



# Natural Bridge Speedway

*Official 2016 Rules*

*Street Stock*

[www.nbspeedway.com](http://www.nbspeedway.com)

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**Rulebook Disclaimer**

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such 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 EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.** They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official.

The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his/her opinion do not alter the minimum acceptable requirements. **NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS.** Any interpretation or deviation is left to the discretion of the officials. Their decision is final.

### **Body and Body Modifications**

- Body and motor must be same manufacturer's line.
- Competing models allowed - Any sedan with a minimum wheelbase of 105 inches will be eligible (including station wagons and pickup trucks).
- No Camaros, Mustangs, Firebirds, or Front Wheel Drive bodies allowed.
- Aftermarket aluminum bodies okay. Front wheel drive steel bodies okay. Fiberglass or aluminum hoods and trunk lids allowed. Stock metric chassis wheelbase must be maintained.
- Stock body lines must be retained.
- Two support bars off rear cage may be welded to rear frame rail on each side.
- All doors must be welded or bolted closed. Hood and rear deck lids must be fastened with pins.
- Fenders may be trimmed. If trimmed, it must be done neatly and rolled under with no sharp edges.
- Must have stock appearing nosepieces.
- Stock bumpers allowed. Plastic nosepieces optional can be braced from behind. No push bars.
- Car must have front and rear pull chains that are attached to the frame.
- Installation of a windshield is permitted and must be a stock glass windshield, Lexan in place of glass, or three 3/8 inch thick round steel bars placed directly in front of the driver.
- Rear spoiler limited to 8 inches in height and cannot extend past quarter panels.
- Car numbers must be displayed on roof and doors

### **Weight**

- All cars must weigh a minimum of 3,175 pounds (with the driver) after the race.
- Natural Bridge Speedway reserves the right to adjust weight up or down to equalize competition
- Natural Bridge Speedway reserves the right to add weight to any car winning more than three races.

## **Chassis, Suspension, and Frame**

- 105 inches minimum wheelbase is required.
- A full NASCAR style roll cage, with a minimum of three sidebars per side is required.
- Metric front clips only, no Camaro front ends.
- Front stock spring pockets must be retained. Rear clip can be replaced with 2" x 3" box tubing from firewall back.
- You cannot use a stock front frame clip or unibody frame and complete chassis with aftermarket tubing. The only portion of the stock frame that can be replaced is the rear clip and the area in front of the front spring pockets to the front bumper.
- Front and rear firewalls must have no holes.
- Floor pan to right of driver seat may be removed to allow for easier installation of mufflers. If floor pan is removed, suitable type metal material is required to box area in. The area can have no holes and it must be sealed. Trunk floor pan is optional.
- A Ford Thunderbird/Cougar body may be mounted on GM metric chassis. GM wheelbase must be retained. Ford engine and transmission must be run. Ex: Thunderbird runs 351 Ford, Monte Carlo runs Gm 350.
- No aftermarket Lower A-ARMS allowed.
- 3-link suspension is allowed but must limit the height of trailing arm link to an angle not above 2 inches maximum when measures from stock frame height.
- One shock per wheel. No aluminum, adjustable, or bypass allowed. No coil-overs allowed.
- If you finish within three places back from another car you may claim that car's shocks for \$500.

### **Front Suspension:**

- a. All front springs must remain in stock location in unaltered mounts. Solid or screw type spacers allowed in stock spring location.
- b. Modifications to lower control arm for height or length not allowed. Right A frame may be reinforced. May install threaded sleeve for Chrysler ball joint.
- c. Aftermarket upper control arms and control arm frame mounts allowed.
- d. No drop spindles. All steering components must remain steel and stock appearing.
- e. Jack bolts allowed.

**Rear Suspension:**

- a. Adjustable trailing arms are permitted in all cars. No snubber or cushion type bushing permitted on lower control arms. Jack bolts are allowed.
  - b. Adjustable pan hard bar must be right side chassis mounted, behind rear end housing – 28 inches minimum, center to center.
  - c. If you use a top link bar on the rear end, it can be a snubber bar only. No spring or shocks.
  - d. No lift of J bars allowed and no traction bar.
- Stock front ends are required. No tubed front ends allowed (no full tubed chassis cars allowed).
  - No suspension adjusting devices allowed in driving compartment.
  - The engine must be located in the following location:
    - The spark plug of the cylinder that is furthest forward must split the ball joints, with a maximum of 1 inch tolerance allowed. This applies to all chassis.
  - Any radiator is permitted and must be mounted in the front of the engine and not come out through the hood.

**Fuel, Fuel Cell, and Fuel Pumps:**

- A NASCAR or NHRA approved fuel cell is mandatory and must be contained in a heavy steel box to prevent puncture. Fuel cell may be offset.
- Natural Bridge Speedway racing fuel only, no additives permitted. Natural Bridge Speedway has the right to withdraw fuel and refill with track fuel.
- Electrical fuel pumps are permitted. Electric fuel pumps must be wired into ignition switch.
- If electric, you must have a drag racing style master shut off switch located behind area on left side of your car, behind seat.

**Brakes**

- Disc brakes are permitted.
- Must have 4 wheel brakes and they must work at all times.
- Brake adjusters in driver's compartment are allowed.
- Use of balance bar brake system permitted.

### **Rear End**

- Floater rear end is permitted.
- A rear end cooler is permitted.
- Nine inch Ford rear end permitted.
- Aluminum or steel hubs okay.
- No Quick Change rear end is allowed.

### **Tires and Wheels**

- Tires **must** be purchased and with an option to brand by Natural Bridge Speedway to run for points.
- All tires must be Hoosier 1325 or 1425 Racing Tires. No white dots
- Maximum of 15" x (10" or 12") wheels are allowed and must retain same offset.
- Larger and longer wheel studs are required.
- Bead locks are permitted.

### **Transmissions and Components**

- Use of stock automatic or manual transmission is allowed. All gears, forward and reverse, must work and vehicle must be able to start and stop on its own without any assistance.
- Three or four speed manual stock transmission permitted. Stock style manufacture's case must be retained. Must have Lakewood style blow proof bell housing.
- No aftermarket transmissions are allowed.
- Stock appearing clutch, pressure plate and throw out bearing required.
- No couplers or small clutches. Clutch must be 10 ½ inch minimum with springs.
- Standard/Manual transmission cars must have inspection hole in bottom of blow proof bell housing. Minimum size of hole to be 1 ½ inches. A Speedway Official must be able to see clutch assembly through the location of this hole. Clutch fork hole will not be permitted for this task.

- Aluminum and steel flywheels are okay, no cast iron flywheels.
- Automatic transmissions must have working torque converter, must have safety blanket or scatter shield.
- No carbon fiber driveshafts and driveshaft loops are permitted.

### **Engine Specifications**

#### Approved Engines:

- a. GM-350 / Ford-351, Cleveland or Windsor / Chrysler – 360. Cast iron only.
- b. .060's maximum overbore on all engines.
- c. No crossbreeding of engine parts. Ford Cleveland and Windsor parts cannot be interchanged.
- d. 364 Cubic Inches is the maximum Cubic Inch allowed. The engine must pump a maximum of 364 as calculated by the P&G. The engine will be checked by using a cylinder of the technician's choice. There are no tolerances to this rule – anything over 364 inches may result in a disqualification.
- e. Engine and transmission must match body manufacturer.

#### Heads:

- All heads must be small valve heads.
- The following aftermarket heads are permitted:
  - a. Dart Iron Eagle S.S. #s 10021070 Bare or 10021171 Complete
  - b. World Product #s 043600 or 043610
  - c. PBM #s 167970
- No bowtie heads.
- Double Hump Heads are allowed.
- No 305 CID heads are permitted.
- 2.02 heads for any make engine are not permitted.
- Aftermarket steel valves are allowed.
- Roller rocker arms are permitted. Stud girdles are allowed.

#### Crankshaft:

- All crankshafts may be aftermarket but must comply with the weight limit.  
Weight limit –50 pounds (all manufacturers)
- All crankshafts must be stock stroke and must be retained with a +/- ten thousands (0.010) tolerance; measuring at visible center of piston. Final value to be determined on average of 4 cylinders on same bank.

- Stock replacement Eagle, Scat or GM crankshaft is okay.
- No grinding or polishing of any internal parts.

Pistons:

- No dome or lightweight pistons are allowed.
- Forged flat top, Stock OEM replacement, flat top, or concave pistons only.
- Pistons must have same appearance as stock manufacturers and must have full skirt.
- No piston/rod combination changes

Connecting Rods:

- Connecting rods must be same weight and length as stock OEM for engine used.
- May be press fit or floating.
- No grinding or polishing of any internal parts.
- Rotating assembly can be balanced but must not reduce the weight of rotating parts.
- Stock replacement Eagle, Scat or GM rod is okay.

Camshaft and Lifters:

- Any hydraulic camshaft is permitted. No roller cams.
- No ceramic, mushroom, collapsed, or solid lifters.
- No titanium valves.
- Screw in studs allowed.

Intake Manifolds:

- No sheet metal intakes are allowed.
- Aluminum Performer Intakes **only** and must be out of the box, untouched. (Ford #s 7183 or 7181 / Chevy #s 2101). No performer RPM intake manifolds.
- No porting or polishing allowed.
- All casting marks must be visible.
- No grinding of ports or runners.



Carburetor:

- Holley 2 barrel #4412 as manufactured. May use Holey Keith Dorton 2 barrel #080583-1 as manufactured. Maximum venturi size 1.375" and maximum throttle plate opening 1.687". Must pass go/no go gauges.
- Spacer is not to exceed 1 ½", and 0.060" allowed for gaskets.
- Must maintain visible carburetor number.
- Choke can be removed.
- Choke horns must not be removed, top of carburetor cannot be ground down.
- Removal of material inside runners is not permitted.
- No acid dipping.
- No grinding, cutting or machining allowed.
- Venturi cluster of carburetor cannot be altered. If any material is removed, it is illegal.

Timing and Distributors:

- Aftermarket or stock electronic ignitions allowed. MSD Box is okay.
- Battery may be relocated. It must be in a marine box and securely mounted.
- Aftermarket coil is permitted.
- External coil is permitted.
- Absolutely no traction control devices of any kind.

Headers and Mufflers:

- Exhaust headers are of driver's/car owner's choice. No stainless headers.
- Schoenfield # 92535 or 609 muffler is required.
- Mufflers must be installed so that part number is visible.