



ORANGE SHOW SPEEDWAY

689 SOUTH E STREET · SAN BERNARDINO, CA 92408
909-888-6788 ext 438 · FAX 909-889-7666

Section 11

2008 ASA PRO-4's DIVISION

GENERAL RULES AND REGULATIONS

NOTE: THE FOLLOWING PRO-4 RULES ARE SUBJECT TO CHANGE TO EQUAL THE LEVEL OF COMPETITION AT ANY TIME.

RULES AT A GLANCE

Fabricated Chassis

97 to 101" Wheelbase

78" Max. Outside width at spindle height

2,000 lbs up to 2360 CC

2,100 lbs from 2361 to 2558 CC

Holley 4412 or 7448 Two Barrel Carburetor

Maximum of two (2) valves per cylinder allowed.

No rotary engines.

D Port and Cast Heads 12 to 1 max. Compression

Arca and SVO Heads 14.5 to 1 max. Compression.

2300 with Arca or SVO heads require 1 ¼ restrictor

2500 with Cast Head no restrictor

2500 with Arca or SVO head require 1 ¼ restrictor and a loss of 2% left side weight

2500 with D port aluminum head requires 1 ¼ restrictor

13"X 10" Steel Wheels

Two Tire Rule - Hoosier 10" F35

NOTICE: ALL EQUIPMENT IS SUBJECT TO THE APPROVAL OF TECH OFFICIALS. NO EQUIPMENT WILL BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION. ALL MEMBERS ARE REQUIRED TO BE FAMILIAR WITH ALL ORANGE SHOW SPEEDWAY TRACK RULES AND ALL RULES IN THEIR DIVISION

11-1 BODIES

11-1.1 All bodies must be neat appearing and stock as produced by manufacturer. Bodies must be constructed of aluminum or fiberglass. Carbon fiber and/or Kevlar components are not permitted.

11-1.2 Flat or slab sided bodies are not permitted. Body components must match for the entire body, i.e. Intrepid nose, doors, rear bumper, etc.

11-1.3 The nose and grill area may be cut for the installation of air ducts only. The rear bumper may not be altered, modified or drilled. A full rear filler panel is required.

11-1.4 The roof must be located in the stock position and may not be crowned or altered in any manner. Minimum roof height is Forty (40") Inches from the ground.

11-1.5 All body parts must be securely attached without sharp edges.

11-1.6 Belly pans are not permitted.

11-1.7 Exterior nerf bars or any other type of external supporting devices are not permitted.

11-1.8 Interior of the car must be totally isolated from engine compartment and fuel cell with firewalls of minimum 20-gauge steel. All holes must be sealed with metal.

11-1.9 Rear spoiler height may not exceed Six (6.0") Inches, measured from any point along the deck lid to top of spoiler on all cars. Rear spoiler may not extend beyond top edge of quarter panels. Any material listed may be used for base but top Four (4") Inches must be clear LEXAN.

11-2 WINDOWS

11-2.1 A windshield made of clear LEXAN® must be used. Minimum thickness is 1/8 inch. Windshields must be supported between the dash bar and roof halo bar with a minimum of Two (2) evenly spaced metal straps 1/8 inch by 1 inch or a single One and One-Half (1 1/2") Inch bar in the center of the windshield welded to the dash bar and the roof halo bar.

11-2.2 Driver side window net is required on all cars. Net material must be minimum 3/4 inch wide and have openings of at least One (1") Inch. Net must be equipped with a quickrelease device on the top left front corner. No seatbelt type buckle releases allowed.

11-2.3 Passenger window opening must maintain at least a 13-inch by 20-inch (13"x20") opening.

11-2.4 Windows must be made of clear LEXAN® material. They must be braced internally to prevent bowing when the car is at speed.

11-3 HEIGHT, WEIGHT AND CHASSIS DIMENSIONS

11-3.1 Minimum wheelbase is 97 inches. Maximum wheelbase is 101". Wheelbase must be within One-Half (1/2") Inch on each side of the car.

11-3.2 Minimum weight of the car and driver 2,000 pounds, including driver. Maximum left side weight may not exceed 58% of the total weight with driver.

11-3.3 The frame rails, body and all added lead must maintain a minimum of Two and One Half (2-1/2") Inches of ground clearance, with the driver in the car. This is including bell housing and clutch assembly.

11-3.4 Car track width is 78" maximum, measured from outside-to-outside of front tires. Width of race car shall never exceed Eighty-Two (82") Inches at any given point.

11-3.5 Added weight must be in minimum Five (5#) pound blocks, must be painted white, must have car number clearly visible on each piece. All added weight must be attached with a minimum of Two (2), 1/2 inch, grade 5 bolts.

11-3.6 Offset and perimeter chassis from all manufacturers are allowed for competition and are subject to tech approval.

11-3.7 Engine Weights:

1600cc - 2360cc = 2000 LBS.

2361cc - 2558cc = 2100 LBS.

11-3.8 **ADDITIONAL WEIGHT PENALTIES APPLY TO THE FOLLOWING:**

Dry sump systems add 50lbs

Engines under 2050cc not to exceed 13 to 1 compression measured by Orange Show Speedway equipment. All engines using production cylinder heads, including the Esslinger "D" port head, are limited to 12 to 1 compression measured by OSS equipment.

Esslinger ARCA and SVO aluminum head must not exceed 14.5 to 1 compression and must use one (1) **1 1/4 OSS restrictor plate**. Restrictor plate must be mounted in proper location. Plates must be purchased from OSS tech and will cost \$50.00. **2361cc to 2558cc using SVO or ARCA aluminum head, 56% max left side with driver**. Use of any aftermarket specialty transmission- must add 50 lbs.

11-4 ENGINE SPECIFICATIONS

11-4.1 Four-cylinder, four-cycle gas engines produced for use in foreign or domestic automobiles for sale in the United States or Canada.

11-4.2 All engines may use factory style or aftermarket flywheels and clutches.

11-4.3 Mid engine cars are not allowed. No limited production engines.

11-4.4 No Nitrous Oxide equipment, fuel injection, supercharging, turbo charging or side bore carburetors.

11-4.5 Valve spring retainers are the only titanium allowed

11-4.6 Holly 4412 two-bbl carburetor or Holley 7448 two-bbl carburetor is mandatory. No multiple carburetion allowed.

11-4.7 Carburetors are limited to the following modifications- A). Removal of choke assembly and air horn. B). Gasket, bowl seats, accelerator pump squirter, power valve, jets, and site plug. C). Carburetor may be flowed and blueprinted. D). Booster may not be shortened, tapered or moved.

E). Spacer plate not to exceed two inches (2") in thickness.
F). The butterflies may be drilled with One (1) idle hole each, maximum of 3/16 inches diameter.
G). Cam and accelerator pump may be replaced with aftermarket. H). The choke and linkage may be removed, but screw holes must be filled.

11-4.8 All cars must have a minimum of Two (2) throttle return springs. Throttle return springs must be attached to the engine.

11-4.9 The use of any stock or modified factory production head may run a maximum of 12 to 1 compression.

11-4.10 All cars must have an operable crank case breather from valve cover, One (1") Inch minimum diameter. Use of catch cans recommended.

11-4.11 Engines under 2050cc not to exceed 13 to 1 compression.

11-4.12 Production manufactured or production aftermarket intake manifolds allowed. No one off or home made manifolds allowed.

11-5 ENGINE LOCATION AND MOUNTS

11-5.1 All engines must be mounted in the car with no more than six inches of engine setback as measured from No. 1 spark plug to center of right front upper ball joint.

11-5.2 Engine oil pan and bell housing height must be no lower than the lowest part of frame, Two and One-Half (2 ½") Inches minimum.

11-6 ELECTRICAL SYSTEM

11-6.1 Any style 12-volt ignition system may be used. Must utilize a single ignition system.

11-6.2 On-board computer analysis recording or transmitting equipment is not allowed at any time.

11-6.3 All cars must be equipped with a functioning starter located near the stock location.

11-6.4 All cars must be equipped with a master electrical switch located in the cockpit of the car. The switch must be within reach of the driver and safety crew from both sides of the car.

11-6.5 Batteries must be securely mounted behind the driver forward of rear end housing and contained in electrically insulated container. Dry cell batteries are not required to be contained in leak proof containers.

11-7 ENGINE COOLING SYSTEM

11-7.1 Electrical fans are permitted.

11-7.2 Top fan guard is required on all cars. Extended shrouds or ducts directing air at radiator are permitted.

11-7.3 A stock type radiator of any source or capacity is permitted. Radiator must be mounted securely in the stock location.

11-7.4 Water pump must be mechanically driven, must be located in the stock location.

11-7.5 A One (1) quart over-flow catch tank is required on all cars. Catch tank may be located in the engine compartment with a hose protruding enabling the driver to see overflow.

11-7.6 Anti-freeze is not approved for use at OSS.

11-8 EXHAUST SYSTEMS

11-8.1 Exhaust pipe may exit beneath or above the frame rail behind the driver and in front of the rear wheels. If exhaust extends out any body part, must be flush.

11-8.2 Exhaust system is subject to approval by Chief Technical Inspector.

11-8.3 Mufflers are mandatory and must not exceed 95 decibels at a distance of 100 feet.

11-9 DRIVE TRAIN

11-9.1 Transmissions must be manual-type and designed for use in production automobiles with two (2) forward and an operable reverse gear. Automatic transmissions are not allowed.

11-9.2 Quick-change rear ends are allowed.

11-9.3 Titanium parts of any kind are not allowed, with the exception of approved engine components.

11-9.4 Transmission coolers are allowed.

11-9.5 Drive shafts must be magnetic steel and painted white. Two (2) steel 360° retaining straps at least 1/8 inch by 2 inches are required for the drive shaft.

11-10 FRAMES/CHASSIS /ROLL CAGES

11-10.1 All competing cars must have a minimum four-point roll cage structure constructed of minimum 1.5-inch by .090-inch (1-1/2" X .090"), outside diameter steel tubing with the entire structure integrally welded to the primary frame structure. All new construction cars must use 1 3/4" x .090 outside diameter steel tubing. Roll cage shall have a minimum of three horizontal driver's side door bars.

11-10.2 All cars competing at OSS must have either steel plates welded into the left-side door bars or a left-side door plate on the outside of the main door bars. The plate must be a minimum of 16 gauge thick steel, and must be welded in place. Plates are subject to approval by Chief Technical Inspector.

11-10.3 Roll cage structure shall be braced to front frame stub with a hoop section surrounding the engine compartment, and rearward with diagonal members connecting to rear frame section.

11-10.4 Bottom bay of car in cockpit section must have "X" member, or equivalent, spanning laterally between main frame members.

11-10.5 Foot well area of driver's compartment shall be protected from side impact by a substructure running from the left-front main roll cage upright to left-side frame.

11-10.6 The main frame rails on all chassis must be steel, 8 inches in circumference, such as 2" x 2" x .083" thick tubing or greater.

11-10.7 Drilling holes to lighten any part of the body, chassis or suspension will not be permitted.

11-10.8 Side rails must be located within the normal tread width of the car.

11-10.9 Frame must have a drive shaft containment hoop front and rear.

11-10.10 All cars must have a tow hook, chain or eye welded to the front of the car. Rear deck must open to allow quick and easy pick-up by tow truck.

11-11 TIRES AND WHEELS

11-11.1 Wheels must be thirteen (13) inches in diameter with a maximum width of ten (10) inches. Wheels must be magnetic steel.

11-11.2 Bleeder valves are not permitted. Only one (1) valve stem per wheel is permitted.

11-11.3 All competitors will compete on the track tire. Tires must be purchased from authorized OSS Hoosier tire dealer.

11-11.4 Soaking, softening or otherwise altering the composition of tires is not permitted, and is a fineable offence.

11-11.5 TWO TIRE RULE A total of six (6) tires, or any combination of six (6) tires may be purchased at any preseason scheduled open practice, or season opening night for your division. From that point on only two (2) tires may be purchased and may only be purchased on your divisions next scheduled race night that you compete. If for any reason the car does not compete in the main event you will surrender your opportunity to purchase two (2) tires at the next scheduled event for your division. At no time will tires be permitted to be ran on any car other than the one they were intended for. Tires must be barcoded by an OSS Official prior to your acceptance from the OSS authorized Hoosier Dealer. At no time will tires be permitted to be banked at the authorized tire supplier at the track. Tires must be only purchased from the authorized tire supplier on the scheduled race night for your division. Cars visiting from another track after opening night will only be able to purchase 2 tires, although 2 scuffed tires of same size and compound that they bring will be barcoded for competition for that event. This will keep a level playing field.

Note: Anyone found not following or manipulating these rules in any way will result in loss of points for that night along with winnings for that event. You will also surrender the tire or tires in question. Please remember this rule is intended to minimize cost and to improve the level of competition.

Please see Director of Competition if you do not fully understand these rules.

11-12 SUSPENSION AND BRAKES

11-12.1 Independent rear suspension is not allowed.

11-12.2 No operator-controlled, radio-controlled, computer-controlled or automatic traction control devices, weight-transfer, weight shifting, or weight-altering devices. Brake bias control is the only "in-car" adjustment permitted

11-12.3 Only ferrous material brake rotors allowed.

11-12.4 Brake calipers must be available for purchase by any competitor for a maximum of \$200 (MSRP).

11-12.5 Shocks must be non-reservoir type and must be available for purchase by any competitor for a maximum of \$200 (MSRP).

11-13 STEERING COMPONENTS

11-13.1 Quick release steering wheels are required. Quick connect must be made of steel or aluminum. A pad of at least two (2) inches thick must cover the steering wheel hub.

11-14 FUEL SYSTEM

11-14.1 Only Track Approved Fuel will be permitted for use and must be purchased from track fuel vendor. The chemical composition of the fuel may not be altered by any means. Any competitor competing with a fuel product not purchased from OSS authorized Fuel distributor will be considered illegal.

11-14.2 All cars must be equipped with an approved fuel cell, securely mounted in the trunk area as far forward as possible.

11-14.3 Fuel cell must be mounted with steel framework (1 inch x 1 inch, .065-inch minimum) and attached with a minimum of four (4) bolts mounted safely and subject to tech approval.

11-14.4 Fuel cell must have a vent hose and the hose must have a check valve in the end. Fuel cell must be totally enclosed in an 18 gauge steel box with a 1/2-inch drain hole in the lower right rear corner.

11-14.5 Ground strap required from fill neck to frame. Fuel cell cap must have a tether.

11-14.6 If fuel line runs through drivers compartment, it must pass through a metal tube sealed at both ends.

11-14.7 Electric fuel pumps must use low oil pressure cut-off switch.

11-14.8 The gasoline shall not be blended with alcohol's, ethers or other oxygenates.

Notes: