permitted a maximum displacement of 360.4 c.i.d.
 - * 2. Ford engines will be permitted a maximum displacement of 362 c.i.d.
 - * 3. 360 Chrysler engines will be permitted a maximum displacement of 367 c.i.d.

CYLINDER HEADS

Steel stock heads only. No after-market, bowtie, or aluminum heads. No port work allowed. No roller rockers. Stock for make and model of car.

INTAKE MANIFOLD

Must be strictly stock for make and model of car. Cast iron intake manifold only. No high-rise truck, marine type, or bowtie intakes allowed. No porting or polishing of any kind allowed. You will pull carburetor to inspect intake at track official's discretion.

EXHAUST

OEM cast iron exhaust manifolds only. No center dump type manifolds. Exhaust must extend past firewall and turn towards ground. Maximum two inch O.D. exhaust pipes. Must remain dual exhaust, no crossover or 'Y' pipes. No exhaust sensors, no center-dump manifolds allowed on Chevrolet. No Headers allowed

CARBURETOR

Carburetor must be stock O.E.M. for make and model of car.

- *O.E.M. carburetors for Ford and Chrysler products, for make and model of car will be allowed if Fomoco or Mopar is molded on carburetor body, for make and model of car.
- *Holley 2 BBL - 4412 - 500 C.F.M., with stock 1.378" maximum venture bore allowed.
- *4 BBL to 2 BBL adapter allowed, 1" height maximum.
- *No double pump carburetors allowed.
- *After market filters allowed as long as it will not require cutting hole in hood to fit on motor.

FUEL SYSTEM

1. Stock manual fuel pump mounted in stock location on engine. Must shut off fuel supply to engine when engine is not running.
2. No electric fuel pumps allowed.
3. All fuel lines routed through drivers compartment will be enclosed inside rigid tubing from bending rear firewall through front firewall and sealed at both ends.
4. No E85 allowed in thunder cars.

ELECTRICAL/BATTERY

1. No dual point distributors.
2. Stock coil in stock location, must use stock distributor.
3. Battery must be securely mounted inside plastic battery safety box.
 - *Plastic battery case will be securely mounted to frame or roll cage bars behind driver's seat.
 - *Battery box top will be securely mounted to battery box.
4. Battery lines running from battery through front firewall will be mounted in flexible tubing, i.e. garden hose, etc. and sealed at both ends.
5. Ground wire will be directly to frame or roll bar.

TRANSMISSION

1. OEM automatic transmission only. All components must be replaceable by OEM components and in stock location. Torque converter must be a steel case functional torque converter with all elements with a minimum of 10-3/16" outside diameter. Converter must have a 1/8" drain plug on outside of converter. Converter temperature and fluid volume may be measured to ensure compliance. Converter must be as warm or warmer than transmission. Converter when drained must measure a volume no less than three (3) quarts. Cooler lines must be blocked off before draining converter for measurement. Addition of material to increase stock converter diameter is illegal. All transmissions must have an operating forward, neutral, park and reverse. All transmissions must be able to stop and idle in gear. A functioning shifter must work and be in stock location. No lock-up type converters allowed. Automatic transmissions will not be allowed to have any wires, cables, or attachments other than shifting linkage and hydraulic fluid lines installed for cooler.
2. No GM Powerglide Transmissions allowed.
3. Drive shaft must be painted white.
4. Drive shaft hoop mandatory under drive shaft 6" to 8" behind transmission tail shaft. No chains.

COOLING SYSTEM

1. Stock radiator in stock location.
2. Aluminum or plastic radiator allowed.
3. No electric fans.

REAR END DIFFERENTIAL

1. Post traction limited slip, locked or welded, spider gears allowed.
2. 9" Ford rear end differentials allowed in non-Ford cars. Floaters will be allowed.

BRAKES

1. No altering of stock brakes allowed.
2. Brake pedal must remain in stock location.
3. Cars must have fully functional brakes on all four wheels.
4. Rear disc brakes allowed. Brake assemblies must be in stock location on all four corners.
5. No brake bias or proportional valve permitted.
6. One O.E.M. master cylinder only for make and model of car.

FRAMES

1. Body and frames must be O.E.M. stock for make and model of car in O.E.M. location. No switching or shifting of any body parts allowed.
2. Complete bumper-to-bumper O.E.M. stock frame for make and model of car other than repairs needed to repair areas due to rust or damage.
3. Repairs to stub must retain exact O.E.M. measurements for make and model of car.
4. A four-post roll cage must be used with three door bars on driver's door. Driver's door must have 1/8" steel plate on door bars. Minimum of two bars on passenger side of car.
5. Cage can be braced, rearward to the frame where it starts to kick up over the rear end. Bars may be added from firewall forward to protect frame and radiator. Front firewall, front or rear hoods optional.

SUSPENSION

1. O.E.M. stock suspension only for make and model of car. Front A-frames and rear suspension arms, O.E.M. stock for make and model of car.
2. No coil-over, overload, cargo ratchet or air assisted shocks permitted.
3. Racing shocks permitted must fit in same brackets as O.E.M. stock front and rear, for make and model of car.
4. Racing springs allowed, must maintain stock O.E.M. frame and body heights for make and model of car.
5. OEM upper A-frame may be replaced using aftermarket upper A-frame.
6. No lift bars or recovery shocks or spring recoils allowed.
7. No screw jacks.

WHEELS

1. Reinforce racing type wheels mandatory. Right rear bead lock only.
2. Maximum wheel width is 8".
3. One-inch lug nuts are mandatory.
4. Any loss of tire and or tire & wheel requires a driver to find safety or pull off of racing surface to infield or exit track immediately.

TIRES

1. No grooving, sipping or soaking allowed.
2. Absolutely no racing tires, disguised as DOT street tires allowed.
3. Must run 70 series DOT approve, 15" DOT name brand tires on 8 " wide rim (maximum).
4. Maximum tire is 255 - 70 - 15.

GAS TANK INSTALLATION

1. Fuel cell mandatory. 18 gallon maximum capacity. Bracing in trunk permitted.
2. Fuel cell will be mounted in trunk area, between frame rails with 1 ½" clearance on all four sides. Minimum of two 12 GA X 1 ½" wide safety strapping, mandatory for safety.
3. Trunk floor may be cut to accommodate fuel cell.
4. O.E.M. fuel tank will be removed.
5. No electrical fuel pumps allowed.
6. Fuel line from trunk to the engine compartment must be steel or steel braided. No copper or rubber allowed. Any fuel line run through drivers compartment will be enclosed in rigid tubing from inside trunk area to inside engine compartment will be sealed at both ends.
7. Tech inspector must approve installation.
8. Fuel cell will be a minimum of 12" above ground or above center line of rear end differential housing, whichever is higher.

RACE CARS SUBJECT TO BEING PUMPED

Any race car entered, whether running the A Main or not, and regardless of whether otherwise disqualified is subject to being pumped. This usually will include, but is not limited to, pumping the top three (3) finishers in the feature race, plus one other feature finisher drawn from positions 1-10.

PUMPING PROCEDURE

1. After the feature race, a track official will notify the drivers of the relevant race cars that their race cars are to be pumped. The drivers of the race cars to be pumped shall then proceed directly to the area designated for inspection and tear down. The track officials will then proceed with the pumping as follows:
2. The track official will advise the driver which cylinder will be pumped.
3. The selected cylinder will be pumped, using the appropriate P&G gauge, in accordance with the manufacturer's instructions.
4. The reading obtained will be multiplied by eight (8), to get the total cubic inches of the engine.

SAFETY

1. A four-post roll cage must be used with three door bars on driver's door. Driver's door must have 1/8" steel plate on door bars. Window net on driver's side is mandatory. Two bars on passenger side only.
2. Cage can be braced, rearward to the frame where it starts to kick up over the rear end. Bars may be added from firewall forward to protect frame and radiator. Front firewall, front or rear hoods optional.
3. All drivers must use approved 5-point safety harness and crotch belt. The tech inspector must approve all seat belt installation. None shall be more than 5 years old.
4. Driver's suit and safety helmet mandatory. Helmet must have a Snell rating of 2000 or newer. Racing shoes and gloves are mandatory. Full racing suit required. Must be approved by track tech.
5. Always stay in car with helmet and seat belts on. Do not get out of car during race unless you have a fire.
6. If hood rises during a race, go to infield immediately.
7. Drive shaft and all ballast must be painted white with number of car in contrasting color. Drive shaft hoop mandatory under drive shaft 6" to 8" behind transmission tail shaft. No chains.

CAR NUMBERS

1. Numbers with letters are allowed. Make the letter large enough to be seen from the tower.
2. Numbers must measure minimum of 22" high by a minimum of 15" wide. The thickness of the number must be no less than 3".
3. Color of the number must be contrasting with the car color.
4. Numbers must be located on both doors and roof of the car. Put the roof number so it can be read from the tower when the car is in the front stretch.
5. Car number above the right rear bumper is recommended.
6. The car must be washed prior to each night's event. Throughout the night, if the number becomes covered with mud, it must be washed before participating in the next event so the scoring team can read the number.
7. If you are caught cheating after a race, you will be disqualified for the night. You will lose winnings and points for the event. If you are caught cheating a second time, you will be barred for two weeks and lose all points for the year.

DISCLAIMER

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of the racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM THE PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR

REGULATIONS. These rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death of a participant, spectator, or official.

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