



Rule Book

June 2023

It is the full responsibility of the entrants, drivers, owners, and sponsors to meet all BOR rules and regulations. Failure to do so shall be reason for penalty, disqualification and/or suspension at the discretion of the Race Director.

BOR RULE BOOK

The rules and/or regulations are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all BOR events, and, by participation in these events, all BOR members are deemed to have complied with these rules. 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.

These rules are in effect to govern all BOR events. Specifications and/or regulations contained in this rule book are intended for use as a guide with respect to safety and for that purpose only. BOR will not accept responsibility for the consequences resulting from their application.

The Rule Book is updated from time to time and the most current dated version will be the governing document for all BOR events.

Contents

- 1. GENERAL RULES 6
 - 1.1 ORGANIZATION 6
 - 1.2 ENTRANTS 6
 - 1.3 DISQUALIFICATION..... 7
 - 1.4 LONG COURSE EVENTS..... 7
 - 1.5 PROTESTS 8
 - 1.6 DRIVER/CO-DRIVER 9
 - 1.7 PITS..... 9
 - 1.8 TECH 10
- 2. COMPETITION REGULATIONS 11
 - 2.1 SAFETY EQUIPMENT 11
 - 2.2 SUSPENSION COMPONENTS 12
 - 2.3 STEERING AND BRAKE COMPONENTS 13
 - 2.4 ELECTRICAL SYSTEM 13
 - 2.5 FUEL SYSTEM..... 13
 - 2.6 ENGINES, TRANSMISSIONS, DRIVELINES..... 14
- 3. VEHICLE SAFETY EQUIPMENT 15
 - 3.1 ROLL CAGES..... 15
 - 3.2 DRIVER RESTRAINT SYSTEMS 15
 - 3.3 SAFETY NETS..... 16
 - 3.4 SEATING 17
 - 3.5 FIRE EXTINGUISHERS..... 17
- 4. GENERAL 17
 - 4.1 DRIVER’S COMPARTMENT 17
 - 4.2 DOORS AND LATCHES 17
 - 4.3 FIREWALLS..... 17
 - 4.4 BALLAST..... 17
 - 4.5 WEIGHT 17
 - 4.6 FLOORBOARDS 18
 - 4.7 BUMPERS 18
 - 4.8 MIRRORS 18
 - 4.9 SKID PLATES..... 18

4.10	STORAGE	18
4.11	FENDERS.....	18
4.12	CHASSIS AND BODY.....	18
4.13	HOSES.....	18
4.14	IDENTIFICATION MARKERS	18
5.	CLASS SPECIFIC RULES.....	19
5.1	UNLIMITED TRUCK	19
5.2	CLASS 1.....	21
5.3	CLASS 1/2-1600.....	23
5.4	CLASS 2.....	27
5.5	CLASS 3.....	29
5.6	CLASS 4.....	32
5.7	CLASS 5.....	34
5.8	CLASS 5-1600.....	37
5.9	CLASS 6.....	42
5.10	MINI METAL	45
5.11	CLASS 7.....	47
5.12	CLASS 7S.....	49
5.13	HEAVY METAL	52
5.14	CLASS 8.....	54
5.15	CLASS 9.....	57
5.16	CLASS 10.....	61
5.17	STOCK BUG.....	65
5.18	CLASS 12.....	70
5.19	CLASS 13.....	73
5.20	CLASS 15.....	75
5.21	CLASS 1450.....	77
5.22	CLASS 2000.....	79
5.23	CLASS CHAMP / CLASS 18	81
5.24	STOCK FULL SIZE.....	85
5.25	CLASS 3000.....	87
5.26	UTV CLASS	90
5.27	CLASS 4500.....	95
5.28	CLASS 6100.....	97
6.0	Appendix	

1. GENERAL RULES

1.1 ORGANIZATION

ORGANIZATION TERMINOLOGY

BOR: Bonneville Off-road Racing

EVENT: A contest in a program of races

RACE: A contest between one or more vehicles competing against the clock or between two or more vehicles competing directly against each other

CLASS: Vehicles in a category may be grouped in classes. A class may be determined by engine size, seating capacity, or any other method listed in the ~~2019~~ BOR rule book. Classes may be combined at the discretion of BOR.

ENTRANT: A driver, rider, co-driver, co-rider whose entry is accepted for a BOR event. Must be a current BOR member, in good standing.

ENTRY APPLICATION: A form supplied to prospective entrants. It must be completed entirely as printed with no additions or deletions.

DRIVER/RIDER OF RECORD: The person named to be the operator of a vehicle entered in an event. He/she must start or finish the race. If the Driver of Record is signed up and has an armband and his car breaks down before he/she gets in, then they still get the points. The driver of record must be at the event.

CO-DRIVER/CO-RIDER: A person listed on the entry application as a co-driver or co-rider who is eligible to drive/ride a vehicle in competition or may occupy the passenger seat.

CONTESTANT: A person named to compete in a race as either a driver/rider or co-driver/co-rider.

VEHICLE TERMINOLOGY

VEHICLE: Any of the cars or trucks listed in the BOR rule book.

MODELS: A particular body, chassis, or engine that has been produced in quantity.

FOUR-WHEELED VEHICLE: A self-propelled land vehicle that has four wheels that contact the racing surface. The wheels must make two tracks. Two wheels steer the vehicle and two must propel the vehicle.

FOUR WHEEL DRIVE VEHICLE: Same as above but must be capable of being driven by four wheels.

OFFICIALS

Operations Director

The Chief Executive Officer of Bonneville Off Road, LLC is responsible for the conduct of all business transactions and events of the organization. All other officials are responsible to the Operations Director. The Operations Director, in partnership with the Board of Directors, has the final decision on all issues involving any Bonneville Off Road, LLC event. The Operations Director, in partnership with the Race Director, has full discretion to make any final determinations of, judgments on, or assess penalties with respect to all Bonneville Off Road, LLC rules.

Race Director

An Assistant Officer of Bonneville Off Road, LLC sharing responsibility with the Operations Director for the on-course conduct of all events. The Race Director also executes other duties and responsibilities in partnership with the Board of Directors.

Race Official: An individual designated by the Race Director to officiate at an event.

Tech Director: Shall inspect the vehicles before and after the event to make sure they comply with the rule book.

Checkpoint Captain: A race official appointed by Bonneville Off Road, LLC to direct the operations of a particular checkpoint and the immediate area around that checkpoint. Checkpoint captains are the direct representatives of the Race Director at their respective checkpoints.

Chief Timer: The person appointed by the Race Director to be responsible for timing an event.

Starter/Flagman: Will be responsible for starting an event under the direction of the Race Director.

Competition Review Board (CRB)

A voting panel composed of the Race Director, Board Member and three randomly chosen drivers.

- 1.1.1** No entrant, pit crew or sponsor shall have any claim for damages, expenses, lawsuits, or otherwise against promoter, track operator, BOR, its officers, agents or directors arising from damage to any vehicle, personal injury to the driver or monetary loss of any kind whatsoever. Entrants, pit crews, members, and sponsors waive any claim they may have against promoter, track operator, BOR or its officials when they voluntarily participate in any racing activities conducted under these rules.
- 1.1.2** The promoter or track operator may run any type of event approved by BOR.
- 1.1.3** The Race Director shall have the authority to penalize, disqualify and or suspend any entrant for the violation of these rules including but not limited to the special rulings and supplementary regulations described in BGR6 and BGR7.
- 1.1.4** Special rulings may be made by BOR to account for conditions presented by the location of the race, the condition of the course or any circumstances requiring such a ruling.
- 1.1.5** Special rulings issued by BOR will be considered as official amendments to this list of rules and regulations.
- 1.1.6** Supplementary regulations may be issued for each event as necessary to amend, suspend, or modify existing rules and regulations.
- 1.1.7** BOR assumes no responsibility whatsoever for delays, postponements and/or cancellations of all or part of an event because of inclement weather, unsafe course conditions and/or any other reason.
- 1.1.8** The Race Director will have overall responsibility for the conduct of any event conducted under these rules. All official race personnel will be directly responsible to the Race Director.
- 1.1.9** No one falling under the jurisdiction of any race official at any race and/or event shall subject said official(s) to improper language or other demeaning actions.
- 1.1.10** BOR members are not employees of BOR and who assume and take all responsibility for all charges, premiums, and taxes, if any, payable on any funds they may receive as a result of their participation in any event(s) as members of BOR.
- 1.1.11** BOR reserves the right to refuse any entry application.
- 1.1.12** The checkpoint captains are the direct representative of the Race Director at their respective checkpoints. Their area of responsibility includes the course ½ the distance to the checkpoint on either side.
- 1.1.13** BOR uses the frequency of 151.805 as a main race channel. All radio or other transmissions which affect BOR control communications are strictly prohibited except in the case of medical emergencies.
- 1.1.14** Checkpoint captains will designate areas leading to and surrounding the checkpoint area. This area is for checkpoint people only. No support teams, pit crews, or chase crews will be permitted in this area. Failure to comply with this rule will subject the entry to disqualification.

1.2 ENTRANTS

- 1.2.1** Any entrant who fails to fully fill out and sign required registration forms and releases shall be disqualified and shall forfeit any prize money, points, and contingencies won in that particular event.
- 1.2.2** No entrant or crew member may enter racing areas until they have signed all releases, and entry forms. No person shall sign the release form for anyone other than himself/herself.
- 1.2.3** The entry applications of persons under the age of 18 shall have a parent or legal guardian sign the release form also. You must be a minimum of 14 years of age to co-ride. To be eligible to drive you must be 16 years of age with a valid driver's license. Or 15 ½ years of age with a valid learner's permit but must have a licensed driver as a co-driver and can only be in

a two seated vehicle. All minors racing in the BOR series must wear approved head and neck restraint.

- 1.2.4** Any entrant who competes in a vehicle that he/she is ineligible to drive, and/or any entrant permitting such action shall forfeit any prize money, points, and contingencies won in the particular event. **Need to clarify**
- 1.2.5** Deliberate, abusive nerfing or bumping shall be reason for penalty, disqualification and/or suspension at the discretion of the Race Director.
- 1.2.6** All entrants must attend the drivers meeting. Failure to do so may result in disqualification and/or fine. Roll call may be taken.
- 1.2.7** If a Driver/Rider of Record change is made after the event drawing the starting position drawn by that entry will be vacated and remain vacant for the duration of the event. The changed entry will be assigned the next available starting position for that class, or no points will be awarded for that event.
- 1.2.8** A driver shall not permit any person other than a co-driver in the co-driver's normal riding position to ride on or in any part of his vehicle.
- 1.2.9** No entrant, crew member or pit people or anybody other than the Race Stewart or a BOR official shall remove or relocate course markings. This is ground for disqualification.
- 1.2.10** All Drivers/ Co-Driver changes during an event must be performed in a BOR approved pit location. Example: Main Pit, Hot Pits, Pit A, B, C, etc.

1.3 DISQUALIFICATION

- 1.3.1** Drinking intoxicating beverages in the pits or on the racecourse or in the surrounding areas by any person is strictly forbidden. Also, the use of narcotics (amphetamines or any other stimulants, barbiturates or other depressants) is forbidden. Any entrant or crew member in an event who shows any evidence whatsoever of being under the influence of any of the aforementioned shall be disqualified subject to suspension from all future events and must leave the premises immediately at the direction of the Race Director.
- 1.3.2** Any person who makes a false statement on a contingency form shall be disqualified and shall forfeit all prize money, points and all contingencies won in the race.
- 1.3.3** Any entry application containing falsified signature shall be disqualified and shall forfeit all prize money, points and contingencies won in that event.
- 1.3.4** Any entrant disqualified from any event forfeits all rights to any prize money, points, and contingencies and shall not be entitled to a refund of any portion of his entry fee.

1.4 LONG COURSE EVENTS

- 1.4.1** The maximum duration of an event will be set by BOR.
- 1.4.2** An entrant's official time of an event shall be the total elapsed time from its actual starting time until the vehicle crosses the finish line in the designated time limit.
- 1.4.3** The winner of each class shall be the vehicle that finished with the lowest elapsed time and meets all other criteria in this section, providing his/her time does not exceed the maximum time limit set by BOR and is verified at the checkpoints.
- 1.4.4** All entrants must report all accidents and breakdowns they may have witnessed and tell a BOR official at the next checkpoint the contestant reaches.
- 1.4.5** Some visible means of warning must be placed at least 200 feet in front of any accident or breakdown. A reflective triangle is required to be carried on all four wheeled vehicles. No flares are allowed.
- 1.4.6** Passing is not permitted within 300 feet of any flag crossing or checkpoint except at the direction of a BOR official. No passing at any pit areas. Failure to comply with this rule will be automatic disqualification or a time penalty. Absolutely no passing at start finish all vehicles must pass through S/F at a safe speed and single file.

1.4.7 Any entrant who must discontinue the race must report to a checkpoint or Start/Finish that he is out of the race.

- 1.4.8** All support aircraft fixed wing or rotary must register with BOR prior to the start of the race. The registration must include aircraft tail number, pilot name and license number, and the frequency the aircraft will be using for radio support. Transmission from any aircraft to any race car is not allowed. No aircraft can be used to drop parts, tools, mechanics, pit support, or create an unfair advantage over non-aircraft support entries. Aircraft shall not be used to transport a Driver or Rider of Record to and from locations on the course. Aircraft cannot be operated in such a fashion as to constitute a nuisance or danger to race vehicles, officials, or spectators.
- 1.4.9** All starting procedures will be announced at the drivers meeting prior to each event.
- 1.4.10** Every vehicle must leave the start line at its designated start time, complete all the required laps and cross the finish line in the time limit to qualify as an official finisher and to be eligible for prize money. Every vehicle must pass through all checkpoints. Failure to pass through all checkpoints along the course will subject that entry to disqualification at the discretion of the Race Director.
- 1.4.11** All vehicles must enter each checkpoint at a safe speed. Racing unsafely into and/or through any checkpoints by one or more vehicles is prohibited.
- 1.4.12** All entries may be checked for their armband at any and all checkpoints. Every entry is responsible for his/her armband. Any entrant found not to have an armband will be disqualified.
- 1.4.13** No race vehicle shall be towed, pushed, pulled, or transported by another vehicle further than 1% of the total distance of the race. No vehicle may be pushed, pulled, or towed through a checkpoint, or within one mile of the finish line. All vehicles must cross the finish line with the engine running and propelling the vehicle. No pushing or pulling will be allowed the last mile.
- 1.4.14** No entrant may run in two or more classes simultaneously with one vehicle even though entries are paid in more than one class. (Short course events excepted).
- 1.4.15** A marked course is that official route designated by and marked with BOR markings. All vehicles must follow this route during the event. No vehicle may deviate from the marked course at any time unless the course is wide enough to pass. Passing is permitted only where there is no vegetation on the side of the course. Course cutting is not allowed and the entrant will be disqualified. Sensitive areas are those which are marked by BOR markings and DQ signs. BOR is not responsible for markings which are damaged or moved. All vehicles must drive only in the correct direction of the course route or trail. No vehicle is allowed to drive backwards on the course. Failure to abide by these rules is grounds for disqualification and/or penalty determined at the discretion of the Race Director.

1.5 PROTESTS

- 1.5.1** The Race Director with or without protest has the right to penalize, fine, disqualify, and/or suspend any vehicle or entrant for violation of any of these rules. Protests may be made by another entrant in the same class as who he is protesting. Such protests must be brought to the Race Director 60 minutes after the race is over. Protests considered by the Race Director to be unsportsmanlike may not be accepted. In non-technical protests, the decision of the Race Director will be final. Interpretation of all rules along with violations and penalties thereof are at the discretion of BOR. Penalties levied at the discretion of BOR are final. The Race Director, at his discretion, may use a Competition Review Board to decide the protest. The Competition Review Board (CRB) will consist of the Race Director, a member of BOR Board of Directors or race official and three randomly chosen drivers prior to the beginning of the event.
- 1.5.2** Inspection of protested items will be required of any entrant who has an official protest lodged against his race vehicle. Failure to permit to inspection will result in automatic disqualification and/or suspension. Those attending the inspection(s) will be as follows:
 - 1.5.2.1** The protestor or his designated representative
 - 1.5.2.2** The protested competitor or his designated representative
 - 1.5.2.3** The protested competitor's mechanic

1.5.2.4 BOR officials

1.5.2.5 The BOR Race Director or Tech Inspector who will perform the required vehicle inspection.

1.5.3 No other person shall be present nor witness the proceedings until the inspection has been completed. At the discretion of BOR with the approval of the protested competitor members of the press will be allowed to observe for reporting purposes only.

1.6 DRIVER/CO-DRIVER

1.6.1 Classes 1-1600, 9, (single seat) 10, (single seat) 12, (single seat), U-sportsman buggy (single seat), L-sportsman buggy (single seat) may only compete with one driver/rider during competition.

1.6.2 Classes 2-1600, 5-1600, 9 (two seat) 10, (two seat) 12 (two seat), Stock bug, U-sportsman buggy (two seat), L-sportsman buggy (two seat).

1.6.3 Class 3000 must always compete with one driver and co-driver.

1.6.4 Class Pro Production UTV that want to race as a single seat must remove the passenger seat or come from the OEM with only one seat. All classes may remove the passenger seat to race as a single seat EXCEPT 5/1600 and Stock Bug (5/1600 and Stock Bug must ALWAYS race with two seats).

1.6.5 QUALIFYING: During our qualifying races, if you qualify with one seat you must compete the entire event or weekend with only one seat. If you qualify with two seats, you must compete the entire event or weekend with two seats. (Medical/personal exceptions must be brought to the Race Director and decisions are under Race Directors discretion.)

1.6.6 Classes 1, Unlimited truck, 3, 4, 5, 7, 7S, 7 4x4, 8, 1450 and 2000 may compete with one or two driver(s)/rider(s) during competition.
Champ class, single and two-seat, may have one or two driver(s)/rider(s) during competition as long as the car meets the weight limit specified for that class.

1.6.7 Driver/rider and/or co-driver/co-rider changes are permitted in all classes as long as the driver/rider and/or co-driver is a banded driver for the event.

1.6.8 Should a situation arise that an entrant, because of severe illness or injury, is unable to continue in or on his entry during competition and a driver/rider or co-driver listed on the entry is unavailable, a BOR banded entrant from another entry may continue in or on that entry.

1.6.9 The Race Director or his designated representatives have the right to change the race vehicle numbers.

1.6.10 The Driver of Record must sign all releases and pick up his/her arm band. In addition, he/she must start or finish the race. This means taking the green flag or taking the checkered flag. The only exception to the rule is when the driver of record is injured in the event and unable to compete safely and the injury is verified by the BOR medical director and race director only then will he/she receive the points. Failure of the Driver of Record to follow this rule will result in no points given to him/her for the event.
The Driver of Record will get the points even though the vehicle broke down before he/she gets in the car only if he/she is signed up, has signed the release form and has his/her armband. The driver of record must be at the event.

1.7 PITS

1.7.1 Stationary pits or chase crews outside of designated areas or traveling in restricted areas: Disqualification.

1.7.2 Reckless driving in pit areas or on any access roads by race vehicle or support vehicles: Disqualification. At all times the Driver of Record assumes responsibility for the actions of his/her pit crews, support crews, and all others associated with his/her team.

1.7.3 The driver of record assumes all responsibility for their pit area. If someone is in your pit without a band it is on you whether you know them or not. Police your pit area.

- 1.7.4** Maximum speed limit on all main pit access roads and in all pit areas shall be 25 mph for all vehicles. Competitors will follow posted pit speed limits or instructions provided in the driver's meeting.
- 1.7.5** BOR reserves the right to change speed limits to account for conditions.
- 1.7.6** All pits must have the equivalent of a UL approved 20 lb. ABC fire extinguisher at all times. This capability may be accomplished using fire extinguishers of any combination (minimum 5 lb. extinguisher) that equal 20 lb. (i.e. one 20 lb., two 10 lb., four 5 lb.).
- 1.7.7** All entrants are responsible for cleaning the pit areas they used during the event.
- 1.7.8** All fuel cans must be kept off native soil and be stored in a secondary containment when not in use (plastic pool, raised edge fuel mat, storage container). Secondary containment is intended to catch any spillage should a fuel leak occur.
- 1.7.9** Fuel mats or tarps are required for all refueling. No vehicles shall be refueled outside approved pit locations.
- 1.7.10** Vehicle refueling shall take place over an approved fuel mat or tarp acting as an impervious barrier. Fuel mats or tarps shall be free from defects or tears which could result in a fluid spill onto native soil. Tarps require fluid absorption products on top of them in the fueling area to prevent any spills from running off the tarp. Fuel mats with a raised boarder do not require absorption material although it is still recommended. Teams responsible for fuel spill onto native soil may be fined and liable for clean-up expense. Any team refueling outside an approved pit location, or without a fuel mat or tarp, may face disqualification.
- 1.7.11** All vehicles may only be refueled with vented fuel cans or gravity fed fuel towers at atmospheric pressure only. No pressurized fueling systems are allowed. Overhead fuel towers must be located at least 50' (15.25M) from the course. All towers shall only use a fueling hose that incorporates a manned spring-loaded dead-man valve that automatically closes the fueling hose when the handle is released. All towers shall only use a fueling hose that incorporates a break-a-way feature that seals the tank/fueling hose if the fueling hose is detached (e.g. in the event the vehicle departs with the hose still attached to the vehicle.) Some form of fuel catch can or container must be in place to prevent overflowing fuel from touching the ground. An attendant manning a fire extinguisher must always be in attendance during the transfer of fuel into the cans or overhead rig.
- 1.7.12** Refueling personnel (anyone actively involved in the refueling of the car) must wear a one piece or two piece fire suit minimally rated to the SFI Foundation's 3.2A/1 manufacturer's certification. The suit shall cover the crew member from the neck to the ankles and to the wrists. This suit must be free from holes, rips, tears, and not worn thin. NFPA 1971, 1977, or 2112 are acceptable alternatives to SFI rated garments for pit personnel. Additionally, refueling personnel must wear:
 - 1.7.12.1** SFI spec balaclava and fire rated goggles or SFI spec balaclava and SA rated full face helmet with visor in the closed position.
 - 1.7.12.2** SFI spec 3.3 fire retardant gloves.
 - 1.7.12.3** SFI spec 52.1 fueler apron.
 - 1.7.12.4** Shoes must cover the entire foot and ankle and be of leather or approved fire proof material. Socks may not be manufactured of synthetic fiber, except for Nomex or similar fire-resistant material.
- 1.7.13** No other work may be performed while fueling is taking place.

1.8 TECH

- 1.8.1** It is the full responsibility of the entrants, drivers, owners, and sponsors to meet all BOR rules and regulations.
- 1.8.2** Each vehicle must pass a safety inspection before it will be allowed to race.
- 1.8.3** BOR reserves the right to subject any vehicle to a mechanical inspection at the discretion of the Race Director. It shall be the responsibility of the Driver of Record to tear down a vehicle when requested to do so. Failure to comply will result in disqualification of driver, entrant and vehicle and may result in suspension from future events by BOR.
- 1.8.4** BOR reserves the right to limit the number of personnel to any area or garage in which inspections are being made.
- 1.8.5** BOR reserves the right to seal or impound a vehicle.
- 1.8.6** BOR assumes no responsibility for impounded vehicles although reasonable efforts will be made to insure their security.
- 1.8.7** No vehicle may be removed from an inspection area after a race without permission from the Race Director. Failure to comply shall subject that entry to disqualification. Any vehicle not taken directly to the post tech area when requested by the Race Director shall subject that entry to disqualification.
- 1.8.8** The Race Director may require the owner of a vehicle damaged in a race to submit to a post-incident inspection. If the owner refuses the car may be restricted from all future BOR events
- 1.8.9** The Race Stewart may impound a vehicle or vehicle parts.

2. COMPETITION REGULATIONS

These regulations apply to all classes unless otherwise noted in supplementary regulations. Unless the class requirement or safety regulations specifically state that a modification or optional equipment is permitted, it will not be allowed. BOR's intent when prescribing specifications for safety equipment for vehicles that will compete under BOR rules is to provide adequate protection to all entrants and spectators. BOR requires all entrants to comply with safety requirements. When operating a vehicle on the race course, at any time, including warm-ups and testing, entrants must wear an approved helmet, protective clothing, eye protection, and safety equipment. All body components and nets must be properly secured during such operations.

2.1 SAFETY EQUIPMENT

2.1.1 Helmets

2.1.1.1 Helmets must be approved by, and bear the label of, one of the following:
Snell SA2015 or SA2020
FIA Standard 8860-2004 or 8860-2010 or 8859-2015

2.1.1.2 Primary helmet fastening must be by means of straps using D-ring buckle. No snaps or Velcro will be permitted as the primary means of securing the helmet. Snaps or Velcro may be present as a means of securing the loose ends of the helmet's straps. The interior and exterior of the helmet must be free from defects (i.e., the padding must be in good condition and the exterior of the helmet must not be damaged).

2.1.2 Fire Suits

2.1.2.1 All competitors shall wear at all times during an event, a one-piece driving suit conforming to one of the following standards:
FIA 8856-2000,
FIA 1986 Standard,
SFI 3-2A/5 Specification
SFI 3-2A/1 Specification with approved fire-resistant underwear (FIA 8856-2000 or SFI 3.3 Specification)

2.1.2.2 Two-piece suits are not permitted. Suits must cover from the neck to the ankles and to the wrists. The suits must not have any holes, rips, or tears, nor be worn thin. Suits must also be free from any petroleum-based contaminants.

2.1.3 NECK RESTRAINTS

2.1.3.1 All competitors shall utilize a Head and Neck Restraint System in accordance with one of the following specifications:
SFI 38.1 specifications
FIA standards 8858-2002
FIA 8858-2010

2.1.3.2 Competitors who violate neck restraint requirements will not be allowed to proceed on race course until resolved.

2.1.3.3 Donuts and neck collars are not allowed

2.1.4 HANDS & FEET

2.1.4.1 All Occupants shall utilize gloves meeting one of the following specifications:
SFI 3.3
FIA 8856-2000 or 8856-2018

2.1.4.2 All competitors must wear shoes and socks during competition. The shoes must cover the entire foot and ankle and be of leather or approved fire proof material. Socks may not be manufactured of synthetic fiber, except for Nomex or similar fire-resistant material.

2.1.5 First Aid Kit

2.1.5.1 A first aid kit must be carried in each vehicle at all times and should be suitable for major and minor injuries associated with racing.

2.1.6 Caution Signs

2.1.6.1 All vehicles must carry 2 reflective triangles.

2.1.7 Horns

2.1.7.1 All vehicles must have a loud sounding horn.

2.1.8 Reflectors

2.1.8.1 All vehicles must have two 2" dia. reflectors on the rear of the car

2.1.9 Fire Extinguisher

2.1.9.1 Each vehicle must carry (2) portable UL approved 2.5 pound ABC rated dry chemical type or HALON fire extinguisher with a gauge. It must be fully charged and easily accessible. On board fire suppression systems are highly recommended. They should have three nozzles located in each of the following areas: driver compartment, fuel compartment, engine compartment. (1) 2.5 pound extinguisher will be mounted inside the vehicle and (1) 2.5 pound extinguisher will be mounted on the outside of the vehicle that is easily accessible from the outside of the vehicle. Must use a quick release type mount.

2.1.9.2 Based on National Fire Protection Association (NFPA) standards, ABC Rated fire extinguisher life expectancy guidelines:

2.1.9.2.1 Disposable fire extinguishers - Should be replaced every 12 years

2.1.9.2.2 Rechargeable fire extinguishers - Should be recharged every 6 years

2.1.10 Survival Supplies

2.1.10.1 All vehicles should carry at least two days of survival supplies and one quart of water per person in vehicle. Long course events only.

2.1.10.2 All vehicles must carry an approved tow strap and will be checked at tech.

2.2 SUSPENSION COMPONENTS

2.2.1 Shock Absorbers and Bump Stops

2.2.1.1 At least one shock per wheel, in working condition. Suspension bump stops must be made of rubber, plastic, or urethane.

2.2.2 Secondary Suspension

2.2.3 Secondary suspension would include leaf springs, torsion bars, coil over shocks, air bags, hoga balls or any other item that changes the wheel rate at any point in its travel other than shocks and the stock suspension system that came with

the vehicle. Air shocks will be considered secondary suspension when charged to 200 PSI in its fully extended state and the static shaft pressure exceeds 300 PSI when fully collapsed. Bump stops will be considered secondary suspension when they contact the suspension unit more than 4" before the end of its travel.

2.2.4 Wheels and Tires

2.2.4.1 Snap-on hub caps or wheel covers of any type are not allowed on any type of vehicle during competition. Tires will be visually checked for condition and must be considered safe by BOR prior to competing. Maximum tire size is 40" outside diameter. No multiple tires are allowed.

2.2.4.2 Tire studs, screws, or any other items added to the tire are not permitted.

2.2.4.3 Grooving, sipping, or other modifications that involve removing material from the tire are permitted.

2.2.5 Fasteners

2.2.5.1 All nuts, bolts and component parts on each vehicles suspension system, chassis and running gear must be secured with S.A.E. grade 8 or better nuts, bolts and secured with either lock nuts, lock washers, cotter pins or safety wire and have at least one full thread showing through the nut.

2.3 STEERING AND BRAKE COMPONENTS

2.3.1 Steering

2.3.1.1 Steering wheel play must be kept to a minimum. Drag link and tie rod ends must be secured and have a cotter pin in each one or lock nut.

2.3.2 Brakes

2.3.2.1 Brakes must be in a safe working condition and able to apply adequate force to lock up all four tires. Turning or steering brakes are allowed.

2.4 ELECTRICAL SYSTEM

2.4.1 Ignition

2.4.1.1 Each vehicle must have a positive action on/off ignition switch. The switch must be within easy reach of the driver and co-driver.

2.4.2 Batteries

2.4.2.1 Batteries must be securely mounted.

2.4.3 Lights

2.4.3.1 All vehicles must have a minimum of two headlights, two brake lights, and two tail lights. Tail lights must be mounted at least 36" from the ground and be 3" in diameter. All lights must be on and working for the entire race, except headlights for day races. All vehicles must have an amber light facing the rear and hooked up to the ignition switch. This must be a fog type light with a minimum of 25 watts and a maximum of 55 watts. LED lights are ok as long as they are the proper size. LED lights must be at least 6" long and 2" high.

2.4.3.2 All vehicles in Classes ½ 1600, Class 2, 3, 4, 5-1600, 6, Class 7, 7S, Mini Metal, 9, Class 11-Stock Bug, 13, 15, 1450, 18, 3000, all UTV class and Stock Bug must run a minimum of a three-inch (3") diameter Blue or green light along with the amber light facing the rear of the vehicle. One or both amber and blue/green light must flash We strongly recommend the use of a light similar to the KC Hi-Lites version or the ATC Safety Light.

2.4.3.3 The Blue Light is to identify the slower moving vehicles. This is to assist the faster moving classes to recognize a slower moving vehicle when they are approaching them.

Compliant Lights

Rear facing light bar or a stand-alone light like All Terrain Concepts ATC Safety or KC Hi Lights 6" C- Series Blue Strobe #1313.

Light can be switched as long as the switch is out of reach of cab occupants. The intent is that the light be on during the entire race.

2.4.4 Starters

2.4.4.1 All vehicles must have a starter capable of turning over the engine.

2.5 FUEL SYSTEM

2.5.1 Fuel

2.5.1.1 Any of the following commercially available gasoline, LPG, or diesel fuels may be used:

2.5.1.1.1 Service station type pump fuel or E-85 that meets EPA regulations for HWY fuel.

2.5.1.1.2 Racing fuel that contains lead and a maximum of 3.5% oxygenated sold for racing only.

2.5.1.1.3 Commercial aviation gas

2.5.1.1.4 Natural or propane gas

2.5.1.2 No alcohol, nitro methane or nitrous oxide is allowed.

2.5.2 Fuel Tanks

2.5.2.1 Fuel cells are mandatory in all classes. Except as noted in individual classes. Filled from and vented to the outside of the vehicle. Safety fuel cell shall consist of a bladder enclosed in a smooth skinned container. All fittings shall be built into the skin of the cell and bonded as an integral part of the tank. The bladder shall be fully enclosed in a smooth skinned casing. The container shall be made of 20 ga. steel, .060 aluminum or .125 marlex. The container must be securely fastened to the frame or floor with bolts and/or steel straps.

2.5.2.2 No jerry cans or other portable fuel containers shall be permitted in or on any entrant vehicle during the event. Use of jerry cans or other portable fuel containers will subject entrant to a time penalty or disqualification.

2.5.3 Fuel Lines, Vents and Caps

2.5.3.1 Fuel filler lines and caps must be mounted in a location where they cannot be knocked open or off during a race. Fuel breather must have a check valve and it must be routed up to top of roll cage then over to the opposite side of the roll cage then down to the floor and out the bottom. All fuel fillers must be surrounded at the outer extremity with a splash shield. A body panel is acceptable as a splash shield. All fuel lines breather lines and filler lines must have hose clamps.

2.6 ENGINES, TRANSMISSIONS, DRIVELINES

2.6.1 Engine and Engine Displacement

2.6.1.1 Where applicable engines must displace no more than specified. Engine displacement may be checked by BOR.

2.6.2 Engine Replacement

2.6.2.1 No vehicle may replace a complete engine during a long course event, short course ok.

2.6.3 Transmission

2.6.3.1 Every vehicle must have a reverse gear. Four wheel drive vehicles must be capable of being driven thru front wheels.

2.6.4 Throttles

2.6.4.1 Each vehicle must have a foot throttle with two return springs attached to the carburetor throttle arm. A stop or override system must be used to keep linkage from passing over center and sticking in an open position

2.6.5 Exhaust

2.6.5.1 Each vehicle regardless of class must have a forestry approved spark arrestor or muffler that exists past the cab.

2.6.6 Drive Shafts

2.6.7 All front engine vehicles that have an open driveshaft must have a retainer hoop securely mounted and located within 6" of the front universal joint

2.6.8 Flywheel Shields

2.6.8.1 All front engine vehicles with standard transmissions and solid lifters must have a Sema - approved bell housing or cover.

2.6.9 Fluid Coolers

2.6.9.1 Oil coolers, transmission coolers and radiators mounted ahead of the driver's compartment must have a shroud behind the cooler to prevent fluid from leaking back to the engine compartment.

2.6.10 Auxiliary Equipment

2.6.10.1 A generator, alternator, fan, water pump and a complete functional electrical system must be hooked up and working at all times.

2.6.11 Superchargers and Turbochargers

2.6.11.1 They are not permitted in any class of competition except for Unlimited Truck, Class 1, select UTV and 7200. Diesel engines in stock classes which utilize stock turbochargers may be approved on an individual basis.

3. VEHICLE SAFETY EQUIPMENT

3.1 ROLL CAGES

3.1.1 All vehicles in competition must be equipped with a roll cage. Minimum design and tubing size based on seamless mild steel DOM or 4130 chromoly for roll cage structures are as follows:

3.1.1.1 Vehicle weight

3.1.1.1.1 DVWR Under 3200 lb. (1452kg) - 1.5" (38mm) diameter x .120" (3.0mm) wall thickness or 1.75" (45mm) diameter x .095" (2.5mm) wall thickness.

3.1.1.1.2 DVWR 3201 lb. (1452kg) - 4400 lb. (1996kg) - 1.75" (45mm) diameter x .120" (3.0mm) wall thickness.

3.1.1.1.3 DVWR Over 4400 lb. (1996kg) - 2" (50mm) diameter x .120" (3.0mm) wall thickness.

3.1.2 CONSTRUCTION PROCEDURES

3.1.2.1 Cages must be securely mounted to the body or frame, braced and gusseted at all connections. Body or cab mounted cages must not be attached by direct welding but must be attached by and bolted through the use doubler plates on each side with a min. thickness of .187". Bolts that are used shall be at least .375" dia. SAE Grade 8 or equivalent. Ends must be located to a body or frame supporting maximum impact. Minimum material dimensions apply to the following:

1. Rear and front hoop
2. Rear and front interconnecting bars
3. Rear down braces
4. Lateral bracing and diagonals must be the same size tubing as the roll cage.
5. Elbow and door bars
6. Lower A- and B-pillar tubes

3.2 ROLL CAGE DESIGN

3.2.1 All roll cages must be constructed with one front hoop, one rear hoop, two interconnecting top bars, two rear down braces and one diagonal brace and necessary gussets. All vehicles must have a diagonal brace.

3.3 DRIVER RESTRAINT SYSTEMS

3.3.1 All vehicles must have a five-point H-style driver restraint system for each occupant. Driver restraints must incorporate a lap belt, anti-submarine strap, and shoulder straps.

3.3.2 The driver restraint system shall consist of one 1 1/2" -2" wide anti-submarine strap, one 2" or 3" wide lap belt and two 2" or 3" wide shoulder straps. Sternum straps and chest buckles may be used. Hybrid Head & neck restraint belts allowed when used in conjunction with a head and neck restraint system.

3.3.3 Safety harness shall meet one of the following standards:

- 3.3.3.1** SFI 16.1 Specification and display a manufacturer name appearing on the current respective list of 16.1 manufacturers at sfifoundation.com.
- 3.3.3.2** SFI 16.5 Specification and display a manufacturer name appearing on the current respective list of 16.5 manufacturers at sfifoundation.com.
- 3.3.3.3** All occupant restraint systems may not be used after their expiration date. SFI labeled belts will not be valid after two (2) years from date of manufacture as marked on the SFI tag.
- 3.3.4** No portion of the driver restraint system may be altered in any fashion from the manufacturer's standard design.
- 3.3.5** All driver restraint systems must be properly mounted in accordance with manufacturer's directions and recommendations. Bolt in, wrap-around, and snap-in mounting styles are permitted, except that lap belts may not be mounted by wrap-around method.
- 3.3.6** In addition to conforming to the manufacturer's directions, driver restraint system installations must also conform to the following:
 - 3.3.6.1** The driver restraint system must be mounted to structural members able to withstand the load the restraint system will place on them in a crash, without rupturing or failing.
 - 3.3.6.2** Driver restraint must be matched to a properly constructed, fitted, and installed seat securely mounted to the frame / chassis / roll-cage.
 - 3.3.6.3** Seats must not be modified to create belt slots.
 - 3.3.6.4** All belts should be as short as possible to minimize the belt's stretch.
 - 3.3.6.5** Belt routing must allow webbing to pull in a straight line against anchor point. Mounting brackets must be at an angle that is compatible with the direction of pull on the webbing.
- 3.3.7** Belts must not rub against any surface that will cause them to fray.
- 3.3.8** Belts using non-sewn anchor plates must be wrapped back a fourth time through the 3-bar slide.
- 3.3.9** Driver restraint systems must be worn properly tightened, by all occupants; at any time the vehicle is in motion (including pre-run).

3.4 SAFETY NETS

- 3.4.1** Window nets shall meet or exceed SFI 27.1 Specifications for all classes.
- 3.4.2** Approved safety nets or wrist/arm restraints are mandatory on all vehicles and must cover the complete open area of the cockpit on both sides of the vehicle to the extent that it is impossible for any limb or body part of any occupant to protrude from the vehicle at any time when the occupant is properly seated and strapped in their normal driving / riding position.
- 3.4.3** Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in a roll over or slide on the side.
- 3.4.4** Nets attached to doorframes are permitted when Door frame is equipped with a latch that prevents it from opening and locked permanently closed.
- 3.4.5** Nets must be installed so that the occupants can release the netting unassisted and exit the vehicle regardless of the position of the vehicle.
- 3.4.6** The net border or edge and the net attachment must be made of materials that are as strong as, or stronger than, the net itself. Net attachments must be at a minimum of every 6 inches. Acceptable attachments include, but are not limited to: steel hose clamps, snaps, lift-a-dot, metal hooks, and steel rods. Nets must be tight so that when subject to a pushing force of approximately 50lbs the net deflects no more than four inches.

3.5 SEATING

- 3.5.1 All seats must be manufactured by a recognized manufacturer and approved for racing application. Mock seats are not approved.
- 3.5.2 All seats must be securely mounted to frame of vehicle.
- 3.5.3 Adjustable track-type seat mounts must be securely mounted to frame of vehicle to allow no lateral or vertical movement between seat and frame or mounting track and frame.
- 3.5.4 Headrests constructed of at least 2" thick resilient padding and being approximately 36 square inches in area are required or the use of a high back seat.

4. GENERAL VEHICLE COMPONENTS

4.1 DRIVER'S COMPARTMENT

- 4.1.1 Driver and/or co-driver must be able to enter and exit the driving compartment unassisted with ease, with the vehicle in any position. The driver's compartment must be separated by firewalls or bulkheads from any acids or fuels.
- 4.1.2 All auto transmission front engine vehicles must have .083 chromoly or .120 aluminum scatter shield covering the top of the bell housing protecting drivers and co drivers, or use SFI rated bell housing.
- 4.1.3 All vehicles with stock cab/floor must cover trans hump with .063 aluminum plating if not auto trans

4.2 DOORS AND LATCHES

- 4.2.1 All vehicles with operable doors, Material may be removed from inside of door to make room for roll cage but is not to interfere with latch mechanism or door hinges. Door internals may be removed such as regulators, windows and window tracks. Secondary door latch is required ~~if the nets are attached to the door.~~

4.3 FIREWALLS

- 4.4 All vehicles in competition must have an all metal firewall to separate the driver's compartment from any danger of fire from the engine and any fuel supplies. A minimum firewall must extend from the drivers shoulder height to the vehicle floor and body sides. If rear mounted fuel cell is higher than shoulder height, the firewall must be extended at least one inch above the fuel cell.

4.5 FLOORBOARDS

- 4.5.1 Floorboards or belly pans are required on all vehicles and must be held on by a minimum of six 1/4" inch bolts per side. It must cover the entire area from front to back and from side to side. No dzus fasteners.

4.6 BUMPERS

- 4.6.1 No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from the vehicles are allowed.

4.7 MIRRORS

- 4.7.1 A rear view mirror is required on all vehicles (interior or exterior acceptable).

4.8 SKID PLATES

- 4.8.1 Skid plates designed to protect the front suspension, steering and brake components are required on all vehicles.

4.9 STORAGE

- 4.9.1 All spare parts and extra equipment carried on a vehicle must be securely fastened to prevent movement during a race.

4.10 FENDERS

- 4.10.1 On all vehicles required to have fenders they must be securely attached to the vehicle with quick release or breakaway fasteners. The removal of fenders for any reason other than damage after the race has started will cause the vehicle to be disqualified. This does not apply to Stock Bug.

4.11 CHASSIS AND BODY

4.11.1 All body parts shall remain on the vehicle (accidental damage excepted) during the entire race. As specified in individual class rules, body/chassis series must be maintained with body/chassis combinations.

4.12 HOSES

4.12.1 All hoses used for fuel and oil lines must be hosed clamped.

4.13 IDENTIFICATION MARKERS

4.13.1 All vehicles in competition must be identified with the correct entrant number.

4.13.2 Entrant numbers shall be assigned to Drivers of Record on a first-come first-served basis. In the event of a conflict, seniority based on the date on which the Driver of Record first competed in a BOR event will determine the outcome.

4.13.3 Race numbers will be a minimum of six (6) inches tall front/rear and eight (8) inches tall on both sides. Side Door Numbers are NOT allowed. The vehicle MUST have side "fin" numbers. (Behind the roll cage just above the rear fenders on both sides.)

4.13.4 Vehicles must display entrant numbers on front, both sides, and back of vehicle. Any number location that is deemed by BOR to be too hard to read will have to be changed before the vehicle is allowed to compete in the event.

4.13.5 Numbers must have a contrasting background such as white letters on a black background or black letters with a white background. A reflective material would work best.

4.13.6 Entrants participating in any series will be required to retain their number for all events in the series.

4.13.7 BOR assumes no responsibility for scoring vehicles with unrecognizable numbers. It is the vehicle driver's responsibility to maintain numbers in recognizable condition. This includes mud, dust, etc. If we can't see your numbers, we will not score your times.

4.13.8 Advertising, symbols, and names may be displayed on competition and support vehicles provided that they do not interfere with required official identification markings and that they are in good taste as judged by BOR sanctioned representatives.

5. CLASS SPECIFIC RULES

5.1 UNLIMITED TRUCK

5.1.1 OPEN PRODUCTION – UNLIMITED

5.1.1.1 UNLIMITED 4 WHEEL VEHICLES

5.1.1.2 MUST HAVE A PRODUCTION APPEARING UTILITY OR SPORTS UTILITY BODY

5.1.2 GENERAL REGULATIONS

5.1.2.1 Entrants in this class shall comply with all applicable general regulations

5.1.3 COMPETITION REGULATIONS

5.1.3.1 This is an open class and all components will be considered open unless it says otherwise in these rules

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

5.1.4 SAFETY EQUIPMENT

5.1.4.1 Helmets

5.1.4.2 Protective Clothing

5.1.4.3 Eye Protection

5.1.4.4 First Aid Kit

5.1.4.5 Caution Signs

5.1.4.6 Horns

5.1.4.7 Reflectors

5.1.4.8 Fire Extinguisher

5.1.4.9 Survival Supplies

5.1.5 SUSPENSION COMPONENTS

5.1.5.1 Shock Absorbers and Bump Stops

5.1.5.2 Secondary Suspension

5.1.5.3 Wheels and Tires

5.1.5.3.1 Any size tires are allowed.

5.1.5.4 Fasteners

5.1.6 STEERING AND BRAKE COMPONENTS

5.1.6.1 Steering

5.1.6.2 Brakes

5.1.7 ELECTRICAL SYSTEM

5.1.7.1 Ignition

5.1.7.2 Batteries

5.1.7.3 Lights

5.1.7.4 Starters

5.1.8 FUEL SYSTEM

5.1.8.1 Fuel

5.1.8.2 Fuel Tanks

5.1.8.2.1 Safety fuel cells are required

5.1.8.3 Fuel Lines, Vents, Caps

5.1.9 ENGINE, TRANSMISSION AND DRIVELINE

5.1.9.1 Engine and Engine Displacement

5.1.9.2 Engine Replacement

5.1.9.3 Transmission

5.1.9.4 Throttles

5.1.9.5 Exhaust

5.1.9.6 Drive Shafts

- 5.1.9.7 Flywheel Shields
- 5.1.9.8 Fluid Coolers
- 5.1.9.9 Auxiliary Equipment
- 5.1.9.10 Superchargers and Turbochargers
 - 5.1.9.10.1 Forced induction (Superchargers and turbochargers) are allowed.

5.1.10 VEHICLE SAFETY EQUIPMENT

- 5.1.10.1 Roll Cages
- 5.1.10.2 Safety Harness
- 5.1.10.3 Safety Nets
- 5.1.10.4 Seating

5.1.11 GENERAL VEHICLE COMPONENTS

- 5.1.11.1 Drivers Compartment
- 5.1.11.2 Doors and Latches
- 5.1.11.3 Firewalls
- 5.1.11.4 Ballast
- 5.1.11.5 Weight
- 5.1.11.6 Floorboards
- 5.1.11.7 Bumpers
- 5.1.11.8 Mirrors
- 5.1.11.9 Skid Plates
- 5.1.11.10 Storage
- 5.1.11.11 Fenders
- 5.1.11.12 Chassis and Body
- 5.1.11.13 Hoses
- 5.1.11.14 Identification Markings
- 5.1.11.15 Advertising on Vehicles
- 5.1.11.16 Workmanship

5.2 CLASS 1

5.2.1 OPEN WHEEL – UNLIMITED

5.2.1.1 UNLIMITED SINGLE AND TWO SEAT VEHICLES

5.2.2 GENERAL REGULATIONS

5.2.2.1 Entrants in this class shall comply with all applicable general regulations.

5.2.3 COMPETITION REGULATIONS

5.2.3.1 This is an open class and all components will be considered open unless it says otherwise in these rules

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

5.2.4 SAFETY EQUIPMENT

5.2.4.1 Helmets

5.2.4.2 Protective Clothing

5.2.4.3 Eye Protection

5.2.4.4 First Aid Kit

5.2.4.5 Caution Signs

5.2.4.6 Horns

5.2.4.7 Reflectors

5.2.4.8 Fire Extinguisher

5.2.4.9 Survival Supplies

5.2.5 SUSPENSION COMPONENTS

5.2.5.1 Shock Absorbers and Bump Stops

5.2.5.2 Secondary Suspension

5.2.5.3 Wheels and Tires

5.2.5.4 Fasteners

5.2.6 STEERING AND BRAKE COMPONENTS

5.2.6.1 Steering

5.2.6.2 Brakes

5.2.7 ELECTRICAL SYSTEM

5.2.7.1 Ignition

5.2.7.2 Batteries

5.2.7.3 Lights

5.2.7.4 Starters

5.2.8 FUEL SYSTEM

5.2.8.1 Fuel

5.2.8.2 Fuel Tanks

5.2.8.2.1 Safety fuel cells are required

5.2.8.3 Fuel Lines, Vents, Caps

5.2.9 ENGINE, TRANSMISSION AND DRIVELINE

5.2.9.1 Engine and Engine Displacement

5.2.9.2 Engine Replacement

5.2.9.3 Transmission

5.2.9.4 Throttles

5.2.9.5 Exhaust

5.2.9.6 Drive Shafts

5.2.9.7 Flywheel Shields

5.2.9.8 Fluid Coolers

5.2.9.9 Auxiliary Equipment

5.2.9.10 Superchargers and Turbochargers

5.2.9.10.1 Forced induction (Superchargers and turbochargers) are allowed.

5.2.10 VEHICLE SAFETY EQUIPMENT

5.2.10.1 Roll Cages

5.2.10.2 Safety Harness

5.2.10.3 Safety Nets

5.2.10.4 Seating

5.2.11 GENERAL VEHICLE COMPONENTS

5.2.11.1 Drivers Compartment

5.2.11.2 Doors and Latches

5.2.11.3 Firewalls

5.2.11.4 Ballast

5.2.11.5 Weight

5.2.11.6 Floorboards

5.2.11.7 Bumpers

5.2.11.8 Mirrors

5.2.11.9 Skid Plates

5.2.11.10 Storage

5.2.11.11 Fenders

5.2.11.12 Chassis and Body

5.2.11.13 Hoses

5.2.11.14 Identification Markings

5.2.11.15 Advertising on Vehicles

5.2.11.16 Workmanship

5.3 CLASS 1/2-1600

5.3.1 OPEN WHEEL – RESTRICTED 1600CC

5.3.1.1 SINGLE AND TWO SEAT BUGGIES LIMITED TO 1600CC VW ENGINE AND VW TYPE 1

5.3.2 SUSPENSION SYSTEM

5.3.3 GENERAL REGULATIONS

5.3.3.1 Entrants in this class shall comply with all applicable general regulations.

5.3.4 COMPETITION REGULATIONS

5.3.4.1 This is a restricted class and all parts shall remain stock unless otherwise noted in the rules.

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

5.3.5 SAFETY EQUIPMENT

5.3.5.1 Helmets

5.3.5.2 Protective Clothing

5.3.5.3 Eye Protection

5.3.5.4 First Aid Kit

5.3.5.5 Caution Signs

5.3.5.6 Horns

5.3.5.7 Reflectors

5.3.5.8 Fire Extinguisher

5.3.5.9 Survival Supplies

5.3.6 SUSPENSION COMPONENTS FRONT SUSPENSION

5.3.6.1 Front suspension is based on VW type 1 ball joint or king and link pin style. Any beam of two steel torsion tubes may be used but must retain stock width. Front axle torsion tube centers may be cut, rotated and rewelded to increase ground clearance. Uses of torsion adjusters are optional. Tube center spacing is open. Any manufacturer's torsion bars are allowed. Front trailing arms may be reinforced or replaced as long as stock VW width and length are retained. Suspension limiters are allowed. Spindles, link pins, ball joints, and shock mounting locations are open. Front suspension track width will be measured from wheel mounting face to wheel mounting face. The maximum width is 55.75 inches. Stock type sway bar is ok. Mounted in the stock location.

5.3.7 REAR SUSPENSION

5.3.7.1 Rear suspension is based on VW type 1 IRS or swing axle.

5.3.7.2 Rear trailing arms may be of any manufacturer. Tubular arms are allowed as long as stock VW IRS swing arm length is retained plus or minus 1 inch. Any type of pivot ok. The stock VW dimension between the center line of the rear axle to the center line of the rear torsion housing is 16.250" plus or minus 1 inch must be retained. Outboard bus reduction gears are allowed. Any axle assemblies are allowed, as long as original VW type suspension is retained. This includes the use of "micro stub hubs". Rear torsion tubes may be supported or replaced but must remain steel and retain stock VW width. Torsion adjusters are allowed. A single torsion per wheel of any manufacturer is allowed. Torsion bars must remain inside the torsion housing. Torsion bars must be connected to the trailing arm with steel spring plates of any manufacturer. Rear suspension track width must not exceed a maximum of 58.25" as measured from wheel mounting face to wheel mounting face. CV joint mounting face to CV joint mounting face must not exceed 47.375" inches as measured at ride height. The entire outer CV must remain inboard of the trailing arm inner bearing.

5.3.7.3 Shock Absorbers and Bump Stops

5.3.7.3.1 No limit on the number of shocks and the sizes of shocks, cooling fins allowed. No air or coilover shocks allowed.

5.3.7.4 Secondary Suspension

5.3.7.4.1 No secondary suspension allowed.

5.3.7.5 Wheels and Tires

5.3.7.5.1 Any tire and wheel are allowed that will mount directly on VW drums. No wheel adapters allowed.

- 5.3.7.6 Fasteners
- 5.3.7.7 Steering
- 5.3.8 STEERING AND BRAKE COMPONENTS
 - 5.3.8.1 Steering system open. Any tie rod and tie rod end allowed.
 - 5.3.8.2 Brakes
 - 5.3.8.2.1 Any type of brake may be used as long as all other rules are adhered to.
 - 5.3.8.3 Ignition
- 5.3.9 ELECTRICAL SYSTEM
 - 5.3.9.1 Battery ignition only, no magnetos. Six or twelve volt systems may be used. Any distributor may be used. Any VW type 1 alternator or generator in the stock location may be used, and must be a working charging system.
 - 5.3.9.2 No crank fired ignitions allowed.
 - 5.3.9.3 Batteries
 - 5.3.9.4 Lights
 - 5.3.9.5 Starters
- 5.3.10 FUEL SYSTEM
 - 5.3.10.1 Fuel
 - 5.3.10.2 Fuel Tanks
 - 5.3.10.2.1 Safety fuel cells are required
 - 5.3.10.3 Fuel Lines, Vents, Caps
- 5.3.11 ENGINE, TRANSMISSION AND DRIVELINE
 - 5.3.11.1 Engine and Engine Displacement
 - 5.3.11.1.1 Engine must utilize VW series type 1, 1600cc, U.S. model sedan components and dimensions. The maximum allowable engine displacement is 1600cc as delivered from the factory
 - 5.3.11.2 ENGINE CASE
 - 5.3.11.2.1.1 Any VW type 1, 2, 3 or “universal” case is allowed. The following modifications may be made to the stock case:
 - 5.3.11.2.1.2 The case may be line bored
 - 5.3.11.2.1.3 The case may be drilled and tapped for oil and temp sending units
 - 5.3.11.2.1.4 The case may be machined for crank pulley seal
 - 5.3.11.2.1.5 Case savers may be installed
 - 5.3.11.2.1.6 Cylinder seating surface may be machined
 - 5.3.11.2.1.7 Oil galleries may be enlarged to 10mm
 - 5.3.11.2.1.8 Threaded oil gallery plugs allowed
 - 5.3.11.2.1.9 Oil squirters allowed
 - 5.3.11.2.1.10 Case may be full flowed.
 - 5.3.11.2.1.11 Gussets are allowed.
 - 5.3.11.3 OIL PUMP
 - 5.3.11.3.1 Any oil pump is allowed. No deep sumps, dry sumps, or sump alterations. Windage trays allowed. Any oil bypass piston and spring allowed. No Accusump systems allowed.
 - 5.3.11.4 FUEL PUMP
 - 5.3.11.4.1 Any combination of stock fuel pump or electric pump may be used. Any fuel filter and pressure regulator may be used.
 - 5.3.11.5 PISTONS
 - 5.3.11.5.1 Pistons must be stock 3 ring only. Any piston and cyl as long as original stock dimensions are maintained. Any type wrist pin keepers. Piston assemblies may be balanced to the weight in grams of the lightest original non-balanced piston. Any manufacture piston rings allowed.
 - 5.3.11.6 CONNECTING RODS
 - 5.3.11.7 Any VW aftermarket connecting rod is allowed as long as the maximum length is 5.4”. connecting rod weight is 500 gram minimum with one (1) rod untouched. No polishing or profiling of rods.
 - 5.3.11.8 CRANKSHAFT

- 5.3.11.9** Crankshaft must be stock VW. Crankshaft may be balanced. Maximum journal size is limited to .030" undersize. No polishing or lightening. Any gear is allowed. Any engine bearing is allowed as long as stock dimensions are maintained. Pulley may be balanced. Sand seals ok. Any VW flywheel may be lightened and balanced. No aluminum flywheel. Any clutch disk and pressure plate but must retain stock VW diameter. Crank may be offset to a maximum of 69.5mm.
- 5.3.11.10** HEADS
- 5.3.11.11** Heads must be U.S sedan stock single port or dual port or their equivalent. Only dual port heads with the following numbers will be allowed. 040101375 2, 040101375 13, 040101375 19 or Autolenia heads or stock OEM heads will be allowed. The MOFOCO replacement heads with part # (mfc-cch040) will be allowed. Heads may be fly cut for clean-up. No porting or polishing. Stock intake 34mm original equipment center section or its replacement. A 1" by 1.5" long by ½ inch tube may be welded 2 inches below the carb flange. A minimum of material may be removed from the end of the tube for clearance. A 1 5/8 X 2" long slip tube may be welded to the end of the runners for use of better hose connection. End castings must be original equipment VW, with the VW logo and part numbers. Balance slot may be welded closed. Vacuum hole may be plugged.
- 5.3.11.12** CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS
- 5.3.11.12.1** Any camshaft, gear, valve spring retainers, lifters are allowed. Beehive springs allowed, Valve spring seat diameter in head must remain stock. May use any valve but must be stock 45 degrees and stock dimensions and 8mm stem size. no titanium valves allowed. Valve guide may be steel, bronze, or cast iron. No grinding or polishing in the port including valve guide. Must use stock VW 1600 rocker arms. The rocker arms may be resurfaced to permit the use of swivel feet. No other grinding or changes may be made to the rocker arms. No roller or needle bearings will be allowed as part of the camshaft or as an interface between the rocker arms and the camshaft. Any push rods and push rod tubes. Any valve adj screws. Valve covers may be of any manufacture.
- 5.3.11.13** FAN SHROUD
- 5.3.11.13.1** After market VW fan shrouds are allowed
- 5.3.11.14** CARBURETOR
- 5.3.11.14.1** Stock VW carb 30 pict 1, 2, 3 or the Solex h-30-pic replacement must be used. Maximum venturi size is 24.10mm. Velocity stacks may be used as long as they are not bonded to the carburetor. No internal modifications are allowed. This includes no removing of parts, no grinding, polishing, or filing. Intake manifolds must be stock. No chemical milling of manifold or carburetor. Choke housing may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used. . A 34mm to 30mm carb adapter must be used.
- 5.3.11.15** RESTRICTOR PLATES
- 5.3.11.15.1** Single seat restrictor plates are 21.5mm
- 5.3.11.15.2** Two seat restrictor plates are 24.0mm
- 5.3.11.15.3** Low compression engine option
- 5.3.11.15.3.1** 1600cc maximum displacement and 8 to 1 compression ratio, must use same heads as high compression engine with same valve size and no porting at all. Stock VW end castings with VW part numbers must be used, no polishing allowed. An EMPI or WEBER 40 or 44 idf carb may be used and tube style intake manifold, No Plenum Manifolds allowed. Must use a maximum 25mm venturi for two seat and a maximum 24mm venturi for single seat. This is a pump gas only engine option with a maximum of 91 octane.
- 5.3.11.16** Engine Replacement
- 5.3.11.17** Transmission
- 5.3.11.17.1** Must be stock VW type 1 or 2 transaxle housing with internal modifications only. No more than four (4) forward speeds are allowed. Any internal modifications allowed. Any gear ratio combinations allowed but only VW type gears (helical cut gears) may be used. Must have a working reverse gear. Any shifter allowed.
- 5.3.11.18** Throttles
- 5.3.11.19** Exhaust
- 5.3.11.20** Fluid Coolers

- 5.3.11.20.1** Any oil cooler allowed with the location optional. Full flow systems are allowed. No deep sumps or dry sumps will be allowed or Accusumps.
- 5.3.11.21** Auxiliary Equipment
- 5.3.11.22** Superchargers and Turbochargers
- 5.3.12** VEHICLE SAFETY EQUIPMENT
 - 5.3.12.1** Roll Cages
 - 5.3.12.2** Safety Harness
 - 5.3.12.3** Safety Nets
 - 5.3.12.4** Safety nets must be attached at all times during the event.
 - 5.3.12.5** Seating
- 5.3.13** GENERAL VEHICLE COMPONENTS
 - 5.3.13.1** Drivers Compartment
 - 5.3.13.1.1** Roof must have a positive latch, no Velcro. The roof must be properly attached at all times during the event.
 - 5.3.13.2** Doors and Latches
 - 5.3.13.3** Firewalls
 - 5.3.13.4** Ballast
 - 5.3.13.5** Weight
 - 5.3.13.5.1** Single seat = 1550 lbs
 - 5.3.13.5.2** Double seat = 1550 lbs
 - 5.3.13.6** Floorboards
 - 5.3.13.7** Bumpers
 - 5.3.13.8** Mirrors
 - 5.3.13.9** Skid Plates
 - 5.3.13.10** Storage
 - 5.3.13.11** Chassis and Body
 - 5.3.13.11.1** Wheel base is open
 - 5.3.13.12** Hoses
 - 5.3.13.13** Identification Markings
 - 5.3.13.14** Advertising on Vehicles
 - 5.3.13.15** Workmanship

5.4 CLASS 2

5.4.1 NOSTALGIA OPEN WHEEL – UNLIMITED

5.4.1.1 VEHICLE MUST HAVE BEEN BUILT BEFORE 1992

5.4.1.2 UNLIMITED SINGLE AND TWO SEAT VEHICLES

5.4.2 GENERAL REGULATIONS

5.4.2.1 Entrants in this class shall comply with all applicable general regulations

5.4.3 COMPETITION REGULATIONS

5.4.3.1 This is an open class and all components will be considered open unless it says otherwise in these rules. Vehicle must have documented proof that it was built before 1992

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

5.4.4 SAFETY EQUIPMENT

5.4.4.1 Helmets

5.4.4.2 Protective Clothing

5.4.4.3 Eye Protection

5.4.4.4 First Aid Kit

5.4.4.5 Caution Signs

5.4.4.6 Horns

5.4.4.7 Reflectors

5.4.4.8 Fire Extinguisher

5.4.4.9 Survival Supplies

5.4.5 SUSPENSION COMPONENTS

5.4.5.1 Shock Absorbers and Bump Stops

5.4.5.2 Secondary Suspension

5.4.5.3 Wheels and Tires

5.4.5.4 Fasteners

5.4.6 STEERING AND BRAKE COMPONENTS

5.4.6.1 Steering

5.4.6.2 Brakes

5.4.7 ELECTRICAL SYSTEM

5.4.7.1 Ignition

5.4.7.2 Batteries

5.4.7.3 Lights

5.4.7.4 Starters

5.4.8 FUEL SYSTEM

5.4.8.1 Fuel

5.4.8.2 Fuel Tanks

5.4.8.2.1 Safety fuel cells are required

5.4.8.3 Fuel Lines, Vents, Caps

5.4.9 ENGINE, TRANSMISSION AND DRIVELINE

5.4.9.1 Engine and Engine Displacement

5.4.9.2 Engine Replacement

5.4.9.3 Transmission

5.4.9.4 Throttles

5.4.9.5 Exhaust

5.4.9.6 Drive Shafts

5.4.9.7 Flywheel Shields

5.4.9.9 Auxiliary Equipment

5.4.9.9.1 A generator, alternator, and a complete functional electrical system must be hooked up and working at all times.

5.4.9.10 Superchargers and Turbochargers

5.4.10 VEHICLE SAFETY EQUIPMENT

5.4.10.1 Roll Cages

5.4.10.2 Safety Harness

5.4.10.3 Safety Nets

5.4.10.4 Seating

5.4.11 GENERAL VEHICLE COMPONENTS

5.4.11.1 Drivers Compartment

5.4.11.2 Doors and Latches

5.4.11.3 Firewalls

5.4.11.4 Ballast

5.4.11.5 Weight

5.4.11.6 Floorboards

5.4.11.7 Bumpers

5.4.11.8 Mirrors

5.4.11.9 Skid Plates

5.4.11.10 Storage

5.4.11.11 Fenders

5.4.11.12 Chassis and Body

5.4.11.13 Hoses

5.4.11.14 Identification Markings

5.4.11.15 Advertising on Vehicles

5.4.11.16 Workmanship

5.5 CLASS 3

5.5.1 OPEN PRODUCTION – SHORT WHEEL BASE 4X4

5.5.1.1 VEHICLES FROM A FOUR WHEEL DRIVE UTILITY TYPE VEHICLE. VEHICLE MUST HAVE BEEN SERIES PRODUCED IN QUANTITIES OF AT LEAST 5,000 UNITS WITHIN A 12 MONTH PERIOD AND BE READILY AVAILABLE TO THE GENERAL PUBLIC IN THE USA.

5.5.1.2 MUST BE A FOUR WHEEL DRIVE CAPABLE OF BEING DRIVEN THROUGH ALL FOUR WHEELS

5.5.1.3 NO PICKUP TRUCKS ALLOWED IN THIS CLASS

5.5.2 GENERAL REGULATIONS

5.5.2.1 Entrants in this class shall comply with all applicable general regulations.

5.5.3 COMPETITION REGULATIONS

5.5.3.1 Manufacturer's body, engine, and chassis combinations must be retained. This class is an open production class and all components will be considered open unless restricted herein

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

5.5.4 SAFETY EQUIPMENT

5.5.4.1 Helmets

5.5.4.2 Protective Clothing

5.5.4.3 Eye Protection

5.5.4.4 First Aid Kit

5.5.4.5 Caution Signs

5.5.4.6 Horns

5.5.4.7 Reflectors

5.5.4.8 Fire Extinguisher

5.5.4.9 Survival Supplies

5.5.5 SUSPENSION COMPONENTS

5.5.5.1 Spindles may be reinforced or replaced, but must retain the original stock concept. Front and rear suspension must be of the same basic design and concept as originally produced and installed on the chassis to which it is mounted. This is determined by the manufacturer of the chassis and the year it was manufactured. Suspension parts may be strengthened, reinforced, or replaced. Suspension must retain the original design and concept (A-arm, struts, I-beam, etc.) and all primary spring systems must retain the original concept (leaf, torsion bar, coil, etc.) that was delivered on the year chassis that is in use. Items with no restrictions are:

5.5.5.1.1 Pivot points

5.5.5.1.2 Spring rates and capacities

5.5.5.1.3 Ball joints

5.5.5.1.4 Mountings

5.5.5.1.5 Travel limit

5.5.5.1.6 Track width but tires must retract inside fender wells

5.5.5.1.7 Primary coil springs are limited to one coil per wheel and must be mounted according to stock concept. Stock production wheel base must be retained plus or minus 2" as long as it does not exceed 108"

5.5.5.2 Shock Absorbers and Bump Stops

5.5.5.2.1 Number of shocks and mounting methods are open. Mounting points may be redesigned, strengthened, and modified. Remote mounted shocks are allowed. Shocks may not protrude thru hood.

5.5.5.3 Secondary Suspension

5.5.5.3.1 Secondary suspension allowed but with the secondary system disconnected. The primary system must be capable of maintaining ride height plus or minus 1.5"

5.5.5.4 Wheels and Tires

5.5.5.5 Fasteners

5.5.6 STEERING AND BRAKE COMPONENTS

- 5.5.6.1 Steering
- 5.5.6.2 Brakes
- 5.5.7 ELECTRICAL SYSTEM
 - 5.5.7.1 Ignition
 - 5.5.7.2 Batteries
 - 5.5.7.3 Lights
 - 5.5.7.4 Starters
- 5.5.8 FUEL SYSTEM
 - 5.5.8.1 Fuel
 - 5.5.8.2 Fuel Tanks
 - 5.5.8.2.1 Safety fuel cells are required
 - 5.5.8.3 Fuel Lines, Vents, Caps
- 5.5.9 ENGINE, TRANSMISSION AND DRIVELINE
 - 5.5.9.1 Engine and Engine Displacement
 - 5.5.9.1.1 Engine must be of the same manufacturer basic design and type and have the same number of cylinders as the one installed by the factory. Any displacement engine may be used as long as the original block casting remains the same. Block must be made of the same type material as that of the block installed by the factory for the particular chassis and body series. Engines must be readily available to the general public in the USA. Engine must not have more than two valves per cylinder. Any make of automotive carburetor(s) may be used maintaining a combined total of one venturi per cylinder. Stock factory fuel injection may be used. Items with no restrictions include:
 - 5.5.9.1.1.1 Strengthening and balancing
 - 5.5.9.1.1.2 Valve train and camshaft
 - 5.5.9.1.1.3 Bore and stroke
 - 5.5.9.1.1.4 Pistons
 - 5.5.9.1.1.5 Blueprinting
 - 5.5.9.1.1.6 Oil and water cooling systems
 - 5.5.9.1.1.7 Air cleaners
 - 5.5.9.1.1.8 Fuel pumps
 - 5.5.9.1.1.9 Exhaust system
 - 5.5.9.1.2 Water and vapor injection not allowed unless originally equipped. Engine must be located in the stock mounting location as delivered from the factory plus or minus 1". This will be measured from the center line of the front spindle to the back of the block
 - 5.5.9.2 Engine Replacement
 - 5.5.9.3 Transmission
 - 5.5.9.3.1 Transmission is open. Rear differential is open but must remain stock concept. Gear ratios, carriers, axles and floating hubs are optional. Front differential must be a production automotive type but axle tubes may be replaced
 - 5.5.9.4 Throttles
 - 5.5.9.5 Exhaust
 - 5.5.9.6 Drive Shafts
 - 5.5.9.7 Flywheel Shields
 - 5.5.9.8 Fluid Coolers
 - 5.5.9.9 Auxiliary Equipment
 - 5.5.9.10 Superchargers and Turbochargers
- 5.5.10 VEHICLE SAFETY EQUIPMENT
 - 5.5.10.1 Roll Cages
 - 5.5.10.2 Safety Harness
 - 5.5.10.3 Safety Nets
 - 5.5.10.4 Seating

5.5.10.4.1 Any seat may be used but must remain in the approximate stock location

5.5.11 GENERAL VEHICLE COMPONENTS

5.5.11.1 Drivers Compartment

5.5.11.1.1 The dash is optional. Upholstered panels, head liners, and carpets may be removed

5.5.11.2 Doors and Latches

5.5.11.3 Firewalls

5.5.11.4 Ballast

5.5.11.5 Weight

5.5.11.6 Floorboards

5.5.11.7 Bumpers

5.5.11.8 Mirrors

5.5.11.9 Skid Plates

5.5.11.10 Storage

5.5.11.11 Fenders

5.5.11.11.1 Wheel openings in fender may be enlarged and flared for tire clearance but stock profile must be retained. Front fender inner panels may be removed. Attachment of fenders, inner panels, and radiator to a front hoop is acceptable provided stock external appearance is retained. Body and fender material may not be substituted with the exception of hoods, trunk lids, fenders and/or bed sides and doors.

5.5.11.12 Chassis and Body

5.5.11.12.1 Frames may be strengthened by adding material but must retain stock configuration, size, and shape. No removal of materials allowed 104" AND SHORTER WHEEL BASE SIX CYLINDER OR LESS POWERED CHASSIS

5.5.11.12.2 Original wheel base plus or minus 2" must be retained not to exceed 104". Frame section must remain stock height and width throughout its entire length. Material may be added or removed for allowable modifications but must be kept to a minimum. The front end of the frame rail may be notched 8" from the front for ground clearance as long as top of frame rail is not modified.

5.5.12 BODY (ALL CHASSIS)

5.5.12.1 Body must maintain original shape, size, configuration and appearance. Additional mounts or parts for body strengthening may be added. Mounting location (vertical, horizontal, lateral) in relationship to the frame must remain stock. The measurement from the center line of the front spindle to the back of the b-pillar post must remain stock plus or minus 1". Hoods, trunk lids, fenders and/or bed sides and doors are required to be in the stock location but may be of any material. Dropped hoods are allowed but stock profile must be maintained. Stock grill assemblies are required. All external sheet metal must remain stock. No internal sheet metal is required. Safety glass windshield, sides, and rear are optional. Hardtops with tops removed are not permitted.

5.5.12.2 Hoses

5.5.12.3 Identification Markings

5.5.12.4 Advertising on Vehicles

5.5.12.5 Workmanship

5.6 CLASS 4

5.6.1 CLASS 1450 PRO

5.6.1.1 TRUCK - PRODUCTION MINI OR FULL SIZE TRUCK

5.6.1.2 THIS CLASS IS OPEN TO ANY FULL OR MINI TRUCK WITH ALL THE SAFETY EQUIPMENT

5.6.1.3 STEEL CAB AND DOORS

5.6.2 GENERAL REGULATIONS

5.6.2.1 Entrants in this class shall comply with all applicable general regulations.

5.6.3 COMPETITION REGULATIONS

5.6.3.1 This class is an open class and all components will be considered open unless restricted herein

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

5.6.4 SAFETY EQUIPMENT

5.6.4.1 Helmets

5.6.4.2 Protective Clothing

5.6.4.3 Eye Protection

5.6.4.4 First Aid Kit

5.6.4.5 Caution Signs

5.6.4.6 Horns

5.6.4.7 Reflectors

5.6.4.8 Fire Extinguisher

5.6.4.9 Survival Supplies

5.6.5 SUSPENSION COMPONENTS

5.6.5.1 Shock Absorbers and Bump Stops

5.6.5.2 Secondary Suspension

5.6.5.3 Wheels and Tires

5.6.5.4 Fasteners

5.6.6 STEERING AND BRAKE COMPONENTS

5.6.6.1 Steering

5.6.6.2 Brakes

5.6.7 ELECTRICAL SYSTEM

5.6.7.1 Ignition

5.6.7.2 Batteries

5.6.7.3 Lights

5.6.7.4 Starters

5.6.8 FUEL SYSTEM

5.6.8.1 Fuel

5.6.8.2 Fuel Tanks

5.6.8.2.1 Safety fuel cells are required

5.6.8.3 Fuel Lines, Vents, Caps

5.6.9 ENGINE, TRANSMISSION AND DRIVELINE

5.6.9.1 Engine and Engine Displacement

5.6.9.1.1 Engine, transmission, and rear end are OPEN with no limitations.

5.6.9.2 Engine Replacement

5.6.9.3 Transmission

5.6.9.4 Throttles

5.6.9.5 Exhaust

5.6.9.6 Drive Shafts

5.6.9.7 Flywheel Shields

- 5.6.9.8 Fluid Coolers
- 5.6.9.9 Auxiliary Equipment
- 5.6.9.10 Superchargers and Turbochargers
 - 5.6.9.10.1 Forced Induction is allowed
- 5.6.10 VEHICLE SAFETY EQUIPMENT
 - 5.6.10.1 Roll Cages
 - 5.6.10.2 Safety Harness
 - 5.6.10.3 Safety Nets
 - 5.6.10.4 Seating
- 5.6.11 GENERAL VEHICLE COMPONENTS
 - 5.6.11.1 Drivers Compartment
 - 5.6.11.2 Doors and Latches
 - 5.6.11.3 Firewalls
 - 5.6.11.3.1 The firewall, floor and rear wall of the cab may be modified to allow room for drive train, suspension components or seats but must be of metal construction.
 - 5.6.11.4 Ballast
 - 5.6.11.5 Weight
 - 5.6.11.6 Floorboards
 - 5.6.11.7 Bumpers
 - 5.6.11.8 Mirrors
 - 5.6.11.9 Skid Plates
 - 5.6.11.10 Storage
 - 5.6.11.11 Fenders
 - 5.6.11.12 Chassis and Body
 - 5.6.11.12.1 Material may be removed from inside of cab to allow room for roll cage.
 - 5.6.11.12.2 Must use steel cab and steel working doors on stock hinges!
 - 5.6.11.13 Hoses
 - 5.6.11.14 Identification Markings
 - 5.6.11.14.1 Numbers must be black on white or white on black.
 - 5.6.11.15 Advertising on Vehicles
 - 5.6.11.16 Workmanship

5.7 CLASS 5

5.7.1 OPEN WHEEL – UNLIMITED BAJA BUG

5.7.1.1 VEHICLES MUST BE A VW SEDAN TYPE 1 HARDTOP OR CONVERTIBLE AS DELIVERED FROM THE FACTORY. 181 SAFARI'S, 900 SERIES PORSCHE'S AND KARMANN GHIA'S ARE INCLUDED IN THIS CLASS

5.7.2 GENERAL REGULATIONS

5.7.2.1 Entrants in this class shall comply with all applicable general regulations.

5.7.3 COMPETITION REGULATIONS

5.7.3.1 This class is an open class and all components will be considered open unless restricted herein.

5.7.3.2 Vehicles must have the external appearance of a "Baja Bug"

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

5.7.4 SAFETY EQUIPMENT

5.7.4.1 Helmets

5.7.4.2 Protective Clothing

5.7.4.3 Eye Protection

5.7.4.4 First Aid Kit

5.7.4.5 Caution Signs

5.7.4.6 Horns

5.7.4.7 Reflectors

5.7.4.8 Fire Extinguisher

5.7.4.9 Survival Supplies

5.7.5 SUSPENSION COMPONENTS

5.7.5.1 Front and rear suspension systems may be modified or replaced as long as stock concept (trailing arms, swing axles, IRS, etc.) is retained and wheel base limit is not exceeded. Stock concept suspension may be substituted for an open trailing arm type suspension, but 105" wheel base limit may not be exceeded. Torsion bars and/or leaf springs are optional.

5.7.5.2 Shock Absorbers and Bump Stops

5.7.5.3 Secondary Suspension

5.7.5.4 Wheels and Tires

5.7.5.5 Fasteners

5.7.6 STEERING AND BRAKE COMPONENTS

5.7.6.1 Steering

5.7.6.1.1 No center steering wheel is allowed.

5.7.6.2 Brakes

5.7.7 ELECTRICAL SYSTEM

5.7.7.1 Ignition

5.7.7.2 Batteries

5.7.7.3 Lights

5.7.7.4 Starters

5.7.8 FUEL SYSTEM

5.7.8.1 Fuel

5.7.8.2 Fuel Tanks

5.7.8.2.1 with Safety fuel cells are required

5.7.8.3 Fuel Lines, Vents, Caps

5.7.9 ENGINE, TRANSMISSION AND DRIVELINE

5.7.9.1 Engine and Engine Displacement

5.7.9.1.1 Any manufacturer air cooled, 4 cylinder, single cam, push rod, VW concept engine is allowed. VW 4 cylinder

water cooled engines may also be used. Displacement is open.

- 5.7.9.2** Production engines
 - 5.7.9.2.1** Any manufacturer production 4 cylinder water cooled engine 2.5 liters or less is allowed. Must retain OEM cast head.
 - 5.7.9.2.2** Must retain OEM cast block. No forced induction allowed.
 - 5.7.9.2.3** (Production engines defined as an engine that was sold in quantities exceeding 10,000 units or more and available to the general public)
 - 5.7.9.2.4** All production engines will be inspected by approved BOR engine inspectors to verify that it is in fact 2.5 liters or less and have cast heads and cast block.
 - 5.7.9.2.5** Wiks racing engines, Major performance racing engines, Leonard Perez mailman motors.
- 5.7.9.3** Engine Replacement
- 5.7.9.4** Transmission
- 5.7.9.5** Throttles
- 5.7.9.6** Exhaust
- 5.7.9.7** Drive Shafts
- 5.7.9.8** Flywheel Shields
- 5.7.9.9** Fluid Coolers
- 5.7.9.10** Auxiliary Equipment
- 5.7.9.11** Superchargers and Turbochargers
 - 5.7.9.11.1** Forced induction is not allowed.
- 5.7.10** VEHICLE SAFETY EQUIPMENT
 - 5.7.10.1** Roll Cages
 - 5.7.10.2** Safety Harness
 - 5.7.10.3** Safety Nets
 - 5.7.10.4** Seating
 - 5.7.10.4.1** One or two seats may be used. No center seating is allowed
- 5.7.11** GENERAL VEHICLE COMPONENTS
 - 5.7.11.1** Drivers Compartment
 - 5.7.11.1.1** Sheet metal front and rear firewalls are required and may be attached to the roll cage. Interior sheet metal may be removed only if stock appearance is retained from the outside and firewall ruling is complied with. Rear seat, upholstered panels, headliners, and carpets may be removed. Pedals may be of any manufacture and location is optional on left side of car
 - 5.7.11.2** Doors and Latches
 - 5.7.11.2.1** Doors must remain in original stock location and maintain stock shape and size.
 - 5.7.11.2.2** Doors may be welded or fastened shut
 - 5.7.11.3** Firewalls Ballast
 - 5.7.11.4** Weight
 - 5.7.11.5** Floorboards
 - 5.7.11.6** Bumpers
 - 5.7.11.7** Mirrors
 - 5.7.11.8** Skid Plates
 - 5.7.11.9** Storage
 - 5.7.11.10** Fenders
 - 5.7.11.10.1** Front and rear fenders must be used.
 - 5.7.11.10.2** Full coverage fenders must be used. Fender mounting location must remain stock. Fenders may be one piece fiberglass. Rear fenders when measured at top center must not measure less than 6" from body. Mounting height is optional. Rear fenders may be made of metal or fiberglass but must have rolled edges. Fenders must resemble a VW Baja Bug rear fender.
 - 5.7.11.11** Chassis and Body
 - 5.7.11.11.1** Single piece front ends allowed. Any body made of metal or fiberglass may be used as long as Baja bug appearance is maintained.

5.7.11.11.2 If convertible body is used, Windshield framework must be retained and rear crossover piece forward of engine cover may be removed. Windshield and window glass is optional but must be shatterproof if retained. Wheel base may be altered to a maximum of 105" as measured from wheel center line to center line front to rear on both sides not to exceed a total of 211" combined. This will be taken at ride height.

5.7.11.12 Hoses

5.7.11.13 Identification Markings

5.7.11.14 Advertising on Vehicles

5.7.11.15 Workmanship

5.8 CLASS 5-1600

5.8.1 OPEN WHEEL – 1600 BAJA BUG

- 5.8.1.1 VEHICLES MUST BE A VW SEDAN TYPE 1 HARDTOP OR SUNROOF AS DELIVERED FROM THE FACTORY. VEHICLE MUST HAVE THE EXTERNAL APPEARANCE OF A “BAJA BUG”. NO CONVERTIBLES, KARMAN GHIAS, 181 SAFARI’S, VARIANTS OR SUPER BEETLES

5.8.2 GENERAL REGULATIONS

- 5.8.2.1 Entrants in this class shall comply with all applicable general regulations.

5.8.3 COMPETITION REGULATIONS

- 5.8.3.1 This class is a stock production class and all components must remain stock except for those modifications allowed herein

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

5.8.4 SAFETY EQUIPMENT

- 5.8.4.1 Helmets
- 5.8.4.2 Protective Clothing
- 5.8.4.3 Eye Protection
- 5.8.4.4 First Aid Kit
- 5.8.4.5 Caution Signs
- 5.8.4.6 Horns
- 5.8.4.7 Reflectors
- 5.8.4.8 Fire Extinguisher
- 5.8.4.9 Survival Supplies

5.8.5 SUSPENSION COMPONENTS

- 5.8.5.1 Front and rear suspension components are limited to stock VW production type 1 parts unless otherwise stated within

5.8.6 FRONT SUSPENSION

- 5.8.6.1 Front suspension may use either VW type 1 ball joint or king and link pin only. Front axle torsion tube centers may be cut, rotated, rewelded or torsion adjusters added. Any manufacturer’s torsion bars are allowed. Any beam of two steel torsion tubes may be used but must retain stock width. Front torsion tubes may be additionally supported by attachment to floor pan and/or roll cage. Original seams may be reinforced. Front trailing arms may be reinforced or replaced as long as stock VW width and length are retained. Spindles, link pins, ball joints, and upper shock mounting locations are open. Lower shock mount may be moved or replaced as long as it stays on the lower trailing arm. Sway bars may be removed. Front suspension track width will be measured from wheel mounting face to wheel mounting face and the maximum width is 55.75 inches.

5.8.7 REAR SUSPENSION

- 5.8.7.1 Rear suspension is based on VW type 1 IRS or swing axle. Rear torsion tubes may be additionally supported by attachment to the floor pan and/or roll cage.
- 5.8.7.2 IRS trailing arms may be modified or replaced as long as stock measurement is 16.250 plus or minus 1 inch as measured from center of torsion to center of axle. any manufacturers axle assemblies are allowed as long as VW type suspension is retained, this includes the use of micro stub hubs.
- 5.8.7.3 Rear shock tower may be removed to body mounting bolt hole only. Torsion adjusters are allowed. Original wheel base must be retained. Torsion bars must be connected to the trailing arm with steel spring plates of any manufacture. Rear suspension track width must not exceed a maximum of 58.250 inches as measured from wheel mounting face to wheel mounting face. CV joint mounting face to CV joint mounting face must not exceed 47.375” inches as measured at ride height. The entire outer CV must remain inboard of the trailing arm inner bearing. May convert existing swing axle suspension to IRS by welding in any manufacturers pivot boxes to torsion housing in stock location while maintaining stock geometry.

5.8.7.4 Shock Absorbers and Bump Stops

- 5.8.7.4.1 Any manufacturer's shocks and sizes are allowed. Cooling fins and/or reservoirs allowed. One shock per wheel in the front. Two shocks per wheel in any location in the rear. No air or coilover shocks allowed. No hydraulic bump stops allowed.
- 5.8.7.5 Secondary Suspension
 - 5.8.7.5.1 No secondary suspension allowed
- 5.8.7.6 Wheels and Tires
 - 5.8.7.6.1 Any tire and wheel are allowed that will mount directly on VW drums. No wheel adapters allowed. Spare tire may be relocated anywhere inside body
- 5.8.7.7 Fasteners
- 5.8.7.8 Steering
- 5.8.8 STEERING AND BRAKE COMPONENTS
 - 5.8.8.1 Steering box may be of any origin. Any steering wheel in the stock location. Any tie rod and tie rod ends allowed. Power steering ok.
 - 5.8.8.2 Brakes
 - 5.8.8.3 Disk brakes ok.
- 5.8.9 ELECTRICAL SYSTEM
 - 5.8.9.1 Ignition
 - 5.8.9.1.1 Battery ignition only, no magnetos. Six or twelve volt systems may be used. Any distributor may be used. Any VW type alternator or generator in the stock location may be used
 - 5.8.9.2 Batteries
 - 5.8.9.3 Lights
 - 5.8.9.4 Starters
- 5.8.10 FUEL SYSTEM
 - 5.8.10.1 Fuel Tanks
 - 5.8.10.1.1 Safety fuel cells are required. Fuel cell may be relocated from stock location. Any size fuel cell is allowed
 - 5.8.10.2 Fuel Lines, Vents, Caps
- 5.8.11 ENGINE, TRANSMISSION AND DRIVELINE
 - 5.8.11.1 Engine and Engine Displacement
 - 5.8.11.1.1 Engine must utilize VW series type 1, 1600cc, U.S. model sedan components and dimensions. The maximum allowable engine displacement is 1600cc as delivered from the factory
- 5.8.12 ENGINE CASE
 - 5.8.12.1 Any VW type 1, 2, 3 or "universal" case is allowed. The following modifications may be made to the stock case:
 - 5.8.12.1.1 The case may be line bored
 - 5.8.12.1.2 The case may be drilled and tapped for oil and temp sending units
 - 5.8.12.1.3 The case may be machined for crank pulley seal
 - 5.8.12.1.4 Case savers may be installed
 - 5.8.12.1.5 Cylinder seating surface may be machined
 - 5.8.12.1.6 Oil galleries may be enlarged to 10mm
 - 5.8.12.1.7 Threaded oil gallery plugs allowed
 - 5.8.12.1.8 Oil squirters allowed
 - 5.8.12.1.9 Case may be full flowed
- 5.8.13 OIL PUMP
 - 5.8.13.1 Any oil pump is allowed. No deep sumps, dry sumps, or sump alterations. Windage trays allowed. Any oil bypass piston and spring allowed. No Accusump systems allowed.
- 5.8.14 FUEL PUMP
 - 5.8.14.1 Any combination of stock fuel pump or electric pump may be used. Any fuel filter and pressure regulator may be used.
- 5.8.15 PISTONS

- 5.8.15.1** Pistons must be stock 3 ring only. Any piston and cylinder as long as original stock dimensions are maintained. Any type wrist pin keepers. Piston assemblies may be balanced to the weight in grams of the lightest original non balanced piston, wrist pin, etc., total seal rings are ok.
- 5.8.16** CONNECTING RODS
- 5.8.16.1** Any VW aftermarket connecting rod is allowed as long as the rods are stock VW length (5.393) and stock weight with a 500 gram minimum with one (1) rod untouched. No polishing or profiling of rods.
- 5.8.17** CRANKSHAFT
- 5.8.17.1** Crankshaft must be stock VW. Crankshaft may be balanced. Maximum journal size is limited to .030" undersize. No polishing or lightening. Any gear is allowed. Any engine bearing is allowed as long as stock dimensions are maintained. Power pulleys are allowed. Pulley may be balanced. Sand seals ok. Any VW flywheel may be lightened and balanced. No aluminum flywheels. Any clutch disk and pressure plate but must retain stock VW diameter. May be offset to 69.5mm.
- 5.8.18** HEADS
- 5.8.18.1** Heads must be U.S sedan stock single port or dual port or their equivalent. Only dual port heads with the following numbers will be allowed. 040101375 2, 040101375 13, 040101375 19 or Autolenia heads or stock OEM heads will be allowed. The MOFOCO replacement heads with a part #(mfc-cch040) will be allowed. Heads may be fly cut for clean-up. No porting or polishing. Stock intake 34mm original equipment center section or its replacement. A 1" by 1.5" long by ½ inch tube may be welded 2 inches below the carb flange. A minimum of material may be removed from the end of the tube for clearance. A 1 5/8 X 2" long slip tube may be welded to the end of the runners for use of better hose connection. End castings must be original equipment VW, with the VW logo and part numbers. Balance slot may be welded closed. Vacuum hole may be plugged.
- 5.8.19** CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS
- 5.8.19.1** Any camshaft, gear, valve springs, valve spring retainers, lifters are allowed. Valve spring seat diameter in head must remain stock. Valve guide may be steel, bronze, or cast iron. No grinding or polishing in the port including valve guide. Any camshaft, gear, valve spring retainers, lifters are allowed. Beehive springs allowed, Valve spring seat diameter in head must remain stock. May use any valve but must be stock 45 degrees and stock dimensions and 8mm stem size. no titanium valves allowed. Must use stock VW 1600 rocker arms. The rocker arms may be resurfaced to permit the use of swivel feet. No other grinding or changes may be made to the rocker arms. No roller or needle bearings will be allowed as part of the camshaft or as an interface between the rocker arms and the camshaft. Any push rods and push rod tubes. Any valve adj screws. Valve covers may be of any manufacture
- 5.8.20** FAN SHROUD
- 5.8.20.1** After market VW fan shrouds are allowed
- 5.8.21** CARBURETOR
- 5.8.21.1** Stock VW carb 30 pict 1, 2, 3 or the Solex h-30-pic replacement must be used. Maximum venturi size is 24.10mm. Velocity stacks may be used as long as they are not bonded to the carburetor. No internal modifications are allowed. This includes no removing of parts, no grinding, polishing, or filing. Intake manifolds must be stock. No chemical milling of manifold or carburetor. Choke housing may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used. A 34mm to 30mm carb adapter must be used.
- 5.8.21.2** Low compression engine option
- 5.8.21.2.1** 1600cc maximum displacement and 8 to 1 compression ratio, must use same heads as high compression engine with same valve size and no porting at all. Stock VW end castings with VW part numbers must be used, no polishing allowed. An EMPI or WEBER 40 or 44 idf carb may be used and tube style intake manifold, No Plenum Manifolds allowed. Must use a maximum 26mm venturi. This is a pump gas only engine option with a maximum of 91 octane.
- 5.8.21.3** Engine Replacement
- 5.8.21.4** Transmission

- 5.8.21.4.1** Must be stock VW type 1 or 2 transaxle housing with internal modifications only. No more than four forward speeds are allowed. Any internal modifications allowed. Any gear ratio combinations allowed but only VW type gears (helical cut gears) may be used. Must have a working reverse gear. Any gear shift lever allowed. Rear frame horns may be modified for cv joint clearance as long as it does not exceed below seam. Any cv joint and axle assemblies.
- 5.8.21.5** Throttles
- 5.8.21.6** Exhaust
 - 5.8.21.6.1** Any exhaust allowed
- 5.8.21.7** Fluid Coolers
 - 5.8.21.7.1** Any oil cooler allowed with the location optional. Full flow system is allowed. No deep sumps or dry sumps will be allowed
- 5.8.21.8** Auxiliary Equipment
- 5.8.21.9** Superchargers and Turbochargers
- 5.8.22** VEHICLE SAFETY EQUIPMENT
 - 5.8.22.1** Roll Cages
 - 5.8.22.2** Safety Harness
 - 5.8.22.3** Safety Nets
 - 5.8.22.4** Seating
 - 5.8.22.5** Any seat allowed but must remain in stock location. Rear seat may be removed. If stock seats are used they must have at least two U-bolts per runner
 - 5.8.22.6** GENERAL VEHICLE COMPONENTS
 - 5.8.22.7** Drivers Compartment
 - 5.8.22.7.1** Rear seat, upholstered panels, headliners, and carpet may be removed. Removal of dash and firewall is prohibited. Dash may be covered with aluminum to install gauges. Pedals must remain in stock fore and aft location. May use roller pedal. May use any throttle cable and VW stock housing. Air cleaner hose may pierce firewall for such things as oil lines, etc.
 - 5.8.22.8** Doors and Latches
 - 5.8.22.8.1** Doors must remain functional and in original stock location with original hinges and working latch. Secondary positive latching devices mandatory if net are attached to doors
 - 5.8.22.9** Firewalls Ballast
 - 5.8.22.10** Floorboards
 - 5.8.22.10.1** Serial numbers are required on the floor pan. No alteration to pan allowed except for heating, bending, or cutting of pan. 1" to allow for tie rod clearance. Frame head may be interchanged from early to late or late to early.
 - 5.8.22.11** Bumpers
 - 5.8.22.11.1** Nerf bars may be added to the sides in front of the rear wheels
 - 5.8.22.12** Mirrors
 - 5.8.22.13** Skid Plates
 - 5.8.22.13.1** Any type front and rear skid plate allowed. Any engine guards allowed
 - 5.8.22.14** Storage
 - 5.8.22.15** CR47 Fenders
 - 5.8.22.15.1** Fenders must be stock Baja Bug kit fenders. Rear fenders may be of any manufacturer. Medal fenders require rolled edges. Rear fenders may be mounted a maximum of 1.5" above the body line as measured at the top of the fender. Minimum width of 6" as measured from the center line of the rear wheel. Rear fender wells may be modified or removed .5" below stock fender holes. Rear package trays must remain in stock location and remain stock size. If fender well is removed the resulting hole must be covered air tight with the same thickness as the material removed
 - 5.8.22.16** Chassis and Body

5.8.22.16.1 Original wheel base must be maintained. Body must be VW type 1 bug or sunroof bug. No convertibles, Ghia's, 181 Safari's, Variants or Super Beetles. Main body shell must be all original. Sunroofs must have metal covering. No fiberglass body or doors. Front and rear sheet metal can be removed far enough to allow a Baja Bug kit. Running boards may be removed. One piece front end allowed. No canvas hoods allowed. No body lift kits.

5.8.22.17 Hoses

5.8.22.18 Identification Markings

5.8.22.19 Advertising on Vehicles

5.8.22.20 Workmanship

5.9 CLASS 6

5.9.1 OPEN PRODUCTION – PASSENGER VEHICLES

5.9.2 VEHICLES BUILT FROM A TWO WHEEL DRIVE PASSENGER TYPE VEHICLE SERIES PRODUCED IN QUANTITIES OF AT LEAST 2000 UNITS WITHIN A 12 MONTH PERIOD. NO AIR COOLED VW'S OR PORSCHE'S ALLOWED, BUT CORVAIRS ARE PERMITTED. LATE MODEL TURBOCHARGED CARS WILL BE ALLOWED PROVIDED ALL EXTERNAL COMPONENTS ON THE ENGINE ARE FACTORY STOCK. COUPES, SEDANS, CONVERTIBLES, STATION WAGONS, AND PASSENGER PICKUPS SUCH AS EL CAMINOS AND RANCHEROS ARE INCLUDED IN THIS CLASS

5.9.3 GENERAL REGULATIONS

5.9.3.1 Entrants in this class shall comply with all applicable general regulations.

5.9.4 COMPETITION REGULATIONS

5.9.5 Manufacturer's body, engine, and chassis combinations must be retained. This class is an open production class and all components will be considered open unless restricted herein

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

5.9.6 SAFETY EQUIPMENT

5.9.6.1 Helmets

5.9.6.2 Protective Clothing

5.9.6.3 Eye Protection

5.9.6.4 First Aid Kit

5.9.6.5 Caution Signs

5.9.6.6 Horns

5.9.6.7 Reflectors

5.9.6.8 Fire Extinguisher

5.9.6.9 Survival Supplies

5.9.7 SUSPENSION COMPONENTS

5.9.7.1 Spindles may be reinforced or replaced but must retain the original stock concept. Front and rear suspension must be of the same basic design and concept as originally produced and installed on the chassis to which it is mounted. This is determined by manufacturer of chassis and the year it was manufactured. Suspension parts may be strengthened, reinforced, or replaced. Suspension must retain the original design and concept (a-arm, struts, I-beam, etc.) and all primary spring systems must retain the original concept (leaf, torsion bar, coil, etc.) that was delivered on the year chassis that is in use. Items with no restrictions are:

5.9.7.1.1 Pivot points

5.9.7.1.2 Spring rates and capacities

5.9.7.1.3 Ball joints (D) Mountings (E) Travel limits

5.9.7.1.4 Track width but tires must retract inside fender wells.

5.9.7.2 Primary coil springs are limited to one coil per wheel.

5.9.7.3 Shock Absorbers and Bump Stops

5.9.7.3.1 Number of shocks and mounting methods are open. Mounting points may be redesigned, strengthened, and modified but may not be mounted in passenger compartment without approved safety shield. Remote mounted shocks are allowed. Shocks may not protrude thru hood

5.9.7.4 Secondary Suspension

5.9.7.5 Secondary suspension allowed but with the secondary system disconnected. The primary system must be capable of maintaining ride height plus or minus 1.5"

5.9.7.6 Wheels and Tires

5.9.7.6.1 Any tire and wheel are allowed as long as wheels and tires do not extend beyond the body lines as viewed from the top

5.9.7.7 Fasteners

5.9.8 STEERING AND BRAKE COMPONENTS

- 5.9.8.1 Steering
- 5.9.8.2 Brakes
- 5.9.9 ELECTRICAL SYSTEM
 - 5.9.9.1 Ignition
 - 5.9.9.2 Batteries
 - 5.9.9.3 Lights
 - 5.9.9.4 Starters
- 5.9.10 FUEL SYSTEM
 - 5.9.10.1 Fuel
 - 5.9.10.2 Fuel Tanks
 - 5.9.10.2.1 Safety fuel cells are required
 - 5.9.10.3 Fuel Lines, Vents, Caps
- 5.9.11 ENGINE, TRANSMISSION AND DRIVELINE
 - 5.9.11.1 Engine and Engine Displacement
 - 5.9.11.1.1 Engine must be of the same manufacturer basic design and type and have the same number of cylinders as the one installed by the factory. Internal modifications are allowed. Items with no restrictions include:
 - 5.9.11.1.2 Strengthening and balancing
 - 5.9.11.1.3 Valve train and camshaft
 - 5.9.11.1.4 Bore and stroke
 - 5.9.11.1.5 Pistons
 - 5.9.11.1.6 Blueprinting
 - 5.9.11.1.7 Oil and water cooling systems
 - 5.9.11.1.8 Air cleaners
 - 5.9.11.1.9 Fuel pumps
 - 5.9.11.1.10 Intake and exhaust system
 - 5.9.11.2 Water and vapor injection not allowed unless originally equipped. Engine must be located in the stock mounting location as delivered from the factory plus or minus 1". This will be measured from the center line of the front spindle to the back of the block
 - 5.9.11.3 Engine Replacement
 - 5.9.11.4 Transmission
 - 5.9.11.4.1 Transmission is open. Rear differential is open but must remain stock concept. Gear ratios, carriers, axles, and floating hubs are optional
 - 5.9.11.5 Throttles
 - 5.9.11.6 Exhaust
 - 5.9.11.7 Drive Shafts
 - 5.9.11.8 Flywheel Shields
 - 5.9.11.9 Fluid Coolers
 - 5.9.11.10 Auxiliary Equipment
 - 5.9.11.11 Superchargers and Turbochargers
- 5.9.12 VEHICLE SAFETY EQUIPMENT
 - 5.9.12.1 Roll Cages
 - 5.9.12.2 Safety Harness
 - 5.9.12.3 Safety Nets
 - 5.9.12.4 Seating
 - 5.9.12.4.1 Any seat may be used but must remain in the approximate stock location
- 5.9.13 GENERAL VEHICLE COMPONENTS
 - 5.9.13.1 Drivers Compartment
 - 5.9.13.1.1 The dash is optional. Upholstered panels, head liners, and carpets may be removed
 - 5.9.13.2 Doors and Latches

- 5.9.13.2.1** Doors must be retained and also meet current roll cage rules regarding side bars. The non-movable frame around the door window may not be removed. Door inner panels may be removed and door may be gutted
- 5.9.13.3** Firewalls
- 5.9.13.4** Ballast
- 5.9.13.5** Weight
- 5.9.13.6** Floorboards
- 5.9.13.7** Bumpers
- 5.9.13.8** Mirrors
- 5.9.13.9** Skid Plates
- 5.9.13.10** Storage
- 5.9.13.11** Fenders
 - 5.9.13.11.1** Wheel openings in fender may be enlarged and flared for tire clearance but stock profile must be retained. Front fender inner panels may be removed. Attachment of fenders, inner panels, and radiator to a front hoop is acceptable provided stock external appearance is retained. Body and fender material may not be substituted with the exception of hoods, trunk lids, fenders and/or bed sides and doors
- 5.9.13.12** Chassis and Body
- 5.9.13.13** Manufacturer/importing distributor body to chassis combination must be retained
- 5.9.14** CHASSIS
 - 5.9.14.1** Original stock wheel base must be maintained. Chassis and frames may be strengthened by adding material but must retain stock unit intact.
- 5.9.15** BODY
 - 5.9.15.1** Body must maintain original shape, size, configuration, and appearance. Additional mounts or parts for body strengthening may be added. Mounting location (vertical, horizontal, lateral) in relationship to the frame must remain stock. The measurement from the center line of the front spindle to the back of the b-pillar post must remain stock plus or minus 1". Hoods, trunk lids, fenders, and/or bed sides and doors are required to be in the stock location but may be of any material. Dropped grill assemblies are required. All external sheet metal must remain stock. No internal sheet metal is required. Safety glass windshield, sides, and rear are optional. Hardtops with tops removed are not permitted. Pickup bed must retain stock dimensions but mounting location is optional. Pickup bed floor may be removed. Tail gate and pickup bed front panels are optional.
 - 5.9.15.2** Hoses
 - 5.9.15.3** Identification Markings
 - 5.9.15.4** Advertising on Vehicles
 - 5.9.15.5** Workmanship

5.10 MINI METAL

5.10.1 OPEN PRODUCTION

5.10.2 LIMITED 2 WHEEL DRIVE VEHICLES

5.10.2.1 MUST BE A PRODUCTION APPEARING LIGHT DUTY TRUCK

5.10.3 GENERAL REGULATIONS

5.10.3.1 Entrants in this class shall comply with all applicable general regulations

5.10.4 COMPETITION REGULATIONS

5.10.4.1 This is a limited class and all components will be considered open unless it says otherwise in these rules

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

5.10.5 SAFETY EQUIPMENT

5.10.5.1 Helmets

5.10.5.2 Protective Clothing

5.10.5.3 Eye Protection

5.10.5.4 First Aid Kit

5.10.5.5 Caution Signs

5.10.5.6 Horns

5.10.5.7 Reflectors

5.10.5.8 Fire Extinguisher

5.10.5.9 Survival Supplies

5.10.6 SUSPENSION COMPONENTS

5.10.6.1 Wheelbase is not to exceed 111". Track width is not to exceed 76" outside of tire to outside of tire. Front wheel travel is limited to 21.5" and rear wheel travel is limited to 23". 4 link rear suspension is allowed. Floating rear end is permitted. Anti-sway bars are permitted

5.10.6.2 Shock Absorbers and Bump Stops

5.10.6.2.1 Is limited to one coil-over and one by-pass shock per corner. No bump stops allowed. Secondary Suspension

5.10.6.2.2 No secondary suspension allowed

5.10.6.3 Wheels and Tires

5.10.6.4 Fasteners

5.10.7 STEERING AND BRAKE COMPONENTS

5.10.7.1 Steering

5.10.7.1.1 No steering quickeners allowed

5.10.7.2 Brakes

5.10.8 ELECTRICAL SYSTEM

5.10.8.1 Ignition

5.10.8.2 Batteries

5.10.8.3 Lights

5.10.8.4 Starters

5.10.9 FUEL SYSTEM

5.10.9.1 Fuel

5.10.9.2 Fuel Tanks

5.10.9.2.1 Safety fuel cells are required.

5.10.9.3 Fuel Lines, Vents, Caps

5.10.10 ENGINE, TRANSMISSION AND DRIVELINE

5.10.10.1 Engine and Engine Displacement

5.10.10.1.1 2.2 liter Ecotec

5.10.10.2 Engine Replacement

5.10.10.3 Transmission

5.10.10.3.1 GM 3-speed Turbo 350 or 3-speed Turbo 400 automatic transmission

5.10.11 DIFFERENTIAL

5.10.11.1 Rear differential is limited to a 9" rear end. Floating rear end is allowed.

5.10.11.2 Throttles

5.10.11.3 Exhaust

5.10.11.4 Drive Shafts

5.10.11.5 Flywheel Shields

5.10.11.6 Fluid Coolers

5.10.11.7 Auxiliary Equipment

5.10.11.8 Superchargers and Turbochargers

5.10.12 VEHICLE SAFETY EQUIPMENT

5.10.12.1 Roll Cages

5.10.12.2 Safety Harness

5.10.12.3 Safety Nets

5.10.12.4 Seating

5.10.13 GENERAL VEHICLE COMPONENTS

5.10.13.1 Drivers Compartment

5.10.13.2 Doors and Latches

5.10.13.3 Firewalls

5.10.13.4 Ballast

5.10.13.5 Weight

5.10.13.5.1 Minimum weight of 2,500 lbs.

5.10.13.6 Floorboards

5.10.13.7 Bumpers

5.10.13.8 Mirrors

5.10.13.9 Skid Plates

5.10.13.10 Storage

5.10.13.11 Fenders

5.10.13.12 Chassis and Body

5.10.13.12.1 Chassis is a complete tubular frame. Fiberglass body must resemble a light duty truck

5.10.13.13 Hoses

5.10.13.14 Identification Markings

5.10.13.15 Advertising on Vehicles

5.10.13.16 Workmanship

5.11 CLASS 7

5.11.1 UNLIMITED MINI TRUCK

5.11.2 GENERAL REGULATIONS

5.11.2.1 Entrants in this class shall comply with all applicable general regulations

5.11.3 COMPETITION REGULATIONS

5.11.3.1 This is an open class, and all items shall be considered open unless stated otherwise in the following regulations.

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

5.11.4 SAFETY EQUIPMENT

5.11.4.1 Helmets

5.11.4.2 Protective Clothing

5.11.4.3 Eye Protection

5.11.4.4 First Aid Kit

5.11.4.5 Caution Signs

5.11.4.6 Horns

5.11.4.7 Reflectors

5.11.4.8 Fire Extinguisher

5.11.4.9 Survival Supplies

5.11.5 SUSPENSION COMPONENTS

5.11.5.1 Suspension is open, with a maximum width of 87" measured from outside of tire to outside of tire,

5.11.5.2 measured at the spindle centerline, horizontal to the ground, with vehicle at ride height. Secondary Suspension

5.11.5.3 Secondary suspension allowed but with the secondary system disconnected. The primary

5.11.5.4 system must be capable of maintaining ride height plus or minus 1.5"

5.11.5.5 Wheels and Tires

5.11.5.6 Fasteners

5.11.6 STEERING AND BRAKE COMPONENTS

5.11.6.1 Steering

5.11.6.2 Brakes

5.11.7 ELECTRICAL SYSTEM

5.11.7.1 Ignition

5.11.7.2 Batteries

5.11.7.3 Lights

5.11.7.4 Starters

5.11.8 FUEL SYSTEM

5.11.8.1 Fuel

5.11.8.2 Fuel Tanks

5.11.8.3 Safety fuel cells are required

5.11.8.4 Fuel Lines, Vents, Caps

5.11.9 ENGINE, TRANSMISSION AND DRIVELINE

5.11.9.1 Engine and Engine Displacement

5.11.9.1.1 Engine is limited to 6 cylinders. Engine placement is open, and can be moved as necessary on the chassis. There are NO placement restrictions.

5.11.9.2 Engine Replacement

5.11.9.3 Transmission

5.11.9.4 Throttles

5.11.9.5 Exhaust

5.11.9.6 Drive Shafts

5.11.9.7 Flywheel Shields

- 5.11.9.8 Fluid Coolers
- 5.11.9.9 Auxiliary Equipment
- 5.11.9.10 Superchargers and Turbochargers
- 5.11.10 VEHICLE SAFETY EQUIPMENT
 - 5.11.10.1 Roll Cages
 - 5.11.10.2 Safety Harness
 - 5.11.10.3 Safety Nets
 - 5.11.10.4 Seating
- 5.11.11 GENERAL VEHICLE COMPONENTS
 - 5.11.11.1 Drivers Compartment
 - 5.11.11.2 Doors and Latches
 - 5.11.11.3 Firewalls
 - 5.11.11.4 Ballast
 - 5.11.11.5 Weight
 - 5.11.11.6 Floorboards
 - 5.11.11.7 Bumpers
 - 5.11.11.8 Mirrors
 - 5.11.11.9 Skid Plates
 - 5.11.11.10 Storage
- 5.11.12 BODY
 - 5.11.12.1 Body must resemble a truck or SUV, and carry the emblem of the manufacture of the body type, i.e. Ford, Chevy etc.. Body material may be fiberglass, metal or carbon fiber.
 - 5.11.12.2 Hoses
 - 5.11.12.3 Identification Markings
 - 5.11.12.4 Advertising on Vehicles
 - 5.11.12.5 Workmanship

5.12 CLASS 7S

5.12.1 OPEN PRODUCTION – MINI/ MID-SIZE PICKUPS OR SUV’S

5.12.2 VEHICLES BUILT FROM A TWO WHEEL DRIVE OR FOUR WHEEL DRIVE MINI, MID-SIZED PICKUP OR SUV. VEHICLES MUST HAVE BEEN SERIES PRODUCED IN QUANTITIES OF 5000 UNITS WITHIN A 12 MONTH PERIOD AND BE READILY AVAILABLE TO THE GENERAL PUBLIC IN THE USA. VEHICLE MUST BE MARKETED AS A MINI, MID-SIZED PICKUP OR SUV

5.12.3 GENERAL REGULATIONS

5.12.3.1 Entrants in this class shall comply with all applicable general regulations.

5.12.4 COMPETITION REGULATIONS

5.12.4.1 The body, engine, and chassis must be of the SAME Manufacturer. This class is an open production class and all components will be considered open unless restricted herein

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

5.12.5 SAFETY EQUIPMENT

5.12.5.1 Helmets

5.12.5.2 Protective Clothing

5.12.5.3 Eye Protection

5.12.5.4 First Aid Kit

5.12.5.5 Caution Signs

5.12.5.6 Horns

5.12.5.7 Reflectors

5.12.5.8 Fire Extinguisher

5.12.5.9 Survival Supplies

5.12.6 SUSPENSION COMPONENTS

5.12.6.1 Suspension parts may be strengthened, reinforced, or replaced. Suspension must retain the original design and concept. Pivot points must remain in stock location. Mounting points may be strengthened. Ball joints are open to any manufacture. Front springs must retain stock concept (leaf, coil, torsion) and remain in stock location. Spring rates and capacities are open. Rear springs open length. Spring may be mounted above or below axles, spring rates and capacities are open. Two single point anti-wrap up bars may be used on the rear differential.

5.12.6.2 Vehicles must have true leaf springs, spring under or spring over, no quarter elliptical systems allowed. Leaf springs must attach to one solid point on frame and one shackle. Front suspension is open. Equal length I beams are allowed; no bulkheads or center mounted A arms. Must have full frames. C notching allowed, must retain full frame.

5.12.6.3 NO TUBE FRAMES.

5.12.6.4 Shock Absorbers and Bump Stops

5.12.6.4.1 Number of shocks and mounting methods are open. Mounting points may be redesigned, strengthened, and modified. Remote mounted shocks are not allowed. Shocks may not protrude thru hood. Hydraulic bump stops are allowed as long as wheel travel and frame rules are observed; no air shocks.

5.12.6.5 Secondary Suspension

5.12.6.5.1 No secondary suspension allowed.

5.12.6.6 Wheels and Tires

5.12.6.7 Fasteners

5.12.7 STEERING AND BRAKE COMPONENTS

5.12.7.1 Steering

5.12.7.2 OPEN Brakes

5.12.8 ELECTRICAL SYSTEM

5.12.8.1 Ignition

5.12.8.2 Batteries

5.12.8.3 Lights

- 5.12.8.3.1 Any manufacture lights may be used but stock headlight opening must be retained
- 5.12.8.4 Starters
- 5.12.9 FUEL SYSTEM
 - 5.12.9.1 Fuel
 - 5.12.9.2 Fuel Tanks
 - 5.12.9.2.1 Safety fuel cells are required
 - 5.12.9.3 Fuel Lines, Vents, Caps
- 5.12.10 ENGINE, TRANSMISSION AND DRIVELINE
 - 5.12.10.1 Engine and Engine Displacement
 - 5.12.10.2 STOCK Factory Engine must be one of original manufacturer with a maximum of six cylinders. Any other engine of the same manufacturer/importing distributor may be used providing:
 - 5.12.10.2.1 It retains a maximum of six cylinders as originally produced by the factory
 - 5.12.10.2.2 It retains the same number of camshafts
 - 5.12.10.2.3 It retains the same number of valves per cylinder
 - 5.12.10.2.4 It does not displace more than 3000cc. Engine must be readily available to the general public in the USA. Any make of carburetor will be allowed with a maximum of one venturi per cylinder. Any make or type of fuel injection allowed.
 - 5.12.10.2.5 Must have a stock factory part number.
 - 5.12.10.3 No rotary piston engines are allowed in this class.
 - 5.12.10.4 Items with no restrictions include:
 - 5.12.10.4.1 Oil and water cooling systems are allowed. The radiator must remain in the stock location.
 - 5.12.10.4.2 Air cleaners
 - 5.12.10.4.3 Fuel pumps
 - 5.12.10.4.4 Exhaust system
 - 5.12.10.5 Water and vapor injection not allowed unless originally equipped. Engine must be located in the stock mounting location as delivered from the factory plus or minus 1". This will be measured from the center line of the front spindle to the back of the block
 - 5.12.10.6 Engine Replacement
 - 5.12.10.7 Transmission
 - 5.12.10.8 Transmission is open provided it is listed and delivered by the manufacture of the vehicle. Rear differential is open. Gear ratios, carriers, axles, and floating hubs are optional.
 - 5.12.10.9 Throttles
 - 5.12.10.10 Exhaust
 - 5.12.10.11 Drive Shafts
 - 5.12.10.12 Flywheel Shields
 - 5.12.10.13 Fluid Coolers
 - 5.12.10.14 Auxiliary Equipment
 - 5.12.10.15 Superchargers and Turbochargers
- 5.12.11 VEHICLE SAFETY EQUIPMENT
 - 5.12.11.1 Roll Cages
 - 5.12.11.2 Safety Harness
 - 5.12.11.3 Safety Nets
 - 5.12.11.4 Seating
 - 5.12.11.5 Any seat may be used but must remain in the approximate stock location
- 5.12.12 GENERAL VEHICLE COMPONENTS
 - 5.12.12.1 Drivers Compartment
 - 5.12.12.1.1 The dash is optional. Upholstered panels, head liners, and carpets may be removed
 - 5.12.12.2 Doors and Latches
 - 5.12.12.3 Firewalls
 - 5.12.12.4 Ballast

5.12.12.5 Weight

5.12.12.5.1 All vehicles have a minimum weight of 3250lbs

5.12.12.6 Floorboards

5.12.12.7 Bumpers

5.12.12.8 Mirrors

5.12.12.9 Skid Plates

5.12.12.10 Storage

5.12.12.11 Fenders

5.12.12.12 Front and rear fenders may be fiberglass

5.12.12.13 Chassis and Body

5.12.12.13.1 Removing 6' front or rear overall for bumpers is allowed. C notching frame is allowed, must retain full frame.

5.12.13 BODY

5.12.13.1 Body must maintain original shape, size, configuration, and appearance. Additional mounts or parts for body strengthening may be added. Mounting location (vertical, horizontal, lateral) in relationship to the frame must remain stock. Must use steel cab. No fiberglass cabs allowed. Hoods, fenders, and/or bed sides and doors are required to be in the stock location but may be of any material. Safety glass windshield, sides, and rear are optional. Hardtops with tops removed are not permitted.

5.12.13.2 Hoses

5.12.13.3 Identification Markings

5.12.13.4 Advertising on Vehicles

5.12.13.5 Workmanship

5.13 HEAVY METAL

5.13.1 OPEN PRODUCTION – FULL SIZE/MINI OR MIDSIZE TRUCKS WITH V8 ENGINES

5.13.2 GENERAL REGULATIONS

5.13.2.1 Entrants in this class shall comply with all applicable general regulations

5.13.3 COMPETITION REGULATIONS

5.13.3.1 This is an open class and all components will be considered open unless it says otherwise in these rules.

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

5.13.4 SAFETY EQUIPMENT

5.13.4.1 Helmets

5.13.4.2 Protective Clothing

5.13.4.3 Eye Protection

5.13.4.4 First Aid Kit

5.13.4.5 Caution Signs

5.13.4.6 Horns

5.13.4.7 Reflectors

5.13.4.8 Fire Extinguisher

5.13.4.9 Survival Supplies

5.13.5 SUSPENSION COMPONENTS

5.13.5.1 Shock Absorbers and Bump Stops

5.13.5.2 Secondary Suspension

5.13.5.3 Wheels and Tires

5.13.5.4 Fasteners

5.13.6 STEERING AND BRAKE COMPONENTS

5.13.6.1 Steering

5.13.6.2 Brakes

5.13.7 ELECTRICAL SYSTEM

5.13.7.1 Ignition

5.13.7.2 Batteries

5.13.7.3 Lights

5.13.7.4 Starters

5.13.8 FUEL SYSTEM

5.13.8.1 Fuel

5.13.8.2 Fuel Tanks

5.13.8.2.1 Safety fuel cells are required

5.13.8.3 Fuel Lines, Vents, Caps

5.13.9 ENGINE, TRANSMISSION AND DRIVELINE

5.13.9.1 Engine and Engine Displacement

5.13.9.1.1 Engine does not need to match vehicle type and may be re-positioned but must remain in front of driver/co driver.

5.13.9.2 Engine Replacement

5.13.9.3 Transmission

5.13.9.4 Throttles

5.13.9.5 Exhaust

5.13.9.6 Drive Shafts

5.13.9.7 Flywheel Shields

5.13.9.8 Fluid Coolers

5.13.9.9 Auxiliary Equipment

5.13.9.10 Superchargers and Turbochargers

5.13.10 VEHICLE SAFETY EQUIPMENT

5.13.10.1 Roll Cages

5.13.10.2 Safety Harness

5.13.10.3 Safety Nets

5.13.10.4 Seating

5.13.11 GENERAL VEHICLE COMPONENTS

5.13.11.1 Drivers Compartment

5.13.11.2 Doors and Latches

5.13.11.3 Firewalls

5.13.11.4 Ballast

5.13.11.5 Weight

5.13.11.6 Floorboards

5.13.11.7 Bumpers

5.13.11.8 Mirrors

5.13.11.9 Skid Plates

5.13.11.10 Storage

5.13.11.11 Fenders

5.13.11.12 Chassis and Body

5.13.11.12.1 Must have steel cab and working doors with factory hinges. Hoses

5.13.11.13 Identification Markings

5.13.11.14 Advertising on Vehicles

5.13.11.15 Workmanship

5.14 CLASS 8

5.14.1 OPEN PRODUCTION – FULL SIZE UTILITY VEHICLE

- 5.14.1.1 VEHICLES MUST BE BUILT FROM A FULL SIZE TWO WHEEL DRIVE UTILITY TYPE VEHICLE. VEHICLES MUST HAVE BEEN SERIES PRODUCED IN QUANTITIES OF AT LEAST 5,000 UNITS WITHIN A 12 MONTH PERIOD AND BE READILY AVAILABLE TO THE GENERAL PUBLIC IN THE USA

5.14.2 GENERAL REGULATIONS

- 5.14.2.1 Entrants in this class shall comply with all applicable general regulations.

5.14.3 COMPETITION REGULATIONS

- 5.14.3.1 Manufacturer's body, engine, and chassis combinations must be retained. This class is an open production class and all components will be considered open unless restricted herein. Cast iron engine block only.

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

5.14.4 SAFETY EQUIPMENT

- 5.14.4.1 Helmets
- 5.14.4.2 Protective Clothing
- 5.14.4.3 Eye Protection
- 5.14.4.4 First Aid Kit
- 5.14.4.5 Caution Signs
- 5.14.4.6 Horns
- 5.14.4.7 Reflectors
- 5.14.4.8 Fire Extinguisher
- 5.14.4.9 Survival Supplies

5.14.5 SUSPENSION COMPONENTS

- 5.14.5.1 Stock wheelbase must be utilized +/- 2 inches. Tires must retract inside of fenders. Spindles may be reinforced or replaced but must retain the original stock concept. Front suspension must be of the same basic design and concept as (a-arm, struts, i-beam, etc.) as available by chassis manufacturer. Suspension parts may be strengthened, reinforced, or replaced. Pivot points are open. Ball joints may be of any manufacturer. Spindles may be of any manufacturer and may be reinforced. Vehicles with straight axle front ends may modify suspension configuration to utilize a four link and coil over shock system.
- 5.14.5.2 Rear suspension must utilize an automotive type differential. Suspension support system is open
- 5.14.5.3 (quarter-elliptical, coil over, four link, etc.) outboard mounted rear springs are permitted. Spring
- 5.14.5.4 rates and capacities are open. Front and rear track width is limited to 80 inches maximum as measured from centerline of tire to centerline of tire. Tires must retract inside of fender wells. Front and rear wheel travel is open.
- 5.14.5.5 Shock Absorbers and Bump Stops
 - 5.14.5.5.1 Number of shocks and mounting methods are open. Mounting points may be redesigned, strengthened, and modified. Remote mounted shocks are allowed. Shocks may not protrude thru hood. No air shocks allowed.
- 5.14.5.6 Secondary Suspension
 - 5.14.5.6.1 Secondary suspension is permitted. Ride height must be retained plus or minus 1.5 inches with secondary suspension disconnected.
- 5.14.5.7 Wheels and Tires
- 5.14.5.8 Fasteners

5.14.6 STEERING AND BRAKE COMPONENTS

- 5.14.6.1 Steering
 - 5.14.6.1.1 Steering box location is optional. Steering box mounting may be reinforced by adding material. Power steering is permitted. Steering box may be replaced.
 - 5.14.6.1.2 Steering parts (tie rods, tie rod ends, idler arms, relay rods, and turning arms) may be specially made. Heim ends are optional. Any manufacturer steering wheel may be used.

5.14.6.2 Brakes

5.14.7 ELECTRICAL SYSTEM

- 5.14.7.1** Ignition
- 5.14.7.2** Batteries
- 5.14.7.3** Lights
- 5.14.7.4** Starters

5.14.8 FUEL SYSTEM

- 5.14.8.1** Fuel
- 5.14.8.2** Fuel Tanks
- 5.14.8.3** Safety fuel cells are required. Fuel cell location is optional. Fuel cell may be sunk in to the bed. Rear frame member may be relocated or replaced in order to sink fuel cell.
- 5.14.8.4** Fuel Lines, Vents, Caps

5.14.9 ENGINE, TRANSMISSION AND DRIVELINE

5.14.9.1 Engine and Engine Displacement

- 5.14.9.1.1** Engines must be of the same manufacturer, design and type and have the same number of cylinders originally installed by the manufacturer. Any displacement engine may be used so long as the original block casting remains the same. Engine must be readily available to the general public in the USA. Any make of automotive carburetor may be used but is restricted to one four barrel. Stock factory fuel injection may be used. Items with no restrictions include:

- 5.14.9.1.1.1** Strengthening and balancing
- 5.14.9.1.1.2** Valve train and camshaft
- 5.14.9.1.1.3** Bore and stroke
- 5.14.9.1.1.4** Pistons
- 5.14.9.1.1.5** Blueprinting
- 5.14.9.1.1.6** Oil and water cooling systems
- 5.14.9.1.1.7** Air cleaners
- 5.14.9.1.1.8** Fuel pumps
- 5.14.9.1.1.9** Exhaust system

- 5.14.9.2** Water and vapor injection not allowed unless originally equipped. Engine must be located in the stock mounting location as delivered from the factory plus or minus 1". This will be measured from the center line of the front spindle to the back of the block. Height will be measured from center of crank to frame rail

5.14.9.3 Engine Replacement

5.14.9.4 Transmission

- 5.14.9.4.1** Transmission is open. Rear differential is open but must remain stock concept. Gear ratios, carriers, axles, and floating hubs are optional.

5.14.9.5 Throttles

5.14.9.6 Exhaust

5.14.9.7 Drive Shafts

5.14.9.8 Flywheel Shields

5.14.9.9 Fluid Coolers

5.14.9.10 Auxiliary Equipment

5.14.9.11 Superchargers and Turbocharger

5.14.10 VEHICLE SAFETY EQUIPMENT

5.14.10.1 Roll Cages

5.14.10.2 Safety Harness

5.14.10.3 Safety Nets

5.14.10.4 Seating

- 5.14.10.4.1** Any seat may be used but must remain in the approximate stock location.

5.14.11 GENERAL VEHICLE COMPONENTS

5.14.11.1 Drivers Compartment

- 5.14.11.1.1** The dash is optional. Upholstered panels, head liners, and carpets may be removed.

- 5.14.11.2** Doors and Latches
- 5.14.11.3** Firewalls Ballast
- 5.14.11.4** Weight
 - 5.14.11.4.1** Vehicles must weigh a minimum weight of 4000lbs dry
- 5.14.11.5** Floorboards
- 5.14.11.6** Bumpers
- 5.14.11.7** Mirrors
- 5.14.11.8** Skid Plates
- 5.14.11.9** Storage
- 5.14.11.10** Fenders
 - 5.14.11.10.1** Wheel openings in fender may be enlarged and flared for tire clearance but stock profile must be retained. Front fender inner panels may be removed. Attachment of fenders, inner panels and radiator is open, provided stock external appearance is retained. Body and fender material is open.
- 5.14.11.11** Chassis and Body
 - 5.14.11.11.1** Original wheel base +/- 2 inches must be retained. Frames may be strengthened by adding material but must retain stock configuration, size, and shape. No removal of materials allowed. Frame must remain stock length but may be notched 8 inches from the front for ground clearance as long as the top of frame rail is not modified. The rear frame may have hydraulic bump stops installed through the upper and lower rail but rail must be cut or drilled only large enough for the installation of such bump stop. The frame over the rear axle may be notched. The notch must not exceed up into the web of the frame more than a maximum of 3 1/2 inches of the original frame web. The top frame rail must remain stock.
- 5.14.12** BODY
 - 5.14.12.1** Truck must maintain a production appearing body. Stock appearing grill and head light opening must be retained. Body subject to BOR approval. Measurement from the centerline of the front spindle to the back of the B-pillar post must remain stock +/- 1 inch.
 - 5.14.12.2** Identification Markings
 - 5.14.12.3** Advertising on Vehicles
 - 5.14.12.4** Workmanship

5.15 CLASS 9

5.15.1 OPEN WHEEL – 100" WHEEL BASE

5.15.2 SINGLE AND TWO SEAT BUGGIES WITH A MAXIMUM WHEEL BASE OF 100" VEHICLE PARTS ARE BASED ON A TYPE 1 VW

5.15.3 GENERAL REGULATIONS

5.15.3.1 Entrants in this class shall comply with all applicable general regulations.

5.15.4 COMPETITION REGULATIONS

5.15.4.1 All parts called out for in this class shall remain in their stock shape, size, and configuration unless otherwise stated herein. There will be no rule changes unless safety related in this class for a period of five years. If it does not say you can change or replace a part you CAN'T do it!!!

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

5.15.5 SAFETY EQUIPMENT

5.15.5.1 Helmets

5.15.5.2 Protective Clothing

5.15.5.3 Eye Protection

5.15.5.4 First Aid Kit

5.15.5.5 Caution Signs

5.15.5.6 Horns

5.15.5.7 Reflectors

5.15.5.8 Fire Extinguisher

5.15.5.9 Survival Supplies

5.15.6 SUSPENSION COMPONENTS

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

5.15.7 FRONT SUSPENSION

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

5.15.8 REAR SUSPENSION

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

5.15.8.2 Shock Absorbers and Bump Stops

5.15.8.3 Only one shock per wheel is allowed. Outside diameter of shock may not be larger than 65mm. shock shafts may not have a diameter larger than .875". Front shocks must be mounted in the stock location. Rear shocks may be mounted in any location. Rear shocks may not have an extended length longer than 31.5". Shock reservoirs allowed. Shocks may be of any manufacturer. No air or coil over shocks allowed. No external bypass shocks.

5.15.8.4 Secondary Suspension

5.15.8.4.1 No secondary suspension allowed.

5.15.8.5 Wheels and Tires

5.15.8.6 Must use a 15" steel rim, 5" wide maximum with any standard offset. Any pneumatic tire and size allowed up to a 33" tall and 10" wide as mounted on 5" x 15" rim with 18lbs of air

5.15.8.7 Fasteners

5.15.9 STEERING AND BRAKE COMPONENTS

- 5.15.9.1** Steering
 - 5.15.9.1.1** Steering box may be of any origin. No power steering allowed. Any tie rod and tie rod end allowed
- 5.15.9.2** Brakes
 - 5.15.9.2.1** Original VW type drum brakes only. Type 1, 2, 3, and 181 any combination of brake shoes. Any combination of VW wheel cyl. Dual master cylinders allowed. Turning brake allowed. Aluminum center drums allowed. Steel spline center is allowed with the aluminum hub that attaches to a VW drum.
- 5.15.10** ELECTRICAL SYSTEM
 - 5.15.10.1** Ignition
 - 5.15.10.1.1** Battery ignition only, no magnetos. Six or twelve volt systems may be used. Any distributor may be used. Any VW type alternator or generator in the stock location may be used. Electronic ignition allowed. No crank fired ignition.
 - 5.15.10.2** Batteries
 - 5.15.10.2.1** Battery must be sealed from driver's compartment.
 - 5.15.10.3** Lights
 - 5.15.10.4** Starters
- 5.15.11** FUEL SYSTEM
 - 5.15.11.1** Fuel
 - 5.15.11.1.1** Automotive pump gas only. This means only fuel sold to the general public for use in domestic cars.
 - 5.15.11.2** Fuel Tanks
 - 5.15.11.2.1** Safety fuel cells are required. Fuel cell may not hold more than 22 gallons. Electric fuel pump may be used but must be used as a backup and routed through the stock system.
 - 5.15.11.3** Fuel Lines, Vents, Caps.
- 5.15.12** ENGINE, TRANSMISSION AND DRIVELINE
 - 5.15.12.1** Engine and Engine Displacement
 - 5.15.12.1.1** Engine must utilize VW series type 1, 1600cc, U.S model sedan components and dimensions. The maximum allowable engine displacement is 1584cc as delivered from the factory.
- 5.15.13** ENGINE CASE
 - 5.15.13.1** Any VW type 1, 2, 3 or "universal" case is allowed. The following modifications may be made to the stock case:
 - 5.15.13.1.1** The case may be line bored.
 - 5.15.13.1.2** The case may be drilled and tapped for oil and temp sending units.
 - 5.15.13.1.3** The case may be machined for crank pulley seal.
 - 5.15.13.1.4** Case savers may be installed.
 - 5.15.13.1.5** Cylinder seating surface may be machined
 - 5.15.14.1.6** Oil galleries may be enlarged to 10mm
 - 5.15.14.1.7** Threaded oil gallery plugs allowed
 - 5.15.14.1.8** Oil squirters allowed.
 - 5.15.14.1.9** Case may be full flowed.
 - 5.15.14.1.10** The case can have gussets welded on top.
- 5.15.14** OIL PUMP
 - 5.15.14.1** Any oil pump is allowed. No deep sumps, dry sumps, or sump alterations. Windage trays allowed. Any oil bypass piston and spring allowed. Full flow systems ok. No Accusump systems allowed.
- 5.15.15** FUEL PUMP
 - 5.15.15.1** Stock fuel pump must be used. Electric fuel pump may be used but must be used as a backup and routed through the stock system. Any fuel filters and pressure regulators allowed,
- 5.15.16** PISTONS
 - 5.15.16.1** Pistons must be stock 3 ring only. Any piston and acyl as long as original stock dimensions are maintained. Any type wrist pin keepers. Piston assemblies may be balanced to the weight in grams of the lightest original non balanced piston, wrist pin, etc. total seal rings allowed.
- 5.15.17** CONNECTING RODS

- 5.15.17.1** Any VW aftermarket connecting rod is allowed as long as the rods are stock VW length (5.393) and stock weight with a 500 gram minimum with one (1) rod untouched. No polishing or profiling of rods.
- 5.15.18** CRANKSHAFT
- 5.15.19** Crankshaft must be stock VW. Crankshaft may be balanced. Maximum journal size is limited to .030" undersize. No polishing or lightening. No offset grinding allowed. Any gear is allowed. Any engine bearing is allowed as long as stock dimensions are maintained. Power pulleys are not allowed. Pulley may be balanced. Sand seals ok. Any VW flywheel may be lightened and balanced. Flywheel may be 8 dowel pinned. Any gland nut. No aluminum flywheels. Any clutch disk and pressure plate but must retain stock VW diameter. Aluminum stock sized pulley ok.
- 5.15.20** HEADS
- 5.15.21** Heads must be U.S sedan stock single port or dual port or their equivalent. Only dual port heads with the following numbers will be allowed. 040101375 2, 040101375 13, 040101375 19 or stock OEM heads will be allowed. Heads may be fly cut for clean up. Minimum of 42 cc's in combustion chamber. No porting or polishing. Stock intake 34mm original equipment center section or its replacement. A 1" by 1.5" long by ½ inch tube may be welded 2 inches below the carb flange. A minimum of material may be removed from the end of the tube for clearance. A 1 5/8 X 2" long slip tube may be welded to the end of the runners for use of better hose connection. End castings must be original equipment VW, with the VW logo and part numbers. Balance slot may be welded closed. Vacuum hole may be plugged. A 34mm to 30mm carb adapter must be used. 7.5 to 1 is the maximum compression ratio.
- 5.15.22** CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS
 - 5.15.22.1** Any camshaft, gear, single valve spring, steel valve spring retainers and lifters are allowed. Valve spring seat diameter in head must remain stock. Valves must be stock 45 degrees. One piece valve ok. Valve guide may be steel, bronze, or cast iron. No grinding or polishing in the port including valve guide. Must use stock 1600 rocker arms. The rocker arms may be resurfaced to permit use of swivel feet. No other grinding or changes may be made to the rocker arms. No roller or needle bearings will be allowed as part of the camshaft or as an interface between the rocker arms and the camshaft. Any push rods and push rod tubes. Any valve adj screws. Stock valve covers only
- 5.15.23** FAN SHROUD
 - 5.15.23.1** Only stock VW fan shrouds are allowed. No 36 horse doghouse shrouds allowed. All sheet metal must be stock. Valve covers and sheet metal may be modified a minimum to allow the use of engine breathers
- 5.15.24** CARBURETOR
 - 5.15.24.1** Stock VW carb 30 pct 1, 2, 3 or the Solex h-30-pic replacement must be used. Maximum venturi size is 24.10mm. Velocity stacks may be used as long as they are not bonded to the carburetor. No internal modifications are allowed. This includes no removing of parts, no grinding, polishing, or filing. Intake manifolds must be stock one piece only. No chemical milling of manifold or carburetor. Choke housing may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used. Vacuum advance port may be removed and plugged
 - 5.15.24.2** Engine Replacement
 - 5.15.24.3** Transmission
 - 5.15.24.3.1** Type 1 bug 4 speed swing axle only. Heavy duty side plates and differential allowed. Stock VW type 1 ring and pinion ratios only (4.37 and 4.12). Stock VW type 1 gears only. Close ratio 3rd and 4th allowed. Axle cover tubes allowed. Other internal modifications are optional. No 3.88 ring and pinions and no close 1 and 2 gear shafts.
 - 5.15.24.4** Throttles
 - 5.15.24.5** Exhaust
 - 5.15.24.5.1** Any manufacturers exhaust allowed.
 - 5.15.24.6** Fluid Coolers
 - 5.15.24.6.1** Any oil cooler allowed with the location optional. Full flow systems are allowed. No deep sumps or dry sumps will be allowed.
 - 5.15.24.7** Auxiliary Equipment
 - 5.15.24.8** Superchargers and Turbochargers
- 5.15.25** VEHICLE SAFETY EQUIPMENT
 - 5.15.25.1** Roll Cages

- 5.15.25.2** Safety Harness
- 5.15.25.3** Safety Nets
- 5.15.25.4** Seating
- 5.15.26** GENERAL VEHICLE COMPONENTS
 - 5.15.26.1** Drivers Compartment
 - 5.15.26.2** Doors and Latches
 - 5.15.26.3** Firewalls
 - 5.15.26.4** Ballast
 - 5.15.26.5** Weight
 - 5.15.26.5.1** Single seat = 1550 lbs. Double seat = 1350 lbs.
 - 5.15.26.6** Floorboards
 - 5.15.26.7** Bumpers
 - 5.15.26.8** Mirrors
 - 5.15.26.9** Skid Plates
 - 5.15.26.10** Storage
 - 5.15.26.11** Chassis and Body
 - 5.15.26.11.1** Maximum wheel base is 100" inches. Measured at ride height.
 - 5.15.26.12** Hoses
 - 5.15.26.13** Identification Markings
 - 5.15.26.14** Advertising on Vehicles
 - 5.15.26.15** Workmanship

5.16 CLASS 10

5.16.1 OPEN WHEEL – LIMITED MOTOR

5.16.1.1 SINGLE OR TWO SEAT VEHICLES LIMITED IN ENGINE SIZE

5.16.2 GENERAL REGULATIONS

5.16.2.1 Entrants in this class shall comply with all applicable general regulations

5.16.3 COMPETITION REGULATIONS

5.16.3.1 This class is an open class and all components will be considered open unless restricted herein

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

5.16.4 SAFETY EQUIPMENT

5.16.4.1 Helmets

5.16.4.2 Protective Clothing

5.16.4.3 Eye Protection

5.16.4.4 First Aid Kit

5.16.4.5 Caution Signs

5.16.4.6 Horns

5.16.4.7 Reflectors

5.16.4.8 Fire Extinguisher

5.16.4.9 Survival Supplies

5.16.5 SUSPENSION COMPONENTS

5.16.5.1 Shock Absorbers and Bump Stops

5.16.5.2 Secondary Suspension

5.16.5.3 Wheels and Tires

5.16.5.4 Fasteners

5.16.6 STEERING AND BRAKE COMPONENTS

5.16.6.1 Steering

5.16.6.2 Brakes

5.16.7 ELECTRICAL SYSTEM

5.16.7.1 Ignition

5.16.7.2 Batteries

5.16.7.3 Lights

5.16.7.4 Starters

5.16.8 FUEL SYSTEM

5.16.8.1 Fuel

5.16.8.2 Fuel Tanks

5.16.8.3 Safety fuel cells are required

5.16.8.4 Fuel Lines, Vents, Caps

5.16.9 ENGINE, TRANSMISSION AND DRIVELINE

5.16.9.1 Engine and Engine Displacement

5.16.9.1.1 Any engine may be used providing:

5.16.9.1.1.1 It is a design that has been series produced in quantities of 5000 units or more in a 12 month period and is readily available to the general public in the U.S.A.

5.16.9.1.1.2 It did not displace more than 2000cc in the stock form.

5.16.9.1.1.3 It retains a maximum of four valves per cylinder. (4) It is not a rotary piston engine.

5.16.9.1.1.4 It does not displace more than the following:

5.16.9.2 Air Cooled Engines

5.16.9.2.1 Single-seat 2100cc – four (4) cylinder push rod.

5.16.9.2.2 May utilize two (2) carburetors or stock fuel injection.

- 5.16.9.2.3 Two-seat 2180cc – four (4) cylinder push rod.
- 5.16.9.2.4 May utilize two (2) carburetors or stock fuel injection.
- 5.16.9.3 Water Cooled Engines.
 - 5.16.9.3.1 Single-seat 1990cc – 8 valve single Two barrel carburetor with a maximum venture size of 38mm.
 - 5.16.9.3.2 Single-seat 1940cc – 16 valve Single two barrel carburetor with a maximum venture size of 38mm or stock fuel injection with maximum throttle body of 55.5cm.
 - 5.16.9.3.3 Two-seat 1990cc – 8 valve single two barrel carburetor. Maximum venture size of 40mm.
 - 5.16.9.3.4 Two-seat 1940cc – 16 valve Single two barrel carburetor with a maximum venture size of 40mm or stock fuel injection with maximum throttle body of 56.5cm.
- 5.16.9.4 Single or Two seat vehicles may use carburetors providing:
 - 5.16.9.4.1 1. It retains a maximum of 2 (two) ventures per carburetor.
 - 5.16.9.4.2 2. Maximum allowable venture size is 40mm for two seat and 38mm for single seat vehicles.
 - 5.16.9.4.3 3. Carburetor(s) must be of the production automotive type.
- 5.16.9.5 Stock Production Engines
 - 5.16.9.5.1 All stock production engines are to be inspected and sealed by TURNKEY ENGINE SUPPLY, WIKS RACING ENGINES OR MAJOR PERFORMANCE to be certified as stock replacement.
 - 5.16.9.5.2 Stock production engines must be stock as delivered from the factory except for the following:
 - 5.16.9.5.2.1 Oil and water cooling systems. (no dry sumps)
 - 5.16.9.5.2.2 Exhaust system, including exhaust manifold. c. Fuel pumps.
 - 5.16.9.5.2.3 ECU
 - 5.16.9.5.2.4 Oil pan may be modified or replaced f. Power steering pump.
 - 5.16.9.5.2.5 Alternator h. Air filter
 - 5.16.9.5.2.6 Belts and pulleys
 - 5.16.9.5.2.7 Fly by wire is allowed.
- 5.16.9.6 GM ECOTEC 2.2cc or 2.4cc
 - 5.16.9.6.1 Stock production gm Ecotec 4 cyl. 2.2 or 2.4 Allowed in either single seat or two seat vehicles. Pistons must be stock or stock replacement pistons, must retain stock dimensions.
 - 5.16.9.6.2 2.2 Or 134 CI will be 86mm bore and 94.6mm stroke.
 - 5.16.9.6.3 2.4 Or 145 CI will be 88mm bore and 98mm stroke.
 - 5.16.9.6.4 2.2 or 2.4 Ecotec Direct port injection will be allowed in single and two seat vehicles but must meet the minimum weight:
 - 5.16.9.6.5 Minimum weight of 2100lbs for two seat vehicles.
 - 5.16.9.6.6 Minimum weight of 2300lbs for single seat vehicles.
 - 5.16.9.6.7 Non-Direct Port injection vehicles must meet the minimum weight:
 - 5.16.9.6.8 Minimum weight of 2000lbs for two seat vehicles.
 - 5.16.9.6.9 Minimum weight of 2200lbs for single seat vehicles.
- 5.16.9.7 FORD ECOBOOST
 - 5.16.9.7.1 2.0 liter,16 valve, I4-DI-TIVCT Direct port injection will be allowed in single seat or two seat vehicles but must meet the minimum weight:
 - 5.16.9.7.2 Minimum weight of 1950lbs for two seat vehicles.
 - 5.16.9.7.3 Minimum weight of 2050lbs for single seat vehicles.
- 5.16.9.8 HONDA
 - 5.16.9.8.1 2.4 direct port injection will be allowed in single and two seat vehicles providing the single seat vehicles weigh a minimum of 2400lbs displacement: 2,354cc
 - 5.16.9.8.2 Bore and stroke: 87mm x99mm (3.43 x 3.90 inches) (143.6ci). The two seat vehicles weigh a minimum of 2300lbs.
 - 5.16.9.8.3 Stock K24 series engine as delivered from the manufacture to vehicles sold in the USA by Honda. Engine cannot be rebuilt. Must be tagged and sealed by one of the company's on the list.
- 5.16.9.9 Stock production engines must abide the following:
 - 5.16.9.9.1 Camshaft must be stock or equal replacement only.

- 5.16.9.9.2** Camshaft must retain original manufacture specifications. Head / valve train must remain per manufactures original specifications. After Market valve train is prohibited, no porting or polishing of head. Must retain manufactures original specifications.
- 5.16.9.9.3** Intake manifold will remain as delivered from manufacture. It must retain its stock shape, size and configuration. No porting or other modifications will be allowed.
- 5.16.9.9.4** Throttle body will remain as delivered from the manufacturer, not to exceed 65mm on blade. No dry sump systems.
- 5.16.9.9.5** Fuel injection is stock with the following restrictions:
 - 5.16.9.9.5.1** Intake manifold will remain as delivered by the manufacture. It will retain its stock shape, size, and configuration. No porting or other modifications. Ports may be matched to heads, but matching may not exceed .250 inches ¼ deep. Manifold must be the unit that was installed and delivered on the engine by the original manufacture. Only U.S.A. delivery fuel injection is allowed. Direct port injection allowed.
 - 5.16.9.9.5.2** Manifold must be installed and sold on production vehicles that are sold for highway use in the U.S.A. and be readily available to the general public.
 - 5.16.9.9.5.3** Throttle body must be production (OEM) type readily available to the general public in the U.S.A. (FLY BY WIRE IS OK.)
- 5.16.9.9.6** All stock production engines are to be inspected and sealed by TURNKEY ENGINE SUPPLY, WIKS RACING ENGINES,OR MAJOR PERFORMANCE to be certified as stock replacement.
- 5.16.9.10** Engine Replacement
- 5.16.9.11** Transmission
- 5.16.9.12** Throttles
- 5.16.9.13** Exhaust
- 5.16.9.14** Drive Shafts
- 5.16.9.15** Flywheel Shields
- 5.16.9.16** Fluid Coolers
- 5.16.9.17** Auxiliary Equipment
- 5.16.9.18** Superchargers and Turbochargers
- 5.16.10** VEHICLE SAFETY EQUIPMENT
 - 5.16.10.1** Roll Cages
 - 5.16.10.2** Safety Harness
 - 5.16.10.3** Safety Nets
 - 5.16.10.4** Seating
- 5.16.11** GENERAL VEHICLE COMPONENTS
 - 5.16.11.1** Drivers Compartment
 - 5.16.11.2** Doors and Latches
 - 5.16.11.3** Firewalls
 - 5.16.11.4** Ballast
 - 5.16.11.5** Weight
 - 5.16.11.6** Floorboards
 - 5.16.11.7** Bumpers
 - 5.16.11.8** Mirrors
 - 5.16.11.9** Skid Plates
 - 5.16.11.10** Storage
 - 5.16.11.11** Fenders
 - 5.16.11.12** Chassis and Body
 - 5.16.11.13** Hoses
 - 5.16.11.14** Identification Markings
 - 5.16.11.15** Advertising on Vehicles
 - 5.16.11.16** Workmanship

5.16.12 If BOR at any time during the racing season determines that any particular brand or make of engine has an advantage, we may equalize that engine either by a reduction in cc 's, or the use of a restrictor plate or by weight limit change. These changes may be required during the racing season.

5.17 Class 11 STOCK BUG

5.17.1 STOCK VW SEDANS

5.17.2 MUST BE A STOCK VW SEDAN AS DELIVERED IN THE U.S.A.

5.17.3 GENERAL REGULATIONS

5.17.3.1 Entrants in this class shall comply with all applicable general regulations.

5.17.4 COMPETITION REGULATIONS

5.17.4.1 Any questions concerning chassis combinations will be decided by referring to VW factory parts manuals and /or VW of America booklet. This is a stock production class and all components must remain stock except for those modifications allowed herein.

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

5.17.5 SAFETY EQUIPMENT

5.17.5.1 Helmets

5.17.5.2 Protective Clothing

5.17.5.3 Eye Protection

5.17.5.4 First Aid Kit

5.17.5.5 Caution Signs

5.17.5.6 Horns

5.17.5.7 Reflectors

5.17.5.8 Fire Extinguisher

5.17.5.9 Survival Supplies

5.17.6 SUSPENSION COMPONENTS FRONT SUSPENSION

5.17.6.1 Front axle torsion tube centers may be cut, rotated, rewelded to increase ground clearance or front adjusters may be used. Original seams may be welded (not reinforced) on the front beam. Shock towers may be additionally supported by the adding of a single gusset; gusset may not extend more than 2" above top torsion tube.

5.17.6.2 Stock front spindles and trailing arms must be used no additional material may be used. Sway bars may be removed. Filling of speedometer hole is permitted. Steering arm on spindle may be reinforced by welding a .25 gusset from the top of the spindle to the end of the steering arm. Front snubbers may be of any manufacture but must retain stock dimension and mounting methods. Suspension limiters allowed.

5.17.7 REAR SUSPENSION

5.17.7.1 Rear suspension torsion bars may be of any origin. Rear suspension springs may be of any origin. Torsion bar adjusters are allowed. Torsion bar grommets may be of any manufacturer but must retain stock VW dimensions.

5.17.7.2 Rear torsion bars may be additionally supported only by the attachment of a terminal end (support member) of the roll cage. Rear shock tower may be removed to body mounting bolt hole. Lower rear shock mounts may be removed or replaced, but must bolt directly to rear trailing arm or swing axle. No remote mounted shocks. Rear trailing arms must remain stock, shape, size and configuration, but may be reinforced by adding material.

5.17.7.3 Shock Absorbers and Bump Stops

5.17.7.4 Only one shock per wheel is allowed. Stock front shock mounts must be utilized. Shock mounting bolts may be changed to a maximum of 1/2 in diameter. Any manufacture shock allowed with 2.0" maximum outside diameter. Rear shock must not have an extended length longer than 18", center of mounting hole to center of mounting hole. Cooling fins and/or reservoirs allowed. No air shocks or coil over shocks allowed. No hydraulic bump stops allowed. No bypass shocks allowed.

5.17.7.5 Secondary Suspension

5.17.7.5.1 No secondary suspension allowed.

5.17.7.6 Wheels and Tires

5.17.7.6.1 Any stock VW steel 4" x 15" wheel that bolts on a stock VW brake drum may be used. Wheel studs allowed. Any manufacturers tire and size allowed up to 31" tall and 10" wide as mounted and inflated on a 4" wide rim with 18 lbs of air. Spare tire is mandatory but may be mounted any place within body shell or trunk.

5.17.7.7 Fasteners

5.17.8 STEERING AND BRAKE COMPONENTS

5.17.8.1 Steering

5.17.8.1.1 Any manufacturer's steering wheel may be used. Steering shaft is open. Use of pillow blocks is allowed. Steering box must be stock, but shims may be used between pitman arm and box. Steering components such as ball joints, steering arms, and tie rods must remain stock.

5.17.8.2 Brakes

5.17.8.2.1 Original VW type 1 drum brakes only on all wheels. Front and rear drums may not be interchanged. Any combination of brake linings allowed as long as stock dimensions are maintained. Any combination of VW master and wheel cylinders are allowed. Emergency brake is optional but if removed the opening must be covered.

5.17.9 ELECTRICAL SYSTEM

5.17.9.1 Ignition

5.17.9.2 Battery ignition only, no magnetos. Six or twelve volt systems may be used regardless of year model. Any manufacturer's distributor may be used. Any VW type alternator or generator system in the stock location may be used.

5.17.10 Batteries

5.17.10.1 Battery must be relocated. If in the driver's compartment it must be covered or sealed to prevent acid from leaking in case of roll over.

5.17.10.2 Lights

5.17.10.3 Additional lighting is permitted. Headlights are optional for short course only. Stock headlights may be replaced with any brand so long as original mounting position is used.

5.17.10.4 Pre-1967 model headlight lenses may be removed. Tail and stop lights must remain functional. Front and rear turn indicators are optional. Back up lighting may not be directed towards the engine compartment or function in any gear but reverse.

5.17.10.5 Starters

5.17.11 FUEL SYSTEM

5.17.11.1 Fuel

5.17.11.2 Fuel Tanks

5.17.11.2.1 Safety fuel cells are required and may be mounted any where and have any capacity. Stock tanks may be used in the stock location. Any type of fuel shut off valve allowed. Stock fuel pump must be used. Electric fuel pump may be used but must be used as a backup and routed thru the stock system.

5.17.11.3 Fuel Lines, Vents, Caps

5.17.11.3.1 Fuel fillers may penetrate and extend through hood but must have a drain/catch boot in case of spillage in front compartment. Fuel cell filler may be located in center of tank and have a maximum of a 2.25" internal diameter neck.

5.17.12 ENGINE, TRANSMISSION AND DRIVELINE

5.17.12.1 Engine and Engine Displacement

5.17.12.1.1 Engine must utilize VW series type 1, 1600cc, U.S. model sedan components and dimensions. The maximum allowable engine displacement is 1600cc as delivered from the factory

5.17.13 ENGINE CASE

5.17.13.1 Any VW type 1, 2, 3 or "universal" case is allowed. The following modifications may be made to the stock case:

5.17.13.1.1 The case may be line bored

5.17.13.1.2 The case may be drilled and tapped for oil and temp sending units

5.17.13.1.3 The case may be machined for crank pulley seal

5.17.13.1.4 Case savers may be installed

5.17.13.1.5 Cylinder seating surface may be machined

5.17.12.1.6 Oil galleries may be enlarged to 10mm

5.17.12.1.7 Threaded oil gallery plugs allowed

5.17.12.1.8 oil squirters ok

- 5.17.12.1.9** case may be full flowed
- 5.17.14 OIL PUMP**
- 5.17.14.1** Any oil pump is allowed. No deep sumps, dry sumps, or sump alterations. Windage trays allowed. Any oil bypass piston and spring allowed. No Accusump systems allowed.
- 5.17.15 FUEL PUMP**
- 5.17.15.1** Stock fuel pump must be used. Electric fuel pump may be used but must be used as a backup and routed thru the stock system. Any fuel filter and pressure regulators may be used.
- 5.17.16 PISTONS**
- 5.17.16.1** Pistons must be stock 3 ring only. Any piston and cyl as long as original stock dimensions are maintained. Any type wrist pin keepers. Piston assemblies may be balanced to the weight in grams of the lightest original non balanced piston, wrist pin, etc.. Total seal rings are ok.
- 5.17.17 CONNECTING RODS**
- 5.17.17.1** Any VW aftermarket connecting rod is allowed as long as the rods are stock VW length (5.393) and stock weight with a 500 gram minimum with one (1) rod untouched. No polishing or profiling of rods.
- 5.17.18 CRANKSHAFT**
- 5.17.18.1** Crankshaft must be stock VW. Crankshaft may be balanced. Maximum journal size is limited to .030" undersize. No polishing or lightening. Offset grinding allowed max 69.5mm. Any gear is allowed. Any engine bearing is allowed as long as stock dimensions are maintained. Power pulleys are allowed. Pulley may be balanced. Sand seals ok. Any VW flywheel may be lightened and balanced.
- 5.17.18.2** No aluminum flywheels. Any clutch disk and pressure plate, but must retain stock VW diameter.
- 5.17.19 HEADS**
- 5.17.19.1** Heads must be U.S sedan stock single port or dual port or their equivalent. Only dual port heads with the following numbers will be allowed. 040101375 2, 040101375 13, 040101375 19 or stock OEM heads will be allowed. Heads may be fly cut for clean up. No porting or polishing. Stock intake 34mm original equipment center section or its replacement. A 1" by 1.5" long by ½ inch tube may be welded 2 inches below the carb flange. A minimum of material may be removed from the end of the tube for clearance. A 1 5/8 X 2" long slip tube may be welded to the end of the runners for use of better hose connection. End castings must be original equipment VW, with the VW logo and part numbers. Balance slot may be welded closed. Vacuum hole may be plugged. A 34mm to 30mm carb adapter must be used.
- 5.17.20 CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS**
- 5.17.20.1** Any camshaft, gear, valve springs, valve spring retainers, and lifters are allowed. Valve guide may be steel, bronze, or cast iron. No grinding or polishing in the port Any camshaft, gear, valve spring retainers, lifters are allowed. Beehive springs allowed, Valve spring seat diameter in head must remain stock. May use any valve but must be stock 45 degrees and stock dimensions and 8mm stem size. no titanium valves allowed. including valve guide must use stock VW 1600 rocker arms. The rocker arms may be resurfaced to permit the use of swivel feet. No other grinding or changes may be made to the rocker arms. No roller or needle bearings will be allowed as part of the camshaft or as an interface between the rocker arms and the camshaft. Any push rods and push rod tubes. Any valve adj screws. Clips on rocker arms may be wire tied. Rocker assemblies may be subject to post race inspection.
- 5.17.21 FAN SHROUD**
- 5.17.21.1** Must use stock VW fan shroud. Heater tubes optional.
- 5.17.22 CARBURETOR**
- 5.17.22.1** Air cleaner location is optional and may be of any manufacturer.
- 5.17.22.2** Stock VW carb 30 pict 1, 2, 3 or the Solex h-30-pic replacement must be used. Maximum venturi size is 24.10mm. Velocity stacks may be used as long as they are not bonded to the carburetor. No internal modifications are allowed. This includes no removing of parts, no grinding, polishing, or filing. Intake manifolds must be stock. The cutting of manifolds to compensate for head milling is allowed but rewelding will not be allowed. No chemical milling of manifold or carburetor. Choke housing may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used
- 5.17.23 LOW COMPRESSION ENGINE OPTION**

- 5.17.23.1** 1600cc maximum displacement and 8 to 1 compression ratio, must use same heads as high compression engine with same valve size and no porting at all. Stock VW end castings with VW part numbers must be used, no polishing allowed. An EMPI or WEBER 40 or 44 idf carb may be used and tube style intake manifold, No Plenum Manifolds allowed. Must use a maximum 26mm venturi This is a pump gas only engine option with a maximum of 91 octane.
- 5.17.23.2** Engine Replacement
- 5.17.23.3** Transmission
 - 5.17.23.3.1** Type 1 bug 4 speed transaxle only. Heavy duty side plate and differential allowed. 8.33 (4.12) ring and pinion only. Stock VW 1st, 2nd, 3rd, 4th gears only, no close ratio gears allowed. Axle over tubes are not allowed. Other internal modifications are optional. Rear transaxle mounts may be supported by a maximum of two vertical straps of .025" x 1" dimension. Adjustable straps are optional. Any gearshift lever allowed. Shift tube must be inside tunnel. Any type 1, 2 or 181 stub axle and any VW cv joint. Oversize bolts ok.
- 5.17.23.4** Throttles
 - 5.17.23.4.1** Stock pedals with no other modifications are allowed.
- 5.17.23.5** Exhaust
 - 5.17.23.5.1** Any exhaust system may be used.
- 5.17.23.6** Drive Shafts
- 5.17.23.7** Flywheel Shields
- 5.17.23.8** Fluid Coolers
 - 5.17.23.8.1** Any manufacturer's oil cooler is allowed with the location optional. Full flow systems ok.
 - 5.17.23.8.2** No deep sumps or dry sump will be allowed. Late model housing approved.
- 5.17.23.9** Auxiliary Equipment
- 5.17.23.10** Superchargers and Turbochargers
- 5.17.24** VEHICLE SAFETY EQUIPMENT
 - 5.17.24.1** Roll Cages
 - 5.17.24.2** There are no restrictions as to terminal points of the roll cage.
 - 5.17.24.3** Safety Harness
 - 5.17.24.4** Safety Nets
 - 5.17.24.5** Seating
 - 5.17.24.6** Any manufacturer's seat allowed but must remain in the approximate location. If stock seat mounts are used, then they must be reinforced using at least two "u" bolts per seat runner.
- 5.17.25** GENERAL VEHICLE COMPONENTS
 - 5.17.25.1** Drivers Compartment
 - 5.17.25.1.1** Rear seat, upholstered panels, headliner and carpets may be removed. Dash may be covered with metal to install gauges.
 - 5.17.25.2** Doors and Latches
 - 5.17.25.2.1** Doors must remain functional and in original stock location. Doors may have original hinges with workable latch. Secondary positive latching devices are mandatory.
 - 5.17.25.3** Firewalls
 - 5.17.25.4** Ballast
 - 5.17.25.5** Weight
 - 5.17.25.6** Floorboards
 - 5.17.25.6.1** Serial numbers are required on floor pan. No alterations to floor pan are allowed. Original seams may be rewelded. Undercoating may be removed. 1965 and older belly pans may be interchanged. 1966 to 1968 belly pans may be interchanged. 1969 or later belly pans may be interchanged. All must maintain original suspension type.
 - 5.17.25.7** Bumpers
 - 5.17.25.7.1** Original stock bumpers and over riders must be used. Stock VW bumper stiffeners are allowed. Brush guards may be added to stock bumpers.
 - 5.17.25.8** Mirrors
 - 5.17.25.9** Skid Plates

- 5.17.25.9.1** Any type front and rear skid plate may be used. Front skid plate may be attached to front beam using 2 “u” bolts with a maximum width of 1.5” attached to the skid plate. Skid plate may be extended forward and upward to but not above the top of the front bumper.
- 5.17.25.10** Storage
- 5.17.25.11** Fenders
- 5.17.25.12** Fender lips on the underside may be flattened to prevent cutting of tires. A rod of .25” maximum diameter may be welded under the outside edge for additional strength.
- 5.17.25.13** Chassis and Body
 - 5.17.25.13.1** The vehicle must retain full chassis and body with no modifications allowed. Rear apron may be removable to aid in removing engine. But must retain stock external appearance. Body must be VW type one bug or sun roof bug. No convertibles, Ghias, Type 181 Things, variants or super beetles.
 - 5.17.25.13.2** Running boards may be removed. Front and rear hood latches may be modified or replaced. Hinges must remain stock. Front rear and side glass optional. Chrome strips, outside mirrors, antennas may be removed. A hole no larger than 1 inch in diameter larger than the shock OD may be cut in the rear fender well to allow for the rear shock.
- 5.17.25.14** Hoses
- 5.17.25.15** Identification Markings
- 5.17.25.16** Advertising on Vehicles
- 5.17.25.17** Workmanship

5.18 CLASS 12

5.18.1 OPEN WHEEL – AIR COOLED

5.18.1.1 SINGLE OR TWO SEAT VEHICLES LIMITED TO AIR COOLED ENGINES

5.18.2 GENERAL REGULATIONS

5.18.2.1 Entrants in this class shall comply with all applicable general regulations.

5.18.3 COMPETITION REGULATIONS

5.18.3.1 This class is an open class and all components will be considered open unless restricted herein

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

5.18.4 SAFETY EQUIPMENT

5.18.4.1 Helmets

5.18.4.2 Protective Clothing

5.18.4.3 Eye Protection

5.18.4.4 First Aid Kit

5.18.4.5 Caution Signs

5.18.4.6 Horns

5.18.4.7 Reflectors

5.18.4.8 Fire Extinguisher

5.18.4.9 Survival Supplies

5.18.5 SUSPENSION COMPONENTS Front suspension

5.18.5.1 Front suspension is limited to VW type 1 configuration. Suspension must be of the twin beam, trailing arm type. Beam is open. This includes width and manufacturer.

5.18.5.2 Trailing arms are open this includes width length and manufacturer.

5.18.5.3 Spindles are open.

5.18.5.4 Shock Absorbers and Bump Stops

5.18.5.5 Secondary Suspension

5.18.5.6 Wheels and Tires

5.18.5.7 Fasteners

5.18.6 STEERING AND BRAKE COMPONENTS

5.18.6.1 Steering

5.18.6.2 Brakes

5.18.7 ELECTRICAL SYSTEM

5.18.7.1 Ignition

5.18.7.2 Batteries

5.18.7.3 Lights

5.18.7.4 Starters

5.18.8 FUEL SYSTEM

5.18.8.1 Fuel

5.18.8.2 Fuel Tanks

5.18.8.3 Safety fuel cells are required.

5.18.8.4 Fuel Lines, Vents, Caps

5.18.9 ENGINE, TRANSMISSION AND DRIVELINE

5.18.9.1 Engine and Engine Displacement

5.18.9.2 Engine must be VW air cooled type and conforms to the following:

5.18.9.2.1 it retains a maximum of two valves per cylinder.

5.18.9.2.2 single seat vehicles do not displace more than 1776cc.

5.18.9.2.3 Two seat vehicles do not displace more than 1835cc. (4) All vehicles limited to 1 carb of any type.

- 5.18.9.2.4 Carb retains a maximum of 2 venturies per cyl.
- 5.18.9.2.5 Maximum allowable venture size for two valve engines is 42mm. (7) Carburetors must be of the automotive type.
- 5.18.9.2.6 This is a rear engine class only; engine must be located behind rear axle centerline.
- 5.18.9.3 NEW CLASS 12 ENGINE OPTION
 - 5.18.9.3.1 Engine must be a Type 1 VW Displacement:
 - 5.18.9.3.1.1 Single Seat vehicles do not displace more than 2110cc Two Seat Vehicles do not displace more than 2276cc
Any Bore/Stroke Combination Allowed
 - 5.18.9.3.2 Carburetors & manifolds:
 - 5.18.9.3.2.1 Individual runner manifolds only, No balance tube. 1 3/4in maximum runner size. No Plenum Manifolds allowed.
 - 5.18.9.3.2.2 OE End Castings only Allowed. Any modifications allowed. All vehicles limited to 1 carburetor
 - 5.18.9.3.2.3 Weber 44IDF & EMPI HPMX 44 carburetor only allowed
 - 5.18.9.3.2.4 Maximum venturi size is 34mm
 - 5.18.9.3.3 Piston: Open
 - 5.18.9.3.4 Crankshaft: Open
 - 5.18.9.3.4.1 Compression Ratio: Maximum compression ratio limited to 9.0:1.
 - 5.18.9.3.5 Cylinder Heads:
 - 5.18.9.3.5.1 Any manufacture cylinder head. Titanium retainers are allowed. Any valve size and manufacture allowed.
Any valve spring size and manufacture allowed.
 - 5.18.9.3.6 Camshaft and Rocker Arms:
 - 5.18.9.3.6.1 Only 1.1:1 & 1.25:1 rocker arms allowed. No roller tip rockers allowed. Any rocker shaft manufacture allowed.
 - 5.18.9.3.7 Any camshaft and lifter manufacture allowed.
 - 5.18.9.3.8 Any Timing Gears allowed.
 - 5.18.9.3.9 Aftermarket VW type fan shrouds allowed. Has to be upright type 1 VW shroud. No Porsche 911 shrouds allowed.
 - 5.18.9.3.10 Oil pump and oil system:
 - 5.18.9.3.10.1 Any manufacture oil pump is allowed. Dry sump, deep sump, and Accusump systems allowed. Ignition
 - 5.18.9.3.11 Any ignition system allowed
- 5.18.9.4 Engine Replacement
- 5.18.9.5 Transmission
- 5.18.9.6 Throttles
- 5.18.9.7 Exhaust
- 5.18.9.8 Drive Shafts
- 5.18.9.9 Flywheel Shields
- 5.18.9.10 Fluid Coolers
- 5.18.9.11 Auxiliary Equipment
- 5.18.9.12 Superchargers and Turbochargers.
- 5.18.10 VEHICLE SAFETY EQUIPMENT
 - 5.18.10.1 Roll Cages
 - 5.18.10.2 Safety Harness
 - 5.18.10.3 Safety Nets
 - 5.18.10.4 Seating
- 5.18.11 GENERAL VEHICLE COMPONENTS
 - 5.18.11.1 Drivers Compartment
 - 5.18.11.2 Doors and Latches
 - 5.18.11.3 Firewalls
 - 5.18.11.4 Ballast
 - 5.18.11.5 Weight Minimum 1500 lbs.

- 5.18.11.6** Floorboards
- 5.18.11.7** Bumpers
- 5.18.11.8** Mirrors
- 5.18.11.9** Skid Plates
- 5.18.11.10** Storage
- 5.18.11.11** Fenders
- 5.18.11.12** Chassis and Body
- 5.18.11.13** Hoses
- 5.18.11.14** Identification Markings
- 5.18.11.15** Advertising on Vehicles
- 5.18.11.16** Workmanship

5.19 CLASS 13

5.19.1 SPORTSMAN BUGGY OPEN WHEEL – 1600CC

5.19.1.1 SINGLE OR TWO SEAT VEHICLES LIMITED TO 1600CC

5.19.2 GENERAL REGULATIONS

5.19.2.1 Entrants in this class shall comply with all applicable general regulations.

5.19.3 COMPETITION REGULATIONS

5.19.3.1 This class is an open class and all components will be considered open unless restricted herein

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

5.19.4 SAFETY EQUIPMENT

5.19.4.1 Helmets

5.19.4.2 Protective Clothing

5.19.4.3 Eye Protection

5.19.4.4 First Aid Kit

5.19.4.5 Caution Signs

5.19.4.6 Horns

5.19.4.7 Reflectors

5.19.4.8 Fire Extinguisher

5.19.4.9 Survival Supplies

5.19.5 SUSPENSION COMPONENTS

5.19.5.1 Shock Absorbers and Bump Stops

5.19.5.1.1 Any number of shocks but no coilover or air shocks

5.19.5.2 Secondary Suspension

5.19.5.2.1 No secondary suspension allowed

5.19.5.3 Wheels and Tires

5.19.5.4 Fasteners

5.19.6 STEERING AND BRAKE COMPONENTS

5.19.6.1 Steering

5.19.6.2 Brakes

5.19.7 ELECTRICAL SYSTEM

5.19.7.1 Ignition

5.19.7.2 Batteries

5.19.7.3 Lights

5.19.7.4 Starters

5.19.8 FUEL SYSTEM

5.19.8.1 Fuel

5.19.8.2 Fuel Tanks

5.19.8.2.1 Safety fuel cells are required

5.19.8.3 Fuel Lines, Vents, Caps

5.19.9 ENGINE, TRANSMISSION AND DRIVELINE

5.19.9.1 Engine and Engine Displacement

5.19.9.1.1 VW type engine only with a maximum displacement of 1600cc. Dual port heads allowed. Any internal modification allowed. Limited to one carb of any make. All other modifications ok Low compression engine option, 8.5 to 1 limited to 1776cc single carb of any make with a max venture size of 36mm, any heads all other modifications are allowed.

5.19.9.2 Engine Replacement

5.19.9.3 Transmission

- 5.19.9.4** Throttles
- 5.19.9.5** Exhaust
- 5.19.9.6** Drive Shafts
- 5.19.9.7** Flywheel Shields
- 5.19.9.8** Fluid Coolers
- 5.19.9.9** Auxiliary Equipment
- 5.19.9.10** Superchargers and Turbochargers
- 5.19.10** VEHICLE SAFETY EQUIPMENT
 - 5.19.10.1** Roll Cages
 - 5.19.10.2** Safety Harness
 - 5.19.10.3** Safety Nets
 - 5.19.10.4** Seating
- 5.19.11** GENERAL VEHICLE COMPONENTS
 - 5.19.11.1** Drivers Compartment
 - 5.19.11.2** Doors and Latches
 - 5.19.11.3** Firewalls
 - 5.19.11.4** Ballast
 - 5.19.11.5** Weight
 - 5.19.11.6** Floorboards
 - 5.19.11.7** Bumpers
 - 5.19.11.8** Mirrors
 - 5.19.11.9** Skid Plates
 - 5.19.11.10** Storage
 - 5.19.11.11** Fenders
 - 5.19.11.12** Chassis and Body
 - 5.19.11.13** Hoses
 - 5.19.11.14** Identification Markings
 - 5.19.11.15** Advertising on Vehicles
 - 5.19.11.16** Workmanship

5.20 CLASS 15

5.20.1 UNLIMITED SPORTSMAN BUGGY OPEN WHEEL

5.20.1.1 SINGLE OR TWO SEAT VEHICLES OVER 1585CC

5.20.2 GENERAL REGULATIONS

5.20.2.1 Entrants in this class shall comply with all applicable general regulations

5.20.3 COMPETITION REGULATIONS

5.20.3.1 This class is an open class and all components will be considered open unless restricted herein

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

5.20.4 SAFETY EQUIPMENT

5.20.4.1 Helmets

5.20.4.2 Protective Clothing

5.20.4.3 Eye Protection

5.20.4.4 First Aid Kit

5.20.4.5 Caution Signs

5.20.4.6 Horns

5.20.4.7 Reflectors

5.20.4.8 Fire Extinguisher

5.20.4.9 Survival Supplies

5.20.5 SUSPENSION COMPONENTS

5.20.5.1 Shock Absorbers and Bump Stops

5.20.5.2 Secondary Suspension

5.20.5.3 Wheels and Tires

5.20.5.4 Fasteners

5.20.6 STEERING AND BRAKE COMPONENTS

5.20.6.1 Steering

5.20.6.2 Brakes

5.20.7 ELECTRICAL SYSTEM

5.20.7.1 Ignition

5.20.7.2 Batteries

5.20.7.3 Lights

5.20.7.4 Starters

5.20.8 FUEL SYSTEM

5.20.8.1 Fuel

5.20.8.2 Fuel Tanks

5.20.8.3 Safety fuel cells are required

5.20.8.4 Fuel Lines, Vents, Caps

5.20.9 ENGINE, TRANSMISSION AND DRIVELINE

5.20.9.1 Engine and Engine Displacement

5.20.9.2 Engine Replacement

5.20.9.3 Transmission

5.20.9.4 Throttles

5.20.9.5 Exhaust

5.20.9.6 Drive Shafts

5.20.9.7 Flywheel Shields

5.20.9.8 Fluid Coolers

5.20.9.9 Auxiliary Equipment

- 5.20.9.10** Superchargers and Turbochargers
- 5.20.9.11** VEHICLE SAFETY EQUIPMENT
- 5.20.9.12** Roll Cages
- 5.20.9.13** Safety Harness
- 5.20.9.14** Safety Nets
- 5.20.9.15** Seating
- 5.20.10** GENERAL VEHICLE COMPONENTS
 - 5.20.10.1** Drivers Compartment
 - 5.20.10.2** Doors and Latches
 - 5.20.10.3** Firewalls
 - 5.20.10.4** Ballast
 - 5.20.10.5** Weight
 - 5.20.10.6** Floorboards
 - 5.20.10.7** Bumpers
 - 5.20.10.8** Mirrors
 - 5.20.10.9** Skid Plates
 - 5.20.10.10** Storage
 - 5.20.10.11** Fenders
 - 5.20.10.12** Chassis and Body
 - 5.20.10.13** Hoses
 - 5.20.10.14** Identification Markings
 - 5.20.10.15** Advertising on Vehicles
 - 5.20.10.16** Workmanship

5.21 CLASS 1450

5.21.1 SPORTSMAN TRUCK

5.21.1.1 PRODUCTION MINI OR FULL SIZE TRUCK

5.21.1.2 THIS CLASS IS OPEN TO ANY FULL OR MINI TRUCK WITH ALL THE SAFETY EQUIPMENT

5.21.2 GENERAL REGULATIONS

5.21.2.1 Entrants in this class shall comply with all applicable general regulations

5.21.3 COMPETITION REGULATIONS

5.21.3.1 This class is an open class and all components will be considered open unless restricted herein

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

5.21.4 SAFETY EQUIPMENT

5.21.4.1 Helmets

5.21.4.2 Protective Clothing

5.21.4.3 Eye Protection

5.21.4.4 First Aid Kit

5.21.4.5 Caution Signs

5.21.4.6 Horns

5.21.4.7 Reflectors

5.21.4.8 Fire Extinguisher

5.21.4.9 Survival Supplies

5.21.5 SUSPENSION COMPONENTS

5.21.5.1 Shock Absorbers and Bump Stops

5.21.5.2 Secondary Suspension

5.21.5.3 Wheels and Tires

5.21.5.4 Fasteners

5.21.6 STEERING AND BRAKE COMPONENTS

5.21.6.1 Steering

5.21.6.2 Brakes

5.21.7 ELECTRICAL SYSTEM

5.21.7.1 Ignition

5.21.7.2 Batteries

5.21.7.3 Lights

5.21.7.4 Starters

5.21.8 FUEL SYSTEM

5.21.8.1 Fuel

5.21.8.2 Fuel Tanks

5.21.8.3 Safety fuel cells are required

5.21.8.4 Fuel Lines, Vents, Caps

5.21.9 ENGINE, TRANSMISSION AND DRIVELINE

5.21.9.1 Engine and Engine Displacement

5.21.9.1.1 Engine, transmission, and rear end are OPEN with no limitations. Engine Replacement

5.21.9.2 Transmission

5.21.9.3 Throttles

5.21.9.4 Exhaust

5.21.9.5 Drive Shafts

5.21.9.6 Flywheel Shields

5.21.9.7 Fluid Coolers

- 5.21.9.8 Auxiliary Equipment
- 5.21.9.9 Superchargers and Turbochargers
 - 5.21.9.9.1 Forced Induction is allowed
- 5.21.10 VEHICLE SAFETY EQUIPMENT
 - 5.21.10.1 Roll Cages
 - 5.21.10.2 Safety Harness
 - 5.21.10.3 Safety Nets
 - 5.21.10.4 Seating
- 5.21.11 GENERAL VEHICLE COMPONENTS
 - 5.21.11.1 Drivers Compartment
 - 5.21.11.2 Doors and Latches
 - 5.21.11.3 Firewalls
 - 5.21.11.3.1 The firewall, floor and rear wall of the cab may be modified to allow room for drive train, suspension components or seats but must be of metal construction
 - 5.21.11.4 Ballast
 - 5.21.11.5 Weight
 - 5.21.11.6 Floorboards
 - 5.21.11.7 Bumpers
 - 5.21.11.8 Mirrors
 - 5.21.11.9 Skid Plates
 - 5.21.11.10 Storage
 - 5.21.11.11 Fenders
 - 5.21.11.12 Chassis and Body
 - 5.21.11.12.1 Material may be removed from inside of cab to allow room for roll cage.
 - 5.21.11.12.2 MUST HAVE STEEL CAB AND STEEL WORKING DOORS.
 - 5.21.11.13 Hoses
 - 5.21.11.14 Identification Markings
 - 5.21.11.14.1 Numbers must be black on white or white on black.
 - 5.21.11.15 Advertising on Vehicles
 - 5.21.11.16 Workmanship

5.21.12 CLASS 2000 - SPORTSMAN TRUCK (leaf spring)

5.21.12.1 PRODUCTION MINI OR FULL SIZE TRUCK

5.21.12.2 THIS CLASS IS OPEN TO ANY FULL OR MINI TRUCK WITH ALL THE SAFETY EQUIPMENT

5.21.13 GENERAL REGULATIONS

5.21.13.1 Entrants in this class shall comply with all applicable general regulations.

5.21.14 COMPETITION REGULATIONS

5.21.14.1 This class is an open class and all components will be considered open unless restricted herein

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

5.21.15 SAFETY EQUIPMENT

5.21.15.1 Helmets

5.21.15.2 Protective Clothing

5.21.15.3 Eye Protection

5.21.15.4 First Aid Kit

5.21.15.5 Caution Signs

5.21.15.6 Horns

5.21.15.7 Reflectors

5.21.15.8 Fire Extinguisher

5.21.15.9 Survival Supplies

5.21.16 SUSPENSION COMPONENTS

5.21.16.1 Must have true leaf springs, spring under or spring over, no quarter elliptical systems allowed. Leaf springs must attach to one solid point on frame and one shackle. Front suspension is open. Equal length I beams are allowed; no bulkheads or center mounted A arms.

5.21.16.2 Must have full frames.

5.21.16.3 NO TUBE FRAMES.

5.21.16.4 Shock Absorbers and Bump Stops

5.21.16.5 Secondary Suspension

5.21.16.6 Wheels and Tires

5.21.16.7 Fasteners

5.21.17 STEERING AND BRAKE COMPONENTS

5.21.17.1 Steering

5.21.17.2 Brakes

5.21.18 ELECTRICAL SYSTEM

5.21.18.1 Ignition

5.21.18.2 Batteries

5.21.18.3 Lights

5.21.18.4 Starters

5.21.19 FUEL SYSTEM

5.21.19.1 Fuel

5.21.19.2 Fuel Tanks

5.21.19.2.1 Safety fuel cells are required.

5.21.19.3 Fuel Lines, Vents, Caps

5.21.20 ENGINE, TRANSMISSION AND DRIVELINE

5.21.20.1 Engine and Engine Displacement

5.21.20.1.1 Engine is open.

5.21.20.2 Engine Replacement

5.21.20.3 Transmission

- 5.21.20.3.1 Open
- 5.21.20.4 Throttles
- 5.21.20.5 Exhaust
- 5.21.20.6 Drive Shafts
- 5.21.20.7 Flywheel Shields
- 5.21.20.8 Fluid Coolers
- 5.21.20.9 Auxiliary Equipment
- 5.21.20.10 Superchargers and Turbochargers
 - 5.21.20.10.1 Superchargers and Turbochargers limited to 4 cylinder and 6 cylinder motors ONLY. No nitrous oxide.
- 5.21.21 VEHICLE SAFETY EQUIPMENT
 - 5.21.21.1 Roll Cages
 - 5.21.21.2 Safety Harness
 - 5.21.21.3 Safety Nets
 - 5.21.21.4 Seating
- 5.21.22 GENERAL VEHICLE COMPONENTS
 - 5.21.22.1 Drivers Compartment
 - 5.21.22.2 Doors and Latches
 - 5.21.22.2.1 The doors of the vehicle must open and close, and made of steel. Material may be removed from inside of door to make room for roll cage but is not to interfere with latch mechanism or door hinges. Door internals may be removed such as regulators, windows and window tracks. Secondary door latch is required if the nets are attached to the door.
 - 5.21.22.3 Firewalls
 - 5.21.22.3.1 The firewall, floor and rear wall of the cab may be modified to allow room for drive train, suspension components or seats but must be of metal construction.
 - 5.21.22.4 Ballast
 - 5.21.22.5 Weight
 - 5.21.22.6 Floorboards
 - 5.21.22.7 Bumpers
 - 5.21.22.8 Mirrors
 - 5.21.22.9 Skid Plates
 - 5.21.22.10 Storage
 - 5.21.22.11 Fenders
 - 5.21.22.12 Chassis and Body
 - 5.21.22.12.1 Must use steel cab no fiberglass cabs at all.
 - 5.21.22.12.2 The cab must remain attached to the vehicle in the same fashion as it was by manufacturer. Windshield is optional. The frame must match the body of the truck, gussets and plating of the frame is allowed. Removing 6" front and back for bumpers is allowed. NO TUBE FRAMES.
 - 5.21.22.13 Hoses
 - 5.21.22.14 Identification Markings
 - 5.21.22.15 Advertising on Vehicles
 - 5.21.22.16 Workmanship

5.22 CLASS CHAMP / CLASS 18

5.22.1 OPEN WHEEL – 1585CC LIMITED TO 120" WHEEL BASE

5.22.2 SINGLE OR TWO SEAT VEHICLES LIMITED TO 1585CC

5.22.3 GENERAL REGULATIONS

5.22.3.1 Entrants in this class shall comply with all applicable general regulations.

5.22.4 COMPETITION REGULATIONS

5.22.4.1 All parts called out for this class shall remain in their stock shape, size, and configuration unless otherwise stated herein.

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

5.22.5 SAFETY EQUIPMENT

5.22.5.1 Helmets

5.22.5.2 Protective Clothing

5.22.5.3 Eye Protection

5.22.5.4 First Aid Kit

5.22.5.5 Caution Signs

5.22.5.6 Horns

5.22.5.7 Reflectors

5.22.5.8 Fire Extinguisher

5.22.5.9 Survival Supplies

5.22.6 SUSPENSION COMPONENTS FRONT SUSPENSION

5.22.6.1 Front suspension is based on the VW type 1 ball joint or king and link pin style suspension. Any beam of two steel torsion tubes may be used but must retain stock width. Front axle torsion tube centers may be cut. Rotated and welded. Use of torsion adjusters is optional. Any manufacturer torsion bars are permitted. Tube center spacing is open. Front trailing arms may be reinforced or replaced as long as stock VW width and length is retained. Spindles, link pins, ball joints are open. Front suspension track width must not exceed stock VW track width. Suspension limiters are permitted. One 8 inch shock with reservoir mounted in stock location. Front shocks limited to 8" of shaft travel.

5.22.7 REAR SUSPENSION

5.22.7.1 Rear suspension is based on VW type 1 IRS or swing axle. Rear trailing arms may be of any manufacturer. Tubular arms are permitted as long as stock IRS swing arm length is retained plus or minus 1 inch. The stock VW dimension between the center line of the rear axle to the center line of the rear torsion housing is 16.25 inches plus or minus 1 inch must be retained. Any axle assemblies are permitted as long as original VW type suspension is retained. No gun drilled axles. Rear torsion tubes may be supported or replaced but must remain steel and retain stock VW width. Torsion adjusters are permitted. A single torsion per wheel of any manufacturer is permitted. Torsion bars must remain inside the torsion housing. Torsion bars must be connected to the trailing arm with steel spring plates of any manufacture. Two 12 inch 2.0 shocks per wheel with reservoirs. No bypass or sleeved shocks front or rear. Max cv is 24 degrees at full droop. Rear suspension track width must not exceed a maximum of 51" as measured from backing plate flange to backing plate flange.

5.22.7.2 Shock Absorbers and Bump Stops

5.22.7.2.1 One 8 inch front per wheel, two 12 inch rear per wheel, size are 2 inch. Cooling fins are not permitted. Air or coil over shocks are not permitted. No 7/8 shafts. No 14" cans or 10" cans allowed. Front shocks limited to 8" of shaft travel rear shocks limited to 12" of shaft travel as delivered from shock manufacturer.

5.22.7.3 Secondary Suspension

5.22.7.3.1 Secondary suspension is not permitted. No coil over or air shocks

5.22.7.4 Wheels and Tires

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

Wheels are open. 16" tires and rims are allowed, bead locks are permitted.

5.22.7.6 Fasteners

5.22.8 STEERING AND BRAKE COMPONENTS

5.22.8.1 Steering

5.22.8.1.1 Steering system is open. Power steering ok. Any tie rod and tie rod end permitted. Heim ends ok

5.22.8.2 Brakes

5.22.8.2.1 May use any brake drum. Aluminum center drums are allowed.

5.22.8.2.2 Steering or turning brakes are permitted. Any master cylinder combination allowed. No disk brakes.

5.22.9 ELECTRICAL SYSTEM

5.22.9.1 Ignition

5.22.9.1.1 Battery ignition only. No magnetos permitted. Any distributor may be used. Comp -u-fire module ok, Any VW type alternator or generator in the stock location may be used. 6 or 12 volt system may be used. 75 amp alternators are allowed.

5.22.9.1.2 NO D.I.S. OR MSD. IGN SYSTEMS. NO CRANK FIRED IGNITION.

5.22.9.2 Batteries

5.22.9.2.1 Batteries must be auto type, no gel cells

5.22.9.3 Lights

5.22.9.3.1 Rearward facing amber light and tail lights are mandatory. Headlights are not required unless the race will be run in the dark or the race should finish in the dark. Any light allowed.

5.22.9.4 Starters

5.22.9.4.1 Stock VW starters only

5.22.10 FUEL SYSTEM

5.22.10.1 Fuel

5.22.10.1.1 Must run unleaded pump gas

5.22.10.2 Fuel Tanks

5.22.10.2.1 Safety fuel cells are required

5.22.10.3 Fuel Lines, Vents, Caps

5.22.11 ENGINE, TRANSMISSION AND DRIVELINE

5.22.11.1 Engine and Engine Displacement

5.22.11.1.1 Engine must utilize VW series type 1, 1585cc; US sedan components and dimensions. The maximum allowable engine displacement is 1585cc as factory delivered.

5.22.12 ENGINE CASE

5.22.12.1 Any VW type 1, 2, 3 or "universal" case is permitted. No aluminum case. The following stock case modifications are permitted:

5.22.12.1.1 May be line bored

5.22.12.1.2 May be machined for crank pulley seal

5.22.12.1.3 Installation of case savers

5.22.12.1.4 Cylinder seating surface may be machined

5.23.12.1.5 Oil galleries may be enlarged to 10mm

5.23.12.1.6 Threaded oil gallery plugs permitted

5.23.12.1.7 Case may be full flowed

5.23.12.1.8 Oil squirters ok

5.22.12.2 OIL PUMP

5.22.12.2.1 Any oil pump is permitted. Deep sumps, dry sumps or sump alterations are not permitted. Windage trays are permitted. Any oil bypass piston and spring permitted. Full flow ok. No accusump systems allowed.

5.22.12.3 FUEL PUMP

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

5.22.12.4 PISTONS

- 5.22.12.4.1 Stock 3 ring pistons only. Any piston and cylinders as long as original stock dimensions are maintained. Any type wrist pin keepers. Piston assemblies may be balanced to the weight in grams of the lightest original non-balanced piston assembly. Total seal rings ok.
- 5.22.13 CONNECTING RODS
 - 5.22.13.1 STOCK VW DIMENSION CONNECTING RODS ONLY
 - 5.22.13.2 Balanced weight of the connecting rods in grams there will be of the four (4) rods one (1) untouched big end and one (1) untouched small end. There is no polishing or lightening of the rods.
- 5.22.14 CRANKSHAFT
 - 5.22.14.1 Stock VW crankshaft only. No offset grinding. Crankshaft may be balanced. Maximum journal size is limited to (.030) undersize. No polishing or lightening. Any engine bearing is permitted as long as stock dimensions are maintained. Power pulleys are permitted. Pulley may be balanced. Sand seals are permitted. Any VW flywheel may be lightened and balanced. No aluminum flywheels. Any clutch disk and pressure plate but must retain stock VW diameter. Eight dowel flywheels are permitted with any gland nut and washer
- 5.22.15 HEADS
 - 5.22.15.1 Type 1 stock dual port heads only. Heads may be fly cut for clean up only. No porting or polishing.
 - 5.22.15.2 8.5 to 1 compression.
- 5.22.16 CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS
 - 5.22.16.1 Any camshaft, any valve springs, any valve spring retainers, and any lifters allowed. Aluminum gears only. Valve spring seat diameter in head must remain stock. Valves must be stock 45 degrees. One piece valves are permitted.
 - 5.22.16.2 No titanium valves allowed, Valve guide may be steel, bronze or cast iron. No grinding or
 - 5.22.16.3 polishing in the port including valve guides. Must use stock VW 1600 rocker arms. Any swivel feet, any rocker shafts. No changes may be made to the rocker arms. Roller or needle bearings will not be permitted as part of the camshaft or as an interface between the rocker arms and the camshaft. Any push rods except no graphite push rods, any push rod tube. Any valve cover, breather tubes ok
- 5.22.17 FAN SHROUD
 - 5.22.17.1 Stock VW fan shrouds. Aftermarket 36 h/p with doghouse cooler ok. Heater tubes are optional. Cutting of tin is ok
- 5.22.18 CARBURETOR
 - 5.22.18.1 Must use stock VW. Carburetor 30 pict 1, 2, 3. Maximum venturi size is 24.10mm. Velocity stacks may be used but cannot be welded or bonded to the carburetor. Internal modifications are not permitted. This includes no removing of parts, no grinding, polishing or filing. Intake manifolds must be stock or its replacement. No chemical milling of manifold or carburetor. Choke housing, choke plate and shaft may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used. Carb adapters are ok.
- 5.22.19 Engine Replacement
- 5.22.20 Transmission
 - 5.22.20.1 Must be stock VW type 1 or 2 transaxle housing. A maximum of four forward gears. Only VW helical cut gears may be used. Any manufacturers 1st and 2nd main shaft as long as stock ratio is used. And any 3rd and 4th gear ratio combinations permitted. Any super diff allowed. Must have a working reverse gear. Hydraulic clutch permitted. Any shifter allowed.
 - 5.22.20.2 Throttles
 - 5.22.20.3 Exhaust
 - 5.22.20.4 Drive Shafts
 - 5.22.20.4.1 No gun drilled axles. Any CV joint with a maximum angle of 24 degrees as measured at full droop. No lightened OR GROOVED OUTER CV RACES.
 - 5.22.20.5 Flywheel Shields
 - 5.22.20.6 Fluid Coolers
 - 5.22.20.6.1 Any oil cooler and location permitted. Full flow systems are permitted. Deep or dry sump systems are not permitted.
 - 5.22.20.7 Auxiliary Equipment
 - 5.22.20.8 Superchargers and Turbochargers
- 5.22.21 VEHICLE SAFETY EQUIPMENT

- 5.22.21.1 Roll Cages
- 5.22.21.2 Safety Harness
- 5.22.21.3 Safety Nets
- 5.22.21.4 Seating
- 5.22.22 GENERAL VEHICLE COMPONENTS
 - 5.22.22.1 Drivers Compartment
 - 5.22.22.2 Firewalls
 - 5.22.22.3 Ballast
 - 5.22.22.4 Weight
 - 5.22.22.4.1 Weight will be dry weight with all tools, spare parts, and spare tire removed but weighed with driver and co-driver...1750lbs @ 100" and any wheelbase over 100" will add 10lbs per inch max 120".
 - 5.22.22.5 Floorboards
 - 5.22.22.6 Bumpers
 - 5.22.22.7 Mirrors
 - 5.22.22.8 Skid Plates
 - 5.22.22.9 Storage
 - 5.22.22.10 Fenders
 - 5.22.22.11 Chassis and Body
 - 5.22.22.12 Hoses
 - 5.22.22.13 Identification Markings
 - 5.22.22.14 Advertising on Vehicles
 - 5.22.22.15 Workmanship

5.23 STOCK FULL SIZE

5.23.1 PRODUCTION FULL SIZE UTILITY VEHICLES

5.23.2 Vehicles built from a full-sized two or four wheel drive SUV or utility vehicle. Vehicles must have been series produced in quantities no less than 5,000 units in a one year period and available to the general public in the USA. Such vehicles must have been marked as a full size vehicle.

5.23.3 GENERAL REGULATIONS

5.23.3.1 Entrants in this class shall comply with all applicable general regulations.

5.23.4 COMPETITION REGULATIONS

5.23.4.1 All parts called out for this class shall remain in their stock shape, size, and configuration unless otherwise stated herein.

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

5.23.5 SAFETY EQUIPMENT

5.23.5.1 Helmets

5.23.5.2 Protective Clothing

5.23.5.3 Eye Protection

5.23.5.4 First Aid Kit

5.23.5.5 Caution Signs

5.23.5.6 Horns

5.23.5.7 Reflectors

5.23.5.8 Fire Extinguisher

5.23.5.9 Survival Supplies

5.23.6 SUSPENSION COMPONENTS

5.23.6.1 Front and rear suspension must be of the same manufacturer, size, shape and configuration as in original production and installed on the chassis to which it is mounted. All suspension components must remain in the original stock location and mounting methods must remain in the stock location. All components will be original manufacturer design and must be delivered from the manufacturer as a stock product. Front axles, I-beams and A-arms must remain stock as delivered. Stock pivot points must be retained. All springs must remain in stock location and retain original concept (torsion, leaf, coil). Rates and capacities are open. Body lift kits up to 3 inches max. are allowed. Riser blocks that are used on the rear of the vehicle must be of a solid material.

5.23.6.2 Shock Absorbers and Bump Stops

5.23.6.3 Two shocks per wheel max. Stock location optional, no air shocks, no remote mounted shocks

5.23.6.4 Secondary Suspension

5.23.6.4.1 Secondary suspension is not permitted.

5.23.6.5 Wheels and Tires

5.23.6.5.1 Any tire/wheel combination is allowed.

5.23.6.6 Fasteners

5.23.7 STEERING AND BRAKE COMPONENTS

5.23.7.1 Steering

5.23.7.1.1 Steering box must remain stock as delivered from the manufacturer. Box mounting may be reinforced but must remain in stock location. Steering parts must remain stock as delivered. Any manufacturer's steering wheel can be used.

5.23.7.2 Brakes

5.23.7.2.1 Steering or turning brakes are not allowed

5.23.8 ELECTRICAL SYSTEM

5.23.8.1 Ignition

5.23.8.1.1 Must remain stock as delivered from the manufacturer. Aftermarket wires and spark plugs are allowed

- 5.23.8.2** Batteries
- 5.23.8.3** Any manufacturer's battery may be used, may be relocated. Additional reinforcement required if battery is in stock location.
- 5.23.8.4** Lights
 - 5.23.8.4.1** Any manufacturer's light may be used. Stock head light openings must be retained.
- 5.23.8.5** Starters
- 5.23.9** FUEL SYSTEM
 - 5.23.9.1** Fuel
 - 5.23.9.2** Fuel Tanks
 - 5.23.9.2.1** Safety fuel cells are required. Location is optional
 - 5.23.9.3** Fuel Lines, Vents, Caps
- 5.23.10** ENGINE, TRANSMISSION AND DRIVELINE
 - 5.23.10.1** Engine and Engine Displacement
 - 5.23.10.2** Any engine may be used as long as it is listed and delivered by manufacturer. Stock block and heads as delivered must be used, may be modified. Internal parts are open. Engine stock location must remain as delivered. Exhaust is open. Smog equipment may be removed. Any single four barrel carburetor is allowed. Stock fuel injection may be used. Intake manifolds and air cleaners are open. Cutting of hood for air cleaner clearance is not allowed
 - 5.23.10.3** Engine Replacement
 - 5.23.10.4** Transmission
 - 5.23.10.4.1** Any transmission may be used as long as it was listed and delivered from vehicle manufacturer.
- 5.23.11** DIFFERENTIAL
 - 5.23.11.1** Front and rear differential must remain stock with exceptions of gear ratio and carriers. Strengthening material may be added. Knock off hubs are not permitted
 - 5.23.11.2** Throttles
 - 5.23.11.3** Exhaust
 - 5.23.11.4** Drive Shafts
 - 5.23.11.5** Flywheel Shields
 - 5.23.11.6** Fluid Coolers
 - 5.23.11.7** Auxiliary Equipment
 - 5.23.11.8** Superchargers and Turbochargers
 - 5.23.11.8.1** are allowed as long as it was factory installed.
- 5.23.12** VEHICLE SAFETY EQUIPMENT
 - 5.23.12.1** Roll Cages
 - 5.23.12.2** Safety Harness
 - 5.23.12.3** Safety Nets
 - 5.23.12.4** Seating
 - 5.23.12.4.1** Seats must remain in stock location, additional bracing of seats is mandatory. Seat manufacturer is open
- 5.23.13** GENERAL VEHICLE COMPONENTS
 - 5.23.13.1** Drivers Compartment
 - 5.23.13.1.1** Dash must remain stock. Items may be removed that could fall out during competition. Aftermarket gauges are allowed. Heat and A/C may be removed. Interior upholstery may be removed
 - 5.23.13.2** Doors and Latches
 - 5.23.13.2.1** Doors must remain stock as delivered and operate on stock hinges. Secondary door latches are mandatory
 - 5.23.13.3** Firewalls Ballast
 - 5.23.13.4** Weight
 - 5.23.13.4.1** Vehicle must retain minimum weight as delivered stock
 - 5.23.13.5** Floorboards
 - 5.23.13.6** Bumpers
 - 5.23.13.6.1** Stock bumpers must remain
 - 5.23.13.7** Mirrors

5.23.13.8 Skid Plates

5.23.13.9 Storage

5.23.13.10 Fenders

5.23.13.10.1 Fenders and wheel openings may be enlarged for tire clearance, not to exceed 2 inches. Front inner fender panels may be modified to a min. for front stock installation. Aftermarket fender flares are permitted

5.23.13.11 Chassis and Body

5.23.13.11.1 Manufacturer's specified year body and chassis combination must be retained.

5.23.14 CHASSIS

5.23.14.1 Wheelbase must remain original. Stock configuration of frame must remain. No narrowing or lengthening of frame is permitted. Material removal is not allowed.

5.23.15 BODY

5.23.15.1 Original shape of body must remain as delivered in configuration and appearance. Additional material for body strengthening may be added. The measurement from the center line of the front spindle to the back of the b-pillar post needs to be remain stock. Pick-up bed floors must remain intact. Trunk lids, doors, hoods, bed sides must remain stock as delivered. Tail gates are optional. Stock grille assemblies must remain. Windshield, side and rear glass are optional.

5.23.15.2 Hoses

5.23.15.3 Identification Markings

5.23.15.4 Advertising on Vehicles

5.23.15.5 Workmanship

5.24 CLASS 3000

5.24.1 DESERT LITES – GM ECOTEC POWERED 4-CYL PRODUCTION MOTOR, SHORT WHEELBASE MINIS

5.24.1.1 Two seat open wheeled mini cars, and two seat mini trucks.

5.24.1.2 VEHICLES MUST HAVE TWO (2) OCCUPANTS.

5.24.2 GENERAL REGULATIONS

5.24.2.1 Entrants in this class shall comply with all applicable general regulations.

5.24.3 COMPETITION REGULATIONS

5.24.3.1 This is an open class and all components will be considered open unless it says otherwise in these rules.

5.24.4 TRANSAXLE EQUIPT VEHICLES NOT EXCEED 103" WHEELBASE AS MEASURED AT RIDE HEIGHT.

5.24.5 LIVE AXLE EQUIPT VEHICLES NOT TO EXCEED 111" WHEELBASE AS MEASURED AT RIDE HEIGHT.

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

5.24.6 SAFETY EQUIPMENT

5.24.6.1 Helmets

5.24.6.2 Protective Clothing

5.24.6.3 Eye Protection

5.24.6.4 First Aid Kit

5.24.6.5 Caution Signs

5.24.6.6 Horns

5.24.6.7 Reflectors

5.24.6.8 Fire Extinguisher

5.24.6.9 Survival Supplies

5.24.7 SUSPENSION COMPONENTS

5.24.7.1 Shock Absorbers and Bump Stops

5.24.7.2 Shock absorbers are open. Wheel travel is unrestricted. Front suspension is open

5.24.7.3 Secondary Suspension

5.24.7.4 Wheels and Tires

5.24.7.5 Wheels are open. Track width is open.

5.24.7.6 Fasteners

5.24.8 STEERING AND BRAKE COMPONENTS

5.24.8.1 Steering

5.24.8.2 Steering or turning brakes permitted.

5.24.8.3 Brakes

5.24.9 ELECTRICAL SYSTEM

5.24.9.1 Ignition

5.24.9.2 Batteries

5.24.9.3 Lights

5.24.9.4 Rear facing blue light mandatory.

5.24.9.5 Starters

5.24.10 FUEL SYSTEM

5.24.10.1 Fuel

5.24.10.2 Fuel Tanks

5.24.10.3 Safety fuel cells are required

5.24.10.4 Fuel Lines, Vents, Caps

5.24.11 ENGINE, TRANSMISSION AND DRIVELINE

5.24.11.1 Engine and Engine Displacement

5.24.11.1.1 Engine location is open. Engine is limited to stock production gm Ecotec 4 cyl. 2.2 and 2.4 motors. Pistons must be stock, or stock replacement pistons must retain stock dimensions. Camshaft must be stock or equal

replacement only. Camshaft must retain original manufacture specifications. Head / valve train must remain per manufactures original specifications. After Market valve train is prohibited, no porting or polishing of head. Must retain manufactures original specifications. Intake manifold will remain as delivered from manufacture. It must retain its stock shape, size and configuration. No porting or other modifications will be allowed.

5.24.11.1.2 The throttle body will remain as delivered from the manufacturer, not to exceed 65mm on blade. No dry sump systems allowed.

5.24.11.1.3 All motors are to be inspected and sealed by TURNKEY ENGINE SUPPLY. Certified as stock replacement.

www.turnkeyenginesupply.com

2620 temple heights dr. Oceanside, ca 92056

760-941-2741

5.24.11.2 Engine Replacement

5.24.11.3 Transmission

5.24.11.4 Throttles

5.24.11.5 Exhaust is open.

5.24.11.6 Drive Shafts

5.24.11.7 Flywheel Shields

5.24.11.8 Fluid Coolers

5.24.11.9 Auxiliary Equipment

5.24.11.10 Superchargers and Turbochargers

5.24.12 VEHICLE SAFETY EQUIPMENT

5.24.12.1 Roll Cages

5.24.12.2 Safety Harness

5.24.12.3 Safety Nets

5.24.12.4 Seating

5.24.13 GENERAL VEHICLE COMPONENTS

5.24.13.1 Drivers Compartment

5.24.13.2 Doors and Latches

5.24.13.3 Firewalls

5.24.13.4 Ballast

5.24.13.5 Weight

5.24.13.5.1 No minimum weight restrictions

5.24.13.6 Floorboards

5.24.13.7 Bumpers

5.24.13.8 Mirrors

5.24.13.9 Skid Plates

5.24.13.10 Storage

5.24.13.11 Fenders

5.24.13.12 Chassis and Body

5.24.13.13 Hoses

5.24.13.14 Identification Markings

5.24.13.15 Advertising on Vehicles

5.24.13.16 Workmanship

5.25 UTV CLASS

5.25.1 Definitions

- 5.25.1.1** A UTV is defined as a standard production based side-by-side style vehicle, single seats included. Engine size maximum is 2000 CC with powersports based drivetrain. Any non-production based belt driven vehicles must be approved prior to racing.

5.25.2 Classes

5.25.2.1 Pro Production Big Engine UTV (BE) definition:

The Production Big Engine class vehicles are built using production UTVs manufactured by registered companies, i.e., Polaris, Can-Am, Speed that issues Vin #'s. Companies must produce a minimum number of 1000 units per year. OEM engines must be used. All OEM engine electronics must be used. Maximum engine size is 2000cc N/A and 1000cc for forced induction. Max wheelbase is 135". Maximum tire size is 35x10.5x 15. Must use hood, grill, front and rear fenders from the production UTV. This Pro Class has a points championship and an individual race purse.

5.25.2.2 Pro Production Turbo UTV Class definition:

The Production Turbo class vehicles are built using production Turbo UTVs manufactured by registered companies, e.g., Yamaha, Polaris, Can-Am, Artic Cat, that issues Vin #'s. Companies must produce a minimum number of 1000 units per year. OEM engines must be used. All OEM engine electronics must be used. Maximum engine size is 1000cc. Maximum tire size is 33x10.15. Must use hood, grill, front and rear fenders from the production UTV. This Pro Class has a points championship and an individual race purse.

5.25.2.3 Pro Production NA UTV Class definition:

The Pro UTV NA production class vehicles are built using production UTVs manufactured by registered companies, e. g., Yamaha, Polaris, Can-Am that issue Vin #'s. Companies must produce a minimum of 1000 units per year to be accepted. OEM naturally aspirated engines must be used. Maximum engine size is 1000cc. Maximum tire size is 33x10.15. Must use hood, grill, front and rear fenders from the production UTV. This Pro Class has a points championship and an individual race purse.

5.25.2.4 Pro Unlimited UTV class definition:

The Pro Unlimited UTV class vehicles are built using a factory UTV frame or a full tube custom frame. Motorcycle, snow mobile or UTV engine must be used. Maximum engine size 1000cc. No car engines. Turbo chargers and superchargers are allowed. Must use Hood and front fenders from a UTV. Max wheelbase 135". The Unlimited Class UTV must have a fuel cell. The 135" wheelbase can be achieved by cutting the factory frame or built into the custom tube frame. Any type of suspension is allowed. This is an open UTV class, with the exception of wheelbase 135" and tire size 35". This Pro Class has a points championship and an individual race purse. Any UTV is legal to race in the Unlimited UTV class. Any racer that enters this class must stay in this class for the remainder of the season, although, they can move to the sportsman class if they do not want to race Pro Unlimited class.

5.25.2.5 Sportsman UTV class definition:

The Sportsman class is for any UTV team that wants to race but does not care, to race for championship points or prize money. The Sportsman class has lower entry fees.

GENERAL REGULATIONS

- 5.25.2.6** Entrants in this class shall comply with all applicable general regulations.

- 5.25.2.7** Driver and co-driver must be 16 years old.

- 5.25.2.8** Each class requires 3 entrants per race to qualify for season points and purse. If a production class has less than 3 entrants, they can opt to join the unlimited or other production class or stay in class for no season points. If an unlimited class has less than 3 entrants, they can continue to race in that class for no season points.

5.25.3 COMPETITION REGULATIONS

- 5.25.3.1** All parts called out for this class shall remain in their stock shape, size, and configuration unless otherwise stated herein.

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

5.25.4 SAFETY EQUIPMENT

- 5.25.4.1** Helmets
- 5.25.4.2** Protective Clothing
- 5.25.4.3** Eye Protection
- 5.25.4.4** First Aid Kit
- 5.25.4.5** Caution Signs
- 5.25.4.6** Horns
- 5.25.4.7** Reflectors
- 5.25.4.8** Fire Extinguisher
- 5.25.4.9** Survival Supplies

5.25.5 SUSPENSION COMPONENTS

5.25.5.1 FRONT/REAR SUSPENSION

- 5.25.5.1.1** All A-arm mounting points must remain the stock design, and remain in the stock location as delivered from the factory. However, they may be reinforced for strength.
- 5.25.5.1.2** The maximum overall wheelbase from spindle to spindle can be increased 8" over stock dimensions.
- 5.25.5.1.3** Maximum wheelbase for unlimited class will be 135".

5.25.5.2 LONG TRAVEL SUSPENSION

- 5.25.5.2.1** Suspension kits must be aftermarket off the shelf suspension kits readily available for sale.

5.25.5.3 TORSION SYSTEM

- 5.25.5.3.1** The only torsion system that is acceptable in limited class is a coil over shock. Any available system is allowed in unlimited class.

5.25.5.4 Shock Absorbers and Bump Stops

- 5.25.5.4.1** Stock shocks or aftermarket replacement shocks are permitted so as far as the original chassis mounting points are retained. Factory mounting position may have material added for the purpose to strengthen, but must retain the factory material, and specifications. Upper shock mount can be repositioned but must be an off the shelf bolt in kit.
- 5.25.5.4.2** Hydraulic Bump stops are not permitted.
- 5.25.5.4.3** Suspension bump stops must be of the solid type.

5.25.5.5 Secondary Suspension

- 5.25.5.5.1** Secondary suspension systems are not allowed in limited class. Secondary suspension systems are allowed in unlimited class.

5.25.5.6 Wheels and Tires

- 5.25.5.6.1** Maximum tire size is 33" outside diameter for limited classes, 35" for unlimited classes.
- 5.25.5.6.2** No multiple tires permitted.

5.25.5.7 Fasteners

5.25.6 STEERING AND BRAKE COMPONENTS

- 5.25.6.1** Steering system is open. Power steering is allowed. Turning or steering brakes are not allowed in limited class.
- 5.25.6.2** Brakes

5.25.7 ELECTRICAL SYSTEM

5.25.7.1 Ignition

5.25.7.2 Batteries

- 5.25.7.2.1** Batteries must be securely mounted with metal attachments.

5.25.7.3 Lights

All UTV'S must have a minimum of two taillights, two brake lights, and a minimum three inch (3") diameter Blue or Green light along with an amber light facing the rear of the vehicle. One or both amber and blue/green lights must flash. The amber lights and blue light must be mounted a minimum of 48 inches from the ground and must be clearly visible from the rear of the vehicle.

We strongly recommend the use of a light similar to the KC Hi-Lites version or the ATC Light.

The Blue Light is to identify the slower moving vehicles. This is to assist the faster moving classes to recognize

a slower moving vehicle when they are approaching them.

Compliant Lights

Rear facing light bar or a stand-alone light like All Terrain Concepts ATC Safety [Link](#) or KC Hi Lights 6" C- Series Blue Strobe #1313 >

Light can be switched as long as the switch is out of reach of cab occupants. The intent is that the light be on during the entire race.

- 5.25.7.3.1** Safety lights must be approved by the BOR UTV Tech Inspector.
- 5.25.7.3.2** All rearward facing lights (taillights, brake lights, blue light, and amber lights) must be in operating condition before the vehicle will be permitted to start the race. All rearward-facing lights must be protected against damage in the event of a rollover Rearward facing amber lights and blue light must be approved by the BOR UTV Tech Inspector.
- 5.25.7.3.3** The amber lights and blue light must remain on during the entire race.
- 5.25.7.3.4** Working headlights are only required for events where any portion of the on- course event takes place between sunset and sunrise.
- 5.25.7.3.5** If during an event any required light fails to operate, the light must be fixed or replaced at the next available pit before the vehicle can continue in the event.
- 5.25.7.4** Starters
- 5.25.8** FUEL SYSTEM
 - 5.25.8.1** Fuel
 - 5.25.8.2** Fuel Tanks
 - 5.25.8.2.1** Stock fuel systems in the stock location - Unmodified stock fuel systems are approved.
 - 5.25.8.2.2** Safety fuel cells are mandatory in unlimited class and should be mounted somewhere safe within the confines of the roll cage and have any capacity. Fuel cells are the only auxiliary tanks allowed.
 - 5.25.8.2.3** Stock tanks may be used, sportsman, pro limited and pro turbo only.
 - 5.25.8.2.4** Factory ECU's must be retained; aftermarket tuners are approved in limited classes. Stand-alone aftermarket ECU's are prohibited in limited classes. Aftermarket CDI is acceptable for carbureted models. Unlimited class ECU is open.
 - 5.25.8.3** Fuel Lines, Vents, Caps
- 5.25.9** ENGINE, TRANSMISSION AND DRIVELINE
 - 5.25.9.1** Engine and Engine Displacement
 - 5.25.9.2** All Production class vehicles must use stock engine cases and cylinder head. Maximum engine displacement is 1000cc, larger displacement may be allowed if produced by the manufacturer.
 - 5.25.9.3** NO turbochargers or superchargers are allowed in Pro Production class.
 - 5.25.9.4** Engine Replacement
 - 5.25.9.4.1** Entrant may replace a complete engine during an event. Entrant will be deemed to have replaced a complete engine if the case has been replaced.
 - 5.25.9.5** Transmission
 - 5.25.9.5.1** Production class, every vehicle must use the stock transmission. Every vehicle must have a working reverse gear. The stock rear differential must be used.
 - 5.25.9.5.2** Unlimited class, any powersports based platform engine and transmission can be used. Maximum engine displacement is 1000cc.
 - 5.25.9.5.3** Trans modifications are allowed if stock case is used.
 - 5.25.9.6** Throttles
 - 5.25.9.7** Exhaust
 - 5.25.9.8** Drive Shafts
 - 5.25.9.9** Flywheel Shields
 - 5.25.9.10** Fluid Coolers
 - 5.25.9.10.1** Oil coolers, transmission coolers and radiators located ahead of the driver and co -driver or in the passenger compartment must have a shroud that will prevent liquids from blowing back or leaking onto the driver and or

co-driver in the event of a rupture or leakage. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

5.25.9.11 Auxiliary Equipment

5.25.9.12 Superchargers and Turbochargers

5.25.9.12.1 Allowed in Pro Turbo, Unlimited, and Sportsman class only.

5.25.10 VEHICLE SAFETY EQUIPMENT

5.25.10.1 Roll Cages

- 5.25.10.1.1** It is each competitor's responsibility to present a safe vehicle for pre-event technical inspection. Competitors must maintain their safety equipment including the roll cage integrity. BOR reserves the right to not allow any cage designs that, in the opinion of the Chief Technical Inspector, is not fit for competition. Competitors are ultimately responsible for their vehicle's safety features, including the design, fabrication, quality of execution, maintenance, and repair of the roll cage structure. The roll cage is considered to be the main 6- point structure that surrounds and protects the vehicle's occupants.
- 5.25.10.1.2** All vehicles must be equipped with a roll cage fabricated of 1020 mild steel mechanical tubing or better (higher carbon content or alloy steel). The following minimum mild steel tubing sizes for roll cage main structure, based on dry vehicle weight rating (DVWR) in race trim, not including occupants, are required:
- 5.25.10.1.2.1** DVWR Under 3200 lb. (1452kg) - 1.5" (38mm) diameter x .120" (3.0mm) wall thickness or 1.75" (45mm) diameter x .095" (2.5mm) wall thickness.
 - 5.26.11.1.2.2** DVWR 3201 lb. (1452kg) - 4400 lb. (1996kg) - 1.75" (45mm) diameter x .120" (3.0mm) wall thickness.
 - 5.26.11.1.2.3** DVWR Over 4400 lb. (1996kg) - 2" (50mm) diameter x .120" (3.0mm) wall thickness.
- 5.25.10.1.3** Stock factory roll cages are not permitted in any class.
- 5.25.10.1.4** Main tubes of the roll cage must be of one piece design with no removable sections. The only bolted joint allowed on the main hoops is at the connection to the vehicle frame. 2 front window bars towards the center of the vehicle are highly recommended.
- 5.25.10.1.5** All roll cage components (hoops, braces, gussets, etc.) must have a minimum of 3" of clearance from any vehicle occupant's helmet when occupant is seated in normal driving/riding position. All roll cage components that might come into contact with the vehicle occupants' helmets must be padded.
- 5.25.10.1.6** A minimum 0.040" expanded or flat sheet steel or 0.125" aluminum should cover the area immediately above the occupants' seats and be attached via welding or bolting to a steel tubing frame work.
- 5.25.10.2** Safety Harness
- 5.25.10.3** Safety Nets
- 5.25.10.4** Seating
- 5.25.10.4.1** All seats must be securely mounted to frame of vehicle.
 - 5.25.10.4.2** Adjustable track-type seat mounts must be securely mounted to frame of vehicle to allow no lateral or vertical movement between seat and frame or mounting track and frame and must be made of metal.
 - 5.25.10.4.3** Headrests constructed of at least 2" thick resilient padding and being approximately 36 square inches in area are required or the use of a high back seat.
- 5.25.11** GENERAL VEHICLE COMPONENTS
- 5.25.11.1** Drivers Compartment
- 5.25.11.1.1** All vehicles must include full size metal doors with permanent or secondary latching system to protect occupants in the event of a roll over, or collision. A chassis integrated door bar with an aluminum skin is approved.
 - 5.25.11.1.2** A minimum 0.040" expanded or flat sheet steel or 0.125" aluminum should cover the area immediately above the occupants' seats and be attached via welding or bolting to a steel tubing frame work.
- 5.25.11.2** Firewalls
- 5.25.11.2.1** Stock UTV engine covers meet the engine firewall requirement for the all UTV classes.
- 5.25.11.3** Floorboards
- 5.25.11.3.1** Stock UTV floorboards are acceptable. Although adding extra protection made of steel or aluminum is highly recommended.
- 5.25.11.4** Bumpers
- 5.25.11.4.1** All vehicles must have a rear bumper secured to frame.

5.25.11.4.2 No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from vehicles are permitted. Ends must be capped and rounded to prevent any sharp edges. Bumpers and nerf bars must be designed in a way that reasonably minimizes the chance of two vehicles becoming locked together.

5.25.11.5 Mirrors

5.25.11.6 Skid Plates

5.25.11.7 Storage

5.25.11.8 Fenders

5.25.11.9 Chassis and Body

5.25.11.9.1 All UTV vehicles must utilize the stock chassis (frame) and maintain stock appearance. The stock chassis is defined as the main lower rails running along the inner sides of the UTV and the front and rear tubes that connect them. The stock chassis may be added for durability and strength, but must retain the stock width, length, and configuration. Bolt in race cage allowed, All body parts must remain on the vehicle (accidental damage excluded) during the entire length of the race.

5.25.11.9.2 Hoses

5.25.11.9.3 Identification Markings

Pro Production Big Engine	DESIGNATED NUMBERS, BE900-BE999
Pro Production Turbo	DESIGNATED NUMBERS, T800-T999
Pro Production N/A	DESIGNATED NUMBERS, 1900-1999
Pro Unlimited	DESIGNATED NUMBERS, 2900-2999
Sportsman	DESIGNATED NUMBERS, 3900-3999

All vehicles in competition must display the official BOR decal on both sides of the vehicle.

Numbers will be black on white or white on black.

Side numbers will be 8" high with a 1" stroke width. Number plates are strongly recommended.

Front numbers will be 4" high.

Rear numbers will be 6" high.

5.25.11.9.4 Advertising on Vehicles

5.26.12.11.5 Workmanship

5.26 CLASS 4500

5.26.1 ULTRA 4 MODIFIED

5.26.2 GENERAL REGULATIONS

5.26.3 Entrant of this Class shall comply with ALL BOR and ULTRA 4 SERIES combined Class Rules.

5.26.4 COMPETITION REGULATIONS

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

5.26.5 SAFETY EQUIPMENT

5.26.5.1 Helmets

5.26.5.2 Protective Clothing Eye Protection First Aid Kit

5.26.5.3 Caution Signs Horns Reflectors

5.26.5.4 Fire Extinguisher

5.26.5.5 Survival Supplies

5.26.6 FRAME & BODY

5.26.6.1 The frame is considered to be the primary frame rails used to mount the drive train and body. It shall run from the OEM motor mount location to behind the rearmost portion of the occupants' seats. The balance of the frame shall remain whole however allowances will be made for suspension mounting. The stock frame should be retained, however aftermarket and custom frames are allowed. Aftermarket and custom frames must be of a boxed design with minimum dimensions of 1.5" x 3" x 0.120". At static ride height the bottom of the frame rails shall be no higher than the top of the tire. At no point shall the frame rails be closer than 16" apart, measured horizontally. The frame rails must remain within 4" of vertical alignment in relation to each other for the entire length of the frame. The body is considered to be the exterior of the cab, bed, doors, hood, front/rear fenders, grill, etc. All vehicles shall resemble an OEM production vehicle, and the body shall be complete with the following limitations and exception s: Modifications to the body for performance and/or clearance are permitted but must preserve the look of the stock body, as originally manufactured. For the purpose of the Modified Class a Production Vehicle is defined as any vehicle that has a minimum of 250 chassis/body combinations sold to the public.

5.26.7 ENGINE

5.26.7.1 Any and all engines are permitted, providing they meet all the additional rules and regulations specified herein, and with the following limitations and exceptions: The back of the engine -block must be located in front of the furthest-forward portion of the driver's seat, unless otherwise- equipped, as originally manufactured in a 4WD configuration. Radiator mounting open

5.26.8 TRANSMISSION

5.26.8.1 Any and all transmissions are permitted, providing they meet all the additional rules and regulations specified herein.

5.26.9 TRANSFER-CASE

5.26.9.1 Any and all transfer-cases are permitted, providing they meet all the additional rules and regulations specified herein.

5.26.10 DRIVESHAFTS

5.26.10.1 Any and all driveshafts are permitted, providing they meet all the additional rules and regulations specified herein.

5.26.11 AXLES

5.26.11.1 Any and all axle assemblies are permitted, providing they meet all the additional rules and regulations specified herein.

5.26.12 STEERING

5.26.12.1 All vehicles must retain some type of mechanical steering linkage (e. g. 'full- hydro' steering is not permitted, unless factory-equipped matching frame), and said linkage must be capable of controlling the direction of the steering wheels/tires without the benefit of any additional power - steering aids. Rear-steer is not permitted.

5.26.13 SUSPENSION

- 5.26.13.1** Any and all suspension components and configurations are permitted, providing they meet all the additional rules and regulations specified herein.
- 5.26.13.1.1** Shock absorbers of any make/model/type are permitted and may be installed in any location and orientation, with the following limitations and exceptions:
- 5.26.13.1.2** Only two shock absorbers are permitted per wheel/tire (not including spare tires).
- 5.26.13.1.3** Shock absorbers shall not be larger than 2.65" in diameter (outer diameter of shock-body) and shall not be capable of any more than 14" stroke.
- 5.26.13.1.4** Shock absorbers must be connected directly to the axle assembly and chassis and shall not be mounted in any way so as to yield any type of mechanical advantage, unless factory- equipped (mounting shock absorbers off-vertical is permitted and shall not be considered a mechanical advantage), or equipped with any type of independent suspension (and then shock absorbers may only be mounted to as to yield a mechanical advantage at the wheels/tires that are independently suspended).
- 5.26.13.1.5** Manual suspension controls (e.g. forced hydraulics) are not permitted.
- 5.26.13.2** Effective 1/1/19 Independent Suspensions will no longer be allowed in the Modified class with the following exception.
- 5.26.13.2.1** Independent Suspended vehicles must use OEM Factory Frame and OEM Factory Body Style for that make/model year and the vehicle must have been Independent for that make/model year.
- 5.26.13.2.2** Frame requirements will exceed class rules to include suspension mounting points for the independent portion of the suspension.
- 5.26.14 WHEELS & TIRES**
- 5.26.14.1** The intent of the tire rule for the modified class is to restrict tire use to only standard production models designed, sold, and advertised for use on highway vehicles. Therefore all tires used in competition shall be readily available to the public from any local distributor. Tires with special construction, compounds, etc. created for the sole purpose of competition will not be allowed. Tires must be DOT-approved, with a maximum outside diameter of 37" (or equivalent), as specified on the tire's sidewall by the original manufacturer.

5.27 CLASS 6100

5.27.1 Spec Unlimited Truck

5.27.1.1 Sealed Engine

5.27.2 GENERAL REGULATIONS

5.27.2.1 Entrants in this class must comply with all applicable general regulations.

5.27.3 COMPETITION REGULATIONS

5.27.3.1 This is a spec engine class and all components will be considered spec unless it states otherwise within these class rules. Engines will be spec crate engines from Ford & GM manufacturers. Engines must be sealed and tagged by Turnkey Engine Supply, Major Performance, Danzio Performance, Redline Performance or WIKS Racing Engines. Motor must be tagged prior to start of race or penalties up to and including disqualification can be assessed. Only engine kits listed will be allowed. All engines regardless of manufacture, Ford or GM, must be purchased through approved engine suppliers. Listed engine suppliers will tag and seal the engines before being shipped to the customer.

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

5.27.4 SAFETY EQUIPMENT

5.27.4.1 Helmets

5.27.4.2 Protective Clothing Eye Protection First Aid Kit

5.27.4.3 Caution Signs

5.27.4.4 Horns

5.27.4.5 Reflectors

5.27.4.6 Fire Extinguisher

5.27.4.7 Survival Supplies

5.27.5 SUSPENSION COMPONENTS

5.27.5.1 Shock Absorbers and Bump Stops Shock absorbers are open. Wheel travel is unrestricted. Front suspension is open

5.27.5.2 Secondary Suspension

5.27.5.3 Wheels and Tires

5.27.5.4 Wheels are open. Track width is open.

5.27.5.5 Fasteners

5.27.6 STEERING AND BRAKE COMPONENTS

5.27.6.1 Steering

5.27.6.1.1 Steering or turning brakes permitted.

5.27.6.1.2 Brakes

5.27.7 ELECTRICAL SYSTEM

5.27.7.1 Ignition

5.27.7.2 Batteries

5.27.7.3 Lights.

5.27.7.4 Starters

5.27.8 FUEL SYSTEM

5.27.8.1 Fuel

5.27.8.2 Fuel Tanks

5.27.8.2.1 Safety fuel cells are required

5.27.8.3 Fuel Lines, Vents, Caps

5.27.9 ENGINE, TRANSMISSION AND DRIVELINE

5.27.9.1 Engine and Engine Displacement

5.27.9.2 Must use one of the following approved sealed engines. 525 horsepower is maximum limit. Maximum of eight cylinder engines allowed in this class.

5.27.9.3 Following engines are approved for 6100 class:

- 5.27.9.3.1** GM LS3 V8 (525 HP) part number: 19370413 (previously no. 19301366) partnered with GM Controller Kit part number: 19354332 and ECU unit part number: 19354329 (previously no. 19258270)
- 5.27.9.3.2** GM LS3 V8 (430 HP) part number: 19370416 (previously no. 19301326) partnered with
- 5.27.9.3.3** GM Controller Kit part number: 19354328 and ECU unit part number: 19354329 (previously no. 19258270)
- 5.27.9.3.4** Ford 3.5L twin turbo ECOBOOST® engine and Control Pack Kit part number: M-6000-35TK Ford 5.0L V8 engine kit part number: M-6007-M50C with wire loom and control pack part number: M-6017-M50B
- 5.27.9.3.5** Ford 351 V8 engine kit part number: M-6007-S374W
- 5.27.9.3.6** GM: LS engines must use factory GM LS style wet sump oil pans. No aftermarket pans are permitted. GM pans may be modified to fit chassis, modified pans must use stock baffling and no increase in volume is permitted. No dry sump oil systems allowed. FORD: No dry sump oil systems allowed. All FORD engines must use wet sump stock oil pan as delivered in the engine kit from the manufacturer. FORD pans may be modified to fit chassis, modified pans must use stock baffling and no increase in volume is permitted.
- 5.27.9.4** Billet fuel rails are allowed.
- 5.27.9.5** Water pumps are open, must be mechanical factory concept, no electric pumps allowed.
- 5.27.9.6** The following modifications are NOT allowed:
 - 5.27.9.6.1** No aftermarket ECU systems installed in vehicle.
 - 5.27.9.6.2** No aftermarket cam shaft replacement- Factory cam upgrade to 525 HP allowed
 - 5.27.9.6.3** (see below)
 - 5.27.9.6.4** No balancing
 - 5.27.9.6.5** No engine block decking
 - 5.27.9.6.6** No line boring
 - 5.27.9.6.7** No dry sumps
 - 5.27.9.6.8** No rebuilding
- 5.27.9.7** Upgrading 430 HP LS3 Engines:
 - 5.27.9.7.1** 430 HP LS3 engines may be upgraded to 525 HP versions ONLY by changing to
 - 5.27.9.7.1.1** GM camshaft part number: 88958770.
 - 5.27.9.7.1.2** Engine Replacement
 - 5.27.9.7.1.3** New crate engines sealed and tagged allowed. Rebuilt or previously installed engines must have specifications reverified and be retagged by authorized engine builders.
- 5.27.9.8** Transmission
 - 5.27.9.8.1** Turbo 400 automatic transmissions ONLY
 - 5.27.9.8.2** Underdrive units are allowed. May be of any manufacture. NO 4 wheel drive vehicles allowed.
- 5.27.9.9** Throttles
 - 5.27.9.9.1** Electronic throttle pedal assembly (fly-by-wire) allowed only if delivered as part of engine control pack delivered direct from the manufacturer.
- 5.27.9.10** Exhaust
 - 5.27.9.10.1** Open
- 5.27.9.11** Drive Shafts Flywheel Shields Fluid Coolers
- 5.27.9.12** Auxiliary Equipment
- 5.27.9.13** Superchargers and Turbochargers
 - 5.27.9.13.1** Forced induction only allowed if supplied as part of OEM engine package. No aftermarket units allowed.
- 5.27.9.14** Roll Cages
- 5.27.9.15** Safety Harness
- 5.27.9.16** Safety Nets
- 5.27.9.17** Seating
- 5.27.10** VEHICLE SAFETY EQUIPMENT
 - 5.27.10.1** Maximum of two seats. No center seating allowed.
- 5.27.11** GENERAL VEHICLE COMPONENTS
 - 5.27.11.1** Driver's Compartment Doors and Latches Firewalls
 - 5.27.11.2** Ballast

- 5.27.11.3** Weight
- 5.27.11.3.1** No minimum weight restrictions
- 5.27.11.4** Floorboards
- 5.27.11.5** Bumpers
- 5.27.11.6** Mirrors
- 5.27.11.7** Skid Plates
- 5.27.11.8** Storage
- 5.27.11.9** Fenders
- 5.27.11.10** Chassis and Body
- 5.27.11.10.1** Vehicle Must have fenders. No open wheel vehicles permitted. Must retain stock truck or SUV appearance.
- 5.27.11.11** Hoses
- 5.27.11.12** Identification Markings
- 5.27.11.13** Advertising on Vehicles
- 5.27.11.14** Workmanship

Appendix
6.0