



Bugorama Racing Series

**2015**

Official Rules



# Bugorama Racing Series

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## Assumption of Risk

Drag racing is a dangerous sport that can result in serious injury or death. Participation in all aspects of the sport is voluntary. The ultimate responsibility for driver and vehicle safety lies with the vehicle owner, driver and crew members. The participant agrees that by entering an event, the participant has had the opportunity to inspect the event site and acknowledges that the event site is safe and suitable for racing. The participant also acknowledges that by participating in the event, the participant may suffer bodily injury or death or loss or damage to property.

The participant further acknowledges that the participant has voluntarily assumed the risk of bodily injury or death or loss or damage to property and waives any claims for bodily injury or death or loss or damage to property against the BRS, its directors, officers, employees, event officials, event sponsors, racetrack operators and other participants; discharges such persons and entities from responsibility for such losses; and covenants not to sue such persons and entities for bodily injury or death or loss or damage to property.

Additional safety equipment or safety-enhancing equipment is always permitted, and the levels of safety equipment outlined in this rulebook are minimum prescribed levels for a particular type of competition and do not forbid the individual racer from utilizing additional safety equipment. In disputed cases whether any item of equipment is safety enhancing or performance enhancing will be determined by the tech inspector and at his sole and absolute discretion.

## Performance Equipment

As to performance equipment, it is to be absolutely clear that the general rule is that unless performance equipment or performance-associated modifications are specifically permitted in this rulebook, they are to be considered prohibited. Any body, chassis, suspension, engine, or equipment changes or modifications not specifically addressed in this rulebook must be submitted by the car owner in writing to the BRS for consideration prior to competition. Approval granted or denied at the BRS, sole and absolute discretion.

Any unauthorized car types, parts, and/or equipment will not be considered approved by reason of having passed through technical inspection at any time, or any number of times. Moreover, having passed technical inspection at any time, or any number of times in the past is not a defense for a violation found on further inspection.

If, after reading the rulebook, you still have questions, consult the BRS chief tech inspector. Remember, it is your responsibility to follow the standards in this rulebook that pertain to your vehicle and your race class.

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## 1. RACE PROCEDURES:

**1.1 Safety:** All cars must meet all current NHRA safety standards. It is advised that all racers obtain current year NHRA rule book and familiarize themselves with the current safety equipment for car and driver pertaining to their vehicles respective E.T. and MPH. Additional safety equipment or safety-enhancing equipment is always permitted and the levels of safety equipment outlined in this rulebook are minimum prescribed levels for a particular type of competition and do not forbid an individual from utilizing additional safety equipment. In disputed cases, whether an item of equipment is safety or performance enhancing will be determined by the tech inspector and at the tech inspector's sole and absolute discretion.

**1.2 Rule Book:** If a rule appears unclear or something is specified or not specified as allowed or not allowed in this rulebook you are advised to check with the BRS before you attempt to race at a BRS event.

**1.3 BRS Fees:** All BRS race day fees and Annual Registration fees must be paid prior to attempting to qualify. You will be denied access to qualify and/or qualifying times will be void until payment is received.

**1.4 Tech Inspection:** Before lining up for tech inspection, all BRS cars must have removed all removable body panels, fenders, engine covers or deck lids, and front ends or hoods. Hinged deck lids, front ends or hoods may remain on car but must have all hold down fasteners removed prior to entering tech. Cars entering tech with removable body panels, fenders, engine covers or deck lids, and front ends or hoods still fastened to the car will be asked to return to their pit to remove the above mentioned items. Once the panels are removed they then may return to the end of the tech line.

**1.5 Permanent Numbers:** All contestants in the BRS must have permanent numbers. No points will be awarded to any driver without a permanent number. Permanent numbers are awarded to any driver who finishes in the top ten of each class. Each driver has the option to retain his old permanent number. If he declines to use the number that relates to his finish in the respective class, another driver may not use that number. Numbers are to be displayed on both side quarter windows and must be a minimum 6" high and 1½" wide. Class-designation letters must be a minimum 3" high. Class and car number must be displayed on the front windshield 3" high and 1" wide. Driver's competition number and class designation must be displayed in a legible manner in a contrasting color to the vehicle's background color, and be clearly visible to the tower personnel. Class and numbers on all heads-up category cars must be in the form of permanent decals or paint.

**1.6 Class Sponsor:** All cars must have the class sponsors and BRS decals displayed in appropriate visible locations on both sides of the car (Running boards, roof, and top of fenders are not acceptable locations) during all qualifying passes and elimination rounds. Failure to have stickers displayed will result in loss of event points and payout. Stickers may not be overlapped or modified.

**1.7 License Passes:** Attempting to make license passes in order to receive NHRA License credentials is prohibited during qualifying and/or eliminations.

**1.8 Assigned Class:** Assigned Class: No class hopping, you may not change classes once qualifying has begun. Only exception is moving from P/E to any other BRS Class prior to completion of qualifying. You must make at least one qualifying run in the class you are moving to. You must also pass thru tech to verify your car is legal for the class and may also be subject to additional BRS Class fees for the respective class.

Once qualifying has been completed and should a racer fail to qualify in their assigned class, they may then move into P/E. You must inform the BRS and track officials in the tower before attempting to move to P/E. Example: a driver that fails to qualify in Super Street cannot drop in to Super Comp even if there is not a full car field but they are allowed to move in to P/E. Two cars required to run any class at a event.

**1.9 Tow Vehicles:** All tow vehicles must have the number of the car they are towing displayed on the front windshield.

**1.10 Burnouts:** All pre-race burnouts are restricted to designated water box area only. No one may touch the car during a burnout. Only one burnout may be made across the starting line. A car must be backed up unassisted to the starting line after a burnout. At no time may a driver turn around on the track and drive back to the starting line after a burnout if they cannot back up under their own power.

**1.11 Staging:** Once a car reaches the front of the staging lanes it must be ready to fire and race. The car must self-start and self-stage. This also applies to bye and single runs. No push starts or staging allowed. Staging must be done under the cars own engine power. No deep staging.

**1.12 Courtesy Staging:** Courtesy staging will be enforced during eliminations in Pro Mod, Super Street, Pro Gas, Super Comp, and Super Gas. Both drivers must have their pre stage lights lit before either may advance into the stage beams. Once both lights have been lit a driver cannot re-stage for a second time. This will result in automatic disqualification. All decisions of the starter are final.

**1.13 Qualifying:** An official qualifying attempt has been made once a racer has properly self-started, self-staged and received the green light. If a racer should break once after taking the green light and is unable to complete a full pass an arbitrary elapsed time will be given and will be considered a valid qualifying pass. Should two racers break in this manner the first to do so will be inserted into the ladder should there be a position to place them.

In the heads up classes should there be a tie in elapsed times the racer with the fastest top speed will have the better qualifying position.

**1.14 Bye Runs:** Racers making single or bye runs are deemed the winner once they have staged and taken the green light. PM, SS, and PG must proceed to scales only if attempting to receive lane choice and/or establishing new records.

**1.15 Lane Choice:** Lane choice for heads up classes is determined by elapsed times. Qualifying positions determines first round lane choice. In subsequent rounds, lane choice goes to the racer that ran the lowest E.T. during the previous round. Lane choice in the index classes for first round is determined by qualifying positions. In subsequent rounds, lane choice goes to the racer nearest the index. If there is a tie the racer first posting the fastest MPH receives lane choice.

**1.16 Alternates:** Only the top qualifiers will be eligible to make the elimination ladders in their perspective classes. If a qualified racer is disqualified prior to the start of eliminations the next racer in order will be inserted into the ladder based on qualifying time. Once ladder pairings have been made the ladder will not be changed. If a qualified racer cannot make first round the paired racer will receive a single run regardless of original qualifying position.

**1.17 Records:** Prior to being awarded any record, minimum weight requirements must have been met when weighed after the pass, then report to the BRS tech for lbs./C.I. verification.

**1.18 Points:** All points are awarded to the driver. A driver must be a current registered member of the BRS. Points are not carried over to another class when a driver changes classes during the season. If there is a driver change during the season the new driver of the car must earn his own points. He does not pick up the points earned by the previous driver. When a driver advises the race director that he/she cannot make the first round and an alternate is available they will take the place of the withdrawing entry. The alternate will not receive the first round points as they belong to the driver who qualified for that position. If the alternate wins the first round then he/she will start earning points. However, they will not get the points for the first round. i.e. winning the first round the driver will only the amount of the first round points. If the second round points are 40 points the driver will only get 20 points.

**1.19 Payouts:** A driver must compete in at least 4 of the 5 races to receive end of the season championship bonus payouts. **Driver must be a BRS member to receive full BRS event payouts.**

**1.20 Penalties:** Racers in violation sections PRO MOD 4.21 & 4.22, SUPER STREET 5.23, PRO GAS 7.22, SUPER COMP 8.10, SUPER GAS 9.10 shall have their registration and competition number suspended and will not be eligible for BRS points championship payouts. A \$500 reinstatement fee may be required before privilege of participation will be reinstated.

**1.21 Revoked Payout Disbursement:** All revoked Payouts will be contributed to the BRS Points Championship Payouts.

**1.22 Protest Procedure:** All protests must be made to the proper BRS official. A BRS protest form must be filed the day of the event. Protest fee of \$250.00 in CASH at time of filing.

**1.23 Race Officials:** The BRS officials have the final authority on any dispute or interpretation of the rules. Any driver or group of drivers attempting to override the BRS will be removed from the BRS program for that race with no refund of entry fee and /or payment to the BRS.

## 2. POINT SYSTEM:

Completion of tech inspection and BRS registration 20 points

Attempt to qualify 10 points

Setting new E.T. record 20 points

### 2.1. Qualifying Points:

Qualifying positions earn points as follows:

8-Car Field		16-Car Field	
Qualifying Position	Points	Qualifying Position	Points
1	8	1	8
2	7	2	7
3	6	3	6
4	5	4	5
5	4	5-6	4
6	3	7-8	3
7	2	9-12	2
8	1	13-16	1

**NOTE:** The #1 qualifier in each qualifying round receives 3 bonus points, the #2 qualifier will receive 2 points and the #3 qualifier will receive 1 point. A driver must actually run in a qualifying round to receive points for that round. Points will not be awarded for runs in previous rounds.

**Records:** To set a new ET record and receive points the vehicle must have the weight and displacement verified. An official record application form must be completed and turned to the race director. **Driver must be a BRS member to receive record recognition.**

**2.2 Race Points:** Racers receive points for final ladder positions. Once a racer has advanced into a round, round points are awarded for that position. If a racer should win any given round, they have now advanced into the subsequent round and have thus received points for the next position in the ladder. **Driver must be a BRS member to receive points.**

**Race Points are earned as follows:**

#### 8-car field

Winner 100

Runner-up 80

Second-round loser 60

First-round loser 40

#### 16-car field

Winner 100

Runner-up 80

Third-round loser 60

Second-round loser 40

First-round loser 20

**NOTE:** The driver in Top Eliminator with the best reaction time during eliminations shall receive 20 bonus points. Cars that do not record the minimum required E.T. of at least 9.50 during at least one round of qualifying will not receive any qualifying points.

Racers in each class will compete for the BRS Championship Racing Series championship title on the basis of total points earned during the

season. If two or more drivers end up in a tie, tie will be broken with most wins, runner-ups, total round wins, etc.

**2.3 Rain Outs:** If an event should be disrupted and stopped due to inclement weather conditions such as rain and or winds prior to qualifying, racers will receive points for tech and BRS registration. If the event is stopped after first round of qualifying has begun but has not yet been completed, no attempt to qualify or qualifying position points will be awarded. Points will only be awarded once all cars in the staging lanes in any given class have made an attempt to qualify. If stoppage occurs during eliminations, racers will be awarded points up to the round prior to the stoppage. Purse distribution will be made at the discretion of the event promo.

## CLASS RULES

### 3. TOP ELIMINATOR

6.00 to 9.50 Dial-In Bracket with a .500 Sportsman tree. Laddered by reaction times.

**3.1 ENGINE:** Naturally Aspirated or Forced Induction. Air Cooled or Water Cooled VW Design Engine (Pauter, Scat, Revmaster, Audi, Auto Craft, etc.)

Engine can have turbo(s), intercoolers, nitrous oxide, fuel injection, blower, and be of any cc displacement. Must have oil containment device.

**3.2 ELECTRONICS:** Any Electronics OK.

**3.3 FUEL:** Any Fuel OK.

**3.4 STARTING CART/BOX:** Remote Starter OK.

**3.5 FRAME:** Front, mid or rear engine dragster, sedan or altered allowed. Must conform to NHRA Standards. Minimum wheelbase is 94.5".

**3.6 TRANSMISSION/REAR END:** Any Transmission and rear end may be used.

**3.7 DRIVER:** Drivers must possess appropriate NHRA Credentials and Licensing. You must have required and approved safety equipment, Jacket, Helmet, Gloves, Wrist Restraints, Neck Brace, Roll Cage, Parachute, Oil Retention (Engine Diaper), etc.

**3.8 TECH:** All cars must pass the track's NHRA approved safety inspection.



## 4. PRO MOD

Heads Up class with a .400 Pro Tree

Gasoline (10.00) lbs./C.I.

Gasoline with intercooler/s (13.00) lbs./C.I.

Gasoline and nitrous oxide (13.70) lbs./C.I.

Methanol, Ethanol, or E85 (13.00) lbs./C.I.

Methanol, Ethanol, or E85 with intercooler/s (13.00) lbs./C.I.

Methanol, Ethanol, or E85 and nitrous oxide (14.00) lbs./C.I.

**4.1 Naturally Aspirated:** Minimum weight 1400 lbs. No maximum engine displacement. Carburetors, mechanical fuel injection and electronic fuel Injection allowed. Gas or Methanol allowed. Oxygen bearing fuel additives or Nitro prohibited (See Fuel Additives section 4.23)

**4.2 Nitrous NA:** Lbs./C.I. (7.00) Minimum weight 1500 Lbs. No maximum engine displacement. Carburetors, Mechanical Fuel Injection and Electronic Fuel Injection allowed. Single or Multi-Stage Nitrous units allowed. Electronic nitrous controllers allowed. Gas or Methanol allowed. Oxygen bearing fuel additives or Nitro prohibited (See Fuel Additives section 4.23).

**4.2.1 Gasoline with intercooler:** 94mm with flat tappet cam lbs/C.I. (11.5)

**4.3 Forced Induction:** (turbocharger or blower): Lbs./C.I. Minimum weight 1500 lbs. No maximum engine displacement. Oxygen bearing fuel additives or Nitro prohibited (See Fuel Additives section 4.23). Fuel system may consist of carburetor/s, mechanical injection, or electronic fuel injection.

**4.4 Body Styles:** Any European bodied cars may be used. Convertibles, Hardtops, or Roadsters allowed. Bodies made of metal only, Fiberglass, or carbon fiber not allowed. Minimum class roof height is 45" for hardtops. Roof removal for the purpose of creating a convertible is prohibited. Any chop amount or type allowed must meet minimum roof height of 45". Convertibles cannot chop the front window or change window angle and the class minimum height for convertibles is 42". Convertibles must have OEM style frame and must retain OEM windshield location and size. Stock drip rails may be removed. Body may be channeled over frame. Body may not be sectioned. Body cannot be lightened by drilling holes in it. Minimum height of door measured from bottom to window crease is 24". Body may not be otherwise altered in height, width, length, or contour.

Car must have all four fenders, with front hood and rear engine cover. Running boards not required. Fiberglass or carbon fiber may be used for fenders, hood, aprons and doors as long as stock appearance is retained, however rear fenders may be widened to accept larger tires. Maximum dimension to out side of rear fenders is 68". Minimum is 58". Rear fenders may be raised on body for tire clearance but must be mounted at least 2" below quarter window measured 25" back from the door opening. One-piece fiberglass front ends are acceptable.

Fenders must be securely mounted to body. Inner edges may be cut for clearance. Engine cover can be fabricated to clear carburetors or turbo. Engine cover is required. Front fenders may be raised for tire clearance but cannot be mounted above the front hood, measured at the centerline of the front tire opening. Maximum dimension to the outside of front fenders is 66". Minimum is 58". The front end may be squared off and an aero lip added for stability. Maximum measurement from front of door to nose is 5" more than stock. Drooped front ends are not allowed. Both doors must remain fully operative (open cockpit bodied cars not required) and can be opened from both the inside and outside. Super Beetle bodies may be mounted with standard Type I front end. All cars must be a finished product and can compete at only two races in primer. Cars must be complete during qualifying and eliminations. i.e. deck lids or box style engine covers, and aprons etc.

**4.5 Wings:** Dragster style wings are not allowed in any class. A spoiler of single plane design is permitted. It must be mounted below the lowest point of the rear window and not more than 48" wide. Maximum height of still plates shall not more than 6" from its mounting point. Maximum gap between the body and spoiler is 1".

**4.6 Windows:** All glass can be replaced with ½" polycarbonate material such as Lean MR 4000. Windows may be flush mounted to the body openings. Windows need not be operative, but must be closed during competition.

**4.7 Frame:** Any type frame permitted providing it meets the safety requirements. Must have automotive type front and rear suspension commonly used by an automobile manufacturer. Must have one hydraulic shock absorber for each spring wheel. Must have NHRA chassis certification.

**4.8 Engine:** One four cylinder opposed pushrod type, 2 valves per cylinder, of VW configuration. Any engine case accepted. Only one spark plug per cylinder allowed unless noted in class rules. Must have oil containment device effective.

**4.9 Engine Swaps:** Driver and or Crew Chief must inform BRS officials during Tech of any spare engine that may be used during competition and provide the engine cubic inch displacement. Engine must be made available to BRS officials to verify compliance with class rules. If an engine swap should be made BRS officials must be informed and car re-weighed prior to competition.

**4.10 Turbocharged:** Water or CO2 cooled Intercoolers only. Must be wet type. No air to air. Draw through only.

**4.11 Transmission:** Any conventionally mounted rear engine transaxle accepted. Must have neutral. Reverse required. Reverse lockout device mandatory. Locked rear ends allowed. Welded spider gears not allowed. Must be manually shifted. No air or electronic shifting. No clutchless or sequential transmissions. Automatic transmissions prohibited. RLR Rev 6 clutch allowed.

**4.12 Flywheel Shield:** All cars must have a flywheel shield. See BRS General Rules 10.19.

**4.13 Fuel System:** After-market fuel tanks or cells are acceptable. All fuel tanks, lines, pumps, etc must be within the confines of the frame and or steel body and must be located outside the driver's compartment. A bulkhead of at least .032 minimum thickness of metal must be between the fuel tank and drivers compartment. Magnesium not permitted. No device, which can reduce the temperature of the fuel, can be mounted on the car.

Water (H<sub>2</sub>O) injection is permitted. Use of any chemical other than H<sub>2</sub>O in water injection system will result in disqualification and loss of all event points and payout. (See BRS General Rules 2.12 Revoked Payout disbursement and BRS General Rules 10.13 Penalties).

**4.14 Wheels and Tires:** Must use automotive-type wheels. Racing slicks permitted. Wire or motorcycle wheels not permitted. Minimum wheel size 13". No maximum width. Titanium wheel studs are not permitted.

**4.15 Ground Clearance:** Ground clearance of 3" minimum from front of car to 12" behind the centerline of the front axle is required. 2" ground clearance minimum for remainder of car except for oil sump and exhaust headers.

**4.16 Wheelbase:** Maximum/Minimum +/- 2" for body used. Axles and body location must remain as originally produced. Maximum wheelbase variation left to right is 1", but cannot exceed 100"

**4.17 Interior:** See BRS General Rules 10.24.

**4.18 Steering:** Minimum steering wheel diameter 13". Butterfly wheel not permitted.

**4.19 Electrical:** Battery must be securely mounted outside of drivers compartment. All cars must be self-starting. Master cutoff switch is required. All cars must have one working taillight.

**4.20 Brakes:** Must be hydraulically operated. Minimum two wheel rear brakes operated by a foot pedal that is mounted in a conventional location.

**4.21 Computers:** Laptop and PCs cannot remain in car while it is making a run down the track. Data recorders may be used to record functions of a vehicle as long as they do not activate any function on the vehicle. Data recorder may not be activated by the throttle, clutch, brake, mechanisms, sensing of wheel speed, inertia etc. Data may be reviewed (printout, replay, etc.) only after the run. Use of such Items will result in disqualification and loss of all event points and payout. (See BRS Race Procedures 1.21 Revoked Payout disbursement and BRS Race Procedures 1.20 Penalties). Memory and playback tachometers are allowed.

**4.22 Traction Control:** The use of traction control devices is prohibited. Use of such Items will result in disqualification and loss of all event points and payout. (See BRS Race Procedures 1.20 Revoked Payout disbursement and BRS Race Procedures 1.21 Penalties).

**4.23 Fuel Additives:** Post purchase or special order fuels where mixing and or blending of any Oxygen bearing additives or Nitro is prohibited. Over the counter fuels such as VP Racing Q16 are allowed.

**4.24 Tow Vehicles:** Tow Vehicles are allowed, however at any time during competition and at its discretion the BRS may revoke the use of tow vehicles after completing a pass to the point until car passes through scales.

**4.25 Scales:** Drivers must proceed directly to scales after each round of qualifying and elimination. Returning to your pit before proceeding to scales after a qualifying pass will void that round of qualifying. Returning to your pit before proceeding to scales after elimination round will result in disqualification resulting in loss of points and payout. If you should lose in eliminations, and your opponent, fails to return to the scales or fails to make weight you will be reinstated into the eliminations, only if you made your minimum weight requirements. If both cars failed to make minimum weight, both cars will be disqualified. It is the driver's responsibility to verify with each track scale, the weight of his/her car prior to each race day. There will be 5 lb error factor allowed.

**4.26 Competition:** Winners in Pro Mod are advised that their engines will be checked for displacement prior to being awarded the win. All false claimed engine sizes will result in the driver being disqualified and loss of points and payout, even if the car is correct weight for the actual size of the engine.

**4.27 Safety:** All cars must meet NHRA safety standards.

**4.28 Two Way communications:** The use of two-way radios for the purpose of voice communication between driver and crew is permitted.

**4.29 Helmet:** See BRS General Rules 10.17.

**4.30 Protective Clothing:** Jacket and pants meeting SFI spec. 3.2A/15 required. Gloves 3.3/1 required. Suit meeting SFI spec 3.2A/15, gloves and boots SFI spec 3.3/5 mandatory when turbocharged with alcohol.

**4.31 Head and Neck Restraint:** Mandatory, must meet SFI spec 3.3 in all cars running 9.99 or faster or in excess of 135 mph.

**4.32 Drivers Restraint System:** See BRS General Rules 10.16.

**4.33 Window Net:** Mandatory, see BRS General Rules 10.22.

**4.34 Parachute:** As required by NHRA, any car exceeding 150 M.P.H. will be required to be equipped with a parachute.

## 5. PRO TURBO

Heads Up class with a .400 Pro Tree

**5.1 Weight:** lbs. / C.I. (12.00) Minimum weight including driver 1600 lbs. 25 lb. penalty for altered rear torsion housing cars (raised or narrowed) 50 lb. penalty for back half style ladder bar, custom rear suspension, or full tube chassis/strut cars

**5.2 Open to Air Cooled 4 Cylinder Draw-Thru turbocharged VW's.** Body may not be lightened by drilling holes. No dragsters.

**5.3 Wings:** Dragster style wings are not allowed in any class. A spoiler of single plane design is permitted.

**5.4 Windows:** All glass can be replaced with 1/8" polycarbonate material such as Lexan MR 4000. Windows may be flush mounted to the body openings. Windows need not be operative, but must be closed during competition.

**5.5 Frame and Suspension:** May use factory VW floor pan or tube chassis with strut suspension. It must meet all the safety requirements. Must have one hydraulic shock absorber per wheel.

**5.6 Shocks:** Shocks may not be adjusted in any way during the run.

**5.7 Engine:** Single Turbo-Single Carburetor only (no blow thru systems) Turbo Compressor housing: 3in. Max OD. Inlet flange turbo compressor wheel specs: Maximum 60mm inducer, 3in. Exducer 3in max OD. Carburetor manifold outlet flange (Max 3in OD intake ducting) 88x94=2443/149 CI. Maximum

displacement 94mm max piston Bore 88mm max stroke 48mm intake x 40mm exhaust valve size maximum. Flat tappet style camshafts only Type 1 head stud configuration only (added head studs permitted) Maximum 1 Spark plug per cylinder. Intercoolers, vacuum pumps, Nitrous, EFI, MFI, BOV's, methanol, nitro, Billet turbo compressor wheels, Billet cylinder heads, Roller cam/lifter combos not permitted. Billet cams allowed. Must have oil containment device.

**5.8 Engine Swaps:** The driver and/or Crew Chief must inform BRS officials during Tech of any spare engine that may be used during competition and provide engine cubic inch displacement. Engine must be made available to BRS officials to verify compliance with class rules. If an engine swap should be made BRS officials must be informed and car reweighed prior to competition.

**5.9 Fuel:** Gasoline only. Nitro, Nitrous, Methanol, Ethanol, E85 Fuel or any Oxygen bearing additives and or Oxygen bearing Fuels prohibited.

**5.10 Fuel System:** After-market fuel tanks or cells are acceptable. Fuel cell must be located outside the driver's compartment. A bulkhead of at least .032 minimum thickness of metal must be between the fuel tank and drivers compartment. Magnesium not permitted. No device, which can reduce the temperature of the fuel, can be mounted on the car.

**5.11 Transmission:** 4 speed manual transmission only. Must have reverse.

**5.12 Clutch Operation:** Clutch management (permitted).

**5.13 Wheelie Bars:** (permitted)

**5.14 Flywheel Shield:** All cars must have a flywheel shield. See BRS General Rules 10.19.

**5.15 Wheelbase Length:** (+ or - 2"/ caster shims ok) for body used. Shortened wheelbase Manx buggies (permitted).

**5.16 Wheels and Tires:** Must use automotive-type wheels. Racing slicks permitted. Wire or motorcycle wheels not permitted. Minimum wheel size is 13" no Maximum width. Titanium wheel studs are not permitted.

**5.17 Brakes:** Must be hydraulically operated. Minimum two wheel rear brakes operated by a foot pedal that is mounted in a conventional location.

**5.18 Ground Clearance:** Ground clearance of 3" minimum from front of car to 12" behind center of the front axle is required. 2" ground clearance minimum for remainder of car except for oil sump and exhaust headers.

**5.19 Roll Cage:** Roll cage required. See BRS General Rules. No part of roll cage may be beneath floor pan.

**5.20 Interior:** See BRS General Rules 10.24.

**5.21. Steering:** Minimum steering wheel diameter is 13" Butterfly wheels not permitted.

**5.22 Electrical:** Battery must be securely mounted outside of drivers compartment. All cars must be self-starting. Master cutoff switch is required. All cars must have one working taillight.

**5.23 Computers:** Computers, data records allowed. Any device used to alter or control the function of any part on the car cannot remain in the car, during qualifying or eliminations rounds. Electronic boost controls allowed.

**5.24 Tow Vehicles:** Tow Vehicles are allowed, however at any time during competition and at its discretion the BRS may revoke the use of tow vehicles after completing a pass to the point until car passes through scales.

**5.25 Scales:** Drivers must proceed directly to scales after each round of qualifying and eliminations. Returning to your pit before proceeding to scales after a qualifying pass will void that round of qualifying. Returning to your pit before proceeding to scales after elimination rounds will result in disqualification and loss of event points and payout. If you should lose in eliminations, and your opponent fails to return to the scales or fails to make weight you will be reinstated into the eliminations only if you made your minimum weight requirements. If both cars failed to make minimum weight, both cars will be disqualified. It is the driver's responsibility to verify with each track scale, the weight of his/her car prior to each race day. There will be 5 lb error factor allowed.

**5.26 Competition:** At the discretion of the BRS, winners in Pro Turbo may be instructed to remove one cylinder head in order to perform an inspection for verification of rule compliance. Engines will be checked for displacement prior to being awarded the win. All false claimed engines sizes will result in the driver being disqualified and loss of points and payout, even if the car is correct weight for the actual size of the engine. Refusal to remove cylinder head when instructed will result in disqualification and loss of event points and payout.

**5.27 Safety:** All cars must be certified for safety (NHRA Safety Certification).

**5.28 Two Way Communications:** The use of two-way radios for the purpose of voice communication between driver and crew is permitted.

**5.29 Helmet:** See BRS General Rules 10.17.

**5.30 Protective Clothing:** Jacket meeting SFI spec. 3.2A/1. Cars 9.99 or quicker or mph faster than 135, jacket and pants meeting SFI spec 3.2A/5 and gloves meeting SFI spec 3.3/5 mandatory.

**5.31 Head and Neck Restraint:** Mandatory, must meet SFI spec 3.3 in all cars running 9.99 or faster or in excess of 135 mph.

**5.32 Drivers Restraint System:** See BRS General Rules 10.16.

**5.33 Window Net:** Mandatory, see BRS General Rules 10.22.

**5.34 Single Parachute:** (permitted)

## 6. SUPER STREET

Heads Up class with a .400 Pro Tree

**6.1 Weight:** Lbs. / C.I. (10.75) Minimum weight including driver 1500 lbs.

**6.2 Body Styles:** Any VW Type I, III or Karman Ghia may be used. No convertibles accepted, metal bodies only. Must have four fenders, with front and rear hoods. Running boards not required. Stock drip rails may be removed. Maximum 4' chop top. Minimum 48" roof height. Car will be measured at race ready stance in the staging lanes with race tire pressure and the driver in the car. Once measured, tire pressure cannot be decreased after measurements are taken. Doing so will result in disqualification. No channeling. Body may not be sectioned. Holes may not be drilled in the body for the purpose of lightning. Minimum height of door measured from bottom to window crease is 24". See BRS general rules. Must retain original windshield and rear window angles. Body may not otherwise be altered in height, width, length, or contour. Fiberglass or carbon fiber may be used for fenders, hood, aprons and doors as long as stock appearance is retained, however rear fenders may be widened to accept larger tires. Maximum to out side of rear fenders is 68". Minimum is 58" Rear fenders may be raised on body for tire clearance but must be mounted at least 2" below quarter window measured 25" back from door opening. One piece, fiberglass front ends are acceptable.

Fenders must be securely mounted to body. Inner edges may be cut for clearance. Cars must have engine cover. Engine cover must be in place during all qualifying runs and elimination rounds. Front fenders may be raised for tire clearance but must not be mounted above the front hood, measured at

the centerline of the front tire opening. Maximum dimension to the outside of the front fenders is 66" measured from the outside of the fenders. Minimum is 58". The leading edge of the front may be squared off and an aero lip added for stability. Maximum measurement from of door may be 5" more than stock. Dropped front ends prohibited. Both doors must be fully operative and can be opened from the inside and out side. Super beetle bodies may be mounted with a standard Type I front end. All cars must be a finished product and can compete at only two races in primer. Cars must be complete during qualifying and eliminations, i.e. deck lids or box style engine covers, aprons etc.

**6.3 Wings:** Dragster style wings are not allowed in any class. A spoiler of single plane design is permitted. It must be mounted below the lowest point of the rear window and not more than 42" wide. Maximum height shall not more than 4" from its mounting point. Maximum gap between the body and spoiler is 1".

**6.4 Windows:** All glass can be replaced with 1/8" polycarbonate material such as Lexan MR 4000. Windows may be flush mounted to the body openings. Windows need not be operative, but must be closed during competition.

**6.5 Frame and Suspension:** Must use factory VW floor pan only. It must meet all the safety requirements. Must have standard VW torsion bar type front beam, but may be narrowed. Must have one hydraulic shock absorber per wheel and be attached utilizing the stock mounting points. The use of coil over shocks is not allowed. Must use VW type torsion bar, spring plate rear suspension. The use of ladder bars is not allowed. The use of

aftermarket spring plates, spring plate grommets, grommet retainers, and torsion bars are allowed (spring plates must maintain stock length). Raised spring plates not allowed. Stock rear torsion housing must be used but may be raised a maximum 4" and narrowed a maximum of 6". Shocks must use factory VW mounts. Shock must retain stock angle. Floor pan must be support front and rear suspension without of the aid of the roll cage, in other words the floor pan is the frame.

**6.6 Shocks:** Shocks may not be adjusted in any way during the run.

**6.7 Engine:** One four cylinder opposed, pushrod type engine of VW configuration. Only two valves per cylinder allowed. Stock valve angles must be used in head. Only one spark plug per cylinder allowed. Any engine case accepted. Engine must be in stock location. Engine must use factory Type I cylinder head stud pattern. A maximum of 4 studs per cylinder allowed. The minimum diameter of a head stud is .281. Weber, Berg, Terminator style carburetors only with a maximum bore of 62mm, No plenums allowed. Fuel injection prohibited. Vacuum pumps are prohibited. Dry Sump systems are prohibited. Must have oil containment device.

**6.8 Engine Swaps:** The driver and/or Crew Chief must inform BRS officials during Tech of any spare engine that may be used during competition and provide engine cubic inch displacement. Engine must be made available to BRS officials to verify compliance with class rules. If an engine swap should be made BRS officials must be informed and car reweighed prior to competition.



**6.9 Fuel:** C25 VP Gasoline only. Nitro, Nitrous, Methanol, Ethanol, E85 Fuel or any Oxygen bearing additives and or Oxygen bearing Fuels prohibited.

**6.10 Fuel System:** After-market fuel tanks or cells are acceptable. Fuel cell must be located outside the driver's compartment. A bulkhead of at least .032 minimum thickness of metal must be between the fuel tank and drivers compartment. Magnesium not permitted. No device, which can reduce the temperature of the fuel, can be mounted on the car.

**6.11 Transmission:** Manual transmission mandatory with a maximum of four forward speeds. Any Single-disc lever-type or diaphragm clutch permitted. Clutch-less or sequential transmissions prohibited. Pneumatic or electronically controlled shifting prohibited. Clutch must be manually operated by the drivers foot. "Washington" anti-shocker hydraulic clutch management system permitted. The cylinder must be preset and remain in a fixed position during the run. Any adjustment during the run prohibited.

**6.12 Clutch Operation:** The driver's foot must control Clutch pedal. Air or electronic solenoid activated clutch release systems and Electronic Magnet release systems prohibited. Clutch engagement may be made by cable or hydraulic master cylinder with slave cylinder. Use of line-loc in hydraulic clutch system prohibited. Multi-stage, variable release, and lockup-type clutch of any description is prohibited. Throw-out bearing must release all fingers, levers, stages, simultaneously. J&G and Kennedy style clutches only. RLR Rev 6 clutch allowed.

**6.13 Clutch Management:** Clutch management for the sole purpose of dampening the shock and impact of clutch engagement is permitted.

**6.14 Flywheel Shield:** All cars must have a flywheel shield. See BRS General Rules 11.19.

**6.15 Wheelbase:** Maximum wheelbase is 97". Minimum is 92". Axles and body location must remain as originally produced. Maximum wheel base variation left to right 1". But cannot exceed maximum 97".

**6.16 Wheels and Tires:** Must use automotive-type wheels. Racing slicks permitted. Wire or motorcycle wheels not permitted. Minimum wheel size is 13" no Maximum width. Titanium wheel studs are not permitted.

**6.17 Brakes:** Must be hydraulically operated. Minimum two wheel rear brakes operated by a foot pedal that is mounted in a conventional location.

**6.18 Ground Clearance:** Ground clearance of 3" minimum from front of car to 12" behind center of the front axle is required. 2" ground clearance minimum for remainder of car except for oil sump and exhaust headers.

**6.19 Roll Cage:** Roll cage required. See BRS General Rules. No part of roll cage may be beneath floor pan.

**6.20 Interior:** See BRS General Rules 10.24.

**6.21. Steering:** Minimum steering wheel diameter is 13" Butterfly wheels not permitted.

**6.22 Electrical:** Battery must be securely mounted outside of drivers compartment. All cars must be self-starting. Master cutoff switch is required. All cars must have one working taillight.

**6.23 Computers:** Computers, Data recorders, or any Electronic device that is used to alter or control the function of any part of the car cannot remain in the car during qualifying or elimination rounds. Use of such Items will result in disqualification and loss of all event points and payout. (See BRS Race Procedures 1.21 Revoked Payout Disbursement and BRS Race Procedures 1.20 Penalties). Memory and playback tachometers are allowed.

**6.24 Tow Vehicles:** Tow Vehicles are allowed, however at any time during competition and at its discretion the BRS may revoke the use of tow vehicles after completing a pass to the point until car passes through scales.

**6.25 Scales:** Drivers must proceed directly to scales after each round of qualifying and eliminations. Returning to your pit before proceeding to scales after a qualifying pass will void that round of qualifying. Returning to your pit before proceeding to scales after elimination rounds will result in disqualification and loss of event points and payout. If you should lose in eliminations, and your opponent fails to return to the scales or fails to make weight you will be reinstated into the eliminations only if you made your minimum weight requirements. If both cars failed to make minimum weight, both cars will be disqualified. It is the driver's responsibility to verify with each track scale, the weight of his/her car prior to each race day. There will be 5 lb error factor allowed.

**6.26 Competition:** At the discretion of the BRS, winners in Super Street may be instructed to remove one cylinder head in order to perform an inspection for verification of rule compliance. Engines will be checked for displacement prior to being awarded the win. All false claimed engines sizes will result in the driver being disqualified and loss of points and payout, even if the car is correct weight for the actual size of the engine. Refusal to remove cylinder head when instructed will result in disqualification and loss of event points and payout.

**6.27 Safety:** All cars must be certified for safety (NHRA Safety Certification).

**6.28 Two Way Communications:** The use of two-way radios for the purpose of voice communication between driver and crew is permitted.

**6.29 Helmet:** See BRS General Rules 10.17.

**6.30 Protective Clothing:** Jacket meeting SFI spec. 3.2A/1. Cars 9.99 or quicker or mph faster than 135, jacket and pants meeting SFI spec 3.2A/5 and gloves meeting SFI spec 3.3/5 mandatory.

**6.31 Head and Neck Restraint:** Mandatory, must meet SFI spec 3.3 in all cars running 9.99 or faster or in excess of 135 mph.

**6.32 Drivers Restraint System:** See BRS General Rules 10.16.

**6.33 Window Net:** Mandatory, see BRS General Rules 10.22.

## 7. PRO GAS

Heads Up class with a .400 Pro Tree

**7.1 Weight:** Minimum Weight including driver 1725 lbs. (1750 lbs. weight for cars with raised torsion housings).

**7.2 Body Styles:** Any VW Type I, III or Karman Ghia may be used. No convertibles accepted, metal bodies only. Must have all four fenders, with front and rear hoods. Running boards not required. Stock drip rail may be removed. Maximum 4" chop top. Minimum roof height is 48". Car may be measured at race ready stance in the staging lanes with race tire pressure and the driver in the car. Once measured, tire pressure cannot be decreased after measurements are taken. Doing so will result in disqualification. No channeling. Body may not be sectioned. Holes may not be drilled in the body for the purpose of lightning. Minimum height of door measured from bottom to window crease is 24". See BRS General rules. Must retain original windshield and rear window angles. Body may not be otherwise altered in height, width, length, or contour.

Fiberglass or carbon fiber may be used for fenders, hood, aprons and doors as long as stock appearance is retained, however rear fenders may be widened to accept larger tires. Maximum dimension to out side of rear fenders is 68". Minimum is 58". Rear fenders may be raised on body for tire clearance but must be mounted at least 2" below quarter window measured 25" back from the door opening. One piece, fiberglass front ends are acceptable.

Fenders must be securely mounted to body. Inner edges may be cut for clearance. Cars must have

engine cover. Engine cover must be in place during all qualifying and elimination rounds. Front fenders may be raised for tire clearance but must not be mounted above the front hood, measured at the centerline of the front tire opening. Maximum dimension to the outside of the front fenders is 66" measured to the outside of the fenders. Minimum is 58". The leading edge of the front end may be squared off and an aero lip added for stability. Maximum measurement from front of door to nose may be 5" more than stock. See BRS general rules. Drooped front ends prohibited. Both doors must be fully operative and can be opened from the inside and outside. Super beetle bodies may be mounted with a standard Type I front end. All cars must be a finished product and can compete at only two races in primer. Cars must be complete during qualifying and eliminations, i.e. deck lids or box style engine covers, aprons etc.

**7.3 Wings:** Dragster style wings are not allowed in any class. A spoiler of single plane design is permitted. It must be mounted below the lowest point of the rear window and not more than 42" wide. Maximum height to be no more than 4" from it's mounting point. Maximum gap between body and spoiler is 1".

**7.4 Windows:** All glass can be replaced with 1/8" polycarbonate such Lexan MR 4000. May be flush mounted to the body openings. Windows need not be operative, but must be closed during competition.

**7.5 Frame and Suspension:** Tubular chassis are not allowed. Must be factory VW steel complete floor pan. Stamped steel floor pans are mandatory and must be welded to tunnel. Pan Head must be in place. Pie cutting of pan head is allowed for added caster. Floor pan must support front and rear suspension without the aid of the roll cage. Roll bar or roll cage is mandatory and must be NHRA approved.

Floor pan must retain factory frame horns. Frame horns may not be modified in any way. 1" transmission raise is allowed for all cars, including raised torsion housing cars. Karman Ghia bodied cars are permitted to raise torsion housing.

Must have standard VW torsion bar type front beam, but may be narrowed. Ladder bars prohibited. VW torsion bar spring plate or IRS rear suspension must be used. The use of commercially available aftermarket spring plates, spring plate grommets, grommet retainers, and torsion bars is permitted (spring plates must maintain stock length). Raised spring plates not allowed. Stock rear torsion housing must be used but may be raised a maximum of 3". And narrowed a maximum of 6". Shocks must use factory VW mounts. Narrowed axles are permitted.

The use of coil over shocks is prohibited. Must have one hydraulic shock absorber per wheel and be attached utilizing the stock mounting points. Single knob adjustable rear and front shock may be used and must be commercially available. Shocks may not be adjusted in any way during run. No electronic or pneumatic shock controllers are allowed. Wheelie bars may be used. Maximum in length is 60".

**7.6 Engine:** Displacement shall be no larger than 2332cc Maximum. Stock magnesium or Auto Linea aluminum engine case may only be used. Vacuum pumps are prohibited. Must have oil containment device. Crankshaft shall be no larger than 84mm stroke maximum. Any manufacturer allowed and may be flanged or wedge-mated. Any main bearing dimensions are permitted. Minimum 2" rod journals. Crankshaft may be turned for repair. Offset grinding and knife edging of crank is prohibited.

Steel rods only, any commercially available manufacturer permitted. Minimum rod length is 5.325 maximum rod length is 5.700. Wrist pin bore must be .866.

94mm max Cylinder Bore. Cylinders may be any commercially available manufacture. Flat top pistons only from any commercially available manufacturer allowed. Any ring type allowed, 3 ring grooves mandatory. No gas porting allowed. The minimum compression height is 1.300. Minimum piston weight with pin is 475 grams. Valve reliefs are allowed. Wrist pin minimum wall thickness is .120. Steel wrist pins of .866 in diameter only allowed. 044 CNC Wedge Port head as SPEC head for class. Heads must use components that are sold with the #1411 wedge port head, NO exceptions. Springs may be shimmed for proper installed height. Installed valve spring height must remain within 1.500 - 1.530, NO exceptions. Any depth fly cut allowed. The welding between the chambers is only permitted for strength, if heads are fly cut. Welding of the head in any other areas other than between combustion chambers is prohibited. NO modifying, porting or blending of ports is allowed. NO modifying, un-shrouding, or blending of

chambers permitted. If seats are replaced to repair heads, intake seat I.D must remain at 1.530. Exhaust seat I.D must remain at 1.320. Valve seat depth must remain at factory height if seats are replaced. NO shortening or profiling of valve guides is permitted. Intake manifold stud location may NOT be relocated.

Servicing of heads-If heads are serviced, all parts must be factory CB #1411 wedge port replacement parts, NO exceptions.

Rev Control prohibited. NO Internal or External rev kits are allowed to control valve train.

Accepted intake manifolds; CB Performance-IDA#3155 / IDF#3157 Bugpack-IDA#1044 / IDF#1038 Berg IDF# GB580A / IDA#GB590 Scat-IDA#30122 IDF#30076 Manifolds may be welded up to 1½ inches from base ONLY to allow match porting and strength, Manifolds may be match ported. Epoxy of any kind is not permitted internally or externally on manifolds. Manifolds may not be shortened.

Valve Angles and Seat Angles. Valve seat angles 30/45/60/75 degrees only. Valve angles 30/45 degrees only. Valve springs may NOT be modified in any way. Replacement valve springs must be CB part# VW650

Rocker arms may have a maximum of 1.5:1 ratio. Any commercially available manufacturer accepted. Keep in mind that the valve springs are only capable of .630" of lift.

Flat tappet cast iron cam from any commercially available manufacturer is allowed. Any manufacturer cam gear permitted. Lifters must be cast iron only. Lifters must be standard VW O.D

dimensions. Minimum lifter weight is 70 grams. Composite lifters prohibited. Steel only push rods from any commercially available manufacturer permitted. Ignition may be any type of distributor. No crank trigger allowed. May use any manufactures coil. Locked timing or mechanical advance only, no timing control.

Full flow oil pump permitted. No dry sumps, external oil bypass allowed. Any commercially available oil sump permitted.

Exhaust may be from any manufacturer. Any size headers permitted. Step headers permitted. Over the top exhaust systems prohibited.

Carburetor may have 48mm throttle plates maximum and 44mm venturi maximum. No mechanical or EFI permitted. Approved carburetors for class are Spanish or Italian Weber 48 IDA/IDF, and Dellorto 48 DRLA. Carburetor modifications to improve the airflow are prohibited. Aftermarket velocity stacks and float bowl enlarging permitted.

**7.7 Air Induction:** Non factory air induction of any kind, where air is ducted into engine compartment such as NACA Ducts, ducted air through scoops under vehicle chassis or windshields is prohibited. Cars that have air induction from racing in another classes must show sufficient proof that air induction is disabled or car will not be allowed to race in class. Modifying air induction before or after a round, the vehicle owner and car will be disqualified (See BRS Race Procedures 1.21 Revoked Payout disbursement and BRS Race Procedures 1.20 Penalties). Pressure boxes and or carburetor trays are prohibited.

**7.8 Engine Swaps:** Driver and or crew chief must inform BRS officials during Tech of any spare engine that may be used during competition and provide engine cubic inch displacement. Engine must be made available to BRS officials to verify compliance with class rules. If an engine swap should be made BRS officials must be informed and car reweighed prior to competition.

**7.9 Fuel:** VP C-12 will be the spec fuel for the class. Nitro, Nitrous, Methanol, Ethanol, E85 Fuel or any oxygen bearing additives and or oxygen bearing fuels prohibited.

**7.10 Fuel System:** After-market fuel tanks or cells are acceptable. Fuel cell must be located outside the driver's compartment. A bulkhead of at least .032 minimum thickness of metal must be between fuel tank and drivers compartment. Magnesium not permitted. No device, which can reduce the temperature of the fuel, can be mounted on the car.

**7.11 Transmission:** Any conventionally mounted 4 speed Type-1, Type-2, or Mendeola transaxle accepted. Must have neutral. Reverse required. Reverse lockout device mandatory. Locked rear ends allowed. Welded spider gears not allowed. Must be manually shifted. No air or electronic shifting. No clutch-less or sequential transmissions. IRS to swing axle conversion "Dave Folts" type kits permitted. Swing axle or IRS suspension only, No coil over/ladder bar type suspension allowed. H-Pattern shifter only, No Vertigate style shifters allowed, No electronic type shifter allowed.

**7.12 Clutch Operation:** Must be manually operated by driver's foot; No air-activated solenoid clutch system allowed. No other device may in no way affect the clutch system. Multi-stage, variable release lockup-type clutch of any type is prohibited. Throw-out bearing must release all of the fingers, levers stages, etc. simultaneously. J&G and Kennedy style clutch only, 200mm only. Hydraulic or cable actuated clutch management is allowed. Any manufacturer allowed. Flywheel must be steel. 12 lbs. minimum weight and 17 lbs. maximum weight. 200mm disc surface only. Flanged flywheels permitted.

**7.13 Clutch Management:** Clutch management such as the "Washington Shocker" for the sole purpose of dampening the shock and impact of the clutch engagement is permitted. Hydraulic or cable actuated clutch management is allowed Clutch management is for 1st gear ONLY. ECU's "electronic control units" are not allowed for clutch management activation or de activation.

**7.14 Wheelbase:** Maximum wheelbase is 97" Minimum is 92". Axles and body location must remain as originally produced. Maximum wheel base variation left to right 1", but cannot exceed the maximum 97".

**7.15 Wheels and Tires:** 9" maximum measured tire width. Must use automotive-type wheels. Racing slicks permitted. Wire or motorcycle wheels not permitted. Minimum wheel size 13". Titanium wheel studs are not allowed.

**7.16 Brakes:** Must be hydraulically operated. Minimum two wheel rear brakes operated by a foot pedal that is mounted in a conventional location

**7.17 Ground Clearance:** 3" minimum from front of car to 12" behind the center of the front axle required. 2" minimum ground clearance for remainder of car. Except for oil sump and exhaust headers.

**7.18 Roll Bar/Roll Cage:** See BRS General Rules 10.21.

**7.19 Interior:** See BRS General Rules 11.24.

**7.20 Steering:** Minimum steering wheel 13" Diameter. Butterfly wheels not permitted.

**7.21 Electrical:** See BRS General Rules 10.23.

**7.22 Computers:** Data acquisition of any kind is NOT allowed. Computers, data recorders, or any electronic device that is used to alter or control the function of any part of the car is prohibited. Use of such Items will result in disqualification and loss of all event points and payout. (See BRS General Rules 1.20 Revoked Payout disbursement and BRS General Rules 1.21 Penalties). Memory and playback tachometers are allowed.

**7.23 Tow Vehicles:** Allowed, however at any time during competition and at its discretion the BRS may revoke the use of tow vehicles after completing a pass to the point until car passes through scales.

**7.24 Scales:** Drivers must proceed directly to scales after each round of qualifying and elimination round. Returning to your pit before proceeding to scales after a qualifying pass will void that round of qualifying. Returning to your pit before going to the scales after elimination round will result in disqualification and loss of event points and payout. If you should lose in

eliminations, and your opponent fails to return to the scales or fails to make weight you will be reinstated into the eliminations only if you made your minimum weight requirements. If both cars failed to make minimum weight, both cars will be disqualified. It is the driver's responsibility to verify with each track scale, the weight of his/her car prior to each race day. There will be 5 lb error factor allowed.

**7.25 Competition:** At the BRS discretion, winners in Pro Gas may be instructed to remove one cylinder head and cylinder in order to perform an inspection for verification of rule compliance. Engines will be checked for displacement prior to being awarded the win. All false claimed engine sizes will result in the driver disqualified and loss of points and payout, even if the car is correct weight for the actual size of the engine. Refusal to remove cylinder head when instructed will result in disqualification and loss of event points and payout.

**7.26 Two-Way Communications:** The use of two-way radios for the purpose of voice communication between driver and crew is permitted.

**7.27 Helmet:** See BRS General Rules 11.17.

**7.28 Protective Clothing:** Neck collar mandatory, jacket meeting SFI spec 3.2A/1 mandatory.

**7.29 Drivers Restraint System:** See BRS General Rules 11.16.

**7.30 Window Net:** See BRS General Rules 11.22.

## 8. SUPER COMP

10.90 Index Class .400 Pro Tree

**8.1 Body:** Any VW or fiberglass buggy or sand rail allowed. Must have some type of body. No dragsters allowed.

**8.2 Chassis:** Any tube frame or VW floor pan allowed.

**8.3 Roll Bar/Roll Cage:** See BRS General Rules 10.21

**8.4 Engine:** Must use VW engine. May be turbocharged, supercharged, fuel injected or carbureted. Engine must be located in stock location for body used. Must have oil containment device.

**8.5 Transmission:** Any manually shifted VW or Porsche transmission allowed. Automatic transmissions allowed. Mendeola transmissions allowed.

**8.6 Flywheel Shield:** See BRS General Rules 10.19.

**8.7 Clutch Operation:** Clutch release, must operated by driver's foot. Air or electronic solenoid activated clutch release systems and electronic magnet release systems prohibited. Clutch engagement may be made by cable or hydraulic master cylinder with slave cylinder. Use of line-loc in hydraulic clutch system is prohibited. Multi-stage, variable release, lockup-type clutch of any description is prohibited. Throw-out bearing must release all fingers, levers, stages, etc. simultaneously.

**8.8 Clutch Management:** Clutch management for the sole purpose of dampening the shock and impact of clutch engagement is permitted.

**8.9 Fuel:** Gasoline, Alcohol and Nitrous allowed. The use of propylene oxide and nitro is prohibited (see section 10.11 Propylene Oxide and Nitro).

**8.10 Electronics:** No electrical devices such as delay boxes or timers may be used. The use of any of these devices will result in disqualification and loss of points and payout. (See BRS Race Procedures 1.21 Revoked Payout disbursement and BRS Race Procedures 1.20 Penalties). Also See BRS General Rules 10.23.

**8.11 Vent Tubes, Breathers, & Oil Lines:** Vent tubes, breathers, where used the tubes must terminate into an acceptable, permanently attached catch tank with a minimum capacity of 1 quart. The catch tank must be baffled to keep overflow off the track. Breather/vent tubes and oil lines must be mechanically secured (tie wraps prohibited) to the fittings and the fittings locked at both ends.

**8.12 Drivers Restraint System:** See BRS General Rules 10.16.

**8.13 Window Net:** See BRS General Rules 10.22.



## 9. SUPER GAS

11.90 Index Class .400 Pro Tree

**9.1 Body:** Any VW or fiberglass buggy or sand rail allowed. Must have some type of body. No dragster allowed.

**9.2 Chassis:** Any tube frame or VW floor pan allowed.

**9.3 Roll Bar/Roll Cage:** See BRS General Rules 10.21.

**9.4 Engine:** Must use VW engine. May be turbocharged. Supercharged. Fuel injected or carbureted. Engine must be located in stock location for body used. Must have oil containment device.

**9.5 Transmission:** Any manually shifted VW or Porsche transmission allowed. Automatic transmissions allowed. Mendeola transmissions allowed.

**9.6 Flywheel Shield:** See BRS General Rules 10.19.

**9.7 Clutch Operation:** Clutch release, must operated by driver's foot. Air or electronic solenoid activated clutch release systems and electronic magnet release systems prohibited. Clutch engagement may be made by cable or hydraulic master cylinder with slave cylinder. Use of line-loc in hydraulic clutch system is prohibited. Multi-stage, variable release, lockup-type clutch of any description is prohibited. Throw-out bearing must release all fingers, levers, stages, etc. simultaneously.

**9.8 Clutch Management:** Clutch management for the sole purpose of dampening the shock and impact of clutch engagement is permitted.

**9.9 Fuel:** Gasoline, Alcohol and Nitrous allowed. The use of propylene oxide and nitro is prohibited (see section 10.11 Propylene Oxide and Nitro).

**9.10 Electronics:** No electrical devices such as delay boxes or timers may be used. The use of any of these devices will result in disqualification and loss of points and payout. (See BRS Race Procedures 1.21 Revoked Payout disbursement and BRS Race Procedures 1.20 Penalties). Also See BRS General Rules 10.23.

**9.11 Vent Tubes, Breathers, & Oil Lines:** Vent tubes, breathers, where used the tubes must terminate into an acceptable, permanently attached catch tank with a minimum capacity of 1 quart. The catch tank must be baffled to keep overflow off the track. Breather/vent tubes and oil lines must be mechanically secured (tie wraps prohibited) to the fittings and the fittings locked at both ends.

**9.12 Drivers Restraint System:** See BRS General Rules 10.16.

**9.13 Window Net:** See BRS General Rules 10.22.

## 10. GENERAL RULES

The BRS general rules are not all encompassing. All racers must review every section and the NHRA general rules as they pertain to your E.T s and MPH run by your car, for car and driver safety equipment, design and installation.

**10.1 License and BRS Registration:** All drivers must have a valid and current drivers license to compete. Current BRS Registration will be required for participating in any BRS class, which includes TE, Pro Mod, Super Street, Pro Gas, Super Comp, and Super Gas. Racers must register each calendar year to obtain competition number or renew competition number.

**10.2 Body:** All replacement body parts must resemble the stock factory item they are replacing, however, they need not be exact, i.e. fenders may be wider to allow for bigger or wider tires. A stock appearing deck lid is defined as follows. The deck lid shall slope downward and the bottom shall extend furthest rearward. Deck lids where the top extends farther back than the bottom shall not be allowed. A fabricated deck lid should include a break in the rear plane. A deck lid is considered part of the car and must be painted.

**10.3 Engine:** Contestants in weight to cubic inch classes must claim exact cubic inch displacement rounded out to the next largest cubic inch. No allowance for over bore, i.e. 131.6 = 132. If engine is changed during a race the competitor must report to technical department supervisor before a run is attempted.

**10.4 Fuel Systems:** All fuel tanks, lines, pumps etc, must be within the confines of the frame and/or steel body and must be located outside the driver compartment. All fuel lines must be metallic or steel braided. A maximum of 12" total front to rear non-metallic or non-steel braided is permitted for connection purposes only. Whenever possible, fuel tanks and fuel lines should be located ahead of engine.

**10.5 Exhaust:** All cars must be equipped with an exhaust collector or stacks installed to direct exhaust out of body to rear of car, away from driver and fuel tank.

**10.6 Alignment:** Each car must have sufficient positive front-end caster to ensure proper handling of car at all speeds.

**10.7 Tires:** All tires must be free of defects. All Street tires must minimum of  $\frac{1}{8}$ " TREAD DEPTH. Farm implement or trailer tires prohibited. Tubeless slicks are required to have steel valve stems.

**10.8 Wheels:** Check for loose lugs, cracked wheels, worn or oversize lug holes, and condition of spindles, axle nuts, cotter pins, etc. Snap-on hubcaps are prohibited on any class car. Each car in competition must be equipped with automotive-type wheels with a minimum 13" of diameter unless class requirements stipulate otherwise. All wheel studs must project into the hex portion of the lug nut by the length equal to one diameter of the stud. Maximum rim width on any car is 16". No rear-wheel discs or covers permitted in any category.

**10.9 Parachutes:** Any car exceeding 150 M.P.H. will be required to be equipped with a parachute from that run on. In other words, once a racecar exceeds 150 M.P.H. it must have a parachute installed on it before it will be allowed to make another run. NO EXCEPTIONS! Parachutes to be made by a recognized parachute manufacturer. Tech inspector may inspect the condition for worn or frayed shroud lines, ripped or dirty canopies and worn or ragged pilot chutes. The release cable housing must be attached within 12" of the parachute pack and in a manner that will allow the inner cable release of the chute. Any car exceeding 200MPH is required to have two (2) parachutes.

**10.10 Ballast:** Any material for the purpose of adding to the cars weight must be permanently attached to the cars structure and must not extend behind the rear of the cars body or above the rear tires. No liquid or loose ballast permitted, i.e. water sand bags rocks, shot bags metal weight etc. Weight boxes "to maximum" made of 1/8" material may be constructed to hold small items such as shot bags, lead bars, etc., as long as the box and contents do not weigh over 125 pounds. The box must be securely fastened to cars frame or cross member with at least two 1/2" steel bolts per hundred pounds. Ballast and weight cannot be altered during eliminations.

**10.11 Propylene Oxide and Nitro:** The use of propylene oxide and nitro is prohibited except in Top Eliminator. Post purchase or special order fuels where mixing and or blending of any Oxygen bearing additives or Nitro is prohibited. Over the counter fuels such as VP Racing Q16 is allowed in all classes with the exception of Super Street and Pro Gas.

**10.12 Throttle:** Regardless of class each car must have a foot throttle incorporating a positive acting return spring directly attached to the carburetor throttle arm. A positive stop or override prevention must be used to keep linkage from passing over center and sticking in an open position.

**10.13 Gasoline:** Gasoline as refined is a mixture of hydrocarbons. Gasoline is a good electrical insulator, or dielectric, and its relative effectiveness as an insulator is represented by its Dielectric Constant. The average D.C. for hydrocarbons, which comprise gasoline, is 2.025. This is defined as a reading of 0 with the BRS Fuel Check meter. The addition of compounds containing nitrogen and/or oxygen may produce a mixture with a D.C. It is recommended that unknown gas be checked before use in competition.

**10.14 Nitrous Oxide:** Nitrous Oxide is permitted in Super Gas, Super Comp, and Pro Mod. Nitrous oxide is prohibited in Super Street and Pro Gas. All bottles must be securely mounted. Hose clamps and/or tie wraps prohibited. Plastic bottle brackets are prohibited. Bottle must be stamped with a minimum DOT-1800 lbs. rating.

Must have a current date stamp. Bottles located in drivers compartment must be equipped with a relief valve and vented out side of drivers compartment. System must be commercially available and installed per manufactures recommendation. Commercially available thermostatically controlled blanket-type warmer accepted. Any other external heating of bottles is prohibited.

**10.15 Two-way communications:** SUPER COMP and SUPER GAS. The use of two-way radios for the purpose of voice communication between driver and crew may only be used in staging lanes and any time after completion of his or her pass. The use of two-way radios is prohibited once racer completes burnout (if no burnout is made use must cease before pre-staging) and throughout pass and until time is posted on finish line light board.

All racers utilizing two-way radios must inform the BRS officials of their use and provide frequencies when paying BRS Fees.

Use of two way radios for relaying start advantage, track position, and top end spotters is strictly prohibited. Usage for this purpose will result in disqualification and loss of points and payout. (See BRS Race Procedures 1.21 Revoked Payout disbursement and BRS Race Procedures 1.20 Penalties).

**10.16 Seat Belts and Restraint System:** Seat belt required in all cars. 3" restraint system required in cars 11.49 and faster, convertibles running 13.40 and faster and all dune buggies. SFI 16.1 specs and must include anti-submarine belt. Wrist restraints required in all open cockpit cars. Restraint system must be updated at 2-year intervals from date of manufacture. All cars not required to use SFI 16.1 system must have an accepted quick release driver seat belt and must be securely mounted. Mounting must be so belt is placed in direct line with direction of pull.

**10.17 Helmet:** As outlined under Class Requirements, drivers in all classes must wear a helmet meeting Snell or SFI Specifications.

SFI Spec 31.1A = Snell SA, open-face helmet  
SFI Spec 31.2A = Snell SA full-face helmet  
SFI Spec 41.1A = Snell M, open-face helmet  
SFI Spec 41.2A = Snell M full-face helmet

Full-face helmet mandatory on all cars 9.99 or quicker. See individual Class Requirements for additional requirements. Shield mandatory 7.49 and quicker.

E.T. cars (13.99 or quicker) must use a helmet meeting Snell SA2005, M2005, M2010, or 41.1A, 41.2A, or 41.1/2005 Specs. Drivers in open-bodied cars must wear a helmet meeting Snell SA2005 or 31.1/2005 Specs.

### **NHRA Rules Helmet Expiration Dates**

#### **Label Expires**

Snell 2005 1/1/2017  
Snell 2010 1/1/2022  
SFI 31.1A 1/1/2014  
SFI 31.2A 1/1/2014

#### **Label Expires**

SFI 31.1/2005 1/1/2017  
SFI 41.1/2005 1/1/2017  
SFI 24.1 (JDRL only) 1/1/2015  
SFI 24.1/2005 1/1/2017

All jackets/pants or suits for SFI spec 3.2A/15 or 3.2A/20 must be recertified on a five year interval.

For all 10.00 to 13.99 closed-bodied cars, either an open-face or a full-face Snell M2005, M2010, K2005, SA2005, 31.1/2005, 41.1/2005 helmet with or without a shield is mandatory.

For all 10.00 and slower dune-buggy-type vehicles and all 10.00 to 13.99 open-bodied front-engine or rear-engine supercharged, turbocharged, nitrous, or naturally aspirated cars, a full-face Snell M2005, M2010, K2005, SA2000, SA2005 helmet and shield mandatory (goggles prohibited).

For all 9.99 and quicker closed-bodied cars, a full-face Snell M2005, M2010, K2005, SA2005 helmet mandatory; shield permitted (goggles prohibited).

For all 9.99 and quicker open-bodied front-engine or rear-engine supercharged, turbocharged, or nitrous cars, a full-face Snell SA2005 helmet and shield mandatory (goggles prohibited).

For all 9.99 or quicker open-bodied front-engine or rear-engine naturally aspirated cars, a full-face Snell M2005, M2010, K2005, SA2005 helmet and shield mandatory (goggles prohibited).

**10.18 Neck Collar:** Mandatory in all BRS classes. Neck Collar must be commercially produced and designed for racing. Two different collars are available: a full 360-degree “donut” type or a pull together “horse shoe” type. Helmet restraint device can be used with or without a neck collar. Modification of the device is prohibited. Must meet SFI spec 3.3 in all cars running 9.99 or faster or in excess of 135 MPH.

**10.19 Flywheel Shield:** All Pro Mod, Super Street, and any turbocharged cars running 11.49 or faster are required to have a flywheel shield. Shields must be made from ¼" minimum thickness steel plate securely mounted to the frame or frame structure and completely surrounding the bell housing 360 degrees. The flywheel shield shall not be bolted to either the bell housing or engine. The flywheel shield must extend rearward to a point 1" further than the flywheel and to a point 1" forward of the rotating clutch assembly.

**10.20 Chassis Certification:** Any vehicle that runs faster than 135 MPH must meet minimum requirements for 9.99 second vehicles, which includes an NHRA chassis certification, NHRA competition license and updated safety requirements.

**10.21 Roll Bar/Roll Cage:** Roll Bar mandatory in all cars 11.00 to 11.49, in convertibles 11.00 to 13.49, and in dune buggies running 12.00 and slower. Roll Cage mandatory in cars running 10.99 or quicker or any car running faster than 135 mph. Full-bodied cars with unaltered firewalls, floor pan, and body, running elapsed times between 10.00 and 10.99 a roll bar only is permitted. Convertibles running 10.99 and faster or with speeds exceeding 135 mph a roll cage is mandatory. Cars running elapsed times 9.99 to 7.50 must have chassis certification with recertification every three years and have serialized sticker placed to cage. Refer to NHRA general regulations for specific roll bar and roll cage design.

**10.22 Window Net:** Ribbon type or SFI spec 27.1 mesh required on any full bodied car required by the rules to have a roll cage.

DATE ON CURRENT SFI	TAG EXPIRATION DATE
Any month 2012	First of following month 2014
Any month 2013	First of following month 2015

**10.23 Electrical:** Battery must be securely mounted with  $\frac{3}{8}$ " mounting bolts fastened to frame structure. Metal hold-down straps are mandatory. A battery located in stock location must be in a sealed, .024" steel, .032" aluminum, or NHRA accepted poly box and vented to the exterior or the car. Master cutoff switch is required if battery has been relocated. All cars must be self-starting. All cars must have one working taillight.

**10.24 Interior:** Doors are required to be functional both from inside and outside of full-bodied cars. Doors must have panels. Headliner not required. Dashboard must be retained. Floor and firewall required minimum .024" steel or .032" aluminum. All enclosed or full-bodied cars must be totally sealed from engine, transmission, and fuel tanks or cells. Openings for all wires, hoses, linkages, etc., must be minimized as much as possible. No center steering unless allowed by class rules.

## FORMULAS:

### To Calculate Engine Displacement

Multiply the bore x bore x stroke x .0007854 x 4 (number of cylinders).

*Example:*

$94 \times 94 \times 86 \times .0007854 \times 4 = 2387$  cubic centimeters

### To Calculate cubic inches multiply result by .061

*Example:*

$2387 \times .061 = 145.607$  rounding up makes 146CI

*Example:*

For Pro Mod Turbo Lbs/C.I. with Methanol:

$13.00 \times 146 = 1898.46$   
(1888 lbs. with driver)

### To Calculate Compression Ratio

Cylinder volume + deck volume + cylinder head volume divided by the sum (Cylinder head volume + deck volume)

*Example:*

$597 + 7 + 40 / 47 = 13.7$  or 13.7: 1 Compression Ratio