

2021 GPS  
**Super Stock**  
Revised 3/1/2021

Car numbers must be a minimum of 24" high numerals on side panels and on the roof in a contrasting color visible from the tower. All lettering must legible from the scoring tower, be in good taste, and acceptable to GPS officials. The Competition Director will make adjustments and allowances, such as weight etc., to provide for visiting competitors whose cars don't totally comply with the following specifications.

**Any part or assembly deemed to be illegal by GPS officials may be confiscated**

### **Competing Models**

Competition open to 1965 to 2010 models of American manufactured hardtop rear wheel drive passenger car frames with a minimum wheel base of 107 inches. Wheel base must be stock for chassis used. Body must be an approved, OEM body and centered over wheel wells (front to rear and side to side). Body, frame sections and engine manufacturer must match. May use any other rear wheel drive body or 1988-to present front wheel drive, two door body, on any 108 inch or longer wheelbase full frame. Note: Body sides may be fabricated using steel but must be stock appearing.

1. All seating, carpeting, flammable materials must be removed. Driver compartment must be completely sealed off from engine compartment and trunk compartment with steel.
2. Must completely stock appearing steel body panels.
3. Hood and trunk latches must be removed and car must be equipped with properly installed hood pins. Hoods and trunk lid bracing may be removed. Fiberglass hoods allowed.
4. Doors must be welded or bolted. Doors may be gutted.
5. The stock steel floor pan and trunk floor **MUST BE RETAINED**. Front fire wall may be modified as needed for engine clearance and must be approved by GPS officials.
6. No part of the tire can protrude past the body of the car. Body cannot be wider than outside edge of tire by more than 1 inch.
7. Headlights, taillights, and molding must be removed. No outside mirrors.
8. Fiberglass or plastic nose pieces and tail pieces are legal. No dirt style noses. A one (1) piece rear spoiler maximum 5" tall by 60" width allowed. No additional spoilers, air dams or fins allowed.
9. A complete set of approved roll bars are required in driver's compartment. Round steel 1-3/4" diameter x .090 wall DOM or better bars are required. All cage bars must be welded and have foot bars approved by officials.
10. All cars must have windshields and back glass. All other glass must be removed.

11. Take-off/quick-release steering wheels recommended.
12. Car must have a front and rear hook/loop accessible by the wrecker
13. Radiators must be mounted securely in front of engine.
14. Tread width may not exceed 76-1/2" inches when measured at the rear outside edge of the wheel tire bead mounting lip at spindle height. 76-1/2" outside-to-outside or 66-1/2" center-to-center

## **SUSPENSION**

1. Stock type front lower control arms only. Absolutely no moving or replacing suspension or spring mounts or cutting any cross-members. Nothing that will limit the normal travel of the suspension will be allowed.
2. Spring adjusters allowed.
3. Minimum 5 inch ride height on frame and body must be maintained. Right side of car cannot be higher than one inch of left side height when measured at the outermost part of the frame rails. 4 inch minimum clearance on exhaust pipes.
4. Spindles must be stock or stock replacement for the manufacturer and unmodified.
5. All steering components forward of the firewall must be stock or stock replacement for make and model. No heim-joint steering ends will be allowed. Cars with non-OEM style tie-rod ends must carry an additional 25lbs. Cars with modified OEM style center-links must carry an additional 25lbs. Fully fabricated (LMSC style) center-links not permitted.
6. No steering quickeners.
7. All shocks must be steel body and shaft, non-rebuildable, and non-adjustable (this means no Schrader valve or any other means of adjusting gas pressure or damping rate at the track). Shocks are subject to a \$500 per set claim by the driver finishing no more than two (2) positions behind claimed driver.

## **TIRES AND WHEELS**

1. Racing wheels with 10" inch maximum width permitted.
2. Left and right side wheels must have the same offset; front and rear do not.
3. No aluminum or magnesium wheels allowed.
4. No bleeders allowed.
5. Large diameter lug nuts allowed.
6. Only steel wheel spacers may be used; left and right side must be equal within 1/4"; front and rear do not have to be equal.
7. Tires must be Hosier F45 scuff's. To ensure that teams are equal on tire usage the tire must not measure less than a 45-durmeter nor have a tread depth of more than 5/32". Since used scuff's are what is desired and that measures may vary around the tire and across the tread an average of 5 measures will be taken for each parameter.

## **ENGINES**

GM Crate as well as this 410-Cam built engines may be used in the Super Stock Division. All GM crate engines shall be inspected based on GPS GM crate guidelines similar to the Late Model and Limited divisions. The 410-cam built engines shall be inspected based on the following guidelines.

1. Engine must be mounted so that the forward most spark plug is no further rearward than the front left upper ball joint.
2. Maximum cubic inch—GM 350 .060 over; Ford 351 .060 over; Dodge 360 .060 over
3. Heads - OEM cast iron only. No aftermarket heads. No grinding, porting or polishing. No machining into the bowl beyond the guide boss. Guide boss may not be altered.
4. Maximum valve sizes; intake 1.94 inches, exhaust 1.50 inches. Valves must be stock length with minimum stem diameter of .340 in the guide, stem diameter below the guide must not be less than .315
5. Camshafts- Stock type hydraulic flat tappet camshafts only. Lift at valve- Intake .410 Exhaust .410
6. Stock or stock replacement hydraulic flat tappets only.
7. Stock or stock replacement rocker arms only. Screw in studs and guide plates allowed. Lock style adjuster nuts allowed. 1.5 stud mount style aluminum roller rockers allowed.
8. Stock or stock size valve springs, retainers, and locks only. No beehive springs.
9. Stock appearing forged or cast steel cranks only, 48 pound minimum; stock stroke must be maintained. Can be balanced but no turning, thinning, or knife edging of counterweights. Must not be lightened or modified in any way.
10. Stock appearing steel connecting rods only. Rod length must be stock for engine.
11. Flat top pistons only. Pistons may not come above deck surface.
12. Carburetors must be stock and unmodified; 2 or 4 barrel permitted and must remain stock without modifications. As an alternative the Holley (part #0-80541-1) 650cfm carburetor may be used without any modifications other than fuel jets, bleed jets, and pump nozzles. If changed, bleeds, jets, and pump nozzles may not be modified or altered in any way.
13. Any stock OEM intake manifold or Edelbrock Performer 2102 Intake is legal. The Performer RPM and EPS are NOT legal. The intake cannot be modified in any way.
14. The GPS approved air cleaner cannot be bigger than 4 inches high x 14 inches across and must be centered over the carburetor inlet.
15. Stock or stock replacement electronic or point style distributors only. No MSD or other aftermarket ignition components. FIRING ORDER must be stock for the engine
16. Magnetic steel tube type headers allowed. Primary tube size maximum 1-5/8" diameter 4 into 1 style connected to a maximum 3" diameter collector. No stepped primaries no merge style joints or try-Y style headers permitted. Tube sizes may only increase and not decrease from the engine exhaust port through out the exhaust

system (no chambered exhaust). Exhaust must exit car behind driver.

17. The track has right to check engine and/or confiscate any part or assembly found to be illegal. Refusal to check engine will result in engine being declared illegal.
18. GM crate engines 602, 603, and 604 Part #'s 8858602/ 19258602, 88958603, and 88958604 are optional. See below for carburetor and weight combinations.
19. Carburetors must remain stock and unmodified and run without spacers. The only changes permitted are to the value of the power valve, metering rods, jets, or air bleeds. On Quadrajet models epoxying of the main wells to prevent fuel leakage is permitted. On Holley models epoxying of the boosters to the carburetor body along with safety wiring each booster to the fuel vent tube is required. One, one-piece, open single hole paper gasket maximum 0.065 inch thickness that matches the exterior dimensions of the carburetor throttle base plate must be installed between the carburetor and intake manifold, with no air leaks. On 2bbl carburetor applications the adaptor plate must be aluminum and may be a maximum .75" thick. It must be a 2-hole design with the hole diameter matching the carburetor venturi size. The holes must also be straight without flair or taper and have no chamfer or radius on either edge.
20. All engines must run the GM H.E.I. type ignition.
21. GPS officials have the right to check engine and/or confiscate any part found to be illegal. Refusal to allow engine inspection by GPS officials will result in the entire engine being declared illegal.

## **FUEL SYSTEM**

1. Must have racing fuel cell enclosed in a steel container not to exceed 12 gallons and must be securely mounted and adequately protected.
2. Only original equipment style engine mounted fuel pumps mounted in the stock engine location may be used. No electric fuel pumps.
3. If the fuel supply line is routed through driver compartment it must be of braided steel construction or be routed through metal tubing and must be securely fastened to the satisfaction of GPS officials. The metal tubing must be painted red and be clearly marked "fuel line do not cut".
4. Fuel cell cannot be lower than rear frame rails.

## **ELECTRICAL SYSTEM**

1. Battery location optional
2. Battery must be full enclosed and securely mounted in metal box and approved by GPS officials.

## **DRIVETRAIN**

1. All cars must have stock type transmission either automatic or manual.
  - a. Automatic transmissions must have full size 11" diameter, functioning stock or stock replacement torque convertor. No

- modifications to any part of the transmission or convertor. No powerglides. Any coolers must be in stock location.
- b. Manual transmissions must be stock 3 or 4 speed transmissions with all working gears. Ratios must be stock that was produced by the manufacturer. Stock type flywheels must be steel and weigh no less than 26 pounds. Stock type clutch min 10-1/2" diameter disc and pressure plates only. As an option a multi-disc 5-1/2" or 7-1/4" diameter clutch may be used. If selected 7-1/4" clutch vehicles must carry an additional 50 pounds of ballast. If selected the 5-1/2" clutch vehicles must carry an additional 75 pounds of ballast. All manual transmission vehicles must be equipped with an approved steel explosion proof bellhousing.
  2. Stock type and length driveshaft for make and model. Must be no smaller than 2.5 inch diameter, must be made of magnetic steel, and painted white for visibility. Car must have drive shaft loop mounted securely within 10 inches of the front of the driveshaft. The driveshaft loop to be constructed from 2" x 1/4" magnetic steel.
  3. Rear ends must be stock type housings floater axel and hubs permitted but must be 'small-5' bolt patterns only. No wide-5 hubs of any kind will be permitted.
  4. No camber or toe allowed in the rear end. This will be checked on the scales in the as raced condition of the car. Cambered or bolt on style hub snouts will not be permitted.
  5. Rubber bushings or fully enclosed mono-ball type control mounts shall be used. No heim-joints permitted on any rear end lower control arms.
  6. The factory rear suspension may be modified to include 3-links, truck arms, or leaf springs. All lower control linkages must be the same length left to right. Cars with 3-link, truck arm, or leaf spring rear suspension may have their weights adjusted to maintain equal competition.

## **BRAKES**

1. Must have OEM style working brakes at all 4 wheels
2. No driver accessible brake adjustments allowed
3. Must have steel brake pedal

## **SAFETY**

1. Aluminum racing seat acceptable to GPS officials required. Five (5) or six (6) point seat belts and shoulder harness system required. All must be properly mounted acceptable to GPS officials with a minimum 3/8" bolts and minimum 1/8" thick fender washers required.
2. Fire suit required; may be of one (1) or two (2) piece style.
3. Fire extinguisher required and must be mounted within reach of driver.
4. Must have Snell SA-05 (or newer) approved helmet.
5. NASCAR approved nylon window screen must be used on driver's side and fold down.

## **Engine, Carburetor, & Weight Combinations**

1. Cars with the 410-cam built engine may run a Quadrajet or the Holley 650-4bbl carburetor and must maintain a minimum weight of 3200 pounds with a right side minimum weight percentage of 45% of the total.
2. Cars with GM 602 crate engine must run the Holley 650-4bbl carburetor and must maintain a minimum weight of 3,000 pounds with a right side minimum weight percentage of 44.5% of the total.
3. Cars with GM 603 crate engines may run a Quadrajet or the Holley 650-4bbl carburetor and have a minimum weight of 3150 pounds and maintain a minimum right side percentage of 45% of the total.
4. Cars with GM 604 crate engines must run a Holley 500-2bbl carburetor and have a minimum weight of 3200 pounds and maintain a minimum right side percentage of 46%
5. All added weight must be in block form not less than five pounds per piece.
6. All weight must be painted white, have car number on it and be securely fastened.
7. Any competitor loosing ballast on the track may be subject to \$100 fine and removal from the event.