



NORTH IDAHO STATE FAIR
DEMO DERBY RULES FOR SUNDAY, AUGUST 29, 2021



General Rules

1. No imperials 1973 and prior.
2. No frame swaps of any kind on any car.
3. No tilting or bending frames on any car.
4. No 9 wire unless using it to replace bumper straps.

Bumper Mounting

1. The frame may be shortened from the front of the car to be able to hard nose the bumper to frame and mounting bracket.
2. You can not shorten any more than the frontmost core support mount.
3. If you remove or alter this mount you will not run.
4. Any car bumper may be used and skins fully welded.
5. No homemade bumpers.

Option #1

- The car is allowed the factory brackets or shocks that came on the car.
- The original location. No stretching or relocating brackets. All brackets welded to frame, bumper hard nosed to frame and bracket.

Option #2

- You may use a 4"x16" by 3/8" flat bar to mount the bumper. It can be welded 12" back from the front of the frame. THE CORE SUPPORT MUST REMAIN IN ORIGINAL LOCATION!
- It can not be cut manipulated in order to further brace the frame. The flat bar will be bent into the shape of an L and welded to the bumper. This can be welded to the top, bottom, or sides of the frame. Not inside the frame. If you use this option all other stock brackets must be removed.
- On shock style GM cars, the pocket is part of the frame but the shock must be removed.

Frame Welding

1. Firewall forward seam welding on the factory rail seam only: this is where the seam comes together to make the rail a box.
2. No welding sheet metal or any other crossmember seams. This includes no welding of brackets for control arms or steering components where they meet the frame. It also means no filling holes inside of the frame or adding bolts or washers to plug the holes.
3. The ONLY welding is to be the top and bottom seam.
4. If you show up with welding anywhere else you will either cut it through the weld and frame 1" on 1" off spacing, or you will load and not race.

Body Bolts & Mounts

1. You can alter the two body bolts at the core support to place all thread through the frame and up through the hood.
2. 1" max on all-thread.
3. You are also allowed two all-thread in the rear of the car.
4. You are allowed to have a 3-inch washer on top and bottom of the frame to secure the all-thread to the frame, or you may weld the all-thread to the side of the frame.
5. It must weld up and down.
6. Do not run the all-thread down the rail and bend it up.
7. You may replace all body bolts with no bigger than a 5/8" bolt with no bigger than a 3" washer on the top side of the car.
8. If you choose to remove factory bushing, you must have a 1" spacer to replace the bushing.
9. NO welding the body to the frame.
10. Core support spacers are a 3" by 6" long max, 1/4" thick.

Suspension

1. Any rear diff out of a car or pick up, 8 lug max DANA 60 and 14 bolt.
2. No bracing within 12" of backing plate or axle flange.
3. No axle savers.
4. You may clamp shocks or place filler blocks in coil springs to adjust height.
5. You may chain the humps with 3/8 chain in two locations.
6. You may weld the A arms down with a 3"x4" strap 1/4" thick.
7. No leaf springs conversions.
8. Max-7 leaf pack, the leafs need to be OEM.
9. You may not move the chackle mount for the springs in your car. They must mount in original location.
10. Trailing arms must be stock off a car in the class. They can not be reinforced.
11. If your car has a rear 3 link, you may add a second top link by modifying a factory upper to fit the car. If I find it to be stronger than a factory in any way I will not let it run. You may use homemade brackets to bolt to the package tray. The arm itself must be made from OEM links.
12. No additional leaf springs clamps other than factory.
13. Pinion Brakes are allowed.
14. Aftermarket tie rods are allowed. Must be factory style rod end.
15. Ball joints must be stock
16. Spindles, A Arms, and other steering components must be stock for the class you are running.

Body Welding

1. You can use filler up to 2" wide and no thicker $\frac{1}{4}$ ".
2. Hoods may have eight points of contact. Hinges are not counted as points.
3. No larger than 1" bolts for points of contact with no bigger than 6" plates.
4. Point of contact is either a bolt and 6" plate $\frac{3}{16}$ " thick, a 6" angle iron pair with two $\frac{3}{8}$ " bolts, or 6" of welded seam with 2" by $\frac{1}{4}$ " thick strapping.
5. If you choose to weld the hood down for your six points of contact the hole in the hood must be minimum seam with 2" by $\frac{1}{4}$ " thick strapping.
6. Trucks can be welded shut solid (outside only – 3" strapping by $\frac{3}{16}$ " thick) there is to be no welding the body to the frame in any location (no inner fenders, body mounts, ect.)
7. You are allowed to have two straps from hood/core support to bumper and trunk lid to bumper. These straps are to be no thicker than $\frac{1}{4}$ " and no wider than 2.5". they cannot be connected by more than 3" on either end to bumper and deck/hood.

Tires/Wheels

1. Any pneumatic tire is allowed.
2. No solid tires.
3. 8" wheel centers allowed.
4. No lip protectors.
5. Stem protectors.
6. No bead protectors.
7. Stem protectors are allowed.
8. You may weld wheel seams with one pass.
9. No doubled tires.

Engine/Trans Mounting

1. Transmission must be a stock case. No aftermarket transmissions.
2. Ultra Bell is allowed (case must be original).
3. Steel Tail is allowed (case must be original).
4. NO transmission brace of any kind.
5. Lower cradles with pulley protectors max $\frac{1}{2}$ " material. They must bolt in factory location or very close to it. If running LS, I understand sometimes there are clearance issues with steering.
6. If welding your cradle in, you are allowed 8" or weld per side. Must weld to crossmember and not to the frame in any location.
7. No distributor protectors at all.
8. If running valve cover protectors or coil protectors on and LS t, the firewall must be cleared so that they in no way brace to motor against the firewall for support.
9. NO factory cradle swaps.

10. Homemade cross members are allowed with a max material size of 2"x 2" to ¼" wall. You may weld this to the frame. No extra added material of any kind. Cross members can never come into contact with any frame kicker (caddies).

Cages

1. Dash bars and rear cross bars are **mandatory**.
2. A minimum of 3" material ¼" thick wall must be used. There also must be door bars on each side of the car. A minimum of 6" material is to be used, but not to exceed 12" wide and 3" thick.
3. One upright bar on the driver's side is mandatory but two are allowed. At no point is the cage allowed to be welded or bolted to the frame. There are to be no braces/kickers running behind the rear crossbar, located directly behind the driver.
4. The gas tank protector must be 4" of the package tray at tech. the cage must be 4" of floor in any location.
5. Please don't try silly things like bolting seats or battery boxes to the frame or it's cross members.
6. If using exterior door bars they must not go into or cover any portion of the point of rear wheel wells.
7. At no point can you brace your cage to reinforce the structure of the car, i.e., bars going from dash bar to firewall. Kickers forward to the floor sheet metal by the body mount.
8. You are allowed to weld 4 down bars from the cage to the floor sheet metal. The bars need to go straight down. They can be located from the front door seam back and no further back than the rear seat footwell. Do not hide bolts to the frame under the down bars as I inspect for that.

Window Bars/Screens

1. Window bar is mandatory in the front. Material must be at least 1" and not exceed 2" material. You may have up to two in front and two in the rear window. The two in the rear must not be mounted past the top trunk seam.

Coolers

1. Radiator must remain in its original location. NOT CLOSE TO STOCK BUT IN STOCK LOCATION!!!
2. Transmission coolers may be used, but must be fastened in a safe container and strapped or bolted down.
3. High pressure line must be used. No fuel line for the transmission!
4. No oil coolers allowed.

Battery

1. You may use up to two batteries as long as they are fastened and covered for safety.

Fuel Cell

1. The factory tanks must be removed from the vehicle, A replacement tank is to be mounted inside the vehicle and the max capacity is 6 gallons. The tank must have a cover on it. NO plastic tanks!

Sheet Metal Bolting and Pre-Bending

1. You may have bolts with a 3/8" max for bolting sheet metal together (fenders, hood bracing, etc.)
2. Hood – 16
3. Fenders – 8 each
4. You may crease the front fenders and the rear quarters. The trunk may be tucked. You can not dish or canoe your trunk.

Frame Repair

1. Any pre-ran may have four 4"x7", 1/4" thick plates welded anywhere on the frame they choose. Plates must remain 4"x7". They cannot be but or changes to stretch. If you show up with four plates on the car you will not be allowed to add any more after the heats. 4 plates per car, max.
2. Fresh cars will be allowed to weld 4 of these plates on their cars after the heat race. At the end of the show no car can be found to have total of four plates or they will be disqualified.