

# ONTARIO

## Demolition Derby

### Eligible Drivers

1. Drivers must be minimum 18 years old, or older, and have a driver's licence (G1 and G2 are acceptable)
2. Drivers 16 to 18 years old and have a driver's licence (G1 and G2 are acceptable) may participate in Mini Size/Figure 8/Demo-X/Specified special events \* **Drivers 16 & 17 years of age must provide a parental consent form and have a parent or guardian onsite**

### Eligible Vehicles (**These vehicles DO NOT qualify for the demolition derby**)

#### Figure-8

- a) Any 1980 or newer 2WD passenger car with a 4-cylinder or 6-cylinder engine, with a wheelbase of **113" or less**
- b) No All-wheel drive vehicles, hearses, limousines, jeeps, vans or trucks

#### Demo-X

- a) Any 1980 or newer 2WD passenger car with a 4-cylinder or 6-cylinder engine, with a wheelbase of **113" or less**
- b) No All-wheel drive vehicles, hearses, limousines, SUV, cross-overs or trucks

#### Vans

1980 or newer FWD unibody Only

### Driver & Pit Crew Rules

1. All Drivers, Mechanics, and Vehicles should report to the registration desk preferably two hours before the start of the event
2. Paid entry allows only one driver, one mechanic, and one tow vehicle into the pit area
3. Each driver must attend the drivers meeting, held approximately 30 minutes before the scheduled start time of the competition
4. No persons under 16 years of age are allowed in the pit or track area prior to, during, or after the race.
5. Crew between 16 and 17 years of age must have a parent and/or guardian present when registering to sign a parental consent form, and the parent and/or guardian must be present throughout the duration of the event.
6. Aggressive driving is limited to the track during the race. It will not be tolerated in the pit area
7. All Drivers and crew are required to sign a release form prior to the race or they will not be admitted to the pit area **8**. There is **ZERO TOLERANCE** for the use of any alcohol or drugs prior to or during the race.
9. Ontario Demolition Derby reserves the right to disqualify or refuse any entry, or otherwise disqualify or eject any participant, crew member or team whose actions impede the progress, enjoyment or efficiency of the event
10. Only the driver of the competing car is allowed on the track after the heats / features without track official permission
11. Ontario Demolition Derby provides Participant Liability Insurance, however personal property and equipment is the responsibility of the owner

## Equipment & Driving Rules

1. All drivers must be equipped with helmets, safety glasses, a seatbelt and a fire extinguisher within reach of the driver and track officials
2. All drivers must be wearing acceptable attire to participate (no shorts, short sleeves, or tank tops)
3. Vehicles must have adequate brakes. The driver must have control of his vehicle at all times
4. No deliberate or aggressive driver door hits will be tolerated
5. If using metal fan blades and the hood of the car comes open the driver will be disqualified
6. If a car catches fire while participating the driver will be immediately disqualified, unless in the final position in which case the other car must make a competitive hit (carburetor fires will be tolerated if it extinguishes itself without assistance)
7. If a ANY door comes open while participating, that car and driver will be disqualified
8. It is the driver's responsibility to be aware of and obey the track officials at all times. Failure to do so will result in disqualification
9. A heat winner or runner-up that qualifies for a feature event must drive the same vehicle in the feature race (if applicable)
10. No driver substitutions are allowed
11. **This is a race, no aggressive hitting.**

## Tire Regulations

- Tires for car events must be P-Rated, or marked as Load Range "B", and cannot have a snow-type lug on the outside of the tire. If a tire is deemed to be too aggressive officials may rule is required modification or replacement
- Tires with removed lugs is acceptable
- Wheel weights must be removed from both drive and non-drive wheels
- Double tires are permitted
- No solid tires **ON DRIVE TIRES**, liquid filled tires or studded tires will be permitted and no external liners (additional side walls) are not permitted
- No welded valve stem protectors

## Welding

Welding is allowed in the following areas only, and is strictly enforced:

- Bumpers (Choose 1 of the following only)
  - a. Original Shock = Bumper may be welded to the brackets, and the brackets may be welded to the frame
  - b. Hard Nosed = Bumper may be seamed to the frame and 2 plates (3"x6" by 3/8") may be added per frame from bumper to frame
  - c. 2"x2" Tube Shocks (6"max length) = Tube Shocks may be welded to bumper only, 1 bolt per shock may go through frame and shock and 1 plates (3"x6" by 3/8") may be added per frame from bumper to frame. YOU must drill an inspection hole at 6" on frame
- Bumpers may not be welded closed or loaded with any material
- Doors and trunks may be welded in only 6 spots on each door and trunk each using **10 SQ IN** plates, with a maximum thickness of 3/16"

## **Welding Continued**

– Repairs to broken, severely rusted, or bent frames are allowed but must follow the below criteria:

- a. Frames can only be repaired using 4"x4" plate, with a maximum thickness of 3/16"
- b. Frames can only be repaired on 2 sides (No boxing, No 3-sided repairs)
- c. All repairs must be painted orange, and disclosed to officials during tech inspection
- d. A repair is only acceptable if a defect is still visible, otherwise it will be removed

-Broken or bent tie-rods, can be repaired. Must be able to see the bend/break

## **Air Bags**

REMOVE ALL AIR BAGS, if an airbag goes off and a track official suspects any injury the car may be disqualified.

The Air bag material **IS HIGHLY RECOMMEND** be used as covers for batteries and gas tanks

## **Protesting**

If a driver believes that another participant is cheating, he/she must approach an official within 15 minutes after the heat or feature. He/she must also present a \$50.00 protesting fee. If the car in question is determined to be cheating, the protest fee will be returned.

**Disclaimer ONTARIO DEMOLITION DERBY has the right to re-inspect / cut/ or drill and vehicle HAVE THE RIGHT TO RE- INSPECT / CUT / OR DRILL ANY VEHICLE AT ANY TIME FAILURE TO PASS TECH WILL RESULT IN DISQUALIFACATION AND/OR FORFIT ANY AND ALL WINNINGS \*\* If there are any questions about the spirit or interpretation of the rules please call ONTARIO DEMOLITION DERBY \*\* Vehicles deemed too small, to damaged or unsafe for their class by officials will not be allowed to participate \*\* Any equipment or fabrication deemed unsafe, over built or inadequate by officials will not be allowed to participate \*\* Any additional modifications not listed below can be deemed illegal, and may result in immediate disqualification \*\* Absolutely any unauthorized welding or unauthorized modifications found on a competition vehicle before, during or after \*\* Refer to website for exact classes at each event**

## Vehicle Preparation Rules

**Engines & Drive Train** – Engines, engine components, transmissions and drivetrain are interchangeable between makes and models, however all replacement parts must come from eligible models

**Numbering** – The front driver door must be painted White – Both Front doors must be numbered for identification (passenger door may also be painted white)

**Vehicle Interior & Exterior** – All glass, decorative mouldings, accessories and trailer hitches must be removed, and the vehicle must be swept clean of any debris – Rear seats, airbags and flammable material must be removed, with the exception of the front seat(s) and dash – Sunroofs **MUST** be covered with a solid cover; strong steel mesh is acceptable

**Motor Mounts** – It is recommended that mounts are welded to the cross member (Chained is acceptable) Most not strengthen your vehicle

**Headers** – Exhaust manifolds may be flipped upward, or alternatively, custom headers may be used

**Batteries** – Only one 12V automobile battery is permitted and must be secured to the floor of the front passenger area – The battery will require a non-flammable cover to be secured after the inspection

### Gas Tanks

– The stock gas tank may be left under the car, BUT you must ADD two 2” straps or one 3” around the gas tank, rusty straps can result in not running for everyone's safety

-Can use a CSA approved tank or fuel cell (or an equivalent alternative) which must be securely mounted in the rear passenger's compartment centred in vehicle

- Min TWO 2in ratchet straps may be used, body steel **MUST** be folded over to prevent strap from being cut
- **MUST** use MIN 1.5 inch washers if using bolts

#### **NO SELF TAPERS PERMITTED**

– All tanks require a non-flammable cover to be secured after inspection. (AIR BAG MATERIAL HIGHLY RECOMMENDED)

– Metal tanks are strongly recommended, but CSA rated plastic boat tanks are acceptable

## 2022 Demo-X/Figure 8 Rules

### Electric Fuel Pumps

- Electric fuel pumps are permitted but must have a functioning shut-off switch (stock column ignition acceptable). The switch must be clearly marked, and located either on the dash area in front of the driver, or on the roof directly above the driver, You may run the fuel pump off the key.

### Shifters

- Stock shifters can be removed and a replacement may be relocated
- Shifter protectors are allowed, **MUST NOT** be attached to the body or crossmember and engine, **MUST NOT** be reinforcing the vehicle in any way.

### Radiators

- Coolant must be flushed out and replaced with water
- Radiators are not mandatory and can be bypassed or removed, if kept then the rad must remain in its stock position.
- Bars running from the struts to the rad cradle can be added. Max 2x2 tube
- Max 2x2 angle can run along the top of the rad cradle, can attached to strut bars

### Transmission Coolers

- Transmission coolers may be used, but must be mounted either within the engine compartment or within the passenger compartment
- If mounted in the passenger compartment 2500psi hydraulic hose must be used, with pressed fittings, and the cooler must be covered with tin, aluminium, or a suitable barrier between the cooler and the driver. Also, holes must be cut in the floor below the cooler to disperse excess fluid

### Body Mounts

- Stock body mounts (bolts, washers, rubber and metal spacers) may not be removed or altered
- If a repair is necessary max 3/8" bolt/rod and max 3" washers may be used
- 2 mounts (1 per side) can be replaced or added using threaded rod (maximum thickness 3/4") in front of front strut / suspension (must be vertical) washer max 3" (Can run from engine cradle to frame but not through hood)
- 2 mounts (1 per side) can be replaced or added using threaded rod (maximum thickness 3/4") behind rear suspension (must be vertical) washer max 3"

### Doors Trunk Hood & Tailgate Fastening

- Doors, trunk and Tailgates can be welded, or fastened shut in 6 spots each, using straps, wire, 1/4" chain or 3/8" bolt with max 3" washers
- **The B-Pillar seam counts for one spot on both the front and back door.**
- If welded, doors, trunk and tailgate may be welded in 6 spots only, using 3/16 plates no larger than **10 sq in**
- Driver`s door can be seam welded
- A minimum 6" hole must be cut in the centre of the hood
- If running an electric fan, or no fan, then the hood can be removed completely
- Hoods may be folded down over the front of the rad cradle but may not extend below the top of the bumper. **(Can not be welded to the bumper)**
- Front and rear threaded Rod Body Mounts can extend up through the Hood **(can not be attached to the engine cradle)** and Trunk with 4" MAX Washers and will be counted as fastened spots (see **Body Mounts**)
- Officials may ask to have your hood opened during inspection or any point throughout the show

## 2022 Demo-X/Figure 8 Rules

### Frames

– Frames can be cut, but may only be repaired as described above (see Welding), and may not be painted or undercoated

### Fenders & Body Panels

-Cutting / pre-bending fenders or body panels is permitted, However fenders may not be bolted  
- You may bolt the inner skin of your hood, ONLY around and within 2 inches of the fire inspection hole

### Bumpers

– Any REBAR is Accepted ( A rebar bumper is any metal bumper that is covered in a plastic outer skin)  
– Bumpers cannot be seam welded, and the ends may NOT be cut (ends can be bent in)  
– Both front and rear bumpers should be chained (1/4" chain) or wired to the body to prevent them from falling off and becoming a hazard on the track in addition to being welded on (see above for Welding limitations)  
– The front Bumper chain or wire (**NO WELDING to the hood**) may only attach to the vehicle in 2 places from the bumper at the front of the vehicle  
– The rear Bumper chain or wire may only attach to the vehicle in 2 places from the bumper at the rear of the vehicle  
– Any chain or wire that connects to the hood or trunk will be counted as fastened spots.

### Gas Tank Protector

– If you Have a gas tank Protector you may not run a Rear Window Bar  
– GTP must be reasonably centred in the rear passenger area of the car, cannot be wider than 26"  
– If GTP is fastened to the floor there must be 2" from any Halo or Post to Post bars.  
– If GTP is connected to a post to post the protector must be at least 2" from the unaltered rear sill or any sheet metal and be fastened securely to post to post bar

### Window Bars

– A single bar or flat plate must be placed in front of the driver from roof to cowl  
– A and H frames are also acceptable (No O or U frames) must be placed in front of the driver from roof to cowl  
– If there is no Gas Tank Protector a rear window bar is permitted, (maximum 2" square tubing) must not come within 6" of a halo bar, may only connect to the roof and speaker deck or the seam between the trunk and speaker deck area as long as it meets the Doors Trunk Hood & Tailgate Fastening rule that counts it as a fastened spot and may not fasten to trunk in any other way and cannot fasten to any other part of the car

### Safety Bars

– A single roll bar may be bolted or welded to the body / frame behind the driver's seat, and can run up over the roof, and back down to the body / frame, with a Single Post-to-Post Bar in between (MAX 4" square tubing)  
– A Dash Bar (Min 3" to Max 4" square tubing) may be mounted door frame to door frame, but not to firewall  
– A Passenger Side Bar (Min 3" to Max 4" square tubing) from Post-to-Post to Dash Bar is permitted  
- Passenger Door may be stuffed with a minimum of 3/4 plywood/steel/combo of both  
-Passenger Door Plate may be added to the outside, must not exceed 3 inches past door seams. Must be bolted/welded in a MIN of 4 spots.  
-Driver's door interior be stuffed with a minimum of 3/4 plywood / steel / combo of both  
– A Drivers Side Bar (Max 2" wide horizontal) from Post-to-Post to Dash Bar is permitted. NO LIMIT ON VERTICAL WIDTH  
– No kickers or down bars permitted.  
– Over built, unsafely built cages or bars that break lose during event ALL results in immediate disqualification

## 2022 Demo-X/Figure 8 Rules

### **Door Plate and Protection**

- It is recommended that the driver's door is reinforced with a flat bar or plate on the outside of the door. The bar or plate may not extend beyond 60" in length and should be from window to rocker
- Passenger Door may be stuffed with a minimum of ¾ plywood/steel/combo of both
- Passenger Door Plate may be added to the outside, must not exceed 3 inches pass door seams. Must be bolted/welded in a MIN of 4 spots.
- It is Highly Recommended that the driver's door interior be stuffed with a minimum of ¾ plywood / steel / combination of both as well

### **Suspension**

- Suspension components may be changed among vehicles, but must remain in original working order
- NO blocking, welding or stuffing suspension or struts and no adding, welding clamping of leaf springs

### **STRUT GUARDS (FWD ONLY)**

MAXIMUM 8" long square tubing may be welded horizontally to the frame between shock and frame

### **A-ARM BAR (FWD ONLY)**

- A 3" x 3/8" single flat bar may be attached from the driver's side Lower A-Arm to the passenger's side Lower A-Arm
- Flat plate can only be attached to the A-Arms with weld and or Bolted, Can NOT be attached to the engine cross member
- Suspension MUST remain original with minimal effect on ride height, A-Arm bar is meant to keep axles in cups NOT to raise ride height

### **STEERING KNUCKLE BRACE (FWD ONLY)**

- For ALUMINIUM Steering Knuckles (Spindles) only
- A brace may be fabricated out of flat plates welded together and flush to the knuckle can connect from the Cam bolts to the calliper mount bolt.
- The Brace may also brace the top and the Bottom of the Knuckle with flat plate

### **OIL PAN PROTECTION**

- A skid plate may be added from the rad cradle back

Examples of Strut Guards, A-Arm Bars, Steering Knuckle Braces are available on the Ontario Demolition Derby Ltd. Facebook Group Photo Album titled "Build Hints and Tips"

The intent of these modifications is to bring otherwise unusable vehicles into contention to provide more and often cheaper vehicle choices for the sport. More sought after and often more expensive derby vehicles are either not eligible or do not benefit from modifications by design