

# Duchesne County Demo Derby 2021

## **Limited Weld Rules** NOTHING other than what is listed below is allowed

Follow general preparation and inspection on standard car rules

**IF YOU HAVE QUESTIONS WHILE YOU ARE BUILDING, SEND TO**

[ropein.wells@gmail.com](mailto:ropein.wells@gmail.com) **YOUR QUESTION WILL BE ANSWERED VIA EMAIL AFTER IT IS DISCUSSED WITH ALL TECHS.**

### **GENERAL PREPARATION:**

- 1-** Original Frame, Body, clip/dog house must be used.
  
- 2-** All glass, plastic and pot metal must be removed. Nothing may remain in the bottom of the trunk or doors. Rear seats in all cars must be removed.
  
- 3-** All outer hardware must be removed - door handles, mirrors, chrome, moldings, screws and fiberglass.
  
- 4-** Driver door must be padded on the inside.
  
- 5-** Front seats must be securely bolted to the floor; however, these bolts may NOT go through the frame! You must have a functioning seat belt. Seats must be mounted within 5 inches of original FRONT seat bolts.
  
- 6-** All flammable materials must be removed from the car other than safety padding and the driver's seat.
  
- 7-** No adding weight to the vehicle, no packing, stuffing of frames, trunks, passenger doors or under floor decking.
  
- 8-** All trailer hitches must be removed.
  
- 9- No** 73 or older Imperials, Lebanon's, Ambulances, Hearses, Sedagons, or Limousines allowed
  
- 10-** Do not paint the body inside the car or paint the frame. If you do you will be sent to

the car wash to power wash it all off before being inspected if you're back in time.

**11- 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.

**After Market parts that are allowed:** Metal Gas tank, Transmission cooler, fuel cooler, brake & gas pedal, shifter, battery box, steering column up to the steering box, drive line, driveline brake, lower saddle cradle, motor, adapter plate for BOP transmission to Chevy block, seat and seat belt. None of these parts can come into contact or even get close to coming in contact with the frame or any Sheetmetal we would consider reinforcement. Post-race inspection will be thorough, and all these items will be re-inspected along with other areas that may be invisible in the initial inspection. Post-race inspection will include all the items looked at in the initial inspection. So, you need to be right when you get here, right after the heat, right after the grudge and right after the feature.

**CAGES & DOOR BARS:** **1.** All cage material must be no larger than 6" O.D., unless specified for a specific rule smaller. 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" of the firewall and be a minimum of 4" off the transmission tunnel. All bars must be straight. **2.** You must weld a bar immediately behind the seat from door post to door post, it can be an X, however; do not connect it directly to frame. You may also have a single bar (with no extensions), across your dash area to replace your dash. Side door bars may not go past the front dash or rear seat bar. End plates are mandatory with a max of 10"x10". End plates must be a minimum of 2" larger than the bar being used. **3.** You may weld two down bars from the cage to the floor pan or frame vertically to protect batteries and your feet. These down bars must remain behind the inside door seam and cannot not exceed 3"x3". **4.** Back of seat cage cross bar, including roll bar must be placed above the rear side of the foot well kick up. You may weld or bolt to the sheet metal or frame two more down bars vertically below the rear seat bar. These bars cannot not exceed 3"x3". **5.** You must have a Vertical roll loop/Halo or upright, it may not exceed 4" O.D behind the seat located above the rear seat bar. This may extend to the floor as your rear seat down bars (see #4). Must be fastened to the roof in 2 locations at least 24" from center.

If it leans towards the back window you will fix it at the track. **A.** Halo bars must be in a direct vertical line with the seat bar. They must be vertical. **b.** Upright post must have a max 10"x 10" plate attached to the roof, welded or bolted in.

c. Upright post must be mounted vertically and in such a way it will not bend. (Ex. Gusseted)

**Gas Tank Protector** - You may run a gas tank protector. It cannot attach to anything other than your seat bar. It must be centered between your frame humps. It cannot exceed 30" O.D. wide only one tube may be used, see diagram below. It must be a full 4" away from rear sheet metal, which cannot be removed or hammered back. The protector must be 4" above all floor sheet metal, which cannot be removed, measured from the highest flat area of the floor in the rear seat area. One 12" gusset per side from the seat bar to the protector may be used. If you choose to run a gas tank cage, it may not be **ANY MORE THAN** the picture below and follow all cage to sheet metal distances listed above. **A.** In a wagon the rear gas tank protector can not be any farther from the rear seat bar than 30" O.D. **3. Doors** **1.** Door seams must be welded using rolled rod no bigger than 1/2" or flat strap no bigger than 2" wide by 1/4" thick. **2.** You may smash the inner and outer skin together of the window opening and weld them solid. **3.** On cars equipped with factory compression style bumpers you may compress the bumper shock tubes and weld them back but don't touch anything beyond 10" with the welder. 80 and fomoco must maintain and utilize the original shock bolt hole. **5**  
**Frame:** **1.** All body mounts "pucks" (rubber biscuit and cone) must be in place. You may not remove bolts and place washers on either side. Exceptions will be made for the all thread in the trunk and in the core support areas below. **2.** No seam welding, no frame swapping in any way. **3.** Frames may be notched or dimpled between the 2 rear frame mounts however do not touch the frame with a hammer anywhere else. **4.** Frame rust is to be handled on a case by case basis with officials. Email and you will be put in touch with one. **5. Absolutely no** cutting, welding, bending, adding to or altering the front frame in any way other than what is specified. **THIS IS CAUSE FOR DISQUALIFICATION.**

**Hood and Trunk and Body:** **1.** Only quarter panels and fenders may be creased. All body panels must be in near **original position vertically.** **2.** Body rust repairs will be allowed using sheet metal of the same thickness as the body on: **a.** The floor pan to "FIX" rust holes only no skinning of the entire floor. **b.** Body rust repairs will also be allowed on the "pillars" only. A piece no bigger than 14" by 14" may be used. At least one 1" inspection holes 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). **3.** Hood must be open for inspection and closed prior to being flagged. **4.** Hinge springs must be removed and two 10" holes need to be cut in the trunk for inspection. **5.** Trunk Lid and Hood must be 100% in stock location. **6.** All decking in wagons must be

removed. **7.** Trunk may be tucked or dished. If your trunk lid is pushed down in the center must be at least 12 inches off trunk floor body at mount elevation. **8.** Trunk may have two 1" bolts, one per frame rail that go from the trunk lid to the frame. 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. The body mount may be removed in the location the all thread goes through. It can also be welded to the side of the frame instead of going through a body mount hole however body mounts need to be factory if doing this. **9.** Choose one of the following three ways to secure the trunk. This is allowed over and above the (2) 1" all thread. **a.** Chains or cables may be used to secure the trunk. 3 places on the drivers and passenger side. Single loops of 3/8 max and can only be sheet metal to sheet metal. **b.** You may weld the trunk. 3 places on the drivers and passenger side. 6" inch lengths of 1/2" rod welded in the seam or 2" wide by 1/4" thick flat stock. **c.** You may utilize 3 pieces of back-to-back 6" inch long, 2"x2" angle on the drivers and passenger side. These may be welded to the sheet metal but not across the seam and bolted together with a 1/2" bolt.

**10.** Choose one of the following ways to secure the hood. This is allowed over and above the (2) 1" all thread. **a.** If bolting, 3 places on the drivers and passenger side. Bolts may be no larger than 8"x 3/4" with two 5" washers per bolt. Washers may not be welded and only be thru sheet metal. **b.** Chains or cables may be used to secure the hood. 3 places on the drivers and passenger side. Single loops of 3/8 max and can only be sheet metal to sheet metal. **c.** You may utilize 3 places of back-to-back 6" inch long, 2"x2" angle on the drivers and passenger side. These may be welded to the sheet metal but not across the seam and bolted together with a 1/2" bolt.

**Engines Transmissions & Rear Ends:** **1.** Engines may be swapped but must remain close to the original position as possible. No cutting of the floor or tunnel to accommodate different motors. A hole may be cut for the distributor. Engine mount pads can be welded to the factory engine cradle only. You may weld one chain link to the engine frame cradle and use a chain or cable to secure your motor. You may have one on the left and right side. No welding or bolting to the frame rails. **2.** If using an engine saddle cradle (see picture below), it may only be fastened to the factory engine cradle and not the frame and you may not use any strap, cable or chain. **3.** Any Direct bolt on factory 5 lug rear ends of passenger car origin may be used. You may interchange make and models. No braced, hybrid or 8 lug or floaters rear ends are allowed. The only welding that will be allowed is welding to add factory coil or leaf mounts, coil spring perches and spider gears. No full float axles. **4.** Stock housing transmissions must be used. No Reid cases, steel bells, aluminum bolt on bells, steel tails, plated pans, skid plates or braces. **5.** A 2"x2"x1/4" thick tube may be used in place of the original stock transmission crossmember. It must mount in the factory position for

that car including Cadillacs and 70s fomoco products.

**Suspension and steering:** 1. Suspension must be stock components from a car legal in this class, nothing locked or welded solid. 2. Front a-arms and rear control arms may not be reinforced or modified or welded down. Must run THE stock leaf pack for leaf cars. Original leaf spring clamps only. 3. Tie rods and ball joints may be swapped out with big box store parts. No Joker, Ski, Wicked type parts and no welding, must bolt or press in. 4. Coil springs may be welded to the axle only and may be doubled or shimmed. 5. Tires, springs and spring spacers may be used to raise the cars suspension. 6. Chaining of humps is optional, if doing so you may only use 2 chains single wrapped. (one per frame rail) May not go through the body. 7. No duct taping of leaf springs 8. Max front and rear bumper height to the bottom is 19" and max low on the rear is 15" to the bottom.

**Windows:** 1. You may know more than 2 window bars in the center of the front and rear window and no more than 18" from window center, or 3/8" chain. 2. **Bars may not be bigger than 36" long by 2" x 2"**. 3. Bars may only be attached by welding directly to the sheet metal or with a mounting plate no bigger than 4" x 4" by 3/16" angle or plate on the roof, cowl, speaker deck or trunk. Plate cannot be mounted on the trunk lid itself. 4. If using rear window bars in a Station Wagon tailgate windows are treated as a rear window but must be mounted at the top of the tailgate, and the tailgate must be in original closed position. 5. No wiring or chaining of any window openings. 6. Window bars may not be attached to the halo bar or any cage components.

**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 stock location. 3. Radiators may be mounted in such a way to hold the radiator in place, not strengthen the core support. No added metal or foam may be used to mount the radiator. If welding radiator in place you may use four 1" welds, one per corner. 4. You may not add cooling capacity. No supplemental cooling devices allowed (electric fans are allowed). 5. If using a pulley mounted fan, it must be covered by hood or sheet metal. 6. NO COOLANT 7. Radiator loops may be used 8. Radiator supports must remain in the stock location. 9. Radiator core support seam welding is NOT allowed. 10. Radiator supports may not be welded to the frame, bumper brackets, bumpers or anything else. 11. If using a ac condenser not in the stock mounting position or mild 1/8" expanded metal to protect the radiator, it may be tie wired to the core support only. 12. You may have up to 1" all-thread, it may go from the hood to the frame, but must go through the

front body mounts, the body mount if it is welded. One per frame rail. Body mount must be removed and a max of a 3" long, 2"x2" tube used as a spacer between frame and core support may be added. No welding on the top or the bottom of it.

**11. FUEL DELIVERY SYSTEMS:** 1. Metal Marine type tank, metal fuel tank or derby type metal fuel tank is required. 2. 6-gallon max tank maximum may be used. 3. Original gas tanks must be removed from the car. 4. You must have the gas tank securely mounted behind the driver's seat with bolts, metal straps, or chain. No seat belts or pull tie straps may be used. 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. **\*\*\*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. An "E" will be attached rear pillar during Tech to Identify the Electric Fuel Pump. 2. Automotive pump gas only, NO ALCOHOL TYPE FUEL MAY BE USED!

**BATTERIES:** 1. Batteries must be secured inside the car and covered, unless you are using a gel cell battery 2. Battery box must be made out of metal! It must be bolted to the floor. Bolts may not go thru or around the frame. 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.

**TIRES & BRAKES:** 1- No split rims or studded tires allowed. 2- You must start with a stock wheel, no bead locks or full wheel centers. You may add a piece of 1/2" rolled or flat steel to the exterior rim lip only. Small wheels center's no larger than 8" only and valve stem protector. No foam filled tires and no wheel weights. 3- All cars must be able to demonstrate the ability to stop at any time. If your brakes do not work, you will not compete. 4- You may not change tires after inspection without official's consent.

**AIR CLEANERS:** 1- You must have an air cleaner over the carburetor all at times during the event.

**CUT OUTS:** 1- Clearance cut outs over the wheel openings are legal but can't be re-bolted or welded. 2- (9) 3/8" bolts with 1.5" washers may be added to the hood to

ONLY hold hood to the hood frame underneath. **3-** If inspection holes and fire holes are determined to be too small you will be asked to cut them larger. **4-** Remember 2-8" holes need to be in the trunk and hood for inspection or you'll be sent back around.

**OVERALL SAFETY IS OUR GOAL AND WILL BE DETERMINED BY THE TRACK OFFICIALS! PRE-RUN/FEATURE/GRUDGE MATCH (CONSI) REPAIR RULE:**

**1.** Ten plates not to exceed a 6" by 4" area by 3/16" of which, only 3 may be used in front of the transmission cross member per frame rail. **2.** Plates may be bent and cut but excess may not be used elsewhere. **3.** Plates and weld must be separated by 1" May not be welded to the body or any other bolted on frame components without permission. **4.** No other frame welding will be allowed! All other repairs made to the frame will be removed. **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.** You may reinforce damaged steering components on pre-run cars only using one piece of 1" by 1" by 1/8" angle, but you must use factory type and strength parts. **7.** No frame wedge blocking.

This year due to the new arena being built, pit space will be limited. We can not use the indoor arena to check in cars. Check in and inspection will be across the bridge in the shop. Once checked in you will be only allowed your derby car and one mechanic vehicle in the pit area. Everything else must be left across the river. This is something that we cannot do anything about, if you are going to have hardship with following this new change, it will be better if you stay home, there is no wiggle room.