

## VSRG Vintage Series Supplemental Rules\*

(January 2008)

[Class Structure](#)  
[Points](#)



### 1. Goal of Series

The goal of this series is to maintain close competition between cars while bringing positive attention to vintage sedan racing. The Vintage 2.5 Challenge Series is designed to recreate the SCCA's small bore sedan racing 1971 and 1972. While close competition is desired, this series will be conducted in the true spirit of vintage racing with emphasis on period correct cars, safety, courtesy and fun.

### 2. Car Eligibility

The series is intended for those cars which were originally allowed to participate in the 1971-72 "2.5 Challenge" series as well as cars that were eligible in the B-Sedan class and C-Sedan class as shown in the 1972 General Competition Rules of the SCCA are eligible for this series. A list of eligible cars can be found in [Appendix S1](#) of this document.

### 3. Rule Interpretation

**A.** These rules are intended to be a guideline to acceptable period correct modifications. For "period correct", the rules should be interpreted as "what was available to all racers prior to 1973". Cars with modifications that are not period correct may incur weight penalties or be required to remove non-conforming modifications prior to competing. It is the responsibility of the owner/driver to provide documentary evidence to support specifications, modifications or additions to the car. Such evidence can include; pre-1973 factory specification sheets, option sheets or catalogs, the homologation papers for the make and model not to exceed FIA Group 2 specification as of 12/31/72 or pre-1973 SCCA recognition forms for the make and model. Other documentation, clearly dated prior to 1973, such as photos and articles from print media sources may also be considered by the VSRG rules committee which will be solely responsible for determining the weight and validity of such evidence.

**B.** While it is the desire of this series to afford every small bore vintage sedan an opportunity to race, series officials reserve the right to refuse entry to any car or driver deemed not eligible under these rules or those of the host sanctioning body.

**C.** Posted rules, nor their intent may not be altered during the season. Specifically the Event Steward, Series Board Members or Series Administrators may not waive, alter or ignore any rule unless clear language within that specific rule provides for such. Additionally the use of an existing provision to redefine the intent of another provision is strictly forbidden.

**D.** Any member found to have a motor with a bore over the maximum allowed, stroked crank, specifically illegal components or that falsifies any required class eligibility documentation will be disqualified for the season, no exceptions. They may continue to race with the group in the exhibition class

### 4. Weight Addition

In order to maintain the series goal of close competition, the addition of weight to a car may be required. Specifically:

**A.** Weight may be added to cars that are modified beyond the "point in time" of the series eligibility.

**B.** Weight may be added to any car that is deemed overly fast and therefore does not provide close competition.

### 5. Required Modifications

The following modifications are required on all cars:

**A.** All cars must meet those of the host sanctioning body's Safety Rules and Regulations requirements.

- B.** Both door windows must be fully open during competition. An open vent window does not suffice.
- C.** There must be a metal bulkhead separating the driver/passenger compartment from the compartment containing the fuel tank. Such bulkhead must be added if the standard vehicle has none.
- D.** Any steering system lock mechanism which is fitted by the manufacturer must be removed.
- E.** The plastic and/or glass portions of headlights, front signal lights and front parking lights must be either taped or removed. If removed they must be replaced with coverings of metal, fiberglass mat, or other approved material not exceeding the dimensions of the original parts mounted in the original location of the original lenses. All other parts of these assemblies must remain as originally installed by the manufacturer. All cars must have at least one working brake light.
- F.** The series may have a required set of decals that must be displayed for each event and which must remain in place for the entire event. VSRG will provide decal placement guidelines and requirements as well as the decals. Cars without the required decals or that exhibit the decals in conflict with the placement guidelines will not be allowed to compete until corrected. The sticker for the major sponsor of the series will be placed across the top of the windshield and no other sponsor sticker shall appear on the windshield.

## **6. Authorized Modifications**

### **A. General**

- 1** It is not permitted to make any changes, alterations or modifications to the standard automobile, its coachwork and chassis or any component as produced by the manufacturer, unless such modifications are required under above or specifically authorized by these rules.
- 2** Any springs (including torsion bars) such as clutch, suspension, etc., may be replaced by others of unrestricted origin, but with no change in the number provided by the manufacturer and on condition they can be fitted without alteration of the original supports or attachments, except as specifically authorized by these rules.

### **B. Chassis and Coachwork**

- 1.** Bumpers may be removed. If removed then all mounting hardware and associated apparatus that extend beyond the body must also be removed. If bumpers are attached, then they must be mounted in the original locations and must be of the same basic shape and size of the original OEM units.
- 2.** A front spoiler may be mounted provided it meets the following requirements. It must be mounted to front underside body panel below and to the rear of the front bumper location. Its width shall be limited to the front wheel track width centerline (front track dimension ). The vertical dimension from the lowest point on the front lower panel to the lowest point on the spoiler shall, not exceed three inches. Openings in the spoiler are permitted for the purpose of ducting air to the brakes and/or oil cooler(s). It shall not extend above a horizontal plane passing through the centerline of the wheel hubs.
- 3.** Rear seat and seatback may be removed. The passenger seat may be removed. The driver seat may be replaced with any suitable seat. A racing type bucket seat providing lateral support for the torso is recommended. Seat mountings may be reinforced.
- 4.** Doors may be bolted or pinned to prevent their opening in case of accident. Pins or straps may be added to engine hoods and trunk lids' to supplement or replace the latches.
- 5.** Floor carpet, carpet padding and floor mats may be removed. Alternate brake/clutch/accelerator pedal assemblies and mounting locations are allowed.
- 6.** Period correct fender flares are allowed. "Box" flares are not allowed and flares must meet the period correct guideline of rule 3A.
- 7.** The headliner may be removed.
- 8.** Jacking points may be strengthened. their location may be changed, or extra ones added.

9. The steering wheel may be replaced and the rake of the steering column may be altered.
10. Inside door handles, window cranks, winding mechanism, side door glass and supporting structures may be removed. Door trim panels shall not be removed however sheet metal or aluminum replacement panels are allowed in lieu of OEM panels. (No gutted doors )
11. The replacement, addition, or removal of accessories, gauges, switches, indicators other interior modifications for the convenience of the driver and to permit the installation of required safety equipment is authorized.
12. Windshield wipers and all associated hardware may be removed or replaced with non-OEM units.
13. Windshield material is free so long as the material used is made of a shatterproof material (ie Lexan). Side windows and rear window material is free. Windshields, rear windows and side windows must be mounted in the same location as original however the method of mounting is free so long as the mounting is safe and secure.

### **C. Tires, Wheels, Suspension**

1. Wheels and Tires Substitute wheels of any type or material may be used, provided their dimension the track they determine are within the limits specified on the SCCA Recognition Form for the automobile; however, all four wheels must be of the same diameter. Rim width: Maximum 7 inches for cars over 1300 cc displacement and 6 inches for cars under 1301 cc displacement . Unless stated otherwise on a valid, period correct recognition form, the wheel diameter must be the same as the original stock or factory option wheel for the year of manufacture . Maximum tire width 205. Tires must be DOT approved, treaded (at time of manufacture) and a 60 or higher aspect ratio.
2. Track: Maximum track as listed on SCCA recognition form measured at a horizontal plane through the hub centerline. Unless stated otherwise on a valid, period correct recognition form, the track may not deviate more than 1/2 inch from stock
3. Spare wheel and tire may be removed.
4. The modification or substitution of spindles and/or rear axle shafts, and modification or substitution of hubs, bearing carriers and universal joint is permitted.
5. The addition or substitution of anti-sway bars is authorized.
6. On McPherson strut type of suspension, spring mounting attachment to the housing may be modified or relocated.
7. Suspension bushings may be replaced by others of a different material .
8. Quick change/knock-off type wheels are not allowed.
9. Spacers (lowering blocks) may be used between leaf springs and their point of attachment on the axle housing.
10. Production suspension control arms must be used, but may be reinforced for safety. The use of heim joints or rod and end links to replace steering linkages, tension control attachments and sway bar attachments is allowed.
11. The wheelbase of the automobile may not be changed or relocated in a fore/aft direction.

### **D. Electrical Systems**

- 1 The standard battery may be replaced by one of different make and capacity. The voltage of the battery and electrical system may not be changed. The battery may be relocated, but if so, must be enclosed in a

protective box (i.e. marine type) and securely mounted.

**2** The standard generator or alternator may be removed or replaced by either a generator or an alternator of different make and capacity, provided the driving method remains unchanged.

**3** The make and location of the ignition coil and condenser may be changed.

**4** Any distributor may be used provided its installation does not require any modification of the engine.

**5** Transistor ignition is permitted provided its installation does not require any modification of the engine. Crank fire ignition systems are specifically prohibited. The ignition system must be triggered by a mechanism inside the distributor housing.

**6** Any make or type of spark plugs may be used.

**7** Additional relays and/or fuses may be installed.

**8** The use of any starter is permitted provided it can be fitted without modification to the engine. **9** Wiring harness may be changed or modified.

### **E. Engine and Drive Train**

**1.** Any exhaust manifold or exhaust header may be used.

**2.** Substitution or modification of the clutch and/or flywheel is permitted.

**3.** Exhaust emission control air pumps an associated lines and nozzles cannot be modified in any way except that they may be completely removed.

**4.** Engines may be re-bored a maximum of 0.080 inch over the standard bore size.

**5.** The crankshaft may be replaced with another of the same basic material however the stroke must remain the same as stock.

**6.** Substitution of main bearing caps is permitted.

**7.** The connecting rods may be replaced with any connecting rod of the same basic material.

**8.** The cooling fan may be modified, substituted or removed.

**9.** Any pistons and piston pins may be used.

**10.** Any camshaft(s) may be used.

**11.** Cam followers may be substituted, except that roller cam followers may not be used unless fitted in production.

**12.** Valves size is free and material is free except that titanium is specifically forbidden. The valve centerlines may not be altered. Upper valve spring retainers/keepers may be made from any material to include titanium .

**13.** It is permitted to lighten, balance or modify in shape by tooling the standard or optional components of the engine and drive train, provided it is always possible to identify them positively as such. Material may not be added to these components unless specifically authorized.

**14.** The use of alternate engine and drive train components, considered replacement parts, such as seals, bearings, valve guides, nuts, bolts, studs, washers. and, gaskets is permitted provided they are of the same type and dimension.

15. Generator, crankshaft, and water pump pulleys may be altered or replaced with others of unrestricted origin.
16. The compression ratio may be increased by machining, using any head gasket(s) or elimination of head gasket(s).
17. Any final drive ratio and any limited slip or locked differential may be used.
18. Any modification may be made in the linkage between the clutch pedal and the clutch housing.
19. Any transmission may be used so long as it meets the following requirements: The number, up to a maximum of 5 forward gears, and direction of gears shall be the same as factory original or as offered as a factory option for the make and model of the car prior to 1973. Reverse gear must be retained and remain operational. Sequential type transmissions are specifically forbidden. Attachment or inclusion and use of any form of electronic interface or device is specifically forbidden. The transmission may not be relocated from original.
20. Heavy-duty propeller shaft(s) may be used in place of the standard shaft(s).
21. The installation of any vent or breather on the engine, transmission or differential is permitted.
22. Any engine oil filter(s) may be used.

#### **F. Cooling System**

- 1 The use of any engine, transmission and differential oil coolers is permitted.
- 2 The use of any water radiator is allowed provided the radiator mounts in the same location as original.
- 3 Sealing or shrouding the air flow area between the normal grille opening and the water radiator is permitted.
4. On water-cooled cars, thermostats may be modified, removed, or replaced with blanking sleeves or restrictors.

#### **G. Induction System**

- 1 Carburetor(s) are free up to a maximum allowed throttle body bore size of 48mm for Weber and 50mm for Mikuni/Solex provided they bolt without modification to original intake manifold as homologated for the make and model of the vehicle.
- 2 Automobiles recognized as being equipped with fuel injection in standard production may make any modification to that injection except changing the make and model of the fuel metering and or fuel distribution unit.
- 3 No changes may be made to the internal or external coachwork, chassis or firewall for the installation of the induction system.
- 4 Any linkage may be used between the throttle(s) and the accelerator pedal. Must have dual springs external to the carburetors .
- 5 Any air filter may be used or the filter may be removed.
- 6 Any fuel pump(s) may be used and the location of the pump(s) may be changed.
- 7 Fuel lines are restricted to a maximum of ½" inside diameter. Only a single fuel supply line may be used between the engine firewall and the bulkhead separating the driver/passenger compartment and the compartment in which the fuel tank is mounted.

## H. Fuel System

1. All cars shall be equipped with a safety fuel cell complying with FIA FT-3 specifications.

## I. Brakes

1. The use of any dual master cylinder and/or pressure equalizing device is premitted.
2. Servo-assist systems are free.
3. Backing plates or dirt shields may be ventilated or removed. Brake air ducts may be fitted provided they extend in a forward direction only and no changes are made in the coachwork. Rear brake ducts may extend a maximum of 24 inches from the disc or drum.
4. The handbrake may be partially or entirely removed.
5. Any brake lines may be used. They may be relocated and given additional protection.
6. Brake discs, calipers and/or drums are free provided; (a) they are mounted in the same location as the standard brakes and (b) any changes involving the brakes, calipers, rotors or disc/drum configuration must be period correct. Supporting documentation will be required for changes.

## J. Minimum Car Weight

- 1 Cars must meet or exceed the minimum racing weight. Weight of the car is to be as raced with driver but without refueling after a race. Cars may be weighed immediately upon exiting the track.

- 2 \*Weight is calculated as follows;

- a. for cars over 1300 cc displacement :

Rotary Piston 1.00 lb/cc  
Push Rod, Non Crossflow 1.00 lb/cc  
Push Rod, Crossflow 1.05 lb/cc  
SOHC, Non Crossflow 1.10 lb/cc  
SOHC, Crossflow 1.15 lb/cc  
DHOC 1.20 lb/cc

- b. Cars under 1301 cc displacement, must weight a minimum of 1,000 pounds and follow the guidelines below:

Push Rod, Non Crossflow 1.20 lb/cc  
Push Rod, Crossflow 1.25 lb/cc  
SOHC, Non Crossflow 1.30 lb/cc  
SOHC, Crossflow 1.35 lb/cc  
DHOC 1.40 lb/cc 1  
Alfa Romeo single spark engine 1.10 lb/cc,  
Alfa Romeo GTA twin spark 1.15 lb/cc.

1. Additional 0.1 lb/cc factor is added to the above for each valve in excess of two per cylinder. Two stroke engines shall be computed on the same basis as pushrod-crossflow engines.

- c. Cars with rotary piston engines covered by the NSU-Wankel patents shall be classified on the basis of a piston displacement equivalent of twice the volume determined by the difference between maximum and minimum capacity of the working chamber.

## Appendix S1 – Eligible Car List (1972 and earlier with homologated engine size )

Alfa Romeo Guilia 1300 and 1300  
 TI Alfa Romeo GT 1300 Junior  
 Alfa Romeo GTA Junior 1300/1600  
 Alfa Romeo GTV  
 Alfa Romeo 1600/1750/2000 GTV [SCCA Recognition Form A1-6 from 1970 or earlier \(PDF\)](#)  
 Auto Union Audi 100  
 BMW 1600-2 and 1602  
 BMW 2002 & 2000tii  
 BMW 2500  
 Austin/Morris 850  
 Mini Cooper 997, 998, S 1071, S 1275  
 Austin America 1275  
 Austin/Morris Marina 1800  
 Triumph T2000  
 Triumph 2.0 Vitesse  
 Triumph 2.5 P.I. Saloon  
 Chevrolet Vega  
 Chrysler Colt  
 Chrysler Cricket  
 Datsun B(L) 100 -1200  
 Datsun PL510 -1600 & 1800  
 Datsun HL510 -1800 [SCCA Recognition Form A1-6 \(PDF\)](#)  
 Datsun 610 - 1800  
 Ford (English)  
 Escort Super and 1300GT  
 Ford Cortina GT 1499, 1598 (1967)  
 Ford Lotus Cortian TC (1964/65/66/67)  
 Ford Escort Mexico  
 Ford Capri 1600, 2000  
 Ford Pinto 1600, 2000  
 Ford New Anglia 997, 123, 124E  
 Ford Anglia Super 1200  
 Fiat 600D  
 Fiat 650 Sport Coupe  
 Fiat 124 1200, Special  
 Fiat 124 Sport Coupe 1438, 1608  
 Fiat 128 Fiat 128 SL Coupe 1300  
 Subaru 1300  
 Subaru 1400 Sedan and Coupe  
 NSU-1000 (NSU-TTS)  
 NSU TT1200  
 Opel Rallye Kadett  
 Opel 1900 Sport Coupe (57R)  
 Opel 1900 Models 51 & 53  
 Renault 8-R1130  
 Renault R8 Major R1132  
 Renault R8 Gordini R1135  
 Renault 12  
 Renault 17TS  
 Sunbeam Imp / Singer Chamois  
 Saab 96 Sedan  
 Saab Sedan V4 and V4 1698  
 Saab 99E Simca 1000 Type SD  
 Toyota Corolla 1100  
 Toyota Corolla 1200  
 Toyota Corolla 1600  
 Toyota Corona MKII  
 Toyota Celica Toyota Carina 1600  
 Madza RX-2 -Dual distributor early motor, cannot be Bridgeported  
 Mazda S1Z4A RX-3 -Dual distributor early motor, cannot be Bridgeported  
 VW 1300 (1955/56)  
 VW 1300 (1967)  
 VW 1500/1600 (1967/68/69)  
 VW 1600 (1970)  
 Volvo P-544

Volvo 122S  
Volvo 142S and 142E \*

These rules are based largely on the 1971-72 Trans-AM 2.5 and B-Sedan rules of the SCCA. Some minor modifications have been made to the rules to due to the age of the rules and the cars.

## Appendix S2 - Classes

- a. The series consist of multiple classes based upon performance potential and SCCA Club Racing Rules and General Competition Rules (GCR?s) classifications of the 1971-72 seasons For B and C-Sedan class cars and the 1972 Trans-AM rules as they applied to the 2.5 Challenge.
- b. The following classes are defined for the series:
  - A. **2.5 Trans-Am**, Under 2.5 liter with dual Carb Size of 48/50 (Weber/Solex) and displacement greater than 1500 cc are required to compete in this class as are all rotary engine powered cars. \*
  - B. **B-Sedan**, Under 2.5 liter but more than allowed by C-Sedan and maximum of dual 45 mm carbs.
  - C. **B-Sedan2**, Under 2.5 liter but more than allowed by C-Sedan and single carb.
  - D. **C-Sedan** (and C-Sedan2 if needed), Maximum displacement of 1300 (plus allowed overbore).
  - E. **Exhibition**, any eligible sedan that does not meet the current rules. No points in this class.
- c. Members may move between classes however points do not transfer between classes therefore a member could possibly accumulate points in all classes.
- d. There is no restriction on moving up in classes however cars may not move to lower classes unless their car meets all of the requirements of the class.
- e. Each year the class winners will be asked to serve on the Series Advisory Board and to serve as ?Class Representatives? for the following year. Service is not mandatory and when declined will be requested of the next driver based on finish order of the class until the position is accepted

## Appendix S3 - Points

1. Season Championships in each class are awarded based on total points accumulated during a season.
2. No more than 80% of the events will be used in determining the season championship. This allows drivers to miss one or more events, depending on the schedule, and still remain in the race for the season championship.
3. Points are earned by class based on the finishing position within the class. For the full points shown below to be applied the class must start a minimum of 6 cars in the final race of the event. Example: For an 8 race season only the top 6 finishes will be used. (  $8 \times 80\% = 6.4$  (rounded to nearest whole number = 6 ).

1st	-	9 points
2nd	-	6
3rd	-	4
4th	-	3
5th	-	2
6th	-	1

4. In the event a class has less than 6 cars entered the points are adjusted downward by moving down the full points scale shown above. The movement will be the difference between the class entries and 6. Adjustment example; The BS2 class has 5 entries so the movement will be  $6-5 = 1$ . In this case the first position of the class will move down the scale by one (1) and earn 6 points rather than the full class value of 9.
5. There will be one participation point (1) awarded for starting the first timed session of a race weekend
6. There is no "pole" point.
7. If a class has a tie final season points in any of the top 3 positions, the average finish position will be used as the tie breaker.