

## 2023 Malvern Bank 360 Sprint Series Rules

Rules are Subject to Change as Needed

Updated 4/18/2023

Any Questions on tech rules please call 402-342-3453

Or Email [office@i-80speedway.com](mailto:office@i-80speedway.com)

**\*Rules are similar to the rules posted by MSTs/Knoxville 360s**

### SECTION I GENERAL INFORMATION

1. All cars entering will pay an entry fee \$25 for early online entry, \$50 late entry payable at draw. Unless stated differently for specified shows. Pre-entry will close 3 days prior to the race at 11pm.
2. 2023 Point fund, must be a Malvern Bank 360 Sprint Series Member to receive point fund. Membership will be \$150.
3. All racing programs are subject to change. Any such changes will be covered at the drivers meeting.
4. Raceceiver Radios are mandatory; we reserve the right to penalize drivers that don't run a Raceceiver. No two-way radios will be allowed. Any driver who willfully ignores orders given by officials in such a way as to bring potential harm to another competitor, official, or fan will be expelled for the night.

***Any driver who fails to display proper judgment when a caution or red flag is displayed will be subject to immediate disqualification for the night.***

### Section 2 - Engine Rules

1. 360 Cubic Inches: plus 1% maximum displacement (360 plus 1% = 363.6).
2. No aluminum blocks. No Titanium in engines, excluding valves and valve retainers.
3. 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 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 SCE #211141, 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 SCE #236116, 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.

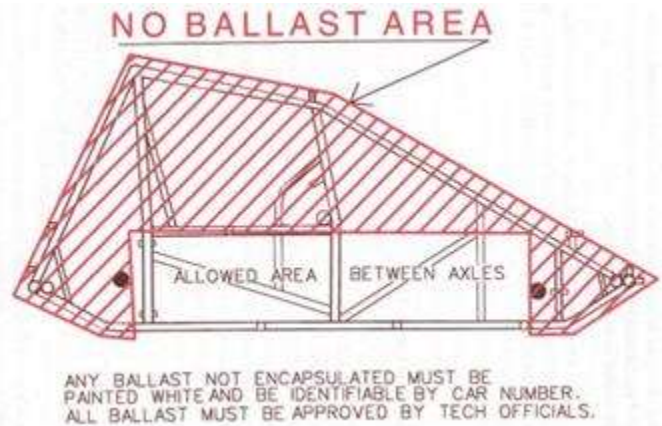
Valve angle and placement may not be altered in any way.  
No welding of any kind, internally or externally, is allowed.

***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 or 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 altered 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.
    - A. All spec heads must remain within 1 degree of the original manufacturing [Chevy: 23 degree, Ford 20 degree, Mopar 18 degree]
  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 I-80 Speedway 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, traction control, 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.

- Any car changing a motor after taking an official green flag will start at tail of its qualified group of "A" Main cars. If the car is qualified for the "B" Main, the car will drop to the tail of the lineup.

### **Section 5 - Ballast Areas Allowed**



### **Section 3 - Chassis Specifications**

- Weight Rule: Weight rule is 1475 lbs., including the driver, at the conclusion of the race. Any bolt-on weight must be painted white and the car number must be on the weight. Loss of any bolt-on weight during competition will disqualify the individual from that event. Bolt-on weight can only be added in the areas designated in the accompanying diagram. The weight must be securely attached and must remain in place during a race. It must not be moved or removed during a red flag situation. We reserve the right to disqualify any individual whose weight mounting procedure does not meet our specifications. (see illustration above)
- Chassis pass any test prescribed by the safety inspectors. The roll cage must be of a four-post design. No dirt champ cars. No elliptical (oval shaped) tubing used on or as part of the main frame structure. Minimum wheel-base of 83 inches, maximum wheel-base of 90 inches. No pieces may be added to the frame so as to resemble, imitate or be specifically designed to deflect, trap or form a wind break of any nature, except those used to cool/protect the motor and braking system. No roadster type chassis allowed, only sprint appearing type bodies, tails and hood will be allowed.
- All chassis will be required to have additional bars installed to support and decrease the span between the front and rear uprights in the driver's area. The new support bars must be in addition to the front and rear uprights. Any attempts to manipulate the front and rear uprights to conform to these measurements will not be allowed at the discretion of American Sprint Car Series Officials. These additional bars will be minimum 1.375 X .083 ASTM4130 normalized steel or equivalent material.**
- Left and right-side support bars may be one of the three designs below. Left and right side support bars do not have to be of the same design. Left and right side support bars may be one of the three options (See Section 6A)
- Slip-tubing is not allowed in the chassis construction. Any existing slip-tubing must be replaced or welded. Clamped or bolted slip tube joint will no longer be allowed.
- Titanium front axles nerf bars and/or rear bumpers will not be permitted. Nerf bars and rear bumpers must be made from magnetic steel and/or stainless steel. Left and Right Nerf bars must attach to the chassis at three points. The bumpers must be a minimum of one (1) inch in diameter and have a minimum material thickness of .065 inches. The nerf bars must not extend past the outside edge of the tires.
- No aluminum frames or draglinks. Tie Rods and Left Front Radius Rods may be aluminum, but highly recommended they be 4130 steel with magnetic steel rod ends. Swaging of the tubing will not be permitted. The drag links must be tethered to the frame with a minimum of one (1) inch nylon webbing.
- Carbon Fiber connecting rods having to do with suspension or steering are not permitted.
- All drive lines must be broken in the coupler or rear slider, fully enclosed and contains no more than one U-joint or C-V joint. No torque arm drive lines allowed. A safety strap or hoop that is securely attached to the chassis is required. Driveline components may not be Carbon Fiber.
- Mufflers: Are not Mandatory, (unless otherwise stated). At this time Knoxville Raceway is the only track we will visit in 2023 that requires a muffler. Only the 14-inch Flowmaster part #53545-10 or Schoenfeld part #14272735-78. Loss of muffler will result in disqualification when mufflers are required.**
- Headers: Must be a minimum of .045.
- Steel, Aluminum or Titanium brake rotors only.

13. The maximum distance from the leading edge of the front bumper to the leading edge of the front torsion tube is a maximum of 8". The maximum distance from the leading edge of the front bumper to the leading edge of the front axle is 23 1/2 inches.
14. No hollow, tubular or drilled out bolts allowed.
15. The right side opening must be a minimum of 10 inches vertical at any point and 21 inches horizontal.
16. The right side panel (armguard) will be permitted to extend a maximum of 7 inches as measured from the outside edge of the middle frame rail and must remain above the middle frame rail.

### Section 3A - Support Bar Diagrams

1. Support bar may be designed similar to what was known as a "safety bar". It must be attached to the top rail at a point 15" to 20" from the rear of the front upright. It must attach to the hip rail and have a gusset attached to the rear upright near a point opposite of the rear brace/shock mount bar. The curve must be between 4" and 7" measured from outside of the rear upright tube to the outside of the support bar. See Diagram 1
2. Existing chassis with a left side support bar installed (formerly called safety bar) that do not meet the option one specification above, may add a gusset that attaches to the top rail 15" to 20" from the rear of the front upright and angle to the support bar. The existing support bar tubing must meet the minimum as described above (1.375 X .083 ASTM4130 normalized steel or equivalent material). See Diagram 2
3. A support bar may be added to the top rail at a point 15" to 20" from the rear of the front upright and to the rear upright near a point of the rear brace / shock mount bar but no higher than 7" above the hip rail. This bar may have a slight curve near the rear upright to accommodate elbow room and ease of fitment. See diagram 3

**Diagram 1**

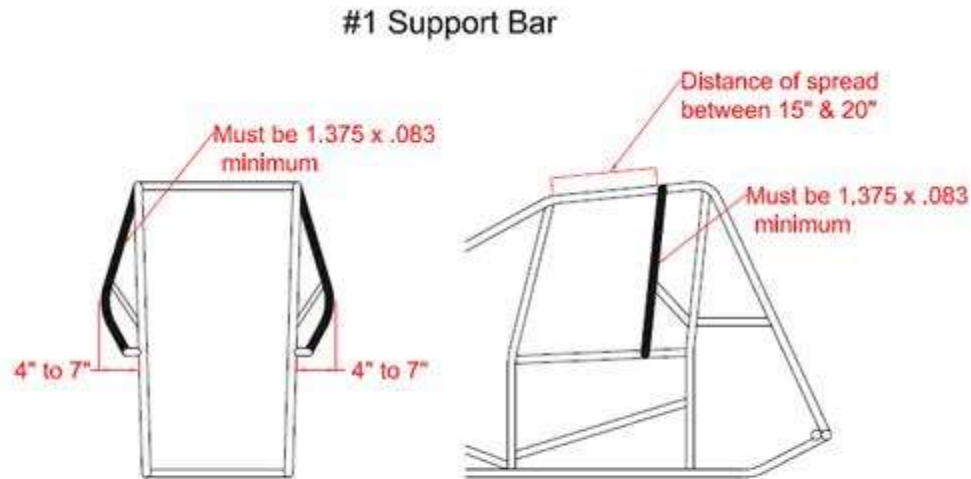


Diagram 16.12.1  
By Tom Devitt

**Diagram 2**

## #2 Support Bar

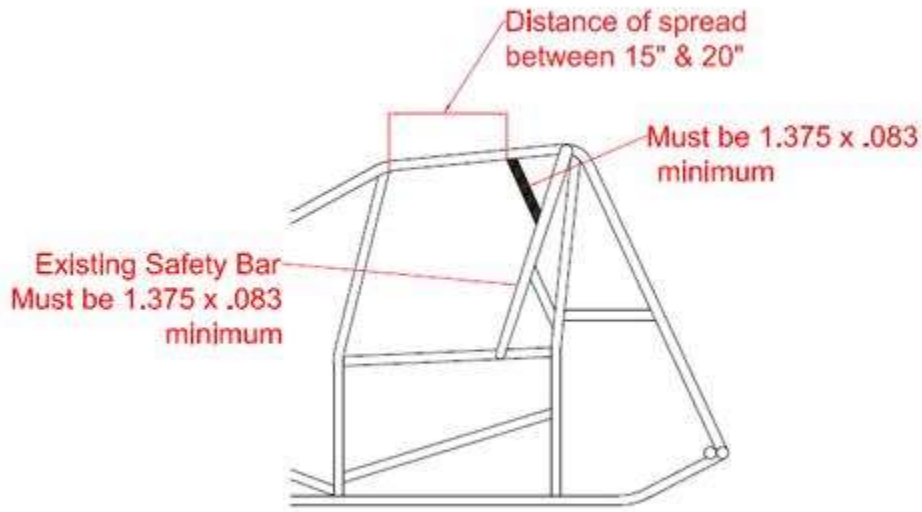
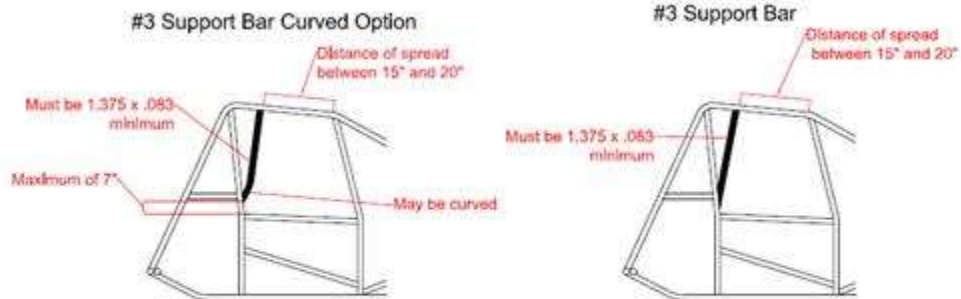


Diagram 16.12.2  
by Tom Devitt

## Diagram 3



Drawing 16.12.3  
By Tom Devitt

## Section 4 - Wing Specifications

### Top Wing: (see Illustration below)

1. Center Foil maximum size of 25 square feet with a maximum width of 60 inches with a one degree plus or minus tolerance.
2. Center Foil shall be fully sheathed in aluminum. Vent holes are strictly prohibited.
3. No wicker bills or Gurney lips permitted on Center Foil, unless center foil is totally flat then a two-inch wickerbill is allowed.
4. Other than the slider mechanism, no moving parts allowed on or in foil structure.
5. 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.)

6. 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.
7. 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.
8. ***Wing T-Post will be built from 1" X .083" minimum ASTM4130 normalized steel or equivalent material. Wing attachment designs will be subject to approval. The only cast pieces approved will be HRP Part #HRP8811-A75-HD. If new T-Post designs are developed they must be submitted for approval. Some approved T-Post designs are in the drawings section (See illustration below).***

***Front Wing: (see Illustration below)***

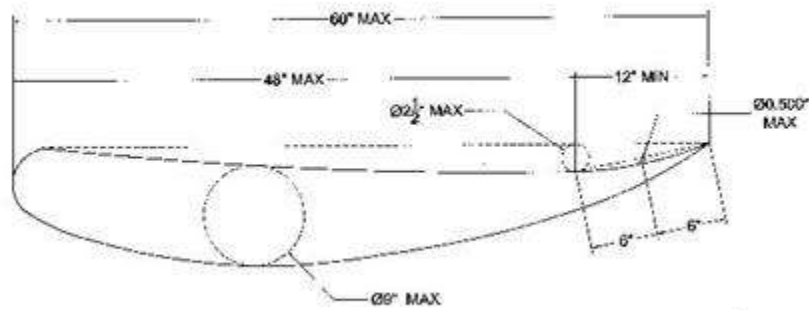
1. Center Foil maximum size of 6 square feet with a maximum width of 36 inches with a one degree plus or minus tolerance.
2. Center Foil shall be fully sheathed in aluminum. No vent holes allowed.
3. Wicker bills up to 1-inch are allowed on nose wing, flat or dished.
4. Maximum distance from the Center Foil front edge to the front edge of the front axle may not exceed 20 inches.
5. 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.
6. Center Foil must be one piece. No split or bi-wings will be allowed.
7. 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.
8. 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.
9. No moving parts allowed on or in foil structure.
10. 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).
11. 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.
12. No rudders or fins on Front Wings.

***Side Board Panels***

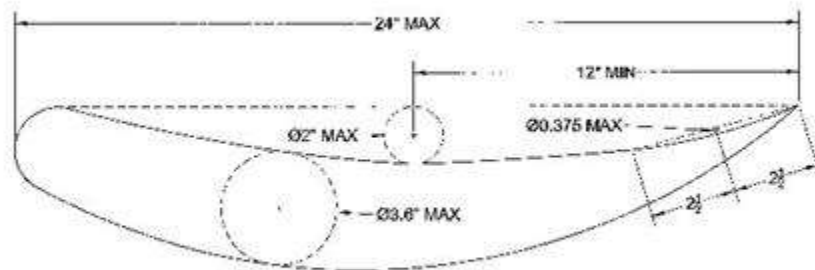
1. All side board panels must be within an eight-degree plus or minus tolerance and be square to center foil.

2. 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.
3. No aero section side panel brace material allowed.
4. No brace or support shall resemble a wicker bill or a split wing.
5. 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. Panels must be mounted parallel and square to the center foil with no more than 1 1/2" of turnout as measured from the Center Foil. Only two (2) corners on the 2/3 of each top wing side board will be permitted. Each corner shall be set at a 90° angle with no tolerance. The leading edge of the side board may not be behind the leading edge of the Center Foil.
6. 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.

### ***Top Wing Diagram/Specifications***

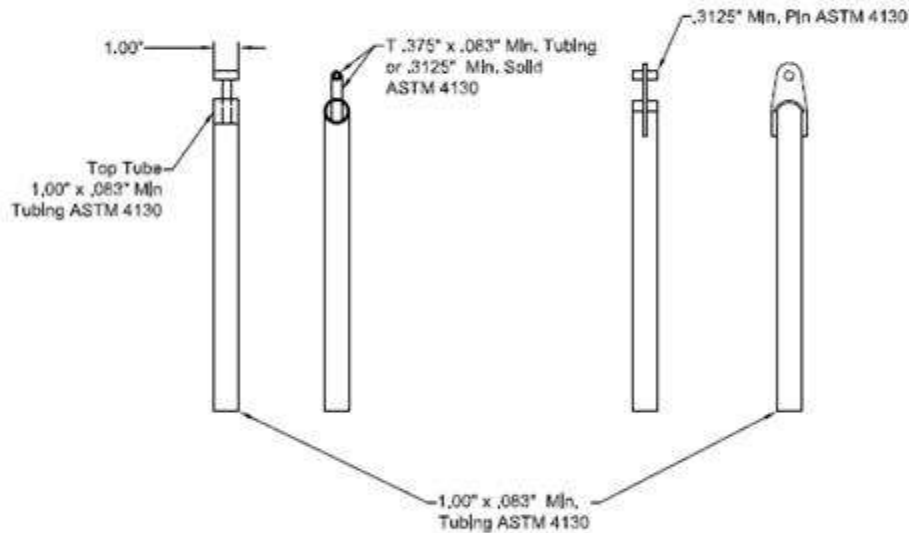


### ***Nose Wing Diagram/Specification***



### ***Wing T-Post Diagram/Specifications***

## Wing T-Post



### Section 5 - Fuel

1. Methanol or Ethanol only, NO NITRO or additives allowed. Fuel subject to be checked anytime by I-80 Speedway officials. NOTE: Fuel samples may be taken for analysis and prize money may be withheld until results are known. (Penalty for fuel infraction will result in forfeiture of all points and moneys won during event detected, and a fine up to \$1000 for first infraction. 2nd infraction subject to suspension up to 1 calendar year.)
2. Fuel Cell must be securely mounted with bladder mandatory. Tank used for Qualifying Heats must remain for all events.

### Section 6 - Tires and Wheels

1. Right Rear Hoosier Racing Tire, 105x16. Medium or Hard, or New Medium, or (Used Racesaver). The new D15A will be allowed at the following tracks Off Road Speedway, Park Jefferson Speedway, Crawford County Speedway, Eagle Raceway. The D15A will be allowed on September, 9<sup>th</sup> at Shelby County Speedway only.
2. Left Rear Hoosier Racing Tire, H12, H15, D12A, or (Used Racesaver).
3. Beadlocks recommended on all wheels.
4. All wheel covers must have a minimum of 5 attachment points if using dzus fasteners. Said dzus fasteners must be made of steel only. Wheel Covers having only 3 attachment points must be bolted-on all three points utilizing a minimum 5/16", flanged steel bolt and an approved fastening (nut assembly) system. Approved fastening (nut assembly) systems:

Keyser Manufacturing, part #100 7-101

Wehrs Manufacturing Part # (WM377A-312 Aluminum 5/16) (WM377S-312 Steel 5/16)

Triple X Chassis Part # SC-WH-7810 (for a 1" spring) / SC-WH-7820 (for a 1 3/8" spring)

Smith Precision Products Part # MC-516-18

Speedway Motors part # 910-07119

6. Maximum right wheel width is 18-inches, maximum left rear wheel width is 15 inches.
7. Left Front is the only tire you can run flat.
8. No tire softeners, no conditioners, no altering of tires with any natural or un-natural chemicals, no hazardous or un-hazardous components or chemicals which alter the factory set baseline settings of a given tire.
9. All sidewall markings must visible at all times. No buffing or removing of the compound designations.

### Section 7A - Tire Penalties and Infractions



1. First offense for the season: Fail heat race durometer inspection and you can start tail end of an assigned B-Main event. Fail B-Main pre-race inspection and you will be finished for the night. Fail A-Main pre-race inspection you won't be permitted to start the A-Main.
2. Second offense for the season: \$1,500.00 Fine and 300 points plus any winnings that have accrued for the event, violator(s) will assume all costs included in any testing procedures, no points and no money will be awarded for that event.

### **Section 7B - Chemically Altered or Defaced Tires**

1. First offense for the season: \$5,000.00 Driver Fine / \$3,000.00 Crew Chief Fine, driver and Crew Chief Suspended indefinitely, no points, no winnings, and the Driver and/or Crew Chief assume all costs of testing procedures. If tires are found to be legal, I-80 shall assume responsibility for the cost of testing.

### **Section 8 – Safety (Compare to Knoxville 360 Safety Rules)**

1. Any driver who exits their car and approaches another driver on a live racetrack may be subject to a fine of \$1,000 and/or be suspended for two calendar weeks. The offending driver will also forfeit their winnings for the night. This also includes family and crew members entering a live racetrack. Under caution, stay in your car. If you are in an unsafe situation, you may exit your car but stay with your car. Dark tracks and dark fire suits make you hard to see. Remember, actions done in anger can have dire consequences. A driver/team who willfully ignores/disobeys an official in a manner which delays the running of the night's program, or places others in danger, will also be subject to a fine of \$1,000 and/or be suspended for two calendar weeks from any event.
2. All drivers are required to wear SNELL SA2015 or SA2020 approved helmet, a fire retarding uniform, protective gloves and arm restraints during competition. Fire retardant underwear is highly recommended.
3. RACEceiver Radios are mandatory; we reserve the right to penalize drivers that don't run a RACEceiver. No two way radios will be allowed. Any driver who willfully ignores orders given by officials in such a way as to bring potential harm to another competitor, official, or fan will be expelled for the night.
4. All cars must be equipped with adequate seat belts, shoulder harness and crotch strap. Strongly recommends a five point hookup with 3 inch belts. Full Containment Seat is highly recommended.
5. It is highly recommended, that the Steering Wheel is secured with a pull type, quick release hub or button style, quick disconnect. Use of removable pin style hubs is not recommended at all due to high risk of failure. It is the driver's responsibility to make sure the steering wheel is securely attached before entering the racing surface. Your safety is truly in your own hands.
6. **An onboard fire suppression system is highly recommended in 2023 on all cars with nozzles positioned as to coat the Engine, Driver, and Fuel Cell. A fire suppression system will be mandatory in 2024.**
7. Approved front axle tether systems are highly recommended. The tether mounting must meet the SFI 55.1 specification which includes two (2) Vectran® HS V-12, or Dynemma 12 tethers attached to the chassis. Tether systems must include a "king pin to king pin" tether that will attach to the axle clamp/band. Tether cables should be installed using the manufacturer's provided fasteners. Tether systems of any type must be pre-approved and installed in accordance with the manufacturer's instructions.
8. If utilized, a tether is required on both left, and right sides of the Front Axle. Tethers must be mounted from the Front Axle, just outside the Radius Rod hookups on both sides of the Front Axle, utilizing the aluminum mounting brackets provided by the manufacturer. Tethers must extend to the second upright of the frame and be attached below the front engine mounts. Tether must be attached with a slipknot around the upright. Crews cannot alter the intentions of the Axle Tethers.
9. If a car needs to be fired in the Pits, the person in the car must be in full safety gear with seat belts properly attached.
10. No flammable liquids allowed in the the cooling systems.

### **Section 9 - Protest**

1. Protest will be taken only from a driver or car owner and then only if the protest is in writing and accompanied by the appropriate protest fee in cash to officials. In the event the protested car is found to be legal, the protest fee shall be given to the owner of the car protested minus a fee that shall be paid to the inspector.
2. All protest must be filed within ten (10) minutes after the completion of the last race of the evening. All protest shall be decided upon by track representative. Any appeal of official decision must be filed in writing within ten (10) minutes of notification.

3. No protests will be accepted on judgment decisions.
4. In the event a car is protested and found to be illegal by the inspector, the driver and car protested shall have all points and money forfeited that were won during the particular race program in question and may be suspended.

**Protest Fees (Figures In Parenthesis Are Filing Fees)**

1. Motor tear down: \$800 (\$100).
2. P & G fuel test \$800 (\$100).
3. Other technical protest: \$200 (\$100).

**Section 10 - Sportsmanship**

Sprint car racing is a very emotional sport. As such, good sportsmanship is the key element of any competitive racing program. This must include respect for all participants – drivers, owners, girlfriends, wives, mistresses, pit crews, and officials. For our part we will make every effort to be consistent with our rules regardless of whom or what is involved.

We will treat all participants with respect and expect similar treatment in return. A racer's pit area is his castle – therefore please stay out of other racer's pit areas, especially after an incident where you have been involved with that racer. Drivers – remember that you are responsible for the actions of your crew. As such, any member of a team who verbally or physically assaults an official will be fined and/or suspended from competition.

Sportsmanship does not just pertain to activities at the track. Be aware that we do our best to present and its drivers in the best light possible. We expect our drivers to do the same. Remember what you say has weight, what you type has meaning, what you do has consequences. Think before you lash out and refrain from posting to social media. You never know who is reading, listening, or watching.