

2014 Caraway Speedway Southern Modified Light Rules & Regulations

Revised 1/12/14

SM Light Mission Statement: Open wheeled Modified based upon Whelen Modified Tour Rules with an integrated rigid cost control exception. This division will provide a budgeted open wheeled racing opportunity for participants seeking to pursue an open wheeled racing career. All 2014 Nascar Whelen Modified Tour will be enforced for the SM Lights with the following changes and/or additions. **Driver Eligibility:** Must be 14 years of age or older. Nascar Charger Division Drivers Membership or higher is required for this division. Available for purchase at the speedway.

1- Approved Competition Models: Approved model bodies are listed in Nascar Rule book. Other models both domestic and foreign steel passenger cars may be approved for the SM Light division providing they are the same in body configuration and meet the spirit and intent of competitive racing in the SM Light Division.

2- Overall Car Weight: All specified weight requirements will be with driver included. The minimum total weight at all times is 2650 pounds for a Late Model Stock type engines. Chevy 604 and Ford 347JR crate engines total weight must be 2550 pounds. Chevy 602 & 603 crate engines weight must be 2450 pounds. Maximum left side weight of car is 56% of total weight. **Car weight must be posted on the hood.** Cars found under the minimum total weight after qualifying will be moved to the rear of the starting order. Cars found under the minimum total weight after the feature event will result in a penalty per the tracks discretion and subject to complete disqualification from the Feature Event. Nothing may be added or taken from the car to make total or left side weight. Gas, oil and/or water may not be added. A 25 pound total weight allowance after race for all cars.

3- Added Car Weight: Added weight must be in block form (magnetic steel or lead only) of no less than 5 pound blocks. Added weight must be securely bolted to the frame rail and painted white with car number in black. No added weight will be permitted inside the driver's compartment. Material and mounting of weight must be acceptable by Track Official.

4- Side Window Glass & Window Screen: A commercially manufactured, SFI rated nylon window net must be installed in the driver's side door window opening. It must be positioned to cover the entire window opening. Window nets may not be used beyond three (3) years from the date of manufacture. The window net must be rib type, made from minimum 3/4 inch, maximum one (1) inch wide nylon material with a minimum one (1) inch and a maximum 2-1/4 inches square opening between the ribs. The minimum window net size must be 22 inches wide by 16 inches high. All window net mounts must be a minimum 1/2 inch diameter solid steel rod on the bottom and a minimum one (1) inch wide by 3/16 inch thick flat steel or a minimum 1/2 inch diameter solid steel rod on the top, with mounts welded to the roll cage. The window net must fit tight 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 Velcro® fastener only – pins or clips are not permitted. The latch must mount at the top in the front to roof bar (#3) and release from the inside.

5- Windshield: A Lexan windshield must be used on the driver's side. A complete windshield screen must be installed on the right side of the opening. The windshield must be mounted flush with the cow or dash panel and extend up to the top of the windshield opening in front of the drivers. All windshields, windshield screens and their installations must be acceptable to Track Officials. Rear windows will not be permitted.

6- Rear View Mirrors: Rear view mirrors are permitted with a maximum width of twenty-six (26) inches. Rear view mirrors cannot extend outside of the car. Side view or spot mirrors are permitted.

7- Dash Panels: All dash panels must be acceptable to Track Official.

8- Firewalls: All front and rear firewalls of not less than twenty-two (22) gauge magnetic sheet steel must separate the driver from the engine compartment and fuel cell. The front firewall must be positioned below the leading edge of the windshield. Firewalls must be sealed and welded in place and be acceptable to Track Official.

9- Doors: All door panels must be constructed of either aluminum or sheet metal and mounted in a manner acceptable to Track Official. Any seams, creases or accent lines fabricated in the doors shall be parallel with the top of the door. A minimum distance of seventy-two (72) inches up to a maximum distance of seventy-eight (78) inches is permitted when measured from the center of the rear axle housing forward to the front of the door. A minimum of forty-three (43) inches or a maximum of forty-five (45) inches is permitted when measured across the car at the front outside edge of the front door panel.

10- Quarter Panels: Quarter panels must be constructed of either aluminum or sheet metal and meet the following requirements:

A. All cars must have rear wheel openings on the right side a minimum of eleven (11) inches and a maximum of fourteen (14) inches radius measured from the center of the rear axle housing.

B. A minimum distance of thirty-four (34) inches and a maximum distance of forty-two (42) inches measured from the center of the rear axle to the rear of the body must be maintained. A maximum distance of sixty (60) inches is permitted between the top of the quarter panels measured across the body at the rear axle housing.

C. The maximum height of the rear quarter panels measured from the ground to the rear of the quarter panel will be thirty-five (35) inches.

D. The rear quarter panel must maintain a minimum of eight (8) inch ground clearance behind the rear wheels. A maximum distance of sixty (60) inches is permitted when measured across the top at the rear of the quarter panels.

11- Grills: The air intake housing at the radiator must maintain a rectangle shape across the front of the nose with an opening being at least as wide as it is high and covering a minimum of one hundred thirty (130) square inches. Only screen will be permitted in the opening to allow for proper cooling. All air that enters the grill area must pass through the radiator core. No fiberglass air intake housing permitted.

12- Hood & Roof: All cars must be equipped with a hood manufactured from a single piece of metal or fiberglass. The hood must be manufactured so that it will completely cover the engine compartment from the left side to the right side, turn down a minimum of four (4) inches on each side and cover (if used) engine side panels. No part of the hood at the side panels except at the "A" post, shock and master cylinder covers may be higher than the lowest part of the hood. Only openings for the air cleaner and distributor will be permitted. No portion of the hood may be higher than the bottom of the air cleaner. Hoods must be fastened with positive fasteners. All hoods must be acceptable to Track Officials. Roof must be stock appearing for make and model of body used. Roof support posts must maintain the same angles as stock production car. The front post ("A" post) must be mounted to the top front of the door panel. The rear post must be anchored to the rear quarter panel. If a fiberglass roof is used, a twenty-two (22) gauge magnetic steel plate, located at the center of the roll bars (from top to bottom), must be welded to the roll cage above the driver's head. Material and installation must be acceptable to track officials.

13- Rear Deck Lid: Rear Deck lid must be constructed of magnetic sheet metal.

14- Bumpers: See 2014 Nascar Whelen Modified Tour Rule Book Specifications

15- Side Rails: See 2014 Nascar Whelen Modified Tour Rule Book Specifications.

16- Identification: All car number configuration and design is subject to approval by Track Officials. Only single or double-digit numbers will be permitted. The size, color, and style of numbers must be adequate to permit prompt identification by Track Officials at all times. Numbers must be solid color, at least eighteen (18)

inches high, measured vertically, excluding borders and silhouettes, must be neatly attached to or painted on both sides of the car on the center of the door. Door numbers must be a minimum of four (4) inches in width, and slant no more than thirty (30) degrees from vertical. The tops and bottoms of all numbers must be even (not staggered). Two (2) digit numbers must not overlap and must have a minimum of 3/4 inch separation. A solid number eighteen (18) inches high, excluding borders and silhouettes, must be neatly attached to or painted on the roof, reading from the passenger side. A solid number a minimum of twelve (12) inches high, excluding borders and silhouettes reading from the passenger side neatly attached to or painted at a forty-five (45) degree angle on the right front corner of the roof is also acceptable. Solid numbers, as large as possible, must be attached to or painted on the right outer nose and taillight covers. The use of number decals is acceptable if Track Officials determine that the number is legible. Mirror foil numbers and decals will not be permitted. Paint schemes using a mirrored or holographic appearance will not be permitted. Numbers will be assigned by contacting the speedway office. Competing in an event does not mean the driver's number will be reserved. The only way to reserve a number is to properly register through the speedway office @ 336-629-5803.

17- Engines: Engines approved for competition are the following: GM Crate Motor ZZ4 / 24502609 or GM Circle Track / 88958603. GM Circle Track 88958604. Ford 6007-D 347JR. Late Model Stock type engine with 2101 intake. All of the parts specified and/or that come stock OEM on these engines must remain as delivered with no modifications or alterations of any kind. Engines will be teched according to GM Performance Circle Track Manual. Any part found not to be OEM per these specifications will be confiscated by Track Officials. Optional: 1.6 stamped rocker arms permitted for Chevy crate engines. Rockers Must be all 1.5 or all 1.6 may not be mixed.

Late Model Stock Type Engines:

- a. Ford / Chrysler Engine refer to 2014 Nascar Whelen All American Series Late Model Stock Rule Book
- b. Chevy Engines

-- Engine Block – Stock GM 350 Maximum with a .06 overbore. Production blocks only no angle milling permitted.

-- Crank Shaft – Only standard steel or cast iron permitted. The rod bearing journals may be drilled. The main bearing journals may not be drilled. Only two (2) piece insert style crank shaft bearings will be permitted. Roller bearings will not be permitted. Counter weights must be the same shape and may be polished. Knife edging or lightening will not be permitted. Minimum crank shaft weight including timing chain sprocket shall be 50lbs.

-- Rods – Only solid magnetic connecting rods will be permitted. Hollow beam connecting rods will not be permitted. Minimum length 5.7 maximum length 6.25.

-- Pistons – Only flat top pistons permitted with a minimum of three ring grooves Piston ring must be in all three grooves. Piston may not protrude above the engine block service. Only a magnetic steel piston pin maintaining a minimum diameter of 0.927 inches will be permitted. Ring size must meet the 2014 Nascar Whelen All American Series Late Model Stock Rule Book.

-- Camshaft – Only magnetic steel camshafts will be permitted. The camshaft bearing journal size must be standard production. Needle or rolling bearing will not be permitted. Only standard production timing chains will be permitted. Belt drive and gear drive systems will not be permitted. Firing order must remain standard.

-- Intake Manifold – Chevrolet EDELBROCK Part #2101 is the only intake permitted. Must remain as manufactured with no port matching or flow work permitted.

-- Cylinder Heads – Must be stock cast iron production only. Two valves per cylinder. Port matching or flow work will not be permitted. Engines with World Product head (Nascar Rule Book) will carry a weight or carburetor penalty to be determined by Track Officials.

-- No coating of any internal part. No porting or polishing will be permitted.

18- Engine Location:

A. Maximum eighteen (18) inch set back measured from the center of the top ball joint to the #1 cylinder spark plug.

B. Engine must maintain a two (2) inch ground clearance at all times.

C. Crank shaft height minimum ten (10) inches measured at the center of the crank.

D. Engine must be mounted between the frame rails in front of the driver. The center line of the crankshaft when measured to the center of the lower ball joint left and right must be within two (2) inches in distance. The engine must not be tilted.

E. The engine location must be approved by Track Officials.

19- Carburetor: The only approved carburetors are Holley 4150 series model #6895 and 4150 HP Series List# 80507. Choke horn (model# 6895) may be removed with a square cut, no taper or bevel, but may not be cut into the body of the carburetor. The air cleaner gasket ring must remain standard. All parts not covered in the preceding re-work guidelines must remain stock. This includes metering blocks and fuel bowls. All boosters must be safety wired. All carburetors must be acceptable to Track Officials. Only a one (1) piece solid aluminum carburetor spacer, one (1) inch thickness, may be installed between the intake manifold and carburetor. Any open or four (4) hole spacer may be used, but the spacer opening must be perpendicular to the base of the carburetor with no taper or bevel. Outside configuration of the space must conform to the shape of the base of the carburetor. No more than one (1) piece paper gasket, maximum 0.065 inch thickness, must be installed between the carburetor and spacer plate. No more than one (1) piece paper gasket, maximum 0.065 inch thickness, must be installed between the spacer plate and the intake manifold. The gasket must be no larger than the top of the intake manifold.

A. All crate engines may run optional Holley 650 CFM HP Series part #0-80541-1. Metering block must read part #11978. Crate engines may also run a two (2) inch straight non tapered spacer plate.

B. Optional: 1.6 stamped rocker arms permitted for Chevy crate engines. Rockers must be all 1.5 or all 1.6 may not be mixed.

20- AIR CLEANER AND AIR FILTER: Only a round dry type paper air filter element maintaining minimum of twelve (12) inch and a maximum of seventeen (17) inch in diameter will be permitted. The air filter element must maintain a minimum of one and one-half (1-1/2) inch and a maximum four (4) inch in height. All air shall be filtered through the element.

21- Electrical: All electrical switches must be operable and must be located within reach of driver except the labeled on off master switch, which must be located on the front of the dash panel in the center. The on off master switch must be wired to the battery cable in a manner that would cut off all electrical power to the car. The electrical system must be acceptable to Track Officials.

22- Cooling System:

A. **Water Pump:** Steel or aluminum OEM type mechanical pump must be used. In stock location turning in the same direction as crank shaft location. Combination water pump / alternator units are not permitted. Any serpentine, cog or V-Belt pulley system is permitted.

B. **Fan:** Engine mounted fans, if used, must be operational and belt driven from the crank shaft. Free spin or clutch type fans will not be permitted. Electrical cooling fans are optional. If an engine driven fan is used, only a standard magnetic steel fan with a minimum of four blades is permitted. Removal of the fan blades or fan belt will not be permitted. The minimum diameter of the fan must not be less than fourteen (14) inches. The fan blades must be a minimum of three and a half (3.5) inches wide. Flat fans will not be permitted. The installation and location of the fan must be acceptable to Track Officials.

C. **Radiator:** Radiators must remain stock appearing and remain in front of the engine. Radiator dust screens permitted. Over flow pipe may be located to the rear of the car. Radiator installation, duct work and piping must be acceptable to Track Officials.

23- Engine Oiling System: The 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 flange must be visible. No kick outs are permitted between the bolt on the flange and the top of the added sump. No external oil pumps allowed. Oil coolers are allowed and must be mounted in location acceptable to Track Officials.

24- Exhaust System: Stainless steel, stepped, 180 degree headers, Try Y headers and multi-merge headers are not permitted. Exhaust header flange must mount directly to cylinder head with no spacers between the flange and cylinder head. The maximum header flange thickness of one-half (1/2) inch permitted. Exhaust headers must be manufactured using a magnetic steel primary tube size of 1 – 5/8 inches up to 1 -3/4 inches outside diameter, maximum inches and length cut off square, no cones or pyramids will be permitted, with a collector tube size of three (3) inch outside diameter. The header collector pipe must not be reduced at any point between the primary tubes and the exhaust pipe. Exhaust pipes must extend a minimum of six (6) inches past the cowl. Only one exhaust pipe per side permitted. No thermal wrap allowed. No interior coatings permitted. No exterior coatings other than paint are permitted. All other coatings including powder coatings are not permitted.

25- Drive Train:

A. **Clutch:** Multiple disc clutch allowed. The disc clutch housing assembly or cover may be made from aluminum or steel. Only magnetic steel disc and pressure plates allowed. Minimum diameter 5 1/2 inches. No direct drives allowed.

B. **Flywheel:** Only magnetic steel flywheel is allowed. The minimum starter ring outside diameter permitted will be 12 7/8 inches. The self starter must be in working order and in stock location. Only standard factory OEM type starters will be permitted.

C. **Bellhousing:** Only a special production all magnetic steel bell housing can be used. The bell housing must enclose the flywheel 360 degrees with minimum 1/4 inch magnetic steel. Any changes to the bell housing must be made with 1/4 inch magnetic steel and welded in place. All welds must be done inside and outside of the bell housing. No bolt on pieces. An opening no larger than 3 1/2 x 4 inches may be used for throw out bearing access. This hole may be covered with sheet metal.

26- Transmission:

A. Only OEM production stock 3 & 4 speed transmissions will be permitted. Top loader transmissions are not permitted. Gear ratio must be of stock OEM production.

B. Only stock O.E.M. factory housings will be permitted.

C. Only OEM type, steel, angle cut forward gears are permitted. Square cut forward gears are not permitted.

D. Removal of first gear or replacement of first gear with a metal spacer, in 4-speed transmissions is permitted. All other forward and reverse gears must be in working order, and they must be operational from inside the driver's compartment. All transmissions must have a constant engagement of the input shaft with gear and countershaft with cluster gears.

E. Five-speed transmissions, with gears removed are not permitted.

F. Quick change transmissions are not permitted.

G. Automatic or semi-automatic transmissions are not permitted.

H. Machining or lightening of any internal rotating or non-rotating parts including gears, shafts and case is not permitted. Gun drilled transmission shafts are not be permitted. Welding on any internal part is not permitted.

I. Additional or different from OEM bearings other than the tail-shaft, which may have roller bearings, is not permitted.

J. Auxiliary, over or under drive transmissions are not permitted. High gear must have a ratio of 1 to 1 and no other gear may have a ratio higher than 1.20 to 1.

27- Drive Shaft: Drive shaft and universals must be standard production type. Drive shaft must be magnetic steel and painted white. Only one piece drive shafts allowed with a minimum diameter of two (2) inches. It is mandatory that two 360 degree magnetic steel brackets, no less than 2 inches wide and 1,4 inch thick be places around the drive shaft and fastened to the cross member of the car. One bracket in the front third of the drive shaft and one in the rear third of the drive shaft.

28- Rear Axle:

A. A standard weight/manufactured quick-change or straight rear end may be used. **Ultra-light or lightweight rear ends or components are not**

permitted.

B. Only magnetic steel axles, bearings, and axle housings are allowed.

C. All axles must be a minimum of 7.00 pounds.

D. Standard ten (10) inch ring gear rear end must be used.

E. Thermal dispersant coatings are not permitted.

F. Lightened, ultra-light, EDM, scalloped, back-cut, ring gears are not permitted.

G. The rear end must be mounted so that the inside edge of the left rear tire is even with or outside the outer most edge of the left side frame rail.

H. Track Official may, at its discretion, require that all cars compete with a final drive gear ratio specified by Track Official for each event.

29- Tires & Wheels: Steel Wheels Only. Maximum wheel width is ten (10) inches. Wheels wider than ten (10) inches will be disqualified from the feature event and/or qualifying and wheels will be confiscated.

(Disqualification results in loss of track points for the event). Tires for the event are Hoosier F-45 purchased at the speedway. Competitors are allowed to purchase up to four (4) tires per event. Once a competitor wins a single event they are only allowed to purchase a total of two (2) new tires per event. After the event a driver must leave two (2) tires in the impound area for next race event. A driver may leave a maximum of four (4) tires in inventory. The other two (2) tires must come from the drivers inventoried tires. **ALL TIRES MUST BE PURCHASED AT THE SPEEDWAY. NO TIRES ALLOWED FROM ANY OTHER SOURCE.**

30- Frame: See 2014 Nascar Whelen Modified Tour Rule Book Specifications.

31- Suspension:

A. Coil Springs: Coilovers, coil springs or leaf springs permitted. Coilovers must mount to lower control arms. Strut bars will not be permitted for mounting of coilovers. Rear spring position may be changed but both rear springs must be located either inside or outside of frame rail.

B. Sway Bars: Only magnetic steel front sway bars are permitted. No rear sway bars (anti-roll bars) will be permitted.

C. Shock Absorbers: All shocks subject to Track Officials approval. Double adjustable shocks and remote adjustable shocks are not permitted. Shocks with a published racer's net price greater than \$350 per shock are not permitted. Approved shocks must be available to all competitors within the price limit. Approved shocks must be within the price limit in their complete on car form, less any separate coilover kits or parts.

32- Ground Clearance: The frame rail and sheet metal ground clearance is a minimum of two (2) inches. All ground clearance requirements are measured with the driver in the car. Frame heights will not be checked at the conclusion of feature events. The frame heights will be check prior to the start of heat races/qualifying and prior to the start of the feature.

33- Tread Width: All cars must maintain the following tread width requirements. A maximum tread width of 83 3/4 inches will be permitted. Treadwidth front to rear must be within two (2) inches. This tread width will be determined by measuring the left outside wheel bead surface to the right outside wheel bead surface and spindle height. Aluminum or steel spacers will be permitted to utilize maximum allowable tread width.

34- Brakes: Four wheel disc brakes are mandatory. Only magnetic cast iron or cast steel round circular rotors permitted. Only metal brake calipers will be permitted. Drilled, slotted or grooved rotors are not permitted. Only factory dust clean outs are permitted. Dust clean outs may not exceed .038 inch in depth. If the dust clean out exceeds .038 inch in depth the rotor is illegal. The brake rotors must be bolted to the hubs. Floating brake rotors are not permitted. Brake calipers with a maximum of four pistons are permitted. All rotors and brake components subject to Track Officials acceptance.

35- Fuel Cell: The use of an approved fuel cell is mandatory. The maximum fuel cell capacity, including the filler spout and overflow shall be twenty-two (22) gallons. No material other than standard foam supplied by the fuel cell manufacture is permissible to make the fuel cell meet the twenty-two (22) gallon capacity.

Fuel Cell Container: The use of a fuel cell container is mandatory. The fuel cell container must meet the following requirements. Fuel cell must be encased in a container not less than twenty-two (22) gauge steel. Fuel cells must be fitted in the container so that the maximum capacity including the filler spout does not exceed twenty-two (22) gallons. **Fuel Cell Container Installation:** The minimum distance from center of rear axle to the fuel cell container must be twelve (12) inch. The fuel cell and the fuel cell container shall be installed in accordance with the following requirements. Fuel cell must be installed as far forward as possible in trunk compartment equal distance between frame rails. Fuel cell installed in a recessed well must be secured with steel tubing not less than (2) lengthwise and (2) crosswise evenly spaced across the top. Tubing must be made of 1" x 1" square steel tubing bolted flat to the floor pan with no spacers. A reinforcement support frame must be constructed using 1" x 1" by .065" square steel tube. The support frame must be constructed using 2 tubes that are welded to and extend from the left side to the right side frame rails. 3 tubes must be equally spaced across the recessed well. These tubes must be welded to the cross support tubes and extend down the front sides, rear sides and under the fuel cell container and recessed well. Minimum 1" square steel tubing reinforcement frame must be welded to the floor pan from frame rail to frame rail. The bottom of the fuel cell container must have a minimum ground clearance of 8". A protective bar, minimum 1-1/2" in diameter and .083" wall thickness must enter below the rear frame section behind the fuel cell. This protective bar must be as wide as the frame rails and extended as low the bottom of the fuel cell with 2 vertical uprights evenly spaced between the frame rails and attached to the rear cross member. (2) Support bars one located on each corner must angle upwards and be welded to the rear frame rails. E: Firewall of steel not less than (22) gauge steel thickness must be located between trunk and driver. **Fuel Pump:** Electric fuel pumps will not be permitted. Cooling of the fuel pump will not be permitted. Only mechanical, lever action, camshaft actuated fuel pumps in the stock location will be permitted.

36- Personal Safety Equipment: Protective Clothing, Helmets, Seat Belts and Seats. See Section 6-4 of the Nascar Whelen All American Series Rule Book. Section 6-4 is the guidelines for mounting seats and seat belts. All seats, seat belts and mounting of them must be acceptable to Track Officials.

37- Roll Bars: See Nascar Whelen Modified Tour Rule Book

For anything not covered, refer to the 2014 Nascar Whelen Modified Tour rulebook. Track officials and or Track Promoters retain the right to approve or disapprove any issues.

For Technical Question concerning rules Contact Darren Hackett at 336-629-5803