

2024 WGAS Full Size Weld Demolition Derby Rules

No 73 or older Chrysler Imperials, Imperial Sub frames, Limousines, Convertibles, Lebarons, Ambulances, or Hearses allowed. Please call if you have a question! 03 fords are encouraged.

Nothing other than what is listed below is allowed!!!! Any frame pinning, plating or welding is grounds for immediate disqualification without a chance to fix it. Do not push the gray area!

Aftermarket Derby Parts that will be allowed:

Transmission Cooler, Gas and Brake Pedals, Shifter, Steering column, Transmission Bell Housing, Drive Line, Drive Line Brake, Yokes, Gas Tank, Battery Box, Carb Halo, Lower Cradle with Front Plate, Body Spacers, Lower Pulley Protector, Engine Mounts, Rear of Head Spark Plug Wire Holders and Budde style Bolt in Engine Saddle for 2003 up FoMoCo's.

We will not allow transmission protectors, steel tails or aftermarket transmission cases.

For 2024 you will be permitted to add your frame repair plates before coming to the track. See pre-run repair rules below.

General Preparation:

1. All glass, plastic, stock gas tanks and pot metal must be removed. Nothing may remain in the bottom of the trunk or doors. Back seat must be removed. Station wagons must remove decking.
2. Mirrors, chrome, moldings and anything flammable except driver's seat must be removed.
3. All trailer hitches and related parts must be removed.

Safety

1. Driver's seat must be bolted or welded securely to the floor board.
2. Must have a functioning seat belt! Lap belt only is ok. Full faced helmet designed for cars is recommended.
3. Pad inside bars around driver. A 3/8" thick plate can be put inside or outside the driver's door only.
4. All cars MUST have a gas tank protector in some form or fashion in their car.
5. Helmet, gloves and eye protection are required
6. Fire extinguishers are mandatory for your pit stall but optional in the car. If in the car they must be securely mounted.

Cages

1. All **Cage** material must be no larger than 8" O.D. unless specified smaller by a specific rule. A square cage around the driver is required and must only be welded to the A and B pillars. See diagram at the end for pictures.
2. **Door Bars** can be a max length of 68" long, this includes the seat and dash bar.
3. You may add 4 **down bars** in your place of choice maximum of 4" material. These bars may attach to the frame, must not angle in any direction and can only be mounted to the door bars or seat bar at or behind the dash bar.
4. **Dash Bar** and center bar must be at least 3" off the tranny tunnel and dash bar 6" off of firewall.
5. **Halo bar** above the roof or up bar is required. Halo must be made from at least 2"x2"x 1/4" material. No leaning bar back, must stay perpendicular with the frame.
6. **Gas Tank Protector**- Max 3" x 3" square bar, can't touch or be attached to anything but the back bar. It must be centered between the frame humps and the outside dimension cannot be more than **38"** wide. The Bars must be more than 6" above floor. Must slide paper behind it for inspection. Gas tank protector may have its own halo but cannot be more than 8" taller than the tank itself and may not be angled out the back window. It may have gussets but must gusset to tank protector only.

Body

1. Outer **door seams** must be welded shut. You can use 3"x 1/4" max strapping or 1/2" rebar for filler.
2. **Hoods** must open for inspection unless prerun and will never again close.
3. **Hoods** can be secured using: six lengths of chain or six locations of 5" long pieces of 2"x2" angle iron bolted back to back with a max of 2 bolts through them. (any placement)
4. Only **Fenders and quarter panels** can be creased with a hammer! **Trunk lid** must attach in stock location and can be dished or tucked but may not attach to trunk floor or inside of the quarters. **Quarter panels and tail light panel** must exist and need to remain upright. Quarters may not be cut to fold around the back. No wedges. **Trunk lids** can be chained with 6 chains or welded shut using 6 total 6" x 3" wide 1/4" thick straps. There must be an 8" diameter inspection hole in the center of the trunk lid.
5. There must be 1 or 2 vertical **windshield bars** (2"x2"x39" max) or chain in the center of the windshield area welded from firewall to the roof. **Rear window bars** are max of 2 (2x2) and need to be 6" off of the pillars. Window bars can only attach to the sheet metal or be attached to 3"x3"x1/4" landing plates that are welded to the sheet metal on the top and bottom. Plate and trunk strap may share the same weld. They can't be on top of the trunk lid or touch it in any way. Rear window bars can be attached to the halo except on wagons.
6. **Wagons**- Window bars can be attached to the top of the tailgate and to the roof. Tailgates count as trunks for welding shut.
7. No adding **body bolts**! Only stock locations can have bolts. **Body spacers** can be removed or replaced with 1" inch spacers and body bolts can be changed to 1/2" bolts, 3" washers and nuts can be used on top of body bolts. The front 2 and 2 in the trunk can be replaced with up to 1" **all thread** that runs up through or immediately next to the stock mounting holes, through the body and through the hood and trunk lid. It can be welded to the side of the frame or bolted on the bottom and top of the frame. 5" plates on all thread max.
8. 6" max gap between **core support** and frame and it can be filled with a 2"x3"x6" O.D. tube welded on the bottom side only.
9. You may clearance **fenders/quarters** and bolt them back together using 4- 3/8" bolts only.
10. You may re-bolt **hood and trunk skins**. 10 bolts maximum each. Sheet metal to sheet metal only.
11. **NO seam welding unless stated** of any kind!!!!!! (frame or body) No welding created seams.

Bumpers

The intention of this rule is to allow you to mount the bumpers in such a way that they are less likely to fall off. Upon inspection if it is determined that you have exceeded the intention of this rule you will be given a chance to correct it. If not corrected you will be disqualified.

1. **No loaded bumpers** of any kind and they cannot go on top of the frame, must remain in front. No shelving.
2. **Bumper swaps** are allowed and they must be O.E.M. off a stock production car.
3. **Tube bumpers** are allowed, Max size is 5"x5"x1/4" or 6"x 4" x 1/4". It must be straight and cannot have a point added. The ends can't stick out more than 10" past the frame and have holes in the ends.
4. **Bumper height** max is 26" to the top of bumper in center. Bumper skins can be hammered down and welded.
5. **Front bumper**: You can weld two 2" wide x 3/8" thick x 30" long straps from bumper to core support. 1" all thread can run through them.
6. **Rear bumper**: You can weld two straps, 2" wide x 3/8" thick x 30" long from bumper to trunk lid. The 1" all thread can run through it. May not weld to the window bar or it's mounting plate.
7. **Mounting the bumper**: no other ways then what is listed below!
 - Stock to the car bumper brackets and shock tubes must stay in the stock locations and may be welded to the front 10" of the frame only. Compression shocks can be collapsed and welded together.
 - Or remove ALL factory brackets and shock tubes and, in its place, use a 10"x4"x1/4" flat Plate welded to the outside of the frame. Formed plates are ok however it must have started as a 4" plate. You can cut the frame square to weld the bumper on but you can't shorten the frame. You may add filler material to the ends of the frame to achieve this. Call if you have questions. 80's up Mercury's and Lincolns can cut back to the point of a ford. Don't not cut the body mount tab.

- Pre 1974 single skin stock bumpers can be welded to the body. Rebar for filler is ok.

Frame

1. No buffing, grinding, packing, cutting, bending, or welding the frame other than what is specifically stated in the rules. Do not pre bend the frame or the body.
2. **80's and newer cars** with the exception of the 2003 up FoMoCo's can **tilt** the front frame rails down at the fire wall seams only, no added metal.
3. **All 80's and newer cars only** can weld 1 **fix it plate** on each frame rail sized to 4"x6"x1/4" on the outside of the top center of the hump before the derby. These will not count against the repair plate rules.
4. You may **notch and dimple** any frame behind the rear frame humps only! No frame seam welding of any kind!
5. **Cadillac and Ford front frame extensions** can't touch the transmission cross member before, during or after the show unless you're mounting the stock crossmember in the stock manner. Nothing may restrict their movement.

Drive Train

1. **Carb halo** is permitted but it may only do exactly that. Must stay inside the headers and terminate just on the back side of the carb.
2. You can use aftermarket **motor mounts** and a lower cradle to hold in the motor. If using the stock upper and lower motor mounts, you may use 4 chains from motor to frame. The chains cannot go more than 4" past the manifolds. May weld 1 link.
3. Steel or aluminum replacement **bell housings** on transmissions are permitted however no other transmission protection is permitted. **Slider drive shafts** are optional. **No steel tails**.
4. Transmission **cross members** can be stock or 2"x2" O.D. straight square tubing.
5. **Headers** through the hood are highly recommended. You also need to cut a hole big enough to get a fire extinguisher into the hood over the motor.

Rear Ends

1. Any factory 5 lug rear end of passenger car origin may be used. No braced or truck rear ends allowed. (drive line brakes do not count as bracing but beware that the mounting doesn't turn into bracing or you'll cut it all off) No bracing beside the 2 plates that go laterally from the caliper mount. All other metal will be removed.
2. Hybrid rear ends allowed (putting Chevy into Ford or vice versa). Must use OEM factory brackets on rear-ends. If you bring fabricated mounts, we will cut them down to next to nothing. Gears can be changed or welded.

Suspension and Steering

1. You may swap **trailing arms** or shorten the upper control arms by cutting and welding with minimal overlap. No plating or reinforcing of control arms at all!
2. **Rear end suspension** must remain working! It can't be locked in any way. No changing **leaf springs**, you must run what came on the car. You can weld or bolt coil springs to the rear end side only.
3. **4 leaf spring clamps** are allowed. **Chaining of humps** is optional but you can only use 2 chains single wrapped per frame rail. No welded links. May go through the body.
4. **Front suspension and steering** must be factory for a car in this class. Swapping around from model to model is ok but no fabrication or reinforcing is permitted. **Upper a-arms** can be welded down by using two 2" wide by 1/4" thick by 8" long straps per side. None of the strap can be outside of the a-arm shaft footprint. **Ball joints** must remain stock or stock replacement and bolted in, no welding. Ski, Joker, Wicked, NLR or any other derby

purpose-built ball joints will be permitted. The OEM replacement junk from the parts store is what is permitted when replacing steering and suspension components. **Steering components** including tie rods must remain stock to a car in the class. You can brace the tie rods with 1"x1" angle iron.

5. Homemade **steering columns** are allowed but must use an OEM stock to a car in the class **steering box**.

Cooling

6. You must use the stock **radiator mounting** position. Radiators can be switched out to aluminum racing style but must be as close to stock size as possible. Radiators can be removed and the hoses looped.
7. Radiator can only be attached to the core support using metal straps, wire or a few 1" welds.
8. You may use a **condenser** or thin expanded metal to protect the radiator but it can only be attached to the core support. No sewer grates.
9. **Transmission coolers** are allowed. If in the drivers' compartment, they must be mounted in a safe manner.

Fuel

1. 10-gallon max **fuel cell** placed centered in the back-seat area and securely mounted is required.
2. Any pump **gas** or E85 can be used and original gas tanks must be completely removed
3. **Fuel lines** can be run under the body or inside. If inside they must be doubled to keep fuel from leaking into the drivers' area. If you use an **electric pump** please let us know how to kill it or we'll just rip the wires out of it.

Batteries and Pedals

1. Batteries must be secured inside car and covered unless using a gel style battery.
2. Max 2 batteries, Battery boxes must be metal and bolted to the floor. 4 inch max sized washers.
3. Gas/brake pedal assembly mounted with max 4 inch washers.

Tires and Brakes

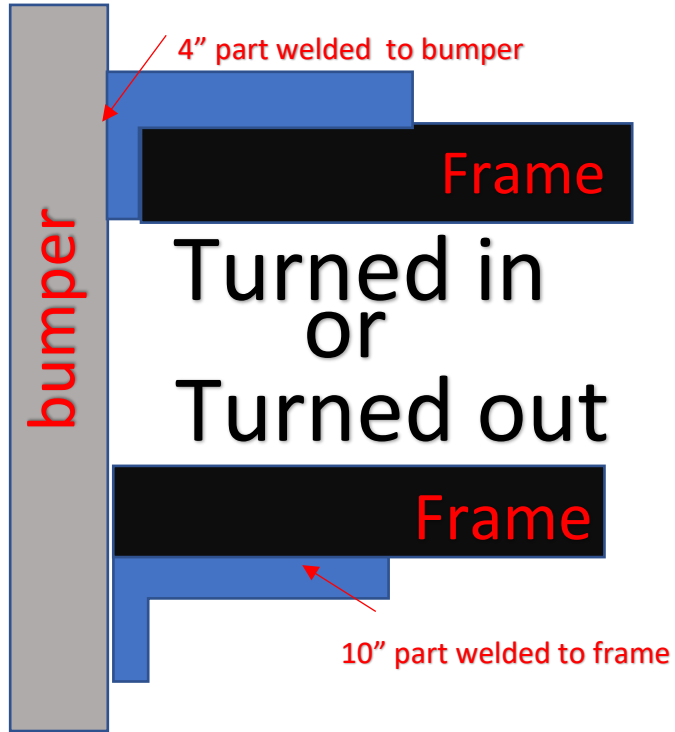
1. Any stock passenger car wheels may be used.
2. You may add a 7" or smaller weld in center for switching bolt patterns. You can also weld on valve stem protectors. No other rim welding allowed. No bead protectors, bead locks or homemade wheels of any sort.
3. Any air-filled tire may be used. No solid forklift styles. You may put tubes in them
4. All cars must show ability to stop before entering the arena and tech!
5. Drive line brakes will be allowed if you can show that it stops the car.

Pre-Ran Cars

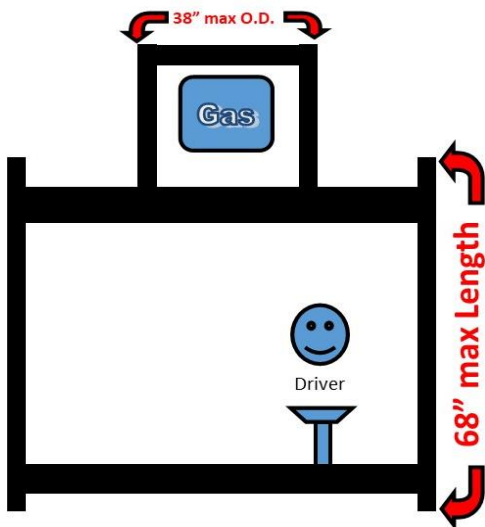
1. Frames may be pulled straight and cracks welded with permission.
2. Before or after the heats you can use a total of 4 fix-it plates, **two 6"x4"x3/8"** max per frame rail to **repair your frame.**

Most Important

1. Cars must have no spiders or spider webs on or in them! Be a good sportsman and have fun.
2. Use bright colors on the car (crowds love pretty cars) **Cars cannot be all Black! Must have at least 50% different color than black.**
3. Numbers must be contrasting color and **must have a roof sign** of some sort, we have to be able to identify you from the tower.



Cage Design



Halo example

