



## POWRi PURE STOCK RULES

**General Rules of Conduct, Track Technical Inspections, Transponders & RaceCeivers**, it is the responsibility of each POWRi Pure Stock competitor to read, understand and abide by the host Speedway General Track Rules. POWRi Pure Stock drivers are to represent the POWRi Racing League in a professional and courteous manner at all times. Any unsportsmanlike conduct by a participant shall be grounds for disqualification and/or punitive action. All sanctioned tracks share information regarding unsportsmanlike behaviors and disqualifications.

### 2022 Rule Updates:

**Cage** - 70" from rear of engine block to seat belt holes in top of seat. Top halo must be minimum 40 inches across, outside to outside.

**Rear Hoop** - May be maximum 12-inches in from bottom of opera window. Minimum one cross bar in top halo.

**Body** - May use later model body must use stock metric firewall, floor pan, and rocker panels. A Pillars must attach to the factory A Pillars. Body must roll in at bottom to factory rocker panel. NO aluminum body panels allowed.

**Brakes** - may run single aftermarket brake pedal. Set back no more than 25 from center of upper ball joint. One OEM type master cylinder must be mounted in the stock location on the firewall. One master cylinder, NO balance bars, one master cylinder rod only NO EXCEPTIONS!

**Communications:** All competitors must have RaceCeivers 1600 in car radio to compete.

**Bodies:** Minimum 108-inch wheelbase, except 1983 or newer t-birds or Chrysler products may be 105-inch wheelbase. Any year American made production car. All cars to remain stock. Full frame cars may remove inner fender wells, unbodies may not. Bumpers must remain stock with no bracing outside frame horns. Radiator may have protection bar. Steering column may be stock or fabricated with removable steering wheel. Car may be stripped, stock fire wall from front to rear with all holes patched, no mirrors, must have safety bars or screen over driver side windshield. Hood fenders, and bumpers required. Engine hoop and snout bars allowed. NO SPOILERS. No enclosed interior.

**Cage:** Must have at least 3 left side and 2 right side door bars, 4 up right bars, cross brace behind driver, middle bar in top, down bars off rear of cage going through rear fire wall into trunk ok, must not connect to rear bumper. Tubing must be round & at least 1.5 inches in diameter .095 wall minimum thickness.

**Engine/Motor:** Stock motor, stock location, stock solid motor mounts in stock location. Must be same make as car. New style chip box (part number CT8727) 6200 RPM max limit.

**Motor Option A:** Size of engine: Max. compression 9 to 1.350 GM .060 max.351 Windsor Ford .060 max.360 Chrysler .060 max. Harmonic balancer on GM 8 inch minimum.

Smaller engine allowed no stroker engines allowed!

Stock balancer ONLY. No modifications, no lightening (min weight 10 lb., 8 oz.).

Heads: GM OEM approved head numbers are: 14079267, 3986336, 3986339, 3986339X, 3986388, 3932441, 376445, 3928454, 3932454, 3876487, 3973487, 3973487X, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997, 3970126. Maximum size valves on these heads are 1.94-inch intake and 1.50-inch exhaust. No performance heads (no double humps, no 292 castings, no LT1, no bowtie, no center bolt valve cover or aftermarket allowed). Porting or polishing, screw in studs with shoulders or guide plates are not permitted. 305 heads on 305 only. No beehive or high-performance valve springs.

Camshaft: Hydraulic camshaft only, must pull at least 15 inches of vacuum, no tolerance. 430 maximum lift at valve, stock 1.5 ratio rockers only, no tolerance. No roller cams, no roller tip or roller rockers allowed. Stock type lifters, NO HP. Must have stock wire clip!

Crankshaft and rods: Stock appearing, no lightweight cranks. No H-beam rods. Press fit rods only, 5.7 rod on GM maximum. Aftermarket Eagle, Scat, stock type ok. 3.48 maximum stroke. No lightening of any kind to crankshaft.

Intake manifold: Stock cast iron, no aluminum, no bowtie, Ford D5 or newer Chrysler no high rise. Intake must be unaltered. Edelbrock intake part numbers 2101 and 2701.

Carburetor: 4412 Holley only 2-barrel, no modifications except jets and choke removed. No modifications to choke tower. Carburetor must have vacuum ports for testing vacuum. No electric fuel pumps, stock manual pump only. Spacer plate for carburetor from intake to carburetor only. Carburetor spacer must remain same front to back max. 1 inch, no taper spacers.

Exhaust: Stock cast iron exhaust manifolds or In Frame rail headers 1 5/8 in. max. diameter, 3" max diameter collector 2-inch o.d. pipe, must extend past driver.

Pistons: Flat top 4-valve relief only. Hypereutectic 4-valve relief ok. No JE, Ross, etc. No high performance.

Radiators: Aluminum radiator ok, aluminum pulleys ok, aluminum water pumps ok.

**Motor Option B:** Crate Engine: Must use unaltered sealed GM 602 crate engine with additional IMCA Cable-Lok system or USRA seals or if the GM 602 crate engine has not been sealed it must be inspected by the Springfield Raceway tech Official & will be sealed with Springfield Raceway seals- NO EXCEPTIONS. Upon inspection, any different, altered, or missing GM seal bolts or IMCA Cable-Locks, USRA seals or Springfield Raceway seals will result in a penalty of 1 week suspension and a \$500 fine. Legal aftermarket oil pans ...Champ pan #CP100LTRB and Champ pick-up #100SB, or with Kevko pan IMCA92 and Kevko pick-up #1005-3/4.

-602 GM crate engine MUST run a 6,000-rpm chip.

-Carburetor rule will be the same as motor option A.

-Engine must pull a minimum of 15" of vacuum at 1000 rpm.

**Oil Pans:** Racing style oil pans allowed. Must have 1" inspection hole above the oil line on the driver's side. Failure to do so will result in removal of pan for inspection. No aluminum oil pans.

**Transmission: Option 1:** All forward and reverse gears must be operational, plus a neutral position. With engine running and car in still position, driver must be able to engage car in gear and move forward, then backward. Only OEM production transmissions allowed. No 'in and out' boxes or quick-change devices allowed. Functioning shift levers must be in OEM location. One steel or aluminum OEM style/size flywheel allowed, must be bolted directly to end of crankshaft. 10.4 in min. clutch stock appearing pressure plate must weigh min. of 15 lbs. Pressure plate will be weighed by itself. Stock spring type disc, no solid hub, min. 15 lb. Flywheel will be weighed by itself. Must be unaltered three- or four-speed in OEM production case. No five (or more) speeds allowed. Must have working clutch inside explosion-proof steel bell housing with one hole for throw out bearing lever or hose, must be 270 degrees around top of clutch and flywheel area. No mini clutch allowed. No racing clutches. Components must rotate, consistent with engine rpm, while car is in any gear. No Bert, Brinn or Falcon type transmissions allowed.

**Option 2:** Stock automatic transmission with full size working torque convertor.  
No power glides, 3-speed automatics only no TCI CNR, etc. type torque convertors. Mandatory must have approved scatter shield constructed of minimum 0.125 inch by 3-inch steel, 270 degrees around flex plate. Only external lines allowed are for transmission cooler. Claim on torque convertors is \$75.

**Rear Ends:** Stock for car, may be locked. Any gear ratio allowed. Rear trailing arms must be stock. No shortening or lengthening of trailing arms. Pinion angle must remain stock. Leaf spring cars must have plates welded to axle tubes to prevent pinion angle from moving. May use 9" Ford or stock rear-end. Trailing arms must remain stock for frame being used and be in stock location on chassis GM to GM, Ford to Ford, etc. FLOATER REARENDS ARE ALLOWED

**Suspension:** All components must be stock OEM for make and model no moving brackets or shortening lengths. OEM bushings only. Steering quicker allowed NO steering boxes less than 2 turns lock to lock. NO weight jacks or spring spacers.  
Shocks: Stock mount, stock appearing racing shocks allowed. No Heim end or adjustable. Take apart from factory OEM shocks allowed.  
Springs: Racing springs allowed.  
Front: No spring spacers, springs same height.  
Stock length aftermarket a frames allowed.  
Rear: No spring spacers, springs same height side to side. Maximum length on rear springs 14".  
Rear Suspension: No aluminum parts. No Schrader valves or adjustable shocks. No gas reservoir shocks. Shocks must be all steel. Cannot move spring forward, back or side to side. Must be in stock location. Leaf springs can run lowering blocks but no adjustable lowering blocks. No spring sliders. No split leaf springs must have same number of leaves in front of axle and behind. No slapper type traction devices. No roller bearings. No Heim ends. Must be stock type bushings. (i.e., if it came with a rubber bushing with steel insert it must remain that way). Aftermarket stock replacement ok. No floating bird cages, coil eliminators or any other traction devices allowed! No weight jack bolts. Rear shocks must be in stock type location (if they came in front of the rear end they must remain there). Rear trailing arms no more than 2 7/8 inches from bottom of housing to center of bolt. Same both sides. Upper control arms no more than 2 1/2 inches from housing to center of the bolt. Same both sides. No adjustment holes allowed on rear end or chassis, must be stock location on chassis. Torque arm cars must use stock type arm, aftermarket replacement ok but must match oem measurements non-adjustable, must use stock type bushing, front mount may be fabricated but cannot be adjustable.

**Weight:** 3,000 lbs. total weight after race with Driver.

**Ignition:** Must be stock! No DUI or MSD, etc.  
New style chip box (part number CT8727) 6200 RPM max limit for motor option A.  
New style chip box (part number CT8727) 6000 RPM max limit for motor option B.

**Fuel Tank:** Must be fuel cell, mounted in trunk. 22-gallon max, at least 2 straps both directions. Must have steel outer can. New style fuel cell or flapper valve update lid (Speedway part number 458-315).

**Fuel:** NO E85 or alcohol-based fuels, pump gas or racing fuels allowed.

**Tires:** Stock Street tires, D.O.T., no all-terrain tires, max. 8-inch tread, will be checked with track gauge, P235/70r15 max., 255/60r15 max., 8-inch asphalt take offs allowed. 50 minimum compound. American Racer G-60 KK704 is allowed

**Wheels:** 8-inch max, steel wheels, no bead locks, must have 1" lug nuts. Optional bead lock RR only.

**Driveshaft:** Stock length, painted white, no aluminum.

**Brakes:** Must have 4 wheel working brakes. No shut off valves, bias valves, or aftermarket pedals permitted. Must use OEM type master cylinder. May remove power booster. Pedal must be in stock location. 4-wheel disc brakes ok. Pedals in Stock Location NO Extensions

**Safety:** Fire Extinguisher: Required, must be in drivers reach.

Uniform: Must wear full racing suit and gloves.

Helmet: Snell-rated SA 2010 or SA 2015 required.

Belts: 3-inch belts, 2 years old max!

Seat: Aluminum racing seat, mounted to cage, securely mounted, stock location. No setbacks!

**This is a stock class, no high-performance parts. If you think it is a gray area, ask track or tech before doing it, tech and rules will be handled by track's interpretation of rules! 5\_3\_22**

