

### Demo Derby Rules 2024

#### *Modified Full Size, Stock Full-Size, Small Car & MiniVan Rules*

Afton, Iowa | July 20<sup>th</sup>, 2024 | Gates Close : 5:30 p.m | Pit Meeting : 6:15 p.m | Start Time : 6:30 p.m

**Entry fee: \$50** per car per driver (18+ to drive). **\$25** for pit passes

Mt. Ayr, Iowa | July 12<sup>th</sup>, 2024 | Gates Close: 7:15 p.m. | Pit Meeting 7:30 pm | Start Time: 8:00 p.m

**Entry fee: \$40** per car per driver (16+ to drive). **\$25** for pit passes

**NOTICE: Union County Fair participants – The parade is scheduled for Saturday evening. If you are arriving after 4:30, to avoid delay, take Highway 34 to 190<sup>th</sup> street, this will bring you in EAST of the fairgrounds. Gates will close at 5:30pm SHARP. No exceptions. (see maps on last page)**

### Prize Pool for Union County Fair

	Modified Full Size (12+ cars)	Modified Full Size (11-3 cars)	Stock Full Size** (12+ cars)	Stock Small Car** (12+ cars)	Mini-Van (8+ vans)	Mini-Van (7-3 vans)
1 <sup>st</sup>	\$1500.00 + trophy	\$1000.00 + trophy	\$2,000.00 + trophy	\$2,000.00 + trophy	\$500.00 + trophy	\$400.00 +trophy
2 <sup>nd</sup>	\$750.00 + trophy	\$500.00 + trophy	\$1,000.00 + trophy	\$800.00 + trophy	\$250.00	-
3 <sup>rd</sup>	\$500.00	-	\$500.00	\$500.00	-	-
4 <sup>th</sup>	-	-	\$350.00	\$250.00	-	-
5 <sup>th</sup>	-	-	\$100.00	\$150.00	-	-

**\*\*If there are 11 or fewer cars (PER CLASS), we will only be paying out to the top 2 places.**

### Prize Pool for Ringgold County Fair

	Stock Full Size** (12+ cars)	Stock Small Car** (12+ cars)	Mini-Van (8+ vans)	Mini-Van (7-3 vans)
1 <sup>st</sup>	\$1,500.00 + trophy	\$1,500.00 + trophy	\$500.00 + trophy	\$400.00 +trophy
2 <sup>nd</sup>	\$700.00 + trophy	\$800.00 + trophy	\$250.00	-
3 <sup>rd</sup>	\$350.00	\$250.00	-	-
4 <sup>th</sup>	\$150.00	\$100.00	-	-

**\*\*If there are 11 or fewer cars (PER CLASS), we will only be paying out to the top 2 places.**

## Participant Regulations

- Drivers must be 18 years old to compete in Union County, 16 years old to compete in Ringgold County.
- Must make contact every 60 seconds or be disqualified.
- No sandbagging.
- No team driving allowed.
- No driver's door hits allowed.
- Must wear full faced helmet & eye protection.
- Seat belts mandatory!!!!
- SMALL CAR/COMPACTS FRONT WHEEL DRIVE WHEELBASE 113"OR LESS.**
- REAR WHEEL DRIVE COMPACTS WHEELBASE 105"OR LESS.**
- 4CYL OR 6CYL, NO V8's**

### Preparation of Cars

No 1973 or older imperial or imperial sub frames. No 1970 or older Lincolns. No stubbing of Cadillac subframes; if you have a Cadillac subframe, it better be a Cadillac car. **No 2003 or newer Fords or Mercury's (NEW 2021)**. No plastic gas tanks ( heavy duty plastic racing fuel cells are allowed) No wedging, no sedagons, no jeeps, no trucks (ranchero and el Caminos are considered trucks), no carryalls, no Hearst, No limos, no convertibles. All glass, chrome, pot metal, lights, carpet, headliner, back seats, fiber glass and anything else that is flammable must be removed before reaching the exhibit area this will be strictly enforced ( do not break glass down in the doors). Trunks must be empty of all debris, spare tire rims, parts, ect. Wagons must have spare tire flap removed or hole cut in it for inspectors to see. Absolutely no welding besides what is stated in these rules. Unlimited 9-wire.

### Mandatory

**You must have a 12x12 vertical roof plate with number. Use your choice of number. No profanity allowed on cars.**

### Engine

No Distributor Protectors at all. you may run lower engine cradle with no kickers at all to frame, only engine mounts!!! No part of the lower cradle can be higher than the cylinder heads. (New 2023)

Small car can run a carburetor, with NO carb protector, and no engine cradles.

### Radiators

Stock, Factory location.

## Transmission

of your choice you can run tranny cradles but cannot touch any part of the crossmember before or after derby (will inspect after)

## Battery

Must be moved to passenger compartment. Must be in a secure position and be covered with something non-flammable like rubber tube, rubber floor mat, etc. Batteries must be secured so they don't move. 2 12v batteries max.

## Suspension

Must remain stock. No weld on shocks, no trailer hitches, No twist in spring spacers, special lifts, blocks, air shackles, air shocks, air lifts must be deflated. Upper control arms may be bolted or welded to the frame. IF they are welded, the strap can be no bigger than 3" by 3".

**FULL SIZE - STRICTLY ENFORCED FRONT BUMPER HEIGHT NO MORE THAN 30" TO MIDDLE!!! REAR BUMPER NO LESS THAN 26" to BOTTOM!!!**

**Stubbing -** Must be GM to GM, Ford to Ford, etc. 10 year window between car year to stub. For example, a 1970s car can run up to a 1980s stub, a 1980s car can run up to a 1990s stub, etc.

Station Wagons must use factory springs. 2" stagger in the back of the spring, 1" spring on the front of the spring. No more than 9 leaves.

Tie Rods may be reinforced. (New 2022)

## Rear Ends

**SMALL CAR AND FULL SIZE: Any 5 lug rear end of your choice. Locking of rear ends, Pinion brakes, hats, and braced rear ends are permitted. (NEW 2023)**

## Drive Shafts

of your choice **SLIDERS ARE OK**

Trailing Arms & A-Arms

Trailing arms may be shortened or lengthened

Reinforced rear control arms are permitted. Front control arms must remain stock. Front upper and lower a arms must remain stock

## Hood

Hood must remain in factory position. 8 hood bolts allowed only 2 may go through the frame outside of radiator. Bolts must not be any bigger than 1" with washers no bigger than 6 inches outside diameter. You must have two holes cut in the hood big enough for fire extinguisher. You may also use 30 bolts around header holes no bigger than SAE 3/8 with washers no bigger than 2 inch outside diameter. Your not allowed to weld hood down.

You can run 2 windshield bars 3 inches wide from roof to Cowl

## Trunk

You can use 4 1" all Thread bolts in trunk or #9 wire not both!! Trunk lids must remain on factory hinges. Tucking or V'ing of trunk lid is allowed, You may chain or #9 wire. **No Rear window straps or bars. (New 2022)**

## Body

**FULL SIZE AND SMALL CARS** can weld doors outside only with 3x3 metal strap, skip 5" then weld your 3x3, skip 5" etc on all doors and trunk, **DO NOT WELD HOOD DOWN!!** Drivers door can be welded solid inside and out. Station Wagons must remove rear decking

No seam welding, no patching. Pre-denting is okay.

## Fenders

Fenders may be trimmed.

10 bolts may be used per fender. Bolts are to be no bigger than 3/8 inch with washers no bigger than 2 inch outside diameter. **OR** you may weld wheel well lips solid.

If you weld wheel lips, you cannot bolt fenders, and if you bolt fenders, you may NOT weld wheel well lips. (NEW 2022)

Full size cars may run 4 plates 3" wide and weld it to the frame and inner fenders. 2 per side.

## Body Mount Bolts

**Bushings must be factory or Equivalent too like a hockey puck**, you can replace body bolts with 7/8" bolts with washers.

**Radiator support and 4 trunks bolts do NOT have to have body bushings. They can be bolted solid.**

## Frame

Fresh frames can use 4 plates front and 4 plates on back.

Pre-Ran Cars can use 6 plates on the front and 6 plates on the back.

(\*\*AND THEY MUST BE PRE-RAN, IF I BELIEVE YOUR CAR IS FRESH, AND HAS 6 PLATES ON FRONT AND/OR ON THE BACK, YOU WILL NOT PARTICIPATE\*\*)

You are allowed to weld all 4 sides on all 8(Fresh) or 12(Pre-Ran) plates, plates or welds, must not touch. **4"x6"x3/8" thick**

EXAMPLE: if you used 3 on the left front you can only use 1 on the right front etc. Can NOT be formed to bent frame. Leave straight and weld but I have to see where it was bent. (NEW 2022)

Trailer hitches must be removed, welding on frame read below, No reinforcing of frame whatsoever. You can notch the frame. Patching of rusty frame allowed on two sides of frame with thickness same as the frame not to exceed 2 inches beyond rust. Must have 1" hole in patch for inspection and leave the rust alone don't cut it away Must be able to see rusty frame. Frames can be pre-bent but Fords have to be cold bent. You may weld frame seam from A-frame, forward, top side only. (NEW 2020)

You may weld crush boxes on fords, inside holes and body mount holes must be open. (New 2024)

### Doors

Chain, wire, bolt or weld. If welding use a 3"x3" no more than 1/4 thick weld then skip 5" then weld 3"x3" then skip 5" weld outside of doors no welding on inside door seems

FULL SIZE and SMALL CAR Driver's door may be welded solid with a strap no bigger than 3 inches, on the outside only. All other doors must be chained wired or welded shut. If you are using chain or wire must be **eight** spots around all doors. (NEW 2024)

### Cage

Mandatory bar behind seat from door post to door post no less than 2"x2"x3/16" thick you can X brace behind seat with no kickers but can connect X brace or roll bar to dash bar with 2 kickers to floor on each side inside of door seems only and can weld to body or frame, no farther back than 5" from B-pillar. **Halos are allowed no further back than 5" from B-Pillar. On Two-Door cars the halo should be no further back than 5" from the top of the seat.** GAS TANK PROTECTOR can be ran but no wider than 30 inches.

### Bumpers

**Stock Small cars are allowed to run a homemade bumper 6"x6"x3/8" thick with no more than a 9" point. Cannot be wider than the fenders. (NEW 2024)**

Bumpers shocks and factory mounts can be welded front and rear.

**Small Car:** One 12" by 4" by 3/8" (12 inch by 4 inch by three-eighths inch) thick plate per side can go on the inside or outside of the frame. It cannot wrap around the frame, and it needs to have a 1/2" (one-half inch) inspection hole. On the other three sides, you get a 1" wide x 4" tall x 3/8" thick filler plate. 2023 cars must cut a 2" gap on 3 sides of plates 1" back from the bumper clear to the frame. Cut them clear to the frame or you will load up. (New 2024)

**FULL SIZE:** One 14" by 4" by 3/8<sup>th</sup> (14 inch by 4 inch by three-eighths inch) thick plate on outside of frame only. You may use a 4" by 4" by 3/8<sup>th</sup> (four inch by four inch by three-eighths inch) thick filler plate on the other three sides. (New 2024)

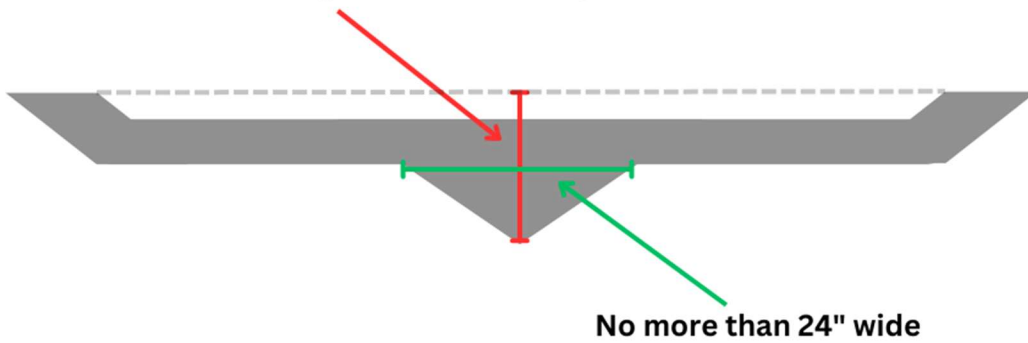
**Full size:** Front bumper may be stuffed with 3x3 square tubing 1/4 thick. You can weld solid to frame (HARD NOSE) or use FACTORY bumper brackets only, you cannot do both. You are permitted to build a homemade bumper using 6"x6"x3/8" square tubing with no more than a 9" point. Point cannot span more than 24". (SEE PHOTO FOR REFERENCE OF MEASUREMENT.) Cannot be wider than the fenders.

**Full Size:** Rear bumpers can be factory or square/rectangle tubing, that is no bigger than 4" x 6" (four inches by 6 inches) and no wider than the tires. No wedge or ramp bumpers. (NEW 2024)

**No factory or homemade Chrysler Pointy's.**

## How Bumper "Point" will be measured

No more than 9" long at center of bumper.



## **Gas tanks**

- SMALL CARS CAN LEAVE STOCK FUEL TANK UNDER CAR **AS LONG AS IT'S IN FRONT OF THE REAR SUSPENSION.**
- Maximum of 6 gallons of gas. Fuel cells/metal boat tanks must be placed in back seat area and properly secured. **NO STOCK TANKS!** Fuel cells must be secured so there is no movement ( Do nouse bungee cords for this). If the tank is not secure you will not be running. Fuel cells must have secure caps and be leak proof. All fuel lines must have no leaks. Stock gas tanks must be removed or have holes in them and washed out. **NO PLASTIC TANKS!**( Heavy plastic racing fuel cells may be use

## **Tires**

### **REMOVE YOUR WHEEL WEIGHTS.**

D.O.T. approved light truck tires or skid loader tires.No fluid in tires,no studded tires

This is a stock class. It will remain a stock class so do not do any more than what is stated in these rules. Do not do anything to make your car illegal after inspection. If this happens you will be disqualified and no return of entry. Officials have the right to re-inspect your car at any time.

### ***Modified Full-Size Rules***

-Door plating is allowed. Plating cannot exceed from doors more than 6". No plating on quarter panels, or front fenders.

- No massive points on front or rear bumpers (NEW 2024)

-Cowl bar kicker can only be behind A-frame.

-No Trucks, no hearses, no ambulances.

**NO OTHER RULES for Mod Full-Size.**



**Mini Van Rules**  
**(NEW 2024)**

- Any front wheel drive compact Mini Van
- This is a STOCK class. There are three (3) things you can weld, **or you will load.**
  1. **Front Bumper**
    - a. Must be a factory non-stuffed bumper OR you made use a 6" x 6" (six inch by six inch) square tube with no point (it **CANNOT** be wider than tires.)
    - b. **Choose only 1 (one) of the following options. NOT BOTH.**
      - i. You may use a 2"x6"x6" (2 inch by 6 inch by 6 inch) long on inside or outside of frame to extend the bumper away from the radiator, but it cannot be welded to the k-frame.
      - ii. Bumpers welded to the frame or hard nose can weld all four sides to the frame and use 2-4"x4"x3/8<sup>th</sup>" (two – four inch by four inch by three-eighths inch) thick filler plates on two sides of each frame rail. These cannot be welded to the k-frame.
    - c. 4 Pieces of #9 wire from radiator support, not hood to bumper, can be used.
  2. **Drivers Door**
    - a. Driver's Door can be welded solid.
  3. **Seat Bar/Halo**
    - a. Seat bar behind driver's seat can be an "X".
    - b. You can also run a bar across your dash and connect your seat bars to dash bars.
      - i. Nothing can be going to the floor or frame other than the halo.
      - ii. This material cannot be smaller than 2 1/2" (two and one-half inches)
- **Doors**
  - o NOT the driver's door, but All other doors and hatch's can have 8 spots of 3/8 chain or #9 wire.
- **Hood**
  - o 6 spots of 3/8 chain or #9 wire.
  - o You may remove the front 2 K-Frame bolts and replace them with 5/8 all thread going straight through hood.
- **Batteries**
  - o Must be moved to passenger floor.
- **Fuel Tank**
  - o Factory fuel tank can be used, but it **MUST** be in front of the rear wheels.
    - If factory tank isn't used, you must use a steel tank. **NO PLASTIC.**
    - No more than six gallons of fuel.
- **Column**
  - o Steering column may be chained up.
- **Tires**
  - o Tubes in tires are allowed.

**Everything else is stock. No exceptions or you will load.**

- o **All suspension**
- o **All drivetrain**
- o **No pipes through the hood.**
  - **Stock exhaust only.**
- o **Stock wheels only.**

## **Power Wheels**

Ages 4-9 yrs

### General Rules

All children must be signed in with both parents at the pit gates. Both parents can't attend event, must have notarized permission slip with child. Call for permission slip. All children must wear approved safety helmets. Bicycle helmets will pass. If child gets out of the power wheel during event, that child is out of the event.

### Power wheels build

All power wheels must remain stock with no added reinforcement. You may add a rubber tire to the tread area of the power wheels tire for added traction. Must use factory 12 volt or smaller lawn mower 12V battery only and must be mounted secure and covered with rubber mat.

### Power Wheels paint

Power wheels can be painted like a demo car each Power wheel must have a number on each side

### POWER WHEEL EVENT

We will run one heat of the power wheels unless we have a lot then we'll go age groups one parent will be allowed on the track with their child during the event. There will be a set time limit depending on number of power wheels after time has expired, the winner Will be determined the child that perform the best during the event. This will be scored by people chosen out of the crowd randomly.

