Metric/ 80's and Build Class Derby Rules

NOTHING other than what is listed below is allowed
Follow general preparation

ALL rules WILL BE followed or you will NOT run. Judges decisions are FINAL!!!

1. Any questions, call JJ Hamilton at (360) 623-2111.
2. If these rules or a verbal communication with JJ does not say you can do it THEN DON'T. I can't stress enough to call first.
3. Any metric passenger car or station wagon only. (Most 1977 & up GM, 1979 & newer ford, Mercury, Chrysler and 1980 and newer Lincolns) IF YOU HAVE MODEL THAT IS IN QUESTION CALL, DO NOT ASSUME! No trucks, jeeps, hearses, limousines.
4. All drivers and pit crew must sign the driver/waiver paperwork or they will not drive in the event.
5. Driver must wear a seat belt, helmet, long sleeve heavy shirt, or racing type jacket, welding jacket etc. Goggles/glasses.
6. All drivers and ONE crew member must attend the drivers meeting.
7. No hot rodding in the pits, keep it at an idle. This will be the quickest way to be DISQUALIFIED.
8. No drivers are allowed alcohol-period. If you are wearing a driver's band and drinking any form of alcohol- YOU WILL BE DISQUALIFIED. No alcohol in the pits until the event is over.
9. Cars will be re-inspected before any prize money is paid out. The cars will be re-inspected by staff only. Everyone else will stay back until cars are deemed to be legal.

Car Preparation:

1. No restubbing. Original body and frame must be used.
2. All cars must be stock, unless modification is stated in the rules.
3. All glass, plastic, chrome, and interior must be removed from car before arriving to the derby.
4. All trailer hitches and braces must be removed.
5. You must have a 15" x 15" sign on the roof of your car with car number on it for judging and recognition of the car. You cannot use the roof sign to strengthen the car.
6. All cars must have working brakes.
7. NO welding other than what is mentioned in this set of rules. If your car is found with any weld, other than what is allowed, and you refuse to fix it to the judge's satisfaction, you and your car will NOT run!!
8. You must have an air cleaner over the carburetor at all times during the event.
9. Anything can be removed; NOTHING can be added other than what is specified in the rules.
10. **Aftermarket parts that ARE allowed: metal gas tank, transmission cooler, brake & gas pedal, shifter, battery box, steering column up to the steering box, driveline, driveline brake, motor, rear ends (see rear end section). BONUS OPTION (see engine/transmission section)**

Frame:

DO NOT ALTER OR WELD THE FRAME OTHER THAN WHAT IS LISTED

Frame Shortening

1. You may shorten the front frame only. You may cut the frame rails off flush with the front edge of the body mount hole, or up to the core support if there is no body mount hole. If it is a weld on mount leave the remaining portion of the body mount in place. If you remove or alter the core support body mount completely or relocate it you will not run. Core support must remain in its factory position whether welded or bolted.

Frame Welding

1. No re-welding of any factory seams is allowed other than what is specified. If any welding on the frame that is not specified in the rules there will be a 3" on 3" off with full daylight slices in the illegal welded section of the frame.
2. No changing or doubling of the rear package tray.

Frame Shaping

1. No frame shaping is allowed.
2. You may tilt the frame in 1 location of your choosing, in 1 of 3 ways.
   A. Cold tilt
   B. Pie Cut and re-weld with a single ½" weld, no added steel.
   C. 79-02 Fords may cut tabs at crush box and re-weld.
3. You may notch the frame in the trunk area only.
4. No fresh paint or undercoating on the frames at all.

If your frame is rusted through, call for instructions on how to fix the rust hole. **DO NOT FIX IT WITHOUT CALLING AND EXPECT TO ALLOW YOU TO RUN IT.**

Rear Suspension:

1. Suspension must be stock components and working. No coil spring to leaf conversions or vice versa.
2. Leaf springs must be made of stock spring material, with a 2" stagger on front and back of each spring, and no springs can be as long as the main leaf. You can only have a total of OEM leaf springs per side. No duct taping leaf springs. No short leafing. You must use the factory shackle front and back mounting locations distance.
3. You can change coil springs to a stiffer spring, you can double the rear springs (they may be tied together in no more than two spots), or put spacers in coil springs to get your height, do not raise the suspension any other ways except what is listed above. Coil springs may be welded to the axle only.
4. You may use 3/8" chain around your axle to the frame hump with one wrap (this may only go thru the sheet metal directly above the hump), links may not be welded or bolted to the frame.
5. No means other than tires and springs may be used to raise the cars suspension.

Rear Ends:

1. Use any factory 5 lug rear end. You may interchange make and models. No Hybrids, floater style or aftermarket rear-ends "Postal". Back braces are welcome. Braces may not extend more than 4 ½" on the outer 10" of a stock size axle tube or 10" on the remaining housing. No axle savers allowed. Axle may not add or be used to brace, bridge or reinforce the frame rails. Maximum of 35 spline axels. May be checked at Officials discretion.
2. You can tilt rear end if you wish. Factory trailing arms may be reinforced.
3. Welded, spool or posi-track allowed.
4. You may convert a Watts-Link to a standard 4 link system by using the upper and lower trailing arm brackets off an older Ford. After market trailing arm mounting brackets are allowed, MAX 4" x 6" plates, ¼" thick and may be attached with max of 4 – 1/2"bolts each side. No positioning of brackets to strengthen the frame in any way, must be mounted in the stock location. If tech thinks it's too much you will cut!

Front Suspension/Steering:

1. All suspension and steering components must be car origin and must be in the stock configuration for the car you are running.
2. Stock OEM tie rods may be reinforced. 3/8" Rod 1 x 1 angle.
3. Upper A-arms only may be welded, bolted or chained down but may not be reinforced.
    a. If welded you may only use up two 2" x 4" x 1/8" thick strap per upper A-arm. This strap must weld to the a-arm & frame and cannot extend farther forward or backward than 1" past the widest part of the a-arm frame.
    b. If chained, only one wrap of 3/8 chain and it may not be welded anywhere.
    c. If bolted, you may only use one bolt no larger than ¾ x 6" long, welded to the outside of the frame.

Tires:

1. No split rims or studded tires. All other tires are allowed.
2. Stock rims only, no bead locks or reinforcing or the rim is not allowed.
3. 8-inch wheel center are allowed. No other reinforcements.
4. Valve stem protectors allowed. Wheel weights must be removed.
5. You may NOT change tires after inspection without official's consent.

Bumpers:

The intention of this rule is to allow you to mount the bumpers in such a way that they are less likely to fall off.

1. Bumpers may be swapped.
2. Stock O.E.M. bumpers off passenger cars may be used or a **Maximum** 5" x 5"x **Maximum** 3/16" SQUARE tube may be used. They cannot extend more than 10" from the outside of the frame. No skinning or additional metal may be added.
3. If using a square tube bumper ends must be open.
4. Bumpers may be flipped.
5. Bumpers may be cut so they do not smash into the tires during the event.
6. No chrome may be welded to the body if using compression style bumpers.
7. No additional material may be added.
8. No more than one set of bumper brackets may be used. You can weld bumper brackets or towers to the frame. You can weld bumper brackets and shocks to the bumper. You can weld shocks to shock

towers. You can collapse shocks, and you can bolt the shocks to the towers with ½" bolt or less, and it must be done vertically.

9. No brackets or shock tubes are allowed to extend any further back than the first 10 inches of the frame unless you are using the factory bracket and tube in the factory position.
    a. Instead of using bumper brackets you are allowed to use 1-4" wide x 3/8" thick strap extending from your bumper down one side of the frame and cannot extend any further back than the first 10" of the frame. You are also allowed to wrap this strap around the front of the frame 4" to create an "L" shape this is to give you enough material to weld your bumper to the strap. Plate may be formed but it cannot double at any point. Do not abuse this rule or you will cut it. You will not be able to use a shock tube if using the strap.
    b. Must be on the outside of frame left, right, top, bottom.
10. Bumper height not to exceed 20" to the bottom of the bumper to the ground and must be a minimum of 12" from the ground to the bottom of the bumper or frame. Bumpers must be in stock location.
11. There are 3 ways of "strapping" your bumper on:
    a. Front and rear bumpers may have 4 loops of wire or one loop of no bigger than 3/8" chain from radiator support/trunk lid or deck to bumper (not frame). These cannot be placed in front of the radiator.
    b. You may have 2 front and 2 rear bumper straps that can be no larger than 36" x 2" x 1/4" thick. Up to 8" may be welded to the body and the bumper.
12. If using an aluminum beam bumper, you may weld your front straps around and to the bottom of the frame or bumper brackets. No more than 3" of strap may be welded or connected to the first 3 inches of the frame.
13. Straps may have a hole burned thru it and be placed over the bolt, over core support all thread bolt.
14. 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.

Engines/Transmissions:

1. Use motor of choice; must use stock motor mounts. Motor must be in stock location within reason approx. 5 inches.
2. If trying to mount an engine with an engine cross member and the motor mounts do not line up, you may use 2 6" x 6" x 1/2" plates on the frame engine saddle to attach your engine mounts to. This may not be welded to the outer frame rails.
3. Distributor protectors are not allowed.
4. You may run 3/8" chain from cylinder head to frame chain; cannot reinforce frame.
5. Skid plate/pan protectors may be used, but must only be the size of the pan and they may not be connected together or be attached to the frame or body in any way. This is to save your oil pans and protect the arenas we drive in.
6. OEM transmission cases only. No spacer in between the transmission and motor unless you are using a BOP transmission adapter plate (adapter plate may not be thicker than 3/8" and not extend more than 1" off the transmission).
7. You are allowed to bolt transmission down to the cross member using factory transmission bolt holes near the tail shaft or chain it to the cross member.
8. You must run the transmission cross member in the stock location for the car you are building. If using a tube, you can weld 2" angle iron no thicker than ¼", no longer than 8" to the side of the frame to support the cross member. You must remove the stock mount if you run the angle iron. If you replace the stock cross member it can be no larger than 2" x 2" O.D.x1/4" tubing. The transmission cross member must be one piece and must be straight from side to side. The transmission cross member is

the only method which the transmission may be tied in. A 3/8" inspection hole must be with 12" of center if using tubing.

9. ONLY 1 BONUS of the following choices may be used;
    a. Lower engine cradle and pulley protector (sway bar must be cut completely out)
    b. Aftermarket Bellhousing
    c. 5 Bar Transmission Brace (top only)

Body Mounts:

1. OEM stock size bolt.
2. All rubber body spacer must be in place. DO NOT modify OEM body spacer in anyway. You must leave at least a ¾" space if using the factory rubber spacer. Do not devise a way that enables you to suck them down tight.
3. Bolts may extend through body and have up to a 2" washer on top, washers must be separate and cannot reinforce the frame. Bolts must be up inside of the frame. If you choose to use a body mount hole for your trunk, ready rod does not have to be up inside frame, the plate can go on the bottom side of the frame and be no larger than 3".
4. Radiator support spacers may be removed, and you can suck the radiator support down solid. (see radiator rules)
5. If you have to build core support spacers you may weld it either to the body or the frame mount, but only one side can be welded. Core support spacers cannot exceed 6" in length and 3" in width.
6. Core support body mounts and 2 trunk body mounts may be replaced with 1" all thread, see hood and trunk section.

Body:

1. Body line creasing is allowed on the exterior of the car only.
2. No exterior body sheet metal, trunks or engine compartment rust repair. Floor boards will be allowed sheet metal repair to mount battery boxes, gas tanks, etc. for safety.
3. No buffing or grinding frames or bodies except where welding is specifically allowed in these rules.

Doors

1. You may weld your doors shut with nothing larger than 3" x 1/8" strap or ½" round stock and must follow the door seam. 5" on 5" off door welding. Do not overlap strap or you will cut the strap off. Or doors may be tied shut in six locations using ½" bolts no longer than 6", 3/8 chain, or #9 wire. If we do not deem the car safe to compete you will add more fastening points.
2. You may smash the inner and outer skin together of the window opening and weld them solid. You may use the same filler as in welding the door seams but no longer than the window opening per door.
3. Driver's door and driver's side of front windshield may have "netting" for driver's safety. NO other windows may have "netting".
4. You are allowed to add bracing to the exterior side of the driver's door. The bracing must not stick any further out than 2" from the door, and may not have any sharp edges. Door bar cannot extend past wheel opening. 12" channel maximum.
5. You may cut wheel wells for tire clearance. Wheel openings may be bolted together with 5-3/8" bolts or less with 1.25" diameter washers. No rolling your fenders and welding them. If you wrap or fold your fenders around the front of the core support do not exceed 4-3/8" bolts with 1.25" washers to bolt back to the core support of fender.
6. Wagons must remove all rear decking and seat components. All other rules above must be followed.
7. No front clip sheet metal swapping.

Radiators/Radiator Supports:

1. Only OEM style passenger car radiators may be used. Aluminum racing radiators of the same style may be used.
2. Radiator must be attached to the core support. Radiators may be mounted in such a way to hold the radiator in place, not strengthen the core support. For mounting radiators, you may use up to 4 – ½" all thread. This may pass thru the bottom of the core support. This must not pass thru upper core support. It may be attached to a 2"x6 1/8" flat steel and must be welded to the core support they must be outside the fan. Metal may be used to mount the radiator.
3. No radiator guards or foam are allowed to use.
4. You may not add cooling capacity. No supplemental cooling devices allowed (electric fans are allowed).
5. No antifreeze.
6. Radiator loops may be used.
7. Front core support cannot be moved back from its factory location. It must stay bolted to the fenders the same way that it came from the factory.
8. You may have up to 1" all-thread, it may go from the hood to the frame, but must go through the front body mounts, this may be welded to the frame after it passes through the body mounts but may not be nutted underneath the body mount if it is welded.
9. Radiator core support seam welding is NOT allowed.
10. Radiator supports may not be welded to the frame, bumper brackets, bumpers or anything else.
11. If using a condenser to protect the radiator, it may be tie wired to the core support only.
12. No foam fill can be used.

Cages & Door Bars: (See Diagram on last page)

1. All cage material must be no larger than 6" O.D., unless specified for a specific rule smaller. It must also be a minimum of 4" off the floor everywhere except the down legs going straight down. No cage material may be within 6" of the firewall and be a minimum of 4" off the transmission tunnel. All bars must be straight.
2. You may weld a bar behind the seat from doorpost to doorpost, it can be an X, do not connect directly to frame, and you may also have a single bar (with no extensions), across your dash area to replace you dash. Side door bars may not go past the front dash or rear seat bar. End plates are mandatory with a max of 10" x 10"; end plates must be a minimum of 2" larger than the bar being used.
3. You may run a bar connecting the dash bar and rear seat bar inside of the front doors only.
4. You may run a total of 2 down bars from the rear seat cage bar to the floor; all down bars must be vertical.
    a. Back of seat cage cross bar, including roll bar has to be placed above the rear side of the foot well kick up directly behind front seat. You may weld two down bars from the rear seat bar to the floor pan or frame vertically. These down bars may only be welded to the floor sheet metal or top of frame. No bolting. These bars cannot exceed 3" x 3" and the front side of the bar must be even with the foot up well. Official has discretion.
5. You must have a roll hoop/halo behind the seat, above the rear seat bar; this may extend to the floor as your rear seat down bar, not in addition to, following rule 4.
6. You may weld a steering column mount to the cage.
7. Gas Tank Protector- you may run a gas tank protector. It cannot attach to anything other than your cage. It must be centered between your frame humps. It cannot exceed 36" wide. It can angle in from your roll over protection. It must be a full 4" away from rear sheet metal, which cannot be removed.

The bracing must be 4” above all floor sheet metal, which cannot be removed, measured from the highest flat area of the floor in the rear seat area.

Hood and Trunk:

1. **Be prepared to remove your hood if the inspectors deem it necessary before or after the event.**
2. Trunk lid and hood must be in stock location and the hood must be open for inspection or have a min 20” x 20” hole for inspection and fire.
3. Any holes in hood may be bolted back together with 3/8” or less bolts and 1.25” diameter washer no more than a total of 8 bolts allowed to pinch the hood sheet metal back together. You may cut multiple holes but do not exceed the 8 bolts.
4. Trunk lids may be tucked, wedged, or canoed. Deck lid must stay on factory hinge and must stay 8” above trunk floor (measured from top of frame rail to the lowest point of the deck lid). If it is close be prepared to cut a hole for measurement purposes.
5. Speaker deck may not be removed.
6. You are allowed 8 spots to bolt or chain the hood and trunk including the 1” all thread to the frame. All other tie down spots must be sheet metal to sheet metal only. A combination of the following four ways to secure the hood and trunk is allowed. You may mix and match the types of hood/trunk fastening, but not exceed 8 total.
    a. If bolting, the hood and trunk bolts may be no larger than 8” x 1” with two 6” x 6” x 1/4” square or 6” x 1/4” round washers.
    b. Chains, #9 wire or cables may be used to secure the hood and trunk, 3” x 3” x 1/4” plate on top of sheet metal and may be welded in place to the sheet metal only.
        i. Chain and cable may be no larger than 3/8”. If excessive chain or cable is found. It will be cut. If using chain or cable it must be singled looped. Two wraps of #9 wire, ½” all thread 8” maximum length, or 3/8” chain may be used no attachment point may come in contact with the frame. All wraps must go the shortest route to tie the lid to the body.
    c. Two 6” lengths of 2” x 2” x 3/16” angle iron may be welded to the body only back to back and bolted together with two a 3/8” bolt. These cannot be welded across the seam.
    d. On the trunk only, you may use 6” lengths of 2” x 1/8” flat strap may be welded to the body only.

Windshield Bars and Firewall:

1. Firewall- You are allowed to lay the firewall flat by cutting reliefs and pounding flat. If you shape the firewall or weld it to reinforce it you will cut the firewall out anywhere it is deemed to be reinforced. If you add any metal to the firewall you will be loaded without the opportunity to fix it.
2. Front Window Bars- For safety, all cars must have (2) windshield bars extending from the roof of the car to the firewall/dash, straps cannot be any larger than 3/8”x3” flat strap. If and only if you remove the firewall/dash completely between the straps you are allowed to connect these two bars. The removed part must be completely removed and must be as wide as the vertical bars. The horizontal bars connecting the two vertical bars cannot be any larger than 3/8” x 3” straps. No more than 6” of strap material allowed on the roof and no more than 6” of strap material allowed on the firewall. Do not go over 6” on roof or firewall or you will cut. Must be min of 16” off of the pillars.
3. Rear Window Bar- Must be in the center of the roof. May extent onto roof no more than 6” past window seam. 2” x 2” O.D. bar may only be attached by welding directly to the sheet metal or with a mounting plate no bigger than 6” x 6” by 3/16” angle or plate. Bottom side of window bar must

come in contact with front deck lid seam. If using rear window bar in a station wagon tailgate windows are treated as a rear window, while the tailgate itself is considered a trunk, but must be mounted at the top of the tailgate, and the tailgate must be in original closed position.

4. No wiring or chaining of any window openings.
5. Window bars may not be attached to the halo bar or any cage components.

Fuel Tank, Oil Coolers, & Transmission Coolers:

1. Original gas tanks must be removed.
2. Only metal marine type tank, metal fuel tank or derby type metal fuel tank is required. Marine tank must be in box.
3. Place fuel cell behind driver's seat or in the center of the car where the back seat used to be. Must securely be mounted behind the driver's seat with bolts, metal straps, or chain. No seat belts or pull tie straps may be used. No other source of gas inside the car at all.
4. 7 gallon (within reason) max tank maximum may be used.
5. Fuel lines must run inside the car, not under the car along the frame. Fuel line must be inside a protective line within the engine compartment.
6. Tranny coolers are allowed. These coolers cannot be placed to reinforce the car. No bolts may extend through the frame to create a body mount.

****IF USING AN ELECTRIC FUEL PUMP, YOU MUST BRING IT TO INSPECTORS ATTENTION AT TECH****

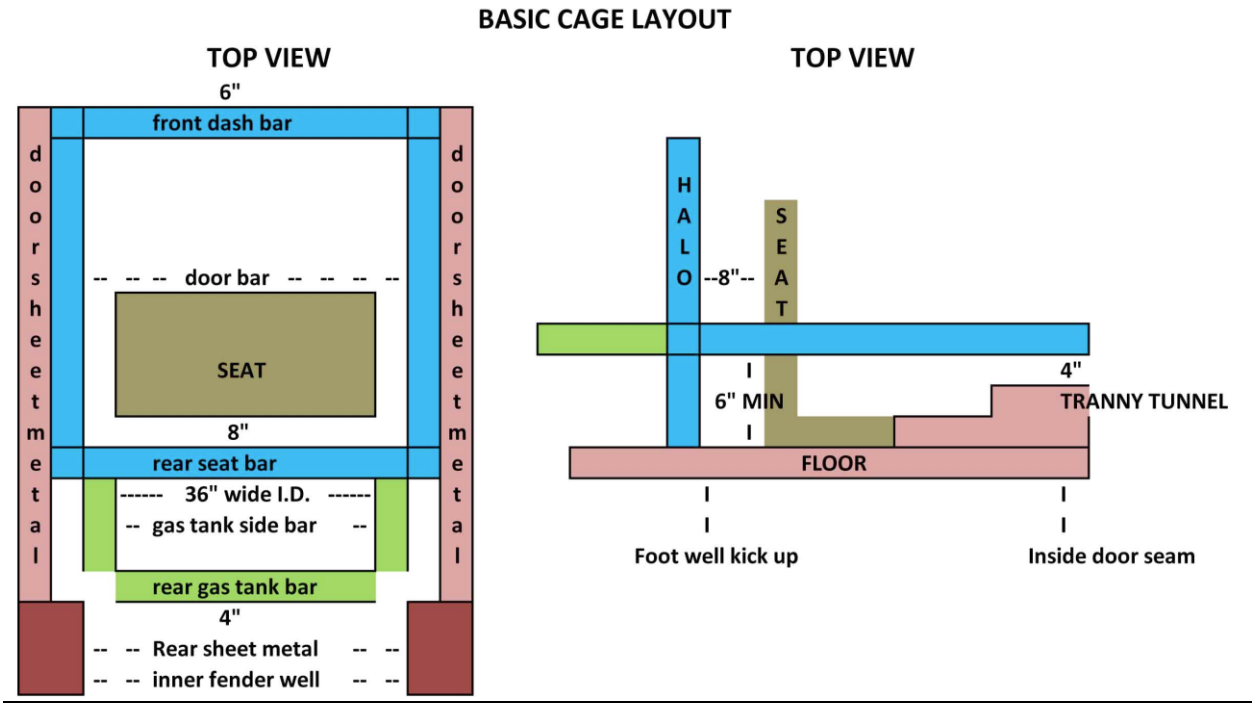
1. Electric fuel pumps are allowed. The on/off switch must be easily accessible and clearly marked with bright paint. An "E" will be attached to rear pillar during tech to identify the electric fuel pump.

Batteries:

1. Batteries must be moved to passenger front floorboard. They must be properly secured and covered, unless you are using a gel cell battery. Up to two 12-volt batteries may be used.
2. Battery box must be made out of metal! It must be bolted to the floor. Bolts may not go thru or around the frame. Seat belts or pull type tie downs may not be used.

Repair Rule:

1. 4 frame rail plates per frame rail may be used: 4" x 6" x 3/16" of which only 3 may be used in front of the transmission cross member per frame rail.
2. If you cut you cannot use the excess pieces anywhere else.
3. Plates and weld must be separated by 1".
4. No other frame welding will be allowed! **All other repairs made to the frame will be removed.**
5. You may patch any hole in the doors or floor of the car for SAFETY only. You must use sheet metal only. And your patch may be only 2" larger than the hole you are patching.
6. No #9 wire may be used for repair.
7. Hump plates ok. 1/4 thick 6" tall, 22" long



Bonus Option Examples

Lower Engine Cradle & Pulley Protector

Aftermarket Bellhousing

5 Bar Transmission Brace