

Whatcom Demo Derby Club

RULE BOOK DISCLAIMER

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. **NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND OR REGULATIONS.** They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official.

The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his/her opinion does not alter the minimum acceptable requirements. **NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS.** Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

Truck Rules

BODY

- 1. FOUR WHEEL DRIVES** Are allowed as long as the front drive line is removed and bumper height rules are met. Stock suspension only
- 2. Any full size pickup truck or suburban** is eligible to run.
- 3. No panels, mini vans, vans, or mini trucks.** Minimum wheel base of 103"
- 4. All sunroof openings** must be covered with sheet metal from the outside of the truck and securely fastened to the roof.
- 5. If you are running a **small** truck** you are allowed to use a 4x4 as long as the front driveline is removed

TRUCK PREPERATION

- 1. All glass including windshield** must be removed. No removal of glass allowed at the track
- 2. Flammable materials inside the truck** must be removed. These include carpet, rear seats, roof liners, interior trim, and dash board. Leaves and other flammable debris
- 3. Truck bed** must be free from debris Including leaves and glass
- 4. All light covers and bulbs, side mirrors, hub caps, grills, side chrome, plastic, pot metal, and door handles** must be removed
- 5. All trailer hitches, related brackets, reinforcements, and hardware** must be completely removed.
- 6. Stock fuel tanks** must be removed.

FUEL SYSTEMS

- 1. A limited capacity metal tank** is required as a replacement gas tank (6 gal. max fuel amount).
- 2. No boat tanks or plastic tanks**
- 3. Fuel tank** must be solidly mounted in the bed of the truck as close to the cab must be no greater than 24" from cab of trucks. Rear seat area if you have a suburban or an extended cab as close to the cross bar as possible centered in the truck.
- 4. Mounting tank to the crossbar** is preferred but not mandatory
- 5. Gas lines and fittings** must be leak proof. Fuel lines may not run between battery box and passenger door.
- 6. Rubber lines fuel lines** Must run through a second larger hose such as a garden hose to prevent accidental spillage Through Fire wall and Cab walls. We encourage you to replace rubber hoses each year.
- 7. A hole** must be made in the floor board for fuel vent hose and Must be secured
- 8. Electric fuel pumps** are optional
- 9. No gas tank protectors** allowed. Tanks maybe mounted to the cross bar cannot go back farther than 15"
- 10. Gravity Fed / Bottom Fed. Fuel Tanks** allowed. Must have ¼ turn shut off valve accessible Vent hose must be looped above tank and secured through hole in floor

SAFTEY BRACING

A front cross brace **must** be installed above the steering column from window post to window post (in the former position of the dashboard). The dash bar **must** not touch the fire wall and must be 5" from the fire

wall, and in no way may it be tied into a distributor plate, and nothing coming forward of the dash bar. In other words dash bar should be a single round or square tube with a flag holder nothing else. It must be a minimum 2" diameter pipe or square tube with 1/8" wall thickness and securely fastened into position. The dash bar in no way may touch the floor or transmission or be attached to the frame of the vehicle. Dash bar cannot have any thing that can be considered a kicker coming off of it. If a two piece dash bar is used, it must be securely fastened so that it cannot collapse (welded or minimum 3/4" bolt)

2. A rear cross brace must be installed behind the drivers seat, if you are running a single cab the cross bar can be placed in the bed as close as possible to the cab. Must be made of 3" pipe or square tube with 1/8" wall thickness, with plates welded on each end. The end plates may not extend more than 24" from the back of the cab. Cross bar must be mounted with a minimum of one 3/4" diameter bolt per side that extends through the side iron. The cross bar must also be bolted to the frame with a max 2 bolts max size is 1" diameter. If you run two cross bars they must be attached to each other and be a maximum 24" from the back of the cab. you may only use two bolts 1" diameter to the frame.

3. All trucks must have one vertical upright post directly behind the drivers seat. Upright must be 2" diameter pipe or square tube with 1/8" wall thickness with a minimum 4"x4" plate welded on each end. The upright will extend from roof to the top of the cross bar or roof to the floor as close to the drivers seat as possible. It must be attached with a minimum two 3/8" bolts. If using a two piece upright the female end should be above the helmet level and solidly pinned with a 3/4" bolt or welded solid. Optional a second upright maybe added to the passenger side. There must be a solid metal support behind the headrest area of the seat, no more than 2 inch gap between headrest and support, and the headrest must be duct taped to the upright.

4. Both front doors must be reinforced with a minimum 8" wide, 3/16" thick channel iron. The side iron must not be more 6' in length and must begin ahead of the front door seam and Must be 6" in front of the front door seam.. The side iron must be bolted with a minimum three bolts 3/4" diameter that extend through the inner panels, and may be welded to the sheet metal. The front bolt must be no farther back than the front door seam and one bolt must go through the cross bar plate. Backing plates must be used 6"x6"x1/4". The ends of the side irons must be cut at a 45 degree angle.

5. Kickers cannot exceed 24" from the cab. No exceptions. Nothing may be further back than 24" from the back of the cab.

6. Gas tank protectors are allowed and must be within 24" of the back of the cab. Maximum height is 16" from bottom of protector. It cannot exceed 36" wide and must be centered between rear humps

7. In Lieu of outside Channel Iron, You may use Inside door bars. They cannot exceed 6' in length. And no more than 6" in front of front door seam. Material used: You may use Channel Iron 8" minimum 3/16" thickness or 4" by 4" square tubing 3/16" minimum thickness.

8. Halo bars may not attach to the frame. If using halo bars, you must also incorporate an upright directly behind the driver's seat. Max height for protector 16" from bottom of protector

SEAT AND SEAT BELTS

1. A lap and shoulder belt are **Mandatory**. They must be securely mounted and have a minimum 2" diameter flat washer where it is mounted through the sheet metal.

2. Four point harnesses are recommended.

3. Seat can be O.E.M. stock of any make/model car (Honda Prelude/CRX seats not recommended).

4. Place a padded headrest on the upright behind the seat if the seat was not equipped with a headrest **mandatory**.

5. No fiberglass or plastic racing style seats will be allowed.

BUILDING, WELDING & SECURING

THERE WILL BE NO OTHER WELDING OTHER THAN WHAT IS STATED BELOW. IF YOU HAVE A QUESTION ABOUT WELDING, PLEASE CALL THE HEAD TECH OFFICIAL!! IF WELDING IS FOUND ON THE FRAME OR SHEET METAL THAT IS NOT SPECIFIED BELOW, YOU WILL BE ASKED TO CUT OR LEAVE!!

1. Outer Door seams may fully welded. You may use filler no larger than 2" wX1/8"t or 3/8" diameter

- rebar or equivalent. If you bolt the doors shut you may use up to four 1/2" bolts per door. If you chain the doors shut you may use 2 chains no larger than 3/8" thick per door.
2. Tailgates may be welded solid. You may use filler no larger than 2"wx1/8"t or 3/8" diameter rebar or equivalent. And have either two chains or two 1" all-thread. If you use all-thread and it touches the frame it will be counted as a bed pin. If you use chain and it wraps around the frame it will also be counted as a bed pin. Angle iron used to secure tailgate must touch the tail gate.
 3. If using angle iron to attach the tailgate pins the max angle iron size is 6"wx6"hX6"Lx1/4"thick.
 4. You are allowed four extra bed bolts. 1" diameter and the plate size will be 6"x6"x1/4"thick.(tailgate bolts that are connected to the frame in any way will count as bed pins)
 5. Hoods can be secured in a maximum of six places other than stock only two of the six can be secured to the frame. You may use bolts or chains.
 - bolt size must be a minimum 1/2" and maximum of 1" diameter only two bolts in an area on either side of the radiator may extend through the frame. Bolts must not exceed 4" above the vehicle surface. Max plate size is 6"x6" diameter and no thicker than a 1/4". You may weld a piece of angle iron 3"x3"x6" long
 - chains must be a minimum 3/8" and maximum 1/2" welded type chain. A bolt no smaller than 3/8" and no larger than 1/2" with washers must connect the chain
- Hoods must be opened for tech bring your hoods to tech. You may run without a hood.**
- 6.. Bumper swaps are allowed, however you may not swap bumper brackets, brackets must remain original to the TRUCK. Any questions call tech.
 7. Bumper brackets may not be relocated. They must remain in their stock location.
 8. Front and rear bumpers may be welded solid (bumper to bumper, bumper to shock, shock to shock, bracket to bracket, bracket to frame) no adding metal. There must be two 3/4" inspection holes in between the frame rails and one 3/4" inspection hole in each end. If tech is still unable to properly inspect the inside of your bumper, you will be required to add inspection holes as necessary.
 9. Bumper must not be welded to the body. **Except if you are using any welds that are securing your tailgate Any questions call a tech official.**
 10. Bumper shock itself may be collapsed and welded. No added material.
 11. You may weld the outer bumper skin to the inner bumper structure of the bumper.
 12. You cannot relocate the trucks rear bumper to the front of the truck No Exceptions.
 13. Rear bumpers are optional and can be welded to the tailgate but may not be welded to any other part of the body. No aftermarket bumpers will be allowed
 14. Rear bumper and bumper brackets may be welded to the frame.
 15. To simplify most of the bumper welding rule we are allowing the frame seams to be welded from the front edge of the A-arms forward. Top, bottom and, sides seams only no adding metal weld width can be no wider than a half an inch. No welding the A-arms to the frame.
 16. **NO STUFFED OR AFTER MARKET BUMPERS WILL BE ALLOWED** A Maximum 5" by 5" by Maximum 3/16" SQUARE tube may be used, but must be open ended and straight. They cannot extend more than 10" from the outside of the frame. No skinning or additional metal may be added to the tube except small plates to mount if needed. Tube bumpers must be painted (intention is to make them look more stock to the crowd).
 17. **Truck Box maybe welded to cab of truck on the outside seam only. You may use up to 2" wide 1/8" thick flat bar.**
 18. **ABSOLUTELY NO PAINTING ON THE FRAME!!!**
 19. Front and rear bumper height min 16" to bottom of bumper and 26" max to bottom of bumper. Pre rans subject to tech discretion
 20. No frame swaps
 21. No welding coil spring spacers.

WINDOW / WINDOW SCREEN

1. two chains, or two flat bar 3" wide 3/16" thick or two 1x1x1/8 pipe down the center of the windshield from top to bottom. Window bar or chain must be secured with a minimum 3/8" bolts maximum 1/2" bolts. Window bar or chain **cannot** be welded in place. Maximum of 18" apart at the top and bottom measured

outside to outside.

2. Rear window bars are not allowed.
3. **Optional:** a protective screen of 1/2" wire mesh or smaller may be installed on the front windshield in front of the driver.

Radiator and Coolers

1. Radiators must remain in the engine compartment. In stock location
2. Radiators and/or fans may be removed
3. An expansion tank may be used instead of a radiator. It must be made of metal, be no larger than a 1 gal.(NOT MUCH BIGGER THAN A MILK JUG) 1 gallon is equal to 2.31 cubic inches, multiply the length in inches x the width in inches x the height in inches, if this is more than 231, make the expansion tank smaller. **When mounting it, must be bolted in place using max four 3/8" bolts, it may in no way strengthen the frame or be used as a kicker. may be mounted directly to the motor. Subject to tech approval**
4. Transmission coolers are allowed and may be mounted in the engine compartment or inside the cab in-closed in a metal box with high pressure lines free from leaks. Coolers may not be mounted to the frame or used as a kicker to keep the frame from dropping or moving forward or backward subject to tech approval.

Batteries

1. Batteries **must** be relocated inside of car and placed in a battery box made out of metal and fully enclosed. Batteries must have an insulating barrier between top of battery and lid ex rubber, foam, wood
2. Battery box **must** have a lid that covers the entire top of the box and it **must** be securely fastened shut. **No ratchet straps or bungee cords of any type or duct tape will be allowed to fasten lid shut.**
3. Switches or wires used for powering the car off **must** be within reach of the driver while harnessed in. There will be no acceptable excuse for not being able to turn your car off in an emergency.

Motor Mounts and Suspension

1. Motor mounts and transmission mounts may be strengthened with bolts, welds or chains.
2. Motor straps welded to the frame and bolted to the motor are allowed. Straps may be a maximum of 2" wide, maximum of 3/8" thick flat bar. You are only allowed two straps per side of the motor. **ONE 2"X2" ANGLE IRON COUNTS AS TWO STRAPS. If you are running an engine cradle you cannot run the extra motor straps.**
3. Engine straps may go no further forward than 3" in front of the forward most part of the cylinder head and, no further back than 3" past the rearward most part of the cylinder head.
4. Engine cradles are allowed as long as they mount in the stock location and in **No Way** strengthens the frame. An engine cradle is any metal device that attaches both motor mounts together underneath the engine. Cradles may not be higher than the lowest point of the valve cover gasket. If your motor mounts are not connected using a cradle, you may bolt motor straps to the head or front of block. **ANY QUESTIONS CALL YOUR HEAD TECH OFFICIAL.**
5. No motor plates will be allowed. A motor plate is any metal device used to protect or mount the engine that is above the allowed engine cradle.
6. **Any 5 or 8 lug rear end may be used.** Must be a factory rear end housing from a production truck. Bracing of the housing is allowed. Aftermarket gears and axles OK.
7. Leaf conversions are not allowed. Suspension must remain stock maximum of 9 leaf springs.
8. You may clamp leaf springs. 4 clamps per leaf 2"x1/2" max clamp size, 2- 3/8" bolts per clamp.
9. You cannot weld suspension solid.
10. **ABSOLUTELY NO TRANSMISSION PROTECTORS.**

Distributor Plates and Carburetor Protectors

1. Distributor plates are allowed. Distributor plates may not be bigger than 12"x12" flat plate.
2. Distributor plate may not be attached to the fire wall or to the frame in any way.
- 3 **If the distributor plate is used you may attach it to the front/rear of the intake manifold on both sides of the carburetor with a maximum 1.75"OD pipe or square tubing with one bolt to the plate and one to the intake. Supports can only be above the Air Cleaner by 1".**

5. no stack protectors.
6. Pulley Protectors are allowed but can in no way be welded to your frame. 1/2" thickness of metal is max for the Pulley protectors. If the tech crew says it is excessive, it is! Call if you have questions. Pulley protectors may not be welded to the cradle or motor mounts unless cradle or motor mounts are bolted in place. If cradles or mounts are welded in, pulley protector must be bolted in place.
7. HALOS are allowed, May be mounted to: water pump, Head, distributor plate, or Intake. And may not exceed 1" above the air cleaner. May be made from max 1" pipe or square tubing, and max 1 bolt at each end of each support, same as distributor plate in rule 3. Up to tech discretion.

Exhaust

1. Stacks are allowed.
2. Any stock exhaust is allowed

Carburetors

1. Any gas carburetor is allowed. No alcohol or propane will be allowed
2. Air cleaners or suitable flame arrestor is required
3. Two 6"x6" holes must be cut in the hood on either side of the carburetor to allow for fire extinguisher access. Stack holes are acceptable for fire access.
4. No alternative starting methods allowed (I.e. starting fluid)

Brakes

1. All Trucks must have at least two working hydraulic brake and must be demonstrated at tech.

Tires, Wheels, and Tie rods

1. Any tire may be used, doubled and fork lift tire O.k. must not stick outside the quarter panel at the start of the derby
2. No split rims.
3. Wheel weights must be removed
4. Valve stem protection is permitted
5. Spring shackle must remain stock no reversing the shackle to lift the ride height.
6. Tie rods may not be reinforced, no pipe tie rods and must have stock ends

ROOF SIGNS

1. Truck number must be put on both doors and easily read. If you number is not readable you will not be allowed to run until corrected.
2. Car numbers will be painted on the signboard.
3. Numbers must be at least 18" high and a minimum of 2" thick
4. Signs must be contrasting colors such as black numbers on white background
5. If the signboard is unreadable the car will not be allowed to race until corrected

MISC CAN & CANNOT DO

1. You may cut the firewall for distributor clearance, but the hole must be recovered with a rubber mat or tin
2. Body bushings maybe removed. If replacing bolts you must use stock size bolts. Washer may not cover body mount hole on the exterior of the frame **NO EXCEPTIONS.**
3. You may re-bolt hood skins. You are allowed 15 bolts maximum, 3/8" diameter bolt size, 1" max washer size.
4. You are allowed 5 bolts per corner of the car to re-bolt out and inner skins together. (5 in each fender and 5 in each quarter panel) 3/8" diameter bolts, 1" diameter washer. These bolts cannot touch the frame or be used to secure the tailgate, hood or, bumpers to the body. No welding of the body panels!!!
5. Fire extinguishers are **NOT** mandatory, but highly recommended. If you have one it must be securely mounted and within drivers reach.
6. No adding a transfer case. No 4 wheel drives.
7. **NO WEDGING THE REAR OF THE TRUCKS. QUESTIONS CALL YOUR HEAD TECH**

OFFICIAL

REPAIRING DAMAGED CARS OR PRE-RAN CARS

1. Frame repair is allowed you can weld any crack in the frame with a single pass (**NOT SEAM WELD THE FRAME JUST THE SPLIT CAN BE WELDED**).
2. You are also allowed (2) 4"x4"x1/8" plate per corner of the car. Plates can only be welded on three sides and the two plates cannot touch each other. minimum 1" gap between plates. You may cut or bend the plates but may NOT use the extra material that was cut off. Plates are only allowed for REPAIR or a crack, tear, or severe kink of the frame. You may not add plate to a non-damaged section of the frame. If the frame rail looks undamaged and you plate it, take a picture of the damage. Violation of this rule will require complete removal of the plate and weld. Any questions contact head tech first!
3. Body panels may be skip welded back together if they are tearing. You may only weld a body panel back to itself, fender back to fender, NOT fender to inner fender (**NOT SEAM WELDED**) welds may not be any longer than 2" on and 2" off in length. No adding extra metal no exceptions.
4. All repairs will be inspected and anything outside of these guidelines will be not allowed to run. So if you have a question ask a tech official.
5. If you are running a pre-ran truck and the frame has already been plated you will not be allowed to add any more plate, and the plate that you used must be to the repair rules listed above no exceptions.
6. You will be allowed to repair bent or broken tie rods with a piece of tubing.
7. No bumper straps
8. 9 wire will be allowed in the following way, to hold bumpers on. It may be doubled over and make a single loop around the bumper to the body or the pins.

MAKE SURE THAT YOUR TRUCK IS FINISHED BEFORE YOU COME THROUGH TECH (IE HAVE EVERYTHING BOLTED AND SECURED PROPERLY) THERE WILL BE A LIMITED NUMBER OF TIMES TO PASS TECH.

Race procedures

- Driver's door hits can cause losing your place and payout and forfeit the opportunity to race in the next show
- All body parts must remain in the vehicle until the race is stopped.
- Tech has final say
- Do not build your car in the pits
- Evening only heats must be lined up for tech after the afternoon show
- You must make an aggressive hit every 2 minutes or you will be timed out.
- Sandbagging may cause you to lose your place and payout and the opportunity to race in the next show. If your vehicle is rolled over, you are timed out at that time.
- You are allowed 2 fires, the 3rd fire disqualifies you and you are timed out at that time.
- After you pass tech your vehicle must be lined up for its heat. No modifications may be made at that time.
- Hits after the horn sounds to stop a heat, hitting another competitor may be cause for disqualification
- You must have a red flag to start the event, when you are timed out, a timer will instruct you to put up your flag.
- You must wear a helmet, eye protection, long sleeves and long pants.