



Welcome to the SMW /Hardcore Derby Promotions Youth Full Size Program. Our intention of this class is to develop demolition derby's future full-size champion drivers. With this Rule Set, we have specifically chosen to instill the basics of car building and detail. Our intention is to see the best built cars show up, not over-built cars. Our focus is developing driving, diligence and sportsmanship. Along with these traits we hope to re-ignite the ability to build competitive, well-built cars. Make no mistake, this is a competitive class that we want to keep at a higher level. We welcome entry level drivers but also look forward to seeing our returning youths continuing their development. We emphasize the Rule Set for this class is based on stock 1980's style vehicles. Pre-run cars will not be discouraged, but our intent is to see everyone show up with the best built car that they can, so we encourage fresh builds. With Hardcore Derby Promotions premiering a national youth full-size championship we have included a couple areas of extra exercising. These implements are well within the means of anyone who will be competing. We are excited to watch these youngsters put on one of the best shows yet to come! Ages

12-16 Youth Full Size

## 2024 Youth Full-Size Rules

## Stock Rules

1980's and newer, **NO 2003 and newer Fords**. No open roofs, no trucks, no four-wheel drive vehicles, no vans, limos or compacts, no hearses, ambulances, etc. that have been frame altered. All cars must remain stock unless otherwise noted. If it is not in the rules, it does not mean you can do it. Frames and components must be standard automotive production standards.

Helmets, If Your helmet comes off you are Out (**fire suit top is 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 Highly Recommended!

Drivers will be given zero warnings for sandbagging before being disqualified. You must make an aggressive hit every **sixty seconds. You** will have one minute to restart your car. You are permitted to continue if your car catches fire/This Call will be determined by the fire department if its fuel/ you will not be allowed to continue 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. Keep in mind that there are two people in the car. Teamwork is not permitted. You will be given one warning before being disqualified.

### Safety

Seatbelts must be bolted in securely for both occupants. \*If these don't pass the 1<sup>st</sup> time through, your car is sent out of inspection. **We will not continue inspection until it is corrected.**

Seats must be securely fastened in vehicle

**If your Helmet comes off during competition you are OUT!**

It is highly recommended that occupant areas be clear of sharp, protruding objects.

Nothing is permitted to be mounted in occupant areas, such as transmission coolers, batteries, power steering, etc.

Anytime deemed to be unsafe will need to be addressed prior to passing inspection.

No hot rodding or hot dogging will be permitted in the Pit Area or surrounding areas. This is only permitted on the track.

Sportsmanship Both on and Off the Track Is Mandatory and enthusiasm are welcomed and encouraged.

### Inspection

1. Officials have the right to drill, scope, etc. as needed.
2. Officials have the right to re-inspect any and all cars before and during the event.
3. Any car found to be cheated will be disqualified.
4. It is **mandatory** that all drivers and youth attend the Driver's Meeting and secondary Youth Meeting with parent or rider. If you do not attend, you will not run.
5. Only drivers and one crew member or passenger are permitted in the inspection area during inspection.
6. Cars that fail inspection get only one re-inspection and must wait until all cars go through a first time to get your car re-inspected (follow the rules).
7. Cars that fail inspection due to Rules or any safety issue forfeit their entry fees — **No Refunds**.
8. Bring torches or appropriate repair pieces to correct any violations found during inspection. If you believe anything to be questionable fix it prior to inspection!
9. You may not only be asked to cut but to totally remove anything found to be outside of the Rules. No half-hearted attempts to cut something will be accepted.
10. No additional welding permitted other than described in the following Rules.
11. Blatant attempts to cheat will result in automatic disqualification and you will not be given a chance to make repairs.
12. Cars inspected and flagged are legal to run and legal to win.

### Stripping

All outside hardware such as glass, plastic, fiberglass and chrome molding, door handles, mirrors, etc. must be removed prior to arrival. No broken window glass 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. All OEM gas tanks must be removed.

### Suspension

Stock suspension only. 1980's upper A-arms may be swapped out in place of the 1980's wishbone style upper arms. 98-02 frames forfeit crossbar on upper arm swap. Tie rods may be reinforced, aftermarket tie rods and tie rod ends permitted. Simple steering stops are permitted. Spindles and ball joints must be stock. ball joints must be OEM over the counter replacement. No homemade or fabricated. moog performance not permitted. Tack welding of ball joints permitted. Twist in coil spring risers may be used; two per side maximum. No spacers in coil spring buckets will be permitted. No stuffing of shocks. Rear springs may be swapped out with any OEM coil spring for ride height. Rear springs may be wired or 1" hose clamp or 1" welds in three places on the bottom of rear spring to be secured. No all thread or homemade shocks. Factory OEM automotive shocks only mounted in the factory location. No truck shocks will be permitted. Rear springs may be wired in top and bottom. Wire cannot be continuous, not used in the manner of creating a solid link. You may however have one limiting chain or cable per side. Must be inboard of shocks, 3/8" size max on chain or cable., they can attach using a 1/2" bolt on each end at package tray and rear differential.

Front suspension may solidly be locked in place using only one of the following options NOT both flat stock or angle iron from lower A-arm vertically to frame using 3" weld per side on frame with only one piece per arm maximum thickness 1/4" or a 2" x 4" x 1/4" thick plate, welded on the front and rear side of the upper control arm. This plate may not extend more than 2" from the A-arm. 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" must be maintained for the vehicle. No altering, restacking or adding of leaf springs will be permitted. No lengthening of the main or altering or relocating of the shackle. Rear suspension must be a working suspension!

**Sway bars must not be altered/manipulated 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. Hardware may be changed at the lower arm 1/2" bolt size max in factory location. Sway bars must be mounted using the factory orientation. No upside-down sway bars. Sway bars must be "Make for CAR".

Automotive five-bolt OEM Housing rear differential or truck diffs are permitted, truck rears may be 8 lug. All differentials may have a simple back brace. This brace must only be on the back side of the rear (the side where a diff cover would be) this brace can extend off the rear no more than 4 inches. It may not extend onto the backing plate, must terminate at the end of the axle tube. No changing size of bolt holes or use of oversized bolts or washers for mounting purposes. Spider gears may be welded. Bolt in axle conversions permitted. No Axles Savers. No ten lug axles. No heavy wall ale tubes-oem only.

Watts Link Conversions are permitted. You may use factory brackets and weld to car or Watts Conversion plates no bigger than 5" x 5" x h"; 4 bolts max per side. Minimal bracket fab for lowers. See Addendum B. Factory suspension brackets cannot be welded, attached or manipulated in any way if you run the watts conversion. They may be removed. If they are smashed flat and or welded down, you will be disqualified.

\*Only stock OEM car trailing arms may be used. They may be adjusted to obtain pinion angle 1" overlap — no reinforcing. Direct bolt-on pinion brakes permitted. No extra bracing to mount If you have a pinion brake you cannot have factory backing plates and drums. You will pull wheels and remove them if you have a pinion brake. Factory brackets can be swapped on rear differential. Example, 1980's Ford brackets to 9", etc. Top ears mounts may be fabricated for mounting purposes, do not exaggerate this onto the rear diff tubes beyond 3" per side. fab with factory style OEM bushings only. No spherical joints, etc.

## Steering Columns

**No Hydro steering**

Steering columns may be altered between box shaft and wheel. No hydraulic conversions.

## 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 the middle of the car. No plates permitted. No welded seams are permitted (even where the factory may have missed). No shaping of front frame horn or dimpling of rear frame hump. No hump plates. No tilting or cold bending front or rear. The rear frame section may be cut or dimpled to bend up. These areas cannot be welded or filled. No rear frame chain of any kind from side to side

will be permitted. There is to be no welding on the frame except within the areas specified in the Rules. Standard automotive production frames and specs. Frames must stay factory width- do not narrow or pull frames in.

**Rust repair**, Must Be Discussed, no angle iron may be used in repair. No framework is to be done without approval first.

**Fix It Plates**, used cars are only, Are permitted **2 fix-it plates Only 4" x 4" x 1/4" Max**, Must Be Attached to the Frame

**Rails or engine crossmember Only**. These plates may be welded solid around the perimeter of the plate but not the center. If more than one side by side plate is needed, a minimum of a 1" gap must be between fix-it plates. The welding of these two plates may not be weaved together, all plates must remain in place, no cutting to make multiple plates. We encourage the building of fresh cars. A Fresh Frame on A used Body Does Not Make It a Pre-Run Car.

Cross member must remain stock. Any OEM factory automotive transmission cross-member is allowed. No added metal to cross-member or altering. A 2" x 2" x 1/4" x 6" 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. Cross-member must remain within 8" of factory location — no added material. 2" x 2" x 1/4" tubing may be used but must have (4) 3/8" holes drilled in it for scoping. Must bolt in the same manner as described in the Rules. See Diagram.

Bumpers must remain in the stock location. Front bumpers on the front and rear bumpers on the rear; no fabricated bumpers are permitted. No loaded bumpers are permitted. Ends of the bumpers must be open. Hard nosing is permitted. **If hard nosing, nothing can be inside of the frame and no bumper shocks of any kind, the shock cannot be unbolted and left inside the frame it must be removed** A maximum plate of 6" x 6" x 1/4" may be welded to the end of the frame Front Not The side top or bottom, for bumper mounting. If you are unsure of what you have asked. For Rear bumper mounting purposes an NLR style Bracket is permitted, may be no longer than 6 inches on the Frame.

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 within first 6" of frame-measured from end of frame. Bumper chain links may not be welded over the seam. 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. Bumpers can and should be #9 wired to the body front and rear; two locations per bumper. Wire may pass through trunk lid and taillight panel and hood/core support; 3 strands per spot.

SMW Bumpers will be permitted — [www.smithmetalworks.info](http://www.smithmetalworks.info) Comparable bumpers will be permitted with approval. Automotive Bumpers may seam Welded, No Loaded or gusseted Bumpers permitted

Maximum bumper heights must be 22" in the front -measured to the bottom of the front bumper. A minimum of 15" in the rear; measured to the bottom side of the FRAME, the rear bumper cannot have any part of it lower than the frame measurement of 15" as mounted on the car.

## Body

Body sheet metal is to remain in stock position. Shaping, forming or creasing is allowed in the following Attachment B: trunk lid/tailgate may be welded, wired or banded in a 3" on 3" off manner, 3" x 3" x 1/8" plate maximum. The trunk may not overlap the quarter panels. **Trunk lid may be tucked and attached to the floor.** One 15" inspection hole is required.

Hole may be bolted in six places with a maximum of 5/16" sized bolts, 1" in length with 1" washers. Rear speaker decks cannot be removed. Absolutely no creasing on the cars in front of the rear doors seam. Rear quarter panels cannot be pushed or squeezed in. Any cars with narrowed frames or quarter panels, or any sheet metal pushed to the frame will be automatically disqualified with no adjustment option.

No metal may be added to the radiator support unless stated. The radiator may be strapped in two places, vertically. Or 2 pieces of 3/8" all-thread maximum, 1" banding, or three strands of #9 wire may be used. Condenser, 1/8" Material Aftermarket Condenser or 1/8" expanded metal may be mounted in four places (not Both), in factory style manner only, with a maximum of four 3/8" bolts. 2" overlap outside of radiator Opening max, Inspectors must be able to see between radiators and condenser. No spray foam is permitted.

All hoods must have a minimum of two 12" x 12" holes. Holes may be bolted in six places with a maximum of 3/8" bolts, 1" in length with 1" washers. You may use six h" bolts for hood hold-downs. 3" x 3" x 1/4" 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"

all-thread in the core support is permitted. 1/2 Max and cannot be used as a Hood Bolt, hood Bolts Must be separate. core support mount bolt cannot be continuous through the hood, you may add 3" x 3" x 3" x 1/8" angle to the inner fender for

hood bolt mounts. No gussets from core support to fenders as hood bolt hold-downs are permitted. Angles cannot connect fenders to the firewall.

It is highly recommended that the driver's and passenger's doors be welded solid and plated. Door skins are also permitted along with inside door plates. Sidebar to sheet metal only; not within body mount areas. No C-channel reinforcements are permitted on the outer doors. Driver's nor passenger's 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 a 3" on 3" off pattern may be used on door seams only. Chain, wire or banding must not pass through or around the frame in any location. Maximum of three strands of wire, maximum of 1" banding. Chaining, wiring and banding must be done from sheet metal to sheet metal in six places only. No washers welded in for wiring will be permitted.

Front and rear window bars may be made of 2" x 2" square tubing or a maximum of 3" x 3/8" flat bar. Only two are permitted in the front window area and may attach at the fire wall. Bars may go 3" maximum onto the roof and no more than 3" onto the fire wall area. No adding of additional metal anywhere on the firewall! Nothing can be attached from firewall to Dash bar! Window bars may not be mounted in a manner to close gaps between ash bar and rear of engine. Anything deemed to be not within the realm of safety but strictly for a competitive advantage may result in disqualification. The rear window bar may not extend beyond 3" from the rear window opening and extend more than 3" from the seeker deck/trunk seam. If welded over trunk seam it counts as one tie down.

## Body Mounts

All factory body mount bolts may be changed with 1/2" bolts only. Body mount hardware and components must be factory orientation and assembled as such other than what is described in this area. You may use hockey pucks or a stack of washers, 3"x3" round or square tube etc. Spacers will be looked at during inspection. All spacers must be free floating. Body mount rubbers must maintain a 1" space between body and frame. No where can spacers be larger in height than 2". 3" x 3" x 1/4" washer top and bottom maximum. It is not permitted to move the body mount hole and washers may NOT be welded in the hole. No additional body mounts are permitted. A maximum of 4" Riser will be permitted at the core

**Support, these 4 inches include and body mount spacer also risers** made of 3"x3" max. Tubing. Risers may not be fastened to frame or core support in any way., Risers Must be Free Floating to core support.

Core support body mounts may NOT be used as hood bolts, Hood Bolts Must Be separate and 1/2" in size MAX No

all thread permitted in the core support.

If you show up to inspection with this, you will be trailered. The purpose shall be

1"

to give adequate fan/radiator fitting only.

### **Cage -**

You may run one bar behind the seat (from post to post) bar cannot go more than halfway past the back door, one bar for the dash area this bar must 5 inches off the firewall and 5 inches off the transmission tunnel, one bar for each door connecting the seat and dash bars. 4" x 4" tubing or 4" pipe maximum size to be used. 6"x 6" x 1/4" mounted brackets may be used for dash and seat bar installation; door bars may not run into front fender area past cowl. Down bars connecting the cage to the floor are permitted in driver and passenger areas. This is for safety only, inside door plates are also allowed. These may only weld to sheet metal and cannot pass through anywhere to frame. Door bars may extend within 2" of rearmost door seam on two door cars must be 2" from wheel tubs. This is to free up space for battery, tanks, coolers, etc. 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. Adequate padding is recommended.

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 1/2" bolts. 4" x 4" maximum.

### **Gas Tank**

No shelves other than the gas tank are permitted. The floorboards and sheet metal must be visible to inspectors. The gas tank must be securely mounted to the floor or mounted on the rear seat bar or tank protector. Maximum size for gas tank protector is 32" wide to the outside of the protector and may be tight to the rear sheet metal. Cannot be attached to sheet metal or package tray. Gas tanks must be constructed of steel or aluminum. 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). The fuel line must be securely fastened and clamped so that it will not pull free from the tank. Holes must be drilled into 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. The shutoff switch must be visibly marked. Fuel tank vents should be positioned away from occupants. Rollover valves are recommended. Any fuel system deemed to be unsafe will not be permitted.

### **Drive Train**

Engine swaps are permitted. Slider driveshafts are permitted. No distributor protectors, Transmission coolers are permitted inside the car. No type of rubber fuel line is permitted as transmission lines. Heavy duty transmission lines or hydraulic JIC are recommended. Enhanced motor mounts are permitted (SMW weld kit or equivalent) to meet specifications. A Front Lower Cradle with Pulley protector is Ok, The Pulley Protector should not be welded or connected to Anything in any manner, integrated Front Plate is acceptable.

Headers are permitted. Aftermarket shifters, gas pedals and brake pedals are permitted. OEM style radiators must be used and placed in the OEM location. Looping of hoses is not permitted. Electric fans are permitted. Transmissions must be stock housing. No steel bells and no steel tails. No transmission braces will be permitted. Stock transmission mounts only. Anything that is bolted to the engine or transmission that may strengthen the car or create an unreasonable advantage at any time will not be permitted—please do not incorporate anything that may compromise safety for an advantage— in this situation removing it will not be an option, only disqualification will result.

Stock style motor mounts. Aftermarket mounts are ok but must have rubber bushing and horizontal bolt. A Simple aluminum aftermarket bell is Permitted. This is something that should and could be bought out of any performance magazine please don't push this (**keep it Simple**). No steel bells. Motor chains must be used with a 3/8" maximum size. The chain must be bolted to the motor and dropped vertically with no more than two links welded to the K frame. 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" beyond the pan. They cannot connect. Basic adapter plates for BOP transmissions are permitted. Cars must have working brakes. All fan blades **MUST** be covered, and all carburetor cars must run an air cleaner. Transmissions may be wired, banded or chained around cross member. This is a simple allowance for mount failure — don't get tricky.

## **Tires and Wheels**

Any air-filled tire up to 16" are permitted. They cannot be solid, foam or water filled nor studded.



OEM stamped steel wheels only. No solid wheels, No bead locks. A weld in center is permitted. Simple valve stem guards are permitted. Lip reinforcements are permitted 2" max size

## **Battery**

Two MAX 12-volt batteries will be permitted. Battery must be secured in a manner that is safe for the driver, passenger and fellow competitors. No ratchet straps or bungee cords are permitted. A battery box is recommended. Battery must be covered with non-flammable material. Battery cables must be insulated from gas tank and components.

## **Rust Repair**

Sheet metal only to patch body tin. Must prove rust. Do not go overboard. 2" overlap onto good sheet metal only. **Please contact us PRIOR to any rust repairs.**

**All Rules are at the interpretation of the Track officials.** If you have questions, **ASK BEFORE** the derby — do not wait until the day of the event! **If you are willing to weld it on, be willing to cut it off.** If you are found to be overbuilt pursuant to these rules you will be given the option to cut or remove illegal parts or load your car and go home. There will be no adjustment option on over builds.



**Questions and concerns can be answered by contacting  
Davy Chapman 330-402-3098 Head Inspector  
Frankie Guy 724-557-7428**

### **NO GO Zones**

**- ANY OF THE FOLLOWING AREAS INFRACED WILL RESULT IN DISQUALIFICATION without the opportunity to adjust. All have been spelled out in the rules in previous seasons. IF YOU WANNA PUSH THINGS, PUSH THE PEN INTO A DIFFERENT ENTRY.**

**Rear Quarter panels-narrowing or pushing in**

**Frame narrowing**

**Frame Tilting**

**Excess Fuel Line/oversized fuel tank**

**Any rewelding of seams body or frame/boxes**

**Body creasing forward of rear door seam**

**Added metal or firewall manipulation**

**Excessive list of car adjustments**

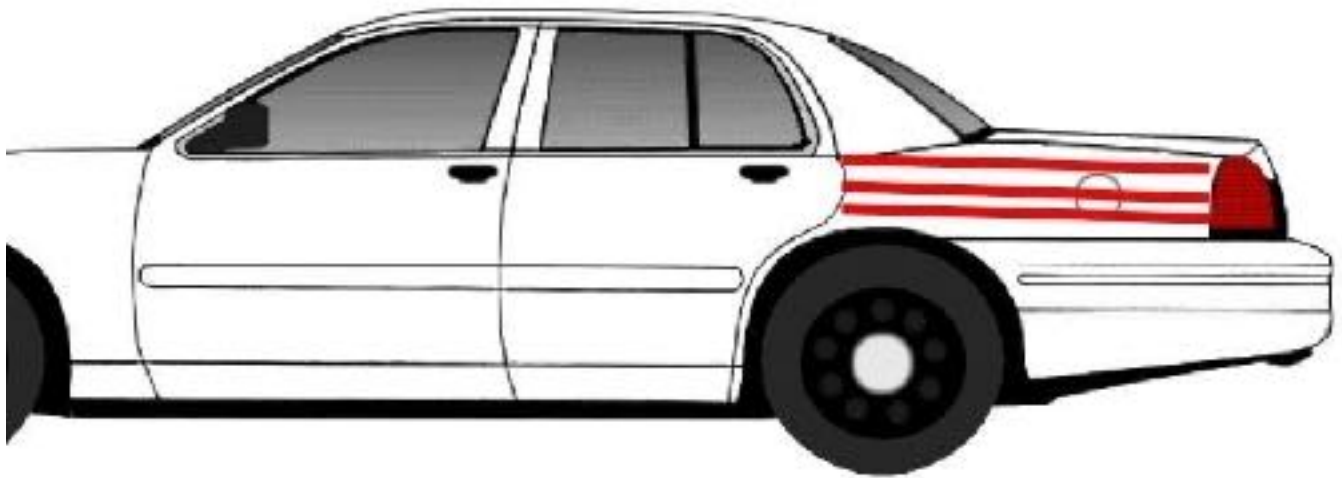


**Trunk lid/tailgate may be welded, wired or banded in a 3 ON 3 Off Manner 3" x 3" x 1/8" plate maximum. The trunk may not overlap the quarter panels.**

**Trunk lid may be tucked and attached to the floor in the same 3 ON 3 Off Manner, These . One 15" inspection hole is required. Hole may be bolted in six places with a maximum of 5/16" sized bolts, 1" in length with 1" washers. Rear speaker decks cannot be removed. Absolutely no creasing on the cars in front of the rear doors seams, Trunks Will Be measured with a straight Edge Strait Down 6' in 3 Places to the top of your deck lid,Anything lower than that will have to be lifted up to meet Specification**

## Trunk Specifications





## Quarter Panel Creasing Specifications

**3 Lines per quarter 3" deep Max. Quarters Cannot be pulled in, in any manner, Quarters must Remain vertical and Within 1" inch of Stock Height, No Raising Roofs or sadagon type roofs on Wagons, Bottoms of Quarters May be folded under for clearance, No adding of anything to connect quarters, Quarters Cannot be sandwiched between body and Frame, These 3 Lines on the Quarter Panels are the Only Panels on the Entire car that may be Manipulated in this fashion**