

MVSO Bomber Rules

COMPETING MODELS

1. Limited to 110-135" wheelbase (as produced, no altering) 1960-1986 American or Canadian passenger cars, trucks, vans, wagons.
2. All vehicles need to a minimum of 3400 pounds.
3. 55% maximum left side weight
4. Ride height must not be lower than 5".

BODY COMPONENTS

1. Must have all body parts to race specifically hood roof trunk lid doors fenders and quarter panels.
2. Inner body panels are to remain intact with the exception of the dash front inner Fender and front inner door panels pillars and door jams to remain intact.
3. All breakable material is to be removed. Outer body trim, door trim, hood ornaments, glass or plastic lenses. Remove all flammable material.
4. Windshield is mandatory (OEM or safety glass.)
5. Bodies must be OEM steel and must remain stock.
6. No sharp edges all edges must be rolled under.
7. Full floorboards and firewalls required. All holes must be covered.

FRAME

1. Must match body to body, make to make, model to model, and year to year.
2. No altering or shortening of frame, or movement to allow suspension travel. Clean undersides of all unused brackets or protruding non secured bolts.
3. Bumpers are to remain in original position but may be reinforced within stock appearing confines.
4. Fenders must be rolled or capped to reduce car hooking and tire cutting.
5. Bumper straps allowed. If used then must be a minimum of 1/8 inch thick and three inch wide bolted or welded, no pop rivets.

ROLL BARS

1. Round steel tubing 1 3/4" x .095" or 1 5/8" x .120". Minimum seamless rollover bars are compulsory for the basic roll cage and must be approved by the tech inspectors. Aluminum and/or other soft metals are not permitted. Roll bar connectors must be welded.

2. On unitized bodied cars the cage must be attached to 6" square plates or tech approved equal, minimum 3/16" thick. The plate must be fish plated 2 plates with the same specifications by four 3/8" bolts. Maximum 3/4 Offset cage.
3. A minimum of three door bars are required on the left side with two bars required on the right side. The left side door bars must curve to the outermost part of the door skin. It is required that a piece of 1/8 inch steel be welded to drivers side door bars. The material should be placed between the door skin and cover the seat area. As an option the material may be welded between the door bars.
4. A dash bar connecting the front cage uprights is required.
5. A wing window bar is required on the driver's side and must be of approved roll bar material.
6. 2 bars may attach to the rear roll cage legs and must extend past the fuel cell. No bars from inside 4 point to beginning of front kick up forward.
7. All roll bars within the drivers reach along with the steering wheel hub must be padded acceptable to the tech inspector.
8. No bars, no X-ing, or tying frames together under car. Cars with bolt on subframes and unibody cars may use connectors. Connectors must only run parallel to wheelbase. No X-ing outside the four point.
9. Front or rear hoops optional. Front hoops can only consist of two bars going through the firewall from the four point and arc downward touching the frame.

WINDOW SCREEN

1. A nylon window screen must be installed in the left side glass opening. The minimum window screen size shall be 22" wide by 16" high. All window screen mounts must be welded to the roll cage. The window screen when in closed position must fit tight. Must be secured with a quick release type lever.

FUEL

1. Fuel shall be automotive gasoline only.
2. The gasoline shall not be blended with alcohol, ethers, or other oxygenates and it shall not be blended with anine, or its derivatives, Nitro compounds or other nitrogen containing compounds.
3. The Speedway reserves the right to require all cars to use the same fuel.

FUEL CELL

1. Tech officials will reject any previously approved fuel cells, containers, or check valves which appear to be damaged, defective, or do not function properly. Fuel

cell vent check valves are compulsory. No pressure systems allowed. Any concealed pressure type containers, fuel lines, or actuating mechanism will not be permitted, even if inoperable. The use of a commercially manufactured fuel cell is mandatory.

2. The minimum fuel tank capacity can be 5 gallons and must be secured appropriately.
3. Must be mounted in center of trunk, a minimum of 12" ahead of rear bumper.
4. Fuel lines are preferred to be run under the car and securely fastened to the frame. Grommets are required where passing through the trunk or firewall. If the fuel line is routed through the cab it must be fully enclosed in 3/4" conduit and securely mounted to the passenger floor.
5. Fuel cell and fuel cell container must be installed as far forward as possible in the trunk compartment.
6. Fuel cell and fuel cell container installed in trunk compartment must be secured with steel tubing no less than two lengthwise and two crosswise evenly spaced across the top. Tubing must be made of 1"x1" x .065 Thick square steel tube. The support frame must be constructed using two tubes that are welded to and extend from the left side to the right side frame rails. 3 tubes must be equally spaced across the fuel cell container. These tubes must be welded to the crossed support tubes and extend down the front sides, rear sides, and under the fuel cell container. The bottom of the fuel cell cannot be lower than 10" from the ground.
7. A firewall free of holes must be located between trunk and driver.

WHEELS

1. 8" Maximum width steel racing wheels or stock steel only. No magnesium.
2. No offset rule on wheels. No bleeders.
3. 15", 16", 17" Allowed and must be same wheel size all the way around on car.

TIRE RULE

1. Class tire DOT radial, HW tread tires, no DOT slicks, no bias ply.
2. You must start the main event on the tires used for qualifying.
3. No tire softener, compounds, or chemicals for softening.
4. Tread of 8" maximum.

HELMETS & NECK ROLLS

1. Head and neck restraints are highly recommended. EX: HANS or Hutchins device. It is recommended that all helmets meet the specifications set forth in the federal motor vehicle safety standard regulations.

SEATS

1. Aluminum racing type seat only. No fiberglass or stock bucket seats.
2. It's recommended that all seats have padded rib protectors and seat leg extensions on both sides.
3. A padded headrest approved by tech officials is required.
4. Seat and seat belts must mount to the roll cage, not to the floor pan. Must use grade 8 bolts and large flat washers.

SEAT BELT & SHOULDER HARNESS

1. A quick release lap belt no less than 3" wide is compulsory. Both ends of the lap belt must be fastened to the roll bar with high quality bolts, not less than 3/8" in diameter.
2. Shoulder harness must be no less than 3" wide unless used with a HANS device and must be installed per manufacturer installation guidelines. Where the harness crosses the roll cage, it must pass through a guide that will prevent the harness from sliding side to side. Shoulder harness inertia reels cannot be used.
3. A center crotch belt must be securely mounted to lower seat frame at bottom.
4. Where the belt passes through the seat edges it must have a grommet installed, be rolled, and or padded to prevent cutting the belt.
5. All seat belts and shoulder harnesses must connect at the lap belt with an approved quick release buckle.
6. Seatbelts must be dated by the manufacturer and must not be used beyond five years after the manufactured date.

ELECTRICAL SWITCH LOCATION

1. A clearly marked master battery shut off switch within 6 inches of the center of the car must be installed. Emergency responders must be able to reach the switch from both sides of the car. A brightly painted, solid square of at least 4" square must surround the switch. The shut off switch must be operational at all times.

STEERING

1. A steel quick release steering wheel is strongly recommended.
2. Center of steering wheel hub must be padded acceptable to tech officials.
3. Factory steering
4. Factory steering box only

ACCESSORIES

1. Race cars will not be permitted to carry on board computers, micro controlled processors, recording devices, electronic memory chips, digital readout gauges, or traction control devices.

MUFFLERS

1. All cars shall be equipped with a non leaking exhaust system exiting the engine Bay.
2. Zoomies or Derby headers allowed.
3. Exhaust system exiting down from the engine Bay must extend past driver and exit between door and the rear tire.
4. Block hugger headers allowed not exceeding 1.75" diameter. Note these are the only allowed or approved headers.

BATTERY

1. Battery may remain in the engine compartment or in stock position, be securely mounted in an enclosed box and accessible from under the hood or relocated inside of car. If inside of car it must be securely mounted in a protective container. It can be no further back than the stock rear firewall and cannot protrude through the floor. The battery box cannot be significantly larger than the battery to allow a lot of movement.

NUMBERS

1. A minimum 24" high 3" wide number is required on the door area and only on the door area of both sides of the car. A minimum 30" high 3" wide number is required on the top of the car facing the right side.
2. A minimum 8" high white number is required on the upper right corner of the windshield.
3. Numbers must be renewed each year.

FIRE CONTROL

1. Race cars must have fire extinguishers securely mounted within reach of the driver. This extinguisher must be mounted on a metal mounting bracket no extinguisher may be taped to roll bars. It is strongly recommended that each car have built-in fire extinguisher equipment, but it cannot be of the dry powder type. ALL ENTRANTS SHOULD HAVE IN THEIR PITS AT ALL TIMES A FULLY CHARGED 15 POUND CAPACITY DRY POWDER FIRE EXTINGUISHER OR ITS EQUIVILANT , SHOWING CURRENT INSPECTION CERTIFICATE.
2. It is mandatory that at all times suits of fire retardant material that effectively cover the body from neck to ankles and wrists, along with fire retardant or leather shoes and gloves to be worn on the racing surface. It is strongly recommended that at all times drivers wear at least a four layer driving suit made of fire retardant material that effectively covers the entire body. It is also strongly recommended that drivers wear long underwear, headgear, gloves, and socks made of fire retardant material.
3. It is strongly recommended that at all times while the car is being refueled or while fuel is being transported from the pit area all crewmen involved should wear at least a four layer suit made of fire resistant material that effectively covers the body. It is also strongly recommended that the crew members wear long underwear, headgear, socks, gloves, and shoes that are made of fire resistant material plus protective eyewear.
4. No antifreeze, no synthetic oils, or additives
5. All safety requirements are mandatory.

BRAKES

1. Four wheel, stock, foot actuated brakes are mandatory. All brakes must work.
2. Must be solid mount. No free float.
3. Stock or aftermarket master cylinder permitted
4. Stock or aftermarket brake pedal permitted
5. Stock rear disc brakes approved.

REAR ENDS

1. OEM stock
2. May be welded
3. NO Detroit lockers. NO gold track. NO Gleason.
4. Rear end must be in stock location and must use all stock parts for attachment.
5. No cambered axle housings. No gun drilled axles.

SUSPENSION

1. All suspension components must be OEM for make (Ford to Ford, GM to GM) with no modifications.
2. Springs must be OEM type. Springs must be same on same side of car
3. OEM front and or rear sway bars are permitted. Must be mounted in stock holes.
4. Lowering blocks allowed (nothing lower than 5" ground clearance) measured to lowest part of frame.
5. OEM rubber bushing only
6. No altering of suspension parts. All components must remain in stock location and only use stock adjustments
7. Stock out of box shock only

RADIATOR

1. Radiator must be mounted in engine compartment
2. Aftermarket and aluminum radiators are permitted
3. All cars will be equipped with an overflow can
4. Electric fans approved

DRIVE SHAFTS

1. Drive shaft and universal must be similar in design to standard production type. Only a one piece steel drive shaft is permitted.
2. It is mandatory that two 160° solid steel brackets, no less than 2" wide and ¼" thick, or steel chain, be placed not more than 12" from each universal joint and fasten to the floorboard.
3. All drive shafts must be painted white.

TRANSMISSIONS

1. A stock OEM automatic transmission with a stock working torque converter is permitted. 3 and 4 speed manual transmissions with all gears working are permitted
2. Transmission must bolt to engine with no modifications.
3. All cars with manual transmissions must have an approved scatter shield around clutch or a constructed shield made of a minimum of ¼" steel over the bell housing section of the floorboard.

CARBURETOR

1. Edelbrock 500 CFM replacement allowed (1403)
2. Holley 500 CFM (4412) Only for replacement or stock carburetor from engine. Only choke and related parts may be removed. Choke horn must remain intact.
3. No tubes, funnels, or any other device which may control the flow of air is permitted inside of the air cleaner or between the air cleaner and the carburetor.
4. A one piece one inch maximum in thickness non tapered carburetor space is permitted.
5. Stock cast iron automotive 2 barrel or 4 barrel intake with adapter. No high rise or GM Z28 replacement manifolds of any kind. No marine intakes permitted.
6. No porting, polishing, acid dipping, adding epoxy or similar substances allowed on intake. No gasket matching allowed.
7. And air cleaner is mandatory at all times. No foam type air cleaners. Top and bottom of air filter housing must be solid and be same diameter, K&N filter element OK. It is permissible to attach a shield in front of the air filter housing up to half the air filter circumference. It cannot be higher than the air filter element. No air boxes.

ENGINE SPECIFICATIONS

1. Stock production V6 or V8 engines only. No engine exchange between makes, must be Ford to Ford GM to GM. Engine must have been available to the general public to purchase.
2. Engine must be stock OEM. All internal parts must be OEM replacement part for make of engine except as noted.
3. Stock flat top OEM type replacement Pistons only. No racing Pistons.
4. Factory OEM as produced stock steel rods. May use aftermarket rod bolts. Must be as produced bore, stroke, and rod length combination.
5. Any flat tappet hydraulic camshaft. No solids, mushroom, or roller Cam shafts..500 inch lift maximum.
6. No gear drives. OEM HEI ignition systems are approved. GM style HEI distributors approved in all makes.
7. Stock cylinder head
8. No crate engines
9. No stud girdles
10. Stock rockers and ratio
11. No porting, polishing, or gasket matching of heads.

12. Exhaust manifolds must be stock cast iron OEM or stock replacement only, from a standard production car. Chassis or block headers are allowed exhaust approved.
13. Fuel pump must be stock OEM type and mount in stock location.
14. Stock steel or cast iron flywheels only. No GM nodular. Minimum thickness .870 inch. No modifications permitted. No aluminum flywheels allowed. Stock OEM type pressure plate and OEM single disk clutches only.
15. 3400 Pound minimum car weight. No exceptions.
16. Cast intakes or OEM
17. Carburetors must be OEM stock, Holley 500 CFM (4412), Edelbrock 500 CFM (1403).
18. No aluminum clutch components. Must remain stock.
19. All parts and components inside engine must be OEM or stock with the exception of the 500 Max lift Cam regardless of engine or make.