DEMOLITION
ENTERTAINMENT MOTORSPORTS ORGANIZATION

Full-Size Pro Division Rules

Sanctioned by D.E.M.O.

Competition Format

Competitors will compete in 32 team bracket. See bracket for details

Car Choice

1. Any American made RWD sedan or station wagon, including imperials. (FRESH CARS ONLY)
2. No coach conversions, sedan bodies on wagon frames or vice versa.

General

1. All welds on cars must be a max width of ½ in. and ¼ in. tall from the surface, single pass only.
2. No cross breeding of frames. Stubs must be from the same make/model of the car.
    a. You may pitch and reweld stub to the side rails.
        i. The bottom seam cannot be rewelded and must remain unmanipulated in factory condition.
3. No buffing, grinding, or sandblasting entire frames. You may only clean up frames where they need welded.
4. No painted frames or overspray on frames.
5. No manipulation of mounting plates or any other added materials unless specifically stated in these rules.
6. A minimum 24x16 in. roof sign is required on all competition vehicles with visible car number.
7. All competition vehicles are required to have an operational seat belt/harness for safety purposes.

Front Frame

1. No frame shaping or stretching permitted beyond what is reasonably required to pressurize the engine into the car. This will be at the inspector's discretion to determine.
2. Frame rails may only be shortened to the front of the core support mounting hole, unless otherwise stated.
    a. The entire mounting hole must be visible and cannot be cut into in any way.
        i. 1976 and older Cadillac's must measure 18 in. from the spring pocket forward to bumper mounting point.
        ii. Full Frame Chryslers may be shortened 4 in. max, from front most part of inside frame rail at front bumper.
            1. The Y's can be closed by pulling the outside part of the frame in, on applicable cars.
        iii. Sub frame Chryslers cannot be shortened at all.
            1. The Y's can be closed by pulling the outside part of the frame in, on applicable cars.
    3. Upper and lower frame seams (exterior seams only) may be welded from the firewall (this includes the boxes) forward. (Ref. General 2. a. i.)
        a. (1) single bead that is max of ½ in. wide, ¼ in. tall.

4. Seam welding is limited to main frame seams and front and back vertical engine saddle seams, only.
5. Engine saddle can be plated with a maximum of (3/8) inch thick plate on top ONLY where engine mounts on the top of the saddle.
    a. The maximum width of engine saddle plate can be 9 inches wide.
    b. Engine saddle plate cannot extend more than 1" on to the frame from the engine saddle., this max overlap your bumper plate if you choose.
        i. If engine saddle plate extends backwards towards driver for motor mounting purposes, it may not be excessive and must be 2" inches away from frame.
6. All cars get (1) tilt in (1) direction, only.
7. Frame rails cannot be cut apart, narrowed and then re-welded in any section of the rail.
    a. Frame locators identifying the (2) halves must be visible.
    b. Width measurements will be taken and compared to factory dimensions.
8. A-arm brackets and a-arms cannot be moved from factory locations.

Center Frame

1. No frame shaping will be permitted.
2. No modifications on center rails beyond what is allowed to mount crossmember and seam welding stated in front frame section will be permitted.

Rear Frame

1. Hump plates will be the only modification permitted.
    a. Must be centered on the hump and must contour the frame.
        i. No more than 1 in. overhang on top or bottom of frame.
            1. No manipulation of overhanging metal to frame and/or welding.
        ii. Must be welded to the OUTSIDE of the frame, ONLY.
        iii. Max of (1) "teepee" per plate.
    b. Max length – 22 in. (Coil/Unibody) / 11 in. (Leaf sprung)
        i. Max thickness – ¼ in.
2. No frame shaping, squeezing, narrowing or seam welding will be permitted, unless otherwise stated.
    a. Rails will be measured from side to side and compared to factory measurements.
3. The top of the rails can be dimpled or cut for bending purposes.
4. You will be permitted 1 of the 3 options below to tie the rear rails together behind the hump.
    a. Option 1: Use (2) Double strands of #9 wire that goes through a single 3/8ths by 3 in. max chain length that is welded to the inside of the hump area.
    b. Option 2: Use (1) single 3/8ths max cable that goes through a single 3/8ths by 3 in. max chain length that is welded to the inside of the hump area.
    c. Option 3: Use (1) 3/8ths by 3 in max length chain link length chain and weld (1) link on each side to the inside of the hump area.

Front Suspension

1. A-arms must be OEM factory from passenger car origin.
2. A-arms are interchangeable. This must be a direct bolt on to factory configuration with no modifications.
3. No aftermarket coil springs, or spring spacers permitted.
4. Only (1) car coil spring allowed per pocket.
5. Factory shocks may be replaced with (1) piece of 1 in. all thread, max.
    a. (6) nuts (standard 1 in. nut for 1.5 in. wrench) and (3) washers per piece, max.

        i. Nut and washer on lower a-arm may be welded.
    b. Measurement for lower a-arm washer is 5x5 in. x (¼) in. thick (or 6 in. round outer diameter).
    c. Top nut and standard 1 in. washer with 3 in. diameter may be welded.
    d. No welding on bottom a-arm other than nut and washer for all thread shock, ball joint rings, and bump stops for spindles.
        i. Bump stops may be no larger than 2x2 in. x (¼) in. thick box tubing and cannot be longer than 2 in.
6. Upper a-arm may have strapping to weld arm down.
    a. You are permitted a total of (4) a-arm straps per side. (2) per lower and (2) per upper.
        i. On the upper a-arm you are permitted to have (1) strap on front side toward bumper and (1) strap on back side of a-arm toward driver.
            1. Measurement of flat strap can be 2 in. wide x 4 in. long x (¼) in. thick. No parallelograms.
        ii. Upper A-arm strapping must follow the contour of a-arm on front and back sides going down to ball joint.
7. A-arms cannot be moved from factory location.
8. Towers and brackets may be removed in order to install front bumper bracket.
    a. Must be reinstalled in the factory location as it came on the car.
    b. May be welded back to the bumper bracket in factory location, at factory angles, only.

Steering

1. Unless stated in the rules, steering components must be of factory car origin, remain stock and mount in factory location.
2. Hydro steering will be permitted.
    a. Steering control module and steering box permitted, only. (NO RACK AND PINION OR CYLINDERS)
3. You may use an adapter plate, but it cannot strengthen the car in any way. (NO WELDING OR TACKING)
    a. Max length – Adapter plates 12” by 7”
4. Aftermarket spindles are permitted.
    a. Aftermarket hubs, spindle nuts, ball joints OR Heim joints are permitted.
        i. Bolts must be separate for each Heim. 3/4 in. 6 in long bolt, max
        ii. Heim or ball joint sleeve, ONLY may be welded to upper and lower a-arms and spring bucket on top side.
    b. Ball joint sleeves and/or rings cannot exceed 3x3 in. tall or 3/8 in. thick and can be welded to the spring pocket.
5. Aftermarket tie-rods are permitted.
    a. Must mount in factory manner.
    b. No big chief tie rods permitted.
    c. Heim joints may be used as tie rods.
        i. 3/4 in. 3 in long bolt, max
6. Idler arms may be welded with (4) 1 in. welds, max.
7. Sway bar can be aftermarket 1 In. round stock max.
    a. Sway bar must be mounted in the factory location.
    b. The bushings may be removed and a 3x3 in. x ¼ in. flat stock must be wrapped around the sway bar to weld to the bottom of the frame.

c. The sway bar cannot run the profile of the frame and must be bent down from the mounting location and bolted or welded to the lower a-arm; maximum contact with the lower a-arm is 2 inches and it can be bolted or welded.
    i. Sway bar can be maximum of 18 ½ inches from the mounting point on the bottom of the frame to the lower a-arm.
d. (1) single 5/8-inch maximum bolt may be used. 03 sway bars must be located within 4 inches of factory location.

Rear Suspension

1. Rear ends may be chained to the humps to prevent them from coming out from under car.
    a. You may weld (1) link per end, max, to the hump plate.
    b. (1) wrap around the frame.
    c. 3/8 in. link size, maximum.
2. "Blocking" or any other temporary means of achieving minimum bumper/frame height as stated in these rules is prohibited. If observed during/after any inspection, sanctions may result as determined by D.E.M.O. officials.

Coil spring cars –

1. Any OEM automotive car coil spring is permitted.
    a. Coil springs may be wired or chained to rear end and package tray (nothing excessive).
2. Factory shock may be replaced with (1) piece of 1 in. all thread per shock, max.
    a. If replaced it must run through the spring.
    b. All thread may run through the body and act as a body mount, but all thread must run through coil spring and exit through factory hole on package tray.
    c. Coil spring must line up with axle tubes.
    d. All thread may extend 6 in. max, above the package tray.
3. Rear-end must mount in factory 4-link configuration.
    a. Watts link conversion permitted for any coil sprung sedan.
        i. Control arms may be replaced with 2 in. wide X 3 in. tall x (¼) in. thick box tubing, max.
        ii. Control arms must pivot freely.
        iii. Upper brackets must be no larger than 6 in. tall x 12 in. wide x (3/8) in. thick and must be (2) separate brackets.
        iv. Each bracket can be attached with (4) 5/8-in. bolts, max.
        v. Lower arm must be in the factory location or relocated to the inside of the box (towards the drive shaft.
            1. May be reinforced with 1/8 in. factory bracket flat plate
            2. If you relocate the box to the inside of the box (towards the drive shaft) you can bolt it using (4) 5/8 in. bolts, max.
                a. This female box can be a maximum of 9 in. long x 5 in. tall and ¼ in. thick plate.
                b. Welded in factory location -
    b. Control arms must be no longer than factory length but may be shortened.
4. No leaf spring conversions for coil sprung cars permitted.

Leaf spring cars –

1. Leaf springs may be a maximum of 5/16 in. thick and no wider than 2 ¾ inches.

a. The main spring must be a factory length spring to the make and model of car you are running.
    i. Must be on top of spring pack.
    ii. Eyelets must be factory configuration. 9/16 in. bolt, max
    iii. Must have 1 in. stairstep down on both ends.
        1. Stairstep starts at center of eyelet on both ends of the main spring.
b. Maximum of (7) total springs total permitted.
    i. (6) 3/8 in. thick clamps per side permitted, max.
        1. Plates OR weld on clamps permitted.
            a. If using plates for clamps, the plates cannot exceed 3 in. x 4.5 in. x 3/8 in. thick.
                i. Max of (2) bolts per clamp.
                ii. The plates cannot connect to the frame in any way before and/or after show.
                iii. Plates cannot be welded to the springs.
        2. (1), ½ in. center pin is permitted per spring, max.
c. Leaf springs must mount as they did from factory and cannot be re-located.

2. Shackles may be replaced with 1/4 in. factory replica but must remain as a factory working shackle.
3. Rear-end must be on top of main spring.
4. Shocks can be replaced with 1 in. all thread and can run through frame / body in factory location.
    a. (1) piece of all thread per shock location permitted.
    b. Rear-end mounting pads are not to exceed 12 in. in length.

Wheels and Tires

1. (4) tires max per car.
    a. Max tire size – 16 in.
2. Wheels and tires may be any configuration.
    a. No studded or foam filled tires on rear.
3. Tires cannot be replaced with steel paddles.
4. Bead locks permitted - 21 in. outer diameter, max.

Front Bumper

1. **(Only)** 74-76 Factory OEM Caprice/Impala OR D.E.M.O. approved front car bumpers which fall within the specs of a 74-76 impala bumpers are permitted
2. D.E.M.O. approved Caprice/Impala replicas are permitted.
    a. (NO CHRYSLER POINTY BUMPERS OR REPLICAS PERMITTED).
    b. These bumpers are not permitted to have any embellished points or slants, period.
    c. May be seam welded and stuffed.
    d. Must have a flat bottom.
    e. No sharp or jagged edges permitted anywhere on bumper for safety reasons.
3. Bumper will be mounted as follows:
    a. Remove factory shock and/or bracket completely and replace with (1) 4 ½ in. x 3/8 in. thick plate (max) welded to top or outside of frame (facing the tire) only.
        i. Must be a flat plate - No TP plates will be permitted – it must be contoured to 1 side of the frame only.
    b. This plate can extend no further back than the center line of the spring pocket.
        i. On 03 and newer – this is the center between the two factory pins.

c. Plate cannot be folded over (2) sides of frame and welded.
d. Plate must touch backside of bumper.
e. Plate can be cut to follow contour of frame.
f. Also, a 2 in. wide x ¼ in. thick x 8 in. long flat strap can be welded to bottom of frame.
    i. This plate must touch the bumper and run straight back.
g. Core support bolt can run through this strap if applicable.

5. The maximum height will be 20 inches from the ground to bottom of the bumper.
    a. No part of the front bumper can be behind the front of frame toward driver.
    b. (1) 6x6 in. x ¼ in. plate to achieve flat mounting surface per mounting location permitted on each frame rail.

Rear Bumper

1. Any OEM automotive rear car bumper or aftermarket DEMO approved replicas will be permitted.
    a. No steel tubing bumpers will be permitted.
    b. All bumpers must be a minimum of 6 inches tall.
    c. Bumper may be seam welded
    d. Bumper may be stuffed but must be inside the skins.
2. Aftermarket replica rear car bumpers are permitted but must bolt together.
    a. These bumpers can also be, seam-welded and stuffed.
        i. Bumper may be stuffed but must be inside the inner and outer skins.
        ii. It must be a minimum of 6 inches tall.
3. Bumpers can be angled at 30 degrees.
    a. This can be obtained by adding 30-degree bumper bracket plates.
        i. Must meet all rules on bumper brackets and can not extend more than 5” off the back of the frame.
4. No sharp or jagged edges permitted anywhere on bumper for safety reasons.
5. See below for mounting:
    a. Bumpers must be mounted in the factory location on all makes and models.
        i. Wagons are not permitted to relocate rear bumper to the frame at any time.
    b. No Factory bumper brackets of any kind will be permitted.
    c. You must mount your rear bumpers as follows:
        i. Coil Sprung Cars – 1. You may use (1) 14 in. x 4 in tall x 1/8 in. thick flat plate per frame rail, on the bottom of the frame only.
        ii. You must have a ¾ deep dimple in both rails within the 14 bumper bracket plate.
        iii. You may also add (2) additional 2 in. wide x 4 in. long x ¼ inch thick straps (2 per mounting location).
        iv. All plates must touch the bumper.
    d. Sheet metal may be removed to hardnose bumper.
        i. Nothing more than needed to attach the bumper.
        ii. Must conform to trunk rules.
    e. Quarter panels cannot be shortened beyond what is necessary to mount bumper.
    f. No part of the rear bumper may be in front of the back of frame toward driver.
    g. No frame rails can be shortened at all.
6. Minimum rear bumper/frame height –
    a. Coil Sprung cars must be a minimum 16 in. to the bottom of the bumper.

i. Coil sprung cars will be measured to the lowest part of the bumper throughout the entire show.

b. Leaf sprung cars will be measured 14 in. to the bottom of the bumper throughout the entire event.

i. If the rear bumper comes off or is removed, you will be measured 16 in. to the bottom of the frame right behind the shackle.

Body Mounts

1. (1) 3 in. by 1 in. tall body spacer maximum can be welded per body mount hole.
    a. Maximum bolt size is 5/8 in. diameter x 6 in. long.
    b. Washers for body bolts may not be larger than 4x4 in. x ¼ in. thick.
    c. Body bolts cannot be moved from the factory location. Bolts must start in the factory location on frame and may run through body and be secured on top side with (1) washer and (1) nut.
2. No extra body mounts unless otherwise stated. The body bolt directly behind the rear humps can be threaded rod and may run all the way through the trunk. Fire wall body bolts can only stick up a ½ out of a single nut.
3. Core support mounts may run from the top of the frame or core support mount to the bottom of the core support only.
    a. Maximum of (4) nuts and (4) washers per core support mount permitted.
        i. Nuts and washers can be welded if desired on core support body mount only.
        ii. Washers on core support body mount are 3 in. round washer x ¼ in. thick.
        iii. Maximum – 5/8 in. bolt to be used for the core support.
4. A maximum of (2) nuts and (2) washers for all other body mounts permitted.
    a. Must be free floating.

Cage/Gas Tank Protector/Halo Bar

1. No cage component, including halo bar, can be larger than 6 in. material (round or box tubing) except the (2) side bars, which can be 8 in. max.
2. The side bars may be 68 in. max length and must be 4 in. away from wheel tubs, this includes the halo bar.
3. If you stack cage material it must conform to all cage specifications and when stacked it cannot exceed the max allowed measurement when added together.
4. No cage component can be contoured or rounded. A 4-point cage surrounding the driver consisting of a maximum of (1) dash bar, (2) side bars and (1) rear seat bar is permitted.
    a. The dash bar and window bars must be minimum 4 in. away from the DP or any other engine cradle component and 5 in. above the topside of the transmission tunnel.
5. The only connecting points for the cage are the a-pillar, b pillar, and down legs.
6. You are permitted up to (6) down legs. (3) per side.
    a. Max size of 6x6 in. x ¼ in. material.
    b. Must be vertical and must run off of the side bars.
        i. May be welded to the top side of the frame, ONLY.
    c. It must not be further forward than the front interior door seam.
    d. Must remain entirely in front of the rear body bolt before the hump.
    e. If you run the halo to the frame, it will count as 1 of your 3 down legs per side.
7. A 10x10 in. x ¼ in. thick plate max, may be added to the b- pillar ONLY to assist with attaching cage to body.

    a. No added metal to a-pillar mount permitted.
8. The bar behind the seat must be no farther back than the kick panel.
9. You may have a center bar connecting the rear bar and dash bar.
    a. The center bar cannot extend behind the rear bar or in front of the dash bar and must be at least 4 in. above the top side of the transmission tunnel.
10. A 32 in. wide max gas tank protector may be added and must be centered in the car.
    a. Must be 3 in. off the floor measured from the body bolt height.
    b. You will be permitted (2) 5/8ths bolts to attached package trey.
    c. Sheet metal in between the gas tank protector and package tray cannot be removed.
11. A Halo bar is mandatory and may attach to the frame, (will count in 68 in. side bar rule).
    a. The halo bar may be 6 in. material max.
    b. Must be vertical coming up from frame and must run straight across roof side to side.
    c. Extensions may be no larger than 2x2 in. x 6 in. long x ¼ in. max. Maximum of (2).
12. Cage, gas tank protector, and halo bar can have (1) gusset per corner; max. length - 30 in.
    a. Gussets are considered a cage component and must adhere to the size limitations.
13. Any material protecting the gas tank must be vertical and cannot extend upward more than 5 in. above the tank.
14. No cage component can be farther back than where the gas tank protector meets package tray on coil spring cars.
15. Gas tank protector cannot be beyond the body centerline of the rearend for leaf spring cars.
16. A 2x2 in. x ¼ in. square tube must be welded from the dash bar to the halo over the a-pillar to prevent the roof from caving on the driver side.
    a. You can weld this bar in.

Interior Bolt Ins

1. Aftermarket components for controlling the car are allowed.
2. No interior component including pedals, battery box, and steering column may connect or strengthen the car in any way.
3. Mounting of these components may not attach to, or be within 2 in. of the frame, crossmember, and/or body bolts.
4. Transmission coolers are permitted but cannot be mounted in a way that strengthens the car.
5. Fuel cells and batteries must be safely mounted (2 batteries max).
6. Bolt ins cannot extend beyond the floor where your feet are or under the seat.

Doors

1. Shaping of sheet metal on doors is allowed but sheet metal cannot be doubled over and / or welded.
2. Doors can be welded 5 in. on and 5 in. off, on the outside of car only
    a. Max material - 3x5 in. wide x 1/8 in. thick strapping.
6. Both front doors may be reinforced with 3/16 in. thick metal on the outside and inside.
7. Driver's door reinforcement is mandatory.
8. The outside door skin cannot extend more than 3 in. from the front factory door seam or rear door seam in any direction.
9. The inner door skin may be welded from the rocker to the top of the door, only.
    a. Cannot exceed length of inner door seams.
10. Driver and front passenger door only is permitted.
11. Inner and outer door can be welded together on topside only on all doors.

a. Metal to achieve this must be 3 in. wide x ¼ in. thick strap, max.

Quarter Panels

1. Quarter panels may be bolted together using a max of (5) 3/8 in. bolts with 1 in. diameter washers.
2. Front and rear quarter panels may be creased.
3. Shaping sheet metal on quarter panels is allowed but sheet metal cannot be doubled over and/or welded.
4. No adding metal to quarter panels permitted.
5. Bottoms of quarter panels may be folded up to trunk pan and may be attached in (3) locations ONLY by using 3/8 in. bolts and 1 in. outer diameter washers OR 1 in. long welds.
6. Quarter panels must remain vertical. (It is understood that the shaping of sheet metal affects vertical appearance.)
7. The top of quarter panels must not be pushed in any farther than the inner edge of frame rail on the same side of car.
8. The top of the quarter panel must measure 10 in. tall from the body bolt elevation.
    a. This measurement will be taken at the top of the quarter panel above taillight area.
9. You will be permitted to completely remove quarter panel sheet metal (all except the floor pan) if you desire.
    a. This would resemble the half trunks on a Cadillac.
10. The remaining upper portion of the quarter panel must slope upward toward base of c-pillar.
11. The bottom of the quarter panel can be pushed in until it meets the trunk floor.

Trunk

1. Speaker decks cannot be removed.
2. The trunk lid must be from the same make of the car and must be a trunk lid.
3. No metal may be added to trunk lid or rain channel.
4. (2) 8x8 in. holes must be cut in the trunk lid for inspection purposes.
    a. Holes must be over body mount area behind humps.
5. The back of the rear wheel tubs and all body mounts in trunk must be accessible and visible during inspection.
6. The trunk lid must mount in factory location but can be contoured down toward top of the package tray without exceeding quarter panel rule.
7. Bolts for hinges must be factory size but can run through the top layer of trunk lid and be secured with washers/nuts with the washer being no larger than 1 in. outer diameter.
8. Trunk can be attached to car by welding 5x5 in. x 1/8 in. thick plates on exterior trunk seams only.
    a. The 5 in. on, 5 in. off, method will be utilized.
    b. Lower trunk/tailgate seam plates may attach to the rear bumper.
9. Station wagon tailgates must remain in the factory location but can be lowered into the box if applicable.
    a. Attaching tailgate to car must be the same method as a trunk lid; 5 in. on and 5 in. off on the exterior only.
10. Trunk floor cannot be narrowed, squeezed or cut and rewelded within 2 in. of the outside of the rear frame rail on either side.
11. Coil spring cars may have (1) extra body mount max per rail in trunk area.
    a. A maximum of (1) piece of 1 in. diameter all thread may be used per location. (30 in. length, max)

b. All thread (only) may weld to frame but must be in between trunk body mounts and remain vertical.
c. (2) standard nuts and (2) 3 in. washers may be used per side.
    i. Standard size nuts and washers must be located on all thread as intended. (NO WELDING)
    ii. Nuts and washers CANNOT be welded to the frame.
d. All thread cannot be sleeved with any additional material.

12. Wagons – If you choose to sedagon a wagon, you are permitted to attach roof material to

Hood

1. Hood must be off for inspection but will be a part of the inspection process.
2. No metal may be added to hood for any reason, except (8) 3 in. round x 1/8 in. thick washers welded on top of hood for hood bolts.
3. Access holes and/or exhaust holes may be bolted back together in a total of (12) locations by using 3/8 in. bolts and 1 in. outer diameter washers OR 1 in. long welds.
4. Hoods can be secured to the car in (8) locations.
    a. Your core support bolts will be considered (2) of the (8) locations.
    b. Factory hinges will be considered (2) of the (8) locations if used.
5. Bolts to secure hood must not exceed 1 in. diameter and 6 in. tall.
    a. Bolts may be welded to fender and/or firewall ONLY.
    b. (1) 5x5 in. x ¼ in. thick plate may be added to each location to assist welding bolts to fender or firewall.
        i. Plate may be folded into an angle if desired.
6. Washers to secure hood cannot exceed 5x5 in. x ¼ in. thick.
7. All hood bolts must be outside of the exhaust tube width.

Firewall

1. No modifications other than flattening window wiper area back/not down to accommodate a distributor protector, attaching window bars per the rules, and/or welding hood bolts on to secure hood per the rules.
2. No rewelding factory firewall seams or adding metal permitted.

Drivetrain

1. Any automotive engine and transmission are allowed.
2. Aftermarket driveshafts are allowed.
3. Any rear end is allowed.
    a. Bracing for the rear end cannot extend more than 13 in. in any direction from the center line of rear-end.
    b. Bracing cannot extend more than 5 in. from the center line of rear-end on the last 12 in. on ends of rear toward tires.
    c. Rearend/Pinon brake protectors cannot be tied in the frame or gas tank protector in any way.
4. Crossmember may be factory car crossmember OR a aftermarket square tube. Max 2x3 in. steel.
    a. Cross member must mount in factory location and must be straight across.
    b. Angle iron to mount cross member can be no larger than 3x3 in. x (¼) in. thick angle iron and no longer than 6 in.
        i. Must attach to the side rails only.

c. Angle Iron or cross member will not be permitted to attach to any secondary frame finger such as a Cadillac, before or during the derby.
d. Cross-member must touch angle iron.

5. The engine and transmission mounting are addressed below.
    a. Full cradles, aftermarket steel bells and transmission braces are permitted.
    b. The mid-plate/DP can be a maximum 3 in. wider than your block on each side.
    c. Cradles must mount to top of engine saddle ONLY.
        i. Motor mount must be 1 in. away from the inner side of frame rail on the inside part of the frame on either side.
        ii. Mount cannot be recessed inside of saddle.
    d. Pulley protectors cannot be any wider than 14 in. and must not come in contact with any steering components.
    e. Trans brace must form to the shape of the transmission and must only connect to motor and crossmember.
        i. Trans brace may be welded OR bolted to crossmember but choose ONLY 1 method.
            1. The mount on crossmember must be centered and no wider than 10 in.
    f. The firewall or cowl area can be shaped for the placement of the engine and trans.
    g. No plastic or steel fan shrouds will be permitted.

Window Bars

1. Front Window Bar
    a. You are permitted (1) 2x2 in. x ¼ in. wall tube that must attach to the top side of the dash bar and your halo bar only.
    b. No part of the tubing may extend past front or rear of the dash bar.
2. Back window Bar
    a. You are permitted (1) 2x2 in. x ¼ in. wall tube attached from the roof to the top of the trunk lid at the trunk and speaker deck seam.
        i. The tubing cannot extend beyond what is welded.
    b. The tube can be attached to the halo bar and 6 in. on trunk lid.
        i. The 6 in. connected trunk lid must start at trunk seam by speaker deck and must run back toward rear bumper.
    c. You may use (1) 6x6 in. x 1/8 in. plate to assist with welding your bar on the roof and trunk lid.
        i. These (2) pieces must touch.
    d. The backbar cannot come within 4 in. of the gas tank protector in any way.

Core Support

1. Core support cannot be moved from factory location and must line up with factory body mount hole on frame. (Neither can be moved)
2. Expanded metal (1/8 in. max) OR radiator guard (1/8 in. max) may be as tall as core support and as wide as the core support mounts, max.
    a. Expanded metal/radiator guard must be mounted directly in front of radiator.
    b. Expanded metal/radiator guard may be welded completely on the core support and spacers.
        i. This may be welded to the back of the bumper.
    c. Expanded metal/radiator guard must be flat material.
3. The radiator must mount in factory core support tray and have only (4) mounting locations top and bottom.

    a. You can use a maximum of (4) ½ in. diameter pieces of threaded rod to mount radiator.
    b. You can also use 2 in. wide x 8 in. long strapping to assist with mounting.
    c. The mounts for radiators cannot strengthen core support in any way.
4. Radiator cannot connect to motor, pulley protector, fan shroud or cradle components in any way.
5. Core support seam welding will be limited to a total of 16 in.
    a. Seam welds may be anywhere on the core support including welding fenders to the core support.
6. Core support spacers may go to the bottom of the core support, only.
    a. Spacer material cannot exceed 3x3 in x ¼ in. thick square tubing.
    b. Tubing may be welded to the top side of frame OR factory bracket (depending on make/model of car) and core support ONLY.
    c. 1 in. all thread may be used within the core support spacer to then extend from the spacer through the hood and act as 2 of your hood bolts.
        i. If your all-thread does not come up directly through the core support, then you may use (1) 3x6 in. x 1/8 in. thick flat plate to be welded to the top of the core support.
        ii. Max of 3 in. of the strap can be welded to the top of the core support.

Rust Repair

1. Rust repair is limited to the top side of the body including pans/window lips/vinyl tops.
2. Rust cannot be removed.
3. Rust repair must be the same thickness as the factory sheet metal and have a max 1 in. overlap.
4. No seam welding will be permitted.
5. No rust repair on frames will be permitted.
6. If you have any questions, you must contact the head inspector first.

03 and Newer

1. You are allowed to weld in a 98-02 FOMOCO cradle.
    a. The cradle must only butt weld and must mount between the factory bolt holes used to bolt in the factory aluminum cradle.
    b. When butt welding an engine saddle in the car, the engine saddle plating must not extend any further over onto the frame rails than the centerline of the (2) factory engine cradle mounting bolts.
    c. Engine saddle can be plated with a maximum of (3/8) inch thick plate on top ONLY where engine mounts on the top of the saddle.
        i. Plate may be butt welded to top plate (if applicable) OR where a-arm bracket attaches to the frame.
2. You will be permitted to weld factory Fomoco upper a-arms brackets in the factory intended manner.
3. Spring pocket: You are permitted to weld in a 1980-2002 FOMOCO spring pocket that attaches to the outside of the frame ONLY, as factory intended on FOMOCO cars that were manufactured with a spring pocket.
4. You can weld in factory upper/lower a arm brackets as factory intended. (No additional welding/plating permitted).
5. Steering: You will be permitted to mount a gear box to the frame just like a 98-02 FOMOCO crown vic. You can drill 3 holes and use a maximum 5/8 in. outside diameter round tube to sleeve the frame for your bolts. An adapter plate may be used but cannot strengthen the frame in any way. Your drag link may be shortened, and a 3-inch round pipe can be used to sleeve it. You are only

permitted to use a hydraulic gear box and control module if using hydraulic steering. This must mount in factory manner.

Patch-It Plates

1. All plates must be purchased from D.E.M.O. at the event.
2. No patch it plates on fresh cars.
3. After round 1, each driver will be allowed a max of (8) patch it plates per car.
4. A maximum of (8) plates will be permitted on any car after round 1. The plates will be 6x6 in. x 1/8 in. flat stock.
5. You can shape these plates. You cannot stretch them beyond the 6x6 in. issued dimensions.
    a. Anything you cut off you will lose.
6. These plates cannot be removed once they have been welded on the car.
7. If your plates are doubled up, you must have a ½ in. hole in the outside plate.