



SPORTSMAN BUGGY

May 2010

GENERAL REGULATIONS

All rules and safety equipment as outlined must be followed.

COMPETITION REGULATIONS

This class and all components will be considered open unless otherwise stated within these class rules. Class allows one or two seat open-wheeled, two wheel drive cars.

ENGINE DISPLACEMENT & LOCATION

Any engine may be used providing:

- It is a design that has been series produced in quantities of 5000 units or more and is readily available to the general public.
- It is located behind the driver, mid engine allowed.
- It retains a maximum of four valves per cylinder.
- It does not displace more than the following:

Water-Cooled Engines

- Single-seat 8 valve Maximum 1700cc
- Single-seat 16 valve Maximum 1650cc

- Two-seat 8 valve Maximum 1800cc
- Two-seat 16 valve Maximum 1750cc

Air-Cooled Engines

- Single-seat 4-cylinder push rod Maximum 1915cc
- Two-seat 4-cylinder push rod Maximum 2000cc
- Rotary-piston engine displacement is 1.5 times the published cc (12A model =1650cc 13B model=1950cc)

Single and two-seat vehicles may use one or two carburetors providing:

- Each carburetor has a maximum of two venturi bores.
- Maximum allowable venturi size is 42mm.
- Carburetor(s) must be of the production automotive type.

Fuel injection is stock production with the following restrictions:

- Intake manifold will remain as delivered by the manufacturer. It must retain its stock shape, size, and configuration.
- No porting or other modifications. Ports may be matched to the heads, but matching may not exceed .250" (1/4 inch) deep.
- Manifold must be the unit that was installed and delivered on the engine by the original manufacturer.
- Throttle body must be production OEM with maximum throttle body of 58.5 mm.

SUSPENSION

- a) Front suspension travel will be limited to 10 inches.
- b) Rear suspension travel will be limited to 12 inches.
- c) Suspension travel will be measured at the axle centerline.

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Safety Rules & Regulations

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PERSONAL PROTECTIVE GEAR

1. Helmets: Snell 2000 helmets are required for 2010 season. All competitors must have their blood type and known allergies marked clearly on their helmets.
2. Eye Protection: Face shield or shatterproof goggles for each occupant.
3. Protective Clothing: A SFI approved fire suit in good condition is required for each occupant. Fire resistant or leather gloves and boots, and neck collars are recommended.

VEHICLE SAFETY

Workmanship: All construction and preparations must be performed in a good workmanship manner subject to the approval of the tech inspector.

1. HARNESS RESTRAINT

Seat Belts and Shoulder Harness: 5 Point harness in excellent condition allowed. A quick release lap belt not less than three inches wide is compulsory. Both ends of the lap belt must be fastened to the roll bar cage with high quality graded bolts, not less than 3/8" diameter, with a nylock and/or cotter pin required.

Shoulder harnesses are mandatory and must be no less than three inches wide and must come from behind the driver's seat. When crossing the roll cage the harness must pass through a steel guide welded to the roll cage that will prevent the harness from sliding side to side.

A crotch belt is mandatory and must be securely mounted to the lower seat frame at the bottom and to the lap seat belt on the top.

Frayed belts, belts in poor condition, weathered or hard belts will not be accepted.

2. SEATS

A racing style bucket seat of either high or low back must be used. If using a low back style seat a head rest must be fitted to allow for protection from rear impacts.

3. WINDOW NETS

Mandatory for every vehicle. All vehicles including single seat vehicles require one net per side. Double seat vehicles with only one occupant require only one driver's net.

4. FIRE EXTINGUISHER

Each vehicle must be equipped with at least one securely mounted 2lb fire extinguisher within the driver's reach. The extinguisher must have gauge showing full charge.

5. INTERIOR

All factory fitted glass must be removed. Interior trim panels, carpet padding, or any other flammable pieces must be removed.

6. FUEL SYSTEMS

The use of a commercially manufactured fuel cell is mandatory.

Fuel Tank: officials will reject any previously approved fuel cell, which appears to be defective, damaged, or not in proper condition.

No pressure systems will be allowed except for LPG or natural gas. Any concealed or non- concealed pressure type containers, feed lines or actuating mechanisms will not be permitted, even if inoperable. Icing, Freon type chemicals or refrigerants may not be used in or near the fuel system.

Electric fuel pumps must have oil pressure shut-off. Loss of oil pressure will automatically shut off fuel pump. A momentary on bypass may be installed. The momentary on bypass may be like a push button, or a 2 pole starter button, which can be mounted in a position best suited to the driver. The oil pressure sending unit is AC Delco part number 25036938 or equivalent.

No material other than standard foam as provided by the fuel cell manufacturer is permitted.

Rear mounted fuel cell must have a chassis or body cross member of substance between the fuel cell and driver and be protected from ground obstacles.

All fuel cells must have a vent line in which a one-way valve is installed and routed correctly. Vehicles that use a filler tube connected to fuel cell for remote filling must have an in-line one-way valve.

Fuel cell cannot be vented into the driver's compartment of any vehicle.

A splash shield must be in place to direct any spill away from the driver, motor and motor exhaust. A body panel is considered sufficient splash shield.

Double return springs on throttle required.

7. CHASSIS FABRICATION

Roll Cage: Roll bar construction must be fully welded. Officials recommend seamless tubing.

Minimum mild steel tubing diameter and thickness for off road racing vehicles weighing:

- Mass up to 3,000 lbs - 1-1/2 inch diameter by .120 wall thickness.
- Mass 3,001 to 5,000 lbs - 1-3/4 inch diameter by .120 wall thickness.
- Mass over 5,000 lbs - 2 inch diameter by .120 wall thickness.

Chromoly chassis must be of comparable strength to mild steel tubing diameters.

All gussets must be of the same material and thickness as the roll cage, measuring three inches by three inches. All tubing, welds, gussets and roll cage construction must be approved by officials.

All vehicles must have three horizontal door bars per side.

All vehicle roll bar and protective caging material must meet or exceed above material specifications. This includes all door bars, diagonals and bracing.

All roll bars within reach of driver's head must have protective roll bar padding. Minimum tube diameter for main chassis structure for all buggy divisions is 1-1/2 by .090 walls minimum.

Gussets required on all intersections in driving compartment within 3 inches of intersection.

Diagonal or similar bracing is mandatory for all truck roof openings as well as front and rear roll bar hoops.

8. VEHICLE CONSTRUCTION

Engines

- Only naturally aspirated engines may compete. Carburetors, fuel injection and propane mixers only are permitted. No Nitrous Oxide, turbo-chargers or superchargers for all race classes are allowed. See class limitations for maximum engine displacement and style.
- Exhaust: No open headers are allowed. All vehicles must be equipped with a spark arrestor or muffler. No straight-through bottle mufflers allowed.

Roofs: All vehicles must have a roof. It must be made of steel or aluminum. All buggies' roofs must be a minimum of .075" aluminum or 16-gauge steel. Recommended 1/8" aluminum with heavy duty hinge. Maximum roof opening between bars is 34".

Steering: There must be no faulty parts or insecure welds.

Floor Boards: Required on all vehicles and must be securely mounted.

Electrical

Lights: All vehicles must have at least one brake light a minimum of three inches in diameter and easily viewed from the back of the race vehicle. Each vehicle must also have a minimum of at least one rear facing amber light with a minimum diameter of 3 inches that shall be on during the entire race.

Radios: In pro class only, Frequency must be recorded with Tech.

Batteries: must be securely mounted in a non-corrosive container in a safe location.

Kill Switch: All electrical switches must be located on the dash panel. The master on/off switch that shuts off electrical power and the engine must be labeled and located on the left dash panel. The master on/off switch must be wired to the battery(s) in a manner that would cut off all electrical power. Each master on/off switch must have a 3 inch red circle around the switch, making the switch easily identifiable.

Vehicle Bodies

Complete bodies must be attached at the start of competition, pre-run or any other on track activities. Bodies must be attached in such a fashion as not to create a pointed or sharp extrusion when panels are removed. Looped body mounting bracket construction.

Bumpers: All vehicles must have safe bumpers front and rear. Technical inspection must approve the bumpers.

Firewall: The vehicle must have a firewall mounted in a manner to protect occupant(s) from fuel, oil, and antifreeze. Any liquid lines inside the driver's compartment must be shielded. Oil coolers and radiators mounted in the rear must have all fittings facing outward from the cockpit.

Brakes and Brake Cooling: Brakes must be operational of all four wheels at start of each race. All brake operation must be approved.

9. WHEELS

All wheels must be in good condition. Lug nuts must be open ended and the proper size for stud. Studs must extend a maximum of two full threads past the end of the lug nut.

No snap or clip-on wheel covers are allowed.

Bead Locks:

- If the bead lock opening is more than eight inch diameter, the wheel studs may be no closer than 1-1/2 inches from the outer most face of bead lock. Stud ends must be rounded.
- Any cut out for the valve stem opening must have the sharp corners rounded off (radiused) and must be capped. Cut out means any removal of bead lock that opens towards the inner circle edge.

10. MARKING AND VEHICLE IDENTIFICATION

All vehicle numbers must:

- Be solid black on a white background and must allow prompt identification by officials at all times.
- Numbers must have one inch of space between them.
- Have a minimum height of eight inches and be a minimum of 1 – 1/2" wide.
- Minimum number plate size is ten inches high by fourteen inches long.
- Be located in the following positions: On the rear of race vehicle, high and close to the back of the cab and on both sides of the vehicle.

Officials may require a competitor to use a different number to avoid confusion or duplication at an event. In the event that a vehicle number is not visible from the timing and scoring, the competitor will NOT be scored. It is each competitor's responsibility to make sure their vehicle number is visible during all race conditions. Advertising on a race vehicle must be in good taste.

Officials may require the use of specific sponsor decals.

FUEL CELL VENT LINE ROUTING DIAGRAM

Fuel Cells: Vehicles must have a vent system that has a one-way valve and is installed and routed correctly.

CHASSIS ROLL CAGE AND GUSSET FABRICATION