



## 2021 POWRi SUPER STOCK RULES

**General Rules of Conduct, Track Technical Inspections, Transponders & Raceceivers,** It is the responsibility of each POWRi Super Stock competitor to read, understand and abide by the host Speedway General Track Rules. POWRi Super 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.

**DECALS AND CONTINGENCY AWARDS** - Drivers must properly display approved POWRi Super Stock sponsor decals in approved locations on the racecar in order to participate in any prize money, point's funds and/or contingency awards which require specific decals and/or decal placement for eligibility. All decals shall be distributed by POWRi, along with a description of each sponsor's program, decal placement requirements and contact information. Sponsorship decals for each participating track while competing for individual track related prize money, point's funds and/or contingency awards which require specific decals and/or decal placement for eligibility. All decals must be positioned on both sides of the racecar at the front of the door below the window opening.

**SAFETY EQUIPMENT:** Rules apply at all times car is on track. Snell-rated SA 2005, SA2010 or SA2015 helmet required. Helmet must accompany driver and racecar at time of inspection. Roll bar padding is required in driver compartment. *Fire retardant padding is recommended.* SFI-approved full fire suit required. Fire retardant gloves, shoes and neck brace (or head and neck restraint) required. *Recommended: Fire retardant head sock and underwear, collapsible steering shaft, right and left seat head supports if using head and neck restraint system, each racecar have built-in fire extinguishing equipment or be equipped with a fire suppression system.* Full-size Driver-side window net required, ribbon or mesh style, and must be mounted securely to roll cage. Minimum two inch wide SFI-approved five point safety belt assembly required, must be mounted securely to main roll cage. *Recommended: Safety belts no more than three years old.* Kill switch required within easy reach of driver and must be clearly marked 'OFF' and 'ON'.

**APPEARANCE:** - All racecars must be numbered with large legible numbers on both sides, on top and on the nose and rear panels. Numbers on the sides of the race car should be in contrasting color from the body and be at least four (4) inches thick and at least eighteen (18) inches high. Top numbers should be at least four (4) inches thick and twenty-four (24) inches high. No profanity allowed on cars or trucks. Crate engines indicate crate on the right front window post in 2" legible letters.

**FRAME:** Any American OEM full body rear wheel drive passenger car, 1964 or newer, full frame or unibody. Johnson Chassis X-Y-G tubular metric frame **will not be allowed.** Must be a minimum of 99 inch wheelbase. Frame must match body - GM to GM, Ford to Ford, Chrysler to Chrysler - AND wheelbase to wheelbase. No altered or twisted frames. Frame must be stock to center of rear end (Must be stock width, thickness, and location to center of rear end. Straight rear axles only. No independent rear suspension. Frame must match the body make (i.e. metric frame, metric body). Must be stock in all aspects and remain unaltered. Spring must remain in stock location and spring may not protrude above original stock mounting position. Race car must be same generation frame and body. Uni-body cars must tie rear frame to front frame.

**WHEELBASE:** Wheel base must remain stock according to year model and no more than 1" difference from side to side. No cars with OEM wheel base less than 99" allowed. Wheel base is measured from center of front hub to center of rear hub on each side with wheels as straight as possible. Either the left or the right side wheel base must be at least stock wheelbase for make and model of car (when measuring, one side must meet wheelbase and other side must be within one inch plus / minus).

**ROLL CAGE:** Main cage must consist of continuous hoops, minimum 1.50 inch O.D. tubing, with a minimum wall thickness of 0.095 inch, *low carbon or mild steel recommended.* Four-post roll cage required, front down bars and rear hoop must be welded to OEM frame. Front down bars must be tied together. Driver's head must not protrude outside cage with helmet on. Roll cage must be cross braced. Installation and workmanship must be acceptable to officials. Roll bar connections must be properly welded and gusseted. It is recommended that roll bars within the driver's reach be padded. Fire retardant padding material is highly recommended. A minimum of one cross bar in top halo of roll cage is required. Minimum of three bars in driver's door. Steel door plate with eighteen (18) gauge or forty-nine one-thousandths (.049) inch minimum thickness metal must be securely welded to the driver side door bars. Plate must extend from the top door bar, to the bottom door bar, and must extend from the back of the seat to 6-inches in front of the seat. Must be visible for inspection. Front and rear hoops are allowed. May have two bars for protection in front of radiator. Must be located behind the front bumper and within the confines of the body, and may be no wider than stock frame horns. Front horns may be tied together. Aluminum and/or other soft metals are not allowed.

**DRIVER COMPARTMENT:** Minimum of gravel screen or three windshield bars in front of driver. SFI rated racing seat only, must be bolted in using a minimum of (4) 0.4375 inch bolts. Seat must remain inside all confines of roll cage. Driver must be sealed off from track, driveline, engine and fuel cell. Kick and rocker panels may be removed. Front OEM firewall may be replaced using steel fabricated full firewall, 18 gauge or minimum 0.049 inch thickness. OEM floor pan may be replaced using steel fabricated floor pan, 18 gauge or minimum 0.049 inch thickness, securely welded to frame. Floor pan may be replaced from front firewall to rear halo supports. Must remain flat/OEM appearing from frame rail to frame rail, can be no higher or lower than frame rail. Exception is maximum eight inch tall driveshaft tunnel. Tunnel must remain similar to OEM tunnel in size. Full rear firewall may be aluminum or steel and may be located no further forward than rear halo supports and no higher than bottom of rear opera windows. All holes in firewalls must be covered with metal. No driver-adjustable devices allowed while car is in competition except brake adjuster. No mirrors.

**SUSPENSION:** GM must run GM suspensions, Ford on Ford, etc.

**Front Suspension:** Tubular front non-adjustable all-steel, upper a-frames allowed. Speedway Motors 3 pc spindle will be allowed with OEM style steering arm. No other aftermarket spindles allowed. OEM Spindles allowed. Front lower control arms must be unaltered OEM or OEM style non-tubular, non-adjustable approved aftermarket direct replacement for frame used on stock mounts in stock location. No aluminum parts. Weight jacks allowed in original centerline of spring tower. OEM upper A-frame mount may be moved or replaced with after-market steel mount matching upper A-frame bolt on design. Ball joints must be OEM replacement style or OEM replacement and non-adjustable. Offset or bearing-type front lower A-frame bushings are not allowed. Mono-ball or heim-style bushings are not allowed. One-piece steel, rubber, polyurethane or nylon bushings only. Inner steel sleeve in bushing must be present. Forward and backward movement in bushing or bushing mount is not allowed. For 1978-1987 GM mid-sized metric frames, OEM upper A-frame may be replaced using one-piece after-market upper A-frame. Shock location may be moved to go through center of aftermarket upper A-frame; maximum one, six inch wide opening on side of spring tower for shock clearance. Non-adjustable welded shock mounts only. Single hole shock mounts only. Suspension mounts must remain OEM and in OEM location. Exception: upper a frame mount may be relocated on chassis. If running sway bar must run OEM sway bar in OEM location. No suspension stops of any kind. No suspension travel limiting devices (chains, straps, etc).

**Rear Suspension:** Suspension must remain in stock position on chassis. Stock length aftermarket trailing arms with stock style bushings required. No mono-balls. **All trailing arms and bushings must be in working order.** Trailing arm bracket must be in stock location on chassis and trailing arm mounting bolts torqued to a minimum of 70 ft. lbs. Farthest trailing arm bracket mount holes on rear end must be 3.5" or less from rear end tubes to center of bolts, must be mounted same on both sides. Rear weight jack bolts allowed, rigid adjustable buckets ok. (No swivels.) No torque absorbing devices and no double shocks. Torque arms allowed only on cars that came out with them and must remain stock dimension and stock mounting. No suspension stops of any kind are allowed. Maximum rear spring height is 16" and must be mounted directly on original type spring perch or weight jack. Up to 1" rear spring spacers allowed. Leaf Spring cars will be allowed to relocate front spring mounting location but must maintain stock spring length, stock total wheelbase and no more than 1" difference in left to right wheelbase. Leaf spring cars may use adjustable rear shackles and sliders.

**STEERING:** Steering box must be OEM or Sweet style and remain within original bolt pattern for type of frame used. May be modified to suit driver, but must remain on left side of cockpit (no center steering). Removable steering wheel and steering quickener allowed. Plastic couplings are not allowed. OEM rack and pinion steering allowed if car was originally equipped. No aftermarket rack and pinion units. Steering components must be steel & stock in length and dimension. Heim joints and swedge tubes are allowed as replacements for outer tie rod ends. Cast OEM style center links only.

**SHOCKS:** One steel non-adjustable unaltered shock per wheel. All shocks must completely collapse into shock body at any time. Shock mounts may be adjusted up or down a total of 2" to keep from shaft bottoming out in body (example 1" top and 1" bottom = 2" total). Shock shaft must move in both directions at least 1" from its installed position and measured at ride height. Shock cannot preload the spring. No bump stops allowed (internal or external), no air, remote reservoir, bulb type, or schrader valve shocks allowed.

**SPRINGS:** One steel, non-progressive spring per wheel only. No helix springs. Maximum rear spring height is 16". Spring rubbers are allowed.

**REAR END:** Rear end may be locked. 8-inch or 9-inch Ford may be used on all car makes. Floater rear ends are allowed. No traction control devices. No ratchet rear ends or torque dividing differentials. No cambered rear ends allowed.

**TIRES:** 10-inch asphalt take offs (10.0 / 27.0 0-15). Tire must match wheel width. Tires must durometer minimum 50 hardness cold and 47 hot or disqualified. Softening is not allowed. No solvents of any kind are allowed. Altering tires with any components or chemicals, which alter the manufacturer's baseline-settings of the tire, is not allowed. Grooving and/or siping is permitted. All sidewall markings must remain visible at all times. Buffing or removing of the compound designations is not allowed. **Listening to tire manufacturer about a new tire possibility. May update with this possibility after testing and cost analysis.**

**TIRE TESTING PROCEDURES:** All tires must "Cold" durometer a minimum of 50 prior to race during inspection, no tolerance allowed. All tires must "Hot" durometer a minimum of 47 after race during inspection, no tolerance allowed. Any tire out of tolerance will result in a disqualification for that race.

**WHEELS:** Must be fifteen (15) inches in diameter and 10 (ten) inches in width. Must use a certified racing wheel. A steel bead lock may be used on the right rear wheel. Mud plugs and wheel covers are allowed on any wheel. Wheel covers must be securely fastened. Must have steel 1" lug nuts & 5/8" studs on all 4 wheels. Spacer or adaptor may not exceed 2-inches total per wheel. Three tabs of no more than 2-inches long each may be welded onto the wheel for mounting of mud cap. Bleeder valves are not allowed. No Wide-5's.

**BRAKES:** Must be operating on all four wheels and must lock up all four wheels during inspection. Must have caliper and rotor on all four wheels. Must be stock / cast / steel type calipers with stock piston diameter. No aluminum calipers. No electronic brake actuators of any kind are allowed. Must be OEM operative four-wheel drum or disc brake combination. Stock rotors only. Scalloped rotors are not allowed. Rotors may not be lightened. Floating brakes are not allowed. Brake lines must be outside frame rails and visible. Brake shut-off and/or pressure sensitive devices are not allowed. One brake bias bar (front to rear only) is permitted. Must maintain minimum OEM dimension for hubs, rotors and calipers.

**EXHAUST & MUFFLERS:** Must be mounted in such a way as to direct spent gases away from cockpit of vehicle and away from area of possible fuel spillage. Use of mufflers is recommended. 'Zoomies' and/or 180-degree headers are not allowed. Exhaust pipes must extend to and connect with one (1) collector at least four (4) inches long. Must remain dual exhaust, no crossover or "Y" pipes.

**COOLING SYSTEM:** Aluminum water pumps are permitted. Cooling system may be modified. Sprinkler systems are not allowed. One (1) Radiator and transmission cooler is allowed and must be mounted under the hood and in front of engine- aluminum allowed. Overflow tubes must be directed to the ground, between frame rails. Accumulators and Accusumps must be mounted in the middle of the racecar or behind the driver, but not on door bars. Top flow air cleaner housings are permitted. Cold air boxes and/or air cleaner ductwork is not allowed. Marine-type engine components are not allowed.

**FUEL SYSTEM:** Automotive gasoline, racing gasoline or E85 is permitted (no E98). No Methanol fuel allowed. No performance enhancing or scented additives. Fuel must pass both dielectric meter and chemical tests. Oxygenated fuel is not allowed. Upper cylinder lubricants are not allowed. Mechanical OEM type fuel pumps only. *Fuel shut-off recommended.* Electric fuel pumps are not allowed.

**FUEL CELL:** Must be SFI Rated, commercially manufactured. Boat and/or stock automotive fuel tanks are not allowed. Must be securely fastened inside trunk of race car and mounted by at least 2 1/8-inch solid steel straps which are 2-inches wide around the fuel cell and above the level of stock trunk floor. Must be in a steel container. Firewall must be between driver and fuel cell. All mounts must be made of steel and attached to frame or roll cage. Must have check valves. A ball- type, flapper, spring or filler rollover valve is mandatory for fuel cells without a positive seal filler neck/cap system. Fuel lines passing through the cockpit must be enclosed in metal pipe or metal conduit. Fuel filters are not allowed in cockpit.

**BATTERY/STARTER:** One 12 volt battery only. No lithium batteries. Must be securely mounted between and above top of frame rails, and positive terminal must be covered. Battery must be in Marine type case if mounted in driver compartment. Starter must bolt in OEM location. Car must have capability of starting without being pushed or pulled. Car is expected to leave initial staging area on demand and unaided.

**GAUGES/ELECTRONICS:** No cell phones, unapproved cameras, transmitting or listening devices (exception is one-way Race Receiver radio by officials), timing retard controls, or digital dash boards. No electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach. Aftermarket or OEM Distributors allowed. No adjustable timing control or magnetos allowed. One MSD 6AL PN#6425, or MSD 6CT PN#6427 box allowed. Aftermarket ignition module and coil allowed. Track may confiscate and exchange MSD box at any time. Magnetos and/or crank-triggered ignitions are not allowed. No more than one (1) coil may be used. Kill switch required within easy reach of the driver. The switch must be clearly marked "off" and "on". Ignition box must be out of reach of driver. Digital gauges are not allowed. OEM type alternator with internal regulator allowed. No electronic traction control devices.

**ENGINES:** GM frame must run GM engine, Ford on Ford, etc. Tip of number one spark plug must be even or in front of installed left upper ball joint. Oil pump must be in stock location and OEM.

**ENGINE OPTION 1: STANDARD ENGINE** - Steel blocks only. Must be able to be used in a conventional passenger car without alteration. 23-degree cast iron heads only. Aluminum intake allowed. Headers allowed. No Tri-Y headers. Tip of number one spark plug must be even or in front of installed upper ball joint. Oil pump must be in stock location and OEM. No dry sump systems. Exhaust system and/or mufflers must be mounted in such a way as to direct spent gasses away from the cockpit. If using an engine block that has been lightened, or with external machining of block or heads must add 25lbs in front of motor plate. (Rev Limit Rule may be added during the season or future if needed).

**ENGINE OPTION 2: CRATE ENGINE** - Crate Engine - GM Performance Parts (GPP) factory-sealed CT400 Chevy small block crate engine (Part No. 88958604. Must be unaltered and sealed from factory at appropriate points (Intake, head, timing chain cover and oil pan) with approved GPP break-off bolts. "Only" GM Performance Crate Motor Specs will be followed during technical inspections. Any altered, damaged or missing GPP break-off bolts will result in driver being disqualified from that event, loss of all track and regional points accumulated up to, and including, the date of the offense, a \$1,000 fine and a one-year suspension from all events. May utilize one (1) Holley 4-barrel carburetor. Use of a spacer between carburetor and intake is optional, but must be no more than 1-inch thick if used and may not be throttle bore adjustable. Aerosol carburetors are not permitted. Any driver running a "Standard" engine with a "Crate" sticker will be disqualified. Must utilize a maximum 6800 RPM rev limiter. (Rev Limit may be subject to changes if needed) Rev Limiter may not be within reach of the driver while in cockpit and must be easily accessible to Officials at any time.

**CARBURETOR:** Maximum one-inch spacer plate is permitted under carburetor. Distance between bottom of carburetor and top of intake manifold cannot exceed one and one-quarter (1.25) inch. Spacer thickness must remain the same front to back and side to side. No aerosol type carburetors allowed. No remotely adjustable spacer/adaptor plate between carburetor and intake manifold. Cars utilizing engine option #1 Standard Engine must use Holley 4412 gauge legal 500 cfm 2-barrel carburetor (1 11/16" throttle bore max. 1 3/8" venturi max). Carb "**must**" pass all top and bottom "go/no go" gauges (boosters included). All air must pass through carburetor venturi to engine. Engine option #2 Sealed crate engines and may use 4-barrel as stated in rules.

**TRANSMISSION & CLUTCH:** - Approved aftermarket transmissions are Bert, Brinn, Falcon, RaceGator, and Mitchell Machine Bullet Tranny with internal or external clutch allowed with both engine options. If using aftermarket transmission must add 25lbs in transmission area on frame, between frame rails, behind engine plate and in front of tail of transmission tail shaft. This weight must be painted orange with car # to signify aftermarket transmission. NO BALL SPLINE TYPE ALLOWED. OEM three-speed, four-speed and automatic production-types are permitted without 25 lb. weight addition. Automatic transmissions must remain in OEM stock appearing automatic case with a functioning stock appearing pump. "In and out" boxes are not allowed. May all be clutch-operated or an OEM automatic with a coupler. May use a hand or clutch pedal operated ball valve for neutral. Clutch must be inside of bell housing for OEM production- type transmissions. Internal clutches are not allowed except for approved aftermarket transmissions. One (1) forward gear and one (1) reverse gear must be in working order, plus a neutral position, and must be able to be shifted by driver. Aluminum flywheel is permitted. Must have full-sized SFI approved explosion proof, aluminum or steel bell housing. Aluminum must be SFI approved (Note: GM bell housing is not SFI approved). Flywheel must bolt to crankshaft. Clutch must bolt to flywheel and clutch must be workable. Mini clutch is allowed. Automatic and aftermarket transmissions must have a guard two-hundred seventy (270) degrees around flex plate or flywheel and must be constructed of at least one-quarter (0.25) inch steel. Alternatively, automatic and/or aftermarket transmissions may utilize an SFI-certified aftermarket guard. Flex plates must be SFI certified. With engine running and racecar in stationary position, driver must be able to engage racecar in gear and then move forward and then backward at time of inspection.

**DRIVESHAFT:** Minimum 2-inch diameter steel drive shaft. Must be painted white and made of steel. A safety loop is required at front half of driveshaft. Alternatively, 2 loops of 1/4-inch by 1-inch solid steel fastened to cross member are allowed. Yokes must be made of steel. No aluminum or carbon fiber driveshaft's allowed.

**STATION WAGON BODY:** Full size wagons only. Floor pan complete to rear yoke. No spoiler allowed. Interior deck max 40". B-post side panels must be open and resemble OEM windows stock dimension & appearance. Roof must stop 6" short of rear deck. 108" wheel base minimum. No dishing or ramping of interior deck. All other Super Stock Rules apply.

**CAR BODY:** Any model rear wheel drive American made production car. All cars and bodies must be stock appearing. Bodies must be squared up on the frame (front to rear and side to side). (May use older nostalgic body on 1967 or newer frame.) No flat late model or modified style roofs. Roof must be OEM style, may be fiberglass or aluminum. A & B pillars must be OEM style. Fenders, doors, and lower rear quarter panels may be aluminum but must maintain original body line contour and remain Stock appearing. No slab side bodies. Must have minimum 14" window openings on both sides of car. Cars may use aftermarket nosepiece and tailpiece but must remain stock appearing for car make and model. No wedge noses. Plastic front nose sides allowed, must not extend past center of front wheel well. Flare may not protrude more

than 2-inches outward or above the standard contour of OEM Fender. Rear of car must be enclosed from frame rail to frame rail and deck to bumper with panel. Panel must be solid with no holes or louvers and a minimum of 40 inches wide. Panel must be mounted vertically with no slope or angle. Taillight area may be left open. Minimum 1 1/4-inch diameter tube front bumper will be allowed with aftermarket nose, but must remain behind nose piece and attach at original position. No mirrors or reflecting device of any kind. All glass, chrome, trim, moldings, etc. must be removed. Windshield must be removed and replaced with a gravel screen or minimum of three (3) windshield bars in front of driver. Gutting of inside panels and front inner fenders will be allowed. No dropped or tunneled interiors. Must be flat and equal height from top of passenger side to driver side door. Front OEM firewall may be replaced using steel fabricated full firewall, 18 gauge or minimum 0.049 inch thickness securely attached to frame. Firewall may be flat or straight and may be moved back to the first factory seam in the frame (where C channel is welded to front stub) or twelve (12) inches from back of motor. OEM floor pan may be replaced using steel fabricated floor pan, 18 gauge or minimum 0.049 inch thickness, securely welded to frame. Floor pan may be replaced from front firewall to rear halo supports. Must remain flat/OEM appearing from frame rail to frame rail, can be no higher or lower than frame rail. Exception is maximum eight inch tall driveshaft tunnel. Tunnel must remain similar to OEM tunnel in size. Full rear firewall may be aluminum or steel and may be located no further forward than rear halo supports and no higher than bottom of rear opera windows. All holes in firewalls must be covered with metal. All doors must be bolted or welded shut. Trunk lid must be secured. Interior on right side of car may be enclosed but must have 12-inch x 12-inch trap door for inspection. Maximum 6-inch high spoiler allowed no wider than the body. Spoiler may be braced on both ends and have one center brace no more than 6-inches high and 12-inches long. The maximum height from the ground to the top of the rear deck at the top of the rear quarter panel is forty-two inches.

**POWRi Super Stock Body Diagram Measurements:**

- A - 8" Max Hood drop from Cowl to front of Fender.
- B - 50" Max Center of Front Hub to Nose.
- C - 70" Max width outside of Door tops measured at Driver's seat.
- D - 70" Max Spoiler width.
- E - 36" Minimum 48" Max center Rear Hub to rear Bumper.
- F - 5" Max Fender or Hood bubble.
- G - 80" Max overall Body width.
- H - 1" Minimum outward Body curvature. (No flat sides, no dished sides).
- I - 42" Max Deck at rear.
- J - 48" Max top of Spoiler.
- K - 7" Max Spoiler side height.
- L - 12" Max Spoiler side length.
- M - 40" Minimum width rear panel (no holes or louvers)

**WEIGHT:** The minimum overall weight for **Engine Option 1 (standard engine)** will be three-thousand (3,000) pounds. The minimum overall weight for **Engine Option 1 (standard engine)** with **Outboard Mounted Front Shocks** will be three-thousand one hundred fifty (3,100) pounds. The minimum overall weight for **Engine Option 2 (crate engine)** will be two thousand eight-hundred (2,800) pounds. The minimum overall weight for **Engine Option 2 (crate engine)** with **Outboard Mounted Front Shocks** will be two thousand nine-hundred (2,900) pounds. Refer to transmission section of rules for directions on weight placement and markings if equipped with aftermarket transmissions. These weights apply to all vehicles racing in the POWRi Super Stock division. The overall weight of the racecar shall be measured at the conclusion of an event with the driver in the cockpit, wearing complete racing apparel.

**BALLAST:** No unsprung weight allowed anywhere on the car. No titanium, magnesium, carbon fiber or tungsten products. May not be mounted in cockpit, or outside of body or hood area. Must be securely mounted, "MUST BE" painted white and clearly marked with the car number. Must be attached with at least two (2) one-half (1/2) inch bolts. May not be attached to rear bumper. Any car with ballast that is not painted white, have car number and securely mounted will be subject to disqualification.

**EIRI:** (Except in rare instances) Decisions of Track Officials are final and binding without exception. In some cases, track safety rules may take precedence - any discrepancy between POWRi and track rules should be brought to the attention of POWRi. Any rule revisions or clarifications during the course of the year will be amended at [www.powri.com](http://www.powri.com) and will be considered as an official part of these rules.

These rules are in effect as of January 1st, 2021 and planned through December 31, 2023. Small yearly updates may be made to keep up with industry changes.





# SUPER STOCK BODY DIMENSIONS

