

COLUMBIA COUNTY RACING ASSOCIATION

4-CYLINDER TUNER DIVISION

2018 RULES

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern all CCRA events. No expressed or implied warranty of safety shall result from publications of, or compliance with these rules and/or regulations. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators, or others.

DECISION ON INTERPRETATION OF RULES BY TECH INSPECTORS SHALL BE FINAL. NO EXCEPTIONS!! IF IT DOESN'T SAY YOU CAN, YOU CAN'T!!

- 1) **COMPETING MODELS** 1. Competition will be open to American and foreign vehicles. 2. Please call for year, make and model questions before building new vehicles. 3. No turbo, supercharged or rotary engines allowed. 4. No convertibles, roadsters four-wheel drive or four-wheel steering allowed.
- 2) **WEIGHT** 1. Minimum weight, including driver is after the main event with no top off as car exits track. 2. 2000 lbs. for all competing cars with the addition of 200lbs to any fwd with a header. Volkswagen with air-cooled engine: 1.0 lb./cc. In fairness of competition, the Tech Director may adjust minimum weights on specific cars.
- 3) **ENGINES** 1. Only standard production four-cylinder engines for make allowed. (VW to VW, Honda-to-Honda, etc.) 2. Maximum 2600 cc with overbore. 3. Block OEM only, modification allowed. 5. Aftermarket and modified internal parts allowed.
- 4) **CYLINDER HEAD** 1. Cylinder head must be OEM for make of car. No racing heads allowed (i.e. Yates, Ford Motorsport, Cosworth, etc.) 2. Porting and polishing allowed. 3. Any aftermarket or OEM valve train components allowed.
- 5) **INTAKES** 1. Modification allowed, aftermarket allowed, adapters allowed. 2. Carburetor adapter: Maximum 2 ¼" allowed between mounting surface of carburetor and intake.
- 6) **CARBURETORS** 1. Any single two-barrel carburetor allowed. Maximum 500 CFM. 2. Choke horn may be removed. 3. Air cleaner mandatory at all times on carbureted cars. 4. Air cooled Volkswagen may use any carburetor setup with up to 650 cfm. 5. Must have two return springs.
- 7) **FUEL INJECTION** 1. Fuel injection must be stock for year, make and model. Modifications allowed. OEM or aftermarket ECU allowed. Fuel mapping, timing, delete sensors, etc. may be modified. 2. Only single throttle body allowed on fuel injected cars. Aftermarket throttle body OK. 3. Aftermarket injectors allowed. 450cc maximum size. 4. Aftermarket air box allowed. 5. No complete standalone fuel injection systems allowed. Must use some stock components for year, make and model. 6. Inspection: When teched, injectors must be removed by the race team and will be confiscated by They will be sent to a testing facility of the tech director's choice. Injectors that test at or below the 450cc threshold will be returned to the team at no charge. Injectors that test more than 450cc will be deemed illegal and not returned.
- 8) **COOLING SYSTEM** 1. Cars must carry an approved catch can or overflow tank; cannot be mounted in driver's compartment. 2. No antifreeze or ethylene glycol coolants allowed. Red Line Water Wetter allowed.
- 9) **ELECTRICAL SYSTEM** 1. Must have working starter at all times. 2. Crank trigger ignition allowed. 3. A master on off switch must be located on the roll bar directly behind the driver's seat and accessible from the outside, or on the dashboard just right of the center, and must be clearly labeled. 4. Battery must be mounted securely in an approved battery box. 5. Battery to be mounted behind driver in front of

rear firewall and as far left as possible. 6. Battery and fuel pump will not be permitted in the fuel tank area. 7. No in-car adjustable timing. 8. No magnetos allowed. 9. Aftermarket distributors and MSD units allowed. 10. Only one coil allowed unless OEM.

- 10) EXHAUST 1. Mufflers are mandatory 2. Any exhaust system mounted through car must be completely covered in a clean, safe manner. Subject to tech. 3. Must be securely mounted. 4. Maximum noise level is 90 DBA at 100 feet. 5. Exhaust must extend behind driver and exit outside of car.
- 11) TRANSMISSION 1. OEM standard for make, adapters allowed. 2. Must have working first and reverse gear 3. Scatter shield mandatory. ¼" steel or approved blanket with 180 degree coverage. 4. Starter mounting position must remain in stock location. 5. Posi traction or limited slip differential okay.
- 12) FRAMES 1. Original frame rails required. May be reinforced. 2. Rear firewall with minimum 20-gauge steel is required between driver's compartment and the fuel cell. Cover must be removable for tech inspection. 3. Original floor pan may be altered. Must be complete in driver's compartment, rocker panel to rocker panel. 4. Fender wells and strut towers may be removed. 5. No roll cage bars to the front bumper directly. 6. All cars must have tow hooks, must be readily visible.
- 13) SUSPENSION 1. Must be per manufacturer and model. 2. Reinforcing allowed, oem coil ok. 3. Springs optional: must be per manufacturer type (i.e. leaf, coil etc.) for make, model and year. 4. Weight jacks and adjustable sleeves allowed. 5. Sway bars optional, one piece only. 6. Spindles and/or steering knuckles must be OEM or direct replacement. 7. Control arms: OEM replacement or aftermarket allowed. Must be mounted in stock location 8. Mounts may be slotted, adjustable and/or heavy duty 9. Aluminum shocks allowed. Struts may be aluminum, steel body OEM or replacement. 10. Pan hard bar allowed. May be adjustable.
- 14) DRIVE SHAFTS - REAR WHEEL DRIVE 1. Must be stock production for make, model and year and must be painted white. 2. Must have two U-shaped brackets no less than 2" wide and ¼" inch thick fastened to floor to keep drive shaft from coming dislodged. 16. STEERING 1. Steering racks and steering boxes may not be moved or repositioned from stock OEM location 2. Heim Joints allowed. 3. Steering column must be padded.
- 15) BODIES 1. All cars must have complete bodies, trunk and deck lid, hoods, fenders, etc. 2. All bodies must be installed on frame as per manufactured, and in the stock location. 3. Hood may be modified to clear air cleaner. Not to be overdone and subject to tech. 4. Doors must be stock appearing; may be made of aluminum. All doors must be securely fastened. 5. Hood may be lightened and trimmed to allow aftermarket nose piece. Dirt style noses allowed. Hood must have rolled edges with no sharp edges. Fiberglass replacement hood ok. 6. Fenders may be altered for clearance only, no handmade fenders. Fiberglass formed fenders ok. 7. Front hoods must use hood pins, rear deck lid, if operable must use hood pins. 8. Side skirts, air dams, front and rear spoilers allowed, must be securely fastened. No fiberglass. 9. One 6" rear spoiler allowed. Must be mounted past the rear tires and not protrude farther back than the outermost edge of the bumper. Must not exceed the width of the body. No sideboards. 10. Sunroofs must be removed and covered.

- 16) BUMPERS 1. Aftermarket bumpers and bumper covers allowed 2. Cannot extend outside of body lines 3. Side nerf bars allowed: 1 ½" maximum outer diameter tubing or 1" x 2" rectangular tubing mounted at most 1 inch from body. Ends must be capped and smooth, no jagged or rough edges. Must not extend past outer edge of tires.
- 17) GLASS 1. Front windshield or lexan must have at least two 1/8" x 1" steel straps 6" left of center and in center or ½" steel mesh with minimum of three ½ tubes in front of driver no further right then centerline okay 2. Subject to tech.
- 18) BRAKES 1. All cars must have four-wheel brakes in operating condition. Tilton style dual master cylinder allowed. A maximum of one proportioning valve on each car.
- 19) WHEELS 1. 8" maximum wheel width. 2. One-piece steel wheels only. 3. No wheel spacers allowed. 4. A single bead lock okay.
- 20) ROLL BARS 1. Full roll cage of 1 ½" x .095" steel tubing minimum requirement. All specifications are subject to tech. 2. Minimum four bars in driver's door, three on passenger side. Driver side bars must extend into driver's door cavity and touch door skin; at least one bar must extend into passenger side door cavity. 4. Cage legs must extend from floor to roof and conform to inside body contour. 7. All cars must have 1/8" steel plate welded onto or in between driver's side door bars.
- 21) FUEL TANKS AND FUEL 1. Gasoline only. Race gas ok. 2. Fuel cell must be in trunk and be securely fastened in a safe manner as close to the firewall as possible, equal distance between frame rails. All tanks must be approved by tech. 5. No aluminum fuel tanks, cells. 6. Maximum fuel capacity of 10 U.S. Gallons. 7. Fuel vent line and filter neck must be equipped with check valve. No converted grease or oil containers or similar utensil may be used as a fuel tank. 8. Fuel cell or tank and fuel cell container, if installed in a recessed well, must be secured with steel straps 1/8" by 1 ½" not less than two lengthwise and two crosswise. Base frame must be made of 1" square tubing minimum, bolted flat to the floor pan with no spacing. Fuel cell container must be supported by three straps, minimum of 1" square tubing to frame equal distance from each end. 9. When mounting fuel cell or tank through trunk floor, an additional container of minimum 20-gauge steel must be used. 1" square tubing frame must be welded to the frame rails only and extend under the fuel cell container and not beyond the rear frame cross member. 8" minimum ground clearance. 10. No fuel cooling cans or devices will be allowed. No glass or plastic filters or filter canisters allowed. 11. Any fuel lines that run through the driver's compartment must be one-piece steel braided line or encased in steel tube. No connections inside driver's area. Steel braided line highly recommended. 12. Factory fuel tanks located in front of the rear axle may remain in stock location but must have a skid plate installed, factory or homemade okay.
- 22) TIRES. 1. Racing tires and wheels ok no wide five wheels, 60 series or larger. No mud type tire.

23) SAFTY

A. FIRE CONTROL - Any car not equipped with a built-in fire suppression system must have a fully charged fire extinguisher. All entrants must have a fully charged 5-lb Halon 1211, Haltron-1 or equivalent fully charged fire extinguisher in their pit.

B. FIRE SUITS - A flame/fire resistant suit designed for auto racing will be highly recommended at all times car is on the track. A 1 or 2-piece flame/fire resistant suit will be accepted. **HIGHLY RECOMMENDED:** Fire resistant gloves, shoes, socks, head sock and underwear. It is recommended that that the driver's suit be the best quality fire protection available.

C. Helmets - Helmets are required and must be approved SHCA or snell type and will be worn at all times the car is on the track. (Full-face snell 90 helmets recommended.) Helmets must accompany vehicle at time of inspection. Fire suits of a flame retardant nature must be worn by all competitors

D. SEAT BELTS - Minimum 3-inch-wide (2" for head and neck restraint systems), SFI-approved five-point safety belt system. Center crotch belt **MUST** be used and must be mounted to the roll cage seat mount. All belts must be mounted securely to main roll cage. **HIGHLY RECOMMENDED:** to replace every 2 years.

E. SEATS - A professional racing seat is required. Seat must be mounted with a minimum of 3/8-inch grade 5 bolts. **HIGHLY RECOMMENDED:** seat also offer rib protection and have leg extensions. Headrests recommended on both sides. No fiberglass, plastic, or homemade seats permitted.

F. WINDOW NET - A window net is mandatory; rib style or mesh is allowed. Must be permanently mounted at the bottom and have an approved quick release at the top. Must be good condition not frayed.