

# Juab County Fair Demolition Derby 2024 WELD Class Rule Package



# New changes from last year are BOLDED in ORANGE. Juab-specific rules will be BOLDED in BLUE.

Any year O.E.M. frame and body model of passenger car or station wagon may be used. No 4x4's, ambulances, hearses, trucks, limousines, etc. **Sedagons are allowed.** 

We reserve the right to re-inspect cars at any time before, during or after the event, even after it has been flagged. You may be asked to cut areas of question open before, during or after the derby as needed. The 80's and newer rules may be applied to the following: Cars built in 1977-79 if there is a car built in 1980 of the same make, model and body style. Additionally, all 1960's coil spring cars and all cars of any year that are not full size i.e. Monte Carlos, T-Birds, Cordoba's, etc. may use the 80's rules.

# Please note: we will allow fresh cars to come with (6) of their 10 total frame plates already installed, however they must be installed using the pre-ran rules below.

# Call with questions.

WE ARE PRIVILEGED TO USE THIS FACILITY. PLEASE TAKE EXTRA CARE IN STRIPPING YOUR CAR! IF IT IS NOT SPECIFIED IN THE RULES BELOW THEN CALL US FIRST BEFORE YOU ATTEMPT IT: OFFICIAL'S DECISIONS ARE FINAL

- 1. All questions can be directed to Lead Tech; Brad Bowman. Contact info on page 22.
- 2. **BUILD TO THE RULES!** Don't over build and expect to cut to the rules. If anything is added to the inside of the frame other than what is specified in the rules you will immediately fail inspection and not be allowed to compete.
- 3. Pre-ran cars ARE ALLOWED.
- 4. Frame, body, and front clips can be swapped but must bolt on directly with zero modifications whatsoever.
- 5. Any American-made car can run with the following exceptions; No 4x4's, ambulances, hearses, trucks, limousines etc. . All sedagons must follow the rules and **must** run a rear bumper, and follow the bumper height rule.

- 6. All drivers and pit crew must sign the driver/waiver paperwork, or they will not compete in the event.
- 7. Drivers must wear a seat belt, helmet, long sleeve heavy shirt, or racing type jacket, welding jacket etc., and goggles/glasses.
- 8. All Drivers and ONE of their crew members must attend the drivers meeting.
- 9. No hot rodding in the pits, keep it at an idle. This will be the quickest way to be DISQUALIFIED.
- 10. No drivers are allowed alcohol period. If you are wearing a driver's band and drinking any form of alcohol -YOU WILL BE DISQUALIFIED.
- 11. Cars may be re-inspected before any prize money is paid out. The cars will be re-inspected by the inspection staff only. Everyone else will stay back until cars are deemed to be legal. Cars cannot leave the arena before final post inspection or you will not be eligible for reinspection.

# **PREPARATION & SAFETY**

- 11 67 1. All glass, plastic, chrome, interior and pot metal must be removed prior to arriving at the derby.
- 2. Nothing may remain in the bottom of the doors or trunk and all outside hardware must be removed (door handles, mirrors, chrome, molding, screws, fiberglass, etc.).
- 3. All trailer hitches, brackets and framework (aftermarket or OEM) must be removed completely.
- No added weight to the car except the weld. No packing the frames, trunks, passenger doors, or under floor decking.
- 5. Front seats must be securely mounted to the floor and must have seat belts. All cars MUST have inner padding on the driver's door and driver's side door posts.
- 6. All flammable materials inside the car must be removed, except necessary safety padding and seat.
- 7. All cars must have working brakes when they go through inspections. If the car does not exhibit the ability to stop, it WILL NOT be inspected.
- Your number must be listed on the side of the car at least 18 inches tall and 18 inches wide. You must have a maximum of a 24" x 24" roof sign with car number for judging and recognition of the car. You may not use it to strengthen the car in any way.
- 9. NO welding other than what is mentioned in this set of rules. If your car is found with any weld, other than what is allowed, and you refuse to fix it to the judge's satisfaction, you will not run! If found on post inspection you will be disgualified!
- 10. ALL CARS MUST BE COMPLETE BEFORE BEING INSPECTED. ONCE INSPECTED YOU ARE NOT ALLOWED TO WORK ON YOUR CAR. (Charging batteries & checking fluids are the only exceptions).

Aftermarket parts that are allowed that may not be mentioned below: metal gas tank, fuel cooler, brake & gas pedal, shifter, transmission cooler, battery box, seat, seat belt, steering column up to the steering box, tie rods, ball joints, spindles, rear trailing/control arms, driveline, driveline brake, lower saddle cradle with front plate up to the heads, motor, transmission, rear ends, and JYD type homemade bumpers.

# FRAME

# DO NOT ALTER OR WELD THE FRAME OTHER THAN WHAT IS LISTED

- You may shorten the front frame only by cutting the frame off flush with the front edge of furthest forward core support body mount bolt hole (whichever is closest to the bumper). All sides of the frame end must be equal. This rule is for hard mounting your bumper. If you shorten too much you will not run. On Cadillac or other GM cars, the center body mount will be considered the point that you may use as a reference to shorten the frame to.
- 2. Lower core support must remain in its factory position. If it is a weld on mount, leave the remaining portion of the body mount in place. If you remove or alter the core support body mount completely or relocate it, you will not run.

#### FRAME WELDING

- 3. No re-welding of any factory seams is allowed other than what is specified. If any welding has been done on the frame that is not specified in the rules, there will be a 3" on 3" off with full daylight slices in the illegal welded section of the frame. This applies to all parts of the frame rails.
- 4. Front top frame seams may be welded from the furthest most forward part of the factory "A" arm mount, top seam only, (1) pass of ½" wide weld allowed. Anything above what is specified will be disqualified. We will also allow you to weld 3" on 3" off on main frame seams top and bottom only firewall forward. Do NOT weld your front rails to your side rails at all.
- 5. The "FRAME" horns that hold the shock tube on a '73, '74, '75 & '76 Chevy, are part of the frame. They may not be manipulated or cut off and put in a different car. The original factory welds may be rewelded with a single pass and no filler.
- 6. No Chrysler subframe chaining other than K-framed cars in front of the motor using only (2) wraps of <sup>3</sup>/<sub>8</sub>" chain with one bolt around the frame only. K members may be welded on top side only, and must stop at the furthest most forward part of the "A"-arm mount.
- 7. Imperial subframe swaps are allowed only in 73' and older Mopars, however, if you use an imperial sub-frame; you must follow Imperial rules.
- 8. Frame Rust Repair If your frame is rusted through, call for instructions on how to fix the rust hole. DO NOT FIX IT AND EXPECT US TO ALLOW YOU TO RUN IT WITHOUT CALLING. Call before fixing any rust on the frame. Must provide pictures. An example of a possible fix would be to cut out the exact rusted piece and add the same exact size in its place and butt-welded in with a 5/8" inspection hole in the middle of the patch.
- 9. **Re-stubbing frames front or back will be allowed. Call before re-stubbing.**
- 10. No changing, welding, or doubling of the rear package tray.

#### FRAME SHAPING/HEAT TREATING

- 11. No frame shaping is allowed.
- 12. No heat treating of the frame is allowed; if caught, you will be DQ'd.

- 13. All cars may plate the rear frame humps using ONE plate per rail that is no larger than 22"x4"x1/4": Must follow the shape of the hump and measure 22" straight across from end to end (furthest point to furthest point). Must be centered in the middle of the frame hump. Hump plate must be welded on the tire side of the frame rail.
- 14. All cars may pitch, tip or tilt the front frame rails in **one** of the following ways:
  - a. You may cold pitch with no added metal;
  - b. You may cut the crush box flaps and pull the front end down, moving the flap <sup>1</sup>/<sub>2</sub>" and re-weld. No added metal. Weld may be no more than factory size: a total of 14" of weld;
  - c. You may cut a pie slice out of the bottom half of the frame not to exceed <sup>3</sup>/<sub>4</sub>" wide and bend the slice back together and re-weld back together. No added metal. Weld not to exceed <sup>1</sup>/<sub>2</sub>" wide. One pie cut per frame rail at the location of your choice. You must adhere to the bumper height rule.
- 15. You may notch or dimple the frame in the trunk area only.
- 16. You may pre-bend the trunk frame.
- 17. No fresh paint or undercoating on the frames at all.
- 18. If you chose to run a basic lower cradle rather than a full cradle you will be allowed kickers. These are two straight pieces of 2"x2"x¼" O.D. MAX pipe or tube that is welded to the front side of your dash bar and goes through the firewall, and must be welded to the top of the frame within 3" of the back of the A-arm: no more than 4" on the frame. Only one on the driver side and one on the passenger side and each may have a max 6" gusset on the dash bar to the kicker. No other added metal.

# FRONT SUSPENSION/STEERING

- 1. Aftermarket spindles are allowed.
- 2. Spring and/or spacer may not be welded to the spring bucket: NOTHING can be inside the spring bucket other than the spring. You may run aftermarket springs.
- 3. Aftermarket tie rods and ball joints may be used.
- 4. You may reinforce stock tie rods with a  $1^{x}1^{x}$  angle.
- 5. Upper and lower control arms may be swapped with factory OEM arms that come from cars legal for this class with no modifications, struts and strut mounting must be factory OEM and in factory position. Do not re-engineer the way the control arms and steering components mount to the frame. No other front suspension or steering may be reinforced. You must bolt the a-arm down like it came factory for that car.
- 6. You may lock your front suspension solid
  - a. You are allowed (2) 3"x4"x<sup>1</sup>/<sub>8</sub>" rectangular pieces of plate per upper A-arm to be welded to the frame, one in front and one in back of the A-arm. No welding of the A-arms directly to the frame.
  - b. You may also use up to 1" bolts, one per frame rail. Bolts must be in the middle of the A-arm. You can have no bigger than a 3" O.D. washer with a max thickness of 1/4".
- 7. Steering box: May be interchanged; a flat ½" plate may be used to adapt the steering box to the frame, mounted in factory position. It must not be more than 1" larger than the

bolt pattern on the frame or steering box. See example picture. If you have one or more bolt holes that don't allow you to bolt directly through the frame, you may have up to 4" of weld from the plate to the frame to help secure the mounting plate in place.

- 8. Pitman arms must remain stock or stock replacement
- 9. Idler arm & center link must remain stock or interchanged for an idler arm for that is off a car that is legal in the class you are running.
- 10. Sway bar must be factory OEM for that car, it must only be bolted in factory position. Factory brackets bolted to the bottom of the frame only may be used.

# **REAR SUSPENSION**

- 1. 1980 and newer and Qualifying cars listed on page 1 in Red with coil spring rear ends may do a leaf spring conversion.
- 2. Shackle or bracket max size is 4" and attach point on the frame may be no more than 4". 55" minimum leaf spring length measured from eye bolt to bolt. If you are making your own shackles, they must be no more than 1/4" thickness and the same size as a passenger car OEM shackle.
- 3. Original leaf spring cars must be mounted in their original mounting position. Leaf springs may not be mounted on top of the axle.
- 4. You are allowed 9 leafs maximum with <sup>3</sup>/<sub>6</sub>" maximum thickness and 2<sup>1</sup>/<sub>2</sub>" width. Must be made from spring material. All "leafs" after the main must be a minimum of 4" shorter than the one above it to give you a 2" stagger on each end. You may not put anything on top of the main leaf, except factory OEM overload spring. In the case you are using a nine leaf spring pack, you may not use an overload spring. You can re-clamp springs, 4 clamps per spring pack, two on each side of axle. Homemade clamps can't exceed 2"x4"x<sup>1</sup>/4". This is the only way to hold springs together. No welding of leaf springs. No duct taping leaf springs. No short leafing, you must use the factory shackle front and back mounting locations distance. Any clamps used to secure an overload spring will be considered one of the clamps.
- 5. You can double, or change coil springs to a stiffer spring, or put spacers in coil springs to get your height. Do not raise the suspension any other way except what is listed above.
- 6. Coil springs may be fastened to the axle only.
- 7. You may use a 3/6" chain around your axle to the frame hump with one wrap (this may only go through the sheet metal directly above the hump), links may not be welded or bolted to the frame.
- **8.** You may use a U-bolt to go around the hump to attach your <sup>3</sup>/<sub>6</sub> chain to help hold rear end in. (Reference to #7).
- 9. Instead of using a hump chain (Rule #7), you may use 1" all-thread going from your rear end up through the package tray and body with a 3" washer on top. This will be counted towards your added body mount, if it goes through the body.
- 10. No other means other than tires, springs, and spring spacers per rules may be used to raise the car's rear suspension.

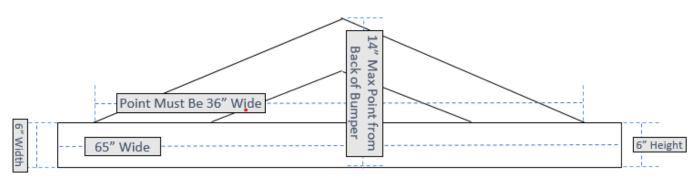
# **REAR ENDS**

- You may use any rear end of your choice, including hybrids and 8-lug. Rear housing bracing may not extend more than 5" back of the OEM axle tube. Axle savers allowed. Rear end housing may not add or be used to brace, bridge or reinforce the frame rails. Officials discretion.
- 2. Rear end control arms can be reinforced: They may be shortened to adjust the pinion angle and they may start from a stock set but can be reinforced or you may build your own using 2"x3"x1/4" square tubing. They must attach in stock configuration for the suspension setup you are using. They may not be any longer than the factory set that came with the car.
- 3. Watts-type conversion brackets are allowed only in the following way:
  - a. Must only be used on Watts cars (Exp. 1998-2011).
  - b. Upper trailing arm brackets must be bolted to the package tray. They must have two separate brackets no larger than 6"x12"x1/4" thick. Must be bolted only and may only be bolted thru the package tray and not thru the body and sheet metal. No welding at all of the upper bracket.
  - c. Watts-link lower brackets can only be 3"x6" long x ¼" thick. One per frame may be used. Cut one side of the tubing to make a "C" channel. Brackets may be welded to the frame. Only one hole to be used to bolt the control arm in place, no other bolts are allowed on these brackets. Bracket must be within ½" of the original mounting bracket. All other stock brackets must be removed.

# **BUMPERS**

The intention of this rule is to allow you to mount the bumpers in such a way that they are less likely to fall off. Upon inspection if it is determined that you have exceeded the intention of the rule you will be given the opportunity to correct it in order to compete, if you are not willing to correct it you will be disqualified. Officials have final say.

- Any Factory passenger OEM, JYD OEM passenger car shaped (must resemble factory OEM bumper) or 6"x6"x%" max square tube bumpers may be used, all bumpers may be loaded.
- 2. If you use a square tube and add a point to the front of the square tube. Point must be to the following specs.
- 3. Bumpers may be flipped.



4. No chrome may be welded to the body if using compression style bumpers.

- 5. Non-compressions factory bumpers for that year of car may be welded to the body. A 2" flat strap may be used to fill the gap in order to weld the chrome to the "exterior" body sheet metal only. Front and Rear bumper height not to exceed 28" to the top of the bumper from level ground and must be a minimum of 14" from the bottom of the bumper to the ground. THIS INCLUDES ALL FRESH CARS AND PRE-RAN CARS.
- 6. Rear bumpers must be a factory OEM rear bumper or a flat face manufactured bumper. No larger than 6"X6". No pointy bumpers or sharp edges/spikes. THIS WILL BE STRICTLY ENFORCED.
  - a. You may use a flat strap or 9-wire to help hold your bumper on.
  - b. You may have (2) Front and (2) rear bumper straps that can be no larger than 36" x 2"x1/4" thick. Up to 8" of the strap may be welded to the hood, top of radiator support or trunk lid and 8" of the strap may be welded to the bumpers. These may angle in front of the radiator but not cross. These may not go to the frame.
  - c. Straps may have a hole burned through it and be placed over the core support all thread bolts.
- 7. The bumper must be completely in front of the frame rails. No part of the bumper may extend back past the front most part of the frame rails.
- 8. Bumpers may only be welded to the end of the shock tubes, brackets and/or frame rails, pending your mounting choice.

BUMPER BRACKETS

- 9. Front brackets or shock tubes are not allowed to extend or be welded any further back than the first 18" of the frame unless you are using the factory bracket and tube in the Factory position.
- 10. Rear brackets or shock tubes are not allowed to extend or be welded any further back than the last 10" of the frame unless you are using the factory bracket and tube in the Factory position.
- 11. No more than one set of bumper brackets may be used. Brackets may be shaped to fit the frame, but not cut apart, if you cut the bracket those pieces cannot be used elsewhere. You can weld bumper brackets to the bumper Shock tube. Bumper shock tube must be attached to the bracket in the factory position. If not, you must discard either the bracket or tube.
  - a. Passenger car OEM outside shock tubes may be used and may be compressed.
  - b. Instead of using factory bumper brackets on the front or back, you are allowed to use ONE of the two options:
    - i. 18"x3"x3"x1/4" pipe/tube;
    - 4" wide (beginning width must be 4" wide) x 18" long x <sup>3</sup>/<sub>6</sub>" thick strap extending from your bumper down one side of the frame and cannot extend any further back than the first 18" of the frame. Plate may be formed (teepeed) but it cannot double at any point. Do not abuse this rule, you will cut it. You will not be able to use a shock tube if using the strap. Brackets/Tubes/Straps may be put on the top, bottom, or sides of the frame. If placed on inside of frame; you **must** drill a <sup>5</sup>/<sub>8</sub>" hole <sup>1</sup>/<sub>2</sub>" behind

brackets for inspectors to access with a frame scope. Same rule applies for rear bumpers;

- iii. Brackets must be on one side of the frame ONLY: on the inside OR outside, following all other rules.
- 12. Rear bumper brackets must follow the rules above but must not be any longer than 10". This will be measured from the end/back of the frame.

#### ENGINE

- 1. Motor Use motor of choice, motor must be in stock location of the car you are running, within reason approximately 5 inches from the front edge of the original motor mount on the frame.
- 2. You may select ONE of (2) options for Engine Cradles:
  - a. Option 1: Lower Engine saddle type cradles with a front plate up to the heads (see sample pic). are allowed but must only attach to the engine cross member and not the frame. The cradle cannot wedge or connect to mid-plate in any way before or after the show. If using factory engine type size mounts with rubber bushing, you may weld the pad completely. If you are hard mounting, you are allowed a maximum of 8" per side to hold the motor in. If you use this method, you are allowed to run kickers from the
  - dash bar to the frame. Follow the kicker rules listed above.
  - b. Option 2: Distributor protectors are allowed. If using a distributor protector, it must be attached to the engine or transmission only, the backside must be no wider than 13". It may not be welded, bolted, or connected to the body, hood or frame. Forward supports must be inside normally positioned headers and not extend past the water pump. Aftermarket cradles are allowed. If running a pulley protector, it cannot be any wider than 14", it must not come in contact with the steering stabilizer or extend 2" past the water pump. No portion of the midplate or the front plate may extend past the heads more than 3" in width. Fan shrouds are allowed, the outside diameter can be no more than 22" wide and 4" out from the front side of the water pump flange. If running a motor with a front mounted distributor or a coil pack motor. The mid plate must follow the DP rule. The mid plate or DP must be 6" from the dash bar. Cradle must stay 4" away from the frame rails. Nothing can come in contact with the DP or Mid-plate before or after the show. If you decide to run this style of a cradle you will not be allowed kickers whatsoever. Call with Questions.
- If trying to mount an engine with an engine cross member and the motor mounts do not line up, you may use (2) 6"x6"x¾" (one per side) plates on the frame engine saddle to attach your engine mounts to. This may not be welded to the outer frame rails or support them.
- 4. There are NO modifications to the frame or engine cross member to fit engines unless it is to cut out for an oil pan, but nothing can be welded back in.

- 5. You may cut off or bend over the front "tongue" on the engine cross member.
- 6. Transmission tunnel may be split with one cut using a cutting wheel to relieve pressure.
- 7. Lower damper pulley protectors are allowed. Must be no more than ½" thick plate and not more than 1" away from the front of the pulley and may only cover the lower half of the pulley. It may not come in contact with the frame, core support etc. The only time it may touch anything is if you are FUBAR. If it is determined that it was used as a wedge you will be DQ'd.
- 8. Skid plate / pan protectors may be used but must only be the size of the pan and they may not be connected together or be attached to the frame or body in any way. Pan protectors must be free-floating in the back and cannot connect to your mid-plate. This is to protect your oil pan only. May not bridge engine and transmission together.
- 9. Aftermarket bell housing, transmission protectors, and tail shafts may be used. May NOT be hard mounted or be attached to the frame, body, or crossmember. It may not come in contact with the frame before or after the event. A B.O.P adapter plate no larger than the bell housing (see pic below) may be used.
- 10. IF using a stock transmission with NO bells, tail shafts, or protectors, you are allowed to bolt the transmission down to the crossmember using factory transmission bolt holes.
- 11. Transmission crossmember may be welded, bolted or fastened to the frame. Crossmember must be within 10" of OEM attachment points. Transmission crossmember must be underneath the factory transmission mount.
- 12. If using a tube, you can weld 2x2"x¼" angle iron no thicker than ¼ ", no longer than 8" to the side of the frame to support the cross member. You must remove the stock mount if you run the angle iron. If you replace the stock cross member it can be no larger than 2"x 2" O.D.x ¼" tubing. The transmission cross member must be one piece and must be straight from side to side. The transmission cross member is the only method which the transmission may be tied in. A ¾" inspection hole must be within 12" of center if using tubing. If you run the square tube, the Cadillac cross member brackets/frame extensions must be cut so they do not come in contact with the crossmember before or after the derby.

## TIRES

 1. Wheels no bigger than 16 inches, no split rims, no studded tires. Doubled tires and solid tires are ok – we don't want any flats!!! Valve stem protectors are ok. Tires may be screwed to rims. NO foam filled tires on the back at all. Inner beadlocks are okay, no outer beadlocks.

# **BODY MOUNTS**

- 1. Body mount bolts to the frame can be replaced with 1/2" bolts.
- 2. Body mounts can be replaced with steel or washers, **must be at least 1**" tall and must be the same size as a stock body mount puck in diameter.
- Bolts may extend through the body and have up to a 3"x ¼" thick washer on top, washers must be separate and cannot reinforce the frame. Bolts, nuts and washers must be up inside of the frame. Bolts may not exceed 8" in length.
- 4. Radiator support mounts can be removed completely. (see Radiator rules for details)
- 5. Absolutely no body mounts may be relocated; do not shorten the front of your car past the original foremost body/core support bolt or you will not run.
- 6. If you have to build core support spacers, you may weld it either to the body or the frame mount, but only one side of the spacer or the other can be welded. If welded to the frame, it must ONLY be welded on the top side of the frame. Core support spacers cannot exceed 6" in length x 3" in width x ¼" thick.
- 7. You may add (2) body mounts in the position of your choice from the firewall back to the rear bumper. %" bolts up to 8" in length and must have a 1" body spacer in between frame and body. They must be painted a bright color for easy viewing. Wagons with extra bolts in the humps already will be considered your (2) extra mounts. If you decide to bolt your coil springs in place through the frame and rear package tray, these will count as your added mounts. They may be 1" in diameter. Must follow all other body mount rules.
- 8. The (4) "K"-Frame pucks may be removed and frames may be bolted directly together using only stock bolt or a %" bolt, (1) washer on each side not to exceed 3" in diameter with (1) nut and/or k-frame may be welded directly together using max ½" filler. All other body pucks need to stay in place unless otherwise explained. If pucks are pulled no chain wrap is allowed.
- 9. You may use up to 1" all-thread, with (4) nuts, (3)-3" washers and (1)-3" washer (that must be on top of the hood and trunk lid) per all-thread. It may go from the hood and trunk lid to the frame, but must go through the front body mounts, or down the side of the frame and be welded to the frame only or a nut welded to the top of the frame. All options must be within 1" of the core support. This may be welded to the frame after it passes through the body mount but may not be nutted underneath the body mount if it is welded. One per frame rail in hood and trunk. If you choose to use a body mount hole for your trunk all thread, this does not have to be up inside the frame, a washer can go on the bottom side of the frame and be no larger than 3" O.D.x¼" thick. If you run your all thread through the body mount, you must still have a 1" spacer between the body and the frame: or you can weld this all-thread 4" vertically down the side of the frame, but MUST stay behind the back side of the hump. Trunk deck and core support may be nutted and washered with a 3" washer. (Reference Hood/Trunk rule #8)
- 10. On wagons, Bolts welded to the frame must be located within 5" of the rear frame body mount; they may be bent and continue through the rear door only.

# BODY

#### **BODY SHAPING**

- 1. Body line creasing is allowed on fenders and rear quarter panels; rear sheet metal above bumper must remain in vertical position. No collapsing or wedging, dovetailing of rear guarter panels and trunks or trunk lid.
- 2. No welding of created seams is allowed.
- 3. Cars with 2-piece fenders may weld half of the exterior seam only using 2" on 2" off. No fillers may be added. Call if you need clarification.
- 4. You may cut wheel wells for tire clearance. You may roll your fenders and bolt them but you may not weld them. Rear and front fenders may be bolted back together with 5 -3/8" bolts or less with 1.25" diameter washers. If you wrap or fold your fenders around the front of the core support do not exceed (3) 3/8" bolts with  $1\frac{1}{4}$ " washers to bolt back to the core support of the fender.

#### RUST REPAIR

- ILE A 5. The only body rust repairs that will be allowed using sheet metal of the same thickness as the body are: (RUST REPAIR FOR SAFETY PURPOSES ONLY)
  - a. The floor pan is to "FIX" rust holes only: no skinning of the entire floor. This applies to the driver seat & foot area, battery and gas tank mounting areas only. Nothing up the doglegs or excessive or it will be removed completely.
  - b. Body rust repairs will also be allowed on the "pillars" only. A piece no bigger than 14"x14" may be used. At least (1) 1" inspection hole must be in the sheet metal for inspection. Do not cover more than the rusted area (ie. 4-inch rust hole does not need the full 14" piece).

#### FIREWALL SEAM

6. You may weld the entire floor pan seam under the gas and brake pedal. No filler may be used. NO OTHER INNER SEAMS MAY BE WELDED! THIS WILL BE THE ONLY EXCEPTION.

## DOORS

- 7. You must weld your doors shut with nothing larger than  $3^{\circ}x3/16$  " strap or  $\frac{1}{2}$ " round stock and must follow the exterior door seam. Do not overlap the strap or you will cut the strap off. You may smash the inner and outer skin together of the door window openings and weld them solid. You may use the same filler as in welding the door but no longer than the window opening per door.
- 8. Driver's door and driver's side of front windshield may have "netting" for driver's safety. NO other windows may have "netting."
- 9. The driver's and/or passenger front doors may be "skinned"; however, it cannot exceed 2" past the footprint of the driver's/passenger front door and may not be thicker than 3/16".
- 10. Wagons must remove all rear decking and seat components. Tailgates are considered trunk lids. All other rules above must be followed.
- 11. All cars must have a 12"x12" Inspection hole in the **TRUNK LID** for inspection purposes.

# **RADIATORS & RADIATOR SUPPORTS**

- 1. Only OEM style passenger car radiators may be used. Aluminum racing radiators of the same style may be used.
- 2. Radiator must be attached to the core support in the original stock location and position. Radiators may be mounted in such a way to hold the radiator in place, not strengthen the core support.
  - a. For mounting radiators, you may use up to (4) <sup>3</sup>/<sub>6</sub> " all-thread. This may pass through the bottom and top of the core support. If you have no lower or upper mounting area, you may attach (2) 2"x 6"x<sup>1</sup>/<sub>6</sub>" flat steel on the top and bottom and must be welded to the core support; they must be outside the fan area.
  - b. Or if welding radiator in place you may use (4) 2" welds, one per corner. No added metal may be used to mount the radiator. It may be welded to core support only; cannot be attached to bumper, bumper brackets or frame.
- 3. Radiator guards are allowed. Cannot be thicker than <sup>1</sup>/<sub>8</sub>" metal. They may only be wired in, OR a maximum of (4) 2" weld.
- If you do not use a radiator guard you may place <sup>1</sup>/<sub>8</sub>" expanded metal or condenser in front of the radiator. May only be wired in, OR a maximum of (4) 2" weld.
- 5. You may not add cooling capacity. No supplemental cooling devices allowed (electric fans are allowed).
- 6. If not using a radiator, Radiator loops may be used.
- 7. Front core support cannot be moved back from its factory location. It must stay bolted to the fenders the same way that it came from the factory.
- 8. You may have up to 1" all-thread, it may go from the hood to the frame. (See rule #9 of body bolts.)
- Radiator core support seam welding is NOT allowed. Only slight modifications due to bumper brackets for mounting core support back into the original position is allowed; official's discretion.
- 10. Radiator supports may not be welded to the frame, bumper brackets, bumpers or anything else.
- 11. No FOAM fill can be used.

# CAGES & DOOR BARS: SEE Diagram on last page

- 1. All cage material must be no larger than 6" O.D., unless specified for a specific rule. It must also be a minimum of 4" off the floor everywhere except the down legs going straight down. No cage material may be within 6" off the middle of the firewall and be a minimum of 4" off the transmission tunnel. All bars must be straight. Driver's door bar may be wider for driver's protection.
- 2. Side bars including roll over may be a max length 62" long. Side bars may be any dimension but must remain off the floor everywhere 4", they must remain 6" away from the firewall (Vertical flat side of engine compartment) and rear sheet metal. This is for driver's safety, not to strengthen the car, if we feel you have pushed this, you will cut!!!
- You may weld a bar behind the seat from doorpost to doorpost, it can be an X: do not connect it directly to the frame, and you may also have a single bar (with no extensions),

across your dash area to replace your dash. You may run a bar connecting the dash bar and rear seat bar.

- 4. For driver safety, you may weld (2) down bars per side from the cage to the floor pan or frame vertically from the cage to protect batteries and your feet. If your frame doesn't line up with the cage you may weld a dogleg over to the frame. These down bars cannot exceed 3"x3". They may only be welded to the top side of the frame within a 3x3" footprint and must go to the outside frame rails. Down bars must be welded within the 62" side bars.
- 5. You may run two 3"x3" max size down bars from the rear seat cage bar to the floor pan or frame. All down bars must be vertical.
  - a. Back of the seat cage cross bar, including roll bar, must be placed above the front side of the foot-well kick up directly behind the front seat.
  - b. Down bars may only be welded to the floor sheet metal with a max 10"x10" plate or to the top of the frame with no plate.
  - c. No bolting unless for a Chrysler subframe; may use a 1" bolt through the subframe behind the seat, and bolt through a max 10"x10" plate welded to the floor may be used. Officials have discretion.
- 6. You must have a vertical roll loop/halo behind the seat, above the rear seat bar; this may extend to the floor as your rear seat down bar, not in addition to, following rule 5. Halo must be attached to the roof with (3) attachment points, each not exceeding 3"x3": (1) of which must be in the center of the roof. No welding bars off halo (no kickers). Roof signs must be bolted to sheet metal only!
- 7. A gusset is allowed and encouraged in all corners where 2 bars meet (Except down bars)
- 8. You may also weld a steering column to the cage.
- 9. One gusset per side may run from the rear of the fuel tank protector to upright posts of the halo bar.
- 10. Gas tank protection side bars must be 4" away from any side and inner fender well sheet metal. Rear bars cannot extend beyond the side bars or be closer than 1" from the back seat (sheet metal/speaker deck/package tray). All interior sheet metal must remain in stock position. No hammering or cutting of sheet metal to achieve clearances; rear bars may not be any taller than the speaker deck level!

# HOOD & TRUNK

- 1. Trunk Lid and Hood must be 100% in stock location, as if mounted on the hinges, and have a min 20"x 20" hole for inspection and fire access in the hood and hinge spring must be removed.
- Any cut outs in the hood may be bolted back together with <sup>3</sup>/<sub>8</sub>" or less bolts and 1<sup>1</sup>/<sub>4</sub>" diameter washer; no more than a total of (12) bolts allowed to pinch the hood sheet metal back together. You may cut multiple holes but do not exceed the 12 bolts.
- 3. You can fold hoods or trunk lids over. Trunk lids must be stock shaped but may be folded in but keep it clean.

- 4. Rear quarters: No collapsing or wedging of rear quarter panels and trunks or trunk lid. We will allow a 6" inch dish on the top of the quarter panel on the trunk for pre-creasing; you may cut out sheet metal also.
- 5. No welding of created seams is allowed.
- 6. Hood: You are allowed to bolt, not including the 1" all thread to the frame. All other tie down spots must be sheet metal to sheet metal only. You have (3) ways to secure the hood:
  - a. You may use (8) bolts in the hood: not including the (2) core support bolts in the hood. Bolts may be no larger than 8"x1" with (2) 3" washers per bolt, with the exception of the two core support bolts thru the frame. Washers may be welded to the inner fenders and to the HOOD only.
  - b. You may use (8) points, not including the (2) core support bolts of two 6-inch individual lengths of 2"x2"x1/4" angle iron may be welded to the hood and body only back to back and bolted together with (2) 3/8" bolts. These cannot be welded across the seam.
  - c. If you choose not to bolt, you may fully weld the hood using only ½" inch round stock or 3"x3/16" flat stock. Must lay FLAT on the outside of the seams, not vertical in the seams. If welding, you must cut out 50% of your hood for inspection purposes.
- 7. Trunk seams may be welded 5" on 5" off. You may do so using only ½" 5" long round stock or 3"x5"x3/16" flat stock. Must lay FLAT on the outside of the exterior seams, not vertical in the seams.
- You may add (2) 1" bolts from the trunk lid through the floor. These may be attached to, or go through, the frame. They may utilize an existing body mount hole but MUST have a 1" body mount/space between the frame and body. You may use (4) nuts and (4) washers, not to exceed 3" in diameter. (Reference Body Rule #9)

## WINDOW BARS/ FIREWALL

- 1. Firewall If you shape, weld, or bold the firewall to reinforce it, you will cut the firewall out anywhere it is deemed to be reinforced. If you add any metal to the firewall you will be loaded without the opportunity to fix it.
- 2. If adding a sleeve/pipe/tubing in the firewall to run the wiring harness or throttle cable through, it may not extend further than 1" inside of the engine compartment and 1" inside of the cab. If this comes in contact with the Dash bar before, during or after the event you may be disqualified.
- 3. Window bars For safety, all cars must have (2) windshield bars extending from the sheet metal roof of the car to the firewall dash or front dash bar, window bars can either be 2"x2" O.D. ¼" tubing OR 3"x%" thick flat bar. These bars must be mounted in the first 6" of the firewall or strictly on the top side of the dash bar. No more than 6" of tube or strap material allowed on the sheet metal roof and no more than 6" of tube or strap material allowed on the firewall dash or front dash bar. Do not go over 6" on the roof or firewall or you will cut. These bars must be a min of 16" apart and mounted on the outside (foot print) of the engine cradle or DP. Window bars may not come in contact with the engine cradle/DP at any time before, during or after the show.

- 4. You may connect the front bars with no more than (2) 3" flat straps horizontally.
  - a. You may connect the front bars with no more than (2) 3" flat straps horizontally, if the entire fire wall is cut out between the window bars.
  - b. One or two bars from the roof to the rear speaker deck area are allowed. Bar(s) may only be attached by welding directly to the sheet metal no more than 6" from the window opening and onto the trunk lid with a mounting plate no bigger than  $6^{\circ}x4^{\circ$ rear window bar in a station wagon, tailgate windows are treated as a rear window, while the tailgate itself is considered a trunk, but must be mounted at the top of the tailgate, and the tailgate must be in the original closed position.
  - c. Rear window bars must be a minimum of 1" off the rear pillars and may not be welded or attached to the pillars in any way.
- 5. No wiring or chaining of any window openings.
- 6. Window bars may not be attached to the halo bar or any cage components.

#### FUEL TANK & TRANSMISSION COOLERS 1.46.7

- 1. Original gas tanks must be removed.
- 2. Metal marine type tank, metal fuel tank, or derby-specific metal fuel tanks are required. NO PLASTIC TANKS ALLOWED!!!
- 3. Place the fuel cell behind the driver's seat or in the center of the car where the back seat used to be. Must be securely mounted with bolts, metal straps, chain, or you may suspend it on your cage, following cage rules. No seat belts or pull tie straps may be used; No other source of gas/ether inside the car at all.
- 4. 15-gallon tank max may be used, must fit within gas tank protector specs.
- 5. Fuel lines must run inside the car; not under the car along the frame. Fuel line must be inside a protective line within the engine compartment.
- 6. \*\*\*If running alcohol, you must bring to the officials attention so we can mark the car for safety reasons.\*\*\*
- 7. Tranny and fuel coolers are allowed. These coolers cannot be placed to reinforce the car. No bolts may extend through the frame to create a body mount.
  - a. If you are not using a gas tank/trans cooler protector, the fuel cell and tranny cooler must be 4" away from the rear sheet metal.

Protector or not, nothing can be within 4" of any sheet metal.

## \*\*\*IF USING AN ELECTRIC FUEL PUMP, YOU MUST BRING IT TO INSPECTORS ATTENTION AT TECH\*\*\*

- 1. Electric fuel pumps are allowed. The on/off switch must be easily accessible and clearly marked with bright paint.
  - a. An "E" will be attached to the rear pillar during tech to identify the electric fuel pump.

# BATTERIES

- 1. Batteries must be moved to the front passenger area. They must be properly secured and covered, unless you are using a gel cell battery. Up to (2) 12-volt batteries may be used.
- 2. Battery box must be made out of metal! It must be bolted to the floor or cage: Bolts may not go through or around the frame or transmission crossmember. Seat belts or pull type tie downs may not be used.
- 3. Rusted out holes in your floor sheet metal may be patched where components will be mounted or for driver's safety with sheet metal only. You may not patch clean and solid floors.
- 4. All body mounts must be visible.

# FOR '03 & NEWER FORDS

#### **CRADLE AND SUSPENSION**

- 1. Only steel cradle or bolt-in cradle:
  - a. You are allowed to use the Johnson Bolt-in Cradle Type System as a conversion to a steel cradle.
  - b. or an identical bolt-in system with no modification
  - c. or weld in a factory Ford cradle. If you weld in a factory Ford cradle (1980-2002 Crown Vic cradles only) you are only allowed to butt-weld a cradle in between the factory frame rails and may use a 12"X4"x1/4 plate to help attach the cradle.
- 2. The cradle must be mounted between the factory frame bolt holes used to bolt in the factory aluminum cradle. You are allowed to weld OR bolt on factory Ford mounts only and the uppers must be mounted between the factory frame holes.
- 3. You are not allowed to plate the crossmember in a 2003 or newer.

#### FRAME

- 1. You can only weld your motor mounting plates to the cross member which are no larger than 6"x6"x3%".
- 2. There must be a 2" gap between your bumper bracket and your engine saddle or bolt in cradle. Call with questions.

#### WELDING

1. No welding on the boxes or frame rails.

#### TILTING

1. You are allowed to tilt the frame in one location and only one direction.

#### **SPRING POCKET**

 You are allowed to build a spring pocket and weld to the side of the frame within the A-arm footprint. This spring pocket can only be one layer thick and made of ¼" material. It cannot be any bigger than 6" in diameter. Spring pocket must be flat on top and only to give the A-arm a spot to rest, not reinforce the A-arm. If inspectors feel that you have overbuilt the spring pocket you will be required to change it.

#### STEERING

- 1. You are allowed to drill up to (3) holes on the driver side frame rail to mount the steering box.
- 2. These bolt holes may be sleeved but sleeve may not be any bigger than <sup>3</sup>/<sub>4</sub>" O.D. round tube.
- 3. The bolts must run through the side of the frame and mount just like they did at the factory.
- You are allowed to drill two (2) bolt holes on the passenger side frame rail for the idler arm-mount. These bolt holes may be sleeved but sleeve may not be any bigger than <sup>3</sup>/<sub>4</sub>" O.D. round tube.
- 5. All steering must be set up as it was in a 1979-2002 and older ford frame. Do not modify steering components or lengths.
- 6. No sway bars will be permitted on '03 and newer fords.

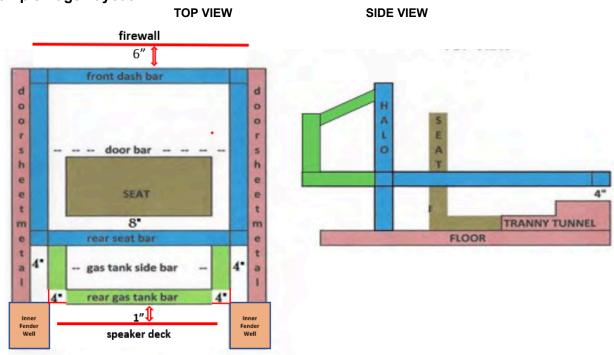
# JUAB COUNTY

#### PRE-RAN / REPAIR RULE:

- 1. (10) frame rail plates may be used, they must be 4"X6"X3/16"; only (8) of them may be in front of the transmission cross member. However if you choose you may use all of them behind the transmission crossmember. Please call with Questions.
- 2. Plates may be bent and cut but must be used on the frame only. If you cut, you cannot use the excess pieces anywhere else.
- 3. Plates and weld must be separated by 1" in between welds and or plates; stitch welding is not allowed between plates.
- 4. Cracked frames may be welded with a single pass. Notify an inspector ahead of time.
- 5. You may patch any hole in the doors or floor of the car for SAFETY only. You must use sheet metal only. And your patch may be only 2" larger than the hole you are patching.
- 6. No #9-wire may be used for repair.
- 7. You may reinforce damaged steering components using one piece of 1"x1"x1%" angle, but you must use factory type and strength parts.
- 8. No wedges may be used between firewall and frame.

# OVERALL SAFETY IS OUR GOAL. ALL BUILD REPAIR RULES WILL BE AT THE DISCRETION OF THE OFFICIALS CARS MAY BE REINSPECTED AT ANY TIME BEFORE, DURING, OR AFTER ALL INITIAL INSPECTIONS AND HEATS

# Please build to the rules, don't plan to cut to the rules.



# Sample Cage Layout





**Mopar Examples** 

Revised 02/2024

Sample Transmission Adaptor Plate





Sample Bar Transmission Protector

FULL Trans Brace



Sample Steering Box Adaptor





133 300 100

Lower Engine Cradle & Pulley Protector

Example of steel tail shaft & bell (steel or aluminum)



Control Arms



Gas Tank Protector max.





# **RULES OF COMPETITION**

- 1. No intentional hitting the driver's door (must be determined by TWO track officials unless it is deemed blatant). If you hit a driver's door under power you will be disqualified from the heat and lose your place standing.
- 2. No sandbagging. (Determined by track officials).
- 3. No intentional hitting of a non-flagged car.
- 4. Each driver will have 2 min to make a hit.
- 5. No team driving.
- 6. Track officials may stop a heat at any time if unsafe conditions should arise. An effort will be made to rectify the issue at which point the heat will resume.
- 7. The definition of a hit is as long as your car is running and able to make a hit unassisted in a forward or reverse motion under power.
  - a. Must be 1/2 car length or more.
  - b. Car-rocking will not be considered a hit!
- 8. Drivers must wear a D.O.T. approved full-face crash helmet. (No add on chin guards).
- 9. Drivers must stay in their safety belts at all times during the competition with your helmet on, even if you are out of time.
- 10. As cars will be staged for the event, there will be no tampering of the opponent's vehicles. Anyone caught tampering will be disqualified from this and any future events. This applies to your whole crew.
- 11. Eye protection is required. Neck braces are highly recommended.
- 12. No pit crew members are allowed in the arena to help remove your car.
  - a. Drivers may NOT provide their own tow vehicle.
- 13. You must wear long pants and a long sleeve shirt.
  - a. You may not wear shorts and/or open shoes while driving in the competition.
  - b. Fire suit is optional.
- 14. Any instances resulting in a tie:
  - a. Money will be split
  - b. Trophy will be flipped for, with a coin toss.
- 15. If your car is rolled on its side or flipped over you will not be allowed to compete any further in that heat; however your time continues as if you were stuck. This will be discussed further in driver's meeting
- 16. If you have two (2) fires of any kind that need extinguishers to put it out, you will not be allowed to compete any further in that heat; however your time continues as if you were stuck. If you must be removed from your car for safety reasons your time will continue to run out accordingly.
- 17. Once you are timed out or disqualified you may not help other drivers. Both you and the driver you assist will be disqualified for the heat.
- 18. All official's calls are final. If you disagree with a call: sorry, arguing with an official or member of the staff or other drivers are grounds for disqualification. No calls will be overturned.
- 19. No hot rodding in the pits or you will be disqualified. This will be strictly enforced.

- 20. Un-sportsman like behavior will not be tolerated and will result in disqualification and may also result in removal from grounds.
- 21. No alcoholic beverages will be allowed! Any driver or pit crew member who has consumed or is consuming alcoholic beverages before or during the derby will be disqualified. NO EXCEPTIONS.
- 22. Each driver must submit a completed entry form, either online or by mail, along with the required entry fee on or before the entry deadline. Entries are non-transferrable and entry fees are non-refundable.
- 23. Drivers must compete in their respective qualifying heat to be eligible for the consolation, grudge match and Main Event.
- 24. Other than what has been specified above, no other alterations or interpretations of the rules will be allowed.
- 25. No obscene words or graphics are permitted on your vehicles: if you are questioning something you have in mind, give us a call.
- 26. Inspection will be from 7:00 4:00. Please allow plenty of time for your car to be inspected. Cars will be impounded upon passing inspection. Make sure your car is race ready when passing inspection. The exception will be after your car is impounded you MAY connect a portable battery charger. No refunds will be made if your car does not pass inspection. Each car will be allowed one truck and one trailer in the pit area AFTER your car passes inspection. No excavators/tractor/backhoes ect.. allowed in the pit area.
- **27.** MANDATORY driver meeting at 5:00. We will draw for heats, driver raffle and go over last minute info.
- **28.** \$150 entrance fee includes driver (Shirt) and 2 pit member shirts. 2 additional pit passes can be purchased upon your car passing inspection for \$25.00 each.
- **29.** Driver and Pit Crew MUST sit in designated seating area while watching the derby. NO SITTING IN/ON THE CHUTES. You will be asked to leave if you are sitting or standing in isles or grandstands, entry area.
- **30.** All drivers will be responsible for anyone in their pit area. All pit crews must sign a waiver before being allowed into the pit area.
  - a. Any decorations that are used must be made out of cardboard or foam.
  - b. Be advised that by participating in this event you and your car may be filmed. You consent to the use of your image, likeness, voice and actions for photo, video, and print use, sale, and marketing without remuneration from the event organizers (Juab County Fair) and Juab County Fair Demolition Derby, or their associates.
  - c. All contestants MUST participate in order to receive their pit passes. Your entry does not guarantee pit passes if you do not run. Arena entry will be restricted: This will be strictly enforced with NO EXCEPTIONS.

# **Questions?** Please contact:

<u>Rules / Tech / Cars</u>: Brad Bowman @ (435) 671-1790