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TECHNICAL RULES

This RockCross™ rule book is issued on the authority of RaceFace Productions . It is designed to not only provide fair and safe rules for the sport of RockCross™, but minimize adjustments of the vehicle for other types of racing.

This section contains the rules and regulations for vehicles competing in various approved classes of any RockCross™ event and govern the regulations, specifications, and restrictions of vehicles by class

RaceFace Productions may amend, suspend or modify existing rules and regulations with a minimum of a 2 week notice for vehicle rules. There may be adjustments to these rules for a specific race contingent upon safety, conditions or venue requirements.

APPLICABILITY

This rulebook is not intended to replace sound judgment with respect to vehicle construction and safety and sportsmanship at the track or venue. You are responsible for your own safety and, by your actions, the safety of others.

2 ORGANIZATION TERMINOLOGY

ROCKCROSS/RACEFACE PRODUCTIONS: The promoter/sanctioning body.

EVENT: A contest between one or more vehicles competing against the clock.

CLASS: A class is a category of vehicles as determined by seating capacity, engine size, suspension type, or any other method listed in this rulebook. Classes may be combined at the discretion of RaceFace Productions.

Pro class entrants will be eligible to receive points, trophies, contingencies, and monetary awards in respect to their finishing position.

Sportsman class entrants will be eligible to receive trophies and contingencies only in respect to their finishing position. They may receive monetary awards at the discretion of RaceFace Productions.

ENTRANT: A The Mint 400 member whose entry is accepted for an event.

DRIVER OF RECORD: The person listed on an official The Mint 400 entry form to be the main operator of a vehicle entered in an event. The driver of record must sign all entry and release forms in person during the normal registration time in order to be eligible for points, prize money, and contingency awards in that event. Identification may be required during

registration. Special consideration registration may be permitted with advanced approval of The Mint 400. Driver of Record is responsible for all actions of his/her team, pit crew and/or anyone associated with the Driver of Record / race vehicle number. Minimum age for drivers in any Car/Truck class is 14 years old, must be 14 by the date of the event. Co-driver age is not restricted.

CO-DRIVER: A person listed on an official The Mint 400 entry form as a cooperater of a vehicle that is eligible to drive or ride during the course of the race. The co-driver must sign all entry and release forms in person during the normal registration time at the same time as the driver of record is signing all entry and release forms. Identification may be required during registration. Special consideration registration may be permitted with advanced approval of The Mint 400.

CONTESTANT: A person listed on an official The Mint 400 entry form to compete in a race as either a driver or co-driver.

EQUIPMENT

Equipment requirements set forth in this rulebook are minimum requirements. This rulebook or any particular individual rule, specification, or standard set forth herein should not be construed as constraining teams or participants from employing greater safety mechanisms or adhering to stricter safety standards than the minimums required, providing that doing so does not cause a conflict with other rules published in this rulebook.

3 TERMS/DISCLAIMER/LIABILITY

- 3.1 RaceFace Productions reserves the right to refuse entry to any applicant, team, competitor, entrant, participant, or any other person, to any event for any reason.
- 3.2 The reader of this rulebook and all participants in any RaceFace Productions event hereby agree to waive, release, relinquish, protect, hold harmless, indemnify and defend the promoter, track operator, and RaceFace Productions and each of their heirs, successors, officers, officials, employees, agents, contractors, and all their respective insurance companies, successors in interest, commercial and corporate sponsors, agents, employees, representatives, assignees, officers, directors, and shareholders of and from any and all claims, demands, liabilities, losses, costs, or damages or expense for any other loss or damage arising, or alleged to have arisen, from any use of any information contained in this rulebook or by reason of any inaccurate information, omission of information, or any negligent act in or related to this rulebook.
- 3.3 RaceFace Productions does not warrant, represent, or otherwise certify that compliance with the rules contained in this rulebook confers any degree of safety, real or imagined.
- 3.4 This rulebook is published without warranty expressed or implied.
- 3.5 All participants in any RaceFace Productions event, and any user of any safety device assumes all risks involved with the use of any information contained in this rulebook, with their participation in any RaceFace Productions event, and with the operation of a vehicle.

- 3.6 RaceFace Productions is not an engineering firm, safety expert company, or medical professional company. RaceFace Productions does not represent any manufacturer of safety or off-road products.
- 3.7 Nothing written in this rulebook is intended to be professional or qualified advice on how to design, build, fabricate, install or use any vehicle, component, part, device, system, or piece of equipment, including safety systems.
- 3.8 No warranty or representation is made as to the ability of any of the information contained in this rulebook to protect any reader of this rulebook, any participant in a RaceFace Productions event, or any user of any vehicle, part, system, or safety device (whether mentioned herein or not) from injury, property damage, or death.
- 3.9 By participating in any way in any RaceFace Productions event all participants signify that they understand and agree that participating in a RaceFace Productions event, installing or using any safety device, and operating an off-road vehicle for any purpose can be hazardous with significant risk of property damage, physical harm/personal injury up to and including death.
- 3.10 All participants expressly assume all risks associated with using any information published in this rulebook, using any driver restraint or other safety system, or participating in any way in any RaceFace Productions event, whether those risks are known or unknown, inherent or otherwise.
- 3.11 RaceFace Productions assumes no responsibility for decisions made by individuals or others using this rulebook.
- 3.12 RaceFace Productions assumes no responsibility whatsoever for delays, postponements or cancellations of all or part of an event for any reason, including inclement weather or unsafe course conditions.
- 3.13 RaceFace Productions event participants, officials, and volunteers are not employees of RaceFace Productions. RaceFace Productions event participants, officials, and volunteers assume all responsibility for all charges, premiums, and taxes payable on any monies, prizes, or other awards that they may receive as a result of their participation in any RaceFace Productions event.

4 TECHNICAL INSPECTION & IMPOUND

4.1 GENERAL TECH INFORMATION

- 4.1.1 It is the entrants', drivers', owners', and sponsors' full responsibility to meet all RockCross™ rules and regulations.
- 4.1.2 RaceFace Productions reserves the right to limit the number of personnel into any area or garage in which inspections are being made or within which vehicles are impounded.
- 4.1.3 Only two (2) members, including the driver, will be allowed with a race vehicle in the post tech inspection area. Technical personnel may allow more at its discretion.
- 4.1.4 RaceFace Productions reserves the right to seal or impound any and all race vehicles.
- 4.1.5 RaceFace Productions assumes no responsibility for impounded vehicles.
- 4.1.6 RaceFace Productions intends to make reasonable efforts to ensure the vehicles' security.

- 4.1.7 The Race Director, Operations Manager, and/or Technical Director may impound any vehicle or vehicle parts.
- 4.1.8 No vehicle is to be touched or may be removed from an inspection area or impound area without permission from the director and Technical Director. Failure to comply shall subject that entry to disqualification.
- 4.1.9 Any vehicle not taken directly to the inspection or impound area when requested by the operations manager or technical director shall subject that entry to disqualification.
- 4.1.10 The Technical Director may seize any illegal parts or devices found on any vehicle. Any item seized by the technical director may not be returned, nor will there be any compensation made by RaceFace Productions, its officials or directors to any entrant who has illegal items seized.
- 4.1.11 Entrants must make all reasonable effort to arrive at the registration and pre-race technical inspection during the hours listed on race information sheets. Failure to do so may result in a \$100 fine being placed on entrant at the discretion of the RaceFace Productions .
- 4.1.12 RaceFace Productions reserves the right to apply frame identification markers to any and all vehicles that participate in RockCross™ events.
 - 4.1.12.1 The frame identification markers are to remain intact and unaltered by vehicle owners, drivers or support personnel.
 - 4.1.12.2 The frame identification markers are to remain on the vehicle for the life of the vehicle. If the frame identification marker is damaged or must be removed to facilitate repairs to the vehicle then the driver of record for the vehicle must notify the RaceFace Productions prior to the next event in order to have a new frame identification marker applied. The driver of record must notate the frame identification number being removed and notify the RaceFace Productions of the number.

4.2 PRE-RACE TECH

- 4.2.1 Each vehicle must pass a safety inspection before it will be permitted to race in any Rockcross™ event.
- 4.2.2 A designated identification marker will be placed on the vehicle after successfully passing the safety inspection. The identification marker must remain on the vehicle until after the finish of the race. The RockCross™ decal must be placed on each side of the vehicle in a prominent location.
- 4.2.3 Each race vehicle is required by The RockCross™ Tech Team to place any special event decals on each side of the race vehicle (i.e. RockCross Triple Crown decal) Failure to comply could result in a time penalty
- 4.2.4 All personal protective gear will be checked at pre-race tech. This includes but is not limited to fire suits, helmets and neck braces. First-aid kits, fire extinguishers, seat belts, and nets will also be checked. This does not imply that these items will be the only items checked.
- 4.2.5 The technical director or assistant technical director may seize any personal protective gear that does not comply with the rules or is deemed unsafe. Any item seized by the technical director will returned after the event. If they are used again they will be seized,

not returned nor will there be any compensation made its RaceFace Productions or RockCross™ officials or directors.

4.3 POST-RACE TECH

4.3.1 RaceFace Productions/RockCross™ reserves the right to subject any vehicle to a mechanical inspection at the discretion of the technical director.

4.3.1.1 In the event of a mechanical inspection, the driver of record will be responsible for removing or preparing the requested items to be inspected as directed. Failure to comply will result in disqualification of entrant and vehicle and may result in suspension from future RockCross™ race events.

4.3.2 The Operations Manager or Race Director may require the owner or entrant of a vehicle damaged in a race-related incident to submit to post-incident inspection. If the owner or entrant refuses, the vehicle and entrant may be disqualified and suspended from the current or future RockCross™ events.

4.3.3 Post-race impound of all finishing vehicles is at the discretion of the RockCross Officials.

4.3.4 Impound time limit is one hour after the official finish of the race.

4.3.5 RockCross officials will release vehicles earlier at its discretion.

4.3.6 Vehicles involved in any type of protest, complaint, or engine claim will be held until after resolution of protest, complaint, or engine claim.

4.3.7 Any refusal by an entrant to comply with engine claim rules as stated in the class rules will result in entrant's disqualification and may include suspension from all Rockcross events for a period of one year. Entrant will also forfeit any prize money, contingencies and any other award due for finishing the race.

5 SAFETY REQUIREMENTS (all classes).

When operating vehicles on the race course, at any time, entrants must use an approved helmet, protective clothing, eye protection, and safety equipment.

Drivers and or Manufactures may petition for the inclusion of products that do not follow or are not specifically listed in the enclosed guidelines. All such products must meet or exceed existing standards.

5.1 PERSONAL SAFETY EQUIPMENT

5.1.1 Helmets. Helmets used in four-wheel vehicles must meet the following requirements;

- Snell memorial foundation, SAH2015, SA2015, or SA2020 with a legible Snell sticker attached
- FIA Standard 8860-2004, 8860-2018, 8860-2018-ABP, 8860-2010, and 8859-2015 with a legible with a legible FIA sticker attached.
- Motorcycle and ATV's must meet the following requirements;
 - Snell memorial foundation, M2015, M2020D, or M2020R with a legible Snell sticker attached.
 - FIA Standard 8860-2004, 8860-2018, 8860-2018-ABP, 8860-2010, and 8859-2015 with a legible FIA sticker attached.

- Youth rider/driver may use SNELL/FIA CM2016.
- RaceFace Productions recommends each helmet be labeled (painted) with the driver/rider's name, blood type, allergies, or any other medical information.
- Left hand side of the helmet must be free of all stickers.
- Straps must have "D" rings, no snaps or Velcro.

SAH2010, SA2010, FIA 8860-2004 and M2010 helmets are not allowed.

5.1.2 Fire Suit.

- Driving suits are required that cover the body from the neck to the ankles and to the wrist. Suits must be manufactured from fire resistant material with the manufacturer's fire-resistant label attached.
- ONE PIECE DRIVING SUITS ARE MANDATORY.
- Drivers' suits must be in good condition, clean and free of damage (i.e., holes, tears, rips, etc.)
- Mandatory driving gloves and shoes must meet SFI 3.3 requirements and be free of holes.
- Fire retardant Head sock rated to the SFI 3.3 specification or a helmet skirt rated to the SFI 3.3/5 specification are mandatory.
- Only cotton undergarments or fire-retardant long sleeve tops, and long bottom undergarments as well as fire retardant socks rated to the SFI 3.3 specification are allowed
- The following are approved
 - FIA 8856-2000
 - FIA 1986 Standard
 - SFI3-2A/5Specification
 - SFI 3-2A/1 Specification with approved fire-resistant underwear (FIA 8856-2000 or SFI 3.3 Specification)
- 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.
- RaceFace Productions highly recommends that each fire suit be labeled on the upper right chest with the wearer's full name, blood type, allergies, and any other important medical information.

5.1.3 Head and Neck

- All drivers/riders in four wheel vehicles must wear a frontal head restraint (FHR) bearing the SFI foundations 38.1 manufacturer certification label.
- All head and neck restrains must be replaced or recertified no longer than 5 years from date of manufacturing.
- FHR must meet one of the following specifications:
 - SFI38.1 specifications.
 - FIA standards 8858-2002
 - FIA 8858-2010

- Competitors who violate 2.2.5 will not be allowed to proceed on race course until resolved.
- Neck collars are not allowed

5.2 Eye Protection.

5.2.1 Shatter resistant eye protection is required for all occupants competing in/on vehicles without full windshields.

5.2.1 Those competing in closed cockpit vehicles must have eye protection available in the event the windshield is knocked out or broken.

5.3 Gloves/Shoes/Socks

5.3.1 All Occupants shall utilize gloves meeting one of the following specifications:

- SFI 3.3
- FIA 8856-2000 or 8856-2018

5.3.2 Shoes/Socks.

5.3.2.1 All competitors must wear shoes and socks during competition.

5.3.2.2 The shoes must cover the entire foot and ankle and be of leather or approved fire proof material.

5.3.2.3 Socks may not be manufactured of synthetic fiber, except for nomex or similar fire resistant material.

5.4 DRIVER RESTRAINT SYSTEMS

5.4.1 All vehicles must have a five-way, six-way or seven-way H-style driver restraint system for each occupant.

5.4.2 Occupant restraint systems must use a latch-and-link or camlock style quick-release buckle (push button are not permitted).

5.4.3 Driver restraints must incorporate a lap belt, crotch), and shoulder straps.

5.4.4 Safety harness shall meet one of the following standards:

- FIA Standard 8853/98 or 8853/2016
- SFI 16.1 Specification
- SFI 16.5 Specification

5.4.5 Parts of Seat Belts may not be mixed or matched. Only complete sets may be used.

5.4.6 Belt/strap material shall be nylon or polyethylene Terephthalate (PET) polyester. Brands of this include Dacron.

5.4.7 Driver restraint system must be in new or perfect condition with no cuts, frayed layers, chemical stains, or excessive dirt and must be in flexible condition (i.e. material must not be stiff).

5.4.8 No occupant restraint systems may be used after their expiration date.

5.4.9 On harnesses with dual SFI/FIA Certification the FIA expiration date will take precedence.

5.4.10 SFI labeled belts with a manufacture date only will not be valid after two (2) years from date of manufacture as marked on the SFI tag.

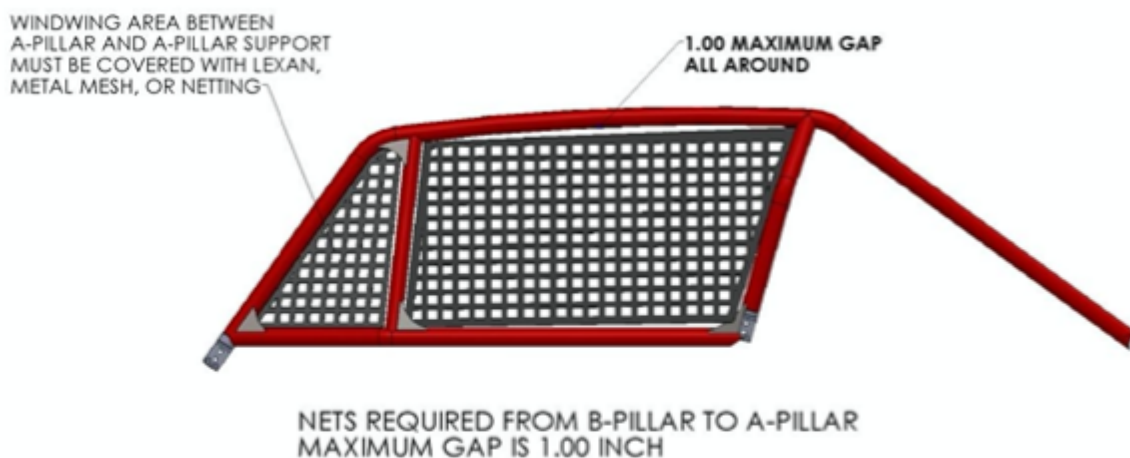
5.4.11 It is highly recommended that all driver restraint systems be replaced after one year from the date of manufacture.

- 5.4.12 No portion of the driver restraint system may be altered in any fashion from the manufacturer's standard design.
- 5.4.13 All driver restraint systems must be properly mounted in accordance with manufacturer's directions and recommendations.
- 5.4.14 Bolt-in, wrap-around, and snap-in mounting styles are permitted.
- 5.4.15 Lap belts may not be mounted by wrap-around method.
- 5.4.16 Restraint system installations must also conform to the following:
 - The occupant 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.
 - Occupant restraint must be matched to a properly constructed, fitted, and installed seat.
- 5.4.17 Seats may not be modified to create belt slots.
- 5.4.18 All belts should be as short as possible to minimize the belt's stretch.
- 5.4.19 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.
- 5.4.20 Anchor mount must be a double-shear bracket.
- 5.4.21 Occupant restraint systems must be mounted using high-quality hardware appropriate for the installation
- 5.4.22 Belts must not rub against any surface that put the belt integrity at risk.
- 5.4.23 Bar slides must be located as close as possible to the anchor plate, or if belt is wrap-around style, to the bar around which they wrap.
- 5.4.24 Belts using non-sewn anchor plates must be wrapped back a fourth time through the 3-bar slide.
- 5.4.25 Wrap-around style mounting should be confined to shoulder belt installation and must include some method to prevent lateral movement of the belts.
- 5.4.26 Lap belt tilt-lock adjusters must not be positioned in, or too close to, the seat slots.
- 5.4.27 Restraint systems must be worn properly tightened, by all occupants, at any time the vehicle is in motion.

5.5 SAFETY NETS

- 5.5.1 Safety nets are mandatory on all enclosed vehicles and must cover the complete open area of side window openings.
- 5.5.2 Safety nets are required with or without side glass and must be labeled SFI 27.1.
- 5.2.3 The net must be fastened every 6 inches around the outside of the net. Fixed corners must be fastened with metal fasteners i.e., hose clamps, Adel clamps, bolts etc.
- 5.2.4 The net border or edge and tie downs shall be made of materials that are as strong or stronger than the netting itself.
- 5.2.5 Acceptable methods of tying the nets into the vehicle include, but are not limited to: hose clamps, snaps, nylon ties, Velcro, metal hooks and steel rods.
- 5.2.6 Nets shall be installed so that the driver and/or co-driver can release the netting and exit the vehicle unassisted regardless of vehicle position.

- 5.2.7 Net installation must meet with the approval of the chief technical inspector. However, it is not the Inspectors responsibility to ensure your safety.
- 5.2.8 Netting must be installed on the inside of the roll cage bars so that it will not be damaged or come off the car in the event of a roll-over or slide on the side.
- 5.2.9 All nets must have no more than a 1inch gap on all borders to contain hands and fingers inside the vehicle.
- 5.2.10 Nets attached to the door frame covering the entire opening are approved as long as the door is equipped with a secondary latching device.
- 5.2.11 Polycarbonate is permitted as long as positive secondary latching devices are used on the doors.
 - 5.2.11.1 Polycarbonate side windows must be mounted in such a fashion as to allow quick removal in event door will not open.



5.6 SEATING

- 5.6.1 Only seats manufactured for racing will be allowed.
- 5.6.2 All seats must be securely mounted using minimum 3/8(.375) inch grade 8 hardware.
- 5.6.3 Adjustable track type seats must be securely fastened so as to allow no vertical or lateral motion.
- 5.6.4 Low back seats are not allowed.
- 5.6.4 Stock (OEM) production seats are prohibited.
- 5.6.5 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.
- 5.6.6 Headrests constructed of at least 2" (50mm) thick resilient padding and being approximately 36 square inches (233 CM square) in area are required.
- 5.6.7 Seats must appropriately accommodate the driver restraint system.

5.7 FIRE EXTINGUISHERS

- 5.7.1 A minimum of one portable UL approved 2.5 lb. or greater ABC-class dry chemical or equivalent Halon, AFFF or Novec fire extinguisher, must be carried in the vehicle in an easily accessible position by all occupants inside the vehicle.
- 5.7.2 A 5 lb. equivalent or greater ABC-class, dry chemical or equivalent Halon, AFFF Or a Novec fire extinguisher(s) must be mounted in a position that is easily located and accessed from the exterior of the vehicle by persons not familiar with the vehicle.
- 5.7.3 Integrated on-board fire extinguishing/suppression systems are highly recommended in addition to the portable fire extinguishers.
- 5.7.4 Integrated on-board fire extinguishing systems must have at least three (3) nozzles located in; passenger compartment, fuel compartment and engine compartment.
- 5.7.5 Fire extinguishers must have a gauge and be fully charged.
- 5.7.6 All extinguishers must be mounted in a manner that permits their removal and use without the use of tools.
- 5.7.7 All fire extinguishers over one year old must have a current (less than one year old) fire marshal's seal and attached label. Fire suppression systems must be current per manufacturer's specifications.

5.8 FIRST AID KIT

- 5.8.1 A weatherproof first aid kit must be carried in each vehicle at all times and must contain at least basic first aid items.
- 5.8.2 The first aid kit must be attached to the vehicle with a quick release attachment. It can not be held by any means that requires cutting or threading to remove.
- 5.8.3 The first aid kit must be easily accessible

6 VEHICLE IDENTIFICATION

- 6.1 All vehicles must be identified with the correct vehicle number displayed according to the rules.
- 6.2 Numbers are assigned by RaceFace Productions
- 6.3 Entrant numbers shall be assigned annually on a first- come first served basis.
- 6.4 Drivers may request specific number.
- 6.5 Numbers 1-10 will be assigned based on previous years finishing
- 6.6 Driver of record finishing 1-10 from the previous year may elect to run his earned number of his requested number.
- 6.7 Once an earned or requested number is chosen, it must be used the entire year.
- 6.8 Requested numbers may stagnate for one year. If no events are competed in by the driver of record holding the number, the number will be forfeited and made available to re-assign by RaceFace Productions.
- 6.9 Vehicles must display the numbers on front, both sides, and back of vehicle.
- 6.10 Any number location that is deemed by a RockCross™ Course Marshal, Technical Director, Assistant technical Director, Scoring Director or communications director to be too hard to read will have to be changed before the vehicle is allowed to compete in the event.

RaceFace Productions reserves the right to require race vehicle numbers and/or background colors be changed.

RaceFace Productions assumes no responsibility for scoring vehicles with unrecognizable numbers. It is the teams responsibility to maintain numbers in recognizable condition at all times.

Side numbers are required on all vehicles behind the B Pillar. Offsetting the plate from the edge of the body is suggested. Protecting the plate from mud is the responsibility of the team. (see 5.8)

All vehicles must have one (1) front facing and one (1) rear facing number plate with the same color combination as the Sides.

Side, front and back numbers must be at least 6" (150mm) tall with a minimum of 1" (25mm) stroke.

Only Block numbering is allowed.

Unlimited Class – Black numbers with white background

Modified – Black numbers – light orange background

Stock – Black numbers PMS 2707 C – Light blue background

UTV – White numbers – Black background

7 GENERAL VEHICLE REQUIREMENTS

7.1 CABIN

7.1.1 Driver and/or co-driver are to enter and exit the driving compartment unassisted with ease, with the vehicle in any position.

7.1.2 All doors must have positive locking mechanisms (A positive locking device is a device used in conjunction with a fastener in order to positively lock the fastener. This means that the fastener cannot work loose from vibrations) on the doors.

7.1.3 Doors must have a permanently attached positive secondary latching device.

7.1.4 All vehicles must have a rear-view mirror that is at least six square inches.

7.1.5 Mirrors must be in a position that provides reasonably clear view behind the vehicle.

7.2 ENGINE COMPARTMENT

7.2.1 Oil coolers, transmission coolers and radiators located in front of the vehicle occupants must have a shroud that, in the event of a rupture or leak, will prevent liquids from blowing back or leaking onto the occupants.

7.2.2 All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

7.2.3 All vehicles must have an all-metal firewall separating the occupants' compartment from the danger of fire from the engine and fuel supply.

- 7.2.4 Firewalls and/or bulkheads must separate the passenger compartment from any fuels, engine fluids, and acids. Cars with rear-mounted radiator must have a wire mesh panel to protect radiator.
- 7.2.5 Firewalls must be fluid tight and extend from body side to body side. If engine is rear-mounted, firewall must extend from the driver's shoulder height to the vehicle floor and extend from body side to body side.
- 7.2.6 If rear mounted fuel cell is higher than driver's shoulder height, a firewall between the driver and the fuel cell must extend at least 2" (50mm) above the top of the fuel cell.
- 7.2.7 The hood is considered an extension of the firewall on front engine vehicles.
- 7.2.8 Any hole placed in the firewall for structural members, lines, etc. should not have more than 0.0625" (1.6mm) gap around the items passing through the firewall.
- 7.2.9 Metallic tape must be used to seal the hole between the firewall and the item passing through the firewall. Rear mounted engines are not required to have a top mounted hood.
- 7.2.10 Floorboards are required on all vehicles
- 7.2.11 Floorboards must be attached by a minimum of six 0.25" (6mm) bolts per side if not an integral part of the body or chassis.
- 7.2.12 Zeus or other quick-turn or 1/4-turn fasteners are not permitted.
- 7.2.13 Floorboards must cover the entire area from in front of the pedal assembly to behind the seat(s), and from the outside edge to the outside edge of the vehicle.
- 7.2.14 Engine shall be free of leaks
- 7.2.15 Engine vents shall run to a fluid containment system, and dipsticks shall be locking type.
- 7.2.16 Spark arrestors or approved mufflers are required on all vehicles.
- 7.2.17 Exhaust outlet must be directed rearward out of the body away from the occupants, fuel cells and tires.
- 7.3 Bumpers/Nerf Bars/rockguards
 - 7.3.1 Safe front and rear bumpers are required on all vehicles.
 - 7.3.2 No hazardous protruding objects from vehicles are permitted.
 - 7.3.3 Tube ends must be capped and rounded to prevent any sharp edges
 - 7.3.4 All components of the vehicle and spare parts/extra equipment carried in a vehicle must be securely attached or stowed to prevent movement during competition. All spare parts and extra equipment must be carried in a manner that minimizes the risk of injury to the vehicle occupants.

7.4 BODIES

All vehicle body parts must remain on the vehicle (accidental damage excluded) during the entire event.

7.5 ROLL CAGES

- 7.5.1 It is each competitor's responsibility to provide a safe vehicle for pre-event technical inspection. Competitors must maintain their safety equipment including the roll cage

integrity. RaceFace Productions reserves the right to fail and vehicle with a cage designs that, in the opinion of the Chief Technical Inspector, is not fit for competition.

- 7.5.2 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.
- 7.5.3 The roll cage is considered to be the main 6-point structure that surrounds and protects the vehicle's occupants.
- 7.5.4 All vehicles must be equipped with a roll cage fabricated of 1020 mild steel mechanical tubing or better (higher carbon content or alloy steel).
- 7.5.5 Six (6) point mounting cages are required over the occupants.
- 7.5.6 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 recommended. However, RaceFace Productions is not an engineering firm nor has it completed any testing of these tubing sizes/types of roll cage construction. Again, it is the competitors responsibly to construct a safe roll cage sufficient for the forces and shock loads that it could encounter under race conditions.

Up to 2000 lbs.

1.500" x 0.095" Cond N/4130/Seamless or ASTM 1018/1026 CDS/DOM

2001 – 2500 lbs.

1.500" x 0.120" Cond N/4130/Seamless or ASTM 1018/1026 CDS/DOM

2501 – 3000 lbs.

1.750" x 0.095" Cond N/4130/Seamless or ASTM 1018/1026 CDS/DOM

3001 – 4000 lbs.

1.750" x 0.120" Cond N/4130/Seamless or ASTM 1018/1026 CDS/DOM

Over 4000 lbs.

2.000" x 0.120" Cond N/4130/Seamless or ASTM 1018/1026 CDS/DOM

The following are also permitted:

DVWR Under 3200 lb. (1452kg) - 1.5" (38mm) diameter x .120" (3.0mm) wall thickness.

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

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

- 7.5.7 Supporting Tubes as defined above with an unsupported span of less than 30" (762mm) are allowed to be the same diameter as the main structure in the .095" (2.5mm) wall thickness or .25" (6mm) smaller tube diameter with .120 (3.0mm) wall thickness.
- 7.5.8 All unsupported span more than 30" (762mm) must be the same diameter and thickness as the main structure.
- 7.5.9 No aluminum or other non-ferrous materials are permitted. (All specifications may be substituted with metric equivalent).
- 7.5.10 Roll cage main structure material may be CREW, DOM, WHR, or WCR mild carbon steel or 4130 chromoly alloy steel.
- 7.5.11 All welds must be of high quality and craftsmanship with good penetration.

- 7.5.12 All roll cage components must have a minimum of 3" (75mm) of clearance from any vehicle occupant's helmet when occupant is seated in normal driving/riding position.
- 7.5.13 All roll cage components that might come into contact with the vehicle occupants' helmets must be padded.
- 7.5.14 Roll cages must be securely mounted to the frame, chassis, or body. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow movement in the cage terminal end.
- 7.5.15 Cab/body-mounted roll cages must sandwich the body structure using a minimum of two .1875" (4.75mm) thick, dissimilar sized, doubler plates, one on each side of the body structure.
- 7.5.16 Roll cage mounting fasteners must be at least .375" diameter S.A.E. Grade 8 (10mm gr 10.9) or equivalent or better.
- 7.5.17 Sandwich plates, if used, must be oriented only in the horizontal plane. No vertical or other non-horizontal sandwich plate orientations are permitted.
- 7.5.18 Sandwich plates must not have aligning edges that would create a shear.
- 7.5.19 All vehicles must have at least one side bar on each side of vehicle that will protect occupants from side impact (doors will not count as a side bar).
- 7.5.20 The sidebars must be of the same tubing material and dimensions as the main frame of the roll cage.
- 7.5.21 The sidebars should be as close to parallel to the ground as possible
- 7.5.22 The sidebars must be securely welded to the front and rear hoops of the roll cage.
- 7.5.23 Gussets must be installed at all major intersections, including diagonal and rear down braces.
 - 7.5.24`Gussets constructed of 3" (75mm) x 3" (75mm) x .125" (3.5mm) flat plate or split, formed and welded corner tubing, or tubing gussets made of the same material and thickness as the roll cage may be used.
- 7.5.24 A minimum .040" (1mm) expanded or flat sheet magnetic steel or .125" (3.5mm) aluminum must cover the area immediately above the occupants' seats and be attached via welding or bolting to a steel tubing frame work.
- 7.5.25 Approved variations may be ran with approval. Final approval will be by Chief Technical Inspector. All findings will be private between driver of record and RaceFace™ Productions.

7.6 TRANSMISSION

- 7.6.1 Transmissions must be free of leaks.
- 7.6.2 Transmission case vents shall run to a fluid containment system.
- 7.6.3 Every vehicle must have a functional reverse gear.

7.7 TRANSFER-CASE

- 7.7.1 Transfer case must be free of leaks.
- 7.7.2 Transfer case vents shall run to a fluid containment system

7.8 DRIVESHAFTS

7.8.1 Driveshaft U-joints shall be covered by the floorboard or with a minimum of .040 (1mm) aluminum, 20 ga. (1mm) steel, 20 ga.(1mm) expanded metal

7.8.2 A rear driveshaft loop is strongly recommended

7.9 STEERING

7.9.1 Power-assisted steering systems must be free of leaks.

7.9.2 Power-assisted steering vent tubes must be attached to a fluid containment system which prevents any fluid from leaking onto the ground

7.9.3 Drag link and tie rod ends designed for use with a castellated nut and cotter pin must be secured with a cotter pin. Spherical rod ends (Heim joints) are a permitted replacement for OEM-style tapered tie rod ends.

7.9.4 All hydraulic steering lines must be free of cracks or leaks. Hydraulic lines must be run in a manner that protects them from damage.

7.10 SUSPENSION

7.10.1 At least one shock absorber per wheel, in working condition and free of leaks must be used on all 4-wheel vehicles. Other systems may be used with prior approval of RaceFace™ Productions, or RockCross Technical Director.

7.10.2 Pivot points and connecting points must be free of cracks and in good physical condition.

7.11 BRAKES

7.11.1 Brakes must be able to lock up all four tires.

7.11.2 Brakes must be in a safe operating condition and free of leaks during the entire event.

7.11.3 If brake system problems occur during the event they must be repaired before continuing in competition.

7.11.4 Turning, cutting, or steering brakes are permitted.

7.11.5 Manual, vacuum boosted, and hydraulically assisted brakes are permitted.

7.11.6 Drivers Brake pedal(s) must be able to operate all brakes with a single foot.

7.11.7 Transmission and/or pinion-brake systems are permitted, providing they meet all other requirements specified herein.

7.11.8 Each vehicle shall have a means of applying continuous brake pressure while vehicle is parked with occupant(s) outside the vehicle. Hydraulic "line-locks" or mechanical "emergency brakes" are permitted.

7.11.9 Plastic brake lines are not permitted.

7.12 FUEL TYPES

7.12.1 Approved fuel types

- Service station pump gasoline
- Racing gasoline, as originally manufactured
- Commercial aviation gas

- Diesel fuel: Alternative fuels, including biodiesel, WMO, WVO, etc., on approval of RaceFace™ Productions
- Propane or natural gas
- Commercially produced, nationally advertised fuel additives may be used.

7.13 FUEL STORAGE

- 7.13.1 Safety fuel cells are required for all vehicles.
- 7.13.2 There must be a substantial cross member and firewall between the fuel tank and the occupants.
- 7.13.3 Fuel tanks must be mounted in such a way as to protect the tank from damage due to a collision, impact from debris or rocks from below the vehicle, damage due to roll over, or the possibility of damage from chassis flex.
- 7.13.4 Safety fuel cells shall consist of a bladder enclosed in a smooth-skinned container. The container shall be constructed of 20 gauge (1mm) steel, 0.060" (1.5mm) aluminum.
- 7.13.5 Container must be securely attached to vehicle with bolts and/or steel straps.
- 7.13.6 Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer.
- 7.13.7 Rotary molded polymer cells are acceptable when encapsulated in a container constructed of 20 ga. (1mm) Steel or 0.060" (1.5mm) aluminum.
- 7.13.8 All fittings must be built into the container skin and bonded to the container skin as an integral part of the tank or mechanically sealed by a ring and counter-ring system by either flat joint or an O-ring.
- 7.13.9 Internal baffling is mandatory in all fuel cells. Foam is an acceptable form of internal baffling.
- 7.13.10 Fuel accumulator tanks (accumulators) are permitted
- 7.13.10 Accumulator tanks shall be constructed of .125" (3.25mm) aluminum or steel, and shall be mounted to the chassis using rubber isolation.
- 7.13.11 Maximum capacity is one quart.
- 7.13.12 Accumulators shall be mounted in a manner that protects them from damage due to impact.
- 7.13.13 Alternative fuels must use an approved fuel cell as determined by DOT standards and with the approval of RaceFace™ Productions
- 7.13.14 Forklift propane fuel tanks are permitted.
- 7.13.15 Alternative fueled vehicles shall not use auxiliary fuel cells.
- 7.13.16 Substitute methods may be approved by RaceFace™ Productions. Approval will be made in writing

7.14 FUEL: PLUMBING, FILLING & VENTILATION

- 7.14.1 Design and installation of fuel system must prevent fuel escaping if the vehicle is partially or totally inverted.

- 7.14.2 Fuel isolation valves that facilitate isolation of the fuel tank from the fuel supply line, fuel return line, and fuel vent line are required. Ball valves, or a combination of ball valve and one-way check valve, located at the supply, return, and vent line are acceptable.
- 7.14.3 Fuel isolation valves shall be located such that, with the vehicle in any position, they may be rapidly closed to restrict the continuous flow of fuel onto the ground in the event of a fuel line failure.
- 7.14.4 Accumulators shall have supply inlet, supply outlet, return supply, and return outlet connections with isolation valves.
- 7.14.5 Fuel tank must be filled and vented outside of the passenger compartment.
- 7.14.6 Fuel Cap must be positive locking/non vented.
- 7.14.7 Fuel filler lines and cap must be located to prevent them from being knocked off or open during vehicle movement, rollover, or accidental impact.
- 7.14.8 Monza/flip-type caps are prohibited.
- 7.14.9 All fuel fillers attached to the frame or a body panel must be connected to the tank using flexible couplers.
- 7.14.10 All fuel fillers must be surrounded by a boot or splash guard (body panel is acceptable as a splashguard, if it is sealed). Boot or splash guard must direct fuel spillage to outside of vehicle and away from occupants' compartment, engine, and exhaust.
- 7.14.11 A fuel filler rollover- check-valve must be incorporated into all fuel cells
- 7.14.12 Fuel vent lines must vent outside of the passenger compartment and have a rollover check valve incorporated at the fuel cell.
- 7.14.13 Fuel vent line must use one of the following routings:
- Fuel vent line must extend to the highest point of the roll cage nearest the fuel cell, across the width of the vehicle, and down to below the belly pan of the vehicle or 3" (75mm) below the fuel cell, whichever is lower.
 - Fuel vent line must loop above the fuel cell to a point that is 4" (100mm) above the top of the fuel cell. From there it shall be wrapped one full loop around the outside of the fuel cell near the top of the fuel cell and then be routed down to a point 3" (75mm) below the lowest point of the fuel cell.
- 7.14.14 All fuel towers shall only use a fueling hose that incorporates a 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.)

ELECTRICAL SYSTEM

7.15 KILLSWITCH

- 7.15.1 A brightly colored, clearly labeled, easily distinguishable, master kill switch must be located in the dashboard area where it can accessed by all occupants of the vehicle.

- 7.15.2 The master kill switch must be able to shut down the entire primary electrical system for the vehicle.
- 7.15.3 The master kill switch must shut down the engine when in the off position.
- 7.15.4 Winch power supply and low amp draw secondary electrical equipment which requires an uninterrupted power supply may circumvent this switch.

7.16 IGNITION/BATTERIES

- 7.16.1 Vehicle must have a positive action on/off ignition switch in.
- 7.16.2 The switch must be labeled "ignition on/off" and be located within easy reach of the driver and from the outside of vehicle.
- 7.16.3 Batteries must be securely mounted with metal brackets, clamps, or tie-downs in a manner that prevents displacement in a roll over.
- 7.16.4 Batteries must be located outside the passenger compartment.
- 7.16.5 All batteries shall be the sealed, non-spill type. Absorbed glass mat (AGM) or "gel cell" type batteries are highly recommended.
- 7.16.6 Flooded Cell batteries are prohibited.

7.17 LIGHTS

- 7.17.1 Working headlights are only required for events where any portion of the on-course event takes place between sunset and sunrise.
- 7.17.2 All vehicles must have a minimum of two tail lights, two brake lights and one rearward facing amber light. Stock tail lights, if so equipped, are permitted as long as they remain on whenever the vehicle's ignition is on.
- 7.17.3 A rearward facing amber light must be installed on all vehicles.
- 7.17.4 All rearward-facing lights must be protected against damage that may be caused by a rollover. Taillights must be at least 3" (75mm) in diameter, or meet with RaceFace Productions approval, and must be mounted in such a manner as to be clearly visible from the rear of the vehicle.
- 7.17.5 Rearward facing amber light, and blue light if so required, must illuminate with a brightness that is at least equivalent to a 40 watt 12V automotive lamp but not brighter than equivalent to a 55 watt 12V automotive lamp. LED lamps of appropriate brightness are permitted. The amber lens must be deep-coated amber in color, no other color is permitted. The blue lens must be medium-coated blue in color, no other color is permitted. The amber light and blue light if so required must be mounted a minimum of 48" (1220mm) from the ground and must be clearly visible, with no obstructions (i.e. not mounted behind any translucent object), from any position in an imaginary arc from the 5 o'clock position to the 7 o'clock position of the vehicle. The amber light and blue light, if so required, must be placed so as not to impair the vision of another driver approaching from the rear.
- 7.17.6 All rearward-facing lights must be connected to the ignition switch or directly to a main battery power switch, such that they remain on whenever the vehicle's ignition is on.

7.17.7 If during an event any required light fails to operate, the light must be fixed or replaced at Before the following heat to continue in the event.

7.18 STARTER

7.18.1 All vehicles must be self-starting by use of an onboard electric starter.

7.19 WHEELS & TIRES

7.19.1 All vehicles shall have a maximum four driven wheels and tires.

7.19.2 nap-on hubcaps or snap-on wheel covers of any type are not permitted.

7.19.3 All factory-built tires from any manufacturer are permitted.

7.19.4 Tire studs, screws or any other items added to the tire are not permitted. Grooving, sipping or other modifications that involve removing material from the tire are permitted.

7.19.5 Secondary Inflation Apparatus are NOT approved.

7.19.6 Tire Liner type products with a functional outer diameter of no more than 27" will be allowed.

7.20 VEHICLE WEIGHT

Official vehicle weight shall be the empty dry weight of the vehicle. Empty dry weight is measured without fuel, spare tires, tools, spare parts or occupants in vehicle. Official weight will be the weight as shown on the RaceFace Productions official scales. Vehicle must drive on and off the scales under its own power with all mechanical systems complete and race ready.

8 STOCK CLASS

The spirit and goal of the stock class is to provide the general off-road community the opportunity to showcase their products while providing a venue for teams to compete in a true drivers' class in vehicles that closely relate to street driven versions of the same. The driver of record will bear the burden of proving legality of any part of their vehicle including but not limited to; Motor/Transmission, frame length, suspension configuration.

Most "Out of the box" aftermarket upgrades are legal

8.1 ELIGIBLE VEHICLES

8.1.1 Any four-wheeled, four-wheel-drive production automotive based vehicles are eligible for competition, providing they meet all the rules and regulations specified herein, and with the following limitations and exceptions:

- Minimum of five hundred (500) units were produced by the original manufacturer for given model year, for given market/region.
- Vehicles produced for foreign markets may be imported for competition, but features and/or components found on vehicles produced for different

regions/markets shall not be combined in any one vehicle if doing so would violate any rules or regulations specified herein.

8.2 FRAME & BODY

8.2.1 Stock frame (frame is considered to be the primary frame rails and all permanently factory cross members) must be retained, and must be complete and unmodified.

8.2.2 No material may be removed for any reason and no section of the frame may be 'massaged' or re-shaped with the following limitations and exceptions:

- The rear portion of the frame and rear cross member may be removed or trimmed for the sole purpose installing an aftermarket rear bumper or "out of the box" suspension system.. Frames may be reinforced by adding material.

8.2.3 Stock body (body is considered to be the full cab, including all interior and exterior sheet metal, bed, doors, hood, fenders, grill, etc.) required.

8.2.4 The body must be complete and unmodified, with the following limitations and exceptions:

- Holes may be cut in any part of the body for the single and exclusive purpose of allowing roll cage tubes and transmission/transfer case linkage to pass-through the body.
- Open holes must be kept to within .5"(12.5mm) of the diameter of any tube or linkage that passes through the body, with further restrictions related to holes in firewalls. The exception to this rule is the allowance for rocker panel protection limited to the area between the wheel wells. You may cut into the body and/or reinforce this area. You may not interfere with the mating surface of the stock door and doorsill. The stock doorsill must be retained and unaltered.
- Stock doors may be modified to create half-doors and/or may also be replaced with aftermarket tubular doors. Doors must open and close, bolted on panels are not allowed.

8.2.5 Stock windows (glass) are not required, but are permitted, providing they meet DOT regulations. Alternatives to traditional safety-glass may be allowed, on approval of Chief Technical Inspector

8.2.6 Front inner fenders must be complete

8.2.7 Front inner fenders may be replaced with aftermarket inner fenders

8.2.8 Front outer fenders may be replaced with OEM-style aftermarket fenders (flared fiberglass fenders are permitted).

8.2.9 Rear inner and outer fenders must be complete and unmodified, with the following limitations and exceptions:

- outer fenders (wheel well openings) may be trimmed for the single and exclusive purpose of allowing for tire clearance.
- Modifications to the outer fenders must preserve the look of the stock wheel wells, as originally manufactured, and must not be trimmed excessively (no more than a 2" (50mm) gap between any part of the outer fender and the tire at full compression).

8.2.10 Extensive damage to any portion of the frame or body (prior to race start) may be considered illegal modifications, and repairs may be required, as determined by, and at the sole discretion of the Chief Technical Inspector.

8.2.11 Stock body mounts may be modified or eliminated, with the following limitations and exceptions:

- The relationship of the body to the frame must remain within 2" (50mm) of stock configuration, as originally manufactured.
- Stock body mounts shall not be modified or eliminated for any reason other than to allow any part of the roll cage to pass through the body in order to be securely attached to the chassis.

8.2.12 Headlights are required and must be functional.

8.2.13 Factory bumpers are not required and may be replaced with aftermarket.

8.3 ENGINE

8.3.1 Stock engine must be retained, but may be replaced with any available in make/model/year.

8.3.2 Any and all modifications are permitted, with the following limitations and exceptions:

- Stock engine-block must be retained, as originally manufactured (boring, stroking and other internal engine modifications are all permitted).
- Forced-induction of all types is not permitted, unless factory-equipped.
- If equipped with a water-cooled engine, the radiator must remain within 6" (150mm) of the original location, as originally manufactured

8.4 TRANSMISSION

8.4.1 Stock transmission must be retained, but may be replaced with any available in make/model/year.

8.4.2 All modifications are permitted, with the following limitations and exceptions:

- Stock transmission case/s must be retained, as originally manufactured.
- Auxiliary transmissions (e. g. secondary transmissions, under / over- drives, etc.) are not permitted.

8.5 TRANSFER-CASE

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

8.6 DRIVESHAFTS

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

8.7 AXLES

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

8.8 STEERING

8.8.1 Steering components may be modified or eliminated and steering components/linkage may be installed in any location and orientation, with the following limitations and exceptions:

- All vehicles must retain some type of mechanical steering linkage (e. g. 'full-hydro' steering is not permitted, unless factory-equipped), and said linkage must be

capable of controlling the direction of the steering wheels/tires without the benefit of any additional power-steering aids.

- The steering box (or rack, if so-equipped) must remain within 4" (100mm) of the stock location. No part of the steering linkage shall be oriented so as to be partially or substantially parallel to the frame rails or any part of the suspension linkage, with the exception of the drag-link and track-bar (if so-equipped, and unless otherwise- equipped, as originally manufactured).
- Rear-steer is not permitted.

8.9 SUSPENSION

8.9.1 Wheelbase must remain within 3" (75mm) of stock, as originally manufactured.

8.9.2 Suspension configuration must remain stock, as originally manufactured (meaning that leaf springs must remain leaf springs, coil springs must remain as coil springs, torsion-bars must remain as torsion-bars, etc.).

8.9.4 Leaf springs may be replaced with any leaf springs and may be installed in any location and orientation, with the following limitations and exceptions:

- Leaf springs must be connected directly to the axle assembly, unless otherwise factory-equipped.
- Links/linkage may be installed, but the leaf springs must be capable of locating the axle assembly relative to the chassis in any direction without the use of any such links/linkage. As such, quarter- elliptical springs, transverse leaf springs, and the use of double-shackles (at the forward and rear leaf spring mounting points at the chassis) are not permitted, unless factory-equipped.

8.9.5 Coil-springs and related suspension linkage may be modified or eliminated and replaced with any coil-springs and linkage, and may be installed in any location and orientation, with the following limitations and exceptions:

- Coil- springs 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.
- Coil- springs shall not be replaced with any type of coil-over shocks, unless factory- equipped (if so-equipped, factory coil-over shocks may be replaced with aftermarket coil-over shocks).

8.9.6 Secondary suspension is not permitted, unless factory-equipped (secondary suspension is considered to be any means or method of supporting any portion of a vehicle's weight and/or affecting the primary spring-rate at any time). As such, springs of all types and airbags, are not permitted.

8.9.7 Air/nitrogen-charged hydraulic bump stops, compressible bump stops made of rubber, foam, or other similar materials are permitted, with the following limitations and exceptions:

- Bump stops shall not have any action whatsoever on any aspect of a vehicle's performance outside of the last 2" (50mm) of vertical wheel-travel (on compression).
- Bump stops must be available on the aftermarket

- 8.9.8 Shock absorbers of any make/model/type are permitted and may be installed in any location and orientation, with the following limitations and exceptions:
- Only one shock absorber is permitted per wheel/tire (not including spare tires).
 - Shock absorbers shall not be larger than 2.65" (67mm) in diameter (outer diameter of shock-body) and shall not be capable of any more than 14" (355.6mm) stroke.
- 8.9.9 Position-sensitive shocks (including bypass shocks of all types) are not permitted.
- 8.9.10 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).
- 8.9.11 Manual suspension controls (e.g. forced hydraulics) are not permitted.

8.10 WHEELS & TIRES

The intent of the tire rule for the stock 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 35" (or equivalent), as specified on the tire's sidewall by the original manufacturer.

9 MODIFIED CLASS

9.1 FRAME & BODY

- 9.1.1 The frame is considered to be the primary frame rails used to mount the drive train and body.
- 9.1.2 It shall run from the OEM motor mount location to behind the rearmost portion of the occupants' seats.
- 9.1.3 The balance of the frame shall remain whole however allowances will be made for suspension mounting.
- 9.1.4 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" (38mm) x 3" (75mm) x 0.120" (3.0mm).
- 9.1.5 At static ride height the bottom of the frame rails shall be no higher than the top of the tire.
- 9.1.6 At no point shall the frame rails be closer than 16" (406mm), measured horizontally.
- 9.1.7 The frame rails must remain within 4" (100mm) of vertical alignment in relation to each other for the entire length of the frame.
- 9.1.8 The body is considered to be the exterior of the cab, bed, doors, hood, front/rear fenders, grill, etc.
- 9.1.9 All vehicles shall resemble an OEM production vehicle, and the body shall be complete with the following limitations and exceptions:

- Modifications to the body for performance and/or clearance are permitted but must preserve the look of the stock body, as originally manufactured.

9.1.10 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.

9.2 ENGINE

9.2.1 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.

9.3 TRANSMISSION

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

9.4 TRANSFER-CASE

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

9.5 DRIVESHAFTS

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

9.6 AXLES

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

9.7 STEERING

9.7.1 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.

9.8 SUSPENSION

9.8.1 All suspension components and configurations are permitted, providing they meet all the additional rules and regulations specified herein.

9.8.2 All Shock absorbers of any make/model/type are permitted and may be installed in any location and orientation, with the following limitations and exceptions:

- Only two shock absorbers are permitted per wheel/tire (not including spare tires).
- Shock absorbers shall not be larger than 2.65" (67mm) in diameter (outer diameter of shock-body) and shall not be capable of any more than 14" (355.6mm) stroke.
- 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).

9.8.3 Manual suspension controls (e.g. forced hydraulics) are not permitted.

9.8.4 Frame requirements will exceed class rules to include suspension mounting points for the independent portion of the suspension.

WHEELS & TIRES

9.9.1 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.

9.9.2 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.

10 UNLIMITED CLASS

ENGINE

All engines are permitted, providing they meet all the additional rules and regulations specified herein.

10.1 TRANSFER-CASE

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

10.2 DRIVESHAFTS

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

10.3 AXLES

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

10.4 STEERING

All steering components and configurations are permitted, providing they meet all the additional rules and regulations specified herein. Rear steering is permitted.

10.5 SUSPENSION

10.5.1 All suspension components and configurations are permitted, providing they meet all the additional rules and regulations specified herein.

10.5.2 Shock absorbers of any make/model/type are permitted and may be installed in any location and orientation, providing they meet all the additional rules and regulations specified herein.

10.5.3 Manual suspension controls (e.g. forced hydraulics) are permitted.

10.6 WHEELS & TIRES

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

11 UTV CLASS

11.1 DEFINITION

11.1.1 A UTV is defined as a standard production based side by side style vehicle, single seats Included. 1000 CC or less motor with powersports based drivetrain.

11.1.2 Any non-production based belt driven vehicles must be approved prior to racing.

11.2 SAFETY

11.2.1 UTV Safety – UTV's to follow all RockCross™ Safety rules with the following exceptions:

- Six Point cage is required.
- Cage must be directly connected to the sub chassis at all six points.

11.2.2 Safety harnesses meeting 5.4 are required.

11.2.3 Seats must have slots for harnesses and adequate headrest contact with a helmet on.

11.2.4 Seats intended for racing are highly recommended.

11.2.5 Doors are required but not required to open. If doors do open, a mechanical secondary latch is required. (zip ties, velcro, tape, do not count as mechanical)

11.2.6 Window nets meeting section 2.2.9 are required. Arm restraints may be used in addition to window nets.

11.2.7 Factory plastic fuel cells allowed if used in factory mounting position

11.2.8 All seats must be attached completely by metal components.

11.2.9 NO plastic components are allowed, even if as originally supplied by manufacturer. The factory latch may be retained.

11.2.10 Performance

11.2.10.1 Engines must be of 1000cc or less powersports configuration.

11.2.10.2 Overboring of motor is permitted.