2023 Oxford Plains Speedway Limited Sportsman Rules

Chassis

- 1. **Chassis:** Any American branded, four (4) passengers, V-8 front engine, rear wheel drive, full frame or uni-body car originally mass produced. Engine and body must be of the same manufacturer as the chassis used.
 - a. Weight: 2,900 lbs, race ready with driver, with a maximum left side percentage of 56%.
 - b. Ballast Weight: Must be in between tires and painted white with car.
 - c. **Bumpers:** Bumpers: Stock front and rear bumpers may be used. Approved tube type front and rear bumpers may be used.
 - d. **Design:** Minimum four (4) point roll cage is required. In addition to the required four (4) point roll cage, the structure may extend to the front as far as the radiator support and to the rear to sufficiently protect the fuel cell. Left side must have a minimum of four (4) horizontal bars with spacers. Right side must have a minimum of three (3) horizontal bars with spacers or an "X" and two (2) horizontal bars.
 - e. **Door Plate:** A minimum of sixteen (16) gauge steel plate of sufficient length and width as to protect the driver must be welded to the roll cage.
 - f. **Fire Walls:** The driver's compartment tub (to the right and to the rear) to be constructed from a minimum of 22 gauge steel. The driver's foot box and firewall to be constructed of a minimum of 22 gauge steel.
 - g. **Frame:** Stock frame rails may be replaced with 2" wide by 3" high tubing from the rearward-most point of the stock front clip. Stock dimensions for the year, make, and model of the car must be retained. Reinforcing with tubing and ¼" plate is allowed to the stock frame.
 - h. **Front Clip:** No tube type front clips allowed. Factory production full 1968 or newer perimeter American passenger car front frame clip only. No modifications to clip permitted except for upper control arm mounting, radiator clearance and mounting and trimming of forward front cross member for center link clearance.
 - i. **Horns:** May be fabricated using 2X3" tube. Steering box and idler arm MUST be in Factory location
- 2. **Crossmember:** NO cutting, raising, shortening, of factory front cross member.
 - i. **Upper Control Arm Mounts:** Mounting point may be relocated.
 - ii. Spring Pocket: May be opened for access.
 - iii. Cross Member: No alterations of OEM engine cross member.
 - iv. **Suspension Points:** No alterations to OEM mounting points.
- 3. **Fuel Cell:** must be a steel container with a check/rollover valve in the vent line; secured with two (2) straps front to rear and two (2) straps left to right. The minimum dimension of strap material is eighth (1/8) inch x one and one half (1½) inch. Fuel cell may not be offset. Cell must be a minimum of 8" above the track and 11" from rearend tube to front of cell
- 4. **Height:** Minimum frame height from ground is 4".

- a. **Interior:** Interior area of car must be completely enclosed in respect to the engine compartment, track surface, tires and rear (fuel cell) compartment. This may be constructed of aluminum with a minimum of .040 thicknesses.
- b. **Pipe:** Minimum roll cage tubing specification one and three quarter (1¾) inch x point zero nine five (.095) inch DOM or seamless tubing.
- c. **Rear Clip:** Rear frame may be altered to accept leaf or coil springs. Underslung chassis must add 2X3 up and over rear axle or mount a 10lbs weight at or near the top rear shock mount on both sides.
- d. **Seat:** Aluminum racing seat with right and left head supports. Seat must be mounted and attached securely to the cage. A support brace must be installed at the rear of the seat. Head should be below halo and clear of all roll bars.
- e. **Seat Belts:** Mounted with three eighths (3/8) inch bolts minimum Grade 8 washers and locking nuts. These must be attached at two (2) separate points on the frame, equal distance from the seat back and not less than twelve (12) inches apart. (See manufacturer instructions for details).
- f. **Steering Column**: A fabricated steering column must have a minimum of two (2) U-joints positioned so as not to allow the steering wheel to be pushed rearward in the event of a collision. Must have steering column stop. All steering wheels must have a center pad.
- g. **Welds:** All welds are to be of high quality and must completely surround the joint. Absolutely no butt welds or sharp edges anywhere.
- h. Battery: 12 volt Battery mounted and covered in a secure fashion mandatory
- 5. **Wheelbase:** The minimum wheelbase allowed is 108", without tolerance. Absolutely no modifications except as specified in this rule book

Motors and Running gear

Crate Option 1)

GM crate engine p/n 88958602 is allowed in full untouched factory form from

- Carburetor: Carburetor is limited to one STOCK Holly 4776 or one Holly HP80540-1 600 C.F.M. four barrel. No alterations are allowed except for the removal of the choke plate and tower. Epoxies or other devices to alter the air flow in the manifold are not allowed. Two .070 thick gaskets are allowed and a maximum 1" spacer is allowed and should have ¼" threaded vacuum port to accommodate tech testing. Any reworking of this carburetor other than as noted above will result in disqualification.
- **Timing Chain:** The timing chain set may be replaced with a double-roller set.
- Oil Pan: A 7" oil pan is allowed
- Height: 12" crank height while at a 4" frame height must be maintained

Built Motor Option 2)

American made engines only. No V-6 engines. No aluminum or other soft metal blocks or heads allowed. Crankshafts must be stock type, dimension and weight. No stroking or de-stroking permitted. Normal engine balancing will be the only modification to this piece allowed. Blocks must

be stock production with standard external measurements in all aspects. Blocks can be dressed. The maximum allowable compression ratio will be 11.0. The maximum cubic inches listed below will be allowed for the following engine makes:

- 1. Chrysler (Dodge & Plymouth) 360 ci + .040
- 2. Ford 351 ci + .040
- 3. **General Motors 350 ci + .040**
- 4. **Balancing:** Normal engine balancing for pistons and connecting rods will be defined as follows: The piston or rod in a set of eight having the least stock weight will be used, and the remaining pistons or rods will be matched to it.
- 5. **Heads**: All cylinder heads must be cast iron, original equipment manufacturer production. The only exceptions to this are noted below with a (++) symbol. Specifications as follows:
 - General Motors maximum intake diameter 1.94"; maximum exhaust diameter 1.50" Chrysler 340 ci motors maximum intake 2.02"; maximum exhaust diameter 1.60" Chrysler 360 ci motors maximum intake diameter 1.88"; maximum exhaust diameter 1.60" Ford Winsor motors maximum intake diameter 1.84"; maximum exhaust 1.54"
 - ONLY THE HEADS LISTED BELOW ARE ALLOWED:
 - General Motors casting #'s 041, 186, 291, 370, 441, 461, 462, & 492. (The 492 casting must be G.M. part
 - #3958603 with 1.94" intake & 1.50" exhaust.)
 - General Motors replacement casting #062 Mexican model used with manifold #2116.
 - World Products Inc. S/R 043600-1 and 043610-1.
 - Ford Winsor motors may use Ford Motorsports casting #GT40-M6049-L302
 - All General Motors heads must use 1.250" diameter valve springs.
 - Any cylinder head not listed must be approved by the management of Oxford Plains Speedway before being used.
 - All cylinder heads must have stock dimension valves and valve springs for the casting used. No
 titanium or neckdown or pro-flow type valves allowed. Valve stem length, diameter and keeper
 groove locations must be stock. Stock type retainers must be used. No angle milling, port
 matching, or polishing allowed. No gear drive assembly allowed. %" screw-in studs, pinned studs,
 polylock nuts, and push-rod guide plates are allowed.
- 6. Lifters: All engines must use hydraulic lifters no mushroom types or roller liters allowed
- 7. **Camshaft**: Hydraulic lifter camshaft with a maximum lift of .450. The lift will be measured at the valve stem. No gear drive assemblies allowed
- 8. **Rocker Arms**: Roller rockers are permitted but must maintain a max. .450 cam lift. Maximum 1:5 rocker arm ratio is allowed.
- 9. **Pistons**: Any "Flat Top" piston with a minimum of two valve reliefs will be allowed. Floating of the wrist pin is optional. Normal engine balancing only. No part of piston shall extend past the top of the block or deck.
- 10. **RODS**: No aluminum or custom steel rods allowed. No grinding, lightening, or polishing of any kind is allowed. The installation of aftermarket rod bolts and nuts is allowed. 6" rods are not allowed.
- 11. **Carburetors:** Carburetors are limited to one stock 4412 Holly 500 C.F.M. two barrel. No alterations are allowed except the removal of the choke plate and tower. Epoxies or other devices to alter the flow in the manifold are not allowed. Spacers or high rise manifolds are not allowed. Adapters not exceeding 1 ½" in height are allowed. Adaptors may not be grooved, tapered, or reworked in any manner. Gaskets shall not exceed ½" thickness.

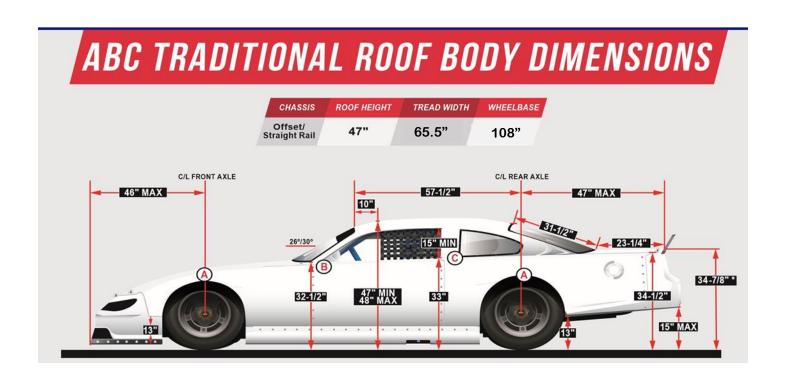
- 12. **Intake Manifolds:** Intake manifolds must be stock Edelbrock 2101 Performer. They may not be modified in any manner.
- 13. **Ignition:** A stock ignition system is allowed. No external amplifier-type systems are allowed. ignitionand rev-limited devices are not allowed.
- 14. **Motor Mounts and Setback**: The original motor mounts may be replaced by steel mounts. They must bolt to the original location, both frame & motor. THERE WILL BE NO MOTOR SET-BACK ALLOWED. Engine plates are not allowed.
- 15. **Exhaust:** Stock manifold with cherry bomb mufflers (are) allowed. Steel headers are allowed. Headers must be Limited Sportsman approved with 1 5/8" tubes and a maximum 3" collector. Crossover headers are not allowed. The only approved muffler is the DynoMax #24219. All tail pipes must exit under the car past the driver
- 16. **Bellhousing & Clutch**: Scatter shields are recommended, but not mandatory. Stock Bellhousing with a hydraulic release bearing allowed. Flywheels and clutches must be stock production OEM. This includes weight, size, and physical appearance. Aftermarket high-performance types are not allowed. All cars must have a 1" hole in the bottom of the bell housing to allow for clutch inspection. No reverse mount bell housings and starter kits allowed

Driveline

- 1. **Rearends:** Rear-ends must be either locked or open single-track. Stock housing for make and model any gear ratio may be used. The rear axles may be replaced on both sides of the car with an aftermarket axle using a larger bearing. The replacement must fit in the original rear-end housing. No ratcheting or torque-sensing devices or clutch packs allowed.
- 2. Ford 9" Option: A Stock steel Nine inch rear may be used with an added 50lbs
 - a. Any gear ratio
 - b. No machining or lightening of ring gear or pinion
 - c. Mini spool or open differential
 - d. No Camber or toe built in
 - e. Steel drive plate and axel caps
 - f. Minimum Axel diameter 1.200 and weigh 7lbs
- 3. **Driveshaft:** Steel driveshaft (singular) only. Driveshaft must have a safety loop of 1/8 thick buy 2" wide
- 4. **Transmissions**: Stock 3 or 4 speed transmissions allowed Transmissions must contain all of the original gears for the unit used. No straight cut gears

No Five star Gen 6 or Revolution body components. Any Combination of ABC, steel or aluminum duplicates body parts can be used but must match all ABC dimensions

- a Roof Height: Roof min height is 47' measured 10' from the center of the windshield
- b **Height:** No part of the body (including side skirts and nose piece) may be closer than three (3) inches to the ground.
- c **Spoiler:** Spoiler must be mounted on the bumper cover in the center left to right with a (maximum) dimension of 6 1/2" tall and 60" long (wide) made of clear Lexan no side bracing or boxing of any kind. Maximum height is 41" from the ground
- d **Air flow devices:** No air flow devices added to the A or B pillar or vent windows allowed Rear quarter windows are optional and must be clear lexan
- e Hood: Maximum hood cowl opening is 2" No scoop or openings in the hood for air cleaner
- f **Bumper Covers**: No modifications allowed to front or rear bumper covers
- g Deck Lid: The rear deck lid must be hinged, pinned for viewing and safety access. No solid riveting



- 1. **Rub Rails:** Lexan rub rails are permitted but must remain between wheels
- 2. **Under panning**: No panning is allowed front or the rear of the car. Radiator duct work can be no wider then radiator.
- 3. **Windows:** A full windshield is required. The windshield must be a minimum of 1/8" thick polycarbonate material such as Lexan. A minimum of two windshield braces are required. Rear windows and quarter windows are optional, and must be made of the same material as the windshield. Window installations are subject to the Tech Inspector's approval.

Suspension

- 1. Adjusters: No driver-controlled chassis adjustments.
- 2. **Control arms:** Stock, unaltered lower "A" frames. Cannot be moved. GM intermediate metric chassis may use any stamped steel OEM type lower control arm Upper: Tube type upper "A" frame allowed and can be moved and fabricated. Control arm bushings are limited to stock, steel, or neoprene type only. No spherical bearing or heim end bushing type permitted
- 3. **Ball Joints:** Screw in ball joints allowed or mono-balls.
- 4. **Drag Link:** Aftermarket adjustable center (drag link) allowed.
- 5. **Materials:** No aluminum, titanium, or carbon fiber parts are permitted. Exception: Tie rod adjuster sleeves.
- 6. **Panhard:** Coil spring rear suspension may be converted to a three-point system with a Panhard bar, No quick Adjusters.
- 7. **Steering:** Steering box must be OEM or utilize 700 series steering box only. No aftermarket design steering box. Must mount with original bolt pattern.
- 8. Pitman & Idler Arm: OEM or Howe replacements allowed.
- 9. Shocks:
 - a. **Option 1)** QA1 Series 53 or 51 or Series 23 standard-valve shocks are permitted and will add 25lbs for 2023 and 50lbs in 2024 Special order or custom shocks are not allowed. 53 or 51 Series shock may only be adjustable by the arrangement of QA1

OEM shim stacks. All shocks must meet QA1 manufacturer specifications. The following part numbers are considered QA1 standard valved shocks:

			Rear			Rear
Front STD	Front Short	Rear Monte	Camaro	Front STD	Rear Monte	Camaro
53943-5	53933-5	53683	53583-5	23943-5M	236812-2M	23583-5M
53943-6	53933-6	53683-5	53584	23943-6M	23683-5M	23584M
53943-8	53933-8	53684	53585	23943-8M	23683M	23585M
53944	53935	53685		23943M	23684M	
53945	53935-3	53685-3		23944M	23685-3M	
53945-3	53937	53686-3		23945-3M	23685M	
53946-4	53937-3	53687-2		23945M	23686-2M	
53947	53938	53688-2		23946-3M	23687-2M	
53947-3				23947-3M	23688-2M	
53948				23947M		
				23948M		

No part of any shock may be changed or altered in any way, including shock pistons, base valves, shafts, etc.

Option 2) QA1 63 series:

Fronts Only	Rears Only
6375-400	6394
6375-500	6394-6
6375-650	6395-3
6375-750	
6375-850	

A sealed non rebuildable shock and will be allowed as a option. Must be used out of the box with **ZERO TOLERENCE** for tampering. **NO bending tweaking or modify of any kind if found before or after the race automatic DISQULIFICATION from event and possible fine.**

**With supply assurances from QA1, this is the shock that will become the spec shock of this division as we fade out other part numbers.

There will be a \$250 claim rule for this shock. All claims must be from competitors racing that night and approved by OPS Tech staff.

- 10. **Spindles:** OEM cast spindles OR aftermarket spindles permitted
- 11. Hubs: Stock OEM type hubs or a Steel aftermarket safety hub may be used on the right front.
- 12. **Springs:** Conventional coil spring with a minimum five (5) inch inside diameter, no coil-over suspension allowed. All springs must be magnetic steel. Minimum front spring rate five hundred (500) pounds / inch.
- 13. Front: No fiberglass graphite or exotic springs permitted.
- 14. **Rear:** Leaf spring, no fiber glass lift bars. No torsion bars in rear. Adjustable leaf spring shackles, sliders and lowering blocks allowed.
- 15. **Weight Jacks:** Must be centered with coil springs. No hydraulic, ratchet, or electric weight jacks anywhere in or on car. "No Bird Cages".
- 16. **Sway Bars:** OEM or Howe type one piece front sway bar allowed, maximum (1 3/8"). Must mount in original location.
- 17. **Third Link:** The rear center link may be a solid link No spring loader third or rubber links permitted.
- 18. **Trailing Arms:** No spring loaded or rubber biscuits. Must be equal length. No center pull trailing arms
- 19. **Tread width:** The maximum tread width allowed will be 65 ½". The overall width from outside to outside of wheel rim bead flanges shall not exceed 73 1/2" inches, as measured with the OPS tread width gauge. Over 65 ½" will add 50 lbs up to 66 ½". Anything over 66 ½' will not be allowed.

Tires and Wheels

- 1. **Tires:** Only Hoosier 500 Left side and 700 Series 9' slick tires purchased at OPS will be approved for use in 2023. 700 can be used on right or left side of car. 500 is for stagger and can ONLY be used on the left side of the car.
- 2. **Bleeders:** Absolutely no tire bleeding devices allowed
- 3. **Wheels:** Steel 8" or smaller racing wheels will be allowed. Minimum 5/8" wheel studs are required on the right side of the car.
- 4. **Brakes**: All cars must have four working brakes on the car. Disc brakes are allowed. Drilling of rotors is not allowed. Clutch cylinders are allowed. Brake bias controls are not allowed. OEM single piston calipers and rear rotors to maintain a min thickness of .810 and be straight veined. No scalped rotors allowed
- 5. **Transponders:** Transponders are mandatory and must be mounted 11' from the back of the rearend tube (see OPS website for description)

Speedway officials may assess weight penalties for race equipment deemed not in compliance with the rules. Race equipment will not be considered as approved by reason of having passed through inspection at any time – or any number of times – unobserved or undetected. Any race equipment which does not conform to specifications contained in the rules listings, or that is not otherwise approved by the Speedway, may not be used in competition.