

### **2022 PENN OHIO PRO STOCK RULES**

**<u>COMPETING MODELS</u>**: Open to any American made passenger car, no torsion bar cars, no convertibles, no station wagons, trucks or vans, no front wheel drive or 4-WD's, sports cars or compact cars. Vehicles not covered under these exclusions do not mean they are pro stock material. Consult technical inspector as to the legality of the vehicle before building. Some models may not be included in the above exclusions. To avoid disappointment and expense, we suggest you check with Penn Ohio/track officials before you build a car.

# The transponder must be mounted on the right rear frame rail of the chassis 12" behind the center of the rear axle tube.

#### **SAFETY RULES**

- **1.** All cars are subject to inspection at any time and must be free from mechanical defects and be in safe racing condition. **TRACK/PENN OHIO OFFICIALS' DECISIONS ARE FINAL!**
- 2. <u>ROLL CAGE</u>: Must be minimum 1-1/2" outside diameter and 0.095" minimum wall thickness, no soft metals (aluminum, etc.) allowed. The recommended six-point cage must surround the driver w/ uprights mounted on the right and left sides of the frame behind the driver, one on each side. There are several allowable variations to this basic design, which are subject to the discretion of the technical inspector. Inspector's decision is final. The four bars joining the four uprights in a horizontal plane above the driver's head must be at least 2 inches above the helmet height of the driver when strapped in the carThere must be at least three horizontal bars on both sides of the car connecting the uprights on the driver's side of the car in the door cavity and at least one bar must be extended to the outer door skin for added driver protection. These bars must have at least one set of vertical supports between the uprights. The right and left uprights in front of the driver must be connected with at least one horizontal bar at dash height. Additional diagonal support bar on left side of chassis from top front of cage down to side. These are minimum allowable bar requirements and of course more are preferred. All junctions of two or more tubes in the cage should be gusseted for additional strength with at least 1/8" plate steel gussets.
- SEATS: All cars must be equipped with a safe racing aluminum seat, high back type recommended. Seat must be securely fastened (bolted) to the roll cage and/or frame in six spots, with a minimum of six (6) 3/8" bolts, four (4) on the bottom and two (2) on the seat back. A 5-point harness system. No safety belts over 2 years old.
- **4.** <u>WINDSHIELD SCREEN</u>: Recommended All cars have a full steel windshield screen of substantial material with a maximum opening on individual holes at 1"x1" (minimum 16 gauge material recommended) and reinforced by a minimum of three (3) steel bars **connected** to the roll cage on top and the dash support bar on the bottom. Side window net is also recommended.
- 5. <u>FRONT AND REAR FIREWALLS</u>: Minimum of 22 gauge sheet metal or .040 aluminum.

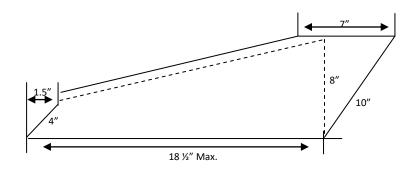
- 6. **FIRE EXTINGUISHER:** All crews are recommended to carry an operable fire extinguisher capable of extinguishing gas and oil fires.
- **7. <u>BATTERY</u>**: Battery may be located in any position except inside the cockpit. A BATTERY MASTER SHUT OFF SWITCH MUST BE INSTALLED IN THE DRIVER'S COMPARTMENT AND MUST BE EASILY ACCESSIBLE TO THE SAFETY CREW AND DRIVER.
- 8. <u>BRAKES</u>: Operable and effective four-wheel hydraulic brakes mandatory. 4 Wheel disc brakes will be allowed, right front shutoff allowed. No aluminum brake parts.
- **9.** <u>WHEELS</u>: (NO BLEEDERS) Minimum five (5) oversized lug nuts STEEL only. Steel racing wheels and oversized studs and maximum rim width 10". Bead lock rims permitted on all 4 corners. NO WIDE 5's.
- **10**. **<u>EXHAUST</u>:** No turn down exhaust. No portion of the exhaust to exit the body panels.
- **11.** <u>**THROTTLE**</u>: Minimum of two (2) springs **MANDATORY**. All throttle linkages must be made of suitable rod or tubing, no all thread permitted. Throttle stops **MANDATORY**. Toe loop **MANDATORY**.

#### **BODY SPECIFICATIONS**

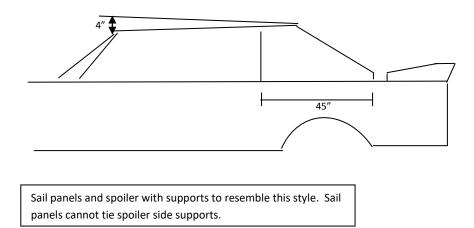
**BODY:** Stock steel bodies or aluminum after-market bodies allowed. Body width may not exceed 78" at top of doors or quarters and 86" at bottom of doors and quarters. The maximum roof size is 60" x 60" with a maximum 4" rake.

Rear spoiler 78" wide x 6 inches of measure material with no more than 3 supports, all the same size (see illustration for support) and must be attached solid to the deck. The spoiler cannot be wider than the deck at the rear. All dimensions will be measured from the deck; tolerance for the hinge only. Maximum spoiler angle will be 90 deg to the deck. If a support is used on the rear of the spoiler it must be mounted below the top of the spoiler material a minimum of ½ inch to not count as spoiler material.

**<u>Rear Deck Height</u>**: Maximum <u>43</u>" from the ground to the top of the deck.



Rear sail panels must be the same left and right, either both open or both closed. The sail panel must drop towards the deck at the back edge of the roof panel. Sail panel maximum length is 45". The sail panels cannot connect to the rear spoiler (see illustration).



All glass and plastic must be removed, no factory hard plastic noses. Noses must not exceed 92" in width anywhere including fender extensions.

## No extra fins, flares, flanges, ridges, beads, spoilers, turn-ins or turn-outs or anything else that can be construed as an aero advantage will be allowed.

No raised left side fenders or body panels, front fenders and hood must be flat from side to side. Maximum drop deck allowed from front of cock pit to rear of deck or side to side will be 4". No angled sides or angled rear decks, must be 90 degrees from rear of deck to rear of quarter panels. Quarter panels must be same length on both sides.

CAR NUMBERS MUST BE 18" HIGH ON BOTH SIDES AND ROOF. ALL CARS MUST BE NEATLY LETTERED. THERE WILL BE NO DUPLICATE NUMBERS. FIRST CAR TO REGISTER WILL HAVE THAT NUMBER.

### **CHASIS SPECIFICATIONS**

- FRAME: May use full stock frame or have stock front sub. Box tube may be used from stock sub to rear. No round tube chassis permitted. Minimum wheelbase of 105". Johnson Frames may be considered legal pending prior approval and inspection by Penn Ohio Series Director and/or Penn Ohio Officials. (Prior to building or purchasing a Johnson Frame/Chassis, contact Penn Ohio Series Director. Don't assume it's legal).
- **2.** <u>STEERING</u>: Conventional boxes only NO RACK and PINIONS. Quick release highly recommended. No rag joints in the steering column.
- 3. <u>**RADIATOR**</u>: Only one (1) per car. Must remain in front of the engine in stock location between frame rails.
- **4.** <u>ENGINE LOCATION</u>: Engine set back: will be at its maximum and verified when the center of the number one spark plug hole, on all make engines (furthest cylinder forward) is in line with the center of the top ball joint.
- **5. TRANSMISSION**: Any transmission allowed. Car must be able to move forward and reverse under its own power. If a cast iron case transmission is used on an aluminum or magnesium bell housing, it must either have a rear trans mount or tethered.

- 6. <u>SCATTER SHIELD</u>: Bell housing scatter shield or steel scatter proof bell housings for standard transmissions recommended. It is also recommended the Automatic transmissions have an explosion blanket.
- **7. DRIVE SHAFT**: All cars must have a 180 degree loop 6 inches behind the front yoke in case of failure made from ¼" x 1" steel. The drive shaft <u>must be painted white</u>. Must have 180 degree strap under rear of shaft.
- 8. <u>REAR END</u>: No quick change differentials, no limited slip or lockers, NO 3 links, torque links, pull bars, lift bars, birdcages, or panhard bars permitted of any sort. NO SPRING ROD OR BISCUIT TYPE TRAILING ARMS OF ANY SORT.
  - a. **<u>Rear Suspension</u>**: Must be double triangulated 4-link or leaf spring suspension. 4-link (upper links must run from the rear end <u>(pumpkin part)</u> housing inward to outward, lower links must run outward to inward.
  - b. <u>**Trailing Arms**</u>: Trailing arm lengths must be between 10"-12 ½" uppers and 17 ½" to 23" lowers (measured from center of bolt hole to center of bolt hole).
- **9.** <u>AXLES</u>: Conventional type or floater style axles permitted. All spindles, hub assemblies and axles STEEL ONLY. No wide 5 patterns permitted. Front.....no late model style spindles, must accept stock-style cast rotors.
- **10.** <u>**FRONT END SUSPENSION**</u>: Upper and lower control arms, stock, tubular, or adjustable allowed. Weight jacks permitted. Stock sway bars permitted. All Stock mounting points for lower control arms. Spindles must be a cast or forged stock or factory reproduction spindle.
- **11. <u>SPRINGS</u>**: Front springs must be in original location. Rear springs must mount on top of the rear end housing. All springs must be conventional steel springs only (NO COILOVERS <u>of any kind including coilover eliminators</u>). Minimum diameter 4 <sup>1</sup>/<sub>2</sub>".
- **12.** <u>SHOCKS</u>: Steel or aluminum non-adjustable (No Coilovers <u>of any kind allowed</u>). 1 Shock per wheel. Shocks can be mounted on front or back of rear end housing.
- **13.** <u>**BUMPERS</u>**: Production type bumpers or tubular bumpers. Rear bumpers minimum height 18" from ground to bumper. Maximum tubing size of 2" round or 2x4 box tubing is permitted. Bumpers are mandatory. Bumpers will be up to the discretion of the tech inspector. Bumper ends must not pass outer edge of body and must not have any sharp edges or hook style ends.</u>
- 14. <u>FUEL TANK</u>: FUEL CELL ONLY!! Fuel cell height 12" minimum from ground to bottom of tank. Fuel cell must be fully encased in a steel container with a minimum recommended thickness of 20 gauge. An optional aluminum container may be used with a minimum recommended thickness of .060". Fuel cell must retain foam inside. Fuel lines must siphon from top only. Fuel tank vent line must have an in-line one-way valve for the prevention of fuel spillage. Fuel cells must meet FIA/SPEC/FT-3 Specification. Install the vent line so that the fuel does not siphon out. Any capacity fuel cell is allowed and the fuel pickup must come out the top, not the side. All fuel lines and fittings must be leak proof. Two (2) skid rails must be installed under the fuel cell, running front to rear the entire width of the fuel cell with minimum 1/8" x 2" material. Cell must be securely strapped down by at least two 1/8" x 1" steel straps to existing supports by use of at least 5/16 grade 5 (3 line) bolts. Any fuel cell mounting deemed unsafe can be rejected by the technical inspector.

15. <u>BALLAST WEIGHT</u>: If ballast weight is needed to make weight, it must be securely bolted and painted white and carry the cars number on it. Use of two ½" grade 5 bolts or greater must be used to bolt on weight. There will be no weight bolted or welded to the rear end housing. No exceptions or excuses.

#### 16. <u>WEIGHT</u>:

- GM 602 Crate any tire 2600 lbs
- Any c.i. car utilizing 8" tires 2700 lbs
- All cars utilizing anything other than 8" tires must weigh 2900 lbs (exception 602 crate cars)

#### 17. <u>TIRES</u>:

- Any compound
- Maximum tread width 14" flat surface
- Grooving and siping permitted

### **ENGINE RULES: Steel Block, Steel Heads**

**<u>88958602 Crate Engine</u>**: This engine has a part number for each item sold; any item is subject to inspection. All part numbers and casting numbers must be visible for inspection. GM engine seal bolts must be in place or be sealed by a Crate Racin' USA, RUSH or FASTRAK certified builder.

# GM 604 is allowed but must meet all GM specifications and be factory sealed or sealed by a certified RUSH or Crate USA rebuilder. (All 604's MUST WEIGH 2900 lbs unless on 8" tires)

- **A.** <u>CAMSHAFT</u>: Any make hydraulic, solid flat tappet or roller camshaft allowed.
- B. <u>INTAKE MANIFOLD</u>: Any open plenum or dual plane intake permitted.
- C. <u>CARBURETOR</u>: Carbureted engines only one four barrel.
- **D.** <u>INGITION</u>: No Mechanical or electrical adjustments from cockpit. No traction control devices. Must run a distributor, no magneto distributors. No LS style set up.
- **E.** <u>**LUBRICATION SYSTEM**</u>: Wet sump systems only. OEM Oil Pump Systems (use of oil coolers will be permitted as long as they are mounted outside of the cock pit area).
- F. <u>WATER PUMP</u>: Stock-type, belt driven.
- G. <u>FUEL PUMP</u>: Stock mount pumps, no electric pumps.
- H. <u>FUEL</u>: Gasoline and E85 ONLY! No additives. Subject to testing.
- I. <u>TRACTION CONTROL</u>: NO traction control of any kind, mechanical or electronic. PENN OHIO PRO STOCK SERIES/Track Officials reserve the right to confiscate any part of the ignition system for further inspection. PENN OHIO PRO STOCK SERIES/Track Officials also reserve the right to install a distributor or MSD 6 series box if traction control is suspected. If parts are confiscated, prize money and points will be held until

results of inspection are known. All legal parts will be returned within 5 days. Violation of any of these rules will result in disqualification.

**TECH INSPECTIONS**: After the feature each night, the winner, possibly second and third place, and/or one random selected car will be checked. Any weight infractions will result in no points, no pay for the night.

**NOTE**: The preceding rules and regulations are designed to provide for the orderly conduct of racing events and to establish minimum acceptable standards and requirements for such events. By participating in these events, all participants are deemed to have complied with these rules and regulations. **No expressed and/or implied warranty or safety assurance shall result from publication of, or compliance with, the preceding rules and regulations. They are intended as a guide and are in no way a guarantee to any participant, driver or official, against injury or death.** Any of the preceding rules may be subject to revision if it is felt that the change would be in the best interest of safety or the Division. Penn Ohio/Track Officials have the right to make decisions and to rule accordingly, in the interest of safety, without recourse from drivers and/or owners. Penn Ohio/Track Officials will decide anything not covered in the preceding rules and regulations if, and when, it becomes necessary.

#### **OFFICIALS' DECISIONS ARE FINAL**