

## 2019 UTV RULEBOOK



Life Is An Adventure ~
Come Live Your Adventure with
Best In The Desert



# UTV CLASS and NUMBER SYSTEM

## **CLASS**

CLASS T900 Pro Production
Turbo UTV

CLASS 1800-1900 Pro Production UTV

CLASS 2900 Pro Unlimited UTV

CLASS R900 Pro RS1 UTV

CLASS S900 Sportsman UTV

CLASS U900 Rally Sportsman UTV



## NEW ADVENTURES IN OFF-ROAD RACING

Best In The Desert Racing Association / The American Off-Road Racing Series rules and/or regulations set forth herein are designed to establish minimum acceptable requirements and to provide for the orderly conduct of racing events. Effective January 1, 2018 these rules and regulations will govern all Best In The Desert Racing Association / The American Off-Road Racing Series events. All Best In The Desert Racing Association members willingly participating in these events are deemed to have complied with these rules and/or regulations. No express or implied warranty of safety shall result from publication of, or compliance with these rules and/or regulations. These rules and/or regulations are in no way a guarantee against injury or death to participants, spectators, or any other person or persons. They are intended as a guide for the conduct of the sport only. Best In The Desert Racing Association / The American Off-Road Racing Series rules and/or regulations are the sole property of Best In The Desert Racing Association.

Use of these rules and/or regulations by any other organization or individual is forbidden, unless Best In The Desert Racing Association grants prior written approval and consideration is received by **Best In The Desert Racing Association**. **Best In The Desert Racing Association**, its members, officers, directors, or staff assume no responsibility, legally or otherwise, for failure or malfunctions of any product or products of recognized manufacturers listed in the rules and/or regulations herein. **Best In The Desert Racing Association** is not liable for decisions and/or actions made by individuals, promoters, organizations or others using **Best In The Desert Racing Association** / **The American Off-Road Racing Series** rules in whole or in part.

Specifications and/or regulations contained in this rulebook are intended for use as a guide with respect to safety and for that purpose only. **Best In The Desert Racing Association** assumes no responsibility for consequences resulting from their voluntary application by any association, organization, manufacturer or individual.

**Note: Best In The Desert Racing Association** reserves the right to change the Rulebook as deemed necessary. These changes may occur at the beginning of each year, or throughout the year.

**Revisions:** 

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## **DEFINITIONS AND GENERAL NFORMATION**

#### **TERMINOLOGY DEFINITIONS**

The terminology, definitions and abbreviations contained herein shall be used in the **Best In The Desert Racing Association**/ **The American Off-Road Racing Series** rulebook, supplementary rules, entry forms, and newsletters and for general use.

#### **RULE USAGE**

**BEST IN THE DESERT RACING ASSOCIATION PROMOTION:** Any and all racing related events fully produced by **Best In The Desert Racing Association.** 

**BEST IN THE DESERT RACING ASSOCIATION CO-PROMOTION:** Another promoter working with **Best In The Desert Racing Association** to promote an event.

**BEST IN THE DESERT RACING ASSOCIATION SANCTION: The** documentary authority to organize and conduct an event as granted by **Best In The Desert Racing Association**.

#### ORGANIZATION TERMINOLOGY

BEST IN THE DESERT RACING ASSOCIATION: The promoter.

EVENT: A contest between one or more vehicles competing against the clock and/or directly against each other.

CLASS: A class is a category of vehicles as determined by engine size, seating capacity or any other method listed in this **Best In The Desert Racing Association/The American Off-Road Racing Series** rulebook. Classes may be combined at the discretion of **Best In The Desert Racing Association**.

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

**Sportsman** class entrants will be eligible to receive trophies and contingencies only in respect to their finishing position.

Note: To qualify for the Best In The Desert Racing Association/The American Off-Road Racing Series year-end points championship and year-end points money, competitors must enter and Start <u>all</u> Best In The Desert Racing Association/The American Off-Road Racing Series <u>car/truck</u> points events during the year.

**ENTRANT:** A **Best In The Desert Racing Association** member whose entry is accepted for an event.

**DRIVER OF RECORD:** The person listed on an official **Best In The Desert Racing Association** entry form to be the main operator of a vehicle entered in an event. The driver of record must sign all entry and release forms in person during the normal registration time in order to be eligible for points, prize money, and contingency awards in that event. Identification may be required during registration. Special consideration registration may be permitted with advanced approval of **Best In The Desert Racing Association**. Driver of Record is responsible for all actions of his/her team, pit crew and/or anyone associated with Driver of Record / race vehicle number.

**CO-DRIVER:** A person listed on an official **Best In The Desert Racing Association** entry form as a co-operator of a vehicle that is eligible to drive or ride during the course of the race. The co-driver must sign all entry and release forms in person during the normal registration time at the same time as the driver of record

#### **Definitions and General Information**

is signing all entry and release forms. Identification may be required during registration. Special consideration registration may be permitted with advanced approval of **Best In The Desert Racing Association.** 

**CONTESTANT:** A person listed on an official **Best In The Desert Racing Association** entry form to compete in a race as either a driver or co-driver.

#### **OFFICIALS**

**DIRECTOR:** The chief executive officer of the Best In The Desert Racing Association, responsible for the conduct of all business transactions and race events of the organization. All other officials report directly to the Director. The Director has the final decision on all issues involving any **Best In The Desert Racing Association** events. The Director has full discretion to make any final determinations, judgments or penalties in relationship to all **Best In The Desert Racing Association** rules and/or regulations.

**OPERATIONS MANAGER:** The associate executive officer of the Best In The Desert Racing Association, sharing responsibility for the on-course conduct of all race events, and carrying out other responsibilities as assigned by the Director.

**RACE OFFICIAL:** All individuals designated by the Director or Operations Manager to officiate at a Best In The Desert Racing Association event.

**COURSE MARSHALS:** The race officials appointed by the Best In The Desert Racing Association to assist the Operations Manager in the on-course conduct of a race event.

**CHIEF TECHNICAL INSPECTOR:** The race official appointed by the Best In The Desert Racing Association to direct the inspections of entrant's vehicles before and after each event, for technical and safety compliance with the Best In The Desert Racing Association's The American Off-Road Racing Series rulebook.

ASSISTANT CHIEF TECHNICAL INSPECTOR: The race official appointed by the Chief Technical Inspector and Best In The Desert Racing Association 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 as assigned by the Director and / or Chief Technical Inspector.

**SCORING DIRECTOR:** The race official appointed by the Best In The Desert Racing Association to direct the timing and scoring operations of a race event.

**COMMUNICATIONS DIRECTOR:** The race official appointed by the Best In The Desert Racing Association to direct the radio communications network operations of a race event.

**CHECKPOINT CAPTAIN:** A race official appointed by the Best In The Desert Racing Association to direct the operations of their checkpoint and the immediate area around the checkpoint.

**PAVED ROAD CROSSING CAPTAIN:** A race official appointed by the Best In The Desert Racing Association to direct the operations of their paved road crossing and the immediate area around the paved road crossing

**PIT STOP CAPTAIN:** A race official appointed by the Best In The Desert Racing Association to direct the operations of their pit stop and the immediate area around the pit stop.

**STARTER:** The person responsible for starting an event by displaying the appropriate flags and/or lights, as directed by the Operations Manager.

#### **EVENT TERMINOLOGY**

**SUPPLEMENTARY REGULATIONS:** Regulations that define special or additional rules for a specific event. **IMPOUND:** A specific place with restricted access designated for the containment of all race vehicles immediately before and/or after an event.

**CONTINGENCY:** A contingency is the commitment made to **Best In The Desert Racing Association** by verbal or written contract with a manufacturer, company or individual to post or pledge a certain amount of cash or product as an award to contestants. Contestants must apply for, be approved by and meet requested requirements as set by the manufacturer, company or individual posting the contingency. Decals are generally required and must be assumed to be required unless otherwise stated. Unless otherwise stated the contestant must finish the event in order to be eligible.

**PAYBACK:** The share of the purse that an entrant receives for finishing a race in a paying position. Only actual finishers qualify for a share of the monetary purse.

#### **RULES SECTION ABBREVIATIONS**

SGR: GENERAL RULES

SGE: ENTRANTS

SGD: DISQUALIFICATION SEC: EVENT COURSE

SGP: PROTESTS

SIP: INFRACTION PENALTIES

SDC: DRIVER / RIDER, CO-DRIVER / CO-RIDER

SGPT: PITS

SGT: TECH-INSPECTION and IMPOUND SCR: COMPETITION REGULATIONS

#### **GENERAL RULES**

SGR1: Off road racing is a hazardous sport in as being such, no entrant, pit crew member or vehicle sponsor shall have any claim for damages, expenses, lawsuits or otherwise against promoter, track operator, Best In The Desert Racing Association, its officers, agents or directors arising from damage to any vehicle, personal injury or death, or monetary loss of any kind whatsoever. Entrants, pit crew members or vehicle sponsors who voluntarily participate in any racing activities conducted under these rules, waive any claim they may have against promoter, track operator, Best In The Desert Racing Association, its officers, agents or directors.

- SGR2: The promoter or track operator may run any type of approved Best In The Desert Racing Association event.
- **SGR3:** The Director or Operations Manager shall have the authority to penalize, disqualify and/or suspend any entrant or crewmember for the violation of these rules including special rulings and supplementary regulations.
- **SGR4: Best In The Desert Racing Association** may issue special rulings to account for conditions presented by the location of the race, the condition of the course or any other circumstance.
- **SGR5:** Special rulings and specifications will be considered as official amendments to the list of rules and regulations when issued by **Best In The Desert Racing Association** in written form in official **Best**

- In The Desert Racing Association publications.
- **SGR6:** Supplementary regulations may be issued for each event as necessary to amend, suspend or modify existing rules and regulations. Supplementary regulations will not be considered official until released in written form in official **Best In The Desert Racing Association** publications.
- **SGR7: Best In The Desert Racing Association** assumes no responsibility whatsoever for delays, postponements and/or cancellations of all or part of an event because of inclement weather, unsafe course conditions and/or any other reason.
- **SGR8:** The Director and Operations Manager will have the responsibility for the conduct of any event conducted under these rules. All official race personnel will be directly responsible to the director and chief steward.
- **SGR9:** The director shall have the authority to penalize any entrant (up to and including disqualification and/or suspension) found to have committed violations of driver's rules and/or conduct.
- **SGR10:** No one falling under the jurisdiction of any race official(s) at any **Best In The Desert Racing Association** event shall subject said official(s) to improper language, physical abuse, threats or any other demeaning action.
- SGR11: Best In The Desert Racing Association members are not employees of Best In The Desert Racing Association. Best In The Desert Racing Association members assume all responsibility for all charges, premiums and taxes payable on any funds they may receive as a result of their participation in any Best In The Desert Racing Association sponsored event(s).
- **SGR12: Best In The Desert Racing Association** reserves the right to refuse and/or deny any entry application or person.
- SGR13: Best In The Desert Racing Association uses the frequency of 151.490Mhz as a main race channel. Best In The Desert Racing Association reserves the right to change the main race channel frequency if deemed necessary. Best In The Desert Racing Association will make all reasonable efforts to notify all entrants of the new frequency. All radio or other transmissions, which affect Best In The Desert Racing Association control communications, are strictly prohibited except in the case of medical emergencies.
- **SGR14:** The checkpoint captains are the direct representatives of the Operations Manager at their respective checkpoints. Their area of responsibility includes 50 yards on either side of the checkpoint.
- **SGR15:** Checkpoint captains will designate areas leading to and surrounding the checkpoint area. This area is for checkpoint personnel only. No support teams, pit crews, chase crews or any other person without expressed permission will be permitted in this area. Failure to comply will subject the entry to penalties of up to and including disqualification.
- **SGR16:** Classes may be combined at the discretion of **Best In The Desert Racing Association**. The combining of classes is for the sole purpose of allowing entrants to race. Entrants will be eligible for position money of the combined class and will be awarded points in their respective classes.
- **SGR17:** The director, operations manager and or chief technical inspctor shall have the authority to penalize, disqualify and/or suspend any entrant for violations of vehicle technical rules.
- **SGR18:** The Director has the final decision on all issues involving any **Best In The Desert Racing Association** events. The Director has full discretion to make any final determinations, judgments, suspensions or penalties in relationship to all **Best In The Desert Racing Association** rules and/or regulations.

#### **ENTRANTS**

**SGE1:** Any entrant who fails to fully fill out and sign required entry forms and releases shall be disqualified

- and shall forfeit any prize money, points and contingencies won in that particular event. Entry forms and releases must be signed in person in front of **Best In The Desert Racing Association** entry personnel. Identification may be required.
- **SGE2:** No entrant may enter racing areas until they have signed all releases and/or entry forms. No person shall sign the release or entry forms for anyone other than himself or herself. Proper identification may be required (i.e., picture ID).
- **SGE3:** The entry applications of persons under the age of 18 must have a parent or legal guardian sign the release form. All entrants under 18 years of age must have entry form notarized.
- **SGE4:** Any entrant who competes in a vehicle that he/she is registered to drive or co-drive must sign all of the documents with Best In The Desert Racing Association. If all documents are not signed with Best In The Desert Racing Association it may result in a vehicle disqualification.
- **SGE5:** Deliberate abusive nerfing or bumping shall be reason for penalty, disqualification and/or suspension at the discretion of the director or operations manager
- **SGE6:** All drivers and co-drivers of record as listed on the official **Best In The Desert Racing Association** entry form must attend all drivers/riders meetings. Failure to do so may result in penalties of up to and including disqualification and/or fines. Armband checks and written roll calls may be made at the meeting.
- **SGE7:** If a driver of record change is made after entrant has completed event registration, the starting position will be forfeited and the entrant will start at the rear of their class.
- **SGE8:** A driver will not permit any other person other than a registered co-driver in the co-drivers normal riding position. The driver shall not permit anyone to ride on or in any part of his or her vehicle other than the normal riding positions.
- SGE9: No entrant, crewmember, pit personnel or any other person(s) other than the Director, Operations Manager or a **Best In The Desert Racing Association** official shall remove, alter or relocate course markings. The person(s) found to have removed, altered or relocated course markings may be disqualified and/or immediately removed from the area and may be refused access to future **Best In The Desert Racing Association** events.
- SGE10: Pre-Fun Run and course knowledge obtained thereof is the responsibility of every entrant of the Best In The Desert Racing Association/The American Off-Road Racing Series events. The Pre-Fun Run 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 the Pre-Fun Run may subject entrant to penalties of up to and including disqualification, suspension, fines up to one hundred dollars (\$100) or any combination of the aforementioned three penalties at the discretion of Best In The Desert Racing Association. There will be no pre-running or practice done in event-registered race prepared vehicles on or near the marked official Best In The Desert Racing Association racecourse. Participants in the Pre-Fun Run with open cockpit vehicles or motorcycles must wear full personnel protective gear. NOTICE: Participation in the Pre-Fun Run is at entrants' own risk.
- **SGE11:** Failure to appear before the director when requested may result in a letter of reprimand and/or infraction penalty at the discretion of the director. Failure to appear before the director when requested twice within a race season may result in an infraction penalty and/or suspension for up to one year at the discretion of the director.

#### **DISQUALIFICATION**

**SGD1:** Drinking intoxicating beverages in the official pre-race technical inspection area and post race areas (i.e., impound, finish line area, etc.), pits, on the racecourse or in the surrounding areas by any person is strictly forbidden. The use of narcotics (amphetamines or any other stimulants, barbiturates or

other depressants) is forbidden. Any entrant or crewmember in an event that shows evidence whatsoever of being under the influence of any of aforementioned shall be subject to suspensions from all future **Best In The Desert Racing Association** sponsored events. Violator must leave the premises immediately at the direction of the Operations Manager or the Director.

- **SGD2:** Any entrant who makes a false statement on a contingency or entry form shall be disqualified and shall forfeit all prize money, points and all contingencies won in the race. Entrant may also be suspended from future events for a period of one year.
- **SGD3:** Any entry application containing a falsified signature will cause entrant to be disqualified and shall forfeit all prize money, points and contingencies won in that event. Entrant may also be suspended from future events for a period of one year.
- **SGD4:** Any entrant disqualified from any event for any reason whatsoever forfeits any and all rights to prize money, points and contingencies. Entrant will not be entitled to a refund of all or any portion of his/her entry fee.
- SGD5: Any entrant, respective pit crews or support crews seen or reported traveling on the course in other than race-registered vehicles participating in the event before the end of the official race time limit may subject entrant to penalties of up to and including disqualification and/or suspension. There is no outside assistance permitted on the course or near the course during the event except for those Best In The Desert Racing Association designated areas set-aside for pits and/or gas stops. Best In The Desert Racing Association retains the right to assess each situation and respond accordingly. (Situations involving safety are at the discretion of the Operations Manager or Director of Best In The Desert Racing Association.)

In the event that a vehicle breaks down on the course Best In The Desert Racing Association approves the following options. Any deviation from these options may result in entrant being disqualified.

- Driver or Co-driver who is with vehicle at time of breakdown may walk to and from the nearest official **Best In The Desert Racing Association** designated pit stop only, in order to retrieve equipment or parts necessary to repair vehicle. Anyone other than the vehicle occupants that deliver equipment or parts will subject that vehicle to disqualification. Obtaining equipment or parts from any other location than an official **Best In The Desert Racing Association** designated pit stop will subject entrant to disqualification.
- Another race-entered vehicle may pick up equipment or parts at the previous official **Best In The Desert Racing Association** designated pit stop and then deliver that equipment or parts to broken down vehicle. The race vehicle picking up the equipment or parts must travel in the proper direction on the course. Traveling backwards on the course will subject both entrants to disqualification. Any pit support vehicle or other than raced entered vehicle delivering parts to a broken down vehicle will subject entrant to disqualification.
- **SGD6:** Any race entrant or their support personnel who subject any **Best In The Desert Racing Association** official, other race entrants or their support personnel to verbal threats and/or physical abuse will be brought before the director. The director will make the decision of disqualification and/or suspension of the driver/rider of record and the offending support personnel for said offenses. Acts of physical abuse may be reported to the proper authorities and may lead to legal action.

#### **EVENT COURSE**

SEC1: Best In The Desert Racing Association will set the maximum duration and length of an event.

**SEC2:** An entrant's official time shall be the total elapsed time from their assigned starting time to the time they cross the official finish line. The elapsed time must be less then the official time length 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 of their class. If the last of their class has already started, the entrant will be started in the next available position solely at the discretion of **Best In The Desert Racing Association**. In all cases if the entrant does not start at their assigned time, their time will start from their assigned starting time, not their actual starting time.
- **SEC3:** The winner of each class shall be the entrant that finished the race with the lowest elapsed time or the most laps within the event time limit. The entrant must also meet all other criteria in order to be declared the official winner.
- **SEC4:** All entrants must report all accidents and/or breakdowns they may have witnessed. Entrant must inform a **Best In The Desert Racing Association** official at the next check point, paved road crossing, pit stop or by radio (if so equipped) of the location, vehicle number, and injuries, if any. All entrants must retrieve a stuck stub from any other entrant who is displaying the stuck stub in the air and deliver the stuck stub to an official at the next paved road crossing, stop check point or pit stop that they come to or a Best In The Desert Official.
- **SEC5:** Two battery-operated red flashing beacons, two long glow sticks or two red reflective devices must be carried in the vehicle. Reflective devices must be at least 12 inches high and 12 inches long and be free standing (similar to trucker's breakdown triangles). Beacons, glow sticks or reflective devices must be placed at least 200 feet and 20 feet behind any breakdown or accident and be placed beside the track on the same side of track as the vehicle.
- **SEC6:** Passing is not permitted within 300 feet on either side of any paved road crossing or inside designated Pit Stop, except at the direction of a **Best In The Desert Racing Association** official. Failure to comply, subjects entrants to penalties of disqualification or a time penalty of 5 minutes for each occurrence at the discretion of the director.
- **SEC7:** Any entrant who must discontinue the race must report, in person or via the stuck stub, to a checkpoint, paved road crossing, pit stop or start/finish that they are out of the race.
- SEC8: No aircraft permitted for the purpose of race support. This includes but is not limited to flying over any race vehicle; transportation of drivers/riders and or support crews (unless a medical emergency exists); communication with race vehicle or pit support vehicle or pit; spotting for race vehicle; transportation of equipment and/or parts; landing on or near the race course in areas other then approved by Best In The Desert Racing Association and within FAA rules; flying too low; and interfering with the normal conduct or actions of the event. Violation of this rule may lead to entrant's disqualification. No Drones are permitted at any BITD event.
  - Note: Requests for aircraft special use (i.e.: filming, observing, etc.) must be submitted to Best In The Desert Racing Association in writing. Requests must include the radio frequencies (helicopter or airplane frequency and race team frequency) to be used and must be submitted no later than one week prior to scheduled event. Any request received during the week prior to the event will not be considered.
- **SEC9:** Starting procedures will be announced at the drivers/riders meeting prior to each event.
- SEC10: Every vehicle must leave the start line at its designated start time. Only those vehicles that cross the finish line within the designated time limit will be declared official finishers. Every vehicle must come to a complete stop and pass through all checkpoints and pit stops. The failure to stop and pass through all checkpoints along the course will subject that entry to penalties of up to and including disqualification at the discretion of the director. Every vehicle must come to a complete stop at all Best In The Desert Racing Association designated paved road crossings. The failure to stop at all designated paved road crossings along the course will subject that entry to penalties of up to and including disqualification at the discretion of the director or operations manager.
- **SEC11:** All vehicles must enter each stop checkpoint or paved road crossing at a safe speed. Unsafe racing into and/or through any stop checkpoint or paved road crossing is prohibited. Speeding through a

stop checkpoint or paved road crossing is automatic disqualification. Rolling through a stop checkpoint, pit stop or paved road crossing is a minimum *five-minute* time penalty for each occurrence. Safe speed is defined as a speed at which a vehicle may make a controlled stop without endangering anyone within the immediate vicinity of the checkpoint, paved road crossing or pit areas.

- **SEC12:** All entrants may be checked for their armband at the Start Line or Finish Line and all vehicles may be checked for the technical inspection sticker at any or all checkpoints or pit stops. Every entrant is responsible for his/her armband and vehicle technical inspection sticker. Any entrant found not to have an armband or vehicle without technical inspection sticker may cause that vehicle to be disqualified.
- SEC13: No vehicle shall be towed, pushed, pulled or transported by any non-race-entered vehicle on the official course while an official event is still in progress. Another race entered vehicle or an official Best In The Desert Racing Association vehicle may push, pull or tow the race-entered vehicle up to the nearest pit stop or checkpoint but may not push, pull or tow it through the pit stop. Occupants of the vehicle that is pushed pulled or towed to that point must make necessary repairs in order to leave that area under their own power. No vehicle may be pushed, pulled or towed by another vehicle within the last two-hundred yards (200 yards) of the finish; only the vehicle occupants at the time of the breakdown may push the vehicle through the finish line. No other person or persons will be permitted to assist in pushing, pulling or towing the vehicle. Best In The Desert Racing Association officials may lend assistance to any race vehicle or the vehicle occupants in any manor Best In The Desert Racing Association deemed reasonable, such as retrieving the vehicle, pulling the vehicle, shuttling parts, tools/equipment, etc.
- **SEC14:**No entrant registered as the **Driver of Record** may run in more than one class with the one vehicle even though entries are paid in more than one class. No individual may be registered as the **Driver of Record** for more than one vehicle in the same class.
- **SEC15:** A marked course is that official route designated by and marked with official **Best In The Desert Racing Association** markings. All vehicles must follow this route during the event. No vehicle may deviate from the marked course at any time unless the course is wide enough to pass. Passing is only permitted where there is no vegetation on the side of the course. Short coursing is not permitted and could result in a time penalty or disqualification. Short coursing is defined as any deviation from the marked course for any reason other than passing. No deviation from marked course including passing is permitted in sensitive areas. Deviation from the marked course in these areas could result with a disqualification. Sensitive areas are those, which are, marked by **Best In The Desert Racing Association** markings and DQ signs. **Best In The Desert Racing Association** is not responsible for markings that are damaged or removed. All vehicles must drive only in the correct direction of the course route or trail. Driving backwards on the racecourse at any time is prohibited. Driving backwards on the course is grounds for penalties of up to and including disqualification and/or suspension.
- SEC16: Points All Drivers of Record must be ENTERED. Race Vehicle must START in ALL races to be considered for a Year-End Championship podium position, a podium finish is 1 st, 2nd and 3rd place. Points awarded for miles on course, determined by the last Best In The Desert Stop Check vehicle cleared on the course if you DNF. All year-end ties are determined by the finishing record of the entrants involved. A Tie If there is a tie after your points are computed, after the throwout race (except Quads and Motorcycles,) then the tie will be determined by whoever finishes the best at the last race of the year.

#### **PROTESTS**

SGP1: The director, or operations manager, with or without protest, has the right to penalize, fine, disqualify, and/or suspend any vehicle or entrant for violation of any Best In The Desert Racing Association/The American Off-Road Racing Series rules. Another entrant within the

same class may make technical protests as the entrant being protested. A five hundred-dollar (\$500) cash fee must accompany protests for each item protested. The protest must be in writing along with the fee and be delivered to the Operations Manager or Director no later than 30 minutes after the official end of time limit. If the protest is proved valid the \$500 fee will be returned to the protestor. If the protest is proved invalid the \$500 goes to the person who was protested. Protests considered by the Operations Manager that shows a lack of sportsmanship may not be accepted. The Operations Manager will direct the technical director to check the protested items. The decision of the Operations Manager and director will be final. Interpretation of all rules along with violations and penalties thereof are at the discretion of Best In The Desert Racing Association. Penalties levied at the discretion of Best In The Desert Racing Association are final.

- **SGP2:** Any entrant who has an official protest lodged against his/her race vehicle must submit to an inspection of the protested items. Failure to submit to inspection will result in automatic disqualification and/or suspension. Those attending the inspection(s) will be as follows:
  - A. The protester or their designated representative.
  - B. The protested competitor or their designated representative.
  - C. The protested competitor's mechanic.
  - D. Best In The Desert Racing Association officials.
  - E. **Best In The Desert Racing Association** Chief Technical Inspector who shall supervise the required inspection of the protested items(s).
  - F. At the discretion of **Best In The Desert Racing Association**, with the approval of the protested competitor, members of the press will be permitted to observe for reporting purposes only.
  - G. No other persons shall be present nor witness the proceedings until the inspection has been completed.
- SGP3: A complaint filed for improper driving or conduct does not require a cash fee. The complaint must be filed in writing with the operations manager or director no later than 30 minutes after the official time limit of event. A complaint may be verbally filed with any radio equipped Best In The Desert Racing Association official if entrant filing the complaint is broken down on the track. The official will notify the operations manager or director of the complaint. The entrant against whom the complaint is filed will be held in impound until complainant arrives at the impound area. The complainant must make every effort to arrive at the impound area within one hour after the official end of event.

#### **INFRACTIONS & PENALTIES**

- SIP1: The following legend of infraction penalties is a guideline used by **Best In The Desert Racing Association** in accessing penalties. These guidelines are not meant to infer that these are the only possible infractions or penalties that may be assessed against any entrant participation in a **Best In The Desert Racing Association** sponsored event.
  - A. Failure to appear before the operations manager and/or director when requested: <u>Letter of reprimand and infraction penalty.</u>
  - A<sub>2</sub>. Second failure to appear before the operations manager and/or director when requested within one season: <u>Infraction penalty and suspension for up to one year.</u>
  - B. Three or more letters of reprimand in a single **Best In The Desert Racing Association** season: Loss of one position in last race entered.

- C. Rolling through a stop checkpoint (i.e. failure to come to a complete stop): *Five* minute time penalty each occurrence.
- D. Speeding through and/or unsafe racing up to or through a pit/stop checkpoint: <u>Disqualification.</u>
- E. Race vehicle traveling on the racecourse in the reverse direction of the race, before the official end of the event: Disqualification.
- $E_2$ . Pit support vehicles traveling on the racecourse before the official end of event: <u>Disqualification.</u>
- E<sub>3.</sub> Pits (stationary, roving or chase) located in any areas other than those areas officially recognized as pit areas as designated by **Best In The Desert Racing Association**: <u>Disqualification</u>.
- F. Minor nerfing: One position.
- G. Major nerfing: Disqualification.
- H. Abusive conduct toward a race official: <u>Disqualification</u>, suspension, one hundred dollar (\$100) fine or any combination of the three.
- I. Short coursing: <u>Disqualification</u>.
- J. Stationary pits or chase crews outside of designated areas or traveling in restricted areas: <u>Disqualification.</u>
- K. Reckless driving in pit areas or any access roads by race vehicle or race support vehicles: <u>Disqualification.</u>
- L. Speeding in a restricted speed area up to 10mph over announced or posted speed limit by race vehicle or race support vehicles: <u>One position.</u>
- M. Speeding in a restricted speed area over 10mph over announced or posted speed limit by race vehicle or race support vehicles: <u>Disqualification.</u>
- N. Any combination of two or more infractions at any one **Best In The Desert Racing Association** sponsored event: Disqualification.
- O. Rolling through a paved road crossing (i.e., failure to come to a complete stop): *Five*-minute time penalty each occurrence.
- P. Speeding through and/or unsafe racing up to or through a paved road crossing: *Five-* minute Time Penalty or Disqualification.
- Q. Driver of Record is responsible for all actions of his/her team, pit crew and/or anyone associated with Driver of Record / race vehicle number.
- SIP2: The Director or Operations Manager has the final decision on all issues involving any **Best In The Desert Racing Association** events. The Director has full discretion to make any final determinations, judgments, suspensions or penalties in relationship to all **Best In The Desert Racing Association** rules and/or regulations.

#### **DRIVERS— CO-DRIVERS**

**SDC1:** Each seat in any race vehicle must be occupied during the entire duration of the event as long as vehicle remains in competition. The maximum number of seats allowed in any Class is three (3). Seating must be designed in such a fashion to allow all passengers a quick exit and must meet with **Best In The Desert Racing Association** approval.

- **SDC2:** Only entrants that are listed on official **Best In The Desert Racing Association** entry form may drive or co-drive in the vehicle for which they are registered. In the event in an emergency, any registered arm-banded racer may get in may race vehicle, but the registered racer must notify a Best In The Desert race official. Registration is limited to a maximum of four entrants per vehicle.
- **SDC3: Best In The Desert Racing Association** reserves the right to change race vehicle numbers and/or background colors.
- **SDC4:** The driver of record must sign all entry forms and releases during the registration period to be eligible for points during that event. Identification may be required. Special consideration registration may be permitted with advanced approval of **Best In The Desert Racing Association**.
- SDC5: Only the Driver of Record will receive points. The race vehicle number will be assigned to the Driver of Record for the entire year. The Driver of Record must enter all points events to become a class champion. The points stay with the Driver of Record and the vehicle number for the entire year. Driver of Record does not have to start or finish, but must be registered to the race vehicle and must have signed all of the releases required by Best In The Desert Racing Association. Driver of Record can be replaced in the race vehicle with special exception approved by Best In The Desert.

#### **PITS**

- **SGPT1:** No vehicle will be permitted to enter pit areas or race area without a valid **Best In The Desert Racing Association**/ **The American Off-Road Racing Series** pit pass, when required. Pit pass must be securely attached to front windshield and be clearly visible. The race-vehicle number must be clearly displayed on side, front and rear windows (refer to **SCR51**).
- **SGPT2:** All designated pits will be a MANDATORY STOP NO PASSING ZONE 25 MPH. At all times the driver of record assumes responsibility for the actions of their pit crew members, support crews, and all others associated with their team.
- **SGPT3:** No person(s) under suspension by **Best In The Desert Racing Association** will be permitted to participate or be permitted to enter the pits or race area.
- **SGPT4:** Any pit support vehicle running on or near the racecourse will result in the entrant being disqualified. Any pit support vehicle traveling in a restricted area will result in entrant being disqualified. No pit vehicle may follow or lead a race vehicle on the racecourse. Any pit vehicle running backwards on the racecourse may cause race vehicle to be disqualified. Any pit support vehicle stopping at a paved road crossing may cause race vehicle to be disqualified. Any pit support vehicle stopping on a road that is near the racecourse and not in an official designated area may cause race vehicle to be disqualified.
  - In the event that a vehicle breaks down on the course, Best in the Desert Racing Association approves the following options. Any deviation from these options may result in entrant being disqualified
- Driver or Co-driver who is with vehicle at time of breakdown may walk to and from the nearest official **Best In The Desert Racing Association** designated pit stop only, in order to retrieve equipment or parts necessary to repair vehicle. Anyone other than the vehicle occupants that deliver equipment or parts will subject that vehicle to disqualification. Obtaining equipment or parts from any other location than an official **Best In The Desert Racing Association** designated pit stop will subject entrant to disqualification.
- Another race-entered vehicle may pick up equipment or parts at the previous official **Best In The Desert Racing Association** designated pit stop and then deliver that equipment or parts to broken down vehicle. The race vehicle picking up the equipment or parts must travel in the proper direction on the course. Traveling backwards on the course will subject both entrants to disqualification. Any pit support vehicle or any other non-race entered vehicle delivering parts to a broken down vehicle will subject entrant to disqualification.

#### **Definitions and General Information**

- **SGPT5:** Any entrant, crew member, or other pit pass holder who takes part in any demonstration in the pits, on the course, or surrounding area before, during or after an event shall be subject to expulsion from the area, suspension from future **Best In The Desert Racing Association** sponsored events and possible legal action.
- **SGPT6:** Maximum speed limit on all main pit access roads and in all pit areas will be 15mph for all vehicles. Maximum speed limit on all other access roads will be 35mph. **Best In The Desert Racing Association** reserves the right to change speed limits to account for conditions.
- **SGPT7:** The Best In The Desert Racing Association Pit Stop Captain shall determine the pitting zone around each pit stop.
- **SGPT8:** All pit supplies must be at least 50 feet from the edge of the racecourse to the racetrack side of race vehicle. No pit may be in the first 50 feet leading into and the first 100 feet leading out of a turn. Pits located within the turn area or less than 50 feet from the track will subject entrant to penalties of up to and including disqualification and or a minimum of one-hour time penalty at the discretion of the director. **Mandatory** at all pits, some form of approved fuel containment mat under the vehicle when fueling. A tub or bucket to catch overflow is mandatory as well.
- All pits regardless if fueling a vehicle during a stop are required to have at a minimum 2-10lb dry chemical or foam equivalent fire extinguishers out and ready for use. If fuel duties are being performed in that pit, including dump can use, you must have at a minimum 1-20lb dry chemical or foam equivalent manned by a dedicated person during the fueling of the vehicle. Any team using an approved pressurized fuel filling system is required to have at a minimum 2 20lb dry chemical or foam extinguishers with one being manned by a dedicated team member for the duration of the stop. NOTE: For pressurized fuel system see SGPT13.
- **SGPT10:** All young children and pets must be kept out of the immediate area where vehicle 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 track and pit vehicles. Campfires may not be permitted due to federal and state regulations. No firewood with nails, (ie. pallets.)
- **SGPT11:** All entrants are responsible for cleaning the pit areas they use during the event.
- SGPT12: Best in the Desert mandates refueling personnel (aka "The Fueler"; the crew member responsible for inserting the fuel nozzle or dry brake during a pit stop) 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. The suit must be free from holes, rips, tears, and not worn thin. Additionally Mandated, SFI Rated Balaclava, SFI 3.3 Rated Fire Retardant gloves and SFI 52.1 Fuel Apron. It is strongly recommend the "fueler" to wear a SNELL SA rated full face helmet. This applies to all fuel delivery systems including dump cans. SFI 3.3 rated fire retardant shoes are also strongly recommended.

Additionally for all pit crew members working in the immediate area of a vehicle being fueled, Best in the Desert's requires for pit crew members are a one piece or two piece fire suit minimally rated to the SFI Foundation's 3.2A/5 manufacturer's certification. Best in the Desert will accept NFPA 1971, 1977, or 2112 as acceptable alternatives to SFI rated garments. The use of a pit crew style helmets and an SFI 3.3 rated balaclava, SFI 3.3 rated fire retardant gloves, and SFI 3.3 rated fire retardant shoes are also strongly recommended.

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#### **SGPT13: Vehicle Refueling**

All vehicles including car, truck, motorcycle, UTV and ATV may only be refueled with vented fuel cans or gravity fed fuel towers. Pressurized fuel systems may be used for Cars and Trucks only and must be approved and inspected by Best in the Desert.

Mandatory that all pits must have some form of approved fuel containment mat under the vehicle when fueling. Must have a bucket (preferably metal bucket) to keep over flowing fuel from reaching the ground.

Overhead fuel towers and pressure systems: Must be placed a minimum of 50 feet from the race course. All towers must have a manned spring loaded dead man valve (ball gate or butterfly) to automatically close the line when the handle is released.

- Fuel pressure systems and overhead towers must have a double redhead dry break with return back to the fuel system tank. **Any other system must be approved by Best in the Desert.**
- No larger than a -10 vent line.
- All vehicles must have an external discriminator valve on the fuel vent.
- It is highly recommended that your fuel system and your vehicle are grounded during refueling
- Some form of fuel catch can, container must be in place to prevent overflowing fuel from touching the ground.
- Fuel pressure systems must have a 10lb max pressure relief valve on the tank and must be purchased from American tank. Shop Number 619-462-4076
- All teams utilizing a pressure system or overhead tower must register with Best in the Desert so the system may be inspected. Best in the Desert reserves the right to disallow any fueling system deemed unsafe.
- All dump cans must contain a full extension vent line to bottom of can.

Any team not compliant with any of these rules can be subject to penalty up to and including disqualification.

#### **TECH-INSPECTION & IMPOUND**

- SGT1: It is the entrants', drivers', owners', and sponsors' full responsibility to meet all **Best In The Desert Racing Association/The American Off-Road Racing Series** rules and regulations.
- **SGT2: Best In The Desert Racing Association** reserves the right to limit the number of personnel into any area or garage in which inspections are being made or within which vehicles are impounded.
- **SGT3: Best In The Desert Racing Association** reserves the right to seal or impound any and all race vehicles.
- SGT4: Best In The Desert Racing Association assumes no responsibility for impounded vehicles. Best In The Desert Racing Association intends to make reasonable efforts to ensure the vehicles' security.
- **SGT5:** The director, operations manager, and/or chief technical inspector may impound any vehicle or vehicle parts.
- **SGT6:** No vehicle is to be touched or may be removed from an inspection area or impound area without permission from the director and chief technical inspector or TURNKEY. Failure to comply shall subject that entry to disqualification. Any vehicle not taken directly to the inspection or impound area when requested by the operations manager or chief technical inspector shall subject that entry to disqualification.
- **SGT7:** The chief technical inspector may seize any illegal parts or devices found on any vehicle. Any item seized by the chief technical inspector will not be returned, nor will there be any compensation made by **Best In The Desert Racing Association**, its officials or directors to any entrant who has illegal items seized.
- **SGT8:** Entrants must make all reasonable effort to arrive at the registration and pre-race technical inspection during the hours listed on race information sheets. Failure to do so may result in penalties being placed on entrant at the discretion of **Best In The Desert Racing Association**. The penalties are as follows:
  - **First offense:** One hundred dollar (\$100) fine to be paid at registration and/or technical inspection area.
  - Second offense: One hundred dollar (\$100) fine and a 5-minute per 100 miles of course time

- penalty (i.e., 200-mile course will result in a 10-minute time penalty).
- **Third offense and on:** One hundred and fifty dollar (\$150) fine and a 10-minute per 100 miles of course time penalty (i.e., 200-mile course will result in a 20-minute time penalty).
- SGT9: Best In The Desert Racing Association reserves the right to apply frame identification markers to any and all vehicles that participate in "The American Off-Road Racing Series." The frame identification markers are to remain intact and unaltered by vehicle owners, drivers or support personnel. The frame identification markers are to remain on the vehicle for the life of the vehicle. If frame identification marker is damaged or must be removed to facilitate repairs to vehicle then the driver of record for the vehicle must notify Best In The Desert Racing Association prior to next event in order to have a new frame identification marker applied. The driver of record must notate the frame identification number being removed and notify Best In The Desert Racing Association of the number.

#### PRE-RACE TECH

- **SGT10:** Each vehicle must pass a safety inspection before it will be permitted to race in any **Best In The Desert Racing Association** event. A designated identification marker will be placed on the vehicle after successfully passing the safety inspection. The identification marker must remain on the vehicle until after the finish of the race. A Best In The Desert Racing Association decal must be placed on each side of the vehicle in a prominent location. Best In The Desert Racing Association supplies a stuck stub. The stuck stub must be placed in the vehicle along with a writing instrument. The stuck stub must remain in the vehicle. If a break down or out-of-race condition occurs, the stuck stub must be completed and given to the proper race official.
- **SGT10.1** Each race vehicle is mandated by Best In The Desert Racing Association Tech Team to place any special event decals on each side of the race vehicle (i.e Best In The Desert Racing Association decal or Best In The Desert Racing Association sponsor decal, or event sponsor.) Failure to comply could result in a time penalty
- **SGT11:** All personal protective gear will be checked at pre-race tech. This includes but is not limited to firesuits, 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 will not be returned, nor will there be any compensation made by **Best In The Desert Racing Association**, its officials or directors to any entrant who has illegal or deemed unsafe items seized.
- **SGT12:** Pre-race impound will be at the discretion of **Best In The Desert Racing Association**. After safety inspection, vehicles will be directed to an impound area where they will remain until assigned removal time. No one will be permitted into impound area after vehicle is placed in impound. Entrants must receive written special permission from **Best In The Desert Racing Association** to enter impound after vehicle is placed in impound.

#### POST-RACE-TECH

- SGT13: Best In The Desert Racing Association reserves the right to subject any vehicle to a mechanical inspection at the discretion of the operations manager and/or chief technical inspector. In the event of a mechanical inspection, the driver of record will be responsible for removing or preparing the requested items to be inspected as directed. Failure to comply will result in disqualification of entrant and vehicle, and may result in suspension from future Best In The Desert Racing Association sponsored events.
- **SGT14:** The operations manager or director may require the owner or entrant of a vehicle damaged in a racerelated incident to submit to post-incident inspection. If the owner or entrant refuses, the vehicle and entrant may be disqualified and suspended from future **Best In The Desert Racing Association** events.
- SGT15: Post-race impound of all finishing vehicles is at the discretion of **Best In The Desert Racing**Association. Impound time limit is one hour after the official finish of the race. **Best In The Desert**

**Racing Association** will release vehicles earlier at its discretion. Vehicles involved in any type of protest, complaint, or engine claim will be held until after resolution of protest, complaint, or engine claim.

**SGT16:** Any refusal by an entrant to comply with engine claim rules as stated in the class rules will result in entrants disqualification and suspension from all **Best In The Desert Racing Association** sponsored events for a period of one year. Entrant will also forfeit any prize money, contingencies and any other award due for finishing the race.

#### **COMPETITION REGULATIONS**

The regulations herein apply to all classes unless otherwise noted in supplementary or specific class regulations. Modifications or optional equipment is not permitted unless the class requirements or safety regulations specifically state that it will be permitted. **Best In The Desert Racing Association's** intent when prescribing specifications for safety equipment for vehicles that will compete under **The American Off-Road Racing Series** rules is to provide reasonable protection to all entrants, pit crews, officials and spectators. **Best In The Desert Racing Association** encourages all entrants to give full attention to safety requirements. Entrants must wear an approved helmet, protective clothing, eye protection and safety equipment when operating a vehicle on the race course at any time, including warm ups and testing. All body components and nets must be properly secured during such operations.

#### **SAFETY EQUIPMENT**

#### **SCR1: HELMETS**

Helmets must be of approved by one of the following with the appropriate approval decal attached; Snell SA2010 or SAH2010 / SA2015. Straps must have D-ring fasteners only. No snaps or velcro will be permitted. The interior and exterior areas of the helmet must be free of defects (i.e., the padding must be in good condition and the exterior of the helmet must not be damaged). Open face helmets are permitted. Beginning with the 2017 Best in the Desert Racing Season, the SA2005 rated helmets are no longer be permitted.

#### **SCR2: PROTECTIVE CLOTHING**

#### **Suits:**

One-piece firesuits are mandatory. Two-piece suits are not permitted. The suits must cover from the neck to the ankles and to the wrists. The suits must not have any holes, rips, and tears or be worn thin. The suits must also be free from any petroleum-based contaminants. All suits must be manufactured from fire resistant material and shall bear a minimum of an SFI 3.2A/5 or higher manufacturer's certification label. Fire retardant gloves and footwear rated to the SFI 3.3 standard are very highly recommended. Best In The Desert Racing Association also highly recommends that each fire suit be labeled on the upper right chest with the entrant's full name, blood type, allergies or other important medical information.

#### **Balaclava**:

Best in the Desert strongly recommends the use of either a fire retardant balaclava rated to the SFI 3.3 specification or a helmet skirt rated to the SFI 3.3/5 specification.

#### **Undergarments:**

The use of petroleum based and other synthetic blends of undergarments such as the athletic or compression style close-fit garments (common used for the cooling, moisture wicking, and quick drying features) *are not permitted*. Synthetic fibers such as nylon, elastane, and polyester melt when ignited and for this reason they will not be permitted. Best in the Desert strongly recommends the use of a fire retardant long sleeve tops, and long bottom undergarments as well as fire retardant socks rated to the SFI 3.3 specification.

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#### **SCR3:** EYE PROTECTION

Shatter resistant eye protection is required for all entrants competing in a **Best In The Desert Racing Association** event. Entrants whose vehicles have full windshields must have eye protection in the vehicle with them at all times. It is highly recommended that entrants wear the eye protection even

with the windshield. It is highly recommended that entrants with removable dentures remove them prior to competing.

#### SCR4: NECK RESTRAINT

Best in the Desert Racing Association will require that any and all persons driving or riding in any class race vehicle wear a frontal head restraint (FHR) bearing the SFI Foundation's 38.1 manufacturer's certification label. All head restraints must be replaced or recertified 5 years from month and date of manufacture.

#### SCR5: FIRST AID KIT

A weatherproof first aid kit must be carried in each vehicle at all times and must contain at least the following items:

2	4" Bandage Compress	2	2" Bandage Compress
1	Triangular Bandage	8	2" x 3" Adhesive Bandages
4	1" x 3.375" Adhesive Bandages	4	Antiseptic (Methylate, etc.)
2	Pairs of Latex Gloves		
The following items are recommended in addition to the required items:			
1	Eye Dressing Packet	1	Ace Bandage
1	Wire Splint (Compact)	1	CPR Face Mask

The first aid kit must be easily accessible within the occupant's area without having to remove any body panels or equipment.

#### SCR6: Breakdown safety devices

Two battery-operated red flashing beacons, two large glow sticks or two red reflective devices must be carried in the vehicle. Reflective devices must be at least 12 inches high and 12 inches long and be free standing (similar to trucker's breakdown triangles). **Best In The Desert Racing Association** is concerned about race areas; thus, flares will not be permitted as a breakdown device. Official **Best In The Desert Racing Association** stuck stubs are supplied to each entrant at registration. The stuck stub must be kept with the vehicle along with a writing instrument. If a break down or out-of-race condition occurs, the stuck stub must be completed and given to another race vehicle to pass on to a race official.

#### SCR7: HORNS

All vehicles must have a loud sounding horn. Horn must be very audible from a distance of 100 feet in front of the vehicle. Sirens are permitted, in addition to a horn, during the actual racing portion of the event.

#### SCR8: REFLECTOR

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

#### **SCR9:** FIRE EXTINGUISHER

Each vehicle must carry a portable UL approved minimum **2.5-lb**. ABC-class dry chemical type or equivalent Halon, AFFF Foam, Novec 1230, FE-36 fire extinguisher. Fire extinguisher must have a gauge, be fully charged, and be easily accessible from inside of the vehicle. An additional minimum **5-lb**. ABC-class, dry chemical fire extinguisher or foam equivalent must be mounted on the exterior of the vehicle. The mounting must be in such a manner as to prevent damage to fire extinguisher during rollover and must be marked in such a manner as to allowing persons not familiar with vehicle to easily find fire extinguisher. On-board fire extinguishers are highly recommended. Portable and on-board fire extinguishers must have a current (less than one year old) fire marshal's seal and attached label. Class 2000 only will be allowed a minimum of 2.5lb ABC-class, dry chemical fire extinguisher or foam equivalent mounted on the exterior of the vehicle.

#### **SCR10: SURVIVAL SUPPLIES**

All vehicles must carry at least one day of survival supplies and one quart of water per occupant or rider. It is highly recommended that additional water be carried for each occupant during the hotter months.

#### SUSPENSION COMPONENTS

#### SCR11: SHOCK ABSORBERS & BUMP STOPS

There must be at least one shock absorber per wheel in working condition at the start of the race. Suspension bump stops must be of the solid type unless class rules allow movable bump stops or secondary suspension.

#### **SCR12: SECONDARY SUSPENSION**

Secondary suspension includes leaf springs, torsion bars, coil-over shocks, air bags, haga balls or any other item, other than shock absorbers and the stock concept suspension system that came with the vehicle that changes the wheel rate at any point in its travel.

Air shocks will be considered secondary suspension when charged to 200 psi in their fully extended state and the static pressure exceeds 300 psi when fully compressed.

Movable bump stops will be considered secondary suspension when they contact the suspension unit more than 4 inches before the end of the wheels upwards travel.

#### **SCR13: WHEELS & TIRES**

Snap-on hubcaps or Snap-on wheel covers of any type are **not permitted** in any class of vehicle during competition. Tires will be visually checked for condition and must be considered reasonably safe by **Best In The Desert Racing Association** prior to competing. Maximum tire size is 40 inches outside diameter. No multiple tires permitted. It is highly recommended that all foreign material be removed from mounting surfaces of the rim and wheel.

Wheel travel will be measured at the end of the centerline of the spindle on all vehicles, regardless of make of vehicle or hub design. In the event that the end of the spindle cannot be established, the entrant may be required to remove end caps, etc., to make the end of the spindle available.

The measurement shall be taken from full droop (full extension of the limit strap) to where the moving parts contact a constant rigid member stopping the upward movement. Bump stops must be fully compressed at time of measurement.

Vehicles with solid axle front ends will be measured from suspension member to metal stop; this is where the axle contacts a constant rigid metal part of the main chassis in a straight up and down motion. "Duck walking" will not be considered wheel travel.

Solid rear axles will be measured in the same manner as a solid front axle noted in the above paragraph.

Each wheel on the vehicle including all spares must have the vehicle's number **STAMPED** in each wheel within 2 inches of the valve stem. The **STAMPED** number must be a minimum 1/4 inch tall and must be on the **OUTSIDE OF THE WHEEL**.

#### **SCR14: FASTENERS**

It is recommended that all component parts on the vehicle's suspension system, chassis and running gear be secured with s.a.e. Grade 8 or better nuts and bolts. Bolts must be secured with either lock nuts, lock washers, cotter pins or safety wire and have at least one full thread showing through the nut.

#### STEERING & BRAKE COMPONENTS

#### **SCR15: STEERING**

All steering components must be in good condition and in proper working order. Drag link and tie rod ends must be secured with a cotter pin in each one. Best In The Desert Racing Association must consider steering reasonably safe before vehicle is permitted to compete.

#### SCR16: BRAKES

Brakes must be in a safe working condition and be able to apply adequate force to lock up all four tires. Brakes must be in a safe operating condition during the entire event. If brake system problems do occur during the event they must be repaired before continuing in competition. Turning or steering brakes are not permitted unless specified in class rules.

#### **ELECTRICAL SYSTEM**

#### **SCR17: IGNITION**

Each vehicle must have a positive action on/off switch in good working order. 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.

#### **SCR18: BATTERIES**

Batteries must be securely mounted with metal-to-metal tie downs. All flooded cell batteries must be fully enclosed including the sides and bottom. Enclosure must be able to contain the quantity of acid contained in the battery if inverted. Batteries shall not be located in the driver's compartment. Batteries will be considered as being in the driver's compartment if there is no firewall between the battery and the driver.

#### **SCR19: LIGHTS**

All vehicles must have a minimum of two taillights, two brake lights and one rearward facing amber light. A rearward facing BLUE LIGHT in addition to the rearward facing L.E.D. AMBER LIGHT or 55 WATT LIGHT the L.E.D. MUST EQUAL A 55 WATT LIGHT, must be installed on all vehicles in the 900, 1200, 1700, 1800-1900, 2000, 2700, 3700, 4700, 6000, 5100, 0 and Class 8100 Open Sportsman classes. This **BLUE LIGHT** is an attempt to identify slower moving classes of vehicles so that faster classes of vehicles will be able to recognize they are approaching a slower vehicle. All lights must be in operating condition at time of inspection. Headlights may be removed for daytime races unless class rules specify stock headlights are to be retained. All rearward-facing lights (taillights, brake lights, blue lights if so required and amber light) must be in operating condition before the vehicle will be permitted to start the race. If during the race any taillight, brake light, blue light if so required or amber light is damaged or burned out, the light must be fixed or replaced at the next available pit before proceeding in the race. Any taillight, blue light if so required or amber light that is connected to a switch that will allow the vehicle to move in any direction under its own power without the lights being on will cause that vehicle to be disqualified. All rearward-facing lights must be protected against damage in the event of a rollover.

Taillights must be at least 3 inches in diameter, or meet with **Best In The Desert Racing Association** approval, and must be mounted in such a manner as to be clearly visible from a distance to the rear of the vehicle. **The L.E.D.** amber light must be either a 3 inch round or model 60 oval shaped light. Rearward blue light if so required must be at least 55watts or greater. 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 inches from the ground and must be clearly visible, with no obstructions (IE: not mounted behind any solid object), from any angle from the rear of the vehicle. The amber light and blue light if so required must be placed so that an approaching driver's vision is not impaired. The amber light, blue

light if so required and taillights must be connected to the ignition switch (connecting straight to the battery switch, if vehicle is so equipped, is acceptable) and remain on during the entire race.

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 inches from the ground and must be clearly visible, with no obstructions (IE: not mounted behind any solid object), from any angle from the rear of the vehicle. The amber light and blue light if so required must be placed so that an approaching driver's vision is not impaired. The amber light and blue light if so required must be connected to the ignition switch (connecting straight to the battery switch, if vehicle is so equipped, is acceptable) and remain on during the entire race.

#### **SCR20: STARTER**

All cars and trucks must be self-starting by use of an onboard electric starter.

#### **FUEL SYSTEM**

#### **SCR21: FUEL**

Any of the following commercially available fuels may be used:

- A. Service station pump gasoline (the type normally used in passenger vehicles for highway use, this also includes E85.)
- B. Racing gasoline as manufactured
- C. Commercial aviation gas
- D. Diesel fuel
- E. Propane or natural gas.

No alcohol, NOS, or nitro-methane is permitted. Commercially produced nationally advertised fuel additives may be used.

#### **SCR22: FUEL TANKS**

Safety fuel cells are required for all vehicles. Auxiliary fuel tanks may be added in all classes except those classes whose class rules do not allow auxiliary fuel tanks. Auxiliary fuel tanks must be safety fuel cells. Alternative fuels (propane or natural gas) must use an approved fuel cell as determined by DOT standards and with the approval of **Best In The Desert Racing Association.** Alternative fueled vehicles may not use auxiliary fuel cells. All fuel tanks must be securely mounted. Fuel tank must be filled from and vented to the outside of the vehicle. There must be a substantial cross member and firewall between the fuel tank and the occupants.

No GI-cans or fuel containers similar in construction or purpose will be permitted in or on any vehicle during the race. Use of GI-cans or other fuel containers will subject entrant to a time penalty or disqualification.

Safety fuel cells shall consist of a bladder enclosed in a smooth skinned container. The container shall be constructed of 20ga. steel, 0.060-inch aluminum or 0.125-inch marlex. Magnesium is strictly prohibited. Container must be securely attached to vehicles with bolts or steel straps. All fittings must be built into the skin and bonded to the 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. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer. Rotary molded polymer cells are acceptable. The physical properties minimum standards are in accordance with Table 1.

Table 1

Test Type	Minimum Standard	Test Specification
Tensile Strength	450 lbs.	Spec CCC-T-1916 Method 5102
Tear Strength	50 lbs.	Spec CC-T-1916 Method 5134
Puncture Test	175 lbs.	Spec MIL-T-6396 Article 4.5.17

These physical properties must be maintained throughout all areas of the finished bladder including seams, joints and fittings.

#### SCR23: FUEL FILLER, VENTS & CAPS

Fuel filler lines and positive-locking non-vented fuel filler caps (Monza/flip-type caps are strictly forbidden) must be located and secured in such a manner as to prevent being knocked off or open during movement, rollover or accidental impact. Design and installation must be in such a manner to prevent fuel escaping from pickups, lines, fillers and breather vents if vehicle is partially or totally inverted. Fuel breather lines must have a rollover check valve incorporated in the fuel cell along with a secondary external discriminator valve which should be mounted visible and at no more than a 15 degree angle. The vent line must extend to the highest point of the rollcage nearest the fuel cell, across the width of the vehicle, and down to below the belly pan of the vehicle or 3 inches below the fuel cell, whichever is lower. OPTIONAL PLACEMENT: The vent line may be wrapped one full loop around the outside of the fuel cell near the top of the fuel cell and then down below the vehicle 3 inches below the lowest point of the fuel cell. Where the vent line attaches to the fuel cell there must be a loop above the fuel cell that extends 4 inches higher than the top of the fuel cell. The breather line must be vented outside of driver's compartment and be directed away from the engine and exhaust system.

All fuel fillers attached to the frame or body panel must use a flexible coupling to the tank. All fuel fillers must be surrounded by a boot or splashguard (body panel is acceptable as a splashguard if sealed). Boot or splashguard must direct fuel spillage to outside of vehicle and away from driver's compartment, engine and exhaust. A fuel filler rollover-check-valve must be incorporated into all fuel cells. It is highly recommended that all detachable fuel filler caps have a flexible strap or chain attached between it and the frame of the vehicle.

#### **SCR23.5:Best in the Desert** – All competitors should review Race Fuel Safety:

Fuel Injected Motors: Because of the resent flash fires after rollovers. Review the fuel rail retaining system on your motors. We suggest that you also interlock your fuel pumps to disable them with the loss of oil pressure, check with your engine builder. This is for your safety.

Fuel Cell Vent Lines: These lines must be routed so that the line runs to all external fuel cell locations; i.e. top – left side – front – right side – back – bottom. This will limit fuel spills when the race vehicle is "Parked" in a position that tips the fuel cell. This is in addition to the rollover flapper/check valves. **Must have inline external discriminator valve**.

All Pits must be in compliance with SGPT9 at all times Random checks will be made and time penalties may be assessed if extinguishers are not ready.

#### **ENGINE TRANSMISSIONS & DRIVELINES**

#### **SCR24: ENGINE LOCATION & DISPLACEMENT**

Where applicable engine displacement and location must adhere to class rules. Engine displacement and location may be checked by **Best In The Desert Racing Association. Best In The Desert Racing Association** reserves the right to mark engine blocks prior to an event.

#### **SCR25: ENGINE REPLACEMENT**

Entrant may replace a complete engine during an event, however the entrant must notify a Best in The Desert official that the engine is being replaced. The engine may only be replaced at an official designated pit.

#### **SCR26: TRANSMISSION**

Every vehicle must have a functional reverse gear. Four-wheel drive vehicles must be capable of being driven through all wheels. Class 1400, 1500, 7200, and 8000 with automatic transmissions are required to have a scatter shield.

#### **SCR27: THROTTLES**

Every vehicle with a foot throttle must have two return springs, with a minimum of a 2-lb. pull, attached to the carburetor. Fuel injected vehicles are exempt from having two return springs.

<u>Computer controlled throttles are exempt from having two return springs but must maintain the</u> <u>stock system.</u> A stop or override system must be used to keep linkage from passing over center and sticking in an open position.

A hand throttle may be used if physical limitations necessitate use of such device. The hand throttle must follow the same guidelines as a foot throttle and must be deemed safe and approved by **Best In The Desert Racing Association.** 

#### SCR28: EXHAUST

Forestry approved spark arrestors or approved mufflers are required on all vehicles. Exhaust system design and installation must be done in such a manner as to extend a minimum of 1 foot past the rear of the driver's compartment, be directed rearward out of the body and away from the driver and co-driver, fuel cells and tires. The exhaust must be placed in such a manner as to minimize the production of dust. Exhaust Pipes must extend at least to the rear of the driver's compartment

#### **SCR29: DRIVESHAFTS**

All front engine vehicles with open driveshafts must have a 0.25-inch x 2-inch steel strap or a 2-inch wide heavy nylon webbed retainer hoop. Hoop or strap must be securely mounted to a body or frame member and must be located within the first 6 inches of the main driveline behind the slip yolk or universal joint. Hoop or strap must be fabricated and located in such a manner that it will reasonably prevent the front of the driveshaft from digging into the ground when the rear suspension is fully compressed to the upper limit of wheel travel. The loop must be as short as possible to prevent severe "whipping" of the driveshaft. A plate that extends down from the frame or body to shorten the strap is advisable.

#### SCR30: FLYWHEEL SHIELDS

All front-engine vehicles with manual transmissions must have an SEMA-approved bell housing or cover. It is highly recommended that front engine vehicles with automatic transmissions have SEMA-approved covers.

#### **SCR31: FLUID COOLERS**

Oil coolers, transmission coolers and radiators located ahead of the driver and co-driver or in the passenger compartment must have a shroud that will prevent liquids from blowing back or leaking onto the driver and/or co-driver in the event of a rupture or leakage. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

#### **SCR32: AUXILIARY EQUIPMENT**

All vehicles must start race with a functional generator or alternator, fan, water pump (water-cooled vehicles) and a complete functional electrical system.

#### SCR33: TURBOCHARGERS & SUPERCHARGERS

Turbocharges and Superchargers only permitted on **gasoline-powered vehicles in classes listed below.** 

**Special Note:** Ford Production 2.0L & 3.5L EcoBoost turbocharged V6 & V4 gasoline engine allowed in Class 2400, 6100, 6200, 7200, 8000 and 8100 Spt only.

Factory installed or aftermarket turbochargers & superchargers are permitted in the following classes: 1400, 1500. Best In The Desert Racing Association at any time may modify rules and/or impose restrictions on turbocharged diesel-powered vehicles in the interest of competition. Every turbocharged & supercharged diesel-powered vehicle must have Best In The Desert Racing Association prior approval before competing in a Best In The Desert Racing Association event for the first time.

#### **VEHICLE SAFETY EQUIPMENT**

#### **SCR34: ROLLCAGES**

Best In The Desert Racing Association believes that it is each competitor's responsibility to present

a safe vehicle for pre-race tech inspection. You must maintain your safety equipment including the roll cage integrity. No changes to the recommended minimum construction specification with respect to diameter or wall thickness are anticipated at this time. As in the past, Best In The Desert Racing Association reserves the right to not allow any safety cage design that, in the view of the tech inspector, is not fit for competition. You, as the competitor, are ultimately responsible for your own vehicle's safety features with respect to the design, quality of execution, maintenance and repair of the roll cage structure.

All vehicles in competition are recommended to be equipped with a rollcage based on seamless mild steel/4130 chrome molly steel tubing. Minimum design and tubing size for rollcage structure is in accordance with Table 2.

Table 2. Minimum Tubing Dimension

Vehicle Weight		
Under 2000 lbs.	1.5" x 0.95"	
2001 to 2500 lbs.	1.5" x .120"	
2501 to 3000 lbs.	1.75" x .095"	
3001 to 4000 lbs	1.75" x .120"	
4001 pounds and over	2.0" x .120"	

e: See manufacturer's' reference charts for alloy steel tubing equivalent strengths. No aluminum or other non-ferrous materials are permitted.

#### MATERIAL

Rollcage construction material may be crew, dom, whr, wcr mild carbon steel or 4130 chromoly. 4130 chromoly is highly recommended for all rollcage construction. Stress relieve all welded intersections by flame annealing. All welds must be of high quality and craftsmanship with good penetration and with no undercutting of parent material. **Oxy-acetylene brazing on rollcage is strictly forbidden.** 

#### ROLLCAGE DESIGN

All rollcages must be designed and constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one diagonal brace and all necessary gussets. The two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop. All rollcage components (hoops, braces, gussets, etc.) must have a minimum of 3-inch clearance from the component to the vehicle occupant's helmets when occupants are seated in their normal riding positions. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded.

Rollcages must be securely mounted to the frame or body. All intersecting points must be gusseted and braced. Cab or body mounted rollcages must be bolted through the body structure and be attached by use of a minimum two 0.1875-inch thick doubler plates (one on each side of body structure). Bolts and nuts must be at least 0.375-inch-diameter s.a.e. Grade 8 or equivalent aircraft quality. Welding of cab or body mounted rollcages to body structure is strictly prohibited. Rollcage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1.5 inches of movement in the cage terminal end.

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 side bars must be of the same tubing material and dimensions as the rest of the rollcage. The side bars must be as close to parallel to the ground as possible, be located to provide maximum protection to the occupants, and be securely welded to the front and rear hoops. The location of the sidebars must not cause difficulty in entering

or exiting the vehicle.

Gussets constructed of 0.125-inch x 3-inch x 3-inch flat-plate or split, formed and welded cornertubing, or tubing-gussets made of the same material and thickness as the rollcage may be used. Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupants' safety.

In the stock classes (8100) on vehicles with rear leaf spring suspension you may add a plate to the front leaf spring outboard mounted hanger if a main roll cage mount is terminated at that point. The plate may only be place in the "V" of the hanger and be welded in place to the hanger only. The plate itself may not attach directly to the frame of the vehicle except for the roll cage attachment bolt that passes through the plate, the roll cage terminal end and the frame. The plate may only be large enough to allow for a good brace for the roll cage mount. Plate design and installation must meet with **Best In The Desert Racing Association** approval. The rear leaf spring hanger of the rear leaf spring may have a kicker bar attached to the flat horizontal portion of the hanger and extend to the main rollcage down brace. The main rollcage cannot directly mount to the rear hanger. The design of kicker bar must be such that you can unbolt it from the hanger. Kicker design must meet with **Best In The Desert Racing Association** approval.

In the stock classes (8100) you may attach a main roll cage mount to the top of the front spring bucket. Design and installation must meet with **Best In The Desert Racing Association** approval.

#### **SCR35: SAFETY HARNESS**

All vehicles must have a minimum of five-point harnesses (six and seven point recommended) consisting of a lap belt, anti-sub strap belt, and two shoulder harnesses with metal to metal "latch and link" or "camlock" buckling system connectors at each point for every occupant in the race vehicle. No push button type releases will be permitted. The harness system shall bear the SFI Foundation's 16.1 or 16.5 manufacturer's certification label on each webbing component. Harnesses utilizing a camlock buckling mechanism shall be regurlary serviced and remain in proper working order. Camlock style harness determined to be improperly maintained or not in proper working order by Best In The Desert will not be allowed for use in competition.

Two-inch all over safety harnesses (complete 2-inch all over webbing) will be permitted by Best in the Desert only if bearing the SFI 16.5 manufacturer's certification label on all webbing components. Ratchet style lap belt adjuster mechanisms are permitted if complying with and bearing the SFI Foundation's 16.1 or 16.5 certification label.

Harness systems must be in new or perfect condition with no cuts, frayed layers, webbing elongation, chemical stains, or excessive dirt, and must be in flexible condition (i.e. material must not be rigid).

The harness system should consist of a lap belt, 2 shoulder harness belts, and an anti-submarine strap.

6 and 7 point harness systems will have a double or triple anti-submarine strap respectively. No "Y" shoulder belts are permitted

Harnesses shall be manufactured in compliance with the SFI Foundation's 16.1 or 16.5 specifications and must show the manufacturer's name and the month and the year of manufacture or SFI expiration date on the certification label. All harnesses must be installed per the manufacturer's instructions and must follow SFI standards. Mixing and matching varying manufacturer's belt components on a single system is not permitted – each occupant's safety harness shall consist of belt components from a single manufacturer. All belts must be replaced three years from the month and year of manufacture or by the expiration date on label. No portion of the safety harness system may be altered in any fashion from the manufacturer's original design. No surplus safety harnesses are permitted. NOTE: Where "D" rings are used, the excess belt material must thread back through the D ring a third time (per illustration on page 85) Mounting hardware must be a minimum of 0.375-inch Grade 8 bolts with a 1.5-inch diameter flat washer attached through the body or frame using lock nuts or cotter keys. All harness hardware must be safety tied or cottered key when applicable. If a wraparound type harnesses is used on a tube, care must be taken to prevent them from slipping and chafing from sharp frame components

\*\*See SFI Seatbelt Mounting Diagram – Appendix #1 (Page 30)

#### **SCR36: SAFETY NETS**

Best In The Desert Racing Association approved safety nets are mandatory on all vehicles and must cover the complete open area of the cockpit on both sides of the vehicle, including open wing glass area with glass or no glass. SFI 27.1 driver/navigator ingress/egress window net are mandatory. Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in the event of a roll over or slide on the side. Nets attached to doorframes are permitted as long as door has a positive secondary latching device. Nets must be installed so that the occupants can release the netting unassisted and exit the vehicle regardless of the position of the vehicle. Net installation must meet with the approval of the chief technical inspector. Lexan in the side windows can be substituted for nets as long as positive secondary latching devices are used. Lexan side windows must be mounted in such a fashion as to allow quick removal in event door will not open.

The net border or edge and the net attachment must be made of materials that are as strong or stronger than the net itself. Net attachments must be every 6 inches. Acceptable attachments are not limited to the following, but will need to meet SFI 27.1 specifications for 2017; Adel clamps, one way snaps, metal hooks, and steel rods. All nets must have no more than a 1inch gap on all borders to contain hands and fingers inside the vehicle in the event of a rollover or slide on the side. No zip ties may be used for the Ingress/Egress net. No Velcro may be used. No spring loaded or pushbutton seatbelt style buckles will be allowed after 2018. Starting 2019 only a quick release sealtbelt style pushbutton latch will be allowed.

Best In The Desert Racing Association requires that occupants of all vehicles must be protected during a roll over in such a manner that prevents them from extending from the body or frame of vehicle.

#### **SCR37: SEATING**

A recognized manufacturer that specializes in seats for racing applications must make all seats. No stock production seats are allowed. All seats must be securely mounted to frame of vehicle and be properly reinforced in such a manner as to keep seat from moving in relationship to the frame. Adjustable track type seats must be securely mounted as to allow no lateral or vertical movement. Stock VW-type seat runners must be clamped to the floor with a minimum of two 0.375-inch diameter U-bolts per rail and have 1-inch minimum diameter flat washers on the underside. Head and neck restraints designed and installed to prevent whiplash are mandatory on all vehicles. Restraints must be a headrest constructed of at least 2-inch thick resilient padding and be approximately 36 square inches in area. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded.

#### **GENERAL VEHICLE COMPONENTS**

#### **SCR38: DRIVER'S COMPARTMENT**

The vehicle occupants must be able to enter and exit, unassisted and with great ease, the driving compartment with the vehicle in any position. Firewalls and/or bulkheads must separate the driving compartment from any fuels, engine fluids and acids. The roof shall also be covered with sheet metal or sheet aluminum if Fiberglass roof is used, Sheet Metal must be attached to the top of the cage. Minimum of .080 inch aluminum, recommended 0.125 covering all areas.

#### **SCR39: DOORS & LATCHES**

All vehicles with operational doors must have positive locking mechanisms and must have a permanently attached positive secondary latching device.

#### **SCR40: FIREWALLS**

All vehicles must have an all-metal firewall separating the driver's compartment from the danger of fire from the engine and fuel supplies. A minimum firewall must be liquid tight and extend from the driver's shoulder height to the vehicle floor and from body side to body side. If rear mounted fuel cell is higher than drivers shoulder height, the firewall must extend at least 2 inches above the

#### **Definitions and General Information**

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 structure members, lines, etc. must be kept to a minimum. The hole should not have more than 0.0625-inch 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.

#### SCR41: BALLAST

All material used for the purpose of adding weight to meet minimum vehicle weight limits. Must be securely attached to a non-removable structure member and be attached in such a manner as to allow weight to be sealed to structure member.

#### **SCR42: WEIGHT**

Official vehicle weight shall be considered the dry weight of the vehicle upon completion of the event with the deletion of fuel from the fuel cell, removal of spare tires, tools, and spare parts and without occupants in vehicle. Official weight will be the weight as shown on the **Best In The Desert Racing Association** official scales.

#### **SCR43: FLOORBOARDS**

Floorboards or belly pans are required on all vehicles and must be attached by a minimum of six 0.25-inch bolts (*Dzus fasteners are not permitted*) per side if not an integral part of the body or chassis. Floorboards must cover the entire area from in front of the pedal assembly to behind the seats and from outside edge to outside edge on each side. Floorboards in the front must extend up in front of the pedal assembly. Installation must be done in such a manner as to afford maximum protection to the occupants from debris.

#### **SCR44: BUMPERS**

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 as to reasonably inhibit two vehicles from becoming locked together. A safe front and rear bumper is required on all vehicles. Design of front and rear bumpers may be specified in some restricted classes.

#### **SCR45: MIRRORS**

A rear view mirror is required on all vehicles. Mirrors must have at least 6 square inches of mirror surface. Mirror must have a reasonably unobstructed view of area behind vehicle.

#### **SCR46: SKID PLATES**

Skid plates designed to reasonably protect the front suspension, steering and brake components are recommended on all vehicles. Skid plate must be made of metal and be securely attached.

#### **SCR47: STORAGE**

All spare parts and extra equipment carried on a vehicle must be securely fastened to prevent movement during competition. All spare parts and extra equipment must be carried in such a manner as to reduce the risk of injury to the occupants.

#### **SCR48: FENDERS**

Fenders must be securely attached to vehicle on all classes requiring fenders. The removal of fenders during competition for any reason other than damage incurred during the competition will result in disqualification.

#### **SCR49: CHASSIS & BODY**

All body parts must remain on the vehicle (accidental damage excluded) during the entire length of race. Body and chassis series must be maintained with the body and chassis combination as specified in class rules.

All repairs must meet with the approval of **Best In The Desert Racing Association**. Photographic evidence of the damaged frame may / will be required for approval of repair work. Entrants must notify **Best In The Desert Racing Association** of required frame repair before starting repair work.

If frame damage occurs at a **Best In The Desert Racing Association** event it is highly recommended that you notify the chief technical inspector so that an inspection of damaged frame may be made at the post race inspection area if at all possible.

#### SCR50: Hoses

All fuel and brake line hoses including metal lines and fittings must be clamped and/or safety wired.

#### SCR51: IDENTIFICATION MARKERS

All vehicles in competition must display the official **Best In The Desert Racing Association** decal on both sides of the vehicle. All vehicles in competition must be identified with the correct class vehicle numbers and be displayed in the proper locations as prescribed herein.

All Entries can choose their number color and background. There must be a gap of at least 1 ¼" between the black line and the numbers. Any number location that is deemed by **Best In The Desert Racing Association** to be too hard to read will have to be changed prior to vehicle competing in the event. Please make numbers easy see. Do not blend numbers into design on vehicle.

**Note:** Best In The Desert Racing Association assumes no responsibility for scoring vehicles with unrecognizable numbers. It is the vehicle driver's responsibility for keeping numbers recognizable.

All vehicles in competition must have identification numbers in the following locations and sizes:

- Minimum 10 inches high with 1-inch-wide stroke on each side of vehicle in line with the occupants.
- Minimum 6 inches high with 1-inch-wide stroke on the rear of vehicle and is plainly visible from the rear.
- Minimum 4 inches high located on the front of vehicle and is plainly visible from the front of the vehicle

#### NUMBER AND PLACEMENT ON SIDE OF VEHICLES

Due to increasing difficulty on reading the vehicle numbers during the events, we must change the rule on vehicle side numbers. The vehicle side numbers must be located to the rear of the drivers compartment and attached to the roll cage. Make them easy for officials to read.

#### RACE VEHICLE NUMBERS

A RACER DOES NOT OWN A RACE VEHICLE NUMBER IN BEST IN THE DESERT. Best In The Desert Racing Association issues numbers at the discretion of Best In The Desert Racing Association. If a participant has a request for a certain number in a certain class BITD will do its best to accommodate that request. If the race vehicle is sold, the number does not go with the race vehicle unless approved by Best In The Desert Racing Association. Vehicle numbers, once assigned you must race at least one Best In The Desert event during the season to retain the number.

#### PIT-SUPPORT VEHICLES

All pit-support vehicles will have minimum 4-inch high white numbers (number of vehicle 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 **Best In The Desert Racing Association** pit pass attached to lower portion of the front windshield on the passenger side.

#### **SCR52: ADVERTISING ON VEHICLES**

Advertising, symbols and names may be displayed on vehicles contingent that they do not interfere with identification markings and provided that they are in good taste.

#### SCR53: WORKMANSHIP

All construction, modifications and alterations must be performed in a workmanlike manner and

#### **Definitions and General Information**

meet with the rules, regulations and approval of **Best In The Desert Racing Association**.

#### **SCR54: RADIO EQUIPMENT**

Any race or 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, marine band and aircraft band as permitted by FCC rules. **Best In The Desert Racing Association** uses the **151.490MHz** frequency.

Outboard linear amplifiers with an output over 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. Included in this rule is **SEC8** in its entirety.

#### **SCR55: SCORING TRANSPONDERS**

All vehicles in competition shall have a transponder mandated by Best In The Desert. All transponders shall be securely attached to the race vehicle on the Driver's side A-pillar.



## **SFI APPENDIX**

### Appendix #1 – SFI Seatbelt Installation Illustrations:

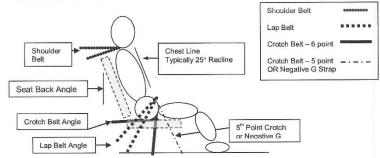


#### SEATBELT INSTALLATION GUIDE\* FOR UPRIGHT SEATING

(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.



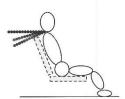
#### SHOULDER BELTS

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

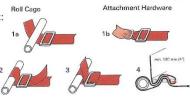
- Clear passage of webbing from top of shoulder (or head and neck restraint) back to the harness bar or mounting point without any interference of the seat openings
- Belts should be as short as possible back to the mounting points



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



Proper Wrap of Shoulder Belt:



## Appendix #1 – (continued) SFI Seatbelt Installation Illustrations:

#### LAP BELTS

Lap Belt Angle: -45° to -80° 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° (2" rearward) through the hole
- Two separate anchors 4 to 6 inches apart (\*)

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° to -20° from the perpendicular just in front of the crotch with anchors 4 to 6 inches apart (x)

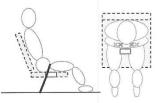
OR

 Crotch Belt Angle <u>Horizontal rearward to under the butt</u> or to the back of the seat (\*)

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











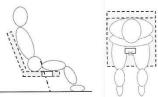
2

## Appendix #1 – (continued) SFI Seatbelt Installation Illustrations:

#### **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:

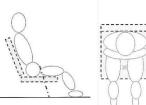
- Crotch Belt Angle: Chest line to 20° through the hole
- Crotch Belt should never wrap around the front of the seat – there should be a pass through
- Crotch belt is used only to maintain position of the lap
   belt



## NEGATIVE G BELT – $(7^{TH} POINT)$

Negative G Strap Angle:  $20^{\rm o}$  to  $25^{\rm o}$  (Chest line extension on a  $25^{\rm o}$  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



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## Appendix #2 – SFI Test Requirement Burn Times



Approximate seconds of protection when exposed to direct fire. Does not include added protection of no flammable under garmets.

SFI Rating	TPP Value	Time to 2nd Degree Burn
3.2A/1	6	3 Seconds
3.2A/3	14	7 Seconds
3.2A/5	19	10 Seconds
3.2A/10	38	19 Seconds
3.2A/15	60	30 Seconds
3.2A/20	80	40 Seconds

## UTV CLASS 900 TURBO CHARGED PRO PRODUCTION UTV

## **OEM STOCK 1000CC ENGINE AND TURBO**

UPDATED 01-15-18 PLEASE NOTE ALL BITD GENERAL AND SAFETY RULES MUST BE FOLLOWED. ALL UTV VEHICLES MUST USE A SAFETY TRACKING SYSTEM FROM WWW.RACINGTRAX.COM 801-836-5198 AT ALL BITD RACES. ANY RULE CHANGES OR UPDATES WILL BE POSTED ON WWW.UTVRACING.ORG CORY SAPPINGTON IS THE BITD UTV TECH INSPECTOR AND FOUNDER OF THE BITD UTV CLASS. PLEASE CONTACT HIM WITH ANY QUESTIONS. IF YOU ARE A NEW RACER PLEASE CONTACT CORY BEFORE YOU SHOW UP FOR YOUR FIRST RACE CORY'S PHONE # IS 602-769-6164 EMAIL **DESERTTOYZ@HOTMAIL.COM ALL NEW UTVs MUST BE** INSPECTED AS THEY ARE BEING BUILT. CALL CORY S FOR INSPECTION. PRO TURBO PRODUCTION CLASS ENGINE MUST BE ALL OEM SHOWROOM STOCK. THEY MUST BE INSPECTED AND SEALED BEFORE YOUR FIRST RACE. IF YOU RECEIVE OR PURCHASE A NEW TURBO UTV CALL IMMEDATLY, BEFORE YOU DRIVE IT. IF YOU ORDER A NEW ENGINE PLEASE CALL IMMEDATLY AFTER ORDERING TO REQUEST A SEAL KIT. IF YOU RECEIVE THE ENGINE PRIOR TO RECEIVING THE SEAL KIT DO NOT OPEN THE CRATE/BOX. CALL CORY IMMEDATLY. TURBOCHARGED ENGINES AND TURBOCHARGERS MUST BE INSPECTED AND SEALED BY BEST IN THE DESERT PRIOR TO RACING. PLEASE CALL BEFORE YOU RACE TO SCHEDULE YOUR INSPECTION CALL CORY S 602-769-6164.

**GENERAL REGULATIONS:** Class entrants shall comply with all class and applicable general regulations. **Note:** The SCR abbreviations refer to the cross-reference listings in the front of this book and are part of the class rules. Where a conflict between the cross-referenced listings and a rule contained under this class occurs, the rule contained under this class has precedence.

All UTV's must be pre-approved before racing in their first BITD event.

ANYTHING NOT BUILT IN COMPLIANCE WITH THE SPIRIT OF THE CLASS MAY BE DEEMED INELIGIBLE TO RACE, COLLECT POINTS, TROPHIES, PRIZE FUNDS, AND CONTINGENCY. PLEASE CONTACT THE BITD UTV TECH INSPECTOR WITH ANY QUESTIONS AT DESERTTOYZ@HOTMAIL.COM

All UTV race vehicles must pass all BITD safety requirements and be approved by the BITD UTV Tech Inspector.

UTV Tech Inspection: Tech inspection is required at each Best In The Desert race for all UTV race vehicles.

Pro Turbo Production UTV Class definition: The Pro Turbo production class vehicles are built using production Turbo UTV's, manufactured by registered companies, i.e. Polaris, Can-Am, Artic Cat, Yamaha,that issues Vin #'s. Companies must produce a minimum number of 1000 units of that exact model and configuration, prior to being allowed to participate in this class, at any Best In the Desert Sanctioned Event. UTV's must have a minimum of 2 seats. OEM engines must be used. All OEM engine electronics must be used. Ecm's may be flashed. No aftermarket ECM's are allowed. Maximum engine size is 1000cc. Must use hood, grill, front and rear fenders from the UTV. The Pro Classes do have a points championship, a points championship fund, and an individual race purse. Minimum age for driver in any UTV Pro class is 14 years old, must be 14 by the date of the event. Co-driver age not restricted.

UTV Pro Turbo production class max width is 80", measured outside of tire to outside of tire at ride height. The wheel base must not exceed 8" over the stock dimension and can only be achieved with the suspension. Frames can not be shortened or lengthened.

#### **UTV-1 PENALTIES:**

At the discretion of the race director or operations manager, Any UTV race team caught breaking these rules "cheating" will receive a minimum penalty of, Disqualification for the race and a 1 race suspension. Best in the Desert has the right to mark, tag or seal any part of a race UTV. Best in the Desert has the right to confiscate any engine at any time for the purpose of class compliance inspection. A fee may be required for the inspection.

#### **UTV-2 OCCUPANTS:**

All UTV's race vehicles must have a driver and a co-driver in the vehicle for the entire race.

#### **UTV-3 DRIVER'S MEETING:**

At least 1 "banded" race team member must attend the BITD driver's meeting at each race.

#### **UTV-4 RADIO & COMMUNICATIONS:**

A VHF type radio is required in all race vehicles. All UTV race vehicles must have their team radio frequency posted inside their vehicle on the passenger side roof area. Best In The Desert official Frequency is 151.490. The Best in the Desert frequency is required on every radio. All race teams are required to provide team specific radio frequency information to the BITD.

#### **UTV-5 SUSPENSION:**

All suspension and mounting points must remain the stock design and in the stock location and or position on the frame, as delivered from the manufacturer. Suspension mounting points may be reinforced for strength. No suspension mounts may be moved, added or removed.

#### **UTV-6 OVERALL MEASUREMENT RESTRICTIONS:**

The max width 80" and is measured from outside of tire to outside of tire at ride height. Width may be checked at any time. Wheelbase can be increased to 8 inches over the stock dimensions. This can only be achieved through the suspension.

Frames cannot be cut, lengthened or shortened.

#### **UTV-7 SHOCK ABSORBERS:**

There must be at least one and only one **coil over shock absorber** per wheel in working condition at the start of the race. Shock absorber mounting points may be moved and strengthen.

#### **UTV-8 BUMP STOPS:**

Suspension bump stops are allowed. They must be of the solid type. No air bump stops.

#### **UTV-9 TORSION SYSTEM:**

The only torsion system that is allowed is a coil-over shock.

#### **UTV-10 TIRES:**

Maximum tire size is 32x10.5x15. Tire must have manufacture size on tire and say 32". No multiple tires per corner permitted. For 2019 Tire size will remain as is, however in 2020 tire size will be increased to a 33x12.5x15.

#### **UTV-11 WHEELS:**

Maximum size is 15". All wheels must be stamped or engraved on the outside, within 3" of the valve stem, with the race vehicles number, this includes spares. The minimum stamp size of the number is  $\frac{1}{4}$ ".

#### **UTV-12 STEERING:**

Power steering is permitted. Turning or steering brakes are not permitted.

#### **UTV-13 BATTERIES:**

#### ALL UTVs MUST HAVE A BATTERY SWITCH.

Batteries must be securely mounted with **metal attachments**. All flooded cell batteries must be fully enclosed including the sides and bottom. Enclosure must be able to contain the quantity of acid contained in the battery if inverted. Gel filled batteries or dry cell batteries are recommended and do not require full enclosures. **Batteries mounted in the drivers compartment must be covered and may not be liquid filled.** 

#### **UTV-14 SAFETY LIGHTS:**

# ALL 4 REAR FACING SAFETY LIGHTS MUST BE WIRED TO THE BATTERY SWITCH. NO OTHER SWITCHES MAY BE IN LINE TO THE SAFETY LIGHTS

All UTVs must have a minimum of two taillights, two brake lights. All UTVs must have 4 rear facing safety lights. The 4 required rear facing safety lights are; 1 steady amber, 1 flashing amber, 1 blue light steady. All 3 of these safety lights must be LED, a minimum of 2000 lumens and 4 bulbs. THE 4th MANDATORY REAR SAFETY LIGHT IS A SPEC BLUE STROBE LIGHT. THIS SPEC BLUE LIGHT MUST BE PURCHASED DIRECTLY FROM KC HILITES 928-635-2607. THIS LIGHT MUST BE MOUNTED AS HIGH UP ON THE CAGE AS POSSIBLE AT A MINIMUM OF 48" AND REAR FACING.

The amber flashing and blue strobe is an attempt to identify the UTV class vehicle, so that faster vehicles will be able to recognize that they are approaching a slower vehicle. Safety lights must be approved by the BITD UTV Tech Inspector.

BITD rules state that all safety lights must be working at all times, if a light fails to work it must be fixed at the next pit stop, or the vehicle may continue.

NOTE--The blue light should only be used during an official race. Blue flashing lights may be illegal in some state.

All lights must be in operating condition at tech inspection. All rearward-facing lights (taillights, brake lights, blue light, and amber lights) must be in operating condition before the vehicle will be permitted to start the race. All rearward-facing lights must be protected against damage in the event of a rollover. Tail lights/brake lights must be at least 3 inches in diameter, or be approved by Best In The Desert Racing. They must be mounted in such a manner as to be clearly visible from the rear of the vehicle. Rearward facing amber lights and blue lights must be approved by the BITD UTV Tech Inspector. 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 lights and blue lights must be mounted a minimum of 48 inches from the ground and must be clearly visible, with no obstructions. The amber lights and blue light must remain on during the entire race.

#### **UTV-15 ENGINE LOCATION AND DISPLACEMENT:**

Maximum engine displacement is 1000cc.

All UTV engines must have the bolts required to seal the engine predrilled with a 5/64" hole before racing. Please call for clarification on which bolts to drill. Cory S 602-769-6164

IF YOU HAVE RECEIVED OR PURCHASED A NEW TURBO UTV FOR THE PURPOSE OF RACING WITH BITD, CALL THE BITD UTV TECH INSPECTOR IMMEDATELY, PRIOR TO DISASSEMBLY, TO HAVE YOUR ENGINE INSPECTED AND SEALED.

IF YOU ARE GOING TO PURCHASE A NEW ENGINE CALL THE BITD UTV TECH INSPECTOR IMMEDATELY, TO REQUEST A SEAL KIT. DO NOT OPEN THE BOX/CRATE BEFORE CALLING 602-769-6164

# PRO TURBO PRODUCTION ENGINE COMPLIANCE AND INSPECTION;

PRO TURBO PRODUCTION UTV CLASS: <u>NO ENGINE / TURBO</u>
MAINTENANCE OR REPAIRS MAY BE DONE WITHOUT CALLING
THE BITD UTV TECH INSPECTOR FIRST. THE DRIVER OF RECORD
MUST CALL FOR APPROVAL, PRIOR TO ANY ENGINE OR TURBO
WORK IS PREFORMED. 602-769-6164. THIS IS MANDATORY.

Turbocharged engines and Turbochargers must be inspected and sealed by Best in the Desert prior to racing. Please call before you race to schedule your inspection with Best in the Desert UTV tech inspector Cory S 602-769-6164.

Pro Production Turbo engines and Turbocharger may not be modified and must be OEM stock as produced by the factory. Turbo engines and Turbocharger must be tagged and sealed by Best In The Desert. No aftermarket parts or accessories are allowed on the Turbo engine and Turbochargers. Tampering or modifying Turbo engines and Turbochargers will result in a penalty and or up to disqualification and suspension. You are be allowed to reflash your OEM FACTORY ECU/ECM. NO AFTERMARKET ECU/ECM'S

All engine and engine parts must remain stock OEM as delivered from the factory. No aftermarket engine parts are allowed. No changes or modifications to the engine are allowed. The engine must remain exactly as delivery from the factory and available to any consumer. No porting, polishing, balancing or any other changes or modifications.

Air cleaner, air tubes, fuel injectors, header pipes, exhaust pipes, muffler and clutch can be changed and or modified. Turbochargers must be OEM stock. No modifications or changes are allowed.

Engine displacement and location may be checked by BITD UTV tech inspector at any time. BITD reserves the right to mark or seal any part of the engine prior to a race. Engines may be impounded after the race for the purpose of inspection.

The stock gear box cases must be used, the internals in the gear box may be modified or changed.

AT ANY TIME A UTV COULD BE IMPOUNDED FOR THE PURPOSE OF ENGINE COMPLIANCE INSPECTION. THERE MAY BE A FEE CHARGED FOR THIS INSPECTION. IF THE ENGINE IS FOUND TO BE MODIFIED, CHANGED OR HAVE AFTER MARKT PARTS THE RACER COULD RECEIVE A PENALTY UP TO DISQUALIFICATION, SUSPENSION AND OR FINES. ONLY THE RACE DIRECTOR CAN ISSUE A PEANALTY.

UTV-15T TURBOCHARGER, ECM/ECU, BLOWOFF VALVES, THROTTLE BODY, INNER COOLER:

**OEM ECM/ECU** must be used. Aftermarket flashes and or reprograms are allowed.

<u>TURBOCHARGERS</u> MUST BE OEM FACTORY. Turbochargers must remain OEM stock, exactly as delivered from the factory. Turbochargers may not be modified, altered and or changes. Turbochargers may be checked and sealed by the BITD UTV Tech Inspector or one of his representatives.

**BLOWOFF VALVES** Are open.

<u>THROTTLE BODY</u> <u>OEM STOCK THROTTLE BODY MUST BE USED.</u> no modifications, alterations and or changes are allowed.

<u>SPECIAL NOTE</u>, The air tube on the Polaris RZR turbo that connects the turbo to the throttle body may be replaced with an aftermarket tube. This tube also holds the blowoff valve.

**INNER COOLERS** Turbo charged engines that use air to air inner coolers must use the OEM stock inner cooler, no other inner cooler can be used, location is open. Turbo engines that use a water to air cooled inner coolers, can change, modify and or move the radiator for the inner cooler. The inner cooler itself must remain stock. No other inner cooler can be used or added.

**<u>FUEL CONTROLLERS</u>** Aftermarket fuel controllers are **NOT** allowed.

#### **UTV-15FD FUEL DELIVERY:**

The fuel delivery system must remain the same design and configuration as the stock system delivered from the factory. Aftermarket fuel pumps, fuel regulators and filters are allowed. Aftermarket or modified fuel injectors are allowed.

#### **UTV-16 FLUID COOLERS:**

Oil coolers, transmission coolers and radiators located ahead of the driver or in the drivers compartment **must** have a shroud that will prevent liquids from blowing back or leaking onto the driver and/or co-driver in the event of a rupture or leakage. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

#### **UTV-17 FUEL CELLS:**

Safety fuel cells are required for all vehicles. Auxiliary fuel tanks may be added in all classes except those classes whose class rules do not allow auxiliary fuel tanks. Auxiliary fuel tanks must be safety fuel cells. Alternative fuels (ie. propane or natural gas) must use an approved. Alternative fueled vehicles may not use auxiliary fuel cells. All fuel tanks must be securely mounted. Fuel tank must be filled from and vented to the outside of the vehicle. There must be a substantial cross member and firewall between the fuel tank and the occupants. No GI-cans or fuel containers similar in construction or purpose will be permitted in or on any vehicle during the race. Use of GI-cans or other fuel containers will subject entrant to a time penalty or disqualification. Safety fuel cells shall consist of a bladder enclosed in a smooth skinned container. The container shall be constructed of 20ga. Steel or .060-inch aluminum. Magnesium is strictly prohibited. Container must be securely attached to vehicles with bolts or steel straps. All fittings must be built into the skin and bonded to the 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. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer. Rotary molded polymer cells are acceptable. The physical properties minimum standards are in accordance with Table 1.

# Table 1 Test Type Minimum Standard Test Specification

Tensile Strength 450 lbs. Spec CCC-T-1916 Method 5102

Tear Strength 50 lbs. Spec CC-T-1916 Method 5134

Puncture Test 175 lbs. Spec MIL-T-6396 Article 4.5.17

These physical properties must be maintained throughout all areas of the finished bladder including seams, joints and fittings.

#### **UTV-17A FUEL FILLER NECK:**

Fuel filler must be located as far away from the exhaust and engine as possible. If the filler neck is on the same side as the exhaust, it must be a minimum distance of 12" forward from the exhaust. Fuel filler must be completely separated from the drivers compartment. Splash guards between the engine and or exhaust are highly recommended. If the filler neck is mounted near the driver or navigator, a splash guard is required to prevent fuel from splashing on the driver or navigator. If standard hose clamps are used, two clamp must be used at each connection. If "T-Bolt" (turbo style) clamps are used only one clamp is required at each connection. T-Bolt hose clamps are highly recommended.

# **UTV-17B FUEL CELL VENT LINES**

The 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 inches below the fuel cell, whichever is lower. OPTIONAL PLACEMENT: Where the vent line attaches to the fuel cell there must be a loop above the fuel cell that extends 6" higher than the top of the fuel cell. then be wrapped one full loop around the outside of the fuel cell near the top of the fuel cell and then 3" below the lowest point of the fuel cell. The breather line must be vented outside of driver's compartment and be directed away from the engine and exhaust system.

#### **UTV-18 FIREWALLS:**

All vehicles must have an aluminum or metal firewall separating the driver's compartment from the danger of fire from fuel supplies. Rear mounted fuel cells require a minimum firewall which must be liquid tight and must extend at least 4 inches above the top of the fuel cell, covering from side to side. Any fuel cell placed in the driver compartment must have a fire wall that covers the fuel cell, filler neck and fuel lines and completely separates them from the drivers compartment. Any hole placed in the firewall for structure members, lines, etc. must be kept to a minimum. The hole should not have more than 0.0625- inch gap around the items passing through the firewall. Metallic tape may be used to seal a hole between the firewall and the item passing through the firewall. Engine firewall must be metal or aluminum, no plastic firewalls.

#### **UTV-19 FUEL FILLER SPLASH GUARD:**

The intent of the splash guard is to keep fuel from being splashed on the driver, passenger, exhaust and engine when the UTV is being refueled. Splash guards must surround the fuel filling area in such a way that it provides protection from

fuel spilling onto the driver, passenger, exhaust and engine when inserting and removing the fuel filler jug.

# **UTV-20 CHASSIS (FRAME), BODY AND ROOF:**

The OEM "stock chassis" (frame) must be used and stock appearance must be maintained. The stock chassis (frame) is defined as, the main lower rails running along the inner sides of the UTV and the front and rear tubes that connect them. Each manufacture has a different description. Please contact the BITD UTV Tech Inspector for a better description. If any part of the stock chassis is damaged you must contact the BITD UTV Tech inspector to get the repairs approved. Any modifications or repairs to the stock chassis (frame) must be approved by the Best in the Desert tech inspector prior to making any repairs. The stock chassis (frame) may be added to, for durability and strength, but must retain the stock width, length, configuration and design. OEM UTV roll cages can not be used. All joints must be welded and attached to frame securely.

**BODY;** The OEM hood, grill, front and rear fenders must be used. All body parts must remain on the vehicle during the entire length of race (accidental damage excluded).

**ROOF;** The roof must be covered with sheet metal or aluminum. Minimum thickness recommended is .060

# **UTV-21 DOORS, WINDOW SAFETY NETS:**

Door area must have "X", "A", "V" or Ladder design bracing and all tubing must be a minimum 1.5"x .095" 4130 chrome moly or 1018/1012 CDS/DOM. Doors that latch and/or open and close are not allowed. Door area must be completely covered with aluminum. Minimum thickness recommended is .060.

# NETS;

**NOTE THAT STARTING IN 2019 ALL WINDOW NETS ARE REQUIRED TO BE SFI RATED.** Safety nets are mandatory on all vehicles and must cover the complete open area of the cockpit on both sides of the vehicle. The maximum gap allowed between the net and the roll cage tube is 3". Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in the event of a roll over or slide on the side. Nets must be installed so that the occupants can release the netting unassisted and exit the vehicle regardless of the

position of the vehicle. Net installation must meet with the approval of the BITD UTV technical inspector. The net border or edge and the net attachment must be made of materials that are as strong or stronger than the net itself. Net attachments must be a minimum of every 6 inches. Acceptable attachments are not limited to the following: hose clamps, snaps, heavy-duty nylon ties, lift-a-dot, metal hooks and steel rods. Steel rods are acceptable methods of bottom fastening. **Best In The Desert Racing Association** requires that occupants of all vehicles must be protected during a roll over in such a manner that prevents them from extending from the body or frame of vehicle.

#### **UTV-22 SIREN:**

All UTV's are required to have a **SIREN** that is **LOUD.** All sirens must be approved by the BITD UTV tech inspector.

#### **UTV-22A BREAK DOWN SAFETY DEVICES:**

All UTV's must have a minimum of one red reflective device must be carried in the vehicle. Reflective devices must be at least 12 inches high and 12 inches long and be free standing (similar to trucker's breakdown triangles). When racing at night, one battery-operated red flashing beacons and two large glow sticks are required. **Best In The Desert Racing Association** is concerned about race areas; thus, flares will not be permitted as a breakdown device. Official **Best In The Desert Racing Association** stuck stubs are supplied to each entrant at registration. The stuck stub must be kept with the vehicle along with a writing instrument. If a break down or out-of-race condition occurs, the stuck stub must be completed and given to another race vehicle to pass on to a race official.

#### **UTV-23 SEATING:**

All vehicles must use seats designed specifically for racing applications manufactured by a recognized racing seat manufacturer. Stock seats must be completely removed. A recognized manufacturer that specializes in seats for racing applications must make all seats. All seats must be securely mounted to frame of vehicle and be properly reinforced in such a manner as to keep seat from moving in relationship to the frame. Adjustable track type seats must be securely mounted as to allow no lateral or vertical movement. Head and neck restraints designed and installed to prevent whiplash are mandatory on all vehicles. Restraints must be a headrest constructed of at least 2-inch thick resilient padding and be approximately

36 square inches in area. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded.

#### **UTV-24 TRANSMISSION/GEAR BOX:**

Stock transmission cases and clutch design must be used. A functional reverse gear is required. The stock front and rear differential cases must be used.

#### **UTV-25 ROLL CAGE MATERIAL:**

All vehicles in competition are recommended to be equipped with a roll cage based on seamless mild steel or 4130 chrome moly steel tubing. Roll cage material may be; crew, dom, whr, wcr mild carbon steel or 4130 chrome moly. BITD HIGHLY RECOMMENDS THE USE OF 4130 CROMOLY. All welds must be of high quality and craftsmanship with good penetration and with no undercutting of parent material.

#### **UTV 26 ROLLCAGE TUBING SIZE:**

Minimum Tubing Dimension;

UTV weight under 2000lbs OD 1.5" x ID .095"

UTV weight 2001 lbs to 2500 lbs OD 1.5" x ID .120" or OD 1.75" x ID .095"

UTV weight 2501 lbs to 3000 lbs OD 1.75" x ID .095"

For the purpose of determining tubing size, the UTV weight is a "dry" weight. Dry weight is race UTV without fuel, spare tires, tools and drivers.

No aluminum or nonferrous materials are allowed to be used in the construction of the roll cage. Minimum tubing material dimension requirements for roll cages apply to this list of required tubes; front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bars. This means that the front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bar must be all made with a minimum 1.5"x.095 if your UTV weights 2000lbs or less and 1.5"x.120 if over 2000lbs.

#### **UTV-27 ROLL CAGE DESIGN:**

Best in the Desert Racing Association believes that it is each competitor's responsibility to present a safe vehicle for pre-race tech inspection. All competitors

must maintain your safety equipment including the roll cage integrity. No changes to the recommended minimum construction specification with respect to diameter or wall thickness are anticipated at this time. As in the past, Best In The Desert Racing Association reserves the right to not allow any safety cage design that in the view of the tech inspector, is not fit for competition. You, as the competitor, are ultimately responsible for your own vehicle's safety features with respect to the design, quality of execution, maintenance and repair of the roll cage structure. All roll cages must be designed and constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one or more diagonal brace, behind the drivers head and all necessary gussets. Front and rear cross over tubes must be gusseted to the side tube. The two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop. All roll cage components (hoops, braces, gussets, etc.) must have a minimum of 3-inch clearance from the component to the vehicle occupant's helmets when occupants are seated in their normal riding positions. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded. Roll cages must be securely mounted to the frame or body. All intersecting points must be gusseted and braced. Cab or body mounted roll cages must be bolted through the body structure and be attached by use of a minimum two 0.1875-inch thick plates (one on each side of body structure). Bolts and nuts must be at least 0.375-inch-diameter s.a.e. Grade 8 or equivalent aircraft quality. Welding of cab or body mounted roll cages to body structure is strictly prohibited. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1.5 inches of movement in the cage terminal end. Gussets constructed of 0.125-inch x 3-inch x 3-inch 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. Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety Oxy-acetylene brazing on roll cage is strictly forbidden. 4130 chrome-moly is highly recommended for all roll cage construction. BITD reserves the right to weight any vehicle at any time and check the wall thickness of the tubing used to build the roll cage. Vehicle weight will be kept private if requested by the competitor.

#### **UTV-28 BUMPERS:**

All UTV race vehicles must have rear bumper secured to frame using minimum 1.5" outside diameter, .083" wall thickness. Front and rear bumpers must sick out a minimum of 2" past the tires, front to back. This is to prevent tires from touching when nerfing. Bumper ends must be made in such a way as to avoid any sharp edges. Bumpers and nerf bars must be designed in a way as to reasonably inhibit two vehicles from becoming locked together. A safe front and rear bumper is required on all vehicles. No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from vehicles are permitted.

# **UTV-29 IDENTIFICATION NUMBERS, MARKERS, AND STICKERS:**

All vehicles in competition must display the official Best in the Desert Racing Association decal on both sides of the vehicle. All vehicles in competition must have identification numbers in the following locations and sizes: Minimum 8" tall with 1"-wide stroke on each **side** of vehicle in line with the occupants. Minimum 6" tall with 1"-wide stroke on the **rear** of vehicle and is plainly visible from the rear. Minimum 4" tall located on the **front** of vehicle or roof and is plainly visible from the front of the vehicle. All vehicles in competition must be identified with the correct class vehicle numbers and be displayed in the proper locations as described herein. Best In The Desert Racing Association assigns vehicle numbers. Call BITD to get a race number. All **Pro UTV class vehicles can have any color numbers on any color background**. Numbers must be easy to see and read at race speeds. Number color and background must be approved by the BITD UTV tech inspector. **ALL NUMBERS MUST BE EASY TO READ. IF THEY ARE NOT, YOU WILL BE REQUIRED TO CHANGE THEM.** 

Sportsman UTV class must have black numbers on a yellow background. This is mandatory. No other combination will be permitted. <u>ALL NUMBERS MUST BE EASY TO READ. IF THEY ARE NOT, YOU WILL BE REQUIRED TO CHANGE THEM.</u>

#### **UTV-30 PIT-SUPPORT VEHICLES:**

All pit-support vehicles will have minimum 4-inch high white numbers (number of vehicle pitting for) on both sides of vehicle on side windows, on upper passenger side corner of front windshield and on rear window. Some of the BITD races require pit support vehicles to have a Best In The Desert Racing Association pit

pass on the dash, in the front windshield of the driver side. These pit passes are handed out at the race.

IMPORTANT: All rules are tentative and may be changed or updated as the BITD season progresses in accordance with the UTV classes. Please contact the BITD UTV class Tech Inspector Cory Sappington at 602-769-6164 or email at deserttoyz@hotmail.com with any questions or for more information on these rules. Please check the web site www.utvracing.org for updates throughout the 2019 season.

Thank you for racing with Best in the Desert.



# UTV CLASS 1800/1900 PRO N/A PRODUCTION UTV

# **OEM ENGINE 1000CC MAX**

UPDATED 01-15-18 PLEASE NOTE ALL BITD GENERAL AND SAFETY RULES MUST BE FOLLOWED. ALL UTV VEHICLES MUST USE A SAFETY TRACKING SYSTEM FROM WWW.RACINGTRAX.COM 801-836-5198 AT ALL BITD RACES. ANY RULE CHANGES OR UPDATES WILL BE POSTED ON <a href="https://www.utvracing.org">www.utvracing.org</a> Cory Sappington IS THE BITD UTV TECH INSPECTOR AND FOUNDER OF THE BITD UTV CLASS. PLEASE CONTACT HIM WITH ANY QUESTIONS. IF YOU ARE A NEW RACER PLEASE CONTACT CORY BEFORE YOU SHOW UP FOR YOUR FIRST RACE CORY'S PHONE # IS 602-769-6164 EMAIL <a href="mailto:deserttoyz@hotmail.com">DESERTTOYZ@hotmail.com</a> ALL NEW UTVs MUST BE INSPECTED AS THEY ARE BEING BUILT. CALL CORY S FOR INSPECTION.

**GENERAL REGULATIONS:** Class entrants shall comply with all class and applicable general regulations. **Note:** The SCR abbreviations refer to the cross-reference listings in the front of this book and are part of the class rules. Where a conflict between the cross-referenced listings and a rule contained under this class occurs, the rule contained under this class has precedence.

All UTV's must be pre-approved before racing in their first BITD event.

ANYTHING NOT BUILT IN COMPLIANCE WITH THE SPIRIT OF THE CLASS MAY BE DEEMED INELIGIBLE TO RACE, COLLECT POINTS, TROPHIES, PRIZE FUNDS, AND CONTINGENCY. PLEASE CONTACT THE BITD UTV TECH INSPECTOR WITH ANY QUESTIONS AT <a href="mailto:deexample.com">DESERTTOYZ@HOTMAIL.COM</a>

All UTV race vehicles must pass all BITD safety requirements and be approved by the BITD UTV Tech Inspector.

UTV Tech Inspection: Tech inspection is required at each Best In The Desert race for all UTV race vehicles.

# PRO PRODUCTION UTV CLASS DEFINITION:

The Pro UTV production class vehicles are built using production UTV's, manufactured by registered companies, i.e. Yamaha, Polaris, Can-Am, Artic Cat, Yamaha, that issues Vin #'s. Companies must produce a minimum number of 1000 units of that exact model and configuration, prior to being allowed to participate in this class in any Best In the Desert Sanctioned Event. UTV's must have 2 seats. . All OEM engine electronics must be used. Ecm's may be flashed. No aftermarket ECM's are allowed. OEM engines must be used. Maximum engine size is 1000cc. Must use hood, grill, front and rear fenders from the UTV. This Pro Class does have a point's championship, a points championship fund, and an individual race purse. Minimum age for driver in any UTV Pro class is 14 years old, must be 14 by the date of the event. Co-driver age not restricted.

#### **UTV-1 PENALTIES:**

At the discretion of the race director, Any UTV race team caught breaking these rules "cheating" will receive a minimum penalty of, Disqualification for the race and a 1 race suspension. Best in the Desert has the right to mark, tag or seal any part of a race UTV. Best in the Desert has the right to confiscate any engine at any time for the purpose of class compliance inspection. A fee may be required for the inspection.

#### **UTV-2 OCCUPANTS:**

All UTV's race vehicles must have a driver and a co-driver in the vehicle for the entire race.

#### **UTV-3 DRIVER'S MEETING:**

At least 1 "banded" race team member must attend the BITD driver's meeting at each race.

#### **UTV-4 RADIO & COMMUNICATIONS:**

A VHF type radio is required in all race vehicles. All UTV race vehicles must have their team radio frequency posted inside their vehicle on the passenger side roof area. Best In The Desert official Frequency is 151.490. The Best in the Desert frequency is required on every radio. All race teams are required to provide team specific radio frequency information to the BITD.

#### **UTV-5 SUSPENSION:**

All suspension and mounting points must remain the stock design and in the stock location and or position on the frame, as delivered from the manufacturer. Suspension mounting points may be reinforced for strength. No suspension mounts may be moved, added or removed.

#### **UTV-6 OVERALL MEASUREMENT RESTRICTIONS:**

The max width 80" and is measured from outside of tire to outside of tire at ride height. Width may be checked at any time. Wheelbase can be increased to 8 inches over the stock dimensions. This can only be achieved through the suspension. **Frames cannot be cut, lengthened or shortened.** 

#### **UTV-7 SHOCK ABSORBERS:**

There must be at least one and only one **coil over shock absorber** per wheel in working condition at the start of the race. Shock absorber mounting points may be moved and strengthen.

#### **UTV-8 BUMP STOPS:**

Suspension bump stops are allowed. They must be of the solid type. No air bump stops.

#### **UTV-9 TORSION SYSTEM:**

The only torsion system that is allowed is a coil-over shock.

#### **UTV-10 TIRES:**

Maximum tire size is 32x10.5x15. Tire must have manufacture size on tire and say 32". No multiple tires per corner permitted. For 2019 Tire size will remain as is, however in 2020 tire size will be increased to a 33x12.5x15.

#### **UTV-11 WHEELS:**

Maximum size is 15". All wheels must be stamped or engraved on the outside, within 3" of the valve stem, with the race vehicles number, this includes spares. The minimum stamp size of the number is  $\frac{1}{4}$ ".

#### **UTV-12 STEERING:**

Power steering is permitted. Turning or steering brakes are not permitted.

#### **UTV-13 BATTERIES:**

#### ALL UTVs MUST HAVE A BATTERY SWITCH.

Batteries must be securely mounted with **metal attachments**. All flooded cell batteries must be fully enclosed including the sides and bottom. Enclosure must be able to contain the quantity of acid contained in the battery if inverted. Gel filled batteries or dry cell batteries are recommended and do not require full enclosures. **Batteries mounted in the drivers compartment must be covered and may not be liquid filled.** 

#### **UTV-14 SAFETY LIGHTS:**

# ALL 4 REAR FACING SAFETY LIGHTS MUST BE WIRED TO THE BATTERY SWITCH. NO OTHER SWITCHES MAY BE IN LINE TO THE SAFETY LIGHTS

All UTVs must have a minimum of two taillights, two brake lights. All UTVs must have 4 rear facing safety lights. The 4 required rear facing safety lights are; 1 steady amber, 1 flashing amber, 1 blue light steady. All 3 of these safety lights must be LED, a minimum of 2000 lumens and 4 bulbs. THE 4th MANDATORY REAR SAFETY LIGHT IS A SPEC BLUE STROBE LIGHT. THIS SPEC BLUE LIGHT MUST BE PURCHASED DIRECTLY FROM KC HILITES 928-635-2607. THIS LIGHT MUST BE MOUNTED AS HIGH UP ON THE CAGE AS POSSIBLE AT A MINIMUM OF 48" AND REAR FACING.

The amber flashing and blue strobe is an attempt to identify the UTV class vehicle, so that faster vehicles will be able to recognize that they are approaching a slower vehicle. Safety lights must be approved by the BITD UTV Tech Inspector.

BITD rules state that all safety lights must be working at all times, if a light fails to work it must be fixed at the next pit stop, or the vehicle may continue.

NOTE--The blue light should only be used during an official race. Blue flashing lights may be illegal in some state.

All lights must be in operating condition at tech inspection. All rearward-facing lights (taillights, brake lights, blue light, and amber lights) must be in operating condition before the vehicle will be permitted to start the race. All rearward-facing lights must be protected against damage in the event of a rollover. Tail lights/brake lights must be at least 3 inches in diameter, or be approved by Best In The Desert Racing. They must be mounted in such a manner as to be clearly visible from the rear of the vehicle. Rearward facing amber lights and blue lights must be approved by the BITD UTV Tech Inspector. 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 lights and blue lights must be mounted a minimum of 48 inches from the ground and must be clearly visible, with no obstructions. The amber lights and blue light must remain on during the entire race.

#### **UTV-15 ENGINE LOCATION AND DISPLACEMENT:**

Maximum engine displacement is 1000cc. Engine size will be checked and measured. Engines will be sealed. OEM stock engine cases and cylinder head must be used. All other engine components are open, i.e.; cams, pistons, connecting rods, etc....

All UTV engines must have the bolts required to seal the engine predrilled with a 5/64" hole before racing. Please call for clarification on which bolts to drill. Cory S 602-769-6164

#### **UTV-15FD FUEL DELIVERY:**

The fuel delivery system must remain the same design and configuration as the stock system delivered from the factory. Aftermarket fuel pumps, fuel regulators and filters are allowed. Aftermarket or modified fuel injectors are allowed.

#### **UTV-16 FLUID COOLERS:**

Oil coolers, transmission coolers and radiators located ahead of the driver or in the driver's compartment **must** have a shroud that will prevent liquids from blowing back or leaking onto the driver and/or co-driver in the event of a rupture or leakage. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

#### **UTV-17 FUEL CELLS:**

Safety fuel cells are required for all vehicles. Auxiliary fuel tanks may be added in all classes except those classes whose class rules do not allow auxiliary fuel tanks. Auxiliary fuel tanks must be safety fuel cells. Alternative fuels (i.e. propane or natural gas) must use an approved. Alternative fueled vehicles may not use auxiliary fuel cells. All fuel tanks must be securely mounted. Fuel tank must be filled from and vented to the outside of the vehicle. There must be a substantial cross member and firewall between the fuel tank and the occupants. No GI-cans or fuel containers similar in construction or purpose will be permitted in or on any vehicle during the race. Use of GI-cans or other fuel containers will subject entrant to a time penalty or disqualification. Safety fuel cells shall consist of a bladder

enclosed in a smooth skinned container. The container shall be constructed of 20ga. Steel or .060-inch aluminum. Magnesium is strictly prohibited. Container must be securely attached to vehicles with bolts or steel straps. All fittings must be built into the skin and bonded to the 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. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer. Rotary molded polymer cells are acceptable. The physical properties minimum standards are in accordance with Table 1.

### Table 1 Test Type Minimum Standard Test Specification

Tensile Strength 450 lbs. Spec CCC-T-1916 Method 5102

Tear Strength 50 lbs. Spec CC-T-1916 Method 5134

Puncture Test 175 lbs. Spec MIL-T-6396 Article 4.5.17

These physical properties must be maintained throughout all areas of the finished bladder including seams, joints and fittings.

#### **UTV-17A FUEL FILLER NECK:**

Fuel filler must be located as far away from the exhaust and engine as possible. If the filler neck is on the same side as the exhaust, it must be a minimum distance of 12" forward from the exhaust. Fuel filler must be completely separated from the driver's compartment. Splash guards between the engine and or exhaust are highly recommended. If the filler neck is mounted near the driver or navigator, a splash guard is required to prevent fuel from splashing on the driver or navigator. If standard hose clamps are used, two clamp must be used at each connection. If "T-Bolt" (turbo style) clamps are used only one clamp is required at each connection. T-Bolt hose clamps are highly recommended.

#### **UTV-17B FUEL CELL VENT LINES**

The 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 inches below the fuel cell, whichever is lower. OPTIONAL PLACEMENT: Where the vent line attaches to the fuel cell there must be a loop above the fuel cell that extends 6" higher than the top of the fuel cell. Then be wrapped one full loop around the outside of the fuel cell near the top of the fuel cell and then 3" below

the lowest point of the fuel cell. The breather line must be vented outside of driver's compartment and be directed away from the engine and exhaust system.

#### **UTV-18 FIREWALLS:**

All vehicles must have an aluminum or metal firewall separating the driver's compartment from the danger of fire from fuel supplies. Rear mounted fuel cells require a minimum firewall which must be liquid tight and must extend at least 4 inches above the top of the fuel cell, covering from side to side. Any fuel cell placed in the driver compartment must have a fire wall that covers the fuel cell, filler neck and fuel lines and completely separates them from the driver's compartment. Any hole placed in the firewall for structure members, lines, etc. must be kept to a minimum. The hole should not have more than 0.0625- inch gap around the items passing through the firewall. Metallic tape may be used to seal a hole between the firewall and the item passing through the firewall. Engine firewall must be metal or aluminum, no plastic firewalls.

# **UTV-19 FUEL FILLER SPLASH GUARD:**

The intent of the splash guard is to keep fuel from being splashed on the driver, passenger, exhaust and engine when the UTV is being refueled. Splash guards must surround the fuel filling area in such a way that it provides protection from fuel spilling onto the driver, passenger, exhaust and engine when inserting and removing the fuel filler jug.

### UTV-20 CHASSIS (FRAME), BODY AND ROOF:

The OEM "stock chassis" (frame) must be used and stock appearance must be maintained. The stock chassis (frame) is defined as, the main lower rails running along the inner sides of the UTV and the front and rear tubes that connect them. Each manufacture has a different description. Please contact the BITD UTV Tech Inspector for a better description. If any part of the stock chassis is damaged you must contact the BITD UTV Tech inspector to get the repairs approved. Any modifications or repairs to the stock chassis (frame) must be approved by the Best in the Desert tech inspector prior to making any repairs. The stock chassis (frame) may be added to, for durability and strength, but must retain the stock width, length, configuration and design. OEM UTV roll cages cannot be used. All joints must be welded and attached to frame securely.

**BODY;** the OEM hood, grill, front and rear fenders must be used. All body parts must remain on the vehicle during the entire length of race (accidental damage excluded).

**ROOF;** The roof must be covered with sheet metal or aluminum. Minimum thickness recommended is .060

### **UTV-21 DOORS, WINDOW SAFETY NETS:**

Door area must have "X", "A", "V" or Ladder design bracing and all tubing must be a minimum 1.5"x .095" 4130 chrome moly or 1018/1012 CDS/DOM. Doors that latch and/or open and close are not allowed. Door area must be completely covered with aluminum. Minimum thickness recommended is .060.

## **NETS:**

NOTE THAT STARTING IN 2019 ALL WINDOW NETS ARE REQUIRED TO BE SFI RATED. Safety nets are mandatory on all vehicles and must cover the complete open area of the cockpit on both sides of the vehicle. The maximum gap allowed between the net and the roll cage tube is 3". Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in the event of a roll over or slide on the side. Nets must be installed so that the occupants can release the netting unassisted and exit the vehicle regardless of the position of the vehicle. Net installation must meet with the approval of the BITD UTV technical inspector. The net border or edge and the net attachment must be made of materials that are as strong or stronger than the net itself. Net attachments must be a minimum of every 6 inches. Acceptable attachments are not limited to the following: hose clamps, snaps, heavy-duty nylon ties, lift-a-dot, metal hooks and steel rods. Steel rods are acceptable methods of bottom fastening. Best In The **Desert Racing Association** requires that occupants of all vehicles must be protected during a roll over in such a manner that prevents them from extending from the body or frame of vehicle.

#### **UTV-22 SIREN:**

All UTV's are required to have a **SIREN** that is **LOUD.** All sirens must be approved by the BITD UTV tech inspector.

#### **UTV-22A BREAK DOWN SAFETY DEVICES:**

All UTV's must have a minimum of one red reflective device must be carried in the vehicle. Reflective devices must be at least 12 inches high and 12 inches long and be free standing (similar to trucker's breakdown triangles). When racing at night, one battery-operated red flashing beacons and two large glow sticks are required. **Best In The Desert Racing Association** is concerned about race areas; thus, flares will not be permitted as a breakdown device. Official **Best In The Desert Racing Association** stuck stubs are supplied to each entrant at registration. The stuck stub must be kept with the vehicle along with a writing instrument. If a break down or out-of-race condition occurs, the stuck stub must be completed and given to another race vehicle to pass on to a race official.

#### **UTV-23 SEATING:**

All vehicles must use seats designed specifically for racing applications manufactured by a recognized racing seat manufacturer. Stock seats must be completely removed. A recognized manufacturer that specializes in seats for racing applications must make all seats. All seats must be securely mounted to frame of vehicle and be properly reinforced in such a manner as to keep seat from moving in relationship to the frame. Adjustable track type seats must be securely mounted as to allow no lateral or vertical movement. Head and neck restraints designed and installed to prevent whiplash are mandatory on all vehicles. Restraints must be a headrest constructed of at least 2-inch thick resilient padding and be approximately 36 square inches in area. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded.

#### **UTV-24 TRANSMISSION/GEAR BOX:**

Stock transmission cases and clutch design must be used. A functional reverse gear is required. The stock front and rear differential cases must be used.

#### **UTV-25 ROLL CAGE MATERIAL:**

All vehicles in competition are recommended to be equipped with a roll cage based on seamless mild steel or 4130 chrome moly steel tubing. Roll cage material may be; crew, dom, whr, wcr mild carbon steel or 4130 chrome moly. BITD HIGHLY RECOMMENDS THE USE OF 4130 CROMOLY. All welds must be of high quality and craftsmanship with good penetration and with no undercutting of parent material.

#### **UTV 26 ROLLCAGE TUBING SIZE:**

Minimum Tubing Dimension;

UTV weight under 2000lbs OD 1.5" x ID .095"

UTV weight 2001 lbs to 2500 lbs OD 1.5" x ID .120" or OD 1.75" x ID .095"

UTV weight 2501 lbs to 3000 lbs OD 1.75" x ID .095"

For the purpose of determining tubing size, the UTV weight is a "dry" weight. Dry weight is race UTV without fuel, spare tires, tools and drivers.

No aluminum or nonferrous materials are allowed to be used in the construction of the roll cage. Minimum tubing material dimension requirements for roll cages apply to this list of required tubes; front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bar must be all made with a minimum 1.5"x.095 if your UTV weights 2000lbs or less and 1.5"x.120 if over 2000lbs.

#### **UTV-27 ROLL CAGE DESIGN:**

Best in the Desert Racing Association believes that it is each competitor's responsibility to present a safe vehicle for pre-race tech inspection. All competitors must maintain your safety equipment including the roll cage integrity. No changes to the recommended minimum construction specification with respect to diameter or wall thickness are anticipated at this time. As in the past, Best In The Desert Racing Association reserves the right to not allow any safety cage design that in the view of the tech inspector, is not fit for competition. You, as the competitor, are ultimately responsible for your own vehicle's safety features with respect to the design, quality of execution, maintenance and repair of the roll cage structure. All roll cages must be designed and constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one or more diagonal brace, behind the drivers head and all necessary gussets. Front and rear cross over tubes must be gusseted to the side tube. The two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop. All roll cage components (hoops, braces, gussets, etc.) must have a minimum of 3-inch

clearance from the component to the vehicle occupant's helmets when occupants are seated in their normal riding positions. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded. Roll cages must be securely mounted to the frame or body. All intersecting points must be gusseted and braced. Cab or body mounted roll cages must be bolted through the body structure and be attached by use of a minimum two 0.1875-inch thick plates (one on each side of body structure). Bolts and nuts must be at least 0.375-inch-diameter s.a.e. Grade 8 or equivalent aircraft quality. Welding of cab or body mounted roll cages to body structure is strictly prohibited. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1.5 inches of movement in the cage terminal end. Gussets constructed of 0.125-inch x 3-inch x 3-inch 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. Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety Oxy-acetylene brazing on roll cage is strictly forbidden. 4130 chrome-moly is highly recommended for all roll cage construction. BITD reserves the right to weight any vehicle at any time and check the wall thickness of the tubing used to build the roll cage. Vehicle weight will be kept private if requested by the competitor.

#### **UTV-28 BUMPERS:**

All UTV race vehicles must have rear bumper secured to frame using minimum 1.5" outside diameter, .083" wall thickness. Front and rear bumpers must sick out a minimum of 2" past the tires, front to back. This is to prevent tires from touching when nerfing. Bumper ends must be made in such a way as to avoid any sharp edges. Bumpers and nerf bars must be designed in a way as to reasonably inhibit two vehicles from becoming locked together. A safe front and rear bumper is required on all vehicles. No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from vehicles are permitted.

# **UTV-29 IDENTIFICATION NUMBERS, MARKERS, AND STICKERS:**

All vehicles in competition must display the official Best in the Desert Racing Association decal on both sides of the vehicle. All vehicles in competition must have identification numbers in the following locations and sizes: Minimum 8" tall with 1"-wide stroke on each **side** of vehicle in line with the occupants. Minimum 6" tall with 1"-wide stroke on the **rear** of vehicle and is plainly visible from the

rear. Minimum 4" tall located on the **front** of vehicle or roof and is plainly visible from the front of the vehicle. All vehicles in competition must be identified with the correct class vehicle numbers and be displayed in the proper locations as described herein. Best In The Desert Racing Association assigns vehicle numbers. Call BITD to get a race number. All Pro UTV class vehicles can have any color numbers on any color background. Numbers must be easy to see and read at race speeds. Number color and background must be approved by the BITD UTV tech inspector. ALL NUMBERS MUST BE EASY TO READ. IF THEY ARE NOT, YOU WILL BE REQUIRED TO CHANGE THEM.

#### **UTV-30 PIT-SUPPORT VEHICLES:**

All pit-support vehicles will have minimum 4-inch high white numbers (number of vehicle pitting for) on both sides of vehicle on side windows, on upper passenger side corner of front windshield and on rear window. Some of the BITD races require pit support vehicles to have a Best In The Desert Racing Association pit pass on the dash, in the front windshield of the driver side. These pit passes are handed out at the race.

IMPORTANT: All rules are tentative and may be changed or updated as the BITD season progresses in accordance with the UTV classes. Please contact the BITD UTV class Tech Inspector Cory Sappington at 602-769-6164 or email at deserttoyz@hotmail.com with any questions or for more information on these rules. Please check the web site www.utvracing.org for updates throughout the 2019 season.

Thank you for racing with Best in the Desert.



# CLASS 2900 PRO UTV UNLIMITED MAX ENGINE 1000CC

### PRO UNLIMITED UTV CLASS DEFINITION:

The Pro Unlimited UTV class vehicles are built using a factory UTV frame or a full custom tube frame. Motorcycle, snow mobile or UTV engine must be used. Maximum engine size 1000cc. No car engines. Turbo chargers and superchargers are allowed. Can use hood and front fenders from a UTV or build custom body in any configuration. Must have 2 seats. Max wheelbase 140". The 140" wheel base can be achieved by cutting the factory frame or built into the custom tube frame. Any type of suspension is allowed. This is an **open** UTV class, with the exception of wheelbase 140", width 80" and tire size 32". This Pro Class does have a point championship, a points championship fund, and an individual race purse. Minimum age for driver in any UTV Pro class is 14 years old, must be 14 by the date of the event. Co-driver age not restricted. **Any approved UTV is legal to race in the Unlimited UTV class. Any racer that enters this class must stay in this class for the remainder of the season, although, they can move to the sportsman class if they do not want to race Pro class.** 

#### **UTV-1 PENALTIES:**

At the discretion of the race director, Any UTV race team caught breaking these rules "cheating" will receive a minimum penalty of, Disqualification for the race and a 1 race suspension. Best in the Desert has the right to mark, tag or seal any part of a race UTV. Best in the Desert has the right to confiscate any engine at any time for the purpose of class compliance inspection. A fee may be required for the inspection.

#### **UTV-2 OCCUPANTS:**

All UTV's race vehicles must have a driver and a co-driver in the vehicle for the entire race.

#### **UTV-3 DRIVER'S MEETING:**

At least 1 "banded" race team member must attend the BITD driver's meeting at each race.

#### **UTV-4 RADIO & COMMUNICATIONS:**

A VHF type radio is required in all race vehicles. All UTV race vehicles must have their team radio frequency posted inside their vehicle on the passenger side roof area. Best In The Desert official Frequency is 151.490. The Best in the Desert frequency is required on every radio. All race teams are required to provide team specific radio frequency information to the BITD.

#### **UTV-5 SUSPENSION:**

All suspension designs, components and mounting points are open.

#### **UTV-6 OVERALL MEASUREMENT RESTRICTIONS:**

The max width 80" and is measured from outside of tire to outside of tire at ride height. Width may be checked at any time. Max wheel base is 180"

#### **UTV-7 SHOCK ABSORBERS:**

There must be at least one and no more than 2 shocks per wheel in working condition at the start of the race.

#### **UTV-8 BUMP STOPS:**

Any suspension bump stop is allowed.

#### **UTV-9 TORSION SYSTEM:**

Any torsion system is allowed.

#### **UTV-10 TIRES:**

Maximum tire size is 32x10.5x15. Tire must have manufacture size on tire and say 32". No multiple tires per corner permitted. For 2019 Tire size will remain as is, however in 2020 tire size will be increased to a 33x12.5x15.

#### **UTV-11 WHEELS:**

Maximum size is 15". All wheels must be stamped or engraved on the outside, within 3" of the valve stem, with the race vehicles number, this includes spares. The minimum stamp size of the number is  $\frac{1}{4}$ ".

#### **UTV-12 STEERING:**

Power steering is permitted. Turning or steering brakes are permitted.

#### **UTV-13 BATTERIES:**

# ALL UTVs MUST HAVE A BATTERY SWITCH.

Batteries must be securely mounted with **metal attachments**. All flooded cell batteries must be fully enclosed including the sides and bottom. Enclosure must be able to contain the quantity of acid contained in the battery if inverted. Gel filled batteries or dry cell batteries are recommended and do not require full enclosures. **Batteries mounted in the drivers compartment must be covered and may not be liquid filled.** 

#### **UTV-14 SAFETY LIGHTS:**

# ALL 4 REAR FACING SAFETY LIGHTS MUST BE WIRED TO THE BATTERY SWITCH. NO OTHER SWITCHES MAY BE IN LINE TO THE SAFETY LIGHTS

All UTVs must have a minimum of two taillights, two brake lights. All UTVs must have 4 rear facing safety lights. The 4 required rear facing safety lights are; 1 steady amber, 1 flashing amber, 1 blue light steady. All 3 of these safety lights must be LED, a minimum of 2000 lumens and 4 bulbs. THE 4th MANDATORY REAR SAFETY LIGHT IS A SPEC BLUE STROBE LIGHT. THIS SPEC BLUE LIGHT MUST BE PURCHASED DIRECTLY FROM KC HILITES 928-635-2607. THIS LIGHT MUST BE MOUNTED AS HIGH UP ON THE CAGE AS POSSIBLE AT A MINIMUM OF 48" AND REAR FACING.

The amber flashing and blue strobe is an attempt to identify the UTV class vehicle, so that faster vehicles will be able to recognize that they are approaching a slower vehicle. Safety lights must be approved by the BITD UTV Tech Inspector.

BITD rules state that all safety lights must be working at all times, if a light fails to work it must be fixed at the next pit stop, or the vehicle may continue.

NOTE--The blue light should only be used during an official race. Blue flashing lights may be illegal in some state.

All lights must be in operating condition at tech inspection. All rearward-facing lights (taillights, brake lights, blue light, and amber lights) must be in operating condition before the vehicle will be permitted to start the race. All rearward-facing lights must be protected against damage in the event of a rollover. Tail lights/brake lights must be at least 3 inches in diameter, or be approved by Best In The Desert Racing. They must be mounted in such a manner as to be clearly visible from the

rear of the vehicle. Rearward facing amber lights and blue lights must be approved by the BITD UTV Tech Inspector. 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 lights and blue lights must be mounted a minimum of 48 inches from the ground and must be clearly visible, with no obstructions. The amber lights and blue light must remain on during the entire race.

#### **UTV-15 ENGINE LOCATION AND DISPLACEMENT:**

Maximum engine displacement is 1000cc. Engine size will be checked and measured. Engines will be sealed. Motorcycle, snowmobile and UTV engines are allowed. All engine components are open. No auto engines.

All UTV engines must have the bolts required to seal the engine predrilled with a 5/64" hole before racing. Please call for clarification on which bolts to drill. Cory S 602-769-6164

#### **UTV-15FD FUEL DELIVERY:**

Fuel delivery is open.

#### **UTV-16 FLUID COOLERS:**

Oil coolers, transmission coolers and radiators located ahead of the driver or in the driver's compartment **must** have a shroud that will prevent liquids from blowing back or leaking onto the driver and/or co-driver in the event of a rupture or leakage. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

#### **UTV-17 FUEL CELLS:**

Safety fuel cells are required for all vehicles. Auxiliary fuel tanks may be added in all classes except those classes whose class rules do not allow auxiliary fuel tanks. Auxiliary fuel tanks must be safety fuel cells. Alternative fuels (i.e. propane or natural gas) must use an approved. Alternative fueled vehicles may not use auxiliary fuel cells. All fuel tanks must be securely mounted. Fuel tank must be filled from and vented to the outside of the vehicle. There must be a substantial cross member and firewall between the fuel tank and the occupants. No GI-cans or fuel containers similar in construction or purpose will be permitted in or on any vehicle during the race. Use of GI-cans or other fuel containers will subject entrant to a time penalty or disqualification. Safety fuel cells shall consist of a bladder

enclosed in a smooth skinned container. The container shall be constructed of 20ga. Steel or .060-inch aluminum. Magnesium is strictly prohibited. Container must be securely attached to vehicles with bolts or steel straps. All fittings must be built into the skin and bonded to the 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. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer. Rotary molded polymer cells are acceptable. The physical properties minimum standards are in accordance with Table 1.

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Puncture Test 175 lbs. Spec MIL-T-6396 Article 4.5.17

These physical properties must be maintained throughout all areas of the finished bladder including seams, joints and fittings.

#### **UTV-17A FUEL FILLER NECK:**

Fuel filler must be located as far away from the exhaust and engine as possible. If the filler neck is on the same side as the exhaust, it must be a minimum distance of 12" forward from the exhaust. Fuel filler must be completely separated from the driver's compartment. Splash guards between the engine and or exhaust are highly recommended. If the filler neck is mounted near the driver or navigator, a splash guard is required to prevent fuel from splashing on the driver or navigator. If standard hose clamps are used, two clamp must be used at each connection. If "T-Bolt" (turbo style) clamps are used only one clamp is required at each connection. T-Bolt hose clamps are highly recommended.

#### **UTV-17B FUEL CELL VENT LINES**

The 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 inches below the fuel cell, whichever is lower. OPTIONAL PLACEMENT: Where the vent line attaches to the fuel cell there must be a loop above the fuel cell that extends 6" higher than the top of the fuel cell. Then be wrapped one full loop around the outside of the fuel cell near the top of the fuel cell and then 3" below

the lowest point of the fuel cell. The breather line must be vented outside of driver's compartment and be directed away from the engine and exhaust system.

# **UTV-18 FIREWALLS:**

All vehicles must have an aluminum or metal firewall separating the driver's compartment from the danger of fire from fuel supplies. Rear mounted fuel cells require a minimum firewall which must be liquid tight and must extend at least 4 inches above the top of the fuel cell, covering from side to side. Any fuel cell placed in the driver compartment must have a fire wall that covers the fuel cell, filler neck and fuel lines and completely separates them from the driver's compartment. Any hole placed in the firewall for structure members, lines, etc. must be kept to a minimum. The hole should not have more than 0.0625- inch gap around the items passing through the firewall. Metallic tape may be used to seal a hole between the firewall and the item passing through the firewall. Engine firewall must be metal or aluminum, no plastic firewalls.

#### **UTV-19 FUEL FILLER SPLASH GUARD:**

The intent of the splash guard is to keep fuel from being splashed on the driver, passenger, exhaust and engine when the UTV is being refueled. Splash guards must surround the fuel filling area in such a way that it provides protection from fuel spilling onto the driver, passenger, exhaust and engine when inserting and removing the fuel filler jug.

#### **UTV-20 CHASSIS (FRAME), BODY AND ROOF:**

Chassis/frame is open. All joints must be welded and attached to frame securely.

**BODY**; Body is open.

**ROOF;** The roof must be covered with sheet metal or aluminum. Minimum thickness recommended is .060

# **UTV-21 DOORS, WINDOW SAFETY NETS:**

Door area must have "X", "A", "V" or Ladder design bracing and all tubing must be a minimum 1.5"x .095" 4130 chrome moly or 1018/1012 CDS/DOM. Doors that latch and/or open and close are not allowed. Door area must be completely covered with aluminum. Minimum thickness recommended is .060.

# NETS;

NOTE THAT STARTING IN 2019 ALL WINDOW NETS ARE REQUIRED TO BE SFI RATED. Safety nets are mandatory on all vehicles and must cover

the complete open area of the cockpit on both sides of the vehicle. The maximum gap allowed between the net and the roll cage tube is 3". Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in the event of a roll over or slide on the side. Nets must be installed so that the occupants can release the netting unassisted and exit the vehicle regardless of the position of the vehicle. Net installation must meet with the approval of the BITD UTV technical inspector. The net border or edge and the net attachment must be made of materials that are as strong or stronger than the net itself. Net attachments must be a minimum of every 6 inches. Acceptable attachments are not limited to the following: hose clamps, snaps, heavy-duty nylon ties, lift-a-dot, metal hooks and steel rods. Steel rods are acceptable methods of bottom fastening. **Best In The Desert Racing Association** requires that occupants of all vehicles must be protected during a roll over in such a manner that prevents them from extending from the body or frame of vehicle.

#### **UTV-22 SIREN:**

All UTV's are required to have a **SIREN** that is **LOUD.** All sirens must be approved by the BITD UTV tech inspector.

#### **UTV-22A BREAK DOWN SAFETY DEVICES:**

All UTV's must have a minimum of one red reflective device must be carried in the vehicle. Reflective devices must be at least 12 inches high and 12 inches long and be free standing (similar to trucker's breakdown triangles). When racing at night, one battery-operated red flashing beacons and two large glow sticks are required. **Best In The Desert Racing Association** is concerned about race areas; thus, flares will not be permitted as a breakdown device. Official **Best In The Desert Racing Association** stuck stubs are supplied to each entrant at registration. The stuck stub must be kept with the vehicle along with a writing instrument. If a break down or out-of-race condition occurs, the stuck stub must be completed and given to another race vehicle to pass on to a race official.

#### **UTV-23 SEATING:**

All UTVs must have 2 seats. All vehicles must use seats designed specifically for racing applications manufactured by a recognized racing seat manufacturer. Stock seats must be completely removed. A recognized manufacturer that specializes in seats for racing applications must make all seats. All seats must be securely mounted to frame of vehicle and be properly reinforced in such a manner as to keep seat from moving in relationship to the frame. Adjustable track type seats must be securely mounted as to allow no lateral or vertical movement. Head and neck restraints designed and installed to prevent whiplash are mandatory on all vehicles. Restraints must be a headrest constructed of at least 2-inch thick resilient padding and be approximately 36 square inches in area. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded.

#### **UTV-24 TRANSMISSION/GEAR BOX:**

Transmission, gearbox and differentials are open.

#### **UTV-25 ROLL CAGE MATERIAL:**

All vehicles in competition are recommended to be equipped with a roll cage based on seamless mild steel or 4130 chrome moly steel tubing. Roll cage material may be; crew, dom, whr, wcr mild carbon steel or 4130 chrome moly. BITD HIGHLY RECOMMENDS THE USE OF 4130 CROMOLY. All welds must be of high quality and craftsmanship with good penetration and with no undercutting of parent material.

#### **UTV 26 ROLLCAGE TUBING SIZE:**

Minimum Tubing Dimension;

UTV weight under 2000lbs OD 1.5" x ID .095"

UTV weight 2001 lbs to 2500 lbs OD 1.5" x ID .120" or OD 1.75" x ID .095"

UTV weight 2501 lbs to 3000 lbs OD 1.75" x ID .095"

For the purpose of determining tubing size, the UTV weight is a "dry" weight. Dry weight is race UTV without fuel, spare tires, tools and drivers.

No aluminum or nonferrous materials are allowed to be used in the construction of the roll cage. Minimum tubing material dimension requirements for roll cages apply to this list of required tubes; front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bar. This means that the front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bar must be all made with a minimum 1.5"x.095 if your UTV weights 2000lbs or less and 1.5"x.120 if over 2000lbs.

#### **UTV-27 ROLL CAGE DESIGN:**

Best in the Desert Racing Association believes that it is each competitor's responsibility to present a safe vehicle for pre-race tech inspection. All competitors must maintain your safety equipment including the roll cage integrity. No changes to the recommended minimum construction specification with respect to diameter or wall thickness are anticipated at this time. As in the past, Best In The Desert Racing Association reserves the right to not allow any safety cage design that in the view of the tech inspector, is not fit for competition. You, as the competitor, are ultimately responsible for your own vehicle's safety features with respect to the design, quality of execution, maintenance and repair of the roll cage structure. All roll cages must be designed and constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one or more diagonal brace, behind the drivers head and all necessary gussets. Front and rear cross over tubes must be gusseted to the side tube. The two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop. All roll cage components (hoops, braces, gussets, etc.) must have a minimum of 3-inch clearance from the component to the vehicle occupant's helmets when occupants are seated in their normal riding positions. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded. Roll cages must be securely mounted to the frame or body. All intersecting points must be gusseted and braced. Cab or body mounted roll cages must be bolted through the body structure and be attached by use of a minimum two 0.1875-inch thick plates (one on each side of body structure). Bolts and nuts must be at least 0.375-inch-diameter s.a.e. Grade 8 or equivalent aircraft quality. Welding of cab or body mounted roll cages to body structure is strictly prohibited. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1.5 inches of movement in the cage terminal end. Gussets constructed of 0.125-inch x 3-inch x 3-inch 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. Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety Oxy-acetylene brazing on roll cage is strictly forbidden. 4130 chrome-moly is highly recommended for all roll cage construction. BITD reserves the right to weight any vehicle at any time and check the wall thickness of the tubing used to build the roll cage. Vehicle weight will be kept private if requested by the competitor.

#### **UTV-28 BUMPERS:**

All UTV race vehicles must have rear bumper secured to frame using minimum 1.5" outside diameter, .083" wall thickness. Front and rear bumpers must sick out a minimum of 2" past the tires, front to back. This is to prevent tires from touching when nerfing. Bumper ends must be made in such a way as to avoid any sharp edges. Bumpers and nerf bars must be designed in a way as to reasonably inhibit two vehicles from becoming locked together. A safe front and rear bumper is required on all vehicles. No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from vehicles are permitted.

# **UTV-29 IDENTIFICATION NUMBERS, MARKERS, AND STICKERS:**

All vehicles in competition must display the official Best in the Desert Racing Association decal on both sides of the vehicle. All vehicles in competition must have identification numbers in the following locations and sizes: Minimum 8" tall with 1"-wide stroke on each **side** of vehicle in line with the occupants. Minimum 6" tall with 1"-wide stroke on the **rear** of vehicle and is plainly visible from the rear. Minimum 4" tall located on the **front** of vehicle or roof and is plainly visible from the front of the vehicle. All vehicles in competition must be identified with the correct class vehicle numbers and be displayed in the proper locations as described herein. Best In The Desert Racing Association assigns vehicle numbers. Call BITD to get a race number. All **Pro UTV class vehicles can have any color numbers on any color background**. Numbers must be easy to see and read at race speeds. Number color and background must be approved by the BITD UTV tech inspector. **ALL NUMBERS MUST BE EASY TO READ. IF THEY ARE NOT, YOU WILL BE REQUIRED TO CHANGE THEM.** 

#### **UTV-30 PIT-SUPPORT VEHICLES:**

All pit-support vehicles will have minimum 4-inch high white numbers (number of vehicle pitting for) on both sides of vehicle on side windows, on upper passenger side corner of front windshield and on rear window. Some of the BITD races require pit support vehicles to have a Best In The Desert Racing Association pit pass on the dash, in the front windshield of the driver side. These pit passes are handed out at the race.

IMPORTANT: All rules are tentative and may be changed or updated as the BITD season progresses in accordance with the UTV classes. Please contact the BITD UTV class Tech Inspector Cory Sappington at 602-769-6164 or email at deserttoyz@hotmail.com with any questions or for more information on these rules. Please check the web site www.utvracing.org for updates throughout the 2019 season.

Thank you for racing with Best in the Desert.







# UTV CLASS RS1 PRO N/A PRODUCTION UTV OEM ENGINE 1000CC MAX

ADDED 09-11-18 PLEASE NOTE ALL BITD GENERAL AND SAFETY RULES MUST BE FOLLOWED. ALL UTV VEHICLES MUST USE A SAFETY TRACKING SYSTEM FROM WWW.RACINGTRAX.COM 801-836-5198 AT ALL REQUIRED BITD RACES. ANY RULE CHANGES OR UPDATES WILL BE POSTED ON <a href="https://www.utvracing.org">www.utvracing.org</a> CORY SAPPINGTON IS THE BITD UTV TECH INSPECTOR AND FOUNDER OF THE BITD UTV CLASS. PLEASE CONTACT HIM WITH ANY QUESTIONS. IF YOU ARE A NEW RACER PLEASE CONTACT CORY BEFORE YOU SHOW UP FOR YOUR FIRST RACE CORY'S PHONE # IS 602-769-6164 EMAIL <a href="mailto:deserttoyz@hotmail.com">DESERTTOYZ@hotmail.com</a> ALL NEW UTVs MUST BE INSPECTED AS THEY ARE BEING BUILT. CALL CORY S FOR INSPECTION.

**GENERAL REGULATIONS:** Class entrants shall comply with all class and applicable general regulations. **Note:** The SCR abbreviations refer to the cross-reference listings in the front of this book and are part of the class rules. Where a conflict between the cross-referenced listings and a rule contained under this class occurs, the rule contained under this class has precedence.

All UTV's must be pre-approved before racing in their first BITD event.

ANYTHING NOT BUILT IN COMPLIANCE WITH THE SPIRIT OF THE CLASS MAY BE DEEMED INELIGIBLE TO RACE, COLLECT POINTS, TROPHIES, PRIZE FUNDS, AND CONTINGENCY. PLEASE CONTACT THE BITD UTV TECH INSPECTOR WITH ANY QUESTIONS AT DESERTTOYZ@HOTMAIL.COM

All UTV race vehicles must pass all BITD safety requirements and be approved by the BITD UTV Tech Inspector.

UTV Tech Inspection: Tech inspection is required at each Best In The Desert race for all UTV race vehicles.

# RS1 PRO PRODUCTION UTV CLASS DEFINITION:

The RS1 Pro production UTV class vehicles are built using production UTV's, manufactured by registered companies, i.e. Yamaha, Polaris, Can-Am, Artic Cat, Yamaha, that issues Vin #'s. Companies must produce a minimum number of 1000 units of that exact model and configuration, prior to being allowed to participate in this class in any Best In the Desert Sanctioned Event. The RS1 UTV's must have 1 seat. All OEM engine electronics must be used. Ecm's may be flashed. No aftermarket ECM's are allowed. OEM engines must be used. Maximum engine size is 1000cc. Must use hood, grill, front and rear fenders from the UTV. This Pro Class does have a point's championship, a points championship fund, and an individual race purse. Minimum age for driver in any UTV Pro class is 14 years old, must be 14 by the date of the event.

#### **UTV-1 PENALTIES:**

At the discretion of the race director, Any UTV race team caught breaking these rules "cheating" will receive a minimum penalty of, Disqualification for the race and a 1 race suspension. Best in the Desert has the right to mark, tag or seal any part of a race UTV. Best in the Desert has the right to confiscate any engine at any time for the purpose of class compliance inspection. A fee may be required for the inspection.

#### **UTV-2 OCCUPANTS:**

All UTV's race vehicles must have an armbanded driver in the vehicle for the entire race.

#### **UTV-3 DRIVER'S MEETING:**

At least 1 "banded" race team member must attend the BITD driver's meeting at each race.

#### **UTV-4 RADIO & COMMUNICATIONS:**

A VHF type radio is required in all race vehicles. **All UTV race vehicles must** have their team radio frequency posted inside their vehicle on the roof area. Best In The Desert official Frequency is 151.490. The Best in the Desert frequency is required on every radio. All race teams are required to provide team specific radio frequency information to the BITD.

#### **UTV-5 SUSPENSION:**

All suspension and mounting points must remain the stock design and in the stock location and or position on the frame, as delivered from the manufacturer. Suspension mounting points may be reinforced for strength. No suspension mounts may be moved, added or removed.

#### **UTV-6 OVERALL MEASUREMENT RESTRICTIONS:**

The max width 80" and is measured from outside of tire to outside of tire at ride height. Width may be checked at any time. Wheelbase can be increased to 8 inches over the stock dimensions. This can only be achieved through the suspension.

Frames cannot be cut, lengthened or shortened.

#### **UTV-7 SHOCK ABSORBERS:**

There must be at least one and only one **coil over shock absorber** per wheel in working condition at the start of the race. Shock absorber mounting points may be moved and strengthen.

#### **UTV-8 BUMP STOPS:**

Suspension bump stops are allowed. They must be of the solid type. No air bump stops.

#### **UTV-9 TORSION SYSTEM:**

The only torsion system that is allowed is a coil-over shock.

#### **UTV-10 TIRES:**

Maximum tire size is 32x10.5x15. Tire must have manufacture size on tire and say 32". No multiple tires per corner permitted. For 2019 Tire size will remain as is, however in 2020 tire size will be increased to a 33x12.5x15.

#### **UTV-11 WHEELS:**

Maximum size is 15". All wheels must be stamped or engraved on the outside, within 3" of the valve stem, with the race vehicles number, this includes spares. The minimum stamp size of the number is  $\frac{1}{4}$ ".

#### **UTV-12 STEERING:**

Power steering is permitted. Turning or steering brakes are not permitted.

#### **UTV-13 BATTERIES:**

# ALL UTVs MUST HAVE A BATTERY SWITCH.

Batteries must be securely mounted with **metal attachments**. All flooded cell batteries must be fully enclosed including the sides and bottom. Enclosure must be able to contain the quantity of acid contained in the battery if inverted. Gel filled batteries or dry cell batteries are recommended and do not require full enclosures. **Batteries mounted in the drivers compartment must be covered and may not be liquid filled.** 

#### **UTV-14 SAFETY LIGHTS:**

# ALL 4 REAR FACING SAFETY LIGHTS MUST BE WIRED TO THE BATTERY SWITCH. NO OTHER SWITCHES MAY BE IN LINE TO THE SAFETY LIGHTS

All UTVs must have a minimum of two taillights, two brake lights. All UTVs must have 4 rear facing safety lights. The 4 required rear facing safety lights are; 1 steady amber, 1 flashing amber, 1 blue light steady. All 3 of these safety lights must be LED, a minimum of 2000 lumens and 4 bulbs. THE 4th MANDATORY REAR SAFETY LIGHT IS A SPEC BLUE STROBE LIGHT. THIS SPEC BLUE LIGHT MUST BE PURCHASED DIRECTLY FROM KC HILITES 928-635-2607. THIS LIGHT MUST BE MOUNTED AS HIGH UP ON THE CAGE AS POSSIBLE AT A MINIMUM OF 48" AND REAR FACING.

The amber flashing and blue strobe is an attempt to identify the UTV class vehicle, so that faster vehicles will be able to recognize that they are approaching a slower vehicle. Safety lights must be approved by the BITD UTV Tech Inspector.

BITD rules state that all safety lights must be working at all times, if a light fails to work it must be fixed at the next pit stop, or the vehicle may continue.

NOTE--The blue light should only be used during an official race. Blue flashing lights may be illegal in some state.

All lights must be in operating condition at tech inspection. All rearward-facing lights (taillights, brake lights, blue light, and amber lights) must be in operating condition before the vehicle will be permitted to start the race. All rearward-facing lights must be protected against damage in the event of a rollover. Tail lights/brake lights must be at least 3 inches in diameter, or be approved by Best In The Desert Racing. They must be mounted in such a manner as to be clearly visible from the

rear of the vehicle. Rearward facing amber lights and blue lights must be approved by the BITD UTV Tech Inspector. 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 lights and blue lights must be mounted a minimum of 48 inches from the ground and must be clearly visible, with no obstructions. The amber lights and blue light must remain on during the entire race.

#### **UTV-15 ENGINE LOCATION AND DISPLACEMENT:**

Maximum engine displacement is 1000cc. Engine size will be checked and measured. Engines will be sealed. OEM stock engine cases and cylinder head must be used. All other engine components are open, i.e.; cams, pistons, connecting rods, etc....

All UTV engines must have the bolts required to seal the engine predrilled with a 5/64" hole before racing. Please call for clarification on which bolts to drill. Cory S 602-769-6164

#### **UTV-15FD FUEL DELIVERY:**

The fuel delivery system must remain the same design and configuration as the stock system delivered from the factory. Aftermarket fuel pumps, fuel regulators and filters are allowed. Aftermarket or modified fuel injectors are allowed.

#### **UTV-16 FLUID COOLERS:**

Oil coolers, transmission coolers and radiators located ahead of the driver or in the driver's compartment **must** have a shroud that will prevent liquids from blowing back or leaking onto the driver and/or co-driver in the event of a rupture or leakage. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

#### **UTV-17 FUEL CELLS:**

Safety fuel cells are required for all vehicles. Auxiliary fuel tanks may be added in all classes except those classes whose class rules do not allow auxiliary fuel tanks. Auxiliary fuel tanks must be safety fuel cells. Alternative fuels (i.e. propane or natural gas) must use an approved. Alternative fueled vehicles may not use auxiliary fuel cells. All fuel tanks must be securely mounted. Fuel tank must be filled from and vented to the outside of the vehicle. There must be a substantial cross member and firewall between the fuel tank and the occupants. No GI-cans or

fuel containers similar in construction or purpose will be permitted in or on any vehicle during the race. Use of GI-cans or other fuel containers will subject entrant to a time penalty or disqualification. Safety fuel cells shall consist of a bladder enclosed in a smooth skinned container. The container shall be constructed of 20ga. Steel or .060-inch aluminum. Magnesium is strictly prohibited. Container must be securely attached to vehicles with bolts or steel straps. All fittings must be built into the skin and bonded to the 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. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer. Rotary molded polymer cells are acceptable. The physical properties minimum standards are in accordance with Table 1.

# Table 1 Test Type Minimum Standard Test Specification

Tensile Strength 450 lbs. Spec CCC-T-1916 Method 5102

Tear Strength 50 lbs. Spec CC-T-1916 Method 5134

Puncture Test 175 lbs. Spec MIL-T-6396 Article 4.5.17

These physical properties must be maintained throughout all areas of the finished bladder including seams, joints and fittings.

#### **UTV-17A FUEL FILLER NECK:**

Fuel filler must be located as far away from the exhaust and engine as possible. If the filler neck is on the same side as the exhaust, it must be a minimum distance of 12" forward from the exhaust. Fuel filler must be completely separated from the driver's compartment. Splash guards between the engine and or exhaust are highly recommended. If the filler neck is mounted near the driver, a splash guard is required to prevent fuel from splashing on the driver. If standard hose clamps are used, two clamp must be used at each connection. If "T-Bolt" (turbo style) clamps are used only one clamp is required at each connection. T-Bolt hose clamps are highly recommended.

#### **UTV-17B FUEL CELL VENT LINES**

The 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 inches below the fuel cell, whichever is lower. OPTIONAL PLACEMENT: Where the vent line attaches to the fuel cell there must be a loop above the fuel cell that

extends 6" higher than the top of the fuel cell. Then be wrapped one full loop around the outside of the fuel cell near the top of the fuel cell and then 3" below the lowest point of the fuel cell. The breather line must be vented outside of driver's compartment and be directed away from the engine and exhaust system.

#### **UTV-18 FIREWALLS:**

All vehicles must have an aluminum or metal firewall separating the driver's compartment from the danger of fire from fuel supplies. Rear mounted fuel cells require a minimum firewall which must be liquid tight and must extend at least 4 inches above the top of the fuel cell, covering from side to side. Any fuel cell placed in the driver compartment must have a fire wall that covers the fuel cell, filler neck and fuel lines and completely separates them from the driver's compartment. Any hole placed in the firewall for structure members, lines, etc. must be kept to a minimum. The hole should not have more than 0.0625- inch gap around the items passing through the firewall. Metallic tape may be used to seal a hole between the firewall and the item passing through the firewall. Engine firewall must be metal or aluminum, no plastic firewalls.

#### **UTV-19 FUEL FILLER SPLASH GUARD:**

The intent of the splash guard is to keep fuel from being splashed on the driver, exhaust and engine when the UTV is being refueled. Splash guards must surround the fuel filling area in such a way that it provides protection from fuel spilling onto the driver, exhaust and engine when inserting and removing the fuel filler jug.

# **UTV-20 CHASSIS (FRAME), BODY AND ROOF:**

The OEM "stock chassis" (frame) must be used and stock appearance must be maintained. The stock chassis (frame) is defined as, the main lower rails running along the inner sides of the UTV and the front and rear tubes that connect them. Each manufacture has a different description. Please contact the BITD UTV Tech Inspector for a better description. If any part of the stock chassis is damaged you must contact the BITD UTV Tech inspector to get the repairs approved. Any modifications or repairs to the stock chassis (frame) must be approved by the Best in the Desert tech inspector prior to making any repairs. The stock chassis (frame) may be added to, for durability and strength, but must retain the stock width, length, configuration and design. OEM UTV roll cages cannot be used. All joints must be welded and attached to frame securely.

**BODY;** the OEM hood, grill, front and rear fenders must be used. All body parts must remain on the vehicle during the entire length of race (accidental damage excluded).

**ROOF;** The roof must be covered with sheet metal or aluminum. Minimum thickness recommended is .060

### **UTV-21 DOORS, WINDOW SAFETY NETS:**

Door area must have "X", "A", "V" or Ladder design bracing and all tubing must be a minimum 1.5"x .095" 4130 chrome moly or 1018/1012 CDS/DOM. Doors that latch and/or open and close are not allowed. Door area must be completely covered with aluminum. Minimum thickness recommended is .060.

### **NETS:**

NOTE THAT STARTING IN 2019 ALL WINDOW NETS ARE REQUIRED TO BE SFI RATED. Safety nets are mandatory on all vehicles and must cover the complete open area of the cockpit on both sides of the vehicle. The maximum gap allowed between the net and the roll cage tube is 3". Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in the event of a roll over or slide on the side. Nets must be installed so that the occupant can release the netting unassisted and exit the vehicle regardless of the position of the vehicle. Net installation must meet with the approval of the BITD UTV technical inspector. The net border or edge and the net attachment must be made of materials that are as strong or stronger than the net itself. Net attachments must be a minimum of every 6 inches. Acceptable attachments are not limited to the following: hose clamps, snaps, heavy-duty nylon ties, lift-a-dot, metal hooks and steel rods. Steel rods are acceptable methods of bottom fastening. Best In The **Desert Racing Association** requires that occupants of all vehicles must be protected during a roll over in such a manner that prevents them from extending from the body or frame of vehicle.

#### **UTV-22 SIREN:**

All UTV's are required to have a **SIREN** that is **LOUD.** All sirens must be approved by the BITD UTV tech inspector.

#### **UTV-22A BREAK DOWN SAFETY DEVICES:**

All UTV's must have a minimum of one red reflective device must be carried in the vehicle. Reflective devices must be at least 12 inches high and 12 inches long and be free standing (similar to trucker's breakdown triangles). When racing at night, one battery-operated red flashing beacons and two large glow sticks are required. **Best In The Desert Racing Association** is concerned about race areas; thus, flares will not be permitted as a breakdown device. Official **Best In The Desert Racing Association** stuck stubs are supplied to each entrant at registration. The stuck stub must be kept with the vehicle along with a writing instrument. If a break down or out-of-race condition occurs, the stuck stub must be completed and given to another race vehicle to pass on to a race official.

#### **UTV-23 SEATING:**

All vehicles must use seats designed specifically for racing applications manufactured by a recognized racing seat manufacturer. Stock seat must be completely removed. A recognized manufacturer that specializes in seats for racing applications must be utilized. All seats must be securely mounted to frame of vehicle and be properly reinforced in such a manner as to keep seat from moving in relationship to the frame. Adjustable track type seats must be securely mounted as to allow no lateral or vertical movement. Head and neck restraints designed and installed to prevent whiplash are mandatory on all vehicles. Restraints must be a headrest constructed of at least 2-inch thick resilient padding and be approximately 36 square inches in area. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded.

#### **UTV-24 TRANSMISSION/GEAR BOX:**

Stock transmission cases and clutch design must be used. A functional reverse gear is required. The stock front and rear differential cases must be used.

# **UTV-25 ROLL CAGE MATERIAL:**

All vehicles in competition are recommended to be equipped with a roll cage based on seamless mild steel or 4130 chrome moly steel tubing. Roll cage material may be; crew, dom, whr, wcr mild carbon steel or 4130 chrome moly. BITD HIGHLY RECOMMENDS THE USE OF 4130 CROMOLY. All welds must be of high quality and craftsmanship with good penetration and with no undercutting of parent material.

#### **UTV 26 ROLLCAGE TUBING SIZE:**

Minimum Tubing Dimension;

UTV weight under 2000lbs OD 1.5" x ID .095"

UTV weight 2001 lbs to 2500 lbs OD 1.5" x ID .120" or OD 1.75" x ID .095"

UTV weight 2501 lbs to 3000 lbs OD 1.75" x ID .095"

For the purpose of determining tubing size, the UTV weight is a "dry" weight. Dry weight is race UTV without fuel, spare tires, tools and drivers.

No aluminum or nonferrous materials are allowed to be used in the construction of the roll cage. Minimum tubing material dimension requirements for roll cages apply to this list of required tubes; front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bars. This means that the front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bar must be all made with a minimum 1.5"x.095 if your UTV weights 2000lbs or less and 1.5"x.120 if over 2000lbs.

#### **UTV-27 ROLL CAGE DESIGN:**

Best in the Desert Racing Association believes that it is each competitor's responsibility to present a safe vehicle for pre-race tech inspection. All competitors must maintain your safety equipment including the roll cage integrity. No changes to the recommended minimum construction specification with respect to diameter or wall thickness are anticipated at this time. As in the past, Best In The Desert Racing Association reserves the right to not allow any safety cage design that in the view of the tech inspector, is not fit for competition. You, as the competitor, are ultimately responsible for your own vehicle's safety features with respect to the design, quality of execution, maintenance and repair of the roll cage structure. All roll cages must be designed and constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one or more diagonal brace, behind the drivers head and all necessary gussets. Front and rear cross over tubes must be gusseted to the side tube. The two top interconnecting

bars must be placed as far to the outside of the top part of the front and rear hoops as possible. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop. All roll cage components (hoops, braces, gussets, etc.) must have a minimum of 3-inch clearance from the component to the vehicle occupant's helmets when occupants are seated in their normal riding positions. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded. Roll cages must be securely mounted to the frame or body. All intersecting points must be gusseted and braced. Cab or body mounted roll cages must be bolted through the body structure and be attached by use of a minimum two 0.1875-inch thick plates (one on each side of body structure). Bolts and nuts must be at least 0.375-inch-diameter s.a.e. Grade 8 or equivalent aircraft quality. Welding of cab or body mounted roll cages to body structure is strictly prohibited. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1.5 inches of movement in the cage terminal end. Gussets constructed of 0.125-inch x 3-inch x 3-inch 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. Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety Oxy-acetylene brazing on roll cage is strictly forbidden. 4130 chrome-moly is highly recommended for all roll cage construction. BITD reserves the right to weight any vehicle at any time and check the wall thickness of the tubing used to build the roll cage. Vehicle weight will be kept private if requested by the competitor.

#### **UTV-28 BUMPERS:**

All UTV race vehicles must have rear bumper secured to frame using minimum 1.5" outside diameter, .083" wall thickness. Front and rear bumpers must sick out a minimum of 2" past the tires, front to back. This is to prevent tires from touching when nerfing. Bumper ends must be made in such a way as to avoid any sharp edges. Bumpers and nerf bars must be designed in a way as to reasonably inhibit two vehicles from becoming locked together. A safe front and rear bumper is required on all vehicles. No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from vehicles are permitted.

## **UTV-29 IDENTIFICATION NUMBERS, MARKERS, AND STICKERS:**

All vehicles in competition must display the official Best in the Desert Racing Association decal on both sides of the vehicle. All vehicles in competition must have identification numbers in the following locations and sizes: Minimum 8" tall with 1"-wide stroke on each side of vehicle in line with the occupants. Minimum 6" tall with 1"-wide stroke on the rear of vehicle and is plainly visible from the rear. Minimum 4" tall located on the front of vehicle or roof and is plainly visible from the front of the vehicle. All vehicles in competition must be identified with the correct class vehicle numbers and be displayed in the proper locations as described herein. Best In The Desert Racing Association assigns vehicle numbers. Call BITD to get a race number. All Pro UTV class vehicles can have any color numbers on any color background. Numbers must be easy to see and read at race speeds. Number color and background must be approved by the BITD UTV tech inspector. ALL NUMBERS MUST BE EASY TO READ. IF THEY ARE NOT, YOU WILL BE REQUIRED TO CHANGE THEM.

#### **UTV-30 PIT-SUPPORT VEHICLES:**

All pit-support vehicles will have minimum 4-inch high white numbers (number of vehicle pitting for) on both sides of vehicle on side windows, on upper passenger side corner of front windshield and on rear window. Some of the BITD races require pit support vehicles to have a Best In The Desert Racing Association pit pass on the dash, in the front windshield of the driver side. These pit passes are handed out at the race.

IMPORTANT: All rules are tentative and may be changed or updated as the BITD season progresses in accordance with the UTV classes. Please contact the BITD UTV class Tech Inspector Cory Sappington at 602-769-6164 or email at deserttoyz@hotmail.com with any questions or for more information on these rules. Please check the web site www.utvracing.org for updates throughout the 2019 season.

Thank you for racing with Best in the Desert.

# CLASS 2951 SPORTSMAN UTV MAX ENGINE 1000CC

#### SPORTSMAN UTV CLASS DEFINITION:

The Sportsman UTV class is an open class. The Sportsman class is for any UTV team that wants to race but does not care, to race for championship points or prize money. The Sportsman class has lower entrée fee. Any UTV vehicles that are not built to the Pro UTV production class rules, but are classified as a UTV by a BITD UTV tech inspector will be allowed race in the Sportsman UTV class.

#### **UTV-1 PENALTIES:**

At the discretion of the race director, Any UTV race team caught breaking these rules "cheating" will receive a minimum penalty of, Disqualification for the race and a 1 race suspension. Best in the Desert has the right to mark, tag or seal any part of a race UTV. Best in the Desert has the right to confiscate any engine at any time for the purpose of class compliance inspection. A fee may be required for the inspection.

#### **UTV-2 OCCUPANTS:**

All UTV's race vehicles must have a driver and a co-driver in the vehicle for the entire race.

#### **UTV-3 DRIVER'S MEETING:**

At least 1 "banded" race team member must attend the BITD driver's meeting at each race.

#### **UTV-4 RADIO & COMMUNICATIONS:**

A VHF type radio is required in all race vehicles. All UTV race vehicles must have their team radio frequency posted inside their vehicle on the passenger side roof area. Best In The Desert official Frequency is 151.490. The Best in the Desert frequency is required on every radio. All race teams are required to provide team specific radio frequency information to the BITD.

#### **UTV-5 SUSPENSION:**

All suspension designs, components and mounting points are open.

#### **UTV-6 OVERALL MEASUREMENT RESTRICTIONS:**

The max width 80" and is measured from outside of tire to outside of tire at ride height. Width may be checked at any time. Max wheel base is 180"

#### **UTV-7 SHOCK ABSORBERS:**

There must be at least one and no more than 2 shocks per wheel in working condition at the start of the race.

#### **UTV-8 BUMP STOPS:**

Any suspension bump stop is allowed.

#### **UTV-9 TORSION SYSTEM:**

Any torsion system is allowed.

#### **UTV-10 TIRES:**

Maximum tire size is 32x10.5x15. Tire must have manufacture size on tire and say 32". No multiple tires per corner permitted. For 2019 Tire size will remain as is, however in 2020 tire size will be increased to a 33x12.5x15.

#### **UTV-11 WHEELS:**

Maximum size is 15". All wheels must be stamped or engraved on the outside, within 3" of the valve stem, with the race vehicles number, this includes spares. The minimum stamp size of the number is  $\frac{1}{4}$ ".

#### **UTV-12 STEERING:**

Power steering is permitted. Turning or steering brakes are permitted.

#### **UTV-13 BATTERIES:**

#### ALL UTVs MUST HAVE A BATTERY SWITCH.

Batteries must be securely mounted with **metal attachments**. All flooded cell batteries must be fully enclosed including the sides and bottom. Enclosure must be able to contain the quantity of acid contained in the battery if inverted. Gel filled batteries or dry cell batteries are recommended and do not require full enclosures. **Batteries mounted in the drivers compartment must be covered and may not be liquid filled.** 

#### **UTV-14 SAFETY LIGHTS:**

# ALL 4 REAR FACING SAFETY LIGHTS MUST BE WIRED TO THE BATTERY SWITCH. NO OTHER SWITCHES MAY BE IN LINE TO THE SAFETY LIGHTS

All UTVs must have a minimum of two taillights, two brake lights. All UTVs must have 4 rear facing safety lights. The 4 required rear facing safety lights are; 1 steady amber, 1 flashing amber, 1 blue light steady. All 3 of these safety lights must be LED, a minimum of 2000 lumens and 4 bulbs. THE 4th MANDATORY REAR SAFETY LIGHT IS A SPEC BLUE STROBE LIGHT. THIS SPEC BLUE LIGHT MUST BE PURCHASED DIRECTLY FROM KC HILITES 928-635-2607. THIS LIGHT MUST BE MOUNTED AS HIGH UP ON THE CAGE AS POSSIBLE AT A MINIMUM OF 48" AND REAR FACING.

The amber flashing and blue strobe is an attempt to identify the UTV class vehicle, so that faster vehicles will be able to recognize that they are approaching a slower vehicle. Safety lights must be approved by the BITD UTV Tech Inspector.

BITD rules state that all safety lights must be working at all times, if a light fails to work it must be fixed at the next pit stop, or the vehicle may continue.

NOTE--The blue light should only be used during an official race. Blue flashing lights may be illegal in some state.

All lights must be in operating condition at tech inspection. All rearward-facing lights (taillights, brake lights, blue light, and amber lights) must be in operating condition before the vehicle will be permitted to start the race. All rearward-facing lights must be protected against damage in the event of a rollover. Tail lights/brake lights must be at least 3 inches in diameter, or be approved by Best In The Desert Racing. They must be mounted in such a manner as to be clearly visible from the rear of the vehicle. Rearward facing amber lights and blue lights must be approved by the BITD UTV Tech Inspector. 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 lights and blue lights must be mounted a minimum of 48 inches from the ground and must be clearly visible, with no obstructions. The amber lights and blue light must remain on during the entire race.

#### **UTV-15 ENGINE LOCATION AND DISPLACEMENT:**

Maximum engine displacement is 1000cc. Engine size will may checked Motorcycle, snowmobile and UTV engines are allowed. All engine components are open. No auto engines.

#### **UTV-15FD FUEL DELIVERY:**

Fuel delivery is open.

#### **UTV-16 FLUID COOLERS:**

Oil coolers, transmission coolers and radiators located ahead of the driver or in the drivers compartment **must** have a shroud that will prevent liquids from blowing back or leaking onto the driver and/or co-driver in the event of a rupture or leakage. All hoses running through the passenger compartment must be shielded. Steel braided hoses do not constitute a shield.

#### **UTV-17 FUEL CELLS:**

Safety fuel cells are required for all vehicles. Auxiliary fuel tanks may be added in all classes except those classes whose class rules do not allow auxiliary fuel tanks. Auxiliary fuel tanks must be safety fuel cells. Alternative fuels (i.e. propane or natural gas) must use an approved. Alternative fueled vehicles may not use auxiliary fuel cells. All fuel tanks must be securely mounted. Fuel tank must be filled from and vented to the outside of the vehicle. There must be a substantial cross member and firewall between the fuel tank and the occupants. No GI-cans or fuel containers similar in construction or purpose will be permitted in or on any vehicle during the race. Use of GI-cans or other fuel containers will subject entrant to a time penalty or disqualification. Safety fuel cells shall consist of a bladder enclosed in a smooth skinned container. The container shall be constructed of 20ga. Steel or .060-inch aluminum. Magnesium is strictly prohibited. Container must be securely attached to vehicles with bolts or steel straps. All fittings must be built into the skin and bonded to the 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. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer. Rotary molded polymer cells are acceptable. The physical properties minimum standards are in accordance with Table 1.

# Table 1 Test Type Minimum Standard Test Specification

Tensile Strength 450 lbs. Spec CCC-T-1916 Method 5102

Tear Strength 50 lbs. Spec CC-T-1916 Method 5134

Puncture Test 175 lbs. Spec MIL-T-6396 Article 4.5.17

These physical properties must be maintained throughout all areas of the finished bladder including seams, joints and fittings.

#### **UTV-17A FUEL FILLER NECK:**

Fuel filler must be located as far away from the exhaust and engine as possible. If the filler neck is on the same side as the exhaust, it must be a minimum distance of 12" forward from the exhaust. Fuel filler must be completely separated from the driver's compartment. Splash guards between the engine and or exhaust are highly recommended. If the filler neck is mounted near the driver or navigator, a splash guard is required to prevent fuel from splashing on the driver or navigator. If standard hose clamps are used, two clamp must be used at each connection. If "T-Bolt" (turbo style) clamps are used only one clamp is required at each connection. T-Bolt hose clamps are highly recommended.

#### **UTV-17B FUEL CELL VENT LINES**

The 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 inches below the fuel cell, whichever is lower. OPTIONAL PLACEMENT: Where the vent line attaches to the fuel cell there must be a loop above the fuel cell that extends 6" higher than the top of the fuel cell. Then be wrapped one full loop around the outside of the fuel cell near the top of the fuel cell and then 3" below the lowest point of the fuel cell. The breather line must be vented outside of driver's compartment and be directed away from the engine and exhaust system.

#### **UTV-18 FIREWALLS:**

All vehicles must have an aluminum or metal firewall separating the driver's compartment from the danger of fire from fuel supplies. Rear mounted fuel cells require a minimum firewall which must be liquid tight and must extend at least 4 inches above the top of the fuel cell, covering from side to side. Any fuel cell placed in the driver compartment must have a fire wall that covers the fuel cell, filler neck and fuel lines and completely separates them from the driver's

compartment. Any hole placed in the firewall for structure members, lines, etc. must be kept to a minimum. The hole should not have more than 0.0625- inch gap around the items passing through the firewall. Metallic tape may be used to seal a hole between the firewall and the item passing through the firewall. Engine firewall must be metal or aluminum, no plastic firewalls.

#### **UTV-19 FUEL FILLER SPLASH GUARD:**

The intent of the splash guard is to keep fuel from being splashed on the driver, passenger, exhaust and engine when the UTV is being refueled. Splash guards must surround the fuel filling area in such a way that it provides protection from fuel spilling onto the driver, passenger, exhaust and engine when inserting and removing the fuel filler jug.

# UTV-20 CHASSIS (FRAME), BODY AND ROOF:

Chassis/frame is open. All joints must be welded and attached to frame securely.

**BODY**; Body is open.

**ROOF;** The roof must be covered with sheet metal or aluminum. Minimum thickness recommended is .060

# **UTV-21 DOORS, WINDOW SAFETY NETS:**

Door area must have "X", "A", "V" or Ladder design bracing and all tubing must be a minimum 1.5"x .095" 4130 chrome moly or 1018/1012 CDS/DOM. Doors that latch and/or open and close are not allowed. Door area must be completely covered with aluminum. Minimum thickness recommended is .060.

# NETS;

# NOTE THAT STARTING IN 2019 ALL WINDOW NETS ARE REQUIRED

TO BE SFI RATED. Safety nets are mandatory on all vehicles and must cover the complete open area of the cockpit on both sides of the vehicle. The maximum gap allowed between the net and the roll cage tube is 3". Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in the event of a roll over or slide on the side. Nets must be installed so that the occupants can release the netting unassisted and exit the vehicle regardless of the position of the vehicle. Net installation must meet with the approval of the BITD UTV technical inspector. The net border or edge and the net attachment must be made of materials that are as strong or stronger than the net itself. Net attachments

must be a minimum of every 6 inches. Acceptable attachments are not limited to the following: hose clamps, snaps, heavy-duty nylon ties, lift-a-dot, metal hooks and steel rods. Steel rods are acceptable methods of bottom fastening. **Best In The Desert Racing Association** requires that occupants of all vehicles must be protected during a roll over in such a manner that prevents them from extending from the body or frame of vehicle.

#### **UTV-22 SIREN:**

All UTV's are required to have a **SIREN** that is **LOUD.** All sirens must be approved by the BITD UTV tech inspector.

#### **UTV-22A BREAK DOWN SAFETY DEVICES:**

All UTV's must have a minimum of one red reflective device must be carried in the vehicle. Reflective devices must be at least 12 inches high and 12 inches long and be free standing (similar to trucker's breakdown triangles). When racing at night, one battery-operated red flashing beacons and two large glow sticks are required. **Best In The Desert Racing Association** is concerned about race areas; thus, flares will not be permitted as a breakdown device. Official **Best In The Desert Racing Association** stuck stubs are supplied to each entrant at registration. The stuck stub must be kept with the vehicle along with a writing instrument. If a break down or out-of-race condition occurs, the stuck stub must be completed and given to another race vehicle to pass on to a race official.

#### **UTV-23 SEATING:**

All UTVs must have 2 seats. All vehicles must use seats designed specifically for racing applications manufactured by a recognized racing seat manufacturer. Stock seats must be completely removed. A recognized manufacturer that specializes in seats for racing applications must make all seats. All seats must be securely mounted to frame of vehicle and be properly reinforced in such a manner as to keep seat from moving in relationship to the frame. Adjustable track type seats must be securely mounted as to allow no lateral or vertical movement. Head and neck restraints designed and installed to prevent whiplash are mandatory on all vehicles. Restraints must be a headrest constructed of at least 2-inch thick resilient padding and be approximately 36 square inches in area. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded.

#### **UTV-24 TRANSMISSION/GEAR BOX:**

Transmission, gearbox and differentials are open.

#### **UTV-25 ROLL CAGE MATERIAL:**

All vehicles in competition are recommended to be equipped with a roll cage based on seamless mild steel or 4130 chrome moly steel tubing. Roll cage material may be; crew, dom, whr, wcr mild carbon steel or 4130 chrome moly. BITD HIGHLY RECOMMENDS THE USE OF 4130 CROMOLY. All welds must be of high quality and craftsmanship with good penetration and with no undercutting of parent material.

### **UTV 26 ROLLCAGE TUBING SIZE:**

Minimum Tubing Dimension;

UTV weight under 2000lbs OD 1.5" x ID .095"

UTV weight 2001 lbs to 2500 lbs OD 1.5" x ID .120" or OD 1.75" x ID .095"

UTV weight 2501 lbs to 3000 lbs OD 1.75" x ID .095"

For the purpose of determining tubing size, the UTV weight is a "dry" weight. Dry weight is race UTV without fuel, spare tires, tools and drivers.

No aluminum or nonferrous materials are allowed to be used in the construction of the roll cage. Minimum tubing material dimension requirements for roll cages apply to this list of required tubes; front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bar. This means that the front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind drivers head, lower rear interconnecting bar must be all made with a minimum 1.5"x.095 if your UTV weights 2000lbs or less and 1.5"x.120 if over 2000lbs.

#### **UTV-27 ROLL CAGE DESIGN:**

Best in the Desert Racing Association believes that it is each competitor's responsibility to present a safe vehicle for pre-race tech inspection. All competitors must maintain your safety equipment including the roll cage integrity. No changes to the recommended minimum construction specification with respect to diameter or wall thickness are anticipated at this time. As in the past, Best In The Desert

Racing Association reserves the right to not allow any safety cage design that in the view of the tech inspector, is not fit for competition. You, as the competitor, are ultimately responsible for your own vehicle's safety features with respect to the design, quality of execution, maintenance and repair of the roll cage structure. All roll cages must be designed and constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one or more diagonal brace, behind the drivers head and all necessary gussets. Front and rear cross over tubes must be gusseted to the side tube. The two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop. All roll cage components (hoops, braces, gussets, etc.) must have a minimum of 3-inch clearance from the component to the vehicle occupant's helmets when occupants are seated in their normal riding positions. All portions of the roll bar or bracing that might come into contact with the vehicle occupant's helmets must be padded. Roll cages must be securely mounted to the frame or body. All intersecting points must be gusseted and braced. Cab or body mounted roll cages must be bolted through the body structure and be attached by use of a minimum two 0.1875-inch thick plates (one on each side of body structure). Bolts and nuts must be at least 0.375-inch-diameter s.a.e. Grade 8 or equivalent aircraft quality. Welding of cab or body mounted roll cages to body structure is strictly prohibited. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1.5 inches of movement in the cage terminal end. Gussets constructed of 0.125-inch x 3-inch x 3-inch 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. Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety Oxy-acetylene brazing on roll cage is strictly forbidden. 4130 chrome-moly is highly recommended for all roll cage construction. BITD reserves the right to weight any vehicle at any time and check the wall thickness of the tubing used to build the roll cage. Vehicle weight will be kept private if requested by the competitor.

#### **UTV-28 BUMPERS:**

All UTV race vehicles must have rear bumper secured to frame using minimum 1.5" outside diameter, .083" wall thickness. Front and rear bumpers must sick out a minimum of 2" past the tires, front to back. This is to prevent tires from touching when nerfing. Bumper ends must be made in such a way as to avoid any sharp edges. Bumpers and nerf bars must be designed in a way as to reasonably inhibit two vehicles from becoming locked together. A safe front and rear bumper is required on all vehicles. No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from vehicles are permitted.

### **UTV-29 IDENTIFICATION NUMBERS, MARKERS, AND STICKERS:**

All vehicles in competition must display the official Best in the Desert Racing Association decal on both sides of the vehicle. All vehicles in competition must have identification numbers in the following locations and sizes: Minimum 8" tall with 1"-wide stroke on each **side** of vehicle in line with the occupants. Minimum 6" tall with 1"-wide stroke on the **rear** of vehicle and is plainly visible from the rear. Minimum 4" tall located on the **front** of vehicle or roof and is plainly visible from the front of the vehicle. All vehicles in competition must be identified with the correct class vehicle numbers and be displayed in the proper locations as described herein. Best In The Desert Racing Association assigns vehicle numbers. Call BITD to get a race number. ALL SPORTSMAN UTV CLASS VEHICLES MUST HAVE BLACK NUMBERS AND A YELLOW BACKROUND.

Numbers must be easy to see and read at race speeds. Number color and background must be approved by the BITD UTV tech inspector. <u>ALL NUMBERS MUST BE EASY TO READ. IF THEY ARE NOT, YOU WILL BE REQUIRED TO CHANGE THEM.</u>

#### **UTV-30 PIT-SUPPORT VEHICLES:**

All pit-support vehicles will have minimum 4-inch high white numbers (number of vehicle pitting for) on both sides of vehicle on side windows, on upper passenger side corner of front windshield and on rear window. Some of the BITD races require pit support vehicles to have a Best In The Desert Racing Association pit pass on the dash, in the front windshield of the driver side. These pit passes are handed out at the race.

IMPORTANT: All rules are tentative and may be changed or updated as the BITD season progresses in accordance with the UTV classes. Please contact

the BITD UTV class Tech Inspector Cory Sappington at 602-769-6164 or email at deserttoyz@hotmail.com with any questions or for more information on these rules. Please check the web site www.utvracing.org for updates throughout the 2019 season.

Thank you for racing with Best in the Desert.







# **RALLY SPORTSMAN UTV**

The Rally Sportsman UTV can only race at 3 of the BITD races.

Parker 250, UTV World Championships, and Laughlin Desert Classic. The Rally Sportsman class is designed for racers to participate in BITD without building a full race UTV. **NOTE: This is not a separate Sportsman class**.

The Rally Sportsman UTV class vehicles are built using production Turbo or NA UTV's, manufactured by registered companies, i.e. Polaris, Can-Am, Artic Cat, Yamaha, that issues Vin #'s. Companies must produce a minimum number of 1000 units of that exact model and configuration prior to being allowed to participate in this class, at any Best In the Desert Sanctioned Event.

Please call Cory Sappington 602-769-6164 with questions.

This class is a stock production class and all components must remain stock except for those modifications permitted herein. All stock manufacturer delivered components on the vehicle must be retained unless specifically allowed to be removed and documented herein.

Manufacturer's body, engine, transmission, drive train, chassis combination and seat configuration must be retained.

6 Point Aftermarket Roll-Cage. (No stock roll cages allowed) Polaris RS1 exempt

Aftermarket suspension allowed but must utilize factory pivot points.

Maximum tire size is 32x10.5x15. Tire must have manufacture size on tire and say 32". No multiple tires per corner permitted. For 2019 Tire size will remain as is, however in 2020 tire size will be increased to a 33x12.5x15.

Front and rear bumpers are required

Side Panels / Doors Required (Doors must be secured to prevent from popping open)

Window Nets Required and Roof Panel Required

One 2.5lb Fire Extinguisher Mounted On UTV w/ Quick Release.

5- Point Seat Belts Required 2" or 3" Wide Belts OK, 3" Preferred

One Piece Fire-Suit Required SFI.A5

Helmet w/ DOT or Snell Decal. Eye Protection Must Be Shatter Resistant.

Gloves and Neck Brace Are Required.

Numbers On Both Sides Of Vehicle. Minimum 8" Tall Numbers, Yellow Background w/ Black Numbers (Refer To BITD Entry Form For # Assignment) Background w/ Black Numbers (Refer To BITD Entry Form For # Assignment)

Two 10lbs or one 20lbs Fire Extinguisher In Your Pit. Must Be Near Vehicle During Fueling. Fuel Mat Required when fueling at a Pit Stop.

OEM stock fuel tanks or fuel cells are allowed.

KC HiLites spec blue strobe light Rear facing, is required and must be wired to the key switch. This light must be mounted as high up on the cage as possible. You must purchase this light directly from KC HiLites. Call 928-635-2607 to buy this light.



# PRE-RACE UTV TECHNICAL INSPECTION FORM

Event			Date		
Vehicle #			Radio Frequency Manufacture/Color		
Driver of Record				Co-Driver	
Pas	s	Fail	Warning	ltem	
0		0	0	Driver of Record at Race and Arm Band	
0		0	0	Driver Suits SFI 3.2A/5 Minimum (No Holes, Rips or Worm Thin)	
0		0	0	Helmets SNELL 2005 or Newer D Ring Chin Strap Type	
0		0	0	Head and Neck Restraint	
0		0	0	Front and Rear Bumpers 2" Past Tires	
0		0	0	2 Fire Extinguishers, Gauge Type Only, Fully Charged and Maintained, 2.5 ABC	
0		0	0	First Aid Kit, Water, Survival Supplies, Breakdown Triangle. NO FLARES!	
0		0	0	Horn (Loud Siren Type)	
0		0	0	Safety Lights Tail, Brake, Amber, Flashing Amber, Blue Solid, Blue Spec, Clearly Visible, LED 2000 Lumen, Wired to Battery Switch	
0		0	0	Rear View Mirror	
0		0	0	Fuel Cell, Bladder, Flapper Vent, Straps, Firewall 4" Above Cell, Splash Guard on Filler, Filler Clamps, Vent Line Routing	
0		0	0	OEM Rear Fenders Body Panels Tow strap	
0		0	0	Pit Crew Fueling Safety Gear Fueling mat	
0		0	0	1000 CC - Engine Seal # Turbo Seal #	
0		0	0	Exhaust (Spark Arrester or Muffler, Exit Past Cab)	
0		0	0	Roll Cage Design (Diagonal Brace, Gussets, Front-Rear Bumper, Etc)	
0		0	0	3" "H" Style 5 Point Harnesses, 3 Year Old Max, Month and Year Must be Tagged, Clips Must be Cotter Pinned, No Tears or Frays	
0		0	0	Safety Nets (Covers Full Side Opening)	
0		0	0	Identification Numbers ( 4" Front 8" Sides 6" Rear) Best In The Desert Sticker on Both Sides	
0		0	0	Wheel Base +8" Track Width 80"	
0		0	0	Battery Bolted Down/In Cab Covered	
0		0	0	Radio Frequency Posted Race Tracker	
0		0	0	Wheels Stamped 1/4" Stamp Close To Valve Stem Outside of wheel	
0		0	0	Stock Frame Rails and Suspension Mounting Points	
0		0	0	Transponder Number	

# BESTIME DESERT RACING ASSOCIATION















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Best In The Desert