

Northwest Region - SCCA

2015 Regional Class Rules

<u>Name</u>	<u>Designator</u>
Club Ford	CF
Conference Production 1-3	CP1; CP2; CP3
Improved Touring – E	ITE
Improved Touring Junk	ITJ
Porsche Club of America	PCA1; PCA2; PCA3; PCA4; SP911
Pro 3	PRO3
Pro44	Pro44
Spec Sports 2000	SS2
Sports 2000	S2
Vintage	VP1; VP2; VP3, VFSR

These rules cover the NWR Region only classes not covered in the GCR.

ASR, FS, FS, GTA, SPO, SPM, & SPU are all covered in the supps and GCR

2015 NORTHWEST REGION SCCA

CF RULES

Club Ford

1. Cars must have been built before January 1, 1982, with all four (4) corners of the spring/shock units mounted outboard of the frame, i.e., one (1) end of the coil spring/shock unit must be mounted in the outboard area of the lower A-arm/control arm or on the lower area of the upright/hub carrier.
2. Exceptions to Rule 1 and accepted as Club Fords will be: Lola T-440 Zink Z-10 ADF Eagle Van Diemen RF 81 Elden PH-6 Royale RP 24, RP 26 Martyn FEF
3. Cars may be modified as long as the major suspension components (spring/shock) remain where they were originally manufactured and the water radiator(s) are not relocated to an inboard, amidships position.
4. All cars must run on the McCreary Compound 133 Tire to be eligible as a Club Ford. The accepted Club Ford tire will be re-evaluated at least yearly. In the interest of safety, the tire rule will be waived upon declaration of a "rain race" by the Chief Steward.

Tires need not be marked prior to qualifying. Competitors, whether the tires are marked or not, do not have to use the same tires in the race as were used in the qualifying.

5. Club Ford cars must display class designation as "CF" or "CFF".
6. Cars must conform to GCR and Formula F Specs unless otherwise stated in the Club Ford Rules, as follows:
 - a. Body work is free within the GCR FF (Formula Ford) dimensions. It is permitted to add vertical side plates to the sides of the spoilers/tails of Club Ford cars. Maximum side plate height is 6 inches, of which not more than 4 inches may be above the horizontal surface of the spoiler/tail. The spoiler/tail and side plates cannot exceed the length or width specified per GCR body work rules. Spoiler may be capable of adjustment. Cockpit adjustment is not permitted.
7. A CLUB FORD COMMITTEE comprised of drivers and/or car owners may be elected yearly at a class meeting to be held at the first road race of the season. For tiebreaking purposes, the total number of Advisors and Committee Members shall be an odd number. If there is one Advisor, there shall be two Committee Members; and if there are two Advisors, there shall be three Committee Members.

The purpose of the Committee is to gather input relevant to the class as a whole from participants and Advisor(s) and to act on this input to clarify and resolve issues, technical disputes and rules conflicts. The Committee shall act as a liaison between the drivers and Advisor(s).

Current Club Ford Committee Members: None at this time 1/01/11

8. Club Ford meetings are open to all class participants (drivers/owners/entrants/crew) for purposes of discussion and idea exchange. For purposes of voting, each car entered for that weekend's meet shall carry one vote. Any team member may vote for that team's car. For purposes of policy making, a 2/3 majority will be required of the attending qualified voters.
9. Questions regarding Club Ford rules or car eligibility will be answered by the Advisor(s) or members of the Committee. The Advisor(s)/Club Ford Committee will rule on requests for inclusion of additional cars, or to confirm the eligibility of any car competing in the class. Final approval of Club Ford rules rests with Region Board of Directors.
10. Fuel regulations are as per the GCR. 100 octane low lead aviation gasoline is specifically permitted.

2015 NORTHWEST REGION SCCA

CP1-3 RULES

Conference Production

CP cars are ICSCC Production prepared as adopted from the current 2013 ICSCC Club Rule Book. All CP classed cars must have an ICSCC logbook and have entered an ICSCC production race within the last 12 months (a one-race waiver will be allowed). CP cars that are built to SCCA GCR/IT minimum safety standards must run on DOT approved tires. CP cars that are built to SCCA Production/GT minimum safety standards may run on racing tires. For this regional only class that is not referenced in the GCR, cars shall meet fuel specifications as defined in GCR 9.3.26 for SS, T and IT classifications:

CP1 is defined as Conference Production A B, C

CP2 is defined as Conference Production D, E, F

CP3 is defined as Conference Production G and lower.

All cars entering SCCA events under CP class rules shall meet 2015 SCCA GCR safety standards. Note: ICSCC rules permit grandfathering of older cars in some cases with regard to newer safety regulations. This grandfathering is expressly ***NOT*** permitted in SCCA Club Racing unless the car is eligible for Vintage, in which case the car is only eligible for Vintage unless updated to current safety standards.

2015 NORTHWEST REGION SCCA

ITE RULES

Improved Touring – E

Class Purpose and Intent:

The intent of this class is to allow automobiles which have been modified and exceed or otherwise do not conform to IT class preparation rules (GCR 9.1.3), or which are not listed in the GCR ITCS, a place to compete. ITE also provides a second-entry class to maximize track time. Entrants shall not be guaranteed the competitiveness of any car.

Automobiles:

1. All ITE cars shall meet or exceed all current GCR safety standards for IT competition (GCR 9.1.3.D.11 Safety). Fuel cells, fire systems and weld-in roll cages with NASCAR-style door bars are allowed and encouraged.
2. All ITE cars shall run on D.O.T. approved tires.
3. Any SCCA approved fuel is allowed in ITE. Diesel fuel is allowed in ITE in production engines designed for diesel fuel. Propane and Nitrous Oxide are prohibited.
4. Any GCR recognized Touring, Improved Touring, Spec Miata or Showroom Stock legal car may compete under the rules specified for its class. Any modification beyond the specific rules for specified class shall require the vehicle to comply with the ITE rules.
5. World Challenge, Firehawk cars are allowed in ITE and MUST conform to their respective rules set. Other Touring type cars from other series may be considered upon application to the Northwest Region Competition Committee. Competitors entering these cars in ITE shall be required to have in their possession a copy of the respective series rulebook for the specific make, model and year of the automobile entered. All ITE cars shall run on D.O.T. tires regardless of their respective series rules set.
6. Any modification beyond the specific rules for the specified series shall require the vehicle to comply with the ITE rules. If a WC, Firehawk or other allowed Touring type car deviates from its respective spec rules in any way, it is no longer eligible under this rule (#5) and must comply fully with the ITE rules.
7. SCCA GT and Production class race cars on D.O.T. tires are prohibited. Any car with GT or Production modifications, not otherwise allowed in the GCR-ITCS section or specified in the ITE rules, make a car ineligible for ITE classification. Tube-frame race cars are not eligible for ITE.
8. All cars shall display the class designation ITE.

Engine:

Engine modifications are limited to the IT preparation rules (GCR 9.1.3.D) except for the following:

1. Cars may use an alternate engine block. The engine block must be from the same manufacturer as the chassis. The engine must remain in the original location utilizing the factory engine mount locations. The engine block type (example: V8) must remain the same as originally delivered and/or offered for sale from the manufacturer.
2. Induction systems and intake manifolds are free. Turbocharged and supercharged cars shall be allowed in ITE.
3. Any flywheel and clutch combination may be used.
4. Fuel and ignition engine management systems are free.
5. Crankshaft, camshaft(s), valve-train components, piston & rod combinations and engine & accessory pulleys are free. Cylinder heads, cylinder head porting, combustion chamber size and compression ratio are free. Aftermarket cylinder heads are allowed.

Transmission / Final Drive:

Transmission / Final Drive modifications are limited to the IT GCR preparation rules (GCR 9.1.3.D.4) except for the following:

1. Any differential/transmission/transaxle housing and/or final drive or gear ratios may be used so long as the replacement unit does not alter the wheel base, axle width, spring and/or shock

attachment points of the race car and the gear ratio remains the same as any gear ratio that can be achieved when utilizing a stock differential/transmission/transaxle housing.

2. Any limited-slip or locked differential is permitted.
3. Factory manufactured all-wheel drive cars are eligible for ITE if they otherwise comply with the rules herein.
4. Automatic transmissions are allowed. Transmission must be from the same manufacturer as the chassis.

Chassis:

Chassis modifications are limited to the IT preparation rules (GCR 9.1.3.D.5) except for the following:

1. Ride height is free.
2. Springs/struts/shock absorbers / control arms are free. Aftermarket suspension components are allowed.
3. Reinforcement of suspension attachment points is allowed.

Brakes:

Brake modifications are limited to the IT preparation rules (GCR 9.1.3.D.6) except for the following:

1. Brake rotor and caliper upgrades are free.
2. Factory anti-lock brake systems (ABS) are allowed.

Wheels / Tires:

Wheel and Tire modifications are limited to the IT preparation rules (GCR 9.1.3.D.7) except for the following:

1. All ITE cars shall run on D.O.T. approved tires.
2. Wheel and tire size are free, within the limitation that the wheel/tire combination must fit completely within the front and rear fender well opening.

Body / Structure:

Body / Structure modifications are limited to the IT preparation rules (GCR 9.1.3.D.8) except for the following:

1. Fender modifications are allowed for the purpose of tire clearance. (per GCR 9.1.3.D.8.a). Flared fenders or non-stock quarter panels used to clear wider tires are not allowed. Alternate fenders and doors are prohibited.
2. Spoilers and wings are free.
3. Bumper covers are free.
4. Lexan glass is permitted for all window areas.
5. Alternate hood and rear deck lid are allowed.
6. Headlights and hardware may be removed. All wiring harnesses not required for the safe operation of the vehicle may be removed. Battery may be relocated within the body.
7. Doors: left and right; must be able to be opened from the outside, Glass and attaching hardware may be removed. Cars with factory fiberglass or aluminum doors shall be required to utilize NASCAR style door bars.

Driver / Passenger Compartment:

Driver / Passenger Compartment modifications are limited to the IT preparation rules (GCR 9.1.3.D.9) except for the following:

1. Interior trim pieces may be altered or removed.

Fuel Testing:

For this regional only class, that is not referenced in the GCR, cars shall meet fuel specifications as defined in GCR 9.3.26 for SS, T and IT classifications. Diesel powered ITE cars are exempt from fuel testing requirements.

Where not specifically stated above, the GCR and/or IT specifications shall apply.

2015 NORTHWEST REGION SCCA

ITJ Rules

Improved Touring – J(unk)

The purpose of ITJ is to create a regional class where cars built for ChumpCar or Lemons racing, if meeting SCCA safety rules, would have a place to race on an SCCA Regional race weekend. As opposed to any other class of SCCA road racing, ITJ competition is designed as a “fun run” class, without any promise of intent of performance equitability. ITJ is designed to provide a way for drivers to earn an SCCA racing license and race in regional competition, with the absolute lowest cost vehicle. In no way will any waivers be considered or granted in areas regarding safety of vehicle or driver.

1. All ITJ cars must comply with the GCR section 9.
2. ITJ vehicles may race with prior accident damage, as long as that prior damage does not create a danger to the driver of that vehicle or fellow competitors.
3. Non-functional additions to vehicles, whose primary purpose is to express creativity, theme, are allowed only if do not create a potential safety hazard to the driver or fellow competitors
 - a. External “props” such as (but not exclusive to) mannequin legs, papier-mâché shark fins, hood mounted longhorns, butterfly wings, are not allowed
 - b. Death Race 2000, Road Warrior, military vehicles and vessels with mounted armaments, and Animal House “attack” vehicles are expressly prohibited.
4. ITJ eligible vehicles
 - a. Must be a “mass produced,” gas-powered, four wheel passenger car
 - b. Minimum weight of 1800 pounds and a maximum weight of 4000 pounds and a production-based engine.
 - i. Cars weighing over 4000 pounds, but under 4300 pounds may appeal to tech for an event waiver.
 - c. Tires must conform to applicable Improved Touring rules, i.e., must be DOT rated tires, and sizes must be consistent with allowable dimensions per the GCR. 190 wear-dated tires are not mandated, but they may be used if the racer prefers.
 - d. Preparation regarding brakes, suspension, and engine must meet either ChumpCar rules or SCCA Improved Touring rules
5. ITJ competitors are encouraged, but not mandated, to meet the \$500 + safety equipment rule of ChumpCars.
 - a. A \$3000 claiming rule or future race exclusion penalty for vehicles not racing within the spirit of the IT- “Junk” car class may be instituted (will be announced prior to the event).
 - b. Handicapping of vehicles based on qualifying laps, actual race lap times, and by competitor input may be instituted at the discretion of Race Stewards.

2015 NORTHWEST REGION SCCA
PCA SUPPLEMENTAL REGULATIONS

Porsche Club of America

PURPOSE: To provide a venue for PCA drivers with competition cars and who are members of the SCCA to participate in Regional competition events with the SCCA under regulations that are uniform in both the Oregon Region and the Northwest Region of the SCCA.

DRIVER ELIGIBILITY: Competition licenses accepted per 2015 General Competition Rules.

DRIVER CONDUCT: The General Competition Rules (GCR) of the SCCA shall be complied with at all times. In the event of a protest involving driver conduct, safety, car preparation, or any infraction of the SCCA GCR, the SCCA process shall be followed. The PCA **may have** available to the Stewards of the Meet (SOM) a PCA Car Steward who shall act solely in the capacity of an advisor to the SOM.

CAR CLASSES: Entrants will be divided into five (5) classes determined by the existing Porsche Club of America (PCA) Club Racing 2015 rule book. The PCA Club Racing Class designation will translate to the following NWR SCCA Classes:

<u>SCCA CLASS</u>	<u>PCA CLUB RACING CLASS</u>
PCA1	GT1, Stock and Prepared classes L, K, J
PCA2	GT2, GT3, Stock and Prepared I, H, G
PCA3	GT4, SP3, Stock and Prepared E, F
PCA4	GT5, GT6 SP1, SP2, A, B, C, D
SP911	Porsche Racing Challenge 911Spec

CLASS MARKINGS: All PCA class cars must indicate their PCA Club Racing club class on both the front and rear in at least 4" high lettering. So as to avoid confusion with SCCA classes, the GT should be omitted (example: Use 1R instead of GT1R). The NORTHWEST SCCA class designations (example: PCA1) should be mounted on both sides of the car as per the SCCA GCR.

CAR PREPARATION: Cars may be modified within the limitations of the PCA Club Racing Rules (year **2015**). No modification shall be allowed that conflicts with a safety rule as governed by the SCCA GCR IT Specs, and all safety requirements of the SCCA GCR shall be complied with. All PCA entrants shall have available for the SCCA tech inspectors a copy of the current PCA Club Racing Rules.

PROTESTS: In the event of a protest, a PCA Competition Committee Class Advisor **may** be available at Tech and to the SOM. The PCA Competition Committee Class Advisor shall make available to the SOM a copy of the PCA Club Racing Rules and shall act solely as an advisor to the SCCA Tech and the SOM on the subject of car preparation. SCCA safety requirements and the SCCA GCR shall take precedence at all times.

WEIGHING OF CARS: Cars subject to a weight limitation will report to the scales and be weighed in accordance with the current SCCA GCR. All cars will report to impound as per the Oregon and NWR Supps and the decision to waive weighing selected cars or the entire class will be made by the Chief Steward or, if that decision is delegated, at the discretion of the Chief Scrutineer.

FUEL TESTING: For this regional only class that is not referenced in the GCR, cars shall meet fuel specifications as defined in GCR 9.3.26 for SS, T and IT classifications.

UNCLASSIFIED CARS: In the event that a Porsche powered car is not classified the car shall run in PCA1.

CLASSIFICATION QUESTIONS: Any drivers with car classification questions may direct them to the designated PCA Competition Committee Class Advisor.

2015 NORTHWEST REGION SCCA

PRO3 RULES

PRO-3

General Intent: PRO-3 conforming to the specifications of International Conference of Sports Car Clubs (ICSCC) aka "Conference" to compete in a Northwest Region class. 2015 Northwest Region PRO-3 rules are derived directly from the ICSCC source located at: <http://www.icsc.com/> under Technical References section.

All PRO3 classed cars must have an ICSCC logbook and have entered an ICSCC race within the last 12 months (a one-race waiver will be allowed). For this regional only class that is not referenced in the GCR, cars shall meet fuel specifications as defined in GCR 9.3.26 for SS, T and IT classifications:

All cars entering SCCA events under PRO-3 class rules shall meet 2015 SCCA GCR safety standards. Note: ICSCC rules permit grandfathering of older cars in some cases with regard to newer safety regulations. This grandfathering is expressly ***NOT*** permitted in SCCA Club Racing unless the car is eligible for Vintage, in which case the car is only eligible for Vintage unless updated to current safety standards.

2015 NORTHWEST REGION SCCA

PRO44 RULES

PRO44

PRO44 was established to provide a dedicated class and rules for racing the Porsche 944 in the Pacific Northwest. The goal is to reasonably control costs to provide an affordable and competitive racing experience.

Eligible Models

PRO44 allows 1983-88 Porsche 944 and 1987-88 924S models with a factory 2.5L 8-valve engine.

Minimum Weight

All eligible models have a minimum class weight of 2600 pounds including driver.

Performance Limits

Maximum HP: 146

Max HP + TQ: 292 (Max TQ = HP + 5%)

All cars must meet the HP, torque and weight restrictions of the class as provided above. No variance is permitted from the HP and torque limits, as a variance for possible dyno fluctuations due to conditions is already built into the prescribed limits.

Competitors will submit cars for dyno testing that will produce sheets from three separate "reproducible" dyno pulls with SAE correction and smoothing factor of 4. It is the responsibility of the competitor to be within the power and torque guidelines of these rules. The guidelines have been established based on the estimated performance of an engine built to the allowed specifications of that car, and include built in allowances for some variance in the testing results. To ensure fairness, an appointed official or an approved technician will operate any cars being inspected on the chassis dynamometer. Prior to the chassis dynamometer inspection the competitor may top off any fluids needed to ensure the engine and drive train are not damaged during testing (however the operator/ official conducting the testing will not be held responsible for mechanical failures during the testing). The fluids must be added with an official present and no other modifications or adjustments may be made to the car. All competitors will provide a dyno sheet from a Dynojet 228 or 248 dyno to the dyno settings referenced above before any regional points may be accrued. This dyno sheet will be entered into the NW Pro44 database and does not need to be redone unless the engine is changed or significant upgrades are performed. The organizers may bring a portable dyno to any event to verify the legality of any car. If enough fellow competitors complain a retest may be required if the Pro44 officials feel it is warranted.

If a car is tested and found to be outside the power guidelines, the competitor will be disqualified for the last official track session. If a competitor is disqualified, he/she will be allowed to modify the car for the next qualifying or race session to come within the power guidelines. Another dyno testing session will be permitted to demonstrate compliance and allow the competitor to continue to race at the racer's cost. No season points may be accrued by a car that has been tested to be above the allowed output. Points can only be accumulated up to the last legal dyno sheet in the possession of the Pro44 officials.

Allowed Modifications

Any modifications not specifically allowed in these rules are not permitted.

All vehicles must use factory stock parts (OEM) from the eligible models as defined above, except where otherwise noted. Stock parts may be updated or backdated except where otherwise noted. Stock

replacement parts may be obtained from sources other than the manufacturer provided they are the exact equivalent of the original parts (OEM equivalent).

Cars may not use any driver-accessible systems that allow adjustment of horsepower levels. Examples of such systems are driver-adjustable electronic tuning and engine timing advance devices, fuel pump output modification devices, boost controllers, adjustable MAP and MAF voltage clamps, and any other system or device that could alter Dyno readings when measured for compliance purposes.

1. Engine

- (a) Manifold and cylinder head port matching is permitted. No material may be removed further than one (1) inch in from the manifold to cylinder head mounting face. Valve guide material is unrestricted.
- (b) Stock or aftermarket chips allowed.
- (c) The 2.7L engine is not allowed.
- (d) Adjustable fuel pressure regulators are permitted.
- (e) Fuel lines may be replaced, relocated, and given additional protection. Aftermarket fuel rail may be used provided it is attached at all 4 factory attachment points to the manifold/ cam housing.
- (f) Air cleaner assemblies may be modified, removed, or replaced.
- (g) Exhaust emission control air pumps, associated lines, nozzles, and electrical/mechanical EGR devices may be removed. The power steering system may be removed.
- (h) Oil pans, pan baffles, scrapers, windage trays, oil pickups, lines, and filters are unrestricted. Oil and power steering hoses may be replaced with metal braided hose (i.e. Aeroquip). A pressure accumulator/"Accusump" may be fitted. Dry sump systems are prohibited.
- (i) Any ignition system which utilizes the original distributor for spark timing and distribution is permitted. Internal distributor components and distributor cap may be substituted. Any spark plugs and ignition wires may be used. Ignition timing is unrestricted.
- (j) Any exhaust header and exhaust system may be used that meets a 103 db maximum sound reading @ 50 feet.
- (k) Engines may be bored to a maximum of .040 inch over standard bore size. Factory oversize replacement pistons or their exact equivalent shall be used. Cast or forged equivalent pistons shall provide the same dome/dish/valve relief configuration, ring thickness and spacing, pin height relationship, weight, and compression ratio as factory replacement oversize pistons. Piston rings are unrestricted.
- (l) Balancing and "blueprinting" of the engine assembly is permitted. Lightening of parts beyond the minimum material removal necessary to balance is prohibited. Alternate engine hardware is allowed. (nut, bolts, washers)
- (m) A tolerance of twenty five thousandths of an inch (0.025") less than the factory service limit is permitted for truing of the head. Under no circumstances may the compression ratio be increased by more than one half (0.5) point over stock. An offset key may be used to return cam timing to the factory specifications.
- (n) Any clutch disc and pressure plate of stock diameter may be used, provided that they are bolted directly to an unmodified stock flywheel. Balancing of the flywheel/clutch/pressure plate assembly is permitted. Lightening of the flywheel beyond the minimum material removal necessary to balance is prohibited.
- (o) Engine gaskets may be replaced with any gasket thickness. Engine drive belts may be replaced with others of equivalent OEM specifications.
- (p) The application and/or use of any painting, coating, plating, or impregnating substance (i.e. anti-friction, thermal barrier, oil shedding coatings, chrome, anodizing, etc.) to any internal engine surface, including intake manifold internal surface, is prohibited. The external areas may be painted/ coated for cosmetic reasons.
- (q) Any radiator may be used, provided it is mounted in the original location, maintains the same plane as the original core and requires no body or structure modifications to install. No new openings created by fitting an alternate radiator may be used for the purpose of ducting air to the engine.

- (r) Oil cooler(s) may be added or substituted. Location within the bodywork is unrestricted, provided that it/they are not mounted within the driver/passenger compartment.
- (s) Water cooling fans may be removed or replaced. Electrically operated fans with manual or automatic actuation may be fitted. Thermostats may be modified, removed, or replaced with blanking sleeves or restrictors.
- (t) Heater hoses may be plugged. Heater water control valve(s) may be added or substituted. Heater core must remain in the car.
- (u) Any O.E. 944/951 connecting rods are permitted. 951 cylinder heads are prohibited.

2. Transmission / Differential

- (a) Updating and backdating of transmissions is permitted within a specific model. Only the 5th gear ratio is allowed to be changed.
- (b) Transmission fluid coolers are unrestricted providing that they serve no other purpose than to cool the transmission fluid.
- (c) Any limited slip diff can be used.
- (d) Modification to or substitution of the shifter mechanism which reduces the range of motion is allowed.

3. Suspension

- (a) Shock absorbers may be replaced provided they attach to the original mounting points. Remote reservoir shock absorbers are prohibited. External shock adjustment limited to two. No shock absorber may be capable of adjustment while the car is in motion.
- (b) Any springs may be used, provided they are of the same number and type as originally fitted, i.e., coil, leaf, torsion bar, and that they shall be installed in the original location using the original system of attachment. Coil over threaded body shock/struts are permitted.
- (c) Sway bars (anti roll bars) are unrestricted providing that they mount in the original location and they are not cockpit adjustable.
- (d) Adjustable camber plates are allowed.
- (e) Bushing material, including that used to mount a suspension subframe to the chassis, is unrestricted.
- (f) The steering lock must be removed or disabled.
- (g) Front control arms may be modified or replaced with updated or aftermarket control arms providing that the mounting locations remain the same as OEM and the ball joints are dimensionally the same as O.E. Bump steer kits are not permitted.

4. Tires and Rims

- (a) Any DOT approved tire is allowed.
- (b) Rim type and style are unrestricted.
- (c) Maximum rim size is 7" x 15"/16". No tire and/or rim may protrude from under the fender when viewed from the top. Note- fenders may not be modified however the inner fender lip may be rolled to provide extra tire clearance.
- (d) Wheel spacers are unrestricted providing that they do not cause a violation of rule 4.(c).
- (e) Any wheel stud, bolt, and or nut is permitted.

5. Brakes

- (a) Brake pad material is unrestricted.
- (b) Steel braided brake lines are allowed and recommended.
- (c) Updating / backdating of brake components is not allowed outside of the 82-87 model year standard 944.
- (d) Parking brake lever, cables and associated parts may be removed.
- (e) Brake fluid is unrestricted.
- (f) Brake ducts are permitted providing that they serve no other function.
- (g) Grooving, slotting, cross drilling of rotors is allowed.

- (h) Removal, replacement, or modification of dust shields is allowed.
- (i) Brake proportioning valves may be used provided that they are of the in-line, pressure limiting type.
- (j) Antilock braking systems must be disabled.

6. Body / Chassis / Interior

- (a) Removal or substitution of components other than those specifically indicated below is not allowed.
- (b) Any mirrors are permitted.
- (c) One (1) rear quarter window may be replaced with Lexan type polycarbonate for the purpose of ducting cooling air to the driver.
- (d) Sheet metal modifications in the rear deck, trunk and spare tire compartment are allowed for installation of a fuel cell or to the spare tire compartment to facilitate removal and installation of transmission. The welding of flat metal for repair of chassis cracks is permitted. Added material may not connect with roll cage components or otherwise provide chassis stiffening beyond the repair of worn areas. Welded metal cannot be used for ballast.
- (e) The driver's seat must be replaced with a racing-type seat meeting the current year GCR. Any seat that is more than 5 years old must have an approved seat back brace installed.
- (f) Spare tires must be removed.
- (g) Additional ducting may be added to provide fresh air to the driver/passenger compartment providing that no modifications to body panels are made to accommodate the ducting.
- (h) Modifications to the underside of the car for the purpose of improving aero effects are not allowed.
- (i) Removal of the car interior, passenger seat, A/C and heating system, audio system, head lamp operating mechanism and related parts are allowed. The door glass and winder mechanisms may be removed.
- (j) The factory "splash guard" located under the engine may be used or deleted. Alternatively a replica in an alternate material may be used subject to the following restrictions. The replica may only be mounted in the original holes for the factory part, it may be no wider than the frame rails and may not extend farther rearward than the cross member. The replica may not be designed to produce significant aero effect and should be as flat as possible. No ducts, holes or similar openings are allowed in the replica.
- (k) 85.5 and newer cars may use any battery, provided it is mounted in the original location and securely fastened. 83-85.1 cars must use an OEM-size battery mounted in the original location.
- (l) Windshield washer systems, rear windshield wiper systems, cruise control systems, horns and the wiring associated with any of these may be removed. Any holes left in the body must be covered or plugged.
- (m) Modifications may be made to the foot pedals to improve the comfort of and control accessibility to the driver.
- (n) Any steering wheel except wood rimmed types may be used. Any shift knob may be used.
- (o) Gauges and instruments may be added, replaced, or removed. They may be installed in the original instrument(s) location using a mounting plate(s), or any other location using a secure method of attachment. Other than modifications made to mount instruments and provide for roll cage installation, the remainder of the dash "board" or panel shall remain intact. Switches to activate the ignition, the lights, the windshield wipers, the starter and other accessories located within the passenger compartment may be replaced and their location changed.
- (p) A maximum of 50 pounds of ballast may be used. All ballast shall be located in the front passenger footwell/seating area, aft of the firewall and any footwell angle, and forward of the aft-edge of the forward-most passenger door opening. Ballast and shall be capable of being removed to be weighed apart from the car.
 1. Each segment shall be fastened with a minimum of two (2) one-half (1/2) inch bolts and positive lock nuts of SAE Grade 5 or better, and shall utilize large-diameter, load-distributing washers.

2. Holes may be drilled in the front passenger footwell/seating area floorpan for purposes of mounting the ballast (only), and said floorpan may be reinforced as required for the same purpose.
- (q) A front aero skirt may be used provided it attaches directly to the front valance and extends downward in the vertical plane only. Any such addition may extend no lower than the bottom of the wheel rims as viewed from the side. It can extend no farther rearward than the original front valance.
- (r) If the O.E. Door panels are removed, the resulting opening must be covered with aluminum sheet (.060" min thickness) or carbon fiber sheet may be utilized. If the interior door structure is removed the cage design must use a "NASCAR bar type design for driver protection.

7. Safety:

All safety items shall be compliant with the current year SCCA GCR for Improved Touring cars. This includes but is not limited too: roll cages, seats, fire extinguisher or fire system, drivers safety equipment, cut off switch, etc.

2015 NORTHWEST REGION SCCA
S2 RULES
Sports 2000

This class is to follow the 2013 GCR Rules. Listed below. This is a Northwest Region regional only class..

SPORTS 2000 PREPARATION RULES

(9.1.8. Sports Racing Category Specifications - GCR – 2013)

B.1. Definition

Open cockpit two (2) seater rear engine sports racing car using a standard Ford 2000cc single overhead camshaft "NE" series engine with a two-venturi carburetor as defined in 9.1.8.B.5 , or the Mazda MZR 2.0 liter as defined in 9.1.8.B.6

Sports 2000 is a Restricted class. Therefore any allowable modifications, changes, or additions are as stated herein. There are no exceptions. IF IN DOUBT, DON'T. Homologation is required for all cars registered after January 1, 1983.

B.2. Safety Requirements

All safety equipment shall comply with Section 9. of the GCR.

B.3. Chassis

- a. Unrestricted except that the use of carbon fiber composite structural materials is prohibited. No engine oil or water tubes are permitted within the cockpit. The engine will be mounted upright and aligned fore and aft in the chassis. New chassis of non-metallic composite construction shall be proven to meet FIA specifications for non-metallic composite chassis prior to being submitted to the SCCA for homologation. Contact the SCCA national office for a list of the relevant FIA specifications/ SCCA requirements.
- b. Swift DB-2 and DB-5 vehicles shall have a properly installed crush box fixed to the foremost bulkhead to protect the driver's feet. The box shall meet the following requirements:
 1. It shall enclose a volume of at least 864 cubic inches (.5 cubic feet).
 2. It shall extend at least 10 inches forward of the front bulkhead.
 3. It shall be constructed of aluminum at least .040 inches thick, carbon fiber or kevlar.
 4. The box may have access holes not exceeding 90 square inches in total.
- c. All cars must have a longitudinal barrier in the left leg area forward of the dash substantially strong enough to prevent the left foot from moving more than 3 inches to the left of the vehicle centerline in the event of a side impact.
- d. It is the intent of these rules to minimize the use of "ground effects" to achieve aerodynamic downforce on the vehicle. Thus, the chassis and body surfaces which comprise the underside of the car shall not deviate from a flat plane by more than 2.5cm (one (1) inch). This deviation may not be used to create an aerodynamic device. For this purpose the underside is defined as being within the rectangular area along the length between the front edge of the front wheels and the rear edge of the rear wheels and across the outside of the front and rear rims. No aerodynamic devices (e.g. "skirts," body sides, etc.) shall extend below this surface anywhere on the car to the rear of the front wheels.

B.4. Bodywork Including Airfoils

- a. The body shall provide a cockpit for two (2) seats and cover all mechanical components including wheels and suspension members except for the exhaust pipe, induction system, and camshaft cover which may protrude through the engine cover.

- b. Between the front and rear axle lines the body shall:
 - 1. Maintain over a minimum of 70% of the length of the wheelbase and over a depth of 20cm (7.9 inches) a minimum body width exceeding the greatest overall width across the tires less 15cm (5.9 inches).
 - 2. Exceed in height the top of the tires over a width of 50cm (19.7 inches) excepting only cockpit and engine openings. There shall be no gap between the main body and the mudguards. The mudguards shall cover the full width of the tires around an arc of 120 degrees, which shall extend forward ahead of the axle centerline on the front and rear wheels and behind the rear wheels to at least 7.5cm (2.95 inches) above the axle centerline.
- c. Maximum vehicle length forward of the front axle centerline: thirtythree (33) inches. Maximum vehicle length rear of the axle centerline: thirty-seven (37) inches.
- d. The body above chassis level in the region of the cockpit shall not be reinforced in any way which would complicate or hinder the rescue of the driver. The cockpit opening seen in plan view shall be symmetrical about the longitudinal axis of the car and shall be large enough for a horizontal rectangle of 80cm (31.5 inches) by 40cm (15.75 inches) to be passed through with its minor axis aligned with the vehicle's longitudinal axis.
- e. Space for two (2) seats shall be provided, each of at least 40cm (15.75 inches) width, and shall be positioned symmetrically about the vehicle's longitudinal axis. There shall be at least 25cm (9.9 inches) wide foot space for both driver and passenger measured at the pedals. The passenger space should provide as much sea space, elbow room, foot, and leg room in terms of length, width, and height as that of the driver. Battery boxes and fire systems are permitted in the passenger seat area.
- f. Maximum height with driver on board, excluding safety roll-over bar and mirrors, shall not exceed at any time 90cm (35.4 inches) measured from the ground.
- g. Airfoils and/or spoilers mounted at the front of the vehicle are permitted. These airfoils and/or spoilers may only be adjusted in a horizontal plane.
- h. Adjustable airfoils and/or spoilers mounted at the rear of the vehicle shall be in the form of a flat plane and may only be adjusted within +/- 20 degrees of vertical.
- i. There shall be no gap between these surfaces, or other airfoil, and the main bodywork.
- j. All ducted air for heat exchangers (water/oil) shall pass through those heat exchangers.

B.5. Engine (Ford Pinto)

A permitted engine is the Ford 2 liter single overhead camshaft "NE" series engine or the 1971-74 Pinto/Capri 2 liter single overhead camshaft engine with nominal bore 90.84mm and stroke 76.95mm (Note: All blocks shall contain casting number HM6015BA, HM6015AA, HM6015BB, HM6015AB, HM6015DA, or HM6015AD. Dashes in the casting number are not relevant.). Production tolerances are permitted providing the total swept volume does not exceed 2000cc.

- a. The rockers shall remain entirely unmodified. Alternate manufacturers may be used as long as the original materials and dimensions are the same. Camshafts must be from Ford Motor Company, or Crower part #E-5753 FF2000, or any camshaft that is a replica of the original camshaft and of the same material may be used. Camshaft geometry shall be stock. An alternate optional camshaft, Elgin part number 2000FC, may be used only in the original iron head. Regrinding camshaft lobes is permitted as long as the camshaft lobe center is $112^{\circ} \pm 2^{\circ}$. Offset keys are permitted. Tuftriding or Parkerizing is permitted. Maximum valve lift at determined points by camshaft rotation will be established. The use of a low rate substitute valve spring is permitted. Load characteristics of special checking spring: twelve (12) pounds at 1.417 inches, thirty (30) pounds at 1.000 inches. An adjustable camshaft sprocket which retains the same number of teeth and pitch as the stock sprocket may be used.
- b. A standard crankshaft shall be used or any crankshaft that is a replica of the original crankshaft and of the same material may be used. Spot machining to achieve balance is permitted. Tuftriding, Parkerizing, shot peening, shot blasting, and polishing are permitted. Minimum weight: twenty-seven point five (27.5) pounds.

- c. The flywheel shall be a standard component or the approved alternate: Elite-001. The minimum weight is 14.4 pounds with ring gear. The flywheel may be machined to achieve minimum weight. Spot machining to achieve balance is permitted. Flywheel bolts are free and locating dowels are permitted. A 1600 GT starter ring may be fitted. The use of any single plate clutch is permitted provided no modification is made to the flywheel other than changing the points of attachment of the clutch to the flywheel. Carbon fiber clutches are not permitted.
- d. Maximum compression ratio will be controlled as follows:
1. Minimum Cylinder Head combustion chamber volume 49cc (not including head gasket). Polishing and/or tooling of the cylinder head to achieve only the required combustion chamber volume is permitted.
 2. Standard Ford gasket, Fel-Pro #8361PT, or Ferrea part number G50100 may be used. Gaskets will have a minimum thickness of .9mm, and a minimum diameter of cylinder aperture 92mm.
 3. Pistons shall not protrude above cylinder block surface at TDC.
- e. It is permissible to reshape inlet and exhaust port by removal of metal within limits. Addition of material in any form is prohibited. Maximum diameter of inlet port at manifold head face 39.5mm. Maximum dimensions of exhaust port at manifold face 35.5mm x 27mm. The distance between the valve centers and the angles of the valves shall not be altered.
- f. Pistons shall be standard Ford Mahle, AE Hepolite, CP, or J&E. Pistons must be unmodified in any way except for balancing and as detailed herein. The following combinations are permitted:
1. Mahle piston P/N 80HM6102LA with rings, pin, connecting rod (with bolts), but without bearings: Minimum permitted weight = 1332.5 grams.
 2. Mahle piston P/N 85HM6102DA with rings, pin, connecting rod (with bolts), but without bearings: Minimum permitted weight = 1240 grams. NOTE: This piston may have either casting #90V108 or #90V118.
 3. AE Hepolite piston P/N 21426, casting P/N 21426 (AE Hepolite) with rings, pin, connecting rod (with bolts), but without bearings: Minimum permitted weight = 1240 grams.
 4. CP Pistons P/N IV 2.0 LTR with rings, pin, connecting rod (with bolts), but without bearings: Minimum permitted weight = 1240grams. Part number and Ivey logo stamped on wrist pins bosses.
 5. J&E piston P/N M-6102-B200 with rings, pin, connecting rod (with bolts), but without bearings: Minimum permitted weight = 1240 grams.
- NOTE: M-6102-B200 piston assembly is now made by JE and is visually different. I.D. Marks: M-6102-B200, Ford racing logo. All marks pin stamped on wrist pin bosses. Piston rings are unrestricted provided that:
1. One oil control and two compression rings are used.
 2. No modification is made to the piston for the installation of rings.
- Localized machining of the gudgeon pin bosses to achieve balance and weight by simple machining; all external surfaces, dimensions, and profiles shall remain standard with the exception of the top surface of the piston crown which may have simple machining to achieve balance, and as required in Section 9.1.8.B.5.d.3.
- g. Valves may be of Ford manufacture or Ferrea part numbers VSOIN200 and VSOEX2000. Valves shall remain standard; no reprofiling or polishing is permitted. The original forty-five (45) degree seat angle shall be maintained. Maximum face diameter inlet 42.2mm. Maximum face diameter exhaust 36.2mm. Maximum valve stem diameter 8.4mm.
- h. Full connecting rods may be standard Ford, Cosworth, Oliver, or Crower. The approved Crower part numbers are SP93230B-4 or SP93230PF-4. Any rod bolts may be used. Floating piston pins may be used. Standard rod length must be 5.00 inches (+.005" -.010"). Machining is permitted to remove

metal from the balancing bosses to achieve balance only. Tuftriding, Parkerizing, shot peening, shot blasting, polishing, etc., are permitted.

- i. Maximum valve lift against cam angle with zero tappet clearance:

(Lift measured in mm)

Angle	Inlet		Exhaust	
	Opening	Closing	Opening	Closing
0	10.442	10.442	10.442	10.442
5	10.36	10.36	10.36	10.36
10	10.11	10.11	10.11	10.11
15	9.69	9.69	9.69	9.69
20	9.11	9.11	9.11	9.11
25	8.37	8.37	8.37	8.37
30	7.45	7.45	7.45	7.45
35	6.38	6.38	6.38	6.38
40	5.17	5.17	5.17	5.17
45	3.86	3.86	3.86	3.86
50	2.59	2.58	2.58	2.59
55	1.5	1.47	1.47	1.5
60	0.86	0.81	0.81	0.86
65	0.65	0.56	0.56	0.65
70	0.54	0.43	0.43	0.54
75	0.46	0.33	0.33	0.8
80	0.37	0.19	0.19	0.37
85	0.26	0.08	0.08	0.26
90	0.2	0.01	0.01	0.2

- j. Engines will be mounted upright, and aligned fore and aft in the chassis.
- k. A single carburetor only will be used on a standard inlet manifold. The carburetor will be a Weber 32/36 DGV 26/27mm venturi, its origin being from a 1600 GT "Kent" or 2000 SOHC NE engine. The Holly 5200 32/36 carburetor also may be used; carburetor with the swaged fuel inlet fitting shall be replaced by drilling and tapping the carburetor body for a threaded fitting. The air cleaner may be removed and a trumpet fitted, and jets may be changed, both throttles may open together, cold start devices and diffused bar may be removed, internal and external antisurge pipes may be fitted, and seals on emission control carburetors may be removed. The bottom of the lower column portion of the auxiliary venture may be machined for purposes of high speed enrichment. No other modifications are permitted. Chokes (venturi) shall remain standard and no polishing or profiling is permitted.
- l. The addition of material by any means to any component is prohibited. m. It is permitted, as a means of repair, to replace damaged valve seats and cylinder bores by replacement cast iron valve seat inserts and cast iron cylinder liners; valve guides may be replaced with cast iron or bronze, all to standard dimensions. Repairs to the cam towers to facilitate replacement of cam bearing and/or replacements of broken or cracked towers is permissible as long as the cam bearing center line is not changed and that one original cam tower is retained. Line boring of cam bearing caps is permitted. n. Balancing of reciprocating and rotating parts is permitted only by removal of metal from locations so provided by the manufacturer.
- o. Non-standard rocker covers are permitted providing they in no way improve the performance of the engine.
- p. Standard valve spring retainers shall be used, and single valve springs only are permitted. Shims are permitted, and valve springs are otherwise free.
- q. Exhaust system and manifold are unrestricted, within SCCA safety regulations.

- r. Lubrication system is unrestricted; dry sump is permitted. Localized machining of the cylinder block is permitted to allow fitting of the oil pump.
- s. Oil coolers are unrestricted.
- t. Cooling system unrestricted. The radiator, if housed in or incorporating a cowl air-scoop deflector, shall comply with body regulations.
- u. Fuel Pump: Unrestricted.
- v. Distributors are unrestricted providing they retain the original drive and location. The distributor is defined as the component which triggers the L.T. current and distributes the H.T. current. The Ignition Timing may only be varied by vacuum and/or mechanical means. It is prohibited to use any other method or component to trigger, distribute, or time the ignition.
- w. Only the standard inlet manifold shall be used. The ports may be reshaped by the removal of metal as long as the following dimensions are maintained: maximum size at head face = 1.437" (36.5mm), maximum size at carburetor flange = 3.405" (86.5mm) x 1.595" (40.5mm). The carburetor seat face may be machined to horizontal in the fore to aft plane. The diameter of the ports may exceed the above listed dimensions if the casting bore is untouched and in its original state. The water passages in the inlet manifold may be plugged. Holes in the inlet manifold resulting from the removal of emission/vacuum lines shall be plugged.
- x. Gaskets and seals are unrestricted except for cylinder head gasket, that has the requirements listed in B.5.d.2. and the intake gasket. The intake gasket thickness must not exceed 1.1mm. Intake gasket is not to be construed as a spacer.
- y. Pump, fan, and generator drive pulleys are unrestricted.
- z. The crankcase breather may be altered or removed, but all breathers shall discharge into a catch tank.
- aa. Mechanical tachometer drives may be fitted.
- bb. Generators are optional.
- cc. Standard oversize and undersize bearings are permitted. This does not allow reducing the bearing surface area by reducing the width of standard bearings.
- dd. The use of non-standard replacement fasteners (nuts, bolts, screws, studs, and washers) which are not connected with or which do not support the intake manifold or any moving parts of the engine is permitted.
- ee. Only modifications or additions specifically covered by these regulations are permitted. All engine components not covered by these regulations shall remain completely standard and unmodified. When a system is specified to be "unrestricted" (e.g. paragraphs r and t), the restrictions of this paragraph do not apply.
- ff. The use of the Fast Forward aluminum cylinder head is permitted. The following dimensions must be maintained.
 - Intake port maximum volume 70.0 cc.
 - Exhaust port maximum volume 52.0 cc.
 - Intake port surface to exhaust port surface 5.580 +/- 0.020 inches
 - Intake valve center line to (adjacent) intake valve center line 4.015 +/- 0.015 inches
 - Exhaust valve center line to (adjacent) exhaust valve center line 4.015 +/- 0.015 inches
 - The machine tool marks in the intake and exhaust ports must remain untouched for 0.750 inches from the respective gasket surfaces.

B.6 Engine (Mazda MZR)

An alternate permitted engine is the Mazda MZR 2.0L dual overhead camshaft engine, which must conform to the following specifications and may be modified only as explicitly allowed. If these specifications do not explicitly allow a modification, then it may not be done. The philosophy of the MZR engine in Sports 2000 is to allow limited engine rebuilds but no performance modifications to the engine. Overhaul procedures that in the slightest way

would increase performance are not permitted (e.g., porting, polishing, coating). Blueprinting, lightening, and balancing are inconsistent with the philosophy of this formula and are not allowed. Where Mazda part numbers are specified, normal industry part number supersession is expected and the superseding part numbers are automatically included.

- a. All surfaces on the head, block, connecting rods, pistons, and crankshaft must remain as manufactured by Mazda and may not be altered in any way. The original casting marks and cast surfaces must remain as-cast and also meet all of the Mazda design values and tolerances stated in the Mazda factory manual or delineated in these specifications. The block may not be decked. The minimum block deck height is 11.930 inches. Only Mazda MZR engine blocks with serial numbers LFE2-10-300E ('05-'08) or LF9G-10-300 ('09) are permitted. The maximum compression ratio is 10.8:1, the required standard bore is from 3.445 inches to 3.448 inches, and the required stroke is 3.272 inches. The maximum bore dimension of 3.448 inches is intended to allow for cylinder wear only. It is not permitted to machine to this dimension. The bore measurement will be taken 1.650 inches below the block deck where the bore is untouched by the piston ring.
- b. Pistons, crankshaft, and connecting rods may be replaced only with standard, original Mazda production parts. The connecting rods may not be bored or remanufactured in any way. Standard oversize and undersize main or connecting rod bearings are permitted. Reduction of the width of the standard bearings is not permitted. Replacement main bearings must be standard Mazda or Cosworth KK3481. Replacement connecting rod bearings must be standard Mazda or Cosworth KK3483. Any rod bolts may be used. c. Only original Mazda replacement piston rings may be used. The ring end gaps may not be altered and must remain as manufactured by Mazda. All of the rings must be installed, including the complete oil scraper assembly. The piston bore may be honed solely to allow piston ring seating. The first and second compression rings must be installed in the positions designated by Mazda.
- d. The cylinder head may not be ported, polished, or machined. The minimum head height is 4.875 inches. A standard three-angle "production" valve job is required, and the only allowed angles are those defined in the Mazda factory manual. The intake valve seat angles must be 35°, 45°, and 70°, the 45° seat must be a minimum 0.048 inches wide. The exhaust valve seat angles must be 30°, 45°, and 65°, the 45° seat must be a minimum of 0.048 inches wide. The camshafts, valves, springs, retainers, and shim/ bucket combinations must be original Mazda parts and not modified in any way. The camshafts must remain as ground by Mazda; no polishing is permitted. Valve seats may not be replaced. Only the Mazda L3G2-10-271A ('05-'08) or LF9G-10-090a ('09) cylinder heads are allowed. Only the Mazda L3E3-12-420 intake and L309- 12-441A exhaust camshafts are allowed. The original, unmodified Mazda camshaft sprockets and crankshaft timing pulley must be used. Camshaft timing must remain stock and must be set per the procedure outlined in the Mazda factory manual. Modifications to the variable valve timing mechanisms are prohibited.
- e. Flywheel: The minimum weight is 5 pounds. Any one piece flywheel may be used. Flywheel bolts are free.
- f. Any dual plate 5.5 inch or single plate 7.25 inch diameter, noncarbon fiber clutch is permitted, provided no modification is made to the flywheel other than changing the clutch's points of attachment to the flywheel. The original, unmodified Mazda clutch assembly may be used.
- g. A Life Racing F42R or F88R ECU and engine wiring harness must be used; the current specification map is required. Failure to use the current map will result in an automatic penalty of 1 year suspension from SCCA Club Racing. The map is available on the SCCA website. Ignition coils must be standard Mazda. Spark plugs are unrestricted.
- h. The Jenvey SCCA-S2 intake kit including intake manifold, o-rings, throttle bodies, throttle position sensor, air horns, and fuel rail must be used. *Only non-performance modifications may be made for installation in the race car.* Fuel injectors must be Mazda L3G5-13- 250 or Bosch 0 280 155 868. Intake air filters are unrestricted. All air entering the engine must pass through the throttle bodies. i. Intake restrictor: 1.205 inch diameter restrictor plate per intake port.
- j. Exhaust system and manifold are unrestricted, within SCCA safety regulations.
- k. Engines will be mounted upright and aligned fore and aft in the chassis.

- l. The addition of material by any means to any component is prohibited.
- m. Non-standard cam / valve covers are permitted provided they in no way improve the performance of the engine.
- n. Three-stage dry sumps having no more than two scavenge stages are permitted. Localized machining of the engine block is permitted to allow fitment of the oil pump. An engine block breather cover may be fitted. The lubrication system is otherwise unrestricted.
- o. Oil coolers are unrestricted.
- p. A liquid cooling system is required; radiators and water pumps are unrestricted. The cylinder head water outlet housing may be modified or replaced to facilitate the routing of coolant lines.
- q. Fuel pumps are unrestricted.
- r. Gaskets and seals are unrestricted, except cylinder head gasket, Mazda part L3G2-10-271A must be used.
- s. Pump, fan, and generator drive pulleys are unrestricted.
- t. Generators are unrestricted.
- u. The use of non-standard replacement fasteners (nuts, bolts, screws, studs, and washers) which are not connected with or do not support the intake manifold or any moving parts of the engine are permitted.

B.7. Suspension

All parts shall be of steel or ferrous material, with the exception of hubs, hub adapters, bell cranks, pivot blocks, and bushes. Front and rear hub carrier material shall be steel or aluminum alloy. Titanium prohibited. Springs: steel only. (Rear hub carrier material on car manufactured before January 1, 1983 is unrestricted, but replacement parts shall be steel or aluminum alloy.)

B.8. Brakes

- a. Only the following ferrous calipers are permitted: AP LD19, AP LD20, AP LD65, ICP-20L/R, ICP-65R, ICP-14F, Girling 12SP and Girling 14F.
- b. Aluminum alloy calipers of two-piece construction (split into two halves that are fastened together by bolts) having no more than 4 pistons and 2 brake pads are permitted. Spacers placed between caliper halves to adjust for rotor width are permitted. Maximum one caliper per wheel.
- c. Brake rotors must be ferrous. Rotor hats / bells must be ferrous or aluminum alloy.
- d. Brake system otherwise unrestricted.

B.9. Shock Absorbers

Design: Unrestricted. Case material: steel or aluminum alloy.

B.10. Steering

Unrestricted.

B.11. Wheels and Tires

Thirteen (13) inch diameter wheels with maximum front rim width of six (6) inches and rear eight (8) inches are the only wheel sizes permitted. Material is unrestricted providing it is metal.

B.12. Transmission

- a. The gearbox shall include an operable reverse gear, capable of being engaged by the driver while normally seated, and contain not more than five forward gears. Five forward gears are permitted with a 25 lb. weight penalty. The ratios are unrestricted.
- b. Rear wheel drive only is permitted.
- c. Final drive ratio is unrestricted.

- d. The differential cannot be modified in any way to limit its normal function. Torque biasing, limited slip, and locking / locked differentials are prohibited. Excessive shimming of the differential is prohibited.
- e. The use of automatic shifting gearboxes is prohibited. Sequentially shifted gearboxes are permitted.
- f. Electro-mechanical, electronic, hydraulic, pneumatic, and/or similarly operated gear change mechanisms and differentials are not permitted. Gear changes must be made through direct mechanical linkage, e.g. by rod or cable. Devices that in any way automate engine speed matching, interrupt ignition, and/or interrupt fuel for the purpose of assisting a gear change are not permitted.
- g. Gearboxes with shafts that are transverse to the longitudinal axis of the chassis are not allowed. The sole exception is the gearbox final drive (crownwheel) shaft axis and final drive shafts (half shafts). All change gears must be located in the case aft of the final drive.

B.13. Fuel Capacity

41 lit. (10.8 gal) maximum.

B.14. Weight

1310 lbs., minimum, Pinto w/iron cylinder head and standard camshaft. 1335 lbs., minimum, Pinto with Fast Forward aluminum cylinder head and standard camshaft. 1335 lbs., minimum, Pinto with iron cylinder head and FC2000 alternate camshaft. 1335 lbs., minimum, Mazda MZR.

B.15. Windscreens are optional

B.16. Bulkheads and Cells

Fuel cells shall be isolated by means of bulkheads and so vented in case of spillage, leakage, or a failure of the cell that fuel and fumes will not pass into the driver or engine compartment or around any part of the exhaust system. No part of any oil or water tank shall be exposed to any part of the driver and passenger compartment. Safety fuel cells, as listed in Section 9.3 Fuel Cell Specifications, are required for cars registered after January 1, 1983. There shall be a liquid tight and fireproof bulkhead separating the fuel tank(s) from the cockpit.

2015 NORTHWEST REGION SCCA

SS2 RULES

SPEC SPORTS 2000

1. Eligible cars are all those manufactured before December 31, 1985, with outboard suspensions, i.e., all four (4) corners of the shock absorbers/spring units mounted outside the monocoque, with one (1) end of each shock unit attached directly to the outboard area of the lower A-arm/control arm or on the lower area of the upright/hub carrier.
2. Spec Sports 2000 cars must display class designation as "SS2."
3. Cars must conform to 2013 GCR and Sports 2000 specifications.
4. Points to be awarded per Northwest Region points rules.
5. Trophies to be awarded as per current Supplementary Regulations.
6. There is no spec tire designated for this class.

The intent of this class is to create a venue whereby drivers of older, less developed, Sports 2000 chassis can seek competition on equal ground.

2015 NORTHWEST REGION SCCA
VP1-3; VFSR SUPPLEMENTARY REGULATIONS
Vintage

1. **PURPOSE:** To provide a venue for people with competition cars who, for various reasons, do not wish to participate in full Regional or National competition events yet want involvement in exciting sport of vintage road racing.
2. Preservation of these cars in a racing environment is viewed as important to the sport and to our club. Retention of experienced vintage drivers fosters continuity of our valued SCCA history and culture.
3. These Supplementary Regulations lay out car preparation standards as well as driver conduct standards and are considered part of the Northwest Region Entry Form as required for including Vintage/Historic cars in SCCA programs per General Competition Rules (GCR) section 3.1.4
4. Vintage run group(s) are conducted according to the Event Supplementary Regulations, the Vintage Supplementary Regulations and the SCCA General Competition Rules. The **only** exceptions to compliance with the GCR and its provisions are contained in these Supplementary Regulations and relate to acceptable racing licenses for drivers and car preparation allowances as allowed per GCR 3.1.4. Section 7 in these Vintage Supplementary Regulations provides the specifics on car preparation.
5. It is the general policy of Northwest Region to recognize cars originally manufactured 25 years ago and earlier in the Vintage Racing Group.
6. **DRIVER ELIGIBILITY:** Drivers must be current SCCA members. holding an Acceptable licenses for individuals participating in Northwest Region events are listed in the 2015 GCR 3.1.4.B. and Appendix C 2.8
7. **DRIVER CONDUCT:** Vintage drivers are expected to provide a safe and enjoyable environment for all participants and spectators. This requires recognizing that vintage grids include cars of many ages with great disparities in speed, cornering, and braking capabilities. Drivers, as well, tend to possess widely varied experience and ability. Accordingly, drivers are expected to exercise great care, prudence, and courtesy in traffic and in passing. The slowest car and driver has as much right to be on track as the fastest, and all drivers must conduct themselves accordingly and make room for each other. Drivers of slower cars are reminded to watch their mirrors and allow faster cars room to pass (both on the straights and in the corners). See Section 6.11 "Rules of the Road" in the GCR.
8. **CAR-TO-CAR CONTACT:** Contact is **absolutely contrary** to the spirit of Vintage racing. Drivers judged at fault may be penalized with exclusion from the event with the possibility for referral to the Stewards of the Meet (SOM) with possibility of probation or suspension of driving privileges at the discretion of the event Chief Steward. The event Chief Steward may rely on advice from the NORPAC Vintage Series Chief Steward and/or the Region's Vintage Committee.
9. **CAR ELIGIBILITY FOR VINTAGE CLASSES:** Generally, cars originally manufactured in 1988 or earlier that have been prepared to, restored to, or preserved in vintage/historic racing condition as far as possible. Examples include 1988 or earlier cars with racing history and 1988 or earlier production cars restored to, prepared to, or converted for, racing to these Vintage Supplementary Regulations and specifications. Safety improvements are encouraged (see car preparation requirements, Section 7). Continuation model years later than 1988 may also be accepted in vintage.

SCCA has reissued publications for earlier years to help in determining appropriate configurations. Special interest cars may be included at the discretion of the event Chief Steward

with the advice of the NORPAC Vintage Series Chief Steward or Vintage Committee. Logbooks from vintage organizations listed in Section 2 will be accepted for Northwest Region vintage classes only.

Cars accepted for vintage group participation may not qualify for regular SCCA regional or national run groups. Cars prepared and presented for Vintage Classes and not eligible for regular SCCA classes shall be issued a special Vintage Log Book (this may be a regular SCCA log book stamped or marked to indicate acceptance in **only** the Vintage Run Group).

10. CAR CLASSES:

- VP1 – Production cars up to 1900cc
- VP2 – Production cars 1901cc up to 3200cc
- VP3 – Production cars over 3200cc
- VFSR – All Formula and Sports Racers (no displacement split)

Production cars that are substantially faster than the majority of other cars in their class may be asked to move into the next class. The decision to move a car shall be at the discretion of the Event Chief Steward with advice from the NORPAC Vintage Series Chief Steward or Vintage Committee.

- 11. CAR PREPARATION:** All Vintage cars must conform to Appendix Z of the SCCA Vintage Competition Rulebook (VCR), publication #5684 dated March 2005. Roll cages as defined in Appendix Z (pages 18 – 26) of the current VCR are required in all production cars considered model year 1973 or later. There is no requirement for cars from model year 1972 or earlier to have roll cages; however, members are encouraged to install roll cages in such cars where satisfactory installation can be achieved. At a minimum, roll bars are required for production cars from model year 1972 or earlier. Where allowed, roll bars must conform to Appendix Z of the current VCR (pages 27 -31).

Vintage cars shall have no minimum weight requirement.

Driver restraint systems must meet current GCR requirements. Driver window safety net or arm restraints are required in closed cars. Open cars require arm restraints. **NOTE:** An SCCA approved Head and Neck Restraint device is required for all SCCA classes including vintage beginning in 2012. See the current GCR for details.

Page numbers listed from the Vintage GCR relate to the 1972 Vintage GCR requirements.

- 12. TIRES:** Must be approximately the same size, width, and profile as those originally offered on the car (either on the standard or optional rim). All cars participating in the vintage production classes (VP1, VP2, VP3) shall use DOT molded tread tires. Formula and Sports Racing (VFSR) cars may use slicks. If there is a specified slick tire available for the Formula or Sports Racing cars that may run in other groups (e.g. Formula Ford or Club Ford) those cars should run the “spec” tire. A waiver for the use of slicks by any car may be granted with the approval of the event Chief Steward as advised by the NORPAC Vintage Series Chief Steward or Vintage Committee (a log book notation of the exception will be made). Avon, Goodyear and Dunlop vintage tires that have been re-grooved to a specific pattern are allowable. Shaving of excess tread (as in the Improved Touring Classes) is permitted.

Note the reasoning behind the treaded tire rule includes (but is not limited to):

- 1) *Reduction of cornering loads on elderly suspensions;*
- 2) *Equalization of cornering speeds to keep drivers from trying unsafe passes (reducing the opportunity for contact) and because we are running cars of greatly varying speeds in one group; and*
- 3) *Vintage is not intended as a contact sport.*

- 13. FUEL:** Vintage classified cars participating in the Vintage Run Group shall meet fuel

specifications as defined in GCR 9.3.26. This allows cars running in Vintage Classes to use unleaded pump gas if they so choose. Leaded racing fuel is also acceptable. Cars running in **only** Vintage Classes do not require a fuel port. However, fuel used in any vintage class car may still be tested.

14. **SPLIT START:** All Vintage races should begin with a split start between formula/sports racing and production car groups unless the event Chief Steward or their designee determines the composition of the run group makes a split start unnecessary. The lead group will be determined by the event Chief Steward or their designee as appropriate. It is recommended that the pace car pace the second group if only one pace car is available.
15. **OTHER ISSUES:** Cars that are upgraded to current level racing specifications may not be considered in the spirit of the Vintage group and may therefore be excluded. Drivers who's driving or other actions are observed to not be in the spirit of the vintage group as determined by the Event Chief Steward, with advice from the NORPAC Vintage Series Chief Steward or members of the Vintage Committee, may be excluded from the run group (see Section 3). Determination of car or driver eligibility or appropriateness for participation shall be at the sole discretion of the event Chief Steward with advice of the NORPAC Vintage Series Chief Steward or Vintage Committee. It is expected that individual situations will arise at various events (i.e. a second driver using a car that might otherwise be excluded) and final participation decisions will be determined by the Event Chief Steward with advice from the NORPAC Vintage Series Chief Steward or members of the Vintage Committee.
16. **PENALTIES:** Penalties will be in accordance with the current GCR and include but are not limited to the potential loss of Northwest Region SCCA Vintage Points.
17. **AWARDS:**
 - A. No event trophies for finishing positions will be awarded but flags maybe available for participants. This is Vintage Racing and not real car-to-car competition racing. If real competition is what you desire, there are other venues within SCCA
 - B. Northwest Region decals must be displayed on each side of the car as directed by Tech.
18. **POINTS FOR YEAR END AWARDS:**

Three (3) points for: Entering (If the entry is withdrawn and fees refunded, no points are awarded)

One (1) point for: Posting a qualifying time

One (1) point for: Every lap completed during the main race

Four (4) points for: First through fifth (1st – 5th) place finishing positions (in class)

Two (2) points for: Sixth through tenth (6th – 10th) place finishing positions (in class)

One (1) point for: Eleventh through fifteenth (11th – 15th) finishing positions (in class)

One out-of-region SCCA Vintage event may be used to substitute for, or in place of one Northwest Region Vintage event.