

BIG HORN BASIN UNIFIED

2018 CHAIN CLASS RULES

I. Vehicles

- A. All vehicles will undergo **THOROUGH INSPECTION** prior to entering the pits!
- B. Any American made make and model of passenger vehicle or station wagon can be used with the following exceptions: No International Travel-cars, convertibles, Checker cabs, ambulances, hearses, limousines, 4WDs, or 1973 and older Imperials (including Imperial sub-frame swaps).
- C. Pre-bending or body modifications to include creasing, wedging, etc. will **NOT** be allowed.
- D. **IF THE RULES DO NOT SPECIFICALLY SAY YOU CAN DO IT ... YOU CAN'T!**

II. General Vehicle Preparation

- A. Vehicles will be completely stripped of all interior to reduce fire hazards. This includes carpet/door panels/rear 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. Steering column and **ALL** steering linkage, tie-rods, etc. must be OEM parts and must remain assembled as factory.
- J. Wheels and tires will adhere to the following rules:
 - 1. Only DOT approved, passenger car or light truck tires are allowed up to an 8 ply rating. Farm implement, loader, solid rubber, foam-filled, or skid steer tires can **NOT** be used.
 - 2. Tires will **NOT** be filled with anything other than air and will be checked for liquids during inspection.
 - 3. Wheels **MUST** be stock-type, factory wheels up to 16" diameter. No weld-in centers.
 - 4. Valve stem protectors are allowed to be welded onto wheels. 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 bolted together. If bolted, drivers may use no more than 5 bolts per wheel-well with a maximum of 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. Bumpers must be passenger car bumpers (*no pickup or homemade bumpers allowed*). Bumper swaps are allowed within the same vehicle make (Ford to Ford / GM to GM). Bumpers may be flipped, and front bumpers may be used on the rear and vice versa
- 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 but not re-welded.
- D. Bumper shocks may be collapsed and welded. All shocks and bumper brackets **MUST** be in stock location.
- E. Bumper brackets may be welded to the bumper **AND** the frame with no added metal. The use of a "no-weld bumper plate" not exceeding 1/2" thick is allowed
- F. **IN ADDITION TO** front and rear bumper mounts, bumpers may be secured to the vehicle by chain:
 - 1. A maximum of (2) vertical chains can extend from the hood around the front bumper.
 - 2. A maximum of (2) vertical chains can extend from the trunk around the front bumper.
 - 3. Chains can **NOT** exceed 3/8" link. Chain links can **NOT** be welded. They must be looped and bolted only.

- Chain holes may **NOT** be reinforced with plate material or large washers.

V. Frames

- Frames may **NOT** be reinforced in any way.
- Frames may **NOT** be trimmed or shortened in any way.
- Frames may be notched or dimpled, but may **NOT** be re-welded.
- Trailer hitches must be completely removed from the frame.
- No fresh paint or undercoating is allowed on the frame.
- Factory holes and openings in the frame **MUST** remain open for inspection.
- Body mounts or “pucks” may **NOT** be removed. They may be replaced with bolts/and washers not exceeding original size if they are broken or damaged **ONLY**.

VI. Outside Body Seams

A. Doors

- The driver’s door may be welded around the full perimeter for safety. Filler material can **NOT** exceed 1/2” round stock/rebar/cold rolled **OR** 2” x 3/16” flat strap.
- Remaining doors **MUST** be chained/banded closed. A maximum of 3/8” link chain or 1” banding may be used.
- Drivers may secure doors with chain/banding with a maximum of six locations per door.
- Chain links can **NOT** be welded. They must be looped and bolted only.
- Any vehicle that has **ANY DOOR** come open will be **IMMEDIATELY DISQUALIFIED**.

B. Trunks and Wagon Tailgates

- Trunks/tailgates **MUST** be chained/banded closed. A maximum of 3/8” link chain or 1” banding may be used.
- Drivers may secure trunks/tailgates with chain/banding with a maximum of six locations.
- Chain links can **NOT** be welded. They must be looped and bolted only.
- Trunk lids must be in the original position and tucking the trunk is **NOT** allowed.
- Rear seat to trunk opening **MUST** remain open to inspect the trunk area.
- Station wagon spare-tire access covers may be bolted according to the following rules:
 - Bolted every 4” with a maximum of 3/8” hardware.
 - A 10” diameter hole **MUST** be cut in the center of the spare-tire access cover for inspection underneath.
 - Drivers may also choose to completely remove the spare-tire access cover if desired.

C. Hoods

- Hoods must be able to be opened and will be completely removed or lifted on hinges prior to inspection.**
- 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:
 - Hoods may have four sets of 6” angle iron (2 per side).
 - Hood angle iron can **NOT** exceed 2” in height & width.
 - Hood angle iron can **NOT** exceed 1/4” in thickness.
 - Only 1 bolt per set of angle iron is allowed and can **NOT** exceed 1/2” hardware.
- Hoods must be located in their **ORIGINAL POSITION**. They can **NOT** be slid forward **NOR** can they be bent over the radiator core support even if they remain in original position.
- Hood openings will adhere to the following rules:
 - 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.
 - All hood openings for exhaust and engine maintenance (radiators / transmission dipsticks / etc.) may have the hood skin and under-hood support webbing bolted together with a maximum of 3/8” hardware.
 - Hood skin can **NOT** be folded into the engine compartment and secured to inner fenders or core support.

VII. Fuel Systems

- PUMP GAS ONLY!** Premium or lesser octane - No aviation, alcohol, or racing fuel will be allowed.
- All stock, factory gas tanks **MUST** be removed. The *only exception* to this rule is vehicles that have the fuel tank integrated into the trunk floor. These tanks **MUST** have holes punched in them.
- 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 or welded straps. Bungee or ratchet 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. Stock radiators may be completely removed, but not relocated. Aftermarket radiators are **NOT** allowed.
- B. Additional or external coolant tanks can **NOT** be used to increase coolant capacity.
- C. Radiator core supports can **NOT** be reinforced and **MUST** be bolted within 1" of the **ORIGINAL MOUNTS**.
- D. Electric cooling fans are allowed.
- E. 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.
- F. Transmission coolers with fans or "cold boxes" are allowed. If used, they **MUST** be located in the rear seat area.

IX. Electrical Systems

- A. Battery **MUST** be relocated to the passenger front floorboard.
- B. A maximum of (1) automotive/marine battery may be used.
- C. Battery **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 as close to the factory location as possible.
3. All engines **MUST** have an air cleaner. No open carburetors.
4. 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. Two 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.
5. **NO ENGINE CRADLES/CAGES/HALOS/DISTRIBUTOR PROTECTORS WILL BE ALLOWED!**

B. Transmissions

1. Transmission mounts may be chained, welded, or made solid.
2. 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 (i.e. Chrysler 9 ¼" swapped out for a Chrysler 8 ¾" or Ford 9"). **No 3/4 ton or 1-ton rear differentials** will be allowed ... **5-LUG MAX!** See **Rule XII.E** for allowable mounting methods.
 2. Rear-ends **MUST** be stock from hub to hub, and they may **NOT** be reinforced or braced in any way.
 3. Rear-end gears may be welded.
- D. Drivers may use any OEM driveline to include factory two-piece or slider-type drivelines. The use of aftermarket or individually fabricated slider-type drivelines will **NOT** be allowed.

XII. Suspensions

- A. The maximum height of any vehicle is 26" to the center of the front and rear bumpers. Inspectors will allow flexibility – within reason – for pre-run vehicles on a case-by-case basis. *Pre-bending does not qualify as pre-run.*
- B. Suspensions **MUST** remain stock, but adjusting factory suspensions within factory means is allowed. For coil spring vehicles, two "twist-in" spring spacers are allowed per spring (purchased ... not fabricated).
- C. Coil springs may be welded to the rear axle and the frame with no added metal.
- D. Rear leaf springs must remain stock.
- E. 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!**

F. Rear frame humps may be chained around the axle. Chain can **NOT** exceed 3/8" link.

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. Window/Windshield Openings

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

C. The driver door **MUST** be reinforced for driver safety by a Halo bar and 4-Point Cage / 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) rear seat bar will 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 bars – Halo bars are **MANDATORY**. They may be routed inside or over the roof of the vehicle. If using a Halo bar with a 4-Point Cage, it will be extended upward from the two rear, vertical posts. If used with the Door Brace, the Halo bar can be independent and attached to the floorboard.
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!**