# **Modified Rules/2019**

## **MUFFLERS ARE MANDATORY/RACECEIVERS MANDATORY**

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 **OF** WARRANTY 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/her opinion does 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.

The Management of <u>Riverside International Speedway</u>

# Frame & Body

NO raised frame rails are allowed. Any other alterations to the front clip is subject to inspection and approval.

No part of racecar can be lower than four inches from the ground (exception is front cross member and oil pan).

Frames may not be widened or narrowed and must be able to support roll cage on both sides. Must be full and complete both sides. Front cross member must remain full and intact; center of cross member may be notched and boxed for radiator and/or steering clearance only.

Minimum wheelbase, 108 inches, both sides. Maximum overall width (front or rear) shall not exceed 78 inches from outside of tire to outside of tire.

Engine compartment will remain open, no side panels; hood sides may have maximum four-inch drop and must be enclosed at rear of hood; maximum hood scoop height - six inches.

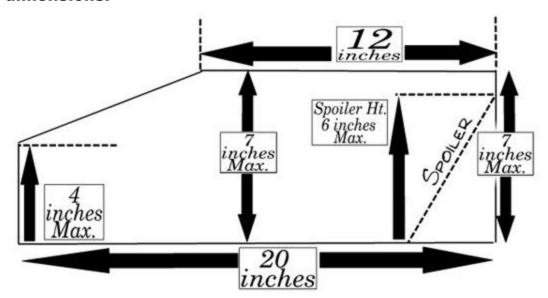
Passenger side of body must be no further forward than rear of block.

No panel in front of right door to engine compartment. No inner panels. No car covers.

Any driver slamming brakes on while on scales will be disqualified and may be subject to loss of points and winnings.

Spoilers on the rear deck of the car are optional.

Spoilers are allowed to be a maximum of 6" from the rear deck to the top of the spoiler blade. Two side panel supports and a maximum of two braces between each end will also be allowed. Please see the diagram below for maximum dimensions:



Modified spoilers may use maximum 2 side panels shaped like or similar to diagram template.

Modifieds may use 2 maximum inside support braces shaped like or similar to diagram template.

No dimension may be larger than the template above.

# Roll Cages

Must consist of continuous hoops not less than 1.666-inch outside diameter with a wall thickness of at least .095-inch. Low carbon, mild steel tubing is recommended.

Must be frame-mounted in at least six places. No brazing or soldering allowed.

Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops. Driver's head must not protrude outside cage with helmet on and strapped in driver's seat. Must have minimum of one cross bar in top halo of roll cage. Roll cage must be securely supported and braced.

Protection of feet is mandatory. Bar across back of engine with vertical bars and rub rails, or similar protection. No brace bars forward of cage may be higher than stock hood height. Main cage no further forward than engine plate.

## **Door Bars**

A minimum of three driver side door bars, at least I.5-inch O.D., must be as parallel with the ground as possible, and located perpendicular to the driver so as to provide maximum protection for driver, but without causing undue difficulty in getting into or out of vehicle. The side bars must be welded to the front and rear of the roll cage members. Must have at least one cross door bar, minimum 1.25-inch O.D., on passenger side of car, either horizontal or angled.

Steel doorplates, 18-gauge or .049-inch minimum thickness metal, must be securely welded to outside of door bars on driver's side. Plate must cover the area from the top door bar to the bottom door bar and from the rear down post to five inches in front of the seat. Must be visible for inspection.

#### **Bumpers**

Center of bumper, front and rear, must be 18 inches, plus or minus two inches, from ground.

Steel bumpers must be used both front and rear at all times and securely mounted with minimum .375-inch bolts. Must be made of minimum 1.25-inch OD tubing, .065 wall thickness on front - .095 wall thickness on rear, and must be able to support car if lifted by wrecker. Two-bar front bumpers must be mounted frame end-to-frame end, no wider than the width of material outside frame horns, with the bottom loop parallel to the ground. Top bar must be directly above bottom bar, minimum 6.5 inches apart, measured center to center at front of bumper (see P in body diagram), so bumper is perpendicular to ground.

Rear bumper, steel nerf bars and bodies must not extend beyond width of tires, and must not contain any sharp edges. Rear bumper no more than two inches wider than body on each side.

Rear bumper must resemble one of three configurations, see diagram on page four.

## Weight

Car must weigh a minimum of 2,450 pounds with driver in the car after race.

Weight may be added to cars at the tech inspector's discretion to allow nonconforming cars to participate.

All weight must be painted white with the car number clearly marked on it. Weight added must be bolted to chassis. No weight may be added to the bumper of any cars.

No lead pellets or liquid weights may be added to any car.

# **Suspension and Steering**

Front suspension and steering must be unaltered approved OEM and be in stock location. Tube type lower A-Frames allowed and must be replaceable by stock parts. Outer tie rod end and adjustment sleeve may be replaced by a minimum .625-inch rod end and steel tube. Weight jack must be in original center line of spring. Stock passenger car spindles only; no fabricated spindles. Spindles can be ground for brake caliper clearance only. Bottom A-frames cannot be altered or moved (exception: can weld shock mount on A-frame). No offset or bearing type lower control arm bushings. Tube-type upper A-frames allowed and can be moved. Front sway bar must be approved OEM. Suspension, steering, and rear end parts must be steel. Steering box must be steel approved OEM and must remain within original bolt pattern for type of frame used. No rack & pinion allowed. Steel steering shafts and knuckles only. In-cockpit steering may be modified to suit driver's taste, but must be kept on left side of cockpit. No center steering allowed.

Steel or aluminum I.M.C.A. type coil-over assembly with 5" minimum diameter springs allowed on rear only – one per side.

Rear of frame may be altered to accept leaf or coil springs; any coil spring must

be at least 4.5 inches outside diameter. One steel coil spring per wheel only. No torsion bars allowed in rear. Progressive springs allowed only on pull or lift bar.

No devices allowed that would enable driver adjustment to alter wheelbase or for weight jacking while car is in competition. No air shocks or air bags allowed.

One shock per wheel only. One additional shock and spring allowed on rear suspension of vehicle. No adjustable shocks. No covers on suspension parts except clear cover on slider and a shield to protect the shocks. This shield can cover no more than the front half of the shocks.

# **Engine**

No aluminum blocks. No magnetos.

Aluminum heads and oil pans allowed.

Any American make engine may be used as long as rear of engine (bell housing flange) is mounted at least 72 inches forward from the center line of rear axle. Engine offset must be kept within 2 inches of centerline of front cross member with engine level. Il-inch engine height minimum from ground to front center of crankshaft.

All engines used in competition must be able to be used in conventional passenger car without alterations. Motor mounts cannot be removed or altered. Castings and fittings must not be changed. No machine work on outside engine.

Wet oiling system only. Oil coolers must not protrude above interior. Accumulators cannot be mounted between driver and left-side door.

Cooling system may be modified. Any overflow tubes must be directed to the ground, between frame rails. Radiators to be mounted in front of engine only.

Conventional air cleaner housings only. No top flow air cleaner housings allowed.

One 2- or one 4-barrel carburetor allowed; must be naturally aspirated. No fuel injection; No electric fuel pumps.

#### **Batteries**

One 12-volt battery only, must be securely mounted and shielded.

Batteries must not be located in the driver's compartment.

## **Electronics**

No transmitting or listening devices other than Race-ceivers used by RIS.

No electronic monitoring computer devices capable of storing or transmitting information except tachometers.

No digital gauges, timing retard controls or oxygen sensors allowed.

One 12-volt non-adjustable ignition box and coil allowed - must be out of driver's reach. No additional ignition accessories allowed.

The only change that can be made with ignition box is rev-limiter setting, and only one high-end setting is allowed. This setting can be changed through one chip, or an internal setting inside the box.

#### **Transmissions**

Must have at least one gear forward and one reverse, plus a neutral position,

Quick-change transmissions will not be allowed.

Bert & Brinn transmissions will be allowed.

With motor running and car in a still position, driver must be able to engage car in gear and move forward, then backward.

Power steering pumps may be mounted on transmission, driveline or engine.

#### **Brakes**

Must have a working caliper and rotor on each wheel and must lock up all four wheels,

Front rotors should be within 15 degrees temperature of each other after all races.

No brake shut-off or pressure sensitive devices allowed.

One proportioning device allowed, front to rear only.

Brake lines must be outside frame rails and visible.

Vented rotors only, no scalloped rotors. Rotors cannot be lightened.

Rotors may be re-drilled for different bolt pattern or larger studs. Must be steel, approved OEM calipers, and they cannot be lightened.

## **Rear End**

Any approved OEM passenger car type or truck rear end may be used.

No aluminum allowed, except lowering blocks, axle cap, and drive flange. A oneinch inspection hole in center section is recommended. Full steel spool, steel mini spool or welded rearends only.

Steel axles only.

Quick-change devices ARE allowed.

No cambered rear ends. One-piece drive flange only. No electronic or mechanical traction control devices allowed.

Minimum 19 inch long panhard bar (J-Bar). Measure straight line center to center.

# Fuel & Fuel Cell

May be either gasoline or alcohol. No Nitrous Oxide.

Racing fuel cells required and must be mounted by at least two solid steel straps, two inches wide around cell. Fuel cells must be enclosed in steel container and must be mounted securely behind rear axle and between the rear tires, no lower than six inches off the ground, protected by roll- cage tubing. Protective tubing must cover the rear and extend past both sides of fuel cell.

Fuel cell must be a minimum of four inches ahead of rear bumper and no part of fuel cell shall be lower than protective tubing. Fuel cell vents, including cap vent, must have check valves, and bladders are highly recommended.

Fuel cells are limited to 32-gallon maximum capacity. Pick-up must not be underneath fuel cell. A limit of one standard fuel filter allowed between the fuel cell and carburetor.

No performance-enhancing fuel additives of any kind.

# **Tires and Wheels**

I.M.C.A.Racing type G60-15 size on all 4 corners.

All tires must maintain a minimum durometer hardness of 45 at any time.

Tires may be grooved, ground or siped. Cannot soften or condition tires. No recaps allowed.

8" steel wheels only allowed.

No wide-five wheel adapters allowed. Aluminum or steel spacers allowed.

May use bead lock, on right side only. External, steel bead lock only and it cannot make the wheel any narrower than 8 inches and no wider than 8.75 inches.

Must use only steel bolts.

Foam type, plastic, or aluminum mud caps allowed.

Rim-mounted bleeder valves are allowed.

# <u>Other</u>

All other General Track Rules apply to Modified class