

# 2016 PETALUMA SPEEDWAY MINI STOCK RULES

Current as of February 10, 2016

### As of 1/25/2014

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### 1 Safety Equipment

### 1.1 Driver

Anything to improve driver safety is generally permitted.

### **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.

Drivers suit. Must be free of defects, rips, or tears. Must be SFI approved 3.2/1 or 3.2/5. If you choose to use the SFI 3.2/1 single layer suit you must wear Nomex underwear. Suits may be one or two piece.

### **Helmet**

Helmet. Must use a Snell SA2010 or newer helmet. No "S" or "M" helmets allowed. All helmets must have a "SA" sticker with the date and serial number. Helmets with a altered, missing or un-readable "SA" sticker will not be allowed.

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.

Gloves. Must be SFI 3.3/1. Must be free of defects and cover the complete hand.

Neck Brace. Must be a SFI 3.3/1 minimum. It is highly recommended that you utilize a head and neck restraint system.

Shoes. Must be SFI 3.3/5. Must be free of defects.

### **Other**

### 1.2 Driver Compartment

Steering wheel with quick release mandatory.

All cars must have a manual fuel shut off valve painted yellow within easy reach of Driver. ELECTRIC PUMPS MUST HAVE AN ADDITIONAL SHUT OFF SWITCH CLEARLY MARKED AND EASILY ACCESSIBLE ON LEFT OF STEFRING WHEFI.

### **Window Net**

All cars must have an SFI approved window net, securely mounted and latched whenever on the track.

Window Net. Must use a SFI 27.1. Nets must not be older than two years old. Nets missing tags, date not punched out, or un-readable tags will not be allowed

### 1.3 Fire Equipment

### Car

An on board fire extinguishing system may be installed instead of a dry chemical extinguisher so long as it has a minimum of one nozzle in the driver's compartment and a minimum 5 lb bottle filled with Halon or equivalent fire suppression chemical or agent. If no on board system, a minimum 21/2 lb. dry chemical fire extinguisher must be mounted in the car in an approved mounting bracket well within reasonable reach of the driver.

### 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

SFI approved or equivalent racing seat mandatory.

There must be a head rest on either the seat or mounted on the roll cage.

All seats must be mounted to the roll cage or frame, not the floor pan using a minimum of 6- 3/8" grade 8 holts

All seat bolts must use large diameter washers to prevent pull through.

### 1.5 Seat Belts

A quick release 5 point seat belt with shoulder harness no less that 3" wide and a submarine (crotch) belt are mandatory.

All belt ends must be attached to roll bar cage or frame separately from the seat with minimum 1/2" grade 5 bolts.

A steel plate may be welded to roll bar cage at driver's right side for belt attachment to prevent driver from sliding from side to side under belt.

Belts must come from behind the driver.

Safety Belts. Must be SFI 16.1. Belts must not be older than two years old. Belts with missing tags, date not punched out, or un-readable tag will not be allowed.

Belts must be fastened at all times while on the race track.

### 1.6 Communication

Raceceivers and Transponders are MANDATORY! Raceceivers and transponders are available for purchase or rent at the track. No scanners, radios, cell phones, signaling devices or other means of communication may be used.

No transmitting or listening devices allowed in race car.

### 1.7 Miscellaneous

### 2 Weight

### 2.1 Class Weight Rules

Minimum weight at any time, with driver: 2150 lbs.

### 2.2 Add-On Weight

Any added weight must be in block form, painted white with car number in black, and bolted to the frame with 2  $\frac{1}{2}$ " bolts. No hose clamps, flex ties, etc.

### 3 Chassis

### 3.1 Eligible Models

Open to all foreign and domestic four cylinder passenger automobiles with four seating positions.

No four wheel drive.

### 3.2 Dimensions/Wheel Base

Maximum wheelbase of 102 inches.

Total car width must not exceed 66".

### 3.3 Frame Specifications

The frame must be stock except that the chassis may be supported to improve the durability of the "Unibody." This means supports may be added from the front shock tower to the rear shock tower and in between. Additional bars may be added to extend behind the fuel tank for protection. A single wrap around bar may be used extending from the roll cage and back again with vertical supports (two) to the frame or bumper brackets.

### 3.4 Roll Cage Specifications

Roll cage must be welded to frame; the uprights must be perpendicular and the horizontal bars must be parallel to the frame with the exception of X support at back of cage. The rear bar must be inside the trunk.

No bars to the body of the car, except the rub rail which can be inside or out.

4 point roll cage REQUIRED.

Materials must be minimum 1 1/2" dia x .095 thick (wall) tubing with sufficient supports to prevent the cage from collapsing upon impact.

Halo must have at least one 1 1/2" dia x .095 crossbar.

Driver door protection must have four horizontal bars from the rear upright on the roll bar to the front upright on the roll bar, with a minimum of two tie bars between each horizontal bar.

### Must plate drivers door bars with 16GA minimum steel plate.

The bottom bar must be attached to the frame with two vertical bars.

If no frame rail exists, a plate must be installed tying the roll bar uprights and the floor together.

All corners must be gusseted. There will a 3/16" hole drilled in cage tubing in a nonstructural area for tech inspection.

All bars and hoops must be continuous. No splices.

### 3.5 Driver's Compartment

Drivers' and passenger compartment must remain open. No inner partitions or compartments.

No mirrors allowed in race cars.

### 3.6 Steering

Must remain stock except a quick steering device may be installed on the input shaft to the steering box.

### 3.7 Front Suspension

Must be stock. No alterations. No spacers. No heated coils.

Rubber bushings may be replaced with urethane bushings.

The spring and shock mounting points may be reinforced but may not move from the original stock location.

Any sway bar must fit in original mounts and not exceed .9" (23mm).

Side to side, car may not exceed 2" of level at all times.

Top strut mounts may be reinforced but not moved.

### 3.8 Front Springs

### 3.9 Rear Suspension

Must be stock. No alterations. No spacers. No heated coils.

Rubber bushings may be replaced with urethane bushings.

The spring and shock mounting points may be reinforced but may not move from the original stock location. Spring shackles must be stock length.

Any sway bar must fit in original mounts and not exceed .9" (23mm).

Side to side, car may not exceed 2" of level at all times.

Top strut mounts may be reinforced but not moved.

### 3.10 Rear Springs

### 3.11 Shocks

Shocks must be stock. No air shocks. No overload shocks.

### 3.12 Brakes

3 wheel brakes in good working order. May not remove or modify the right front hub.

No adjustable proportioning valves.

No drilling or lightening of drums or rotors.

No aftermarket pedal assemblies or master cylinders.

Stock power units optional.

All brake components must be stock for year make and model.

### 3.13 Electrical and Electronics

### **Battery**

Battery located in driver's compartment must be securely mounted with an angle iron frame on top and bottom and must have a complete rubber covering.

Stock or aftermarket stock replacement batteries only.

### **Electrical**

Alternator optional

### **Electronics**

### 3.14 Engine Compartment

Cage in engine compartment may not exceed 1 1/2" dia x .120 wall and must consist of a main bar loop (from firewall to radiator and back to firewall on other side of engine.

Only one down tube from loop to frame on each side of radiator position.

Only one tube may be placed in front of radiator for protection, placed horizontally 11/2" in front of the radiator and centered.

Cage must not extend outside of frame. This cage must not be tied to the bumper in any way.

If a shield or any obstruction is in the way of engine cage a max imum1 1/2" cutout will be allowed.

### 3.15 Engine Location

### 4 Bumpers, Nerf Bars & Rub Rails

Bumpers must be stock, mounted in stock location.

Bumpers may be welded to the brackets and the brackets welded to the frame.

Bumpers must be chained to the frame. Chain must be looped around bumper and radiator protection tube at least once and then bolted to itself with a minimum 3/8", grade 5 bolt. May not use weld on tabs with bolts.

No other reinforcement is permitted. Bumper guards must be removed. Bumper straps must be plated and bolted to the body quarter panel/ fender where they curve around to avoid "hooking" of bumpers. No supports behind bumper.

The use of round head bolts is mandatory.

### **RUB RAILS**

May be installed on the inside or outside of the body, flush with or as close to the side as possible, extending no farther than the back of the front wheel well to the front of the rear wheel well.

This bar must be made with flat steel that is a maximum of 1/4" x 2" or Box steel that may not exceed 1.1/8" x 2".

No round pipe.

Must be securely bolted or welded to the main roll cage. If bolted, you must use a round headed bolt for mounting. The ends of the rub rail must be tapered and welded shut.

Must be mounted 24" from the ground  $\pm 1$ " and must be bolted within 2" of ends.

No other exterior rub rails permitted.

### 5 Engine

### 5.1 Block

Must be absolutely stock as delivered from the factory. Engine may not be changed from model to model.

Maximum displacement of 2400 cubic centimeters with no more than 2 valves per cylinder.

Mazda's: Piston or rotary okay. Toyota, DOHC, Honda Canadian head and Honda CVCC 3 valves are approved. Any other engine not fitting these specifications must be approved in advance by Petaluma Speedway.

Compression must not exceed 200 PSI on any cylinder. Compression will be measured as follows: hot engine, wide open throttle, all sparks plugs removed and 3 or more compression cycles for tested cylinder.

Motor Mounts may be replaced with solid mounts of the same dimension as OEM. In stock location only.

ENGINE SIZE MUST BE PAINTED or DECALED ON HOOD. MUST BE LEGIBLE.

- 5.2 Crankshaft
- 5.3 Connecting Rods
- 5.4 Pistons
- 5.5 Heads

Must be absolutely stock except: Valve guides open.

Valves must be stock. Valve springs, keepers, retainers open.

No angle milling. Cylinder head must be as cast. The intake port may be ground to match the gasket no deeper than 1/2" from the gasket surface. No other modifications of any kind allowed.

No porting, polishing or grinding.

- 5.6 Springs
- 5.7 Valves
- 5.8 Camshaft
- 5.9 Rockers
- 5.10 Oil Pan

### 5.11 Intake

Any manifold allowed on all motors to facilitate the installation of the track carburetor. If intake needs to be modified to install carb, the manifold may be modified only to install carb. No porting, polishing or grinding. If only an adapter is necessary, the intake must remain stock.

Must produce no less than 15" of manifold vacuum at 1000 RPM. A 3/16" vacuum port must be provided for tech inspection purposes. Lack of 3/16" vacuum port will result in disqualification.

### 5.12 Air Cleaner

Any type of air cleaner may be used except oil-coated.

### 5.13 Fuel Delivery System

WEBER "DG" series or one (1) HOLLEY "5200" series or Holley 4412. These two choices of carburetors have one butterfly of 32MM and one butterfly of 36MM. The only modifications allowed to the carburetors are 1) the removal of the choke shaft and butterfly assembly and 2) the addition of a float bowl vent. No other grinding, polishing, enlarging or modifications are allowed.

The carburetor and air cleaner must fit below the hood.

Normal aspiration only. No air rams, diverters or tunneling.

Any fuel pump allowed. Fuel pump mounting will be subject to tech approval.

### 5.14 Ignition

Ignition switches must be painted red and may be relocated.

No double coils.

No electronic ignitions unless stock for year, make and model. All excess wiring may be removed.

### 5.15 Starter

Starter must be stock or aftermarket stock replacement and in stock location for year, make and model.

### 5.16 Cooling System

Oil Cooler may be installed but must be in the motor compartment.

Any stock production radiator must be located in stock position. No holding tanks. No auxiliary radiators. Electric fans can be added to assist stock fan. Stock fan may not be removed. Catch tank must remain in engine compartment. Overflow hose must lead to ground.

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

### 6 Drivetrain

### 6.1 Bellhousing

Must have a 1" hole in the bottom of the housing at 5 or 7 o'clock to inspect the clutch or torque converter.

### 6.2 Clutch

Must be stock OEM. Must have all standard gears for year, make and model.

Clutch or torque converter must be stock for year, make and model of car.

### 6.3 Transmission

Must be stock for year, make and model. Automatics OK.

Transmission cooler OK provided it is mounted in the engine compartment or trunk compartment or rear shelf area. Lines that go through driver's compartment must be enclosed in pipe or steel conduit or be steel braided lines.

Must be able to shift into all gears and maintain stock shifting configuration.

### 6.4 Flywheel

### 6.5 Driveshaft

Steel only and must be painted white.

A safety loop of 1" x 1/2" x 1/8" thick steel must be securely mounted in the front section of the drive shaft.

### 6.6 Rear End

Must be stock as manufactured for the car. No aftermarket locking devices of any kind permitted.

Welded spider gears OK.

No switching rear ends to accommodate posi-tractions. Posi-tractions or limited slip rear ends are OK provided they came stock from the factory for the year, make and model of car.

### 6.7 Miscellaneous

### 7 Exhaust

### 7.1 Manifold/Header

Must be stock, as manufactured for year, make and model.

No grinding, port matching, or modifications of any kind.

No special exhaust manifolds.

No headers, unless stock for year, make and model. VW air cooled may run an extractor but must fit under body.

### 7.2 Exhaust System

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

### 7.3 Mufflers

Must run any stock or aftermarket muffler as long as it meets the DBA limit. <u>Strict db reading of 95 decibels at 100 feet</u>. And pointed down Any car exceeding this limit will not be allowed to compete.

All mufflers may not be modified in any way from original production.

### 8 <u>Body</u>

### 8.1 Body, Body Types

Must be stock, or stock replacement. Competitors may fabricate replacement body parts due to race damage however, the shape, form, and contour must remain stock and recognizable for make and model. Fabricated replacement body parts must meet with tech official approval.

Safety modifications include: Fender edge may be cut a maximum of 3" around tire for clearance.

No body, hood or roof gutting.

All plastic, pot metal, glass, chrome, decor, grills, etc. must be completely removed (in general, anything on the car body that might be jarred loose and fall on the track must be removed).

The back seat and all excess upholstery must be removed.

The doors must be securely welded or bolted closed.

Trunks, hoods and/or hatches must be secured with two quick release pins.

"Five door" models are OK provided all other safety requirements are met (also see gas tank rule).

### <u>PETALUMA SPEEDWAY</u> <u>2015 Mini Stock Rules</u>

Front and rear wheel wells must remain intact.

Trunk area must be enclosed. Two 1" drain holes may be added.

Hood may be bubbled to fit air cleaner, but must remain solid. No holes.

No spoilers or wings even if stock. No aerodynamic devices.

Front and rear windows and all side windows must be removed. All glass must be removed, including mirrors.

Front windscreen must be 1/2" wire mesh screen.

You may not fill in any window opening.

### 8.2 Spoiler

### 8.3 Body Appearance

See General Rules

Bodies must be free of excess dents and maintain the car's original, stock-appearing contour.

### 8.4 Identification

ENGINE SIZE MUST BE PAINTED or DECALED ON HOOD. MUST BE LEGIBLE.

Car Number must be a minimum of 6" x 26" on both doors and roof.

Car number must also be at the left headlight and taillight areas, a minimum of 6" high.

No reflective surfaces on body or interior.

If letters are assigned they must be used and must measure at least 10" high.

Minimum 2 1/2" separation between numbers. (Color combinations other than white and black which are too difficult for the officials to see or score will be required to change.)

Numbers should be a contrasting color to the car color and easy to read from the scoring tower.

### 9 Fuel System

### 9.1 Fuel

Gasoline or race gas only.

No performance enhancing additives allowed.

### 9.2 Fuel Cell

Must be fully enclosed in the trunk of the vehicle or in a specially constructed container.

Complete fire walls must protect the driver's compartment from any gas spill.

Spouts must also be enclosed in the "trunk."

Tanks must be mounted, deep in the trunk, to avoid rear impact.

All tanks will be placed in a 1" square tube frame and secured with 4 straps 2" wide x 1/8" thick- steel only.

5 door and 3 door lift back cars must have fuel cell in rear area behind where trunk area would be and must be enclosed in steel box so it cannot spill into driver's area.

Two 1" drain holes must be drilled in the bottom of fuel cell containment box.

Trunk may be cut to fit fuel cell but must be sealed.

Vent must have check valve.

Gas lines must be securely clamped at every joint and protected from rough or sharp surfaces.

No plumbers tape on any fuel related item.

If the gas line runs through the driver's compartment, the line must be enclosed in steel conduit.

### 10 Tires and Wheels

### 10.1 Tires

Must be D.O.T. P205/60 or 70 series ONLY with stock tread pattern.

No mud, snow, sand or other specialty tires permitted. No race tires or re-grooved tires. No recaps.

The tire must be designed to mount on a 5 1/2" wheel minimum.

Tires of any competitor may be "Claimed" by the race track for \$30.00 each at the completion of any A-main event.

### 10.2 Wheels

Must be stock 13" OR 14" steel wheels only.

Wheel width must not exceed 7", stock offset only. No positive offsets. No other aftermarket wheels are permitted. EXCEPTION: White spoke wheels or similar wheel design OK provided it does not exceed neutral offset (50/ 50). May use wheel screws, maximum of five per wheel. May run Hoosier P205/60D 13 part #12130

Wheel centers may be reinforced or double centered. Studs may also be reinforced.

A maximum of one, 1/2" spacer per wheel may be used on both front wheels to avoid tires rubbing the studs.

### 11 Miscellaneous Class Specific Rules

Front wheel drive vehicles may run with a left rear flat provided the vehicle maintains control.

Absolutely no performance modifications are allowed unless specified below. In general, anything that improves the performance of the car beyond its stock capabilities is illegal.

Remember this is an inexpensive class of racing.

### 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.

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