

# **2019 WGAS Chino Demolition Derby Rules**

**Open to American cars built after 1965. No 73 or older Chrysler Imperials, Imperial Sub frames, Limousines, Lebarons, Ambulances, or Hearses allowed. Please call if you have a question!**

**Nothing other than what is listed below is allowed!!!!**

**After Market Derby Parts that will be allowed:**

Metal Gas Tanks, Transmission Cooler, Gas and Brake pedals, Shifter, Steering column (from box back), Drive Line, Drive Line Brake, Lower Cradle with Pully Protector, Engine mounts.

## **General Preparation:**

1. All glass, plastic, and pot metal must be removed. Nothing may remain in the bottom of the trunk or doors. Back seat must be removed.
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
3. Pad inside bars around driver. A 3/8" thick plate can be put inside the driver's door only.
4. Helmet, gloves and eye protection are required
5. 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 be welded below the A and B pillars. See diagram at the end for pictures.
2. Dash Bar can be no closer than 5" from the fire wall and 3" from tranny tunnel. Back Bar must be within 4" of the driver's seat. Door bars can not extend past dash bar and can only go 6" past back bar.
3. Halo bar above the roof or up bar are required. Halo must be made from 2"x2"x 1/4" or similar material. Halo can run down to floor board and be tack welded (no more than 3" of weld).
4. 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 inside dimension cannot be more than 6" wider than the Outside Dimension of the gas tank. The Bars must be more then 4" above floor.

## **Body**

1. Outer door seams must be welded shut. You can use 2"x2"x1/8" strapping or 1/2" rebar for filler.
2. Hoods must open for inspection.
3. Hoods can have 6 lengths of chain to hold shut. (any placement)

4. Bodies can or creased with hammer to help control the bend only! Trunk lid must remain in stock location and can be rolled or tucked. Trunk lids can be chained with 6 chains or welded shut using six total 6" long 2" wide 1/8" thick strapping pieces. If welded shut there must be a 20" diameter inspection hole in the center.
5. There must be 1 or 2 vertical bars (2"x2"x39" max) in the center of the windshield area welded from firewall to the roof. Rear window bars are optional. Window bars can not be more then 18" apart and can only be welded to the sheet metal or attached to mounting plates that are welded to the sheet metal. They can't be on top of the trunk or hood.
6. **Wagons**- Window bars can be attached to the top of the tailgate. Tailgates count as trunks for welding shut. All decking must be removed!
7. Body spacers can be removed and body bolts can be changed but must remain stock size. Except the front and rear 2 which can be replaced with up to 1" all thread that runs up through or 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, then again on top of the hood and trunk lid. You can use 4"x4"x1/2" washers on the all thread.
8. You may clearance fenders and bolt them back together using four 3/8" bolts only.
9. You may re-bolt hood and trunk skins. 10 bolts maximum each
10. **NO seam welding unless stated** of any kind!!!!!! (frame or body)

### 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
2. Bumper swaps are allowed but they must be O.E.M. off a stock production car or you can use an open ended straight 5"x5"x1/4" tube that can not have any added metal or stick out farther then 6" from the side of the frame.
3. Bumpers may be flipped and cut shorter. Maximum 20" from ground to lowest point.
4. Front bumper: You can weld two 2" wide x 3/8" thick x 36" long straps from bumper to core support. 1" all thread can run through them.
5. Rear bumper: You can weld two 2" wide x 3/8" thick x 30" long straps from bumper to trunk lid. The 1" all thread can run through it.
6. Mounting the bumper: no other ways then what is listed below!
  - Stock to the car only 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.
  - You can remove **ALL** factory brackets and shock tubes and, in its place, use a 14"x4"x1/4" flat plate with the last 4" bent into a L. The 10" part can be welded top and bottom only to the outside of the frame. The bumper can then be welded to the 4" piece and the nose of the frame. You can cut the frame straight to weld the bumper on. There must be at least 1.5" of frame in front of the core support bolt left after the cut. (see drawing on last page)
  - Pre 1974 single skin stock bumpers only can be welded to the body in addition to one of the above ways of mounting.

## Frame

1. No buffing, grinding, packing, cutting, bending, or welding the frame other than what is specifically stated in the rules
2. No Chrysler sub frame chaining
3. 80's and newer cars can tilt the front frame rails down at the fire wall only. Gap between core support and frame can be filled with a 2"x2"x5" O.D. tube that the 1" all thread can run through.
4. You can notch and dimple the frame behind the rear frame humps only!
5. No seam Welding of any kind!!! Unless specifically stated. (Frame or Body)
6. Cadillac frame extensions can't touch the transmission cross member unless its stock.

## Drive Train

1. Any Engine and transmission can be used!
2. Engines must remain as close to stock location as possible. A hole can be cut for the distributor.
3. You must have a air filter or spark arrester on your car.
4. You can use aftermarket motor mounts and a lower cradle to hold in the motor. If using the stock motor mounts, you can weld stock mounts to the cradle and use 4 chains from motor to frame. The chains cannot go more than 4" past the manifolds.
5. Transmissions can have different bell housings welded on for mounting to different motors.
6. Transmission cross members can be stock or 2"x2"x1/4" O.D. square tubing.
7. Slider drive shafts are optional and can be ran with a drive line break.
8. 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, hybrid or truck rear ends allowed. (drive line breaks do not count as bracing)
2. Rear end gears/axles may be changed. Gears can be welded or posi'd
3. You may shorten the upper control arms to achieve pinon angle by cutting and over lapping then welding back together only! No plating or reinforcing of control arms at all!

## Suspension

1. Rear end suspension must remain stock!!! No adding leaves or welding shocks. It will be checked for bounciness! You can tack weld or bolt coil springs to the rear end only.
2. Front suspension can be welded solid by using two 2" wide by 1/4" thick by 8" long straps per side. **A arms and ball joints must remain stock!** (except 80's cars can switch out upper A arms only to A arms from another passenger car but must use stock mounting.)
3. 4 leave spring clamps are allowed, 2 in front and 2 behind the perch. Chaining of humps is optional but you can only use 2 chains single wrapped per frame rail.

## Cooling

1. You must use stock radiator mounting position. Radiators can be switched out to aluminum racing style but must be as close to stock size as possible.
2. Radiators can be removed and the hoses looped.
3. Radiator can only be attached to the core support. Using straps, wire or 1" welds is ok

4. Stock or plastic fans only. No electric fans unless car came stock with them.
5. You may use a condenser or thin expanded steel to protect the radiator but it can only be attached to the core support
6. Transmission coolers are allowed. If in the drivers compartment they must be covered or in a box.

### **Fuel**

1. Any pump gas or E85 can be used
2. 10-gallon max fuel cell placed centered in the back-seat area and securely mounted is required. No ratchet straps.
3. Original gas tanks must be completely removed.
4. 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.
5. You can use an electric fuel pump but there must be a kill switch installed for it.

### **Batteries**

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. No ratchet straps

### **Tires and Brakes**

1. Any stock passenger car rim may be used. Rims can not be larger than 15"
2. You may add a 6" or smaller weld in center for switching makes. You can also weld on valve stem protectors. No other rim welding allowed
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.

### **Steering**

1. Tie rod ends must remain stock. You can brace the tie rods with 1"x1" angle iron
2. After market steering columns are allowed but must use stock steering box.

### **Pre-Ran Cars**

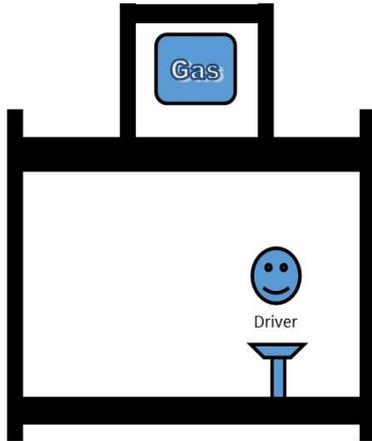
1. Frames may be pulled straight
2. You can use **two 6"x4"x3/8"** steel fixer plates per frame rail. They can only be welded onto a spot on the frame that is already bent or cracked. Must be able to prove the bend to tech. (need to have pictures or be able to see the bend or crack around plate!!!!)

### **Most Important**

1. Cars Must have no spiders or spider webs on or in them!!!!!!!!!!!!!!
2. Be a good sportsman and have fun
3. Use bright colors on the car (crowds love pretty cars)
4. Numbers must be contrasting color and painted big enough for the officials to see from the tower.

Drawings:

**Cage Design**



**Halo example**

