

SOUTHSIDE SPEEDWAY
2009 RULES

LATE MODEL SPORTSMAN

(Revised April 10, 2009)

1. **COMPETING MODELS** – Any steel-bodied American-made passenger sedan manufactured after 1982 to current year model with a minimum of 105” and a maximum 108” wheelbase. The only approved manufactured vehicles for the 2009 racing season are: General Motors, Chrysler/Dodge/Plymouth, Ford and Toyota body style (using Chevrolet frame and motor).

2. BODIES

- A. After-market steel bodies may be used. Front plastic fenders permitted. Bodies must be installed per manufacturer’s specifications. All bodies must have rolled fenders and doors. Doors may be aluminum. Body must be centered on frame. Flat-side bodies are not allowed. Five Star or ARP only composite LMSC body permitted. No offset bodies permitted.
- B. The Director of Competition must approve all body styles.
- C. Floor pan kits permitted.
- D. Fiberglass hood is approved but must retain stock appearance. Hoods must have positive fasteners right side and left side, and 2 positive fasteners across the rear of hood. Front edge of the hood must not be exposed, and must fit into a slot across the entire width of the front of the hood. The hood must seal tight to the fenders and the windshield at all times. No holes permitted in hood for cooling, or allowing air to the carburetor or breather.
- E. All air entering through the grille must be directed through the radiator. Fixed brake cooling ducts allowed from bumper cover to spindle. Must be approved by track officials.
- F. Must have steel bumpers front and rear. Stock appearing rubber bumper covers permitted.
- G. Roof height must be no less than 49 inches when measured 10 inches back from top center of windshield.
- H. Rear spoiler may be a maximum of 5 inches high and 54 inches long.
- I. Toyota body style may be LMSC composite bodies with approved bumpers and window. No offset body permitted.
- J. Inside trunk area sheet metal may be left open. Driver’s compartment must be enclosed.

3. FRAMES

- A. Frames may be altered for wedge bolt installation and fuel pump clearance. Rear cross member may be fabricated.
- B. Standard production frames over 108” may be used but must be shortened to 108” by removing a section of the side rails.

- C. Ford and Chrysler may use a GM frame. Body and engine must be from the same manufacturer. The only exception is the Toyota body style which will use a GM engine and follow GM engine and weight specifications.
- D. Tube frames with a minimum 105" wheelbase permitted. Side rails must be a minimum of 2 inches wide by 3 inches high. Rear clip must step up over axle.
- E. Any stock OEM front clip permitted.
- F. Cars must maintain a minimum left-side and front air dam clearance of 5 inches and a minimum exhaust pipe clearance of 3 inches with driver in car.
- G. Tube snouts will be permitted with no weight penalty.

4. ROLL CAGE

- A. A complete approved roll cage, including roof center bar required. See supplemental rules for installation instructions.
- B. Roll cage must be centered on frame.
- C. All bars within the driver's reach must be padded.
- D. A .090" magnetic steel plate attached to the driver's side door bars is required.

5. SHOCK ABSORBERS

- A. Any type of shock is permitted. Rebuildable shocks allowed but must be non-adjustable. **External valves and/or fittings permitted.**

6. WEIGHT

- A. All cars must maintain a minimum 3100-lbs. total weight and 1450-lbs. right side weight at the start of the event. Gas may not be added at the end of the race. **At the end of the race the following tolerance will be allowed: ½ (one-half) pound per lap. Weight loss must be equal side to side.**
- B. Added weight must be in block form of no less than 5-pound blocks (no pellets) and painted white with the car number on it.
- C. Added weight must be securely bolted in place. Weight may not be added to the outside of the frame rails or ahead of the front spindles or behind the rear axle or inside the driver's compartment.
- D. Dislodged weight will not be returned to the car for weighing after the race.
- E. Cars will be weighed with the driver in a driving position.
- F. Track officials reserve the right to alter the weight rule to balance the competition.

7. GLASS

- A. All glass must be removed. Front and rear windshields must be replaced with clear Lexan® or Plexiglas. Clear Plexiglas may be installed in the rear quarter windows on cars with standard window posts.
- B. All cars must have a rear view mirror, which must not extend beyond the outer edge of door or "A" post.

8. ENGINE LOCATION

- A. GM engines (also used with Toyota body style) may be relocated so that the front spark plug on the right side is no further back than the center of the upper ball joint.
- B. Ford and Chrysler engines may be relocated so that the front of the cylinder head on the right side is no further back than the center of the upper ball joint.
- C. Engine must be centered between the frame rails.
- D. Minimum crankshaft height is 12 inches, measured from the center of the crank pulley to the ground with the driver in the car.

9. STEERING

- A. Rack & pinion not allowed. All components must be of magnetic steel.
- B. Quick-release steel steering wheel with padded center required.

10. FUEL AND FUEL CELL

- A. Racing fuel is permitted. Additives are not allowed.
- B. An approved fuel cell required. Maximum capacity, including the filler spout and overflow must be 22 gallons. The nominal fuel cell size must be 32- 5/8 inches by 16-5/8 inches by 8-7/8 inches.
- C. Materials other than standard foam as provided by an approved fuel cell manufacturer will not be allowed.
- D. Fuel cell check valve is required and must be acceptable to track officials. All approved fuel cells may be equipped with a steel ball fuel filler and fuel vent check-valve assembly.
- E. Fuel Cell must be enclosed in an approved container of no less than 20-gauge steel. Four steel straps minimum 1-inch wide X 1/8-inch thick must secure the cell to the trunk.
- F. A steel firewall not less than 20-gauge thick must separate the driver's compartment from the fuel cell. Trunk floor around fuel cell must be complete. When deck lid is raised, the perimeter around it and down to the cell or trunk must be enclosed with not less than 20-gauge steel. When the trunk area is enclosed from the left quarter panel to the right quarter panel, no part of the floor may be lower than the top of the frame rail.
- G. Outside fill is not allowed.
- H. Cell must be mounted as far forward in the trunk as possible. Fuel Cell must be equal distances between the frame rails. Four straps having a minimum 1-inch width by 1/8-inch thickness must secure the cell to the trunk floor.
- I. Fuel vent line and filter neck must be equipped with an approved check valve.
- J. Fuel cell may be lowered between the frame rails and must be a minimum 9 inches from the ground.

11. SUSPENSION

- A. Rear springs must mount on or forward of axle housing.
- B. Truck type rear lower control arms permitted. Mounting points may be moved. Solid adjustable panhard bars only. No J-bars allowed. Solid adjustable third

link allowed. No spring-loaded or torque absorbing upper links allowed. No rubber or urethane bushings permitted in upper link or panhard bar. Rear sway bar not allowed. Rubber, urethane, or steel bushings permitted in trailing arms. All trailing arm bushing must be the same type and construction.

- C. Screw type height adjusters on panhard bar are not allowed.
- D. Wedge bolts permitted on front and rear.
- E. Front lower control arms must be equal length.
- F. Front upper control arms may be replaced with tubular arms with no more than 1/2 inch difference in length.
- G. Heavy-duty ball joint permitted.
- H. Any production spindle, hub and rotor within the manufacturer's line permitted. After market hubs and spindle permitted. No wide-five wheels or hubs allowed.
- I. Front sway bar 3 piece (LMSC type) allowed.
- J. Coil-over suspension not allowed. Coil-over eliminators allowed. Coil Springs must be a minimum of 4 1/2 inches in diameter.
- K. Maximum tread width is 64-1/2 inches and must be equal front and rear.

12. BELL HOUSING

- A. After-market steel bell housing required.
- B. An inspection hole 3 inches by 4 inches must be cut or installed in the lower half of the bell housing.

13. DRIVE SHAFT

- A. Steel standard production with a minimum diameter of 2-3/4".
- B. Drive shaft must be painted white.
- C. Two "U" shaped steel straps, 2 inches wide and 1/4" inch thick must surround shaft and be fastened to the floor cross-member.

14. REAR AXLE

- A. Rear end housing may be interchanged between GM, Ford and Chrysler.
- B. After-market solid magnetic steel axles must be used. No drilling or lightening allowed.
- C. Full floating hubs are permitted.
- D. Quick-change center section allowed.
- E. Torque limiting devices are not allowed.
- F. Camber on rear wheels is not allowed. Only steel axle housings and axles are permitted. Only metal drive plates are permitted, and drive plates must be one (1) piece with a single internal spline. Grease fittings are not permitted on the drive plates or axle caps.

15. TRANSMISSION

- A. Transmission must remain standard production 3 or 4 speed with all gears including reverse in working order.
- B. Automatic transmissions are not allowed.
- C. Only one gearshift lever permitted in driver's compartment.

D. High-performance after-market transmissions are not allowed.

16. CLUTCH ASSEMBLY

- A. Aluminum or lightweight parts are not allowed.
- B. Corvette flywheel permitted on any make and model but must weigh a minimum of 15 pounds.
- C. GM, Ford, Toyota body style and Chrysler may use a steel flywheel with a minimum weight of 15 pounds.
- D. Hydraulic clutch control permitted.
- E. 10 ½ inch stock clutch only allowed.

17. BRAKES

- A. Standard production brakes within manufacturer's line permitted. After market brakes allowed.
- B. After-market rotors allowed. Rotors or drums cannot be drilled or lightened.
- C. Master cylinder must be mounted on engine side of firewall.
- D. Floor mounted pedals not allowed.
- E. In-car brake adjusting devices allowed.

18. ELECTRICAL SYSTEM

- A. High Energy Ignition (HEI) required. No multi-spark ignition boxes permitted. Cutting or splicing of any of the wires is not allowed. All components and wires must remain in their original factory configuration. Points distributors are permitted. Magnetos are not allowed. Timing retard components are not allowed.
- B. Ignition coil must be mounted on engine side of firewall. No wire looms or wiring harnesses permitted. All electrical wiring must be point-to-point and each wiring connection must be easily traceable and removable from the car for inspection purposes.
- C. A master on-off switch on battery cable must be located in center of dash.
- D. A 12-volt automotive battery must be installed in front of left rear wheel.
- E. Starter must be in working order.

19. ENGINES

- A. Cylinder blocks must be stock standard production except for allowed over-bore. Internal polishing not allowed.
- B. Engine displacement limited to the following: GM and Toyota body style 350ci + maximum .060 overbore. Ford 351ci + maximum .060 overbore. Chrysler 360ci + maximum .030 overbore.
- C. Flat-top three-ring pistons only. No part of piston may protrude above the top of deck surface.
- D. Only solid steel rods permitted. Must be stock length for make and model of engine. "H" or "I" beam connecting rods allowed.

- E. Crankshaft must be must weigh minimum of 50 pounds. May not be lightened or knife-edged.
- F. Toyota body style must follow GM specifications. Once Toyota manufactures a motor that is approved the track will require the Toyota motor to be used the following season if running a Toyota body.
- G. All casting numbers must be legible.

20. COOLING SYSTEM

- A. Extra water lines to heads, block or intake are not allowed.
- B. Water only. Additives not allowed. Antifreeze not allowed.

21. LUBRICATION

- A. Oil pan must be made of magnetic steel.
- B. Dry sump system not allowed. Oil pan must be a wet sump type and manufactured using a stock production type pan with only a sump reservoir added to the bottom. All bolt holes and bolt hole flanges must be visible. Kick-outs will not be permitted between the bolt-on flange and the top of the added sump.
- C. All oil cooler installation must be acceptable to track officials.
- D. Oil cooler must be mounted forward of front firewall.

22. CAMSHAFT

- A. Camshaft may be hydraulic or mechanical.
- B. Stock diameter, non-roller lifters required.
- C. Must maintain the following maximum lift: GM and Toyota body style .480, Ford .510 and Chrysler .510 at 0 lash.
- D. Stock ratio roller rocker arms permitted. Stud girdles are not allowed.

23. CARBURETOR

- A. GM, Toyota body style and Chrysler must use a two-barrel automotive type Rochester 2V with a maximum 1-11/16 throttle bore and a maximum 1-1/4 venturi. **Booster in Rochester carburetor must measure a maximum of .249 in center hole of booster. (Tech gauge measures .259 to allow for tolerance. If gauge slide through booster it will be declared illegal). Height of booster must be a minimum of .746. (Tech gauge measure .736 to allow for tolerance. If gauge slides over booster it will be declared illegal).** Rochester carburetor must run with cast iron intakes only. Ford may use a stock Holley 2300 model number 7448 (350cfm).
- B. No alterations except that all vacuum-ports must be tapped and plugged. Choke hardware may be removed.
- C. Only one gasket of 1/4" maximum thickness may be used between carburetor and intake.
- D. Marine or special application carburetors are not allowed. Model numbers must not be altered or removed. No polishing, grinding or machine work allowed on any part of carburetor.

- E. If any part of carburetor is found to be illegal, the complete carburetor must be surrendered.
- F. Optional carburetor permitted, only when mated with optional intake manifold listed in rule # 24C: Stock Holley 2300HP. If optional carburetor is utilized, only a one (1) piece solid aluminum carburetor spacer may be utilized. Spacer must be .750 inch in thickness, and must be installed between the carburetor and intake manifold.
- G. The spacer must be centered on the intake manifold and have two (2) holes with 1 ½ inch openings located in the center that matches the base of the carburetor. Holes must be cut perpendicular with the base of carburetor. No taper, bevels, or any modifications permitted.
- H. A one (1) piece two (2) hole paper gasket maximum .065 inch thickness that matches the exterior dimensions of the carburetor throttle plate must be installed between the carburetor and spacer. A one (1) piece paper gasket maximum thickness of .065 inch thickness must be installed between the spacer and the intake manifold. The gasket must be no larger than the top of the intake manifold.

24. INTAKE MANIFOLD

- A. Any stock production passenger car two-barrel permitted. No alterations or modifications. Interior of manifold must retain original cast iron finish.
- B. All 4 carburetor mounting-bolts must be in place.
- C. Optional intake manifolds permitted only when mated with optional carburetor listed in rule # 28F: GM and Toyota body style – Edelbrock part #2101. Ford – part # M9424C358. Chrysler – part # 4532852.

25. AIR FILTER

- A. Only a round dry-type paper air filter element maintaining a minimum of 12 inches and a maximum of 14 inches in diameter will be permitted. The air filter element must maintain a minimum of 1 ½ inches and a maximum 4 inches in height. All air must be filtered through the element. The air filter elements must not be sprayed or soaked with any type of chemicals or liquids.
- B. Only a round metal air filter housing will be permitted. The top and bottom of the air filter housing must be solid and must be the same diameter. Lips or expanded edges will not be allowed. The center stud hole in the top of the air filter housing must not be recessed more than 1-inch. The air filter housing must be the same diameter as the air filter element. The air filter housing must be centered and set level on the carburetor. The bottom of the air filter housing must be lower than the top of the carburetor choke horn. Tubes, funnels or any device which may control the flow of air will not be allowed inside of the air cleaner or between the air filter housing and the carburetor.

26. EXHAUST

- A. Any stock production cast iron manifold permitted.

- B. Exhaust manifold may be stock unaltered cast iron. Center dump/ram type manifold is allowed. Crossover equalizer tubes or thermal-wrap are not allowed.
- C. Exhaust headers will be permitted. Headers must be manufactured using a magnetic steel primary tube size of 1-5/8 inches outside diameter, maximum 30 inches in length cut off square, with a collector tube size of 3 inches outside diameter. Cones or pyramids are not allowed. The header collector pipe must not be reduced at any point between the primary tubes and the exhaust pipe. The maximum thickness permitted on the header-mounting flange will be 3/8 inch.

27. CYLINDER HEADS

- A. Aluminum, GM angle-plug or Ford SVO heads are not allowed. World Products Chevy V-8 S/R heads, part number 043600 are permitted.
- B. Ports cannot be machined, cut, deburred, polished or painted. Cast finish must remain as manufactured. Casting numbers must not be altered or removed.
- C. Screw-in rocker studs permitted.
- D. Any size valve spring and retainer permitted.
- E. Must have standard production three-angle valve seat. When cutting the valve seat angles, stone or grinding marks are not allowed above the bottom of the valve guide. All cutting in reference to the valve job and bowl area must be centered off the centerline of the valve-guide. Radius cuts are not allowed. Upon completion of the valve job, the bowl area above the valve seat to the bottom of the valve guide must still be the same configuration as far as shape and finish as it was from the manufacturer. Surfaces and/or edges where the cutter or stone has touched must not be polished. Hand grinding or polishing will not be permitted on any part of the head.
- F. Combustion chamber volume must be no less than 70cc for GM, Toyota body style, Ford and Chrysler/Dodge/Plymouth.
- G. Heads may not be angle cut and valve angle cannot be changed.
- H. Valves must have stock stem diameter.
- I. Titanium valves are not allowed.
- J. Maximum valve size permitted as follows: GM and Toyota body style 1.940" intake and 1.500" exhaust. Chrysler 2.020" intake and 1.600" exhaust. Ford Windsor 1.840" intake and 1.540" exhaust. Ford Cleveland 2.045" intake and 1.654" exhaust.
- K. No Vortec heads permitted. Heads must be pre-approved by track officials.
- L. Stud girdles permitted.

28. TIRES AND WHEELS

- A. Track spec tire only. No alteration allowed.
- B. Any steel wheel with a maximum of 8 inches width.
- C. Any wheel offset and spacer permitted to obtain maximum of 64-1/2 tread width. Wheel offset and spacer thickness must be the same from left to right.
- D. Tread width must be on center with frame, body and roll cage.
- E. The tires used in qualifying must be used in the feature race.
- F. See separate Southside Speedway tire rules.

29. PERSONAL SAFETY EQUIPMENT

- A. Full fire resistant driving suit is required.
- B. Fire resistant gloves are required.
- C. It is recommended that helmets meet the specifications set forth in the Federal Motor Vehicle Safety Standard Regulations or meet the specifications set forth by the American National standards Institute, Inc.
- D. Competition shoulder harness and lap belt must be at least 3 inches in width. Sub strap is required. Metal-to-metal buckles are required on shoulder and seat belts. The shoulder harness should be attached to the roll bar behind the driver's seat even with or slightly higher than the driver's shoulder. Where the harness crosses the roll cage, it must pass through a steel guide welded to the roll cage. Shoulder harness inertia reels are not allowed.
- E. Where the belts pass through the seat edges, it must have a grommet installed, be rolled, and/or padded to prevent cutting of the belt.
- F. All seat belts and shoulder harnesses must connect at the lap belt with a quick-release buckle acceptable to track officials.
- G. Seat belts and shoulder harnesses should not be more than Three (3) years old. Production-car factory-type shoulder belts or straps are not allowed.
- H. A window net made from minimum $\frac{3}{4}$ inch, maximum 1-inch wide nylon rib-type material must cover the left side door window opening. The maximum square opening between the ribs must not exceed $2\frac{1}{4}$ inches. The minimum window net size must be 22 inches wide by 16 inches high.
- I. Window net mounts must be a minimum of $\frac{1}{2}$ inch diameter solid steel rod on the bottom and a minimum 1-inch wide by $\frac{3}{16}$ inch thick flat steel or a minimum $\frac{1}{2}$ inch diameter solid steel rod on the top, with mounts welded to the roll cage.
- J. The window net, when in the closed position must fit tightly and be secured with a lever-type quick release latch. The lever must be secured by a detent ball in the lever and may be supplemented by a Velcro® fastener only. Pins or clips are not allowed. The latch must be mounted at the top in the front to the roof bar. An approved cam-lock latch is permitted.
- K. An approved and fully charged fire extinguisher must be securely mounted within easy reach of the driver and cannot be taped to roll bar.
- L. Aluminum seats are required.
- M. All roll bars within reach of driver must be padded.
- N. The steering wheel must be steel and have a quick-release for removal. The center of the wheel must be padded.
- O. Head and neck restraints are required.

30. POST RACE INSPECTION

A. If a car is deemed to be in violation of the rules penalties will be dispensed based upon the infraction. Failure to honor post race inspection will result in disqualification from that racing event, and further disciplinary action is possible. All decisions by tech officials are final and non-appealable.

B. Illegal parts must be surrendered to the track official in charge. Parts not surrendered will be cause for a fine and possible suspension from future events.

C. Items that have passed previous inspections do not mean they are legal and can be deemed in violation of the rules at any time.

D. Once tech officials notifies the driver/crew chief/team member/owner or any member of the race team of the items to be inspected the team will have 15 minutes to begin tear down. The car/parts, etc must be presented to officials for inspection within 30 minutes of notification unless otherwise directed by tech officials.

31.RULE INTERPRETATION

A. All decisions by track officials are final and non-appealable. Interpretation of all rules is final and non-appealable as defined by track officials. Violation of the spirit or intent of the rules is prohibited.

31. PROTEST

A.. No protest allowed.

32. For more information contact:

Southside Speedway (804) 744-2700

email: sssraceofficial@yahoo.com