BIG HORN BASIN UNIFIED 2024 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-alls, convertibles, Checker cabs, ambulances, hearses, limousines, 4WDs, or 1973 and older Imperials (including Imperial sub-frame swaps).

II. General Vehicle Preparation

- A. ALL CARS MUST REMAIN STOCK UNLESS SPECIFIED BELOW! THIS MEANS IF IT DIDN'T COME FROM THE FACTORY WITH IT, YOU ARE NOT ALLOWED TO DO IT. NO WELDING!
- B. IF THE RULES DO NOT SPECIFICALLY SAY YOU CAN DO IT ... YOU CAN'T!
- C. Vehicles will be completely stripped of all interior to reduce fire hazards. This includes carpet/door panels/rear seats/dash/headliners/unnecessary electrical wires. If desired, the dash and driver's door panel may remain.
- D. All glass must be removed, and every attempt must be made to remove ALL glass fragments prior to inspection.
- E. All exterior trim/door handles/mirrors/lights/plastic grilles/etc. must be removed. Metal grilles may remain.
- F. If the vehicle was equipped with air bags, they MUST be removed.
- G. Drivers' doors MUST BE PAINTED A CONTRASTING COLOR.
- H. THERE IS NO WELDING ALLOWED <u>UNLESS SPECIFICALLY STATED WITHIN THESE RULES!</u>
 This includes re-welding factory spot-welded seams.
- I. 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.
- J. Obscenities or vulgarity will **NOT** be allowed anywhere on the vehicle.
- K. Steering columns and ALL steering linkage, tie-rods, etc. must be OEM and must remain assembled as factory.
- L. 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 and fenders may be trimmed for tire clearance but they can NOT be re-welded nor bolted.
- B. Drivers may patch rust holes **IN FLOORPANS ONLY**. The patch material **MUST** be the same thickness (18 to 20 gauge) and can be bolted or welded with no added metal up to a maximum of 2" beyond the repaired hole.
- C. Pre-bending or body modifications (creasing, hammering, wedging, tucking, etc.) will NOT be allowed.

IV. Frames

- A. Frames may NOT be plated, pinned, or otherwise reinforced in any way unless specifically allowed in the rules.
- B. Pre-run vehicles are authorized 12" of reinforcing plate on each frame rail a total of 24" 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 6" in length in a given location. Drivers must split the plate **VERTICALLY** into smaller sections (i.e. two 6" long plates **OR** a three 4" long plates, etc.). Drivers can **NOT** combine the remainder with another plate (i.e. a 4" long plate being combined with a 6" long plate to create a 10" plate).
 - 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.
- 8. NOTE! Sub-frames are NOT considered "pre-run" if swapped into a fresh body!
- C. Frames may **NOT** be reinforced in any way.
- D. Frames may **NOT** be trimmed, shortened, nor tilted in any way.
- E. Frames may be notched or dimpled, but notches may **NOT** be re-welded.
- F. Trailer hitches must be completely removed from the frame.
- G. Frame chains will **NOT** be allowed.
- H. All body mounts must remain original.
 - 1. Body mounts or "pucks" may NOT be removed.
 - 2. Body bolts may be replaced with hardware not exceeding original size only if they are broken or damaged.
 - 3. NO ADDED BODY MOUNTS ARE ALLOWED.

V. Bumpers

- A. Bumpers must be passenger car bumpers (no pickup bumpers allowed) or the pipe/tubing bumper mentioned in **RULE V.D.** below. Bumper swaps are **NOT** allowed.
- B. All bumper brackets and shock-mounts MUST be in stock location and bolted only.
- C. Shock-bumpers MUST be mounted with factory-style shock mounts and bolted only.
- D. Drivers can choose pipe or square tubing in place of the original bumper with no additional brackets/shock mounts.
 - 1. It must be straight and can NOT exceed the vehicle track width, 4" in diameter, or 1/4" thick material.
 - 2. The ends MUST remain open.
 - 3. It may be welded directly to the end of the front frame rails with no added metal
- E. Bumpers can **NOT** be stuffed, packed, or reinforced in any way.
- F. Bumper ends may be trimmed and/or bent around but can **NOT** be re-welded.
- G. Bumpers may be secured to the vehicle by chain these do not count as "points" for hood & trunk closure.
 - 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 rear bumper.
 - 3. Chains can NOT exceed 3/8" link. Chain links can NOT be welded. They must be looped and bolted only.
 - 4. Chain holes may NOT be reinforced with plate material nor large washers.

VI. Outside Body Seams

A. Doors

- 1. Doors must be chained or wired shut. Drivers may use #9 wire or a maximum of 3/8" link chain.
 - a. Drivers may chain or wire each door with a maximum of four points (hinges/latches do not count).
 - b. If using chain, drivers may use two wraps at each point.
 - c. If using #9 wire, drivers may use a maximum of five wraps at each point.
- 2. Drivers' doors may welded around the outside perimeter **ONLY**. Filler material can **NOT** exceed 1/2" round stock/rebar/cold rolled **OR** 2" x 3/16" flat strap.
- 3. Chain links can **NOT** be welded. They must be looped and bolted only.
- 4. Any vehicle that has ANY DOOR come open will be IMMEDIATELY DISQUALIFIED.

B. Trunks and Wagon Tailgates

- 1. Trunks/tailgates must be chained or wired shut. Drivers may use #9 wire or a maximum of 3/8" link chain.
 - a. You may chain or wire a maximum of four points for trunk/tailgate (hinges/bumper chains do not count).
 - b. If using chain, drivers may use two wraps at each point.
 - c. If using #9 wire, drivers may use a maximum of five wraps at each point.
- 2. Chain links can **NOT** be welded. They must be looped and bolted only.
- 3. Trunk lids must be in the original position and tucking the trunk is NOT allowed.
- 4. Rear seat to trunk opening MUST remain open to inspect the trunk area.
- 5. Station wagon spare-tire access covers may be bolted according to the following rules:
 - a. Drivers may use a maximum of six bolts with a maximum of 3/8" hardware.
 - b. A 10" diameter hole MUST be cut in the center of the spare-tire access cover for inspection underneath.
 - c. Drivers may also choose to completely remove the spare-tire access cover if desired.

C. Hoods

- 1. Hoods must be able to be opened and will be completely removed or lifted on hinges prior to inspection.
- 2. Hoods must be chained or wired shut. Drivers may use #9 wire or a maximum of 3/8" link chain.
 - a. Drivers may chain or wire a maximum of six points (hinges/bumper chains do not count).
 - b. If using chain, drivers may use two wraps at each point.
 - c. If using #9 wire, drivers may use a maximum of five wraps at each point
- 3. 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.
- 4. Hood openings will adhere to the following rules:
 - a. A minimum of (2) holes with a 12" 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. Hood openings can NOT be re-welded or bolted. Excess hood skin MUST be removed.

VII. Fuel Systems

- A. PUMP GAS ONLY! Premium or lesser octane No aviation, alcohol, or racing fuel will be allowed.
- B. All stock, factory gas tanks **MUST** be removed. The <u>only exception</u> to this rule is vehicles that have the fuel tank integrated into the trunk floor. These tanks **MUST** have holes punched in them.
- C. Fuel tanks with a maximum capacity of 6 gallons must be located in the rear seat area. They must be effectively securely 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.
- F. Fabricated throttle or pedal assemblies are **NOT** allowed, but drivers may route a wire or cable from the carburetor linkage to the interior of the vehicle as a backup.

VIII. Cooling Systems

- A. Stock radiators may be completely removed, but not relocated. Aftermarket radiators are 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 to the ORIGINAL MOUNTS.
- D. Engine fans may be removed.
- E. Electric cooling fans are allowed **ONLY IF OEM**.
- F. Radiator and electric cooling fans must be bolted to the radiator core support ONLY. Mounts MUST BE OEM.
- G. Expanded metal/screens between fan and radiators can **NOT** be used.
- H. Expandable spray foam can **NOT** be used to mount/protect radiators.
- I. Transmission coolers with fans or "cold boxes" are allowed. If used, they MUST be located in the rear seat area and high-pressure hoses must be used NO FUEL LINE!

IX. Electrical Systems

- A. The battery MUST be relocated to the passenger front floorboard.
- B. A maximum of one automotive/marine battery may be used.
- C. The 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 OEM brakes. No pinion brakes or fabricated braking systems/pedals are allowed.
- B. All vehicles MUST have sufficient brakes and will demonstrate braking ability at inspection.

XI. <u>Drive-trains</u>

A. Engines

- 1. Engines **MUST BE STOCK** no built or modified engines will be allowed. This means engines must be OEM from carb to oil pan with no aftermarket performance parts.
- 2. Engine swaps are allowed including across vehicle makes (Ford into GM, MOPAR into Ford, etc.).
- 3. Engines MUST be located in factory location using factory-style, crossmember mounts.
- 4. Two additional chains or straps may be used to tie the engine down to the frame. **NO MORE THAN 4"** of the chain/strap may be welded to the frame for **EACH** mount.
- 5. All engines **MUST** have an air cleaner. No open carburetors.

6. NO ENGINE CRADLES/CAGES/HALOS/DISTRIBUTOR PROTECTORS WILL BE ALLOWED!

B. Transmissions

- 1. Transmissions MUST BE STOCK no built or modified transmissions will be allowed.
- 2. Transmission mounts must be factory-style mounts. Drivers may add a single loop of chain around the mount.
- 3. Individually fabricated cable or physical linkage shifters are allowed.
- 4. Shifters may be bolted to the floorboard or directly to the transmission.
- 5. NO TRANSMISSION BRACES WILL BE ALLOWED!

C. Rear Differentials

- 1. Rear-ends MUST be passenger car rear-ends. No 3/4 ton or 1-ton rear differentials allowed 5-LUG MAX!
- 2. Rear-end swaps are allowed including across vehicle makes (Ford into GM, MOPAR into GM, etc.).
- 3. Rear-ends MUST be bolted in using factory mounts and brackets with no modifications. See RULE XII.E.
- 4. Rear-ends MUST be stock from hub to hub; however, drivers may swap/interchange gears if desired.
- 5. Rear-ends can NOT be reinforced or braced in any way. No axle-savers.
- 6. Posi-traction, spooled, or locked rear-ends are allowed, and rear-end gears may be welded.
- D. Drivelines MUST be factory/OEM. No aftermarket or individually fabricated slider-type drivelines will be allowed.

XII. Suspensions

- A. The maximum height of any vehicle is 18" to the bottom 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.
- C. Coil springs must remain stock, and they may **NOT** be bolted/welded/tied to the frame nor axle.
- D. Rear leaf springs must remain stock, and extra clamps are NOT allowed. The factory clamps may remain.
- 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 replace with other OEM components.
- F. 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. Window/Windshield Openings:

- 1. For safety, all windshield openings **MUST** have one brace bolted between the firewall/cowl to the roof. It may only attach in one place on the firewall/cowl and one place on the roof.
- 2. For safety, all rear window openings **MUST** have one brace bolted within the window frame only. It may only attach in one place at the top of the window opening and one place at the bottom of the window opening.
- 3. For safety, an optional, metal window "net" or "screen" may be used in driver's window ONLY.
 - a. The net/screen may be attached at up to two points on the roof and two points on the door.
 - b. If drivers choose to do this, it will count as "two fastening points" on the driver's door.
- 4. Material for window openings can NOT exceed 1" in diameter/width (rod, pipe, tubing, strap, etc.).
- C. The driver door MUST be reinforced for safety by and 4-Point Cage or Door Brace. Safety reinforcements must be contained within the passenger compartment ONLY (except the Halo bar and Outside Door Brace). Safety reinforcements may be welded to the FLOORBOARD ONLY. Drivers may also use plates where pipe or tubing meets the floorboard (maximum of 6" X 6" in size and up to 1/4" in thick). 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 **OPTIONAL**. It 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. It is **HIGHLY RECOMMENDED** that vertical posts for Halo bars be welded to the floorboard directly over the frame.
- 4. Outside Door Brace An Outside Door Brace may be used instead, but they are **NOT RECOMMENDED**. The use of "Grader Blade" material as an Outside Door Brace is allowed, but it is **NOT RECOMMENDED!** Outside Door Braces will adhere to the following rules:
 - a. Plate thickness cannot exceed 1/2" thick.
 - b. Plate cannot exceed 16" in height.
 - c. Plate must cover door seam to door seam and may exceed up to 3" past door seam on either side.
 - d. Plate must be fastened with minimum of six 1/2" bolts and up to a maximum of ten 1/2" bolts.
 - e. Oversized washers up to 3" in diameter may be used to prevent bolts from pulling through the door skin.
- D. A gas tank protector is not required but **HIGHLY RECOMMENDED**. If adding a gas tank protector to your vehicle's cage/brace, it may not be attached to nor touching any portion of the body metal.

		526
	zi zi	

BIG HORN BASIN UNIFIED 2024 LIMITED WELD 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-alls, convertibles, Checker cabs, ambulances, hearses, limousines, or 4WDs. NOTE! Imperials 1973 and older, as well as vehicles with an Imperial sub-frame swap, are only allowed to compete in the Worland, Powell (Park County Fair and Smashtoberfest), Casper, Rawlings (one heat), and Thermopolis derbies. Lovell DOES NOT allow 1973 or older Imperials or Imperial sub-frame swaps.
- C. No "sedagons" or vehicles with excessive pre-bending will be allowed ... ask before you build.

II. General Vehicle Preparation

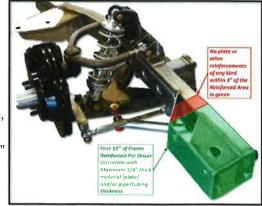
- A. Vehicles will be completely stripped of interior to reduce fire hazards. This includes carpet/door panels/rear seats/dash/headliners/unnecessary electrical wires.
- B. All glass must be removed, and every attempt must be made to remove ALL glass fragments prior to inspection.
- C. All exterior trim/door 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. 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.
- G. Obscenities or vulgarity will **NOT** be allowed anywhere on the vehicle.
- H. Drivers may use a custom or fabricated steering column but ALL steering linkage, tie-rods, etc. must remain stock.
- I. Wheels and tires will adhere to the following rules:
 - 1. Any tire may be used so long as they only contain air. No solid rubber or liquid/foam-filled tires 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

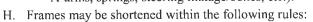
- A. Body sheet metal seams may be welded from **REAR OF THE A-ARMS FORWARD** with no added metal. Otherwise, there is **NO WELDING** allowed <u>unless specifically stated elsewhere within these rules!</u>
- B. Wheel-wells may be trimmed for tire clearance and may have the inner and outer skin welded or bolted together. If welded, no additional metal may be added. If bolted, a maximum of 10 bolts may be used (3/8" hardware).
- C. 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.
- D. If creasing body panels, hammered or artificial body creases can **NOT** be welded or bolted.

IV. Frames

- A. Frames may NOT be plated, pinned, or otherwise reinforced in any way unless specifically allowed in the rules.
- B. Drivers may reinforce (pin/plate/stuff/etc.) the FIRST 10" of the frame per their discretion. The limitations are:
 - This rule applies to the FRAME RAILS ONLY and does NOT include reinforcement of any crossmembers or other frame supports that fall within the first 10" of the frame (e.g. the Imperial sub-frame cross-beam).
 - 2. Any material added (plate, strap, angle iron, etc.) can **NOT** exceed the height or width of the frame nor exceed 1/4" thick.
 - 3. **IN ADDITION TO** the plate/strap/angle iron mentioned above, Drivers may use pipe or tubing to stuff the frame and/or mount a bumper. Material will have a maximum wall thickness of 1/4" and **only one pipe or tube per frame rail will be allowed.**



- 4. <u>INSTEAD</u> OF USING PIPE OR TUBING ABOVE, drivers may use shock-mounts to stuff the frame and/or mount a bumper only one shock-mount per frame rail will be allowed.
- 5. If Drivers place pipe/tubing/shock-mounts <u>into</u> the frame, they **MUST** drill a 1/2" diameter inspection hole in the side of the frame at the 11" mark.
- 6. No other reinforcements or modifications of any kind will be allowed within 3" behind your first 10" of frame. This includes motor mount or cradle straps/chains, A-arm Straps, other reinforcing plates, All-thread, etc.
- C. <u>In addition to</u> the reinforcement allowed on the FIRST 10" of the frame, 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 provided they are AT LEAST 3" BEHIND THE FIRST 10" OF FRAME. The intent of this rule is to give drivers the ability to strengthen any common, known weak spot(s) on fresh vehicles <u>in a controlled and equal manner</u>. 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 <u>in a controlled and equal manner</u>. 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.
 - 8. NOTE! Sub-frames are NOT considered "pre-run" if swapped into a fresh body!
- D. Frames may be seam welded FROM THE REAR OF THE A-ARMS FORWARD with no added metal.
- E. Any vehicle with a "Y" or split-frame immediately behind the front bumper can have one of these three options:
 - 1. The "Y" may be pinched or squeezed closed. The closed "Y" may be seam welded with no added metal.
 - 2. The frame "Y" can be plated per the rules above (counts against total plate allowance).
 - 3. If not welded, a maximum of (2) bolts may be used per side running horizontally (side-to-side) through the "Y portion" to prevent it from spreading (3/4" hardware).
- F. Frame "Tilting or Notching" will be accomplished by one of the following options:
 - 1. Drivers may "cold tilt" any vehicle without cutting or welding.
 - 2. Drivers may tilt frames using a "pie-cut" or notch. A pie cut or notch may be rewelded with no metal added and may be strengthened with a reinforcing plate if desired (counts against total plate allowance).
 - 3. Drivers may tilt Ford/Lincoln/Mercury vehicles at the crush box by cutting and rewelding **the FACTORY TABS/SEAMS ONLY**. The crush box can **NOT** have gussets.
 - 4. Regardless of tilt method, spacers at the core support can **NOT EXCEED** 6" in height. Spacer material must be hollow and can **NOT** exceed 2" in diameter.
- G. Drivers can **NOT** join or graft non-original sections of one frame to another frame. All frames **MUST** remain as designed/produced from the factory other than modifications specifically allowed in these rules with <u>one exception</u>:
 - 1. 2003+ Ford/Lincoln/Mercury can *replace* the stock aluminum crossmember with a steel crossmember harvested from a donor vehicle **No K-Frames**.
 - It may be welded into the existing frame at the crossmember mounting surface only with no added metal, and ALL SUSPENSION AND STEERING COMPONENTS <u>MUST BE OEM PARTS</u> (i.e. spindles, A-arms, springs, steering linkage/boxes, etc.).



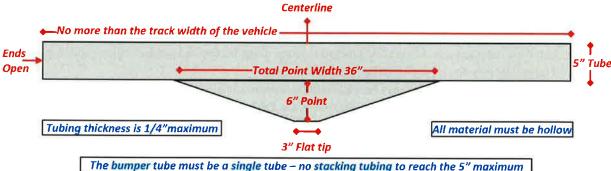
- 1. Front frames shortened no further than original core support mounts.
- 2. Rear frames shortened only so much as necessary to flush-mount a rear-bumper with the original body metal.
- I. Trailer hitches must be completely removed from the frame.



- No fresh paint or undercoating is allowed on the frame except the required painting of reinforcing plates if used.
- K. Factory holes and openings in the frame MUST remain open for inspection and can NOT be welded shut.
- L. Complete sub-frame swaps (i.e. Shocker sub into Mopar C-body, etc.) are allowed for UNIBODY CARS provided they do NOT violate other rules and are mounted as original (BOLTED ONLY), including Imperial sub-frames.
- M. Body mounts or "pucks" may be removed, but the body 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.

\mathbf{V} .

- A. Bumpers must be passenger car bumpers or home-made to specifications (see below). Bumper swaps from other vehicle makes are allowed. 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 and may be re-welded with no added metal.
- D. Bumpers may have the chrome outer shell and steel inner core welded together with no added metal.
- E. Bumpers with multiple pieces (i.e. bumper corners) may be welded together with no added metal.
- F. HOME-MADE BUMPERS are allowed ON THE FRONT ONLY if constructed within the following parameters:



- G. Bumpers may be welded directly to the frame with no added metal (trimming/shaping end of frame rails is allowed).
- H. Shock-mounts may be welded solid around the tube seam only (must be drained if welded).
- If Drivers do not use the pipe/tubing/shock-mounts (only one per frame rail) discussed in RULE IV.B. to mount a bumper, they may use modified OEM or individually fabricated bumper brackets within the following rules:
 - 1. Fabricated bracket material (plate, strap, angle, etc.) can **NOT** exceed 1/4" thickness.
 - 2. OEM or individually fabricated bumper brackets may be welded to bumper AND frame with no added metal.
 - 3. Fabricated brackets can **NOT** exceed the height or width of the frame nor extend more than 3" onto the frame.
 - 4. Fabricated brackets (nor pipe/tubing/shock-mounts) can NOT extend bumpers over 6" from the frame.
- J. IN ADDITION TO rear bumper mounts, bumpers may be secured to the rear of the vehicle by welding OR chain:
 - 1. Drivers may weld the entire perimeter of the REAR BUMPER directly to the body metal of the vehicle. Due to varying gaps between the bumpers and car bodies, drivers may use the following filler materials:
 - Round stock/rebar/cold rolled steel not exceeding 1/2" thick.
 - b. Up to a maximum of 2" x 3/16" flat strap.
 - c. NOTE: If the gap cannot be filled by the above two options, flat strap of a greater width may be used, but it cannot extend more than 1" onto the body or bumper.
 - 2. If drivers do not desire to weld the entire perimeter of the bumper, they may instead choose to use (2) **VERTICAL** straps welded from the trunk lid or wagon tailgate to the bumper.
 - Strap can **NOT** exceed 4" x 3/16" metal.
 - b. Strap will **NOT** extend more than 6" onto the bumper and 6" onto the trunk or wagon tailgate.
 - 3. If chaining, a maximum of (2) vertical chains can extend from the trunk lid 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.
- K. IN ADDITION TO front bumper mount, bumper may be secured to the front of the vehicle by welding AND chain:
 - 1. Bumper ends can be welded to the forward edge of the front fenders on the sides of the vehicle only.
 - 2. 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.
- 3. INSTEAD of chains, Drivers may use (2) metal straps from the front bumper to the core support ONLY.
 - a. Straps cannot exceed 3" wide and 1/4" thick material.
 - b. Straps can only be welded up to 6" onto the bumper and 6" onto the core support.

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. On the front door to front fender seams **ONLY**, a maximum of 4" x 3/16" strap is allowed.
- 3. Inner and outer door skins may be pinched together along the top and welded with no added metal.
- 4. Interior door seams can **NOT** be welded.
- 5. Any vehicle that has ANY DOOR come open will be IMMEDIATELY DISQUALIFIED.

B. Trunks and Wagon Tailgates

- 1. Trunks and tailgates 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. Trunk lid support webbing can NOT be welded or bolted to the trunk lid.
- 4. Inner and outer tailgate skin may be pinched together along the top and welded with no added metal.
- 5. Trunks lids may be "tucked" within the following rules:
 - a. If welding, the trunk lid may be welded to the interior trunk floor with no added metal. In the event the trunk lid does not fully meet the trunk floor, the **ONLY** filler material that can be used is sheet metal.
 - b. If bolting, the trunk lid may be bolted with a maximum of 3/8" hardware.
- 6. Trunks lids may be "wedged" within the following rules:
 - a. Trunk lids may be pushed downward or caved-in, and rear fenders may be bent or folded inward.
 - b. Trunk and tailgate seams can **NOT** be welded in any place on the interior of the trunk floor or lower trunk side extensions; however, rear fenders may be pushed inward and bolted to the lower trunk side extensions with a maximum of 3/8" hardware. No more than (10) bolts may be used on each side.
 - c. LIMITED welding is allowed (no added metal) to secure fenders. Inspectors will use discretion.
- 7. **IN ADDITION TO** all trunk and tailgate closure method above (including tucking), drivers are allowed (2) All-thread (one per side) up to 1" in diameter in the location of their choice under the following stipulations:
 - a. All-thread can be welded or bolted to or through the rear frame with no added metal.
 - b. 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.
- 8. Rear seat to trunk opening MUST remain open to inspect the trunk area. If the trunk is wedged, (2) holes with a 6" diameter on each side of the trunk lid are MANDATORY for inspection.
- 9. Station wagon spare-tire access covers may be welded or bolted according to the following rules:
 - a. Stitch welded with 4" long welds separated by 4" gap.
 - b. Bolted every 4" with a maximum of 3/8" hardware.
 - c. A 10" diameter hole MUST be cut in the center of the spare-tire access cover for inspection underneath.
 - d. Drivers may also choose to completely remove the spare-tire access cover.

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 fenders). 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 irons pieces shorter than 4" in length (i.e. 5" 5" 8" **OR** 6" & 12" **OR** 4" 6" 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. **IN ADDITION TO** bolted angle iron, (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.
- 4. **ALTERNATIVELY,** if drivers do not wish to use the bolted angle iron, (4) additional All-thread (two more per side) with a maximum diameter of 1"may be used under the following stipulations:
 - a. All-thread can be welded or bolted to or through the frame with no added metal.
 - b. All-thread must be within the engine compartment and can NOT touch, attach, or pass through firewall.
 - 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. Underhood support webbing can **NOT** be welded or bolted to the hood skin.
- 8. 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.
- 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 ONLY! Premium or lesser octane No aviation, alcohol, or racing fuel will be allowed.
- B. All stock, factory gas tanks **MUST** be removed. The <u>only exception</u> to this rule is vehicles that have the fuel tank integrated into the trunk floor. These tanks **MUST** have holes punched in them.
- C. Fuel tanks with a maximum capacity of 6 gallons must be located in the rear seat area. They must be effectively securely 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. Aftermarket aluminum radiators are allowed, but added or external coolant tanks can **NOT** be used to increase coolant capacity. Electric cooling fans are allowed
- B. Radiator core supports can **NOT** be reinforced and **MUST** be bolted within 1" of the **ORIGINAL MOUNTS**.
- C. 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.
- D. Transmission coolers with fans or "cold boxes" are allowed. If used, they MUST be located in the rear seat area.

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. Pinion brakes allowed.

XI. Drive-trains

A. Engines

1. Engines MUST be located within 4" of the stock engine location.

- 2. Firewalls and floorboards may be trimmed or bent for engine and/or distributor clearance but <u>every attempt</u> 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!**
- 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. 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' discretion*.
 - b. 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.
 - c. LOWER ENGINE CRADLES are allowed, but they can NOT reinforce the frame.
 - d. Engine mid-plates are allowed **SOLELY** as a distributor protector/carb halo mount. The mid-plate/distributor protector/carb halo can **NOT** be attached to **ANY** portion of the vehicle body, frame, or the lower engine cradle/trans protector.
- 5. Fabricated distributor protectors are allowed with a maximum of 3/8" plate.
- 6. Fabricated engine and transmission pan protectors are allowed, but they must be individual components attached directly to either the engine or transmission. Engine cradles, midplates, and/or transmission braces cannot be connected to create complete and seamless support from front to rear of the drive-train.
- 7. Carb halos are allowed with a maximum of 1 1/2" pipe or tubing, but they can **NOT** extend outside the valve covers. They may attach to the intake, heads, or distributor protector.
- 8. The method of "removing bolts" from full cradles will **NOT BE ALLOWED**. **NO FULL ENGINE CRADLES/CAGES ARE ALLOWED!**



- Transmission braces are allowed but may have NO MORE THAN FOUR BARS OR STRAPS (1" thick). Transmission braces may NOT be attached to the lower engine cradle. NO FULL TRANSMISSION CAGES/PAN PROTECTORS ALLOWED!
- 2. Transmission mounts may be chained, welded, or made solid.
- 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. Drivelines may be OEM or aftermarket. Fabricated slider-type drivelines are allowed.



- 5 LUG MAX! Rear-end swaps from one make to another make are allowed (i.e. Chrysler 9.25 swapped out for a Chrysler 8.75). NO 3/4-TON or 1-TON REAR-ENDS. See <u>RULE XII.J</u> for regulations on rear-end swaps.
- 2. Rear-ends may have **ONE** truss brace on the top, bottom, or rear of the housing. Drivers may also fabricate or add axle-savers along with their single brace.
- 3. NO FULLY BRACED OR ENCLOSED REAR-ENDS ARE 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. Adjusting factory suspensions within factory means is allowed.
- C. On the front suspension only, Drivers may choose to chain OR weld their A-arms down to increase height.
 - 1. Drivers may chain A-arms down with a maximum of 3/8" chain, and chain can only extend 3" onto the frame.
 - 2. Drivers may also weld **ONE** strap from the front **OR** rear side of the A-arm to frame, not to exceed 3" wide and 1/4" thickness. The A-arm strap can only extend 3" onto the frame.
- D. NO SOLID OR FULLY WELDED REAR SUSPENSIONS!
- E. Lifting blocks or shackles can NOT be used to increase height.
- F. Coil springs may be welded to the rear axle and the frame with no added metal.
- G. Factory trailing arms can NOT be reinforced!
- H. Fabricated trailing arms MUST be channel (3-sided) and can NOT exceed 2" diameter and 1/8" wall-thickness.
- I. Rear frame humps may be chained around the axle. Chain can **NOT** exceed 3/8" link.







- J. Rear leaf conversions are allowed, but they must be performed as close to a "factory-like" installation as possible. This means a solid front mount and a swinging shackle for the rear mount. SHORT LEAFS AND EXCESSIVE BRACKETS, PERCHES, PANHARD BARS, OR TRAILING ARMS WILL NOT BE ALLOWED! NOTE: THE LOVELL DERBY DOES NOT ALLOW LEAF CONVERSIONS (No Imperial Event).
- K. Rear leaf springs
 - 1. Leafs must be 2 1/2" WIDE OR LESS (passenger car leaf springs). No pick-up or HD leaf springs allowed.
 - 2. Leafs may be added or removed, but "leaf packs" can **NOT** contain more than (7) leafs unless the vehicle was originally equipped with a greater number of leafs in stock form (i.e. GM wagons with 9-leaf OEM springs).
 - 3. Leaf spring clamps may be added. Clamps may be stock-type clamps or individually fabricated clamps. A MAXIMUM of (4) clamps are allowed per leaf pack. Leafs can NOT be welded together.

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 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. Bars must start and end within 2" of the rear 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 safety by and 4-Point Cage or Door Brace. Safety reinforcements must be contained within the passenger compartment ONLY (except the Halo bar and Outside Door Brace). Safety reinforcements may be welded to the FLOORBOARD ONLY. Drivers may also use plates where pipe or tubing meets the floorboard (maximum of 6" X 6" in size and up to 1/4" in thick). 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**. It 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. It is **HIGHLY RECOMMENDED** that vertical posts for Halo bars be welded to the floorboard directly over the frame.
 - 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. Lastly, the use of "Grader Blade" material as an Outside Door Brace is allowed, but it is **NOT RECOMMENDED!**
 - 5. A gas tank protector is not required but **HIGHLY RECOMMENDED**. If adding a gas tank protector to your vehicle's cage/brace, it may not be attached to nor touching any portion of the body metal.

BIG HORN BASIN UNIFIED 2024 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 <u>UNLESS SPECIFICALLY STATED WITHIN THESE RULES!</u>
 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. Body sheet metal seams may be welded from **CENTER OF THE FRONT AXLE FORWARD** with no added metal. Otherwise, there is **NO WELDING** allowed <u>unless specifically stated elsewhere within these rules!</u>
- B. 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).
- C. 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.
- D. If creasing body panels, hammered or artificial body creases can NOT be welded or bolted

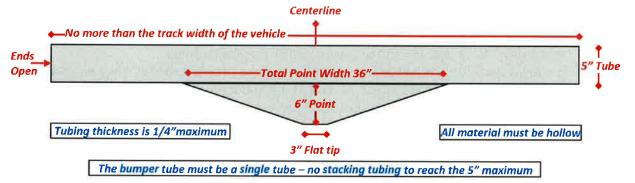
IV. Frames

- 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 body 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:

V. Bumpers

- A. Trucks **MUST** have both front and rear bumpers with one exception (See <u>RULE VI.B.7</u>). Bumpers must be passenger car, pickup bumpers, or home-made (*see below*). Bumper swaps from other vehicle makes are allowed. 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 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. HOME-MADE BUMPERS are allowed ON THE FRONT ONLY if constructed within the following parameters:



- F. Bumpers may be welded directly to the frame with no added metal (trimming/shaping end of frame rails is allowed).
- G. OEM or individually fabricated bumper brackets may be welded to the bumper AND the frame with no added metal.
- H. 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. Fabricated brackets can only be welded or bolted to **ONE SIDE** of the frame additional counts toward *plate*.
 - 4. The use of a "no-weld bumper plate" not exceeding 1/2" thick is allowed.
 - 5. 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.
 - 6. Fabricated brackets can NOT overly extend bumpers more than 6" from back of bumper to frame.
- I. IN ADDITION TO front bumper mount, bumper may be secured to the front of the vehicle by welding OR chain:
 - 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.
 - 2. **INSTEAD** of chains, Drivers may use (2) metal straps from the front bumper to the core support **ONLY**.

- a. Straps cannot exceed 3" wide and 1/4" thick material.
- b. Straps can only be welded up to 6" onto the bumper and 6" onto the core support.

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 irons 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 securely 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. <u>Electrical Systems</u>

- 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 <u>every attempt</u> 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. 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' discretion*.
 - 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.
 - c. LOWER ENGINE CRADLES are allowed, but they can NOT reinforce the frame.
 - d. Engine mid-plates are allowed **SOLELY** as a distributor protector/carb halo mount. The mid-plate/distributor protector/carb halo can **NOT** be attached to **ANY** portion of the vehicle body, frame, or the lower engine cradle/trans protector.
- 6. Fabricated distributor protectors are allowed with a maximum of 3/8" plate.
- 7. Carb halos are allowed with a maximum of 1 1/2" pipe or tubing, but they can **NOT** extend outside the valve covers. They may attach to the intake, heads, or distributor protector.
- 8. The method of "removing bolts" from full cradles will **NOT BE ALLOWED**. **NO FULL ENGINE CRADLES/CAGES/FLUID PAN PROTECTORS ARE ALLOWED!**



B. Transmissions

- Transmission braces are allowed but may have NO MORE THAN FOUR BARS OR STRAPS (1" thick). Transmission braces may NOT be attached to the lower engine cradle. NO FULL TRANSMISSION CAGES/PAN PROTECTORS ALLOWED
- 2. Transmission mounts may be chained, welded, or made solid.
- 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. Drivelines may be OEM or aftermarket. Fabricated slider-type drivelines allowed.

D. Rear Differentials

- 1. Rear-end swaps from one make/style to another make/style are allowed.
- 2. Rear-end swaps from a 5-lug to an 8-lug rear-end are also allowed. See **RULE XII.H** for allowable mounting methods.
- 3. Rear-ends may have **ONE** truss brace on the top, bottom, or rear of the housing. Drivers may also fabricate or add axle-savers along with their single brace.
- 4. NO FULLY BRACED OR ENCLOSED REAR-ENDS 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 <u>must be reasonable</u> 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!
- G. Fabricated trailing arms MUST be channel (3 sided) and can NOT exceed 2" diameter and 1/8" wall-thickness.
- H. 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!**
- 5. A gas tank protector is not required but **HIGHLY RECOMMENDED**. If adding a gas tank protector to your vehicle's cage/brace, it may not be attached to nor touching any portion of the body metal.

BIG HORN BASIN UNIFIED 2024 COMPACT CLASS RULES

I. Vehicles

- A. All vehicles will undergo THOROUGH INSPECTION prior to entering the pits!
- B. Any make and model of passenger vehicle or station wagon can be used provided they have a **WHEELBASE NOT GREATER THAN 108**" and the engine size can **NOT** exceed <u>6 cylinders</u>. The wheelbases of vehicles can **NOT** be modified in any way to meet this requirement.
- C. No "sedagons" or vehicles with excessive pre-bending will be allowed ... ask before you build.

II. General Vehicle Preparation

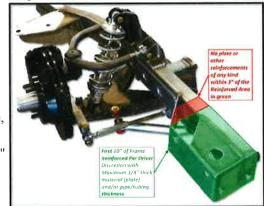
- A. Vehicles will be completely stripped of all interior to reduce fire hazards. This includes carpet/door panels/rear seats/dash/headliners/unnecessary electrical wires.
- B. All glass must be removed, and every attempt must be made to remove ALL glass fragments prior to inspection.
- C. All exterior 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. Both front doors and the roof **MUST** have the driver name and number clearly **VISIBLE** and **LEGIBLE**. A safely and properly secured roof sign is allowed but not required.
- G. Obscenities or vulgarity will **NOT** be allowed anywhere on the vehicle.
- H. Drivers may use a custom or fabricated steering column but ALL steering linkage, tie-rods, etc. must remain stock.
- I. Wheels and tires will adhere to the following rules:
 - 1. Any tire may be used as long as they only contain air. No solid rubber or liquid/foam-filled tires allowed.
 - 2. Wheels MUST be stock-type, factory wheels up to 15" 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. Body sheet metal seams may be welded from **REAR OF THE A-ARMS FORWARD** with no added metal. Otherwise, there is **NO WELDING** allowed <u>unless specifically stated elsewhere within these rules!</u>
- B. 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).
- C. 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.
- D. If creasing body panels, hammered or artificial body creases can NOT be welded or bolted.

IV. Frames

- A. Frames may NOT be plated, pinned, or otherwise reinforced in any way unless specifically allowed in the rules.
- B. Drivers may reinforce (pin/plate/stuff/etc.) the FIRST 10" of the frame per their discretion. The limitations are:
 - This rule applies to the FRAME RAILS ONLY and does NOT include reinforcement of any crossmembers or other frame supports that fall within the first 10" of the frame (e.g. the Imperial sub-frame cross-beam).
 - 2. Any material added (plate, strap, angle iron, etc.) can **NOT** exceed the height or width of the frame nor exceed 1/4" thick.
 - 3. **IN ADDITION TO** the plate/strap/angle iron mentioned above, Drivers may use pipe or tubing to stuff the frame and/or mount a bumper. Material will have a maximum wall thickness of 1/4" and **only one pipe or tube per frame rail will be allowed.**



- 4. <u>INSTEAD</u> OF USING PIPE OR TUBING ABOVE, drivers may use shock-mounts to stuff the frame and/or mount a bumper only one shock-mount per frame rail will be allowed.
- 5. If Drivers place pipe/tubing/shock-mounts <u>into</u> the frame, they **MUST** drill a 1/2" diameter inspection hole in the side of the frame at the 11" mark.
- 6. No other reinforcements or modifications of any kind will be allowed within 3" behind your first 10" of frame. This includes motor mount or cradle straps/chains, A-arm Straps, other reinforcing plates, All-thread, etc.
- C. <u>In addition to</u> the reinforcement allowed on the FIRST 10" of the frame, 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 provided they are AT LEAST 3" BEHIND THE FIRST 10" OF FRAME. The intent of this rule is to give drivers the ability to strengthen any common, known weak spot(s) on fresh vehicles <u>in a controlled and equal manner</u>. 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 <u>in a controlled and equal manner</u>. 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 and ensure they are within the rules stated above.
 - 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.
 - 8. **NOTE!** Sub-frames are **NOT** considered "pre-run" if swapped into a fresh body!
- D. Frames may be seam welded FROM THE REAR OF THE A-ARMS FORWARD with no added metal.
- E. Frames may be notched or dimpled. If notched forward of the A-arms, it may be re-welded with no metal added.
- F. Drivers can **NOT** join or graft non-original sections of one frame type to another frame type ... all frames **MUST** remain as designed and produced from the factory other than modifications specifically allowed in these rules.
- G. 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.
- H. Trailer hitches must be completely removed from the frame.
- I. No fresh paint or undercoating is allowed on the frame except the required painting of reinforcing plates if used.
- J. Factory holes and openings in the frame MUST remain open for inspection and can NOT be welded shut.
- K. Body mounts or "pucks" may be removed, but the body 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.

V. Bumpers

- A. Full size vehicle bumpers are **NOT** allowed compact car bumpers **ONLY**. Bumper swaps from other compact vehicle makes are allowed. 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 1/4" 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 with multiple pieces (i.e. bumper corners) may be welded together with no added metal.
- F. Bumpers may be welded directly to the frame with no added metal (trimming/shaping end of frame rails is allowed).
- G. Shock-mounts may be welded solid around the tube seam only (must be drained if welded).
- H. If Drivers do not use the pipe/tubing/shock-mounts (**only one per frame rail**) discussed in **RULE IV.B**. to mount a bumper, they may use modified OEM or individually fabricated bumper brackets within the following rules:
 - 1. Fabricated bracket material (plate, strap, angle, etc.) can **NOT** exceed 1/4" thickness.

- 2. OEM or individually fabricated bumper brackets may be welded to bumper AND frame with no added metal.
- 3. Fabricated brackets can NOT exceed the height or width of the frame nor extend more than 3" onto the frame.
- 4. Fabricated brackets (nor pipe/tubing/shock-mounts) can NOT extend bumpers over 6" from the frame.
- I. IN ADDITION TO rear bumper mount, bumper may be secured to the rear of the vehicle by welding OR chain:
 - 1. Drivers may weld the entire perimeter of the **REAR BUMPER** directly to the body metal of the vehicle. Due to varying gaps between the bumpers and car bodies, drivers may use the following filler materials:
 - a. Round stock/rebar/cold rolled steel not exceeding 1/2" thick.
 - b. Up to a maximum of 2" x 3/16" flat strap.
 - c. **NOTE**: If the gap cannot be filled by the above two options, flat strap of a greater width may be used, but it cannot extend more than 1" onto the body or bumper.
 - 2. If drivers do not desire to weld the entire perimeter of the bumper, they may instead choose to use (2)

VERTICAL straps welded from the trunk lid or wagon tailgate to the bumper.

- a. Strap can **NOT** exceed 4" x 3/16" metal.
- b. Strap will NOT extend more than 6" onto the bumper and 6" onto the trunk or wagon tailgate.
- 3. If chaining, a maximum of (2) vertical chains can extend from the trunk lid 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.
- J. IN ADDITION TO front bumper mount, bumper may be secured to the front of the vehicle by welding AND chain;
 - 1. Bumper ends can be welded to the forward edge of the front fenders on the sides of the vehicle only.
 - 2. 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.
 - 3. INSTEAD of chains, Drivers may use (2) metal straps from the front bumper to the core support ONLY.
 - a. Straps cannot exceed 2" wide and 1/4" thick material.
 - b. Straps can only be welded up to 6" onto the bumper and 6" onto the core support.

VI. Outside Body Seams

A. Doors

- 1. Doors may be welded around the full perimeter on the **OUTSIDE OF THE VEHICLE ONLY**. At a minimum, the driver door **MUST BE WELDED!**
- 2. If welded, filler material can **NOT** exceed 1/2" round stock/rebar/cold rolled **OR** 2" x 3/16" flat strap. On the front door to front fender seams **ONLY**, a maximum of 4" x 3/16" strap is allowed.
- 3. Inner and outer door skins may be pinched together along the top and welded with no added metal.
- 4. If welding is not used, doors can be chained or banded around the full perimeter:
 - a. The chains or banding material can **NOT** attach to or encompass the frame.
 - b. Chains can NOT exceed 3/8" link. Banding material can NOT exceed 1" wide.
 - c. You can choose to combine methods if you are not welding the door seams (i.e. band window frames and door posts combined with chaining the body in the lower door jambs).
- 5. Any vehicle that has ANY DOOR come open will be IMMEDIATELY DISQUALIFIED.

B. Trunks and Wagon Tailgates

- 1. Trunks and tailgates can be welded around the full perimeter on the OUTSIDE OF THE VEHICLE ONLY.
- 2. If welded, filler material can **NOT** exceed 1/2" round stock/rebar/cold rolled **OR** 2" x 3/16" flat strap.
- 3. Trunk and tailgate seams can **NOT** be welded in any place on the interior of the trunk floor or lower trunk side extensions; however, rear fenders may be pushed inward and bolted to the lower trunk side extensions with a maximum of 5/16" hardware. No more than (10) bolts may be used on each side.
- 4. Trunk lid support webbing can **NOT** be welded or bolted to the trunk lid.
- 5. Inner and outer tailgate skin may be pinched together along the top and welded with no added metal.
- 6. If not welded, trunks and tailgates can be chained / banded around the full perimeter within the following rules:
 - a. Chains or banding material can **NOT** attach to or encompass the frame.
 - b. Chains can **NOT** exceed 3/8" link. Banding material can **NOT** exceed 1" wide.
 - c. Chaining and banding methods can be combined if not welding the trunk or tail gate seams.
- 7. Trunks lids may be "tucked" within the following rules:

- a. If welding, the trunk lid may be welded to the interior trunk floor with no added metal. In the event the trunk lid does not fully meet the trunk floor, the **ONLY** filler material that can be used is sheet metal.
- b. If bolting, the trunk lid may be bolted with a maximum of 3/8" hardware.
- 8. Trunks lids may be "wedged" within the following rules:
 - a. Trunk lids may be pushed downward or caved-in, and rear fenders may be bent or folded inward.
 - b. Trunk and tailgate seams can **NOT** be welded in any place on the interior of the trunk floor or lower trunk side extensions; however, rear fenders may be pushed inward and bolted to the lower trunk side extensions with a maximum of 3/8" hardware. No more than (10) bolts may be used on each side.
 - c. LIMITED welding is allowed (no added metal) to secure fenders. Inspectors will use discretion.
- 9. **IN ADDITION TO** all trunk and tailgate closure methods above (including tucking), drivers are allowed (2) All-thread (one per side) up to 1" in diameter in the location of their choice under the following stipulations:
 - a. All-thread can be welded or bolted *to or through* the rear frame with no added metal.
 - b. 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.
- 10. Rear seat to trunk opening **MUST** remain open to inspect the trunk area. If the trunk is wedged, (2) holes with a 6" diameter on each side of the trunk lid are **MANDATORY** for inspection.
- 11. Station wagon spare-tire access covers may be welded or bolted according to the following rules:
 - a. Stitch welded with 4" long welds separated by 4" gap.
 - b. Bolted every 4" with a maximum of 3/8" hardware.
 - c. A 10" diameter hole **MUST** be cut in the center of the spare-tire access cover for inspection underneath.
 - d. Drivers may also choose to completely remove the spare-tire access cover if desired.

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 irons pieces shorter than 4" in length (i.e. 5" 5" 8" **OR** 6" & 12" **OR** 4" 6" 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. **IN ADDITION TO** bolted angle iron, (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.
- 4. **ALTERNATIVELY**, if drivers do not wish to use the bolted angle iron, (4) additional All-thread (two more per side) with a maximum diameter of 1"may be used under the following stipulations:
 - a. All-thread can be welded or bolted to or through the frame with no added metal.
 - b. All-thread must be within the engine compartment and can NOT touch, attach, or pass through firewall.
 - 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. Underhood support webbing can **NOT** be welded or bolted to the hood skin.
- 8. 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.
- 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 ONLY! Premium or lesser octane No aviation, alcohol, or racing fuel will be allowed.
- B. All stock, factory gas tanks **MUST** be removed. The <u>only exception</u> to this rule is vehicles that have the fuel tank integrated into the trunk floor. These tanks **MUST** have holes punched in them.
- C. Fuel tanks with a maximum capacity of 6 gallons must be located in the rear seat area. They must be effectively securely 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 with fans or "cold boxes" are allowed. If used, they MUST be located in the rear seat area.

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. Pinion brakes allowed.

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 <u>every attempt</u> 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. 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' discretion*.
 - b. 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.
 - c. LOWER ENGINE CRADLES are allowed but can NOT reinforce the frame.
 - d. Engine mid-plates are allowed **SOLELY** as a distributor protector/carb halo mount. The mid-plate/distributor protector/carb halo can NOT be attached to ANY portion of the vehicle body, frame, or the lower engine cradle/trans protector.
- 6. Fabricated distributor protectors are allowed with a maximum of 3/8" plate.

- 7. Fabricated engine and transmission pan protectors are allowed, but they must be individual components attached directly to either the engine or transmission. Engine cradles, pan protectors, and/or transmission braces cannot be connected to create seamless support from front to rear of the drive-train.
- 8. Carb halos are allowed with a maximum of 1 1/2" pipe or tubing, but they can **NOT** extend outside the valve covers. They may attach to the intake, heads, or distributor protector.
- 9. The method of "removing bolts" from full cradles will **NOT BE ALLOWED**. **NO FULL ENGINE CRADLES/CAGES ARE ALLOWED!**

B. Transmissions

- Transmission braces are allowed but may have NO MORE THAN FOUR BARS OR STRAPS (1" thick). Transmission braces may NOT be attached to the lower engine cradle. NO FULL TRANSMISSION CAGES/PAN PROTECTORS ALLOWED!
- 2. Transmission mounts may be chained, welded, or made solid.
- 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. Drivelines may be OEM or aftermarket. Fabricated slider-type drivelines are allowed.

D. Rear Differentials

- 5 LUG MAX! Rear-end swaps from one make to another make are allowed (i.e. Chrysler 9.25 swapped out for a Chrysler 8.75). NO 3/4-TON or 1-TON REAR-ENDS. See RULE XII.H for regulations on rear-end swaps.
- Rear-ends may have ONE truss brace on the top, bottom, or rear of the housing.
 Drivers may also fabricate or add axle-savers along with their single brace. NO FULLY BRACED OR ENCLOSED REAR-ENDS ARE ALLOWED.



E. 4WD vehicles MUST have one driveshaft completely removed. Drivers may choose either the front or rear.

XII. Suspensions

- A. The maximum height of any vehicle is 20" 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. 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!
- C. Lifting blocks or shackles can **NOT** be used to increase height.
- D. Coil springs may be welded to the rear axle and the frame with no added metal.
- E. Factory trailing arms can **NOT** be reinforced!
- F. Fabricated trailing arms MUST be channel (3 sided) and can NOT exceed 2" diameter and 1/8" wall-thickness.
- G. Rear frame humps may be chained around the axle. Chain can NOT exceed 3/8" link
- H. 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!
- I. Rear leaf springs must be stock, and can **NOT** be welded together. Drivers may add stock-type or fabricated leaf spring clamps if they desire. A **MAXIMUM** of (4) clamps are allowed per set of leaf springs.

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 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 3" diameter pipe or 3" square tubing.
 - 1. 4-Point Cage The 4-Point Cage may be constructed <u>with a maximum</u> 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**. It 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. It is **HIGHLY RECOMMENDED** that vertical posts for Halo bars be welded to the floorboard directly over the frame
 - 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!**
 - 5. A gas tank protector is not required but **HIGHLY RECOMMENDED**. If adding a gas tank protector to your vehicle's cage/brace, it may not be attached to nor touching any portion of the body metal.