

# Birch Run Speedway Limited Late Model Rules 2024

**Body:** Minimum of 101-inch wheelbase. The body must be made of sheet steel, aluminum, or fiberglass, made for racing aftermarket components are required. Carbon-fiber roof air box only allowed. The driver's compartment is recommended to be made of metal; aluminum is acceptable. Fastened securely in place and separate from the engine compartment and fuel cell area. All cars must be completely and neatly painted. The full front windshield and rear window made of Lexan only. Plexi-glass is not allowed. Radios or Mirrors are **not** allowed.

## Body Design Requirements:

- Maximum height of back of rear quarter panel to ground: 37 inches.
- Center of front hub to front of splitter nose piece: maximum of 45 inches.
- Minimum ground clearance at the nose of the car: 3 inches.
- Minimum roof height to ground: 45 inches.
- Center of rear hub to back of rear quarter panel: 46 inches max.
- Rear quarter panel ground clearance behind tires: 6 inches minimum.
- Width of nose: 82" maximum at wheel flare and no further back than centerline of the spindle. **Air MUST travel through nose.** Measurements for opening of nose 24" wide x 4 ½" tall or 18" wide x 6" tall. Aftermarket nose pieces only.
- Minimum height of side widow openings: 14 inches.
- Minimum width of side window openings: 22 inches.
- Minimum roof width: 45 inches.
- Maximum body width at rear tires: 78 inches.
- Maximum rear deck spoiler width: 72 inches.
- Spoiler 8in Max- must be flat. No side verticals or forward-facing lips- on spoiler or rear deck. Or any other Aero devises.
- Maximum width of the flat surface on the top of the body between the front windshield and rear post: 4 inches.
- The top surface of the deck lid must not be dished and cannot be lower than the top of the rear quarter panels.

- The width of the fenders must gradually taper from their maximum width at the wheels to the rear of the car. Straight panels or abrupt kick in just before the rear of the car are not allowed.
- **82-inch max track width. front and rear.** *This will be measured with toe plates at bulge at the bottom of the tire.*
- Rear filler panels are mandatory and must be made of solid material. Minimum height of 14 inches x the width of the body. The filler panel will be measured vertically, perpendicular to the ground, directly to the deck lid under the base of the rear spoiler.

**Battery:** Only one battery is allowed. The battery must be securely mounted outside of the driver's compartment. A battery disconnect is mandatory and must be in easy reach of the driver and track officials.

**Brakes:** Four-wheel hydraulic brakes are mandatory and must be in good working condition. Aftermarket components including proportioning valves are allowed. Brake floaters are not allowed.

#### **Engine:**

- Cast iron engine blocks only.
- 23-degree head only.
- No cubic inch limit.
- Dry sumps and/or 18-degree heads are allowed per weight addition. Cars using Dry Sump Engines and/or 18-degree heads must add 100 lbs. anywhere on the car and 50 lbs. on each front frame rail in the designated area to equal 2900 pounds total.
- Cast iron or aluminum heads, porting and polishing of the heads is allowed.
- Cast iron or aluminum intake manifolds are allowed.
- Roller rocker arms are allowed. Roller cams are allowed.
- Carb: 2 or 4 barrels allowed.
- The air cleaner may protrude through the hood.
- Engine location is that the forward most spark plug must be within 4 inches of the centerline of the adjacent ball joint on all frames.
- All cars must always have a working starter.
- Engine coolant:—WATER ONLY!! Antifreeze is not allowed

**Chip Rule:** 7600 max rpm chip. Ignition box **MUST** be mounted on the right-side corner of the interior by the front of the dash and chip must face outward toward

passenger window. No digital ignition boxes. *All cars must be similar in the way the RPM chip functions, any chip that is noticeable different in operation from others, the box & chip will be sent to manufacture of tracks choice to be inspected.*

**Exhaust:** Exhaust must be completely sealed and exit the car behind the driver. Mufflers are mandatory. Maximum allowable noise level is 100 decibels.

**Differential/Drive Axle:** Floaters and quick change are allowed.

**Fuel System:** All cars must have a fuel cell securely mounted in the rear area of the chassis between frame rails behind the rear-end. MUST BE A STEEL CONTAINER WITH A MINIMUM 22 GAUGE STEEL. A firewall must separate fuel cell area from driver's compartment. Fuel lines cannot run through the driver's compartment. Electric fuel pumps are not allowed. The fuel cell must have a minimum of 8 inches of ground clearance.

**Fuel:** Pump gas only, no additives are allowed.

**Frame:** Frames must be completely fabricated of a minimum 2-inch x 3-inch 0.95-wall thickness tubing or have a sub frame assembly.

**Radiator:** Any radiator is allowed. Any reinforcement to protect the radiator must be mounted behind the grill. A one-gallon catch must be mounted securely in the engine compartment.

**Roll Cage:** All cars must have a six (6)-point cage system made of 1 ¾ inch diameter 0.95 wall thickness steel tubing that is welded to the frame of the car. Four drive side bars made of the same size and type of roll cage material must be securely mounted to the roll cage to protect the driver during side impact. A steel plate 18 x 24 x 1/8 must be mounted to protect the driver. All bars around the driver must be padded with made for racing roll bar padding.

**Rub Rails:** Rub rails must be securely mounted to the body using carriage bolts. The ends of the rub rail must be rounded off and welded shut. Kick-outs are not allowed.

### Shocks:

- A. single adjustable shocks only, one sweep type rebound adjuster allowed, a small sweep wheel below the main rebound sweep wheel for high-speed adjustments is not allowed.
- B. no canister/ bulb type or exotic shocks allowed

- C. no binding of ball joints or chassis components to manipulate travel.
- D. one shock & one spring per wheel.
- E. no bump stops allowed on suspension or chassis, no bump springs allowed, no travel limiting components internal or external of the shock.
- F. no travel limiting components attached to suspension or chassis, any type of travel limiting component that can manipulate shock or suspension travel will be a D.Q.
- G. shock shaft must compress into shock body leaving no room for a travel limiting component
- H. a shock in question that is put on a load machine & creates a progressive load that would support the car in race trim as the shaft travels inward will be considered a travel limiting device that manipulates travel.
- I. Tech reserves the right in asking race teams to remove all shocks from race car in question, for the purpose of inspecting suspension movement through travel, suspension should move through travel with no binds or travel limiting components interfering.

j. tech reserve the right in asking race teams to remove any shock in question, tech will install shock or shocks on load machine to compress shock or shocks, checking for travel limiting components

J. tech reserves the right use a 3rd party shock tech to examine shocks internally if a tech decision cannot be made during tech, if shock is deemed illegal after 3<sup>rd</sup> party inspection, race team is responsible for inspection cost.

**\*\*Front and/or rear shocks may be removed to verify suspension moves without any restrictions\*\*.**

### Suspension:

- A. Ride height will be measured at the foot box, minimum 2 ½ inches, maximum 5 ½ inches. Rebound adjustable shocks only.
- B. **NO bumps or bump springs** anywhere in the suspension or chassis.
- C. Shock shaft must travel completely inside the body of the shock.
- D. Tubular upper A-frames, rack and pinion steering are allowed.

- E. Driver actuated weight jacking devices are not allowed.
- F. Wide-five hubs and rims are allowed.
- G. Must have min of 2.5 diameter spring operating on each corner of chassis.
- H. Computer controlled and/or hydraulic control devices are not allowed.

#### Tires:

- Towel City Tire 10" Slick with the 89A Compound.
- Tire Soaking is NOT ALLOWED
- NO alternating tires ie, cutting or shaving of tires. anyone suspected of tampering with tires will be deemed illegal by B.R.M.S.

**Transmission:** Must have a minimum of 2 working forward gears and reverse. Drive shafts: must be painted white. Front and rear drive shaft hoops made of steel are required. Chains are not allowed. Shifting is not allowed on starts or restarts. Bert, Brinn, Falcon, Jericho, Hightower and OEM are okay. **\*\*If suspected of shifting at any time competitor will be black flagged and immediately disqualified\*\*.**

#### Weight:

- Wet sump engines 2700 pounds minimum with driver before the race.
- All added weight must be painted white and securely mounted to the car using ½-inch bolts.
- Max 60.9% left side weight. 61% is a DQ
- Dry Sump Engines 2900 lbs. with driver. 50 lbs. on each side of upper frame on front sub on both sides (100 lbs. total). Lead will be removed from the chassis and weighed. Total vehicle weight 2900 lbs
- B.R.M.S. will adjust weight to keep a consistent level of competition.

**Wheels:** **Steel** made for racing wheels **only**. 10-inch maximum width. Wheel studs must be ½-inch minimum with 1-inch hex lug nuts.

**Window Nets:** Approved driver side window net with a quick release mechanism securely mounted to the roll cage is mandatory.

I, \_\_\_\_\_ racer acknowledge that my distributor & chip are in operation as it was from the manufacture & has not been tampered with to enhance performance & operation, I will accept responsibility fines & penalties of any of the above parts deemed illegal by Whittemore Speedway Officials.

\$1,000 fine, no return of box or chip, to racer that is deemed illegal by Birch Run Speedway Officials Driver cannot return to track unless fine is paid.

\$10,000 fine, no return of box or chip enhanced with traction control, to racer that is deemed illegal by Birch Run Speedway Officials driver cannot return to track unless fine is paid.