2015 - 360/358 Sprint Car Rules

AREAS HIGHLIGHTED IN RED ARE CHANGES FOR THIS SEASON

Variations from any specification or rule must be approved by the speedway tech officials.

CHASSIS:

A sprint car is defined as a racing vehicle of single seat design, built upon a racing chassis and mounted on four racing wheels. No rear engine cars or aluminum frames allowed. No box tubing frame rails. Driver's compartment shall be separate from the engine by a firewall of suitable material.

Allowable wheelbase of 83 - 90 inches.

Steel front axles only. Rear axles may be aluminum.

Must have front and rear brakes in working order.

Maximum wheel diameter is 15 inches. Right rear wheel maximum width is 18 inches and left rear wheel maximum width is 15.25 inches.

No plastic or carbon fiber wheels permitted.

Wheel covers must be securely fastened.

All brake rotors may be steel, aluminum or titanium.

Other than top wings, NO cockpit adjustments are permitted. Non-permitted cockpit adjustments include, but are not limited to, adjustable shocks and weight jackers.

Nerf bars, which offer adequate protection in the event of contact with another car, are mandatory. Nerf bars and bumpers must be made of steel and be at least one-inch in diameter. Nerf bars must be bolted or roll pinned to the vehicle. No pop rivets may be used to fasten nerf bars, bumpers or wings. Nerf bars may not extend past the outside of tires.

Hoods are mandatory during racing.

Total weight of car and driver may not be less than 1,475 pounds. Weigh-in to be after any event or qualifying. Weight to be measured as car comes off the track in the condition that it took the checkered flag. Any added weight must be securely fastened. Weight measured by Selinsgrove Speedway scales. Any car in the top 5 of any event, or any other car directed by speedway officials, that does not go directly to the scales first before the car stops with the crew and/or at the trailer will be disqualified and scored last for that event. Any car required to be weighed at the completion of any event that does not meet the minimum weight requirements will be disqualified and scored behind all other cars that were on the track at the end of the event. The number of cars required to be weighed for any event may be changed by track officials and teams will be notified.

All cars must use either a driveline strap or a driveline hoop restraint constructed of .065 steel either welded or bolted to the chassis. Metal hoop restraints must react positively to magnet testing. The rear cross member used for mounting the steel driveline hoop must be constructed of .083 steel.

Drag links must utilize 4130 steel of at least 1" in diameter and a minimum wall thickness of .058.

Tie rods and heim ends must be made of steel only. A magnet must stick at all times. No swedging of the tubing will be allowed.

Drag link must be tethered to the frame with nylon webbing of at least 1 inch wide.

No drilling of any bolts, fasteners or heim ends. No hollow fasteners allowed.

ENGINES:

358 Engines:

Any cast iron block. V-8 engine only.

358 cubic inch maximum displacement.

Maximum stoke 3.5 inches.

Flat top pistons only - no domes or dishes. Zero deck height.

Maximum compression ratio of 10.8:1 as measured by whistler gauge.

Cast iron heads of stock configuration mandatory.

All Chevrolet OEM heads and Chevrolet aftermarket heads must have a 23 degree valve guide angle plus or minus 1 degree.

All Ford OEM 302 Boss heads and Ford aftermarket Type "N" heads must have a 10 degree valve guide angle, plus or minus 1 degree. All other Ford heads must have a 20 degree valve guide angle, plus or minus 1 degree.

Other manufacturers contact speedway management for valve guide angle.

Port and polish of heads permitted.

No raised intake runners or spread port exhaust.

No modification to push rod area on intake port.

Steel rods only

No modification permitted to heads that would enable the use of down nozzles or multiple spark plugs per cylinder.

Must be naturally aspirated. Fuel injection or carburetor allowed. Timed and/or electronic fuel injection units are prohibited.

No titanium crankshafts. There must be a 3/4 inch inspection hole in the left side of the oil pan opposite the number one rod journal or the oil pan will be removed for inspection purposes.

NO vacuum oil pan systems.

NO titanium in engines, excluding valves and valve retainers.

360 ENGINES:

360 Cubic inches, plus 1% maximum displacement (360 + 1% = 363.6)

No aluminum blocks.

No titanium in engines, excluding valves and valve retainers.

INJECTORS: 2-3/16 inch maximum inside diameter of injector stack – 2.187 at least 3 inches in length. Note: larger injectors may be used, but sleeves a minimum of 3 inches in length must be installed in stacks above the butterflies. No relief hole may be drilled above the butterfly on any injector. No alteration of injector manifold mounting holes will be allowed.

Due to manufacturing process some injector stacks may be slightly larger. There will be a tolerance of .005 allowed on no more than 3 stacks. No throttle body or plenum type injectors allowed. No down nozzle injectors.

No timed fuel injectors will be allowed. Electronic fuel injection shall not be allowed. Only one injector nozzle and one injector line per cylinder.

Injection unit shall have one shaft operated butterfly per cylinder. The immediate area of the butterfly must be round. No slide or barrel type injectors will be allowed.

Cylinder Heads

List of Cylinder Heads approved for ASCS competition is as follows:

A. Chevy - #27-211 B. Ford- #27-223 C. Mopar- #27-222
Spec Heads: Brodix Chevrolet Style Heads part # 27-211 with ASCS stamp. Intake opening no larger than original opening, the only exception being, inlet opening may be ground or polished 3/4 inches or no further into port than the closest edge of the closest letter of the ASCS logo. During this polishing the left side of the letter "A" is sometimes inadvertently brushed with polish wheel. This is permissible as long as letter is still intact. During polishing of inlet port sometimes polish marks may go slightly further than the 3/4 inch. Please note that the intake port is for a Fel-Pro #1206, or equivalent, gasket. Angle milling is allowed as long as the head remains within 1 degree of original manufacturer's specifications. Excessive porting and/or angle milling of the ASCS logo Cylinder Heads may affect their structural integrity, and is in no way recommended by Brodix.

Spec Heads: Brodix Ford Style Heads part # 27-223 with ASCS. Intake opening must be 2.150 inches tall by 1.300 inches wide. Intake port polishing will be allowed. Polishing will be allowed in the combustion chamber area to avoid hot spot chafing. Polishing will be allowed in the exhaust ports as long as the original ASCS logo is not affected or port shape is not altered substantially. Please note that the intake port is for a Fel-Pro #1262, or equivalent, gasket. Angle milling is allowed as long as the head remains within 1 degree of original manufacturer's specifications. Excessive porting and/or angle milling of the ASCS logo Cylinder Heads may affect their structural integrity, and is in no way recommended by Brodix.

Absolutely no intake or exhaust port relocation, raising, enlargement or reshaping of any type. Valve angle and placement may not be altered in any way on the

ASCS spec head or on any other head. ASCS checking fixtures to check the above specifications and dimensions will be used by sanctioned ASCS tracks.

Valve angle and placement may not be altered in any way. No welding of any kind, internally or externally, is allowed.

Guidelines regarding porting and polishing:

1. Intake port openings must match the following:

A. ASCS Chevy- FP #1206 or equivalent B. Ford- FP#1262 or equivalent C. Mopar- FP#1213 or equivalent

1. Porting and polishing of intake ports is allowed with the following restrictions:

A. All ASCS logos must remain completely intact. B. Pushrod area and intake openings must meet previous requirements and checking fixtures currently utilized by sanctions ASCS tracks. C. Valve spring pockets may not be welded or altered in any way with intent to relocate ports.

1. Absolutely no exhaust port relocation, raising, enlargement of reshaping of any kind.

A. Polishing is allowed as long as the original ASCS logo is not affected or port shape is not altered substantially. B. Valve spring pockets may not be welded or alte1red in any way with intent to relocate parts.

1. Polishing will be allowed in the combustion chamber area to avoid hot spot chaffing.

Any internally repaired ASCS spec head must be re-certified by Brodix.

1. All spec heads must remain within 1 degree of the original manufacturing.
2. Penalty for altered spec head will be subject to suspension, for one calendar year. Forfeit all points and moneys won, during the race which the infraction was found, and subject to a $500 fine that must be paid to before reinstatement.
3. All oil pans must have inspection plug, pans without plug will be subject to pan removal at any time.
4. No Turban driven, Turbo or blower will be allowed.
5. Only two valves and one spark plug per cylinder allowed. No big blocks.
6. No computer operated or controlled parts, such as fuel injections, fuel systems, crank trigger switches in the cockpit, chassis adjusting systems, shocks, etc.
7. No offset motors will be allowed, engine must be directly in front of driver. Driver must straddle drive-line.
8. Any car changing a motor after taking an official green flag will start at tail of its qualified group of "A" Main cars

In order to attach a seal to an approved engine, it is required that two adjacent bottom head bolts or studs be drilled with two intersecting holes in each bolt or stud large enough to accept a 1/16th inch wire. Any car that does not have this seal intact will be automatically pumped.

WINGS:

No car will be allowed to compete without a top wing.

Wings cannot be replaced on track during a red flag or in work area. Car must go to the pit area to replace all wings.

No car will be allowed to start, re-start or continue an event if one or more top wing side panels are missing.

In addition to the following specifications, any 410 or 358 wing that was legal in 2013 is permitted.

Top Wing:

Center Foil maximum size of 25 square feet with a maximum width of 60 inches with a one degree plus or minus tolerance.

Center Foil shall be fully sheathed in aluminum. Vent holes are strictly prohibited.

No wicker bills or Gurney lips permitted on Center Foil, unless center foil is totally flat then a one-inch wickerbill is allowed.

Other than the slider mechanism, no moving parts allowed on or in foil structure.

The 12-inch section located at the rear of the Center Foil must not have the belly/curl arc out of proportion with the rest of the Center Foil. The belly/curl arc must span the entire length of the Center Foil and appear to be a gradual arc with the deepest point no further back than 48 inches from the leading edge. As measured on a 12-inch straight edge, the belly at 6 inches from the rear of the Foil may not be deeper than ½ inch. There is zero tolerance on this ½ inch depth. It is suggested that the wing blue print specify 15/32-inch depth, so that if any deflection or movement of the wing occurs, the depth will not exceed the ½ inch specification. (This ½ inch measurement ensures that the belly/curl arc is gradual.)

The belly/curl arc must start at the radius of the Center Foil's leading edge and shall not exceed a depth of 2½ inches. Center Foil thickness cannot exceed 9 inches. Center Foil top surface from side to side must remain flat. Center Foil must be one-piece construction. No split or bi-wings will be permitted. Wings must be fabricated of metal alloys only. No fiberglass, carbon fiber or other similar material may be used in the basic framework of the wings. Top wing must not extend beyond outside of rear tires.

Two stationary foils or rudders will be allowed to run the entire length of the underneath portion of the top wing. Maximum height proportions are 1 inch at the front and 3 inches at the rear. Nowhere shall the foil exceed 3 inches in height. The top wing can be cockpit/driver adjustable.

Front Wing:

Center Foil maximum size of 6 square feet with a maximum width of 36 inches with a one degree plus or minus tolerance.

Center Foil shall be fully sheathed in aluminum. No vent holes allowed.

Wicker bills up to 1-inch are allowed on nose wing, flat or dished.

Maximum distance from the Center Foil front edge to the front edge of the front axle may not exceed 20 inches.

The Center Foil front edge must remain at least 1 inch behind the front edge of the front bumper. Center Foil top surface from side to side must remain flat.

Center Foil must be one piece. No split or bi-wings will be allowed.

Wings must be fabricated of metal alloys only. No fiberglass, carbon fiber or other similar material may be used in the basic framework of the wings.

The Front Wing must not extend beyond outside of front tires. The Front Wing may not be cockpit or driver adjustable while the car is stationary or in motion.

No moving parts allowed on or in foil structure.

The 5" section located at the rear of the front foil must not have a bell/curl arc that is out of proportion with the rest of the front foil. As measured on a 5-inch straight edge, the belly at 2 ½ inches from the rear of the foil may not be deeper than 3/8 inch. There is zero tolerance on this 3/8-inch depth. It is suggested that the wing blue print specify 11/32-inch depth, so that if any deflection or movement of the wing occurs, the depth will not exceed the 3/8-inch specification (This 3/8 inch measurement ensures that the belly/curl arc is gradual).

The belly/curl arc must span the entire length of the front foil and appear to be a gradual arc with the deepest point, no further back than 12 inches from the leading edge. The belly/curl arc must start at the front foil's leading edge and shall not exceed a depth of 2 inches. Top foil thickness cannot exceed 3.6 inches.

No rudders or fins on Front Wings.

Side Board Panels

All side board panels must be within an eight-degree plus or minus tolerance and be square to center foil.

Side panels may not be supported by braces whose section is not horizontal. All braces or supports shall be oriented thin edge to face the air stream. Only rectangular, round or oval metal braces not exceeding 1 inch in width may be used.

No aero section side panel brace material allowed.

No brace or support shall resemble a wicker bill or a split wing.

Top Wing sideboards maximum size, 72 inches long and 30 inches tall. Panels must be of one-piece construction. Panels must be fabricated flat so as to have no turnouts or flaps made of more than 2 inches of material on the front or rear of panel and no more than 1 1/4 inches on the top or bottom.

Front Wing side boards maximum size, 12 inches tall and 26 inches long with no more than one inch overhang from the center foil front edge to the side board front edge. Sideboards may have front, back, top and bottom turnouts of no more than 1/2 inch.

FUEL & TANK:

Approved fuel bladder required. No carbon fiber fuel tanks.

Methanol only according to Federal Standard of Purity, Grade A or AA.

No additives of any kind including top lube will be allowed in the fuel.

Water test and/or chemical test will be used to check fuel. Testing by Selinsgrove Speedway Equipment.

BODY:

Only Sprint style body panels, tails and hoods will be permitted.

No side foils, rudders or panels are to extend beyond rear cage support bars on any side.

No body pieces to extend beyond or underneath front torsion tube, with the exception of the hood. No wedges or foils under car.

All cars will be required to run a full sprint appearing hood. Hood must extend to front torsion tubes. While the hood may be a multiple piece design, it must appear to be one continuous piece. Maximum outside hood width will be 30 inches.

The driver's right side opening must be a minimum 10 inch vertical opening at any point and a minimum 21 inch horizontal opening at any point.

No Gurney lips or turnouts are permitted on any body panels.

Side body panel designs or concave surfaces that, in the sole discretion of track officials, are intended to trap, alter or direct air flow for the purposes of gaining an aerodynamic performance advantage will not be permitted. Any body or chassis design subject to the approval of track officials prior to use.

Safety bar(s) and/or arm guard paneling that protrude outward from the frame rails for the purpose of creating room for the driver will be permitted. The guard(s) and/or paneling will be permitted to extend a maximum of 7"-inches as measured from the outside edge of the middle frame rails and must remain above the middle frame rail. The sole purpose of this area is creating elbow room for the driver. The elbow room must remain above the upper "middle" frame rail and may not extend rearward of the leading edge of the rear axle.

Tires:

Hoosier Racing Tire On All 4 Corners

Front Tires:
Part #31-131 85/8.0-15 D12

Part #31-132 85/8.0-15 D15, D20

Left Rear Tires :
Part #38-137 15.0/90-15 H12
Part #38-147 15.0/92-15 H12, H15
Part #38-157 15.0/94-15 (SH) H12
Part #38-159 15.0/94-15 H12, H15
Part #38-167 15.0/96-15 H12, H15

Right Rear Tires:
Part #38-221 105/16.0-15 H15, H20, Medium (D25), **H-R15**
Part #38-231 105/18.0-15 Hard (F55)

Factory development on the 105/16.0-15 has been conducted on a 17 inch wide wheel so the recommended wheel width is 17 inches. The minimum recommended width is 16 inches and the maximum is 18 inches.

MISCELLANEOUS:

No Titanium drive shafts.

No mirrors of any kind may be used.

The use of electronic logic processors including any traction control devices to control any function of the racecar, and/or any system for continuous gathering of data from any function of the racecar for which the intended use is computer downloading is strictly prohibited. Penalty is loss of driver/owner points for the season and loss of all earnings from the event that the infraction occurred.

RADIOS/TRANSPONDERS:

No radios (one way or two way) or other means of electronic communications between the driver and anyone other than track officials is permitted.

All drivers are required to use a receiver capable of receiving frequency 454.000 for one-way communications from track officials.

360 / 358 Sprint Cars are required to use transponders. Rental units are available from the speedway.

Transponders for Sprint Cars should be mounted on the left side of the car to the vertical bar near the position of the radiator but can be no less than 31" from the center nose of the car. Adjustments can be made to the front nerf bar to obtain this distance if necessary.

Transponders must be mounted in a vertical position pointing straight down and as close to the ground as possible. There cannot be any metal, carbon fiber or other material that would deflect or block the signal between the transponder and the ground.

Transponder should not be mounted within 12" of any device that generates, transports or stores electric or magnetic energy (individual race cars may require a greater distance or shielding).

Transponders/brackets should be riveted, wire tied or clamped to the mounting point with additional wire ties, clamps or other securing devices encompassing the entire mounting point / bracket / transponder for additional security.

Speedway is not responsible for lost/damaged transponders. Damaged/Lost units rented from Speedway are the responsibility of renter.

It is each race team's responsibility to assure that the transponder they are using is mounted properly and in working condition at all times car is on track.

SAFETY EQUIPMENT:

High back seats are mandatory. Seat must be mounted to frame with a minimum of three (3) bolts.

Full-face helmet and visor, SA2000 Standard Snell approved or newer is mandatory. SA2005 Standard Snell approved or newer is suggested.

Driving Uniforms are mandatory. It's suggested they be flame retardant and minimum two layers.

Racing Shoes are mandatory. It is suggested they be flame retardant racing shoes.

Gloves are mandatory. They must be flame retardant racing gloves.

Front windshield protection is mandatory. It is suggested to be a minimum .090 screening.

Arm restraints are mandatory.

Kill switch within reach of driver is mandatory.

Fuel shut-off valve within reach of driver is mandatory.

10" minimum vertical opening on right side of cockpit is mandatory.

Minimum 3 inch wide seat belts, mounted to frame with bolts or looped over frame tubes, belts traveling through bottom of seat are mandatory and minimum 3 inch wide shoulder harness, double over shoulder, military shoulder straps with anti-sub crotch belts, harness to go over a horizontal tube located no less than 3 inches below the top of the driver's shoulders are mandatory. It is suggested all these belts be less than 2 years old.

Other Suggested Safety Equipment:

Knee pads or padding around steering.

Flame retardant underwear.

Flame retardant head sock.

Flame retardant foot socks.

Neck collars.

Headrest padding.

Right/Left side head net or support with quick release capabilities.

Head and Neck Restraint System (HANS, Hutchens, D-Cell or other brand)

Securely mounted fire extinguisher within reach of driver.

***Note - these rules are subject to change during the racing season. ***
The officials' interpretation of these rules is FINAL.