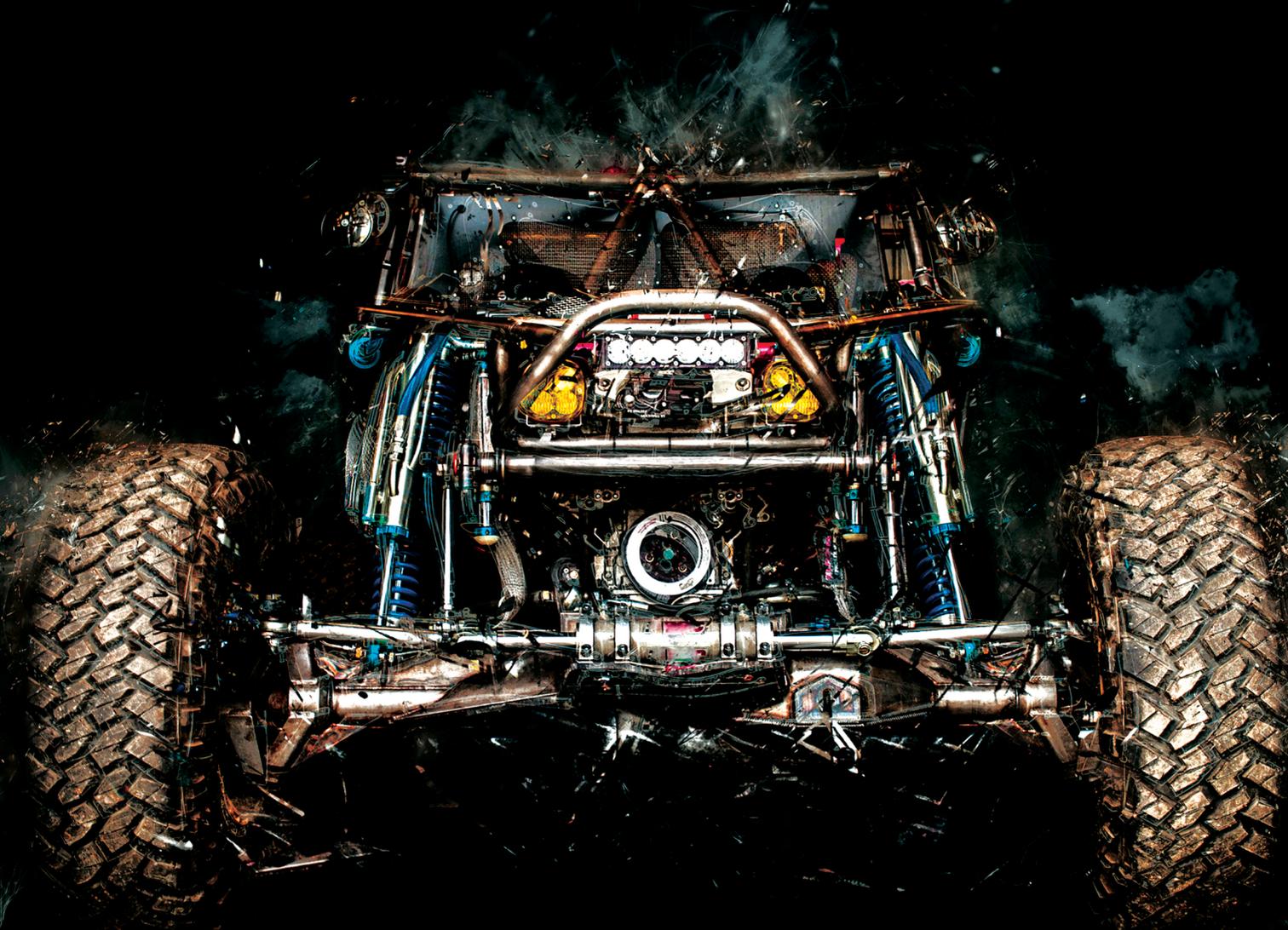


**ULTRA4**  
Unlimited 4 Wheel Drive Racing



**2023**  
**RULEBOOK**

12/1/2022    VERSION 5.3

<b>TECHNICAL RULES</b> .....	<b>7</b>
<b>1 TECHNICAL RULES &amp; REGULATIONS</b> .....	<b>7</b>
1.1 TECHNICAL INSPECTION & IMPOUND .....	7
<b>2 COMMON VEHICLE REQUIREMENTS (all classes)</b> .....	<b>10</b>
2.1 SERVICEABILITY .....	10
2.2 SAFETY EQUIPMENT .....	10
2.3 VEHICLE IDENTIFICATION.....	17
2.5 GENERAL VEHICLE COMPONENTS.....	19
2.6 ROLLCAGES.....	20
2.7 ENGINE.....	22
2.8 TRANSMISSION.....	23
2.9 TRANSFER-CASE .....	23
2.10 DRIVESHAFTS.....	24
2.11 STEERING.....	24
2.12 SUSPENSION .....	24
2.13 BRAKES .....	24
2.14 CONTROLS.....	25
2.15 FUEL SYSTEM.....	25
2.16 FASTENERS .....	28
2.17 ELECTRICAL SYSTEM.....	28
2.18 WHEELS & TIRES .....	30
2.19 VEHICLE WEIGHT.....	31
<b>3 STOCK CLASS / 4600</b> .....	<b>32</b>
3.1 ELIGIBLE VEHICLES.....	32
3.2 FRAME & BODY.....	32
3.3 ENGINE.....	34
3.4 TRANSMISSION.....	34
3.5 TRANSFER-CASE .....	34
3.6 DRIVESHAFTS.....	35
3.7 AXLES.....	35
3.8 STEERING.....	35
3.9 SUSPENSION .....	35
3.10 WHEELS & TIRES .....	37
<b>4 MODIFIED CLASS / 4500</b> .....	<b>38</b>
4.1 FRAME & BODY.....	38
4.2 ENGINE.....	38
4.3 TRANSMISSION.....	39

4.4	<i>TRANSFER-CASE</i> .....	39
4.5	<i>DRIVESHAFTS</i> .....	39
4.6	<i>AXLES</i> .....	39
4.7	<i>STEERING</i> .....	39
4.8	<i>SUSPENSION</i> .....	39
4.9	<i>WHEELS &amp; TIRES</i> .....	40
<b>5</b>	<b>LEGENDS CLASS / 4800</b> .....	<b>41</b>
5.1	<i>ENGINE</i> .....	41
5.2	<i>SEATS</i> .....	41
5.3	<i>SUSPENSION</i> .....	41
5.4	<i>AXLES</i> .....	41
5.5	<i>TIRES</i> .....	41
5.6	<i>SAFETY</i> .....	41
<b>6</b>	<b>UNLIMITED CLASS / 4400</b> .....	<b>42</b>
6.1	<i>ENGINE</i> .....	42
6.2	<i>TRANSFER-CASE</i> .....	42
6.3	<i>DRIVESHAFTS</i> .....	42
6.4	<i>AXLES</i> .....	42
6.5	<i>STEERING</i> .....	42
6.6	<i>SUSPENSION</i> .....	42
6.7	<i>WHEELS &amp; TIRES</i> .....	42
<b>7</b>	<b>UTV CLASS / 4900</b> .....	<b>43</b>
7.1	<i>Definition</i> .....	43
7.2	<i>Safety</i> .....	45
7.3	<i>Performance</i> .....	45
<b>8</b>	<b>PIT-SUPPORT VEHICLES</b> .....	<b>46</b>
<b>9</b>	<b>EVENT RULES &amp; REGULATIONS</b> .....	<b>47</b>
9.1	<i>EVENT OFFICIALS</i> .....	47
9.2	<i>EVENT PARTICIPANTS</i> .....	50
9.3	<i>EVENT COURSE</i> .....	53
<b>10</b>	<b>SERIES POINTS &amp; CHAMPIONSHIPS</b> .....	<b>66</b>
<b>11</b>	<b>INFRACTIONS &amp; PENALTIES</b> .....	<b>68</b>
<b>12</b>	<b>PROTESTS &amp; GRIEVANCES</b> .....	<b>70</b>
<b>13</b>	<b>COMPETITOR BOARD</b> .....	<b>71</b>
<b>14</b>	<b>APPENDIX A – GLOSSARY</b> .....	<b>73</b>
<b>15</b>	<b>APPENDIX B – SEATBELT INSTALLATION GUIDE</b> .....	<b>78</b>

## COPYRIGHT

The Hammerking Productions Inc. Rulebook is the sole property of, and the copyright held by, Hammerking Productions Inc.. The Hammerking Productions Inc. Rulebook may not be used by any person or entity, in part or in whole, for any reason whatsoever, without the express written permission of Hammerking Productions Inc..

## INTRODUCTION/OVERVIEW

This Hammerking Productions Inc. Rulebook is issued on the authority of Hammerking Productions Inc. and is effective upon receipt unless otherwise directed.

The Hammerking Productions Inc. Rulebook is intended to provide approved standardized regulations and procedures to ensure the safest, fairest, highest quality competitive motor sports experience for competitors, fans, and sponsors of Ultra4 events.

The Hammerking Productions Inc. Rulebook contains the rules, regulations, specifications, and guidelines (hereafter collectively known as the “rules”) that govern the conduct of, and participation in, Hammerking Productions Inc. competitive motor sports events, primarily the King of the Hammers™(KOH) race and its associated qualifying events.

Hammerking Productions Inc. may issue Supplementary Regulations that are in addition to the rules contained in the Hammerking Productions Inc. Rulebook, or that amend, suspend or modify existing rules and regulations. Supplementary Regulations apply to a specific event, race, venue, or time and place. Hammerking Productions Inc. may issue Special Rules to account for conditions presented by the location of the event, the condition of the course, or other circumstance. Special Rules and Supplementary Regulations will be considered official amendments or additions to the Hammerking Productions Inc. Rulebook when issued in writing by Hammerking Productions Inc..

## APPLICABILITY

Although this rulebook is directive in nature, no instruction, however comprehensive, can apply in all conceivable circumstances. Nothing in this rulebook, therefore, is intended to replace the requirement for all participants at all times to exercise sound judgment and embody a high level of sportsmanship; nor is it intended to replace the requirement for participants to be responsible for their own safety and conduct.

## PARTICIPANTS

All participants in any Hammerking Productions Inc. event must comply fully with all applicable rules as published in this rulebook and in applicable Special Rules and Supplementary Regulations.

## EQUIPMENT

Equipment standards and specifications set forth in this rulebook, particularly safety standards, are to be considered 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.

## DOCUMENT CONVENTIONS

- Interpretation of the following words is provided to clearly define their meanings as used in this rulebook:
- The words “shall” and “must” has been used to indicate that compliance with, or application of, a rule or procedure is mandatory.
- The word “should” has been used to indicate that compliance with, or application of, a rule or procedure is preferred or recommended, but not mandatory.
- The word “May” has been used to indicate an acceptable or suggested means of accomplishment or that compliance with, or application of, a rule or procedure is optional.
- The word “will” has been used only to indicate futurity; not to indicate any degree of requirement.
- Special attention has been given to enhancing and clarifying the vocabulary used throughout this rulebook. Specifically defined terms, acronyms and abbreviations used in this rulebook are defined in the Hammerking Productions Inc. Rulebook - Glossary of Terms, Acronyms, and Abbreviations. This glossary is appended to the Hammerking Productions Inc. Rulebook as Appendix A.
- ~~STRIKETHROUGH~~ – Text removed since previous revision ~~EXAMPLE~~
- UNDERLINE – New Text since previous revision EXAMPLE

## PRECEDENCE

In the event of any inconsistency within this rulebook, Hammerking Productions Inc. shall be contacted for clarification prior to the start of an event.

In the case of a discrepancy noted, or clarification required, after the start of an event, Hammerking Productions Inc. will use the post-race Competition Review Board (CRB) to determine the appropriate response. Such response may include, but need not be limited to, making a ruling, issuing a clarification, taking disciplinary action, or taking some other action deemed necessary by the CRB.

In the event of conflict between any documents referenced herein and the contents of this rulebook, the latter shall prevail.

In the event of any inconsistencies between the contents of this rulebook (including any documents referred herein) and any applicable United States federal, state, or local laws and regulations, the latter shall prevail.

In the event of conflict between the contents of this rulebook and the rules or specifications of any outside sanctioning body with whom an event is co-promoted, the stricter or more stringent rule or specification shall prevail.

Hammerking Productions Inc. reserves the right to modify this rulebook, at any time, at their sole discretion.

## TERMS/DISCLAIMER/LIABILITY

Hammerking Productions Inc. reserves the right to refuse entry to any applicant, team, competitor, entrant, participant, or any other person, to any event for any reason.

The reader of this rulebook and all participants in any Hammerking Productions Inc. event hereby agree to waive, release, relinquish, protect, hold harmless, indemnify and defend the promoter, track operator, and Hammerking Productions Inc. 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.

Hammerking Productions Inc. does not warrant, represent, or otherwise certify that the information in this rulebook as fit for any purpose whatsoever. Hammerking Productions Inc. does not warrant, represent, or otherwise certify that compliance with the rules contained in this rulebook confers any degree of safety, real or imagined. This rulebook is published without warranty expressed or implied.

The reader of this rulebook, all participants in any Hammerking Productions Inc. event, and any user of any safety device assumes any all risks involved with the use of any information contained in this rulebook, with their participation in any Hammerking Productions Inc. event, and with the operation of a vehicle.

Hammerking Productions Inc. is not a professional engineering company, safety expert company, or medical professional company. Hammerking Productions Inc. does not represent any particular manufacturer of safety equipment nor does Hammerking Productions Inc. warrant or endorse or represent that anything written in this rulebook is, in any way, shape, or form, fit for any purpose whatsoever.

Nothing written in this rulebook is intended to be professional, competent 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.

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 Ultra4 event, or any user of any vehicle, part, system, or safety device (whether mentioned herein or not) from injury, property damage, or death.

By participating in any way in any Hammerking Productions Inc. event all participants signify that they understand and agree that participating in a Hammerking Productions Inc. event, installing or using any safety device, and operating an off-road vehicle for any purpose CAN BE HAZARDOUS AND PRESENTS A RISK OF PROPERTY DAMAGE, PHYSICAL INJURY OR DEATH.

All participants expressly ASSUME ANY AND 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 Hammerking Productions Inc. event, whether those risks are known or unknown, inherent or otherwise.

Hammerking Productions Inc. assumes no responsibility for decisions made by individuals or others using this rulebook.

Hammerking Productions Inc. 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.

Hammerking Productions Inc. event participants, officials, and volunteers are not employees of Hammerking Productions Inc. 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 Hammerking Productions Inc. event.

## **TECHNICAL RULES**

### **1 TECHNICAL RULES & REGULATIONS**

#### **1.1 TECHNICAL INSPECTION & IMPOUND**

- 1.1.1 It is the Driver of Record's responsibility to ensure their vehicle meets and/or abides by all Hammerking Productions Inc. technical rules, regulations, and specifications.
- 1.1.2 The Driver of Record shall be responsible for providing the Chief Technical Inspector with documentation and records pertaining to compliance of any and all rules specified herein.
- 1.1.3 Hammerking Productions Inc. reserves the right to limit the number of personnel allowed into any area or garage in which inspections are being made or within which vehicles are impounded.
- 1.1.4 Hammerking Productions Inc. reserves the right to seal or impound any entrant vehicle.
- 1.1.5 Hammerking Productions Inc. assumes no responsibility for impounded vehicles. Ultra4 intends to make reasonable efforts to ensure the security of impounded vehicles.
- 1.1.6 The Directors, Race Director and/or Chief Technical Inspector may impound any vehicle or vehicle parts.
- 1.1.7 Any/all vehicles may be subject to a post-race impound and a second, more thorough, tech inspection.
- 1.1.8 No vehicle shall be removed from an inspection area or impound area without permission from the Directors, Race Director or Chief Technical Inspector. Any vehicle removed without appropriate permission shall subject that entrant to disqualification. Any vehicle not taken directly to the inspection or impound area when requested by the Race Director or Chief Technical Inspector shall subject that entrant to disqualification.
- 1.1.9 The Chief Technical Inspector may seize any illegal parts or devices found on any vehicle. Any item seized by the Chief Technical Inspector may not be returned, nor will there be any compensation made by Hammerking Productions Inc., its officials or directors to any entrant who has illegal items seized.

- 1.1.10 Failure of entrants to present themselves at registration and pre-event technical inspection during the hours announced or listed on event information sheets may result in the following penalties, at the discretion of Hammerking Productions Inc.
- 1.1.11 Failure to show up for final registration call: DNS
- 1.1.12 Hammerking Productions Inc. reserves the right to apply frame identification markers to any and all vehicles that participate in Hammerking Productions Inc. events. The frame identification markers are to remain intact and unaltered. The frame identification markers are to remain on the vehicle for the race year of the inspection. If frame identification marker is damaged or must be removed to facilitate repairs or modifications to vehicle then the Driver of Record for the vehicle must notify Hammerking Productions Inc. prior to next event in order to have a new frame identification marker applied.
- 1.1.13 Each vehicle must pass a technical inspection before it will be permitted to compete in any Hammerking Productions Inc. event. A designated identification marker will be placed on the vehicle after it successfully passes the technical inspection.
- 1.1.14 It is the Driver of Record's responsibility to arrange a yearly technical inspection prior to racing. No vehicle will be allowed to race without having passed a yearly inspection, with a current inspection certification band intact and legible in the location originally placed by the Chief Technical Inspector.
- 1.1.15 Hammerking will attempt to provide opportunities for inspection in all regions of the US; however, it is not possible to provide local inspection for every driver or vehicle. It is the responsibility of the driver to make arrangements to have the inspection performed.
- 1.1.16 Tampering with the inspection band is strictly prohibited. Any evidence of tampering will result in disqualification of the band and require vehicle re-inspection at an additional cost before said vehicle is allowed to race. Abuse of this rule may result in permanent disqualification of vehicle and driver from future Hammerking events.
- 1.1.17 The personal protective gear of all competitors will be checked at pre-race technical inspection. 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. The Chief Technical Inspector or assistant Chief Technical Inspector may seize any personal protective gear that does not comply with the rules or is deemed

unsafe. Any item seized by the Chief Technical Inspector or assistant Chief Technical Inspector may not be returned, nor will there be any compensation made by Hammerking Productions Inc. its officials or directors to any entrant who has illegal or unsafe items seized.

- 1.1.18 Pre-race impound will be at the discretion of Hammerking Productions Inc. After technical inspection, vehicles will be directed to an impound area where they will remain until assigned removal time. Only designated Hammerking Productions Inc. officials will be permitted into the impound area after a vehicle is placed in impound. All other personnel must receive special written permission from Hammerking Productions Inc. to enter the impound area after vehicle is placed in impound.
- 1.1.19 Hammerking Productions Inc. reserves the right to subject any vehicle to a technical inspection after the event, at the discretion of the Race Director and/or Chief Technical Inspector. In a post-race technical inspection, the Driver of Record will be responsible for removing or having removed or preparing the requested items to be inspected, as directed. Failure to comply will result in disqualification of entrant, and may result in suspension.
- 1.1.20 The CRB or Directors may require an entrant vehicle damaged in an event-related incident to submit to post-incident inspection. If the owner or driver refuses to allow the vehicle to be inspected, the vehicle and driver may be disqualified and suspended from future Hammerking Productions Inc. events.
- 1.1.21 Post-race impound of all finishing vehicles will be at the discretion of Hammerking Productions Inc. If impounded post-race, vehicles will be released no later than two hours after the official finish of the event. Vehicles involved in any type of protest or complaint will be held in impound until after the CRB rules on the protest or complaint.
- 1.1.22 Any refusal by a competitor to comply with CRB rulings shall result in competitor's disqualification and suspension of competitor from all Hammerking Productions Inc. sponsored events for a period of not less than one year.

## 2 COMMON VEHICLE REQUIREMENTS (all classes)

### 2.1 SERVICEABILITY

- 2.1.1 All necessary or required equipment, gear, devices, safety equipment, and vehicle components, as described in the Hammerking Productions Inc. Rulebook (including any special rules or supplementary regulations), must be in good and proper working condition at the time of technical inspection. Certain equipment and components must remain serviceable throughout the event, and if damaged during the event must be repaired or replaced before the vehicle may continue on course, as specified in the Hammerking Productions Inc. Rulebook Technical Rules and Specifications.

### 2.2 SAFETY EQUIPMENT

Drivers and or Manufactures may petition inclusion of products that do not follow the enclosed guidelines. Such products must demonstrate the ability to meet or exceed existing standards. All exceptions will be documented in appendix A of the Rule book.

#### 2.2.1 PERSONAL SAFETY EQUIPMENT

- 1) All competitors shall wear at all times during an event, a one-piece driving suit conforming to one of the following standards:
- FIA 8856-2018 or FIA 8856-2000
  - FIA 1986 Standard
  - SFI 3.2A/5 Specification or SFI 3.4/5 Specification
  - SFI 3.2A/1 Specification with approved fire-resistant underwear (FIA 8856-2000 or SFI 3.3 Specification)
  - Suits that have their homologation withdrawn may NOT be worn.

- 2.2.2 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. Hammerking Productions Inc. 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.

- 2.2.3 Helmets must be approved by, and bear the label of, one of the following:
- Snell SA2010 or SAH2010 or SA2015 or EA 2016 or SA2020

- FIA Standard ~~8860-2004~~ or 8860-2010 or 8859-2015 or 8860-2015
  - ~~Snell SA2010, Snell SAH2010 and FIA 8860-2004 certified helmets will NOT be accepted after January 1<sup>st</sup>, 2022.~~
- 2.2.4 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).
- 2.2.5 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 or FIA 8858-2010
  - Competitors who violate 2.2.5 will not be allowed to proceed on race course until resolved.
  - Donuts and neck collars are not allowed
- 2.2.6 Shatter resistant eye protection is required for all competitors in a Hammerking Productions Inc. event.
- 2.2.7 All Occupants shall utilize gloves meeting one of the following specifications:
- SFI 3.3
  - FIA 8856-2000 or 8856-2018
- 2.2.8 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.
- 2.2.9 DRIVER RESTRAINT SYSTEMS
- 1) All vehicles must have a five-way, six-way or seven-way H-style driver restraint system for each occupant. Occupant restraint systems must use a latch-and-link or camlock style quick-release buckle (push button are not

permitted). Driver restraints must incorporate a lap belt, anti-submarine strap(s), and shoulder straps.

- 2) Safety harness shall meet one of the following standards:
  - FIA Standard 8853/98 or 8853/2016 and currently appear as valid on the respective current FIA technical list at [FIA.com](http://FIA.com).
  - SFI 16.1 Specification and display a manufacturer name appearing on the current respective list of 16.1 manufacturers at [sfifoundation.com](http://sfifoundation.com).
  - SFI 16.5 Specification and display a manufacturer name appearing on the current respective list of 16.5 manufacturers at [sfifoundation.com](http://sfifoundation.com).
- 3) Parts of Seat Belts may not be mixed or matched. Only complete sets may be used.
- 4) Belt/strap material shall be nylon or Dacron polyester. 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) All occupant restraint systems may not be used after their expiration date. On harnesses with dual SFI/FIA Certification the FIA expiration date will take precedence. 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. It is highly recommended that all driver restraint systems be replaced after one year from the date of manufacture.
- 6) No portion of the driver restraint system may be altered in any fashion from the manufacturer's standard design. This includes welding of couplers or alternate sewing of belts.
- 7) No surplus driver restraint systems are permitted.
- 8) 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.
- 9) In addition to conforming to the manufacturer's directions, occupant restraint system installations must also conform to the following:

- 10) 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.
- 11) Occupant restraint must be matched to a properly constructed, fitted, and installed seat firmly mounted to the frame / chassis / roll-cage.
- 12) Occupant restraint system must be used with a seat with the proper number of slots, in the proper locations, for the belts. Seats must not be modified to create belt slots.
- 13) All belts should be as short as possible to minimize the belt's stretch.
- 14) 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.
- 15) Preferred anchor mount is a double-shear bracket.
- 16) Occupant restraint systems must be mounted using high-quality hardware appropriate for the installation. 1/2" (13mm) or 7/16" (12 mm) fine-thread Grade 8 (10.9) bolts and Grade 8 (10.9) deformed-thread locknuts (or better) are recommended.
- 17) Belts must not rub against any surface that will cause them to fray.
- 18) 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.
- 19) Belts using non-sewn anchor plates must be wrapped back a fourth time through the 3-bar slide.
- 20) Wrap-around style mounting should be confined to shoulder belt installation and must include some method to prevent lateral movement of the belts.
- 21) Lap belt tilt-lock adjusters must not be positioned in, or too close to, the seat slots.
- 22) Restraint systems must be worn properly tightened, by all occupants, at any time the vehicle is in motion.

#### 2.2.10 SAFETY NETS

- 1) Hammerking Productions Inc. approved safety nets 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.

- 2) Wind wing areas located behind the A pillar must be filled by safety net material if there is any chance that any limb or body part of any occupant could protrude from the vehicle at any time when the occupant is properly seated and strapped in their normal driving / riding position. Lexan is not permitted.
- 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.
- 4) Nets attached to door frames are permitted.
- 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.
- 6) For vehicles using factory or factory-style doors, Lexan in the side windows can be substituted for nets as long as positive secondary latching devices are used on the doors. Lexan side windows must be mounted in such a fashion as to allow quick removal in event door will not open.
- 7) 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 (150mm) 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 (23kg) the net deflects no more than four inches.
- 8) Window nets shall meet or exceed SFI 27.1 or FIA J253.11 Specifications for all classes.

#### 2.2.11 SEATING

- 1) All seats must be manufactured by a recognized manufacturer that specializes in seats for racing applications and be of a type suitable for the event.
- 2) Stock (OEM) production seats are prohibited.
- 3) All seats must be securely mounted to frame of vehicle and mounts must be properly reinforced to keep seat from moving in relationship to the frame.

- 4) 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) Headrests constructed of at least 2" (50mm) thick resilient padding and being approximately 36 square inches (233 CM square) in area are required.
- 6) Seats must have appropriate slots to properly accommodate driver restraint system.

#### 2.2.12 FIRE EXTINGUISHERS

- 1) Each vehicle must carry a portable UL approved 2.5 lb. or greater ABC-class dry chemical or equivalent Halon, AFFF, 4Fire or Novec fire extinguisher, easily accessible by all occupants inside the vehicle.
- 2) An additional 5 lb. equivalent (1x 5 lb. or 2x 2.5 lb.) or greater ABC-class, dry chemical or equivalent Halon, AFFF, 4Fire or 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.
- 3) Integrated on-board fire extinguishing/suppression systems are highly recommended in addition to the portable fire extinguishers. In the event a vehicle is equipped with an on-board fire extinguishing/suppression system, vehicle must still meet all other requirements of 2.2.12.
- 4) Fire extinguishers must have a gauge and be fully charged. All extinguishers must be mounted in a manner that permits their removal and use without the use of tools. 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) Element E50 fire extinguisher can be substituted for one of the three required 2.5lb extinguishers. The remaining 2 x 2.5 or 1 x 5 extinguisher(s) must meet requirements of section 2.2.12 The Element E50 can be used in any location allowed in section 2.2.12.

#### 2.2.13 HORNS

- 1) All vehicles must have a loud horn. Horn must be clearly audible from a distance of 100 feet in front of the vehicle. The use of sirens is permitted, in addition to a horn, during the actual on-course portion of the event.

- 2) Disposable air horns are not an acceptable method of meeting the horn requirement.

#### 2.2.14 REFLECTORS

- 1) All vehicles must have two 2" (50mm) wide x 8" (200mm) long red reflective tapes or two 2" (50mm) diameter round red reflectors (DOT stock tail light lenses satisfy this requirement) attached to the rearmost portion of vehicle at each corner.
- 2) The reflective tape or reflectors must be clearly visible from the rear.

#### 2.2.15 BREAKDOWN SAFETY DEVICES

- 1) Two battery-operated red-light flashing beacons or two red reflective devices must be carried in the vehicle as breakdown safety devices. Reflective devices must be at least 12" (305mm) high and 12" (305mm) long and be free standing (similar to trucker's breakdown triangles). Flares are not permitted.
- 2) Breakdown safety devices shall be readily accessible and not require vehicle disassembly for use.

#### 2.2.16 FIRST AID KIT

- 1) A weatherproof first aid kit must be carried in each vehicle at all times and must contain at least basic first aid items.
- 2) The first aid kit must be easily accessible within the occupant's area without having to remove any body panels or equipment.
- 3) Occupants with special medical needs should make those needs known in an obvious location on their fire suit or helmet.

#### 2.2.17 SURVIVAL SUPPLIES

- 1) All vehicles must carry water, food, any medications and any other supplies required for the vehicle occupants to safely survive unassisted for a period of not less than 24 hours. As a minimum, at least one quart (1L) of water per occupant must be carried. It is highly recommended that additional water be carried for each occupant during hotter weather. Hammerking Productions Inc. highly recommends entrants carry sunscreen.

## **2.3 VEHICLE IDENTIFICATION**

- 2.3.1 All vehicles in competition must be identified with the correct entrant number.
- 2.3.2 Entrant numbers shall be composed of a combination of the digits 0 through 9 only.
- 2.3.3 Entrant numbers shall be assigned annually 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 an Hammerking Productions Inc. event will determine the outcome, with OG13 having first right, 2008 KOH second right, and so on.
- 2.3.4 Vehicles must display entrant numbers on front, both sides, and back of vehicle. Any number location that is deemed by Hammerking Productions Inc. to be too hard to read will have to be changed before the vehicle is allowed to compete in the event.
- 2.3.5 Entrants are advised that checkpoint staff at each checkpoint will not allow vehicles to continue after stopping, until numbers can be verified.
- 2.3.6 Hammerking Productions Inc. reserves the right to require race vehicle numbers and/or background colors be changed.
- 2.3.7 Hammerking Productions Inc. assumes no responsibility for scoring vehicles with unrecognizable numbers. It is the vehicle driver's responsibility to maintain numbers in recognizable condition.
- 2.3.8 All 4 Wheel Vehicles must utilize a 'Shark fin' style number plate located behind the B Pillar and offset in from the side panels of the vehicle to protect from mud. In addition to the Shark Fin, all vehicles must have one (1) front facing and one (1) rear facing number plate with the same color combination as the Shark Fin.
- 2.3.9 Shark Fin numbers must be 7" (175mm) tall with 1" (25mm) brush stroke in Arial Narrow font only. Front facing and rear facing numbers must be 6" (150mm) tall.
  - 1) 4400 Class – Black numbers with white background
  - 2) 4500 Class – Black numbers Pantone Matching System (PMS) 151 C – light orange background
  - 3) 4600 Class – Black numbers PMS 2707 C – Light blue background

- 4) 4800 Class – Black numbers PMS 101 C – Yellow background
- 5) 4900 Class – White numbers – Black background
- 6) The National or European Class Champion may use white numbers on a PMS 485 Red background

## 2.5 GENERAL VEHICLE COMPONENTS

- 2.5.1 The vehicle occupants must be able to quickly and easily enter and exit unassisted with the vehicle in any position.
- 2.5.2 Firewalls and/or bulkheads must separate the driving compartment from any fuels, engine fluids, and acids. Exception to this rule is cars that have a rear-mounted radiator, cars with rear-mounted radiator should have a wire mesh panel to protect radiator.
- 2.5.3 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. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.
- 2.5.4 All vehicles with operational doors must have positive locking mechanisms on the doors and doors must also have a permanently attached positive secondary latching device.
- 2.5.5 All vehicles must have an all-metal firewall separating the occupants' compartment from the danger of fire from the engine and fuel supply. A minimum firewall must be liquid tight and extend from body side to body side. If engine is rear-mounted, firewall must be liquid tight and extend from the driver's shoulder height to the vehicle floor and extend from body side to body side. 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. The hood is considered an extension of the firewall on front engine vehicles. Any hole placed in the firewall for structural members, lines, etc. must be kept to a minimum. The hole should not have more than 0.0625" (1.6mm) gap around the items passing through the firewall. 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.
- 2.5.6 Floorboards are required on all vehicles and must be attached by a minimum of six 0.25" (6mm) bolts per side if not an integral part of the body or chassis. Dzus or other quick- turn or ¼-turn fasteners are not permitted. 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. Installation must be done in such a manner as to afford maximum protection to the occupants from debris.

- 2.5.7 All vehicles must start event with a functional: generator or alternator, fan, water pump (water-cooled vehicles), and a complete functional electrical system. Air cooled vehicles are permitted.
- 2.5.8 Safe front and rear bumpers are required on all vehicles. 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.
- 2.5.9 Bumpers must be constructed in a manner that would prevent tire to tire contact in a front or rear impact with another vehicle.
- 2.5.10 A rear-view mirror is required on all vehicles. Mirrors must have at least six square inches of mirror surface. Mirror must have a reasonably unobstructed view of area behind vehicle.
- 2.5.11 Skid plates designed to afford a reasonable degree of protection to the front suspension, steering, and brake components are recommended on all vehicles. Skid plates must be securely attached.
- 2.5.12 All spare parts and extra equipment carried on or 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.
- 2.5.13 All vehicle body parts must remain on the vehicle (accidental damage excluded) during the entire event.

## **2.6 ROLLCAGES**

- 2.6.1 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. Hammerking Productions Inc. 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.
- 2.6.2 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:

- 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.
- 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.

2.6.3 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. All unsupported span more than 30" (762mm) must be the same diameter and thickness as the main structure. No aluminum or other non-ferrous materials are permitted. (All specifications may be substituted with metric equivalent).

2.6.4 Roll cage main structure material may be CREW, DOM, WHR, or WCR mild carbon steel or 4130 chromoly alloy steel. All welds must be of high quality and craftsmanship with good penetration and with no undercutting of parent material.

2.6.5 All roll cage components (hoops, braces, gussets, etc.) must have a minimum of 3" (75mm) 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.

2.6.6 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. 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. Roll cage mounting fasteners must be at least .375" diameter S.A.E. Grade 8 (10mm gr 10.9) or equivalent or better. Sandwich plates, if used, must be oriented only in the horizontal plane. No vertical or other non-horizontal sandwich plate orientations are permitted.

- 2.6.7 All vehicles, including those with stock steel doors, must have at least one side bar on each side of vehicle that will protect occupants from side impact. The sidebars must be of the same tubing material and dimensions as the main frame of the roll cage. The sidebars should be as close to parallel to the ground as possible, must be located to provide maximum protection to the occupants, and must be securely welded to the front and rear hoops of the roll cage. The location of the sidebars must not cause difficulty in entering or exiting the vehicle.
- 2.6.8 Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupants' safety. 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.
- 2.6.9 Six (6) point mounting cages are required over the occupants.
- 2.6.10 A minimum .040" (1mm) 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 framework.
- 2.6.11 Engineering
- Option #1: follow safety cage rules as outlined above.
  - Option #2: Provide at driver of record's sole expense a certified engineered drawing to be reviewed by Hammerking Productions Engineering consultant for approval. Final approval will be by Chief Technical Inspector. All findings will be private between driver of record and Hammerking Productions.
  - Option #3: Hammerking will have proposed chassis design engineered and make all findings public record. Final approval will be by the Chief Technical Inspector.

## **2.7 ENGINE**

- 2.7.1 Engine shall be free of leaks. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.

- 2.7.2 Engine vents shall run to a fluid containment system, and dipsticks shall be locking type. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2.7.3 Forestry approved spark arrestors or approved mufflers are required on all vehicles. Exhaust system outlet must extend a minimum of one foot (305mm) past the rear of the occupants' compartment; be directed rearward out of the body away from the occupants, fuel cells and tires; and be placed in such a manner as to minimize the production of dust. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2.7.4 No entrant may replace a complete engine during an event. Entrant will be deemed to have replaced a complete engine if the block has been replaced.

## **2.8 TRANSMISSION**

- 2.8.1 Transmission shall be free of leaks. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2.8.2 Transmission case vents shall run to a fluid containment system. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2.8.3 Every vehicle must have a functional reverse gear.
- 2.8.4 Transmission shall have an approved scatter shield, or approved floor between occupants and transmission.

## **2.9 TRANSFER-CASE**

- 2.9.1 Transfer case shall be free of leaks. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2.9.2 Transfer case vents shall run to a fluid containment system. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2.9.3 All vehicles must be capable of transmitting power to all four wheels/tires and must be equipped with a functioning low range. Low range is defined as a gear ratio that is lower (numerically higher) than 1:1.

## **2.10 DRIVESHAFTS**

2.10.1 Driveshaft U-joints shall be covered with a minimum of .040 (1mm) aluminum, or 20 ga. (1mm) steel, or 20 ga.(1mm) expanded metal, or 1/8" (3.25mm) Lexan such that pieces are deflected away from the occupants in the case of U-joint failure. Material only needs to be installed between occupants and driveshaft U- joints.

2.10.2 A rear driveshaft loop is recommended

## **2.11 STEERING**

2.11.1 Power-assisted steering systems shall be free of leaks. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.

2.11.2 Power-assisted steering vent tubes must be attached to a fluid containment system which prevents any fluid from leaking onto the ground. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.

2.11.3 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.

2.11.4 All hydraulic steering lines must be in good working order and free of cracks, defects, or leaks. Hydraulic lines shall be run in a manner that protects them from possible damage.

## **2.12 SUSPENSION**

2.12.1 There must be at least one shock absorber per wheel.

2.12.2 Suspension pivot points and connecting points must be free of cracks and in good physical condition as determined by the Chief Technical Inspector or his/her delegate.

2.12.3 Shock absorbers shall be free of leaks. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.

## **2.13 BRAKES**

- 2.13.1 Brakes must be able to apply adequate force to lock up all four tires. Brakes must be in a safe operating condition and free of leaks during the entire event. If brake system problems occur during the event they must be repaired before continuing in competition. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2.13.2 Turning, cutting, or steering brakes are permitted.
- 2.13.3 Manual, vacuum boosted, and hydraulically assisted brakes are permitted.
- 2.13.4 Brake pedal(s) mounted in driver's footwell must be able to operate all brakes with a single foot.
- 2.13.5 Transmission and/or pinion-brake systems are permitted, providing they meet all other requirements specified herein.
- 2.13.6 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.
- 2.13.7 Plastic brake lines are not permitted. ~~However, cars that have them and were teched and banded with them in place are allowed to run them.~~

## **2.14 CONTROLS**

- 2.14.1 All throttles, whether controlled by hand or foot, must have at least one return spring of sufficient stiffness to instantly close the throttle plate when the throttle is released. Carbureted vehicles must have at least two throttle-return springs, at least one of which must be attached to the carburetor. All vehicles should have at least one throttle return spring at the throttle plate and one at the throttle control (pedal or hand control). Computer controlled throttles (Electronic Throttle Control or "drive-by-wire" systems) are exempt from the requirement to have a return spring at the throttle body but must have a return spring at the throttle control (pedal or hand control) or maintain the stock OEM system. A positive stop or throttle override system must be used to prevent throttle linkage from sticking in an open position.
- 2.14.2 Adaptive controls may be used, as required. Hand throttles must meet the same requirements as a foot throttle, and must meet with the approval of Hammerking Productions Inc.

## **2.15 FUEL SYSTEM**

### 2.15.1 FUEL: TYPES

- 1) Any of the following commercially available fuels may be used:
  - Service station pump gasoline (the type normally used in passenger vehicles for highway use, this also includes E85.)
  - Racing gasoline, as originally manufactured
  - Commercial aviation gas
  - Diesel fuel: Alternative fuels, including biodiesel, WMO, WVO, etc., on approval of Hammerking Productions Inc.
  - Propane or natural gas
- 2) Commercially produced, nationally advertised fuel additives may be used.
- 3) Alcohol and nitromethane are not permitted.

### 2.15.2 FUEL: STORAGE

- 1) Safety fuel cells are required for all vehicles. Auxiliary fuel tanks may be added. Auxiliary fuel tanks must also be safety fuel cells.
- 2) There must be a substantial cross member and firewall between the fuel tank and the occupants.
- 3) Fuel tanks shall be mounted in a fashion to protect the tank from damage due to a rear-end collision, impact from debris or rocks from below the vehicle, damage due to roll over, or the possibility of damage from chassis flex.
- 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. Magnesium is strictly prohibited. Container must be securely attached to vehicle with bolts or steel straps. 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. Internal baffling is mandatory in all fuel cells. Foam is an acceptable form of internal baffling. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer. Rotary molded polymer cells are acceptable when

encapsulated in a container constructed of 20 ga. (1mm) Steel or 0.060" (1.5mm) aluminum.

- 5) Fuel accumulator tanks (accumulators) are permitted under the following guidelines. Accumulator tanks shall be constructed of .125" (3.25mm) aluminum or steel and shall be mounted to the chassis using rubber isolation and shall have a capacity of no more than one quart. Accumulators shall be mounted in a manner that protects them from damage due to impact.
- 6) 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.
- 7) Alternative fuels (propane or natural gas) must use an approved fuel cell as determined by DOT standards and with the approval of Hammerking Productions Inc. Forklift propane fuel tanks are permitted. Alternative fueled vehicles shall not use auxiliary fuel cells.
- 8) Substitute methods may be approved by Hammerking Productions Inc.

#### 2.15.3 FUEL: PLUMBING, FILLING & VENTILATION

- 1) Design and installation of fuel tank and related components (plumbing) must prevent fuel escaping from fuel pickups, fuel lines, fuel fillers and fuel vents if the vehicle is partially or totally inverted. 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. 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. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 2) Accumulators shall have supply inlet, supply outlet, return supply, and return outlet connections with isolation valves.
- 3) Fuel tank must be filled from, and vented to, the outside of the occupants' compartment.
- 4) Fuel filler lines and positive-locking, non-vented fuel filler caps must be located and secured in such a manner as to prevent them from being

knocked off or open during vehicle movement, rollover, or accidental impact. Monza/flip-type caps are strictly prohibited.

- 5) All fuel fillers attached to the frame or a body panel must be connected to the tank using flexible couplers. 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. A fuel filler rollover-check-valve must be incorporated into all fuel cells. It is highly recommended that detachable fuel filler caps have a flexible strap or chain to secure them to the vehicle.
- 6) Fuel vent lines must have a rollover check valve incorporated at the fuel cell, and must vent outside of occupants' compartment, and be directed away from the engine and exhaust system.
- 7) 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.

## **2.16 FASTENERS**

- 2.16.1 It is recommended that all component parts of the vehicle's steering, suspension, chassis, drivetrain, and running gear be secured with S.A.E. Grade 8 or better or metric equivalent, fasteners. Male threaded fasteners (bolts, cap-screws, studs, etc.) should be secured with either: lock nuts, lock washers, cotter pins or safety wire and shall have at least one full thread showing through the nut.

## **2.17 ELECTRICAL SYSTEM**

### **2.17.1 KILL SWITCH**

- 1) A brightly colored, highly visible, easily distinguishable, master kill switch must be located in the dashboard area of the vehicle and be clearly labeled.

- 2) The master kill switch must be able to shut down the entire primary electrical system for the vehicle. The master kill switch must shut down the engine when in the off position.
- 3) Winch power supply and low amp draw secondary electrical equipment which requires an uninterrupted power supply may circumvent this switch.
- 4) It is highly recommended that heavy-duty marine-style battery disconnect switches, capable of carrying total vehicle current load (including winch) be used and wired so that the entire electrical system can be disabled with one switch.
- 5) Kill switch should be accessible by all occupants in the vehicle.

#### 2.17.2 IGNITION

- 1) Each vehicle must have a positive action on/off ignition switch in. The switch must be labeled “ignition on/off” and be located within easy reach of the driver and from the outside of vehicle. All electric fuel pumps with independent switches must be labeled “fuel on/off” and be within easy reach of driver and from outside of vehicle. It is highly recommended that electric fuel pumps not be independently switched.

#### 2.17.3 BATTERIES

- 1) Batteries must be securely mounted with metal brackets, clamps, or in a manner that prevents displacement in a roll over.
- 2) Batteries shall not be located in the occupants' compartment. Batteries shall be considered as being in the occupant's compartment if there is no firewall between the battery and the occupants.
- 3) All batteries shall be the sealed, non-spill type. Absorbed glass mat (AGM) or “gel cell” type batteries are highly recommended.

#### 2.17.4 LIGHTS

- 1) Working headlights are only required for events where any portion of the on- course event takes place between sunset and sunrise.
- 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.

- 3) A rearward facing amber light must be installed on all vehicles.
- 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 Hammerking Productions Inc. approval, and must be mounted in such a manner as to be clearly visible from the rear of the vehicle.
- 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.
- 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) 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.

#### 2.17.5 STARTER

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

### **2.18 WHEELS & TIRES**

- 2.18.1 All vehicles shall have exactly four driven wheels, each with exactly one tire.
- 2.18.2 Snap-on hubcaps or snap-on wheel covers of any type are not permitted.
- 2.18.3 All factory-built tires from any manufacturer are permitted.
- 2.18.4 Tires shall be visually checked for condition and must not be considered obviously unsafe by the Chief Technical Inspector.

- 2.18.5 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.
- 2.18.6 Secondary Inflation Apparatus that retains the profile of the tire in the event of a puncture will not be allowed. Tire Liner type products with a functional outer diameter of no more than 27" will be allowed. Vehicles can and will be tested at any time. First time offense, disqualification from the race. Second time, season long suspension.
- 2.18.7 The requirement for DOT Street Legal tires in the limited classes is implied for all race compound 'sticky' tires regardless of their DOT Stamp. For example the Competition Maxxis Trepadors that have a DOT Stamp. DOT / road legal tire classes are restricted to tires that are intended for highway use and are available to the general public as part of a multiple line of tire sizes within the design.
- 2.18.8 Soaking tires or chemical modification in the DOT / road legal classes will not be allowed.
- 2.18.9 Durometer testing to confirm that tires conform to other tires in the DOT / road legal classes within 5% will be conducted.

## **2.19 VEHICLE WEIGHT**

- 2.19.1 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 Hammerking Productions Inc. official scales. Vehicle must drive on and off the scales under its own power with all mechanical systems complete and race ready.

### **3 STOCK CLASS / 4600**

The spirit of the stock class is to allow OEM and aftermarket vendors 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.

#### **3.1 ELIGIBLE VEHICLES**

- 3.1.1 Any and all 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 one thousand (1000) 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.

#### **3.2 FRAME & BODY**

- 3.2.1 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. 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. Frames may be reinforced by adding material.
- 3.2.2 Stock body (body is considered to be the full cab, including all interior and exterior sheet metal, bed, doors, hood, fenders, grill, etc.) required. 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. Holes may be cut in the firewall, grill and core support exclusively for roll cage. Roll cage includes the main 6-point structure that surrounds and protects the vehicle's occupants. The roll cage also includes additional tubing designed to protect the structural integrity of the vehicle and its occupants and must be tied to the standard 6-point occupant cage. Additional tubes are limited to no more than 2 connecting

tubes which may be ran through the bumper, grill or firewall, respectively and must connect to the A Pillar as close to the windshield frame as safely possible. 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 specified in Section 2.4.5. 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.

- 3.2.3 Stock doors may be modified to create half-doors and/or may also be replaced with tubular doors. Doors must open and close, bolted on panels are not allowed.
- 3.2.4 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 Hammerking Productions Inc.
- 3.2.5 Front inner fenders must be complete and unmodified, unless specifically required by the 6-point occupants safety roll cage only and does not include allowances for auxiliary tubes, 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)
- 3.2.6 Front outer fenders may be replaced with OEM-style aftermarket fenders (flared fiberglass fenders are permitted).
- 3.2.7 Rear inner and outer fenders must be complete and unmodified, unless specifically required by the 6-point occupants safety roll cage only and does not include allowances for auxiliary tubes, 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).

- 3.2.8 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.
- 3.2.9 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 1" (25mm) 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.
- 3.2.10 Factory headlights are required and must be functional.
- 3.2.11 Factory bumpers are not required and may be modified or eliminated.

### **3.3 ENGINE**

- 3.3.1 Stock engine must be retained but may be replaced with any available in same make/model/year. 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.
- 3.3.2 If equipped with a water-cooled engine, the radiator size and type is free but must remain within 6" (150mm) of the original location, as originally manufactured. The heater core may be deleted or relocated, if relocated it must utilize OEM inlet and outlets and meet requirements of 2.5.3.

### **3.4 TRANSMISSION**

- 3.4.1 Stock transmission must be retained but may be replaced with any available in same make/model/year. Any and 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.

### **3.5 TRANSFER-CASE**

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

### **3.6 DRIVESHAFTS**

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

### **3.7 AXLES**

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

### **3.8 STEERING**

- 3.8.1 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 draglink and track-bar (if so-equipped, and unless otherwise- equipped, as originally manufactured). Rear-steer is not permitted.

### **3.9 SUSPENSION**

- 3.9.1 Wheelbase must remain within 3" (75mm) of stock, as originally manufactured.
- 3.9.2 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. This includes suspension and axle type, such that solid axle to remain a solid axle, TTB to remain TTB, A-Arm to remain A-Arm, etc. This includes but is not limited to strut, swing axle, sliding pillar, multi-link, semi-trailing arm, and swing arms.
- 3.9.3 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.

- 3.9.4 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).
- 3.9.5 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.
- 3.9.6 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).
- 3.9.7 Shock absorbers of any make/model/type are permitted and may be installed in any location and orientation, with the following limitations and exceptions:
- 1) Only one shock absorber is permitted per wheel/tire (not including spare tires). Vehicles originally equipped with multiple shocks per wheel may run the same number of shocks as originally supplied by the manufacturer in the same locations. It will be up to competitor to verify OEM fitment of multiple shocks on their vehicle. 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.
  - 2) Position-sensitive shocks (including bypass shocks of all types) are not permitted.
  - 3) 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).

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

### **3.10 WHEELS & TIRES**

3.10.1 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.

3.10.2 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, unless otherwise stated in supplementary regulations covering special events (e.g., Colorado hill climb events).

## **4 MODIFIED CLASS / 4500**

### **4.1 FRAME & BODY**

- 4.1.1 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.
- 4.1.2 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).
- 4.1.3 At static ride height the bottom of the frame rails shall be no higher than the top of the tire.
- 4.1.4 At no point shall the frame rails be closer than 16" (406mm), measured horizontally.
- 4.1.5 The frame rails must remain within 4" (100mm) of vertical alignment in relation to each other for the entire length of the frame.
- 4.1.6 The body is considered to be the exterior of the cab, bed, doors, hood, front/rear fenders, grill, etc.
- 4.1.7 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.
- 4.1.8 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.

### **4.2 ENGINE**

- 4.2.1 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.
- 4.2.2 Radiator mounting open

### **4.3 TRANSMISSION**

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

### **4.4 TRANSFER-CASE**

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

### **4.5 DRIVESHAFTS**

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

### **4.6 AXLES**

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

### **4.7 STEERING**

4.7.1 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.

### **4.8 SUSPENSION**

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

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

- 1) Only two shock absorbers are permitted per wheel/tire (not including spare tires).
- 2) 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.
- 3) 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).

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

4.8.4 Independent Suspensions are not allowed in the Modified class with the following exception:

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

#### **4.9 WHEELS & TIRES**

4.9.1 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.

4.9.2 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.

## **5 LEGENDS CLASS / 4800**

### **5.1 ENGINE**

~~5.1.1 Engine must be front mounted~~

### **5.2 SEATS**

5.2.1 2 seats must be side by side

### **5.3 SUSPENSION**

5.3.1 Shocks: only a single shock per corner is allowed. Any coil carrier apparatus are considered shocks.

### **5.4 AXLES**

5.4.1 Axles must be solid type. No TTB or IFS of any kind allowed.

### **5.5 TIRES**

5.5.1 Tires must be DOT NON-STICKY compound no larger than 37" Diameter as factory labeled.

### **5.6 SAFETY**

5.6.1 All safety and tech rules apply

## **6 UNLIMITED CLASS / 4400**

### **6.1 ENGINE**

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

### **6.2 TRANSFER-CASE**

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

### **6.3 DRIVESHAFTS**

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

### **6.4 AXLES**

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

### **6.5 STEERING**

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

### **6.6 SUSPENSION**

- 6.6.1 Any and all suspension components and configurations are permitted, providing they meet all the additional rules and regulations specified herein.
- 6.6.2 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.
- 6.6.3 Manual suspension controls (e.g., forced hydraulics) are permitted.

### **6.7 WHEELS & TIRES**

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

## 7 UTV CLASS / 4900

### 7.1 Definition

7.1.1 A UTV is defined as a standard production-based side by side style vehicle, single seats included. 1000 cc or less ~~motor~~ engine with powersports based drivetrain. Any non-production-based belt driven vehicles must be approved prior to racing.

**7.2 Safety** UTV's to follow all Hammerking Productions Inc. Safety rules with the following clarifications:

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

7.2.2 Safety harnesses meeting 2.2.9 are required.

7.2.3 Seats must have slots for harnesses and adequate headrest contact with a helmet on. Seats intended for racing are highly recommended.

7.2.4 If doors do open, a mechanical secondary latch is required. (zip ties, velcro, tape, do not count as mechanical) If doors are removed, vehicle must meet requirements of 2.6.7

7.2.5 Window nets meeting section 2.2.10 are required. Arm restraints may be used in addition to window nets.

7.2.6 Factory plastic fuel cells allowed if used in factory mounting position. Non factory chassis require fuel cells that meet section 2.15

7.2.7 All seats must be attached completely by metal components. NO plastic components are allowed, even if as originally supplied by manufacturer. The factory latch may be retained.

7.2.8 Breakdown signage ~~device~~ devices must meet requirements of 2.2.15

### 7.3 Performance

7.3.1 Engines must be of 1000 cc or less powersports configuration. Overboring of ~~motor~~ engine is permitted.

7.3.2 Aftermarket steering racks are allowed.

### 7.4 Stock Production UTV

7.4.1 OEM chassis with at least 250 Cars produced in Make/Model Year

7.4.2 1000 cc maximum engine size limited to as delivered OEM engine

- 7.4.3 Engine must match chassis and body
- 7.4.4 Aftermarket Turbos NOT Allowed
- 7.4.5 Promoter decision to allow N/A Subcategory
- 7.4.6 Must use OEM ECM to control engine and transmission
- 7.4.7 CCV Clutch or Gear driven transmission
- 7.4.8 80" Wide Max
- 7.4.9 33" Tire Max unless OEM factory equipped
- 7.4.10 Must use differential housing from same OEM but can be from alternate model.
- 7.4.11 No Portals unless OEM factory equipped.
- 7.4.12 Must use OEM pan.
  - 1) Damaged tubes may be replaced with similar size tubing.
  - 2) Tubing directly connected to pick up points may not be changed.
  - 3) Reinforcing allowed, material may be added but not removed.
- 7.4.13 Must use OEM suspension pickup points including all shock mounting points
  - 1) Reinforcing allowed, material may be added but not removed.
- 7.4.14 No bypass shocks unless OEM factory equipped
- 7.4.15 Must run full body
  - 1) Doors may be replaced with aftermarket doors or closed metallic panels. If doors are removed, vehicle must meet requirements of 2.6.7
  - 2) Rocker panels may be armored, but not clearanced or removed
  - 3) Rear bed plastics may be trimmed for fitting of spare tire(s)
- 7.4.16 Hydro steering not allowed unless OEM factory equipped.

## **7.5 Pro Modified UTV**

- 7.5.1 Based on OEM chassis with at least 250 Cars produced in Make/Model Year

7.5.2 1000 cc maximum engine size limited to as delivered OEM engine

7.5.3 Engine must match chassis and required bodywork

7.5.4 Aftermarket Turbos Allowed

7.5.5 Must use OEM ECM to control engine and transmission

7.5.6 CCV Clutch or Gear driven transmission

7.5.7 80" Wide Max

7.5.8 35" Tire Max unless OEM Factory Equipped

7.5.9 No Portals unless OEM Factory Equipped

7.5.10 Aftermarket chassis allowed

7.5.11 Must use stock suspension pickup point locations.

1) Reinforcing allowed

7.5.12 Must run full front plastics from A pillar forward

## **7.6 Open UTV**

7.6.1 2000 cc maximum engine size limited to as delivered OEM engine

## **7.7 Prototype UTV**

7.7.1 Prototype maximum engine size limited to as delivered OEM engine

7.7.2 Promoter decision to mix with existing classes

1) In Hammerking Productions Inc. events Prototype UTV would be in 4400

2) In desert racing formats Prototype UTV will run in B2

## **8 PIT-SUPPORT VEHICLES**

### **8.1.1 Visibility**

- 1) All pit-support vehicles shall display minimum 4" (100mm) high white numbers corresponding to the entrant number of the vehicle they are pitting for, on both sides of vehicle on side windows, on upper passenger-side corner of front windshield, and on rear window. Pit support vehicles must have current Hammerking Productions Inc. pit pass attached to lower passenger- side corner of front windshield.

## 9 EVENT RULES & REGULATIONS

### 9.1 EVENT OFFICIALS

9.1.1 The following are the designated Hammerking Productions Inc. event officials:

<u>Title</u>	<u>Description</u>
Operations Director	The Chief Executive Officer of Hammerking Productions Inc. 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 Event Director, has the final decision on all issues involving any Hammerking Productions Inc. event. The Operations Director, in partnership with the Event Director, has full discretion to make any final determinations of, judgments on, or assess penalties with respect to all Hammerking Productions Inc. rules.
Event Director	The Hammerking Productions Inc. officer who is responsible for all aspects of a given Hammerking Productions Inc. event.
Executive Directors	<p>A term to refer collectively to the Operations Director and the Event Director. The Operations Director and the Event Director may be the same person.</p> <p>The Executive Directors are responsible for the conduct of any event conducted under these rules. All official event personnel are responsible to the Executive Directors.</p> <p>The Executive Directors have the authority to penalize, disqualify, or suspend any participant (competitor or crew member) for unacceptable conduct or violation of these rules, including any Special Rules and Supplementary Regulations.</p>
Race Director	An Assistant Officer of Hammerking Productions Inc. sharing responsibility with the Executive Directors for the on-course conduct of all events. The Race Director also executes other duties and responsibilities in partnership with the Executive Directors.
Directors	A term to refer collectively to the Executive Directors, the Race Director and the CRB Director.

Race Official	An individual designated by the Race Director to officiate at a Hammerking Productions Inc. event. There are normally several Race Officials for any given event. As a collective group, the term “officials” includes the Directors, the following list of officials, and any other person designated an event official by Hammerking Productions Inc. for a given event.
Course Marshall	The race official appointed by Hammerking Productions Inc. to assist the Race Director in the on-course conduct of an event.
Chief Technical Inspector	The race official appointed by Hammerking Productions Inc. to direct the inspection of entrants' vehicles before and after each event, for compliance with the applicable portions of the Hammerking Productions Inc. Rulebook.
Assistant Chief Technical Inspector	The race official appointed by the Chief Technical Inspector and Hammerking Productions Inc. to assist the Chief Technical Inspector. The Assistant Chief Technical Inspector shall perform all duties of the Chief Technical Inspector in the event the Chief Technical Inspector is not available. The Assistant Chief Technical Inspector shall carry out all other duties assigned by the Executive Directors, Race Director, and/or Chief Technical Inspector.
Scoring Director	The race official appointed by Hammerking Productions Inc. to direct the timing and scoring operations of an event.
Communications Director	The race official appointed by Hammerking Productions Inc. to direct the radio communications network operations of an event.

Checkpoint Captain	<p>A race official appointed by Hammerking Productions Inc. to direct the operations of a particular checkpoint and the immediate area around that checkpoint.</p> <p>Checkpoint captains are the direct representatives of the Race Director at their respective checkpoints. Their area of responsibility includes 50 yards on either side of their checkpoint.</p> <p>Checkpoint captains will designate areas leading to and surrounding their checkpoint area. These areas shall be for checkpoint personnel only. No support teams, pit crews, chase crews, nor will any other person not having express permission be permitted in these areas. Failure to comply will subject the offending entrant or team to penalties of up to and including disqualification.</p>
Road-Crossing Captain	<p>A race official appointed by Hammerking Productions Inc. to direct the operations of a particular road-crossing and the immediate area around that road-crossing.</p>
Pit Stop Captain	<p>A race official appointed by Hammerking Productions Inc. to direct the operations of a particular pit stop and the immediate area around that pit stop.</p>
Competition Review Board (CRB)	<p><del>A voting panel composed of the Race Director and two randomly chosen representative from each racing class. For more information refer to -12.1.1 Red Card Procedures, and 13.1.4 Competition Review Board. A panel composed of the Operations Director, Event Director, Race Director, Chief Technical Inspector, and the CRB Director. The CRB shall meet as required to decide matters concerning rule infractions, sportsmanship, and on-course conduct; primarily those identified by on-course officials and the red card system. The CRB shall meet approximately 30 minutes after the close of the event finish line, and before the event awards ceremony.</del></p>
CRB Director	<p><del>Director of the Competition Review Board, appointed by the Race Director. The CRB Director shall be a third-party holding no position in Hammerking Productions Inc. shall make the CRB Director known to the event participants at the drivers' meeting, and he shall represent the drivers in post-race rule matters. CRB Director will oversee the CRB process, call the meeting to order, and report the outcome of the CRB to the event participants.</del></p>

## 9.2 EVENT PARTICIPANTS

### 9.2.1 REGISTRATION

- 1) An entrant number shall be assigned to the Driver of Record for the entire year. Driver championship points stay with the Driver of Record and the entrant number for the entire year. Driver of Record must be a registered competitor in every event bearing her/his assigned entrant number. Driver of Record must start or finish every event in a competing race vehicle bearing his/her assigned entrant number. Driver of Record must also, for every event, have signed all releases required by Hammerking Productions Inc.
- 2) Driver of Record and assigned entrant number form an inseparable pair for each year. No Driver of Record may switch assigned entrant numbers during the year or be the registered Driver of Record for more than one entrant number; and no entrant number may have more than one registered Driver of Record during the year. The actual event vehicle may be modified, upgraded, or replaced (subject to certain series restrictions –see section 22), but the Driver of Record and his/her assigned entrant number may not be altered, modified, swapped, traded, bought, sold, or otherwise changed.
- 3) Each Driver may only be Driver of Record for one car per class per event
- 4) Any participant who fails to complete and sign the required entry forms and releases will be subject to disqualification. Entry forms and releases must be signed in person, witnessed by Hammerking Productions Inc. entry personnel. Government issued photo identification may be required.
- 5) All competitors under 18 years of age at the start of the event must have their entry form notarized and their release signed by a parent or legal guardian. No person under 18 years of age at the start of the event shall be the driver of record for any Hammerking Productions Inc. stand-alone event.
- 6) Driver of Record and/or co-driver(s) who are listed on the official Hammerking Productions Inc. entry form must attend all drivers' meetings. Failure to do so may result in penalization, denial of right to start, disqualification, and/or fines. Armband checks and written roll calls may be made at the meeting.
- 7) No participant may enter racing areas, pre-run, or receive the official course map until they have signed all entry forms and releases. No person shall sign any entry form or release for any other person.

- 8) Special consideration registration may be permitted with advanced approval of Hammerking Productions Inc.

### 9.2.2 CONDUCT

- 1) Any competitor having an application bearing a falsified signature shall be disqualified. Competitor may also be suspended from future events for one year.
- 2) Failure to attend the drivers' meeting by at least one member of entrant: penalization, denial of right to start, disqualification and/or fines.
- 3) Abusive conduct toward a race official: Disqualification, suspension, minimum one hundred dollar (\$100) fine or any combination of the three.
- 4) Drinking intoxicating beverages in the official pre-race technical inspection area, post-race areas (e.g., impound, etc.), pits, on the racecourse or in the surrounding areas by any person is strictly forbidden. The use of narcotics or other illegal or illicit drugs is forbidden. Any participant that shows any evidence whatsoever of being under the influence of any of the aforementioned may be immediately disqualified and subject to suspension from all future Hammerking Productions Inc. events. Violator must leave the premises immediately at the direction of the Directors.
- 5) Any participant who subjects any Hammerking Productions Inc. official, event staff, volunteer, other event participant or spectator to improper language, verbal threats and/or physical abuse, or any other offensive, harassing, or demeaning language or behavior shall suffer automatic disqualification or be brought before the CRB. If brought before the CRB, the CRB will make the decision of disqualification and/or suspension of the offending competitor and/or participant for said offenses. Competitors are responsible for the behavior of all participants acting on their behalf, including but not limited to: their pit crew, support crew, and sponsors. Acts of physical or verbal abuse may be reported to the proper authorities and may lead to legal action. Poor sportsmanship or unsportsmanlike conduct, in the pits or on the course, before, during, or after an official Hammerking Productions Inc. event may subject offending or related entrants to disqualification.
- 6) Failure to appear before the CRB when requested may result in a letter of reprimand and/or penalty at the discretion of the CRB. Failure to appear before the CRB when requested twice within a race season may result in a penalty and/or suspension for up to one year at the discretion of the CRB.

### 9.2.3 DRIVERS & CO-DRIVERS

- 1) Only competitors that are listed on the official Hammerking Productions Inc. entry form may drive or co-drive the vehicle for which they are registered. Registration is limited to a maximum of four competitors per vehicle.
- 2) All drivers must be at least 16 yrs. old at the start of the event (subject to further restrictions regarding driver eligibility, as determined by land manager for each event.
- 3) No person other than the registered competitors of an entrant vehicle shall ride in, on, or occupy that vehicle. No competitor shall ride in or on their vehicle other than in the normal driving/riding positions. Enforcement of these rules for any entrant vehicle is the responsibility of the driver of record for that vehicle.
- 4) Competitors may exit vehicle during event as follows:
  - i Co-driver(s) may exit vehicle on course to spot, winch, repair vehicle, or bio break.
  - ii Driver may exit vehicle on course to repair vehicle or bio break.
  - iii Competitors may exit vehicle in designated pits.
- 5) No person may exit vehicle at any time unless it is safe to do so.
- 6) Competitors may not intentionally choose to exit vehicle for any reason if, by stopping the vehicle and doing so, they will impede the flow of traffic, providing the vehicle is capable of moving under its own power at the time.

### 9.2.4 QUALIFYING

- 1) Drivers may only qualify in one car per class. Driver must start in the car they qualify in.

### 9.2.5 SUBSTITUTE DRIVER

- 1) ~~Drivers are allowed one substitution per season.~~ Drivers are allowed more than one substitute driver if deemed medically necessary. Automatic medical conditions allowed are pregnancy and injuries that include broken bones. Other medical reasons will need to be reviewed on a case-by-case basis by the Race Director.

## 9.3 EVENT COURSE

### 9.3.1 EVENT COURSE

- 1) Hammerking Productions Inc. will set the maximum duration and length of an event.
- 2) An entrant's official time shall be the total elapsed time between their assigned starting time and the time they cross the official finish line. This elapsed time must be less than the designated time limit of the event. If an entrant does not report to the staging area in time to stage in their respective starting position, the entrant will be placed in the rear and will start after the last assigned start time. If an entrant does not report to the staging area in time to start before the last assigned starter leaves the starting line, they shall be judged DNS. In all cases, if the entrant does not start at their assigned time, their time will still start from their assigned starting time, not their actual starting time.
- 3) The winner of the event shall be the entrant that either: finishes the race with the lowest elapsed time or completes the most laps or greatest distance within the event time limit, or receives the best score for the event. The entrant must also meet all other criteria and must not be disqualified in order to be declared the official event winner.
- 4) When encountering an on-course accident, rollover, breakdown, or disabled vehicle, all entrants must make reasonable efforts to assess the condition of the competitors involved. Competitors who are involved in an accident, rollover, breakdown, or whose vehicle is disabled must make every effort to signal their condition to passing competitors (e.g., give a thumbs up). If, upon encountering an on-course accident, rollover, breakdown, or disabled vehicle, a passing vehicle is unable to determine that the competitors involved are OK or if there is any doubt as to the status or condition of the competitors involved, they must inform a Hammerking Productions Inc. official at the next checkpoint, road crossing, or pit stop or by radio (if so equipped) of the location, vehicle number, and any apparent injuries.
- 5) Breakdown safety devices (beacons, or reflective devices) must be placed at least 200 feet and again at approximately 20 feet behind any breakdown or accident and be placed beside the track on the same side of track as the disabled vehicle.

- 6) Any entrant who must discontinue the event must report to a race official at a checkpoint, paved road crossing, pit stop or start/finish that they are out of the race.
- 7) No aircraft including drones are permitted for the purpose of race support. This includes, but is not limited to, flying over any race vehicle; transportation of competitors and/or support crews (unless a medical emergency exists); communication with race vehicle; spotting for race vehicle; transportation of equipment and/or parts; landing on or near the racecourse in areas other than approved by Hammerking Productions Inc. and within FAA rules; and interfering with the normal conduct of the event. Violation of this rule may lead to entrant's disqualification. Requests for aircraft special use (i.e., filming, observing, etc.) must be submitted to Hammerking Productions Inc. in writing. Requests must include the radio frequencies (helicopter or aircraft frequency and race team frequency) to be used and must be submitted no later than one month before scheduled event. Any request received during the month prior to the event shall not be considered.
- 8) Starting procedures will be announced at the drivers' meeting at each event.
- 9) No entrant may leave the start line before their assigned start time. Only those entrants that cross the finish line within the designated time limit will be declared official finishers. Every vehicle must come to a complete stop at each checkpoint. Failing to come to a complete stop at any checkpoint will subject the offending entrant to a minimum fifteen minute time penalty for each occurrence and possibly disqualification, at the discretion of the CRB. Every vehicle must come to a complete stop at each Hammerking Productions Inc. road crossing that has been designated as a full-stop crossing, or when signaled to stop by road crossing officials. Failing to do so will subject the offending entrant to a minimum fifteen minute time penalty for each occurrence and possibly disqualification, at the discretion of the CRB.
- 10) All competitors may be checked for their safety gear sticker or armband and all vehicles may be checked for their technical inspection sticker at any or all checkpoints or designated road crossings. Every competitor is responsible for his/her safety gear sticker, armband, and vehicle technical inspection sticker. Any entrant not in possession of the required safety gear sticker(s), armband(s), or vehicle technical inspection sticker may be subject to disqualification.

- 11) No entrant vehicle shall be towed, pushed, pulled or otherwise moved or transported by any non-entrant vehicle, or spectator group on the official course while an event is still in progress. Exceptions may be made by course marshals if broken down vehicle is impeding flow of race traffic. If necessary, a course worker may assist with movement of broken-down vehicle without penalty to the driver. Occupants of a vehicle that is pushed, pulled or towed clear of traffic must make necessary repairs to leave, under their own power, the area to which they were relocated. No vehicle may be pushed, pulled or towed by another vehicle within the last one hundred yards (100 yards) (91.5M) of the finish line.
- 12) No person may be registered as the Driver of Record for more than one vehicle at the same event. The Driver of Record may be registered in another vehicle as a co- driver.
- 13) A marked course is the official route designated by and marked with official Hammerking Productions Inc. markings and/or indicated via the official GPS track. All vehicles must follow this route during the event and shall drive only in the correct direction of the course route. ~~Passing is only permitted where there is no vegetation on the side of the course. Short coursing is not permitted. No deviation from the marked course, including passing, is permitted in sensitive areas. Deviation from the marked course in these areas shall result in automatic disqualification. Sensitive areas shall be marked by Hammerking Productions Inc. markings and DQ signs. Hammerking Productions Inc. is not responsible for markings that are damaged or removed. All vehicles shall drive in only in the correct direction of the course route.~~ Intentionally driving in the opposite direction of the course to gain a competitive advantage is prohibited and shall be grounds for penalties of up to and including disqualification and suspension.
  - i Special attention must apply in environmentally sensitive areas on the official route. Sensitive areas shall be marked by Hammerking Productions Inc. markings and DQ signs. Hammerking Productions Inc. is not responsible for markings that are damaged or removed. Deviation from the marked course, including passing, in sensitive areas is not permitted and may result in disqualification. Passing is only permitted where there is no vegetation on the side of the course.
- 14) Failure to stage or report to starting line-up by posted or announced time; or failure to stage or line up in time to start at assigned starting time: Rear start or DNS.

- 15) Failure to come to a complete stop at any road crossing designated as a full-stop crossing or failing to stop when signaled to do so by road crossing officials: Fifteen- minute time penalty for each occurrence.
- 16) Speeding in a restricted speed area up to 10 mph over announced or posted speed limit by race vehicle or support vehicles: One position penalty
- 17) Speeding in a restricted speed area is prohibited. Speeding in excess of 10 mph (16kph) over announced or posted speed limit by race vehicle or support vehicles may result in Disqualification.
- 18) Short coursing, defined as intentionally or unintentionally leaving course limits and receiving a competitive advantage, is not permitted and ~~shall~~ may result in time penalties or a DNF at the point where the course was deviated. Short Coursing Infractions can be corrected without penalty by safely returning to the start point of the deviation and continuing the marked course. Correction must be done before the completion of the current lap or crossing finish line, whichever comes first. Specific boundaries of the official route shall be addressed during the drivers meeting. General guidelines include the following:
  - i Any deviation from the marked course outside the limits of the course center, as defined by the following will be considered short coursing:
    - Rock Trails – 50’ (15.25M) on either side of course center
    - Desert Trails – 150’ (45.75M) on either side of course center
    - Trails that are otherwise announced prior to the race in the drivers meeting, with specified limits different from above
  - ~~ii Infractions can be corrected without penalty by safely returning to the start point of the deviation and continuing the marked course. Correction must be done before the completion of the current lap or crossing finish line, whichever comes first.~~
- 19) Excessive or abusive nerfing or bumping: Disqualification.
- 20) Any competitor or competitor’s crew member traveling on the course before the official event finish in other than event-registered vehicles participating in the event, may subject entrant to penalties of up to and including disqualification and suspension. There is no outside assistance permitted on the course or near the course during the event except for in the official areas designated for pits and/or fuel stops. Hammerking Productions Inc. reserves

the right to assess each situation and respond accordingly. Situations involving safety are at the discretion of the Directors.

- 21) Competitors are not permitted to receive outside assistance during green flag conditions. However, if a vehicle breaks down on the course, or rolls over and requires assistance to be righted, the following rules apply. ~~Hammerking Productions Inc. approves the following options.~~ Any deviation from these ~~options~~ rules may result in entrant being disqualified.
- i Driver or Co-driver who is with vehicle at time of breakdown may travel by foot to and from an official Hammerking Productions Inc. designated pit stop of their choice, in order to retrieve equipment or parts necessary to repair vehicle. Except as detailed below (in 9.3.1 section 21) ii), if any other person delivers equipment or parts to entrant vehicle, entrant will be subject to disqualification. Obtaining equipment or parts from any location other than an official Hammerking Productions Inc. designated pit stop will subject entrant to disqualification.
  - ii Another race-entered vehicle may pick up equipment or parts at an official Hammerking Productions Inc. designated pit stop (but not from any other location), and then deliver that equipment and/or those parts to broken down vehicle. The race vehicle picking up and delivering the equipment or parts must travel in the proper direction on the course. Traveling the wrong way on the course will subject both entrants (broken down vehicle and delivery vehicle) to disqualification. If any pit support vehicle or other vehicle not registered and competing in the event, delivers anything to a broken down vehicle, that broken down vehicle entrant shall be subject to disqualification.
  - iii No entrant that has officially finished the event or has ceased competing may re-enter the course to deliver anything to a broken down or stranded vehicle. With the permission of the Executive Directors or Race Director, DNF vehicles or vehicles having officially finished the event may enter the course after the close of the course checkpoint immediately after a broken or stranded vehicle to retrieve the broken or stranded vehicle and return it to main pit as a DNF, providing that in doing so neither vehicle travels or crosses any part of the course that is still live or active.
  - iv Race vehicle traveling on the course in the reverse direction of the course, before the official completion of the event may result in penalties or Disqualification.

- v Pit support vehicles traveling on the racecourse before the official completion of event may result in penalties or Disqualification.
  - vi To minimize environmental impact and minimize traffic congestion on the course, Hammerking Productions Inc. will provide official recovery crews to aid in the righting of vehicles that have rolled over. Entrants may use this service, if available, or other outside assistance (i.e., assistance from spectators) ONLY to right a rolled vehicle. Once righted, vehicle must not receive any further outside assistance of any kind. If able to continue after having been righted, vehicle may continue on course without penalty. If vehicle cannot continue after righting but does not, in the opinion of the officials, pose an impediment to traffic flow, entrants may attempt to repair vehicle and continue, but may not receive any outside assistance in doing so. If a righted vehicle cannot continue and is, in the opinion of the officials, an impediment to traffic flow, 9.3.1.11 applies. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
  - vii Any entrant vehicle that is unable to continue, whether or not it has been righted with or without outside assistance, and that as a result of being disabled poses, in the opinion of the officials, an impediment to traffic flow, may be relocated on, or removed from, the course by means of official recovery crews or other outside assistance only to the point that they no longer pose an impediment to traffic flow. Once so relocated or removed, competitors may attempt to repair vehicle and continue, but may not receive any outside assistance in doing so.
  - viii Section 9.3.1, subsection 21, paragraphs “iii” and “vi” above, will be subject to a minimum 2 hour penalty up to disqualification as decided by the CRB. A second occurrence of receiving outside help will result in disqualification for the rest of the season.
- 22) Competitors may not receive any help in repairing a damaged vehicle outside approved pit areas. At no time may a team accept outside assistance from spectators to navigate an obstacle. (e.g., pushing or pulling a vehicle up the plaque line at Sledge Hammer.) Except as detailed above in section 9.3.1, subsection 21, paragraphs “iii” and “vi” in the interests of minimizing environmental impact and/or on- course traffic congestion, no entrant shall receive any outside assistance whatsoever. At no time, regardless of circumstance, shall an entrant receive outside assistance which unfairly benefits that entrant. Receiving advice, guidance, or spotting through an obstacle from anyone other than a co- entrant or co-competitor may be

considered an act of outside assistance. Entrants that receive outside assistance, except as specified in section 9.3.1, subsection 21, paragraphs “iii” and “vi” above, will be subject to disqualification.

- 23) No participant or any other person except a Hammerking Productions Inc. official shall remove, alter, or relocate course markings. Any person found to have removed, altered or relocated course markings will be subject to disqualification and/or immediate removal from the event area and may be banned from future Hammerking Productions Inc. events.
- 24) Pre-running and course knowledge obtained thereby is the responsibility of every entrant of a Hammerking Productions Inc. event. Pre-running must be done in a safe and sensible manner and may be restricted or denied due to federal and/or state regulations. Unsafe and/or irresponsible driving during pre-running will subject entrants to penalties of up to and including disqualification and suspension. Participation in pre-running is at entrants’ own risk and may not be part of the official event. All pre-running should be conducted according to park or land-use rules. Pre-runners must be aware of, and abide by, any rules or regulations regarding the use of BLM or park property. Participants engaged in pre-running shall always consider safety as the highest priority and be aware of other recreational users of the area in which they are pre-running.

### **9.3.2 CHECKPOINTS & ROAD-CROSSINGS**

- 1) All vehicles must enter each checkpoint or designated road crossing at a safe speed. Unsafe racing into and/or through any checkpoint or designated road crossing is prohibited. Speeding through a checkpoint or designated road crossing shall result in disqualification. Safe speed is defined as a speed at which a vehicle can make a controlled stop without endangering anyone in the immediate vicinity of the checkpoint or designated road crossing.
- 2) Passing is not permitted within 300 feet (91.5M) on either side of any road crossing or checkpoint, except at the direction of a Hammerking Productions Inc. official. Failure to comply shall subject entrant to disqualification or a time penalty of 15 minutes for each occurrence, at the discretion of the CRB.
- 3) Rolling through a checkpoint (i.e., failure to come to a complete stop): 15 minute time penalty for each occurrence.
- 4) Speeding through and/or unsafe racing up to or through a checkpoint: Disqualification.

### 9.3.3 PITS

- 1) Stationary pits or chase crews outside of designated areas or traveling in restricted areas: Disqualification.
- 2) Reckless driving in pit areas or on any access roads by race vehicle or support vehicles: Disqualification. No vehicle shall be permitted to enter pit areas or course area without a valid Hammerking Productions Inc. pit pass, displayed as prescribed in this rulebook. 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. Pit bands must be worn by all members of the pit crew. No exceptions. Penalties for non-compliances will be:
  - i First level minor infraction: First offense, warning and non-banded person removed from the pit area until banded. Second offence will result in a 5 minute penalty for each non-banded person in the pit area added to the driver of records elapsed time.
  - ii Second Level Major infraction: Automatic disqualification if any non-banded person touches the race vehicle in any way or performs any race pit support to the vehicle, driver or co-driver.
- 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.
- 4) No person under suspension by Hammerking Productions Inc. will be permitted to participate in any event or be permitted to enter the pits or course area.
- 5) Any pit support vehicle running on or near the course shall result in the entrant being disqualified. Any pit support vehicle traveling in a restricted area shall result in entrant being disqualified. Any pit support vehicle stopping at a road crossing may cause entrant to be disqualified. Any pit support vehicle stopping on a road that is near the course and not in an official, designated area may cause entrant to be disqualified.
- 6) Pits (stationary, roving or chase) located in any areas other than those areas officially designated as pit areas by Hammerking Productions Inc. : Disqualification.
- 7) Any competitor, crew member, or other pit pass holder who takes part in any demonstration in the pits, on the course, or in the surrounding area

before, during, or after an event shall be subject to expulsion from the area, suspension from future Hammerking Productions Inc. events, and possible legal action.

- 8) Maximum speed limit on all main pit access roads and in all pit areas shall be 15 mph (24 kph) for all vehicles. Maximum speed limit on all other access roads shall be 35 mph (56 kph).
- 9) Hammerking Productions Inc. reserves the right to change speed limits to account for conditions.
- 10) The Hammerking Productions Inc. Pit Stop Captain shall determine the pitting zone around each pit stop.
- 11) All pit supplies must be at least 50 feet (15.25M) from the edge of the course. No pit may be in the first 50 feet (15.25M) leading into, or the first 100 feet (31M) leading out of, a turn. Pits located within this turn area or less than 50 feet (15.25M) from the course will subject entrant to penalties of up to and including a minimum one-hour time penalty or disqualification, at the discretion of the CRB.
- 12) 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.). A minimum of 10 lb. worth of extinguisher(s) must be manned during all pit stops (e.g., if 5 lb. extinguishers are used, then the pit crew must man two fire extinguishers).
  - i All pit fire extinguishers must have current (less than one year old) fire marshal's tag, seal in place, and be fully charged. Random checks will be made and time penalties may be assessed if extinguishers are not manned and ready.
- 13) All young children and pets must be kept out of the immediate area where vehicles will pit. Pets must be kept on a leash. All campfires must be kept out of immediate pit area. Campfires must not be placed between the course and pit. Campfires may not be permitted due to federal and state regulations. Firewood with nails is prohibited.
- 14) All entrants are responsible for cleaning the pit areas they used during the event.

- 15) All fuel cans must be kept off native soil and be stored on an impervious barrier. 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. Fluid absorption products are highly 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.
- 16) Fuel mats are required for all refueling. No vehicles shall be refueled outside approved pit locations. Storage of fuel in the pits shall consider safety the highest priority. Check with local event restrictions concerning the storage, transportation, and transfer of fuel. Hammerking Productions Inc. highly recommends the use of safety tape and “No smoking/No open flame” signs in the area surrounding fuel storage and transfer locations. See Section 9.3.5 ENVIRONMENTAL SAFETY for more information and rules related to environmental concerns and considerations.
- 17) 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. It is highly recommended that your fuel system and your vehicle are grounded during refueling.
- 18) Refueling personnel (any one 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/5 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. Additionally, refueling personnel must wear:
  - SFI spec balaclava and fire rated goggles or SFI spec balaclava and SA rated full face helmet with visor in the closed position

- SFI spec 3.3 fire retardant gloves
- SFI spec 52.1 fueler apron must be worn by person operating fuel connection to vehicle

SFI spec 3.3 fire retardant shoes are also strongly recommended. NFPA 1971, 1977, or 2112 are acceptable alternatives to SFI rated garments with the exception of the SFI spec 52.1 fueler apron.

- 19) No other work may be performed while fueling is taking place.

#### 9.3.4 COMMUNICATIONS

- 1) Hammerking Productions Inc. announces main race channel at driver's meetings. Hammerking Productions Inc. reserves the right to change the main race channel frequency if deemed necessary. Hammerking Productions Inc. will make all reasonable efforts to notify all entrants of any changes to the main race channel frequency.
- 2) Medical emergency operations frequency will be announced, if separate from race ops, at driver's meeting during all stand-alone Hammerking Productions Inc. events.
- 3) All radio or other transmissions which interfere with Hammerking Productions Inc. control communications are strictly prohibited except in the case of medical emergencies.
- 4) All race and support-vehicle radio equipment is strictly prohibited from interfering with or disrupting race communications on all frequencies allotted to the amateur radio band, public service band, citizens band, marine band and aircraft band as defined by FCC rules. Outboard linear amplifiers with an output exceeding 25 watts are prohibited. An outboard linear amplifier is a device that boosts the power of the radio and is connected between the radio and antenna.
- 5) In cases where Hammerking Productions Inc. is the co-promoter using an existing sanctioning body's event logistics, that sanctioning body's radio frequencies will be used. All entrants must verify radio frequencies before attending any event.

- 6) For long course races, the race car and at least one pit radio must be able to receive and transmit on Race Ops and Weatherman. These frequencies will be available in the driver's packet and at the driver's meeting.
- 7) For short course races, all teams in all divisions are required to have one spotter per race vehicle in the Hammerking Productions Inc. designated area any time the race vehicle is on the race track.
  - i Spotter must check in with the Hammerking Productions Inc. official in the designated spotter area before the start of the race and must remain in the area as long as his/her vehicle is on the track.
  - ii Spotters must have 2 working radios consisting of 1 working "listen only" radio and headset with the ability to hear the competition director as well as 1 two-way radio to communicate directly with the driver in the race vehicle.
  - iii Drivers may be penalized for inappropriate spotter behavior.
  - iv Spotters must have vehicle numbers marked clearly on front and back of person so as to be easily visible to Hammerking Productions Inc. officials. Numbers must be black on a white background with a minimum size of 2 inches by 3 inches.

#### 9.3.5 ENVIRONMENTAL SAFETY

- 1) Each vehicle shall carry a 13 gallon or larger disposable plastic trash bag to extract any soil contaminated in a roll over. Contaminated soil may be left in plastic 13 gallon trash bag on side of course for sweep crew to collect and dispose of.
- 2) Index of all environmental-related rules:
  - i Section 2.6.1 (engine leaks)
  - ii Section 2.6.2 (engine fluid containment)
  - iii Section 2.6.3 (spark arrestors)
  - iv Section 2.7.1 (transmission leaks)
  - v Section 2.7.2 (transmission fluid containment)
  - vi Section 2.8.1 (transfer-case leaks)

- vii Section 2.8.2 (transfer-case fluid containment)
- viii Section 2.10.1 (power-assisted steering leaks)
- ix Section 2.10.2 (power-assisted steering fluid containment)
- x Section 2.11.3 (shock absorber leaks)
- xi Section 2.12.1 (brake system leaks)
- xii Section 2.14.3 (fuel valves and vents)
- xiii Section 9.3.3 (fuel mats)
- xiv Section 9.3.1 subsection 21vi (recovery)

## 10 SERIES POINTS & CHAMPIONSHIPS

### 10.1.1 POINTS

- 1) Points are assigned as follows for each race in the ULTRA4 Series.  
1000 points for winning, 975 points for 2nd, and 965 for 3rd.
- 2) For every driver from 4th place through the last driver that completes 2/3 of the race (determined by miles or laps depending on race format), each driver will receive 5 less points than the driver who finished ahead of them.  
Example: 4th is 960, 5th is 955, 6th is 950 through the last driver to complete 2/3 of the race. The 2/3 mark will be announced on site at drivers meeting prior to race.
- 3) Every driver that starts the race receives 200 points for starting. For each driver that starts, but does not complete 2/3 of the race, the points remaining between the last 2/3 finisher and the 200 points for starting will be divided based on the number of miles/laps/checkpoints necessary for 2/3 then multiplied by the number of laps/miles/checkpoints completed by the driver. Miles, laps or checkpoints will be determined based on race format. Example: If 10 drivers finish the necessary 2/3 of the course. The last driver to be assigned the 5 point increment will be the 10th place driver awarded 930 points. The remaining drivers will have 730 points (930-200) divided by the number of miles/laps/checkpoints necessary for 2/3. Using the 2017 Smittybilt Every Man Challenge race as an example Pit 2A at 94 miles was the 2/3 point.  $730/94 = 7.76$ . A driver that completed 1 mile will receive 208 ( $200+(7.76*1)$ ) points. A driver that completed 89 miles will receive 891 points ( $200+(7.76*89)$ ).
- ~~4) Should less than 10 drivers not complete 2/3 of the race, the top 10 drivers for each race will be assigned points based on the 5 point reduction scale, and all points after 10th place (930 points) will be assigned per the formula above.~~
- 4) 7 bonus points are awarded to the driver who qualifies the fastest in their class at each race.
- 5) At short course events, where qualifying and heat races are held, heat race winners starting positions for the main race will be based on their initial qualifying position, not the overall speed of respective heat races. This is only for the main race, not B Mains or LCQs.

### 10.1.2 CHAMPIONSHIPS

- 1) The East, North and West Coast Series Champions are determined by the driver with the most points from all 3 regional races in their respective series. A driver cannot combine East, North and West races for these Championships.
- 2) The National Champion is determined by the driver with the most points from KOH, their top 3 regional races, and the National Championship. A driver can combine East, North and West races for this Championship.
- 3) A driver must compete in all respective races to be eligible for the championship. Driver of record may appoint one substitute driver to race in one regional race in lieu of the driver and have it count towards the driver of record points.

## 11 INFRACTIONS & PENALTIES

### 11.1.1 AUTHORITY

- 1) The Executive Directors, Race Director, and Chief Technical Inspector have the authority to penalize, disqualify, or suspend any entrant for violations of the technical rules.
- 2) Penalties Under Green – The following procedure shall be utilized if penalties are applied by a Race Director under green flag conditions.
  - i The Race Director or appointee will make every reasonable effort to provide driver and/or team with description of infraction and exact penalty being applied.
  - ii Driver Team can:
    - Accept penalties and continue racing
    - Accept penalties and retire from event
    - Continue racing and challenge penalty at the finish with a Red Card.
  - iii The Race Director has the overarching and FINAL authority to disqualify/black flag any competitor at any time for safety infractions.

### 11.1.2 INFRACTIONS

The following list of infractions is a guideline used by Hammerking Productions Inc. in assessing penalties. These guidelines are not meant to infer that these are the only possible infractions, nor the only penalties that may be assessed against any entrant participating in a Hammerking Productions Inc. event.

- 1) Unauthorized Competitive Advantage
  - i Minor infraction – usually unintentional, non-strategic, accidental in nature resulting in a minor competitive advantage. Generally, yields up to a 15 second advantage.
    - Minor infraction penalty: five (5) times the received benefit

- Received advantage will be determined by the race director
- ii Major infraction – intentional, strategic, and blatant disregard for the rules resulting in a major competitive advantage. Generally, yields more than a 15 second advantage.
- Major infraction penalty: ten(10) times the received benefit
  - Received advantage will be determined by the race director
- iii Course/Trail Bypassing
- Skipping or bypassing a marked trail in its entirety will result in a DNF at the mark where the course was deviated. i.e., skipping 3<sup>rd</sup> lap only trails at King of the Hammers.
- iv Time penalties will be added to the actual finish time of the competitor and will not be used to determine if the competitor has finished outside of the allowed time limit for the race. If it is found by the Race Director that the competitor has short coursed in order to make the finish under the time limit the finish time will include the penalty minutes resulting in a DNF.
- 2) Conduct detrimental to Hammerking, ULTRA4 or the Event. Any action deemed detrimental to Hammerking, ULTRA4 or the specific event will result in automatic disqualification for the season up to permanent ban subject to CRB review.
- 3) Any entrant disqualified from any event for any reason whatsoever forfeits any and all prize money, points, and contingencies won in that event. Entrant will not be entitled to a refund of any portion of entry fee.
- 4) When video replay is available it will be used to resolve a timing issue, scoring issue, or red card situation.

## 12 PROTESTS & GRIEVANCES

### 12.1.1 ~~FILE COMPLAINT~~ RED CARD PROCEDURE

- 1) Each entrant may file one Red Card ~~complaint~~ to the CRB during the event ~~by using a red card~~. Red card must contain protestor's name and vehicle number, an explanation of the situation including the Ultra 4 rule that is in question. Red cards must be presented at race control within 30 minutes of completion of session/race in which alleged infraction occurred. All Red Card situations require a CRB meeting. Should the situation warrant, an additional two hours will be given from end of session/race to gather additional information and materials. Red card ~~complaints~~ may only be ~~made~~ filed in protest to a penalty imposed by race official or against competing entrants for the following infractions during the course of an event:
  - i Vehicle leaving the course or short coursing.
  - ii Receiving outside assistance.
  - iii Refueling without an approved fuel mat or tarp acting as an impervious barrier.
  - iv Unsportsmanlike conduct.
  - v Excessive or abusive nerfing or bumping.
  - vi Vehicle non-compliant with rulebook.

### 12.1.2 ~~FILE GREIVANCE~~

- ~~1) A competitor who believes they have been aggrieved by an item in the rulebook, by the action or inaction of a director, volunteer, or other participant (including other competitors) has the right to file a grievance with the CRB. Such a grievance must be filed with the Race Director no later than 30 minutes after the completion of the event.~~

## 13 COMPETITOR BOARD

### 13.1.1 RULEBOOK PUBLISH DATE

- 1) All technical rule changes will be announced no later than December 1 of the previous year.

### 13.1.2 PROPOSE RULE CHANGE

- 1) For a proposed rule change, the appointed class representative must present the potential change to the series. The series will manage the vote and report the results publicly. If the proposed rule change receives the required 75% of eligible drivers votes, it will be sent to the series for review. All proposed rule changes must be ratified by the series.
- 2) To be a driver that is eligible to vote in proposed rule changes, said driver must have been the driver of record in a series event and class within the last calendar year.

### 13.1.3 SAFETY RULES

- 1) The Series reserves the right to unilaterally impose penalties for violation of safety rules or unsafe actions at an Hammerking Productions Inc.event that may include a DNF or disqualification.

### 13.1.4 COMPETITION REVIEW BOARD (CRB)

- 1) A panel composed of the Race Director and two representatives from each racing class shall be required to meet when a competitor files a red card against another competitor or in protest to a penalty imposed by a race official.
  - i CRB members shall be selected randomly at the drivers meeting from a list of all registered drivers.
  - ii If chosen driver is unable to attend post-race CRB meeting it is that driver's responsibility to find a replacement CRB member. Failure to appear for your duty as a member of the CRB may result in your disqualification.
  - iii The CRB shall meet at the finish line approximately 30 minutes after the close of the finish line, and before the event awards ceremony.
  - iv Both parties involved with the conflict shall have the right to testify on their own behalf (share their side of the story).

- v The CRB will use a majority vote to determine if a rule has been broken and shall use the guidelines provided within this rule book to determine penalties that may be imposed. Drivers from the class in which the red card was filed will not be eligible to vote.
- vi When a CRB is used to determine a red card decision, the resulting outcome is final and cannot be overturned or modified.
- vii A penalty of DNF or DQ imposed by the Race Director must be ratified by a majority vote from the CRB unless penalty was imposed under Race Director's unilateral authority outlined in section 13.1.3/

## 14 APPENDIX A – GLOSSARY

Hammerking Productions Inc. Rulebook – Glossary of terms, acronyms, and abbreviations

Term	Definition
Automatic Disqualification	Disqualification assigned immediately to an entrant, whether or not they have completed the event, by the Executive Director, Event Director, or Race Director, at the discretion of Hammerking Productions Inc. for certain grievous infractions. Entrants suffering automatic disqualification shall be so informed by the Executive Director, Event Director, or Race Director and, when so informed, must immediately leave the course by the safest and most expeditious means possible without interfering with any other entrants still in competition. Failure to comply shall result in fines and/or suspension.
Co-Driver	A person who is listed on an official Hammerking Productions Inc. event entry form as the co-operator of a vehicle and who is eligible to drive or ride during the course of the event. 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.
Competitor	The person or persons occupying the vehicle during an event. The Driver of Record and the Co-driver(s) (if present) are the competitors.
Contingency	<p>Contingency is a commitment made by a manufacturer, retail outlet, or other business to Hammerking Productions Inc. regarding a specific purse to be paid to event competitors in return for display of contingency logos.</p> <p>Event competitors must sign up for contingency with manufactures, and manufactures must execute contracts with competitors immediately following the completion of the event. Contingency offers must be made available to Hammerking Productions Inc. no less the 30 days before the start of any event for which the contingency is offered.</p>

Crew Member	Any person associated with, acting on behalf of, or working for a team, whether compensated or not, is a crew member. Crew members include, but are not limited to: pit crew, radio operators, fuelers, mechanics, volunteers, support personnel, cooks, cleaners, cheerleaders, umbrella girls, etc.
Designated Time Limit	The maximum allowable time entrants have to complete the course/event or cross the finish line. Calculated as the total elapsed time between the entrant's start time and either the time at which the finish line closes or the time at which the checkpoint immediately after the entrant's present position closes, whichever occurs first.
Disqualification	The state of being disqualified. An official event result assigned to entrants for certain violations of the rules. Disqualification results in the entrant being ineligible for any points, purse, prize, or contingency related to the event in which they are disqualified. Entrants who are disqualified receive no finishing time, score, or placement for the event in which they are disqualified. Disqualification may be decided post-event by the CRB or, for certain grievous infractions, may be assigned immediately and automatically to an entrant by the Executive Director, Event Director, or Race Director, at the discretion of Hammerking Productions Inc. The latter case is known as automatic disqualification.
DNF	Did Not Finish – The official event result assigned to entrants that do not complete the course/event or do not complete the course/event within the maximum allowable time.
DNS	Did Not Start - The official event result assigned to entrants that do not start the course/event, whether unable to or prohibited from doing so by regulation or ruling.

Driver of Record	A person who is listed on the official Hammerking Productions Inc. documents as the main operator of a vehicle during the event. The Driver of Record must sign all Hammerking Production Inc. forms and is responsible for any taxes that may be incurred from prize money resulting from event purse, prizes, or contingency. The Driver of Record must be at least 18 years of age at the start of an event, and must be at the controls of the vehicle at the start or finish of any Hammerking Production Inc. event in which they are listed as such. The Driver of Record must sign all entry and release forms in person during the normal registration time.
Driver's Meeting	A pre-competition meeting chaired by the Directors at which critical and specific event information is provided to competitors. Attendance at the drivers' meeting is compulsory.
Entrant	An entity competing in an event and consisting of a registered vehicle, a registered Driver of Record, and from zero to three registered Co-drivers.
Event	A contest or competition between competitors driving vehicles.
Excessive/Abusive Nerfing or Bumping	Deliberately contacting another vehicle with the intent to damage, disrupt, or upset that vehicle or its occupants. Deliberately contacting another vehicle with willful disregard for the safety of the other vehicle's occupants or the integrity or condition of the other vehicle or possible damage that such contact may cause to the other vehicle.
Finish of the Event	The finish of the event is defined as the time at which the last competitor completes the course/event or crosses the finish line; or the time at which the finish line/last checkpoint closes, whichever occurs first.
Hammerking Productions, Inc.	A California Corporation formed for the purpose of organizing, producing, and promoting off-road motorsports events, races, and films. Hammerking Productions Inc. is the promoter of the King of the Hammers™ race.
Hammerking Productions Inc. Rulebook	The manual published by Hammerking Productions Inc. containing the rules for the conduct of, and participation in, Hammerking Productions Inc. events.

Impound	A specific place, with restricted access, to be used for the purpose of the pre-race and/or post-race inspection of a vehicle.
Infraction	Failure to comply with, adhere to, obey, or carry out any rule, regulation, practice, procedure, requirement, or specification contained in the Hammerking Productions Inc. Rulebook, including any Special Rules or Supplementary Regulations.
King of the Hammers™	A Hammerking Productions Inc. race held annually in the Johnson Valley ORV recreation area.
KOH™	An abbreviation of “King of the Hammers™”
Nerfing or Bumping	Deliberately contacting another vehicle.
OG13	The original competitors in the inaugural King of the Hammers™ race in 2007. The OG13 are given full access to participate in any or all future King of the Hammers™ races without first having to qualify or otherwise earn a position in said race.
Outside Assistance	Any physical act, action, or other help received by any entrant from any person who is not a registered member of that entrant, other than in designated pits.
Participant	Any person, in any capacity, taking part in a Hammerking Productions Inc. event. Competitors, their crew members and support personnel, and team’s sponsors are all participants.
Pit Crew	A crew member, or members, who specifically work in the pits during an event.
Purse	Prize money awarded in accordance with the specific guidelines for a particular event. Event purse shall be announced at drivers’ meeting and be paid out following event.
Qualifier	An event in which competitors compete to qualify for a starting position in the main King of the Hammers™ race.
Race	A contest of speed and/or endurance, against the clock and/or other vehicles. A race is a specific type of event.

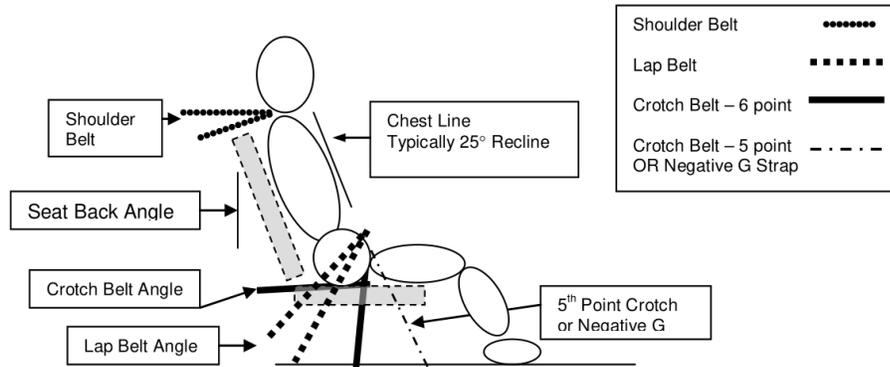
Red Card	A ticket, token, card or other device provided to each driver before the event which they may use to report a violation of the rules that they witness or to file a grievance with the Directors or CRB.
Rules	Rules, regulations, specifications, and guidelines published in the Hammerking Productions Inc. Rulebook for the purpose of ensuring the safe, fair, and orderly conduct of races and other events.
Short Coursing	Any deviation from the marked course for any reason other than passing, providing said passing takes place in an approved location along the course.
Special Rules	Rules issued by Hammerking Productions Inc. to account for conditions presented by the location of the event or race, the condition of the course or any other circumstance.
Stand-Alone Event	An event promoted independently by Hammerking Productions Inc. without the cooperation or collaboration of any other sanctioning or promotion company or body.
Start of the Event	The start of the event is defined as the time at which the drivers' meeting begins.
Supplementary Regulations	Rules set forth by Hammerking Productions Inc. that are supplemental (in addition) to the rules contained in the Hammerking Productions Inc. Rulebook, or that amend, suspend or modify existing rules and regulations. Supplementary Regulations apply to a specific event, race, venue, or time and place.
Team	A person or persons, identified by a team name, and associated with a particular, specific, and registered Driver of Record and a vehicle that bears an official entrant number, constitute a team. Often a team will be composed of a Driver of Record, Co-driver(s), various crew, and possibly sponsor representatives. However, in the case of a single-seat race vehicle, it is possible that a single person, (the Driver of Record) and a registered vehicle constitute the whole team.
Technical Rules	Those rules, regulations, and specifications set forth in the Hammerking Productions Inc. Rulebook that govern the technical, design, and equipment requirements for vehicles, competitors, pit crews and support crews competing in Hammerking Productions Inc. events.

# 15 APPENDIX B – SEATBELT INSTALLATION GUIDE



## SEATBELT INSTALLATION GUIDE\* FOR UPRIGHT SEATING (UP TO 25° RECLINE SEAT BACK ANGLE) June 5, 2012

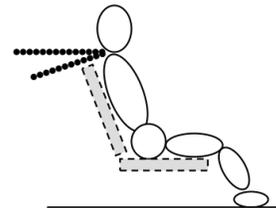
\*IMPORTANT NOTICE: The purpose of this guide is to provide motorsports vehicle drivers, owners and mechanics with additional information on seatbelt installation. This guide is for informational purposes only and in no way should it be construed to be an express or implied warranty of safety or guarantee that Driver Restraint Systems mounted in accordance with this guide will prevent any injury, systems failure, property damage, or death. Participation in motorsports carries with it the risk of serious injury, property damage and death at all times regardless of which driver restraint systems are used. This informational guide does not supersede or replace product manufacturers' installation instructions or sanctioning body rules and requirements. This guide applies to Driver Restraint Assemblies which pertain to the SFI Specification 16.1 and SFI Specification 16.5 compliance programs. Prior to any seatbelt installation or installation modification, consult with the motorsports vehicle builder, seatbelt manufacturer, and sanctioning body. At all times the driver and vehicle owner have prime responsibility for the safe installation and use of seatbelts.



### SHOULDER BELTS

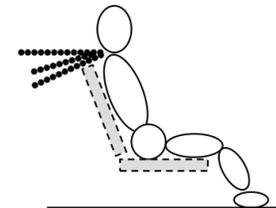
Shoulder Belt Angle: 0 to -20° (-10° optimum) from horizontal

- Clear passage of webbing from top of shoulder (or head and neck restraint) back to the harness bar or mounting point without any interference of the seat openings
- Belts should be as short as possible back to the mounting points

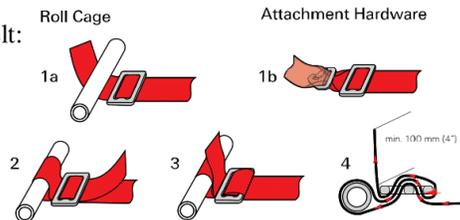


Double Shoulder Belt (Over/Under Belt):

- Upper belt (2" belt) 0 to -10° (-10° optimum)
- Body belt (3" belt) -10 to -30° (-20° optimum)
- Separation between upper and lower belt 1" to 2"
- Upper belt mounted to line up with the inside edge (closer to the neck) of the Body belt



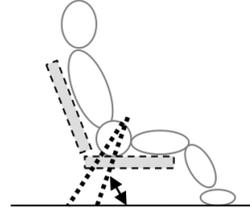
Proper Wrap of Shoulder Belt:



## LAP BELTS

Lap Belt Angle:  $-45^{\circ}$  to  $-80^{\circ}$  from the horizontal

- Belt should ride within the curvature of the pelvic bone preferably just below the iliac crest
- There should be clear passage through the seat opening without webbing being corded or binding on edges of seat openings with a direct path to the mounting point
- The webbing should not ride against any hardware such as seat mounting brackets, bolts, or tabs
- Lap belt adjusters should be clear of the seat openings. Pull-up adjusters if outside the seat opening should be a minimum of 2" below the opening when the lap belt is tightened
- Belts to the mounting point should be as short as possible mounted beside the seat and never behind the seat
- Lap belt should be allowed to pivot freely at the mounting point
- Webbing should be allowed to pull on hardware in plane (straight)



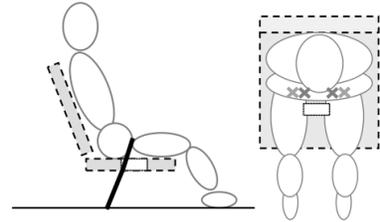
Position of the Cam Lock or Latch and Link

- Centered on the body 1 to 2 inches below the belly button when all belts are tightened

## CROTCH BELT – 6-POINT

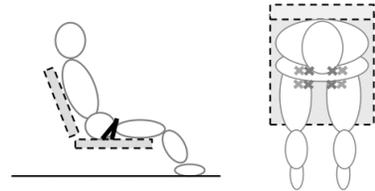
Sports Car “Shell Type Seat” and aluminum seats with single crotch belt hole forward of the inside seat back from 10 to 12 inches: *(NOTE: Seats with a single hole positioned more than 12 inches from the inside seat back are designed for 5 point belt installations and may not be as effective for 6-point installations):*

- Crotch Belt Angle:  $-20^{\circ}$  (2" rearward) through the hole
- Two separate anchors 4 to 6 inches apart (x)



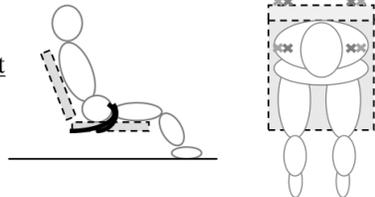
Containment Seats with Crotch belt mounting directly to seat bottom OR through holes provided at the back of the seat bottom: *(Driver is sitting on the Crotch belts)*

- Crotch Belt Angle  $-10^{\circ}$  to  $-20^{\circ}$  from the perpendicular just in front of the crotch with anchors 4 to 6 inches apart (x)



OR

- Crotch Belt Angle Horizontal rearward to under the butt or to the back of the seat (x)



Option (typically for single-seat wide cockpits):

Crotch Belt mounting to the front side of the outboard lap anchors. (Option not illustrated)

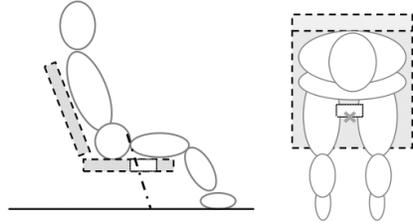
Considerations:

- Routing of crotch belts should have a clear and unobstructed path to the mounting point

## CROTCH BELT – 5-POINT

Sports Car “Shell Type Seat” and aluminum seats with single crotch belt hole forward of the inside seat back from 11 to 13 inches:

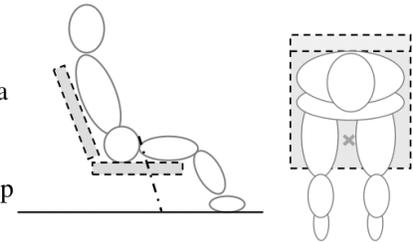
- Crotch Belt Angle: Chest line to 20° through the hole
- Crotch Belt should never wrap around the front of the seat – there should be a pass through
- Crotch belt is used only to maintain position of the lap belt



## NEGATIVE G BELT – (7<sup>TH</sup> POINT)

Negative G Strap Angle: 20° to 25° (Chest line extension on a 25° seat back angle)

- Used in conjunction with a 6-point crotch belt system as an additional point to maintain the position of the lap belt in “Negative G” i.e. rollovers



SFI Foundation, Inc.  
15708 Pomerado Road, Suite N208, Poway, CA 92064 • (858)451-8868 FAX# (858)451-9268  
website: [www.sfifoundation.com](http://www.sfifoundation.com) email: [sfi@sfifoundation.com](mailto:sfi@sfifoundation.com)