

2023 Eastern Michigan State Fair

Derby Rules Motor Swap/Back to the Basics

Car Choice

Any year car No imperials /Imperial sub frame swaps. No limousine, ambulance, hearse No sedans of any station wagon at any time.

General

Cars must be stripped clean of any flammable materials except for the driver's seat. All glass must be removed. ABSOLUTLY NO PAINTING OF FRAME OR INSIDE THE BODY COMPARTMENT!

Core Support/Radiator

Core support cannot be moved from factory location and must line up with factory body mount hole on frame. Factory condenser or 1/8" radiator protector or 1/4 expanded metal may be used to protect the radiator. This may be as wide as the core support mounts and tall as the core support and must mount directly in front of the core support. You may bolt any of these with [6] 3/8's bolts and max 1" store bought washers. Radiator must mount in factory core support tray and can have only [4] mounting locations top and bottom. The mounts for the radiator cannot strengthen core support in any way. Radiator cannot connect to motor, pulley protector, or cradle. Core support spacers can be no taller than 6" and made from 2"x 2" tube max, must be free floating core support all thread 1" max with 3" floating washer's these may be used as 2 of your hood tie downs.

Hoods

Hoods must be open for inspection. Hoods can be secured with [4] locations of #9 wire in addition to the core support mounts. You may have [10] 3/8" bolts to secure the cutout around the headers. You may weld 1" store bought washers to hood and fenders to run wire through, washers may not connect.

Quarter Panels

Bottoms of the quarter panels may be folded up to the trunk pan and can be attached in [3] spots per side with 3/8" bolts and 1" outer diameter washers.

You may body shape the quarter panels on the side, do not beat them down and make them a wedge. You may NOT weld body seams. No body shaping of doors or front fenders.

Firewall

You may cut the firewall out for distributor clearance. No welding on the sheet metal in anyway.

Body

Doors may be welded in 12 spots total per side of car using max 4"x4" ¼" plates or you may #9 wire your doors in 12 spots total with 4 strands. Sheet metal to sheet metal not to the frame in any way. You may run a driver's door skin, but can only overlap the door seams 2", and if you choose this, it will be 50% of the door plates for the driver's side. Which means 6 spots of 4" x 4" plus skin or 12 spots of 4" x 4", not both.

Window Bars

You may have [2] bars in the front windshield 3" wide ¼" thick this may be welded at each end, or you may bolt with [1] ½" bolt at each end 3" max washer. No more than 4" on the roof or cowl per bar. Or you may use #9 wire or 3/8 chain.

Trunk Lid /Tailgates

Trunk lid or tailgate may be removed. If using trunk lid you may hold it shut in 12 spots total with welding 4"x4" ¼" plates or #9 wire 4 strands sheet metal to sheet metal not around frame or bumper in any way. Trunk lid must have an inspection hole 8"x 8" [must be a factory trunk lid] you may push the trunk lid to the floor.

Cage/Halo Bar/Gas Tank/Up and Over Bar

Cage components, halo bar can be up to 6" material [round or box tube]. A four-sided cage surrounding driver consisting of dash bar, 2 side bars and rear seat bar. Dash bar must remain 5" above topside of the transmission tunnel and 5" away from the distributor/rear of cylinder head. All cage components must be at least 4" above body bolt elevation. Only connecting point for cage can be A-

pillar, B-pillar. A 10"x10" ¼" plate can be added to the B-pillar only to assist with attaching cage to body. The bar behind the seat must be no farther back than the kick panel. Side bars can be 60" long. The center bar cannot extend behind the rear bar and must be at least 5" above the topside of the transmission tunnel. A 32" wide gas tank protector may be added and must be centered in the car. Gas tank protector may ONLY be attached to the rear bar. Must be free floating no welds/bolts/ wire to the sheet metal or frame in anyway. The gas tank protector cannot extend behind the rear seat area. Gas tank protector may not attach to up and over bar. Cage/halo bar and gas tank protector can have [1] gusset per corner. Gusset are considered a cage component and must adhere to the size limitations. Any material protecting the gas tank must be vertical and cannot extend upward more the 4" above tank. You may have 1 up and over bar, max 6" material, must be vertical, can be bolted to your roof using two ½ in bolts.

Body Mounts

Maximum bolt size is 5/8" diameter and 6" long. Washers for body bolts can be no larger than 3"x3". Body bolt cannot be moved from factory location. No extra body bolts for any reason. Bolts can only go through the top layer of frame. Body bolts can NOT attach to the cage in any way. You do not need a spacer between the frame and body.

Interior Bolt-in

Aftermarket components are allowed, such as pedals, battery box, shifter, and gas tank/fuel cell, transmission cooler and steering column. The mounting of these components cannot attach to the frame in any way or strengthen the car. Mounting surfaces cannot exceed 22"x22."

Front Bumper

You may shorten the front frame rails to the front side of core support hole. Any OEM automotive bumper allowed. Aftermarket replica bumpers are allowed but must be factory measurements. If you choose to manufacture a homemade bumper, it must conform to the following size limits. Point to mounting surface may not extend beyond 14". No sharp or jagged edges allowed anywhere on the bumper for safety reasons. You may attach front bumper to frame rails, you may use a factory shock tube 7" long max and/or you may use [4] 3"x7" ¼" plate.

Welded to bumper and the side of frame rail, 2 plates per frame rail. Maximum height will be 22" from ground to the bottom of the bumper. No welding beyond 7" from the back bumper on the frame rail.

Rear Bumper

Any OEM automotive bumper allowed or 6"X 6" tube max. You may run factory shock or bracket that came on the make and model of car you are running. Bracket and/or shock must be in factory location but can be tilted. Or you may use a 6"x"6 plate to mount your bumper. No shorting of rear frame in anyway. No weld beyond last 7" of rear frame.

Frame

The top of rear rails can be dimpled or cut for bending purposes only and cannot be re-welded. Frames cannot be shaped in any way. No welding on frame other than specified. No modifications of frames in any way. This means NO tilting, NO cold bending NO re-stubbing allowed. The rear frame rails can NOT be lower than 14" Hump plate cannot exceed 22"x6"x3/8" they must be centered on the outside of the hump.

Front Suspension

All suspension and steering must remain stock from a car. (Unless a modification is stated) ZERO aftermarket parts. Spindles must be car origin. You can replace upper and lower arms from other year make and model cars, you may trim to fit but no adding material or welding will be allowed. You may weld an arm down using [2] 2"x2" ¼" plate per rail you may swap out springs but must be OEM springs. Ball joints must be OEM to make model of car. You may run aftermarket tie rods or reinforce stock. NO hydraulic steering. On 03 and newer fords you must use factory aluminum cradle. You may extend the top or the bottom of the strut for ride height. Bolt on only. No aftermarket shocks. Sway bars must be OEM.

Rear Suspension

Coil spring cars- any OEM automotive coil spring is welcome. Coil spring can be wired, chained, or bolted to rear and package tray. If using washers nothing larger 3x3 (Nothing excessive) and must remain in factory location. Factory shocks only! Must remain in factory location. Rear end must mount in factory.

4 link configurations only. You may run aftermarket control arms with maximum 2x4' tubing, or you may reinforce a factory set of control arms. Watts link conversion is allowed for 98 and newer fords. Upper brackets must be no larger than 6x12x3/8. Must be two separate brackets. Each bracket can be attached with 4-5/8 bolts max. Washers cannot exceed 3" diameter. For mounting lower control arm bracket you may use a female tube no larger than 3x3x3 1/4" thick. This may be welded to your frame. Leaf spring cars- Must be factory amount, no thicker than ¼" No flat stock plate type springs. You may add 3 clamps per side. These clamps cannot be any larger than 2x4x1/4 using 2-3/8 bolts per clamp.

Wheels/Tires

4 tires max per car. Wheels and tires can be any configuration with the exception of studded tires. Tires cannot be replaced with steel paddles.

Rust

Rust repair must have pictures sent to the head inspector for approval. Any car with rust repair fixed without approval will NOT be allowed.

Drivetrain

Any automotive engine and transmission are allowed. Aftermarket drive shafts are allowed. Any rear end is allowed. Bracing of the rear end is allowed, it cannot touch or be connected to the frame in any way. Any bracing of the rear end must be 5" away from the frame. Cross members must be factory for the make and model of the car you are driving, or you may use 2x2x1/4 tube. You may use angle iron no bigger than 3x3x8x1/4 for mounting the cross member. This bracket may only be welded to the frame no more than 8" mounting surface welded. Simple lower engine cradle with front plate and pulley protector only allowed, cannot attach to sway

bar. No distributor protector in any way. Aftermarket engine mounts will be allowed. Must have a rubber or neoprene bushing. The mounting surface cannot exceed 8"x8". These may only be welded to the frame saddle. If using OEM mounts you may use 3/8 chain to chain engine, one link may be welded to the frame saddle only. Aftermarket bells will be allowed, but no additional bracing allowed, or a slip over transmission brace will be allowed. The transmission brace must be above the pan.

BELL OR BRACE IS ONLY FOR TRANSMISSION PROTECTION, NOT FOR WEDGING OR ADDING STRENGTH TO THE CAR. TRANSMISSION MUST BE FREE FLOATING! YOU MAY USE A STOCK LIKE TRANSMISSION MOUNT. INSPECTORS WILL CHECK FOR MOVEMENT WITH A PRY BAR! MUST HAVE MOVEMENT!

03 or newer fords, your lower engine mount must bolt to the aluminum cradle [4] bolts max and cannot be wider than the inner frame rail's.

Used Cars

You will be allowed to use 4-4x6x1/4 plates. Must be a noticeable bend in the frame. Plates must be approved by the head inspector otherwise not allowed.

Do not read into these rules!! If it doesn't say you can that means you can't.

These rules are designed to keep the cost down and get new drivers involved.