

# 2011 Lakeside Speedway A Modified Rules

(1-2011)

These rules may be adjusted to ensure competitive fairness.

## 1. BODIES:

- a) All bodies are subject to Tech Official approval.
- b) Bodies are expected to resemble IMCA Modified type racecars.
- c) All sheet metal seams shall have the lip on the underside leaving a smooth top finish.
- d) Must have a minimum of three windshield bars in front of driver.
- e) Cowl panel in front of driver can be no wider than cockpit and no farther back than the steering wheel. Firewall and floorboards are mandatory, .125-inch aluminum, or 16 gauge or .060-inch steel, complete floor required.
- f) Fiberglass or metal duplicates of body parts are permitted.
- g) 5 inch rear spoiler and spoiler brackets must be manufactured of Lexan or aluminum, spoiler angle may be adjustable, rear of spoiler cannot be suspended above the deck to create a wing effect. Side boards on nose piece must not exceed 2". No other ground effects are allowed anywhere outside or inside the car.
- h) Passenger side of body must be no further forward than rear of block.
- i) No panel in front of right door to engine compartment.

## 2. ENGINE OPTION:

- a) **CRATE Motor Option:**
  - a. Must use unaltered sealed CT 525 GM #19171821 crate engine.
  - b. Upon inspection, any different, altered or missing GM seal bolts will result in disqualification, loss of all points for the season, \$1,000 fine and a one year suspension.
- b) **Other than crate motor:**
  - a. Steel blocks only, No GM Rocket blocks.
  - b. No titanium engine parts permitted except valve spring retainers.
  - c. Maximum cubic inch is 410 for all engines, normally measured by air volume pump.
  - d. Maximum compression 14.0 to 1. Atmospheric conditions and equipment limitations suggest a .3 tolerance. Therefore compression measurements greater than 14.3 means disqualification.
  - e. No aluminum heads or dry sump systems will be allowed.
- c) Engine must be self-starting at all times.
- d) All engines must be located so that when measured from the center of rear axle housing to the rear of the engine (at the bell housing flange) there is a minimum distance of 72 inches.
- e) Engine offset must be kept within two inches of centerline of front cross member with engine level.
- f) Engine height minimum will be 11 inches from ground to front center of crankshaft.
- g) No magnetos.
- h) Oil coolers must not protrude above interior.
- i) Cooling system may be modified.
- j) Any overflow tubes must be directed to the ground, between frame rails.
- k) Radiators to be mounted in front of engine only.
- l) If an accusump is used it must be fully enclosed.

## 3. CARBURETORS.

- a) One 2 or one 4 barrel carburetor.
- b) No Predators or Webers.

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- c) Only one round air cleaner may be used. Maximum size will be: 14" diameter by 4" thick.
- d) Air cleaner top and bottom must be made of solid metal.
- e) No air boxes. Open hood scoops are allowed.

## 4. WEIGHT:

- a) **Crate motor option:** A minimum weight of 2,200 lbs with driver at end of race.
- b) **Other than crate motor:** A minimum weight of 2,400 lbs with driver at end of race.

## 5. ELECTRICAL/ELECTRONIC SYSTEM.

- a) **Crate Motor Option:** Must use LSX Ignition controller P/N 19171130 with a maximum 7500 RPM. Controller may be exchanged with a track supplied controller at any time.
- b) **Other than crate motor:** RPM chip must not exceed 8400.
  - a. One MSD ignition box and/or MSD rev limiter allowed on car mounted in engine compartment or over the steering column accessible via an inspection cover. If used, the only approved ignition box is the MSD 6A, 6T, or any version of the MSD 6 box will be allowed. No other ignition boxes will be considered.
  - b. The following MSD remote rev limiters are allowed:
    - P/N 8728, MSD Soft Touch Rev Control, is designed to be used on standard points ignition or inductive ignition systems. This means that the PN8728 can be installed on engines with a GM HEI Ignition, Ford or Chrysler electronic ignition and any standard breaker points system without an MSD box.
    - P/N 8738 MSD Soft Touch Rev Control is approved for use with MSD 6T and 6TN Ignition Boxes.
    - P/N 6420 MSD 6AL Ignition Control Box with Rev Limiter Built-In.
    - P/N 6430, MSD 6 ALN Ignition Control Box with Rev Limiter Built-In.
  - c. The only changes that can be made with ignition box is rev-limiter settings, and only one high-end setting is allowed.
- c) No electronic monitoring computer devices capable of storing or transmitting information except tachometers allowed on cars.
- d) Tachometers must be mounted so that they can be removed before the A feature.
- e) No digital gauges allowed on car.
- f) No electronic traction control devices allowed.
- g) No adjustable ignition control boxes allowed.
- h) No timing retard controls allowed.
- i) Any car suspected of running a traction control device due to a missing engine or unusual handling characteristics can be pulled out of competition and not allowed to race.
- j) Additionally, any ignition component may be replaced with track components or confiscated and sent to the manufacturer for review.
- k) No bundling of wires, all wires must be open and visible.
- l) One 12-volt battery only, must be securely mounted and shielded. Positive post/terminals must be shielded.
- m) All vehicles must be self-starting without being pushed or pulled in staging area or on the track. All cars must join lineup on demand or go to rear of that race.

## 6. EXHAUST:

- a) Exhaust system must be mounted in such a way as to direct spent gasses away from cockpit of vehicle and away from areas of possible fuel spillage.

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## 7. DIFFERENTIAL:

- a) Any approved OEM passenger car type or truck rear end may be used.
- b) No aluminum allowed except lowering blocks, axle caps, drive flange, spool, ring gear and pinion housing, and internal quick change rear end parts and bearing carriers".
- c) Rear ends must be locked with a spool.
- d) Steel axles only.
- e) Steel-tube quick change rear ends are allowed. Steel axle tubes only. Minimum ten (10") inch ring gear only; no titanium, no aluminum birdcages, and no wide five hubs. Quick changes are optional, not mandatory.
- f) Minimum driveshaft diameter is 2 inches.
- g) Steel driveshafts, painted white, and steel yokes only.
- h) No scalloped ring gears.

## 8. TIRES AND WHEELS:

- a) The track tire is the BTC (Boubin Tire Company) stamped McCreary American Racer G60.
- b) Tire siping, grooving, and grinding allowed. No conditioning of tires allowed. Tire durometer cannot be less than 50.
- c) No re-caps allowed.
- d) No wide-five wheel adapters allowed.
- e) Aluminum or steel spacers allowed.
- f) Bead locks approved.
- g) External, steel bead lock only and it cannot make the wheel any narrower than 8 inches and no wider than 8.5 inches.
- h) Must use only steel bolts.
- i) Foam rubber and/or plastic mud plugs do not require fasteners. All other mud plugs require metal, mechanical fasteners such as DZUS fasteners. Tape to hold a metal mud plug in/on the wheel will not be allowed.
- j) Bleeder valves are allowed.

## 9. FRAMES:

- a) Factory production, 1964 or newer, complete full parallel American passenger car frames only.
- b) Frames may be cut in rear only at point not further than 36 inches from center of rear end housing.
- c) No front clips or tube type allowed.
- d) Maximum two-inch wide by four-inch tall frame stiffener may be welded directly to outside of frame rail.
- e) Frames may not be widened or narrowed and must be able to support roll cage on both sides.
- f) Must be full and complete both sides.
- g) Frames may be notched for swedge tube clearance.
- h) Front cross member must remain full and intact where joined at the frame rails, center of cross member may be notched for radiator and/or steering clearance only.
- i) No Jeep, Bronco, etc. or four-wheel drive frames allowed.
- j) No sports car frames allowed.
- k) No front wheel drive allowed.
- l) Frame Horns may be removed in front of steering box.
- m) No part of frame can be lower than four inches from ground except front cross member.
- n) Wheelbase minimum is 108 inches and maximum 112 inches.

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## 10. SUSPENSION AND STEERING:

- a) Front suspension and steering must be unaltered approved OEM and be in stock location, and must be replaceable by stock parts.
- b) Weight jack must be in original centerline of spring.
- c) Stock passenger car spindles only; no fabricated spindles.
- d) Spindles can be ground for brake caliper clearance only.
- e) Bottom A-frames cannot be altered or moved (exception: can weld shock mount on A-frame). OEM replacement lower A-frames approved; lower A-frames must be the same, right and left, and of same design.
- f) No offset lower control arm bushings.
- g) Tube-type upper A-frames allowed and can be moved.
- h) Front sway bar must be approved OEM.
- i) No aluminum or fiberglass suspension or rear end parts allowed.
- j) Steering box must be steel approved OEM and must remain within original bolt pattern for type of frame used.
- k) No rack & pinion allowed.
- l) Steel steering shafts and knuckles or collapsible steering shafts.
- m) In-cockpit steering may be modified to suit driver's taste, but must be kept on left side of cockpit.
- n) No center steering allowed.
- o) No coil over shocks allowed either front or rear.
- p) Steel or aluminum rear coil over kits allowed, minimum 4½-inch spring, no threaded shock bodies. No other aluminum or fiberglass suspension or rear end parts allowed.
- q) No homemade coilovers used anywhere on race car.
- r) Rear of frame may be altered to accept leaf or coil springs; any coil spring must be at least 4½-inches outside diameter.
- s) One steel coil spring per wheel only.
- t) No torsion bars allowed in rear.
- u) Progressive springs allowed only on pull or lift bar.
- v) No devices or methods permitted that would allow a driver to alter the vehicle geometry while the car is in competition.
- w) No air shocks or air bags allowed.
- x) One steel bodied shock per wheel only.
- y) Additional shocks in other locations permissible.
- z) Suspension parts may be covered to protect them from damage but must be uncovered for inspection purposes.
- aa) No gas charged sliders or two-way sliders.
- bb) Gas or oil filled shocks only except a zero shock (no compression/no rebound) may be used in lieu of slider.
- cc) Computer or electric controlled shocks are not permitted.
- dd) Outer tie rod end and adjustment sleeve may be replaced by a minimum .625-inch rod end and steel tube.

## 11. TRANSMISSIONS:

- a) Must be Lakeside Speedway approved.
- b) With motor running and car in a still position, driver must be able to engage car in gear and move forward, then backward, and put it in neutral.

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- c) Manual transmissions must bolt to an explosion proof bellhousing.
- d) Automatic transmissions must have an approved scatter shield or blanket.
- e) Bert, Brinn, or Falcon internal clutch transmissions are approved.
- f) All transmissions without bolt on items (linkage, bellhousing, etc.) must weigh at least 43 lbs.

## 12. BRAKES:

- a) Brakes must be operated on all four wheels and must lock up all four wheels during inspection
- b) No brake shut-off or pressure sensitive devices allowed.
- c) Proportioning valve allowed, front to rear only
- d) Brake lines must be outside frame rails and visible.
- e) Vented rotors only.
- f) Rotors cannot be lightened. Must maintain minimum OEM dimensions for hubs/rotors and calipers.
- g) Rotors may be re-drilled for different bolt pattern or larger studs
- h) Must be steel, approved OEM calipers, and they cannot be lightened
- i) No gun-drilled, tubular or hollow bolts or studs anywhere on car
- j) One brake caliper per wheel using only two brake pads per caliper is permitted.

## 13. FUEL:

- a) Gasoline or alcohol. Racing fuel allowed. Scented, upper cylinder lube with alcohol only. No performance enhancing additives. Fuel must pass dielectric, chemical, and specific gravity tests.
- b) No electric fuel pumps.

## 14. BUMPERS:

- a) Steel bumpers must be used both front and rear
- b) 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
- c) Must be made of minimum 1.25-inch tubing and must be able to support car if lifted by wrecker.
- d) Rear bumper, steel nerf bars and bodies must not extend beyond width of rear tires, and must not contain any sharp edges
- e) Rear bumper must resemble one of the following designs:
  - 1) Solid bumper of square or round tubing no wider than five inches outside each rear frame rail.
  - 2) If rear bumper is wider than five inches outside rear frame rail it must be capped with no sharp edges and bent forward on the end at a 90 degree angle inside the rear quarter panels
  - 3) a bumper constructed in a loop design that loops back inside the rear quarterpanels.
- f) All tubing must be capped.

## 15. REAR VIEW MIRROR and RECEIVER.

- a) Mirrors or reflective material not allowed.
- b) Receiver required.

## 16. IDENTIFICATION AND MARKING.

- a) All car numerals must be applied in bold, contrasting, non-reflective, non-mirror colors.
- b) Side numbers must be at least 18 inches high, letters if used must be 12 inch high and all neatly attached.
- c) A number 24 inches high (letters if used must be 18 inch high), must be attached to the roof, reading from the passenger side.

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- d) Numbers must be at least 4" wide.
- e) Sponsors' names must not interfere with car numbers and must be neatly lettered.
- f) If numbers cannot be read then driver loses all rights to question finish.

## 17. SAFETY:

- a) A toggle type ignition kill switch boldly marked ON and OFF must be connected and located directly behind the driver's seat.
- b) Helmets are required and must be a minimum of SA2005 with certification label inside helmet.
- c) Helmet must be worn at all times car is on the track and must be provided for inspection.
- d) Roll bar padding (fire retardant recommended) on all roll bars within the reach of the driver's head must be covered with roll bar padding. Roll bar padding in conjunction with a containment seat will be determined on an individual basis by Lakeside Officials.
- e) An approved head and neck restraint system (i.e. Hutchens, G-Force, Hans, etc.) is required. An approved head and neck restraint system means a system tested and subsequently approved for sale by vendors.
- f) SFI approved full fire suits of a flame-retardant nature must be worn by all competitors. Nomex underwear highly recommended.
- g) Fire retardant gloves and fire retardant shoes are required.
- h) Minimum 6-point safety belts, sub belt, and shoulder harness required and securely mounted as prescribed by manufacturer. Excess belt must be secured.
- i) Seat belts and shoulder harness cannot be more than three years old.
- j) Aluminum seat only, must be bolted in using minimum 0.375 inch bolts with oversize washers to keep bolt from pulling through seat (fender washers). Head and shoulder supports are highly recommended.
- k) Seat must be mounted inside the frame rail and ahead of the "B" Post of the roll cage.
- l) Bottom of seat can be no lower than the bottom of the frame rail.
- m) All cars must have an approved rib type, made from minimum 3/4 inch, maximum one inch wide nylon material with a minimum one-inch square opening between the ribs, window net in the driver's side window at all times the car is on the track. No mesh nets.
- n) Window nets, minimum 22" wide and 16" high, must latch at top of car so that window net hangs down on door or inside door when unlatched. Triangle window nets in addition to regular window net recommended on each side of seat.
- o) The bottom of the window net must be securely connected to door bars (pop rivets, hose clamps, and/or wire tied is not acceptable).
- p) It is recommended that cars be equipped with a fully charged Halon On Board Fire Suppression System.
- q) Minimum requirement is a 2.5 lb. fire extinguisher securely mounted in vehicle and within driver's reach for activation.
- r) Each team must have a minimum 10 lb. Dry chemical and/or 10 lb. CO2 and/or 2.5 gallon water fire extinguisher in their pit area. Fire extinguishers must be visible.
- s) Steel drive shafts and yokes only.
- t) Drive shaft must be painted white.
- u) Rear Springs must be cable or rope tethered so that they do not come out of a car. Cable must be 1/8" minimum diameter or rope must be 3/8" minimum diameter
- v) Roof Escape hatch approved provided it is closed and locked during racing.

## ROLL CAGES.

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- a) Car builders and drivers/owners are responsible for roll bar installation. Officials will examine all workmanship to check that roll cage welds are completed and may test to ensure the proper metal diameter and wall thickness was used.
- b) Round steel tubing, seamless roll-over bars are required for the basic roll cage. Acceptable minimum size tubing is as follows: one and three-quarters (1-3/4) inches by .090 of an inch or one and one-half (1-1/2) inches by .095 of an inch for mild steel and DOM tubing (one and three-quarters (1-3/4) inches by .083 of an inch for chrome-moly tubing). Aluminum and/or other soft metals are not allowed. Roll bar connections must be properly welded.
- c) Low carbon, mild steel tubing is recommended.
- d) Must be frame-mounted in at least six places.
- e) No brazing or soldering allowed.
- f) Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops.
- g) Driver's head must not protrude outside cage with helmet on and strapped in driver's seat.
- h) Must have minimum of one cross bar in top halo of roll cage.
- i) Roll cage must be securely supported and braced.
- j) Protection of feet is mandatory.
- k) Bar across back of engine with vertical bars and rub rails, or similar protection.
- l) No brace bars forward of cage may be higher than stock hood height.
- m) Main cage no further forward than engine plate.
- n) Modifications shall be made to ensure trailing arm will not penetrate the driver's compartment. Any modifications are subject to the Competition Director's or Technical Director's approval.

## **DOOR BARS.**

- a) A minimum of three driver side door bars, at least 1.5-inch O.D and .083 wall thickness, 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.
- b) The side bars must be welded to the front and rear of the roll cage members.
- c) Must have at least one cross door bar, minimum 1.25-inch O.D., on passenger side of car, either horizontal or angled.
- d) A minimum of 18 gauge steel doorplates welded from 'A' post to 'B' post top to bottom of the door bars will be required.

## **FUEL CELLS:**

- a) Racing fuel cells required and must be securely mounted by at least two solid steel straps, two inches wide, or 1" square tubing around cell.
- b) Fuel cells must be enclosed in steel container and must be mounted securely behind rear axle and between the rear tires, no lower than 10 inches off the ground, protected by roll-cage tubing.
- c) Protective tubing must cover the rear and extend past both sides of fuel cell.
- d) Fuel cell shall be a minimum of four inches ahead of rear bumper.
- e) Fuel cells shall have check valves, and bladders are highly recommended.
- f) Fuel cells are limited to 32 gallon.
- g) Pick-up must not be underneath (bottom side) fuel cell.
- h) No plastic or urethane fuel lines allowed.
- i) Fuel cell must have in internal flapper valve.

## **WEIGHT:**

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- a) If weight/ballast needs to be added it must be securely fastened, but cannot be in driver's compartment.
- b) Weight/ballast must be painted white with car number on it. The driver is subject to a \$100 fine if the car number is not on the weight or the incorrect car number is on the weight.
- c) All weight/ballast must be lead.
- d) All weight/ballast must be securely mounted and not exposed at any point to outside interference.
- e) Race vehicles losing weight/ballast on racetrack will be disqualified and weight/ballast retained by Lakeside Speedway.

Speedway Officials will have the final word on all matters of rules. Speedway officials will be empowered to restrict any car from competing. Any other alterations or modifications not specifically allowed for in these rules will be considered illegal.

**IMPORTANT NOTE: COMPETITIVE RACING CAN RESULT IN INJURY AND/OR DEATH TO THE PARTICIPANT. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.**

The rules and regulations are intended as guides for the conduct of the sport. They are in no way a guarantee against injury or death to a participant, spectator, officials, or other.

**Questions regarding these rules may be forwarded to either [JDG48@AOL.com](mailto:JDG48@AOL.com) or [lopezbobby86@yahoo.com](mailto:lopezbobby86@yahoo.com). Questions and answers will be posted on the Lakeside Speedway WEB site: [www.Lakesidespeedway.net](http://www.Lakesidespeedway.net).**

## **1. BODIES:**

**NEW:** g) 5 inch rear spoiler and spoiler brackets must be manufactured of Lexan or aluminum, spoiler angle may be adjustable, rear of spoiler cannot be suspended above the deck to create a wing effect. Side boards on nose piece must not exceed 2". No other ground effects are allowed anywhere outside or inside the car.

## **2. ENGINE OPTION:**

### **NEW: CRATE Motor Option:**

- 1) Must use unaltered sealed CT 525 GM #19171821 crate engine.
- 2) Upon inspection, any different, altered or missing GM seal bolts will result in disqualification, loss of all points for the season, \$1,000 fine and a one year suspension.

## **3. CARBURETORS.**

**NEW:** No air boxes. Open hood scoops are allowed.

## **4. WEIGHT:**

**NEW: Crate motor option:** A minimum weight of 2,200 lbs with driver at end of race.

## **5. ELECTRICAL/ELECTRONIC SYSTEM.**

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**NEW: Crate Motor Option:** Must use LSX Ignition controller P/N 19171130 with a maximum 7500 RPM. Controller may be exchanged with a track supplied controller at any time.

**NEW: Other than crate motor:** RPM chip must not exceed 8400.

**Deleted:** No transmitting or listening devices in car.

**Discussion:** Deleted as receivers will be required. In addition, race cameras have been allowed.

## 8. TIRES AND WHEELS:

**NEW:** b) Tire siping, grooving, and grinding allowed. No conditioning of tires allowed. Tire durometer cannot be less than 50.

**Discussion:** We opted to get out of the siping/grooving/grinding tire business to allow driver's to determine what was needed to fit their situation. This change allows siping, grooving, and grinding.

## 10. SUSPENSION AND STEERING:

**OLD:** z) no covers on suspension parts

**New:** z) Suspension parts may be covered to protect them from damage but must be uncovered for inspection purposes.

## 13. FUEL:

**NEW:** Gasoline or alcohol. Racing fuel allowed. Scented, upper cylinder lube with alcohol only. No performance enhancing additives. Fuel must pass dielectric, chemical, and specific gravity tests.

**Discussion:** Fuel oxidizers are increasingly difficult to detect. Equipment to detect oxidizers is getting more expensive. Some fuel vendors have already added oxidizers and unless racers devote time to research the fuel they are using may not even know it. So, this rule was adopted in an effort to maximize the use of various testing procedures to identify fuel performance enhancing additives.