BEST IN THE DESERT

PRO TURBO UTV

PRO TURBO UTV OEM STOCK 1000CC TURBO ENGINE

PLEASE NOTE ALL GENERAL AND SAFETY RULES MUST BE FOLLOWED.

All UTV vehicles must use a safety tracking system from www.racingtrax.com at 801-836-5198 at all races.

UTV Tech Inspection: Tech inspection is required at each official race for all UTV race vehicles. All UTVs must be pre-approved before racing in their first event. All UTV race vehicles must pass all safety requirements and be approved by the UTV Tech Inspector.

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.

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 UTV tech inspector with any questions.

UTV TURBO PRODUCTION CLASS ENGINE MUST BE ALL OEM STOCK.

<u>Pro Turbo Production UTV Class Definition</u>: The Pro Turbo production class vehicles are built using production Turbo UTVs or approved aftermarket turbo or supercharger kits. Manufactured by registered companies, i.e., Polaris, Can-Am, Artic Cat, Yamaha, that issue Vin #s.

Companies must produce a minimum number of 500 units of that exact model and configuration prior to being allowed to participate in this class at any Race officially Sanctioned Event.

- UTVs must have a minimum of 2 seats.
- OEM engines must be used. Maximum engine size is 1000cc.
- All OEM engine electronics must be used.
- ECM /ECU may be flashed. No aftermarket ECM/ECU are allowed.
- Must use the 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.
- The minimum age for drivers in any UTV Pro class is 14 years old; they must be 14 by the date of the event. The co-driver age is not restricted.
- UTV Pro Turbo production class max width is 80", measured outside of tire to outside of tire at ride height. The wheelbase must not exceed 8" over the stock dimension and can only be achieved with the suspension. Frames cannot be shortened or lengthened.



UTV-1 PENALTIES:

At the discretion of the Race Director, any UTV race team caught breaking these rules "cheating" may receive a maximum penalty of Disqualification for the race and a 1 race suspension. Race officials have the right to mark, tag, or seal any part of a race UTV. Race officials have the right to confiscate any engine at any time for the purpose of class compliance inspection. A fee may be required for the inspection. **ONLY THE RACE DIRECTOR CAN ISSUE A PENALTY.**

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 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.** Race official Frequency is 151.490. The official race frequency is required on every radio. All race teams are required to provide team-specific radio frequency information.

UTV-5 SUSPENSION:

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

UTV-6 OVERALL MEASUREMENT RESTRICTIONS:

The max width is 80" and is measured from the outside of the tire to the outside of the tire at ride height. Width may be checked at any time. The 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 strengthened but must remain on as delivered OEM arm. Upper shock mounts are open.

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 35x10.5. The tire must have the manufactured size on the tire and say 35". Tires will be checked at 20lbs of pressure with +/- 1/2" allowed 3 of the 4 tires on the car must be within the +/- 1/2" rule. No multiple tires per corner are permitted.

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 4".

UTV-12 STEERING:

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

All Aftermarket parts must be a direct bolt-in 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. Enclosure must be able to contain the quantity of acid contained in the battery if inverted. Gelfilled 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.**

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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

UTVs ARE REQUIRED A MINIMUM OF 2 REAR FACING SAFETY LIGHTS. THEY MUST BE WIRED TO THE REQUIRED BATTERY SWITCH. NO OTHER SWITCHES MAY BE IN LINE WITH THE SAFETY LIGHTS (CONNECTION PLUGS All UTVs must have a minimum of 2 red tail lights, 2 red brake lights, 1 rear facing Amber steady LED & 1 Amber flashing with a minimum of 2000 lumens and no less than Safety lights must be approved by the UTV Tech Inspector. <u>rules state that all safety lights</u> 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 not continue.

All lights must be in operating condition at tech inspection. All rearward-facing lights (taillights, brake lights, and amber lights) must be operating before the vehicle can 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 Race official Racing. They must be mounted in such a manner as to be clearly visible from the rear of the vehicle.

Rearward-facing amber lights must be approved by the UTV Tech Inspector. The amber lens must be deep-coated amber in color (no other color is permitted). The amber lights must be mounted at least 48 inches from the ground and clearly visible, with no obstructions. The amber lights must remain on during the entire race.

UTV-15 ENGINE LOCATION AND DISPLACEMENT:

Maximum engine displacement is 1000cc.

PRO TURBO PRODUCTION ENGINE COMPLIANCE;

Pro Production Turbo engines and turbochargers may not be modified and must be OEM stock as produced by the factory. This includes the intake manifold and exhaust to the turbo. 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 allowed to reflash your OEM FACTORY ECU/ECM.

NO AFTERMARKET ECU/ECMS

All engine and engine parts must remain stock OEM Dimensions as delivered from the factory. Aftermarket internal engine parts are allowed but must be OEM sizes and weight. The engine must remain exactly as delivered from the factory and available to any consumer. No porting, polishing, balancing, or any other changes or modifications. Head studs Open.

Air cleaners, fuel injectors, header pipes, exhaust pipes, mufflers, and clutch can be changed and or modified.

Turbochargers must be OEM stock. No modifications or changes are allowed.

Engine displacement may be checked by the UTV tech inspector at any time, and he 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.

Protests: see SGP1: -

ENGINE: 1500.00 Protest of the engine must be filed within 1hr of race finish and must be filed by the driver of record entered in the same class.

If the protest is proven valid, the fee will be returned to the claimer and DQ of guilty and a 5000.00 fine.

If the protest is proven invalid, a fee will be given to the protest party.

The stock gearbox cases must be used; the internals in the gearbox 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 ILLEGAL AFTER-MARKT PARTS, THE RACER COULD RECEIVE A PENALTY UP TO DISQUALIFICATION, SUSPENSION AND OR FINES. ONLY THE RACE DIRECTOR CAN ISSUE A PENALTY.

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



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

BLOWOFF VALVES Are open.

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

<u>SPECIAL NOTE</u>: An aftermarket tube may replace the air tube on the Polaris RZR turbo that connects the turbo to the throttle body. This tube also holds the blowoff valve.

INNER COOLERS Aftermarket OEM dimension cooler is allowed. Turbo-charged engines that use air-to-air inner coolers must use the OEM stock dimension 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 in stock dimensions. No other inner cooler can be used or added.

FUEL CONTROLLERS 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.

TV-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 advised for all vehicles but can use OEM stock tank in stock location and with stock fuel pump and filling hose.

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 gravity transfer only. 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. The fuel tank must be filled from and vented to the outside of the vehicle. A substantial cross-member and firewall must exist 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 the 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 20 ga. 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 a 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 are required a minimum of 3" a splash



guard is required to prevent fuel from splashing on the driver or navigator. Two clamps must be used at each connection if standard hose clamps are used. If "T-Bolt" (turbo style) clamps are used, only one clamp is required at each connection. T-Bolt hose clamps are mandatory.

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 the 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 firewall that covers the fuel cell, filler neck, and fuel line and completely separates them from the driver's compartment. Any holes placed in the firewall for structure members, lines, etc., must be kept to a minimum. The hole should not have more than a 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, Complete OEM plastic Tubs accepted.

The Bulkhead firewall separating the driver from the engine compartment must be even with the driver's shoulder on vehicles with in-cab fuel cells.

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. Minimum of 3"

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

The OEM stock PIVOT POINTS must be MAINTAINED. The stock chassis (frame) may be added to for durability and strength, but must retain the stock width, length, configuration, and design.

Materials can be replaced. OEM UTV roll cages **cannot** be used. All joints must be attached to the frame securely.

BODY: The OEM hood and grill area may be modified for bumpers, and front and rear fenders must be used. All body parts must remain on the vehicle during the entire length of the race (accidental damage excluded). Body materials open.

ROOF: The roof must be covered with sheet metal or aluminum. The minimum thickness recommended is .060 Or Carbon Kevlar fiber pre-oven cured only.

UTV-21 DOORS, WINDOW SAFETY NETS:

The door area must have an "X," "A," or "V" Ladder design or a Rally-style torso and thigh protection bars. Doors may also be operable provided there is above bracing to prevent injury in the case of a side impact, or the doors may be hinged with the interconnecting tubes. They need to have a slide bolt 1.5 "by .095 with a minimum overlap of 4", plus the bolt must be spring-loaded with a locking indent. bracing, and all tubing must be a minimum of 1.5"x .095".

The door's lower leg and torso must be completely covered with aluminum. The minimum thickness recommended is. 060.Doors

NETS;

NOTE 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 rollover 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 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. NON-Acceptable attachments are not limited to the following: hose clamps, snaps, heavy-duty nylon ties, lift-a-dot, and metal hooks.

Steel rods are acceptable methods of 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 **SIREN** that is **LOUD.** All sirens must be approved by the UTV tech inspector.

UTV-22A BREAK DOWN SAFETY DEVICES:

All UTVs 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). 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-inch-thick 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 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 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 chrome moly. 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 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 "**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 in a way to reasonably inhibit two vehicles from becoming locked together. A safe front and rear bumper are 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: PRO UTV TURBO- T1 – T999 White background with black numbers

All vehicles in competition must display the official Race 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 the vehicle in line with the occupants. Minimum 6" tall with 1"-wide stroke on the rear of the vehicle and is plainly visible from the rear.

Minimum 4" tall, located on the front of the 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 to get a race number. Numbers must be easy to see and read at race speeds. The number color and background must be approved by the UTV tech inspector. All Pro UTV class vehicles must have their specified color numbers and color backgrounds. 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:

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