

Thunder/ Hobby Stock – 2018 – Gillette Thunder Speedway / Black Hills Speedway

The GSCRA head tech person has the final say in all interpretation of the following rules. The Techs determination will be final. If an item is not stated as legal, it is deemed to be illegal. The use of transponders will be required starting this season. IMCA license will be required.

Rule 1 – Car Type

1. Any American made car (no trucks) with a minimum factory wheel base of 108”
2. No convertibles allowed
3. No four wheel drive or front wheel drive cars allowed
4. No former street stock cars allowed

Rule 2 – Bodies

1. Must remain strictly stock
2. Hoods may be trimmed and liner removed, but no after-market. You may cut a hole in the hood or have a maximum 4 inch high hood scoop.
3. No cutting or trimming of any body panel is allowed, except for bar and roll cage installation
4. All glass and chrome must be removed. This includes any exterior chrome, moldings, emblems, door handles, bumper guards and plastic grills. Fiberglass parts that may be subject to being broken must be removed
5. All flammable materials must be removed from inside the car
6. Steering shaft must remain in stock location. A removable steering wheel is allowed and highly encouraged. A solid shaft must remain the same length as the stock shaft.
7. Full uncut floorboard must extend from the front firewall to the rear bumper. It must remain uncut and no cutting of trunk floor. However, the trunk spare tire bubble may be removed and the hole plated shut.
8. Inner front fender wells may be removed. Front and rear fenders may be trimmed for tire clearance. All sharp edges must be rolled or covered.
9. Doors may be either welded or bolted shut. If bolted a minimum 1 ½ inch strap with 2 bolts on each end must be used.
10. Bumpers may be welded to prevent loss. Each end must be turned to prevent hooking another car. Bumper shock absorbers may be welded or replaced with steel pipe no larger than 1 ¾ inches in diameter with a .125 thickness.
11. One bar no larger than 2 inches in diameter for radiator protection will be allowed. Bar must be horizontal to the frame and behind the sheet metal. Two vertical bars will be allowed on each side of the radiator to support this hoop. Bars may go back to the firewall but not to go through. They must remain in front of the firewall (Exception if it's a uni-body)
12. Bars for leg protection are required
13. Uni-body cars must have a minimum 1/8 inch thick 6 inch square welded under the main cage legs. Plate must be securely welded to main structure of uni-body OR be bolted through the structure with a matching plate on the underside.
14. Uni-bodies will be tied together with 2 inch X 1 inch tubes.

15. No tinning in the passenger compartment.
16. Aftermarket nose and tail covers are allowed

Rule 3 – Suspension

1. No modifying of suspension
2. All suspension components must remain absolutely stock for make, model, and year of car. No spacers or aftermarket parts of any kind or hold down chains allowed.
3. Rubber suspension bushings only. No polyurethane, plastic, steel, aluminum, brass or any other material non OEM for the model used
4. Stock OEM springs only. No air shocks or shocks with helper springs allowed. No aluminum suspension components allowed. NO racing springs allowed.
5. Springs must have the SAME spring rate, diameter and height from left front to right front and left rear to right rear and must be stock OEM for year make and model of car.
6. Shocks or springs may be claimed for \$10.00 each by the tech or GTS. If deemed legal, they will be returned in 5 days
7. Spring or shock claim must be turned in before the start of the main event to the pit steward. Shocks and springs claimed will be exchanged after completion of the main event.
8. All four wheels must have functioning brakes to OEM specifications.

Rule 4 – Transmission and Rear End

1. All Drive train components shall be strictly unmodified stock OEM parts.
2. Stock passenger car type transmission for make and model of car.
3. Stock passenger car type rear end only.
4. Rear end and transmission must match family of car used. (Example: Ford for Ford, Chevy for Chevy)
5. All cars must have ALL working forward and reverse gears.
6. No power glides allowed.
7. Automatic transmissions will have a stock working 11 inch torque converter NO lockup converters allowed. Add on oil cooler is allowed, but must be shielded from the driver if located near drivers compartment. No material may be added to torque converter to achieve or equal 11 inch measurement. All converters shall contain 4 quarts of fluid. Although a quick oil detection plug is not required. Scatter shields are optional and are not required.
8. Rear ends may have spider gears welded or posi traction.
9. No aluminum components allowed.
10. No full spools allowed, Minis are allowed.
11. Rear end gears may be run no deeper than 4.10 gearing.
12. All components must remain stock.

Rule 5 – Engines

1. No high performance engines allowed.
2. All engine components must be strictly stock and stock OEM production availability for make and model of car.

3. Engines may be interchanged within their family line if no modifications of any kind are required and all mounting remains in stock placement.

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4. Up to .60 over bore is allowed

5. Pistons shall be stock flat top or less. No dome pistons allowed. 400 engine is allowed to run flat top pistons. 9.5 to 1 compression

6. No aluminum manifolds , stock or otherwise

7. Stock exhaust manifolds only, no center dump Chevy allowed. Exhaust must extend past the driver and remain under the floor board

8. ABSOLUTELY NO machining, milling or modifying of cylinder heads, intake manifolds, exhaust manifolds, carburetors or any portion of the cylinder block.

9. All engine and components, except camshaft and lifters must remain and be OEM factory production available for engine to be legal. 350 must run 350 crank and 350 rods

10. All cars must have a hydraulic flat tappet cam with a .450 gross valve lift or less.

11. Stock OEM ignition only.

12. No out of ordinary add on equipment allowed.

13. Carburetion will be limited to one stock 500 CFM 2 barrel. Or one stock Holley 4412. No grinding or polishing of any kind allowed. Shaft must remain round. Choke can be removed but not the air horn. Must have stock measurements. Maximum thickness of gaskets and adapter plate will be 1 ½ inches. Stock aluminum adapters only. No high performance adapters allowed.

14. Stock two or four barrel intake manifolds only.

15. No heads allowed that are listed as high performance in the interchange manuals.

16. Chevy heads: NO Vortec heads, NO multiport fuel injection heads and NO casting numbers ending with 040, 041, 186, 291, 191, 370, 432, 461, 462. No bow tie heads, No SO, No w-2 heads. No 202 intake valves on Chevy or Chrysler. No airflow devices allowed below carburetor.

17. GSCRA has the right to remove and inspect cylinder heads at the tracks discretion. Cost of head gaskets ONLY will be reimbursed.

18. Aftermarket oil pan is allowed but not required

19. The engine must remain in its stock location. You may NOT relocate the motor mounts.

20. All cars must run a track issued restrictor plate. NO PLATE NO RACE

21. Aluminum aftermarket pulleys allowed.

Rule 6 – Safety

1. Car must have a minimum 4 point roll cage.

2. Four bars required on driver's side.

3. Three bars minimum on right side.

4. 1 ½ inch X .095 minimum mild steel tubing on mail roll cage.

5. A competition safety harness with three inch belts mounted in 5 points is required. Belts must meet the required safe age limit for use. Belts must be fastened to a point on the frame or roll cage. Must be replaced every three years.

6. Race type seat required. NO fiberglass.

7. Must have window net. Spring loaded only.
8. Must have screen and/or bars in front of driver.
9. Roll bar padding will be used where the drivers head or arms could make contact with the roll bars. This includes halo and vertical cage bars.
10. Drive shafts shall be painted white.
11. Drive shaft must have a 360 degree safety hoop.
12. A plate on driver's door with 1/8 inch minimum thickness. It must cover from top to bottom bar and from back of driver's seat to driver's knees.
13. No unshielded batteries in drivers compartment

Rule 7 – Fuel

1. Pump gas only, 92 octane or less.
2. No electric fuel pumps, stock mechanical only. NO Holley, NO Carter, NO Edelbrock and no adjustable fuel pumps Allowed.
3. No additives, alcohol, or exotic octane boosters allowed.
4. Fuel may be tested at any time.
5. No adjustable fuel tanks allowed. All fuel lines will run outside of the cars body. Maximum of 3/8 inch fuel line.
6. Racing fuel cell required. Fuel cell must be in approved metal housing. Plastic fuel bladders will not be allowed to be bolted down by themselves. Permanent tin housing must be around it.
7. Protection bar around fuel cell is required. Bar must protect rear side from collision and extend below the bottom level of the fuel cell.
8. Fuel system must meet safety requirements at all times.

Rule 8 – Wheels and Tires

1. Approved steel safety wheels or racing wheels only. NO stock rims allowed
2. No aggressive tread design is allowed. All season tread is allowed. No mud or snow tires
3. Maximum tire size is p235/70/R15 or up to series tires in actual passenger car type tire. Any current Hoosier B mod or IMCA A mod tire allowed.
4. Maximum rim width is 8 inches.
5. Wheel studs will be required to be ½ inch minimum diameter on the front and rear of car
6. No welding on rims.

Rule 9 – Weight

1. 3300 pounds minimum, including driver.
2. All weight, if added, must be mounted with a minimum of two ½ inch bolts. Weights must be painted white and have car number written on them.
3. Weight cannot be mounted in driver's compartment.

Rule 10 – Miscellaneous

1. Failure to pass inspection can result in up to a \$500.00 fine to the driver and/or a 30 day suspension for the driver (depending on the severity of infraction) Penalty will be decided by the board of directors.
2. It is the driver's responsibility to prove to the Tech inspector they are legal.
3. Thunder stock drivers will fall under the GSCRA rules for protesting a mechanical part they deem an unfair advantage.

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Rule 11 – Tear down/Claiming Motors

Tear down:

1. Protest fees: \$100.00 cash for either the top end or bottom end. \$200.00 cash for both. You must write down what you want checked.
2. The only persons that shall be present at the tear down will be the following: the driver for the car in question, The protesting driver, One GSCRA thunder stock class rep, GSCRA officials the GSCRA tech inspector and a helper if they request. Anyone else must be authorized by GSCRA tech inspector. Any other driver not involved with the car or GSCRA members will be fined a MINIMUM of \$50.00 if they show up at the tear down.

Claiming of Motor:

1. To claim a motor you must present CASH dollars to the scale official within 5 minutes after the race. Claimer must have in writing what they are claiming.
2. The drivers are the only ones that can claim a motor.
3. To claim a motor the driver will present \$1200.00 in CASH. Or if the engines are compatible \$400.00 in CASH.
4. The claimer must pull into the claim area.
5. All external parts on any claim will be removed. Long blocks include intake manifold and tin.
6. You cannot claim or be claimed if you are racing at the track for the first time. You can only claim or be claimed TWICE in one racing year.

By signing this document I agree that I have read and fully understand all 5 pages of these rules as written and failure to comply could result in FINE and/or SUSPENSION. GSCRA Reserves the right to fully inspect cars at any time for safety or performance compliance. Failure to cooperate will result in immediate suspension.

Driver Print

Date

Driver Signature