

# DEMOLITION DERBY 2019 RULES

## GENERAL BUILD RULES

1. All vehicles must tech to the 2019 Rules – Previously run cars included. Note: OEM means original equipment of the manufacturer.
2. All cars will be inspected before entering the arena.
  - a. Nothing may be added after inspection without tech approval.
  - b. All winning cars will be re-inspected prior to leaving the arena area and before payout
3. NO 1973 and older Imperials, Commercial Vehicles, Convertible frames
4. No frame swaps from 2003 newer Ford Motor Co. vehicles to any other year or make of vehicle. (SEE: **FOMOCO** section)
5. Other than above, the Derby is open to any American made hardtop model stock car or station wagon or Ranchero/El Camino body style.
6. Mini-Vans, or SUV and Crossovers also allowed as long as they are based on a midsize or full size automobile platform and are classified as a "minivan" or "midsize SUV".
  - a. Examples: Ford Windstar, Dodge Caravan, Honda Passport, Mazda CX-9, Hyundai Santa Fe, Nissan D Platform vehicles.
  - b. No light truck or full size SUV or van platforms.
  - c. If you are unsure what platform your vehicle is based on, Google it or e-mail [crashmania@yahoo.com](mailto:crashmania@yahoo.com).
  - d. No 4X4 or AWD allowed unless 1 drive line is removed.
  - e. No cab forward designs allowed.

## 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.
  - a. **METRIC CARS** are 1977+ GM Cars, 1979+ Ford and Mopar cars. Mopar M-Body cars 1977+ also fall in this category.
  - b. **OLD IRON CARS** are anything older than a METRIC car. 2003 and newer FOMOCO produced vehicles will also be considered OLD IRON
  - c. Some additional exceptions will also apply to 1998 and newer FOMOCO produced frames. See the **FOMOCO** section in the rules for these exceptions. (FOMOCO=Ford Motor Company, i.e. Ford/Lincoln/Mercury)

# PREP

1. Must remove all breakable or flammable material.
  - a. All glass, chrome, plastic, exterior mirrors, headlights, taillights, chrome rings, emblems, grills, and flammable materials must be removed except the driver's seat.
  - b. Glass must be removed.
  - c. Rear seats must be removed.
  - d. Must remove inside spare tire compartment lid and all seats from station wagons.
2. Car numbers must be 18" tall in clear contrasting paint.
  - a. Roof sign recommended.
  - b. If you do not use a roof sign, you must have numbers on the roof and on each side.
  - c. Roof sign can in no way be used to strengthen car.
3. Batteries must be removed from engine area and moved to the inside of vehicle.
  - a. Must be placed in a securely mounted battery box or steel frame.
  - b. Must be placed in the passenger floor area or backseat area.
  - c. No wooden or plastic boxes or plastic milk crates.
  - d. All batteries will be covered with rubber inner tube or other nonconductive material to protect the driver.
4. Radiator must be in original stock position.
  - a. No additional radiator supports, mounts, or guards.
  - b. Only wire, garden hose, straps or plastic ties may be added to secure the radiator.
  - c. No water from the cooling system inside of the driver compartment.
5. Floor shift/after-market cable shifter allowed.
6. Locked rear ends allowed.
7. Aftermarket steering allowed.
  - a. No reinforcing.
  - b. No reconfiguring where boxes mount.
  - c. One (1) extra knuckle.
8. Any tire and wheel combination may be used. No liquid filled tires.
9. Valve stem protectors allowed.
10. No Beadlocks.
11. Hand throttle allowed – (Return Springs).
12. Transmission coolers allowed. Must be inside of car & covered. DOUBLE CLAMPED.
13. Engine location may be moved but must remain within 3" of stock positioning.
14. A hose attached to the transmission filler tube (Burp Tube) for fire safety.
15. Any racing or factory automobile seat may be used.
  - a. Must be securely mounted.
  - b. Bench seat OK.
16. You may choose to either run a distributor protector or a pulley protector on the engine cradle, but not both at the same time.
  - a. Distributor protectors allowed.
    - i. Cannot be attached to or within 10" of the dash bar.
    - ii. Must have relief cut in firewall for distributor protector clearance. Protector may not be used as a brace against the firewall.
  - b. Lower engine cradles allowed.

- i. Cannot be welded to frame.
  - ii. Must not come up sides, in front or behind engine higher than exhaust manifold.
  - iii. Can only include pulley protectors if not using a distributor protector.
17. No trans braces.
18. No steel bell-housing.
19. Gas tank protector allowed and recommended (see CAGE COMPONENTS).
20. No additional welding will be allowed on any vehicle following tech until after a heat for repairs (see REPAIR RULES).

## **SAFETY**

1. Stock seat belt or racing harness lap belt required.
  - a. 4-point harness recommended.
  - b. Seat belts must remain buckled during the entire time of the heat. EXCEPTION: FIRE.
2. DOT approved safety helmets are required.
  - a. Must stay on during the entire length of time of the derby.
3. Fire extinguisher recommended.
  - a. Must be mounted securely, easily accessible to driver.
  - b. If the derby is stopped twice for a fire on the same car you may be counted out at that point by officials' discretion.
4. Car 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.

## **FUEL SYSTEMS**

1. Fuel tanks must be a safe container of steel construction.
  - a. Example: Jeep can or boat tank and must be approved by an official.
  - b. NO PLASTIC containers unless completely surrounded by securely mounted steel.
2. Gas tanks must be securely placed and must be bolted and/or chained solid.
  - a. Tanks must be capped and behind the driver in the rear seat area.
3. Gas tank protectors are allowed and recommended. (see CAGE COMPONENTS section)
4. Stock gas tanks cannot be used and must be removed from the vehicle unless relocated to back seat area.
5. 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.

## **WINDOWS**

1. Side Window post (B pillar) bracing is allowed and recommended on cars that do not come with a factory window post.
  - a. 2 post per side including allowed (you may add 1 additional to single post cars).
  - b. No other bracing is allowed.
  - c. Halo (over the roof) roll bars allowed and will be counted as window posts if they go through the window opening.

2. Front window bars or bands:
  - a. Max material size is 3-inch x 3-inch x 1/4-inch square tube or 4-inch x 3/8-inch flat bar.
  - b. You may use a plate or angle at each end to mound window bar to.
    - i. Max 4-inch x 4-inch x 1/4-inch plate or 2-inch x 2-inch x 1/4-inch angle.
  - c. **OLD IRON** cars may have a maximum 2 vertical front window bars.
  - d. **METRIC** cars may have a maximum 3 front window bars.
  - e. IF the middle portion of the firewall is completely cut out, you must run a window bar on each side of the cut out firewall to the roof.
  - f. 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, horizontal bar must be at least 10 inches away.
3. A front and driver's window screen is allowed and recommended. Easily removed window net is recommended on driver's window.
4. **METRIC** cars may add 2 rear window bars.
  - a. Max material size is 3-inch x 3-inch x 1/4-inch square tube or 4-inch x 3/8-inch flat bar.
  - b. You may use a plate or angle at each end to mound window bar to Max 4x4x1/4-inch plate or 2x2x1/4 angle.
  - c. Mounting plate cannot extend completely past the front of the trunk lid seam. If mounting plate covers the trunk lid seam in any way, it will be counted as a trunk mounting point.
  - d. **OLD IRON** cars may not add rear window bars.

## **BODY**

1. You may use 6 bolts per fender. You may only bolt inner and outer fender skin around wheel well.
  - a. Max size is 1/2-inch bolt with 1.5-inch washer.
2. Firewall may be cut to accommodate rear mount distributors.
  - a. All holes must be covered with non-flammable material.
  - b. If the middle of firewall is completely cut out, you must have a vertical windshield bar on both sides of the cut out from the roof to the dash. You may add a horizontal cross bar between the vertical windshield bars only if the middle of the dash is completely cut out.

## **DOORS**

1. Doors must be chained and/or welded shut securely.
  - a. Maximum 2-1/2-inch x 1/4-inch thick metal strap or 3/4-inch round-rod may be used as filler.
  - b. Chains must be a minimum 1/8-inch and a maximum of 3/8-inch chain.
  - c. If welding, you may only weld up to 50% of entire door, inner and outer seams included.
  - d. You may weld inner and outer door skins together at window opening only.
2. A door bar on driver's side door area is mandatory with minimum 6-inch channel.
  - a. Passenger door bar strongly recommended.
  - b. The door bars cannot extend past the beginning of the fender openings.
3. Inside door bars are allowed and must be padded.
  - a. Inside door bars may not extend through firewall or rear wheel well and may not be attached directly to frame or kickers.
4. Driver door (only) may have a steel/metal plate up to 3/8-inch thick welded to door skin only.

- a. May not cover any of the door seams by more than 2-inches.

## **FRAME**

1. Stock body mounts may be changed to no larger than 3/4-inch bolts or all-thread with max 6-inch washers on top side only.
  - a. Bolts must be inside frame or in stock positioning on bottom side.
  - b. Bushings may be removed but must be replaced with at least 1/2-inch of washers or other filler material.
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 body to frame on any car except for if chain is needed after a heat for repairs.
  - a. You must contact track official for approval and inspection prior to and after the repairs. No exceptions.
6. No trailer hitches.
7. No objects protruding outside of car.
  - a. If officials determine that a car is unsafe it will not be allowed to run until fixed.
8. **METRIC** cars may hammer or "shape" the frame above the rear axle (humps) only.
9. Square tube in place of transmission mount allowed in stock position.
  - a. Cannot be used to strengthen frame or be stronger than stock mount.
10. You may re-weld frame seams from the firewall forward.
  - a. The firewall starts right in front of the body mounts at the firewall.
  - b. You may re-weld frame seams behind the rear axle.
  - c. Maximum 1/2-inch weld, no filler material allowed.
11. You CANNOT weld pinch frames together.
12. You may hammer y-frames down on Chrysler and weld the seam.
  - a. No cutting or adding metal to do this.
  - b. 1/2-inch filler material may be used.
13. NO "tilting" of the frame at any point on any vehicle.
14. "Tucking", "notching" and "pre bending" all are allowed on trunk areas.
  - a. No added metal.
15. Frames must be in OEM condition on any and all vehicles other than stated above. NO ADDED METAL.

## **CAGE COMPONENTS**

1. Must have at least 1 vertical upright bar. 2 vertical bars recommended.
  - a. May be attached to sheet metal or top of frame only, not both.
2. Halo (over the roof) roll bars allowed.
  - a. Will be counted as window posts if they go through the window opening.
  - b. Must be vertical and may be attached to the top of the frame only or sheet metal only, not both.
  - c. If welding to the frame, do not plate the bottom of the roll bar or the frame.
  - d. You may only weld an open tube to only the top of the frame.

- e. Welds MAY NOT extend to the sides of the frame. No plates on frame.
  - f. If welding to only sheet metal, you may use up to an 8-inch x 8-inch x 1/4-inch plate on each end at the floor and roof but it may not be attached to frame in any way.
  - g. Top piece over the roof may be up to 6-inch x 6-inch square or round tube, or up to 10-inch channel.
  - h. You may add a 45-degree angled piece up to 12-inches at the bottom of the uprights to be able to weld uprights to frame if needed.
3. A behind driver bar cross bar (spreader bar) is mandatory.
    - a. Must be welded or bolted behind driver's seat from side to side.
    - b. The spreader bar cannot exceed 6-inches in diameter.
    - c. Spreader bar must be at least 5-inches above the top of the frame rails.
    - d. Each end of the cross bar may be attached to up to an 8-inch x 8-inch x 1/4-inch plate, welded or bolted to the door skin.
    - e. Spreader bar may be welded or bolted to upright bars.
  4. Rear Kicker allowed.
    - a. A bar may be connected from upright bars or spreader bar to rear frame in front of the back tires.
    - b. Not to extend past front of speaker tray.
    - c. Kickers NOT allowed to front frame.
    - d. You may only weld an open tube to the top of the frame. No plates.
  5. You are NOT required to remove the dash, but it is recommended.
    - a. IF dash is removed, you must install a dash bar from side to side, above the steering column.
    - b. Dash bar may not be connected to window bars.
  6. Driver side door bar is mandatory with minimum 6-inch channel.
    - a. Passenger door bar strongly recommended.
    - b. The door bars must not extend into any wheel well opening.
    - c. Inside door bars are allowed and must be padded.
    - d. Inside door bars may not extend through firewall or rear sheet metal, and may not attach directly to the frame.
  7. Gas tank protector allowed.
    - a. May be attached to behind seat spreader bar or sheet metal but may in no way be attached to or within 5-inches of any part of the frame or rear kickers.

## **BUMPERS**

1. Any stock OEM automotive bumper allowed.
2. Automotive makes may be swapped.
3. You may weld bumper chrome to inner beam but each end must be open for inspection. No loaded or capped bumpers.
4. Homemade bumpers also allowed following these guidelines.
  - a. You may use a maximum of 6-inch x 6-inch x 3/16-inch square tube, one piece, open on each end.
  - b. Chrome skin off any stock aluminum automotive bumper may be wrapped around the steel tube and welded. (Optional but encouraged for appearance).

- c. You must cut the chrome skin so that it does not wrap all the way around to overlap on itself.
  - d. No extreme reshaping of chrome skin.
  - e. Bumper width may not be wider than car.
5. Bumper tips and fender wells may be trimmed. No reinforcing with added metal.
6. Bumper may be mounted in **ONE** of the following ways:
- a. **STOCK**
    - i. Stock brackets may be welded to bumper & frame in stock position.
    - ii. You CANNOT cut in separate pieces, stretch, or bend stock mounts to reconfigure in any way and reattach them to the car or bumper.
    - iii. Bumper shocks may be compressed and welded.
  - b. **HARD-NOSE WITH PLATE**
    - i. You may remove all stock mounting hardware and weld the bumper directly to the frame (hard-nose).
    - ii. You may cut the frame flat to mount the bumper.
    - iii. You may NOT cut frame any closer than 19-inches from center of the A-Arm.
    - iv. You may cap the end of the frame with a maximum 6-inch x 6-inch x 1/8-inch plate to weld the bumper to.
    - v. All stock mounting hardware must be removed.
  - c. **HARD NOSE WITH FLAT-BAR MOUNT**
    - i. Maximum 3x1/4x12-inch piece of flat bar may be used and may be welded or bolted to the side of the frame and to the bumper in place of stock mounts.
    - ii. You may bend the front 5-inch or less of the flat bar to make an "L" to provide more surface to weld the bumper to.
    - iii. "L" must be bent away from the frame, NOT across the front to cap the frame.
    - iv. Flat bar may only be attached to front 10-inch of the frame rails.
    - v. If welded the full 10-inches back, then only allowed 2-inches for the "L".
    - vi. Bumper may be welded to the frame where it touches.
    - vii. You may also use two additional pieces of 1-inch filler up to 4-inches long each.
    - viii. Square, round, channel or angle iron can be used as filler.
    - ix. DO NOT cap or plate the front of the frame if using this method.
    - x. ALL stock mounting hardware must be removed.
7. No braces welded or added to bumper.
8. Bumper cannot be welded to car body.
9. Chain or strap around the bumper to hood or trunk is allowed but will be counted as a hood/trunk mounting point.
10. Maximum height from ground to bottom of bumper not to exceed 22-inches in front or rear.

## **HOOD & TRUNK**

- 1. All cars' hood and trunk are will be opened or must be 100% visible (inspection hole) for inspection.
- 2. You may attach the hood and trunk at a maximum 8 POINTS each.
- 3. Trunk lids may be chained, bolted, or welded.
- 4. Hoods may be chained or bolted only.
- 5. Maximum bolt size is 1-inch in diameter

6. Maximum washer size, 6-inch x 6-inch x 1/4-inch.
7. Every 5-feet of chain used will count as 1 mounting point.
8. Maximum weld filler size is 2-inch x 1/4-inch flat bar or 3/4-inch round-rod.
9. Every spot that is welded will count as one pointing POINT on the trunk, maximum 10-inches of weld at any point.
  - a. Welded points may not be within 5-inches of each other.
10. You are allowed to attach 2 of the POINTS to or around the bumpers in front and rear.
  - a. These can be chain or flat strap max 3-inches x 3/16-inches.
11. Inside of engine compartment must be visible through fenders or inspection hole 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 to the frame in front and 4 points in the rear.
  - a. CLARIFICATION: If you use multiple methods to secure the trunk, make sure to read this section carefully.
  - b. EXAMPLE: 2 bolts, 2 chains, and 40-inches (4 points) of weld is equal to 8 POINTS.
14. If tucking or wedging, you may NOT weld the trunk lid or fenders to the trunk floor.
15. If you choose to tuck, wedge, or sedagon a vehicle, you may be required to cut a larger inspection hole.
16. Maximum material size is 5/16-inch x 4 foot chains or maximum 1-inch all thread.
17. Factory hinges are counted as mounting POINTS if not removed.
18. Hoods CANNOT be welded.
19. Must have a minimum 12-inch x 12-inch inspection hole in the hood unless inner fenders are removed.

## **SUSPENSION & AXLES**

1. Any 5 lug rear end allowed.
2. No coil to leaf conversions.
3. Only stock automobile springs.
4. OEM shackles only. Previously run derby cars with broken springs or shackles can be repaired but may not be stronger than stock. Subject to official's decision.
5. Leaf springs may have (3) clamps per side (6) total on car 1/4-inch in thickness and not over 1-1/2-inches in width, with two (2) bolts per clamp. These cannot exceed the thickness and width stated.
6. No added metal within 10" of brake drums.
7. No reinforcing of control arms or welded from frame to rear end.
8. Heavily modified axles will be subject to tech approval. Call ahead if you're unsure.
9. No axle-savers.
10. Spring spacers and stuffed shocks or 3/4-inch all-thread in place of shocks are allowed.
11. A-Arms may be connected to the frame by either chain or bolt or weld at point of contact only.
12. Sliders shaft drivelines OK.
13. Tire and wheel combination optional.
14. Valve stem protectors OK.
15. No beadlocks.



16. No liquid filled tires.

## **METRIC CAR OPTIONS**

1. **METRIC** cars may add two (2) 4-inch x 4-inch x 1/8-inch plates anywhere they like on the frame. Only 1 per frame rail. Must be painted white.
  - a. If plate is fully welded, inspection hole may be requested or drilled in plates by official.
2. **METRIC** cars may add hump plates.
  - a. You may use a plate no larger than 12-inches x 4-inches x 1/8-inches.
  - b. You may cut the 12-inch plate into no more than three (3) smaller pieces.
  - c. Plate must stay inside the shape of the frame above the rear tires or you will be asked to cut it down.
  - d. Cannot be lower than 10-inches from the top peak of the frame hump.
3. Hump plates and 4-inch x 4-inch frame plate can BOTH be used on **METRIC** cars.
  - a. Both must be painted white and 1/2-inch inspection hole may be requested if plates are fully welded.

## **1998 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 way:
  - a. Use the upper and lower trailing arm brackets off an older Ford.
  - b. Aftermarket brackets are allowed, but no thicker than 1/4-inch and may be attached with max of three (3) 1/2-inch bolts each side.
  - c. No shortening of trailer arms, no positioning of brackets to strengthen the front down legs of the rear hump.
  - d. Must be mounted in the stock location.
  - e. You may use any automotive or fabricated spring bucket but it must not strengthen the frame in any way and cannot be larger than necessary to hold coil spring. Must be mounted off 2 existing cradle bolts. DO NOT weld to frame in any way.
  - f. No bolts horizontally through the frame or "pinning".
2. To mount steering box, you may weld a tube to the top and bottom of frame.
  - a. Must be mounted in same location as O2 and older FOMOCO.
  - b. Do not weld excessively.
  - c. 3 bolts max. Top and bottom bolts may be within 1-inch of the top or bottom frame wall and not be considered pinning.
  - d. Other than allowed above, do not pin 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 may NOT be swapped to any car body other than stock 2003+ FOMOCO bodies.

# REPAIRS AFTER A HEAT

1. Allowed two 6-inch x 6-inch x 1/8-inch repair plates after each heat you are in.
  - a. You may only repair back to stock strength. Subject to tech approval.
  - b. Only one 6-inch x 6-inch plate per frame rail, per heat.
  - c. You may cut each 6-inch x 6-inch plate into 2 separate smaller pieces.
  - d. Each piece may not be within 1-inch of each other.
  - e. Repair plate may be cut or bent and welded or bolted to any damaged area of the frame you choose.
2. Cars that advance straight to the Main Event of CrashMania can use all four 6-inch x 6-inch plates. Two per frame rail, Only to restore stock strength.
3. Chain or wire allowed for repairs after heat. Only single wrap at any point on the vehicle, maximum 4 chains or wires, 4 foot max length.
4. 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.

## OTHER NOTES

1. Unless otherwise stated in these rules, there will be absolutely no added metal or non-factory parts or equipment added to any car.
2. No one under 15 allowed to drive in the event (under 18 must have Parent/Guardian signature, both must have valid ID).
3. Must have current, valid state driver's license or permit.
4. Must sign waiver and release form day of race.
5. If you have any questions, please call Head Official: Johnny Brown @ 509-301-7161 or Head CrashMania Class tech: DJ Wade @ 509-820-5288 or e-mail [crashmania@yahoo.com](mailto:crashmania@yahoo.com).

## EVENT LINE UP

5:00 pm – Driver's Meeting

6:30 pm – Time Trials

7:30 pm – Parade of Cars

Heat Races – Max six drivers per heat

Trophy Dash

Powder Puff Heat Races – Max six drivers per heat

Powder Puff Trophy Dash

Australian Pursuit

Demolition – 4 Cyl.

Demolition – 8/6 Cyl.