

KITSAP DESTRUCTION DERBY ASSOCIATION

2019 BUILD RULES

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Article I. Eligible Cars

Section I.01 Big Cars

- (a) Any year sedan, station wagon, panel, ambulance, Travelall, Suburban, or Pickup truck is allowed to race but not finale unless a special event.
 - (i) Panels, ambulances, Travelalls, Suburbans, pickup trucks, pre-1974 Chrysler Imperials are excluded from finale. (For this application, El-Caminos and Rancheros are considered acceptable for finale).
- (b) The vehicle must be determined safe by the Tech Boss at the time of the event.
- (c) No active four-wheel, all wheel, or convertible vehicles are allowed.

Section I.02 Mini Cars

- (a) Any year sedan, station wagon, or coupe, or compact truck/SUV that meets the following:
 - (i) The vehicle must have a 4-cylinder engine and originally been available with a factory 4-cylinder when manufactured.
 - (ii) Wheel base must be 106” or less for rear wheel drive car, 107.25” or less for front wheel drive car, 118” or less for compact truck/SUV.
 - (iii) No active four-wheel or convertible vehicles are allowed.
 - (iv) Cars can finale with Pick-Up truck rear ends so long as the rear end came from a mini truck.
 - (v) No full frame vehicles will be allowed to finale.

Section I.03 Special Event Vehicles

- (a) Special event vehicles must comply with rules decided by the association for the event. (See specific rules/regulations for the special event for details.) The tech crew has requested that the team captains, before each event notify the crew of specific criteria.

Article II. General Building Rules

Section II.01 What must be removed:

- (a) All glass, including windshield MUST be removed.
- (b) Flammable materials inside the car must be removed. This includes the carpet, the rear seat, and interior trim. Do not forget the door panels and roof liner.
- (c) All light covers/bulbs, side mirrors, hubcaps, grill, side chrome, plastic, and pot metal must be removed. Side chrome shall mean anything below the window frame. Door handles are allowed as is the rearview mirror.
- (d) All trailer hitches, related brackets, reinforcements, and factory fuel tanks.

Section II.02 Building, Welding, and Securing

- (a) All doors must be securely fastened by either welding, pinning them with a minimum ½” bolt, or chaining them in a minimum of one place. If the side irons extend the full width of the door, no other method of fastening is required.
 - (i) 1/8” plating may be added to exterior of door skin on front doors only and may not extend past door skin.
 - (ii) When securing door seams you may use 2” wide 1/8” thick strapping and or up to ½” rebar.
- (b) Hoods can be bolted in a maximum of 6 places other than stock, in which only 2 may go to the frame. Bolt size must be a minimum of ½” and maximum of 1”. MAX plate size is 6”x6”. Bolts must not exceed 4” above the vehicle surface. Chains can be a maximum of ½” welded type. Hoods may be welded instead of bolted, a 6”x6”x1/4” plate may be used in place of a bolt, but hood center must be cut out large enough to fully inspect under the hood if welded down.
- (c) Trunks may be fastened using chains, bolts, or welds. Welds can be 5” long with a 5” gap to the next weld on the outside of the trunk sheet metal only. If using flat plates, it must not exceed 5”x2”x1/8” in each place. If bolting, plate size cannot exceed 6”x6”, and all thread (1” MAX) only, two may go through the frame or floor area. Not to exceed 6 bolts or chains.
- (d) Body mounts may be removed. If replacing bolts, you may use bolts/all thread no larger than ¾”, MAX 3”x3”x1/4” washer/plate. Washer WILL NOT cover body mount hole on exterior of frame. Must be able to see inside the frame, and cannot be welded to the frame. In addition, you may add two (2) body mounts. No larger than ¾” bolts/fasteners. MAX washer size is 3”x3”x1/4”. Must be brightly painted for easy viewing. If your station wagon came with the body bolts in the humps, these are your 2 additional mounts. You will NOT be allowed to add more mounts.
- (e) Welding over factory seams without adding any metal other than wire is permitted.
- (f) No plug welding of frame holes.
- (g) For bumper: OEM bumpers and isolators per class may be used. Attachment by welding and bolting without adding additional material, not to extend further than the front of the upper control arm/strut tower. Top of bumper must not exceed 28” from the ground when new. Only one set of bumper brackets/mounts per car.
 - (i) OEM bumpers may be substituted with hollow, non-gusseted box tubing not to exceed 4”x4”x3/16”. May be no wider than the vehicle. Attachment method must follow rule 2.02(g). Must be open on both ends, must be straight, with no additional material added.
 - (ii) Front bumper isolators may be substituted with ¼” x 4” flat bar extending no further than front control arm/strut tower and attached to each frame rail on one side only, not to exceed 4” attachment to the bumper. Must remain flat on frame. Must not exceed 18” behind mounting surface of bumper.
 - (iii) Rear bumper isolators may be substituted with ¼” x 4” flat bar extending to no further than 10” forward of the bumper and attached to each frame rail on one side only, and not to exceed 4” attachment to the bumper. Must remain flat on frame. Must not be more than 14” in total length.
- (h) A chain or cable must be attached to the frame on the front of the car for the tow trucks to use if/when the vehicle needs to be towed off the track.
- (i) May lock suspension down with 2 straps, max 2”x4” maximum 6” long strap per upper A arm only. For strut type front ends they may be locked using tubing material no thicker than 1/8” and sleeve must not exceed the coil area of the strut.
- (j) OEM spindles for that class vehicles must be used.

Section II.03 Brakes

- (a) All vehicles must have functioning brakes.

Section II.04 Tires, Wheels, and Tie rods

- (a) The brand of tires is optional. The horizontal tread will be not more than 5/16" and the side lug will not exceed 7/16". Only steel wheels will be permitted. The tech crew may check your spare tires. Running on an illegal tire will result in loss of pay and points; additionally, you will be suspended for the night.
- (b) All drive tires must be covered halfway down the wheel or flaps must be put on.
- (c) Wheel wells may be trimmed.
- (d) Welding washers on wheels for valve stem protection is permitted.
- (e) Tie rods may be reinforced.
- (f) Studded tires that meet 2.04(a) requirement above shall have studs removed.
- (g) No split rims or multiple piece rims will be allowed.
- (h) May use weld-in-centers – max 3/8" thick.
- (i) On 2003 and newer Ford products, if using an after-market cross member it must bolt in and use stock OEM suspension and steering components for that class.

Section II.05 Sign Boards and Flags

- (a) Car numbers will be painted on the sign board. Numbers shall be at least 18" high and a minimum of 2" thick. They shall also be painted on the passenger side roof of the vehicle, also 18" tall. Signs need to be in contrasting colors (i.e. black lettering on white background). If the sign board is unreadable, the car will not be permitted to race until it is corrected. In the event of a roll over, your sign board must have the ability to collapse. For trucks, the lower corner of the number must be above the bed rail.
- (b) Sign board codes must be a minimum of 4"x4". The codes are:
 - (i) "R" to be used for Rookie (first KDDA year) drivers.
 - (ii) "E" to be used for electric fuel pumps.
 - (iii) "F" to be used for vehicles to be in ONLY the finale
 - (iv) "X" to be used for special event vehicles
 - (v) "T" to be used for team cars
- (c) American Flags may not be flown from your vehicle. You may paint them on.
- (d) Sign boards on Pick-Ups MUST be visible from the tower.

Section II.06 Repairing Your Vehicle

- (a) Body – When repairing damaged cars, you cannot use material thicker than stock. This may be checked at any time during the night of racing.
- (b) Frame – When repairing damaged cars, you may use four (4) 4"x4"x1/8" plates per frame section (per quarter). Plates or welds may not touch each other. They may not attach to each other. Repaired pieces must have an inspection hole drilled in the center of the plate. A frame section is one frame rail in front of or behind an OEM firewall. 4 plates RF frame 4 plates RR frame, 4 plates LF frame, and 4 plates LR frame. That's 16 total plates. You may not add any more than this. **YOU MAY NOT TAKE PLATES AWAY FROM ONE (1) FRAME SECTION AND ADD TO ANOTHER.**

Article III. Front End Builds

Section III.01 Window Opening

- (a) A protective screen of ½” wire mesh or smaller must be installed in front of the driver. Cars with a sunroof are allowed as long as the opening is securely covered with wire mesh, ½” or smaller.
- (b) One strap of 3/16”x2” wide (round stock or channel is acceptable) down the center of the windshield from top to bottom. These are the minimum requirements.
- (c) Optional rear window bars may be added no more than 6” extension on roof and lower attachment must not exceed 10” behind front trunk seam. Deck lid fastening points will not count as two trunk hold downs. They may be no larger than 2”x1/4” box tubing or ¼” flat plate, maximum of 2 each, parallel with the roof. Window bars may not be attached to the truck pins or halo bar.

Section III.02 Cooling System/Radiators

- (a) Cooling system, other than stock may be permitted at Tech Discretion. Radiators and/or fans may be removed. Expansion tanks must remain in engine compartment as close to the stock location as possible. Heater cores must be secured and covered if left in the car. Radiator support or radiator attachment shall be no stronger than what is stock.
- (b) Transmission coolers other than stock, if used, must be in the back-seat area, below the window level. Transmission coolers and all hoses must be shielded from the driver. A hole must be cut in the floor to allow for fluid to run off or leaks.
- (c) No metal cooling fans are allowed for any class.

Section III.03 Motor Mounts

- (a) Motor mounts and transmission mounts may be strengthened with bolts, welds, or chains. Motor straps welded to the frame and bolted to the motor are allowed. Straps can have a maximum thickness of ¼” flat bar only and are limited to two straps on each side. Engine supports may be used so long as they are not reinforcing the frame.
- (b) Engine cradle must be bolted, not welded. When using a motor conversation kit/adaptor there is a maximum of 12” of weld allowed.
- (c) 2”x2”x3/16” box tubing may be used as a transmission cross member.

Section III.04 Protectors-Distributor/Motor/Tranny/Headers

- (a) Distributor plates, no larger than 2” on either side of the distributor may be used. They will be attached in no more than four places and must be mounted only to the motor. Distributor plates must be at least 6” forward of the front cross pin at tech. Never to touch the dash bar.
- (b) Engine halo/pulley protector must stay within 6” in front of the harmonic balancer. Halo needs to stay under the closed hood. Halo may be no wider than the motor unless otherwise specified.
- (c) Transmission protectors may only be used on rear wheel drive cars and may only be attached to the cross member in a max of two spots.
- (d) Header protectors may be allowed in rear wheel drive cars only.

Section III.05 Exhaust

- (a) Stack must be a minimum of 18” from the exhaust port. No flared tips are allowed. Turnouts are at the tech crew discretion.

Section III.06 Carburetor

- (a) Vehicles must have either an air cleaner or suitable flame arrestor. A minimum of one 6” unobstructed hole must be cut in the hood for fire extinguisher access.

Article IV. Mid to Rear Vehicle Build Rules

Section IV.01 Gas Tank and Fuel Pump

- (a) A limited capacity of 6 gallon or less metal tank or racing fuel cell is required (*Stock fuel tanks are no longer allowed*) You must solidly mount it in the interior of the car, ahead of the rear axle using a minimum 2” strap or 5/16” chain. The tank must be located at least 8” for mini cars or 12” for big cars from the inner door panels.
- (b) Metal splash shields must be installed between gas tank and drivers and must be securely fastened. One exception: Racing fuel cells do not require additional splash shields.
- (c) Gas lines and fittings must be leak proof. NO EXCEPTIONS. Rubber fuel lines located inside the passenger compartment must run through a second larger hose such as a garden hose.
- (d) Electric Fuel pumps are optional. The device must be easily visible and switch easily identifiable. The letter “E” must be painted on your sign board.

Section IV.02 Batteries

- (a) All batteries must be relocated inside of the vehicle. The battery box must be of metal construction, fully enclosed, securely fastened to the floor and securely closed using 5/16” bolts or 2” straps.
- (b) Switches or wires used for powering off the car must be within reach of the driver while harnessed into the seat.

Section IV.03 Safety Bracing

- (a) A front cross-brace must be installed from window post to window post, above and as close as possible to the steering column (where the dash board once was). It must be constructed using a minimum of 2” pipe with 1/4” wall and be securely fastened into position. If a 2-piece pipe is used it must be securely fastened so that it cannot collapse. You may leave the dashboard in a mini car.
- (b) A rear cross brace must be installed from door inner skin to door inner skin, as close to the door posts as possible and at least halfway up from the floor. It must be made of a minimum 2” pipe (mini cars), and 3” (big cars) with 1/4” thickness, and plates welded on the ends. The cross brace must be bolted with a minimum of two 3/4” bolt per side, extending through the side irons. (See diagram), (See Rule 4.03(e)). If the cross brace is collapsed, it must be pinned with a minimum size of 3/4” bolt or welded so it cannot rotate. Bracing (side shift bar) is mandatory to run from rear cross brace to the floor or frame area to prevent side shift of cross bar. The side shift bars must be located directly under the cross pin and be firmly attached to vehicle body or frame. The side shift bars must stay in line with the cross pin and may not extend toward the rear of the vehicle in any way.

- (c) All cars must have a minimum of one upright (vertical) post behind the driver's seat, but two is recommended. The upright must be made of a minimum 2" pipe with a 4"x4" plate welded to the top. The upright will extend from the roof to the cross bar or to the floor and must be welded to the crossbar and must be located as close to the seat as is possible. It must be attached with a minimum of two 3/8" bolts on each end. Backing plates (exterior of car) must be used and a maximum of 6"x6" x1/8" thick on both top and bottom (if extending to the floor boards) ends of the upright (see diagram). Note: if using a 2-piece upright, the female end should be above the helmet level, unless the upright is welded or solidly pinned with a bolt, 3/4" minimum.
- (d) Gas tank protectors may be added behind the rear cross bar assembly and will not extend beyond the rear axle. It may not be connected to the frame or body of the vehicle. Must be in line with the wheel well and cannot be welded or bolted to the sheet metal.
- (e) Both front doors must be reinforced with a minimum 8" height, 1/4" thick channel iron. The side iron must not be more than 6'6" and must begin ahead of the front door seam and be not more than 6" in front of the front door hinges. The channel iron must be centered on the door in a horizontal manner. No sloping side irons. The iron must be bolted with a minimum of three bolts (3/4" minimum) that extended through the inner panels. Backing plates must be used and must be a minimum of 6"x6" on both front and rear ends of the iron. The front bolt must be located no further back than the front fender/front door seam at least two other bolts must go through the plate connected to the rear cross bar. If the front pin location is not possible due to electrical components, a third bolt must be as far forward as possible. (See diagram.) The ends of the side irons must be cut at a 45-degree angle. (see diagram.)
- (f) Inside door bars- Outside door bars may be substituted with inside door bars, with a minimum requirement of 2x6x1/4" box tubing. When doing so the cross bars must be securely fastened. Must not exceed past rear seat area. **INSIDE DOOR BARS MUST BE PRE-TECHED, PRIOR TO RACE DAY. EXAMPLE DIAGRAM ATTACHED.**

Section IV.04 Harness, Seat & Steering Column

- (a) Approved 4-point harnesses are mandatory (lap belt 3" min, shoulder belt min 2"). Lap belts must be mounted to stock mounts or have a 2" minimum flat washer where it is mounted through the sheet metal. The shoulder harness must be firmly attached to a secure area of the vehicle to allow a 45 degree upward slope to the center of the drivers shoulders. At the tech crew's discretion, you may secure the harness to the cross bar.
- (b) The seat may be OEM stock of any make/model car (Honda Prelude/CRX sets not recommended). It is recommended that you place a headrest on the upright behind the seat if the seat was not equipped with a headrest.
- (c) No fiberglass or plastic racing style seats.
- (d) All steering columns in rear wheel drive vehicles must have an added safety support to eliminate the column from dropping into the lap of the driver.

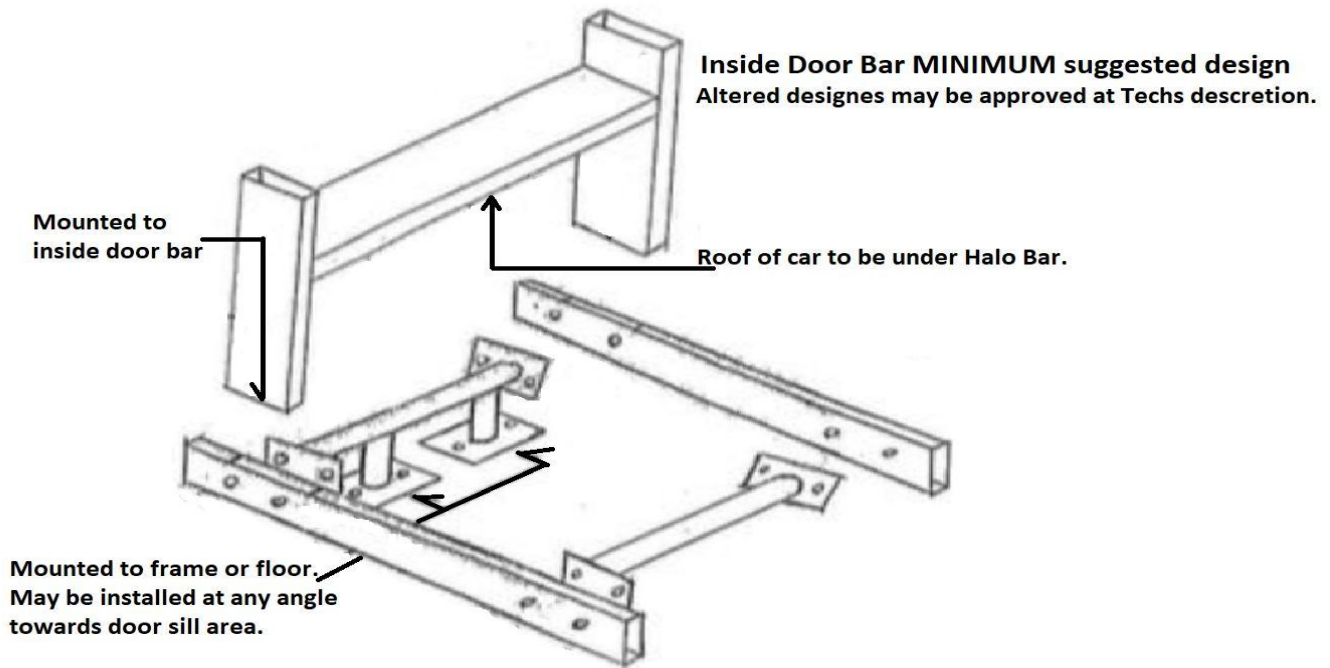
Article V. Special Event Rules

Section V.01 Rollover

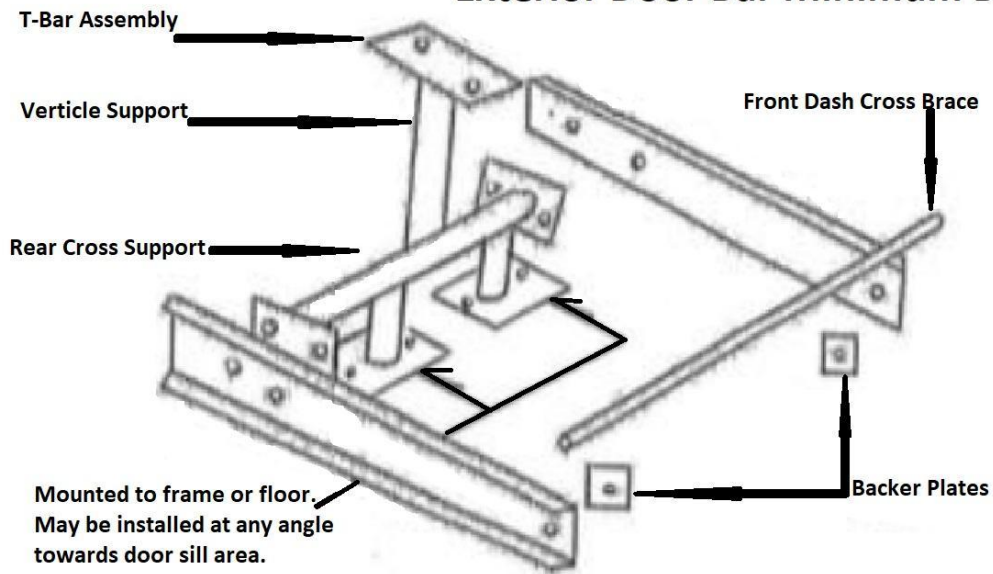
- (a) Must have at least one upright and one diagonal bar, 2" minimum located behind the driver's seat area. It must allow for full range of motion for the driver's head.
- (b) Driver door must have a net or screen.
- (c) At least a 4-point harness is required seat restraint.
- (d) All doors must be chained closed. Welds are optional in addition to chains.
- (e) All Wheel Drive vehicles are allowed for this event.

Section V.02 Chain-n-Go

- (a) GM Cars 1977 and newer, all other cars 1980 or newer.
- (b) Hoods & trunks may be chained or wired shut in a maximum of 6 places, chain must not exceed 3/8" link using (1) loop or (2) loops when using a maximum of #9 wire.
- (c) Hoods must have a minimum of (2) 6" access holes.
- (d) Stock bumpers for that vehicle must be used, bumpers may be traded from front to rear as long as they mount in same points. Bumpers may be additionally secured using chain or wire not to exceed above dimensions and loop count not to exceed (2) points per bumper.
- (e) Engine swaps are allowed. Engine mounts may be welded to the frame, while not reinforcing the car.
- (f) Steering u-joints may be added connecting the steering column to the steering box.
- (g) Door bars, window screen, dash bar, spreader bar behind seat, upright, gas tank, & battery box must follow basic build rules.
- (h) Modified shifters and throttle pedal assemblies may be used.
- (i) Stock rear end from that vehicle must be used, while the differentials may be welded. Rear axle humps may be chained in no more than (2) points using one loop. Stock TYPE drive shafts only must be used.
- (j) Rear of the car may be pre-bent, NO side panel body forming will be allowed.
- (k) You may cut, notch or remove any additional parts to the standard prep rules.
- (l) IF IT DOES NOT SAY YOU CAN, THEN ASSUME YOU CAN'T.



Exterior Door Bar Minimum Design



IF IT'S NOT IN THE RULES, DO NO DO IT!