

CLASS 9

OPEN WHEEL – 100” WHEELBASE SINGLE AND TWO SEAT BUGGIES WITH A MAXIMUM WHEEL BASE OF 100” VEHICLE PARTS ARE BASED ON A TYPE 1 VW GENERAL REGULATIONS Entrants in this class shall comply with all applicable general regulations COMPETITION REGULATIONS All parts called out for in this class shall remain in their stock shape, size, and configuration unless otherwise stated herein.

SUSPENSION COMPONENTS Front and rear suspension components are limited to stock VW production type 1 parts unless otherwise stated herein. Suspension must retain stock concept and no other suspension types used with the stock suspension

FRONT SUSPENSION Front suspension must be type 1 ball joint. Front axle torsion tube centers may be cut, rotated and rewelded to increase ground clearance. Original seams may be welded (not reinforced) on front beam. Torsion adjusters allowed. Any manufacturer’s torsion leaves are allowed. Suspension limiters are allowed. Filling of speedometer hole in spindle is permitted. Steering arm on spindle may be reinforced by welding a ¼” gusset from the top of the upper ball joint to the end of the steering arm. A single tube may be welded from one shock tower to the other shock tower as a reinforcement member. Half tubes or plating may be used to reinforce beam. Only VW ball joints may be used, no aftermarket ball joints allowed. Stock VW trailing arms and spindles only

REAR SUSPENSION Rear suspension is limited to stock VW type 1 components. Rear suspension torsion bars may be of any origin. The torsion housing must remain stock dimensions, aftermarket housing is allowed. Any spring plates and spring plate grommets are allowed. Torsion adjusters are allowed. Spring plate retainers are allowed

Shock Absorbers and Bump Stops Only one shock per wheel is allowed. Outside diameter of shock may not be larger than 65mm. shock shafts may not have a diameter larger than .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”. Shock reservoirs allowed. Shocks may be of any manufacturer. No air or coil over shocks allowed. No external bypass shocks. No electronically controlled shocks. Secondary Suspension No secondary suspension allowed. Wheels and Tires Must use a 15” rim, steel or aluminum, 7” wide maximum with any standard offset. Any pneumatic tire and size allowed up to a 33” tall and 10” wide as mounted on 7” x 15” rim with 18lbs of air

STEERING AND BRAKE COMPONENTS Steering box may be of any origin. No power steering allowed. Any tie rod and tie rod end allowed Brakes Original VW type drum brakes only. Type 1, 2, 3, and 181 any combination of brake shoes. Any combination of VW wheel

cyl. Dual master cylinders allowed. Turning brake allowed. Aluminum center drums allowed. Steel spline center is allowed with the aluminum hub that attaches to a vw drum.

ELECTRICAL SYSTEM Ignition Battery ignition only, no magnetos. Six- or twelve-volt systems may be used. Any distributor may be used. Any VW type alternator or generator in the stock location may be used. Electronic ignition allowed. No crank fired ignition. **FUEL SYSTEM** Fuel Automotive 91 octane pump gas only. This means only fuel sold to the general public for use in domestic cars. Fuel Tank Safety fuel cells are required. Fuel cell may not hold more than 22 gallons.

ENGINE, TRANSMISSION AND DRIVELINE This is an engine claimer class. This means that any finisher in the top five can claim the first-place finisher's engine by putting up \$2500.00 in cash in the allotted protest time. The first-place finisher must release rights to his engine to the claimer. The engine in this case will be the long block. Sheet metal, fan housing, carburetor, generator/alternator, distributor, intake manifold, exhaust, etc. are not included in this rule. The protest time will be one hour after the last official finisher crosses the finish line. There must be a D.R.E.A. official present at the time of the protest. D.R.E.A. will take no responsibility for the condition of the engine; it will be bought as is. Failure to abide by claimer rule is grounds for disqualification and a ban from racing future D.R.E.A. races for a period of one (1) year. 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 (96.662 cubic inches) 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 be line bored (B) The case may be drilled and tapped for oil and temp sending units (C) The case may be machined for crank pulley seal (D) Case savers may be installed (E) Cylinder seating surface may be machined (F) Oil galleries may be enlarged to 10mm (G) Threaded oil gallery plugs allowed (H) Oil squirters allowed (I) Case may be full flowed (J) The case can have gussets welded on top OIL PUMP Any oil pump is allowed. No deep sumps, dry sumps, or sump alterations. Windage trays allowed. Any oil bypass piston and spring allowed. Full flow systems ok. No accusump systems allowed.

FUEL PUMP Electric fuel pump may be used. Stock fuel pump can be deleted.

PISTONS Pistons must be stock 3 ring only. Any piston and cyl. as long as original stock dimensions are maintained. Any type wrist pin keepers. Piston assemblies may be balanced to the weight in grams of the lightest original non balanced piston, wrist pin, etc. total seal rings allowed.

CONNECTING RODS Any VW aftermarket connecting rod is allowed as long as the rods are stock VW length (5.393) and stock weight with a 500 gram minimum with one (1) rod untouched. No polishing or profiling of rods. **CRANKSHAFT** Crankshaft must be stock VW. Crankshaft may be balanced. Maximum journal size is limited to .030" undersize. No polishing or lightening. No offset grinding allowed. Any gear is allowed. Any engine bearing is allowed as long as stock dimensions are maintained. Power pulleys are not allowed. Pulley may be balanced. Sand seals ok. Any VW flywheel may be lightened and balanced. Flywheel may be 8 dowel pinned. Any gland nut. No aluminum flywheels. Any clutch disk and pressure plate but must retain stock VW diameter. Aluminum stock sized pulley ok.

HEADS Heads must be U.S sedan stock single port or dual port or their equivalent. Only dual port heads with the following numbers will be allowed. 040101375 2, 040101375 13, 040101375 19 or stock OEM heads will be allowed. Heads may be fly cut for cleanup. Minimum of 42 cc's in combustion chamber. No porting or polishing. Stock intake 34mm original equipment center section or its replacement. A 1" by 1.5" long by ½ inch tube may be welded 2 inches below the carb flange. A minimum of material may be removed from the end of the tube for clearance. A 1 5/8 X 2" long slip tube may be welded to the end of the runners for use of better hose connection. End castings must be original equipment VW, with the VW logo and part numbers. Balance slot may be welded closed. Vacuum hole may be plugged. A 34mm to 30mm carb adapter must be used. 7.5 to 1 is the maximum compression ratio.

CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS Any camshaft, gear, single valve spring, steel valve spring retainers and lifters are allowed. Valve spring seat diameter in head must remain stock. Valves must be stock 45 degrees. One piece valve ok. Valve guide may be steel, bronze, or cast iron. No grinding or polishing in the port including valve guide. Must use stock 1600 rocker arms. The rocker arms may be resurfaced to permit use of swivel feet. No other grinding or changes may be made to the rocker arms. No roller or needle bearings will be allowed as part of the camshaft or as an interface between the rocker arms and the camshaft. Any push rods and push rod tubes. Any valve adj screws. Aftermarket valve covers are allowed.

FAN SHROUD Stock or Aftermarket Shrouds permitted. No center mount or 911 shrouds.

CARBURETOR Stock VW carb 30 pict 1, 2, 3 or the solex h-30-pic replacement must be used. Maximum venturi size is 24.10mm. Velocity stacks may be used as long as they are not bonded to the carburetor. No internal modifications are allowed. This includes no removing of parts, no grinding, polishing, or filing. Intake manifolds must be stock one piece only. No chemical milling of manifold or carburetor. Choke housing may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used.

Vacuum advance port may be removed and plugged Transmission Type 1 bug 4-speed swing axle only. No more than four (4) forward speeds are allowed. Heavy duty side plates and differential allowed. Any internal modifications allowed. Any gear ratio combinations allowed but only VW type gears (helical cut gears) may be used. Must have a working reverse gear. Any shifter allowed. Axle cover tubes allowed. CV joint conversions on either end of the axle are not permitted. Fluid Coolers Any oil cooler allowed with the location optional. Full flow systems are allowed. No deep sumps or dry sumps will be allowed

GENERAL VEHICLE COMPONENTS Weight Single seat= 1550 lbs. Double seat = 1350 lbs. Chassis and Body Maximum wheelbase is 100" inches. Measured at ride height.