The rules and/or regulations set forth herein are designed to provide the orderly conduct of racing events and to establish minimum acceptance requirements for such auto racing events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules.

NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND / OR REGULATIONS.

These rules and regulations are intended as a guide for the conduct of auto racing at South Sound Speedway and are in no way a guarantee against injury, or death to a participant, spectator, officials, or others. The Race Director and/or Technical Director shall be empowered to permit minor deviation from any of the specifications or rules herein, or impose any further restrictions that, in their opinion, do not alter the minimum acceptable requirements.

NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF THESE SPECIFICATIONS OR RULES.

Any interpretation of, or deviation from these specifications or rules is left to the discretion of the Race Director and/or Technical Officials. Their decision will be final.

### 1) General Dimensions and Weight

The following chart contains typical metrics that may be checked by Tech for quick reference. Any metric of the rulebook may be checked by Tech.

Rule	Metric	Notes	Value
4(c)	Wheelbase	As measured from hub-to-hub, wheels straight, on level ground	73" ± 0.5"
11(c)	Track Width	Car must roll through approved hoop, including nerf bars	62.0"
1(a)	Maximum Height	As measured from ground to highest point of roof	52.0"
1(b)	Maximum Roof Height	As measured from bottom of frame rail to highest point of roof	44.0"
1(c)	Maximum Body Width	As measured at widest point of body	38.0"
1(d)	Maximum Roof Slope	As measured from the lowest to highest point of roof	3.5"
3(p)	Maximum Cowl Height	As measured from bottom of frame rail to highest point on cowl	30.0" ± 0.5"
3(j)	Windshield Height	Minimum height of windshield opening	7.0"
3(j)	Side Window Height	Minimum height of side window opening	8.0"
3(j)	Rear Window Height	Minimum height of rear window opening	6.0"
4(a)	Front Suspension Height	Maximum height of front suspension components	25.0"
4(b)	Front/Rear Axle Center	As measured from similar components (except from wheels)	± 0.5"
5(d)	Bumper Height	As measured from ground, Min/Max for front and rear bumpers	4.0" - 14.0"
5(e)	Bumper Vertical Width	Minimum vertical width of front and rear bumpers	6.0"
5(b)	Front Bumper Width	Min/Max Front bumper width	24.0" - 36.0"
5(c)	Rear Bumper Width	Min/Max Rear bumper width	40.0" - 50.0"
15(a)	Pre-race Weight	Weight before qualification with driver	1,200.0 lbs
15(b)	Post-race Weight	Weight after main event without driver	1,000.0 lbs
15(c)	Maximum Left Weight	Maximum left side weight with driver	54%

### 2) Frame/Cage

- a) Roll cage shall be constructed using minimum 1.25" OD  $\times$  .095" or 1.50" OD  $\times$  .065" round steel tubing for the primary members. Secondary members must be minimum of 1.0"  $\times$  .065" steel tubing.
- b) Frame side rails shall be constructed using minimum 1.0" x 2.0" x 0.120" rectangular steel tubing. Round, oval, or square tubing is <u>not approved</u>. Full through-cuts of frame rails must be gusseted or sleeved by the same material thickness as frame rails.
- c) Frame rails shall be no more than 38.0" wide at any point. Front and rear frame rails shall be equidistant from the centerline of the front and rear cross members. The left frame rail may taper from the A-pillar to the B-pillar for a maximum offset of 3.0" from the centerline at the B-pillar, provided overall width does not exceed 38.0" at any point.
- d) Cross members shall be constructed using minimum 0.120" thick wall steel material. A minimum of three (3) cross members shall be installed in the cockpit. Cross members may be round, oval, square, or angle.
- e) Door outer frame shall be constructed using the same material as the secondary members as the roll cage. Doors shall have a minimum of two (2) cross members welded through the midsection using minimum 1.0" x .065" round steel tubing. The driveshaft tunnel support may be included as one (1) bar for this rule and shall be constructed using minimum 1.0" x .065" square or round steel tubing, extending from the A-pillar to the B-pillar.
- f) Doors shall be functional and driver must be able to exit from either door safely. Doors shall have no less than two contact points to cars body that are adequately sized to prevent collapse in case of impact and shall have a locking latch with roll cage protection for the driver.
- g) Rooftop entry shall have minimum of two point locking devices and roll cage that protects the driver with no less than five contact points of adequate size to prevent collapse in case of a rollover.
- h) At minimum, a welded structural support bar constructed of the same material as the primary members as the roll cage shall extend from left to right B-pillars at approximately 23" above the frame rail.
- i) A floor pan constructed using minimum 14-gauge steel that covers the entire cockpit shall be welded in place.
- j) Driveshaft tunnel shall have a minimum of three (3) hoops surrounding the driveshaft constructed using minimum 1.5" x 0.185" flat or 1.0" x .065" square or round steel tubing. Front hoop shall be within 8" of the front u-joint, middle hoop shall be in the knee/thigh area, rear hoop shall be near the rear bulkhead.
- k) All roll cage bracing shall be intact and permanently welded.
- I) Lightening of frame rails is <u>not approved</u>.
- m) Over-slung rear frame rails are <u>not approved</u>.

### 3) Body

- a) Car body may be modeled after 1928-1948 vintage production American coupe, sedan, sedan delivery, wagon, or pickup truck. Open top, T-top, and convertible cars are not approved.
- b) Frames and roll cages, including firewall, doors, and rear section framing, must be fabricated as a single frame unit, already forming the actual contour and dimensions of the finished body.
- c) No part of the roll cage shall be exposed. Trucks may have rear down tubes exposed.
- d) Maximum trunk height for trucks shall be 31" as measured from bottom of frame rail to the top of the trunk bed. Trunk rails shall be no taller than 3.5".
- e) Sheet metal skins must be secured with Dzus type fasteners, or permanently attached by rivets or spot weld approximately 12" between each attachment point located at the perimeter of each panel where it meets the roll cage, firewall, or trunk framing. Skin must not bulge, or gap open between attachment points.
- f) The roof must be of metal construction. The roof shall start at the top of the cowl in the front of the car, incorporate the front window, and extend to the top of the trunk.

- g) Side windows must be cut to simulate the original body and must extend inward to cover the roll cage.
- h) All skins will be of metal construction. Fiberglass, plastic, nylon is <u>not approved</u>. Outer skins shall be a minimum of 26-gauge steel or .032" aluminum.
- i) Complete firewalls shall contain the cockpit. Any gap or hole exceeding 3/8" must be covered with sheet metal, a plug, or permanent type sealant.
- j) Minimum opening for front window is 7" height. Minimum opening for side window is 8". Minimum opening for rear window is 6" height. Non-metallic sun visors are approved.
- k) Fenders or structure to simulate fenders of any type are <u>not approved</u>.
- Each car will have grill shell and simulated original grill matching its body style or a simulated radiator and vertical loop mounting bar mounted in near stock location and a hood to match radiator size and body style as not to distract from overall appearance. No grill is required if simulated radiator is used.
- m) Functional radiator may be mounted in the trunk area; maximum opening in truck for radiator must be 16" wide x 12" tall and must be screened or louvered.
- n) Engine compartment must conform to scale of body length and must match contour of body where it meets the right and left side of body panels. Firewall or cowling outer skin must be stock appearance in size and shape.
- o) Hood may be notched, louvered, bent, or cut in any manner, but may not to distract from the stock appearance or detract from neat appearance.
- p) Hood scoop will be measured from a straight line projected out from the rear most portion of the hood. The maximum cowl height is  $30'' \pm 0.5''$  measured from the bottom of the frame rail to the top of the cowl.
- q) Car must have all body panels in place and secure at the beginning of any race event.
- r) Airfoils and wings are not approved.

#### 4) Engine Location

- a) Engine shall be front mounted in the stock location for the model of car.
- b) Engine shall not extend more than 12.0" from either side of cross member centerline.
- c) The rear of the cylinder head shall not extend more than 17.0" behind the center of the front hubs. No other part of the engine or transmission shall extend more than 21.0" behind the center of the front hubs.

#### 5) Suspension

- a) Front suspension shall not extend above 25.0" as measured from the ground. Front suspension shall not extend behind the firewall.
- b) The front and rear axles shall be centered as measured from similar components (except wheels) with a tolerance of  $\pm$  0.5".
- c) Wheelbase, as measured from hub-to-hub with wheels straight on level ground, shall be 73.0" ± 0.5".
- d) Straight front axles are <u>not approved</u>.
- e) Leaf springs are <u>not approved</u>. Torsion bars as primary suspension are <u>not approved</u>.
- f) 3-Link rear suspension only. Birdcage, Z-link, Jacob's, or Watts link are not approved.
- g) Steering components shall have safety fasteners, such as cotter pin or self-locking. It is recommended that all suspension components have safety fasteners.
- h) Trailing arms located outside of the frame rails shall not extend forward of the B-pillar.
- i) Weight jacks are approved; however they <u>cannot</u> be adjustable from the cockpit.
- j) Sway bars are approved; however they <u>cannot</u> be adjustable from the cockpit.

### 6) Nerf Bars/Bumpers

- a) Bumpers and nerf bars shall be constructed using 1.0" OD x .065" minimum/.095" maximum round steel tubing.
- b) Front bumper shall be between 24.0" to 36.0" in overall width and shall not extend more than 6.0" forward of front tires.
- c) Rear bumper shall be between 40.0" to 50.0" in overall width and shall not extend more than 6.0" behind the rear body panel, or 8.0" if the car has a simulated fuel tank. Rear bumper shall not extend more than 28" behind the center of the rear axle.
- d) Front and rear bumpers shall be a between 4.0" to 14.0" above the ground.
- e) Front and rear bumpers shall be a minimum of 6.0" vertically wide.
- f) Nerf bars shall have a minimum of three (3) mounting points. Rear lower mount shall be no more than 18.0" in front of the rear axle. Rear upper mount shall be no more than 18.0" above the lower mount. An additional brace from the frame to the lower bar is strongly recommended.
- g) Lower bar shall be parallel to frame rail for its majority.
- h) Lower bar shall not extend more than 1.0" beyond rear tires.
- i) Nerf bars shall not interfere with opening of the doors.
- j) Bumpers and nerf bars shall not have sharp points or edges.

#### 7) Decals

- a) All cars shall have numbers in five (5) locations, as large as possible:
  - i) Left/Right Doors: minimum 12" tall, 2/3 height (except #1).
  - ii) Roof: As large as possible, oriented to right side of car.
  - iii) Rear: minimum 6" tall, placed high enough to be viewed by trailing drivers.
  - iv) Front: minimum 2" tall, placed on the upper corner of the windshield frame.
  - v) Roman numerals and gold leak are <u>not approved</u>.

### 8) Engines

- a) Motorcycle engines only. Snowmobile or other special application engines <u>not approved</u>. Maximum allowable displacement is 1,250cc. Must be four cycle. Must be four cylinders. Must be naturally aspirated.
- b) Hayabusa motors are not approved.
- c) Engine shall be a regular production, with minimum 500 units per year, for two consecutive full years. (i.e. 2023 production and earlier for 2025 season.)
- d) Clutch and transmission shall be intact. All gears shall be installed and operational.
- e) Engine shall be cooled only by original intent. Fans and oil coolers are approved.
- f) Aftermarket fuel injection is <u>not approved</u>. Fuel injection may not be modified in any way from its OEM specifications. Engines with secondary fuel rails that are OEM mounted on the air cleaner may use aftermarket fuel rails.
- g) Aftermarket air filters and velocity stacks are approved.
- h) Aftermarket ignition coils are approved; however ignition system shall be of OEM intent.
- i) Camshafts shall be OEM lift and duration. Adjustable cam sprockets are approved.
- j) Exhaust and headers shall be installed so as not to detract from the stock appearing hood, except for side panels below engine cowling.
- k) Mufflers shall be installed and abate sound to less than 90 dBa at 100 feet.
- 1) Auxiliary starters are not approved.
- m) Flashing of stock ECU is approved.
- n) Aftermarket ECUs are approved; however traction control/anti-slippage devices are not approved.

#### 9) Fuel

- a) Commercially available fuel less than 95 octane is approved. E85 is approved. Avgas is not approved.
- b) Nitrous oxide, nitro, propylene oxide, or any other oxygenating additives are not approved.
- c) Fuel cell shall not exceed five (5) gallons. Fuel cell shall be vented to not leak in any position.
- d) Fuel cell shall be mounted in the trunk, between the frame rails, with metal straps.
- e) Fuel cell shall be shielded from cockpit by a complete firewall.

#### 10) Drivetrain

- a) A steel driveshaft, painted white, shall be used to drive an automotive-style rear axle.
- b) Quick-change rear ends with individual axles and bearing type hubs are approved.
- c) Quick-change gear sets 1 6 are approved.

#### 11) Wheels

- a) Only steel 13" steel rims are approved. Rims shall not exceed 8" wide.
- b) Bead lock rims are approved only on the right rear wheel.
- c) Rim offset is not limited; however car must roll through a 62" hoop.
- d) The following tires are approved:
  - i) American Racer NeDwarf
  - ii) Hoosier HTWD STARS Medium
  - iii) Hoosier Chain link
- e) The following tire sizes are approved:
  - i) 22.5/7.0-13, 23/7.0-13
  - ii) P205-60D13, P215-60D13, P235-60D13
- f) Tires shall measure 45 durometer or harder.
- g) Tires may be grooved or siped in any manner.
- h) Tires shall not show any cords prior to entering the track for any event.
- i) Alteration of the numbers or letters on the tires is not approved and shall be grounds for disqualification.
- Softening compounds or chemical soaking is <u>not approved</u>.

#### 12) Brakes

- a) All cars shall have a minimum of three (3) wheels controlled by brakes; however four (4) brakes are recommended. Only one (1) brake per wheel is approved.
- b) Electric brake shut-off is approved from the cockpit. Brake shut-off devices are <u>only approved</u> to control the front right wheel.
- c) Mechanical bias adjustment is approved from the cockpit. Other bias devices are <u>not approved</u>.

#### 13) Shocks

- a) Steel or aluminum body shocks are approved. Externally adjustable or reservoir shocks are not approved.
- b) Coil-overs can be mounted in any orientation. Only one shock and spring approved for each corner.

#### 14) Electrical

a) All batteries shall be rear mounted in the trunk area, except for Lithium-Ion batteries under one (1) pound. Lithium-Ion batteries weighing under one (1) pound may be mounted in the cowl area. Batteries shall be shielded from the driver and securely mounted with a top restraint made of metal that also holds battery caps.

- b) Cars shall have a master electrical switch clearly located and marked. Switch must be accessible to track crew.
- c) Cars shall have an intact and operational charging system.
- d) Electronic tachometers and electronic power steering are approved. Fluid-driven power steering is <u>not approved</u>.
- e) No electronic traction devices. Any electronic devices <u>shall not</u> be adjustable by the driver during a race. Any such devices shall be mounted outside the cockpit. Display or transmission of any gathered or processed data to the driver or any remote location is <u>not approved</u>. Data recorders may be used to record functions of a vehicle, so long as they do not activate any function of the vehicle. Data recorders may not be activated by the throttle, clutch, brake, mechanical mechanisms, radio transmissions, sensing of wheel speed, inertia, laser device, or transmission of track position or location, must be activated by separate switch.

### 15) Weight

- a) Car shall weigh a minimum of 1,200 pounds with the driver before any race event.
- b) Car shall weigh a minimum of 1,000 pounds without the driver after the main event.
- c) Maximum 54% left side weight with driver is permitted.
- d) Ballast <u>shall not</u> be mounted or poured outside of body or frame. All ballast shall be securely bolted or welded inside of body or frame rail and extend no lower than frame rail. Ballast shall be painted white and have the car number clearly marked.

#### 16) Safety

- a) An approved 5-point racing harness equipped with a quick release buckle **is required**. All safety restraint harnesses will be installed in accordance with manufacturer's guidelines.
  - i) Ends of harness must be attached to the frame of the car with not less than 3/8" Grade 8 bolts and safety nuts.
  - ii) Lower belts will be installed at a 45-degree angle to the driver's hips.
  - iii) Shoulder harness shall mount behind and below the top of the driver's shoulder and will go over both shoulders.
  - iv) Belts shall be replaced or recertified every 2 years.
- b) Approved racing type helmet with current Snell rating is required. (SA-2015).
- c) An SFI approved fire retardant race suit, gloves, and shoes **are required** to be worn by all drivers. Single layer fire suit is a **minimum**.
- d) An approved racing neck device **is required** to be worn by all drivers. A head restraint device is **strongly recommended**.
- e) At minimum, a two (2) pound fire extinguisher **is required** to be mounted in the cockpit to be accessible to the driver. A five (5) pound on-board Halon fire system with at least two nozzles is **strongly recommended**. Each pit shall be equipped with a five (5) pound fire extinguisher.
- f) Catch cans for oil and water are required.
- g) Radiators and oil coolers shall not be mounted in the cockpit or on the rear deck lid.
- h) Door latches shall be positive locking, so as not to open from vibration or upset, and must not jam if door is damaged.
- i) Hoods and trunk lids shall be securely attached by spring latch or Dzus butterfly attachments to allow track crew quick access. Sheetmetal screws are <u>not approved</u> for any body panels.
- j) Car shall have a production made, quick-release steering wheel.
- k) Suspension mounts shall be shrouded if contained in the cockpit.

- Sharp edges, free standing edges, or protruding objects which could endanger driver shall be folded, molded, filed smooth, or otherwise protected inside the cockpit.
- m) Glass is <u>not approved</u> for any component.
- n) Windshield shall be protected by ½" mesh or bars that prevent at 2" block from entering the cockpit. Shatterproof Lexan is approved on asphalt only.
- o) Raceceivers **are required** unless the track does not have a transmitting system. Other listening or transmitting devices are <u>not approved</u> and shall be cause for disqualification.
- p) Rearview mirrors of any type are not approved.

### 17) Rules of Conduct

- a) Any driver or crew who shows evidence of having partaken of alcoholic beverages or drugs will be required to leave the premises immediately and may be subject to suspension.
- b) The driver shall be responsible for the actions of his/her entire pit crew that are with the car. The driver shall be the sole spokesperson for the car and pit crew in all matters pertaining to the race, and only the driver shall take part in any arbitration with the race officials in charge.
- c) Any driver who deliberately rams another car on the track during a yellow or red flag shall be black flagged from that race. Any driver who rams another car in or around the pits shall be disqualified and suspended.
- d) All drivers or their representatives will be required at the pit meetings.
- e) Fighting, physically or verbally, or abusive gestures in the pits or on the race premises is <u>not allowed</u> at any time. Any member who fights in the pits, track, or on the race premises shall be disqualified.
- f) Any driver who threatens or assaults, either verbally or physically, any race official or persons serving under their direction shall be disqualified and suspended.
- g) Race officials or the host track may inspect any car and/or driver equipment for compliance of any rule at any time before, during, or after the race event. Upon tech inspection, only driver and car owner will be allowed in tech area. Cars or drivers deemed to be illegal or unsafe shall not be allowed to compete in the event and the driver may be subject to discipline for non-compliance.

### 18) Race Procedures and Points

#### a) Procedures

- i) The initial start will be double file, restarts will be California-style. On the initial start and all restarts no passing to the inside before the start/finish line. In the event of a caution on the first lap of the race, the field will be restarted as per the original line up except for the car(s) causing the caution which will restart at the rear of the field.
- ii) Any car causing a yellow flag will restart at the rear.
- iii) Bumpers and nerf bars are required to be intact and attached before any race event. If either a car's bumpers or nerf bars become detached or unsafely damaged during a race event, the car shall receive a mechanical black flag. Upon appropriately resolving the issue, the car may return to the track under caution.
- iv) Under caution, any car may exercise a two-lap hot pit. Any legal change, adjustment, or repair may be made. If the car cannot return by the end of two laps, the car must wait until the next caution to return to the track.
- v) Under stops, cars may exit the track for repairs, if race officials give them permission.
- vi) Any car leaving the track under caution or stop will restart at the rear.
- vii) When entering the track, stay above the white line and near the wall.
- viii) When exiting the track, stay near the wall and wave a hand out the right window.

- ix) Any car shown the black or black/yellow will report to the pits to be assessed by race officials; this does not mean immediate disqualification. A race official will inform you of the reason and if you may return to the track.
- x) Main will not end under caution. The race will end with a green, white, checkered.

#### b) Points -

- i) Qualification
  - 1. Drivers will be awarded 20 points starting with first place, decreasing by 2 points through the qualifying field. No driver will be awarded less than 2 points if they qualified.
- ii) Heats
  - 1. Drivers will be awarded 50 points starting with first place, decreasing by 5 points through the heat field. No driver will be awarded less than 5 points if they started the heat.
  - 2. Drivers will be awarded 5 points for each car passed during the heat, based upon starting to finishing position.
- iii) Mains
  - 1. Drivers will be awarded 100 points starting with first place, decreasing by 10 points through the main field. No driver will receive less than 10 points if they started the main.
  - 2. No passing points will be awarded for mains.
- iv) Points are accrued by dues-paid members only to be counted towards season end championship.