

2012



THUNDER CAR RULES/SPECIFICATIONS

The following specifications have been prepared by Montpelier Motor Speedway and their officials as guidelines for the construction of a Thunder Car. No express or implied warranty of safety shall result from publications of or compliance with these rules. They are intended as a guide and are in no way a guarantee against injury or death to participants, spectators, or others.

Anything not covered by these guidelines, **must be approved**, by the promoter or his assigned steward. These specifications are intended to be in effect throughout the 2012 auto-racing season. However, continuous development in auto racing and technology may necessitate changes in these guidelines, and management reserves the right to change them at any time.

THE PURPOSE OF THIS DIVISION IS TO PROVIDE AN INEXPENSIVE WAY FOR A BEGINNER TO GET INTO STOCK CAR RACING.

2012 Rule Changes indicated in BOLD

1. All thunder cars must be strictly stock for make and model of car.
2. Inspections may be made at anytime at the discretion of track officials.

WEIGHT

1. 3200 lbs with 500 CFM #4412 two barrel Carburetor
2. 3400 lbs with OEM four barrel Carburetor
3. Top five may be weighed immediately after the feature.

BODY

1. The stock steel unaltered floor pan, stock front firewall will be used only.

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 driver's compartment. 16 Ga. sheet metal minimum.
5. The only modifications to the floor pan or firewall are for repair of rust areas. All holes in driver's compartment must be covered with minimum of 16 Ga. 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 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

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. **Entirely Stock (May Run Aftermarket Valve Covers and 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 max.
7. No engine swapping between make and model of car.
8. No external vacuum canisters.

CYLINDER HEADS

Steel stock heads only. No after-market, bowtie, or aluminum heads. No port work allowed. No roller rocker. 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 or marine type intakes allowed. No porting or polishing of any kind allowed. You will pull carburetor to inspect intake at track official's discretion.

EXHAUST MANIFOLD - Cast Iron Manifolds

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

- * O.E.M. stock 4BBL carburetors allowed, must be for make of car.

GM-Quadrajet, Ford-Fomoco, Mopar-Mopar

- * Holley 2BBL-4412-500 C.F.M., with stock 1.378" maximum venturi bore allowed.

- * No double pump carburetors allowed.

- * Aftermarket filters allowed as long as it will not require cutting hole in hood to fit on motor.

- * Gas City I 69 Speedway 2 barrel Rochester is legal.

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. O.E.M. stock automatic transmission with three forward gears and one reverse must function in all gears with engine idling.

COOLING SYSTEM

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

REAR END DIFFERENCIAL

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.

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. **May run upper tubular A arms.**
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. Metric cars can reinforce O.E.M. upper A-frames only.
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. Must run 70 series DOT approve, 15" DOT name brand tires on 8" wide rim (maximum).
2. Maximum tire is 255-70-15
3. No grooving, sipping or soaking allowed
4. Absolutely no racing tires, disguised as DOT street tires allowed.

GAS TANK INSTALLATION

1. Fuel cell mandatory. 22 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 engine compartment must be steel or steel braided. No copper or rubber allowed. Any fuel line run through driver's 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 centerline of rear end differential housing, whichever is higher.

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 90 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 the 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 seen 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 PROMOTER/TRACK OFFICIALS SHALL BE EMPOWERED TO PERMIT MINOR DEVIATION FROM ANY OF THE SPECIFICATIONS HEREIN OR IMPOSE FURTHER RESTRICTIONS THAT IN THEIR OPINIONS DO NOT ALTER THE MINIMUM ACCEPTABLE REQUIREMENTS. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHOULD RESULT FROM SUCH ALTERATIONS OF SPECIFICATIONS. ANY INTERPRETATION OR DEVIATION OF THESE RULES IS LEFT TO THE DISCRETION OF THE PROMOTER/TRACK OFFICIALS. PROMOTER/OFFICIAL DECISIONS ARE FINAL.

The absence of a specific rule does not imply approval, consent, or permission regarding the subject.

IF IT IS NOT IN THESE RULES, DO NOT TRY IT