



## **2022 Pure Stock Rules**

***General:** These rules and regulations are designed to govern driver and crew member conduct during GSS racing events. By participating in these events, all drivers are required to comply with these rules. While GSS makes no claim of guaranteed safety, these rules are enforced as a guide for the conduct of the sport. GSS is in the entertainment business. Drivers, Owners, Crew and GSS Staff cooperate to provide this exciting level of entertainment. All rules, race scheduling and structure, are designed and implemented to support a balance between competition and entertainment value. Drivers and crew are required to conduct themselves as professionals at all times. GSS may change any rule at any time in an effort to reduce the cost of racing, maintain equal competition, or improve safety.*

**ALL EQUIPMENT IS SUBJECT TO THE APPROVAL OF GSS OFFICIALS. NO EQUIPMENT WILL BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THRU INSPECTION UNNOTICED. EFFORTS TO TAKE ADVANTAGE OF "LOOPHOLES" IN THESE RULES WILL NOT BE TOLERATED. ALL RACE CARS WILL BE SUBJECT TO INSPECTION BY TRACK OFFICIALS AT ANYTIME.**

# 2022 Pure Stock Division Specifications



## **1. SEATS**

Approved aluminum driver's seat required.

Seat must be fastened to frame/roll cage and located to give adequate distance from driver's arm to door bars. Shoulder supports on right and left sides of seat are recommended, and head support on right is required. Full containment seats recommended. (No Carbon Fiber). Seat may not protrude outside 4 point upright or top cage halo. Leg containment supports are recommended.

## **2. SAFETY BELTS**

***Belts must be dated within 3 years of event date or newer.*** A minimum five-point harness system is mandatory. Competitors using the HANS device may use a standard three-inch (3") or the Schroth racing two inch (2") wide shoulder strap. Schroth Racing shoulder strap system has been specifically designed for use with the HANS device. Schroth part numbers are profi iii-6fh; hybrid iii- h; profi iii-6h. Shoulder harness belts shall not be mounted lower than the shoulder line of the driver or 10 degrees. Belts must be anchored to roll cage or frame. Grade "5" bolts ½" min diameter required. Shoulder harness must not be anchored lower than 2-inches below driver's shoulder height. 6-point belts (double crotch strap) are recommended.

## **3. DRIVING COMPARTMENT**

Cockpit must be completely sealed off from engine compartment and fuel cell. Only steel interior panels, floorpans, firewalls etc are allowed. - No aluminum allowed. (This will be strictly enforced and will require replacement with approved steel). Roll bar padding required around driver; *Recommended: Fire retardant padding.* A securely mounted operational 2-½ pound minimum fire extinguisher with gauge visible for inspection purpose is mandatory. Extinguisher must be mounted in a quick release bracket. Fire suppression systems are recommended. Driver-side window net required, minimum 16 inch by 20-inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window. Bottom net mounting must be secure and approved. Clearly labeled push-pull or toggle type kill switch accessible from either side of car is required. A gas pedal toe bar (kick- up) is highly recommended. No driver-adjustable devices allowed while car is in competition. No carbon fiber interior components will be allowed, likewise, no carbon fiber or titanium components allowed anywhere on car.

#### **4. DRIVER AND DRIVER'S ATTIRE**

Complete SFI- approved fire-retardant driving suit and gloves required. Eye protection required at all times, and a ***Snell Helmet SA-2010 minimum required SA-2015 helmet or newer recommended***. Snell "M" or D.O.T helmets not allowed. Head and Neck restraints (HANS Type), fireproof shoes, are strongly recommended. GSS officials will monitor items related to safety, but ultimately it is the responsibility of the driver to monitor, maintain, and update his safety equipment. Complete SFI- approved fire-retardant driving suit and gloves required

#### **5. ELIGIBLE MODELS**

Any 1955 or newer American-made passenger car allowed. Minimum wheelbase of 108-inches (104-inches for Ford and Chrysler), no convertibles, T-tops, sports cars, pony cars or special manufactured cars allowed without prior approval. Unitized body cars required to cross brace driver's area and have sandwich plates at roll cage mounting points.

#### **6. FRONT WHEEL DRIVE ELIGIBILITY**

Front wheel drive cars produced before 1996 with V-6 EFI engines and minimum 104-inch wheelbase allowed. Full unit-body structure, including trunk floor, required. OEM electronic fuel injection system required. Fuel Cell required. Headers allowed. Minimum weight 2900#'s. All other rules apply.

#### **7. WHEELBASE AND TREAD WIDTH**

Wheelbase must be within 1" of stock. Maximum tread width 65 inches measured at center to center of tires at spindle height (front and rear).

#### **8. GROUND CLEARANCE**

Min. ground clearance 5" at any point (with driver), except front cross-member and mufflers which is 3½".

#### **9. FRAME/ROLL CAGE**

Frame must be unaltered from front to back. Rear frame section behind rear spring pockets may be replaced with square or rectangular to replace rusted or damaged framework. Repairs must be approved by tech officials. Roll cage must have four uprights located in the furthest forward corners of the driver's compartment and directly behind the driver's seat. Roll cage width must be symmetrical and not narrower than frame rails. Roll cage must be constructed of 1¾" .090 wall tubing or equivalent. No pipe fittings, galvanized pipe, or exhaust tubing allowed. Roll cage must be welded to the frame or the sandwich plates if unitized body. Rear main roll cage uprights must be reinforced with two bars welded to the rear frame kick-up. These bars must mount to top of frame kick-up ahead of rear axle. Two additional bars can run from these roll cage support bars back to a point on the frame at least 16 inches from the rear bumper mount. These bars may not be located within 24 inches of the main roll cage halo bar. Roll cage must include an "X" or diagonal brace behind driver. Three bars required in both the driver's and right-side doors. Doors may be gutted for bar clearance. All welds must be gusseted and of good quality. Deflector plates and foot protection bar required. One bar from each roll cage upright allowed through the rear firewall, bar must mount to frame at or before the top of the axle kick-up. Rubber body mounts (OEM or similar required). Front hoop bars (two only) allowed from roll cage uprights through firewall to front stub and upper radiator protection bars. Front hoop may connect to front stub at a maximum of six points. Wedge (diagonal) bars allowed. Metric cars may modify forward firewall (moderately) for distributor clearance. Frame rails may be boxed in. An "X" brace under driver compartment is permitted. Unit body cars allowed four bars from roll cage to rear sub-frame. Sub-frames must be connected with tubing.

## **10. INTERIOR**

Firewalls and floorpan must be steel and of stock origination. Aluminum interior panels, firewalls, floorpans etc, of any kind or type are strictly not allowed. Front Firewall may be boxed to allow clearance for valve covers and distributor with engine setback. Rear firewall must be added to isolate from trunk area.

## **11. SPINDLES. HUBS. STEERING**

Stock unaltered spindles, hubs, and steering components required for make, model and year. Coleman steel hubs allowed. No lowered, dropped, or fabricated spindles allowed, except IMCA approved 3-piece 1979-up GM metric midsize spindle with 10 1/2" rotor. Heim joints are not allowed anywhere in front or rear suspension. Fabricated steering column must incorporate 2 U-joints. No electric power steering units. Power steering pump must be driven from front of motor by belts. Quick release steering wheel system is highly recommended. **Max camber is 3-inches measured at the wheel.**

## **12. SPRINGS/SUSPENSION/SHOCKS**

**12A. SPRINGS-**Any stock appearing magnetic steel spring with minimum dimension of 5"x8.5". Springs must be in stock location front and rear. No trick or progressive rate springs. One conventional single coil spring rubber per spring allowed. Spring buckets may protrude through floor pan.

**12B. SUSPENSION-** Stock suspension components for make, model, year of car required. No modifications allowed, except rubber bushings may be replaced with poly or steel stock replacement parts. Stock ball joints (stock length and width) required. Full size spindles are not allowed on metric chassis. Lower control arms on metric cars may be lengthened 1". Rear stabilizer bar must be removed. Any magnetic spring over 5" in diameter allowed. Rear springs must be over 11 inches tall in non-metric cars. Rear springs must be over 8 inches tall in metric cars. No progressive springs allowed. Straight valve shocks (compression and rebound must be equal) required. Shocks must be non-rebuildable and non-adjustable. Stackable shims allowed on top or bottom of coil springs. Stock Steering components required. No adjustable (threaded type) spring separators. Weight jacks allowed in rear only.

**12C. SHOCKS** - One steel shock per wheel that is non- adjustable; unaltered, with 5/8" or smaller shaft diameter. No bulb-type, threaded body, coil over, air, or remote reservoir shocks. No Schrader valves or bladder type valve allowed. No external or internal bumpers or stops. Maximum 2.125-inch O.D. shock body. Shocks cannot be mounted in any other manner other than stock configuration. No shock covers allowed. All shocks must completely collapse at any time. Shocks may not be able to be disassembled and able to be reassembled. **NO Rebuildable shocks allowed.**

**12D. GM METRIC CHASSIS EXCEPTIONS:** IMCA approved stamped steel tubular upper A-arm 8 to 8-1/2 inches only allowed. One inch longer than stock ball joint allowed, both sides must be the same length. G body stock center link required.



### **13. BRAKES**

Four -wheel brakes required at all times. Only one master cylinder allowed. Master cylinder and pedals must remain in stock location. No "made for racing" components allowed. No brake blower motors allowed. One OEM brake bias adjuster (proportioning valve) located in engine compartment allowed.

### **14. FUEL & FUEL PUMP**

No E85 is allowed. Approved pump fuel only. No electric fuel pumps. No oxygen bearing or performance enhancing additives may be introduced into the inductions or fuel supply, either at the fuel cell or upstream in the system.

### **15. FUEL & FUEL CONTAINER**

Fuel cells Mandatory, 16-gallon capacity maximum, all fuel cells must have 1/8" deflector plates on sides and rear. Fuel cells mounted no lower than 11" from ground. Stock fuel tank must be removed. Steel fuel lines or steal braided fuel lines only, if run thru the interior of the car must run thru another steel tube complete from front to back. The use of U style cells has been prohibited.

### **16. WEIGHT**

All weights are minimums and will be made with the driver sitting in the driver's seat, with steering wheel in place, hands on steering wheel and helmet on driver's head with no fuel allowance. Minimum total weight for all cars 3400 lbs. Non-metric chassis minimum 53% front axle, and minimum 55% left side. Minimum left side weight for GM metric chassis cars is 56%. Cars utilizing a 602 crate motor will receive a 50 lbs weight break. All weights must be properly anchored to (and not lower than) frame rail outside driver's compartment. Ballast must be painted white and lettered with car number. All weights include driver. Non-compliant roll cages must put 25# to right side frame rail in the driving compartment. Management reserves the right to adjust the weight requirements as needed to preserve competitive balance.

### **17. WHEELS**

Aftermarket made for racing, steel wheels required, 8" maximum width. No bleeders allowed. One-inch lug nuts required on all wheel studs. Oversized diameter studs required. Wheel studs must be long enough for threads to show on outside of lug nuts. No wide five wheels. Minimum wheel weight is 19.0 lbs. Maximum allowed wheel spacer thickness is 3/8 inch on any corner of car. Maximum wheel offset(backspacing) is 4 inches with minimum being 2 inches. Management may claim any tire at any time for \$75.

### **18. TIRES**

Approved tire: Hoosier D-800 or Am Racer AR870 only. Only Hoosier D-800 will be sold at track. Chemical treatment of tires (softening) is not permitted and if found guilty will result in the disqualification from the event and loss of prize money and points. Drivers guilty of altering and/or chemical treatment of tires will also be suspended for the next night of racing. If a driver is found altering and/or chemical treatment of tires on the last night of competition, he/she will be disqualified for that night of points and prize money and deducted of all points from the previous night of competition.

### **19. ENGINE LOCATION**

All engines must be located so that the center of the furthest forward spark plug hole is in line with or ahead of the upper ball joint centerline. Minimum crankshaft centerline height 10 1/2" (front and back). All engines must be mounted in an approved manner.

## **20. CRATE ENGINES-GM 602 CRATE ENGINE**

(P/N #19258602) must be used as produced from factory. Weight may be adjusted for fair competition. Crate engines must run stock style HEI distributor with coil in cap and maximum timing is 34 degrees. MSD Soft Touch Rev Control Part #018-8728 or 018-8727CT with a maximum 6200 rpm chip required. Box must be mounted out of reach of driver. Maximum compression can never be greater than 9.2 to 1. All crate engines may not be altered from factory specs. Any evidence of tampering with engine components will result in disqualification, confiscation, fine, and suspension for balance of season. GSS Tech staff reserves the right to impound motors for inspection or dyno testing. Factory Seals may be removed for tech purposes, those engines will not be required to be recertified, allowing for more in-depth technical inspection throughout the season. No refreshing buy new instead. Repairs allowed with prior management approval. No Ford or Chrysler crate engines allowed.

## **21. Concept ENGINE**

Engine must be stock for that make. All engines may be located so that center of the furthest forward spark plug is in line with or ahead of the upper ball joint's centerline. No Chevrolet 400cid engine blocks allowed. Maximum displacement 362 (373 for MOPAR) cid, maximum compression 10.8 to one; 9.3 to 1 or less deduct 100#'s No domed pistons. Flat top or dished pistons only. No aluminum intakes or heads. **No vortec heads allowed.** Hydraulic cam/lifters only. Lifters must pass leak-down test. Maximum lift at valve: GM-.425-inch, Ford/Mopar - .465-inch. No matching, grinding, polishing of any type allowed. No aftermarket parts, no stud girdle, no dual point distributors. OEM type, mechanical fuel pump, in original location, required. No dual feed carbs. Air cleaner and overflow tank located under hood required. Maximum intake valve diameter is 2.02". The IO52 World Product stock replacement head with 171 cc intake runners or Dart iron eagle SS straight plug head with 165 cc intake runner are the only non-OEM heads allowed. Roller tip rocker arms allowed - 1.52 ratio max. **Rocker arm oil deflector plates are allowed.** A 3/4" NPT inspection plug in oil pan is recommended. Inspection hole must be located in line with second or third rod journal of crankshaft, on either side of pan and above sump area (oil level). One Holley 4412 carb required. OEM mechanical fuel pump, in stock location, required. No electric water pumps allowed.

**22. CRANK SHAFT**--Stock appearing crankshaft required, minimum weight #48. Crankshaft must have stock appearing counterweights and may not be scalloped or gun drilled. Stock (un-altered) flanges required. Any suspect crank shaft can be removed and weighed.

**23. IGNITION**-Stock type (HEI) ignition components only. Firing order may not be altered. No MSD boxes, dual-point distributors, computer controlled, or crank fired ignition systems allowed.

**24. FORD AND CHRYSLER EXCEPTIONS**--Ford and Chrysler will be permitted some variation to improve competitiveness. Such variation requires prior approval by director of competition.

**25. CARBURETOR**-Stock unaltered 500 CFM Stock Holley 4412 2 bbl. or Dorton 003-0 required on all cars. No alterations except removal of choke "Butterfly" allowed. Carb must pass inspections with all go/no go gauges used at tracks. Holley 4412HP metering block is allowed but cannot have any additional fuel passages drilled and or plugged. Standard 4412 metering block may be drilled/plugged but can only have a total of 3 fuel passages per side of metering block. Aftermarket metering blocks are not allowed. Double return springs and air cleaner required to act as flame arrestor. No air induction boxes, or ram air units allowed. Steel or steel braided fuel lines required; metal fuel filter required

**26. CARB SPACERS, GASKETS, MOUNTING**-Carb Adaptor: 1-1/4" max thick w/gaskets. No part of adaptor may protrude into plenum of Intake Manifold. Adaptors are one piece only. Aluminum and phenolic spacers are both allowed.

**27. 602 Carb Spacer**-1" thick Aluminum carb adapter with One .065 single paper gasket is allowed on GM 602 Crate Engine.

**28. INTAKE MANIFOLDS**-Completely stock passenger car 2-bbl. or 4 bbl. cast iron only. No grinding, polishing or altering allowed. No Bow-Tie manifolds.



**29. EXHAUST SYSTEM-** Mufflers are Mandatory; Stock cast iron exhaust manifolds required. Exhaust manifolds may not be ported. No headers allowed. No corvette center dump manifolds allowed. Maximum exhaust pipe diameter 2½" before collector and/or muffler, 3½" maximum diameter behind collector/muffler. Exhaust must exit left or rear (not right side) and behind driver. Maximum 100 decibels at 100 feet, any car not meeting 100 decibels will add 25#'s for the night and must be remedied by next event.

**30. DRIVESHAFT-**Minimum diameter 2 -1/2" steel driveshaft required. Driveshaft must be painted white. Safety hoop required on front half of driveshaft. Driver must be protected from driveshaft entering into driver's compartment.

**31. REAR END-**Rear end must be stock type, "open" or locked by welding or spool only. No quick changes. No Floater rear-ends or cambered tubes allowed. All plugs (drain, inspection, etc.), must be safety wired.

**32. BATTERY-**Batteries must be securely mounted ahead of rear axle and away from fuel container and lines. All batteries in driving compartment must be in an approved sealed battery box. Maximum 12-volt system.

**33. RADIATOR-**Any metal radiator that does not alter the exterior appearance of car allowed. Fan protection (20-gauge minimum thickness) required. Overflow tank located under hood required. **No anti-freeze allowed.**

**34. TRANSMISSION-** Stock automatic transmissions with all forward and reverse gears operating required. Stock operating 12-inch minimum diameter torque converter required. Transmission overflow bottle required. No lightweight (Vega type) torque converters allowed. Power-glide transmissions allowed. No rubber transmission lines allowed. Transmission cooler not allowed in driver compartment. Aftermarket or S-10 right side axle required on metric cars. All plugs (drain, inspection, etc.), must be safety wired.

**35. TOW HOOKS-** Tow hooks required on front and rear must be painted white and easily accessible.

**36. BODY AND APPEARANCE-**Body must match frame used. Complete stock appearing steel bodies with Stock, unaltered body mounts required. All doors must be welded shut. Fenders may be trimmed moderately for clearance. **Fenders may not be inclined downward more than two inches from stock.** Front & rear overhangs may be shortened maximum of 4-inches. All glass and plastic must be removed, except windshield. Hood pins must replace hood and trunk latches. Hood X reinforcement must be removed. Aftermarket nose pieces allowed. Full rocker panels required. Stock steel bumpers, front and rear, may be reinforced, and bumper ends must connect to body. Tire cutting edges must be trimmed. Limited radiator protection bars allowed. Modest use of bars on top of bumper and outside of nose piece allowed. Plastic nose and rear bumper covers allowed provided they are stock appearing for that make & model car. No multi-plane spoilers. Maximum spoiler height is 5"; Maximum spoiler width 60". Spoiler must be centered on rear tail section. No wings or skirts allowed. No forward-facing air scoops or holes (except for pins) in hood allowed. Bumper ends must be capped and not extend past body. Stock or Lexan windshields, (1/8" minimum thickness) required, all other windows (if used) must be of Lexan. 12" maximum vent windows. Sunroofs must be closed in with sheet metal. Body must be within 2" of outside of tires. Numbers 18" high required on both sides and roof (readable from right side). 1" square rub rails allowed; mounted within 3" of ends. Ends must be tapered, capped, and ground smooth. All body modifications are subject to tech official approval.

**38. TRANSPONDER- Mandatory.** Location of transponder is 165" behind front edge of nosepiece.

**39. TEAM DRIVING-**Championship points will not be awarded to "teams". Cars may be driven by more than one driver, but points will be awarded only to the driver on that night. Payoff will be sent to the car owner on file.

**40. CHAMPIONSHIP POINTS** -will be awarded per your finishing position. If drivers are disqualified, drivers behind them do not advance.

**41. RADIOS-**No 2-way communication Radios Allowed

**41a. One-way RACeivers** are mandatory for Race Director Communications, frequency is 454.000

**42. LOCAL TRACK VISITING EXCEPTION-**Cars from local neighboring tracks that have similar but differing rules, and/or similar performance, may be allowed to participate during the 2022 season in the interest of welcoming competition. These cars will be granted temporary eligibility status for two weeks at the discretion of GSS officials on a case-by-case basis for eligibility and rule book conformity.

**44. TECH INSPECTION-**All cars are subject to inspection ANYTIME before, during, or after a race; Officials reserve the right to disqualify cars, require changes, confiscate illegal parts etc. Any interference with any official(s) and his/her duties will result in an automatic disqualification, and/or possible suspension. Disqualification (except weight violation) is retroactive to ALL previous events competed in that race meet. Any driver/owner refusing to allow the track officials to inspect his car will lose points and money earned for the night. Driver must provide their own tools.

<b>WEIGHT</b>	<b>OFFENSE</b>	<b>POINTS</b>	<b>FINE</b>
1-5 LBS LITE	ANY OFFENSE	-10 POINTS	-\$50
6 LBS & Over	ANY OFFENSE	Disqualification	Disqualification
<b>LEFT OR REAR %</b>			
UP TO 0.2% HIGH	ANY OFFENSE	-10 POINTS	-\$50
0.3% & OVER	ANY OFFENSE	Disqualification	Disqualification
<b>TRACK WIDTH</b>			
UP TO 1/8" WIDE	ANY OFFENSE	-10 POINTS	-\$50
1/8" & OVER	ANY OFFENSE	Disqualification	Disqualification

**45. TEAR DOWN CLAIM:** For a fee of \$750 any Hobby/Pure Stock driver may request to have the head, intake, exhaust, or carburetor removed for inspection. If found legal, \$500 is awarded to the one inspected with \$250 retained by the officials. If illegal, the fee is returned to the protester and the violator forfeits all money and points won that night. . Officials can require valve covers, distributor, intake, carburetor, exhaust manifolds, and heads be removed and inspected for compliance. If components are found to be illegal they will be confiscated and destroyed. If found to be legal the owner will receive \$100 allowance for gaskets.

**46. DYNOMETER TEST:** At the request of the Tech Staff any engine can be required to be dynamometer tested to determine its compatibility with the intent of the rules.