



# 2025 Mini Stock Rulebook

(Revised 1-6-25) For Tech Support Email: Keith Benson @ [KeithBenson32@yahoo.com](mailto:KeithBenson32@yahoo.com)



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# PETALUMA SPEEDWAY 2025 MINI STOCK RULES

## Table of Contents

1 Safety Equipment .....	3-5
2 Weight .....	6
3 Chassis .....	7-10
4 Bumpers, Nerf Bars & Rub Rails .....	10
5 Engine .....	11-14
5 Exhaust.....	14
6 Drivetrain .....	15
7 Body .....	16
8 Fuel System .....	17
9 Tires and Wheels .....	18
10 Electrical .....	19
11 Miscellaneous Class Specific Rules Disclaimer .....	20

New updated areas are **highlighted**

## 1.1 Driver

### Racing Suit:

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 3.2.1 or 3.2.5 Nomex underwear is recommended. Suits may be one or two piece.

### Helmet.

Must use a Snell SA2020 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 unreadable "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.

Tear off system, and neck restraint lugs should be installed per manufacturer's instruction.

**Gloves:** Must be free of defects and cover the complete hand. **SFI 3.3.1**

**Shoes:** Must be free of defects. **SFI 3.5.1**

**Neck Brace:** It is highly recommended that you utilize a head and neck restraint system.

## 1.2 Driver Compartment

**Window Net:** All cars must have an SFI approved window net, securely mounted and latched whenever on the track. Window Net. Nets must not be older than two years old.

Nets missing tags, date not punched out, or unreadable tags will not be allowed.

Steering wheel with quick release mandatory

**All cars must have a manual fuel shut off valve painted yellow within easy reach of driver and safety crews.**

**ELECTRIC FUEL PUMPS MUST HAVE AN ADDITIONAL SHUT SWITCH CLEARLY MARKED AND EASILY ACCESSIBLE ON LEFT OF STEERING WHEEL.**



## 1.3 Fire Equipment

Car:

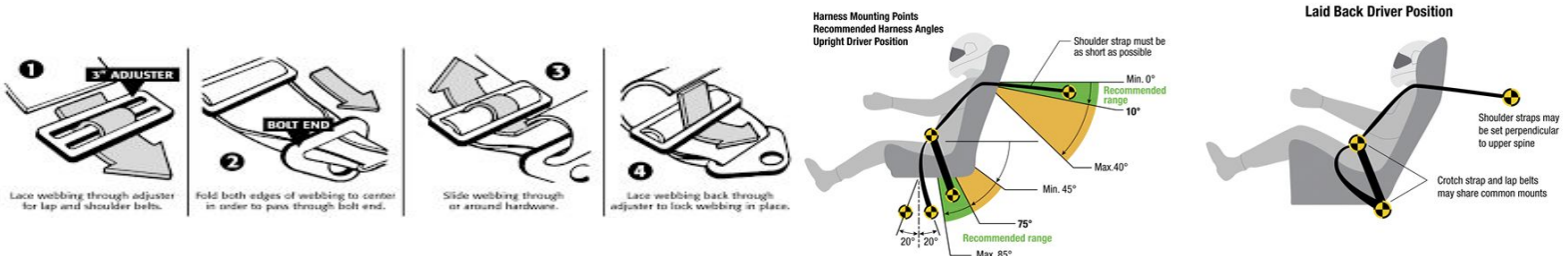
An on board fire extinguishing system may be installed instead of a dry chemical extinguisher so long as it has a minimum of one nozzle in the driver's compartment and a minimum 5 lb bottle filled with Halon or equivalent fire suppression chemical or agent. If no on board system, a minimum 2 1/2 lb. 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 bolts. All seat bolts must use large diameter washers to prevent pull through.

**1.5 Seat Belts** A quick release seat belt with a minimum of 5 points, with shoulder harness no less than **2" wide**, with a submarine (crotch) belt are mandatory. All belt ends must be attached to roll bar cage or frame separately from the seat with grade **8 bolts no less than 7/16 with a locking nut**. 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. Must loop back through adjuster as shown in diagram. Follow manufacturer's recommended installation instructions. **Must be min SFI 16.1**



Safety belts must not be older than two years old. Belts with missing tags, date not punched out, or unreadable 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 (see Margaret at the pit office).

No scanners, radios, cell phones, **smart watches**, or signaling devices or other means of communication may be used.

No transmitting or listening devices allowed in race car.

No driving mirrors allowed in race cars.

## 1.7 Miscellaneous

All cars and safety gear must be inspected by the tech inspectors before being allowed on the race track.

Cars or gear found to be in violation of the safety rules will be asked to revise items before going on to the track.

## 2.1 Class Weight Rules

Weight Minimum weight formula for motor compression test are as follows:

175 psi @ 2,000 lbs minimum weight

200 psi @ 2,150 lbs minimum weight

225 psi @ 2,300 lbs minimum weight

250 psi @ 2,500 lbs minimum weight

## 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 two ½” bolts and large body washers.

No hose clamps, flex ties, etc.

## 2.3 Weight penalty

Weight penalty may be set by officials for vehicles that don't conform to the class rulebook. (visitor cars etc)

See Engine & Clutch for weight penalty.

## 3.1 Eligible Models

Open to all foreign and domestic four cylinder passenger automobiles & small trucks.  
Open to Front or Rear wheel drive only.

No AWD or four wheel drive.

Open to Solid axle or independent drive.

Open to Strut or LSA suspension.

## 3.2 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. Changes or repairs should get tech approval.

## 3.3 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.

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.

Must plate drivers door bars with 16GA minimum steel plate to prevent intrusion.



EXAMPLES



## 3.4 Driver's Compartment:

Drivers' and passenger compartment must keep OEM floor and firewall.

Passenger floor pan may be modified for safety access if headers come through the driver's compartment. All modifications need to be metallic. Modifications subjected to tech approval.

## 3.5 Steering:

Must retain stock OEM steering box or rack and pinion.

Hydraulic or electric power steering ok.

Steering quickener device may be installed on the input shaft to the steering box.

Racing U-joints or collapsable steering shafts are encouraged.

No heim joint tie rods.

## 3.6 Front Suspension:

Must be stock, in stock location. No alterations. No spacers. No heated coils. Rubber bushings may be replaced with urethane bushings, or non-adjustable spherical bearing. The spring and shock mounting points may be reinforced but may not move from the original stock location.

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

Top strut mounts may be reinforced but not moved.

## 3.7 Front Springs:

Must be in stock location and stock diameter dimensions.

Spring rates, spring wire size, and height is open.

No coilovers unless it was installed as OEM

Spring rate rubbers ok





# 3 CHASSIS

9

## 3.8 Rear Suspension

Must be stock OEM, No alterations. No heated coils.

Rubber bushings may be replaced with urethane bushings, or non-adjustable spherical bearing.

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

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

Top strut mounts may be reinforced but not moved.

Adjustable shackles in the stock location are allowed.

## 3.9 Rear Springs

Stock OEM location and spring diameter only. Leaf springs must be steel.

Spring rates, wire diameter. heights Open.

Spring rubbers ok if it can't fall out under extension.

Non adjustable spacers only (No weight jack bolts)

## 3.10 Shocks

Sealed steel only, No air shocks. No overload shocks. No adjustable shocks. No rebuildable shocks.

Heim joint ends ok if mounted in stock locations.

## 3.11 Brakes

3 wheel brakes must be non-adjustable piston-type, in the stock location and in good working order. **No brake shut off valve**

Floating style brake rotor can be removed on RF

RF Caliper can be removed when running three brakes.

No adjustable proportioning valves.

No drilling or lightening of drums or rotors. (Must be no less than OEM min thickness)

**Aftermarket pedal assemblies can be used to convert auto to manual if they have no brake bias adjustment. (Subject to tech approval)**

OEM style and size master cylinder must be used.

Stock power brake units optional.

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

**Friction compound OPEN**

## 3.12 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 1 1/2" 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. Must have a chain or chassis tube that can be accessed for towing.

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

## 3.13 Engine Location

Stock engine location only

## 4.1 Bumpers,

Bumpers can be stock or fabricated, mounted in stock location.

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

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.

Plastic stock looking bumper covers can be used. No Late Model Looking

## 4.2 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. Ends need to be capped, or angle cut 45 degrees and sealed off.

## 5.1 Block

Must be absolutely stock as delivered from the factory.

Engine may not be changed from manufacturer to manufacturer (Ex Ford in Ford)

Maximum displacement of 2400 cubic centimeters

Any engine over 2400cc will add 1lb of weight per CC over in the front of the rear engine block centerline. In addition to the vehicles current total legal weight. Any engine found after the race over 2400cc without extra weight added will be given a DQ for the event. Cyl pump test will be used to test CC size.

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:

175 psi @ 2,000 lbs minimum weight

200 psi @ 2,150 lbs minimum weight

225 psi @ 2,300 lbs minimum weight

250 psi @ 2,500 lbs minimum weight

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:

Stock production only (OEM Stroke, must match block code)

No Stroker, No lightweight, No knife edge

## 5.3 Connecting Rods

OEM for year of block only, OEM length.

No lightweight performance connecting rods

Steel Rod Bolts Open

Bushing ok

## 5.4 Pistons:

Any Flat top or dished Piston

(Domes only if OEM for engine assembly code)



## 5.5 Heads

Must be OEM cast iron or aluminum. (OEM for engine block assembly)

Valve guides open.

Valves must be stock diameter.

Valve springs, keepers, retainers open.

No Titanium material in the motor. (Titanium Retainers only if steel isn't an option to run springs, must be verified with tech prior to installation).

No angle milling to change valve angle from OEM

Standard 3 Angle valve job ok

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 bowl blending, acid porting, extrude honing, epoxy filling etc.

Cam tower straps ok.

Head Bolts or studs open

Head gasket open

\*All cyl head parts are subject to tech approval



## 5.6 Springs: Open

## 5.7 Valves: OEM diameter size for cyl head model

Example: Ford 2.3 Lima 1.735 intake 1.50 exhaust

## 5.8 camshaft

Maximum of .500 valve Lift (+ .010 tolerance for heat) tested at retainer with dial.

Adjustable cam sprocket ok.

No billet steel cams. (unless it was produced from factory that matches head code)

Cam drive can be belt, chain, or gears, but needs to match OEM configuration.

## 5.9 Rockers: OEM stamped steel roller rockers can be used only if they match cyl head production year. Mustang Cast roller can be used if it matches cyl head ID#

No aftermarket rollers



## 5.10 Lifters

Solid adjustable or Hydraulic lifters

**5.11 Oil Pan:** Open, wet sump only. 1" inspection hole recommended.

## **5.12 Intake**

Any manifold, with adapter, 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 as produced.

## **5.13 Air Cleaner**

Any type of air cleaner may be used. **Can have hood cut to fit.**

## **5.14 Fuel Delivery System**

WEBER "DG" or HOLLEY "5200" series. These two choices of carburetors have one butterfly of 32MM and one butterfly of 36MM. Holley 0-7448 350CFM or Holley 0-4412 500CFM can be used.

The only modifications allowed to the carburetors are the removal of the choke shaft and butterfly assembly, the addition of a float bowl vent.

No other grinding, polishing, enlarging or modifications are allowed.

Jets and air bleeds open

Must pass the track Go / NoGo gauges.

OEM fuel injection allowed.

Fuel pump low-oil shut-off switch allowed.

Any fuel pump allowed.

Fuel pump mounting will be subject to tech approval.

## 5.15 Ignition

Ignition switches must be painted red and may be relocated. No double coils. No traction control devices, no magnetos,

**NO programable ignition timing boxes.**

Boxes to control Rev limit is ok. (Like MSD 6AL chip or dial) or MSD soft touch rev control.

## 5.16 Cooling System

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

Any radiator can be used. Must be located in front of engine.

No holding tanks. No auxiliary radiators.

Electric or stock mechanical fan can be used.

Catch tank must remain in engine compartment. Overflow hose must lead to ground.

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

**Pulley size open.**

## 5.17 Exhaust Manifold/Header

Stock or headers allowed.

## 5.18 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.

## 5.19 Mufflers

Must run any stock or aftermarket muffler as long as it meets the DBA limit. **Strict db reading of 95 decibels at 100 feet.**

Any car exceeding this limit will not be allowed to compete.

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

Exhaust exit should be point down towards track surface.

**Exhaust should be long enough to discharge behind driver.**

## 6.1 Transmission

Must be OEM and with all gears operational. Automatics OK.

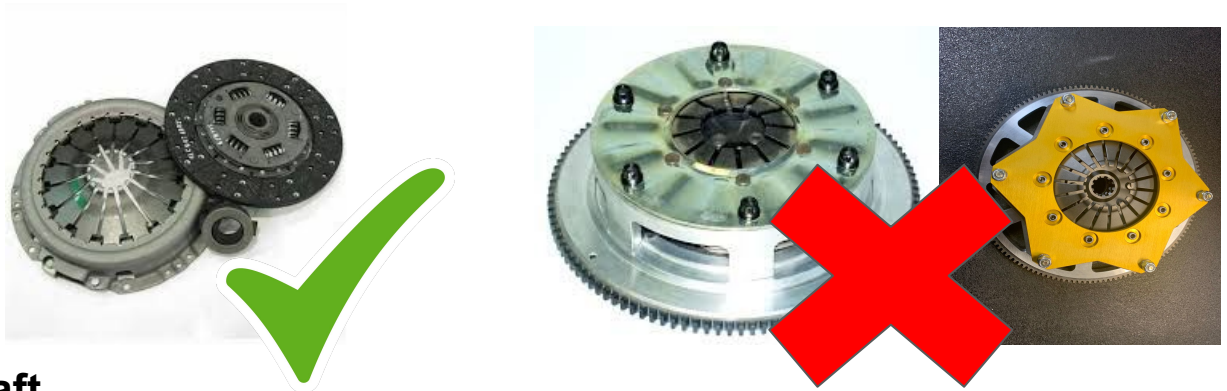
Transmission cooler OK provided it is mounted in the engine compartment or trunk compartment or rear shelf area. Lines that go through driver's compartment must be enclosed in pipe or steel conduit or be steel braided lines.

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

**6.2 Flywheel:** OEM Only, No Lightweight, No Aluminum\*

**Clutch:** OEM style only. No performance Aluminum pressure plates\*  
Friction disc open

\*50lbs of weight will be added to the front of the car for non-conforming assemblies prior to events. Will be removed and weighed to verify.



## 6.3 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.

## 6.4 Rear End

OEM type. No aftermarket locking devices of any kind permitted.

Welded spider gears, **mini and full spools** OK.

No switching rear ends to accommodate posi-tractions/ limit slips.

Posi-tractions or limited slip rear ends are OK provided they came stock from the factory for the year, make and model of car. (Subject to tech approval)

## 6.5 Misc

## 7.1 Body, Body Types

Must be stock appearing to make and model. Competitors may fabricate replacement body parts due to race damage however, the shape, form, and contour must look stock and recognizable for make and model. Fabricated replacement body parts must meet with tech official approval. **Metallic body parts only**. Safety modifications include: Fender edge may be cut a maximum of 3" around tire for clearance.

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). Must have rear wheel wells that seal off dirt to drivers area. Trunk area must be enclosed. Two 1" drain holes may be added.

Front and rear windows and all side windows must be removed. All glass must be removed, including mirrors. Rear side window can be filled in with sheet metal, or plastic.

**Front windscreen must have either protection bars in front of driver, or a wire mesh screen, or both.**

**7.2 Spoiler:** No wings. No Sideboards, Mini trucks can have spoiler **6" max.**

**7.3 Body Appearance** See General Rules

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

**7.4 Identification** ENGINE SIZE MUST BE LABELED ON HOOD, MUST BE LEGIBLE. Tech to confirm size with pump tester

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.

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.



# 8 Fuel System

17

## 8.1 Fuel

Pump gas, race gas, or E85 allowed. NO Methanol

No performance enhancing additives, Nitro, or Oxygenated fuel.  
Any fuel found to be illegal will result in DQ

## 8.2 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 liftback 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/ rollover valve.



## 9.1 Tires

D.O.T. P205/215/235 series 60/70 ratio, with stock tread pattern. No mud, snow, sand or other specialty tires permitted, re-grooved tires. No recaps.

Hoosier P205, 215, 235

Tires must have a durometer of 50 or higher.

## 9.2 Wheels

13"/14"/15" Racing Steel wheels recommended.

(all other wheels need tech approval)

Wheel width must not exceed 8"

4 or 5 lug

Negative backspacing to be no less than 2" (Too little backspace can cause axle flange to break off w/tire)

**9.3 Wheel Studs** may also be upgraded, open end lugnuts recommended with extra threads showing through.

## 9.4 Wheel spacer:

A maximum of one, 1/2" spacer per wheel may be used for chassis tuning.

## 10.1 Battery

Battery must be securely mounted with frame on top and bottom.

Battery kill switch must be accessible by driver and track safety crew.

If battery is located in drivers compartment, it must be enclosed in container. Marine battery box ok.



Stock or aftermarket stock replacement 12V batteries only.

(Non-spill or gel recommended)

Battery is should not be installed in an area that can cause damage during a racing incident.

## 10.2 **Electronics:**

Fuel injected vehicles are to retain the factory PCM and programing for the year, make, model.

No Traction devices of any kind are allowed.

Anti Lock brakes should be disabled in a safe manner that computer doesn't control braking or traction.

## 11 Miscellaneous Class Specific Rules

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

After the first week of competition the winner will start his or her next main event last. Correspondingly the runner up will start their next main event second to last.

### **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.**

#### **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.