Douglas Volunteer Fire Department

2024 Demo Derby

Saturday August 17th, 2024

Entry Fee: \$80.00

GENERAL QUALIFICATIONS and SAFETY RULES

- These rules will be strictly enforced. NO CHEATING WILL BE TOLERATED! Any driver not obeying the
 rules will be disqualified. Disqualification will result in forfeiture of all entry fees. Any crewmember
 who is disqualified will have the car he/she is attached to disqualified.
- 2. ALL REMITTANCE WILL BE CASH, CASHIER'S CHECK OR MONEY ORDER. NO PERSONAL CHECKS WILL BE ALLOWED
- 3. The Douglas Volunteer Fire Department reserves the right to approve or reject any and all entries. The judge's decision is final. The head judge will decide any discrepancies.
- 4. Participants must be 16 years of age or older, anyone under 18 years of age must have a signed minor release.
- 5. Only drivers, owners, mechanics, that sign the release sheet will be permitted in the arena area. 1 Driver, and 2 arena passes will be allowed per car registration. You may purchase 2 additional spectator passes/\$15.00 and/or 1 additional arena pass/\$25.00. All driver, arena, and spectator passes MUST be picked up by 5:30. All entry fees are non-refundable
- 6. Any one participant may enter into the consolation heat if the car has run in one of the preliminary heats, and can be repaired for the consolation heat, is eligible to enter again at the discretion of the judges. Car maybe re-inspected for compliance.
- 7. The use of intoxicating beverages or controlled substances prior to or during the show disqualifies the user from the day's events and they are subject to the suspension at future demos sponsored by the Douglas Volunteer Fire Department. **This will be enforced. Subjected to a breathalyzer.**
- 8. The Douglas Volunteer Fire Department and Wyoming State Fair, State of Wyoming, will not be responsible for any accident, injury or property loss incurred during Demolition Derby activities.
- 9. No walkie-talkies or radio systems are permitted in the cars.
- 10. A driver must hit another truck every 90 seconds to prevent disqualification. Being hit by another truck does not qualify as your hit. A hit must have complete separation and produce a noticeable impact.
- 11. There will be NO deliberate hitting of the driver's door. This will result in immediate disqualification and forfeiture of any entry fees. ALL JUDGE'S DECISIONS ARE FINAL!
- 12. All trucks must be registered **BEFORE** being inspected. Inspection will be between 11:00am 4:00pm the day of the derby. Any truck not registered by 3:00pm will be charged an additional \$50 late fee. **Please have your car ready and in compliance when you arrive.** Any trucks not inspected by 5:00pm, **will not be eligible to run**. After final inspection, all trucks will be impounded. A mandatory driver's only meeting will be at 5:00.

- 13. Due to lack of adequate space in the pits, any non-derby cars or non-support vehicles will not be allowed in the pit. One support vehicle with trailer per derby truck is permitted. NO HOT RODDING IN THE PITS. Keep it at an idle. Any violation of this, truck will be disqualified.
- 14. In the event of a vehicle fire, flip over or injury, or any debris deemed unsafe, **only Fire Department personnel are allowed on the track**, and the heat will be stopped until safety is restored. Trucks may get 1 additional chance to run as long as the truck passes a safety check and the driver is OK. All other drivers will remain in their truck at all times or will be disqualified.
- 15. Stay in the vehicle! Do not leave your vehicle or loosen safety belt; except in case of fire; until the last vehicle has stopped and been given the checkered flag. A Red flag means ALL vehicles are to stop where you are until the green flag is given again. In the event of a red flag, all remaining drivers are given a fresh 90 second hit time when the heat is restarted. A Black flag, when waved at you means you have been disqualified. Stop, shut off your engine, break your stick and remain in the vehicle until the heat is over. **DO NOT** remove your helmet! No smoking will be allowed.
- 16. All vehicles will be inspected before the program begins. The last vehicle to initiate a hit is the winner. Top 3 vehicles may be re-inspected at conclusion of the main. Everyone else will stay back until trucks are verified to be legal.
- 17. All vehicles must be removed by midnight day of derby or they will be towed at owner's expense and will be disqualified for the following years event.
- 18. Profanity, displays of temper, unruliness, belligerence or any kind of conduct not deemed the norms of society in general will not be tolerated. Any person exhibiting such conduct to any official of the Douglas Volunteer Fire Department or another contestant will be subject to expulsion from the Demo Derby. All entry fees and deposits will be forfeited. ALL JUDGE'S DECISIONS ARE FINAL!

Truck Class Specifications and Rules

- 1. All drivers must wear a DOT Certified safety helmet. All drivers must have functioning safety belts. **Neck braces are strongly encouraged.**
- 2. Standard 1/2 ton, 3/4 ton, 1-ton regular cab, extended cab, or crew cab trucks, Suburbans, Broncos, Blazers, Vans, etc. No commercial vehicles. Pickup trucks must have a standard box, no flatbeds. 4-wheel drives must have one drive line removed.
- 3. Original frame style must be used. Body swaps are allowed. The body cannot be welded to the frame. No added metal unless noted in the rules.
- 4. Any and all air bags, sensors and propellant charges must be removed or discharged.
- 5. All glass, including head and taillights must be removed **prior** to your arrival.
- 6. The rear seat, drivers door armrest, door handles, door locks, seat belts not being used, mounting screws, clips, license plates, antennas, all wheel weights, all side and decorative chrome, trim and rubber stops must be removed.
- 7. All dirt, loose debris, screws, broken glass and anything deemed unsafe, must be swept, vacuumed or removed out of the car.
- 8. Any and all trailer hitches must be removed.
- 9. Air conditioning units must be discharged or removed.

- 10. A maximum of (2) batteries may be used and MUST be mounted inside the vehicle. Battery must be properly secured, and covered with a non-conductive material. No plumbers strap allowed. (ex. Rubber, wood, etc.)
- 11. Radiators must be in original location if used.
- 12. A maximum of 6 gallons of fuel will be allowed. Fuel tank must be moved into the backseat area or in the center of the truck box securely fastened and protected. No plumbers strap allowed. If placed in the trunk box, it must be a metal tank and be bolted, not ratchet strapped. Covered with a non-flammable material is recommended. Original gas tank must be removed or the entire bottom of the tank cut out.
 - A. Gas tank protection can only be mounted to the center of the seat bar using 3" x 3" max size and no closer than 4" from all sheet metal including top of tunnel and rear deck. Max width 30" O.D. A 12" horizontal gusset per side is allowed to the seat bar.
- 13. Vehicles may utilize electric fuel pumps. A fuel cut off switch MUST be clearly marked with RED PAINT for easy identification within arms reach of driver in the event of a fire. This is for driver and fire personnel protection.
- 14. All doors and end-gates must be welded, chained or steel strapped shut. If a Driver door comes open during the demo that truck will be disqualified. Strongly recommended materials: Welding or chain. Filler may be used on door seams but restricted to 3/8" round bar or 1 1/2" by 1/8" thick flat metal strap.
 - A. When welding the end-gate shut, it may not be welded to the rear bumper.
 - B. Box MUST be bolted or welded to cab as needed to fill gap. When welding, 4" x 3/16" strap maximum.
- 15. Cutting fenders for wheel clearance is permitted, and may be folded and one of the following:
 - A. Welded without the use of extra metal or excessive welding.
 - B. Bolted with 3/8" bolts. Bolts must be cut flush with the nut.
- 16. All vehicles **MUST** have working brakes before their heat begins.

17. **CAGE**

The driver door MUST be reinforced for safety by a 4-Point Cage. Safety reinforcements must be contained within the passenger compartment ONLY (except the Halo bar). Drivers may also use plates where pipe or tubing meets the floorboard (maximum of 8" X 8" in size and up to 1/4" thick). All safety reinforcements must be constructed WITH A MAXIMUM OF 6" diameter and a minimum of 2" round or square tubing. All cage welds should be sound and of adequate size to prevent cage, halo, etc. from failing.

- A. 4-Point Cage The 4-Point Cage may be constructed with a maximum of (4) vertical posts. (1) bar across the dash area, (2) bars across both the driver and passenger doors, and (2) bars across the rear seat area.
 - 1) (1) additional down bar per side from lowest door bar to floor to protect driver and battery.
 - 2) (1) additional bar on each side may extend from the cage or roll bar to the rear wheel well no further than the axle. Single cab trucks may extend the bar behind the seat through the cab and box.
- B. Halo Bar Halo bar or roll-over protection is MANDATORY. It may be routed inside or over the roof of the vehicle. If using a Halo bar with a 4-Point Cage, it will be extended upward from the two rear, vertical posts.

18. **BUMPERS**

- A. All bumper brackets must be stock with no additional brackets and may be welded to bumper and frame, or may remove all original brackets and shock tubes and use one 14" x 4" x 1/4" flat strap with the last 4" bent into an "L", welding 10" on the outside of the frame and the 4" bend to the bumper.
- B. Bumpers may be welded directly against the frame with no added filler material.
- C. No bracket can be welded beyond 10" from the front of the frame.
- D. Two-piece bumpers may be welded together
- E. Single piece front or rear bumpers may be welded to body.

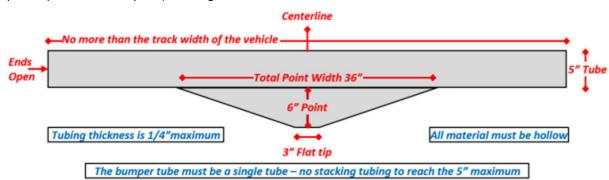
- F. 9 gauge wire or 3/8" chain must go around front and rear bumpers and secured to the frame or body in two (2) places with a max of 2 wraps at each location. This is done to help prevent bumpers from falling off and stopping the show.
- G. INSTEAD of chains, Drivers may use (2) metal straps from the front bumper to the core support ONLY.
 - 1) Straps cannot exceed 3" wide and 1/4" thick material.
 - 2) Straps can only be welded up to 6" onto the bumper and 6" onto the core support.
- H. Maximum front bumper height is 26" to bottom of bumper.
- I. Minimum rear bumper height is 18" to bottom of bumper.

REAR BUMPER OPTIONS:

- 1) Any stock pickup or car rear bumper
- 2) 4" x 4" straight open-end square tube or round pipe
- 3) No pointed rear bumpers

FRONT BUMPER OPTIONS:

- 1) Any stock pickup or car bumper may be used and stuffed with steel reinforcement.
- 2) Aftermarket or homemade replica bumper made with 1/4" steel conformed to stock dimensions.
- 3) 5" x 5" x 1/4" straight open-end square tube or 5" x 1/4" round pipe with added flat point (36" x 6" tapered span with 3" flat point) See diagram below.



19. **HOODS**

- A. Must be in original location
- B. Must be operable or removable for inspection, with a minimum 12" hole cut over the carburetor for fire extinguishing. Cut out sections **only**, may be folded over and rewelded or bolted with 3/8" bolts.
- C. Hood can be chained, wired, or bolted (no larger than 1" bolts, 1/2" chain, or 3 wraps of 9 wire). **Maximum of 6, any combination**, but only 2 can be attached to the frame and may replace the front two body bolts. Frame washers may not exceed 4" x 4" x 3/16" and may not be welded. Additional bolts max 8" long may have two washers per bolt not to exceed 5" x 5" x 1/4" and can be welded. If two pieces of angle iron are welded on top of the hood and fender, they cannot be longer than 8" and no larger than 2" x 2" x 1/4" with one bolt.
- D. No hood bolts in front of radiator.

20. BED/CARGO AREA

- A. Cargo area must be empty and have a 12" x 12" inspection hole or be completely visible. Cut out section may be folded and welded or bolted
- B. Bed sides and end-gate may be folded in with no additional welding. If folded (2) 1" bolts may go through end-gate to the frame. Any SUV's cannot extend through the roof.

21. FRAME

- A. Broken or cracked frame rails may be welded and up to 24 inches of reinforcement plating per frame rail will be allowed.
 - 1) Plates can NOT exceed 1/8" steel on two sides or 1/4" on one side with one full inch unwelded to verify thickness of patch.
 - 2) Plates can NOT be taller than vehicle frame.
 - 3) Plates can NOT exceed 10" in length
 - 4) Plates must be at least 3" away from other plates
 - 5) Maximum of 4 repairs per frame rail (4 repairs on driver side, 4 repairs of passenger side).
 - 6) All frame plates **MUST** be painted RED.
 - 7) Plating can NOT be connected to the bumper.
- B. No frame seam welding, except back side of a-arms forward.
- C. No frame tilting on any vehicle from rearend forward. Rear frame rails behind rear end hump may be notched or pre-bent.
- D. No pinning.
- E. C channel frames may be boxed with 1/4" plate in the front up to the engine cross member and 10" on the far rear of the frame.
- F. Repairs will be thoroughly checked to judge's discretion. A bore scope may be used at inspection if needed.

22. TRANSMISSIONS

- A. Steel bell housing will be allowed.
 - 1) Requires a slice on top of the tunnel from the front of the firewall to 2" behind the bell housing.
- B. Transmission brace will be allowed.
 - 1) Must have 2" of clearance from sheet metal if using transmission brace.
- C. Transmission cross member may be replaced with maximum 2" x 2" x 1/4" tube.
 - 1) Cross member may be bolted or welded.
 - 2) No gussets of added metal.
- D. Steel tail shaft will be allowed.
 - 1) Tail shaft can **NOT** be welded to cross member.
- E. Transmission coolers are allowed.

23. ENGINES

- A. Engine swaps from other vehicle brands are allowed.
- B. Lower front cradle is allowed.
- C. Full engine cradle and distributor protector will be allowed
 - 1) Neither can be within 4" of sheet metal or sheet metal must be cut out.
 - 2) Neither one can come in contact with the dash bar.
 - 3) If either one is excessive, they will be cut.
- D. Vehicles with an aluminum frame cradle may use a one-piece bolt-in engine saddle plate over the aluminum cradle to mount the engine to.
- E. If no cradle is used, then four 3/8" chains with no-welded links or cable, or two 2 1/2" x 1/4" strap, or two 2" x 2" x 3/16" angle may also be used to secure the engine. One chain link may be welded to the frame, or if strap or angle are used no more than two inches may be welded to the frame.
- F. Attachments may not be more than 4" ahead of or behind the engine block.
- G. Pulley protector is allowed if stabilizer bar is removed.

24. REAR ENDS

- A. Any braced rear ends may be used.
 - 1) Nothing can extend more than 4" from the axle housing or interfere with the way a frame might bend.
- B. Modified drive shafts will be allowed.

25. **SUSPENSION**

- A. Stock OEM suspension only.
- B. Rear shackle hanger can be removed.
- C. No wrapping of springs.
- D. Main leaf may not be shortened or relocated.
- E. No leaf spring conversions or watts link conversions.
- F. Coil spring spacers are allowed.
- G. Rear control arms may be reinforced using the original control arm.
- H. Shocks may not be welded or modified.
- I. Upper A-arms my be welded to the frame on both sides with a 2" x 2" x 1/8" strap. 2" weld on A-arm and 2" weld on frame
- J. Spindles, tie rods, and tie rod ends must be OEM stock.
 - 1) To repair bent or broken tie rods use only a 3" long piece of pipe as a coupler or a 3" long piece of 1" angle iron.
 - 2) Only one repair per tie rod allowed.
- K. Maximum front bumper height is 26" to bottom of bumper.
- L. Minimum rear bumper height is 18" to bottom of bumper.

26. **BODY**

- A. All exterior factory body seams may be welded.
 - 1) Do not use filler rod or strap or more than one weld pass.
 - 2) Folding or pinching body panels together is not a factory seam.
- B. No welding under the vehicle, engine compartment or inside of cab.
- C. Vehicles with rear storage compartments may weld the lids shut.
- D. Top of doors may be pinched and welded.
- E. Sun roofs must be enclosed.
- F. Driver's door may also be reinforced on the outside up to 10" past the door seams
- G. Driver's door must be painted a contrasting color. All other doors must be the same color as the rest of the vehicle.
- H. Number must be on both front doors and top of vehicle in contrasting color.
- I. OEM rubber body mounts may be removed. Mounts may not be replaced with steel mounts.
- J. Body and box cannot be welded to frame.
- K. Body bolts may be replaced with 3/4" bolts and 4" x 1/4" washers not welded.
- L. Factory holes in body or frame may not be patched unless damaged, except firewall holes may be patched for fire safety.
- M. When repairing damaged vehicles, patch damage with no more material than is absolutely necessary.
 - 1) No material stronger than what you are repairing is to be used.
 - 2) Use the same thickness of metal not to exceed 18 guage.
 - 3) May overlap holes or rust by 1".
 - 4) Officials may drill patches to verify thickness and overlapping.

27. WINDSHIELD/REAR WINDOW OPENINGS

- A. For safety, all windshield openings MUST have (2) bars welded vertically in front of the driver.
- B. For safety, rear window openings **MAY** have up to (2) bars. If equipped, the front bar connection shall be welded to the halo bar, and rear connection shall be welded to sheet metal not to exceed past the rear axle. Bars cannot exceed 6" in diameter.

28. WHEELS/TIRES

- A. No dual wheels or split rims.
- B. Any type tire is allowed.
- C. No studded tires on drive axle.
- D. Wheel weights must be removed.
- E. No homemade or reinforced wheels.
- F. Universal inner wheel centers are ok, but no full wheel centers.
- G. Valve stem protection Is ok.
- 29. Vehicles must remain stock unless otherwise noted in the rules. If it's not in the rules, it does not mean you can do it. Call for clarification. Contact Clint at 307-351-1039 or Trevor at 307-359-2619.