

# RICHLAND COUNTY FAIR DEMO DERBY RULES

## OLNEY, IL

(These are the same rules they are using at Fairfield, Albion,  
Mt. Carmel, and Iuka)

### 4/6 CYLINDER RULES

(Adopted 2/28/2022)

WE HAVE THE RIGHT TO RE-INSPECT, CUT, OR DRILL ANY CAR AT ANY TIME. IF YOU ARE CAUGHT BREAKING THE RULES SET HERE FORTH YOU WILL FORFEIT ANY AND ALL WINNINGS AND OR PRIZES YOU ARE DUE. **JUDGES DECISIONS ARE FINAL.**

#### AUTOMOBILE BODY REGULATIONS

1. Passenger cars or station wagons only. Wheelbase must be 108" or less. No exceptions.
2. Station wagons converted to a sedans are allowed. If roof sheet metal is bolted to the floor pan, officials can cut a hole to inspect for reinforcements under the sheet metal.
3. All glass, side windows, rear windows, headlights, and taillights, must be removed before reaching the track. Rolling down windows is not permitted.
4. Rear seat of sedan must be removed, top and bottom. On station wagons all seats and decking must be removed. Station wagons must be emptied to the floorboards.
5. Cars must have a seatbelt and working brakes. **MANDATORY**
6. Battery may be moved but must be securely fastened and covered in passenger compartment. Two batteries are allowed.
7. **MANDATORY** – Front windshield must have a bar or loop of #9 wire from roof to the firewall for safety. 1 bar 3 inch wide by 3/8 inch max or 2 loops of #9 wire only.
8. Trailer hitches: Class A or frame mounted must be totally removed. Class B or bumper mounted trailer ball stub must be cut off.

#### GAS TANKS AND FUEL PUMPS

1. Stock gas tank **MUST** be removed from original position and mounted in the rear seat area and secured. A marine tank or fuel cell is strongly recommended. All lines and fitting must be leak proof and meet approval of the track officials. Electric fuel pumps are allowed but must have a shut-off switch within reach of the driver. Tanks must be covered before entering the track.
2. All lines must be run inside care, not along the frame underneath. All lines should be double clamped.

#### RADIATOR AND CORE SUPPORT

1. Radiator must be in stock position. Any automotive type of radiator can be used. Must be an OEM automotive radiator.

2. No reserve tanks and no added cooling capacity.
3. Core support seams can be welded. These are the only body seams that are allowed to be welded. No exceptions.
4. Multiple electric fans mounted to the radiator, may be used.
5. Radiator protectors are allowed but must be in front of or behind radiator.
6. Protectors are to be full floating or bolted to the radiator.
7. Protectors cannot be wider than the cooling surface of the radiator.
8. Protector cannot be thicker than 1/8" and must be made out of a form of expanded metal or screen. No solid metal allowed at all. No angle iron or flat strap.
9. This is a radiator protector, not a core support reinforcement.

#### BODY

1. No body seams may be welded except for the ones outlined on the core support. No metal may be added. Inner fenders may be welded to frame. Body cannot be welded to frame anywhere else.
2. No doubling of body panels allowed; no added metal allowed. No reinforcing of the firewall. Body sheet metal patching must be okayed by official. Call first.
3. No adding of metal between inner and outer fender skins. This means no welded in gussets, angle iron or shackle rod.
4. Body creasing, enhancing of existing body lines and addition of body lines is allowed. Do not fold the metal over to create a doubled effect. If this is found, it will be torch cut. If there is any place where metal is formed into layers, it will be torch cut. No man made seams can be welded.
5. Body mounts may be replaced with up to and no larger than 1 inch bolts or all thread with washers or plates no bigger than 4 inches in diameter and no thicker than ¼ inch. These plate washers cannot be welded down. No overlapping of washers or plates.
6. Body spacers at the core support cannot be no larger than 2" round or 3" x 3" square tubing.
7. Only two added body mounts allowed.
8. Fenders may be bolted together with a maximum of 10 – 3/8 inch bolts or smaller with 3/8 inch or smaller washers per wheel opening.
9. Doors may be welded, chained, or wired. If doors are welded, they cannot be welded any farther than 3" on each side of the door seam. 4 inch wide trap max. ¼ inch thick max.
10. No body mount bolts, or all thread allowed through the humps.
11. 2 rear window bars are allowed. Cannot be attached to cage anywhere. Must go from roof sheet metal to rear speaker deck and trunk lid. Must be attached sheet metal to sheet metal. Must be attached at least 8" off and inside the pillars. 12 inches into the roof and 4 inches on to truck lid. Welded or bolted or both.
12. Rear window bars must be made out of a max of or up to 3" x 3" ¼ inch thick material. No solid stock.

#### SUSPENSION

1. Bumper height 24" or less at top of bumper.

2. A arm can be welded solid. A arm can be bolted or welded down. You may weld square stock or pipe between the upper and lower A arms to set suspension height. 1" pipe or 1" x 1" square. Not solid square or round stock.
3. A arm cannot be plated or reinforced. Stock A arms only.
4. Tie rods may be reinforced.
5. Steering gear boxes may be modified. After market steering columns are allowed.
6. Sway bars must be in factory stock position or taken out completely. Cannot be flipped and welded to the frame.
7. Suspension stiffness left to discretion of driver.
8. 2" pipe may be used to reinforce struts.

#### **HOODS AND TRUNKS**

1. Hoods must have two (2) holes, at least four (4) inches in diameter on each side of the carburetor. Not directly on top of the carburetor. If the hood is removed, either the fan or fan belt must be removed.
2. Hood cut outs cannot be welded. Bolted only. Hood seams cannot be welded.
3. Max of 50 bolts allowed in hood and trunk total between the two. No added metal. 3/8" bolts max with factory 3/8" washers.
4. Hoods must be opened upon request during inspection. If we cannot see, we will cut.
5. Hoods may be secured by all thread outboard the radiator, 2 pieces at firewall, and 1 at each fender well. 1-1/2" x 1-1/2" x 5" long angle iron may be used with the all thread. 3 on each side of the car. If welding all thread to strut tower, all thread cannot be longer than 22".
6. The all thread outboard the radiator can be sleeved with up to 2 inch tubing or round pipe. These 2 pieces of all thread are the only ones that can be sleeved.
7. 4" x 3/16" strap can be used from core support to bumper.
8. If you use #9 wire to hold down hood, you are allowed unlimited #9 wire across the front in front of radiator.
9. Don't wire hood down until after inspection.
10. You may use all thread to secure the trunk lid. All thread must go thru factory body mounts. (4 total) cannot be sleeved. Front wheel drive may weld all thread to side of frame, but there must be a 6" open gap between washer and down bar. Washers may be no larger than 4 inches in diameter and cannot be welded down. Unlimited #9 wire can be used here as well.
11. Trunks and tailgates can be welded solid; max 4 inch wide strap 1/4 inch thick.
12. The trunk lid must be in stock position. No moving forward or backwards of trunk lid.
13. The trunk lid may be v'd in the center but must remain at least 10" off the trunk floor.
14. No adding of metal in trunk lip area to fill the gap.
15. Relocation of the rear speaker deck is no allowed. It must remain in stock position. It can be cut out. If cut out, it cannot be placed anywhere else in the car.

#### **SAFETY CAGES**

1. You should have a six point cage. The cage can be welded to the frame in four (4) places. Must go to flat part of frame. You can have up to six (6) down posts, three (3) per side (4 to frame, 2 to sheet metal). You should have a dash bar, a

cross bar behind the seat and two (2) door cross bars. The door bars cannot be less than 12 inches off the floor. Nothing can be ran between the rear wheel humps or welded to the humps. No kickers to the frame humps – front or back. All down post must be straight. (NO ANGLES)

2. Door bars must stop at dash bar. Nothing in front of dash bar.
3. Dash bar cannot be more than 6 inches in front of front door seam. Dash bar cannot be in front of front door post.
4. Cage can be made out of 3" pipe or 3" square tubing, MAX.
5. All down tubes must be behind the dash bar, straight up and down and on the flat part of the top of the frame. Cannot go to the body mount boxes.
6. Gas tank protectors are allowed. Can touch the rear deck metal or package tray.
7. Front wheel drive cage can be welded directly to body skin or all down bars can be welded to the floor with a 5" x 5" x 1/4" plate MAX

#### **HALO BARS OR ROLLOVER BARS MANDATORY**

1. You MUST add a halo bar to the cage components listed above. It may not exceed 5" in diameter.
2. On a 4 door post car, this bar must attach to the seat bar. NO EXCEPTIONS.
3. On a 2 door or 4 door non-post car, this bar may be attached to the floor sheet metal.
4. Halo bars must be in a direct vertical line with the seat.
5. Halo bars may not be angled toward the rear of the car.
6. You may bolt the halo bar to the roof sheet metal in 2 places.
7. The halo bar cannot be attached to the front window bar or rear window bar!!!!!!

#### **FRAMES – ABSOLUTELY NO CONCRETE IN FRAMES**

1. Factory frame seams may be welded from firewall forward only. A single bead or one pass weld is allowed. Anything considered excessive by the officials will be dealt with at the time of inspection.
2. Preran cars only will be allowed band aids totaling no more than 24 inches. Cannot be thicker than 3/16". No excessive welding. There must be visible sign of damage. Judges have the last and final say.
3. Any other reinforcing of frame found will result in disqualification.
4. Sub frame cars cannot be tied together. If you want to run a full frame car, buy a full frame car, don't build one.
5. No tilting or hump plating.
6. No shortening of frames except to mount front bumper.
7. No plating, stuffing, heat treating, or foam filling of frames is allowed. Do NOT paint, undercoat, oil or grease your frames of you will not even be inspected.
8. You may run one (1) wire or chain from frame rail to frame rail underneath back of car behind rear end. Front wheel drive may run wire or chain underneath front of car.
9. You may put a bolt thru frame to hold it together. Only one (1) per wheel opening, must be loose during inspection, (pinning of frame) one inch id stamped washer only not cut out plates.
10. You may notch the frame for minimal pre-bending, but do NOT weld the cut.

11. If changing front sub, cut 3 inches behind second cross member bolt hole. When replacing, can overlap 010 inches, able to weld both sides, but no adding extra metal. Must be from same make and model.
12. When replacing frame, frame must come from the same make of the car you are running. And is legal in this class.
13. If re-subbing one side of the frame, you are allowed to cut and fit the new frame flush and weld one pass all the way around (butt – fit – weld).
14. Rear frame rails may not be shortened.
15. You may chain or wire your axle to the frame hump. You may not use strapping of any kind for this. 3/8" chain maximum.

5. Skid plates are allowed. Must be separate oil/transmission plates. No full-length skid plates. No bolting or welding to frame.
6. Distributor protectors are allowed but must be attached to engine or transmission mounting bolts. Backside must be no wider than 12". CAN NOT CONTACT CAGE AT ANY TIME. If you run a distributor protector do not mount your dash bar closer than 5" from the middle of the dash. It may not be welded, bolted, or connected to the body, hood, or frame. Forward supports must be inside normally positioned headers and not extend past the water pump.
7. Transmission braces are allowed. OEM crossmember ONLY!!!!

ALL FRAMES THAT HAVE BEEN ALTERED IN ANY WAY WILL BE DRILLED. (HAMMERED, SHORTENED, PAINTED, GRINDING MARKS, ETC.) NO EXCEPTIONS!! IF YOUR CAR IS FOUND TO BE PLATED YOU COULD BE BANNED FROM RUNNING AT SHOW FOR THE YEAR!!

### BUMPERS

1. Any OEM shock canister may be bolted or welded to any car. Amounts of bolts or welds may not exceed typical stock installation. Homemade bumper brackets are permitted, no gussets or bracing. Not to extend behind OEM mounting bolt location on frame. May use 2 ½ inch max round or square tubing. No thicker than ¼ inch or 3/8 by 3 inch flat bar may be used. No solid stock may be used. Any OEM stock automobile bumper may be bolted or welded to the shock canister or bumper brackets. You may weld outer chrome or bumper to inner skin of bumper. You may use two (2) pieces of light chain per shock. Fenders and bumper ends may be trimmed to allow for wheel clearance.
2. For you guys that are cutting the frame down to mount your bumper, you are allowed 12" of mounting bracket or shock tube welded or bolted to the frame, no more on the frame than that.
3. This rule also applies to putting your tubes inside the frame. You are allowed 12" only inside the frame regardless if you cut the frame or not.
4. May have a ¼" thick x 2" wide strap from bumper to frame or bumper to body. Two on front and two on rear. Closest place on frame to bumper. Only a 2" x 2" area on each end of strap may be welded to bumper and frame or body.
5. Homemade front bumpers allowed. No wider than 13" on point. Point must be spread out. No taller than 6". Bumper length must be within fenders.
6. Bumpers can be loaded with metal only. No solid bumpers and no concrete. NO EXCEPTIONS!!

### ENGINE AND TRANSMISSION

1. Any 4 or 6 cylinder engine or transmission may be used in any car but must be mounted within 5" of the original motor.
2. Chained, welded, or homemade motor mounts will be permitted, but must meet approval of officials.
3. Any type of header is allowed but must be directed away from driver compartment.
4. Transmission oil coolers and engine oil coolers are permitted. Must be secure and contained and covered inside the car, for the driver's protection.

### REAR END

1. Any automobile rear end can be used in any car but must be a 5-lug rear. This rule does not mean you can transform a coil spring to leaf spring or vice versa. On models originally equipped with leaf springs, stock leaf springs, and hangers MUST be used. Leaf packs on all cars may have no more than original leaves per pack. Homemade spring perches or homemade trailing arm brackets may be welded to rear end. Rear end spider gears may be welded solid. You may tilt rear end by shortening or lengthening rear end control arms.
2. Any drive shaft or U joint may be used. Welding of drive shaft is permitted.
3. No extra metal added. Any bracket that shows reinforcement to the frame will not be allowed.
4. You may tilt the rear end by lengthening or shortening the trailing arms. Trailing arms may be reinforced.
5. You may have fine (5) spring clamps per spring. You pick if you want them in front of or behind axle or split them between the front and back.

### TIRES

1. Only sixteen (16) inch or smaller tires and wheels will be allowed. No split rims allowed.
2. Valve stem protectors, liquid in tires permitted or screws in rims to hold tires in place permitted.
3. Wheel weights must be removed.
4. Double stuffed tires are permitted. We do not want any flats!!!!

If you are found to be too built for these rules, you will be given 2 options.

- A. CUT OR REMOVE ILLEGAL PARTS.
- B. LOAD ON TRAILER AND GO HOME.

Either way you will NOT RECEIVE A REFUND!

If you have any questions, you can contact one of the superintendents listed below.

Austin Clow	618-354-8039
Kevin McCormick	618-839-5922
Justin Westall	618-919-1387