



Pro Line Fab & Green n Go

PURE STOCK – 2017

Preface:

Minimum age requirement is 14 years of age – Ages 14 -17 must have a notarized release form signed by their parent or legal guardian and a copy of birth certificate on file with STS. Any driver who is registered and competing in an upper class will not receive points in Pure Stock Division. **Driver Restraint/Safety:**

Reference Safety Rules in General Rules, Subject to Track Inspection and Approval, applies to all times car is on the track including packing, both driver and passenger. Fully charged fire extinguishers are mandatory in the driver's compartment within the reach of the driver, must have a fill level gauge.

All drivers are required to have a working RACEceiver.

Frame:

Any American made OEM 1964 or newer full frame or unibody rear wheel drive stock passenger car, full framed S -10 or Ford Ranger pickups, or Metric Framed Station Wagons with a minimum wheelbase of 108 inches. Wheelbase must measure same left to right.

No Camaros, No Firebirds, No Trans Ams, No Mustangs, No Corvettes, No Convertibles, No Sport Cars, No Front Wheel Drives or All Wheel Drives allowed.

GM to GM, Ford to Ford, Chrysler to Chrysler.

Frames must be OEM Stock, no cutting, shortening, lengthening or modifying allowed, frame may be X-braced.

Unibody cars may tie front frame to rear frame, and may plate top section of rear unibody frame.

Full frame cars may replace rear frame section with minimum 2-inch x .095 steel tubing from 1-inch behind factory shock tower, must be replaced with same length of frame material removed.

Roll Cage:

Minimum of a four -point roll cage with continuous hoops must be constructed of magnetic steel tubing of no less than 1.5 inch OD x .095 inch wall thickness and must be welded to OEM frame.

Main roll cage and halo must be a minimum of 1 inch above driver's head with helmet on and buckled in car.

Main cage rear hoop must have a minimum of one horizontal bar and one diagonal bar from top of hoop to bottom of down bar.

Main cage front uprights must tie together with a minimum of one horizontal bar.

Front left and right kickers required from main cage forward and must tie into frame in front of firewall.

Rear left and right kickers required from main cage to rear frame section.

Front loops allowed, rear loop for fuel cell protection required.

All welds must be complete, gussets in critical areas highly recommended.

Door Bars:

Minimum of 3 driver's door bars 1.5 inch OD x .095 inch wall thickness, parallel to frame and perpendicular to driver and a minimum of 2 horizontal passenger door bars, (3 bars also required on passenger side if passenger in car).

Must be constructed with a minimum of 3 vertical bars from frame to top door bar in an intertwined fashion to strengthen door bar system.

Driver's side steel door plate of 18 gauge or 0.0049- inch minimum thickness is required, plate must extend the full length of the door, may be welded into door bar system design. (Also required on passenger side if passenger in car).

Body:

Bodies must be stock appearing, body panels may be replaced with minimum 22-gauge steel aftermarket body panels.

May be fabricated but must be stock appearing with body lines, No flat sides.

Front and rear firewall, floor pan, kick panels and rocker panels must remain stock be complete and remain in stock location.

Floor pan may be cut only to allow clearance for roll cage installation, all openings must be covered with minimum 22-gauge steel or .040 aluminum.

Gutting of roof, A, B or C pillars, roof supports, kick panels or rocker panels *not allowed*.

Any rusted out or partially missing floor pans or rear firewall must be replaced with minimum 22- gauge steel.

Inner skin may be removed from hood, truck lid and doors.

Bodies cannot be moved from the original rubber bushing location no more than + or - 1 inch.

No spoilers (even if factory equipped), no wings or anything that alters stock appearance.

May have a totally enclosed cowl or hood scoop not to exceed 3.5 inches in height.

Maximum 6-inch skirt allowed around lower perimeter of body.

Upper front windshield visor is allowed not to exceed 7 inches in width.

Doors must be bolted or welded shut, sunroofs and T-tops must be reinforced and enclosed.

All glass, plastic, upholstery, combustibles, lights, mirrors, and trim must be removed, No rear view mirrors of any kind allowed.

Outer fenders may be cut a maximum of 7 inches of tire circumference for clearance and inner fenders wells may be removed.

No narrowing, shortening or lengthening of fenders or hoods allowed, must maintain stock appearance.

No enclosed interiors or decking allowed, no part of dash can be more than 28" inch from back edge of the center of the hood. No roof rake, must remain OEM as stock production released.

Trunk floor may be removed from quarter panel to quarter panel and no farther forward than OEM rear firewall.

Race car and body should be maintained in such a manner as to keep a presentable appearance.

Hood and trunk and must be secured with hood pins, no holes allowed in hood except for hood pins, no exposed air cleaners. Must start each race night with all body panels including hood, trunk lid, fenders, nose or tail piece and bumpers.

Cars with floppy or loose body parts considered as a safety hazard will not be allowed to compete until requested repairs are made.

A minimum of three vertical windshield bars are required in front of driver for protection, must be minimum 3/8 inch OD (also required on passenger side if passenger is in car). Must extend from upper windshield seam at roof to lower windshield seam at cowl.

Any car with gutted roof, roof supports, pillars, gutted kick panels or missing rocker panels will be allowed but will be required to have a minimum weight of 3400lbs with driver with a maximum rear percentage of 50%. Must post 3400 in minimum 1 inch letters of contrasting color on top of right door for easy Tech identification.

Effective Jan. 1st 2018: Stock body panels may be cut 2 inches below body line and replaced with minimum 22-gauge steel or .040 aluminum panels.

Nerf Bars:

One Nerf bar per side allowed not to exceed 3 inches from body line.

May be constructed with maximum 1½ inch square or maximum 1 ½ inch OD round mild steel tubing.

Must be rounded or closed and turned back toward body on both ends, with no sharp edges, may not extend further than front wheel opening and must end in front of rear wheel opening.

Lexan Decal protection allowed.

Bumpers:

Stock type front and rear bumpers must have steel plate to fill void from bumper to fender or quarter panels to prevent hooking, can be bolted or welded, no sharp edges.

Fabricated pipe front and rear bumpers will be allowed on cars with aftermarket nose and tail pieces.

Pipe bumpers under nose and tail pieces may extend past frame to body but no bracing or reinforcing allowed outside of frame.

No Cattle Guard Front or Rear Bumpers – Subject to Track Inspection and approval. No sharp edges.

Must have a visible chain loop for wrecker hook up on front and rear of car.

Engine:

Any OEM factory production small block cast iron American made V-8 engine with a maximum of 364 CID.

Stock replacement 2 or 4 valve relief pistons, no light weight pistons or wrist pins, no floating wrist pins (rod to pin).

OEM or aftermarket stock appearing 5.7 connecting rods only, aftermarket rod bolts allowed.

OEM or aftermarket stock replacement standard weight crankshafts allowed, minimum weight 48lbs., no bull nosing, lightning or knife edging allowed. Maximum stroke of 3.48 inches.

Engine Balancing OK.

No splayed main caps.

Engine bolts may be aftermarket.

Aftermarket Harmonic Balancer OK.

Maximum compression of 170 PSI, compression will be checked with all spark plugs and air cleaner removed, engine will be rotated by starter for five compression strokes, carburetor butterflies will remain closed.

Aftermarket oil pans OK, recommend a 1" inspection plug.

The plug should be located on the left hand side approximately 2" down from the pan rail and in line with a connecting rod assembly that is convenient to look at when the pan is installed in the car.

Any type of windage trays are not allowed.

OEM type timing chain system only, double roller allowed, gear drives or belt drives not allowed. Aluminum pulleys and serpentine belt system allowed.

Cast iron water pump only, may be aftermarket.

Aftermarket power steering pump with integrated tank OK

Motor must be in OEM location; solid motor mounts allowed but must be in

OEM location, *No tolerance.* Cylinder Heads -

OEM production unaltered cast iron cylinder heads with a minimum 72cc combustion chamber. OEM casting number must remain on heads. No grinding of any kind allowed on heads, *no* gasket matching, *no* porting or polishing allowed.

Vortec or double hump OEM heads *not allowed*, 305 heads allowed on 305 CID engines only, 305 heads not allowed on 350 CID engines. Maximum 1.94 intake valves and 1.50 exhaust valves, Exception: 1.630 exhaust valves allowed on Chrysler Engines.

Heads may be flat milled for surfacing reasons only, no angle milling.

Valve spring OD diameter must not exceed 1.250 inch (+ or - .015 inch).

Guide plates, 3/8 X 7/16 screw in studs and poly locks *allowed*, pinning of OEM studs allowed.

Stud mounted 1.5 stamped steel rockers on GM & Chrysler, 1.6 on Ford, full roller or roller tipped rockers are not allowed. After-market valve cover with breather tubes allowed, oil diverters allowed.

Effective Jan. 1st 2018 - Engine Quest (EQ) GM part number CH350I, (EQ) Chrysler part number CH318B, World Products Ford part number 53030 will be allowed.

Intake -

Stock unaltered cast iron or aluminum OEM intake manifolds only. *No* aftermarket, bowtie, marine, or high-rise intakes. *No*

internal modifications of any intake permitted, No deburring, acid porting, gasket matching or grinding allowed.

Must have a ¼ inch accessible vacuum port on intake for Tech.

Camshaft and Lifters-

Hydraulic camshaft and conventional hydraulic flat tappet lifters only, no hydraulic OEM roller lifters. Rhoads, Variable Duration or "Bleed Down" lifter *not allowed*.

Maximum valve lift of .450 inch measured at steel retainer. Solid lifter will be used at tech to confirm. Maximum push rod length of 7.800 inch.

OEM firing order cannot be changed thru cam design. GM firing order 1-8-4-3-6-5-7-2.

Engine must have a minimum of 15 inches of vacuum at 1000 RPM, *No tolerance*

No vacuum canisters allowed, brake booster will be disconnected and capped during time of vacuum inspection.

Intake-

Stock unaltered cast iron or aluminum OEM intake manifolds only. *No* aftermarket, bowtie, marine, or high-rise intakes. *No* internal modifications of any intake permitted, *No* deburring, acid porting, gasket matching or grinding allowed. Must have a ¼ inch accessible vacuum port on intake for Tech.

602 Crate Engine Option:

Unaltered sealed GM Part Number 88958602 or 19258602 GM Crate engine is allowed.

- Must remain factory sealed – any different, altered or missing GM seals bolts will result in DQ.
- May have IMCA seal cables but must register and present track with all register paperwork.
- With 500 CFM 2 Barrel (reference carburetor rules), *No* 4 barrels. This is subject for tear down and internal inspections.

CARBURETOR AND FUEL:

One unaltered 500 CFM Holly 4412 2-Barrel, is subject to be checked with go-no-go gauge.

Removal of the choke flap and shaft is the only modification allowed, choke horn must remain, cannot be removed.

2-barrel to 4-barrel carb adaptor is allowed with a 1 1/4" max height including gaskets. Must have two throttle return springs.

4412 Ultra XP Carburetors are not allowed.

GM Q/Jets, GM Spread Bores, Ford Motorcraft or Chrysler OEM 4-Barrels are not allowed. Fuel injection is not allowed.

Maximum air cleaner of 14 inches in diameter x 4 inches in height, top flow style air cleaners are not allowed. Any type of Ram Air or Forced Air Induction is not allowed.

Fuel -

Pump gas, aviation gas or race fuel with no additives, no methanol or smell enhancing additives.

Mechanical fuel pump must be stock mount push rod activated, aftermarket manual type pump is OK. (Example: Carter, AC, Holley).

Electric fuel pumps are *not* allowed.

Fuel lines which pass thru driver's compartment must be enclosed in metallic conduit or pipe from front firewall to rear firewall. Fuel Cell -

Racing fuel cell required, maximum 22-gallon capacity, must be in minimum 20-gauge steel container. Must mount with minimum one-inch square tubing or two solid steel straps around entire cell, two inches wide and 0.125-inch-thick, between frame rails and behind rear axle. Fuel cells cannot be mounted lower than rear end axle tubes. Must have protection loops to prevent damage to fuel cell.

Fuel cell vents, including cap vent, must have check valves. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required.

Exhaust:

OEM cast iron exhaust manifolds only— no porting, acid dipping or modifications allowed.

Headers, marine, 2 ½-inch center dump, or tubular steel exhaust manifolds are *not* allowed.

Exhaust pipes must turn down or extend past driver's compartment

Transmission/Driveshaft:

Only OEM production transmission with the exception of No 5 or 6 speed or overdrive transmissions allowed. All forward gears must be in working order on all transmissions, with a neutral and working reverse. No aluminum or light weight flywheels.

Automatics-

Must have a fully operational torque converter with a minimum diameter of 11-inches with no modifications – may not be smaller converter with ring added to meet 11-inch rule.

No "Dummy" converters.

No Direct Drive automatic transmissions allowed.

Automatics must pass following inspection, with engine at idle, and brake applied, transmission must shift from "neutral" gear to "reverse" gear and from "neutral" gear to "low" gear, without causing engine to stall. Race car must remain stationary during such shifting and testing.

SFI Rated flex plate required, Scatter shield recommended on all automatic transmissions.

Transmission cooler OK, if mounted in driver's compartment must be shielded to protect driver from fluid in case of leak.

Standards-

No racing transmissions, must be stock OEM gear ratios, no re-gearing with aftermarket gear ratios.

Must have a minimum 10.5-inch clutch, pressure plate, OEM or OEM replacement *steel* flywheel, no aluminum components allowed.

Standard transmissions must explosion proof steel bell housing or have a minimum ¼ inch steel plate covering the bell housing – minimum 270 degrees around top of clutch/flywheel area.

Aftermarket *clutch* pedal, hydraulic master cylinder, and throw out bearing allowed. Car must be self-starting.

Driveshaft-

All drive shafts must be steel with a minimum diameter of 2.5 inch, painted white with the car number.

Driveshaft must have a 360-degree safety loop constructed of minimum ¼ inch thickness by 2-inch width mounted within 6 inches from behind of front u-joint.

Suspension:

Front and rear suspension must be stock for that make and model with no modifications.

Front: Nonadjustable tubular type upper control arms are allowed, must use *steel* cross shaft. Following part numbers allowed:

- Metric Cars - Day Motor Sports Part # UP-41000R/L, UP-910-34394R/L, Speedway Motors 910-34394R/L or 910-31134R/L, must install right on right (8" C-C), left on left (8 1/2" C-C).
- Novas or Non-Metric full frame cars - Speedway Part # 910-34397-91/4.

Upper and lower A-arm mounts on frame must remain in stock location, cannot be moved.

Ball joints must be OEM replacement. *No* extended, low friction or rebuildable type ball joints.

Upper and Lower A-Arm bushings may be replaced with OEM rubber type only.

No offset, spherical or low friction bushings allowed front or rear.

Rear:

Control and Trailing arms may be reinforced but cannot be lengthened or shortened, must be OEM center to center lengths.

Control and trailing arms must mount in stock location on frame, frame mounting points may not be altered in any way. Leaf springs must mount in OEM stock spring mounts front and rear, rear sliders are *not* allowed. Springs:

Aftermarket steel springs allowed, minimum 5 inch OD springs, must be OEM design, if car being raced was OEM production manufactured with rear pigtail design spring must be of single or double pigtail design and must fit stock spring perch in stock location on rear end. Maximum height 15 inches.

Spring spacers allowed, spring spacers may not be adjustable or threaded. Weight jacks not allowed.

Leaf spring cars may use non-adjustable lowering blocks, must use OEM replacement rubber style bushings in front and rear springs, rear sliders *not allowed*. No bump stops of any kind allowed.

Sway bars allowed, must be OEM design, with equal height/spacing on each side, no preload.

Shocks:

The following steel bodied, factory welded, non-rebuildable shocks are allowed in OEM stock mounting position.

- PRO - SS100, SS201 and SS200 Street Stock
- QA1 - EC Series Stock Mount
- AFCO - 10 Series Street Stock Mount
- DOETSCH TECH – 0101, 0102 & 0103 Street and Hobby Stock
- OEM or OEM replacements (No OEM Bilstein)

No air shocks, No Bilstein

Modifications or custom valving of shocks of any kind is not allowed.

Shocks with grinding marks, re-welds or shocks which are painted over will result in DQ.

Shocks must have OEM stock type rubber ends, no screw on or welded on type rod ends of any kind allowed. No bump stops internal or external, all shocks must fully collapse and extend.

Shocks will be eligible for a \$50.00 per shock claim – one or all four.

Shock claim procedures:

- Top four finishers in main event are subject to shock claim.
- Must have raced on previous 2 consecutive race nights in order to claim.
- Must start and finish main event on lead lap.
- Claim must be made with US currency (cash) at Tech Pad within 10 mins. of the completion of the main event.
- Each driver may claim up to four shocks per year.
- Any driver may only have a maximum of 4 shocks claimed per year.
- Refusal of claim will result in DQ and forfeiture of all points.

Rear End:

Rear-end must be stock OEM for make and model of car, bracing of rear end allowed.

OEM Brackets and mounting holes must remain in stock location and cannot be rotated, leaf spring mounts on rear end must remain in stock location and cannot be rotated.

Any gear ratio is allowed as long as the housing doesn't have to be altered to accept.

Rear end may be locked or welded, mini spools allowed.

No limited slip, lockers or posi-trac rear-ends allowed.

Steering:

Must use stock OEM gearbox for make and model.

May use aftermarket steering shaft, related components and quick release steering wheel disconnect.

Quick Steer is optional.

Drag link, tie rods and all other steering components must be OEM or stock replacement for make and model. Bolt on Spindle Savers OK. **Brakes:**

Must have all brake components on all 4 wheels, must have minimum of 3 wheel brakes operational at all times.

Functioning right front brake shut off valve is allowed, must be out of reach of driver, RF brake must be 100% operational if valve is in open position at time of Tech inspections.

OEM or stock replacement steel brake calipers must be of single piston design, no dual piston calipers or aluminum calipers allowed. Must remain OEM piston size for make/model of car being raced, no undersized or oversized calipers.

Aftermarket brake pedal with single master cylinder allowed, does not have to be mounted in stock location.

Only one brake master cylinder allowed and may be aftermarket.

Any type of adjustable front to rear brake bias adjusters are *not* allowed.

For safety purposes, rear disc brakes optional, rear disc brakes must be *steel* components only, no light weight components.

Wheels/Tires:

Wheels-

Any 15-inch diameter x 8-inch wide steel wheel allowed.

5/8 studs and 1-inch lug nuts are required.

Maximum 1-inch wheel spacers allowed, minimum of 2 threads must be visible on stud with spacer installed. Bead locks are not allowed. Tires-

Hoosier G-60, American Racer KK704, Southwest Speed Dirt 60, 8-inch Asphalt take off or 60 Series Street Tires. Grinding, siping and grooving allowed.

No chemical softening or conditioning.

Electrical/Battery:

All cars must have a master positive (+) battery disconnect switch located outside the car within easy reach of track personnel.

Must be clearly marked Off/On and interrupt all 12-volt power to car.

Must have an ignition on/off switch in driver's cockpit and must be in easy reach of driver. Only one 12 volt battery is allowed.

Highly recommend battery to be in trunk area and must be between and above frame rails, if located in within driver's area must be in sealed steel enclosure and securely mounted. Subject to track safety inspection and approval.

Aftermarket Starter OK, all starters must be block mounted, no reverse mounted starters.

Ignition:

OEM stock distributors, can be HEI or points type, aftermarket stock replacement components allowed.

All components of HEI distributor including coil must be internal, points ignition may run external coil.

No external spark boxes or adjustable rev limiters.

NO traction control devices of any kind.

Excluding spark plug and external coil wires, maximum of 2 wires connected to distributor one switched positive for ignition and one for tachometer.

Radiator/Engine Cooling:

Only one radiator is permitted in stock location, Aluminum aftermarket radiator OK. Radiator protection is required, must not extend outside frame horns or forward of hood.

Radiator core support may be removed and alternate radiator support fabricated.

Water pump mounted fans only, spacers allowed, *No* electric fans.

Weight/Ballast:

Minimum Weight: 3300lbs. with driver after race – 3400 if body has any gutting (reference body rule). Maximum Rear Percentage: 50%

All ballast weight must be securely fastened, be painted white and include readable car number. Ballast weight *cannot* be mounted inside driver's compartment.

Scoring:

Numbers must be a minimum of 24 inches in height and 4 inches in width.

Must be on both sides of car and positioned on roof so number can be read from passenger side of car.

All numbers must be of a *contrasting* color and be easily read from scoring tower. Recommend one 6-inch number on front of car to aid in line procedures

Over 113 Inch Wheel Base Exception:

Any American made OEM production vehicle with a minimum 113-inch wheel base at track's discretion may be allowed to compete.

- OEM engine with cubic inches must match year and make of vehicle with no performance modifications or see engine rules.
- Front bumpers will be heavily scrutinized, must be OEM and properly secured and cannot be reinforced.

Courtesy Rule:

Any car from another track with "minor" rule infractions will be allowed to compete for (1) one night. Cars with minor infractions *are* subject to weight penalties.

ALL cars are subject to track inspection and approval before entering into competition, and may be subject for re-inspections.

Any car which is determined as unsafe will not be allowed to compete until safety issue is corrected and car is declared safe for competition. STS reserves the right to clarify or amend these rules as deemed necessary.

If you have any questions or require any clarifications, please do not hesitate to contact.

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