2013 PETALUMA SPEEDWAY
DWARF CAR RULES

Current as of February 22, 2013

PETALUMA SPEEDWAY

2013 Dwarf Car Rules

As of 2/22/2013

Table of Contents

1 Safety Equipment 2
2 Weight 3
3 Chassis 3
4 Bumpers, Nerf Bars & Rub Rails 6
5 Engine 6
6 Drivetrain 7
7 Exhaust 8
8 Body 8
9 Fuel System 9
10 Tires and Wheels 9
11 Miscellaneous Class Specific Rules 10
12 Disclaimer 10

Changes are highlighted in Yellow.

1 Safety Equipment

1.1 Driver

Driver Suit

All drivers must wear a driving suit of fire resistant material that effectively covers the body.

Minimum requirements are a single layer Nomex suit with underwear, gloves and neck brace. Nomex socks, shoes are mandatory and Nomex helmet skirt recommended. Uniforms must be clean and in good repair. Soiled, torn, worn, or poorly fitting uniforms will not be allowed.

Helmet

All drivers must wear a full face helmet SA2005 or newer. 2010 will be the last year that SA-2000 helmets will be allowed.

Any helmet with the inside identification labels (stickers) defaced, obliterated or removed will not be approved for competition.

Helmets which are abused, thrown or involved in an injury accident will be confiscated by Officials.

Driver's helmet should carry name, blood type, allergies and date of last tetanus shot along with pertinent medical history – this is optional but suggested.

Other

1.2 Driver Compartment

All cars will have a production made quick-release, removable steering wheel.

Must have complete fire wall between driver and fuel cell.

Window Net

1.3 Fire Equipment

Car

All cars are required to have a fire extinguisher. 5 Lb. Halon on board fire system with a minimum of 2 nozzles installed is highly recommended. If a portable type fire extinguisher is used, it must be mounted inside the car easily removable by driver with one hand while in belted position.

PETALUMA SPEEDWAY

2013 Dwarf Car Rules

Pit

Each pit area must be equipped with a serviceable A-B-C type (dry powder) fire extinguisher minimum 7.5 pound capacity. This is in addition to extinguisher in race car. The extinguisher must be visible from pit road.

1.4 Seat

1.5 Seat Belts

All cars must have an approved 5-point racing harness, equipped with a quick release buckle. Both ends of harness must be attached to the frame of the car with, not less than 3/8" grade 8 bolts. All seat belts will be installed at a 45-degree angle to the driver's hips. Shoulder harness comes from behind the driver, and will go over both shoulders so that they will be held securely in the seat. (All safety restraint harnesses will be installed in accordance with manufactures guidelines).

Seatbelts must be replaced or recertified every 2 years.

1.6 Communication

Racecever and transponders are mandatory and are available to buy or rent at track.

No listening or transmitting devices (with exception of track approved raceceiver).

1.7 Miscellaneous

No glass of any type is permitted. Side windows may have shatterproof Lexan, minimum of 1/16". Front windshield must have 1/2" square mesh windscreen, or a bar system with a maximum of a 2" opening. A 2" block cannot fit through the opening.

2 Weight

2.1 Class Weight Rules

No car shall weigh less than 1,000 pounds without driver. In the event that multiple cars are not meeting the weight requirement, the accuracy of the scales will be considered by the head tech official.

2.2 Add-On Weight

No ballast will be mounted outside of body or frame. All ballast must be securely bolted or welded inside of body or frame rail and extend no lower than frame rail. Ballast will be painted white and have the car number clearly marked

3 Chassis

3.1 Eligible Models

There will be no special class of cars; all oval track Dwarf Cars run under the same competition.

Car body will be of 1928 to 1948 vintage coupe, sedan, sedan delivery, wagon, or pick-up truck. Must have been a production car.

No open top cars such as roadsters or convertibles. No convertible bodies with hard tops or "T" tops. The cars must be replicas of factory stock bodies. They must have full roof of metal construction.

All cars will be of metal construction. No fiberglass, plastic, nylon etc.

3.2 Dimensions/Wheel Base

Maximum car height, 48", top to ground. Maximum body width, 38".

40" maximum body height from bottom of frame rail to top of car.

The slope of the roof may not exceed 3 1/2" measured from the highest point in the rear just before the main cage starts to turn downward, to the lowest point just before the main cage starts to turn downward. The slope on the front hood should remain in proportion to the rest of the body.

Wheel base 73" (1/2" tolerance allowed) measured at the center of the spindle to the center of rear end housing.

Outside tire width not to exceed 61" (must be able to pass through 61" opening)

3.3 Frame Specifications

All lower frame side rails will be a minimum of 1" x 2" rectangular tubing with a minimum of .120" wall (lower frame rails on right and left side, running from extreme front to extreme rear: does not include cross member). No round, oval or square tubing in lower side frame rail.

All frames, including firewall, doors, and rear section framing, must be fabricated as a single frame unit, already forming the actual contour and dimensions of the finished body.

All cars will be of metal construction. No fiberglass, plastic, nylon etc. No aluminum for frame.

Firewall between engine and manned compartment is mandatory. There must be a complete firewall, front and rear separating engine and trunk compartments from manned compartments.

There will be a minimum of three (3) cross members in the main compartment; one at the forward end, one in the center and one at the rear. The cross members will be made of steel only, with a minimum wall thickness of .120". Cross members may be round, oval, square or angle.

3.4 Roll Cage Specifications

Roll cage must be constructed of a minimum 1.25" OD & 1.5" OD x .065 wall tubing in the main roll cage. Secondary members will be a minimum of 1" OD x .065. Wall.

All roll cages, including firewall, doors, and rear section framing, must be fabricated as a single frame unit, already forming the actual contour and dimensions of the finished body.

All roll cage bracing must be intact, permanently welded. Enter and exit by door only. Doors must be functional and driver must be able to exit from either door safely.

No aluminum for roll cage.

The right and left doors must have a minimum of two bars with a minimum of.065" wall xl" OD tubing welded through the midsection of the door frame. The bar supporting the drive shaft tunnel may be included as one of these, only on drive shaft side. Drive shaft side of car must have one bar, minimum of .065 "wall xl" tubing, welded inside to front and rear door post positioned horizontally.

All cars will have a permanent structure support bar, located behind the seat at approximately 23" above the frame rail, extending from side to side. The bottom of the seat will not be more than 63' back, measured from the upper ball joint. The seat may be tilted back for added driver head clearance; however, no portion of the seat may be back more than 68" as measured above. A seat pan must be welded in place, using a minimum of 14-gauge steel.

3.5 Driver's Compartment

All inside suspension mounts must be shrouded from driver's compartment. No sharp edges or protruding objects, which could endanger driver, shall be inside driver's compartment. All cut and freestanding edges must be folded, molded or filed smooth (i.e. window and door edges).

No rearview mirror or any type

3.6 Steering

Steering components must have safety fasteners, such as cotter pin or self-locking nuts.

If steering box is mounted in front cowling, the pitman arm may not extend more than 1 1/2" outside the natural contour of the body near that point, and must not prevent proper door operation.

3.7 Front Suspension

Front suspension must not exceed 25" measured from the ground to the highest point of any front suspension, or extend rearward past the most forward panel of the fire wall, except under frame rail, where it can not be seen from either side.

The center of the front axle will be mounted in the center of the frame from side to side, (1/2" tolerance is allowed).

No straight axels.

3.8 Front Springs

3.9 Rear Suspension

The center of the rear axle will be mounted in the center of the frame from side to side, (1/2" tolerance is allowed).

No straight axels.

No Bird Cage type rear linkage or Jacob's ladder.

Trailing arms, located outside of frame may not extend beyond the rear doorpost.

3.10 Rear Springs

No leaf spring or torsion bars.

3.11 Shocks

Steel shocks only, one shock per tire. 4 shocks only.

3.12 Brakes

Must have at least two (2) brakes controlling 2 wheels

Brake Bias manual devices are allowed inside the driver compartment

3.13 Electrical and Electronics

Battery

All batteries must be rear mounted (trunk area). Batteries must be securely mounted with a top restraint made of metal. Restraint must also hold battery caps.

Charging system optional.

Electrical

Electronics

No electronic (i.e. computer) traction devices.

No electronic or manual devices will be adjustable by the driver during a race. Any such devices shall be mounted outside the driver's compartment.

3.14 Engine Compartment

Engine compartment must conform to scale of body length and must match contour of body where it meets the right and left side of body panels. Firewall or cowling outer skin must be stock appearance in size and shape; only inner panel may be altered.

3.15 Engine Location

All engines must be front mounted, in stock location for model of car.

Engines may not be extended more then 12” to either side of car body centerline.

Engine set back is the square of the motor (rear fins) may not extend more then 17” from center of front axle. No part of the engine or transmission may be more than 21" set back, as measures above.

4 Bumpers, Nerf Bars & Rub Rails

Front bumper must be no wider than 36" and will not extend more than 6" forward of front tires.

Rear bumper must be no wider than 50" and will not extend more than 6" from extreme rear body panel or 8" if the car has a simulated fuel tank.

Front and rear bumpers must be a minimum of 4" above the ground, and a maximum of 14". A 2" extension bar may be allowed on top of the bumper, but must not exceed 16" high from the ground.

Bumper will be a minimum of 6” wide vertically.

Bumpers are to be made from round tubing .065” minimum, and .095” maximum.

There will be no sharp points or edges.

Nerf bars must be mounted on both sides in front of rear tire and be no more than 18" from center of rear axle to rear of nerf bar. A minimum of a three (3)-point mounting is required. The lower bar must be parallel to lower frame rail from the rear of the car then curve or bend toward lower frame rail. The upper bar is to attach to the roll cage a maximum of 18" above the rear attachment point of the lower bar. An additional diagonal brace from frame rail to lower bar is strongly recommended. Nerf bars must not interfere with the opening of either door and must roll through a 61" opening.

These nerfs will be constructed of a minimum of .065" x 1" on, and a maximum of .095" x 1 " on wall tubing. Lower bars may not extend more than 1" past the tire tread in rear only. Must roll through 61" opening.

5 Engine

5.1 Block

Motorcycle engines only. No snowmobile or other special application engines. 1250cc is the maximum allowable displacement.

1250 cc maximum, 4 cycle 4 cylinders maximum.

Must be a regular production (minimum 500 units per year)

Engines must have stock bore and stroke with no more then 1 mil. over bore over the original factory specifications for the engine manufacturer. OEM bore and stroke only. (The 1 mil. over bore is intended for cleanup only, not aftermarket pistons.) Engines will be checked with a bore and stroke gauge and must not exceed manufacturers original cc's for that motor.

5.2 Crankshaft

5.3 Connecting Rods

5.4 Pistons

5.5 Heads

Unmodified OEM cylinder heads only.

5.6 Springs

5.7 Valves

5.8 Camshaft

Camshafts must have stock lift and duration, adjustable cam sprockets are allowed.

5.9 Rockers

5.10 Oil Pan

5.11 Intake

5.12 Air Cleaner

5.13 Fuel Delivery System

This rule applies to fuel injected motors: OEM fuel injection only. Fuel injection may not be modified in any way from its original OEM specifications. OEM ignition systems only. No after market fuel injection allowed. After market boxes that adjust Fuel Curve, Timing and RPM only, are allowed. The only boxes that are approved are the Dynojet 2, 3, and 3R.The Dyno jet 3 with the USB is allowed with no external modules plugged in. Any boxes of this type, other than those specified, must be pre-approved by Pit Steward, 30 days prior to the event. Any car that is discovered to have any other electronic devices other that those outlined above, or who has made any modifications to these allowed boxes, will be disqualified.

Must be naturally aspirated.

5.14 Ignition

5.15 Starter

Must a have working starter.

5.16 Cooling System

Engine must be cooled by original intent. May use extra fans or oil cooler.

Water only to be used for coolant. Use of antifreeze results in disqualification. Water Wetter or equivalent ok.

6 Drivetrain

6.1 Bellhousing

6.2 Clutch

Must a have working clutch.

6.3 Transmission

Must have a working transmission.

No quick change in the entire drive system, meaning from motor.

6.4 Flywheel

6.5 Driveshaft

Must use steel drive shaft from motor to automotive rear end.

Drive shaft must have a minimum of 3 360-degree loops. One near each end, one in center. Must be fabricated from a minimum 3/16" x 1-112" steel bar, or 1.00" x .065 steel tubing.

Drivelines must be painted white.

6.6 Rear End

6.7 Miscellaneous

7 Exhaust

7.1 Manifold/Header

7.2 Exhaust System

Exhaust and headers must be installed so as not to detract from stock appearing hood, with the exception of side panels.

7.3 Mufflers

Mufflers are mandatory.

Strict 95dba @ 100'.

8 Body

8.1 Body, Body Types

Sheet metal outside skins must be secured with Dzus type fasteners, or permanently attached by rivets or spot weld no more than 12" between each attachment point located at the perimeter of each panel where it meets the roll cage, firewall, or trunk framing. Skin must not bulge or gap open between attachment points. Any gap or hole exceeding 3/8" must be covered with sheet metal, a plug, or permanent type sealant.

Outer skin shall be a minimum of 26-gauge steel or .040 aluminum.

Body must be skinned to match its type. (I.e. 3-window couple must be skinned as a 3 window, not as a 5-window). Right and left doors must be operational and allow passage. Windows and door must be near scale size, shape and location. All doors must be hinged as to open.

No fenders of any type. No structure of any type to simulate or act as a fender.

Each car will have grill shell and simulated original grill matching it's body style or a simulated radiator and vertical loop mounting bar mounted in near stock location and a hood to match radiator size and body style as not to distract from overall appearance. No grill is required if simulated radiator is used. Functional radiator may be mounted in the trunk area.

Any hood may be notched, bent or cut in such a manner, as not to distract from the stock appearance or on car using a radiator/simulated radiator, hoods may not be altered so as to detract from neat appearance.

Bubble height (i.e.: carbs, air cleaners, hood scoop) will be measured from a straight line projected out from the rear most portion of the hood. The bubble may not exceed 4" above that line and at no place on the hood may the bubble exceed 5". A tolerance of 1/2" will apply. There will be no obstruction of the drivers view.

At the beginning of the race night, all cars must have all body parts intact.

No airfoils, wings or streamlining of body.

All door latches must be a positive locking device, so as not to open from vibration or up set, and not to jam if door is damaged.

All hoods and trunks must be securely fastened by, spring latch, nuts and bolts or dzus fasteners (no screws)

8.2 Spoiler

8.3 Body Appearance

Doors and windows must remain in stock appearance and location.

8.4 Identification

All cars must have numbers in five (5) locations: Numbers on right & left door and roof must be a minimum of 12" high, and the width must be 2/3 of the height, except for the number #1. On the roof, it should be as large as possible. The number on the rear of the car must be a minimum of 6", and located above the bumper so to be viewed by the driver behind. The assigned association letter must be a minimum of 6" high on the roof and the doors and 2" high on the rear of the car. A minimum 2" number and letter must be displayed on the left front upper corner of the windshield. All numbers must be permanent (i.e.: vinyl or painted). All numbers should be made to be as large and clear and plain as possible to assist in scoring.

No roman numerals, gold leaf.

2 valves, air-cooled motors: MUST run the letter "A" in front of their number.

9 Fuel System

9.1 Fuel

Pump gas, aviation fuel, racing gas.

No nitrous oxide, no alcohol, NO nitro or propylene oxide type additives

2 valves, air-cooled motors may run alcohol. These cars MUST run the letter "A" in front of their number.

9.2 Fuel Cell

Not to exceed 5 gallons.

Tank must be vented so as not to leak fuel in any fashion, non leaking cap.

Fuel cell must be mounted between frame rails, in trunk.

Fuel cell must be mounted with metal straps only.

10 Tires and Wheels

10.1 Tires

Hoosier D.O.T, 8" wide maximum tread width, 50 durometer reading and/or Hoosier "Mediums" or "RC-3".

No softening compounds will be allowed.

Hoosiers decals must be displayed on both sides of car.

10.2 Wheels

Steel wheels only, 13” WHEEL ONLY, 7” maximum width

No bead locks.

PETALUMA SPEEDWAY

2013 Dwarf Car Rules

11 Miscellaneous Class Specific Rules

12 Disclaimer

FROM: THE MANAGEMENT OF PETALUMA SPEEDWAY

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 EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION 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 minor deviations from any of the specifications herein or impose any further restrictions that in his opinion do 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. REFEREE'S DECISION IS FINAL.

2004 STATE RULES ALLOW NO LIQUID DUMPING FACILITIES AT THE FAIRGROUNDS. Each race car that enters the Fairgrounds Pit Area MUST have an empty container(s) approved by the MANAGEMENT OF PETALUMA SPEEDWAY that will hold at least 2 gallons of used oil (fluids) for collecting anything that may be drained out of the race car or tow vehicle at each event. These container(s) must be removed with the racecar after every race and be disposed of at an approved facility at the owner's expense.

IMPORTANT NOTICE

It is ultimately the obligation of each participant to insure that his/her conduct and equipment comply with all applicable Petaluma Speedway rules and regulations as they may be amended from time to time. No expressed or implied warranty of safety shall result from publication of or compliance with these rules. They are intended as a guide for conduct of the sport and are in no way a guarantee against injury or death to participants, spectators or others.