

GLS 2010 Mini - Cup Rules

Note: Drivers must participate in 75% of races to be eligible for points payout. In the event of a cancellation payout will be determined by what the track pays to the GLS Series for that date and pay may be paid at a later date.

GENERAL BODY REQUIREMENTS

- 1) All bodies must be kept in good shape.
- 2) Hinges and pin kits required. Roof opening must be hinged in front only. Positive latches that can be opened from inside and outside body required. Hood and trunk must be held shut with positive pin fasteners-one (1) on each side or fastened in a manner acceptable to official(s). Roof rails no taller than 3/4 inches running the length of the roof and rear window are permissible.
- 3) Cars must be neat appearing. Chassis must be painted or powder-coated. Body interior may be left unpainted. Any body damage must be neatly repaired and acceptable to official(s).
- 4) Body exterior dimensions shall be no more than 120 inches long, 47 inches in width. Body must remain level with chassis and cannot be offset on frame.
- 5) Fenders may not be cut or altered except for clearance, subject to approval by official(s). No fender flairs.
- 6) Open Division cars must weigh 700 pounds if using an EES motor and 740 pounds when using an Arena Racing Sealed motor with driver ready to race. Maximum left side weight is 55% of total race weight. All weights will be calculated on scales approved by GLS. It is the responsibility of the race car driver to see that their car meets the specified minimum weight requirements.
- 7) If weight is needed to meet minimum requirements then lead must be mounted securely. GLS suggests poured lead - no buckshot or BB's.
- 8) Weight must be attached to frame, or placed inside frame rails with grade 8 hardware, and cannot slide from front to back or side to side in a manner acceptable to official(s).
- 9) A spoiler must be attached to the rear deck lid and must maintain a minimum angle of 35 degrees to the ground. Rear spoiler must measure 2" from the top of the trunk lid to the top of the spoiler and no less than 32" in length and must be centered. Windshield, rear window, and quarter windows are mandatory.
- 10) Lexan must be a minimum of .060, but may be thicker. Tinting of windshield in not permitted. Lexan may be attached by rivets or nuts and bolts. Bracing is allowed on windshield or rear window. No holes or cracks in Lexan and must be mounted directly to body.
- 11) Left side window must have window net fastened to roll cage (may have quick release mechanism). Right hand window may have Lexan window that can be easily removed by safety crew. No enclosures of any kind will be allowed in the left window. The rear window may not be altered or drilled.
- 12) Wink type dimensional mirrors permitted with a maximum width of 28inches. Mirror glass must be secured with silicone or equivalent. Side view mirrors cannot extend beyond the widest part of car body. ALL MIRRORS ARE SUBJECT TO APPROVAL BY OFFICIAL(S).
- 13) Dashboard optional
- 14) Foot box interior must be constructed of aluminum at least 22 gauge. Panels must be securely fastened to chassis. Panels may be added to keep debris from driver's compartment. All interior panels are subject to approval by official(s).

- 15) A maximum of 2 openings with a total of 16 square inches are permitted in the nose of the car. These must be covered by a layer of wire mesh attached by one half-inch strip to hold the wire to the outer-edge of the opening. All openings are subject to approval by official(s). No openings are allowed in rear body section.
- 16) One engine cooling hose from the outside of the vehicle to interior of engine compartment is permitted. This hose must be mounted in the rear side window. The pickup point of the hose must not exceed the outside body lines of the car. The hose, or an extension thereof, must not extend more than 1 inch past the inside edge of the firewall or engine covering. The diameter can be no larger than 3 inches.
- 17) Bumpers must be made of steel and fastened to chassis.
- 18) All cars must maintain a minimum roof height of no less than 30.5 inches. Not including roof rails. Car height off the ground and body height, including rake or degrees of body angle, shall be determined by measuring overall height of car at rear of the hatch on the roof centerline.
- 18) No remote, mechanical or electrical devices for shifting weight, adjusting weight, adjusting panhard bar or ride height will be permitted from inside the cockpit.
- 20) Body must be mounted as close as possible to level with the main frame rails. Body will be checked with a level at the door sill and must have a maximum rake of 1 degree.
- 21) If found illegal at the end of the race, points and all monies are forfeited.
- 22) The top five finishers are responsible for tech- Each driver will choose one item to tech after the race. **ONLY THE TOP FIVE WILL HAVE A SAY IN THE TECHING PROCESS**
- 23) Scales are mandatory after the race

EQUIPMENT AND GENERAL ACCESSORIES

- 1) GLS requires that all cars be fitted with an aluminum racing seat that fits the driver's physical characteristics.
- 2) All seats must be securely mounted between the center frame rails of vehicle and frame rails must be equally spaced from the center of chassis. The frame rails must remain in original manufacturers position. GLS Recommends at least five mounting bolts in seat.
- 3) No driver shall compete in any event with head or arm extended outside of a car opening. The top of the driver's helmet must be at least one (1) inch below the top edge of the roll cage. This will be measured with the driver securely buckled in the car's seat.
- 4) All drivers must wear a racing type helmet with a Snell rating of SA95 or newer. **No M Designated Helmets Allowed**
- 5) All drivers must wear an approved driving suit, shoes and gloves. A single layer fire suit is the minimum allowed.
- 6) GLS requires all drivers use arm restraints or the car must be equipped with window nets.
- 7) GLS requires drivers to wear a **NECK Collar or some form of Hutches/HANS Device** .
- 8) GLS highly recommends all drivers wear underwear, shoes, socks, neck collars and gloves made of fire resistant material.
- 9) Two-way radio communication with a race spotter is optional but recommended.
RaceCeiver's will be mandated at many of the tracks that we attend. It will be up to the team to have a RaceCeiver for these races.
- 11) Fire extinguishers are optional, but recommended. **Aimed at Gas Tank**
- 12) All entrants must have in their pit area at all times, as part of their equipment, a fully charged fire extinguisher.

13) All belts and harnesses must be a minimum of 5-point type and meet the following minimum requirements:

- A. Have a minimum SFI rating of 16.1
- B. Be at least 3 inches wide for adults and 2 inches wide for Future Stars.
- C. **Be dated by the manufacturer and no more than 3 years old.**
- D. A quick-release seat lap belt is required.
- E. Both ends of the lap belt must be fastened to the roll cage with grade 8 bolts not less than 3/8" in diameter. BELTS SHOULD BE MOUNTED ACCORDING TO GLS OFFICIAL(S)
- F. Shoulder harness must come from behind the driver's seat. Inertia reels can not be used.

GENERAL ENGINE REQUIREMENTS

- 1) All cars must have a GLS approved sealed engine, a Honda GX390 from EES or Mountain Machine.
- 2) Serial numbers cannot be removed from engine block.
- 3) Arena Racing USA supplied Honda GX390 sealed engines are also legal.

HONDA CARBURETOR TECH.

- 1) Must pass the .930 Go/No-Go bore gauge. Carburetor must remain as supplied by EES or Mountain Machine with no alterations, i.e. no knife edging of throttle blade.
- 2) Carburetor insulator for Honda carburetor must be drilled for pulse pump. Fuel pump must be pulsed from insulator only. Only one hole is allowed. No air leaks.
- 3) If Arena Racing USA engine is used, the legal Arena Racing USA supplied carburetor must also be used and must remain unmodified.

CARBURETOR GASOLINE FILTER

- 1) Gasoline filters may be used. The location and size of the filter must be acceptable to official(s).

AIR FILTER AND ADAPTER

- 1) All engines are required to have an air filter and carburetor adapter.

SPARK PLUG

- 1) Any make or brand of spark plug may be used. Plug must remain unaltered from factory but sealing ring may be removed for head temperature sensor.
- 2) Aftermarket spark plug connectors may be used to replace stock Honda connectors.

IGNITION SYSTEM

- 1) Altering the ignition timing from stock Honda GX390 specifications is not allowed.
- 2) Spark intensifiers are prohibited.

STARTER

- 1) The electrical self starter must be in working order. All cars must be capable of starting under their own power.
- 2) The starter cup is an extension of the recoil starter assembly and can be removed if desired. It also presents a hazard when adjusting the carburetor. The screen must be replaced and firmly attached to the motor in the original location and made of 1/4 inch mesh.
- 3) Holes can be drilled to access starter bolts

BATTERY

- 1) All batteries subject to approval by official(s).

ELECTRICAL SWITCH LOCATIONS

- 1) All electrical switches must be located on the left side of the dash panel and must be labeled showing the on/off positions.
- 2) A switch must be wired so as to ground the ignition.

ENGINE EXHAUST SYSTEM

- 1) Exhaust pipes only from EES or Mountain Machine are allowed. Pipe must have no interior restrictions and be a minimum of 22 inches and maximum of 29 inches end to end. No staged pipes allowed. If tracks require mufflers, GLS permits ONLY the "RLV" muffler. All mufflers must be attached to the header pipe and contain a minimum of one baffle.
- 2) Additional bracing and brackets to reinforce and support pipe are legal.
- 3) Exhaust pipe wrap or coating is legal.

FUEL & OIL

- 1) Unleaded gasoline available at a corner service or racing fuel.

FUEL CELL

- 1) The use of fuel cell, capacity of 1 1/2 gallons or less is mandatory.

CLUTCH

- 1) Only a dry centrifugal clutch is allowed. No transmissions, belt driven torque converters, oil bath clutches or axle clutches.

CHAIN / GEAR SPROCKETS

- 1) Only #35 chain allowed. Chain guards permitted and must be acceptable to official(s). No automatic or manual chain oiling systems permitted.

BRAKE COMPONENTS

1) All brake and brake cooling component parts and installation must be acceptable to the official(s).

REAR AXLE

The rear axle must meet the following requirements:

- 1) Axle must be mounted solid to suspended chassis.
- 2) Minimum 1.25" steel or chrome molly hollow axles permitted. Axle cannot extend beyond rims. No alternate materials allowed.
- 3) Both rear hubs must be keyed securely to axle. Stewart Hubs are allowed
- 4) Axle key stock must be secured in an additional fashion (tie wrap, tape, etc.) on all cars.

WHEELS

All wheels must meet the following requirements:

- 1) Wheels are 8" diameter aluminum with a 6" to 7" rim width.
- 2) GLS strongly recommends 4 bolt hubs and wheels for maximum safety.

TIRES

1) Hoosier MC780, American Racer m32, or Arena Racing Tires. No other tire or compound is legal.

TIRE TRACK

- 1) All cars must maintain a tread with between 43" and 46" inches measured at the widest point (sidewall) of the tire set at zero toe-in. Aluminum spacers are permitted to utilize maximum front tread width.
- 2) All tires and wheels must be enclosed by the body.

WHEELBASE REQUIREMENTS

1) The maximum allowable wheelbase for either side of the car is 61 inches. The minimum allowable wheelbase for either side of the care is 60 inches.

CHASSIS

1) All chassis must be painted or powder coated. No filled or solid tubing allowed and must be approved by GLS officials for safety.

SUSPENSION

1) All cars must have a suspension consisting of the following:

A) Four (4) Afco, Carrera, or Pro shocks. No remote or adjustable shocks allowed. **(Re-buildable Shocks are allowed)**

B) Two (2) front springs with a rating of 10# to 1000#, any brand allowed.

C) Two (2) rear springs with a rating of 10# to 1000#, any brand allowed.

2) Front shock spacing may not exceed one (1) inch width.

SPINDLES

1) All spindles, upper and lower control arms must be original manufacturer. All spindles and arms subject to approval by GLS officials. No home made suspension items.

STEERING

1) All cars must be equipped with a steering column constructed of 0.750 x .065 steel tubing. Collapsible steering is acceptable.

2) A quick release coupling acceptable to the official(s) on the steering wheel is mandatory.

3) Only rack and pinion steering is permitted.

4) All steering linkage must be properly secured. The U-joint is Afco part number 30309. The steering shaft and mounting block should be padded to protect driver's legs and lower body.