

2022

Murray County Speedway

Worthington Speedway

Bombers

General Rules

- Any sanction (IMCA, USRA, etc) car cannot run in bomber class in same calendar year.
- Will follow IMCA line-up procedures using 3-week event average.
- Race Receiver is required and mandatory. Must be in working condition.
- Must be at least 14 years of age to race.
- Amendments may be made to these rules if officials see fit at any time.
- The main goal of this class is to be safe and **HAVE FUN!**

Eligible Models & Body

1. Passenger Automobile with factory steel roof only. No station wagons, convertibles, rear or mid-engine cars will be allowed.
2. 4 cylinder and V6 cars are allowed.
3. All bodies must be steel and strictly stock per OEM, fully intact and unaltered. All hoods and trunks must be securely fastened. No gutting of trunk lids.
4. No aluminum hoods and trunks unless OEM. Hoods should have no holes or air scoops. Hood must be separate from fenders.
5. OEM steel bumpers must be in stock location. All bumpers **must** be capped to the body. The Reinforcement of any bumper is not allowed. Compression bumpers must be welded.
6. Damaged bumpers may be replaced with 2x4 inch square tubing no thicker than 0.125 inches and no wider than body, must be capped. Bumper must have one (1) inch inspection hole on both ends. Bumper must be mounted in stock location and stock height.
7. Chains are required on bumpers, front and rear, for tow truck to attach to.
8. No moving or changing of windshield post or quarter posts. No altering or channeling of the body is allowed. Nothing allowed to alter the stock appearance such as but not limited to wings, spoilers, skirts, or air scoops. Six (6) inch maximum sun visor is allowed.
9. Car numbers must be 24 inches tall and 3 inches thick on sides of car.
10. All chrome, glass, upholstery, front and rear seats, lights, and mirrors must be removed.
11. All doors must be secured shut.
12. Full floorboards must remain stock OEM.
13. Trunk floor maybe removed to accommodate fuel cell.
14. A full visible metal firewall must separate the driver from the fuel cell and trunk compartment
15. Full OEM firewall must separate driver from engine compartment and must remain in stock location.
16. All holes in front and rear firewall must be covered with metal.
17. No expendable type foam can be used on any part of the car.
18. Inner wheel wells front and rear must be stock. Front fender well may be removed.
19. All Stock gas tanks must be removed. A fuel cell in a metal container is required. It must be mounted above the rear frame rails. Two steel straps mounted to the frame or roll cage and around fuel cell minimum 2 inches wide.
20. Check valve or roll over valve and flap required.
21. Brakes on all four wheels are required and they must work. No brake shut-off devices are allowed. No rear disc brakes unless OEM. No aluminum brake drums. Stock master cylinder mounted in stock location. No aftermarket brake pedal assembly allowed.
22. No computers or data recorders unless OEM.

23. If fuel line runs through drivers compartment it must be in a continuous solid metal pipe or metal conduit securely attached from the front firewall to the rear firewall.
24. Rub rail maximum 1 inch thick and 2 inches tall, mild steel only. No grater blades. Ends must be tapered. No sharp edges or they will have to be removed. Rub rail maximum material thickness of 0.125 inches.
25. Bodies can be repaired with OEM thickness of material only.

Drivers Equipment

1. Five-point safety belt. Belts should be anchored to the roll cage only, not to floor. (Belts are not be no more than two years old)
2. Full face helmets only. Must be SNELL rated SA2005 or newer.
3. Fire suit, neck brace or Hans device, fire retardant gloves and shoes are required.
4. Roll cage padding is recommended in driver's compartment.
5. Driver's window net mounted to roll cage is mandatory. Three (3) ¼ inch windshield bars in front of driver are required.
6. Detachable steering wheel is optional.
7. Steering column must be double knuckled or collapsible shaft OEM. No welding of collapsible shaft.
8. All cars must have aluminum high back racing seat that is fastened to the roll cage. Bolting to the floor is **NOT ALLOWED**. Seat must be no farther back than "B" pillar, unless it is a four door car.
9. Kill switch must be within easy reach of driver clearly marked on and off
10. Any fuel injected car running an electric fuel pump must have a shut off switch, to the left of steering wheel. It must be clearly marked "ON-OFF" and easily accessible for safety personal.

Suspension/Steering

1. Must be OEM suspension. No altering or changing suspension or steering. All components must match frame and be in original location.
2. Shocks must be stock appearing, mounted in stock location, Non-rebuild able shocks only. Shocks must match side to side
3. No spacers or chains allowed on suspension.
4. Stock unaltered springs pockets in OEM location allowed. No spacers and screw jacks
5. Springs must match side to side. (Length, diameter, coils and compression rates)
6. All steering parts must be OEM parts and location
7. No steering quickeners (minimum 2.5 turns stop to stop)

Drivetrain

1. OEM automatic transmission with OEM working torque converter. Transmission must have **ALL** forward gears and reverse.
2. Any external auxiliary transmission coolers must be mounted in close proximity to the radiator.
3. OEM manual transmissions must have all forward gears and reverse. Transmission minimum 10½ inch diameter single disc clutch.
4. OEM passenger car rear end only. Ford 9 inch non floater rear ends allowed. Must be mounted like stock rear end for that make and model of car.
5. No maximum rear end gear ratio.

Wheels and Tires

1. Unaltered OEM 205/75, or 205/70, 14 inch or 15-inch passenger tire only. All four tires and wheels must be same size.
2. No double side wall tires allowed. No doubling of tires.
3. Passenger car tires only. Absolutely no mud, racing, snow, fancy, exotic or trick gumball tires allowed. No trailer tires allowed. No winter or winter force style tires allowed.

4. ½ inch wheel studs are recommended. 1 inch lug nuts required on any steel wheel.
5. Maximum 15 x 7 inch wheel only. No bead locking devices or screws allowed. 3 or 4 inch offsets only or OEM. No wheel spacers.
6. Racing or spoke wheel allowed.

Battery

1. Only one 12 volt battery per car.
2. Battery must be securely mounted in the trunk area. It must be enclosed in a marine type box or metal box or be mounted directly to frame. Positive post must be covered.

Roll Cage

1. Main cage must consist of continuous hoops, minimum 1.75 O.D. tubing, with wall thickness of at least 0.095 inches. Tubing recommended low carbon or mild steel. Four-post roll cage required, front down bars and rear hoop must be welded to OEM frame. Unibody cars are required to weld cage to 6 x 6 steel plates to floor. Drivers head must not protrude outside with helmet on. Rear hoop must have "X" brace, consisting of one full horizontal and one full diagonal bar, minimum 1.25 O.D. with 0.083 inch wall thickness. Front down bars must be tied together; Passenger side front down bars must be maximum 11 inches in from top of door. Must be minimum 40 inches between outside edge of front and rear down bars at top of door panel. Maximum 41 inches from top center of windshield to front edge of rear hoop; maximum 13 inches to front edge of top halo. Top halo must be minimum 40 inches across, outside to outside. Rear hoop may be maximum 12 inches in from bottom of opera window. Minimum one cross bar in top halo. Rear kickers (down bars) must be minimum 1.25 inch O.D. tubing 0.083 inch wall thickness.
2. All door bars and uprights must be minimum 1.75 inch O.D. with 0.095 inch wall thickness. Minimum three door bars, both sides, parallel to ground, and perpendicular to driver. Minimum four uprights tied from frame to top door bar on driver's side, and minimum three uprights on passenger side. Steel door plate, 18 gauge or 0.049 inch minimum thickness, must be securely welded to outside of door bars on drivers side. Plate must cover area from top of door bar to rocker panel and from rear down post to five inches in front of seat. Plate must be visible for inspection.
3. Front hoops allowed in engine compartment. Two bars can be used to protect the radiator. Bars must be behind bumper, no wider than frame rails. Maximum 2 inch O.D. tubing. Factory radiator support may be used. No radiator support bars farther back than front of upper A-arms.
4. No square tubing or galvanized pipe is allowed in the making of roll cage.
5. Fuel cell protection bar strongly recommended must be mounted from frame rail to frame rail no higher than the fuel cell.
6. Inner door panels may be removed to accommodate the roll cage only.
7. "X" bracing frame is optional, stock transmission cross member required if frame is not "X" braced. No other reinforcing of frame is allowed.

Engine and Carburetor

There shall be (2) engine options. You must pick one and follow all the rules of that option.

Option #1

1. OEM engine for that make and model of car. VIN will be used to validate that is how car came out of the factory. No alterations to intake, exhaust, or ignition system. All components used must be OEM or OEM equivalent replacement for that car.
2. Unaltered bore, stroke and camshaft specs must be maintained.
3. Naturally aspirated engines only no turbos or superchargers engines will be allowed.
4. Must maintain factory fuel delivery. The ONLY exception to this is; 4 barrel carburetor can be removed and replaced by a 2 barrel carburetor of the same make (GM to GM, Ford to Ford, ect). Must maintain OEM intake manifold. Adapter may be used no more than one (1) inch rise including any gaskets.

5. Must be in original mounts.
6. Simply NO modifications.
7. Four cylinder, V6, must run the OEM engine option.

Option #2

1. Any American make engine allowed. OEM steel passenger production vehicle block only. No GM Bowtie, Ford SVO, or Chrysler W components allowed. Gm approved block numbers are:10105123, 10066034, 3892657, 3914660, 3914678, 3932388, 3932386, 3956618, 3970000,3970006, 3970010, 3970014, 10066033, 10066036, 10243880, 14010207, 14010209, 14010287,14016376, 14016379, 14054727, 14088528, 14088548, 14088552, 1093638, 14101148.
2. Stroke must match block. No 400 or larger cubic inch parts allowed. Maximum 361 cubic inch (GM); 363 (Ford); 370 (Chrysler).
3. Maximum compression ratio is nine to one (9:1), NO TOLERANCE. Compression ratio checked using Whistler and cubic inches checked using pump, OR by visual inspection of part and/or casting numbers, pistons etc.
4. Flat top or dished pistons only, no gas ported pistons. OEM or OEM appearing replacement steel crankshaft only – cannot be lightened. No aeroing, bullnose, knife edge, undercut or drilling of second or third rod throws.
5. OEM or OEM cast appearing steel rods only – GM 5.7 inch, 6 inch or GM Vortec rod part number 10108688 allowed.
6. Cap screws allowed. No splayed main caps.
7. Conventional flat tappet cam and lifters or hydraulic only, No roller cams. Cannot alter lifter bores.
8. OEM firing order cannot be changed (GM 1-8-4-3-6-5-7-2)
9. Wet sump oiling system only. Steel oil pans only. Racing oil pans allowed. Mandatory one inch inspection holes in all pans- no obstruction to crank and rods.
10. Steel Heads only. No Vortec heads allowed. Must be unaltered.
11. No roller tip rockers arms allowed. GM – 1.25 inch maximum O.D. valve spring. No beehive valve springs allowed.
12. GM to GM, Ford to Ford, Chrysler to Chrysler.
13. Intakes must be stamped with OEM part number. No aftermarket intakes allowed.
14. Two (2) barrel carburetor only. No Holleys on GM. Adapter may be used on 4 barrel intakes. Maximum rise one (1) inch including gaskets. No porting and polishing of engine parts. Rochester carburetor will be checked with IMCA tools
15. No sealed engines allowed.
16. Stock distributor cap, stock module.
17. No headers, OEM manifold only. No center dumps.