

# 2021

## Redwood County Fair Stock Demo

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### Stock Rules For 80's and newer & Old Iron Stock, Safety Requirements and Car Regulations:

#### GENERAL RULES APPLIES TO ALL CLASSES UNLESS NOTED.

- NO IMPERIALS (PRE 1973), HEARSEs, OR AMBULANCES.
- NO Radi-Barrels or homemade Radiators
- All drivers must wear full face helmet
- All drivers must wear long sleeves or some form of a non-flammable leather or racing jacket
- All glass, interior, loose objects, etc. must be removed
- All cars must have a seat bar from door post to door post
- All cars must have a dash bar if dash has been removed (all air bags must be removed) those bars may be connected.
- Gas tank protectors are allowed, must be attached to seat bar only and no more than 24" wide behind the gas tank. **There must be a minimum of 1" space between protector and sheet metal/rear package. Sheet metal must remain unaltered behind the fuel tank protector.**
- **Roll loop is required**
- **Remove all wheel weights**
- A 15" x 15" Roof sign is required for identification purposes.
- Driver's side steel window net is recommended Drivers door should be painted a contrasting color to the rest of the car (can only cover drivers area of car)
- We HIGHLY recommend that you tape your wheel to prevent hand/arm injury.
- 03' and newer are allowed to run in the 80's and newer, however with those cars, you have to run them COMPLETELY stock up front, that means rack/pinion, suspension, and everything stays stock, no swaps of anything.

#### INTERIOR:

- All station wagon decking must be removed
- Driver's door padding is required
- Windshield bars are required 2 max. 3-inch wide max. Attached to roof and firewall no more than 6 inches onto the roof or firewall.
- One down bar is allowed on each side of car to help prevent driver/batteries, etc. from being hit. Attached to floor sheet metal only and may not pass through the floor.
- Body bolts must remain in factory location, 1/2" diameter bolt maximum, and isolators must remain rubber. Must maintain a 3/4" space and cannot pinch the frame (allowed through top side only). 3" washer diameter maximum.

## EXTERIOR:

- All chrome strips, door handles, etc. must be removed from car
- All trailer hitches must be completely removed Shocks and leaf springs must be in original condition, not home-made. NO extra clamps.
- NO welding of frames. No welding of any type unless stated in these rules, Front suspension may be welded for height. No more than 2" strap to hold top a-frame down. Can also use a piece of chain. No more than 2" of weld on frame for attachment.
- No displaying foul, profane, or suggestive wording or decorations. You will be required to paint or remove infraction.
- Any automotive bumper may be used, cut to fit, and maybe stuffed. Otherwise you can use up to a 4X4X1/4" square tubing **MUST REMAIN FLAT** open on both ends and wrapped in chrome, No Homemade bumper brackets Bumpers may be welded on. Bumper to factory shocks/brackets, factory shocks/brackets to frame. One set of brackets only. Bumper skin may also be welded down with no added material. Shocks/Brackets must be factory to the car and in factory location.
- Y-frame Chryslers can cover one side of the frame only (top or bottom), with a plate no larger than to cover the opening, and must be at the most the same thickness of the frame or less (Old Iron Stock Only).

## HOOD AND UNDER HOOD:

- Hoods must remain in stock position a minimum of a 6" hole must be cut in hood for Fire Dept. access. Header holes are OK
- Radiator must be in stock position. Ratchet straps or wire to hold in place, do not use bolts.
- Floor shifters are ok
- Motors and transmission may be welded in place.
- Do not reinforce frame or you will cut. Officials' decision.
- NO distributor protectors or tranny braces for the stock class
- NO Full Engine Cradles
- Lower Cradles are ok
- Pulley protectors are allowed but the sway bars must be removed then.
- Mid Plates are allowed they cannot contact the frame, must have a minimum of 1" space from the firewall, and cannot be wider than heads of the engine (not the valve covers).
- Carburetor Halos are allowed but must be within reason and must be able to pass through the firewall.
- External tranny coolers will be allowed. Must be securely mounted on floor. Lines must be rated for high pressure. DO NOT just use fuel lines with hose clamps. Please use proper padding, etc. when attaching lines to the interior.

### DOORS WIRES AND CHAINS:

- Two or four door hard top vehicles will be allowed 3 wire locations from roof to the frame. 2 or 4-door Sedans will be allowed 1 wire location per door. Six wraps per location. Wire CANNOT attach to cage/roll loop/windshield bars.
- Drivers Door may be welded shut SOLID, ONLY THE DRIVERS DOOR!!
- Driver's door safety bar is optional. If using safety bar it must be either outside the car or between door skins. No thicker than 1" flat stock. Bar cannot extend more than 4 inches past door seam on front or rear of door.
- All other doors may be chained or wired in **2 locations per seam** or Seams may have **2 - 3"X5"X1/8"** plates welded on to hold doors shut.

### HOOD, TRUNK AND TAILGATES:

- Must be chained or wired only. NO WELDING!
- 6 fastening points per hood, 6 for the trunk as well
- **You will be allowed 2- 3/4"-bolts at the core support in the hood only**, but must be bolted in place, no welding anywhere to attach these bolts. You will be allowed a 5x5 washer on the hood bolt but must remain free-floating.
- **You will be allowed 2- 3/4" bolts through the trunk**, must be attached through the frame no welding. You will be allowed a 5"x5" washer on the hood bolt but must remain free floating (must maintain body spacer if going through a body mount).
- 4 bumper ties (chain or wire only) allowed. Core support to bumper. Must be in place during inspection
- Trunk lids may be tucked in. Leave 60% in factory location, do not dish trunk lid/speaker deck more than 4" past factory or you will cut.
- **Do not pound/pinch body lines**

### GAS TANK:

- Maximum of 8 gallons of gas will be allowed
- Gas tank must be inside car mounted in the rear seat area. Must be securely fastened down. Do not use plumbers tape with self-tappers. Official's decision is final. Splash cover is recommended
- DO NOT USE gas lines under the car.
- No non-metal containers. Boat tanks or well-made fuel cells highly recommended.
- Notify officials in inspection if you are running an electric fuel pump.
- Must have a shut off switch. SWITCH MUST BE LABELED

### **TIRES/REAR-END:**

- Anything goes but they must be filled with air.
- Stem protectors are OK
- Remove all wheel weights
- Small wheel centers are ok, no full centered wheels
- Any stock 5-lug rear-end may be used.
- NO bracing or after-market axles of any sort.
- Rear end may be welded for posi traction.
- Suspension must remain stock. No adding of any spring clamps on leaf spring cars. (Missing or broken factory clamps may be replaced but must be 1/4" thick or smaller, must maintain factory appearance and bolts cannot exceed 3/8" only 4 per wheel end 2 fore and 2 aft the axle).
- Coil springs must be wired in to prevent them from coming out.
- Rear may also be chained down in 1 spot to get desired height.
- Pinion Brakes are allowed.
- Slider driveshaft's are allowed.
- Humps are allowed to be peened in.
- Tie wire or chain from rail to rail behind the humps is allowed.

### **Battery:**

- Limit of 2.
- Must be securely fastened and covered on front passenger floor.
- Plastic Battery Boxes are not allowed unless a metal frame is incasing them.

### **Body, Frame, and Frame Repairs:**

- **Cold bending is allowed.**
- Pre notching (Pieing) the frame is allowed. (Covering the notch with a plate and welding back over is not allowed and vehicle will not be allowed to compete)
- Rust repairs are a case by case issue. Sheet metal must be repaired with sheet metal only. No more than 1" past affected area. Rust holes in frames, **Call for instructions.** 1/8" max thickness.
- **Pre-run frame repairs:** Do to so many abusing this in the past we now will limit the amount of repairs allowed. You will be allowed (3) 4x6" plates per frame rail. There must be 1/2" gap between plates, cannot overlap. Must be able to prove the repair or you will cut.

## Stock Truck Demo Rules

- LIGHT BUILD TRUCK RULES: 1/2- 3/4-ton LIGHT BUILD TRUCK RULES 1/2 - 3/4-ton American made pickup, ext, crew cabs, suburban's are allowed, 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. ANY QUESTIONS: CALL BEFORE CUTTING! No welding other than specified!!!! NO adding extra braces in frame or engine cradles outside of what is stated. If officials suspect a 1 ton frame it will be driver's responsibility to have written proof by frame code, vin number, if it is not  $\frac{3}{4}$  or less it will not run.
- HOOD may be chained  $\frac{3}{8}$  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". Max. rods welded to frame used for hood pin at core support, rods may be welded to core support 5" per rod (5" long filler material can be used to reach core support if not resting tight against), u 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 1in. max hood pins, wires, or chain must go from sheet metal to sheet metal only, - hood washers no larger than 5x5 inches  $\frac{1}{4}$  thick, hood pins must be straight up and down 1'. max length. U may use 4  $\frac{3}{8}$  bolts each hole to bolt hood skin together hood openings around stacks. MUST have two window bars no larger than 3" diameter or 2 #9 wires in windshield opening to prevent hood from entering drivers compartment for driver's safety.
- DOORS may be chained two locations per seam or welded 24" of total weld outside only (1/4 In. strap no wider than 2") each chain or wire location will count as 4" of weld. Drivers 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, no removing, may be chained in two locations per side OR welded using 2x2 angle iron inside, or flat strap outside 24" total on the sides plus an additional 12" of weld or 4 chains on bottom of tail-gate to box (not bumper). 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 not used. If bumper is used may lower tailgate and weld to top of frame only (not bumper) and chained in two lower locations, suburban, SUV back doors use tailgate rules to secure.
- BUMPERS Front and rear bumpers may be changed to a seam welded, loaded car bumper, (rear bumper must remain flat) no adding bumper brackets to frame. If u choose not to install a factory car bumper u can use a (FLAT only) 6'. long max, 5" diameter or less,  $\frac{3}{8}$  thick square or round tube behind factory truck bumper welded to frame, 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  $\frac{1}{4}$  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 max 27" to the top of bumper- min. 22" top in the rear. No open frame rails.

- **TIRES** Any ply tire allowed, stuffed, skid, ag ok, 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 inch 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 stock (bolted) in factory location to maintain ride height. 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.
- **ENGINE/TRANS** 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 inch 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. 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. Trans coolers allowed if deemed safe, do not use rubber unbraided trans lines. Trans may be chained or wired to cross-member. Block saver lower engine cradles allowed without pulley protector. Dist. protectors, trans. Protectors, steel ultra-bells, steel tail shafts will not be allowed. Aluminum ultra-bells will be allowed. Any driveshaft may be used, sliders ok. No radiator barrels, must use a radiator in factory location, or loop hoses.
- **BODY BOLTS** Trucks may have 8 locations of chains, bolts or U-bolts to secure box to frame, cab 6, and core support 2, (suburban's, SUVs, may only use 10 total throughout cabin compartment and 2 at core support) 1" diameter max size bolts with plate size no larger than 1/4" thick x 8" square) bolts may be bolted through top of frame like factory or may weld to outside of frame, do not pin frame. In addition you may leave original body mounts in factory location but must remain 100% stock rubbers included, if removed and bolted solid u loose option to use extra factory location.
- **BOX** Roll over bar (**REQUIRED**) mounted in front of box, (must remain 5" gap min. 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, roll over 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" of strap per side (24 total) to weld cab and box together. U 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 max, no chains) . No folding box-sides over to create a wedge, may bolt fenders with 6 -3/8 bolts to bolt fenders together 2" washers max. 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 max. on cage material, only attached to cab, floor, or body mount plate not directly to frame. Suburban's, SUVs 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 2 battery's max. allowed on pass floor, properly mounted and covered, NO BUNGE STRAPS!! Gas tank must be removed, and one relocated in front of box, 8 gal. max. May use electric fuel pumps if well labeled (FUEL SHUT OFF). FRAME If frame bent, may plate 1" past bend both directions 1/4 in thick one side of frame only. if long area over 6" is bent please call ahead for authorization, No boxing of frames.
- MISC. Stock steering components, may alter steering shaft from box to steering wheel, tie rods may be reinforced in center. Shifter may be altered, ign. and starter wires may be altered. 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

### SUBCOMPACT

- **All stock rules apply**
- Any car with a maximum wheel base of 104" rear wheel drive, or 108" front wheel drive 4 or 6 cylinder.
- Full center Implement tires will be allowed on the rear axle of FWD cars only.
- Wheelbase will be based upon factory specifications only.

### **STOCK MINI'S: (NO Durango's)**

- Open to GM S-10, Ford Rangers, Dodge Dakota pickups, Ford Explorers, GM Blazers, Mini Vans, and Jeeps
- 4 or 6 Cylinder
- **All Stock "Truck" Rules apply.**
- **Roll Loop is Required!!** All cage components must remain inside cab, other than the Roll Loop which may be directly behind the cab. Roll loop ONLY may be attached to top side of frame.
- Kicker from Roll loop may go no farther back than the front side of the wheel tubs, attached to sheet metal only.

**ALL QUESTIONS MUST BE ASKED OVER THE REDWOOD COUNTY FAIR DEMO DERBY FACEBOOK PAGE SO EVERYONE CAN SEE THE QUESTIONS AND ANSWERS.** *If you can't put the question online I will put it on there for you with your name attached to it.*

**If it's not in the rules don't assume you can do it, officials' decision is final. JUST BECAUSE IT HAPPENED IN THE PAST DOESN'T MEAN IT WILL BE ALLOWED NOW.** Thanks in advance for your participation, let's have a good, clean show for the fans!!! Any questions please contact me on Facebook. Check the Facebook page Redwood County Fair demo page for updates. Joe Ibberson -----  
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