LANCO MICRO MIDGET AUTO RACING CLUB, INC.

2024 Car Specifications

Date: 10/23/2023

LANCO MICRO MIDGET AUTO RACING CLUB, INC.

Car Specifications
2024

These specifications provide the framework for LMMC officials to inspect racecar. In addition to interpreting and enforcing these specifications, LMMC officials are authorized to make such other determinations or take such other actions as they determine to be necessary to promote the best interest of micro sprint racing, including, but not limited to fairness and prompt finality of completion and results.

Table of Contents

LANCO MICRO MIDGET AUTO RACING CLUB, INC.

Car Specifications
2024

I. GENERAL

A. There will be five (5) racing classes:
Sportsman, 125cc 2 cycle/250cc 4 cycle, 250cc 2 stroke, Winged 600 4 cycle and Wingless 600 4 cycle.
B. Lanco is a member of the U6SA organization, in addition to the specs listed below, all 600 cars must follow the 600cc Micro Sprint Universal Rules defined by the U6SA.
C. Classes may be added at the discretion of the Board of Directors, rules for the new class will be updated as necessary outside of normal rule change process.

II. WEIGHT

A. Car and driver weight at completion of race shall be 600 pounds or greater for the Sportsman, 125cc 2 cycle/250cc 4 cycle and 250cc 2 stroke classes, weight for the 600 classes will be determined by the U6SA organization.

III. ENGINES

A. Single cylinder engines only are allowed for all classes except twin cylinder engines are allowed for the 250 four stroke class and 4 cylinder engines for 600 classes.
B. The sportsman class allows the following engines:
1. *The spec engine rules for the 1992-2007 Honda in the Sportsman class are designed as a restrictive rule set to promote and lower costs along with equal competition. LMMC realizes these specifications apply to engines that have long been out of production and as such is implementing the following policy. In the even that a parts shortage necessitates a mid-year rule change, the procedure to update the following Sportsman engines rules is as follows:*
    a) *No rule changes can be made prior to June 1st*
    b) *Changes can only be made to allow an aftermarket solution to an OEM parts shortage problem*
    c) *Approved changes using this policy will be permanent unless rescinded through the normal fall rule change process*
    d) *Changes will be voted on by the driver or a team representative for any member registered car number that has scored points in the calendar in question. One vote per registered car number. A vote requires a quorum of 50% of the registered teams who have scored points in that season. Of that quorum, a 75% approval vote is required to pass a change. A vote may only be scheduled to occur on a race night and should be called 30 minutes prior to the start of hot laps.*
    e) *Assuming the requirements of section d are met, the tech committee must ratify the change by simple majority*
        i) *If the tech committee is tied, the club President (or Vice President in his/her absence) will break the tie*
    f) *If the change is ratified by the tech committee (and President if necessary), the change will then proceed for Board of Directors ratification. The tech committee and President will dictate the urgency of the change, determining whether the Board of Directors votes at its next scheduled meeting, or via an emergency e-mail/phone voting procedure. Simple majority is required to pass.*

2. *Spec 250cc liquid cooled engine*

    a) *The following are the approved engines:*

        i) *1992 to 2007 Honda CR 250cc*

    b) *Cylinder and head must hold a minimum of 20.5cc of fluid for a compression ratio test.*

        i) *The volume is measured with the head bolted to the cylinder of a race ready engine, when the piston is at TDC (Top Dead Center) and measured to the top of the spark plug threads.*

c) *The engine must be stock in configuration and appearance with no internal or performance modifications other than those modifications listed below: (all other internal or performance modifications will be considered illegal)*

i) *Any carburetor*

ii) *Any pipe*

iii) *Any fuel pump*

iv) *Any piston manufactured as an OEM replacement for the approved engine.*

v) *Power valves may be removed and replaced with a plug.*

vi) *Clutch linkage and kick-starter assemblies may be removed and plugged.*

vii) *Remove and weld aluminum lug by chain sprocket on engine side case.*

viii) *Remove and weld aluminum casting on case half where carburetor rests.*

ix) *Aftermarket covers may be used for the: clutch cover, ignition and/or power valve.*

x) *Clutches may be removed and clutch hub may be altered or replaced with an aftermarket hub.*

xi) *Cylinder modifications any internal modifications that do not alter the appearance of the outside of the cylinder. Welding is permitted in the area of the rear transfer ports and reed cage to repair or prevent cracks. However, this welding may not be used to allow reshaping of the transfer port or reedcage beyond the limits of the original factory casting.*

xii) *Any Honda OEM straight or angled carb insulator boot.*

(1) *Modifications for carb retention are allowed as long as they do not enhance performance*

xiii) *Stock Honda head, no inserts.*

(1) *Head cutting is allowed – must meet 20.5cc fluid test.*

xiv) *The clutch side may be sealed from the gear case and an additional fill plug may be added.*

d) *Additional Clarifications*

i) *Stock Bore*

ii) *Stock Stroke*

iii) *Stock OEM or aftermarket direct replacement cranks and rods may be used as long as they are of OEM configuration and specification. No modifications are permitted to the cranks or rods.No base or spacer plates*

iv) *The following stock OEM gaskets must be used and may not be modified: Head*

v) *Ignition must be stock appearing, any plug wire, spark plug or spark plug cap may be used.*

vi) *Stock OEM reed cage and reeds from a 1992 to 2007 Honda CR250cc model year engine – no modifications. Aftermarket reeds are permitted as long as the reed cage remains stock. Reed stopper plates may be removed at competitor's discretion.*

vii) *No reed spacer*

3. *270cc Air Cooled Engine*

a) *Engines marketed as an air-cooled 250cc displacement or fewer engine.*

b) Maximum piston displacement shall be 270cc.

C. There will be only one engine permitted per car.
D. Maximum piston displacements shall be:
1. *125cc engine – 8.24 cu.in. (or 135.00cc)*
2. *Carburented 4-stroke 250 engine max displacement 270cc - Fuel injection is permitted, if fuel injection is used, the motor must remain stock bore and stroke and use the OEM throttle bodies. Engines the came from the factory with fuel injection must remain stock bore and stroke even if running a carburetor.*
3. *2-stroke 250 cc engines – 16.4754 cu.in. (or 270cc) or 450cc 4-stroke engines. Carbureted 450cc 4-stroe engines may run a maximum displacement of 486cc. Fuel injected 450cc 4-stroke engines must remain stock bore and stroke and use the OEM throttle body modified for use with alcohol. If a 450 engine came from factory with fuel injection, it must remain stock bore and stroke even if running a carburetor.*
4. *600 – see the Engine Specifications defined by the U6SA for piston displacement.*

Note: To find cubic centimeters (cc) multiply Bore X Bore (mm) x3.14 x stroke (mm) divide by 4000.

E. Titanium cranks are illegal. (Protest able only)

IV. MUFFLERS

A. Mufflers are required to provide a sound limit of 100 dba maximum 4-2stroke must provide muffler at sound limit of 104 dba maximum

V. DRIVER

A. All cars must be rear wheel drive
B. No open drive shafts will be allowed.
C. Chain guards or arm guards must be installed on all cars where chains are exposed to the driver. If no arm guard is used, the chain guard must meet the same material and thickness specifications as the firewall.

VI. CAR DIMENSIONS

A. Wheelbase- 70 inches, maximum – 56 inches, minimum
B. Width (at tire sidewalls) 64 inches maximum, 40 inches minimum.
1. *There is no width rule for the 600 classes.*

VII. FRAME

A. Roll cages
1. *Roll cages are mandatory*
2. *There must be a minimum 12 inches opening between the top rails:*
3. *The material must be a minimum of one inch O.D., .083-inch wall thickness: anything 1.25 inch O.D. and over .065.*
4. *All roll cages must have at least a 2 inch gusset at all butt joints.*
5. *Roll cages with front down tubes must extend forward from the top of the cage to the front shock mounts.*
6. *Roll cages must be attached to the frame (minimum of six points)*
7. *Under no circumstances may the helmet of a normally seated driver extend above the roll cage.*
8. *Roll cages must be high enough that the driver's helmet, when seated in normal position, is three (3) inches below the roll cage. Otherwise a wing will be mandatory.*
9. *Full roll cage extensions, including gussets, if extension is more than five (5) inches high, are allowed as required.*

B. Side Bars:
1. *All cars must be equipped with horizontal or vertical sidebars. If the car is not equipped with both left and right side bars, an approved manufacturer's full containment seat is mandatory.*
2. *Construction to be of the same material requirements as roll cages, (one inch minimum on both sides).*

C. Nerf bars and bumpers:
   1. *All cars must be equipped with nerf bars through out the race.*
   2. *Right nerf bar must extend at least to the middle of the tire, but not beyond the outside of the tire. Left nerf bar must extend to at least the middle of the tire, but no more than 1 inch past the outside of the tire.*
   3. *Cars must be equipped with bumpers extending beyond the front and rear tires through out the race. No blunt ends, no flat bumpers, must be "V" shaped on the rear.*

VIII. WHEELS, TIRES AND BRAKES

A. Wheel diameter: 10 inch maximum
B. No dual wheel cars will be permitted.
C. All cars must be equipped with functional rear brakes. Front brakes are optional.
D. The Wingless 600 class has a minimum durometer rule for the right rear tire. The tire must punch 50 both before and after the race. A ten-minute cool down period is permitted if necessary, after the race. Any brand, any compound. The only rule is the durometer.

IX. STEERING AND THROTTLE

A. No cable steering allowed.
B. Direct steering specifications:
   1. *5/8 inch minimum steering column shaft*
   2. *3/8 minimum heim ends*
C. Quick release steering wheel optional
D. Only foot operated throttles, with positive return are permitted. Physical challenged equipment acceptable

X. BODY

A. All cars must have complete bodies (normal sprint car). No extending panels on hood or tail. Lower side panels must extend to the rear of seat and/or seat belt mounts and forward past throttle and/or brake. Sail panel and flare may extend past rear down tube no more than 3.25 inches.
B. Painting and numbering (guidelines only – not a tech item)
   1. *All cars must be painted an attractive color or colors*
   2. *A six-inch minimum height car number is to be painted on both sides of the tail.*
   3. *A 15-inch minimum height car number is to be painted on top of the wing, angled towards the right, from the front of the car.*
   4. *A 10 inch minimum car number is to be painted on both sides of the wing.*
   5. *Any letter as part of the number must be half the size of the number and appear at the rear of the number.*
C. Firewall
   1. *All cars must be equipped with a firewall between the driver and the engine compartment. Minimum thickness specs are:*
      Steel 24 gauge (0.0239 inches), Aluminum 0.050 inches,
      Fiberglass or plastic 0.095 inches.
D. Floor pan
   1. *The floor pan must come to a point just rear of the front axle or tie rod to the front edge of the driver's seat.*

XI. BALLAST

A. Any material used for the purpose of adding weight must be Welded or bolted to the car structure.
B. No liquid or loose ballast will be permitted.

XII. FUELS AND FUEL SYSTEMS

A. Only methanol alcohol and water (and oils for lubricating purposes) are legal fuels.
B. Approved legal additives are posted in the pit shack
C. Exterior fuel tanks will be permitted and are to be made of high impact material only.

D. Only one fuel tank per car
E. Only natural aspirated fuel systems allowed (carburetor)
   1. *Forced fuel induction or superchargers of any type will not be allowed.*

XIII. WINGS

A. All wings must be all metal or lexan construction externally
B. All mounts and adjustments must be outside of roll cage
C. Wings sizes:
   1. *Wings cannot exceed 12 sq. ft. (1728 sq. in.) this will include all flat or tapered areas viewable from the top.*
   2. *Maximum length of wing panel is 54 inches.*
   3. *Inside side panel may be a maximum of 24 inches high*
   4. *Outside panel may be a maximum of 24 inches*
   5. *Panels must be parallel and not obstruct the driver's vision.*
   6. *There will be a maximum of two-inch lip on the side panels.*
   7. *A front wing is optional, not to exceed 432 sq. inches.*
   8. *Front wing of 600 is not to exceed 576 sq. inches.*

XIV. CONSTRUCTION METHOD AND PRACTICES

A. Fabrication of critical parts, frame, running gear and attached brackets, cowl frame, back rest, fuel tank mount, bumpers, nerf bars, front and rear axles, steering mechanisms, engine mounts, exhaust mounts and roll cage parts must be welded.
B. Radiator mounting and locations is optional but must have adequately mounted brackets, no wire ties and must not extend center of rear tires.
C. Batteries must be securely mounted. If the battery is not of the sealed variety, then it must also have a cover.
D. Shifters must be in such a position that a driver cannot get his hand near the drive chain or other moving parts when shifting.
E. Nothing on the car will be allowed past the outside edge of tires.
F. Stop and or tail lights are not permitted.

XV. SAFETY ELEMENTS IN CAR CONSTRUCTION

A. Full five point seat belt, shoulder harness and anti-submarine strap are mandatory.
   1. *Safety belts and harness must be attached to the car frame with 5/16 inch (minimum) bolts or securely wrapped around the frame at all times, (but not the lower frame rail).*
   2. *Quick release must unlatch both belt and harness at the same time.*
   3. *All cars must be equipped with approved ant-submarine belts mounted to the frame of the car.*
   4. *All shoulder harnesses must be mounted so that straps loop over a bar, even with the driver's shoulders, to a maximum of six inches below the shoulders at all times, regardless of driver changes.*
   5. *High backed seats will be mandatory, a High backed seat is defined as full backed incorporating a headrest.*
B. Car must be equipped with a positive on off fuel valve and operating ignition switch located within easy reach of driver.

XVI. OPEN SHOW CAR SPECS

A. Cars must meet Lanco's weight, fuel wheel base, and motor specifications.

XVII. TECHNICAL COMMITTEE INSPECTION

A. All of the above are subject to the technical committee's interpretation and approval.