



SUPER STOCK **SS4** 4'S
NORTHWEST PRO4 ALLIANCE SERIES

2012 NP4A *SS4 Series* Rules

The Northwest Pro4 Alliance would like to announce the introduction of the new SUPER STOCK 4 SERIES for modified four cylinder stock cars. This new series will allow mini stock teams to make improvements to their cars that will enhance the appearance, increase the performance and allow them to travel to some of the best tracks in the Northwest.

PREFACE

These rules will be in effect for the 2012 SS4 Series racing season. It is intended that the rules not change during the racing season. However, in the event a rule needs to be changed in order to equalize competition it will be done. Please understand that these rules were developed in order to enhance competition among many different types of vehicles. If your team is affected due to the use of high performance equipment and is faced with having to add weight or scale back and set aside some expensive parts, please keep in mind that your willingness to do so will help move the entire SS4 Series concept forward to a brighter and stable future. At the completion of the six-race series, all technical data will be reviewed and a determination made of whether any changes are warranted.

DISCLAIMER

Auto racing by its very nature is a dangerous sport. While every effort has been taken to insure the safety of the drivers, crew, and spectators, this compilation of rules and procedures does in no way imply assumption of responsibility or risk, ultimately, each participant is solely responsible for his or her safety.

ALLOWABLE CARS

Open to American and Foreign compact vehicles, 104" stock wheelbase or less, originally available with a four cylinder engine. Front or rear wheel drive only. No four wheel drive.

BODIES

All cars must have complete bodies with no sharp edges resembling a late model stock car complete with a nose and tail panel. S2, NGB or ABC style bodies allowed. No dirt style bodies allowed. Outlaw bodies and mounting are subject to approval based on the spirit and intent of this class.

1. No carbon fiber allowed
2. Roofs – complete required. May be fiberglass or stock steel.
3. Windows - All window materials, front, rear, and sides must be of polycarbonate (Lexan) material. No acrylic (Plexiglas) material allowed
4. Hoods – complete hood are required, no holes or scoops allowed.
5. Doors – Aluminum or steel required
6. Wheels/Tires may not extend outside of body panels
7. Rear spoilers may not exceed width of the mounting surface nor impair rear vision. Maximum height 6" as measured vertically from deck/mounting point at a right angle to the top of the spoiler. Maximum Spoiler material 8". Single plane aluminum or clear polycarbonate (no Plexiglas). No dirt-style wings allowed

CHASSIS

All chassis will be 'Pan' based from [see Allowable Cars].

'Super 4' tubular chassis allowed [see Super 4 weight rules and restrictions]

1. Original frame rails required. No lightening. May be reinforced.
 - a. Front frame rails must extend beyond forward most suspension mounting points
 - b. Rear frame rails must extend beyond rearward most suspension mounting points. (exception: fabricated rear clip [see Weights])
2. Original floor pan required; must be complete in driver's compartment, rocker panel to rocker panel. Rusted or damaged floors must be patched using equal material, isolated to repair area – subject to tech.
3. Stock firewall/cowl must remain in original location. Must attach to floor pan as per factory.
4. Fender wells, strut towers/aprons, core supports, rear body panels, inner quarters and trunk floors may be removed.
5. Open drivers compartment required [see exhaust].
6. Rear firewall with a minimum of 20-gauge steel is required between driver's compartment and the fuel cell.
7. Chassis ride height of 3 inch minimum.

8. WEIGHT RULES

Pan Cars - Displacement is actual, includes overbore.

1. < 2100cc displacement = 2100lbs
2. 2100-2400cc displacement = 2200 lbs
3. > 2400cc displacement = 2300 lbs
4. Fabricated rear clip – Add 50 lbs
5. Incomplete floor pan – Add 50 lbs (*i.e. does not extend rocker to rocker*)
6. FWD and/or IRS – Add 100 lbs
7. Twin cam and/or 16 valve – Add 100 lbs
8. Ported cylinder head – Add 150 lbs

Super 4 Chassis – 2400lbs.

Restrictions: 2350cc maximum displacement single O/H cam 8 valve, no porting allowed. No IRS or FWD. Must comply with body rules.

Left side weight: 55% maximum.

All removable ballast weights must be painted white and have car number on them.

ROLL CAGES

Six point roll cage mandatory of minimum 1-1/2 inch diameter x 0.090 inch wall thickness ERW or DOM tubing.

1. Roll bar shall have at least one diagonal brace from top of hoop to bottom.
2. Minimum of 3 horizontal door bars required on driver's side of cage and 2 door bars required on right side of cage. All door bars shall have vertical braces welded between them. Top left door bar may not be lower than 3 inches below driver's window opening. Left door bars must be plated.
3. One overhead bar from front to rear in center of the halo that is out of reach of the driver's helmet when driver is strapped in, is required if utilizing fiberglass roof.
4. Padding - Energy absorbing padding must be installed on all bars and tubes in driver area where contact maybe made between driver extremities and bars.
5. Two braces from main roll bar hoop down to the rear clip are required. Braces are to extend as far back as the body will allow.
6. Minimum 2 windshield braces must be placed behind windshield top to bottom.
7. Nerf bars, if utilized shall be minimum 1 inch square or round diameter tubing with rounded ends, must be located within body.
8. One vertical (Earnhardt Bar) is recommended from middle of halo hoop front down to cage front hoop at dash level.

ENGINE

Inline 4 cylinder, 4 cycle gas engines produced for use in foreign or domestic automobiles for sale in the United States and Canada. No Rotary, Air-cooled or horizontally opposed engines allowed.

1. Only standard production four cylinder engines for make allowed. (Ford to Ford, Honda to Honda, etc...)
2. Maximum 2500 cc OEM engine size / overbore to maximum 2600 cc allowed
 - a. Super 4 chassis – 2350cc maximum allowed
3. Must be mounted in stock location and centerline.
4. **Block** OEM only, modification allowed.
 - a. Aftermarket and modified internal parts allowed.
5. **Cylinder Head:** Cylinder head must be OEM for make of car. No racing heads allowed.
 - a. Any aftermarket or OEM valve train component allowed.
 - b. No porting or polishing allowed on twin-cam or 16 valve heads.
 - c. Porting and polishing allowed on single cam 8-12 valve [see Weights]
 - i. excludes Super 4 chassis.
 - d. Four valve heads to be used only on correct cc block as per factory.
 - i. excludes Super 4 chassis.
6. **Intakes:** Modification allowed, aftermarket allowed, adaptors allowed.
7. **Carburetors:** Any single 2 barrel carburetor allowed.
 - a. No fuel injection at this time.
 - b. No turbo, supercharger, or forced air induction.
 - c. Air cleaner required.
 - d. Must have two return springs.

TRANSMISSION

OEM standard for make;

1. Adaptors allowed.
2. Must have working first and reverse gear.
3. Scatter shield mandatory ¼ inch steel or approved blanket.
4. Front wheel drive vehicles May Not use posi-traction or limited slip differential
5. **Driveshaft:** (rear wheel drive)
 - a) Must be painted white.
 - b) Two steel; drive shaft containment loops or straps, 0.125" x 1" minimum cross section are required, One at each end of driveline.

ELECTRICAL

1. A master electrical shut off switch must be installed within easy reach of the driver and safety crew members to kill the electricity to all electric components in the event of an emergency.

- a. If the master shut off switch cannot be located within easy reach of safety personnel, then an additional master shut off switch must be installed in a location accessible to safety.
 - b. The master shut off switch must be clearly marked
2. Must have working starter at all times.
3. **Battery:** Must be mounted securely in an approved battery box.
 - a. Battery to be mounted behind driver in front of rear firewall and as far left as possible.
 - b. Battery and fuel pump will not be permitted in the fuel tank area.
4. **Distributor:** Aftermarket distributors and MSD units allowed. No magnetos.

EXHAUST

1. Mufflers required at all times.
2. Any exhaust system mounted through car must be covered in a neat safe manner; subject to tech.
3. Must be securely mounted
4. Exhaust must exit behind driver.
5. Exhaust noise level shall meet track requirements

OILING/COOLING:

1. Aftermarket oil pans allowed
2. No dry sump oiling systems.
3. Oil cooler, remote oil filter, external drain lines and attachments shall be of proper design and strength to resist bursting or leaking.
4. Radiators shall remain inside body shell. Cooling fans, engine driven or electrical, must be enclosed within shroud.
5. Separate overflow containers with 1 quart minimum capacity required for radiator and crankcase/dry sump ventilation system. Crankcase/dry sump overflow container must be metal.
6. No anti-freeze or ethylene glycol coolants allowed.

SUSPENSION:

1. Must be per manufacturer, make, and model and year.
2. Reinforcing allowed.
3. May be lowered.
4. Springs optional: must be per manufacturer type (i.e. leaf, coil, or torsion) for make, model and year.
5. Coil-overs allowed.
6. Weight jacks, screw jacks, and adjustable sleeves allowed.
7. Sway bars optional, one piece only
8. Spindles and/or steering knuckles must be OEM or direct replacement.

9. Control arms: modification allowed, OEM replacement or aftermarket allowed. Must be mounted in stock location.
10. Mounts may be slotted, adjustable and/or heavy duty
11. Shocks and/or struts must be steel body and similar to OEM, heavy duty allowed. No external reservoir type allowed.
12. Shock and/or strut mounts may be extended for travel. May not protrude thru body.
13. Adjustable camber/caster plates allowed.
14. Pan hard bar allowed, may be adjustable.
15. Wheel base must be within plus or minus one inch of stock.

STEERING/BRAKES

1. Steering racks and steering boxes may not be moved or repositioned from stock OEM location.
2. No Heim Joints.
3. Steering column must be padded.
4. Quickeners allowed.
5. Brakes shall be on all four wheels and operable at all times.
6. Rotors must be stock. No home built and/or drilled rotors.
7. Cooling ducts allowed.
8. No anti-lock brakes or components allowed.
9. Tilton style dual master cylinder with brake bias allowed.

WHEELS/TIRES

1. 8" maximum wheel width.
2. One piece steel wheels only
3. No wheel spacers between wheel and hub

TIRES: Hoosier: 8 Inch. Mini Stock tire, three groove. Available at WVSO/Prosser Automotive

SAFETY:

1. **Seats:** shall be racing type with head rest behind driver's helmet.
 - a. Right side head restraint required. Left side head restraint recommended
 - b. Seats shall be securely fastened to roll cage in upright position.
 - c. Seats of fiberglass construction are not allowed.
2. **Window Net:** Safety window net of either mesh or web construction are required in driver's side window.
 - a. Must not exceed 3 years old (2009)
 - b. Must be fastened securely with a quick release type latch that can be activated from either inside or outside the car.
3. **Seat Belts:** 5 point quick release style required.
 - a. Lap Belt - 3" minimum width, shall have metal connectors and be firmly attached to the roll cage by steel brackets of sufficient strength.

- b. Shoulder harness - 3” minimum width, shall be double straps attached separately to the roll cage by metal brackets that are part of the roll cage. “Y” belt shoulder harness with single point attachment to roll cage is not allowed
 - c. Anti-submarine belt – 2” minimum width, shall be attached to the seat bracket that is part of the roll cage.
 - d. All belts expire 3 years following date of manufacture and must be replaced. (2009)
4. **Fire Extinguisher:** A 2.5 lb. (minimum) carbon dioxide or dry powder, Coast Guard approved, with gage in working order and fully charged extinguisher is required
- a. Extinguisher must be in drivers reach while strapped in car
 - b. An on board Halon fire suppression system is recommended, but not required.
 - i. If installed, minimum one nozzle each in engine bay and driver area. Safety note: Position nozzle and aim it away from driver in direction of anticipated flame sources. Halon can cause frost bite.
 - c. Fire extinguisher or Halon fire suppression system must be securely mounted in car.
 - d. Each car must have a 5 lb. minimum fire extinguisher with current inspection tag readily accessible in pit area.
5. Hutchens, neck collar or similar restraint device is **highly recommended**.

FUEL & CELL

1. **Fuel cells** are required with 8 gallon minimum and 12 gallon maximum capacity.
 - a. Bottom of fuel cell must be 8” minimum from ground.
 - b. Fuel cell bladder must be enclosed in metal container.
 - c. Fuel cell metal container shall be mounted securely to chassis with steel tube frame surrounding container and minimum of 2 straps on top.
 - d. Fuel cell shall be electrically grounded to chassis.
 - e. Fuel cell filler cap shall be tethered to the fuel cell or fuel cell containment straps with a short length of light gage safety cable or ball chain.
2. Fuel pump shall not be mounted in driver compartment and shall be mounted within frame rails.
3. Electric fuel pumps must be wired with an oil pressure operated shutoff switch in the electricity supply line. A momentary override switch may be used when starting the motor.
4. Fuel lines passing through driver compartment must be encased in metal tube or protected by woven stainless steel wire mesh covering on outside of fuel hose.