

2024 Revisions highlighted in RED

These rules should be used for all Tri-State Challenge PLM events along with all WVSO, Stateline Speedway, Tri City Raceway and Hermiston Raceway PLM events.

1. **SAFETY** - It is recommended that each car have, within the driver's reach, built-in fire extinguishing equipment containing Halon 1211 or equivalent. Dry powder is not permitted. Any car that is not equipped with a built-in fire extinguisher must have an adequate fire extinguisher securely mounted within reach of the driver. The fire extinguisher may be secured to the roll bars or mounted on the left side door area. All entrants should have in their garage or pit area as part of their equipment, always, a fully charged 10- or 13-pound dry chemical, Halon, or equivalent fire extinguisher. Head and neck restraint mandatory.
 - a. **ELECTRICAL CUT-OFF SWITCH:** All cars must be equipped with a master cut-off switch, center accessible from either side of the car. The cut-off switch must completely disconnect electrical power and must be clearly marked with an "ON-OFF" decal.
2. **COMMUNICATIONS** - One or two-Radios are required for use in this class.
3. **BODY REQUIREMENTS** – Bodies must be ABC stock appearing fiberglass. All bodies must maintain their original dimensions. Must be installed in a professional manner and meet manufacturers' guidelines. No swapping of generations.
 - a. Minimum 47" roof height required, measured 10" back from top edge of the front windshield. Maximum 34 1/2" quarter panel height at rear of panel. Maximum 15" ground clearance at rear quarter panels and rear bumper cover. The nose must maintain stock shape, the bottom lip on the nose must be present, and the lower nose must maintain 3" from the bottom of the grill opening to the bottom of the nose.
 - b. The outside of the front nose can be a maximum of 80".
 - c. The hood must fit in the original position and maintain the original configuration. The hood must have a minimum of 6 hood pins.
 - d. Rear spoiler height may not exceed 6.5 inches, measured from any point along the deck lid to top of spoiler on all cars. A rear spoiler may be a maximum of 60 inches wide on all cars. For GEN6 body 64.5 inches.
 - e. No streamlining allowed, no under and/or belly pans permitted. Radiator box 29-inch MAX.
 - f. The rear bumper cover may not be altered, modified, or drilled.
 - g. Exteriors nerf bars or any other type of external supporting devices are not permitted. Lexan number protectors okay.
 - h. The interior of the car must be totally isolated from the engine compartment and fuel cell with firewalls. All holes must be sealed.
 - i. Front and rear fenders including side skirts will not exceed 1 inch flare from outside of tire.
 - j. A body template will be used at the Chief Tech Inspector's discretion and his decisions are final and referee with 9.0 version ABC will be in place. Gen 6 5star body approved.



4. **WINDOWS** - A windshield made of clear safety glass or Lexan must be used. Each car must have a rear window made of clear safety glass or Lexan. Rear windows must be flat and not dished from roof to deck lid. There must be an open space at the top passenger side of the windshield for the class sponsor.
 - a. Must have 3 vertical braces inside the windshield spaced at least 6" apart.
 - b. No windows in the driver's door or passenger's door, window wings okay. A driver's side window net is required on all cars and must be equipped with a quick-release device on the top left front corner.
5. **HEIGHT, CHASSIS DIMENSIONS** – These weight advantages/penalties may be adjusted at any time in the interest of fair competition.
 - a. The minimum wheelbase permitted is 101 inches.
 - b. Maximum tread width is 67".
 - c. There must be a minimum of 8 inches ground clearance at the fuel cell.
 - d. Added lead weight must be painted white and must have car number clearly visible on each piece. Lead must not hang below your frame.
6. **LATE MODEL ENGINE & TOTAL WEIGHT REQUIREMENTS** - These weight advantages/penalties may be adjusted at any time in the interest of fair competition. All cars 58% left side weight MAX. Maximum 1" spacer on all motors.

You must fit into one of these categories.

Weight 2750:

- a) Factory GM encrypted sealed crate 602/604; PLP tool legal; 650cfm; 1.5 rocker 602 -6000 chip; 604 -6400 chip.
- b) Factory Ford sealed crate, Serial#D347SR; BLP tool legal; 650cfm; 6400 chip - NO carb spacer.

Weight 2775:

- a) Steel head, Edelbrock performer dual plain; 7300 chip; 360ci MAX.
- b) **R7 Ford crate factory sealed; 650CFM, 6400 chip, tool legal – NO carb spacer.**

Weight 2800:

- a) Aftermarket sealed crate 602/604; tool legal, 650CFM; 1.5 rocker 602 -6000 chip; 604- 6400 chip.
- b) **Factory sealed GM604 with 6.5-inch pan, 1.5 rocker, 6400 chip.**
- c) **NON-REBUILT 604 crates with non-encrypted seals, 1.5 rocker, 6400 chip.**
- d) Aftermarket sealed Ford crate; Cope, Hamner, Progressive MEP425LM; 650CFM; 1.5 rocker, 6400 chip, tool legal - no carb spacer.
- e) Sealed SPEC Hamner, MEP, Progressive; tool legal; 750CFM; 7600 chip
- f) Brodix SPEC head; 360ci max; 7600 chip.
- g) 9 to 1; tool legal; 390CFM; 360ci max; 7600 chip.
- h) CT525; 650CFM or 750CFM; 7200 chip; tool legal

Honored aftermarket seals: Cope, Hamner, TRE, Progressive and McGunigill for the crate engine.

DYNO Testing: Any engines, open or crate combos can be sent to TRE for Dyno Testing by Tech Directors discretion.

- 7. CRATE ENGINES** - All crate engines must be pre-approved by the Technical Director.
- a. Sealed crate engine rule: The GM 604 crate engine car weighs 2,750 lbs. with all original seals. Unaltered.
 - b. The GM crate engine is allowed in any body. GM to Ford, GM to GM, GM to Dodge, etc.
 - c. NO aftermarket harmonic balancers allowed. You may use the GM 6-3/4" harmonic balancer, part # 12551537, or the GM harmonic balancer that comes with the crate engine.
 - d. It is mandatory to use the GM valve springs, part # 12551483 or 12499224, and 1.5 ratio rocker arms, part # 12367345, on all GM sealed crate engines.
 - e. It is mandatory for all crate engines to use the **650 CFM Holley, part # 0-80541-1-2** tool legal stock carburetor. No oxygenated fuel allowed. Alterations to the carburetor and/or any carburetor components will not be permitted. Only Holley replacement and/or service parts will be permitted in carburetor rework. The Technical Director reserves the right to confiscate any competitor's carburetor.
 - f. 1-inch max height spacer allowed between carburetor and intake.
 - g. **The Technical Director reserves the right to impound, inspect, replace, and/or have an independent engine builder inspect and test any competitors crate engine at any time.**
 - h. Any team found to have tampered with any engine seals will be subject to disqualification from the event, loss of all points, suspension, and/or other penalties issued from the Technical Director. Any seals that, in the judgment of the Technical Director, have been tampered with and/or altered will result in the engine being declared ineligible for competition.
 - i. **Ford factory sealed 347SR/347SR7 crate:** 1.5 or 1.65 rockers, all seals in place, no carb spacers, 6400 chip, no oxygenated fuel.
 - j. The Technical Director may impound the ineligible engine for further inspection and/or return it to an authorized crate engine re-builder, Cope, Ed Nereaux or TRE at the expense of the team, for recertification. If, at the conclusion of testing, the engine has been declared altered, modified, or tampered with, the offending team(s) will be subject to disqualification from the event, loss of all points, fines, suspensions,

If it does not say you can, you cannot. Please build to the rules not around them.

12/15/2023 revised

confiscation of the engine, an indefinite suspension and/or additional fines and penalties as deemed appropriate by the Technical Director.

- k. Minimum clutch diameter of 5.5 inches. No ceramic clutches.
- 8. AIR CLEANERS AND FILTERS** - Air must enter the filter housing in an even and consistent manner without obstruction. Tech reserves the right to impound all air filters at any time. Air filter housing must be round and made of metal, fiberglass, or carbon fiber. No alteration of air flow in air cleaners is permitted.
- 9. ENGINE LOCATION AND MOUNTS** - The engine must be properly fitted between the frame rails within one inch of the center line.
- a. Engine set back is measured from the most forward spark plug hole to the connecting line of the center of the upper ball joint.
 - i. Chevy motors will have a 2-inch setback.
 - ii. Ford crate motors may have up to a 4-inch setback.
 - iii. Chevy 602/604 crate motors may have up to a 4-inch setback.
 - iv. Dual plane manifold cars with steel heads (Chevy, Ford, Dodge) may have up to a 4-inch set back.
- 10. ELECTRICAL SYSTEM** - Electronic distributors, single or dual breaker points or any camshaft driven type distributors are permitted. Magnetos, crank trigger, optically triggered or computerized systems are not permitted. Traction control devices, electrical or otherwise, are not permitted. Batteries must be securely mounted within the confines of the body. Batteries must not be in the driver's compartment. A maximum of (2) ignition boxes are permitted, both ignitions must be functional and controlled by a switching device. No electronic tuning.
- 11. ENGINE COOLING SYSTEM**
- a. Radiators must be stock appearing and remain in the stock location.
 - b. Anti-freeze is not permitted for use in the cooling system.
 - c. The water pump must be mechanically driven, must be in the stock location.
- 12. ENGINE EXHAUST SYSTEMS** - If exhaust pipes exit out the passenger side of the car, there cannot be any sharp edges.
- 13. DRIVE TRAIN** - Any aftermarket or OEM, manual or automatic shift transmission may be used. Transmissions with enclosed clutches are permitted. Transmission must have a functional forward gear and reverse gear. The spacer plates and discs must be made of magnetic steel only. The flywheel must be constructed of aluminum or steel. Drive shafts must be painted white. No carbon fiber wrapped. No slipper clutches, no internal clutch transmissions.
- 14. REAR ENDS** – Full floater rear ends are required. Quick change rear ends are permitted. Cambered rear ends are permitted. No mini quick change.
- 15. FRAMES** - Full tube frames or stock sub frames are permitted. Perimeter style chassis and offset, straight-rail, chassis are permitted. Main frame rails must be constructed of rectangular tubing having a minimum outside circumference of 10 inches and a minimum thickness of .120 inches. NO LIGHTENING HOLES PERMITTED. The driver's side door must have at least 3

complete horizontal bars between the pillars and 2 vertical bars extending from the window opening to the frame rails. Roll cage must be welded to main frame rails in a minimum of 6 locations.

- 16. SUSPENSION** - Independent rear suspension is not permitted. Independent front suspension is required. The minimum coil over spring diameter is 2 1/2". Minimum big spring diameter is 4 3/4".
- It is mandatory to have one shock per wheel.
 - It is mandatory to have one spring per wheel.
 - Static weight jacking devices are permitted. No weight may be moved while the car is in motion.
- 17. STEERING COMPONENTS** - Steering columns may collapsible (U-joints are acceptable).
- 18. BRAKES** - 4-wheel disc brakes with magnetic steel, non-coated rotors are required. Brake bias valves are permitted. Aftermarket calipers are permitted. Brakes must be functional at each wheel during competition. No carbon fiber or titanium components. **Brake blowers on bead and or rotor. No tire blowers.**
- 19. FUEL SYSTEM** - All cars must be equipped with an approved fuel cell, securely mounted in the trunk area as far forward as possible. Fuel cells must have a ground clearance of 8" or more. Fuel cell must be mounted with steel framework (1 inch x 1 inch, .065 inch minimum) and attached with a minimum of 4, 1/2" bolts to the frame rails. Glass fuel filters, electric fuel pumps and belt driven fuel pumps are not permitted. Fuel lines may not enter the driver's compartment. Oberg fuel shut off valve mandatory.
- 20. FUEL –**
- The addition of any oxygen bearing compounds or otherwise power additives are prohibited.
 - This includes NO oxygenated fuel.
 - Samples of fuel may be taken at any time and sent to the fuels manufacturer for testing. If fuel is deemed by the manufacturer to be altered you will be immediately disqualified, loss of all season points to that period, and possible expulsion from the series.
 - No icing or cooling of fuel system.
 - No CHP, CHP Plus, C-85 or E85.
- 21. TIRES AND WHEELS** - Magnetic steel, 15" by 10" racing wheels are required. Use of the track specified tire is mandatory. Soaking, softening or otherwise altering the composition of tires is not permitted inside or out. Drivers caught soaking will face penalties such monetary fines and indefinite suspension. Competitors must start the feature event on the tires used during qualifying. **The series specified tire is the Hoosier 970 for Late Models.**