

# Wapello County Fair 2017

## General Rules for Weld Classes - 6 Pages Total

1. Any American made sedan or station wagon may be run. **No** '03 and + Fords, **No** Chrysler Imperials, 4x4's, ambulances, hearses, or trucks, etc.
2. 80/newer cars must be a 1980 or newer body style car.
3. Driver must be 18 years of age and have a valid driver's license. Ages 14-17 must have a notarized permission slip and some form of driver's license.
4. Driver must wear seat belt, helmet, and some form of eye protection.
5. No intentional driver's door hits. It does happen and you will be disqualified if we feel it was intentional. Do not use your door as a shield either as you will be disqualified for that also.
6. You will be given 30 seconds for an aggressive hit and 60 seconds for a restart or if you are hung up.
7. The only time we will pull two cars apart is when it is down to the final two. If a car is rolled over we will roll it back over and if it deemed safe will be allowed to run again.
8. No sandbagging or holding. No pinning to win.
9. If you have 2 fires of any kind that need extinguishers to put it out, you will be disqualified.
10. All drivers and pit crew members must attend the drivers meeting
11. Any controversies will be taken up at the drivers meeting.
12. No Alcohol in the pits until conclusion of last feature. If any driver or crewmember is caught with alcohol their car will be disqualified and removed from the grounds.
13. Cars are subject to re-inspection before any prize money is handed out. There is a \$150 pro-test fee and you must be a driver in order to protest.
14. You must arrive a minimum of 2 hours prior to starting time. Please call if you will be late. You will only have 2 chances to go thru tech. If you do not make the necessary changes you will not be allowed to participate.
15. Any questions call first. If it doesn't say you can do it, don't do it.
16. Judges decisions are final.

### Car Preparation

1. All cars must be stock, unless modification is stated in the rules.
2. All glass, plastic, chrome, etc. must be removed before arriving at the derby. Do not paint on the frame or inside of the car. . Remove all grease from frame. Bolts to hold any chain cannot go through the frame. No foam in frame.
3. All decking in station wagons must be removed.

4. Use motor and tranny of choice but must be in stock location. Motor and tranny mounts can be fabricated and welded as long as it does not strategically reinforce the frame, "A" frame, or shock towers. No engine mounts, braces, cables, or chains may extend more than 4" in front of, or 4" behind the a-frame. Pipe can be no bigger than 1 ½" inches or ½" thick flat steel. You cannot add any extra metal to the top of the frame to weld your pipe to. Motor or tranny cannot be connected to any part of the cage. Cross-member must be in stock location but can be replaced with up to 4x4 square tubing (no side of the tubing can be more than 4" otherwise you'll cut it. Tranny protector maybe be tied to the cross-member but the tranny mount cannot be any wider than the tranny pan. Tranny protector must be at least 6" away from any other bars. If we feel that it does not meet requirements, you will cut it.
5. Distributor protectors will be allowed. The protector can only be mounted to engine and or tranny bell housing. There must be 6 inches of clearance between the back of the distributor protector and the dash bar at the start of the event. Dist. Cap protector can't be mounted to body, frame, and cage. No rear engine straps can be connected to DP. DP can't be bigger the 12"X12" Firewall must remain stock with no reinforcing allowed. No reinforcing or adding extra metal to the transmission tunnel.
6. Use rear end of choice. Rear end may be back braced but cannot act as a kicker. Welding the rear end is allowed.
7. Radiator must be in stock location. No radiator barrels. Radiator guards cannot be welded to the radiator support.
8. Brakes must be workable and deemed safe.
9. Trailer hitches and any extra bracing must be removed.
10. A-arms and ball joints must remain stock. You may use a strap up to 2 inches wide to weld the top a-arms only down. You may only have 3" of weld on the strap and 3" on the frame. A-arms may not be welded directly to frame only strapped down. Do not weld your bottom a-arms down. Do not cover any holes in the frame.
11. Original gas tanks must be removed. You must use a boat tank or well-made fuel cell and it must be properly secured and covered. NO GAS CANS. Plastic gas tanks must be covered with a metal shield. Place fuel cell behind driver's seat or in the center of the car. Gas tank bolts cannot be bolted or welded to or thru to the frame, sheet metal only. Gas Tank protector can be no wider than 28 inches, 14 inches on each side from the middle of the back seat area. It cannot be attached to the back seat panel. Must run straight back off the seat bar. Cannot act as a kicker and cannot be thicker than 2" thick tubing.
12. Tires no bigger than 15 inch. No split rims or studded tires. Valve stem protectors are ok.
13. Transmission coolers are allowed but must be safe.
14. Batteries must be moved to passenger floorboard and must be properly secured and covered.
14. Number must be on both doors and on top of your roof in visible colors.

## **Car Building**

### **Frame/Cage/Bumpers**

1. You may weld your frame seams  $\frac{1}{2}$ " wide from the front to the tranny cross-member top and bottom side. No frame seams may be welded behind the cross-member. All doors maybe welded solid using only  $\frac{3}{8}$ " cold rolled filler, or up to 3" x  $\frac{1}{4}$ " thick flat strap. Exterior only may be welded. NO inner seam welding or bolting anywhere!! Trunks/tailgates may be welded solid but must have at least a 12-inch square cut in them. Radiator support maybe welded.
2. If you do not weld your doors, trunk, or tailgate you can chain them with  $\frac{3}{8}$  chain or less and will be allowed 2 chains per seam or you may wire it with #9 wire up to 3 strands in two spots per seam.
3. All cars may begin the derby with four 4"x6"  $\frac{1}{4}$ " thick plates per frame rail. You will not be allowed to add any more than 4 plates even if the car is bent so choose wisely.
4. The cage may be made of no bigger than 6" material. You are allowed one dash bar and 2 side bars. For the two front down bars all parts of the tube must be at least 10" behind the crush-box or if the car doesn't have a crush-box it is from the furthest back part of the firewall. All horizontal bars must be at least 12" off the floor (where your feet are). A halo bar may be ran but it must be ran directly vertical of the back seat bar, cannot be angled. 2 rear down bars will be allowed but cannot act as a kicker in any way or it will be cut. Sidebars cannot be longer than 60 inches and they cannot go past the backseat body mount on a ford or Chevy and no farther back than the front leaf spring shackle on a Mopar. Cage maybe welded to the frame. Any cage parts that strengthen the frame or car will be cut.
5. Bumpers are interchangeable and must be stock appearing. Any automotive bumper and bumper brackets may be used, but not more than one set of bumper brackets can be used. You can weld the bumper brackets or towers to the frame. You can weld bumper brackets and shocks to the bumper. You can weld shocks to shock towers. Instead of bumper brackets you will be allowed to use a 4" wide x  $\frac{3}{8}$ " thick strap extending from your bumper down one side of the frame (cannot be wrapped onto any other side). You will be allowed to wrap this strap around the front of the frame 4" to create an "L" shape this to give you enough material to weld your bumper on. Your factory brackets or your strap cannot extend any further back then the very front most part of your original factory top-front a-arm bracket factory weld. You may use a factory bumper and pull it apart and add whatever you want inside the bumper. If you choose to manufacture a homemade bumper it must conform to the following size limit. It can be no larger than 8"x8" The point must taper over an area of at least 32" Overall the bumper cannot exceed 12" wide at the tip of the point. The point may only extend 4" from the flat part of the bumper. The bumper must be completely in front of the frame rails. No part of the bumper may extend back past the front most part of the frame rails. No sharp edges that would be deemed unsafe. Front bumper must be at least 14" off the ground and cannot exceed 26" in height both measured from the ground to the bottom of the bumper.
6. Rear bumper may have 2 straps from trunk deck or tailgate to bumper not to the frame. Straps can be up to 4" wide and no more than 5" on the bumper and 5" on the trunk or tailgate. Straps may be up to  $\frac{1}{4}$ " thick. Sedans Only: Rear bumper must be at least 16" off the ground measured from the bottom of the bumper.

7. No pinning of the frame. Bolts cannot go thru the frame for chaining or wiring purposes.
8. You may run hump plates. The plates must be one piece and cannot be bigger than 22" long 1/4" thick and must follow the contour of the frame. Plates must be on the outside of the frame. Plates cannot hump plate and leaf a car.
9. There is no frame shaping allowed at all. Do not sharpen the corners of the frame or square them in any way or form. The only frame shaping allowed is 22" total of the rear hump frame.
10. Rusty frames maybe repaired with 1/8" metal, 2" past the rust. Leave 1" not welded so we may see how thick the steel is. We must be able to see the rust the day of the show, pictures will not work.
11. Bent Frames: You will only be allowed 4 total spots per frame rail with no thicker than a 1/4" steel and maybe not be any bigger than a 4"x6" piece. You must least at least 1" between the patches. No doubling of patching. Leave an inch not welded or put a hole big enough for us to see how thick the steel is in the middle.
12. If you are running a 70 or older Lincoln, you must drill a 1/2" hole 6-10" in front of the fire wall on the outside of the frame for inspection purposes.
13. If we have any suspicion that your car might be illegal we will drill one or more holes in your frame.

### **Suspension:**

1. Suspension must be stock height. Leaf springs must be stock. Leaf spring thickness cannot be greater than 5/16" You may add one extra leaf spring as long as the main but it may not be wrapped to form a double main. Leaf springs must stagger down from longest to smallest. You must have a 2" stagger in the back and 1" stagger in the front. If you have a leaf spring on top of the main you will cut it completely out. No flat stacks or welding of stacks. NO Shackle can be bigger than 3" x 3/16" thickness. 6 clamps are allowed per side. Homemade clamps may not exceed 2x4x1/4". You can put spacers in sagging coil springs. You may bolt or wire your coils in to prevent them from falling out. You may loop wire or chain from rear end to frame in 2 spots on each side. No bigger than #9 wire (4strands max.) or 3/8" chain may be used. You may run wire from frame rail to frame rail in two spots behind the rear end.
2. Tie rod ends and rear control arms may be strengthened but must be workable. Tie rod ends must be stock appearing
3. You may convert a Watts Link Ford to a GM rear end in the following way. Use the trailing arm brackets off an older ford or metal of the same size and thickness. You may cut out the package tray out of an older ford and weld it back in with only one pass 1/4" thick. It cannot be positioned to strengthen the rear hump or frame. Call before doing it if there is any question!
  1. Leaf conversions on 80's cars: May only be done if running in an old iron class.
    - a. Must use the factory lower control arm mounts bracket for front leaf bolts. No short stacks or sideways mounted leafs allowed. You may lightly re-weld control arm bracket seams, but no frame reinforcements.

- b. You are allowed 9 leaf's maximum, only one as long as the main (and under the main), and the rest must be staggered every 2 inches. You may use 5 leaf spring clamps per side. No welding. Springs must be of passenger car origin.
- c. May weld 3 inch washer to frame for rear mount bolt. No other welding or bracing allowed on frame.
- d. You CAN NOT weld any frame seams behind the a-arm if you leaf and 80's car.
- e. If you do leaf an 80's car, your DP can not be against the firewall. If you choose to run a DP it cannot touch the firewall, before, during, or after the event if your car is leafed.

### **Body/inside of car:**

1. Body mounts bolts (consist of 2 nuts, 1 bolt, and two plates) can be replaced with up to 1" bolts and the body mounts can be replaced with steel washers no bigger than 3". No body bolt can be more than 12" long except 2 of your hood bolts. (Full Size only) Body mount bolts must be up inside the frame as factory and body maybe sucked down solid. Used cars that have the washers on the bottom side of the frame must drop the body washer down so we can see inside the frame. Body Bolts cannot be welded to the side of the frame. You may add four body bolts. You may weld the spacers to the body but not the frame. Bolts may extend through body and have up to a 5x5x1/4" thick washer on top but must be removed for inspection if we cannot see inside the frame. Radiator support mounts can be 1" and removed and sucked down solid. You may also weld your 2 front radiator support all thread pieces to the top or side of the frame. You may also weld the front body mount spacer to the frame. No other all-thread may be welded to the frame unless specified. Body mounts cannot be used as a kicker or a wedge. You may cut the excess frame off the front rails but you may not move the front body mount. We must be able to see where your front body mount was on your front radiator support mounts. All body mounts must remain in stock location.
2. Hood must be off or open for inspection. Hoods ca not be welded shut. Only bolted, wired or chained. Hood must have at least a 12-inch square hole cut out for fires. You are allowed 16 total bolts in your hood for your cutouts. You are allowed 8 hood bolts and must have at least 4. You can use up to 1" all thread for your hood bolts. Chrysler products may run all thread behind radiator support down to top of frame and be welded to top of frame with no added material. Hood bolts must be sheet metal to sheet metal. Hood plates cannot exceed 5x5x1/2. Angle iron maybe be used as a hood plate but cannot be thicker than 3/16" and not longer than 5 inches long. Only 2 of your hood bolts may go thru the frame.
3. Trunk/tailgate must be in stock location. You may fold over 60% of the trunk lid. No sedagoning of wagons or wedging of sedan trunks. You may run two 1" all thread from trunk lid to frame can be welded to the side of the frame but the other two must go through the body mount hole.
4. You will be allowed 8 spots total inside the car of #9 wire or 3/8 cable or chain.
5. Hardtop cars can weld a strap at the doorpost.
6. May alter steering column.
7. You may cut out wheel wells for tire clearance. Fenders may be bolted with 12 3/8" bolts only. No welding of the cutouts.

8. Must have at least 1 windshield bar in the front windshield for safety purposes. Windshield bar can only attach to firewall sheet metal not to any other bars. Do not connect your bar to your halo bar or roof sign. Your bars must also be at least 3" outside your distributor protector. You cannot run a back window bar at all.
  9. All Fuel Lines Must be ran inside the car with high pressured lines and deemed safe!
- MOST IMPORTANT RULE OF ALL: JUDGES DECISIONS ARE FINAL!**

### **Rules for Compact Building**

1. General Rules and Car Preparation also apply to compacts except for the following.
2. Wheelbase is 108 inches or less with a 4 or 6 cylinder motor.
3. 4x4's can be run but one drive shaft must be removed. No altering Wheelbase
4. A 2x2 ¼ inch thick piece maybe added on the top side of the radiator support but must be between the two pieces of all-thread and cannot exceed the outside of the frame.
5. All Frame and Body seams maybe welded under the hood, firewall forward with no filler.
6. All cage rules apply with the exception that the side bars can be no longer than 72 inches and front dash bar may be against firewall.
7. One back window bar maybe ran in the middle of the back window. It cannot exceed 2 inches wide and ¼ inch thickness and must be in front of the truck seam and cannot be attached to the halo bar.
8. You will be allowed to do one of the following, not both (neither can be 12 inches behind the front of the frame).
  - a. Run a stock shock and bracket that cannot exceed 12 inches. If you do this the shock must be inside the bracket.
  - b. Run a pipe no bigger than 3 inches in diameter or a 3x3" tube. Neither can be thicker than ¼". Neither of these may be longer than 12". If you do this option you must have a ½" hole drilled in your frame at the 12" point. You must also drill in your pipe or tube a ½" hole so we can see how thick it is also. These must be drilled before coming thru inspection.
9. You may run 6 leaf springs anyway you want. Cannot double wrap the main and must be no thicker than 5/16" You may use up to 6 spring clamps. Stagger must be 2" inches in the back and 1" in the front.
10. Any car that is not factory leafed may have a plate 1/8" thick by 18" long by 4" wide, one side only back half of the car only. Rear trailing arms must be located in factory positions.
11. Only 3 layers including factory sheet metal, maybe be used for radiator support. Sheet metal cannot be thicker than 1/8"
12. You may wedge a trunk but if you do your bumper height must be a minimum of 18 inches off the ground from the bottom of the back bumper