



2023 Demolition Derby **BIG CAR BUILD RULES**

GENERAL

1. All cars will be inspected before entering the arena.
 1. Nothing may be added after inspection without tech approval.
 2. All winning cars will be re-inspected prior to leaving the arena area and before payout.
2. Frame/body swaps allowed as long as body mounts are exact match. Can not alter mounts to fit.
3. No 1973 or older Imperials or Imperial sub-frames.
4. Other than above, the Derby is open to any American made hardtop model stock car or station wagon.
5. Note: OEM means original equipment of the manufacturer.

METRIC, OLD IRON & FOMOCO

1. Certain rules will apply differently to different types of cars. This is meant to equal the playing field among different vehicles. Pay close attention to the differences in the rules for your vehicle.
2. **METRIC** is as follows:
 1. 1979 + front wheel Toronado and Eldorado
 2. 1977 + GM
 3. 1979 + Ford
 4. 1979 + Chrysler
3. **OLD IRON:**
 5. Anything older than the above METRIC cars and 2003 and newer FOMOCO will follow OLD IRON.

PREP

1. Must remove all breakable or flammable material.
 1. All glass, chrome, plastic, exterior mirrors, headlights, taillights, chrome rings, emblems, grills, and flammable materials must be removed except the driver's seat.
 2. Glass must be removed, not broken inside doors.
 3. Rear seats must be removed.
 4. Must remove the inside spare tire compartment lid and all seats from station wagons.
2. Car numbers must be 18" tall in clear contrasting paint.
 1. Roof Sign recommended.
 2. If you do not use a roof sign, you must have numbers on the roof and on each side.
 3. Roof signs can in no way be used to strengthen cars.
3. Batteries must be removed from the engine area and moved to the inside of the vehicle.
 1. Must be placed in a securely mounted battery box or steel frame.
 2. Must be placed in the passenger floor area, back seat area or within cage.
 3. No wooden or plastic boxes or plastic milk crates.
 4. All batteries will be covered with rubber inner tube or other nonconductive material to protect the driver.
4. Radiator must be in the original stock position.

1. No additional radiator supports, mounts, or guards.
2. Only wire, garden hose, straps or plastic ties may be added to secure the radiator.
3. No water from the cooling system inside the driver compartment.
5. Floor Shift/After-market Cable shifter allowed.
6. Locked/welded stock rear ends allowed.
7. Aftermarket steering allowed.
 1. Adapter plates can be used
 2. Hydro steering allowed
 3. No reconfiguring where boxes mount. (see FOMOCO section for exception).
 4. 2 extra knuckles
8. Any tire and wheel combination may be used. No liquid filled tires.
 1. Valve stem protectors allowed
 2. No beadlocks
 3. Bead lips or bead protectors allowed
 4. No solid tires
9. Hand throttle allowed – (Return Springs).
10. Transmission coolers allowed. Must be inside the car & covered. **DOUBLE CLAMPED**
11. Engine location may be moved but must remain within 3” of stock positioning.
12. A hose attached to the transmission filler tube (Burp Tube) for fire safety.
13. Any racing or factory automobile seat may be used.
 1. Must be securely mounted.
 2. Bench seat OK
 3. Seat may in no way be attached to frame
14. Gas Tank protector allowed and recommended (see CAGE COMPONENTS)
15. No additional welding will be allowed on any vehicle following tech

SAFETY

1. Stock seat belt or racing harness lap belt required.
 1. 4-point harness recommended.
 2. Seat belts must remain buckled during the entire time of the heat. **EXCEPTION: FIRE.**
2. DOT approved safety helmets are required.
 1. Must stay on during the entire length of time of the derby.
3. Fire extinguisher recommended.
 1. Must be mounted securely, easily accessible to the driver.
 2. If the derby is stopped twice for fire on the same car you may be counted out at that point by officials’ discretion.
4. Cars must exhibit the ability to stop at all times. Brake failure will result in disqualification.
5. Safety glasses and gloves **MUST** be worn by all drivers.
6. Mud screen allowed and recommended on front and driver’s window.

FUEL SYSTEMS

1. Fuel tanks must be a safe container of steel construction.
 1. Example: Jeep can or boat tank and must be approved by an official.
 2. **NO PLASTIC** containers
 3. Gas tanks must be securely mounted and must be bolted and/or chained solid.
 4. Tanks must be capped and behind the driver in the rear seat area.

2. Gas tank protectors are allowed and recommended. (see CAGE COMPONENTS section)
3. Stock gas tanks cannot be used and must be removed from the vehicle unless relocated to the back seat area.
4. Newer model cars equipped with fuel injection systems that run with electrical fuel pumps, an electrical "Kill Switch" must be added, placed and marked where an official can easily shut it off from outside the vehicle if needed.
5. No methanol.

WINDOWS

1. Side window post (B pillar) bracing is allowed and recommended on cars that do not come with a factory window post.
 1. 2 posts per side allowed (you may add 1 additional to single post cars).
 2. No other bracing is allowed.
2. Halo (over the roof) roll bars are allowed and will be counted as window posts if they go through the window opening.
3. Front window bars or bands:
 1. Max material size is 3" x 3" x 1/4" square tube or 4" x 3/8" flat bar.
 2. You may use a plate or angle at each end to mount the window bar to.
 3. Max 4" x 4" x 1/4" plate or 2" x 2" x 1/4" angle.
 4. Cars may have a maximum 2 vertical front window bars
 5. IF the middle portion of the firewall is completely cut out, you **MUST** run a window bar on each side of the cut out from firewall to the roof.
 6. You may run 1 horizontal bar between each vertical window bar if the firewall is cut out between them. If a distributor protector is used, the dash bar must be at least 10" away.
4. A front and driver's window screen is allowed and recommended. Easily removable window net is recommended on the driver's window.

BODY

1. **METRIC** may use 8 bolts per fender to bolt the inner and outer fender skin around the wheel well (**OLD IRON** may use 5 bolts per fender).
 1. Max size 1/2" bolt with 1.5" washer.
2. Firewall may be cut to accommodate rear mount distributors when a distributor protector is not used.
3. All holes must be covered with a non-flammable material.

DOORS

1. Doors must be chained and/or welded shut securely
 1. Maximum 2.5" x 3/16 thick metal strap or up to 3/4" round-rod may be used as a filler.
 2. Chains must be a minimum 1/8" and a maximum of 3/8" chain.
 3. If welding on **OLD IRON**, you may only weld up to 50% of the entire outer door seams. **METRIC** can weld 100%.
 4. You may weld inner and outer door skins together at window opening only. No added metal.
2. A door bar on the driver's side door area is mandatory with a minimum 6" channel.
3. Passenger door bar strongly recommended.
4. The door bars cannot extend past the beginning of the fender openings.
5. Inside door bars are allowed and must be padded.

1. Inside door bars may not extend through the firewall or rear wheel well and may not be attached directly to frame or kickers.
6. The Driver's door (only) may have a steel/metal plate up to 3/8" thick welded to door skin only.
7. May not cover any of the door seams by more than 2".

FRAME

1. Body mounts may be changed to no larger than 3/4" bolts or all-thread with max 6" washers on top side only.
 1. Bolts must be inside the frame or in stock positioning on the bottom side.
 2. Bushings may be removed but must be replaced with at least 1/2" of washers or other filler material.
 3. No extra body mounts will be allowed
2. Body may not sit directly on the frame.
3. No welding body to frame.
4. One wrap of chain around the rear frame hump to axle is allowed.
5. No chains or U-Bolts allowed around the body to frame on any car except for if the chain is needed after a heat for repairs.
6. You must contact track officials for approval and inspection prior to and after the repairs. No exceptions.
7. No trailer hitches.
8. No objects protruding outside of the car.
9. If officials determine that a car is unsafe it will not be allowed to run until fixed.
10. Square tube in place of transmission mount allowed in stock position.
 1. Cannot be used to strengthen frames or be stronger than stock mount.
11. Front frames may be shortened but can't be shorter than 19 inches from the center of A-arms
12. Frames must be in OEM condition on any and all vehicles other than stated above. NO ADDED METAL.
13. Tilting allowed. (see additional build options)

CAGE COMPONENTS

1. Have at least 1 vertical upright bar from floor to roof. 2 vertical bars recommended.
 1. May be attached to sheet metal or top of frame only, not both.
2. Halo (over the roof) roll bars allowed.
 1. Will be counted as window posts if they go through the window opening.
 2. Must be vertical and may be attached to the top of the frame only or sheet metal only, not both.
 3. If welding to the frame, do not plate at the bottom of the roll bar or frame.
 4. You may only weld an open tube to only the top of the frame.
 5. Welds MAY NOT extend to the sides of the frame. No plates on frame.
 6. If welding to only sheet metal, you may use up to an 8x8x1/4 plate on each end at the floor and roof but it may not be attached to the frame in any way.
 7. Top piece over the roof may be up to 6" x 6" square or round tube or up to 10" channel.
3. A behind driver cross bar (spreader bar) is mandatory.
 1. Must be welded or bolted behind the driver's seat from side to side.
 2. The spreader bar cannot exceed 6" in diameter.
 3. Spreader bar must be at least 5" above the top of the frame rails.

4. Each end of the cross bar may be attached to up to an 8x8x1/4 plate, welded or bolted to the door skin.
5. Spreader bar may be welded or bolted to upright bars
4. You are NOT required to remove the dash but it is recommended.
 1. IF dash is removed, you must install a dash bar from side to side, above the steering column.
 2. Dash bars may not be connected to window bars.
5. Driver side door bar is mandatory with a minimum 6" channel.
 1. Passenger door bar strongly recommended.
 2. The door bars must not extend into any wheel well opening.
 3. Inside door bars are allowed and must be padded.
 4. Inside door bars may not extend through the firewall or rear sheet metal and may not attach directly to the frame.
6. Gas tank protector allowed.
 1. May be attached to behind the seat spreader bar and against sheet metal but may in no way be attached to or within 5" of any frame rail.

BUMPERS

1. Any stock OEM automotive bumper allowed.
2. Automotive bumpers may be swapped between different models and makes
3. Homemade bumpers also allowed following these guidelines
 1. You may use 6" x 6" x 1/2" square tube. 6" point is measured from tip of point to front of 6" x 6" tube. 6" point spread over 36" wide.
 2. Chrome skin off any stock automotive bumper may be wrapped around the steel tube and welded.
4. Bumper width may not be wider than car
5. Bumper tips and fender wells may be trimmed.
6. Bumper may be mounted in **ONE** of the following ways:

1. STOCK BRACKETS

1. Stock brackets may be welded to the bumper & frame in stock position. Max 1/2" filler material.
2. You CANNOT cut in separate pieces, or bend stock mounts to reconfigure in any way and reattach them to the car or bumper.
3. Bumper shocks may be compressed and welded.
4. Bumper shocks may be extended no more than 10 inches back from front of frame rail on the top of the frame rail or the outside of the rail.

2. HARD-NOSE WITH PLATE

1. You may remove all stock mounting hardware and weld the bumper directly to the frame (hard nose).
2. You may cut the frame flat to mount the bumper.
3. You may NOT cut the frame any closer than 19" from the center of the A-Arm.
4. You may cap the end of the frame with a maximum 6" x 6" x 1/4" plate to weld the bumper to.
5. All stock mounting hardware must be removed.

3. HARD NOSE WITH FLAT-BAR MOUNT

1. Maximum 4" X 1/4" x 15" piece of flat bar may be used and may be welded to the side of the frame and to the bumper in place of stock mounts.

2. You may bend the front 5" of the flat bar to make an "L" to provide more surface to weld the bumper to.
3. Flat bar may only be attached to the front 10" of the frame rails.
4. Bumper may be welded to frame where it touches
5. You may also use two additional pieces of 1" filler up to 4" long each.
6. Round rod or flat bar filler only
7. No extra plates allowed at front of frame
8. ALL stock mounting hardware must be removed.
7. Bumper cannot be welded to the car body.
8. Chain or strap around the bumper to hood or trunk is allowed but will be counted as a hood/trunk mounting point.
9. Maximum height from ground to bottom of bumper not to exceed 22" in front or rear.

HOOD & TRUNK

1. Cars' hood and trunk area will be opened or must be 100% visible (inspection hole) for inspection.
2. You may attach the hood at 8 POINTS and trunk at a maximum of 12 POINT.
3. Trunk lids may be chained, bolted or welded.
4. Hoods may be chained or bolted only.
5. Maximum bolt size is 1" in diameter.
6. Maximum washer size, 6" x 6" x 1/4".
7. Angle iron for hood to not exceed 2"x2"x4" with 2- 1/2" bolts per mounting point.
8. Every 5 feet of chain used will count as 1 mounting point.
9. Maximum weld filler size is 2" x 1/4" flat bar or 3/4" round-rod.
10. Every spot that is welded will count as one mounting POINT on the trunk, maximum 8" of weld at any point.
 1. Welded points may not be within 4" of each other.
 2. You can attach 2 of the POINTS from hood and trunk to or around the bumpers in front and rear.
 3. These can be chain or flat strap max 3" x 3/16"
11. Inside of the engine compartment must be visible through fenders or inspection holes if hood is not easily removed.
12. For **OLD IRON** cars, only 2 POINTS may be connected to the frame in the front and only 2 points in the rear.
13. For **METRIC** cars, 4 mounting POINTS may be connected to the frame in front and 4 POINTS in the rear.
 1. CLARIFICATION: If you use multiple methods to secure the trunk, make sure to read this section carefully.
 2. EXAMPLE: 2 bolts, 2 chains, and 64" (8 POINTS) of weld is equal to 12 POINTS.
14. If tucking or wedging, you may NOT weld the trunk lid or fenders to the trunk floor.
 1. If you choose to tuck, wedge, or sedagon a vehicle, you may be required to cut a larger inspection hole.
15. Maximum material size is 5/16" x 4' chains or maximum 1" all-thread.
16. Factory hinges are not counted as mounting POINTS.
17. Hoods CANNOT be welded.
18. Must have a minimum 12" x 12" inspection hole in the hood unless inner fenders are removed.

SUSPENSION & AXLES

1. No coil to leaf conversions
2. Only stock automobile springs.
3. OEM shackles only. Previously run derby cars with broken springs or shackles can be repaired but may not be stronger than stock. Subject to the official's decision.
4. Leaf springs may have (6) clamps per side (12) total on the car ¼" in thickness and not over 1-1/2" in width, with two (2) bolts per clamp. These cannot exceed the thickness and width stated.
5. OEM control arms may be reinforced but may not be welded from frame to rear end.
6. Upper and lower trailing arms can be shortened and stuffed or square tubing can be used as the trailing arm.
7. Spring spacers and stuffed shocks or 1" all-thread in place of shocks are allowed. (Only bolted thru package tray not body)
8. Tire and wheel combination optional.
9. Valve stem protectors OK.
10. Bead lips or Bead protectors allowed
11. No beadlocks.
12. No liquid filled tires.
13. No solid tires.
14. After market tire rods and ball joints allowed.
15. Manufactured spindles

98 AND NEWER FOMOCO

1. For Watts-link conversion on Fords, you may convert a Watts-Link to a standard 4 link system in the following ways:
 1. Use the upper and lower trailing arm brackets off an older Ford, they can be stuffed/loaded. Or you can use square tubing as trailing arms.
 2. Aftermarket brackets bolted to package tray are allowed, but no thicker than 3/8", may be attached with a max of (3) ½" bolts and (1) 3/4" bolt to each side.
 3. No positioning of brackets to strengthen the front down-legs of the rear hump. Brackets for lower trailing arm will not be any larger than 3" x 6" and only 50% welded to the frame (3" side horizontal, 6" side vertical).
 4. Must be mounted in the stock location.
 5. Can only use one of the below options for cradle:
 1. Johnson Bolt-in Cradle or similar bolt-in style
 2. Weld in a steel cradle, no added metal
 3. NLR style cradle to cover aluminum cradle (3/8" MAX)
 6. No bolts horizontally through the frame or "pinning".
2. To mount the steering box, you may weld a tube to the top or bottom of the frame.
 1. Must be mounted in the same location as 02 and older FOMOCO.
 2. Do not weld excessively.
 3. 3- 1/2" Bolts max, Top and bottom bolts may be within 1.5" of the top or bottom frame rail and not be considered pinning.
 4. Adapter plate may be used.
 5. Other than allowed above, do not pin the frame in any way to mount the steering box.
3. Do not weld any seams behind the firewall, even if the factory skip-welded the seam, do not weld!

4. You may cut the excess frame off the front rails but you may not move the front body mount. All body mounts must remain in stock location.
5. In all cases other than stated above, 1998-2002 FOMOCO vehicles will follow **METRIC** car rules.
6. In all cases other than stated above, 2003 AND NEWER FOMOCO vehicles will follow **OLD IRON** car rules.
7. 2003 and newer FOMOCO frames can swap bodies only as long as its an exact match. Can not alter body mounts, they must line up.

ADDITIONAL BUILD OPTIONS

1. Lower engine cradle with pulley protector
 3. Cannot be welded to frame.
 4. Pulley protector may only be attached to the cradle and may not be welded or bolted to any part of the car.
2. Full cradle including header protectors
 1. Distributor protector cannot be attached to or within 10" of the dash bar.
 2. 18" width x 12" height removal of firewall with a 12" continuous cut in tunnel from front to back (18" wide x 12" vertical) hole needs to have distributor cap centered in it).
3. Transmission brace
 1. Transmission brace skid plates allowed.
4. Steel transmission bell housing with a steel tail.
5. Slider shaft driveline.
6. 8 lug $\frac{3}{4}$ ton truck rear ends fully braced.
7. Any 5-lug rear end with back bracing and axle savers.
8. Hump plates
 1. Hump plates may not exceed 24"x4"x1/4"
 1. If using 3/16" or 1/4" plates, they may not be bent. 1/8" or smaller plates may be bent to be stiffer.
 2. Measure 24" at outer perimeter for contoured hump plates.
 3. Flat bar can be used for hump plates can only be welded to outside frame rail.
9. Stuff/load any OEM bumper
 1. Stuffed/loaded OEM bumpers must have factory backing with a factory skin.
10. Manufactured replica bumpers from approved manufacturers.
 1. Must follow general dimensions of a stock OEM bumper.
 2. IF you are not sure about your manufactured or homemade bumper, please send pictures to your local head tech inspector. Do not just show up with an unapproved bumper.
11. Connect A-arms to the frame
 1. Use either chain or bolt or weld at point of contact. You may use 4"x4"x1/4" strap on front and back side only.
12. Re-weld frame seams from the firewall forward.
 1. The firewall starts right in front of the body mounts at the firewall.
 2. Maximum 1/2" weld, no filler material allowed.
13. Weld pinch frames together.
 1. You may remove the k member pucks, but must have a 1" gap between the K member and the pinch frame
14. Hammer y-frames down on Chrysler and weld the seam.
 1. No cutting or adding metal to do this.

2. ½" filler material may be used.
15. OLD IRON add two 4" x 4" x 1/8" plates anywhere on the frame. METRIC can add four plates.
 1. OLD IRON only 1 per frame rail (METRIC 2 per frame rail).
 2. Must be painted white.
16. 2 rear window bars.
 1. Max material size is 2" x 2" x ¼" square tube or angle or 4" x 3/8" flat bar.
 2. You may use a plate or angle at each end to mount the window bar to. Max 4" x 4" x ¼" plate or 2" x 2" x 1/4" angle.
 3. Mounting plate cannot extend completely past the front of the trunk lid seam in any way or it will be counted as a trunk mounting point.
 4. Window bars may only be 30"
 5. Rear window bar may not connect to the cage.
17. Body creasing
18. Tilting allowed, can choose only one of the below methods:
 1. Notch bottom of frame behind cross member, tilt, re-weld with no added metal.
 2. Tilt twice in front of A-arms, two tilts per rail with no added metal.
 3. Cut welds at firewall, tilt, re-weld with no added metal.

OTHER NOTES

1. Pre-ran cars may use plates to repair damage only to restore to stock strength, subject to the above rules and subject to tech approval. If deemed excessive you will have the opportunity to fix it. Must pass tech by specified time for that show.
2. Pre-ran cars can be re-stubbed. Butt weld new frame to pre-ran frame and two repair plates (4"x4"x1/8") used on each rail where frame butt welds are.
3. Unless otherwise stated in these rules, there will be absolutely no added metal or non-factory parts, or equipment added to any car.
4. No one under 15 is allowed to drive in the event (under 18 must have Parent/Guardian signature, both must have valid ID)
5. Must have a current, valid state driver's license or permit.
6. Must sign waiver and release form day of race.