



# 2024 "410" Sprint Car Rules

## Preface

These rules provide the guideline for all events. The rulebook may be amended from time-to-time and special rules may be published and/or adjusted at any particular event with the participants receiving prior notification. By participating in these events, all participants agree to comply with these rules and regulations.

The rules are not intended to express or imply the warranty of safety as a result of publication of, or compliance with the rules and regulations as stated herein. The rules are intended to offer a guideline for the conduct and officiating of an event.

Sharon Speedway Officials shall be empowered to permit any reasonable and/or appropriate amendment from any of the specifications and/or procedures herein, or impose any further restriction that, in their opinion, does not alter minimum acceptable requirements. Revisions to the rules are not intended to express or imply the warranty of safety as a result from any such deviation or restriction of the specifications, rules and/or procedures. Any interpretation of, deviation from, these rules herein, is left to the discretion of the racing officials and their jurisdiction is final.

Any visible equipment changes and/or performance enhancing changes to previously approved cars and/or equipment must be approved in writing prior to introduction into competition by Sharon Speedway. Sharon Speedway Officials reserve the right to immediately determine the legality and use of any equipment that has not received prior written approval for introduction into competition.

It is ultimately the obligation of each participant to ensure their conduct and equipment comply with all of the applicable rules, as they may be amended from time-to-time. The rules are in no way a guarantee against injury and/or death to participants, spectators, officials and/or others.

# Car Rules

ANY CAR, TEAM AND/OR DRIVER THAT DOES NOT MEET THESE SPECIFICATIONS AND/OR EQUIPMENT REQUIREMENTS WILL BE SUBJECT TO PENALTIES AS DETERMINED BY SHARON SPEEDWAY OFFICIALS.

## 1. Engines

- a) Only small block V-8 engines with the cam in the block and a maximum of 410.00 cubic inches of displacement (tolerance + 0.000) will be permitted. The formula  $6.2832 \times \text{bore}^2 \times \text{stroke}$  will apply. Big block engines will not be permitted.
- b) The engine must be mounted in-line with the driver and the drive-line must pass beneath the driver on center through the driver compartment. Offset engines and/or offsetting the position of the engine will not be permitted.
- c) The engine block and cylinder heads must be machined from cast aluminum. Billet machined blocks and/or cylinder heads will not be permitted.
- d) Engines with the magneto and/or distributor in a forward mounted and/or front mounted position will be allowed but must be approved prior to competition. Engines with the magneto and/or distributor mounted in the stock OEM production position for the block and/or engine must be approved prior to competition.
- e) Approved Front Drive Magneto System: Moroso 60205 & 60206.
- f) Only normally aspirated engines will be permitted. Turbo chargers, super chargers and/or forced induction of any type and/or description will not be permitted.
- g) The maximum engine cylinder bore size shall be 4.165 inches.
- h) All engine cylinder sleeves (inserts) must be machined from an iron and/or steel alloy.
- i) Titanium crankshafts, connecting rods and/or rod caps will not be permitted.
- j) Only two (2) valves and one (1) spark plug will be permitted per cylinder.
- k) Cylinder heads must retain a traditional valve pattern. Rotation of the valves will not be permitted. Canted or splayed valve cylinder heads must be approved prior to introduction into competition.
- l) Only steel connecting rods with a maximum length of 6.000 inches will be permitted.
- m) All oil pans must have an inspection plug. The inspection plug must be a #12AN fitting or 1.00inch pipe plug.
- n) In the event that an engine does not have an inspection plug the oil pan must be removed for inspection prior to competition.
- o) Only throttle plate (butterfly) and shaft throttle body styles with round circular bores will be permitted. The maximum throttle bore as measured at the throttle plate (butterfly) may not exceed 3.000 inches in diameter. Slide plate, rotary cylinder, and/or other styles will not be permitted for competition. Carbon fiber manifolds and/or any other injection type pieces manufactured from carbon fiber will not be permitted.

- p) A maximum of 16 fuel nozzles, utilizing two (2) per cylinder will be permitted. One (1) nozzle must be placed in the cylinder head and one nozzle must be placed in the injector.
- q) A minimum of two (2) throttle return springs must be used to mechanically return the throttle to a fully closed position.
- r) Only magneto-type ignitions will be permitted. A single (1) crank-trigger type system will be permitted as a backup ignition system. One (1) single switch that alternates the current between the magneto and the crank trigger only may be mounted to the dashboard within the driver's reach. Only 2-way, on-off type switches will be permitted. Multiple coil-pack ignitions will not be permitted.
- s) Steel and stainless steel headers will be permitted. Titanium headers will not be permitted.
- t) New engine components and/or new engine configurations must be submitted and approved by Sharon Speedway Officials.
- u) If an engine is inspected and it measures over 410.00 cubic inches, the driver and the car will be disqualified. All earned points and money will be forfeited for that event and the driver, car and owner will be suspended for the next three (3) Sharon Speedway events. NOTE: The engine may be checked at any time during an event or torn down after the event at the discretion of Sharon Speedway Officials. If a Sharon Speedway Official finds the motor to be illegal, the competitor will be given the opportunity to remove the cylinder head for clarification purposes. There will be a one hour time limit set for this process following the conclusion of the A-Main.
- v) An engine conforming to the Alternative 410 Motor Program (A4MP) will be permitted.
- w) The rules and specifications for this program are available at: [www.alternative410motor.com](http://www.alternative410motor.com)
- x) All winnings will be held until the motor is determined to be legal by means outlined at: [www.alternative410motor.com](http://www.alternative410motor.com)

## **2.Fuel**

- a) Fuel additives, including but not limited to nitro, nitro methane and/or nitrous oxide injection will not be permitted. Pure methanol and/or other approved fuels will be permitted. Fuel samples may be taken from time-to-time for inspection and analysis.
- b) A fuel cell with bladder and foam will be the only type fuel cells permitted. The fuel cell must be of one piece construction of cross-link polyethylene plastic. Alterations and modifications will not be permitted.
- c) All teams are encouraged to run a 33 gallon fuel tank and bladder.

## **3.Traction Control Devices**

- a) Traction control devices of any type are not permitted at any time, during any event.
- b) Any team found with a traction control device in pre and/or post-race inspection shall be disqualified from that event. Additional penalties, including indefinite suspension and/or fines, and/or any penalty deemed appropriate by Sharon Speedway Officials may be issued.

- c) From time-to-time random inspections will occur and various components may be impounded for further analysis and inspection including, but not limited to ignition systems, ignition boxes, wiring looms and/or tachometers.
- d) The Xtreme 30 sparkbox version #2 both long & short is LEGAL. The Xtreme 30 sparkbox version #3 both long & short is ILLEGAL. Check with manufacturer for correct and legal application.

#### **4.Chassis/Frame**

- a) All chassis/frames built during and/or after the 2005 season should have a manufacturer's serial number and identification plate visible and welded on the left front side of the roll cage upright.
- b) Roadster type chassis will not be permitted. Slip-tubing is not allowed in the chassis construction. This includes safety bars. Any existing slip-tubing must be replaced or welded. Clamped or bolted slip tube joint will no longer be allowed.
- c) The chassis must have a minimum of six (6) mounting points for securely mounting any manufacturer's seat per the seat and chassis manufacturer's specifications.
- d) Drag links must be made of 4130 steel a minimum of one (1) inch in diameter and a minimum material thickness of .058 inches. Drag links, Tie Rods, and Left Front Radius Rods must be 4130 steel with magnetic steel rod ends. Swedging 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.
- e) Hollow and/or drilled bolts, fasteners, and/or heim joints (rod ends) will not be permitted.
- f) Only front axles made of magnetic steel will be permitted. Approved axle dimensions are:  
 2-1/4" x 0.120"  
 2-3/8" x 0.095"  
 2-1/2" x 0.095"  
 Larger thicknesses may be approved at Official's discretion.
- g) 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. 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. All left and right side nerf bars must attach to the chassis at 3 points. 2 point side nerf hoops will no longer be allowed. For any car to be pushed off at any time the rear bumper must be in place behind the tail tank.
- h) Front axle tether systems are highly recommended. If utilized the tether mounting must meet the SFI 55.1 specifications 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 manufactures provided fasteners. Tethers of any type must be installed and used in accordance with the manufacturer's instructions.
- i) All radius rods shall be constructed as a solid piece of round tubing with provision for a rod end on each end. No addition to the radius rod will be allowed. Radius rods must be attached to the frame and axle in a stationary manner. Devices that are designed to change the length or position of the radius rod in any way while the car is moving will not be allowed.
- j) LF radius rods are to be made of 4130 steel with steel rod ends.

- k) The front bumper must not extend more than eight (8) inches from the frame and/or the measurement from the center of the front axle to the front of the front bumper must not exceed 23.5 inches.
- l) The top of the roll cage shall have a maximum outside width of 29.5 inches. Bracing that would prevent the driver's ability to exit through the opening and/or inhibit safety/rescue workers ability to extract the driver will not be permitted.
- m) The cockpit horizontal middle frame bar will have a maximum outside width of 32.0 inches.
- n) The bottom frame rail will have a maximum outside width of 26.5 inches.
- o) All tubing utilized in the construction and/or fabrication of the main frame must be round in shape. Any other shapes, such as elliptical (oval) tubing will not be permitted.
- p) Only steel, carbon fiber or aluminum floor plans will be permitted.
- q) The minimum wheelbase will be 83 inches. The maximum wheelbase that will be permitted will be 90 inches.
- r) Front anti-roll torsion bar assemblies (sway-bars) will not be permitted.
- s) All cars must have a driveline strap and/or a driveline hoop restraint constructed of a minimum of .065 inch magnetic steel either welded and/or bolted to the chassis. The rear cross member used for mounting the steel driveline hoop must be constructed of .083 inch steel.
- t) Wings, bumpers and/or nerf bars must be positively fastened with bolts & nuts, hitch pins and/or roll pins only.
- u) The only chassis and/or frame adjustable device will be one (1) top wing adjuster for the top-wing slider mechanism. The slider must be one dimensional and allow forward and rearward movement only.
- v) The following frame measurements are minimum dimensions. Only those areas indicated are mandatory and subject to technical inspections. In lieu of the "BUTT" BAR a car's rear end can be tethered to the rear chassis. ASTM4130 normalized steel or equivalent material is suggested. See drawing 16.5 A,S.

TOP RAILS 1-1/2" x .095"

BOTTOM RAILS 1-3/8" x .095" or 1-1/2" x .083"

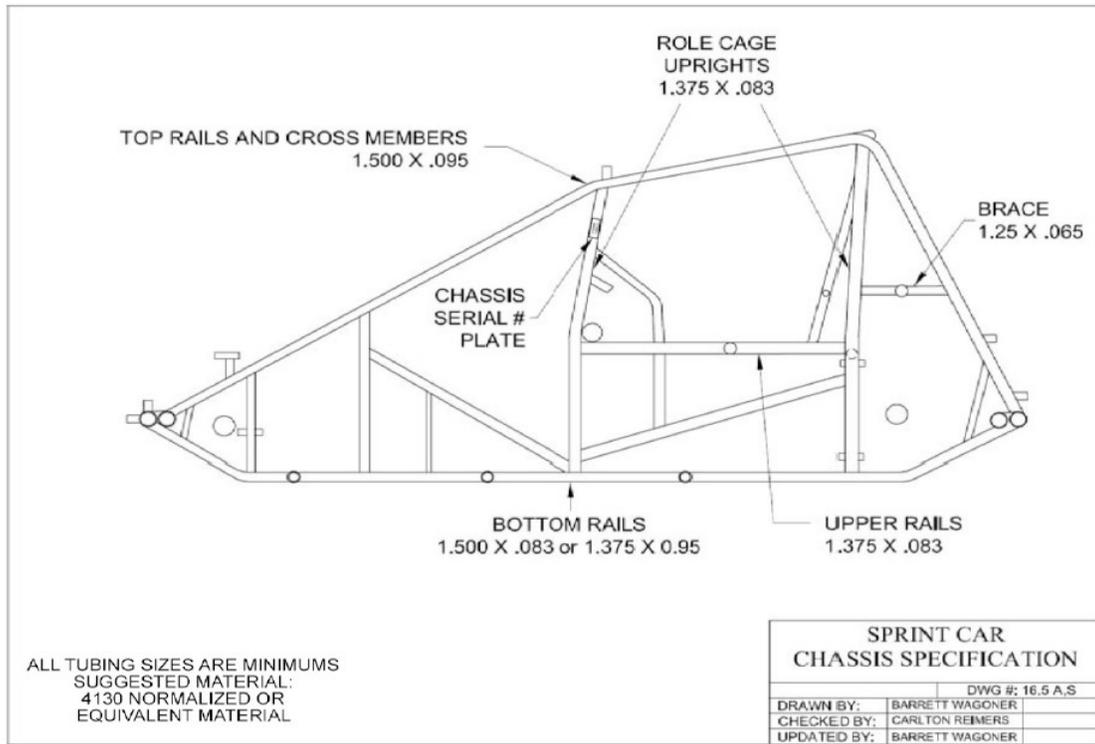
ROLL CAGE UPRIGHTS 1-3/8" x .083"

ROLL CAGE CROSSMEMBER 1-1/2" x .095"

UPPER RAILS 1-3/8" x .083"

REAR END SAFETY "BUTI" BAR 1" x .083" or 1-1/4" X .065"

BRACE 1-1/4" x .065"



- w) Torsion arm stops will be mandatory on both sides of the front torsion bars. The retainer may be of the rod-type with a securing cap or insert with an expanding mandrel and/or any other approved Torsion arm stop design. Torsion arm stops must be installed and used in accordance with the manufacturer's instructions.

The following torsion bar stops(s) have been approved for competition:

- Moose Block 1200 Retainer Kit
- All Star Performance All Star 10730 Retainer
- Maring Safety Retainer
- Butlerbuilt Mandrel
- KKR grove and clip
- Kaeding Clip
- DMI – T-REX (Torsion Restraint Express System)
- Schroeder Part number "BARS" (for Schroeder bars with relief in ends)
- Schroeder Part Number: "RWLAR" (Wedge Lock)

The approved Torsion Arm Stop may be revised from time-to-time with additional approvals and/or other changes to the approved list.

- x) Chassis Support Bars: Beginning in 2019, all chassis were 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 Officials.

These additional bars will be a minimum 1.375" x .083" ASTM4130 normalized steel orequivalent 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.

Right side body opening shall remain the same 10 inches vertical and 21 inches horizontal at any point, with the exception of the 1-3/8" support tubing in place.

Left and right side support bars may be one of the three options:

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 inches to 20 inches 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 inches and 7 inches measured from outside of the rear upright tube to the outside of the support bar. See drawing 16.12.1.
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 inches to 20 inches 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. Seedrawing 16.12.2.
3. A support bar may be added to the top rail at a point 15 inches to 20 inches 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 inches above the hip rail. This bar may have a slight curve near the rear upright to accommodate elbow room and ease of fitment. See drawing 16.12.3.

#1 Support Bar

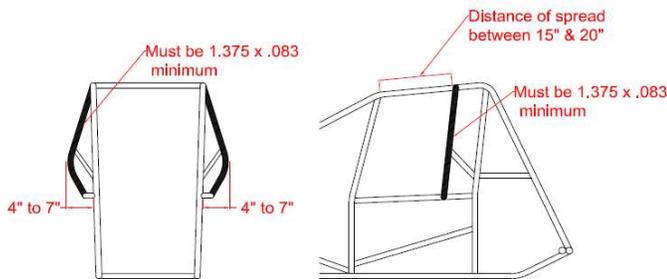


Diagram 16.12.1  
By Tom Devitt

#2 Support Bar

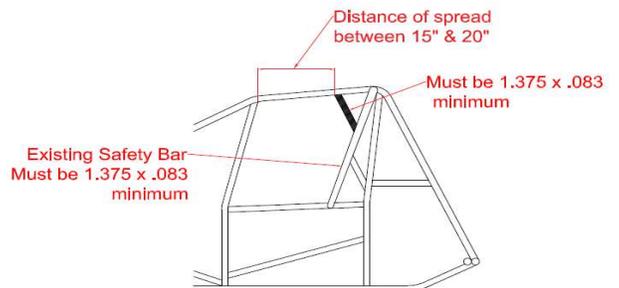
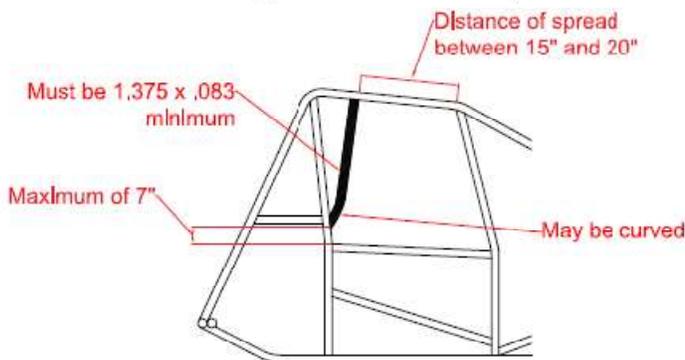
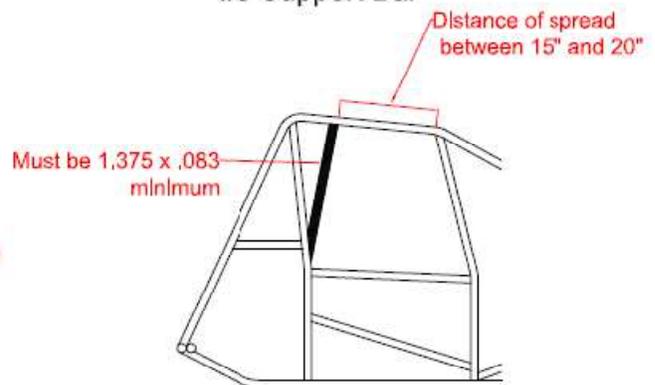


Diagram 16.12.2  
by Tom Devitt

#3 Support Bar Curved Option



#3 Support Bar



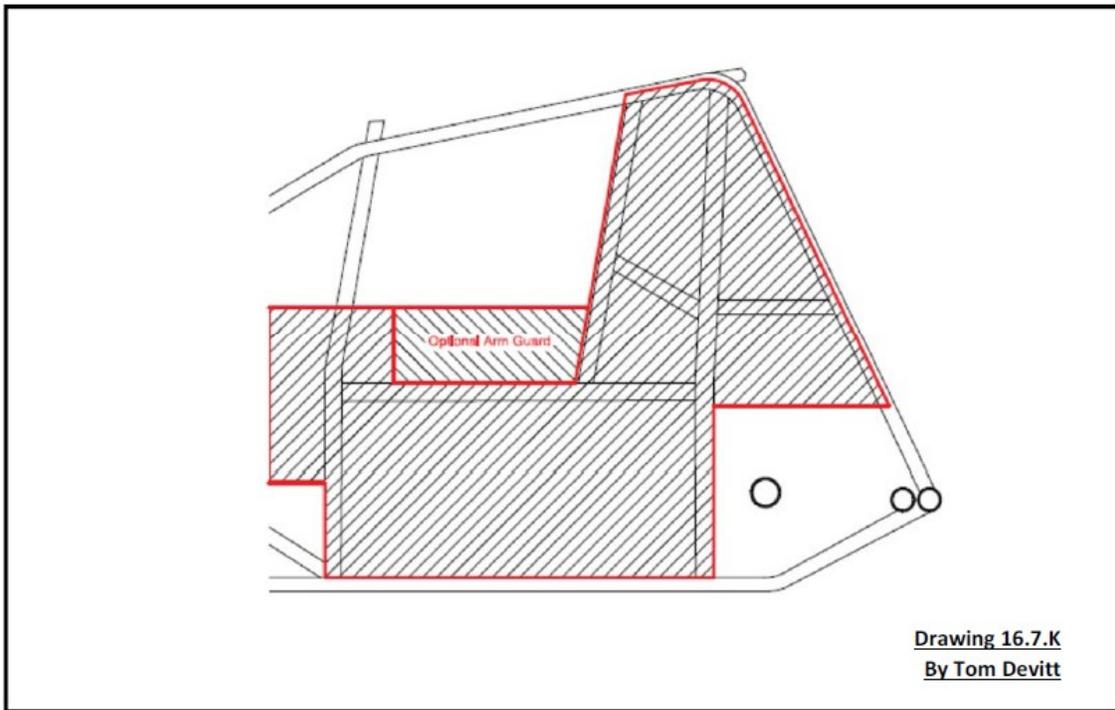
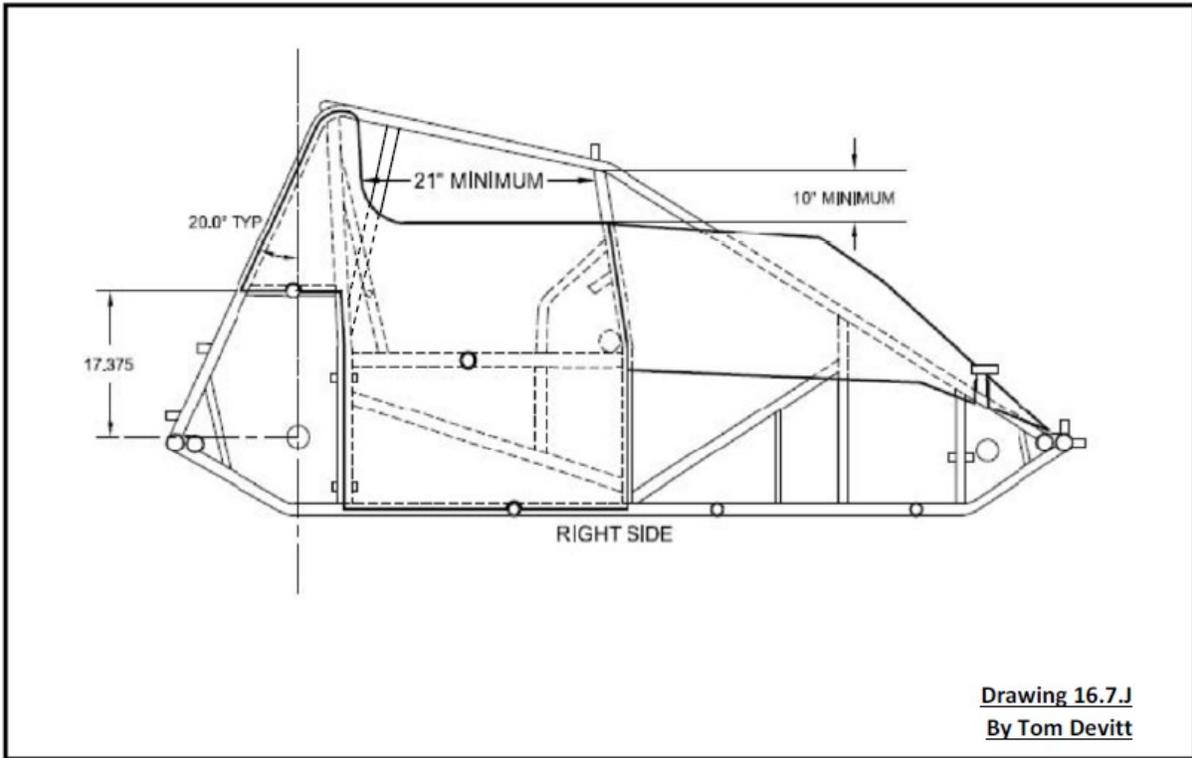
Drawing 16.12.3  
By Tom Devitt

## **5.Weight**

- a) All racecars must weigh a minimum of 1425 pounds with a driver fully prepared to compete in the car throughout an entire event.
- b) Additional bolt-on weight will be permitted, but must be mounted and fastened to the frame and/or chassis in a secure manner. All additional bolt-on weight must be mounted and fastened in the area between the bottom frame rails and axles but mounted no higher than the upper rails. At the discretion of Officials additional bolt-on weight may be mounted and/or fastened forward of the front axle, but not past the front torsion bar. All bolt-on weight must be painted white.

## **6.Body**

- a) Only standard type Sprint Car bodies, tails and hoods will be permitted.
- b) Side foils, rudders and/or panels that extend beyond the rear of the cage support bars will not be permitted.
- c) Nose pieces and/or the top portions of the hood must not extend forward of the leading edge of the front torsion tube or similar position on a coil-over car. Torsion tubes must be positioned in what is considered a conventional location. The hood side paneling or other side body pieces must not extend forward of and/or below the front axle.
- d) Sunshields are permitted. Sunshields cannot extend beyond the down tubes of the car or restrict the driver's vision, restrict driver's exit, or direct air all at the discretion of Officials. The maximum height is 9 inches and no dish visors or wicker bills are allowed.
- e) Wedges and/or foils underneath the racecar will not be permitted.
- f) Pieces that are added to the basic frame to resemble, imitate and/or be specifically designed to deflect, trap and/or form a pattern for air to travel in a directed manner, except for those used to cool and/or protect the motor and the brake system, will not be permitted.
- g) Mirrors of any kind, whether attached to the racecar and/or the driver, will not be permitted. All cars must have a minimum of an 18 inch tall number on the outside of both top wing panels and a minimum 18 inch tall number on the top wing center foil. Any letter utilized as part of the car number must be a minimum of 12 inches tall. If there are cars at any event that carry duplicate car numbers then one of the two cars will be required to add a letter to the number for scoring purposes.
- h) All cars will be required to run a full sprint-type appearing hood with a maximum outside hood width of 30 inches. The hood must extend to the front of the torsion tubes and/or similar location on coil-over cars. The hood may be a multiple piece design, but visually, it must appear to be one continuous piece in side-to-side and front-to-back manner.
- i) The driver's right side opening must be a minimum of 10 inches vertical at any point and a minimum of 21 inches horizontal at any point. See Drawing 16.7.J. The left side paneling may extend to but not forward of the support bar. See Drawing 16.7.K. The use of a left side arm guard as part of the paneling is acceptable as long as it or any other part of the paneling does not prevent left-side driver entry or exit at the discretion of Officials.



- j) 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.

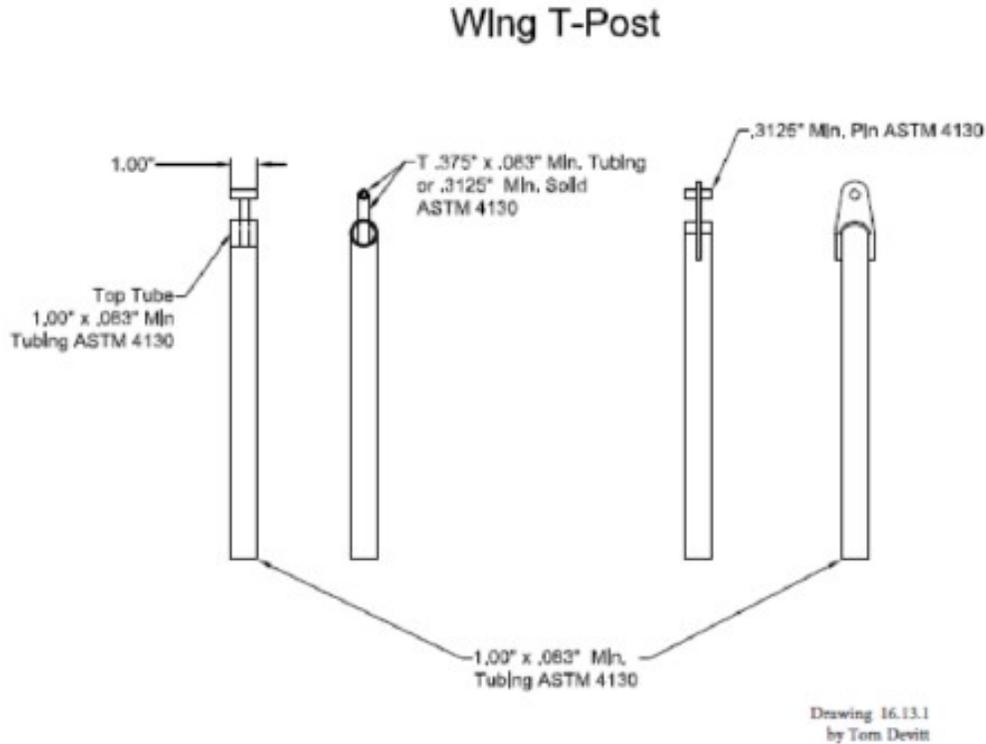
- k) Rear radius rod protectors will be permitted. The maximum protector vertical opening will be 10 inches in height by 24 inches long and it must not extend more than 3-1/2 inches from the outside edge of the bottom frame rails.
- l) A maximum 1-1/2 inches wide by 20 inches long exhaust fume deflector, located on the bottom side-body panel at the rear edge will be permitted. The turnout angle must not exceed 90 degrees.
- m) All other side paneling must be fabricated flat and must not extend past the outside edge of the frame rails more than the thickness of the paneling material.
- n) Side body panel designs and/or concave surfaces that, in the sole discretion of Officials, are intended to trap, alter and/or direct airflow for the purpose of gaining an aerodynamic performance advantage will not be permitted.
- o) Any new body designs including, but not limited to side body panels, hood design, nose pieces and/or any other part of the exterior body must be approved by Sharon Speedway Officials prior to being introduced into competition.

## **7.Wings**

### **a) Top Wing Center Foil**

- i. Center Foil maximum size of 25 square feet with a maximum depth/thickness of 9 inches and a maximum length of 60 inches. Center Foil must be square or rectangular in shape with all 4 corners set at 90 degree angles with no variance allowed. Center foil top is to be flat from front to back and side to side. The center foil top must start being flat within 6 inches from the center foil's front leading edge. See Drawing 16.8.1.E at the end of this document.
- ii. Center Foil shall be fully sheathed in aluminum. Vent holes, dimples, ridges and/or any other type of fabricated modification will not be permitted anywhere on the wing.
- iii. A maximum 2 inches removable wicker bill may be mounted on the rear edge of the center foil. Wicker bill must be 90 degrees to the top of the center foil. Built-in wicker bills or gurney lips will not be permitted. The maximum dimension of wicker bill may change periodically at the discretion of Sharon Speedway Officials. Any such changes will be issued in writing prior to the event in which the change will be made.
- iv. The top wing may be adjustable in the cockpit by the driver. Other than the slider mechanism, moving parts will not be permitted on or in the foil structure.
- v. Only one slider mechanism will be permitted on the top wing, which only permits forward and backward adjustment.
- vi. Underneath side of center foil must appear to be a continuous smooth arc with no recesses, concaves, or protrusions. Center Foil must be one piece construction. Split or bi- wings will not be permitted. Only wings fabricated of metal alloys will be permitted. Fiberglass, carbon fiber and/or other similar material(s) will not be permitted in the basic framework of the wings. The top wing must not extend beyond outside of rear tires.
- vii. Foils or rudders will not be permitted anywhere on the top wing.
- viii. 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. See Drawing 16.13.1.



#### b) Nose Wing Center Foil

- i. The center foil will have a maximum size of 6 square feet with a maximum width of 36 inches and a maximum length of 24 inches. The center foil must be square or rectangular in shape with all four corners set at 90 degree angles. See Drawing 16.8.2.K at the end of this document.
- ii. Center foil shall be fully sheathed in aluminum. Vent holes, dimples, ridges and/or any other type of fabricated modification will not be permitted, anywhere on the wing.
- iii. A maximum 2 inch removable wicker bill may be mounted on the rear edge of the center foil. The wicker bill must be 90 degrees to the top of the center foil. Built-in wicker bills or gurney lips will not be permitted. The maximum dimension of wicker bill may change periodically at the discretion of Officials. Any such changes will be issued in writing prior to the event in which the change will be made.
- iv. The maximum distance from the center foil front edge to the front edge of the front axle may not exceed 20 inches.
- v. The center foil front edge must remain at least 1 inch behind the front edge of the front bumper. The center foil top surface from side to side must remain flat.
- vi. The center foil must be one piece. Split or bi-wings will not be permitted.
- vii. Only wings fabricated of metal alloys will be permitted. Fiberglass, carbon fiber or other similar material(s) will not be permitted in the basic framework of the wings.
- viii. The nose wing must not extend beyond the outside of front tires. The nose wing may not be cockpit or driver adjustable while the car is stationary and/or in motion.

- ix. Moving parts will not be permitted on or in the foil structure. Rudders or fins will not be permitted.
- x. The 5 inch section located at the rear of the front foil must not have a belly/curl arc that is out of proportion with the rest of the front foil. As measured on a 5inch straight edge, the belly at 2-1/2 inches from the rear of the foil may not be deeper than 3/8inch with no tolerance. 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).
- xi. The belly/curl arc must span the entire length of the front foil and appear to be a gradual arc with the deepest point, not 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. Front foil thickness cannot exceed 3.6 inches.

#### **c)Side Board Panels**

- i. All braces or supports shall be oriented thin edge to face the air stream. Only rectangular, round or oval metal braces not exceeding 1inch in width will be permitted. Adjustable bracing will not be permitted.
- ii. Aero elliptical brace material will not be permitted.
- iii. Brace or support shall not resemble a wicker bill or a split wing Side boards must be mounted square to the center foil and parallel to each other. Any kick-out will not be permitted.

#### **d)Nose**

- i. The noseside board's maximum size will be 26 inches long and 12 inches tall with an overhang not exceeding 1inch from the center foil front edge to the side board front edge.
- ii. Side boards may have a maximum 1/2 inch front, back, top and bottom turnout(s) (flange).

#### **e)Top**

- i. The Top wing side board's maximum size will be 72 inches long and 30 inches tall. The top 2/3's of each top wing side panel shall consist of only 2 corners. Each corner shall be set at a 90degree angle with no variance. This portion of the side panel's leading edge may not be behind the center foils leading edge.
- ii. Panels must be of one-piece construction.
- iii. Panels must be fabricated flat. Turnouts on all edges of the wing must not exceed 1-1/4" x 1-1/4" and must be orientated at a 90 degree angle to the flat portion of the side panel. Both top wing side boards should be at a 90 degree angle from the center section at any point. If wing panel(s) become damaged, repairs must be made before the car can compete in the next event.

In the event that there are new wing/foil components and/or a new wing/foil configuration they must be submitted per the rule book prior to being introduced into competition for approval.

## 8. Wheels/ Wheel Covers

- a) The maximum width for the right rear wheel will be 18 inches. The maximum width for the left rear wheel will be 15 inches.
- b) The maximum wheel diameter will be 15 inches.
- c) Only steel or titanium wheel cover fasteners will be allowed.
- d) Plastic and/or carbon fiber wheels will not be permitted.
- e) Both 5 and 3 mounting point wheel covers will be allowed for competition under the following conditions. Starting with the 2017 racing season wheel covers having a minimum of 5 attachment points may continue to use dzus fasteners. Said dzus fasteners must be made of magnetic steel or titanium only. Wheel covers having only 3 attachment points must be bolted-on at all 3 points utilizing a minimum 5/16 inch, flanged magnetic steel or titanium bolt and an approved fastening (nut assembly) system.
- f) Optional fastening systems that are equal or superior to the above approved system will become available as the season opens and will be looked at for approval before competition.
- g) Approved fastening (nut assembly) systems:
  - Keyser Manufacturing, Part #100 7-101
  - Wehrs Manufacturing Part # WM377A-312 (Aluminum 5/16)
  - Wehrs Manufacturing Part # WM377S-312 (Steel 5/16)
  - Triple X Chassis Part # SC-WH-7810 (for a 1" spring)
  - Triple X Chassis Part # SC-WH-7820 (for a 1-3/8" spring)
- h) Digital air bleeders are allowed, but cannot be operated remotely. Air may not be introduced to the tire from any onboard system.

## 9. Tires

- a) Only the following designated Hoosier Racing Tires will be permitted for competition on all four (4) positions.

The tires listed immediately below are required for competition.

**Front:**

85/8.0-15 D12, D15, D20

**Left Rears:**

D12A (92, 93, 94 & 96)

**Right Rears:**

D15A, Medium

- b) The altering of any tire compound, by any means, will not be permitted. Chemical alteration of the tread carcass and/or tread compound, such as tire 'soaking' and or the introduction of tread 'softener' and/or the physical defacement (removal, altering and/or covering) of tire sidewall markings in any manner will not be permitted. If any competitor is found to have altered their tires any penalty deemed appropriate by Sharon Speedway Officials may be issued.

- i. Any tire may be inspected and/or analyzed for alteration at any time. This will consist of a process as determined by the independent laboratory that performs the analysis. A “Chain of Custody” process will be outlined with the competitor upon inspection of the tires.
  - ii. The analysis process will require shipment of the tire to the selected laboratory. Additional race event(s) may be completed before a determination is made. If a penalty is issued, the event(s) that fell into the analysis time period while the tire(s) were being analyzed will be considered as part of the penalty time period.
- c) Defacing or altering, in any way, the tire manufacturers’ brand name, logo and other tire compound/size information is not allowed.

#### 10. **Shocks**

- a) Only conventional and thru-rod style shock absorbers will be permitted. No additional components may be added to the torsion arm or other suspension components to help control the suspension. Only 1 shock per wheel will be allowed, a maximum of 4 shocks per car. Any new suspension configuration or new style shock configuration must be approved by Sharon Speedway Officials prior to being placed into competition. Performance, safety, cost, along with other variables, will factor into the approval process. It is recommended that the approval process be completed prior to product production.  
Approved thru-rod style shocks: Penske – Part # PS-7700T

#### 11. **Other**

- a) Racing components in aluminum and magnesium should be checked for stress and replaced on a regular basis, based on the manufacturer’s recommendations of the life usage of the part. These parts are, but not limited to, wheel centers, live rear axles, hubs and top wings.
- a) Computer operated and/or controlled parts, such as fuel injection, fuel systems, chassis adjusting systems, etc., will not be permitted at any time during any event. The use of any electronic remote and/or wireless equipment capable of adjusting any equipment and/or function on the race car during any type of racing competition will not be permitted.
- b) The use of electronic logic processors (this includes 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 race car for which the intended use is computer downloading will not be permitted at any time during any event.
- c) Two-way radios, crew-member to driver and/or any other means of electronic communication, other than the one-way radio used to communicate by Track Officials will not be permitted.
- d) All cars shall be equipped and/or be capable of being equipped with a transponder (for lap scoring). Transponders shall be located on the right side behind the front torsion bar tubes on the vertical gusset. The fitted transponder box shall be mounted as close as possible to the ground, but not protrude below the frame rail. It is the responsibility of the competitor to ensure that the transponder is in quality working condition, fully charged and is securely mounted and is in a suitable position with brackets as outlined above. Competitors may be required to leave their driver’s license when they receive their transponder equipment. Should a team’s transponder be lost, damaged, destroyed and/or not returned, the replacement cost of the transponder will be withheld from the team’s purse winnings from that event. It is in everyone’s interest that transponders are suitably and securely attached and are in good working condition.

- e) Competitors will be required to receive and use “one-way radio communication” from Sharon Speedway Officials. The communication from the Race Director will aid in the direction of the race, including, but not limited to, safety and resetting the race lineup prior to any restart.
  
- f) Electronics, Gauges and Dashes
  - i. 2-way communication devices in or attached to the race vehicle or on the driver’s person will not be permitted.
  - ii. Cellular, satellite and/or Wi-Fi devices in or attached to the race vehicle or the driver’s person will not be permitted (including cell phones or smart watches).
  - iii. Antennas will not be permitted in or attached to the race vehicle or carried by the driver.
  - iv. All forms of a vehicle position system (GPS) will not be permitted.
  - v. Only approved lap timing and or lap time recording devices (transponders) will be permitted.
  - vi. Gauges to monitor engine conditions are permitted at the discretion of Sharon Speedway Officials.
  - vii. All electric gauges, whether analog or digital, except tachometers, will only be permitted to have one (1) input from the respective gauge sensor. Outputs from the gauges will not be permitted. Tachometers will be permitted to record engine RPM for recall.
  - viii. Electronic Dash Modules will not be allowed.
  - ix. All additional wiring harnesses related to Electronic Dash Modules or any other type of data acquisition must be completely removed from the race vehicle during an event.

## **Personal Safety Equipment**

### **1.General**

- a) Each Competitor is solely responsible for the effectiveness and proper installation, per the manufacturer’s specifications, of personal safety equipment and determining it to be acceptable for competition at every event. Each Competitor is expected to investigate and educate themselves for continuing improvement regarding their own personal safety equipment.

### **2.Seat Belt/Restraint System**

- a) Each car will be equipped with minimum of an SFI 16.1 or SFI 16.5 approved restraint system, until the date of the belt expiration (two years from the date of manufacture). Seat belt restraint systems shall be installed and used in accordance with manufacturer’s instructions. In any type of manufacturer’s installation, the fasteners must be as supplied by the manufacturer. No belts to seat installation will be allowed. Belts must bolt to or wrap around the chassis. A seven- point harness is recommended.
- b) Seat belt material should not be permitted to come in contact with any sharp or metal edge, including when the material passes through the seat.

### **3. Protective Clothing**

- a) All drivers will be required to wear a fire resistant driving uniform meeting minimum SFI 3.2A/5 specifications and display a valid SFI 3.2A/5 label.
- b) All drivers should wear fire resistant accessories, including, but not limited to: head sock, under garments, shoes and socks. All drivers will be required to wear fire resistant gloves. Shoes and gloves will be required to meet minimum SFI 3.3 specifications and display a valid SFI 3.3 label.

### **4. Seats**

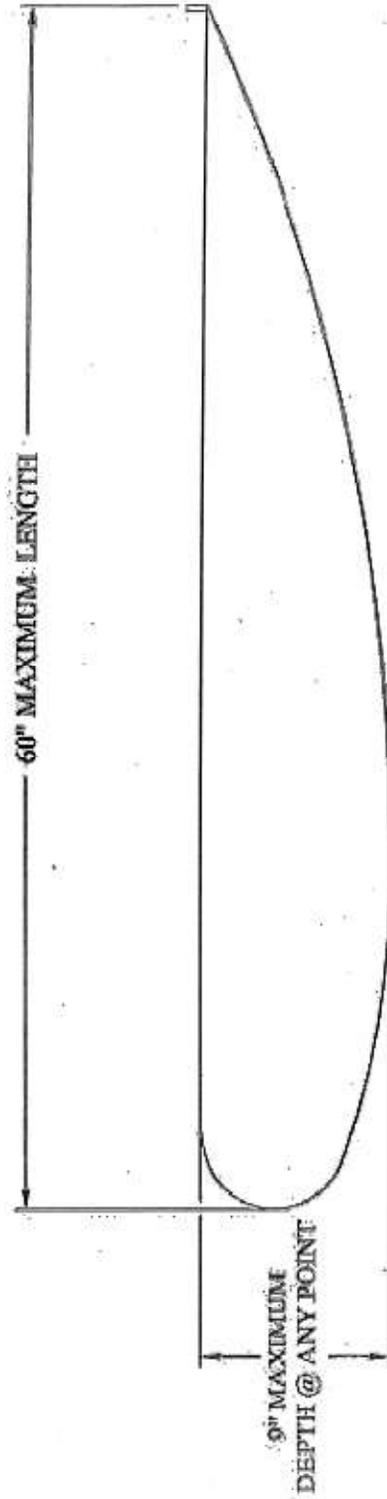
- a) All current aluminum seats must be full containment type construction and must adhere to the general design specifications of SFI 39.2 seat construction standards. Design shall include comprehensive head surround, shoulder and torso support system, energy impact foam, and removable head foam.
- b) Approved carbon fiber seats must have a current valid SFI 39.2 Certification.
- c) Up fitting a current seat with bolt on kits will be permitted with a seat manufacturer produced kit and an acceptable base seat approved by the seat manufacturer. Components must include comprehensive head surround, shoulder and torso support system, and energy impact foam. It must be installed in accordance to seat manufacturer instructions. Combining components may not meet SFI 39.2 Certification.
- d) Seats must be used as supplied and installed following instructions provided by the seat manufacturer.
- e) If the left side head surround is 7 inches or less when measured from the back of the headrest, then a left side head net meeting the SFI 37.1 must be installed with a quick release latch. A minimum left side head surround of 4 inches is required.
- f) The recommended driver's seats may be revised from time-to-time with additional approvals and/or other changes to the approved list.
- g) A right side head restraint net and/or support are required. All head restraint nets should be equipped with quick release mechanisms.
- h) The approved nets may be revised from time-to-time with additional approvals and/or other changes to the approved list.

### **5. Helmets**

- a) All drivers will be required to wear a full-face helmet with a minimum safety rating of FIA 8859-2015, FIA 8860-2018, Snell SA2020, Snell EA2016, or Snell SA2015.
- b) It is strongly recommended that helmets have the Eject™ helmet removal system installed as per the manufacturer's instructions.
- c) At all times during an event including practice, qualifying and competition (excluding starting the car for engine warm-up) it is required that drivers wear an SFI-approved head and neck restraint device/system that is properly mounted and connected per the manufacturer's instructions. The device should meet SFI 38.1 specifications and display a valid SFI 38.1 label.
- d) Arm restraints are recommended and must be connected and used as instructed by the manufacturer.

## **6. Other (HIGHLY RECOMMENDED)**

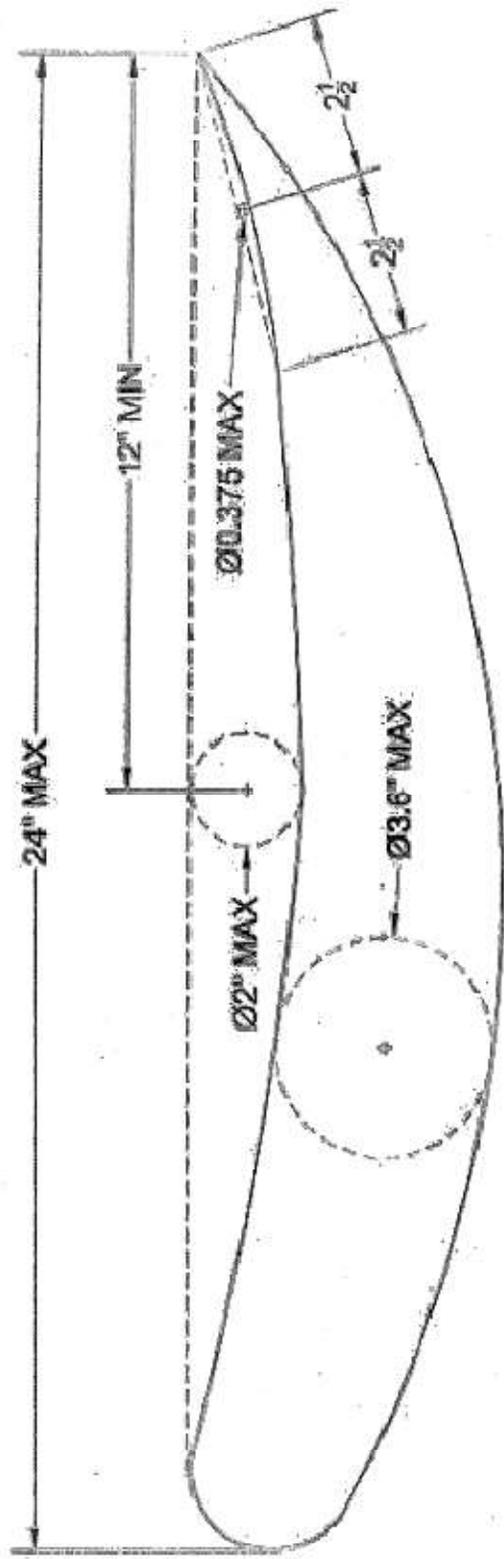
- a) No sharp and/or protruding edges in and around the cockpit.
- b) Windshield screens should be a minimum thickness of 0.090 inch and should be securely fastened to the roll cage.
- c) A clearly marked electrical engine shut off switch within reach of the driver.
- d) A clearly marked fuel shut off valve within reach of the driver.
- e) Only SFI flame retardant seat, roll bar, knee and steering pads and/or padding should be utilized.
- f) A drive line containment system; either a steel torque ball housing made of a minimum .120 wall thickness magnetic steel attached to the firewall with steel and/or titanium bolts and/or a torque ball u-joint containment blanket is highly recommended to shield revolving parts within the cockpit.
- g) All teams should have an easily accessible 2.5 gallon FFF fire extinguisher or its equivalent at the back of the team's transporter.
- h) Fire Suppression systems are highly recommended. If a fire suppression system is installed, it must be installed securely and meet or exceed SFI 17.3 specifications and must meet the following:
  - i. System must include a thermal trigger and a manual trigger, both mounted in the driver's compartment. The thermal trigger must be in the lower area of the drivers compartment forward of the seat near the area of the fuel pump. The manual trigger must be mounted within reach of the driver on the forward left-hand side of the cockpit. A minimum of one nozzle must be mounted in the lower area of the cockpit forward of the seat.
  - ii. A DOT approved cylinder manufactured of aluminum or steel must be securely mounted to the frame per the manufacturer's instructions and the discretion of the Sharon Speedway Officials. The cylinder must have a minimum capacity of 5 lbs.
  - iii. The system must be fully charged and display a legible and valid SFI 17.3 and manufactures label, easily viewable at any time by Sharon Speedway Officials. Cylinder that are beyond useful certification date must be inspected, serviced, and re-labeled by the manufactured.
  - iv. If a nozzle is connected to the cylinder with a line, the line must be steel or steel reinforced and must be triggered at the end of the line.
  - v. Approved Manufactures are:
    - Lifeline Fire & Safety USA, (540-251-2724)
    - Safety Systems Inc. (Firebottle), Ft Myers, FL (239-995-6300)
    - Spa Technique Inc., Indianapolis, IN (317-271-7941)
    - Safecraft Safety Equipment, Martinez, CA (800-400-2259)



MAX. 2" WICKER BILL MAY BE MOUNTED ON REAR  
EDGE OF THE CENTER FOIL

SPRINT CAR  
TOP WING  
CENTER FOIL

DWG #16.8.1.E	
DRAWN BY:	BARRETT WAGONER
CHECKED BY:	CARLTON REIMERS
UPDATED BY:	BARRETT WAGONER



SPRINT CAR FRONT WING SPECIFICATION		PAGE 6
DESIGNED BY	REVISIONS	DATE
CHECKED BY	DATE	
DRAWN BY	DATE	

2" WASHER BELL IS ALLOWED ON FRONT WING WITH FLAT TOP WING OPTION.