

Douglas County Speedway Mini Figure 8

CAR CONSTRUCTION RULES



ELIGIBLE VEHICLES:

1. Any make of passenger car or station wagon that is of unibody construction (no full frame cars) with a 104" or shorter wheelbase. Engines will be a maximum of 4 cylinders. No rear, mid or rotary engine cars allowed.

STRIP CAR:

1. 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. Stock dash may remain intact.

CLEAN INTERIOR:

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

B POST REINFORCEMENT:

1. Determined by inspection, 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.

SHEET METAL:

1. 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.

HOOD, DOORS, AND TRUNK:

1. MUST be bolted or chained safely shut. Doors may be welded.
2. Hood may be secured with up to 4 hood pins up to 1 inch maximum diameter. Ready rod suggested. Front pins may extend through the radiator support. All 4 pins may be attached to the frame but no gussets or back bracing is permitted. Maximum hood washer size is 6 by 6 inches.
3. Inner and outer hood skins may be bolted together with up to eight 3/8" bolts and equivalent washers, or can be welded.
4. 2 holes are required in the hood (on each side of the engine) large enough for a fire extinguisher nozzle. Minimum 40in. Car number cut in hood is good. Hole material can stay attached.
5. Wheel wells may be bolted together with maximum five 3/8" bolts and equivalent washers cut flush to the nut.
6. 1 replacement fender or quarter panel (or equivalent sheet metal) may be added over top of the original damaged panel.
7. Trunks may be secured with up to 4 ready rod pins up to 1 inch maximum diameter. All four pins may be attached to the frame but no gussets or back bracing is permitted. Trunk may be welded.

BUMPERS:

1. 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 or bumpers may be pinned (Max 1 inch ready rod max 4 inches from frame horn) but no pinning is to extend beyond the bumper. Bumpers must be stock type car or truck bumpers. Holes may be cut in the floor plan and chain looped through holes and bumpers to secure them in place.

DOOR BARS:

1. Driver and front Passenger doors must be reinforced with steel bars
2. Channel iron, box steel or I beam. No angle iron.
3. Door bar to be minimum 8 inches high on driver's side.
4. Door bar to be minimum 6 inches high on passenger side. 8" if you allow a Navigator.
5. Door bars must extend a minimum of 4" past the front of the driver's door and extend far enough back to allow it to bolt to the rear cross. Wheel well to wheel well is recommended.
6. All sharp edges must be blunted. Door bars are to be beveled ends.

DOOR BAR BOLTS:

1. A minimum of four 5/8" 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. (Be careful when cutting holes for front door bar hole as there are important wires in that area.)
2. The front bolt is to go through the front fender and the foot box. (If there's no room for a bolt through the foot box then put the front bolt through the door as close to the A post as possible.)
3. The second bolt is to go through the door near the hinges.
4. The third bolt is to go through the rear cross bar.
5. The fourth bolt is to go through the rear cross bar and the rear door or quarter panel.
6. No bolts are to extend beyond the outside of the door bars

OIL & TRANSMISSION COOLER LINES:

1. Oil and transmission fluid coolers, if used must be mounted to the firewall inside the engine compartment. (Or the cooler must be bypassed.)
2. Automatic transmission lines must be joined with suitable material and be double clamped.
3. Oil pressure gauge supply line must be steel, brass or copper only. Plastic lines are not permitted.

RADIATOR:

1. 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. An expanded metal or wire mesh screen may be installed in front of the radiator. Screen may not extend beyond the frame horns. 3" x 3" x 1/4" angle iron may be installed along the top and bottom of the radiator support. Maximum 2" square or round tubing may be mounted from the radiator support to the frame. Maximum 2" angle iron or flat bar may be welded from the radiator support to strut towers or firewall.

SEAT:

1. Driver's seat must be a high bucket or a tech approved racing seat. It must be securely bolted to the floor and fastened to the driver's upright.

ROLL CAGE:

1. 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 other 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 cross bar may be sleeved with a minimum 6" long 3/16" wall thickness 2" inside diameter pipe and two 1/2" bolts.
2. 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 for top and bottom uprights.
3. Both uprights MUST be back braced by steel pipe, bolted or welded to the rear floor boards, to the rear strut towers, or the base of the rear firewall. Minimum two 1/2" bolts per flange with suitable nuts and washers or welded.
4. 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 both door bars. Flanges are to contact both doorposts. Minimum two 5/8" bolts with suitable nuts and washers on each flange.
5. 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.
6. A Stock car cage may be used, subject to Tech pre-approval as to the material thickness and the method of mounting.
7. Anywhere that may contact the driver must be adequately padded with approved roll bar padding.

WINDSHIELD:

1. 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 and past the center of the windshield opening. No open-faced helmets permitted if using replacement windshields.
2. A minimum 1/8" x 2" metal bar must be bolted vertically in the center on the outside of the windshield. This is to keep your hood from coming in and chopping the drivers so it MUST NOT be mounted to the hood.

GAS TANK:

1. Most stock tanks mounted ahead of the rear axle are permitted. Other tanks must be replaced with an approved gas tank, an approved fuel cell, or a metal boat tank.
2. 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. Tanks must not move. An angle iron base frame is mandatory and must not reinforce any other part of the vehicle. A drain hole is required in the lowest part of the trunk floor.
3. 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.) like a fuel cell.
4. All fittings must extend from the top of the 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.
5. A battery or fuel pump 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.
6. Gas tank must be accessible for inspection by way of an inspection hole or trunk opening if its in the trunk.

REAR END:

1. Rear wheel drive cars may change rear end between manufacturers. Locked rear ends are allowed.

BATTERY:

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

CARBURETOR, FUEL INJECTION, FLAME ARRESTOR;

1. A carburetor, Fuel Injection air cleaner or suitable flame arrester is required, but this may not extend through the hood. No high-rise adaptors or wooden adapters allowed. This is for safety of the driver and the fire crew.

TIRE & WHEELS:

1. No Forklift tires, studded tires, retread tires or racing tires permitted. No home fabricated or redrilled wheels and no unilug rims permitted. Other than that, you may use any rims with DOT street tires that you can fit into your wheel wells. All wheel studs, lug nuts and stud seats are to be in good condition before the start of a race.

FRAMES:

1. Sub frames may not be reinforced. Equivalent gauge steel may be used to repair broken sub frames.

DRIVE SHAFT HOOPS:

1. Drive shaft hoops on rear wheel drive cars 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. Hoop can be made of flat bar, chain, cable, trapping etc.

EXHAUST:

1. Exhaust pipes are to extend 24" past the driver's seat. No open headers, mufflers are mandatory. Must not be louder than 95 decibels at 100ft.

SUSPENSION:

1. Stock front springs/struts only. Replace broken or damaged springs/struts with original OEM or equivalent.
2. OEM or equivalent shocks only. No air shocks. Shocks are to be mounted in stock location only.
3. Pulverized suspensions may be "jury rigged" to make the car work. This modification only after the suspension has been damaged beyond repairing.
4. Stock sway bars may be preloaded or heated. Sway bars may be attached to "A" arms.
5. Tie rods may be reinforced. RECOMMENDED...NO...REALLY....VERY RECOMMENDED!!!
6. Damaged suspension may be repaired by mounting it solid.

NUMBERS:

1. In the event of a transponder system failure the numbers will be scored visually.
2. Be as creative as you like but remember what was said in point (1).
3. Numbers should be a minimum 14" high, 2" thick and 7" wide. And be of contrasting colors from the car itself. All vehicles must have a number on the roof.

TECH:

1. 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.
2. Any part or equipment found during an inspection or any other time, that does not meet applicable PRA standards must be surrendered to PRA Tech Officials at that time, and will not be returned. Failing to not give up the part or parts will result in a fine and/or suspension.

PRA Officials recommend that you carefully study the PRA rulebook in order to be familiar with all aspects of racing. If you are considering a part for modification or procedure not covered in these rules, contact PRA Tech Official before proceeding with any purchases or modifications.