

# Wright County Fair Limited Weld Truck Class 2023

**1/2 to 3/4 Ton** American made pickup, extended cabs, crew cabs, and suburbans are allowed; 2-wheel drive or 4X4 with front drive shaft removed. NO 1 tons or frame swaps. **Frames must remain stock and not shortened or altered in any way, shortening front or rear frame horns is not allowed.** No welding other than specified!! NO adding extra braces in frame or engine cradles. If officials suspect a 1 ton frame, it will be driver's responsibility to have written proof by frame code and VIN number or you will not run.

**Hood** may be chained (3/8" chain), wired or bolted in 6 separate locations, two chains or wires may go from core support to bumper. You will be allowed two 1 inch maximum rods welded to frame used for hood pin at core support. Rods may be welded to core support 5 inches per rod (5 inch long filler material can be used to reach core support if not resting tight against). You will also be allowed a 5x5 inch washer welded to top of core support for hood pins to go through to hold in position, other 4 locations up to 1 inch maximum. Hood pins, wires or chain must go from sheet metal to sheet metal only. Hood washers no larger than 5x5 inches, 1/4 inch thick. Hood pins must be straight up and down, 1 foot maximum length. You may use four 3/8" bolts each hole to bolt hood skin together hood openings around stacks. **MUST** have two window bars no larger than 3 inches in diameter or 2 #9 wires in windshield opening to prevent hood from entering driver's compartment for driver's safety. Must be open for inspection

**Doors** may be chained in two locations per seam or welded with 24 inches of total weld **outside only** (1/4 inch strap no wider than 2 inches). Each chain or wire location will count as 4 inches of weld. Driver's door may be welded solid and reinforced for safety (highly recommended) and can have a driver's window net.

**Tailgate** must be ran in upright position, can not be removed. It may be chained in two locations per side OR welded using 3x3 angle iron inside, or 3" flat strap outside (24 inches total on the sides) plus an additional 12 inches of 2 inch angle or 4 chains on bottom of tailgate to box (not bumper or frame). Angle on bottom of tailgate to box must not be connected to box plates. Tailgate may be lowered and welded to end of frame rails to use as a bumper as long as no other form of bumper is used. If bumper is used, you may lower tailgate and weld to top of frame only (not bumper) and chained in two lower locations. Suburban and SUV back doors use tailgate rules to secure.

**Bumpers** Front and rear bumpers may be changed to a seam welded, loaded car bumper (rear must remain flat) no adding bumper brackets to frame. If you choose not to install a factory car bumper, you can use a (FLAT only) 6 ft. long maximum, 5 inch diameter or less, 3/8 thick square or round tube behind factory truck bumper welding to frame. No other metal can be added to bumper besides bumper skin, no sharp edges, cannot protrude past fenders (must be covered by a skin on front side). Bumpers may be welded to frame plus added 2x2 inch wide, 1/4 inch thick angle iron also to help secure to frame on all sides. Do not run lengthways down frame as a bracket, bumper attachment only. **Bumper height maximum is 30 inches to the top of bumper, minimum is 24 inches to top of bumper.** No open frame rails. If running a replica bumper, the bumper must meet factory measurements and must have a chrome skin covering it.

**Tires** Any ply tire allowed, stuffed, skid, ag okay, split rims allowed but ring must be fully welded. Uni-lug wheel centers 9" max. diameter may be used, no bead locks or full centers. **1" wide "lip" protectors will be allowed on rims.**

**Suspension** Front axle, non leaf-spring trucks may install 3/4 bolt in center of a-arm welded to spring pocket to gain height. Front shocks may also be replaced with a piece of steel tube. These tubes can be bolted in factory shock location or can be welded to axle and ran vertically upside of frame and welded to frame, no welding can exceed 2 inches in width on frame for these tubes. **These tubes are to gain ride height not to reinforce the truck (if material on frame is deemed excessive you will be cutting).** Stock leaf packs, no adding or re-stacking leaves, you may have 6 leaf clamps per leaf pack total. **No coil to leaf conversions on front axles.** Factory leaf spring perches may be welded or bolted to frame to help from tearing off. May add two chains per axle to frame, 3/8 chain. 1/2 ton may swap to 3/4 ton rear ends, may be welded posi-traction, no bracing on rear ends. No axle savers. Factory leaf hangers must be in the same location as factory hangers if they are needed to be replaced (no moving hangers forward or backwards).

**Engine/Transmission** May crossbreed engines and transmissions. No adding engine cradles or extra braces in frames other than directly specified. **For older c-channel frame trucks with no engine crossmember this is your allowance: you will be allowed to build an engine crossmember out of 2x6 1/4" thick tube max, you will be allowed to have a piece of the 2x6 tube 6 inches long welded or bolted in the c-channel part of the frame, from there you can weld the 2x6 tube straight across off those pieces. This crossmember must be directly above the front axle of the truck, absolutely no gussets or extra bracing from crossmember to frame. Must only contact engine/cradle at mounting bolts ONLY. Outside of motor mounts bolts, crossmember cannot be used as a brace or support for lower engine cradle or any other part of drivetrain or suspension. In addition to the crossmember, you will be allowed to box frame from front frame horns to this crossmember. Max thickness on plate will be**

**3/16", no internal reinforcement behind plate. Must have inspection hole in frame capping.** Do not use firewall as a brace. May have 2 chains or wires to frame to hold motor in place. May weld motor mounts in size of factory mount. Engine must be bolted to mount with 2 bolts not welded. Transmission coolers allowed if deemed safe, do not use rubber unbraided transmission lines. Transmission may be chained or wired to crossmember. Block saver lower engine cradles allowed without pulley protector. Lower engine cradle is not to be used as support for the frame and must be at least 2 inches from any part of the frame. Distributor protectors, transmission protectors, steel ultra-bells, steel tail shafts will not be allowed. **Aluminum ultra-bells will be allowed.** Any driveshaft may be used, sliders okay. No radi-barrels, must use a radiator in factory location, or loop hoses. If you have any non factory frame capping or frame seam welding behind the engine crossmember, you will not run.

**Radiator** If your radiator mounts are not able to be used this is your allowance: To support your radiator you will be allowed a max of 4"x4" angle iron to bolt or weld to your factory core support. This angle iron can be a max of 1/8" thick material. This angle iron will only be allowed to support the bottom of your radiator, and cannot exceed the width of radiator. From this point you can bolt radiator to core support or use small ratchet straps to hold radiator in. You will also be allowed to spray foam radiator in.

**Body Bolts** If you leave the original body mounts (100% stock rubbers) in the factory locations, you may do the following: Trucks may add an additional 8 box bolts, 6 cab bolts, and 2 core support bolts; Suburbans and SUV's may add an additional 10 bolts throughout the cabin compartment, and 2 at the core support. If you remove the body mounts and bolt everything solid, you lose the additional bolts outlined above. Body bolts can be up to 1 inch maximum in diameter with washers no larger than 1/4 inch thick and 8x8 inch square. Bolts must be ran VERTICAL and be bolted through the top of frame like factory, or welded to the outside of the frame. Do not pin the frame with body bolts.

**Box** Rollover bar (strongly recommended) mounted in front of box (**must remain 5" gap minimum away from top of cab, must stay vertical not angled**). Can bolt or weld to box floor or to box washer plates (not frame). No wider than frame on uprights, no wider than cab on top, may have kickers two feet back from uprights to support, and one crossbar across bottom of kickers to protect gas tank. Rollover bar cannot attach to interior cage components. Box may be bolted to cab in 4 locations, 1" bolt size, 5x5 plates AND may weld 12 inches of strap per side (24 total) to weld cab and box together. You will be allowed one location to wire box side to box side, location of choice - cannot go to or around frame (4 strands of wire maximum, no chains). No folding box sides over to create a wedge. May bolt fenders with 6 - 3/8 inch bolts to bolt fenders together, 2 inch washers maximum threads, must point inward. Outside fender creasing is allowed.

**Cage** MANDATORY – Must run a bar behind seat and dash bar. Seat bar no further back than 10" behind seat. **Dash bar must be minimum 4" away from transmission bell and firewall.** May use 6x6 plates on ends, may connect dash bar to seat bar. **For down bars you are allowed the following: two down bars off of driver side door bar to floor OR may kick inward and attach to side of frame passing through floor. For passenger side you are allowed one down bar from passenger side door bar to the cab floor only to protect the battery. These are the only down bars you are allowed.** You may attach a rollover bar from seat bar up to or over roof and down to dash bar but these bars cannot connect or come in contact with rollover bar in trucks with boxes to stop truck from bellying. 5" diameter maximum on cage material and only attached to cab, floor or body mount plate, not directly to frame. **Suburbans and SUV's** may attach a floating gas tank protector off seat bar, 24x24 protector must remain 4 inches away from any sheet metal. These are the only internal cage components allowed.

**Battery/Gas Tank** Two batteries maximum allowed on passenger side floor, properly mounted and covered, NO BUNGEE STRAPS!! Gas tank must be removed and one relocated in front of box, 15 gallons maximum. May use electric fuel pumps if well labeled (FUEL SHUT OFF).

**Frame** If frame bent, you will be allowed to use a max size of 4"x6" 3/16" plate to repair bends. Plates must have a minimum of 1 inch between the plate, plates must remain flat and can only be used on one side of the frame. Max of 10 plates on a truck. If long area over 6 inches is bent, please call for authorization. No boxing of frames.

**Miscellaneous** Stock steering components, may alter steering shaft from box to steering wheel. Tie rods may be reinforced in center. Shifter may be altered, ignition and starter wires may be altered. Your number (given by demo official) must be on both doors and a sign with your number must be on roof for recognition of vehicle. Number must be painted with a contrasting color from truck. A fire extinguisher is recommended and securely fastened down in vehicle. Any objectionable picture, logo, or slogan will be removed from your vehicle or you will not be allowed to participate. No welders allowed in pit. No alterations allowed on vehicles after inspection. If you are stopped at gate because of alteration, you may be disqualified. Demo chairman reserves the right to alter program as needed. Vehicle may be reinspected at any time. This is a low build class, if rules don't say you can't do it, don't assume you can!!! **MUST REMAIN STOCK OTHER THAN STATED IN RULES.**