

BIG HORN BASIN UNIFIED

2018 TRUCK CLASS RULES

I. Vehicles

- A. All vehicles will undergo **THOROUGH INSPECTION** prior to entering the pits!
- B. Any American made make and model of 1/2 ton or 3/4 ton pickup truck or SUV including Suburban, Bronco, Blazer, Ram Charger, etc. No heavy/medium duty trucks or commercial-type vehicles will be allowed.

II. General Vehicle Preparation

- A. Vehicles will be completely stripped of all interior to reduce fire hazards. This includes carpet/door panels/seats/dash/headliners/unnecessary electrical wires.
- B. All glass must be removed, and every attempt must be made to remove **ALL** glass fragments prior to inspection.
- C. All exterior trim/door handles/mirrors/lights/plastic grilles/etc. must be removed. Metal grilles may remain.
- D. If the vehicle was equipped with air bags, they **MUST** be removed.
- E. Drivers' doors **MUST BE PAINTED A CONTRASTING COLOR**.
- F. **THERE IS NO WELDING ALLOWED UNLESS SPECIFICALLY STATED WITHIN THESE RULES!**
This includes re-welding factory spot-welded seams.
- G. Both front doors and the roof **MUST** have the driver name and number clearly **VISIBLE** and **LEGIBLE**. A properly secured roof sign is allowed but not required.
- H. Obscenities or vulgarity will **NOT** be allowed anywhere on the vehicle.
- I. Drivers may use a custom or fabricated steering column but **ALL** steering linkage, tie-rods, etc. will be stock.
- J. Wheels and tires will adhere to the following rules:
 - 1. Drivers may use any type of tire they desire so long as they contain only air. No solid rubber or liquid/foam-filled tires will be allowed.
 - 2. Wheels **MUST** be stock-type, factory wheels up to 16" diameter.
 - 3. Weld-in centers are allowed at the mounting surface only (roughly 6-8" diameter) and not exceeding 1/4" thick.
 - 4. Wheels may have valve stem protectors welded to them. No "bead locks" allowed.
 - 5. Wheels and tires (spares included) **MUST** have a large "+" painted on them **IN A CONTRASTING COLOR** to allow Field Judges to determine if/when your brakes are locked.

III. Sheet-metal

- A. Wheel-wells may be trimmed for tire clearance and may have the inner and outer skin welded or bolted together. If welded, no additional metal may be added. If bolted, a maximum of 10 bolts may be used (3/8" hardware).
- B. Drivers may patch rust holes in the body metal or floorpans as well as repair holes from damage that occurred in a previous derby. The patch material **MUST** be the same thickness (18 to 20 gauge) and can be welded with no added metal up to a maximum of 2" beyond the repaired hole.
- C. If creasing body panels, hammered or artificial body creases can **NOT** be welded or bolted

IV. Bumpers

- A. Trucks **MUST** have both front and rear bumpers with one exception (**See RULE VI.B.7**). Bumpers must be passenger car or pickup bumpers. Bumper swaps from other vehicle makes are allowed. Bumpers may be flipped, and front bumpers may be used on the rear and vice versa. Drivers can choose pipe or square tubing *in place of* the original bumper, but it must be straight, can **NOT** exceed 60" in length, 4" in diameter, or 1/8" thick, and the ends **MUST** remain open.
- B. Bumpers can **NOT** be stuffed, packed, or reinforced in any way, and factory openings can **NOT** be closed.
- C. Bumper ends may be trimmed and/or bent around and may be re-welded with no added metal.
- D. Bumpers may have chrome outer shell and steel inner core welded together with no added metal.
- E. Bumpers may be welded directly to the frame with no added metal (trimming/shaping end of frame rails is allowed).
- F. OEM or individually fabricated bumper brackets may be welded to the bumper **AND** the frame with no added metal.
- G. Individually fabricated bumper brackets will adhere to the following rules:
 - 1. Fabricated bracket material (plate, strap, angle, etc.) can **NOT** exceed 1/2" thick. If using pipe or square tubing, a maximum of 3" pipe or 3" square tubing with a maximum wall thickness of 1/4" will be allowed.
 - 2. Fabricated brackets can **NOT** exceed the height or width of the frame, and they may not extend more than 6" onto or into the frame. Pipe/tubing can **NOT** extend more than 10" onto or into the frame.

3. The use of a “no-weld bumper plate” not exceeding 1/2" thick is allowed.
 4. Shock absorber-type bumper mounts may be welded to the inside or outside of the frame with no added metal. Shock absorbers may also be welded solid around the tube seam only (must be drained if welded). Similar to pipe/tubing, Shock absorbers can **NOT** extend more than 10” onto or into the frame unless they did when stock.
 5. **Fabricated brackets can NOT overly extend bumpers more than 6” from back of bumper to frame.**
- H. **IN ADDITION TO** front bumper mount, bumpers may be secured to the front of the vehicle by chain **ONLY**:
1. A maximum of (2) vertical chains can extend from the hood to the bumper.
 - a. Chains can **NOT** exceed 3/8” link and links can **NOT** be welded.
 - b. Chain holes may be reinforced with plate material or large washers. Plate material can **NOT** exceed 4” x 4” square and 1/8" thick. Washers can **NOT** exceed 4” diameter.

V. Frames

- A. Frames may **NOT** be plated, pinned, or otherwise reinforced in any way unless specifically allowed in the rules.
- B. Fresh vehicles are authorized 10” of reinforcing plate on each frame rail – *a total of 20” on the entire vehicle* – in the location(s) of your choice. The intent of this rule is to give drivers the ability to strengthen any common, known weak spot(s) on fresh vehicles in a controlled and equal manner. Pre-run vehicles are authorized an additional 10” of reinforcing plate on each frame rail – *now a total of 40” on the entire vehicle* – in the location(s) of your choice. The intent of this rule is to give drivers the ability to repair damaged, kinked, or bent frame rails on pre-run vehicles in a controlled and equal manner. The following rules apply to reinforcing plates:
 1. Reinforcing plates can **NOT** exceed 1/4” thick.
 2. Reinforcing plates can **NOT** exceed the height or width of the frame.
 3. Reinforcing plates can **NOT** exceed 10” in length. Drivers can choose to split a plate **VERTICALLY** into smaller sections if they desire (i.e. two 5” long plates **OR** a 4” and 6” long plates). If one plate is split, drivers can **NOT** combine the remainder with another plate (i.e. a 6” long plate being combined with a 10” long plate to create a 16” plate). Each 10” plate allocated may only be split once.
 4. Reinforcing plates can **NOT** be located within 3” of another plate but can be on **OPPOSING** sides of the frame.
 5. Reinforcing plates may be welded or bolted in place lengthwise along the frame.
 6. If drivers utilize any reinforcing plates, the plated locations will be disclosed to inspectors at the time of inspection. They **MUST** be painted with **RED PAINT** in order to allow inspectors to clearly identify them.
 7. **HIDDEN OR EXTRA PLATES FOUND AT ANY TIME FROM INSPECTION TO CONCLUSION OF DERBY WILL RESULT IN IMMEDIATE DISQUALIFICATION! Entry fees are non-refundable.**
- C. Frames may be shortened within the following rules:
 1. Front frames shortened no further than original core support mounts.
 2. Rear frames shortened only so much as necessary to flush-mount a rear-bumper with the original body metal.
- D. Trailer hitches must be completely removed from the frame.
- E. No fresh paint or undercoating is allowed on the frame.
- F. Factory holes and openings in the frame **MUST** remain open for inspection and can **NOT** be welded shut.
- G. Body mounts or “pucks” may be removed, but the bed, cab, and front clip of the vehicle can **NOT** be welded to the frame. If body mounts/pucks are removed, replacement bolts/washers can **NOT** exceed 3/4” hardware and 3” diameter washers:

VI. Outside Body Seams

- A. Doors
 1. Doors **MUST** be welded on the **OUTSIDE OF THE VEHICLE ONLY.**
 2. Filler material can **NOT** exceed 1/2” round stock/rebar/cold rolled **OR** 2” x 3/16” flat strap.
 3. Interior door seams can **NOT** be welded.
 4. Any vehicle that has **ANY DOOR** come open will be **IMMEDIATELY DISQUALIFIED.**
- B. Tailgates and Beds
 1. Tailgates are optional, but if drivers use a tailgate, it must be a stock, pickup-type tailgate.
 2. Tailgates **MUST** be welded on the **OUTSIDE OF THE VEHICLE ONLY.**
 3. If welded, filler material can **NOT** exceed 1/2” round stock/rebar/cold rolled **OR** 2” x 3/16 flat strap.
 4. Bed sides may be folded over and inward to the center of the bed within the following rules:
 - a. The bed sides may be secured to the **BED FLOOR ONLY** with a maximum of (4) All-thread up to 1” in diameter. Holes for All-thread may have a 1” washer welded to bed side and floor with no added metal.
 - b. No other welding on the bed sides will be allowed.

5. The gap between the cab and the bed may be welded on the sides of the vehicle **ONLY**. Filler material can **NOT** exceed 4" x 3/16" strap. Additionally, drivers may also bolt the front of the bed directly to the back of the cab with no more than (8) bolts. Bolts can **NOT** exceed 1" hardware.
6. Tailgates may be slid downward, but they can **NOT** be welded or bolted to the bumper or the frame.
7. Drivers may choose to compete without a rear bumper **IF AND ONLY IF** the tailgate of the vehicle is moved downward and sufficiently covers the exposed ends of the frame rails.

C. Hoods

1. **Hoods must be able to be opened and will be completely removed or lifted on hinges prior to inspection.**
2. Hoods may be secured with bolted angle iron (pieces of opposing angle iron each being welded to the hood and front fender). Hood angle iron will be inspected within the following rules:
 - a. Angle iron can only be welded to the **SIDES** of the hood. This is defined as driver and passenger sides.
 - b. Hood angle iron can **NOT** exceed 18" **TOTAL LENGTH** per side of the hood. Drivers may split their allowable 18" of angle iron as desired, but drivers can **NOT** use angle iron pieces shorter than 4" in length (i.e. 6" - 4" - 8" **OR** 9" & 9" **OR** 10" - 8" and so on).
 - c. Hood angle iron can **NOT** exceed 2" in height & width.
 - d. Hood angle iron can **NOT** exceed 1/4" in thickness.
 - e. A maximum of 2 bolts per set of angle iron are allowed, but can **NOT** exceed 1/2" hardware.
3. **INSTEAD OF** bolted angle iron, (4) bolts (two per side) with a maximum diameter of 1" may be used to bolt the hood down. Holes for these bolts may have a 3" washer welded to the hood skin with no added metal
4. **IN ADDITION TO** bolted angle iron or 1" bolts mentioned above, (2) All-thread (one per side) with a maximum diameter of 1" may be used under the following stipulations:
 - a. All-thread **MUST** be located immediately in front, behind, or pass through the radiator core support.
 - b. All-thread can be welded or bolted *to or through* the front frame with no added metal.
 - c. All-thread holes may be reinforced with plate material or large washers. Plate material can **NOT** exceed 4" x 4" square and 1/8" thick. Washers can **NOT** exceed 4" diameter.
5. Hoods must remain in **ORIGINAL POSITIONS**. They can be folded over at the radiator core support but can **NOT** be slid forward. If folded, hoods can **NOT** be bolted or welded to bumper or radiator core support.
6. Hoods can **NOT** be cut/sectioned with the front portion bolted or welded to fenders or radiator core support.
7. Hood skin can **NOT** be folded down to the inner fenders or radiator core support; however, hood skin can be folded to the underside of the hood up 4" and welded with no added metal or bolted with up to 3/8" hardware.
8. Underhood support webbing can **NOT** be welded or bolted to the hood skin.
9. Hood openings will adhere to the following rules:
 - a. A minimum of (2) holes with a 6" diameter on each side of the engine near the carburetor are **MANDATORY** in case of fire. Hood holes from stacks or headers should meet this requirement, but they may need to be enlarged at the discretion of the inspector.
 - b. All hood openings for exhaust and engine maintenance (radiators / transmission dipsticks / etc.) may have the hood skin and under-hood support webbing secured together by welding the perimeter of the opening with no added metal or by bolting with a maximum of 3/8" hardware.

VII. Fuel Systems

- A. **PUMP GAS OR DIESEL FUEL ONLY!** Premium or lesser octane - No aviation, alcohol, or racing fuel allowed.
- B. All stock, factory gas tanks **MUST** be removed.
- C. Fuel tanks with a maximum capacity of 6 gallons must be located in the rear seat area. They must be effectively secured and fastened with bolts, ratchet, or welded straps. Bungee or pull-style straps are **NOT** allowed.
- D. Metal fuel tanks are highly recommended, but plastic fuel tanks are allowed provided they are designed to be a fuel tank (no gas cans). Fuel tank fittings must be secured into the tank in an appropriate fashion (no duct tape).
- E. Vehicles may utilize electric fuel pumps. The switch area must be clearly marked with **RED PAINT** for easy identification in the event of a fire. This is for driver and fire personnel protection.

VIII. Cooling Systems

- A. Radiators may be completely removed, but not relocated.
- B. Aftermarket aluminum radiators are allowed.
- C. Additional or external coolant tanks can **NOT** be used to increase coolant capacity.
- D. Radiator core supports can **NOT** be reinforced and **MUST** be bolted within 1" of the **ORIGINAL MOUNTS**.
- E. Electric cooling fans are allowed.

- F. Radiator and cooling fan mounts may be bolted or welded to the radiator core support **ONLY**. Mounts can **NOT** be excessive enough to be considered reinforcement and can **NOT** be attached to the frame.
- G. Transmission coolers or “cold boxes” are allowed. If used, they **MUST** be located in the front, center of the bed.

IX. Electrical Systems

- A. Batteries **MUST** be relocated to the passenger front floorboard.
- B. A maximum of (2) automotive/marine batteries **OR** (1) large tractor/Cat battery may be used.
- C. Batteries **MUST** be secure and **MUST** be covered for driver safety.
- D. Metal battery boxes with a top strap are **HIGHLY RECOMMENDED** and may be bolted or welded to the floor.

X. Brake Systems

- A. Vehicles **MUST** have *sufficient* brakes and will demonstrate braking ability at inspection.

XI. Drive-trains

A. Engines

- 1. Engine swaps from other vehicle brands are allowed.
- 2. **Engines MUST be located within 4” of the stock engine location.**
- 3. Firewalls and floorboards may be trimmed or bent for engine and/or distributor clearance but *every attempt* must be made to close off the interior of the vehicle from the engine compartment for driver safety. Openings larger than 6” must be covered with **SHEET METAL!**
- 4. All engines **MUST** have an air cleaner. No open carburetors.
- 5. Engine mounts will be inspected within the following rules:
 - a. Stock engine mounts may be welded or made solid.
 - b. Individually fabricated engine mounts are difficult to regulate due to unique mounting requirements, but bottom line, they can **NOT** be excessive or reinforce the frame in any way. *Inspectors will use discretion.*
 - c. Four additional chains or straps may be used to tie the engine down to the frame. **NO MORE THAN 4”** of chain/strap may be welded to the frame for **EACH** mount.
 - d. **LOWER ENGINE CRADLES** are allowed but can **NOT** reinforce the frame.
 - e. **If a mid-plate is used, it can NOT be connected to frame or lower engine cradle.**
- 6. Distributor protectors will be allowed but must be at least 10” away from dash bar.
- 7. **NO FULL ENGINE CRADLES/CAGES/HALOS/PROTECTORS WILL BE ALLOWED!**



B. Transmissions

- 1. Transmission mounts may be chained, welded, or made solid.
- 2. Transmission braces are allowed but may have **NO MORE THAN FOUR BARS/STRAPS** (1” thick). Transmission braces may **NOT** be attached to a mid-plate or connected to a lower engine cradle. **NO FULL TRANSMISSION CAGES ALLOWED!**
- 3. Individually fabricated floor shifters are allowed. Floor shifters may be bolted to the floorboard or directly to the transmission. They may also be welded to the floorboard.

C. Rear Differentials

- 1. Rear-end swaps from one make/style to another make/style are allowed. Rear-end swaps from a 5-lug rear-end to an 8-lug rear-end are also allowed. See **Rule XII.F** for allowable mounting methods.
- D. Drivelines may be OEM or aftermarket. Fabricated slider-type drivelines are allowed.
- E. 4WD vehicles **MUST** have one driveshaft completely removed. Drivers may choose either the front or rear.

XII. Suspensions

- A. The height of the vehicles’ bumpers *must be reasonable* and similar to the original ride-height for the vehicle. **LIFTED OR EXCESSIVELY JACKED UP VEHICLES WILL NOT BE ALLOWED.** Inspectors will allow flexibility – within reason – for pre-run vehicles on a case-by-case basis.
- B. The minimum height for the rear of the vehicle is 18” to the bottom of the bumper or frame rail. This is due to the historical and demonstrated risk of roll-overs, specifically in the Truck Class, if/when lower-profile tires are used.
- C. Adjusting factory suspensions *within factory means* is allowed. Additionally, drivers may chain A-arms down (maximum of 3/8” chain with links unwelded). **NO STRAP, SOLID, OR FULLY WELDED SUSPENSIONS!**
- D. Lifting blocks or shackles can **NOT** be used to increase height.
- E. Coil springs may be welded to the rear axle and the frame with no added metal.
- F. Factory trailing arms can **NOT** be reinforced and wall-thickness can **NOT** exceed 1/8” on fabricated trailing arms.

- G. If a rear-end swap is performed, it **MUST** be mounted just as the factory did for the vehicle it's swapped **INTO**. This means drivers must use the same brackets, saddles, perches, trailing arms, etc. as their vehicle did in stock form. If they are damaged beyond repair or altogether missing, drivers must use materials similar to stock in strength and design. **LEAF CONVERSIONS ARE NOT ALLOWED!**

XIII. Safety

A. Driver safety equipment

1. All drivers must wear closed-toed shoes and pants. Shorts/sandals will **NOT** be permitted.
2. Long sleeve shirts and gloves are recommended. The use of fire-retardant clothing is also recommended.
3. A DOT approved closed-faced safety helmet is **MANDATORY**. If this equipment falls off during the derby, you may be **DISQUALIFIED**. Face shields, goggles, or safety glasses are recommended.
4. At a minimum, a lap-safety belt is **MANDATORY**. If a safety belt becomes unsecured or fails during the derby, you may be **DISQUALIFIED**. A shoulder harness is recommended.
5. Fire extinguishers are optional, but if they are used, they **MUST** be mounted **SECURELY!**

B. Windshield/Rear Window Openings

1. For safety, all windshield openings **MUST** have (2) bars welded vertically in front of the driver.
2. For safety, rear window openings **MAY** have up to (2) bars welded vertically in the window frame only. These bars must start and end within 2" of the rear window opening and can **NOT** extend onto the trunk.
3. Material for windshield/rear windows can **NOT** exceed 1" in diameter/width (rod, pipe, tubing, etc.).

C. The driver door **MUST** be welded. It **MUST** also be reinforced for driver safety by a 4-Point Cage or Door Brace. Safety reinforcements must be contained within the passenger compartment **ONLY**. The only exceptions are the Halo bar and Outside Door Brace. Safety reinforcements may be welded to the **FLOORBOARD ONLY**. To increase strength and safety, Drivers may utilize end plates where the pipe or tubing meets the floorboard. End plates can be a maximum of 6" X 6" in size and up to 1/4" in thickness. All safety reinforcements must be constructed **WITH A MAXIMUM OF 4" diameter pipe or 4" square tubing**.

1. 4-Point Cage – The 4-Point Cage may be constructed with a maximum of (4) vertical posts, (1) bar across the dash area, (2) bars across both the driver and passenger doors, and (2) bars across the rear seat area no more than 12" behind the driver seat [(1) of the rear seat bars must be no more than 12" above the floorboard].
2. Door braces – The Door Brace may be constructed with (1) door bar slanted upward across the driver door and (1) rear seat bar slanted downward to the passenger rear floorboard no more than 12" behind driver seat.
3. Halo bar – Halo bar or roll-over protection is **MANDATORY**. They may be routed inside or over the roof of the vehicle and can be welded to the 4-Point Cage or Door Brace. Drivers can choose to place the Halo Bar in the forward-most portion of the bed and weld it directly to the frame (one point on each side) with no added metal. If placed in the bed, slanted support bars may be added extending downward to the bed floor or forward side of the wheelhousing (not attached to frame) similar to a factory roll-bar. At no time will they be placed further back than the forward-most side of the wheelhousing.
4. Outside Door Brace – An Outside Door Brace may be used instead, but they are **NOT RECOMMENDED**. It can **NOT** extend more than 12" past the front and rear door seams. The use of "Grader Blade" material as an Outside Door Brace is allowed, but it is **NOT RECOMMENDED!**