

# 2021 Hard Core Derby Promotions

## Youth Full Size Class Rules Ages 12-17

### Stock Rules

1980s and newer. No open roofs, No Trucks, No Four-wheel drive vehicles, No Vans, limos or compacts, no hearses, ambulances, taxis, natural gas cars etc. that have been frame altered from factory. All cars must remain stock unless otherwise noted. If it is not in the rules, it does not mean you can do it(03 and up cars are permitted)

Helmets. (**Fire suit Top highly recommended**) long sleeves, and eye protection must be worn at all times. Seat belts must be fastened. If your helmet comes off, you are Out !!! fire extinguisher is mandatory!!!!!!

Drivers will be given one warning for sandbagging before being disqualified. You must make an aggressive hit every thirty seconds. You will have one minute to restart your car. You are permitted to continue racing if your car catches fire once; however, you will be disqualified after the second fire. Do not use your driver's door as a shield. Driver's door hits are NOT permitted. Teamwork is not permitted. You will be given one warning before being disqualified.

### Inspection

1. Officials have the right to drill, scope, etc as the need too.
2. Officials Have the right to re-inspect any and all cars Before, During or After the event
3. any care found to be cheated will not receive Any Prize Money Or trophies! !
4. All Drivers Must attend the Drivers Meeting (**Mandatory**)
- 5 .Drivers Only Allowed In the Inspection Area During Inspection
- 6.Cars That Fail Tech Only Get 1 Re-inspection, and must wait till all cars go through a first time to get Your car Re-inspected (follow the Rules)
- 7.Cars That Fail Tech Due to Rules or any Safety Issues Forfeit Their Entry Fees/No REFUNDS
- 8.Bring Torches or appropriate repair pieces on anything you might believe questionable!
9. Anything found outside the rules may not only asked to be cut but may be asked to be removed Totally! !!! NO Halfhearted Attempts to Cut something will be accepted.
- 10.No additional welding permitted other than described in the following rules.
- 11.Blatant attempts at cheating will result in automatic disqualification and you will not have a chance to make repairs.

## Stripping

All outside hardware such as glass, plastic, fiberglass and chrome molding, door handles, mirrors, etc. must be removed prior to arrival. No broken windows in doors. All flammable material must be removed. All airbags must be removed. Cars Must be swept clean of all dirt and debris. all station wagon rear decking must be removed. No OEM gas Tanks left in the must be removed!

## Suspension

Stock suspension only for that year make and model of vehicle . 80s Upper A-Arms **MAY NOT** be swapped out in place of the 90s wishbone style upper arms No aftermarket tie rods, spindles, ball joints, or homemade fabrications. No coil spring risers or blocks may be used. No stuffing of shocks. Rear springs may be swapped out with any OEM coil spring for ride height. Rear springs may be wired or l-inch hose clamp or l-inch welds in three places on the bottom of rear spring to be secured. No homemade shocks in the front or rear. Tie rods may NOT be reinforced, factory tie rods only (inner and outer). No all-thread or homemade shocks. Factory OEM shocks only mounted in the factory location.

Front suspension may be locked in place solid using ONE of the following Options NOT Both! 3" wide max Flat Stock Or Angle Iron From Lower A-arm vertically to frame using 3" inch welds on frame with only one piece per arm max thickness 1/4 inch OR a 2"x4"1/4" inch thick plate welded on the front and rear side of upper control Arm. This plate may Not extend more than 2" from the a arm. Any factory leaf spring cars must have factory leaf springs, clamps, and hardware. The clamps must remain factory. No homemade or bolt on spring clamps. OEM factory stairstep of 3 inches must be maintained for the vehicle. No altering, restacking, or adding of leaf's. No lengthening of the main or altering or relocating of the shackle. Rear suspension MUST BE A WORKNG SUSPENSION! ! !!!

Watts links may be converted using the following method: The upper control arm mounts must bolt only to the package tray using FOUR h" max bolts. You MAY NOT use a single mount; they must be two separate mounts no larger than 8"x8" max. The lower mount can be a factory mount removed from 97 and back car or a piece of 3"x3"x1/4" thick wall tubing or channel. The mount may be no longer than 6" long and must be mounted like the non-watts car. A h' max bolt may be used to attach the control arm and can only pass thru one side of the frame. All rear control arms must be from a factory non watts link car and have no reinforcement. After market control arms are not permitted.

Sway bars may not be altered from OEM shape or size. Sway bars may not be welded to the frame in any way. Sway bars are to be mounted to the frame using OEM brackets and hardware in its factory location. Sway bars must be mounted using the factory orientation. No upside-down sway bars.

**Rear End** Any Factory stock five bolt rear-ends only. No custom rear-ends. No reinforcing the tubes. Factory trailing arms may be lengthened or shortened to achieve pinion angle. They may have a 2" overlap and be welded but no adding of material or reinforcement in any way. Factory OEM trailing arms must be used. NO AFTERMARKET arms permitted. No changing size of bolt holes or use of oversized bolts or washers. Spider gears may be welded. No oversized or aftermarket axles. Direct Bolt on pinion brakes accepted. No extra bracing to mount pinion brake. Added on spring perch mounts on top of rear end only, may not rape on the tube in any place

## **Frame**

Factory frames only. No frame altering other than described in the rules. Front frames may be shortened to the front of the core support mount. Core support mount may not be modified. Repair stubs must be butt-welded in factory manner CALL FIRST. No plates. No seams may be welded (even where the factory missed!). No shaping of front frame horn or dimpling of rear frame hump. No hump plates. No tilting or cold bending. Rear frame section may be cut or dimpled to bend up. No rear frame chain or wire of any kind from side to side or up and down.

For bigger areas of rust repair, metal must be 4"x4"x1/8" inch thick. No angle iron may be used in repair. No framework is to be done without an OK call first!!!!!! !! 8 repair plates max 4 per rail. YOU WILL ONLY BE ALLOWED FOUR REPAIR PLATES CROSSMEMBER FORWARD, 2 PER FRAME[R. FOUR PLATES CROSSMEMBER BACK, 2 PER RAIL. Fix it PLATES Must be 4"x4"x and have a 1/4 hole in them to see thickness. This is to ensure that all repairs made are as close to the same as possible on all cars. Fix It Plates may be welded solid. If more than one side by side plate is needed a minimum of a 1" inch gap must be between the fix it plates welds. The weld of these two plates may not be weaved together, all plates must remain in one piece, no cutting to make multiple plates

Cross member must remain stock. Any OEM factory automotive transmission cross member is allowed. No added metal to cross member or altering. A.2"x2"x1/4"x6" angle may be welded to the frame for cross member mounting. Cross member must be bolted to the frame plate angle mount. No larger than 3/8" bolts may be used, with two bolts on each side or 1 h" bolt may be used. Cross member must remain within 8 inches of factory location, no added material! ! !

## **Bumpers**

Bumpers must remain in the stock location. No loaded bumpers. Ends of the bumpers must be open. You may NOT reinforce or weld. Chrome may not be welded to the backing of bumper. HARD NOSING the bumper is allowed, if HARD NOSING nothing can be inside of frame and No Bumper shocks of any kind may be used. A 6" x 6" x 1/4" plate MAX may be welded to the end of the frame for bumper mounting!

Bumper shocks MAY be collapsed and welded. 3/8 chain may be wrapped and welded to outer bumper skin with a maximum of two links welded to the frame top and bottom. Bumper chain links may not be welded over the seam. Links cannot be welded any farther than 6" back from the end of the frame. The rear bumper chain may Not pass through the body in any manner. It is attached bumper to frame only. Bumper chain links may not be welded from the skin to the frame.

SMITH METAL WORKS MIGHTY MINI BUMPERS "will be permitted" 1/8 material max!! !  
**[www.smithsmetalworks.info](http://www.smithsmetalworks.info)** ! Maximum bumper heights must be 22 inches in Max and a minimum of 15 inch

## BODY

Body sheet metal is to remain in stock position., shaping, forming, or creasing is allowed in the following manner.( See Attachments) Trunk lid/tailgate may be welded., wired or banded in SIX Places 3"x3"x1/8 inch plate maximum. The trunk may not overlap the quarter panels. Trunk lid may be tucked and attached to the floor in two places. This counts as 2 of your 6 places. No more than 3" to floor and trunk lid. One fifteen-inch inspection hole is required. Hole may be bolted in six places with a maximum of 5/16 sized bolts, 1 inch in length with 1-inch washers.

#9 expanded metal may be added to the outside of the radiator support and be mounted in four places using 3/8 bolts and a max diameter 1 " washer. The radiator may be strapped in two places, vertically. 1/2 inch all-thread max, one-inch banding, or three strands of 9 wire may be used. Condenser may be mounted in four places, factory style only with a maximum of four 3/8 inch bolts.

All hoods must have a minimum of two 12"x12" inch holes. Holes may be bolted in six places with a maximum of 5/16" sized bolts, 1 inch in length with 1-inch washers. You may use six Half inch bolts for hood hold-downs. 3"X3"x1/4 inch maximum dimensions for the hood hold-downs. Hood bolts may pass through core support only; they may not pass through or around the frame. No 1 inch all-thread in the core support. You may add 3"x3"x3"x1/8" angle to the inner fender for hood bolt mounts. No Gussets from core support to fenders as hood bolt hold downs! !!!

The driver's door may be welded solid and plated "**highly recommended**. Drivers door reinforcement may not extend beyond the driver's door seams more than 3". Doors may be welded, banded, bolted, or chained shut. If welded they may be welded using the 3" on 3" off pattern Doors Only(NOT Trunk). Chain, wire, or banding must not pass through or around the frame in any location. Maximum strands of wire is three, maximum width of banding must be one inch. Chaining, wiring, and banding must be done sheet metal to sheet metal in same pattern as the welding only. No washers welded in for wiring will be permitted.

Front and rear window bars may be made of 2"x2" inch square tubing or 3 "x 3"x3/8 flat bar max Only 2 are permitted in the front window area and may not attach at the fire wall any wider than the headers. bars may go 3 inches max on to the roof and no more than 3" onto the fire wall area. Rear window bar (one bar centered in window opening) may not extend beyond 3" of the rear window opening and extend onto the trunk lid more than 3" from the speaker deck/trunk seam.

### Body Mounts

All factory body mount bolts may be changed with 1/2 inch bolts only. You may use hockey pucks or a stack of washers etc. All spacers must be free floating. Body mount rubbers must Maintain a 1 -inch space minimum between body and frame. 3"x3"x1/4" washer top and bottom max! !Body mount hole may not be moved, and washers may not be welded in the hole. No additional body mounts are permitted. A maximum of three inches will be permitted on risers made of 2"x2" tubing. Risers may not be fastened to bumper, frame, core support, or body of car in any way. Core support mounts may NOT be used as HOOD BOLTS

\*\*\*\*\* NO 1 inch all-thread permitted in the core support.

## **Cage**

You may run one bar behind the seat (from post to post) bar cannot go more than halfway past back door, one bar for the dash, and one bar for each door connecting the seat and dash bars. 4x4 or 2x6 inch tubing or 4-inch pipe maximum size to be used. 1/4 by 6-inch mounting brackets may be used for dash and seat bar installation. Door bars may not run into beyond or attach to the firewall. No down bars off of the cage permitted in any way. Door bars may not extend more than 8 inches past the seat bar or past the center of the rear doors. No seat belts may be bolted to the floor connecting any part of roof or trunk in any location other than the OEM mounting location for safety only.

A rollover halo bar may be installed for protection. The halo bar must run vertically from the rear seat bar only. The halo bar may be attached to the roof in two places using h inch bolts. The two mounting points may not be any farther than 6" from the halo bar. 4X4 MAX tubing! !

## **Gas Tank**

Gas tank must Securely mounted to the floor. rear seat bar or inside the gas tank protector. Maximum size for gas tank protector is 24 inches wide to the outside of the protector and may be tight to the rear sheet metal. Gas tanks must be constructed of steel. This includes metal fuel cells, Jerry cans and boat tanks. No plastic tanks or lacquer cans will be permitted (even if you put it in a milk crate!). Fuel line must be securely fastened and clamped so that it may not pull free from the tank. Gas tanks must also be covered with a cover made of non-flammable material. Four h inch holes must be drilled in the floor underneath the tank if it is mounted on the bar, or around the perimeter of the tank if mounted on the floor. If you are using an electric fuel pump, you must use high pressure fuel line. A shutoff switch must be located on the dash bar. Shutoff switch must be visibly marked. Fuel tank vents should be positioned away from occupants. And a roll over valves are highly recommended

## **Drive train**

Engine Swaps are permitted slider shafts are permitted. No Distributor protectors, cradles or pulley protectors are permitted. Transmission coolers are permitted inside the car. No type of rubber fuel line permitted as transmission lines. Heavy duty Transmission lines or hydraulic JIC recommended

Headers are permitted. Aftermarket shifter, gas pedal, and brake pedals are permitted. OEM style radiators may be used and placed in the OEM location. Electric fans are permitted. No transmission braces will be permitted. Stock motor and transmission mounts only. Motor chains must be used with a 3/8-inch maximum size. Chain must be bolted to the front of the engine and may only be a max length of 15" Links may not be welded from the frame to the motor. No skid plates. Transmission pan and oil pan may be plated for protection. Plate may not exceed 1 inch beyond the pan.

Cars must have working brakes. ALL FAN BLADES must be covered, and all air cars must run an air cleaner

## **Tires and Wheels**

Any air-filled tire up to a 16 inch. They Cannot be solid, or foam or water filled. Tires may not be studded.

OEM stamped steel wheels only. No solid wheels or bead locks. A simple 8-inch weld in center weld IS permitted. Simple valve stem guard, no larger than 3"x3"x1/4" are permitted. No Lip protectors.

## **Battery**

One 12-volt battery will be permitted. Battery must be bolted to the passenger side floorboard NO ratchet straps or bungee cords. A battery box is highly recommended. Battery must be covered with non-flammable material.

## **Rust Repair**

Sheet metal only to patch body tin, stich welded only must prove rust. do not go overboard 2-inch overlap onto good sheet metal

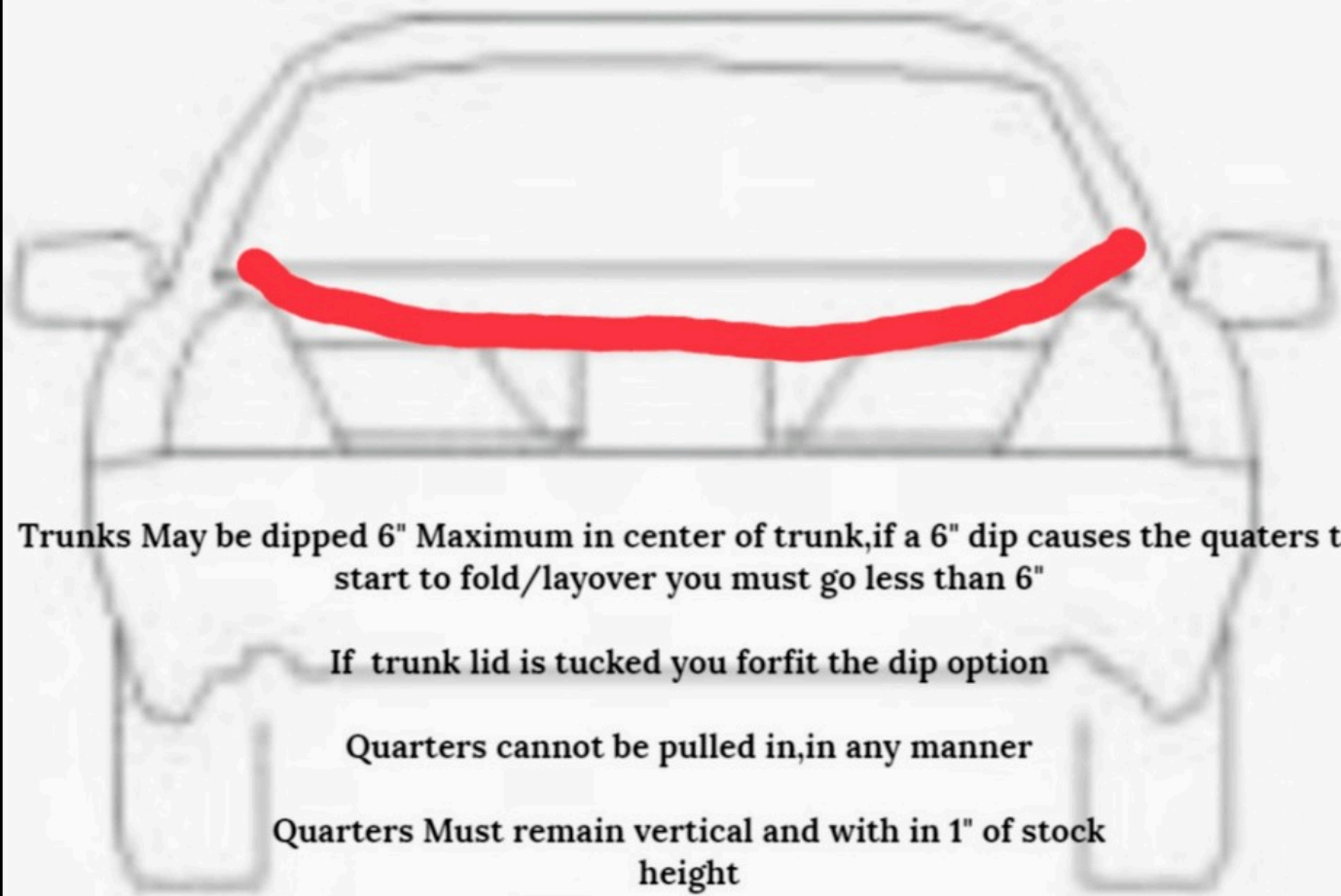
All rules are to the interpretation of the track officials. If you have questions. ASK before the derby!!!! NOT THE DAY OR If you are willing to weld it on, be willing to cut it off. If you are found to be overbuilt to these rules you will be given the option to cut or remove illegal parts or load your car and go home. Please **Follow The Rules!**

## **QUESTIONS?**

Justin Hartzell (304) 559-7893

Charlie Post (724) 350-5984

Frankie Guy (724) 557-7428



Trunks May be dipped 6" Maximum in center of trunk,if a 6" dip causes the quaters to start to fold/layover you must go less than 6"

If trunk lid is tucked you forfeit the dip option

Quaters cannot be pulled in,in any manner

Quaters Must remain vertical and with in 1" of stock height

No Raising of the Roofs or window Opening on wagons

Bottoms of quaters may be folded under for clearence, No adding of anything to connect quaters ,Quaters cannot be sandwiched between fram and body



## **Quarter Panel Creasing Specifications**

**3 Lines per Quarter 3" inch deep Max**

**Quarters Cannot be pulled in, in any Manner, Quarters Must Remain vertical and within 1 inch of stock height**

**No Raising of Roofs or Window openings on Wagons**

**Bottoms of Quarters May be folded under for clearance, No**

**adding of Anything to connect Quarters and Quarters**

**Cannot be sandwiched between body and Frame these are the only way Quarters Are to be Manipulated**

