

2017 SUNSHINE STATE CHALLENGE SERIES RULES

IMPORTANT: Competitors **MUST READ** the "Additional Series/Track Rules" Section at the end for additional rules specific to a Track or Series.

A. Eligible Cars and Bodies Guidelines

1. All competing cars will be full-sized, stock American manufactured passenger car bodies. Current A-B-C Body Rules apply unless otherwise specified herein. Refer to A-B-C Rulebook and guidelines for details. Also, no panels allowed extending top edge of doors. No under car panning outside of frame rails and no further than drivers' box front or rear of bottom of driver's seat. Any holes in body not being used must be covered and remain so during the race.
2. Rub rail are discouraged and may only be used if they are polycarbonate.
3. If exhaust exits through the door, installation must include an exhaust flange that is mounted flush to the door. Maximum 1/2" gap around the exhaust pipe. Pipe must not protrude through door.
4. At all times, the ABC "A" measurement must maintain a min. length of 11.5 inches. Also, 20 inches is the min. length allowed for the nose, measured from the bottom, leading edge at center, up to the hood seam.
5. The air box between the nose and radiator may have no pieces wider than the radiator. No types of under-body air deflectors are allowed. All air for blowers or coolers in the engine compartment must be pulled from the nose or the radiator air box. Air may not be blown or forced onto the tire or bead...air may only be directed to the brake rotors. **The duct work between the nose and the radiator may be no wider than 29" and may not be carbon fiber.**
6. Minimum Base Weight: 2750 lbs (see "Series/Track Additional Rules" section for additional weight breaks or penalties).
7. 58.0% Max. Left side weight at all times (without refueling). For post-race total weight rules, teams may refuel, or officials may utilize "1 lb. per lap" burn-off.
8. 66 inch maximum tread width for all cars.
9. **Interiors must be steel or aluminum only.**
10. All cars must go through technical inspection prior to car taking to the track for practice. Cars will be weighed with driver, and may be done prior to or after qualifying and prior to or after the feature. Reading of designated scales will be official. Issues discovered in pre-practice tech that are not fixed to satisfaction by pre-qual. tech will result in the loss of 1 qualifying lap.

B. Engines

Basic Engine Guidelines

1. **Use of any engine under 347 Cubic Inches will require a 50lb penalty.**
2. Engines with rear mounted distributors will be located so the forward most spark plug is no more than two inches (2") from the center line of the upper ball joints. Engines with front mounted distributors: up to four inches (4") setback from centerline of upper ball joints. Crate Engines may use four inch (4") setback.
3. Engines may not be offset more than one inch (1") from centerline of car.
4. Front center of crankshaft must have at least ten inches (10") of ground clearance. Crate Engines must be at least 11 inches.
5. Standard steel blocks only. No Carbon Compacted blocks of any type.
6. No Ford D3, SC, or other High Port heads. The following are the ONLY approved Ford heads: A, B, C, C3, and C35. These heads must remain unaltered other than porting and polishing. No altering of these heads will be allowed so as to change runner floor or roof height to raise port or ports, these heads will be considered high ports and are not permitted. Runner floor and runner roof heights must remain as manufactured from Ford.
7. No Overhead Camshafts.
8. A maximum 16 inch (O.D.) air element and housing must be used.
9. Carburetor restriction must be done with a solid plate or cone type system only, and may NOT be externally adjustable in any way. No adjustments may be made to the carb/restrictor package following qualifying. Teams will race with the same package they qualify with.
10. Any competitor that finishes in the top 5 may be required, at their expense, to remove the intake, heads, and/or oil pan for inspection purposes.
11. **Externally lightened blocks will receive a weight penalty to be determined, with the goal to eventually eliminate those blocks.**

9:1 Compression Engine 362 Max Cubic Inches/Cast Iron Block/ (This package may phased out in the near future)

1. Cannot exceed 9.5:1 compression. Method of determining compression will be at the discretion of Officials.
2. Minimum valve angle: GM-18 degrees; Ford 9 degrees with 4 degrees valve center; and Mopar 12 degrees. (+/- 2 degrees)
3. Steel or aluminum cylinder heads.
4. Steel standard production crankshaft; balancing, lightening, stroking allowed.
5. Any camshaft, any steel lifter, any rockers arms. Gear drives allowed.

6. Steel or aluminum intake. No fabricated intakes. No material may be added to production intake manifold to increase carb height. No welded on spacers or air deflection devices allowed in intake. No part of carb spacer shall enter the intake.
7. 390 CFM 4bbl Part #6895 or #80507. Carburetors must pass inspection at any time regardless of temperature. Booster bar may be removed from center of booster (max inside dia. of booster .473) and the booster may be tapered from the center seam down (booster must retain .700 length minimum) but all 4 boosters must be the same style. No other modifications are allowed on carbs.
8. 1" Maximum spacer allowed but cannot extend into manifold.
9. 8200 rpm max.

Southern Super Parts Engine (SSPE)

Southern Super Parts Engine (May Be Claimed for \$21,000 + pulling fee)

1. Maximum Engine displacement is 362 cubic inches.
2. Maximum compression ratio is 11.5:1 with +.5 tolerance.
3. Any flat top piston permitted with 927 wrist pin and .043 x .043 x 3mm ring package only. Pistons must not extend out of the top of engine block. Maximum racer cost of \$1400.00 per set.
4. Cast Iron engine blocks only.
5. Intake must remain stock. Absolutely no match porting or blasting of any kind permitted. Slotting of bolt holes, water lines and matching of sides allowed. Ford part #: Edelbrock 2928, 2929, or 2934 only. Chevy part#: Edelbrock 2814 and 2892 only.
6. Crankshaft must have a minimum weight of 40 pounds (with front timing pulley or sprocket). Minimum main size Chevy 2.300/ Ford 2.250. Maximum advertised racer cost of \$1400.00
7. Connecting rods: Minimum rod journal size 1.850". Absolutely no piston-guided rods permitted. Maximum racer cost of \$1400.00 per set. No titanium rods permitted. Minimum rod weight 560 grams.
8. Listed Brodix Cylinder Heads only. Heads may be surfaced to achieve proper compression ratio. Absolutely no other work of any kind will be permitted to the intake ports, exhaust ports, or combustion chambers. Ford part #: SP STS T-1 F Std 225-SSPE. Must retain minimum valve angle of 20°. Chevy Part #: SP STS T-1 STD 225-SSPE. Must retain min. valve angle of 21°. Multi-angle valve job permitted. Absolutely no blending of valve job below valve seat permitted. Chamber must retain shape 3/8" above valve seat. Minimal blending due to multi-valve jobs permitted.
9. Maximum valve size: Intake 2.08", Exhaust 1.60", Stem size 11/32". Intake valve may be titanium or stainless steel. Exhaust must be stainless steel.
10. No Titanium valve springs permitted. Maximum racer cost: \$425.00 per set. Titanium retainers permitted. Lock angles not specified.
11. Camshaft must be Competition Cam Part #: 21151712. Camshaft must be installed on 104° intake centerline +/- 1°. Roller lifters, maximum racer cost of \$700.00 per set. Maximum lift of .715" while using 1.6 rockers checked at valve with zero lash. Maximum 1.6 rocker arm racer cost of \$1,500.00 per set. Magnetic-type push rods only. No keyway guided lifters permitted.
12. Maximum 5 stage dry sump oil pump permitted. Max. racer cost of \$1,250.00.
13. Oil pan must have 1" inspection hole. Absolutely no sectional pans permitted. Open box pans only (NO windage tray / scrapers etc.). Max. Racer cost of \$550.00.
14. Ignition System may only be Crane Cams Ignition part # 6000-6701. Mount on right side of car dials point out the passenger side. The mag positive & negative shall be a maximum length of 62 inches. Must be remain uncut or spliced and on top of dash in clear view. Mandatory 8000 RPM Rev Limiter must be installed and fully functional. Absolutely no crank trigger pickups permitted.
15. Carburetor must be an unaltered 750 CFM 4779, 80528 Holley permitted. Carburetor must pass inspection at any time regardless of temperature. Maximum 1" carburetor spacer permitted on Ford motor only. Maximum 1/2" carburetor spacer permitted on Chevrolet motor only.

"Other Engines"

1. S.E.A.L. approved McGunegill, Hamner, Ford 374D and Florida SPEC "Sealed Engines" may also be used. **The 6 existing Ford 374D engines are grandfathered for the next two years. That package will be eliminated after that. No new Ford 374D engines may be built.** If necessary, series officials may add or subtract weight to ensure fair competition. Any tampering of seals or established construction of these engines is grounds for immediate disqualification. Additional tech rules will apply. The maximum RPM is the series mandated 7600 for these engines. Rev limiting device must be operational at all times with RPM Dials securely covered. All Sealed engines must use the gauge legal, 750 carb as described in the SSPE section.
2. The "ACE" Engine as commonly used in the ARCA Midwest Tour may also be used with a 750 carb as described in SSPE engine section. Series officials may add or subtract weight to ensure fair competition. 7800 rpm max.

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3. Crate engines may also be used. Series officials may add or subtract weight to ensure fair competition. Cars utilizing crate engines must use the engine, carb and ignition specifications from the FFS Pro Late rules.

C. Fuel System

1. Sunoco 110 spec fuel. Fuel samples may be taken at any time and tested. Alcohol, nitro-methane, nitrous oxide, other oxygenating agents, other additives and/or fuels that contain masking agents or oxygen are not permitted. Street-use pump gas is not allowed. Use of such substances or additives will result in immediate disqualification and loss of points.
2. No electric fuel pumps or forced induction of any kind are permitted.
3. No icing or cooling of fuel system.
4. A fuel cell will be mandatory with a 22-gallon (U.S.) maximum. Fuel cell must have a minimum of eight inches (8") ground clearance. Fuel cell must be equipped with at least two (2) protective straps completely around the cell. Fuel cell must be mounted securely behind the rear axle of the car. Cars must have a minimum 1/8" steel plate, or similar strength aluminum plate, between fuel cell and rear end. A similar plate at the rear of the fuel cell is recommended. All cars must have safety bar at the rear of the fuel cell. At a minimum, all fuel cell configurations must include a rubber type cell in a steel container. **No "U" Shaped Fuel Cells or non standard-shaped fuel cells.**

D. Ignition

1. Battery powered ignition. Vehicle MUST start under own power.
2. Maximum 16 Volt Battery. Car must be capable of being started with a 12-volt battery. No Magnetos.
3. All wiring must be sealed. No unplugged wiring. All ignition boxes must be mounted on the passenger side, in plain view, and out of reach of the driver...and...all wires to the distributor must be run separately and not part of a bigger loom or wiring harness.
4. All teams must only use **ONE** Crane Cams Ignition part# 6000-6700 (HI-6RC) and a Coil part# 730-0192 (PS92N), *mounted on a tray as specified at website.*

E. Suspension

1. No fifth (5th) coil, torque arm or lift bar suspensions will be permitted. No birdcage set-ups of any kind (3 or 4 link). Trailing arms must mount to rear end in a solid fashion (heim allowed) and no part of the trailing arm mounting may freely rotate around the rear end. **All parts of 4 Link must be solid, one piece construction with no moving parts, with one heim at each end. Trailing arms, third link and track bar mounts must also be solid and may not have the ability to move.**
2. No cockpit, driver adjustments, other than brake bias.
3. Coil Springs and Spindles must be Steel. (Exception: approved Coleman Spindle)
4. No traction control devices, electronic or otherwise, will be permitted. Use of traction control will be cause for immediate D.Q. and suspension from series.
5. One shock per wheel. Shocks must be only mechanical in nature and no part of suspension or shocks may utilize electricity.

F. Wheels and Tires

1. American Racer Tire only. Steel 10" wheels only.
2. **Bleeders are not allowed. Hidden bleeders will be checked for!!!**
3. Cars must start the feature on the same tires on which they qualified. Cars running the last chance race may change tires prior to that race, but must return to the qualifying tire for the feature. Cars that run the last chance race on qualifying tires will be allowed to change tires prior to the feature.
4. Use of tire softening or altering agents will not be permitted. Use of such substances will result in immediate disqualification, loss of points and money.

G. Transmission, Driveshaft, Rear End

1. Full standard type transmission only will be permitted. No quick-change transmissions will be permitted. Automatic transmissions will not be permitted. Crate engine teams may use their transmission rules with no weight penalty.
2. A minimum of one reverse and two forward gears will be required.
3. Multi-disc clutches will be permitted. No direct drives. Conventional clutch mounted to fly wheel only will be permitted. Any transmission that does not meet these guidelines may be assessed a minimum 25 lbs penalty.
4. No carbon fiber or nonstandard material clutches. **The minimum clutch diameter is 5.5"**. No "slipper" or "centrifugal" clutches allowed.
5. Driveshaft must be equipped with a minimum of two (2) safety straps and must be painted white. Drive shafts must be made of Aluminum or Steel only, and use no other materials (i.e. carbon fiber, etc).

H. Brakes

1. Vehicle must be equipped with four-wheel hydraulic brakes.
2. No carbon fiber rotors. **Only steel rotors are allowed (no titanium).**
3. Brake fluid circulators permitted. Liquid or gas cooling not permitted.

I. Safety

1. Radio communication to the drivers is mandatory, with a minimum of one (1) spotter for each team. Spotter must have the capability to monitor series race control with a scanner.
2. Approved seat belts and double shoulder harness will be required, no older than three (5) years. A crotch strap will be required.
3. A capable form of head & neck restraint must be used. A strap-type neck restraint is mandatory (No Neck Collars). Drivers will not be allowed on the racetrack at any time without proper neck restraints in place.
4. Helmet must be 2005 Snell standard or better and have sticker visible for inspection. Full-face helmets required.
5. Clean, full driving suit and approved gloves for fire protection are mandatory.
6. Side plate for driver's door will be mandatory. Must be 12 inches (12") high post-to-post, 1/16" minimum thickness steel or and must be fastened with a minimum of six (6) half-inch bolts or securely welded to series' approval.
7. Driver's window must be equipped with safety net with quick release-latch. String window nets will not be permitted. The minimum net size must be 22" wide and 16" high. When latched, the window net must fit and pull tight.
8. Resilient padding designed for roll bar use must be installed on any roll cage member which can be reached by any extremity of the driver while driver is normally seated with restraints fastened. Steering wheel must be padded.
9. All lead weights must be painted white, with the car number painted on each individual piece. All lead weights must be securely fastened. Any lost weight will result in a \$10 per pound fine. *No Tungsten or similar weight allowed!*
10. All competing teams must possess a minimum 10 lb. Aluminum working fire extinguisher while in attendance in pits, and this item must be presented at inspection. Car number must be painted on fire extinguisher
11. A main electrical cut-off switch needs to be clearly marked and easily accessible to safety crews.
12. Numbers must be a minimum of 21" in height, with body of each character a minimum of 3" in width and must be professionally placed on each door. A number will be required on top, readable from the infield.
13. A car number at least six inches (6") in height must be placed in the upper right hand corner of the windshield.
14. Roll cage must be constructed of 1 3/4" OD round steel tubing with a minimum wall thickness of .090". Three inches (3") maximum gussets measured diagonally must be welded in main roll cage area where a 90 degree angle exists or where the roll cage meets the main frame rails. The main frame rails / bolt-on clips must be steel from radiator area to behind the fuel cell. Main Frame rails must be a minimum of 2" x 3" rectangular steel.
15. **Bumper bars and right side body bars must be a minimum of .065 x 1 1/4 tubing.**
16. No part of any cooling system may be located in driver's compartment.
17. Batteries must be securely mounted outside of driver's compartment.
18. A working Fire Suppression system or driver accessible fire extinguisher is required. All cars must have an OBERG Vacuum Style fuel shut off placed at the point the fuel exits the cell

OFFICIAL DECISIONS

1. Any situation not specifically covered in these rules will be acted upon by the official or officials in charge at the time, whose decision will be final and binding on all participants.
2. Any disagreement over technical questions or operations will be resolved by series officials. When decision is rendered, decision is final and binding
3. Continuous developments in racing may necessitate changes which cannot be anticipated at the time rules are formulated. If necessary, rules may be updated, changed, deleted or added to at the discretion of the officials.
4. At certain events, to encourage participation of local competitors, the officials may alter the rules for those cars to try and create a level playing field for cars that might fall outside of the normal rules. Official's decisions are final.

Additional SUNSHINE STATE CHALLENGE SERIES Rules Section

1. 10 Gallon Minimum fuel purchase required on races 100 laps or more.
2. All races will be tire impound and tires will be picked and mounted the day of the race only by determined order.
3. Any engine not in these rules can be looked at on a case by case basis.
4. FI Spec engines are held to original rules and penalties.