

# **HOBBY STOCK RULES**

01/14/2018

Pure Stock / Thunder Stock cars please contact the raceway for information on racing at Tomah-Sparta Speedway

## **BODY/CHASSIS**

1. 108" minimum wheelbase, American made stock production vehicles from 1955 to 1988 only.
2. No convertibles, or pony cars. Must be front engine, rear drive only.
3. Models with a full factory frame must retain that frame in stock position
4. Unibody models not allowed unless discussed with Tomah-Sparta Speedway officials prior to construction.
5. X Brace allowed
6. Chassis must remain stock, full frame bumper to bumper (exception #7 below)
7. Rear frame rails, rearward of 6" behind axle centerline, can be replaced with square tubing.
8. Frame interchange not allowed
9. Frame must be original length, width, thickness, location, etc
10. Do not cut away any material from the factory frame
11. Do not reinforce the factory frame in any way which might obstruct, cover over, relocate, change, interfere with, etc any part of the frame such as spring pockets, body bolts, mounts, etc.
12. Leave the frame stock
13. All body mounting must be in stock location and attachment
14. Frame and rocker panels must be a minimum of 6" off the ground
15. All body components, including fenders, roof, cowl, doors, quarter panels, trunk lid, etc must remain in stock location and orientation & of steel material.
16. Rear spoiler are allowed.
17. All metal interior body work, such as floor, and front and rear firewalls, must stay intact. Rusted areas must be replaced with steel of similar thickness. Seal all holes.
18. Inner door material may be removed
19. No chopping of the roof to make it lower
20. No shortening of the fenders or quarters
21. No aluminum, fiberglass body parts allowed with tech approval, except for 5" maximum width aluminum rocker panel
22. Aftermarket plastic bumpers allowed..
23. Remove all cloth, plastic, vinyl, carpet, leather, etc., and any other non-essential flammable items
24. Air-conditioning, heaters, & radios must be removed. Remove all headlights, taillights, side markers, emblems, moldings, nameplates, & associated hardware
25. Front & rear seats & associated hardware must be removed

26. Stock hood & trunk latch must be replaced with pins, hood and trunk lid may be gutted & supports may be required by tech officials
27. Removal of trunk floor is allowed.
28. No sharp objects allowed anywhere in/on vehicle
29. No front air dams
30. Radiator air deflector-3" max. Width of radiator only
31. Safety hoop MANDATORY, on front half of drive shaft
32. Steel drive shaft only, 2 1/2" minimum diameter, painted white or bright color

### **WINDSHIELD/SIDE WINDOWS**

1. No screen or half windshield permitted.
2. Windshield may remain factory glass or be replaced with 1/8" minimum thickness lexan.
3. All other glass must be removed
4. Rear windows are allowed
5. Rear side windows are allowed

### **BUMPERS/RUB RAILS**

1. Bumpers must be welded to vehicle
2. No cutting of bumpers or corners
3. Remove all trailer hitches
4. 1" square tubing "rub rails" allowed between front and rear wheel wells. Ends must be chamfered and capped

### **ROLL CAGE**

1. Radiator protector no more than 4" in front of radiator and angled toward radiator
2. Radiator protector brace may be added, not to exceed 9" tall and may not extend outside the horns. Must be behind grill & immediately in front of radiator
3. All roll cage bars will be a minimum of 1 3/4" OD x .090" wall steel tubing.
4. No tail pipe tubing or water pipe allowed in roll cage
5. All cage joints require gussets welded in the corners
6. All cage connections shall be completely welded
7. Basic 4 point cage required
8. The bottoms of these bars are to be welded to the frame in the forward most corner of the interior and just behind the plane of the back seat.
9. A minimum of (2) side to side and (2) front to rear bars are required to give triangulated support to the 4 point roll cage
10. A minimum of (3) driver's and (2) passenger door bars are required
11. All bars must be welded to the frame and to each other & NOT to the metal body work
12. Must have roof center bar
13. Driver's door plate mandatory, 1/8" thick steel welded to door bars
14. No half or shorty cages
15. No bars of any kind may be mounted or extend outside the confines of the car body
16. Padding of roll cage bars near driver's head, arms & legs are mandatory, and pad steering column

17. Installation of additional cage bars and supports are allowed to add additional strength to cage

**Special note:** Several local and national firms produce pre-cut and pre-bent cage pieces and kits especially designed for pure stock type race cars. These products may be stronger, less expensive, and more workable than home engineered bars.

## **ENGINE**

1. Maximum compression to 9.5 to 1
2. "76" cc style heads only. See tech official for casting numbers that are legal.
3. Maximum cubic inch: Chevy 362 Ford 362 Mopar 373
4. Flat top or dish pistons only
5. Production type steel crankshaft with normal configuration counter weights required. No lightweight crankshafts.
6. No titanium parts of any kind
7. Must have inspection plug in oil pan: 3/4" NPT located in line with second or third rod journal of crankshaft, on either side above oil level. Hole in windage tray also required.
8. Oil pan may be no lower than bottom of cross-member. Options to correct are to add square tubing to bottom of cross-member, or raise motor.
9. Number 1 spark plug must be in line with or ahead of the upper ball joint centerline. GM 108" Metric chassis with engine in stock location, deduct 50 lbs.
10. All blocks, heads, manifolds (intake & exhaust) must be cast iron and remain untouched except for boring of block. No marine or bow-tie intake manifolds.
11. All camshafts and lifters must be hydraulic. No solid or roller cams
12. Hydraulic cam/lifters only. Maximum valve lift for all engines (GM, Ford & Mopar) is .420" at intake and exhaust.
13. No rev kits, roller rocker arms. Roller tip rocker arms are not allowed.
14. Lifters must be stock type hydraulic, and as installed and adjusted must bleed down .100". No high dollar lifters allowed.
15. No aftermarket heads or manifolds
16. Maximum intake valve diameter is 1.94"
17. Body and engine manufacturer must match. All GM cars are allowed Chevy engines
18. THE TRACK HAS THE RIGHT TO DISASSEMBLE ANY ENGINE FOR ANY REASON
19. No crate engines allowed

## **IGNITION**

1. 12 volt maximum battery
2. Stock type distributor & coil only. Firing order must not be altered.
3. No dual point distributors, or MSD boxes

## **BATTERY**

1. Battery must be securely mounted (metal strap) behind driver in a marine style case.
2. NO BUNGEE CORDS!

## **CARBURETORS**

1. 2 barrel Holley 4412 only
2. 1 1/4" maximum thickness adapter and gasket combination allowed. Bore must not be tapered.
3. Carburetor must have air cleaner. No air boxes allowed
4. No tapered carb spacer plate

### **EXHAUST**

1. Completely stock cast iron exhaust manifolds only. No polishing, grinding or alterations allowed. Manifolds must exit downward, maximum 2 1/8" outlet. Center dumps are allowed(except Corvette).
2. No headers allowed
3. Exhaust must exit rear of driver's compartment and under car to rear, not to side
4. System Options:
  - a. Dual exhaust with pipes and mufflers not to exceed 2 1/2" at any point
  - b. No 2 into 1 exhaust allowed
  - c. No X pipes allowed

### **COOLING SYSTEM**

1. Aluminum radiator allowed
2. Any radiator that can fit in normal stock location may be used
3. No modification to hood for radiator clearance is allowed
4. Some type of additional heavy duty screen must be used to protect radiator
5. A shroud around the outside diameter of the fan is required
6. Water only in radiator. No anti-freeze \$50 FINE

### **DRIVETRAIN**

1. Automatic transmissions only
2. Working stock torque converters only, with 12" minimum diameter
3. It is recommended to install 3/4" plug in rear cover above oil level, for inspection of differential, otherwise rear cover removal at the track may be required
4. Rear end must be stock for that make. No 9" Ford rear ends allowed
5. Aftermarket axle on right side highly recommended
6. All transmission rubber hoses must be sealed from driver
7. All gears must work
8. Must idle when in gear
9. All drain and inspection plugs must be safety wired. \$50 fine for oiling up the track.

### **SUSPENSION**

1. Front suspension components such as control arms, struts, hubs, etc. must remain stock and in stock location, mounted in stock position and manner for that make, model, and year. No after-market ball joints allowed. Oversize ball joints may be used. However distance from control arms to spindle must match stock for that make and model. Reaming of spindles is permitted in order to accomplish this.
2. Poly bushings allowed.
3. No rear sway bar components

4. Rear Suspension – stock only
5. Front sway bar must be mounted to frame in stock location. No shims allowed. Adjustments are to be made with the bolts in between sway bar eye and lower control arm. Maximum of 1 1/4” diameter sway bar. Sway bar must not be tubular, must be solid one piece bar.
6. One stock style shock per wheel, mounted in stock position, location and manner, non adjustable, non rebuildable, with 5/8” or smaller diameter shaft. Valving must be stock off the shelf, nationally advertised.
7. No tie rod or heim end shocks
8. Any steel spring that fits in stock location allowed
9. No adjustable (threaded type) spring spacers
10. Add stackable shims only, (allowed on front and rear springs)

### **BRAKES**

1. Stock brakes only
2. No drilled, vented, j-hooked or directional vane rotors, (Coleman hubs OK)
3. No rear disc brakes
4. Brakes must be in working condition at all 4 wheels
5. Brake type must be stock for that make and model on all 4 wheels
6. One stock master cylinder only
7. Brake pedal must operate normally and be in stock location
8. Single piston calipers, no aluminum components of any kind
9. No made for racing brake calipers
10. One brake proportioning valve allowed, stock only
11. Wheel fans and brake blowers (electric fans) are not allowed

### **WEIGHT**

1. Minimum weight is 3400 lbs, with 53% minimum front, 42% minimum right side, with driver.
2. All added weights must be painted white and lettered with your car number. No tungsten, lead shot, ball bearing, or liquid type allowed. No moving weight or weight moving devices allowed.
3. No weights are permitted to extend or hang below frame

### **FUEL and FUEL TANK**

1. Steel fuel lines only. NO PLASTIC, RUBBER, COPPER, & OR ALUMINUM FUEL LINES!
2. Vacuum fuel pumps only, no electric fuel pumps
3. Stock fuel tank must be removed. Fuel cells MANDATORY, 16 gallon maximum and must have 1/8” deflector plates on sides and rear
4. Fuel cells: must be securely mounted to the frame, be painted red, and be mounted so bottom of cell is a minimum of 11” above ground
5. Vents must contain rollover valves to prevent spillage

6. Fuel cell must have 1 3/4" diameter protector bar on rear, braced back to frame and extend below fuel cell
7. Gasoline only, no oxygenated additives allowed.

### **WHEELS and TIRES**

1. Hoosier 850 tires only.
2. Maximum wheel width is 8". ARE ALLOWED TO USE 8" WHEELS, WITH BACK SPACING OF 2" TO 5"
3. Stock wheels allowed on left side, steel racing wheels required on right side
4. Must use large 1" lug nuts, minimum five per wheel, threads must be visible on outside of lug nuts
5. Minimum wheel weight 19 lbs
6. Wheel offset (backspacing): 2" maximum. (1" back spaced wheels not allowed)

### **SPECIAL NOTES**

1. This division is meant to be an entry/learning level to racing. Drivers with experience in Late Models or higher divisions will not be allowed to compete in this division. At the promoter's discretion noticeably superior cars may be subject to a handicap penalty consisting of weight and/or percentage changes. Rules trickle down from higher divisions, which means if it's not legal in a Late Model, don't expect it to be legal here, etc.
2. Ford and Chrysler vehicles will be allowed some variations to improve competition. ALL MODIFICATIONS MUST BE APPROVED BY TRACK OFFICIALS.

### **SAFETY**

1. Helmet Snell SA-2005 (SFI 31.1 2005) or newer. Snell "M" helmets not allowed. Eye protection mandatory.
2. 3" minimum width lap and shoulder harness, 2008 or newer. Crotch strap required.
3. Belts must be anchored to roll cage or frame. Belt anchors must swivel or be bolted solid pointing in same direction as when driver is belted in. Grade 5 hardware required.
4. Shoulder harness must not be anchored lower than 2" below driver's shoulder height
5. Head and neck restraint, 6-point belts (double crotch strap) recommended
6. Fire retardant driving suit and gloves MANDATORY, driving shoes are recommended
7. Approved aluminum driver's seat required, must be mounted to frame or cage as far from door bars as practical. Rib rest must remain flexible. Headrest support at rear of seat required.
8. Shoulder supports and head supports on right and left sides of seat recommended
9. Driver's compartment must be sealed off from engine compartment and fuel container
10. Access to driver from right side by emergency personnel required
11. Securely mounted fully charged fire extinguisher, dial type required
12. Ribbon or mesh type window net with seat belt style release at front top cage upright required
13. Clearly labeled kill switch accessible from both sides of car required

14. Tomah-Sparta Speedway officials will monitor items related to safety, but ultimately it is the responsibility of the driver to monitor, maintain, and update his safety equipment.

### **MISCELLANEOUS**

1. No tire treatments
2. No Nitrous Oxide, superchargers, turbochargers or fuel pressure systems
3. No aluminum blocks, heads or dry sump oil systems
4. In any and all circumstances, if part of your car is deemed by the tech staff not to support the stock specifications, it will be declared illegal at that time. You will lose points and money for the night. All parts in question must be removed immediately.
5. No anti-freeze: \$50 FINE!
6. Two way radios are not allowed, one way "RACEceivers" required.
7. Team driving will be allowed, maximum of one car with two drivers per team. Championship points will be awarded to this team using the same rules as for individual driver cars. Teams wishing to do this must register as such with the promoter before the first night of the racing season. Each driver must race a minimum of three nights.
8. Championship points will be awarded per your finishing position. If drivers are disqualified, drivers behind them do not advance.
9. Tow Hooks: on front and rear required, painted bright color and/or labeled as TOW HOOK
10. Traveling cars will need to fill out home-track weight requirements.

### **APPEARANCE**

1. A professional appearing paint job in an attractive color required. All lettering must be professional and in good taste. No duct tape or shake 'n spray numbers.
2. 18" high numbers on both doors and roof (readable from right side)
3. All dark colored cars must have ample light colored lettering or numbers to improve visibility
4. Headlight orbits must be tinned over and finished out. Attractive grille areas required.
5. No profanity/offensive lettering allowed.

### **INSPECTION**

1. All cars are subject to inspection ANYTIME before, during, or after a race
2. Officials reserve the right to disqualify cars, require changes, confiscate illegal parts etc. The decision of the officials is final, and will be based upon fair play, safety, and to protect the "Spirit of Stock Car Racing"
3. Any interference with any official(s) and his/her duties will result in an automatic disqualification
4. Official's decisions will be based upon fair play, safety, and to protect the "Spirit of Stock Car Racing"
5. Disqualification (except weight violation) is retroactive to ALL previous events competed in that race meet
6. Non-compliance with the rules outlined here will subject the participants (owner/driver) to disqualification

7. All non-complying components will be seized by track officials
8. Any driver/owner refusing to allow the track officials to inspect a car will lose points and money earned and will have the subject car impounded until inspection is performed with crew chief and driver present
9. Owner/driver must provide tools

**END OF HOBBY STOCK RULE SECTION**