

Merritt Speedway & Tri-City Motor Speedway

Factory Stock Rules

2021 Season

Updated January 2021

Changes for 2021 season

Tires

Hoosier M-60 or American Racer P245 required on right rear only

Flat deck from back of seat to back of car IS OK. If deck heights get excessive, a height rule will be evaluated and implemented

Body OEM Appearing

Fiberglass Hood, Roof and Trunk OK, stock appearing

No flat roof, no wickers

No flat, full length decks

No flat sides

Opera windows, stock appearing same size, both open or both closed

Shocks

No bulb shocks

One-piece body only

Unaltered

No bump stops internal or external

Brakes

Front to rear brake adjuster allowed

Brake Rotors must be vented as cast – no solids

Seat

Seat 30" at bottom

Fuel

No E85 fuel

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 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 of these rules is left to the discretion of the officials. Their decision is final.

No radios, **EXCEPT MANDATORY RACECEIVERS**, allowed in car, or with any pit member or anyone connected with the racecar.

1. SAFETY EQUIPMENT

Rules apply at all times car is on track. An operational 2-½ pound minimum fire extinguisher with gauge visible for inspection purpose is mandatory in each racecar and tow vehicles. Extinguisher must be mounted in a quick release bracket. DUCT TAPE AND/OR ZIP TIES ARE NOT AN ACCEPTABLE MOUNTING DEVICE.

Rules apply at all times car is on track. Snell-rated SA2010 or SA2015 helmet required. Roll bar padding required in driver compartment. *Recommended: Fire retardant padding.* SFI-approved full fire suit required. Fire retardant gloves, shoes and neck brace (or head and neck restraint) required. **Competitors under the age 18 are recommended to use an SFI 38.1 head and neck restraint system due to the young body and developing bones.** Right and left seat head supports required if using head and neck restraint system. *Recommended: Fire retardant head sock and underwear, collapsible steering shaft.* Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window. Minimum three inch (two inch with head restraint system) wide SFI-approved five point safety belt assembly required, must be mounted securely to main roll cage. *Recommended: Safety belts no more than two years old.* Any safety equipment physically or visibly worn or damaged must be replaced, regardless of age. All safety equipment must not be altered and must follow manufacturers use, specifications and requirements for installation.

2. FRAME

Any American OEM full body rear wheel drive passenger car, 1968 or newer, OEM full frame or unibody. Minimum 107.5 inch wheelbase, maximum one inch difference from side to side. Frame rail connecting front and rear sub frames must be stock frame rail. Rear of frame behind rear tires, no further forward than one inch behind factory seam, may be replaced in OEM location with minimum 2 inch by 2 inch steel tubing with 0.095 inch wall thickness. Factory seam must remain visible. Frame may be "X" braced. No mixing of frame and / or suspension parts. Engine and Body must match. May use Ford frame with GM engine and body or Chrysler engine and body. May use GM frame with Ford engine and body or Chrysler engine and body. May use Chrysler frame with GM engine and body or Ford engine and body.

No Mustang frames.

Unibody cars with wheelbases over 108" will be permitted to run with a maximum 50.00% rear weight.

Camaro frames will be allowed.

3. ROLL CAGE

Main cage must consist of continuous hoops, minimum 1.5 inch O.D. seamless DOM tubing, with a minimum wall thickness of 0.095, low carbon or mild steel recommended. Front and rear hoop must match main cage pipe size.

Four-post roll cage required, front down bars and rear hoop must be welded to OEM frame.

Driver's head must not protrude outside cage with helmet on. Rear hoop must have "X" brace, consisting of one full horizontal and one full diagonal bar, minimum 1.25 inch O.D. with 0.083 inch wall thickness.

Front down bars must be tied together; passenger side front down bars may 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. 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.

May have maximum two horizontal bars, (in addition to bar tying front frame horns together) for radiator protection; must be behind bumper, within confines of body, no wider than stock frame horns. Required rear kickers (down bars) and engine hoop must be minimum 1.25 inch OD tubing, with 0.083 inch wall thickness. Fuel cell protection required must be mounted frame rail to frame rail, no higher than fuel cell, inside trunk area with maximum 1.75 inch OD tubing. All bars must be inside body. Foot protection bar required.

4. DOOR BARS

All door bars and uprights must be minimum 1.50 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 side, and minimum three uprights on passenger side.

Steel door plates, 18 gauge or 0.049 inch minimum thickness, must be securely welded to outside of door bars on driver's side. Plate must cover area from top door bar to frame and from rear down post to five inches in front of seat. Must be visible for inspection.

5. BODY

Unaltered OEM, and centered over wheel wells (front to rear and side to side) Camaro, Firebird, or Mustang bodies are allowed on a full frame chassis. Body and engine make must match. Front body mounts must be visible. Sunroofs and T-tops must be enclosed. OEM or aftermarket plastic nose and tail pieces allowed, must match body, nose pieces that are built with a duckbill are not allowed such as Dominator Camaro SS Nose # DOM330 and the Gen 6 Fivestar Nose. The nose and body must match. Minimum 8" ground clearance on the nose. All body panels may be gutted, including fenders, doors, hood, roof, quarters and trunk, but must remain original size. Fiberglass hood, roof and trunk ok, must be stock appearing. All other body must be steel. Maximum of 2" of air cleaner may protrude through hood. Roof rake measured with a 6' level may be no more than 2" down from the rear to front of the roof. Hood must be separate from fenders, in OEM location, with rear sealed off from driver compartment with metal. All inner wheel wells may be removed. Rear edge of trunk may be trimmed and rear tail light support removed only if aftermarket tail piece is used. Trunk floor must be removed over rear end housing; entire trunk floor may be removed. All windows must remain open, except opera windows may be covered with clear lexan, no decals. All 'B' pillars may be trimmed to minimum 2 inch width, must remain within OEM location. Maximum seven inch metal sun visor may be added to top of windshield opening. Wheel wells may be trimmed for tire clearance. No spoilers or reflective body panels. Rocker skirt/flare allowed between tires only, cannot extend outside tires, minimum 4 inch ground clearance. Car number must be minimum four inches thick and 20 inches tall and clearly visible, on both sides, top and back of car, and front if possible.

6. DRIVER COMPARTMENT

Minimum of three windshield bars in front of driver. Aluminum high-back seat only, must be bolted in using minimum 0.375 inch bolts and follow manufacturers installation and usage guidelines. Seat must remain inside all confines of roll cage. Every part of seat must be 33" in front of centerline of rear axle. Cars with seat less than 33" but more than 30" will be permitted to race with a total weight of 3200 lbs and 100 lbs of weight bolted in front of the firewall, 50 lbs on each side of frame.

Seat – Angle of seat – 33 inches from center of rear end housing to rear bottom corner of seat

Penalty – 50 lbs in front of bell housing – 25 lbs per side

The entire body and interior must be magnetic steel, the only 2 exceptions are the dash panel and the rear firewall may be filled in with aluminum. Driver must be sealed off from track, driveline, engine and fuel cell. Kick and rocker panels may be removed. Front OEM firewall may be replaced using steel fabricated firewall, 18 gauge or minimum 0.049 inch thickness. Top of firewall can be no further back than 12 inches from the back of engine block, measured horizontally. Bottom of firewall can be no further back than rear of oval body mount frame hole. Dash must not extend more than 24 inches back from top of firewall. Dash must be flat, may be steel or aluminum, rear can be no higher than front, except for cowl in front of driver. OEM floor pan may be replaced using steel fabricated floor pan, 18 gauge or minimum 0.049 inch thickness, securely welded to frame. Floor pan may be replaced from front firewall to rear halo supports. Must remain flat/OEM appearing from frame rail to frame rail, can be no higher or lower than frame rail. Exception is maximum 8-inch tall drive shaft tunnel. Tunnel must remain similar to OEM tunnel in size. No cockpits, interior must remain open. Rear firewall may be aluminum or steel and may be located no further forward than rear halo supports and no higher than bottom of rear opera windows. All holes in firewalls must be covered with metal. No driver-adjustable devices allowed. No brake adjusters. No mirrors.

7. FRONT SUSPENSION

All components and mounts (including center link) must be steel, unaltered OEM, in OEM location and match frame. Rubber, nylon or steel lower A-frame bushings only - no offset or bearing type. No sway bars. Exceptions are: OEM upper A-frame mount may be moved or replaced with aftermarket steel non-adjustable mount matching upper A-frame bolt on design; OEM or OEM replacement ball joints allowed. OEM upper A-frame may be replaced using steel non-adjustable aftermarket upper A-frame. Lower A-Arms must be stock, match frame and not altered.

8. STEERING

No rack and pinion. All components must be steel, unaltered OEM, in OEM location and match frame. Exceptions are: replacement spindle with Speedway Motors raised cast - part numbers 91034501-L and 91034501-R, OEM steering column may be replaced with steel knuckles and steel steering shafts (collapsible recommended). No Straight Steering Shafts Allowed (Must have minimum ONE knuckle in shaft). Quick release required - steering quickener and steering wheel may be aluminum.

9. SHOCKS

One steel nonadjustable unaltered shock per wheel. No coil over, air, or remote reservoir shocks. No Schrader or bladder type valve allowed. No coil over eliminators. Outboard mounted front shocks will be permitted.

10. SPRINGS

One steel spring per wheel only. All coil springs must be minimum 4.5 inches O.D. and non-progressive. O.D. Front coil springs must be 9.5 inch free height with 0.5 inch tolerance. Rear coil springs must be 11-16 inch free height with 0.5 inch tolerance. Screw jacks will be allowed on the front and rear of car. You may use shims, a screw cup or screw jacks to adjust springs. No composite leaf springs.

11. REAR SUSPENSION

All components and mounts must be steel, unaltered OEM, in OEM location, and match frame. No independent rear suspension. Rubber, nylon or steel control arm bushings only, no offset or bearing type. Welded single-hole shock mounts only. Exceptions are: coil springs may be moved, but center line of axle tube can be no further forward than the front of spring, or no further back than rear of spring; shocks may be moved, but must remain similar to stock style mounting and location. Springs must be mounted vertical with a max 5 degree angle. Springs must be tethered to mount to keep from falling out (Ex: hose clamped or other steel tether) Upper and lower control arm mounts on rear end must be level and identical with each other with no adjustment holes. Maximum of 2.5" from the bottom of the axle tube to the center of the lower control arm mounting bolt. Upper control arm mounts on rear end must be level with each other. Lower control arms may be replaced with square tubing replacement and must measure 19.25" center of bolt to center of bolt.

12. REAR END

Any steel, approved OEM passenger car or truck non-cambered rear end (housing and carrier) allowed. Safety hubs (floater) allowed. No sway/panhard bars. All components must be steel, exceptions are: lowering blocks, axle cap, and drive flange may be aluminum. No adjustable lowering blocks. One inch inspection hole in housing required. Full steel spool, steel mini spool or welded rear end only. Steel axles only. No quick change devices. One piece drive flange only. No torque-dividing differentials. No Gold Tracks. No Lockers. No scalloped ring gears.

13. BUMPERS/RUB RAILS

Maximum one inch wide by two inch tall steel or lexan rub rails allowed - bolted flush to body. **Front and rear tow chains mandatory (must be a minimum of 3/16 chain)**. All front bumpers must be mounted minimum six inches from front frame horns. Steel bumper mounts only. No sharp edges allowed on bumpers, rub rails or bolts. One of two bumper options must be used and must be OEM height:

OEM: Bumpers not covered by plastic nose or tail piece must be complete, unaltered OEM, capped to fender with steel, welded or bolted. No bars past outside edge of body other than rub rails.

Aftermarket: Fabricated tubular bumpers allowed, but must be covered by plastic nose or tail piece and bent to

fit with rounded ends. Main bumper bar must be minimum 1.5 inch O.D. (maximum two inch) with 0.083 inch (maximum 0.125 inch) wall thickness on front, and 1.75 inch O.D. with 0.120 inch wall thickness on rear.

14. TIRES/WHEELS

The only racing type tire that is allowed is the American Racer P245/70D-15 Tire with MSPA stamp on sidewall. No altering, chemical softening or conditioning of tires. Tires will be subject to a durometer test. Your tires must be harder than the baseline determined by MICHIGAN DIRT TRACK officials. Tires may be ground, grooved or siped only if the tire has less than 50% tread. No re-caps, No McCreary. American Racer P245/70D-15 Tire with MSPA stamp or **Hoosier M-30/M-60** will be required. **Hoosier M-60 or American Racer P245 required on right rear only.** (Unless posted otherwise)

Wheel spacer or offset wheel, or a combination of the two allowed. Maximum overall width shall not exceed 78 inches from outside of tire to outside of tire. Maximum 8 inch wide wheel. Racing wheels and racing / safety 1 inch lug nuts required on all wheels. May use bead lock, on right rear only. If using bead lock, right rear must measure 17 psi after each race. External, steel bead lock only and it cannot make wheel any narrower than 8 inches and no wider than 8.75 inches. Steel bolts only. No Mud plugs or wheel covers in Street Stock Class. No bleeder valves.

15. BRAKES

Steel, unaltered OEM, or unaltered OEM replacement, operative four wheel, drum or disc brakes allowed. Front components must match frame and maintain minimum OEM dimensions for hubs/rotors and calipers, cannot be lightened. OEM diameter caliper pistons only. Bolt pattern may be changed. Larger studs allowed. Vented rotors only, solid faced rotors only, no scalloped or ceramic coated rotors. Rear rotors may be aftermarket 0.810 inch thick (new). No floating brakes. No brake shut-off, no ratchet valves, no pressure sensitive devices. No left to right proportioning allowed. Front to rear brake bias adjustment cannot be made from driver's compartment or while in competition. No pinched off brake lines. Brake lines must be visible. Aftermarket pedal assembly allowed.

16. EXHAUST

May run stock exhaust manifolds or round tube headers only. All primary header tubes must enter directly into one collector at same point at end of header. Must remain dual exhaust, no crossover or "Y" pipes. No exhaust through body panels or fenders. No merge collectors. No exhaust sensors. Must point away from track and driver and exit behind driver compartment. Holes in exhaust pipe will not be allowed, no drilling of pipe and connections must be tight and leak free.

The following are your 2 Exhaust/Muffler Options:

- The last 24" of each exhaust pipe must be constructed of maximum 2" outside diameter exhaust pipe mounted at the end of exhaust system. Additional muffler optional but not required.
 - IMCA609 Muffler mounted at the end of each exhaust pipe.

17. FUEL SYSTEM

Mechanical OEM type push rod fuel pumps only. Racing fuel cell required, must be in minimum 20 gauge steel container. Must be securely fastened in trunk above top of rear frame rails, behind rear tires, no further forward than factory seam where rear frame rail can be replaced, with minimum two solid steel straps around entire cell, two inches wide and 0.125 inch thick. No fuel cells allowed over rear end housing. Metal firewall must be between driver and fuel cell. All cell mounts must be steel, securely welded to frame/cage. No adjustable fuel cell mounts. Fuel cell vents, including cap vent, must have check valves. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required. Fuel cell cap must be secured to fuel cell by cable, chain, or tie strap. Fuel lines through driver compartment must run through metal pipe or metal conduit. One fuel filter only, cannot be in driver's compartment. No cool cans. Air cleaner top/stud cannot direct air into carburetor. No top flow air cleaner housings, cold air boxes or air cleaner duct work. **MUST HAVE ROLLOVER**

VALVE IN VENT TUBE OF FUEL CELL. Fuel shut off ball valve is required (See rule 19 for shut off valve mounting details).

18. CARBURETOR

Stock 2 barrel carburetor allowed, must match make and manufacturer of car. Example: Ford-to-Ford, Chevy-to-Chevy, Mopar-to-Mopar. Holly #4412--2 bbl (500 not 750) carburetor will be allowed. Absolutely no alterations or modifications to any carburetor, except for removal of choke plate. Choke horn cannot be removed. Any driver caught with non-4412 - 500 CFM Holley or non-stock 2 barrel carburetor, will be fined \$500 or suspended for two weeks. Float bowl must face forward. No transverse mount carburetors. Carburetor adapter/spacer allowed, maximum thickness (between carburetor and intake) including gaskets is 1.20 inches.

Top 10 may have to pull carburetor after every feature. Inspection Gauges will be used.

19. FUEL

Gasoline Only. Racing fuel is allowed. No alcohol, no methanol, no E85 / E98. No performance enhancing or scented additives. Fuel must pass both dielectric and chemical tests. **A fuel shut off valve is required on each car. "Fuel Shut Off" securely mounted and easily accessible. The Michigan Dirt Track Inspector has final decision on mounting of shut off valve.**

Fuel shut off options:

If running a ball valve: A fuel shut off ball valve is required to be within reach of driver and safety crew and to be mounted with the handle through the deck or firewall not to be mounted inside the cockpit. The valve and handle must be painted bright orange, and clearly labeled with "Fuel Shut Off" securely mounted and easily accessible.

If running an Oberg Valve: An Oberg Fuel Line Safety Valve is required to be installed under body/deck and behind firewalls, in the fuel line and per manufacture instructions; not to be mounted inside the cockpit. The valve must be securely mounted and easily accessible for inspection. Car must be clearly labeled with "Oberg Fuel Valve" composed of a vinyl sticker (1" stroke orange letters with a white 1/2" outline) sticker must contrast from body and graphics to be easily readable. Two stickers will be required; one on the deck where the ball valve would have been mounted and one on the fuel cell or on the trunk lid.

20. BATTERY/STARTER

One 12-volt **or 16-volt** battery only, must be securely mounted between frame rails. The battery must be securely mounted with positive fasteners and brackets. The battery terminals must be insulated or enclosed with a non-conductive material that will prevent contact with any part of the race car should the battery become dislodged from the battery mount. Battery must be in Marine type case if mounted in driver compartment. Starter must bolt in OEM location. Car must have capability of starting without being pushed or pulled. Car must leave initial staging area on demand, unaided, or go to rear of that race.

A clearly labeled Battery ON/OFF 'KILL' switch must be to the right of the driver and within driver's reach. This is for the Safety Crew to be able to kill power to everything.

21. GAUGES/ELECTRONICS

No unapproved cameras, transmitting or listening devices. No timing retard controls, or digital gauges (including tach). No electronic monitoring computer devices capable of storing or transmitting information except analog tach. No adjustable ignition control boxes. Only one OEM 12 volt ignition system allowed, must be out of driver's reach. Ford engines may run HEI ignition. No additional ignition accessories. No magnetos or crank triggers. No MSD, Accel or Crane (Aftermarket) ignition boxes allowed. OEM type alternator with internal regulator allowed. No electronic traction control devices.

22. TRANSMISSION / DRIVE SHAFT

Must have at least two forward gears and one reverse, plus neutral position. With motor running and car in still position, must be able to engage car in gear and move forward, then backward. Only OEM production type transmissions allowed - two speed, three speed, four speed and automatic. No five speed (or more) transmissions, no "in and out" boxes, or no quick change devices allowed. Functioning shift levers must be in OEM location. Flywheel / flexplate must be bolted directly to end of crankshaft, and pressure plate must be bolted directly to flywheel / flexplate. One flywheel / flexplate only, and all driveline components within bellhousing must rotate consistent with engine RPM while car is in any gear. Unaltered flexplate must be full OEM, or OEM replacement.

Bert/Brinn allowed. NO BALLSPLINE/GEN 2'S ALLOWED.

Manual: Must be OEM or OEM replacement case and have a working clutch inside explosion-proof steel bell housing or scatter shield - minimum 270 degrees around top of clutch/flywheel area. Multi disc racing clutches are permitted.

Automatic: Must remain in OEM or OEM replacement case, with a functioning OEM appearing pump. Aluminum OEM bellhousing may be replaced with aftermarket explosion-proof aluminum bellhousing. Original OEM bellhousing must have approved scatter shield constructed of minimum 0.125 inch by three inch steel, 270 degrees around flexplate. Manual bump starts allowed.

Drive Shaft: Minimum two inch diameter magnetic steel drive shaft must be painted white. Magnetic steel slip-yokes only. 360-degree drive shaft loop required and must be constructed of at least 0.25 inch by 2 inch steel, or 1 inch tubing, mounted 6 inches back from front U-joint.

23. ENGINE COMPARTMENT

The forward most spark plug hole may not be set back any further than a perpendicular line with the center of the upper ball joint for each manufacturer. Aftermarket engine mounts allowed, including mid-plate. Engine must be OEM appearing, must be able to be used in conventional passenger car without alteration. GM engine with GM body, Ford engine with Ford body, Chrysler engine with Chrysler body. Radiator must be mounted in front of engine. Cooling system may be modified. No antifreeze allowed, water only. Overflow tubes must be directed into overflow tank (one gallon size recommended).

24. ENGINE SPECIFICATIONS

Any American make engine allowed. Steel heads, block and oil pan only, **(steel block only)**. Castings and fittings cannot be changed, no machine work on outside of engine. No cubic inch limit. Full roller rocker arms allowed. Stud girdles are allowed. Flat tappet cam/lifters only, cannot alter lifter bores. No mushroom lifters. No roller cams. OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2). Steel or aluminum water pumps allowed. No electric water pumps allowed. 'Wet' sump oiling system only. Accumulator allowed – cannot be located between seat and door bars.

25. INTAKE

No altering/modifications will be allowed to intake, no welding, no shaving, etc.

Air gap intakes are not allowed. Inspector has final discretion on all intakes.

Cast iron or aluminum OEM intakes will be permitted. No marine intakes.

Must have 1 inch inspection hole in intake or pull distributor to view camshaft and lifters.

26. WEIGHT

Minimum weight limit is **3,000 pounds**, after race with driver in car.

Cars with seat less than 33" but more than 30" (from the center of the rear end to the closest part of the seat) will

be permitted to race with a total weight of **3200 pounds** and 100 lbs of weight bolted in front of the firewall, 50 lbs on each side of frame. No added weight to the rear end housing.

Unibody cars with wheelbases over 110" will be permitted to run with a maximum 50.00% rear weight.

No cement pellet or liquid style weights. No tolerance. No weights and/or loose objects in driver compartment or outside body and must not be visible. Weights must be securely mounted to frame or roll cage and painted white with car number on it. Weights must be attached with at least two 0.5 inch bolts. **Cannot have more than 25 pounds of ballast weight per 0.5 inch bolt.** Example: 75 pound stack of weights requires three 0.5 inch bolts. No titanium, magnesium or carbon fiber products. No gun-drilled, tubular, hollow bolts or studs. Must use magnetic steel fasteners only.

27. WRECKER HOOKS MANDATORY FRONT AND REAR

Both must be accessible. If no wrecker hooks are on the car, the car will be pushed, towed, or dragged to the infield until after the racing program is completed. 3/16 chains are mandatory.

NEITHER WRECKER CREWS NOR RACETRACK PERSONNEL WILL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE ANY VEHICLE.

NOTE: Non-Conforming or altered parts may be confiscated

No reflective car numbers. If we can't see them from 100 feet away at 80 MPH, you may not be scored.

28. Claims

Promoter only claim on engine - \$850

Promoter only claim on shock claim - \$50

Promoter only carburetor claim - \$250