

## CLASS 2000

# Open-wheel restricted suspension 1600CC Single & two-seat cars limited to 1600CC VW engine & VW type-1 suspension system

### GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations

### COMPETITION REGULATIONS

This is a restricted rear engine, open wheeled class. Components will be open unless otherwise stated within these class rules.

**Note:** The SCR abbreviations refer to the cross-reference listings in the front of this book and are part of the class rules. Where a conflict between the cross-referenced listings and a rule contained under this class occurs, the rule contained under this class has precedence.

### SAFETY EQUIPMENT

- SCR1: HELMETS
- SCR2: PROTECTIVE CLOTHING
- SCR3: EYE PROTECTION
- SCR4: HEAD AND NECK RESTRAINTS
- SCR5: FIRST AID KIT
- SCR6: BREAKDOWN SAFETY DEVICES
- SCR7: HORNS
- SCR8: REFLECTORS
- SCR9: FIRE EXTINGUISHER
- SCR10: SURVIVAL SUPPLIES

### SUSPENSION COMPONENTS

#### FRONT SUSPENSION

Front suspension is based on the VW type-1 ball joint or king and link pin style suspension. Any beam of two steel torsion tubes may be used but must retain stock width. Front axle torsion tube centers may be cut, rotated and welded. Use of torsion adjusters is optional. Any manufacturer torsion bars are permitted. Tube center spacing is open. Front trailing-arms may be reinforced or replaced as long as stock VW width and length is retained. Spindles, link pins, ball joints and shock mounting locations are open. Front suspension track width must not exceed stock VW track width. Suspension limiters are permitted.

Front Suspension: Front suspension track width must not exceed 55  $\frac{3}{4}$  inches as measured from wheel mount face to wheel mount face.

#### REAR SUSPENSION

Rear suspension is based on VW type-1 IRS or swing-axle. Rear trailing arms may be of any manufacturer. Tubular arms are permitted as long as stock VW IRS swing-arm length is retained plus or minus 1-inch. The stock VW dimension between the centerline of the rear axle to the centerline of the rear torsion housing is 16.25 inches plus or minus 1-inch must be retained. Outboard bus reduction gears are permitted. Any axle assemblies are permitted as long as original VW type suspension is retained. Rear torsion tubes may be supported or replaced but must remain steel and retain stock VW width. Torsion adjusters are permitted. A single torsion per wheel of any manufacturer is permitted. Torsion bars must remain inside the torsion housing. Torsion bars must be connected to the trailing arm with steel spring plates of any manufacture. Rear suspension track width must not exceed a maximum of 58.25 inches as

measured wheel mounting face to wheel mounting face. CV joint mounting face to CV joint mounting face must not exceed 47.38 inches, as measured at the ride height. The entire outer CV joint must remain inboard of the trailing arm inner bearing.

**SCR11: SHOCK ABSORBERS & BUMP STOPS**

The number of shocks and the sizes of the shocks are open. Cooling fins are permitted. Air or coil-over shocks are not permitted.

**SCR12: SECONDARY SUSPENSION**

Secondary suspension is not permitted.

**SCR13: WHEELS & TIRES**

Any tire and wheel combination is permitted that will mount directly on VW drums. Wheel adapters are not permitted.

**SCR14: FASTENERS****STEERING & BRAKE COMPONENTS****SCR15: STEERING**

Steering system is open. Any tie rod and tie rod end permitted.

**SCR16: BRAKES**

May use any combination of drum or disc brakes. Steering or turning brakes are permitted.

**ELECTRICAL SYSTEM****SCR17: IGNITION**

Battery ignition only. No magnetos permitted. Any distributor may be used. Any VW-type alternator or generator in the stock location may be used. Six- or 12-volt system may be used.

**SCR18: BATTERIES****SCR19: LIGHTS**

Rearward facing blue light is mandatory

**SCR20: STARTER****FUEL SYSTEM****SCR21: FUEL****SCR22: FUEL TANKS**

Safety fuel cells are required.

**SCR23: FUEL FILLER, VENTS & CAPS****ENGINE TRANSMISSION & DRIVELINES****SCR24: ENGINE LOCATION & DISPLACEMENT**

Engine must utilize VW series type-1, 1600cc; us model sedan components and dimensions. The maximum allowable engine displacement is 1600cc as factory delivered.

**ENGINE CASE**

Any VW type-1, 2, 3 or universal case is permitted. The following stock case modifications are permitted:

- A. May be lined bored.
- B. May be drilled and tapped for oil and temp sending units.
- C. May be machined for crank pulley seal.
- D. Installation of case savers.

- E. Cylinder seating surface may be machined.
- F. Oil galleries may be enlarged to 10mm
- G. Threaded oil gallery plugs permitted.

**OIL PUMP**

Any oil pump is permitted. Deep sumps, dry sumps or sump alterations are not permitted. Windage trays are permitted. Any oil bypass piston and spring permitted.

**FUEL PUMP**

Any combination of stock fuel pump or electric pump may be used. Any fuel filter and pressure regulator may be used.

**PISTONS**

Stock 3 ring pistons only. Any piston and cylinder 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 assembly.

**CRANKSHAFT**

Stock VW crankshaft only. Crankshaft may be balanced. Maximum journal size is limited to thirty thousandths undersize. No polishing or lightening. Any gear is permitted. Any engine bearing is permitted as long as stock dimensions are maintained. Power pulleys are permitted. Pulley may be balanced. Sand seals are permitted. Any VW flywheel may be lightened and balanced. No aluminum flywheels. Any clutch disk and pressure plate but must retain stock VW diameter. Connecting rods may be balanced to the lightest non-balanced rod. No polishing or profiling of rods. Eight dowel flywheels are permitted with any gland nut and washer.

**HEADS**

Heads may be US sedan stock single port or dual port or their equivalent Heads may be fly cut for clean up only. Porting or polishing **NOT** allowed. Dual port heads from Brazil, Part # 0401013752, Part # 04010137513, Part # 04010137519, or Stock OEM heads will be allowed. MOFOCO Heads PN #MFC-CCHO40 are permitted. Carb Spacer Adapter allowed Empy 981293B.

**CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS**

Any camshaft, gear, valve springs, valve spring retainers and lifters are permitted. Valve spring seat diameter in head must remain stock. Valves must be stock 45 degrees. One-piece valves are permitted. Valve guide may be steel, bronze or cast iron. No grinding or polishing in the port including valve guides. Must use stock 1600 rocker arms. The rocker arms may be resurfaced to permit the use of swivel feet. No other grinding or changes may be made to the rocker arms. Roller or needle bearings will not be permitted 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 adjustment screws. Valve covers may be of any manufacture.

**FAN-SHROUD**

Aftermarket, fan-shrouds are permitted. Heater tubes are optional.

**CARBURETOR**

Must use stock VW carburetor 30 pict. 1, 2, 3. Maximum venturi size is 24.10mm. Velocity stacks may be used but cannot be welded or bonded to the carburetor. Internal modifications are not permitted. This includes no removing of parts, no grinding, polishing or filing. Intake manifolds must be stock. No chemical milling of manifold or carburetor. Choke housing, choke plate and shaft may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used.

**RESTRICTOR PLATES**

Intake manifold is restricted to a stock 34mm original equipment center section or its replacement. A 1 ½ inch (1.500) long by half-inch (.500) diameter tube may be weld two inches below carburetor flange. A maximum of 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. No porting or polishing.

Single seat restrictor plates are 21.5mm.

Two seat restrictor plates are 24.0mm.

**Warning:** Restrictor plates may not be modified in any manner.

No other item except restrictor plate may be installed between carburetor and manifold.

#### **Low Compression Engine Option**

1600cc maximum displacement and 8 to 1 compression ratio, must use same heads as high compression engine with same valve size and no porting at all. Stock VW end castings with VW part numbers must be used, no polishing allowed. An EMPI or WEBER 40 or 44 idf carb may be used and tube style intake manifold, NO Plenum Manifolds allowed. Must use maximum 25mm venture for two seat and a maximum 24mm venture for single seat. This is a pump gas only engine option with a maximum of 91 Octane.

#### **SCR25: ENGINE REPLACEMENT**

#### **SCR26: TRANSMISSION**

Must be stock VW type-1 or 2 transaxle housing with internal modifications only. A maximum of four forward gears. Any internal modifications permitted. Only VW helical cut gears may be used with any gear ratio combinations permitted. Aftermarket side covers are permitted.

#### **SCR27: THROTTLES**

#### **SCR28: EXHAUST**

#### **SCR29: DRIVESHAFTS**

#### **SCR30: FLYWHEEL SHIELDS**

**SCR31: FLUID COOLERS** - Any oil cooler and location permitted. Full flow systems are permitted. Deep or dry sump systems are not permitted.

#### **SCR32: AUXILIARY EQUIPMENT**

#### **SCR33: SUPERCHARGERS & TURBOCHARGERS**

#### **VEHICLE SAFETY EQUIPMENT SCR34: ROLL CAGES**

#### **SCR35: SAFETY HARNESS**

#### **SCR36: SAFETY NETS**

#### **SCR37: SEATING**

#### **General vehicle components**

#### **SCR38: DRIVER'S COMPARTMENT**

#### **SCR39: DOORS & LATCHES**

#### **SCR40: FIREWALLS**

#### **SCR41: BALLAST**

**SCR42: WEIGHT** - Vehicle dry weight will be 1550 lbs. for both single and two seat vehicles.

#### **SCR43: FLOORBOARDS**

#### **SCR44: BUMPERS**

#### **SCR45: MIRRORS**

#### **SCR46: SKID PLATES**

#### **SCR47: STORAGE**

#### **SCR48: FENDERS, NOT ALLOWED**

#### **SCR49: CHASSIS & BODY**

#### **SCR50: HOSES**

**SCR51: IDENTIFICATION MARKERS-BITD** will assign vehicle numbers.

#### **SCR52: ADVERTISING ON VEHICLES**

#### **SCR53: WORKMANSHIP**

#### **SCR54: RADIO EQUIPMENT**