

# 2010 Western Speedway Bomber Car Rules

Here is Western Speedways class of full track automobile racing for the beginner.

## 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.**

These rules and/or regulations 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, official or others.

The Race Director shall be empowered to permit minor deviations 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 alterations or specification.**

Any interpretation of or deviation from these rules is left to the discretion of the officials. Their decision is final.

## Driver Eligibility

Any person 16 years of age or older with a valid drivers license may participate. Any person under 18 years of age must have a notarized release signed by a parent or legal guardian; Minor release forms are available from the Western Speedway office or back gate. Western Speedway management reserves the right to make exceptions to eligibility on a "Case by case" basis.

Anyone who is under a doctors care, is receiving Workers compensation or is drawing sick benefits from any source must make their condition known and a decision will be made by the track management as to that persons eligibility to drive.

# Bomber Car Rules

Point to ponder.... These are the cars we race.... NOT race cars.

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# Eligible Vehicles

Passenger cars, station wagons or small trucks with a minimum wheelbase of 101" and a maximum wheelbase 110". All 4 wheels must have working brakes.

## 1. PERSONAL PROTECTION:

(A) All Drivers must wear a Snell 95 or newer helmet (Snell 2000 is recommended).

Goggles or a face shield must be worn. Neck braces are recommended. Belts cannot be older than 10 years and must have SFI tag on them, so we can tell what year they were made. If no tag, they will be considered too old and must be replaced.

(B) All drivers must wear Proban or Nomex coveralls or a driving suit in good repair.

(C) A properly mounted minimum 3" lap belt, 3" shoulder belts, five-point racing harness will be worn at all times when on the track. Anti-submarine strap is not optional.

(D) All cars must have approved safety netting in the driver's window. Window nets must release downward from the inside of the top of the driver's door with a spring or metal seat belt clip mounted inside the car. Minimum 3/8" steel round stock and hose clamps top and bottom. Trunk torsion rods are suggested.

(E) All vehicles must have a charged 1.87 lb (minimum) ABC fire extinguisher accessible in their pit area.

2. ALL combustible material, glass, plastic, ornaments, chrome trim, lights, bulbs, etc, must be removed except for the windshield and driver's inner door panel. If door panel is removed the door must be padded.

3. Vehicles must be clear of loose objects such as broken glass, plastic debris, loose bolts and screws, etc.

4. Some cars may require a 3/8" x 2" steel flat bar bolted to the outside top of the driver's upright and be bolted or welded to the driver's door bar.

5. No removal of sheet metal from interior of passenger compartment, except as needed for installation of bars. Front fender wells, inner hood and trunk skins may be removed. Door hinges may not be removed. Rusted floorboards must be patched with equivalent gauge sheet metal. All unnecessary holes in the firewall and floor must be patched with suitable sheet metal.

6. Hood, doors, and trunk

(A) Hood and trunk must be bolted or chained safely shut.

(B) Doors may be welded.

(C) 2 holes are required in the hood, one above each valve cover, large enough for a fire extinguisher nozzle, minimum 7" x 10". If inner fenders are removed the hood openings are not required.

(D) Trunks must not be welded shut.

**7.** Bumpers must be stock type car or truck bumpers. Front and rear bumpers on all vehicles must have chain, welded or bolted on both sides of the frame horns, and then securely welded or bolted to the bumper. Bumper shocks may be welded.

**8.** Door bar:

If the roll cage doesn't have driver's door inner protection then a door bar must be bolted on the outside of the driver's door.

(A) Chanel iron, box steel or I beam. No angle iron.

(B) Door bar to be minimum 6" high and 1/4" thick.

(C) Door bar must extend a minimum of 6" past the front and back of the door unless this would cause bar to extend into or over the wheel wells. Bar may not extend into or over the wheel wells.

(D) Door bar is to be mounted level to the ground.

(E) All sharp edges must be blunted. Door bars are to be beveled ends.

**9.** Door bar bolts.

A minimum of four 3/4" bolts with suitable nuts and washers are required to bolt any door bar on. These must be bolted through the entire door/fender, not just the door skin.

These bolts may be used to secure the dash bar, or rear cross bar.

The front bolt is to go through the front fender and the foot box.

The second bolt is to go through the door near the hinges.

The third bolt is to go through the rear cross bar.

The fourth bolt is to go through the rear door and rear cross bar or quarter panel.

No bolts are to extend beyond the outside of the door bars.

**10.** Oil and transmission cooler lines.

Oil and transmission fluid coolers, if used must be mounted to the firewall inside the engine compartment.

Automatic transmission lines must be joined with suitable material and be double clamped.

Oil pressure gauge supply line must be steel, brass or copper only. Plastic lines are not permitted.

**11.** Radiator must be mounted in the stock location. Expansion tanks and electric fans are optional. All fans must be covered with a Tech approved shroud. Radiator and/or fans may be removed all together. 2" maximum angle iron can be bolted along top of rad support with maximum 2" square or round tubing braces which may be welded from rad support to frame in front of suspension.

**12.** Engine, transmission and engine compartment must be cleaned.

**13.** Drivers seat must be a high bucket without removable headrest or a tech approved racing seat. It must be securely bolted to the floor and fastened to the driver's upright.

**14.** Roll cage.

**(A)** Bomber cars can have a full roll cage that entails a minimum four-point cage. All welds must be proper and cages must be approved by Head Tech. All cage bolts will be a minimum 1/2" bolts with suitable nuts and washers. All cage pipes will be a minimum of 2" outside diameter steel pipe, 3/16" minimum wall thickness. Drivers side upright to be minimum 3" x 3/16". All pipes that are joined will be welded. The roll cage may also consist of the following.

**(B)** Must have two uprights welded together with one cross pipe. One upright will be directly behind the driver's seat and the other upright will be in the passenger seat area. The cross pipe needs to be level and a maximum of 4" from the roof. Uprights must be flanged and bolted to the floor and the roof with a minimum 6" x 6" x 3/16" steel plate. A minimum 3 bolts per flange with suitable nuts and washers is required.

**(C)** Both uprights must be back braced by steel pipe. The back brace is to be welded to the upright near the cross bar and welded to the frame at the other end. Instead of welding to the frame you may use a minimum 6" x 6" flange and bolt the back brace to the rear floorboards or the base of the rear firewall within the interior compartment. A minimum of two 1/2" bolts per flange with suitable nuts and washers is required.

**(D)** A cross brace must be installed from the driver's side to the passenger's side behind the driver's upright. This cross brace must be flanged and bolted through the door bar and the passenger side door (And quarter panel if applicable). Flanges are to contact both doorposts. Minimum two 3/4" bolts with suitable nuts and washers on each flange.

**(E)** A dash bar must be installed from the driver's doorpost to the passenger's doorpost, above the steering column. This dash bar must be flanged and secured on both ends. The steering column must be chained securely to the dash bar.

**(F)** A Stock car cage may be used, subject to Tech pre-approval as to the material thickness and the method of mounting.

**(G)** Anywhere that may contact the driver or passenger must be adequately padded.

Cage for trucks:

(i) A full six-point cage is preferred with all associated door bars and cross bracing. All welds must be proper and cages must be approved by Head Tech. All cage bolts will be a minimum 1/2" bolts with suitable nuts and washers. All cage pipes will be a minimum of 2" outside diameter steel pipe, 3/16" minimum wall thickness. All pipes that are joined will be welded.

(ii) Four contact points are required on the floor in the cab and 2 through the box. The four in the cab must be welded to a minimum 6" x 6" plate on the bottom of each corner of the cab, with three 1/2" (minimum) bolts per plate through the body, (gussets to the frame are preferred). The top of the uprights in the cab must be connected with pipe (Halo). The two points in the box must be welded to the frame, equal to or in front of the rear end (approximately 45 degree angle).

Minimum two 1/2" bolts per flange with suitable nuts and washers.

(iii) Anywhere that may contact the driver must be adequately padded.

(iv) A Tech approved four-point roll cage is permitted. Door bar must be bolted to the four-point roll cage.

4 point roll cage:

(a) Minimum four-point cage is mandatory. All welds must be proper and cages must be approved by Head Tech. All cage bolts will be a minimum 1/2" bolts with suitable nuts and washers. All cage pipes will be a minimum of 2" outside diameter steel pipe, 3/16" minimum wall thickness. Drivers side upright to be minimum 3" x 3/16". All pipes that are joined will be welded.

(b) Must have two uprights welded together with one cross pipe. One upright will be directly behind the driver's seat and the other upright will be in the passenger seat area. The cross pipe needs to be level and a maximum of 4" from the roof. Uprights must be flanged and bolted to the floor and the roof with a minimum 6" x 6" x 3/16" steel plate. A minimum of 3 bolts per flange with suitable nuts and washers is required.

(c) Both uprights must be back braced by steel pipe, welded to the frame, equal to or in front of the rear end at approximately 45 degree angles.

(d) A cross brace must be installed from the driver's side to the passenger's side behind the driver's upright. This cross brace must be flanged and bolted through the door bar and passengers door. Flanges are to contact both doorposts. Minimum two 5/8" bolts with suitable nuts and washers on each flange.

(e) A dash bar must be installed from the driver's doorpost to the passenger's doorpost, above the steering column. This dash bar must be flanged and bolted on both ends with a minimum 5/8" bolts with suitable nuts and washers.

The steering column must be chained securely to the dash bar.

(f) Anywhere that may contact the driver must be adequately padded.

**\*Note\*** A four point cage drastically reduces leg room for the driver and is not recommended.

**15.** Windshields.

**(A)** Stock windshield in good repair is preferred. Lexan replacement or maximum 1" expanded metal or 1" wire mesh replacement allowed.

Securely mounted replacement must extend from the driver's side window upright post, past the center of the windshield opening. No open faced helmets permitted if using replacement windshields.

**(B)** A minimum 1/8" x 2" metal bar must be bolted vertically in the center of the outside of the windshield.

**16.** Gas tank.

**(A)** Stock gas tanks must be removed. Approved gas tank is an approved fuel cell or a metal boat tank.

**(B)** Gas tanks located in the trunk must be securely mounted under the back window ledge with a minimum 1/8" x 2" band of iron placed through the handle across the top. Rubber must be placed between the strap and the tank. The tank must be a minimum of 18" from the rear of the trunk. Tanks must not move. An angle iron base frame is mandatory and must not reinforce any other part of the vehicle. A minimum 4" drain hole is required in the lowest part of the trunk floor.

**(C)** A sheet metal firewall (flash shield) must completely seal the trunk, and the gas tank from the interior of the car or the tank may be sealed in a metal box. If the tank is sealed in a metal box it may be mounted inside the passenger's compartment. The tank must be accessible for inspection by way of inspection holes or opening the trunk.

**(D)** All fittings must extend from the top of the metal boat tank. Fuel lines inside the vehicle must run continuously inside a garden hose, or hose of similar protection for the whole length of the interior.

**(E)** Any vehicle with an electric fuel pump will have a capital "E" beside their number on the sign. A battery shut off switch must be mounted to the driver's side upright and be readily accessible to the safety crew, in the event an emergency shut off is required.

**17.** Vehicles equipped with a power steering box must have operating power steering at all times.

**18.** Rear ends can be changed between corporation to corporation. Locked rear ends are allowed.

**19.** Batteries must be securely mounted in a marine battery box in good repair, or a Tech approved battery box inside the vehicle within the frame rails. The battery box must be securely fastened to the floor. (Metal or wood battery boxes recommended with sufficient padding inside box and bolted solid to floor with minimum 4 - 1/2" bolts).

**20.** You may run any carb and any intake manifold , no highrise intakes allowed and an adapter plate is permitted if needed but no highrisers or wooden adapters allowed See head tech in regard to fuel injection. A carburetor, Fuel Injection air cleaner or suitable flame arrester is required, but this may not extend through the hood.

**21.** Any diameter, maximum 8 inch wide rim with DOT street tires. No racing tires, McRearys, etc. No retread tires permitted, including stock car and old timer car tires. Tech has no way to ensure that the new tread compound meets DOT requirements. All wheel studs, lug nuts and stud seats are to be in good condition. Front right wheel must be a reinforced type rim (1/4" White spoke or heavier). No home fabricated or re-drilled wheels are permitted. No unilug rims.

**22.** Frames may not be reinforced. Equivalent gauge steel may be used to repair broken frames.

**23.** Drive shaft hoops are mandatory. Hoops must be located approximately 12" back from the front end of the drive shaft. Hoop helps prevent a broken drive shaft from digging into the track.

**24.** Suspension.

**(A)** No changing or altering springs. Replace broken or damaged springs with original OEM or equivalent.

**(B)** OEM or equivalent shocks only. No air shocks. Shocks are to be mounted in stock location only.

**(C)** Rear ends may be changed between corporations and locked rear ends are permitted.

**(D)** Stock sway bars may be preloaded or heated. Sway bars may be attached to "A" arms.

**(E)** Tie rods may be reinforced.

**25.** Exhaust pipes are to extend 24" past the driver's seat if run beneath the car. Exhaust pipes extending out of the hood are to be muffled. No open headers. Mufflers or some sort of silencer mandatory.

**26.** Car numbers:

**(A)** Must be on the roof and both sides of the car.

**(B)** One, Two digit numbers only. In the event of a transponder system failure the numbers will be scored visually.

**(C)** Be as creative as you like but remember what was said in point (B).

**(D)** Numbers should be a minimum 14" high, 2" thick and 7" wide. And be of contrasting colors from the background paint. The roof number is to be read from the passenger side, unless you plan to back your car across the start finish line every lap.

27. All vehicles will be subject to a Tech and safety inspection. If your vehicle fails tech inspection any shortcomings will be explained fully allowing you an opportunity to expedite repairs. In some cases, if repairs can't be made, your vehicle may not race.

28. No dynamiting of brakes allowed.

29. Any hitting (Nerfing is hitting) deemed intentional by the officials will result in a black flag. Depending on the severity of the hitting the consequences will range from a "Stop and go" penalty to loss of all points and prizes and possibly driving privileges. Play nice!

30. Claiming:

(A) The promoter may claim any car that they feel is more competitive than the others for \$1000 less window net, belts, battery and race seat if one is installed in the car

(B) Refusal to surrender a claimed car results in the loss of any prizes earned in the meet and all of your points earned during the race season thus far.

## Racing Points Schedule

Any car which times in will earn 10 points.

Heats will be lined up as per qualifying order (slow/fast heats).

Slow Heat will receive 15 points for 1st, 14 for 2nd, 13 for 3rd and so on.

Fast Heat will receive 20 points for 1st, 19 for 2nd, 18 for 3rd and so on.

Main will receive 50 points for 1st, 48 for 2nd, 46 for 3rd and so on.