

Class 9

OPEN WHEEL – 100” Wheelbase

Competition Numbers 900-999

DEFINITION

Single and two-seat vehicles with a maximum wheelbase of 100”.
Maximum displacement is 1585 cc. Vehicle parts are based on a Type 1 VW.

GENERAL REGULATIONS

Entrants in this class shall comply with all applicable general regulations.

COMPETITION REGULATIONS

This class is a stock production-based class and all components must remain stock except for those modifications allowed herein. Vehicles that raced SCORE previously, and do not meet current specifications, can possibly be modified and “Grandfathered” into current competition. Contact SCORE Tech Director for information.

To view these complete sections, click on the following links

General Regulations - <http://score-international.com/raceinfo/rule-book/general-regulations-2/>

Competition Regulations - <http://score-international.com/raceinfo/rule-book/competition-regulations/>

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NOTE: The CR abbreviations listed under this class (i.e. CR1 HELMETS) refer to cross reference listings in the Competition Regulation section on this website. These cross-referenced listings are part of the class rules. Where a conflict occurs between the cross-referenced listing and a rule contained under this class, the rule contained under this class has precedence.

SAFETY EQUIPMENT

CR 1 HELMETS AN HEAD AND NECK RESTRAINTS

CR 2 PROTECTIVE CLOTHING

CR 3 EYE PROTECTION and DENTURES

CR 4 FIRST AID KIT

CR 5 EMERGENCY SIGNALING DEVICES

CR 6 HORNS

CR 7 REFLECTORS

CR 8 FIRE SUPPRESSION EQUIPMENT

CR 9 SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

Front and rear suspension components are limited to stock VW production Type 1 parts unless otherwise stated within.

Suspension must retain stock concept and no other suspension types used with the stock suspension (I.E. air shocks, sway-bars, coilover shocks, dual torsion bar, etc.)

Front Suspension

Front suspension must be a VW Type 1 ball joint. Front axle torsion tube centres may be cut, rotated, re-welded to increase ground clearance. Original seams may be welded (not reinforced) on front beam. No additional material may be added. Torsion adjusters allowed.

Filling of speedometer hole in spindle is permitted. Steering arm on spindle may be reinforced by welding a 0.25” gusset from the top of the upper ball joint mount to the end of the steering arm.

A single tube may be welded from one shock tower to the other as a reinforcement member.

Suspension limiters allowed.

Rear Suspension

Rear suspension is limited to stock VW Type 1 components, swing axle or I.R.S. (independent rear suspension) Effective 1/1/20. Rear suspension torsion bars may be of any origin. The torsion housing must retain stock dimensions; aftermarket housing is allowed. Torsion bar grommets may be of any manufacturer as long as stock dimensions are retained. Torsion adjusters allowed.

Rear suspension limiters and spring plate retainers are allowed. Rear spring plates may be of any origin.

CR 10 SHOCK ABSORBERS and BUMP STOPS

Only one shock per wheel is allowed. Outside diameter of shock may not be larger than 65.00mm. Shock shafts may not have a diameter larger than 0.875”.

Front shocks must be mounted in the stock location. Rear shocks may be mounted in any location. Rear shocks may not have an extended length longer than 31.5”.

CR 10 SHOCK ABSORBERS and BUMP STOPS – cont'd

Shock reservoirs are allowed.
Shocks may be of any manufacturer.
No air or coilover shocks allowed.
No external bypass shocks.

CR 11 SECONDARY SUSPENSION

No secondary suspension is allowed.

CR 12 WHEELS and TIRES

Must use a 15" steel rim, 5" wide maximum with any standard offset.
Any manufacturers tire and size allowed up to 32" tall and 10" wide as mounted and inflated on 5"x15" rim with 18 lbs. of air.

CR 13 FASTENERS**STEERING AND BRAKE COMPONENTS****CR 14 STEERING**

Steering box may be of any origin. No power steering allowed. Any manufacturers steering wheel and adapter may be used. Any steering dampener may be used. Any steering shaft allowed and sheet metal tube may be removed. Any tie rods and tie rod ends are allowed.

CR 15 BRAKES

Original VW type drum brakes only. Drums may be studded but not reinforced. Any combination of brake linings. Any combination of VW master and wheel cylinder are allowed. Dual master cylinders allowed.

ELECTRICAL SYSTEM**CR 16 IGNITION**

Battery ignition only, no magnetos. Six or twelve-volt systems may be used regardless of year model. Any manufacturer's distributor may be used. Any VW type alternator or generator system in the stock location may be used.

CR 17 BATTERIES

Battery must be sealed from driver's compartment.

CR 18 LIGHTS - REAR FACING BLUE LIGHT IS REQUIRED

Additional lighting is permitted. Any manufacturers stop and tail lights are allowed

CR 19 STARTERS**FUEL SYSTEM****CR 20 FUEL**

Fuel is restricted to automotive pump gasoline only. Automotive pump gasoline will be considered gasoline that is sold to the general public for use in domestic cars.

CR 21 FUEL TANKS

Safety fuel cells are required.
Fuel cells may not hold more than 22 gallons.
Stock fuel pump must be used. Electric fuel pump may be used but must be used as a backup and routed through the stock system

CR 22 FUEL FILLERS LINES, VENTS, and CAPS**ENGINE, TRANSMISSION AND DRIVELINES****CR 23 ENGINE and ENGINE DISPLACEMENT**

Engine must utilize VW series Type 1, 1600cc, U.S. model sedan components and dimensions. The maximum allowable engine displacement is 1584cc; as delivered from the factory.

Engine Case

Any VW type 1,2,3 or "universal" case is allowed. The following modifications may be made to the stock case:

- A) The case may align bored.
- B) The case may be drilled and tapped for oil pressure and/or temperature sending units.
- C) The case may be machined to allow the installation of a crank pulley seal.
- D) Case savers may be installed.
- E) Cylinder seating surface may be machined.
- F) Early case oil galleries (8mm) may be enlarged to the dimensions of the universal case (10mm).
- G) Threaded oil gallery plugs allowed.

Oil Pump

Any manufacturer's oil pump is allowed. No deep sumps, dry sumps, or sump alterations. Windage trays are allowed. The use of any oil-bypass pistons and springs are allowed.

Fuel Pump

Any combination of stock fuel pump or electric pump may be used.

Any fuel filters and fuel pressure regulators may be used.

Pistons

Pistons must be stock 3 ring only. Pistons and cylinders may be any manufacture as long as original stock dimensions are maintained. Any type wrist pin retainers. Piston assemblies may be statically balanced to the equivalent weight in grams of the lightest original non-balanced piston, wrist pin, etc.

Crankshaft

Crankshaft must be stock VW. Crankshaft may be balanced. Crankshaft maximum journal re-sizing is limited to .030" undersize.

No polishing or lightening of crankshaft is allowed. No offset grinding of crankshaft is allowed. Any crankshaft gear is allowed. Any manufacturers engine bearing may be used as long as the stock dimensions are maintained. Power pulleys not allowed. Pulleys may be balanced. Sand seals may be used. Any VW flywheel may be lightened and balanced. Flywheels may be eight dowel pinned and any gland nut and washer may be used. No aluminium flywheels are allowed. Any manufacturers clutch disc or pressure plate allowed but must retain original stock VW diameter. Clutch and pressure plate may be balanced. Connecting rods may be statically balanced, but not polished or profiled. Balanced weight of the connecting rods in grams should be equivalent to the lightest original non-balanced stock rod.

Heads

Heads may be U.S. sedan stock single port or dual port or their equivalent. Heads may be fly cut for clean-up. No porting or polishing is allowed. Only dual port heads from Brazil, part number 040 101 375 2 or 040 101 375 13, 040 101 375 19 or stock OEM heads will be allowed. MOFOCO and EMPI heads are also approved.

Intake manifold is restricted to a stock 34mm original equipment center section or its replacement A 1½-inch (1.500) long by half-inch (.500) diameter tube may weld two inches below carburetor flange. A maximum of a ¼ inch (.250) may be removed from each end of the center section for clearance. A slip tube with a 1-5/8 inch (1.625) diameter, two-inches (2.000) long may be welded to the end of the runners to allow the use of a better hose connection. Machine matching the I.D. of the valve seat to the port of the head only 0.250" below valve seat (no hand grinding) is allowed. **No porting or polishing.**

End castings must be original equipment VW, with VW logo and part numbers. No porting, polishing, or matching of powers allowed. Balancing slot may be welded-closed. Vacuum hole may be plugged. A 34mm to 30mm carburetor adapter must be used. The only carburetor adapter that is allowed is the EMPI part number 98-1293-B.

Combustion chamber volume may not be smaller than 42cc. Compression ratio of 7.5:1 is highest ratio allowed.

Camshaft, Valves, Lifters and Rocker Arm(s)

Any camshaft, camshaft gear, valve spring retainers, valve springs and lifters are allowed. Valve spring seat diameter, in head, must remain stock VW. Valves must be stock 45 degrees. One-piece valves are allowed. No polishing or profiling of valves allowed. Valve guides may be steel, bronze or cast iron. Valve guide seals are allowed. No grinding or polishing in the port including valve guides. Any camshaft may be used which will allow the use of the standard stock VW 1600cc rocker arm(s). Rocker arms must remain stock VW 1600cc. No roller or needle bearings will be allowed as part of the camshaft or as an interface between the rocker arm(s) and the camshaft. Push rods and push rod tubes may be of any manufacturer. Rocker arm valve adjustment screws and wave washers may be of any origin. Clips on rocker arms may be wire tied. Valve covers and sheet metal must remain stock, any year allowed. Valve covers and sheet metal may be modified a minimum to allow for the use of engine breathers.

Fan Shroud

After market fan shrouds are allowed. Heater tubes are optional.

Carburetor

Air cleaner location is optional and may be of any manufacture. Velocity stacks may be used as long as they are not welded or bonded to the carburetor. Stock VW carburetors 30 pict 1,2 or 3 or the Solex H-30-PIC replacement must be used. Maximum venturi size of carburetor is 24.10mm. No internal modifications in the carburetor venturi or throttle blade are allowed. This includes no removing of parts, no grinding, polishing, or filing. Intake manifolds must be stock VW. Intake manifold may be cut to allow for head modifications. No chemical milling of manifold or carburetor.

Carburetor - continued

Automatic choke housing may be removed. Choke plate and shaft may be removed. Electric needle valves are optional. The stock float bowl vent may be moved and/or plugged. An external float bowl vent may be incorporated. Any air and main jet may be used.

CR 24 ENGINE REPLACEMENT**CR 25 TRANSMISSION**

Type 1 bug, 4-speed swing axle only. Heavy-duty side plates and differential allowed. Stock VW type 1-ring and pinion ratios only (8.33 and 8.35). Stock VW Type 1 gears only. Closed ratio 3rd and 4th gears allowed. Axle over tubes permitted. Other internal modifications are optional.

CR 26 THROTTLES**CR 27 EXHAUST**

Any manufacturers exhaust system is allowed.

CR 28 DRIVE SHAFTS**CR 29 FLYWHEEL SHIELDS****CR 30 FLUID COOLERS**

Any manufacturers oil cooler is allowed with the location optional. Full flow system is allowed. No deep sumps or dry sumps will be allowed.

CR 31 AUXILIARY EQUIPMENT**CR 32 SUPERCHARGERS and TURBOCHARGERS****VEHICLE SAFETY EQUIPMENT****CR 33 ROLL CAGES****CR 34 SAFETY HARNESS****CR 35 SAFETY NETS****CR 36 SEATING****GENERAL VEHICLE COMPONENTS****CR 37 DRIVERS COMPARTMENT****CR 38 DOORS AND LATCHES****CR 39 FIREWALLS****CR 40 BALLAST**

CR 41 WEIGHT - Single Seat - 1550 lbs. minimum 2-Seat - 1350 lbs. minimum

CR 42 FLOORBOARDS**CR 43 BUMPERS AND HAZARDOUS PROTRUSIONS****CR 44 MIRRORS****CR 45 SKID PLATES****CR 46 STORAGE****CR 47 FENDERS**

CR 48 CHASSIS and BODY - Maximum wheelbase is 100".

CR 49 HOSES**CR 50 IDENTIFICATION MARKINGS****CR 51 ADVERTISING ON VEHICLES****CR 52 RADIO EQUIPMENT****CR 53 WORKMANSHIP****CR 54 TRACKING DEVICE**