

## IMPORTANT: PLEASE READ

As many of you already know, and others are soon to find out the SEGA is a family. The SEGA gives it's all to make sure we provide a great atmosphere for you to race and grow. It goes without saying, but it is a very painstaking process to keep the organization functioning. As you've heard us say numerous times over the years, the SEGA is all about the fans, without them we couldn't survive, nor would we have the incentive to keep pushing forward. Your car is always yours and you can do with it as you see fit. But, with this being said we ask you to keep your SEGA family in mind if you are considering running at an event put on by our immediate competition. The SEGA as a whole has worked very hard to grow into what we have become, and with your continued support we will keep heading in a positive direction.

**Also See General & All Class BASIC ENGINE Rules**  
**SEE PHOTO Documents for pictures and examples of approved equipment**

### 1. H/Gas 2023 Basic Engine Rules

- a. Minimum weight for H/Gas is 1400 lbs.
  - i. Flatheads 9 lbs per cubic inch
  - ii. In-Line Non-Crossflow 10 lbs per cubic inch
  - iii. In-Line Crossflow 10.5 lbs per cubic inch
  - iv. VW's 11 lbs per cubic inch
  - v. Please note: The weight to cubic inch rule does not apply unless you run 7.699 or quicker. Anytime you run 7.699 or quicker you must go across the scales.
  - vi. Until you run 7.699, weight is not a factor.
- b. Production type cylinder heads only. No exotic type heads such as Sissel/Duggan heads or hybrid heads.
- c. Moving of ports or raising of ports beyond that for porting, polishing, or gasket matching is NOT allowed.
- d. Changing of valve angles is NOT allowed.
- e. Canting of valves is NOT allowed.
- f. Off-center valve guides for the purpose of increasing valve size/spacing is NOT allowed.
- g. If a direct replacement aluminum head exists and if it meets all stated guidelines it is allowed with an added 50 pound penalty.
- h. Chevrolet in-line 4's and 6's can have the lump port modification.
- i. Chevrolet in-line 4 Mercruiser individual port head allowed with stated guidelines.
- j. No changing of head configurations are allowed. Example: Changing non-crossflow head to crossflow head.
- k. No external welding or material filling of any make of cylinder head for the purpose of raising ports or increasing gasket sealing area is allowed.
- l. Class for engines with original manufacture production starting 1967 and earlier. For example, you may have a Chrysler slant 6 from 1975 because the engine started original production pre-1967.

- m. Class for any Inline flat head or overhead valve 4, 6 or 8 cylinder. Any opposing (flat) 4 or 6 cylinder engines. (i.e. Volkswagen or Corvair) Also, Flat head V8's.
- n. No over-head valve V6 or V8 engine allowed.
- o. Flat head engines are NOT allowed to be modified for overhead valve conversions
- p. Flatheads can run aluminum heads with no penalty.
- q. Allowed special interest engines: Pontiac Slant 4, International Scout Slant 4, Ford Kent 4 and Pontiac OHC 6. Crossflow heads are allowed for stated special interest engines.
- r. Aluminum blocks are not allowed for in-line 4, 6, 8 and flathead V8's.
- s. Engines must be in original location, i.e. cars that came from the factory with engine in the front or the rear. Engine may not be relocated from original factory location. 10% set back rule allowed. Measured from center front spindle to center front spark plug hole.
- t. We're requesting a "Spirit of the era" for VW engines pertaining to external and internal parts. We understand many of the original type parts are no longer available but please keep in mind your car is supposed to reflect a car from 1967. With that said; we are currently allowing a maximum of 2276cc (138.8 ci) engine size. This may be revised at any time to smaller displacement.
- u. Weber/EMPI style reproductions IDF and IDA carbs are allowed.
- v. 42mm maximum Venturi size.
- w. Round Bar Tayco style linkage or center twist DDS style carb linkage only please, stay away from hex-bar to preserve the look.
- x. VW cylinder heads limited to factory production and reproduction style only. (044, 042, etc.) Intake valves and intake and exhaust ports must remain in stock locate. Porting and reshaping is allowed.
- y. Cylinder heads with relocated ports not allowed. No Square Ports are allowed. Heads like the Competition Eliminator are not allowed.
- z. Maximum 44mm intake valve.
- aa. External welding to add material for porting & strength is NOT allowed.
- bb. Only one spark plug per cylinder.
- cc. All engines must retain stock firing order.
- dd. Approved engine diaper or catch pan capable of containing the complete oil volume or the engine is required. ZERO Tolerance.

## **2. Intakes & Carburetors**

- a. All carburetors must be mounted inline
- b. Old school style carburetor(s) must be used. Example, old style Holley's with the right gold color (Model # 4150 - 4160 - 4010 - 4011). AFB, Quadrajet, Rochester, Stromberg, Weber IDA, IDF and
- c. DCOE Dellorto Down Draft allowed. Or any other period carburetor. The EMPI EPC and HPMX weber copies are allowed. We could be forgetting some so ask if your carburetor is not listed here.

- d. No colored anodizing, the carburetor must look as it would have in the 1960's. None of the new style carbs that is a copy of a Holley.
- e. Handmade intake or modified aftermarket intake using tubing or other materials must be check and cleared with us first. Again, please remember this is 1967.
- f. No Predator, Dominator, Demon or Street Demon carbs allowed. No Electronic Fuel Injection allowed.
- g. All in-line 4 and 6 cylinder engines will be limited to one 4-barrel, 2 downdraft 2-barrels or 2 downdraft one-barrel carburetors.
- h. Inline 8 cylinder and flathead V8 engines will be limited to one 4-barrel or three 1- or 2-barrel carburetors.
- i. No side draft carburetors are allowed on in-line engine except Carter YH-2066 as were original equipment on the 1953-1954 Corvette Blue Flame 6's.
- j. Mechanical fuel injection is currently allowed but is given no weight break. Electronic fuel injection is NOT allowed.
- k. VW must use off the shelf Cast intake manifold like CB Big Beef, Empi, etc. No homemade manifolds allowed. Welding manifold to build up material for match porting is allowed.
- l. Any internal intake manifold modification can be performed but must stay internal with the following exceptions:
- m. Welding and small changes for carburetors to fit or be turned straight.
- n. The extreme top can be modified to accept more than 2 carbs. Drawing must be submitted for approval.
- o. Intake adapter plates are only accepted if no other options are available to mate your intake to heads. Adapters will only be allowed on approval on an as needed basis, but not in attempts to gain extra horsepower.
- p. Dual carbs CAN NOT have the center hung float bowls.
- q. Single carb CAN use center hung float bowls.
- r. Single Carb must have a scoop if sticking through the hood. Scoop must be mounted to the hood, not the carburetor.

### **3. Transmission/Clutch**

- a. All cars must have a clutch and straight drive transmission. You must use the clutch to shift. Clutch-less shifts are not allowed and will be vigorously enforced and may include suspension from competition.
- b. Clutch pedal must go all the way to a positive stop on the shifts. Engine must be broke loose from the transmission on the shifts. Front wheels must touch the ground during the shift. External cameras as well as in-car cameras will be used if it is suspected a car is not using the clutch to shift. Not allowing a camera in the car or tampering with an official camera is grounds for disqualification.
- c. See interior rules for shifter handle/knob rules. Inline, H pattern, and column shifters are legal.
- d. Volkswagen must use H pattern shifters ONLY. See picture reference for accepted shifters.

- e. Volkswagen must use VW or Porsche Swing Axle transmissions only. No Bus trans allowed.
- f. Transaxle must be in stock location. 1" (Maximum) raised mounts are allowed.
- g. Single disc clutch only. Multi-disc clutch is not allowed.

#### **4. Chassis / Suspension**

- a. No coil over shocks Double adjustable shocks OK but must be painted to look like an old shock (No Billet look) If the shock is from a coil over we request that the threads be removed.
- b. VW's may use stock front I-beam. May be modified with lowering adjusters.
- c. If A-Arm front suspensions are used must use unmodified Stock Stamped steel for car year and factory produced A-arms. Or modified front suspension to accept straight axle.
- d. No rack and pinion steering
- e. No sheet metal rear end housing. Must be made from production car housing. (See Accepted Rear end housings)
- f. No stock 9" ford third members unless they are nodular, this is to prevent track oil downs, as several cars have already proven a factory third member will not hold.
- g. No aluminum third members other than Moser, Strange, or Mark Williams. This is to prevent oil downs,
- h. Call if you find another quality third member that you would like to run
- i. No round tube chassis and/or frames.
- j. Chassis can be fabricated from boxed or rectangle tubing and must be in the general area of the original.
- k. This cannot be small tubing braced up like a double rail pro car.
- l. No aftermarket or tube A Frame. No Strut type front end
- m. No 4 Link rear suspension.
- n. No wishbone type sway bars.
- o. No diagonal link sway bars, must be pan hard or watts link.
- p. No anti roll bars hooked to the rear end housing.
- q. Chassis may only be 1 1/2" below rocker panel unless it's the stock chassis in the stock location.
- r. Ladder bars or traction bars front pivot point cannot be located forward of the rear of engine block.
- s. Max engine set back is 10% of wheelbase at #1 spark plug. Engine set back rule is 13.5% on any car that had the grill over the front axle (example 1932 Ford).
- t. Rear brace on housing is legal but don't get carried away. If you are going to brace the housing, call Quain for approval first. Pictures or drawings will be necessary for approval.
- u. No coil spring on front Straight axle. Must be some sort of leaf spring
- v. A Arm front suspension cars may use factory coil spring

- w. Add on weight cannot hang more than 3" below chassis at the point where it's mounted, unless it is hidden inside a suspension component
- x. Any added chassis bracing that would take away from the era correct look must be approved during the build.
- y. Must have 4 wheel brakes.
- z. No solid suspensions. Must have 4 working shocks.
- aa. Axles must be replica of something from the 60s or prior. No jeep axles or modern truck axles.
- bb. Steering box must be mounted to the frame rail or stock location. It cannot be mounted to the axle (VW stock location on front beam is approved).

## **5. VW Specific Chassis / Suspension Rules**

- a. Must have full steel factory or factory replacement floor pans.
- b. VW's Beetle and Karmann Ghia are allowed.
- c. One-piece fiberglass front ends are allowed but must be early style and period correct.
- d. No chop tops are allowed on any VW.
- e. Factory Frame Horns only. Must be in stock location. Frame horns and torsion housing cannot be relocated.
- f. 1" (maximum) raised transaxle/motor mounts may be used.
- g. Axle limiting straps are allowed.
- h. No shortening of rear axles, axle tubes or torsion bars/housing allowed.
- i. Front frame head must be in stock location. Front frame head may be "pie cut" for caster adjustment only.
- j. Frame head may NOT be relocated or raised from stock location.
- k. No coil over shocks allowed.
- l. Straight/drop axle beam/tube may be used. Frame head may be remove only when tube/ beam axle is used. (non0 factory beam)
- m. Must have front brakes.
- n. Disc brake conversion is allowed as long as stock wide 205mm x 5-lug pattern is retained.
- o.

## **6. Wheelie Bars**

- a. Wheelie bar must have the 1960's era look not something that came from a mail order catalog. (See accepted wheelie bars)
- b. No round bottom bars, this should be made of aluminum or steel plate
- c. Wheelie bar wheels must be under bottom plate not behind it. Bottom bar cannot be round tubing. No X or V bar between wheelie bars allowed. Only a single bar between wheelie bar wheels will be allowed.
- d. Wheelie bars must be 2 wheels, and at least 16" apart, and centered from side to side
- e. No visible springs on wheelie bars unless it's the era correct type mounted to the bumper. If you must have springs they must be at the top of the bar and not visible. Some of the old bars that hooked to the bumper had a round bar to stabilize but that's a different set up and is ok.

- f. No long wheelie bars. Maximum length if hooked to the housing is 44" from the center of the housing to the center of the bolt.
- g. If wheelie bars are hooked to the body, the diameter of the wheel plus 6" is allowed to hang behind the back of the body.
- h. VW may hard mount wheelie bars to body or Axle tube spring mounting flange,
- i. VW's limited to maximum 38" from center caster to center of axle tube. Caster cannot stick out more than 10" past rear apron.

**See picture document for accepted wheelie bars for VW.**

southeast gassers association