

UTV PRO STOCK

MAX ENGINE:

OEM STOCK 1000cc ENGINE MAX
NATURALLY ASPIRATED AND FORCED INDUCTION

*NOTE ALL GENERAL AND SAFETY RULES MUST BE FOLLOWED.

General and Safety Rules:

- 1. Mandatory Compliance: All participants must adhere to general and safety rules.
- 2. **Safety Tracking System**: UTV vehicles are required to use a safety tracking system provided by **RacingTrax** (contact: 801-836-5198) for all races.

UTV Tech Inspection:

- 1. **Inspection Requirement**: Each UTV race vehicle must undergo a tech inspection before every official race.
- 2. **Pre-approval**: UTVs must be pre-approved prior to their first event.
- 3. **Safety Standards**: All vehicles must meet safety requirements as determined by the UTV Tech Inspector.

General Regulations:

- 1. **Compliance with Rules**: Participants must follow all class-specific and general regulations as outlined.
- 2. **Conflict Resolution**: In cases where general rules conflict with specific class rules, the rules under the class take precedence.
- 3. **Eligibility Clause**: Vehicles not complying with the "spirit of the class" may be disqualified from racing, earning points, receiving trophies, prize funds, or contingency.

Contact:

Participants should reach out to the UTV Tech Inspector for clarifications or questions regarding compliance and safety requirements



The **UTV Pro Stock** is a competition category with specific requirements for vehicles, ensuring they are based on production all-wheel-drive UTVs (Utility Terrain Vehicles). Here's a breakdown of the key rules and specifications:

Vehicle Eligibility:

- Production UTVs: Must be manufactured by registered companies (e.g., Yamaha, Polaris, Can-Am, Kawasaki, Speed, Arctic Cat, Honda, etc.) that issue VIN numbers.
- Minimum Production Requirement: Companies must produce at least 1,000 units of the exact model and configuration to qualify.
- Seating: Only 2-seat UTVs are allowed. Single-seat vehicles are not permitted.

Engine and Electronics:

- Engine Specifications:
 - o Must use **OEM engines**.
 - o Maximum engine size is **1000cc**.
- ECM Rules:
 - OEM engine electronics are required.
 - o ECMs may be **flashed**, but **aftermarket ECMs** are not allowed.

Drivetrain:

• Clutch System: Only CVT clutches with belt drive are permitted.

Body and Structure:

- Plastic OEM Body Modifications:
 - Plastic in the **bed interior** may be removed.
 - The door area must be covered with aluminum.

Competition Details:

- The class offers a **point's championship**, a **championship fund**, and an **individual** race purse.
- Drivers must be at least **14 years old** by the event date to compete.
- There is no age restriction for co-drivers



Key Rules for Modifications

1. Suspension Arms:

- o Aftermarket arms allowed if they're direct bolt-in.
- o Ball joints can be replaced; UNI balls and adjustable rod ends are allowed.
- o Arms can extend to the widest size offered by the manufacturer.

2. Tie Rods:

o Can be replaced; rod ends are allowed.

3. Steering Racks:

o Replaceable, but only with direct bolt-in units.

4. Radius Rods:

o Can be replaced; adjustable rod ends allowed.

5. Sway Bar Links:

o Replaceable with direct bolt-in options.

6. Clutch Kits:

o Aftermarket direct bolt-in kits permitted.

7. Shocks:

o Must mount in the OEM location; manufacturer is open.

8. Air Filtration:

o Filters in OEM air boxes may be replaced, and the air box design is open.

9. Exhaust Systems:

o Mufflers are open to modification.

10. Steering Components:

Steering wheels are open to customization.

11. Seating:

Race seats are allowed.

12. Wheels and Tires:

- Max tire size: 33x10.5.
- Wheel offsets must comply with track width rules.

13. Electronics:

o Radios, gauges, and lights are open to customization.

14. Charging System:

o No aftermarket alternators; only OEM charging units allowed.

15. Battery Placement and Size:

o Relocation allowed, but must comply with battery rules; size is unrestricted.

16. **Axles:**

Open design, but CVs must fit OEM stub axles.

17. Cooling Systems:

o Radiators and fluid coolers are open to modification.



UTV-1 PENALTIES:

This rule establishes the authority and discretion of the Race Director to oversee compliance and enforce penalties in UTV racing events. Here's a breakdown of its key points:

1. Discretion of the Race Director:

- The Race Director has sole authority to issue penalties for rule violations, specifically for cheating.
- The maximum penalty includes disqualification from the race and a one-race suspension.

2. Inspection and Compliance Measures:

- Race officials may mark, tag, or seal parts of the race UTV for compliance tracking.
- Officials have the authority to confiscate engines for inspection at any time to ensure class compliance.

3. Inspection Fees:

o A fee might be required to conduct the inspection process.

4. Enforcement of Penalties:

 Only the Race Director is authorized to enforce penalties, maintaining centralized control over disciplinary actions.

This framework ensures fair competition while providing officials with tools to maintain rule compliance and integrity in the race.

UTV-2 OCCUPANTS:

- 1. Vehicles must only have two seats.
- 2. Both a driver and a co-driver must be present in the vehicle for the entire race.

UTV-3 DRIVER'S MEETING:

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

UTV-4 RADIO & COMMUNICATIONS:

These requirements ensure communication standardization and safety during races.

- 1. **Mandatory VHF Radio**: Every race vehicle must be equipped with a VHF-type radio.
- 2. **Posting Team Frequency**: UTV race vehicles must display their team-specific radio frequency on the passenger side roof area of their vehicle's interior.
- 3. Official Race Frequency: All radios must include the official race frequency, 151.490.
- 4. **Team-Specific Frequency**: Race teams are required to provide their unique radio frequency details.



UTV-5 SUSPENSION:

Stock Design and Location:

- All suspension and mounting points must remain in their original design and location as delivered by the vehicle manufacturer.
- These points can be reinforced for strength, but no alterations such as moving, adding, or removing mounts are allowed.

Aftermarket Arms and Ball Joints:

- The use of aftermarket suspension arms is permitted.
- Ball joints can be replaced with UNI ball systems.

Track Width Update:

- Vehicles may be updated to match the manufacturer's widest OEM-delivered width.
- For example, a UTV designed with a 64" track width can be updated to a 72" width if the manufacturer offers a version with this width.
- However, the width must not exceed the OEM manufacturer's maximum width.

UTV-6 OVERALL MEASUREMENT RESTRICTIONS:

Maximum Width:

- The maximum width is **78 inches**, measured from the outer edge of one tire to the outer edge of the other tire at ride height.
- Width can be checked at any time.

Wheelbase:

- The wheelbase can be modified by up to ±3 inches from the stock dimensions.
- Modifications must be achieved through the suspension.

Frame Restrictions:

- Frames cannot be cut, lengthened, or shortened.
- The frame must remain complete from the top of the doors down.
- Frames can be **gusseted** (reinforced for strength), but **no material can be removed**.

UTV-7 SHOCK ABSORBERS:

Coil-Over Shock Absorber Requirement:

- Each wheel must have one functional coil-over shock absorber at the start of the race.
- No more, no less—ensuring consistent and legal suspension configurations for all participants.



Mounting Points:

- The lower mounting points for the shock absorber:
- Can be relocated and reinforced as needed.
- Must remain attached to the original equipment manufacturer (OEM) control arm.

Valving and Spring Rates:

• Teams have the freedom to choose or modify the valving and spring rates according to their performance needs.

UTV-8 BUMP STOPS:

Any suspension bump stop is allowed. Must only be mounted to one arm (slapper style only).

UTV-9 TORSION SYSTEM:

Must be coil over shock

UTV-10 TIRES:

Maximum Size:

- The largest tire allowed is **33x10.5**.
- Tires must have the **manufacturer's size** marked, indicating **33 inches**.

Measurement Standard:

- Tires will be measured at 20 pounds of pressure (PSI).
- A tolerance of ±½ inch is allowed on the actual tire size during measurement.

Compliance Requirement:

• At least 3 out of 4 tires on the vehicle must conform to the ±½ inch size tolerance.

Tire Configuration:

• **No multiple tires** per corner of the vehicle are allowed.

UTV-11 WHEELS:

• All wheels must be stamped or engraved on the outside, within 3" of the valve stem, with the race vehicle number; this includes spares. The minimum stamp size of the number is ¼".

UTV-12 STEERING:

Power steering is permitted, as are turning or steering brakes. All Aftermarket parts must be direct bolt-ins and interchangeable with stock parts.



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. The 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 driver's compartment must be covered and may not be liquid-filled.**

UTV-14 SAFETY LIGHTS:

Safety light requirements for UTVs for rear-facing safety lights

- Minimum Light Requirements:
 - Two Red Tail Lights.
 - Two Red Brake Lights.
 - One Rear-Facing Amber Steady LED Light.
 - One Rear-Facing Amber Flashing LED Light.
- Brightness:
 - The amber flashing light must have a minimum of 2000 lumens.
- Wiring:
 - All safety lights must be connected directly to the required battery switch.
 - No additional switches for the safety lights are allowed in the circuit (only connection plugs).
- Approval:
 - All safety lights must be inspected and approved by a **UTV Tech Inspector**.

All four rear-facing safety lights must be directly connected to the battery switch and that no additional switches are allowed between the battery switch and the safety lights.

This configuration ensures that the safety lights are always functional when the battery switch is engaged.

All lights must be in operating condition at tech inspection.

UTV-15 ENGINE LOCATION AND DISPLACEMENT:

Engine Displacement Limits:

- Maximum displacement is 1000cc.
- This is a hard limit on the physical volume of the engine's cylinders.

Measurements:

• Engine size will be inspected, so competitors should be prepared for officials to physically measure the bore, stroke, and other parameters to confirm compliance.



OEM Block and Cylinder Heads:

 The engine's bore (diameter of the cylinders) and stroke (distance the piston travels) must match the Original Equipment Manufacturer (OEM) specifications.
 This ensures no customizations or modifications that might increase engine displacement or performance.

OEM Stock Engine and Turbo

Only engines and turbochargers in their original, unaltered OEM form are allowed.
 No modifications to these components are permitted, ensuring a level playing field.

UTV-15FD FUEL DELIVERY:

MUST BE COMPLETELY STOCK AS DELIVERED.

UTV-16 FLUID COOLERS:

Location Open

UTV-17 FUEL CELLS:

Safety Fuel Cells: Recommended for all vehicles.

OEM Fuel Systems: OEM stock tanks in stock locations with stock pumps and filling hoses are permissible.

Maximum Size- 20 gallons

Auxiliary Fuel Tanks:

- Allowed in most classes unless explicitly prohibited.
- Must be gravity transfer only.
- Prohibited for vehicles using alternative fuels like propane or natural gas.

Safety Requirements:

- Mounting:
 - All fuel tanks must be securely mounted and separated from vehicle occupants by a cross-member and firewall.
 - o Tanks must be filled and vented externally.

Prohibited Containers:

 GI cans or similar fuel containers are not allowed. Use results in penalties or disqualification.



Fuel Cell Construction:

• Bladder and Container:

- Bladders must be enclosed in smooth-skinned containers.
- o Containers constructed from 20-gauge steel or .060-inch aluminum.
- Magnesium containers are strictly prohibited.
- Containers secured with bolts or steel straps.

Fittings:

o Must be integrally built into or sealed mechanically to the tank skin.

• Internal Baffling:

o Required for all fuel cells.

Bladder Material:

o Nylon or Dacron woven fabric impregnated with fuel-resistant elastomer.

Rotary-Molded Polymer Cells:

Acceptable if they meet physical property standards.

Physical Properties (Table 1 Minimum Standards):

- Tensile Strength: 450 lbs. (Spec CCC-T-1916, Method 5102)
- Tear Strength: 50 lbs. (Spec CC-T-1916, Method 5134)
- Puncture Resistance: 175 lbs. (Spec MIL-T-6396, Article 4.5.17)

UTV-17A FUEL FILLER NECK:

Location of Fuel Filler:

- Must be positioned as far as possible from the exhaust and engine.
- If placed on the same side as the exhaust, the fuel filler must be at least 12 inches forward of the exhaust.

Compartment Separation:

• The fuel filler must be completely isolated from the driver's compartment to ensure safety.

Splash Guards:

- A splash guard with a minimum height of 3 inches is mandatory.
- Its purpose is to prevent fuel from splashing onto the driver or navigator.

Clamping Requirements:

• T-Bolt (turbo-style) clamps: Only one clamp is required per connection.

^{*}The use of T-Bolt hose clamps is mandatory.



UTV-17B FUEL CELL VENT LINES

Primary Routing:

- The vent line should extend from the fuel cell to the highest point of the roll cage that is nearest to the fuel cell.
- It should then run across the width of the vehicle.
- The vent line must travel down to either:
 - Below the belly pan of the vehicle.
 - Or 3 inches below the fuel cell, whichever is lower.

Optional Placement:

- If the vent line attaches directly to the fuel cell, there must be a loop above the fuel cell.
- This loop should extend 6 inches higher than the top of the fuel cell.
- The loop should then be wrapped around the outside of the fuel cell, near the top, and then travel downward to 3 inches below the lowest point of the fuel cell.

Ventilation Requirements:

- The vent line must exit the vehicle's driver compartment.
- It must be directed away from the engine and exhaust system to prevent any risk of fire or explosion.

UTV-18 FIREWALLS:

Material Requirements

• The firewall must be made of aluminum or metal.

Rear-Mounted Fuel Cells:

• The firewall must be liquid-tight and extend at least 4 inches above the top of the fuel cell, covering it completely from side to side.

In-Cab Fuel Cells

• The firewall must cover the fuel cell, filler neck, and fuel line, ensuring complete separation from the driver's compartment.

Hole Restrictions

• Any holes in the firewall for structural members, lines, etc., must be minimal, with a gap no greater than 0.0625 inches around items passing through.

Sealing Holes

 Metallic tape can be used to seal any gaps around items passing through the firewall.



Engine Firewall

• The firewall between the driver and engine must be made of metal or aluminum, or complete OEM plastic tubs may be used.

Bulkhead Firewall

• For vehicles with in-cab fuel cells, the bulkhead firewall should be aligned with the driver's shoulder.

UTV-19 FUEL FILLER SPLASH GUARD:

As outlined, the splash guard prevents fuel from splashing onto critical areas such as the driver, passenger, exhaust, and engine during the refueling process. To ensure adequate protection, the splash guard must fully surround the fuel filling area and extend at least 3 inches. This helps contain any fuel that may spill during the insertion or removal of the fuel filler jug, safeguarding both the vehicle's components and its occupants.

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

Chassis Pivot Points

- **Stock Chassis Definition:** Includes all original welded tubing and brackets from the top of the door and bed downward.
- Damage and Repairs:
 - Approval from the UTV Tech Inspector is mandatory for any damaged chassis repairs.
 - All modifications or repairs require prior approval from the race official tech inspector.

Permitted Modifications:

- Reinforcements for durability and strength are allowed but cannot alter the stock width, length, configuration, or design.
- Use of OEM UTV roll cages is prohibited.
- o All joint attachments must be securely fastened to the frame

Body Requirements:

- Plastic Body: Must remain OEM (Original Equipment Manufacturer).
 - Minimal notching for bumpers and roll cage installation is acceptable.
 - o This includes adjustments to the dash and interior tub.

Roof Specifications:

- The roof must be covered with sheet metal or aluminum.
- The recommended minimum thickness is 0.060 inches.



UTV-21 DOORS, WINDOW SAFETY NETS:

Door Area Design:

• Must feature either an "X," "A," or "V" ladder design or a Rally-style torso and thigh protection bars.

Operable Doors:

- Doors may be operable, provided they have bracing to prevent injury in the event of a side impact.
- Alternatively, the doors can be hinged with interconnecting tubes.

Slide Bolt:

- The door must have a slide bolt of at least 1.5 inches by .095 inches with a minimum overlap of 4 inches.
- The bolt should be spring-loaded with a locking indent.

Tubing:

• The bracing and tubing must have a minimum size of 1.5 inches by .095 inches.

Leg and Torso Protection:

• The lower leg and torso must be fully covered with aluminum, with a minimum recommended thickness of 0.060 inches.

SFI-Rated Nets:

• All window nets must be SFI-rated.

Net Coverage:

• Nets must cover the complete open area of the cockpit on both sides of the vehicle.

Net Installation:

- The maximum gap between the net and the roll cage tube must be 3 inches.
- Nets must be installed on the inside of the roll cage to prevent damage or detachment during a rollover or slide.

Exit Requirements:

 Occupants must be able to release the net and exit the vehicle unassisted, regardless of the vehicle's position.

Net Attachments:

- Net attachment points must be strong enough, and the net's border or edge must be made of material as strong or stronger than the net.
- Attachments should be made at least every 6 inches. Unacceptable attachment methods include hose clamps, snaps, heavy-duty nylon ties, lift-a-dot, and metal hooks.
- Steel rods are acceptable for bottom fastening.

Best In The Desert Racing Association requires that all vehicles' occupants be protected during a rollover to prevent them from extending from the body or frame of the vehicle.



UTV-22 SIREN:

All UTVs are required to have a **LOUD SIREN.** The UTV tech inspector must approve all sirens.

UTV-22A BREAK DOWN SAFETY DEVICES:

All UTVs must carry at least one red reflective device. The device must be free-standing and at least 12 inches high and 12 inches long (similar to trucker's breakdown triangles).

One battery-operated red flashing beacon and two large glow sticks are required when racing at night.

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 and a writing instrument must be kept with the vehicle. If a breakdown 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 seats must be securely mounted to the frame of the vehicle and be properly reinforced in such a manner as to keep the seat from moving in relation to the frame. Adjustable track-type seats must be securely mounted 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- inchthick resilient padding and be approximately 36 square inches in area. All roll bar or bracing portions that might come into contact with the vehicle occupant's helmets must be padded.

UTV-24 TRANSMISSION/GEARBOX:

Stock OEM Transmission Cases:

• The vehicle's transmission must retain its original equipment manufacturer (OEM) casing. No aftermarket or modified transmission casings are permitted.

Clutch Requirements:

- The clutch itself must be an OEM unit.
- Modifications to clutch spring rates are allowed, giving flexibility for performance tuning.



Functional Reverse Gear:

• The transmission system must have a working reverse gear, ensuring the vehicle can move backward as required.

Differential Rules:

- Both the front and rear differentials must remain stock as supplied by the vehicle's manufacturer.
- Aftermarket or modified differentials are not allowed.

UTV-25 ROLL CAGE MATERIAL:

All vehicles in the 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 cromoly. 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 ROLL CAGE TUBING SIZE:

Minimum Tubing Dimension.

UTV weight = > 2000lbs OD 1.5" x ID .095"

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

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

For the purpose of determining tubing size, the UTV weight is a "**WET**" weight. Wet weight is race UTV with full fuel, spare tires, tools, and drivers.

UTV-27 ROLL CAGE DESIGN:

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 "A" Pilar, vertical tube at front of door area "B" pilar, rear vertical hoop "C" Pilar, Torso and Thigh bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind driver's head, lower rear interconnecting bar. The front windshield area is not to have open space larger than 30", so all 2-seat cars must run an intrusion bar. It may consist of 2-1"x .095 tubes or a single tube to match the rest of the roll cage.

This means that the front vertical hoop, rear vertical hoop, upper door bars, door bracing, top interconnecting bars, rear down braces, diagonal bracing behind the driver's head, and 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-28 BUMPERS:

All UTV race vehicles must have the rear bumper secured to the frame using a minimum 1.5" outside diameter and .095" wall thickness. The front must pick out a minimum of 2" past the tires. Rear bumpers must stick past a minimum of 4" past the tire and must be between 30" and 40" from the ground. This is a bump area to prevent tire-to-tire contact. Front bumpers should be built to match that height requirement. Bumper ends must be made in such a way as to avoid any sharp edges.

Bumpers and Nerf bars must be designed to reasonably inhibit two vehicles from becoming locked together. All vehicles must have safe front and rear bumpers. Hazardous front or rear bumpers, Nerf bars, frame heads, or other protruding objects are not permitted.

UTV-29 IDENTIFICATION NUMBERS, MARKERS, AND STICKERS:

UTV Pro: S1 – S999 Green Background; White Numbers

Decal Requirement:

• All vehicles must display the official Best In The Desert Racing Association decal on both sides of the vehicle.

Vehicle Identification Numbers:

Numbers must be placed in specific locations with the required sizes:

Side Numbers:

• Minimum 8 inches tall with a 1-inch-wide stroke, displayed on each side of the vehicle in line with the occupants.

Rear Numbers:

Minimum 6 inches tall with a 1-inch-wide stroke, visible from the rear.

Front or Roof Numbers:

Minimum 4 inches tall, visible from the front of the vehicle.

Visibility:

Numbers must be clearly visible and easy to read at race speeds.

Color and Background:

The number color and background must be approved by the UTV tech inspector.
 For Pro UTV class vehicles, the specified color numbers and backgrounds must be used.



Approval Process:

• Vehicle numbers are assigned by the Best In The Desert Racing Association. Participants must contact them to get a race number.

Changes:

• If the numbers are not easy to read, the vehicle will be required to change them.

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 a minimum of 4-inch-high white numbers (number of vehicles pitting for) on both sides of the vehicle on side windows, on the upper passenger side corner of the front windshield, and on the rear window. Some of the 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's side. These pit passes are handed out at the race.

UTV-31 Brakes:

Brakes are open

For Questions:

Email: <u>utvtech@bitd.com</u>

Allen Rudd: BITD UTV Liaison

(775) 870-5143