

"THE AMERICAN OFF-ROAD RACING SERIES" CAR / TRUCK RULES

NEW ADVENTURES IN OFF-ROAD RACING

Best In The Desert (BITD) / **The American Off-Road Racing Series (AORRS)** 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, 2021** these rules and regulations will govern all **BITD/AORRS** events. All **BITD** 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. **BITD/AORRS** rules and/or regulations are the sole property of **BITD**.

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

Notes:

- 1) **BITD** reserves the right to change the Rulebook as deemed necessary. These changes may occur at the beginning of each year, or throughout the year.
- 2) Currently the BITD Rule book is in the process of a full-revision. Over the next year, BITD will create One (1) "BITD Rule Book" comprised of 5 Sections:
 - **1.***General Rules* BITD will eventually eliminate all "General Rules" in the previous four (4) rule books. The 2021 version of the "General Rule Book" will supersede all other general rules unless the rule was missed, i.e., something in MC not being added to general rules.
 - 2. Youth Rules Have been revised to the BITD format, and updated for 2021
 - 3. *Motorcycle and Quad* No changes at this time. As noted above, the new "General Rule Book" will apply.
 - 4. *UTV* Many changes have been made
 - Added/New classes
 - Revision and clarifications to existing classes
 - ***Please read the "General Rule Book" carefully.
 - ALL UTV CLASSES will have until 2022 to fully comply with the "BITD General Rule Book"

5.Car and Truck

• There have many clarifications to class rules, no major changes, most have been previously known.

1. The following classes have minor clarifications - 1000, 6100, 6200 and 7100

CAR / TRUCK RULE BOOK

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CLASS 1700, 27000, 3700 AND 4700 – JEEPSPEED RULE BOOK - WWW.BITD.COM	
CLASS 4400 ULTRA 4 / KING OF THE HAMMERS (KOH) – WWW.ULTRA4RACING.CO	<u>M</u>
CLASS 6000 R-6 TROPHYLITE RULE BOOK - <u>HTTP://TROPHYLITE.COM/</u>	

CLASS 6800 R-8 TROPHYLITE RULE BOOK - HTTP://TROPHYLITE.COM/





























CLASS 1000

OPEN-WHEEL UNLIMITED SUSPENSION LIMITED ENGINE

One or two seat open-wheeled cars, no fenders.

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

This is an open class and all components will be considered open unless otherwise stated within these class rules.

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.

SAFETY EQUIPMENT

SCR1: HELMETS SCR2: PROTECTIVE CLOTHING SCR3: EYE PROTECTION SCR4: HEAD AND NECK RESTRAINTS SCR5: FIRST AID KIT SCR6: BREAKDOWN SAFETY DEVICES SCR7: HORNS SCR8: REFLECTORS SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

SCR11: SHOCK ABSORBERS & BUMP STOPS SCR12: SECONDARY SUSPENSION SCR13: WHEELS & TIRES SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES Steering or turning brakes permitted.

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required. SCR23: FUEL FILLER VENTS AND CAPS

ENGINE TRANSMISSION AND DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Any engine may be used providing:

- A. It is a design that has been series produced in quantities of 5000 units or more and is readily available to the general public in the U.S.A.
- B. It did not displace more than 2400 cc in the stock form.
- C. It retains a maximum of four valves per cylinder.
- D. It is not a rotary-piston engine.
- E. It does not displace more than the following:

Special Note: There will be no modifications allowed to stock production engines. Custom Oil Pan or After-Market Oil Pans are allowed and Aftermarket Harmonic balancers are allowed

Water-cooled engines		
Single-seat	1800cc – 8 valve	Single two-barrel carburetor
Single-seat	1750cc – 16 valve	Single two-barrel carburetor or stock fuel injection with max throttle body of 58.5cm
Two-seat	1900cc – 8 valve	Single two-barrel carburetor
Two-seat	1850cc – 16 valve	Single two-barrel carburetor or stock fuel injection with max throttle body of 58.5cm
Air-cooled engines		
Single-seat	2200cc – four-cylinder push rod	May utilize 2 carburetors or stock fuel injection
Two-seat	2400cc – four-cylinder push rod	May utilize 2 carburetors or stock fuel injection
Stock Prod. Engines		
Single-seat or Two-seat	2.2, or 2.4 liter, GM Eco-Tech engine sealed by Turnkey Engine Supply	Must use stock multi-port or Direct fuel injection with any manufacture ignition system. This excludes forced induction.
Single-seat	2.0 liter, 16 Valve, Ford	Must use stock Ford direct
or	Engine I4-DI-TIVCT	injection with Ford
Two-seat	Sealed by Turnkey Engine Supply	manufactured ignition, when available mid-2011.

**For the Class 1000, all engines must be sealed by one of the approved BITD engine sealing/tagging company listed below:

Turnkey Engine at <u>www.turnkeyenginesupply.com</u> – 760-966-2663. Wik's Racing Engines – 3265 Birtcher dr. LV, NV 89118 - 702-837-2522 DanZio Performance - <u>http://www.danzioperformance.com</u> – 951-245-2537 CBM / Chris Bland – 725 S. La Cadena Dr Colton, Ca 92324 - 909-291-7550 Redline Performance – 1380 North Lakeview Av Anaheim, Ca 92708 – 714-777-5758

F. Single and two-seat vehicles may use carburetors providing:

- 1. It retains a maximum of two ventures per carburetor.
- 2. Maximum allowable venturi size is 42mm.
- 3. Carburetor(s) must be of the production automotive type.

- G. Fuel injection is stock production with the following restrictions:
 - 1. Intake manifold will remain as delivered by the manufacturer. It must retain it's stock shape, size, and configuration. No porting or other modifications. Ports may be matched to the heads, but matching may not exceed .250" (1/4 inch) deep. Manifold must be the unit that was installed and delivered on the engine by the original manufacturer. Only U.S.A. delivery fuel injection is permitted. Manifold must be installed and sold on production vehicles for street use in the U.S.A. and be readily available to the general public.
 - 2. Throttle body must be production (OEM) type readily available to the general public in the U.S.A.

SCR25: ENGINE REPLACEMENT SCR26: TRANSMISSION SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT SCR39: DOORS & LATCHES SCR40: FIREWALLS SCR41: BALLAST SCR42: WEIGHT SCR43: FLOORBOARDS SCR43: FLOORBOARDS SCR44: BUMPERS SCR45: MIRRORS SCR46: SKID PLATES SCR46: SKID PLATES SCR47: STORAGE SCR48: FENDERS SCR49: CHASSIS & BODY SCR50: HOSES SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: ADVERTISING ON VEHICLES SCR53: WORKMANSHIP SCR54: RADIO EQUIPMENT

CLASS 1100

(CLASS 10 LIGHTS) OPEN WHEEL – BEAM SUSPENSION AIR COOLED ENGINE & FORD PRODUCTION 2-LITER 16 VALVE ENGINE dohc i-4 WATER COOLED

One or two seat open-wheeled cars, no fenders, and limited to air-cooled engines and twin beam suspension with trailing arms.

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

This is an open class and all components will be considered open unless otherwise stated within these class rules.

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.

SAFETY EQUIPMENT

- SCR1: HELMETS
- SCR2: PROTECTIVE CLOTHING
- **SCR3:** EYE PROTECTION
- SCR4: HEAD AND NECK RESTRAINTS
- SCR5: FIRST AID KIT
- **SCR6: BREAKDOWN SAFETY DEVICES**
- SCR7: HORNS
- **SCR8: Reflectors**
- **SCR9:** FIRE EXTINGUISHER
- **SCR10: SURVIVAL SUPPLIES**

SUSPENSION COMPONENTS

Front Suspension

Front suspension is limited to VW type 1 configuration only. Suspension must be of the twin beam with trailing arm type only.

Beam is open including the width and manufacturer.

Trailing arms are open including the width and manufacturer.

Spindles are open.

SCR11: SHOCK ABSORBERS & BUMP STOPS

SCR12: SECONDARY SUSPENSION

SCR13: WHEELS & TIRES

SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES Steering or turning brakes permitted.

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required.

SCR23: FUEL FILLER VENTS AND CAPS

ENGINE TRANSMISSION AND DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Engine must be a VW type 1 and adhere to the following:

- 1) It retains a maximum of two (2) valves per cylinder.
- 2) Single seat vehicles are limited to a maximum of 1776cc.
- 3) Two seat vehicles are limited to a maximum of 1835cc.
- 4) All vehicles are limited to one (1) carburetor. Any make of carburetor may be used with the following provisions.
 - a) Limited to a maximum of two (2) venturis.
 - b) Maximum allowable venturi size is 42mm.
 - c) Must be of the production automotive type.

-OR-

Ford production 2.0 liter 16 V DOHC I-4 also, when available mid-2011

Single-seat	2.0 liter, 16 Valve, Ford Engine I4-DI-	Must use stock Ford direct injection
or	TIVCT	with Ford manufactured ignition.
Two-seat	Sealed by Turnkey Engine Supply	

This is a rear engine class only and is defined as the engine must be located behind the rear axle centerline.

CLASS 1100 ENGINE OPTION

Engine must be a Type 1 VW Displacement: Single Seat vehicles do not displace more than 2110cc Two Seat vehicles do not displace more than 2276cc Any Bore/Stroke Combination Allowed Carburetors & Manifolds: Individual runner manifolds only, no balance tube. 1 ³/₄" maximum runner size. No Plenum manifolds allowed. OE End Castings only allowed. Any modifications allowed. All vehicles limited to 1 carburetor Weber 441DF & EMPI HPMX 44 carburetor only allowed Maximum venture size is 34mm Piston: Open Crankshaft: Open Compression Ratio: Maximum compression ratio limited to 9.0:1

Cylinder Heads:

Any manufacture cylinder heads. Titanium retainers are allowed. Any valve size and manufacture allowed. Any valve spring size and manufacture allowed.

Camshaft and Rocker Arms:

Only 1.1:1 & 1.25.1 rocker arms allowed. No roller tip rockers allowed. Any rocker shaft manufacture allowed.

Any camshaft and lifter manufacture allowed.

Any timing gears allowed.

Aftermarket VW Type fan shrouds allowed. Dry Sump, deep sump, and accusump systems allowed. Ignition: Any ignition system allowed.

SCR25: ENGINE REPLACEMENT SCR26: TRANSMISSION Transmission type is open.

SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT SCR39: DOORS & LATCHES SCR40: FIREWALLS SCR41: BALLAST SCR42: WEIGHT Minimum weight is 1500lbs for all vehicles.

SCR43: FLOORBOARDS SCR44: BUMPERS SCR45: MIRRORS SCR46: SKID PLATES SCR47: STORAGE SCR47: STORAGE SCR48: FENDERS SCR49: CHASSIS & BODY SCR50: HOSES SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: Advertising on vehicles SCR53: Workmanship SCR54: Radio equipment

CLASS 1200 FACTORY STOCK

CLASS "FACTORY STOCK" PRODUCTION FULL-SIZED TRUCK & SUV

Current model Vehicles from a two or four-wheel drive full-sized pickup or SUV. Current model Vehicles must have been built as new Vehicle in the last 5 years. Vehicles must be series produced of at least 4000 units within a 36-month period. There must be a minimum of 4000 series vehicles sold to the general public in the U.S.A. within a 36-month period. Vehicles must be marketed as a full-size half ton vehicle. A minimum bed size length of four (4) feet is required to be considered a full-size pickup truck.

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

Manufacturer's body, engine, transmission, drive train, and chassis combinations must be retained. 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. Parts offered for sale from the same OE manufacturer, with an OE part number, for the same model, as dealer installed accessories, over the counter accessories, or performance parts are considered original equipment.

SAFETY EQUIPMENT

SCR1: HELMETS SCR2: PROTECTIVE CLOTHING SCR3: EYE PROTECTION SCR4: HEAD AND NECK RESTRAINTS SCR5: FIRST AID KIT SCR6: BREAKDOWN SAFETY DEVICES SCR7: HORNS SCR8: REFLECTORS SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

Front and rear suspensions must be original manufacturer design as delivered from the factory and must remain in original stock locations. All bushings and movable pivots must remain stock as delivered from the manufacturer. Stock mounting methods retained. Shocks may be of any manufacturer but must maintain original stock mounting method and location. Stock pivot points must be retained. A-arms, I-beams, and front axles must remain stock as delivered from the factory. Parts must retain stock dimensions, material, and configuration as delivered from the manufacturer. Front and rear springs must remain in stock locations and retain original stock concept (leaf, coil, and torsion). Spring rates and capacities are open. Rubber bushings may be replaced with urethane bushings. Stock sway bars may be removed.

SCR11: SHOCK ABSORBERS & BUMP STOPS

Shock absorbers must retain OE mounts. Shock configuration, manufacturer and tuning are open

SCR12: SECONDARY SUSPENSION

Parts offered for sale from the same OE manufacturer, with an OE part number, for the same model, as dealer installed accessories, over the counter accessories, or performance parts are considered original equipment.

SCR13: WHEELS & TIRES

Aftermarket wheel studs are permitted. Any Tire and wheel may be used but tires must be a maximum of 37" tall tire.

SCR14: FASTENERS

No exotic materials may be used for any fasteners. Only conventional hardware comparable to what is equipped from the manufacturer for that stock vehicle. Bolts may be replaced with grade 8 or equivalent steel standard aftermarket hardware as required.

STEERING & BRAKE COMPONENTS

SCR15: STEERING

Steering box or rack and pinion must remain stock as produced by the manufacturer.

Any power steering pump may be used in the approximate stock location.

Steering parts (tie rods, tie rod ends, idler arms, pitman arms, relay rods, and turning arms) must remain manufacturer's original stock equipment.

Any manufacturer steering wheel may be used. Steering wheel location must remain stock. Collapsible Steering column shaft may be replaced.

Steering Wheel airbags may be disabled or removed.

SCR16: BRAKES

Turning or steering brakes are not permitted.

Brakes must remain stock as delivered by the manufacturer. Antilock or proportioning valves may be removed or replaced. Brake pads are open.

Brake soft lines may be replaced with stainless steel braided lines and fittings.

ELECTRICAL SYSTEM

SCR17: IGNITION

Ignition must remain stock as delivered from the manufacturer. Stock electronics systems must be maintained as delivered from the manufacturer. "PCM" calibrations may be modified. Additional wiring may be added for added components required to compete (i.e. race radio, intercom, lights, parker pumpers, GPS units)

SCR18: BATTERIES:

Batteries may be relocated. If stock battery mount is used it is mandatory that the base and tie down be reinforced for safety reasons.

SCR19: LIGHTS

Original manufacturer light must be used in the stock headlight openings. Rearward facing yellow light and blue lights are mandatory. Aftermarket additional lights may be added

Stock tail / brake lights must be retained and functioning at all times

SCR20: STARTER FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required. Fuel cell must be mounted in bed Fuel Cell may hold a maximum of 50 gallons in size.

SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Any engine may be used providing that it is listed by the vehicle manufacturer as standard equipment or an option for that model of vehicle in that particular year of production. Engine and all components must remain stock as delivered from the Manufacturer. Stock block, heads, intake, and all engine components as delivered by the manufacturer must be used and may not be modified. All internal parts are open. The upper intake of the factory fuel injection cannot be modified. Water and vapor injection is not permitted. Dry sump systems are not permitted. Radiator must remain in stock location.

Engine must be located in the stock mounting location as delivered from the manufacturer and use stock engine mounts.

Air cleaners may not protrude through the hood.

Any make and type of exhaust is permitted.

Emissions equipment may be removed.

Dry sumps are not permitted. External oil coolers are permitted.

SCR25: ENGINE REPLACEMENT

SCR26: TRANSMISSION

Any transmission may be used providing it is produced by the vehicle manufacturer and offered as a stock component for that make, year, and model of vehicle. Any shifter may be used.

DIFFERENTIAL

Manufacturer's differential must be utilized for the same year make and model of vehicle. Gear ratios, Gear carriers, and are open and any combination may be used in the stock unmodified housings. Original stock manufacturer's axles must be used and must remain stock and unmodified. Original stock manufacturer's floating hubs are permitted if equipped is from manufacturer. Front and Rear straight axle differentials only may have material added for strengthening purposes only. Non-straight axle differentials (traction beam, etc) may not have material added for strengthening but may use a skid plate to protect the front pumpkin only. The skid plate must be a bolted-on type only and may not reinforce the differential in any way

Knock-off hubs are not permitted.

SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS

Radiators must remain in the factory stock location. Aftermarket oil and transmission coolers are permitted.

SCR32: AUXILIARY EQUIPMENT

SCR33: SUPERCHARGERS & TURBOCHARGERS

Only stock as delivered engines offered from the manufacturer will be permitted to utilize any form of forced induction. All components of the engine and forced induction system must remain stock and unmodified. All factory delivered turbo chargers and or intercoolers must remain stock as delivered by the manufacturer for that year, make, and model vehicle. No modifications allowed to air connection tubes or air cleaner connections. No removing of any components of the intake system if the vehicle comes from the factory with forced induction systems.

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS

SCR37: SEATING

Any manufacturer's racing seat may be used but must remain in the stock location. Additional seat bracing is mandatory.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT

Dash and all related components must remain in vehicle and must be stock as delivered. Holes may be cut to allow roll cage clearance but must be kept to a minimum. Stock Radio / sound system, Heater, Air conditioning systems may be removed. It is highly recommended that flammable items such as upholstered panels, headliners and carpets be removed.

Pedal assemblies must remain stock as delivered and remain in stock side to side and fore and aft locations.

SCR39: DOORS & LATCHES

Doors must operate on stock hinges and latches in stock location. Positive latching secondary door latches are required.

SCR40: FIREWALLS

Firewalls must remain stock, complete, and in original location. Holes left in stock firewall must be covered with metal of the same thickness or greater. Holes may be placed for the routing of fluid lines, electrical, and roll cage but must have the absolute Minimum of material removed for such.

SCR41: BALLAST

SCR42: WEIGHT Vehicle must weigh the original stock factory delivery weight minimum. SCR43: FLOORBOARDS SCR44: BUMPERS Bumpers may be modified. Stock bumpers not required.

Modification must meet with **BITD** approval.

SCR45: MIRRORS

SCR46: SKID PLATES

Skid plates, skid plate brackets and braces must not be attached to any suspension component or pivot point in any fashion that would reinforce that component or pivot point. SCR47: STORAGE

SCR48: FENDERS

Wheel openings in fenders may be enlarged a maximum of 2 inches for tire clearance. Front fenders, rear fenders or bedsides must remain factory stock materials. Aftermarket fender flares may be added. Flares and wheel openings must meet with **BITD** approval. Fenders must retain stock appearance and location. Plastic inner fender panels may be removed.

SCR49: CHASSIS & BODY

Manufacturer's specified year chassis and body combinations must be retained.

CHASSIS

Original wheelbase must be maintained. Lengthening or narrowing of frame is not permitted. Removal of material is not permitted. Frames may not be altered in any way. No addition of material to the frame is permitted for strengthening purposes.

Chassis control systems such as ABS, stability control, and traction control may be disabled. Modified calibration of these systems is allowed.

BODY

A maximum of a 1.5-inch body-lift may be utilized.

Body must maintain the original shape, size, configuration, and appearance as delivered from manufacturer. Mounting location (vertical, horizontal, and lateral) must remain original stock in relationship to the frame. Stock body mounts may be replaced so long as stock location and height is maintained. The measurement from the front spindle centerline to the back of the b-pillar post must remain stock.

Pickup bed floors must remain intact except to support fuel cell, spare tires, tools, safety equipment or other safety / support bolt in items.

Original stock frame configuration must be retained. Lengthening or narrowing of frame is not permitted. Removal of material is not permitted. Damaged areas of the frame may be plated with the same thickness of metal as that of the original frame thickness (i.e. 0.25-inch thick frame = 0.25-inch thick plate). The plate area may only be as large as required to cover the damaged area and to allow for the welding of the plate to a non-damaged area of the frame.

All repairs must meet with the approval of **BITD**. Photographic evidence of the damaged frame may / will be required for approval of repair work.

Hoods, trunk lids, doors, fenders, and bedsides must be original factory stock as delivered by manufacturer and must be in its original stock locations. Tailgates are optional. Stock front grill assemblies are required.

Stock front headlight assemblies are required.

Safety glass windshields, rear and side glass is optional.

The frame at the location of the rear bump stop directly over the differential may be reinforced. The reinforcement must be centered along the centerline of the bump stop. Installation must meet with **BITD** approval.

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS

Sanctioning body will assign vehicle numbers.

SCR52: ADVERTISING ON VEHICLES SCR53: WORKMANSHIP SCR54: RADIO EQUIPMENT

CLASS TRICK TRUCK

UNLIMITED TRUCKS/SUV'S

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

This is an open class and all components will be considered open unless it states otherwise with these class rules.

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.

SAFETY EQUIPMENT

- SCR1: HELMETS
- SCR2: PROTECTIVE CLOTHING
- **SCR3:** EYE PROTECTION
- SCR4: HEAD AND NECK RESTRAINTS
- SCR5: FIRST AID KIT
- **SCR6: BREAKDOWN SAFETY DEVICES**
- SCR7: HORNS
- SCR8: REFLECTORS
- SCR9: FIRE EXTINGUISHER
- SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

SCR11: SHOCK ABSORBERS & BUMP STOPS SCR12: SECONDARY SUSPENSION SCR13: WHEELS & TIRES SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES Steering or turning brakes are permitted.

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required. SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT SCR25: ENGINE REPLACEMENT SCR26: TRANSMISSION SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING Maximum of three (3) seats may be used but must meet with BITD APPROVAL.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENTSCR39: DOORS & LATCHESSCR40: FIREWALLSSCR41: BALLASTSCR42: WEIGHTSCR43: FLOORBOARDSSCR44: BUMPERSSCR45: MIRRORSSCR45: MIRRORSSCR46: SKID PLATESSCR47: STORAGESCR48: FENDERSVehicle must have fenders. No open wheeled vehicles permitted.SCR49: CHASSIS & BODY
Body must resemble a truck or SUV.

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: Advertising on vehicles

SCR53: WORKMANSHIP

SCR54: RADIO EQUIPMENT

CLASS 1500 OPEN-WHEELED VEHICLES UNLIMITED SINGLE & TWO-SEAT VEHICLES

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations. If vehicle has been entered in Class 1400 Trick Truck it cannot be entered in Class 1500 Unlimited vehicle.

COMPETITION REGULATIONS

This is an open class and all components will be considered open unless it states otherwise within these class rules.

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.

SAFETY EQUIPMENT

- SCR1: HELMETS
- **SCR2: PROTECTIVE CLOTHING**
- SCR3: EYE PROTECTION
- SCR4: HEAD AND NECK RESTRAINTS
- SCR5: FIRST AID KIT
- SCR6: BREAKDOWN SAFETY DEVICES
- SCR7: HORNS
- SCR8: REFLECTORS
- **SCR9:** FIRE EXTINGUISHER
- **SCR10: SURVIVAL SUPPLIES**

SUSPENSION COMPONENTS

SCR11: SHOCK ABSORBERS & BUMP STOPS SCR12: SECONDARY SUSPENSION SCR13: WHEELS & TIRES SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES Steering or turning brakes are permitted.

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required.

SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT SCR25: ENGINE REPLACEMENT SCR26: TRANSMISSION SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS ARE PERMITTED, SEE SCR33, PG 27.

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT SCR39: DOORS & LATCHES SCR40: FIREWALLS SCR41: BALLAST SCR42: WEIGHT SCR43: FLOORBOARDS SCR44: BUMPERS SCR45: MIRRORS SCR46: SKID PLATES SCR46: SKID PLATES SCR47: STORAGE SCR48: FENDERS, NOT ALLOWED SCR49: CHASSIS & BODY SCR50: HOSES SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: Advertising on vehicles SCR53: Workmanship SCR54: Radio equipment

CLASS 2000

Open-wheel restricted suspension 1600CC Single & two-seat cars limited to 1600CC VW engine & VW type-1 suspension system

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations

COMPETITION REGULATIONS

This is a restricted rear engine, open wheeled class. Components will be open unless otherwise stated within these class rules.

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.

SAFETY EQUIPMENT

SCR1: HELMETS SCR2: PROTECTIVE CLOTHING SCR3: EYE PROTECTION SCR4: HEAD AND NECK RESTRAINTS SCR5: FIRST AID KIT SCR6: BREAKDOWN SAFETY DEVICES SCR7: HORNS SCR8: REFLECTORS SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

FRONT SUSPENSION

Front suspension is based on the VW type-1 ball joint or king and link pin style suspension. Any beam of two steel torsion tubes may be used but must retain stock width. Front axle torsion tube centers may be cut, rotated and welded. Use of torsion adjusters is optional. Any manufacturer torsion bars are permitted. Tube center spacing is open. Front trailing-arms may be reinforced or replaced as long as stock VW width and length is retained. Spindles, link pins, ball joints and shock mounting locations are open. Front suspension track width must not exceed stock VW track width. Suspension limiters are permitted.

Front Suspension: Front suspension track width must not exceed 55 $\frac{3}{4}$ inches as measured from wheel mount face to wheel mount face.

REAR SUSPENSION

Rear suspension is based on VW type-1 IRS or swing-axle. Rear trailing arms may be of any manufacturer. Tubular arms are permitted as long as stock VW IRS swing-arm length is retained plus or minus 1-inch. The stock VW dimension between the centerline of the rear axle to the centerline of the rear torsion housing is 16.25 inches plus or minus 1-inch must be retained. Outboard bus reduction gears are permitted. Any axle assemblies are permitted as long as original VW type suspension is retained. Rear torsion tubes may be supported or replaced but must remain steel and retain stock VW width. Torsion adjusters are permitted. A single torsion per wheel of any manufacturer is permitted. Torsion bars must remain inside the torsion housing. Torsion bars must be connected to the trailing arm with steel spring plates of any manufacture. Rear suspension track width must not exceed a maximum of 58.25 inches as

measured wheel mounting face to wheel mounting face. CV joint mounting face to CV joint mounting face must not exceed 47.38 inches, as measured at the ride height. The entire outer CV joint must remain inboard of the trailing arm inner bearing.

SCR11: SHOCK ABSORBERS & BUMP STOPS

The number of shocks and the sizes of the shocks are open. Cooling fins are permitted. Air or coil-over shocks are not permitted.

SCR12: SECONDARY SUSPENSION

Secondary suspension is not permitted.

SCR13: WHEELS & TIRES

Any tire and wheel combination is permitted that will mount directly on VW drums. Wheel adapters are not permitted.

SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING

Steering system is open. Any tie rod and tie rod end permitted.

SCR16: BRAKES

May use any combination of drum or disc brakes. Steering or turning brakes are permitted.

ELECTRICAL SYSTEM

SCR17: IGNITION

Battery ignition only. No magnetos permitted. Any distributor may be used. Any VW-type alternator or generator in the stock location may be used. Six- or 12-volt system may be used.

SCR18: BATTERIES

SCR19: LIGHTS

Rearward facing blue light is mandatory

SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required.

SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Engine must utilize VW series type-1, 1600cc; us model sedan components and dimensions. The maximum allowable engine displacement is 1600cc as factory delivered.

ENGINE CASE

Any VW type-1, 2, 3 or universal case is permitted. The following stock case modifications are permitted:

A. May be lined bored.

- B. May be drilled and tapped for oil and temp sending units.
- C. May be machined for crank pulley seal.
- D. Installation of case savers.

- E. Cylinder seating surface may be machined.
- F. Oil galleries may be enlarged to 10mm
- G. Threaded oil gallery plugs permitted.

OIL PUMP

Any oil pump is permitted. Deep sumps, dry sumps or sump alterations are not permitted. Windage trays are permitted. Any oil bypass piston and spring permitted.

FUEL PUMP

Any combination of stock fuel pump or electric pump may be used. Any fuel filter and pressure regulator may be used.

PISTONS

Stock 3 ring pistons only. Any piston and cylinder as long as original stock dimensions are maintained. Any type wrist pin keepers. Piston assemblies may be balanced to the weight in grams of the lightest original non-balanced piston assembly.

CRANKSHAFT

Stock VW crankshaft only. Crankshaft may be balanced. Maximum journal size is limited to thirty thousandths undersize. No polishing or lightening. Any gear is permitted. Any engine bearing is permitted as long as stock dimensions are maintained. Power pulleys are permitted. Pulley may be balanced. Sand seals are permitted. Any VW flywheel may be lightened and balanced. No aluminum flywheels. Any clutch disk and pressure plate but must retain stock VW diameter. Connecting rods may be balanced to the lightest non-balanced rod. No polishing or profiling of rods. Eight dowel flywheels are permitted with any gland nut and washer.

HEADS

Heads may be US sedan stock single port or dual port or their equivalent Heads may be fly cut for clean up only. Porting or polishing **NOT** allowed. Dual port heads from Brazil, Part # 0401013752, Part # 04010137513, Part # 04010137519, or Stock OEM heads will be allowed. MOFOCO Heads PN #MFC-CCHO40 are permitted. Carb Spacer Adapter allowed Empy 981293B.

CAMSHAFT, LIFTERS, VALVES, ROCKER ARMS

Any camshaft, gear, valve springs, valve spring retainers and lifters are permitted. Valve spring seat diameter in head must remain stock. Valves must be stock 45 degrees. One-piece valves are permitted. Valve guide may be steel, bronze or cast iron. No grinding or polishing in the port including valve guides. Must use stock 1600 rocker arms. The rocker arms may be resurfaced to permit the use of swivel feet. No other grinding or changes may be made to the rocker arms. Roller or needle bearings will not be permitted as part of the camshaft or as an interface between the rocker arms and the camshaft. Any push rods and push rod tubes. Any valve adjustment screws. Valve covers may be of any manufacture.

FAN-SHROUD

Aftermarket, fan-shrouds are permitted. Heater tubes are optional.

CARBURETOR

Must use stock VW carburetor 30 pict. 1, 2, 3. Maximum venturi size is 24.10mm. Velocity stacks may be used but cannot be welded or bonded to the carburetor. Internal modifications are not permitted. This includes no removing of parts, no grinding, polishing or filing. Intake manifolds must be stock. No chemical milling of manifold or carburetor. Choke housing, choke plate and shaft may be removed. The stock float bowl vent may be plugged and relocated. Any air and main jet may be used.

RESTRICTOR PLATES

Intake manifold is restricted to a stock 34mm original equipment center section or its replacement. A 1 $\frac{1}{2}$ inch (1.500) long by half-inch (.500) diameter tube may be weld two inches below carburetor flange. A maximum of $\frac{1}{4}$ inch (.250) may be removed from each end of the center

section for clearance. A slip tube with a 1 5/8-inch (1.625) diameter, two inches (2.000) long may be welded to the end of the runners to allow the use of a better hose connection. No porting or polishing.

Single seat restrictor plates are 21.5mm.Two seat restrictor plates are 24.0mm.Warning: Restrictor plates may not be modified in any manner.No other item except restrictor plate may be installed between carburetor and manifold.

Low Compression Engine Option

1600cc maximum displacement and 8 to 1 compression ratio, must use same heads as high compression engine with same valve size and no porting at all. Stock VW end castings with VW part numbers must be used, no polishing allowed. An EMPI or WEBER 40 or 44 idf carb may be used and tube style intake manifold, NO Plenum Manifolds allowed. Must use maximum 25mm venture for two seat and a maximum 24mm venture for single seat. This is a pump gas only engine option with a maximum of 91 Octane.

SCR25: ENGINE REPLACEMENT

SCR26: TRANSMISSION

Must be stock VW type-1 or 2 transaxle housing with internal modifications only. A maximum of four forward gears. Any internal modifications permitted. Only VW helical cut gears may be used with any gear ratio combinations permitted. Aftermarket side covers are permitted.

- SCR27: THROTTLES
- SCR28: EXHAUST
- SCR29: DRIVESHAFTS
- SCR30: FLYWHEEL SHIELDS

SCR31: FLUID COOLERS - Any oil cooler and location permitted. Full flow systems are permitted. Deep or dry sump systems are not permitted.

- SCR32: AUXILIARY EQUIPMENT
- SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENTSCR34: ROLLCAGES

SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING

General vehicle components

SCR38: DRIVER'S COMPARTMENT SCR39: DOORS & LATCHES **SCR40: FIREWALLS** SCR41: BALLAST SCR42: WEIGHT - Vehicle dry weight will be 1550 lbs. for both single and two seat vehicles. **SCR43: FLOORBOARDS SCR44: BUMPERS SCR45: MIRRORS SCR46: SKID PLATES** SCR47: STORAGE SCR48: FENDERS, NOT ALLOWED SCR49: CHASSIS & BODY SCR50: HOSES SCR51: IDENTIFICATION MARKERS-BITD will assign vehicle numbers. SCR52: Advertising on vehicles **SCR53: WORKMANSHIP SCR54: RADIO EQUIPMENT**

CLASS 3000

DESERT LITES- SPEC MINI CAR, TRUCK, OR SUV WITH SPEC ENGINE SEALED PRODUCTION MOTORS

TWO OR THREE SEAT OPEN WHEELED MINI CAR, TRUCK OR SUV.

GENERAL REGULATIONS

CLASS ENTRANTS SHALL COMPLY WITH ALL CLASS AND APPLICABLE GENERAL REGULATIONS.

COMPETITION REGULATIONS

This is an engine spec class and all components will be considered spec unless it states otherwise within these class rules. Engines will be spec crate engines from Ford & GM manufacturers. Engines must be sealed and tagged by Turnkey Engine Supply. **Motor must be tagged prior to start of race or penalties up to and including disqualification can be assessed.** Only engine kits listed will be allowed. All engines regardless of manufacture, Ford or GM, must be purchased through Turnkey Engine Supply. Turnkey Engine Supply will tag and seal the engines before being shipped to the customer Contact Turnkey Engine Supply for more information.

Turnkey Engine Supply at www.turnkeyenginesupply.com 3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663 VEHICLES WILL NOT TO EXCEED **118**" WHEELBASE AS MEASURED AT RIDE HEIGHT

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.

SAFETY EQUIPMENT

SCR1: HELMETS SCR2: PROTECTIVE CLOTHING SCR3: EYE PROTECTION SCR4: HEAD AND NECK RESTRAINTS SCR5: FIRST AID KIT SCR6: BREAKDOWN SAFETY DEVICES SCR7: HORNS SCR8: REFLECTORS SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

SCR11: SHOCK ABSORBERS & BUMP STOPS - SHOCK ABSORBERS SHALL NOT EXCEED 3.5" OD. WHEEL TRAVEL IS UNRESTRICTED. FRONT SUSPENSION IS OPEN. SCR12: SECONDARY SUSPENSION SCR13: WHEELS & TIRES Maximum tire size of 35" tall Knock-off hubs are NOT permitted SCR14: FASTENER

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES - STEERING OR TURNING BRAKES ARE PERMITTED.

ELECTRICAL SYSTEM

SCR17: IGNITION Control pack programming is permitted but must have easy access for removal and visual inspection. SCR18: BATTERIES SCR19: LIGHTS - BLUE LIGHT FACING REAR, MANDATORY SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS - SAFETY FUEL TANKS ARE REQUIRED SCR23: FUEL FILLER VENTS AND CAPS

ENGINE DIFFERENTIAL AND TRANSMISSION

SCR24: Engine is limited to a 4-cylinder motor. Only those engines listed here are permitted. See below:

For Transaxle, open wheel vehicles:

ENGINE LOCATION IS OPEN. ENGINE IS LIMITED TO STOCK PRODUCTION GM ECOTEC 4 CYL 2.2 AND 2.4 MOTORS. PISTONS - Stock pistons only replacement pistons must maintain stock dimensions. CAMSHAFT - Stock camshaft or equal replacement only. Camshaft must retain original manufacture specifications. HEAD/VALVETRAIN - Must remain per manufactures original specification. After-market valve-train is prohibited No porting or polishing of head. Must retain manufactures original specifications.

INTAKE MANIFOLD - Intake manifold will remain as delivered from manufacture. It must retain its stock shape size, and configuration. No porting or other modifications allowed.

THROTTLE BODY - Throttle body to remain as delivered from manufacture, not to exceed 65mm on blade.

Turnkey Engine Supply must inspect, tag and seal the engines prior to start of race or penalties up to and including disqualification can be assessed.

Contact Turnkey Engine Supply at <u>www.turnkeyenginesupply.com</u> 3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663.

For Live Axle equipped Truck or SUV:

Engines must be mounted in the front of the vehicle like a truck with all pulleys facing forward. No mid or rear engine truck or SUV chassis configurations will be allowed.

- 1. FORD 2.3 TURBO ECOBOOST ENGINE, CONTROL PACK **#M-6007-23TA** WITH CONTROL PACK **#M-6017-23TA** WITH 310 HP AND 320 FT LBS TORQUE.
- 2. GM 2.0 TURBO ECOTEC 260 HP WITH 260 FT LBS TORQUE, **GM LHU MOTOR**
- 3. GM 2.7 TURBO ECOTEC 300 HP WITH 340 FT LBS TORQUE. 2019 NEW MOTOR

All engines regardless off manufacture must be purchased, sealed and tagged by Turnkey Engine supply before being shipped to end user. All parts that come on the engine kit will be considered part of the engine including intake-upper and lower, valve covers, oil pan. No engine rebuilds are permitted. If engine fails a new sealed engine must be installed.

Contact Turnkey Engine Supply at www.turnkeyenginesupply.com -

3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663.

(1) One Exception only – Any Race Vehicle that has participated in a **BITD** event in Class 3000 prior to 1/1/2019 will be grandfathered into this class for 2019 and 2020 season, under the 2018 Class 3000 rules.

SCR26: ALL VEHICLES MUST USE PRODUCTION BASED REAR WHEEL DRIVE AUTOMATIC OR MANUAL TRANSMISSIONS.

SCR26.5 DIFFERENTIAL

TRANSAXLE VEHICLES

MUST USE PRODUCTION BASED TRANSAXLE SYSTEM

LIVE AXLE VEHICLES

Rear axle assembly must use a light automotive type straight axle housing with a standard Ford 9" removal type ring and pinion third member, standard type bearings, Drive plate, floating hub is to be used, ring and pinion is to be no larger than 9' with axles no larger than 40 spline, gear ratio is open. 2- or 4-wheel drive is open.

- SCR27: THROTTLES
- SCR28: EXHAUST
- SCR29: DRIVESHAFTS
- SCR30: FLYWHEEL SHIELDS
- **SCR31: FLUID COOLERS**
- SCR32: AUXILIARY EQUIPMENT
- SCR33: SUPERCHARGERS AND TURBOCHARGERS.

FACTORY SUPPLIED TURBOCHARGERS ARE ALLOWED. SEALED BY TURN KEY ENGINE SUPPLY

VEHICLE SAFETY EQUIPMENT

SCR34: ROLL CAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: Minimum of two (2) and Maximum of three (3) seats may be used.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVERS COMPARTMENT SCR39: DOORS AND LATCHES SCR40: FIREWALLS SCR41: BALLAST SCR42: WEIGHT. NO MINIMUM WEIGHT LIMIT SCR43: FLOORBOARDS SCR44: BUMPERS SCR45: MIRRORS SCR46: SKID PLATES SCR46: SKID PLATES SCR47: STORAGE SCR48: FENDERS.

Vehicle must have fenders if equipped with a live axle. Body and motor must match and resemble a truck or SUV with emblem of manufacturer type (i.e. Ford Oval or Chevy Bowtie)

SCR49: CHASSIS

WHEELBASE IS LIMITED TO 118" TRACK WIDTH IS OPEN.

SCR50: HOSES

- SCR51: IDENTIFICATION MARKERS. BITD WILL ASSIGN VEHICLE NUMBERS
- SCR52: ADVERTISING ON VEHICLES
- SCR53: WORKMANSHIP

SCR54: RADIO EQUIPMENT

CLASS 5000 UNLIMITED BAJA

Vehicles must be a VW sedan type-1 hardtop or convertibles as delivered from the factory. 181 Safaris, 900 series Porches, Karmann Ghias, VW type-2 and type-3 are included in this class.

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations

COMPETITION REGULATIONS

This class is an open class and all components will be considered open unless stated otherwise herein these class rules. Vehicles must have the appearance of being "Baja'd".

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.

SAFETY EQUIPMENT

SCR1: HELMETS SCR2: PROTECTIVE CLOTHING SCR3: EYE PROTECTION SCR4: HEAD AND NECK RESTRAINTS SCR5: FIRST AID KIT SCR6: BREAKDOWN SAFETY DEVICES SCR7: HORNS SCR8: REFLECTORS SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

Front and rear suspension systems may be modified or replaced as long as stock concept (trailing-arms, swing-axles, IRS, etc.) is retained and wheelbase limit is not exceeded. Stock concept suspension may be substituted by open trailing-arm type suspension but wheelbase limit must not be exceeded. Torsion bars and/or leaf springs are optional.

SCR11: SHOCK ABSORBERS & BUMP STOPS SCR12: SECONDARY SUSPENSION SCR13: WHEELS & TIRES SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

- SCR15: STEERING Center steering wheel is not permitted.
- SCR16: BRAKES

Steering or turning brakes are permitted.

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required. SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Any four-cylinder air or water-cooled VW concept engine is permitted. NO FORCED INDUCTION (SCR33). Alternative Manufacturer Engines ANY MANUFACTURER PRODUCTION* four-cylinder water cooled engine of 2.5L or less is permitted. Must retain OEM cast heads. Must retain OEM cast block. NO FORCED INDUCTIONS (SCR33)

*Production defined as an engine that was sold in quantities exceeding 10,000 units and available to the general public.

SCR24a. ENGINE INSPECTION AND TAG

Any "Alternative Manufacturer Engines" must be inspected and tagged by an approved engine inspector to verify that the engine being used is 2.5L or less and that the OEM cast head and OEM cast block are intact.

Approved Engine Inspectors

Major Performance Racing Engines 10722 Kenny St. Suite C Santee, CA 92071 (619) 596-0886

Redline Performance

1380 N Lakeview Ave Anaheim, CA 92807 (714) 777-5758 Wiks Racing Engines 3265 Birtcher Drive Las Vegas, NV 89118 (702) 837-2522

Turnkey Engine Supply 3915 Oceanic Drive Oceanside, CA, 92056 (760) 966-2663

SCR25: ENGINE REPLACEMENT SCR26: TRANSMISSION SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS – TURBO CHARGED DIESEL ENGINES AND SUPERCHARGERS ARE NOT ALLOWED.

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS

SCR37: SEATING

One or two seats may be used in any location, except center seating, within the passenger portion of vehicle. Any manufacturer's racing seat may be used.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT

Sheet metal front and rear firewalls are required. Firewalls may be attached to the rollcage. Interior sheet metal may be removed but stock appearance must be retained from the outside and firewall rule is complied with. It is highly recommended that flammable materials such as rear seat, upholstered panels, headliners and carpets be removed. Pedals may be of any manufacturer with mounting location optional on left side of vehicle.

SCR39: DOORS & LATCHES

Doors must remain in stock location and maintain stock in shape and size. Doors may be welded or fastened shut on convertible body's aftermarket fiberglass side panels and windshield frame is permitted.

SCR40: FIREWALLS

- SCR41: BALLAST
- SCR42: WEIGHT
- **SCR43:** FLOORBOARDS
- **SCR44: BUMPERS**
- SCR45: MIRRORS
- SCR46: SKID PLATES
- SCR47: STORAGE

SCR48: FENDERS

Front fenders must be used. Fender mounting location must remain stock. Fenders may be onepiece fiberglass. Rear fenders must not measure less than 6 inches from body when measured at top center of fender. Rear fender mounting height is optional. Rear fenders must have rolled edges but may be made of metal or fiberglass. Rear fenders must resemble Baja fenders.

SCR49: CHASSIS & BODY

Vehicle must retain original steel body and doors. Metal may be added to strengthen the body and floor pan. Floor pan is optional. One-piece front ends are permitted. Removal of front and rear sheet metal is permitted but only enough as required to allow for installation of Baja kit or one piece front end. Body may not be cut any farther forward then the upper line of the original engine cover. Hardtop sedans must retain top, removal of top is not permitted. If convertible body is used the windshield framework must be retained. Rear crossover piece forward of the engine cover may be removed. Stock body width must be retained. A body lift of a maximum of 3.625 inches from the floor pan is permitted. Wheel wells may be cut out a maximum of 2.5 inches. Any other combination of raising or cutting is permitted as long as combined modifications do not exceed the 3.625-inch limit. Windshield and window glass is optional but must be shatterproof if retained. Wheelbase may be lengthened to a maximum of 105 inches as measured from front wheel centerline to rear wheel centerline. Combined measurement from both sides cannot exceed 211 inches.

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: Advertising on vehicles

SCR53: WORKMANSHIP

SCR54: RADIO EQUIPMENT

CLASS 6100

SPEC TRICK TRUCK WITH SPEC SEALED ENGINE - TRUCKS/SUV'S

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations. All parts are to be approved by **BITD**.

COMPETITION REGULATIONS

This is an engine spec class and all components will be considered spec unless it states otherwise within these class rules. Engines will be spec crate engines from Ford & GM manufacturers. Engines must be left **"AS DELIVERED"** from Turnkey, only modification noted below are allowed. Engines must be sealed and tagged by Turnkey Engine Supply. **Motor must be tagged prior to start of race or penalties up to and including disqualification can be assessed.** Only engine kits listed will be allowed. All engines regardless of manufacture, Ford or GM, must be purchased through Turnkey Engine Supply. Turnkey Engine Supply will tag and seal the engines before being shipped to the customer Contact Turnkey Engine Supply for more information. Contact Turnkey Engine Supply at <u>www.turnkeyenginesupply.com</u> 3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663

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.

SAFETY EQUIPMENT

SCR1: HELMETS SCR2: PROTECTIVE CLOTHING SCR3: EYE PROTECTION SCR4: HEAD AND NECK RESTRAINTS SCR5: FIRST AID KIT SCR6: BREAKDOWN SAFETY DEVICES SCR7: HORNS SCR8: REFLECTORS SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

SCR11: SHOCK ABSORBERS & BUMP STOPS SCR12: SECONDARY SUSPENSION SCR13: WHEELS & TIRES Maximum tire size of 40" tall Knock-off hubs are permitted.

SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES

ELECTRICAL SYSTEM

SCR17: IGNITION - Control Packs must have easy access for removal and visual inspection. SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required.

SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Engine is limited to a sealed 8 cylinder. Only those engines listed here are permitted. See below list. All engines must be purchased through Turnkey Engine Supply.

NOTE: Starting January 2020 we will only accept the Cup style tag from Turnkey. NO Cable tags will be allowed.

A) Engines must be mounted in the front of the vehicle like a truck with all pulleys facing forward. No mid-engine or rear engine chassis configuration.

B) ** MUST MAKE VEHICLE ACCESSIBLE FOR REMOVAL OF VALVE COVER, ACCESS TO THROTTLE BODY, ACCESS TO ECU AND OBD PORTS FOR TECH-INSPECTION.

- C) **BITD** Approved Engine Types
 - 1. Ford 5.0L V8 engine kit part number M-6007-M50C with wire loom and control pack part number M-6017-M50B
 - General Motors LS3 (430HP) V8 engine kit part number 19370416 with wire loom and control pack part number 19258270 - Upgrade option: GM Cam Shaft part number 88958770 that comes in the GM LS3 (525HP) motor. Turnkey Engine Supply will be the only engine builder allowed to perform this upgrade
 - 3. Ford 3.5 twin turbo Ecoboost engine
 - 4. Ford 351 V8 Engine Kit Part Number M-6007-S374W.
 - 5. Ford Boss (535 HP) Part number M-6007-Z2427FFT
 - 6. GM LS3 (525 HP) Part number 19370413 with GM Control Pack Part number 19354332
 - GM LT1 Part number 19416592 with LT1 Control Pack Part number 19417227. Can use intake manifold part # 12697714.
 - 8. Billet Fuel rails allowed.
 - 9. Water pumps are open, must be mechanical factory concept, no electric pumps allowed.
 - 10. Exhaust manifolds are open to install aftermarket exhaust.
 - All Ford Motors are allowed to use either of these two carburetors 650 CFM Holley part# 80541-1 or 750 CFM Holley part#80528-1

All engines regardless of manufacture must be purchased thru Turnkey Engine Supply, i.e., Ford, GM, etc.... Turnkey Engine Supply will tag and seal the engines before being shipped to the customer.

For those vehicles that might already have the larger displacement motors installed and tagged by another engine builder, your vehicle will be legal to compete beginning Jan. 1st, 2020. However, if your vehicle finishes in the Top 10 with another engine company's tag, it may be subject to inspection.

Those vehicles with other engine sealing company's tags will ONLY be honored Jan. 1st, 2020 through August 1, 2020. Beginning August 13, 2020 Class 6100 vehicles will be required to have an engine sealed and tagged by Turn Key Engine Supply to participate.

Contact Turnkey Engine Supply at www.turnkeyenginesupply.com -

3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663.

SPECIAL NOTE: Spec Engine control module programming open.

Engines must be tagged and sealed by Turnkey Engine Supply who is approved by **BITD**. Only Turnkey Engine Supply may be used for engine tagging. All parts that come in the engine kit will be considered part of the engine including Intake – upper and lower, valve covers, Oil Pan.

LS engines must use factory GM LS style wet sump oil pan, no aftermarket pans are permitted. **GM** pans may be modified to fit chassis and add volume. Pans must be inspected and installed by Turnkey when engine is sealed.

Ford: No Dry Sump oil systems allowed. All Ford engines must use wet sump stock oil pan as delivered in the engine kit from the manufacturer. Ford pans may be modified to fit chasses, modified pans must use stock baffling and no increase in volume is permitted. Pans must be inspected and installed by Turnkey when engine is sealed.

GM: No Dry Sump oil systems allowed. All GM engines will be open to any GM wet sump oil pan but must be approved and installed by Turnkey Engine Supply.

No external oil pumps allowed

You may install an external oil cooler and external oil filter but must be done without modification to the engine block or oil system in any way. Oil filter adapters are permitted.

3-Quart oil accumulator is allowed.

GM Engine Only: A race quality harness is an option to use with the required GM Factory ECU. Also, Engine can have a replacement high volume wet sump oil pump an aftermarket harmonic balancer and timing chain guide. All must be installed by Turnkey Engine Supply before sealing of engine.

SCR25: ENGINE REPLACEMENT – no engine rebuilds are allowed. If engine fails a new engine must be purchased thru Turnkey Engine Supply. See SCR24:

SCR26: TRANSMISSION

All vehicles must use a Turbo 400 automatic transmission only. This will be the only transmission type allowed.

All transmissions must have 3 forward gears and a working reverse.

DIFFERENTIAL

Rear axle assembly must use a light automotive type straight axle housing with standard Ford 9" removal type ring & pinion third member. Standard type bearings, drive plate, floating Hub is to be used. Ring and pinion size, ratio open. Must be approved by

BITD.

No overdrive units allowed. ***** ONLY SINGLE RATIO UNDERDRIVE ALLOWED.**

SCR26.5: 2-WHEEL DRIVE ONLY

(1) One Exception only – Race Vehicle #6130 will be grandfathered into rules, but race vehicle #6130 must comply with the following specifications:

1. Transfer Case must be a one-to-one ratio in high range only. Transfer case must be tagged, sealed and approved by BITD Chief Car/Truck Technical Inspector. 2. Transfer case must have lockout installed for low range.

SCR27: THROTTLES

Fly by wire throttle pedal assemblies must be used if the engine kit is delivered from the manufacturer with electronic throttle pedal configuration.

SCR28: EXHAUST

SCR29: DRIVESHAFTS

SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS

SCR32: AUXILIARY EQUIPMENT

SCR33: SUPERCHARGERS & TURBOCHARGERS

No Superchargers or Turbochargers permitted in this class No forced induction system of any kind

VEHICLE SAFETY EQUIPMENT

- SCR34: ROLLCAGES
- SCR35: SAFETY HARNESS
- SCR36: SAFETY NETS
- SCR37: SEATING

Minimum of two (2) and Maximum of three (3) seats may be used but must meet with **BITD** APPROVAL.

GENERAL VEHICLE COMPONENTS

- SCR38: DRIVER'S COMPARTMENT
- SCR39: DOORS & LATCHES
- **SCR40: FIREWALLS**
- SCR41: BALLAST
- SCR42: WEIGHT: No Weight Limit
- SCR43: FLOORBOARDS
- **SCR44: BUMPERS**
- **SCR45: MIRRORS**
- **SCR46: SKID PLATES**
- SCR47: STORAGE
- SCR48: FENDERS

Vehicle must have fenders. No open wheeled vehicles permitted.

SCR49: CHASSIS & BODY

CHASSIS

Wheelbase and overall width are open. (Track Width Open)

All vehicles must be configured like a TRUCK or SUV.

All must use an automotive type straight axle housing and third member with either 3 or 4 link rear suspension configurations.

BODY

Body must resemble a truck *or SUV* and must have emblem of manufacture of type of truck (ie. Ford Oval or Chevy bowtie) Overall width and length is unlimited.

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS

BITD will assign vehicle numbers.

- **SCR52:** ADVERTISING ON VEHICLES
- **SCR53: WORKMANSHIP**
- SCR54: RADIO EQUIPMENT

CLASS 6200 OPEN-WHEELED VEHICLES UNLIMITED SINGLE & TWO-SEAT VEHICLES SPEC ENGINE ONLY

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

This is an open class and all components will be considered open unless it states otherwise within these class rules. ONE OR TWO SEAT OPEN WHEELED CARS, NO FENDERS, SPEC ENGINE ONLY

- NOTE: Independent Rear Suspension Only (No solid rear axle allowed)
- **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.

SAFETY EQUIPMENT

- SCR1: HELMETS
- **SCR2: PROTECTIVE CLOTHING**
- **SCR3:** EYE PROTECTION
- SCR4: HEAD AND NECK RESTRAINTS
- SCR5: FIRST AID KIT
- SCR6: BREAKDOWN SAFETY DEVICES
- SCR7: HORNS
- **SCR8: REFLECTORS**
- **SCR9:** FIRE EXTINGUISHER
- **SCR10: SURVIVAL SUPPLIES**

SUSPENSION - Independent Rear Suspension Only (No solid rear axle allowed)

STEERING & BRAKE COMPONENTS

SCR16: BRAKES

Steering or turning brakes are permitted.

ELECTRICAL SYSTEM - OPEN

TIRES - MAXIMUM TIRE SIZE 37" TALL

FUEL SYSTEM

SCR22: FUEL TANKS Safety fuel cells are required.

SCR23: FUEL FILLER, VENTS & CAPS

TRANSMISSION – OPEN ENGINE & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

This is an engine spec class and all components will be considered spec unless it states otherwise within these class rules. Engines will be spec crate engines from Ford & GM manufacturers. Engines must be sealed and tagged by Turnkey Engine Supply. Motor must be tagged prior to start of race or penalties up to and including disqualification can be assessed. Only engine kits listed will be allowed. All engines regardless of manufacture, Ford or GM, must be purchased through Turnkey Engine Supply. Turnkey Engine Supply will tag and seal the engines before being shipped to the customer Contact Turnkey Engine Supply for more information.

Contact Turnkey Engine Supply at <u>www.turnkeyenginesupply.com</u>

3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663

Only those engines listed here are permitted. See below list.

- 1. Ford 5.0L V8 engine kit part number **M-6007-M50S** must be purchased through Turnkey Engine Supply
- 2. General Motors LS3 (430HP) V8 engine kit part number **19370416** (Rev 5/19/14) must be purchased through Turnkey Engine Supply.
- 3. Ford 3.5 twin turbo EcoBoost (Turbocharged) engine must be purchased through Turnkey Engine Supply.
- 4. Ford 2.0L EcoBoost (Turbocharged) I-4 engine kit part number M-6007-20T electronics open
- 5. Ford 2.3L EcoBoost (Turbocharged) I-4 engine kit part number electronics open
- 6. Ford 3.5 twin turbo EcoBoost (Turbocharged) engine must be purchased through Turnkey Engine Supply.
- 7. Billet Fuel rails allowed.
- 8. Water pumps are open, must be mechanical factory concept, no electric pumps allowed.

All engines regardless of manufacture must be purchased thru Turnkey Engine Supply, i.e. Ford, GM, etc. Turnkey Engine Supply will tag and seal the engines before being shipped to the customer.

Contact Turnkey Engine Supply at <u>www.turnkeyenginesupply.com</u> – 3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663.

SPECIAL NOTE: Spec Engine control module programming open.

Engines must be tagged and sealed by Turnkey Engine Supply who is approved by **BITD**. Only Turnkey Engine Supply may be used for engine tagging. All parts that come in the engine kit will be considered part of the engine including Intake – upper and lower, valve covers, Oil Pan.

LS engines may use factory GM LS style wet sump oil pan, or aftermarket external dry sump oiling system. GM pans may be modified to fit chassis. Pans must be inspected and installed by Turnkey when engine is sealed.

GM: Water pump Open to aftermarket mechanical pump, no electric pumps allowed

You may install an external oil cooler and external oil filter but must be done without modification to the engine block or oil system in any way. Oil filter adapters are permitted.

3-Quart oil accumulator is allowed.

GM Engine Only: Engine can have a replacement high volume wet sump oil pump, timing chain guide may be replaced with upgraded GM chain guide and aftermarket harmonic balancer and aftermarket mechanical throttle limited to 92mm.

All must be installed by Turnkey Engine Supply before sealing of engine.

SCR25: ENGINE REPLACEMENT

No engine rebuilds are allowed. If engine fails a new engine must be purchased and tagged and sealed by Turnkey Engine Supply.

SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS

SCR31: FLUID COOLERS

SCR32: AUXILIARY EQUIPMENT

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING Maximum of three (3) seats may be used but must meet with BITD APPROVAL.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT SCR39: DOORS & LATCHES SCR40: FIREWALLS SCR43: FLOORBOARDS SCR45: MIRRORS SCR46: SKID PLATES SCR46: SKID PLATES SCR48: FENDERS, NOT ALLOWED SCR49: CHASSIS & BODY SCR51: IDENTIFICATION MARKERS SCR52: ADVERTISING ON VEHICLES SCR53: WORKMANSHIP

CLASS 7100

MINI TRUCK CHALLENGE SPORTSMAN CLASS ONLY MINI OR MID-SIZED TRUCKS / SUV

Vehicles built two or four-wheel drive mini or mid-sized pickups and suv. Vehicles must have been series Produced in quantities of at least 5000 units within a 12-month period. Vehicle must be readily available to the general public in the U.S.A. Vehicle must be marketed as a mini or mid-sized pickup or suv.

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

Body and chassis combinations of vehicle manufacturer must be retained. This class is a stock Production class. Aftermarket and fabricated front suspension kits are allowed. All components must remain stock except those modifications listed herein.

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.

SAFETY EQUIPMENT

SCR1: HELMETS SCR2: PROTECTIVE CLOTHING SCR3: EYE PROTECTION SCR4: HEAD AND NECK RESTRAINTS SCR5: FIRST AID KIT SCR6: BREAKDOWN SAFETY DEVICES SCR7: HORNS SCR8: REFLECTORS SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

Front suspension must be of the same configuration as originally produced. Suspensions may be strengthened and reinforced or fabricated in any manner so long as original stock concept (a-arm, I-beam, etc.) is retained. Lower A-Arms must retain stock pivot points but maybe reinforced. Upper A-Arm pivot points are open. NO J-Arms. I –Beams must mount in factory pivots in the stock location, pivots can be reinforced and/or gusseted. Ball joints may be of any manufacturer. Spindles may be of any manufacture and may be reinforced. After market suspension kits and components are allowed. Pivot mounts may use spherical bearings in place of the stock rubber. Spring buckets maybe clearance to provide room for shocks and coil overs, only minimum frame material may be removed for the purpose of mounting shocks or clearance for steering. Front and rear track width is open.

Rear suspension must utilize an automotive style differential. Rear springs may be relocated to the side of the frame. Frame may not be modified or notched in any manner. Springs may be mounted above or below

the axle. Spring rates and capacities are open. Two single point rear differential anti-wrap bars or a single wishbone may be used.

Rear wheel travel limit is 18" axle to frame rail. Stock sway bars may be removed. All suspension components will and can be subject to the approval by **BITD.** Hydraulic bump stops are permitted Air shocks are not permitted.

SCR12: SECONDARY SUSPENSION

SCR13: WHEELS & TIRES

Aftermarket wheel studs are permitted. 37" max tire size.

SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES

ELECTRICAL SYSTEM

SCR17: IGNITION

Vehicles with 3000 - 4300cc engines must retain the vehicle manufacturers stock CPU / ECU computer and ignition as delivered by the factory. Programming is open. Except Chevy Colorado with 4.3 must remain stock programming. SCR18: BATTERIES Battery type and location is open.

SCR19: LIGHTS Any manufacturer head light may be used. SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL
SCR22: FUEL TANKS
Safety fuel cells are required.
Fuel cell location is optional. Fuel cell may be sunk into the bed. The rear frame member may be relocated, removed or replaced in order to sink the fuel cell.
SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT Engine must be one delivered in the vehicle or one that is available from any manufacturer (with the provisions listed herein) from the manufacturer / importing distributor with a maximum of six cylinders. Engine must be available to the general public of the U.S.A. Maximum engine displacement is *Stock production 3000cc - 4300cc or modified* 2999cc and smaller (187.5ci). Rotary piston engines are not permitted. Water and vapor injection are not permitted. Engine location must be the stock mounting location as delivered from the manufacturer plus or minus 1-inch. Engine mounts are open. This will be measured from the front spindle centerline to the back of the block.

Engine Rules

Motor is limited to a maximum of 4.3L 6 cylinder. Must be a production motor from any manufacturer in any chassis (i.e., Body and motor do not need to match) No High output motors permitted.

This Class has a 300 HP limit in stock form, anything over must be approved by BITD

Restricted items:

- A. Intake manifold. (Must remain stock vehicle manufacturers factory intake manifold)
- B. Fuel injectors
- C. Mass air flow sensor
- D. All internal components IE: pistons, cam, crank etc.
- E. Block and heads

Unrestricted engine items include:

- A. Oil and water-cooling systems. No Dry sumps.
- B. Air cleaners open
- C. Fuel pumps open
- D. Exhaust system open

E. CPU/ECU must be the same as delivered by the factory but programming is open except Chevy Colorado must remain delivered as by factory with 4.3 Motor

CARBURETOR

2999cc engine rule

Any make of carburetor or fuel injection may be used but must maintain a maximum of one venturi per cylinder.

3000cc - 4300cc engine rule

Stock production vehicle manufacturers factory fuel EFI must be maintained as delivered.

SCR25: ENGINE REPLACEMENT

SCR26: TRANSMISSION Any OEM style transmission may be used T400, T350, C4, C6, etc. No underdrive allowed. Transmissions subject to the approval by **BITD** on a per vehicle basis. Any shifter may be used.

DIFFERENTIAL

Front differential must remain original stock as delivered by the manufacturer, with the exception of gear ratios. Materials may be added for strengthening purposes only. Front differentials, including traction beam type, may be reinforced.

Rear axle assembly must use standard automotive style. Housings are open. Gear ratios, carriers, axles and floating hubs are optional. No gear re-ducted rear ends allowed. Only a single ring and pinion rear end is allowed. Axles are limited to a maximum of an industry standard 40 spline 1.750" diameter axle. Knock-off hubs are not permitted.

Knock-off hubs are not permitted. SCR27: THROTTLES SCR28: EXHAUST

SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING Any manufacturer's racing seat may be used but must remain in the stock location.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT

Dash is optional. It is highly recommended that flammable items such as upholstered panels, headliners and carpets be removed.

Pedal assemblies must remain in the stock fore and aft position.

SCR39: DOORS & LATCHES

Doors must be full doors and must operate on stock hinges and latches. Must have a secondary latching device.

SCR40: FIREWALLS

Firewalls must remain stock, complete and in original location. Firewall clearance is permitted only to make room for transmission. Holes left in stock firewall must be covered with metal and sealed. Firewall maybe modified for tire and shock clearance and replaced with sheet metal.

SCR41: BALLAST

SCR42: WEIGHT

Vehicle must weigh dry 3250 lbs. minimum.

SCR43: FLOORBOARDS

Alterations to floorboard, for the routing of exhaust to rear of vehicle, are permitted but floor must remain stock.

SCR44: BUMPERS

Bumpers may be modified. Stock bumpers not required. Modification must meet with **BITD** approval.

SCR45: MIRRORS SCR46: SKID PLATES SCR47: STORAGE SCR48: FENDERS Open

SCR49: CHASSIS & BODY

Specified year chassis and cab combinations of manufacturer must be retained. Front fenders hood, grill and rear fenders open.

CHASSIS

Original wheelbase must be maintained plus or minus 1-inch.

Frame may be strengthened by addition of material but must retain stock configuration. Lengthening or narrowing of frame is not permitted. Removal of material is not permitted.

Frames may not be altered. Frame rail exceptions:

A. The front end of the frame rail may be notched a maximum of 7 inches from the end for ground clearance. Top of frame rail must remain stock.

BODY

Original body shape, size, configuration and appearance must be maintained. Additional body strengthening mounts or parts may be added. Original stock mounting location (vertical, horizontal, and lateral) in relation to the frame and mounting methods must be retained. The measurement from the spindle centerline to the back of the b-pillar post must remain stock plus or minus 1-inch. Body mounts may be modified for tire clearance.

Internal body structural members may be removed. Clearance holes may be cut or drilled for rollbars, supports, shocks, etc.

Hoods, trunk-lids, doors fenders and bedsides are required to be in original stock locations. Hoods, front fenders and bedsides may be of any material. Tailgates and pickup bed front panels are optional. Stock front grill assemblies are mandatory.

Safety glass windshields, side and rear glass is optional.

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers. SCR52: ADVERTISING ON VEHICLES SCR53: WORKMANSHIP SCR54: RADIO EQUIPMENT

CLASS 7200

MINI-TRICK TRUCK UNLIMITED TRUCKS/SUV'S

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

This is an open class and all components will be considered open unless it states otherwise with these class rules.

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.

SAFETY EQUIPMENT

- SCR1: HELMETS
- SCR2: PROTECTIVE CLOTHING
- **SCR3:** EYE PROTECTION
- SCR4: HEAD AND NECK RESTRAINTS
- SCR5: FIRST AID KIT
- **SCR6: BREAKDOWN SAFETY DEVICES**
- SCR7: HORNS
- SCR8: REFLECTORS
- **SCR9:** FIRE EXTINGUISHER
- **SCR10: SURVIVAL SUPPLIES**

SUSPENSION COMPONENTS

SCR11: SHOCK ABSORBERS & BUMP STOPS

SCR12: SECONDARY SUSPENSION

SCR13: WHEELS & TIRES Maximum tire size of 37" tall Knock-off hubs are permitted.

SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells are required. SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Engine is limited to a six-cylinder open, and only those engines listed here are permitted. See below list.

All engines must be purchased through Turnkey Engine Supply.

NOTE: Starting January 2020 we will only accept the Cup style tag from Turnkey. NO Cable tags will be allowed.

Turbochargers on factory Ford Ecoboost engines only, are allowed.

- Ford 5.0L (460HP) V8 engine kit part number M-6007-M50C with wire loom and control pack part number M-6017-M50B
- General Motors LS3 (430HP) V8 engine kit part number 19370416 with wire loom and control pack part number 19258270.
- 3. Ford 3.5 twin turbo ecoboost engine
- 4. Billet Fuel rails allowed.
- 5. Water pumps are open, must be mechanical factory concept, no electric pumps allowed.
- 6. Dry sump systems are allowed

Contact Turnkey Engine Supply at <u>www.turnkeyenginesupply.com</u> – 3915 Oceanic Drive, Oceanside, CA, 92056, 760-966-2663. SPECIAL NOTE: Spec Engine control module programming open.

SCR25: ENGINE REPLACEMENT SCR26: TRANSMISSION SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING Maximum of three (3) seats may be used but must meet with BITD APPROVAL.

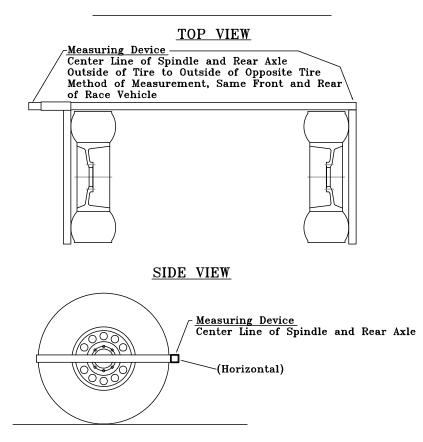
GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT SCR39: DOORS & LATCHES SCR40: FIREWALLS SCR41: BALLAST SCR42: WEIGHT SCR42: WEIGHT SCR43: FLOORBOARDS SCR44: BUMPERS SCR45: MIRRORS SCR45: MIRRORS SCR46: SKID PLATES SCR46: SKID PLATES SCR47: STORAGE SCR48: FENDERS Vehicle must have fenders. No open wheeled vehicles permitted.

SCR49: CHASSIS & BODY

Body must resemble a truck <u>or SUV</u> and must have emblem of manufacture of type of truck (ie. Ford Oval, Chevy bowtie, Honda H...) **Overall width is limited to 87 inches as measured from outside of tire to outside of tire at the center line of the spindle and rear axle. BITD** has a measuring device that measures overall width at the horizontal center line off the front spindle and rear axle from outside of tire to outside of opposite tire at ride height. Suspension and steering wear or damage is the responsibility of the truck owner and is considered in the overall width. (See diagram.)

***Class 7200 Overall Width, Effective January 1, 2019, Maximum Dimension 87"



SPECIAL NOTE: 25 PSI minimum in each tire

Special Note: Measuring Device: any suspension components or frame impeding the measuring device to go to center line of spindle, the measurement will be taken where the measuring device stops. Suspension and steering wear or damage is the responsibility of the truck owner and is considered in the overall width.

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: ADVERTISING ON VEHICLES SCR53: WORKMANSHIP SCR54: RADIO EQUIPMENT

CLASS 7300 PURE-STOCK PRODUCTION MINI OR MID-SIZED PICKUP/SUV

Vehicles built from a two or four-wheel drive mini or mid-sized pickup & SUV. Manufacturer's stock wheelbase must be retained. Vehicle must have been series produced in quantities of at least 4000 units within a 36-month period. There must be a minimum of 4000 series vehicles sold to the general public in the U.S.A. within a 36-month period. Vehicles must be marketed as a mini or mid-sized pickup and be readily available to the general public in the U.S.A.

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

This class is a pure stock production class. All components must remain stock as delivered from the manufacturer unless otherwise stated within. Manufacturer's body, chassis, engine, transmission, and differentials must be retained. Parts offered for sale from the same OE manufacturer, with an OE part number, for the same model, as dealer installed accessories, over the counter accessories, or performance parts are considered original equipment.

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.

SAFETY EQUIPMENT

SCR1: HELMETS

- SCR2: PROTECTIVE CLOTHING
- SCR3: EYE PROTECTION
- SCR4: NECK BRACES
- SCR5: FIRST AID KIT
- SCR6: BREAKDOWN SAFETY DEVICES
- SCR7: HORNS
- SCR8: REFLECTORS
- SCR9: FIRE EXTINGUISHER SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

Springs (rate and load) are open but must be attached to the vehicle using the OE manufacturers' interfaces. Spring spacers are allowed.

Front and rear suspension components must remain stock manufacturer, shape, size and configuration as originally produced and installed on the chassis to which it is attached. All suspension components must remain in the original stock locations and retain the original stock mounting methods. All components will be original manufacturer's' design and remain stock as delivered from the manufacturer.

A-arms, I-beams, and front axles must remain stock as delivered by the manufacturer of the chassis to which it is attached, unless specifically stated otherwise herein. All suspension components must remain stock size, shape, and configuration as delivered by the manufacturer; no addition of material is permitted unless stated otherwise herein. Stock pivot points must be retained. Rubber bushings may be replaced with urethane bushings.

Ford specific: For model years 1998 thru 2002 the upper right two-piece A-arm is being replaced with a one-piece A-arm bearing part number of 2L5Z-3084-BA.

No welded washers are allowed on any suspension component, pivot point, or any suspension mounting position with the exception of the specific areas addressed under suspension components.

Vehicles with radius arm brackets that have a stock cross member attached to the bracket and the frame, must use the stock cross member as delivered from vehicle manufacturer. You cannot reinforce the stock cross member in any manner or manufacturer your own cross member. The cross member may only attach in the original stock mounting holes in the bracket and frame. **WARNING:** Only vehicles equipped from the factory with a radius arm cross member may use a horizontal cross member between the radius arm brackets. Vehicles that did not come stock from the factory with a radius arm brackets that require the radius arm cross member, may not use the radius arm brackets that require the cross member. Any attachment of a cross member or plate for any purpose, including skid plate bracket, to any other radius arm bracket is strictly forbidden.

Ford-specific: The main engine cross member center I-beam pivot point may have one washer, maximum of the same thickness of the original pivot point thickness, welded to one side only of the pivot point.

Ford-specific: The radius arm bracket may have a plate spot-welded onto the back of the bracket where the radius arm passes through the bracket. The plate may be only 3/8-inch-thick maximum and may extend around the existing radius armhole 5/8-inch maximum. You may only spot weld the washer in place, you may not weld entirely around the washer. The spot weld may only be long enough as what is needed to hold the washer in place without it falling. A washer welded to the front of the radius arm bracket is prohibited.

Specific permitted component changes:

- A. Toyota a-arm vehicles may use manufacturer-stock T-100 series spindles.
- B. Ford I-beam vehicles may use back dated manufacturer's stock I-beams for the same model of vehicle (Ranger to Ranger).

Front and rear springs must remain in the stock locations and retain original stock concept (leaf, torsion, and coil). Spring rates and capacities are open.

SCR11: SHOCK ABSORBERS & BUMP STOPS

Shock absorbers must retain OE mounts. Shock configuration and manufacturer and tuning is open.

SCR12: SECONDARY SUSPENSION

Max 4" Travel Bump stops are permitted.

SCR13: WHEELS & TIRES

Any manufacturer's wheel is permitted. Tire type is open. Tire may not be larger than 35" diameter. Aftermarket wheel studs are permitted.

SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING

- 1) Steering box or rack and pinion must remain stock as delivered by the manufacturer and in the stock mounting location.
- 2) Steering parts (tie rods, tie rod ends, idler arms, pitman arms, relay rods and turning arms) must remain stock as delivered by the manufacturer.
- 3) Any manufacturer power steering pump may be used in the approximate stock location.
- 4) Steering Wheel airbags may be disabled or removed.
- 5) Any manufacturer steering wheel may be used.
- 6) No power assist can be added aftermarket.
- 7) Steering column shaft may be replaced.

SCR16: BRAKES

Turning or steering brakes are not permitted.

Anti-lock brake feature may be disabled. Brake pads are open. Soft Brake lines may be replaced with stainless steel braded lines and fittings.

ELECTRICAL SYSTEM

SCR17: IGNITION

Ignition system must remain original stock as delivered by the manufacturer. Any make of spark plugs and wires are permitted.

SCR18: BATTERIES

Battery type and location is open. If the stock mounting location is used, additional support is highly recommended for the mounting plate and tie down.

SCR19: LIGHTS

Any manufacturer light may be used. Amber safety light is mandatory. Stock headlight opening must be retained. Rearward facing blue light is mandatory.

SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL

SCR22: FUEL TANKS

Safety fuel cells are required.

OE Fuel Tank must be removed. Mandated fuel cell is limited to a single unit with a maximum capacity of 44 gallons, unless built to race before 2015, has to be approved by BITD Fuel cell must be mounted on the bed or load floor.

SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Any engine may be used providing that it is listed as standard equipment or an option for that model of vehicle in that particular year of production. Engine must have a maximum of six cylinders with a maximum displacement of 4300cc. Stock block and heads must be utilized as delivered by the manufacturer but may be modified. All internal components are open.

Engine must be located in the manufacturer's stock mounting location. Engine mounts may be strengthened by the addition of material.

Any make and type of exhaust is permitted.

Smog equipment may be removed.

Any make of automotive carburetor(s) or factory stock fuel injection may be used, providing they maintain a maximum of one venturi per cylinder. Any OE factory intake manifold set (upper and lower) appropriate for the engine may be used. Upper intake manifold cannot be modified.

Any make of intake manifold may be used for carbureted engines only.

Any make of air cleaner may be used with the location optional but must not cut the hood for clearance.

Any make of fuel pump and filter is permitted.

Dry sumps are not permitted. External oil coolers are permitted.

SCR25: ENGINE REPLACEMENT

SCR26: TRANSMISSION

Any shifter may be used.

DIFFERENTIALS

Front and rear differentials must remain factory stock as delivered by the manufacturer. Gear ratios and carriers are open. Front and rear straight axle differentials only may have material added for strengthening purposes only. Non-straight axle front differentials (traction beam, etc.) may not have material added for strengthening but may use a skid plate to protect the front pumpkin only. The skid plate must be a bolted-on type only and may not reinforce the differential in any way.

Knock-off hubs are not permitted.

- **SCR27:** THROTTLES
- SCR28: EXHAUST
- **SCR29: DRIVESHAFTS**
- **SCR30: FLYWHEEL SHIELDS**

SCR31: FLUID COOLERS

Radiators must remain in the factory stock location. Aftermarket oil and transmission coolers are permitted.

SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

- **SCR34: ROLLCAGES**
- SCR35: SAFETY HARNESS
- SCR36: SAFETY NETS
- SCR37: SEATING

Any manufacturer's racing seat may be used in the approximate stock location. Additional seat bracing is mandatory.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT

Dash must maintain stock appearance. Items that may come off during competition such as ashtrays, glove box, etc. may be removed.

Aftermarket gauges in any location may be used.

Air conditioning and heating units may be removed.

Items such as door panels, headliners, visors, rear seats, and carpets may be removed. Stock pedals in the stock locations must be maintained.

SCR39: DOORS & LATCHES

Doors must remain stock and operate on stock hinges as delivered from the manufacturer. Positive latching secondary door latches are required.

SCR40: FIREWALLS

Firewalls must remain stock as delivered from the factory and may not be modified. Holes may be placed for the routing of fluid lines, electrical, and roll cage but must have the absolute minimum of material removed for such. Holes must be closely drilled to minimize the area open around the item penetrating the firewall and must meet with the approval of **BITD**.

SCR41: BALLAST

SCR42: WEIGHT

Vehicle must weigh the original stock factory delivery weight minimum.

SCR43: FLOORBOARDS

SCR44: BUMPERS

Bumpers may be modified. Stock bumpers not required. Modification must meet with **BITD** approval.

SCR45: MIRRORS

SCR46: SKID PLATES

Skid plates, skid plate brackets and braces must not be attached to any suspension component or pivot point in any fashion that would reinforce that component or pivot point.

SCR47: STORAGE

SCR48: FENDERS

Wheel openings in fenders may be enlarged a maximum of 2 inches for tire clearance. Front fenders, rear fenders or bedsides must remain factory stock materials. Aftermarket fender flares may be added. Flares and wheel openings must meet with **BITD** approval. Fenders must retain stock appearance and location.

Front inner fender panels may be modified to a minimum for shock installation.

SCR49: CHASSIS & BODY

Body and chassis combinations for the year of manufacture must be retained.

CHASSIS

Chassis control systems such as ABS, stability control, and traction control may be disabled. Modified calibration of these systems is allowed.

Original wheelbase must be retained.

Original stock frame configuration must be retained. Lengthening or narrowing of frame is not permitted. Removal of material is not permitted. Damaged areas of the frame may be plated with the same thickness of metal as that of the original frame thickness (i.e. 0.25-inch thick frame = 0.25-inch thick plate). The plate area may only be as large as required to cover the damaged area and to allow for the welding of the plate to a non-damaged area of the frame.

All repairs must meet with the approval of **BITD**. Photographic evidence of the damaged frame may / will be required for approval of repair work. Entrants must notify **BITD** of required frame repair before starting repair work. If frame damage occurs at a **BITD** 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.

The frame at the location of the rear bump stop directly over the differential may be reinforced per the following options only. The reinforcement must be centered along the centerline of the bump stop. Installation must meet with **BITD** approval. You may not combine the options.

(Option 1)

A single bar roll cage connection point may be utilized.

(Option 2)

Frame may be boxed with one flat plate only that is a maximum of 6" long with a maximum thickness of the existing frame thickness.

(Option 3)

Two vertical tubes may be placed between the upper and lower frame rails. The placement of the tubes may be placed a maximum of 6" apart as measured from centerline of tube to centerline of tube. The tubes may only have an outside diameter as large as that of the measurement of the frame rail as measured on the inside of the frame from the web to the lip of the frame rail.

BODY

Body must maintain the original shape, size, appearance and configuration. Additional parts or mounts for body strengthening may be used. Mounting location (vertical, horizontal, and lateral) must remain stock in relationship to the frame and must retain stock mounting method. The measurement from the back of the b-pillar post to the centerline of the front spindle must remain stock. A maximum of a 3-inch body-lift may be utilized. The blocks must be made of a non-crushable material that will not deform during competition.

Internal body structural members must remain intact. Holes may be placed for the placement of rollcage, fluid lines, or electrical.

Pickup bed floors must remain intact except for the material removal required for sinking the fuel cell.

Hoods, trunk lids, doors, and bedsides must remain stock as delivered by the manufacturer. Tailgates are optional. Hoods, fenders, and tailgates may be upgraded to the latest available update for that series of vehicle body and chassis combination. You cannot update the hoods, fenders and tailgates between series of the same production vehicle if the body and chassis combination is different between the series runs. (Example: A Ford Ranger with I-beam type_suspension cannot upgrade body components to the A-arm series body components. The body components can only be upgraded to the last series run of I-beam type body components.)

Stock front grill assemblies are required. Safety glass windshields, rear and side glass is optional.

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: ADVERTISING ON VEHICLES SCR53: WORKMANSHIP SCR54: RADIO EQUIPMENT

CLASS 8000

PRODUCTION FULL-SIZED TRUCK / SUV'S

Vehicles built from a two or four-wheel drive full-sized truck / SUV. Vehicle must have been series produced in quantities of at least 4000 units within a 36-month period. There must be a minimum of 4000 series vehicles sold to the general public in the U.S.A. within a 36-month period. Vehicle must be readily available to the general public in the U.S.A. Vehicle must be marketed as full-sized truck /SUV.

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations

COMPETITION REGULATIONS

Manufacturer's body, engine, and chassis combinations must be retained. This is an open class and all parts will be considered open unless restricted herein.

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.

SAFETY EQUIPMENT

SCR1:HELMETSSCR2:PROTECTIVE CLOTHINGSCR3:EYE PROTECTIONSCR4:HEAD AND NECK RESTRAINTSSCR5:FIRST AID KITSCR6:BREAKDOWN SAFETY DEVICESSCR7:HORNSSCR8:REFLECTORSSCR9:FIRE EXTINGUISHERSCR10:SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

Front suspension must be of the same configuration as originally produced and installed on the chassis to which it is mounted. Suspensions may be strengthened and reinforced in any manner so long as original stock concept (a-arm, I-beam, etc.) is retained. Pivot points are open. Ball joints may be of any manufacturer. Spindles may be of any manufacture and may be reinforced. Vehicles with straight axle front ends may modify suspension configuration to utilize a four link and coil over shock system.

Rear suspension must utilize an automotive differential. Suspension support system is open (quarterelliptical, coil-over shocks, four-link, etc.). Outboard mounted rear springs are permitted. Spring rates and capacities are open.

Tires must retract inside of fender wells.

Front and rear wheel travel is open.

SCR11: SHOCK ABSORBERS & BUMP STOPS

Number of shocks and mounting methods are open. Mounting points may be strengthened and design modified. Remote mounted shocks are permitted.

Hydraulic bump stops are permitted.

SCR12: SECONDARY SUSPENSION Secondary suspension is permitted.

SCR13: WHEELS & TIRES SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING

Steering box location is optional. Steering box mounting may be reinforced by adding material.

Power steering is permitted.

Steering box may be replaced.

Steering parts (tie rods, tie rod ends, idler arms, relay rods, and turning arms) may be specially made. Heim joints are optional.

Any manufacturer steering wheel may be used.

SCR16: BRAKES

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL

SCR22: FUEL TANKS

Safety fuel cells are required. Fuel cell location is optional. Fuel cell may be sunk into the bed. Rear frame member may be relocated or replaced in order to sink fuel cell.

SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT

Engine must be of the same manufacturer basic design, type and have the same number of cylinders as the one installed by the manufacturer. Any displacement engine may be used. After market block may be used. Engine must be readily available to the general public in the USA. Engines must be mounted in the front of the vehicle like a truck with all pulleys facing forward. No mid-engine chassis configuration.

Special Note: Ford Production turbocharged V6 gasoline engine allowed in Class 8000.

Items with no restrictions include:

- A. Strengthening and balancing.
- B. Valve train and camshaft.
- C. Bore and stroke.
- D. Pistons
- E. Blueprinting.
- F. Oil and water-cooling systems. Dry sumps are permitted.
- G. Heads
- H. Air cleaners.
- I. Fuel pumps.
- J. Exhaust systems (must have muffler or spark arrestors.)

Any make of carburetor will be permitted. Stock factory fuel injection is permitted. Aftermarket port fuel injection is not permitted.

SCR25: ENGINE REPLACEMENT

SCR26: TRANSMISSION

Transmission is open.

DIFFERENTIAL

Rear axle assembly must use an automotive type straight axle housing and third member. Gear ratios, carriers, axles, and floating hubs are optional. Knock-off hubs are permitted. Axle tubes may be replaced.

SCR27: THROTTLES

SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS SCR37: SEATING Any Manufacturer's racing seat may be used but must remain in the approximate stock location.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT

If the full stock cab is not being utilized, metal sheeting must be installed on the sides of the roll cage by the occupants to afford protection in event fiberglass doors are damaged or missing. The sheet metal must extend from the front firewall to behind the seats and from the floor to the horizontal bar at the approximate height of the door's windowsill. Sheet metal must be attached to the top of the cage if a fiberglass roof is used. Vehicles utilizing a stock cab are exempt from the

sheet metal sides but it is recommended if utilizing fiberglass doors.

SCR39: DOORS & LATCHES SCR40: FIREWALLS SCR41: BALLAST SCR42: WEIGHT Vehicle must weigh dry 4000 lbs. minimum.

SCR43: FLOORBOARDS

SCR44: BUMPERS

SCR45: MIRRORS

SCR46: SKID PLATES

SCR47: STORAGE

SCR48: FENDERS

Wheel openings in fender may be enlarged for tire clearance but must maintain their original bodylines. Fenders may be flared.

Front and rear fender inner panels may be modified, replaced, or removed. Fenders must be securely mounted. Hinged front ends are not permitted. Attachment of fenders, inner panels, and radiator to front hoop is acceptable providing that the stock external appearance is maintained.

Fiberglass front & rear fenders are permitted.

SCR49: CHASSIS & BODY

Manufacturer's chassis and body combinations must be retained to the rear of the cab.

CHASSIS

Original wheelbase plus or minus 2 inches must be retained.

Frame rails must remain stock shape, size, length, configuration, and material to the rear of the cab.

No material may be removed from frame rails with the exception of the following.

Frame rail exceptions:

The front end of the frame rail may be notched a maximum of 8 inches from the end for ground clearance. Top of frame rail must remain stock.

BODY

Body must resemble a truck or SUV. Motor and body must match and have the correct emblem of manufacturer (i.e. Ford Oval or Chevy Bowtie)

Hoods, trunk lids, doors, fenders, and bedsides are required. Hoods, front fenders, doors, and bedsides may be made of fiberglass. Pickup bed floor and inner fender wells may be removed. Tailgates and pickup bed front panels are optional.

Front Grill assembly must resemble stock appearance, (ie. Decals or fiberglass.) Safety glass windshields, side, and rear glass are optional

SCR50: HOSES

SCR51: IDENTIFICATION MARKERS BITD will assign vehicle numbers.

SCR52: Advertising on vehicles SCR53: Workmanship SCR54: Radio Equipment

CLASS 8100 UNLIMITED SPORTSMAN

GENERAL REGULATIONS

Class entrants shall comply with all class and applicable general regulations.

COMPETITION REGULATIONS

This is an unlimited sportsman class and all components will be considered open unless it states otherwise with these class rules. No BITD points issued for this class, no year-end class championship awarded.

- **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.
- **Note:** No Driver of Record, who has raced in any Professional Class with BITD as a Car or Truck Driver of Record will be allowed to be a Driver of Record in the Sportsman Class. The Unlimited Sportsman Class is a NO Points Class. BITD Director/Owner can make a final decision regarding Driver of Record with special circumstances.

SAFETY EQUIPMENT

- SCR1: HELMETS
- SCR2: PROTECTIVE CLOTHING
- **SCR3:** EYE PROTECTION
- SCR4: HEAD AND NECK RESTRAINTS
- SCR5: FIRST AID KIT
- SCR6: BREAKDOWN SAFETY DEVICES
- SCR7: HORNS
- SCR8: REFLECTORS
- SCR9: FIRE EXTINGUISHER
- SCR10: SURVIVAL SUPPLIES

SUSPENSION COMPONENTS

SCR11: SHOCK ABSORBERS & BUMP STOPS SCR12: SECONDARY SUSPENSION SCR13: WHEELS & TIRES SCR14: FASTENERS

STEERING & BRAKE COMPONENTS

SCR15: STEERING SCR16: BRAKES

ELECTRICAL SYSTEM

SCR17: IGNITION SCR18: BATTERIES SCR19: LIGHTS Rearward facing blue light is mandatory. SCR20: STARTER

FUEL SYSTEM

SCR21: FUEL SCR22: FUEL TANKS Safety fuel cells must be utilized. Stock fuel tanks must be removed completely. SCR23: FUEL FILLER, VENTS & CAPS

ENGINE TRANSMISSION & DRIVELINES

SCR24: ENGINE LOCATION & DISPLACEMENT SCR25: ENGINE REPLACEMENT SCR26: TRANSMISSION SCR27: THROTTLES SCR28: EXHAUST SCR29: DRIVESHAFTS SCR30: FLYWHEEL SHIELDS SCR31: FLUID COOLERS SCR32: AUXILIARY EQUIPMENT SCR33: SUPERCHARGERS & TURBOCHARGERS

VEHICLE SAFETY EQUIPMENT

SCR34: ROLLCAGES SCR35: SAFETY HARNESS SCR36: SAFETY NETS

SCR37: SEATING

All vehicles must use seats designed specifically for racing applications manufactured by a recognized racing seat manufacturer. Up to four (4) seats are allowed.

GENERAL VEHICLE COMPONENTS

SCR38: DRIVER'S COMPARTMENT SCR39: DOORS & LATCHES SCR40: FIREWALLS SCR41: BALLAST SCR42: WEIGHT **SCR43:** FLOORBOARDS **SCR44: BUMPERS SCR45: MIRRORS SCR46: SKID PLATES SCR47: STORAGE SCR48: FENDERS** SCR49: CHASSIS & BODY **SCR50: HOSES SCR51: IDENTIFICATION MARKERS** Numbers will be black on a yellow background per SCR51 rule as outlined in general rules section.

BITD will assign vehicle numbers.

SCR52: Advertising on vehicles

SCR53: WORKMANSHIP

SCR54: RADIO EQUIPMENT

SFI APPENDIX

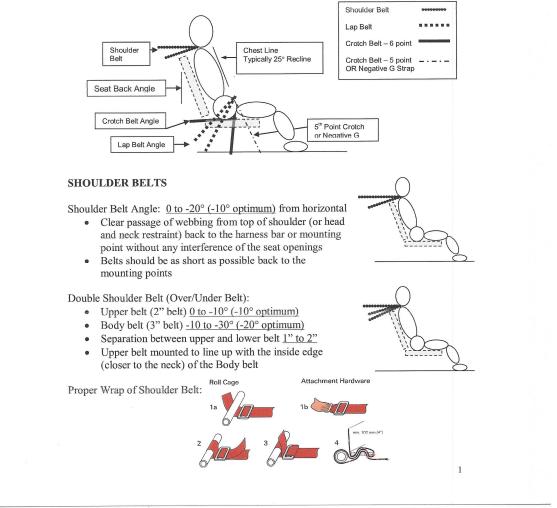
Appendix #1 – SFI Seatbelt Installation Illustrations:



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 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.



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

LAP BELTS

Lap Belt Angle: <u>-45° to -80°</u> 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 (×)

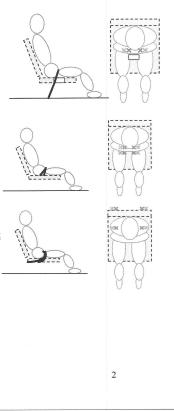
Containment Seats with Crotch belt mounting directly to seat bottom OR through holes provided at the back of the seat bottom: (Driver is sitting on the Crotch belts)

- Crotch Belt Angle <u>-10° to -20° from the perpendicular</u> just in front of the crotch with anchors 4 to 6 inches apart (×) OR
- Crotch Belt Angle Horizontal rearward to under the butt 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



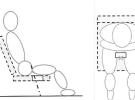
Appendix #1 – (continued) SFI Seatbelt Installation Illustrations:



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:

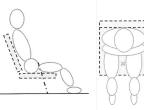
- Crotch Belt Angle: Chest line to 20° through the hole
- Crotch Belt should never wrap around the front of the seat there should be a pass through
- Crotch belt is used only to maintain position of the lap belt



NEGATIVE G BELT – (7TH POINT)

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

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



3



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 garments.

SFI Rating	TPP Value	Time t Degree
3.2A/1	6	3 Sec
3.2A/3	14	7 Sec
3.2A/5	19	10 Sec
3.2A/10	38	19 Sec
3.2A/15	60	30 Se