

"KING" CLASS RULES 2024

(Used for 2025 Combat Class)
Sanctioned by D.E.M.O.
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Car Choice

Any RWD sedan or station wagon including 1966 and older imperials. (All cars must be fresh)

Core support / radiator

Core support cannot be moved from factory location and must line up with factory body mount hole on frame. (Neither can be moved) Expanded metal (1/4" max) or radiator guard (1/8" max) can be as tall as core support and as wide as the core support mounts. Expanded metal/radiator guard must be mounted directly in front of radiator. Expanded metal/radiator guard can be attached to core support in (8) spots with (1) inch welds or (3/8) inch bolts and (1) inch outer diameter washers. Instead of expanded metal or radiator protector, an aftermarket radiator guard can surround radiator. You can not run both. Material for guard can be a maximum of (1/4) inch thick and must adhere to all previous specs. This may not be used to strengthen the car in anyway. Radiator must mount in factory core support tray and can have only four mounting locations top and bottom. The mounts for radiator cannot strengthen core support in anyway. Radiator cannot connect to motor, pulley protector, fan shroud or cradle in any way. Core support seam welding will be limited to a total of (16) inches. Seam welds can be placed anywhere on core support including welding fenders to the core support. Core support spacers can run all the way through core support. Spacer material cannot exceed (3) inches by (3) inches by (3) inches by (3) inches by (4) inch thick square tubing. Tubing can be welded to the top side of frame or factory bracket (depending on make/model of car) and core support only.

Front fenders

Shaping of sheet metal on fenders is allowed but sheet metal cannot be doubled over and / or welded. Seam welding on inside of fender is allowed but is limited to a total of 10 inches per fender. Wheel tub and/or both layers of fender can be bolted using (3/8) inch bolts with (1) inch outer diameter washers. Bolting of fenders is limited to (5) bolts per fender and bolts must be located in wheel well area. Bolts to mount fender to firewall cannot exceed oem sizes. Sheet metal around marker light can be folded up to bottom side of core support and attached in (2) spots with either (1) inch long welds or (3/8) inch bolts with (1) inch outer diameter washers.

Firewall

No modifications other than flattening window wiper area toward interior of car to accommodate a distributor protector, attaching window bars per the rules, and/or welding hood bolts on to secure hood per the rules. No rewelding factory firewall seams or adding metal allowed.

Hoods

Hoods must be off for inspection but will be a part of the inspection process. No metal may be added to hood for any reason, except 8 1" store bought washers welded on top of hood for hood bolts. You may use 3" by 3" tubing (1" tall) in 8 locations to bolt hood through. Access holes and/or exhaust holes may be bolted back together in a total of (12) locations by using (3/8) inch bolts and (1) inch outer diameter washers or (1) inch long welds. Hoods can be secured to car in (8) locations. Factory hinges will be considered (2) of the (8) locations if used. Bolts to secure hood cannot exceed (1) inch diameter and (6) inches tall. Bolts can be welded to fender and/or firewall. A (4) inch by (4) inch by (½) inch thick plate can be added to each bolt location to assist with welding bolts to fender or firewall. Plate may be folded into an angle if desired. Washers to secure hood cannot exceed (5) inches by (5) inches by (½) inch thick. All hood bolts must be outside of the exhaust tube width.

Doors

Shaping of sheet metal on doors is allowed but sheet metal cannot be doubled over and / or welded. Doors can be completely welded to car on the outside of car only by using (3) inch wide by (¼) inch thick strapping. Do not overlap strapping. Both front doors can be reinforced with (3/16) inch thick metal. Driver's door is mandatory. Metal plate cannot extend more than (3) inches from front factory door in any direction. Inner and outer door can be welded together on topside only on all doors. Metal to achieve this must be (3) inch wide by (¼) inch thick strap maximum.

Quarter panels

Quarter panels can be bolted together using (5) 3/8 inch bolts with (1) inch diameter washers. Shaping of sheet metal on quarter panels is allowed but sheet metal cannot be doubled over and / or welded. Absolutely no metal may be added to quarter panels. Bottoms of quarter panels may be folded up to trunk pan and can be attached in (3) locations by using (3/8) inch bolts and (1) inch outer diameter washers or (1) inch long welds. Quarter panels must remain vertical. It is understood the shaping of sheet metal effects the vertical appearance. Top of quarter panels cannot be pushed in any farther than the inner edge of frame rail on the same side of car. The top of the quarter panel must measure (10) inches tall from the body bolt elevation. This measurement will be taken at the top of the quarter panel above taillight area. The remaining upper portion of the quarter panel must slope upward toward base of c-pillar. Bottom of quarter panel can be pushed in until it meets the trunk floor. Trunk floor cannot be narrowed, squeezed, or cut and rewelded. Trunk floor is defined by the entire width of the horizontal floor in trunk area. (Call if you are uncertain)

Trunk

Speaker decks can be removed if desired. No metal may be added to trunk lid or rain channel. Two (8) inch by (8) inch holes must be cut for inspection purposes. Holes must be over body mount area behind humps. Holes can be bolted together with eight (3/8) inch bolts and (1) inch outer diameter washers or (1) inch welds per hole. The backside of the rear wheel tubs and all body mounts inside trunk must be accessible and visible during inspection. Once car has passed, holes can be covered with factory thickness sheet metal and attached by using the (8) bolts already mentioned. Inspection hole covers must be presented during inspection and installed when your stick is being taped on. Trunk lid must mount in factory location but can be contoured down toward top of package tray without exceeding quarter panel rule. Bolts for hinges must be factory size but can run thru top layer of trunk lid and be washered and nutted with washer being no bigger than (1) inch outer diameter. Trunk can be attached to car by welding (5) inch wide by (5) inch long (½) inch thick plates on exterior trunk seams. The (5) inch on, (5) inch off, method will be utilized. Station wagon tailgates must remain in factory location but can be lowered into box if applicable. Attaching tailgate to car must be done in the same manner as a trunk lid (5 inch on and 5 inch off). Coil spring cars can have one extra body mount per rail

in trunk area. A maximum of one inch diameter all thread may be used. All thread can weld to frame but must be inbetween trunk body mounts and remain straight up and down. Four nuts and four standard 3 inch washers may be used per side. Nuts and washers can be welded. All thread cannot be sleeved with any additional material. Maximum length on all thread is 30 inches long.

Washers and nuts will be called plates.

Window bars

Option # 1 - (2) inch by (2) inch by ($\frac{1}{2}$) inch wall tubing in front and rear windows (one tube per window). The tube in back window can only be attached (6) inches onto roof and (6) inches on trunk lid and be sheet metal mount only. The (6) inches on trunk lid must start at trunk seam by speaker deck and can run back toward rear bumper. Front window bar can attach to halo and must mount directly on top of dash bar only.

Option # 2 – two (3) inch wide by (½) inch thick flat bars per front and rear window. Front bars can be attached (6) inches onto roof and (6) inches onto firewall or to top of dash bar. Rear bar can attach (6) inches onto roof and (6) inches onto trunk lid and be mounted to sheet metal only. The (6) inches on trunk lid must start at trunk seam by speaker deck and can run toward rear bumper. Metal bars cannot connect in anyway. All window bars can be attached by bolting and welding. Both bars in front window must be within exhaust tube width.

Station wagons can have one (3) inch wide by (3/8) inch thick flat plate from roof to tailgate. Can be welded (6) inches on roof and (6) inches on tailgate. Strap must be in center of car and vertical.

Cage / halo

No cage component, including halo bar, can be larger than (6) inch material (round or box tubing). If you stack cage material it must conform to all cage specifications. No cage component can be contoured or rounded. Four-sided cage surrounding driver consisting of dash bar, two side bars and rear seat bar. Dash bar can touch the distributor protector but must remain (4) inches above topside of transmission tunnel. Two down legs can be welded to frame. Down legs must be vertical and can only attach to side bars or rear seat bar. Down legs must be behind firewall body mounts (toward driver) and/or in front of the wheel tubs (toward driver). All cage components must be at least (4) inches above body bolt elevation and (4) inches above topside of transmission tunnel with exception of down legs. Only connecting point for cage can be a-pillar, b pillar, and down legs. A (10) inch by (10) inch by (3/8) inch thick plate can be added to the b-pillar only to assist with attaching cage to body (no added metal to a-pillar mount). Bar behind the seat may be no farther back than the kick panel. Side bars must stop one inch in front of rear wheel tubs. You may have a center bar connecting rear bar and dash bar. The center bar cannot extend behind rear bar and must be at least (4) inches above topside of transmission tunnel. A 32-inch-wide gas tank protector may be added and must be centered in car. Tank protector can attach to package tray by using two 5/8"s bolt max 6" long or by using two welds, 3" beads. Sheet metal in-between tank protector and package tray cannot be removed. Halo bar can be bolted and/or welded to roof and must attach to top of side bars only. Halo to be vertical coming from side bars and must run straight across roof side to side. Extensions to bolt halo to roof can be no longer than 10 inches and/or wide and can only have one bolt thru roof per extension. Two extensions total for halo bar. Halo bar cannot be any farther back than the 18 inches behind center body mount. Cage, gas tank protector, and halo bar can have one gusset per corner. Gussets are considered a cage component and must adhere to the size limitations. Any material protecting the gas tank must be vertical and cannot extend upward more than (12) inches above tank. No cage component can be farther back than where the gas tank protector meets package tray on coil spring cars. Nothing beyond frontside of rear end hump inside car for leaf spring cars.

Body mounts

You may weld (1) store bought 3" outside diameter washer with a 1-inch center hole for your body bolt per factory body bolt hole. (Maximum 1/8" thick) Maximum bolt size is (1) inch diameter and (6) inch in length. Washers for body bolts can be no larger than (4) inches by (4) inches by (3/8) thick. Body bolts cannot be moved from factory location for any reason. Bolts must start in factory location on frame and can be ran thru the body and washered / nutted on top. No extra body mounts for any reason. (unless otherwise stated) core support mounts can run from bottom of frame thru core support and can act as two of the 8 hood mounts. Two nuts and washers per core support mount. Nuts and washers can be welded if desired on core support body mount only. Washers on core support mount must be standard store bought (1) inch washer with a diameter no bigger than 3 inches. Two nuts and washers for all other body mounts and must be free floating. All body mounts with the exception of core support must have a (1) inch tall spacer between frame and body. Maximum size for spacer is (3) inch diameter or (3) inch by (3) inch square and must be free floating. Body spacers are allowed to be threaded.

Interior bolt-ins

Aftermarket components for controlling the car are allowed. However, no interior component including pedals, battery box, and steering column may strengthen the car in anyway. Mounting of these components may not attach too, or be within 2 inches of the frame, crossmember, and/or firewall. Transmission coolers are allowed but again, cannot be mounted in a way that strengthens the car in anyway. Fuel cells and batteries must be safely mounted (2 batteries max).

Front frame

Upper and lower frame seams can be welded from firewall forward. Area where front rail meets the side rail can be welded as well but nothing beyond that point. Seam welding is limited to main frame seams only. Do not weld brackets for suspension or engine saddle seams. Engine saddle can be plated with (10) inch by (10) inch by (1) inch thick plate where engine mounts. Cars may have one tilt point per rail and can be re-welded in that specific area only. Fomoco crush box cars can cut and re-weld flaps but cannot add metal to do so. Fomoco - 03 and Newer frames may use two tilts in front of the a-arms. Absolutely no shortening of these frames. Rails cannot be cut apart and narrowed and then re-welded in any section of the rail. Frame locators that locate the two halves must be visible. Width measurements will also be taken and compared to factory dimensions. All cars must adhere to the core support rule for length on front frames; caddies must measure 18" going forward from shock pocket. A-arm brackets and a-arms cannot be moved from factory locations!! 2003 and newer Fomoco and Mopar automobiles cannot be shortened.

Center frame

No modifications on center rails beyond what is allowed to mount crossmember and seam welding stated in front frame section.

Rear frame

Only modification allowed on rear rails will be the addition of hump plates. No welding of frame seams anywhere. Rails cannot be squeezed together or narrowed. Rails will be measured from side to side and compared to factory measurements. Top of rails can be dimpled or cut for bending purposes only and cannot be re-welded. All factory coil sprung or factory unibody cars can have a (32) inch hump plate. Pre 1980 leaf cars can have a 12 inch hump plate. All plates must be centered in the hump area. Hump plate can be straight across hump or contoured but can only connect

to outside of frame (toward tire) and must be at least two inches away from rear end. Hump plates can be a maximum thickness of (3/8) inch and (6) inch tall. All unibody cars will be allowed to shorten the rear body up to 10 inches. This is measured from where the bumper would mount. No metal may be added.

Max hump plate for leaf spring cars is 22 inches.

Front bumper

Any oem automotive car bumper allowed. Bumper may be seam welded and stuffed. Aftermarket replica bumpers are allowed but must be to factory measurements. No sharp or jagged edges allowed anywhere on bumper for safety reasons. See below for mounting;

Option # 1 – run the factory shock and/or bracket that came on the make and model of car you are running. Nothing can be welded beyond (14) inches. Bumper can be hardnosed to front of frame. Deviations from this requires a call to head inspector for approval. Also, a (2) inch wide by (¾) inch thick by (8) inch long flat strap can be welded to bottom of frame. This plate must touch the bumper and run straight back. Core support bolt can run thru this strap if applicable.

Option # 2 – remove factory shock and/or bracket and replace with a flat plate welded to top of frame only. Contoured plates are allowed but cannot exceed the 4 inch width. Measurements for plate are to be (3/8) inch thick by (4) inch wide, and (14) inch long. Plate cannot be folded over to sides of frame and must touch backside of bumper. Plate can be cut to follow contour of frame. Also, a (2) inch wide by (¾) inch thick by (8) inch long flat strap can be welded to bottom of frame. This plate must touch the bumper and run straight back. Core support bolt can run thru this strap if applicable. No part of front bumper can be behind the front of frame toward driver.

Maximum height will be (30) inches from ground to top of bumper (strictly enforced) – This includes anything added to the bumper.

Maximum height on bumper will be 28 inches to the top.

Rear bumper JUNE 13th - 15th - 2025

Any oem automotive car bumper allowed. (Must be 5 inches tall) Bumper may be seam welded and stuffed. Aftermarket rear bumpers are allowed but must be within the following specifications: No more than 8" tall or shorter than 5" and no more than 4" wide. Bumper must measure 5" tall. A 35-degree slant will be max aloud and must meet all other specifications. If you have questions, better to ask then cut your bumper off at the show. No sharp or jagged edges allowed anywhere on bumper for safety reasons. Rear bumper can be welded to body with (6) - (3) inch wide, by (1/4) thick, by (6) inch long straps in addition to mounting options below for any car.

Option # 1 – bumper cannot be hardnosed to frame. Run the factory shock and/or bracket that came on the make and model of car you are running. Bracket and shock must be in factory location but can be tilted. Nothing can be welded beyond (14) inches on frame measured from back of frame toward hump. Two additional straps can be added per mounting location. Measurement for strap is (2) inch wide, (¼) inch thick, and (8) inches long.

Option # 2 – remove factory brackets and/or shock and hardnose rear bumper to frame. A (4) inch wide, by (3/8) inch thick, by (14) inch long flat plate can be welded on any side of the frame. The (14) inch strap must connect to rear bumper. You can also add two additional (2) inch wide, by (¼) inch thick, by (4) inch long straps (2 per mounting location). Sheet metal can be moved to hardnose bumper but cannot be rewelded beyond rules stated in the trunk/tailgate section. Quarter panels cannot be shortened beyond what is necessary to mount bumper.

Minimum height from ground to bottom of bumper will be (14) inches. This will be strictly enforced and no allowances given.....period! Rear bumper must be minimum (5) inches tall and will also be strictly enforced.

You will not be permitted to slide bumper over the frame.

Must maintain 14 inches throughout the entire show. (Start of heats)

Front suspension

A-arms must be oem factory from passenger car origin. A-arms are interchangeable but must be a direct bolt on to factory configuration with no modifications. No aftermarket coil springs or coil spring spacers allowed. One inch all thread can replace the factory shock. Four nuts and three washers per all thread. Nut and washer on bottom can be welded. Measurement for bottom washer is (5) inches by (5) inches by (½) inch thick (or 5 inch round). Top nut and standard store bought (1) inch washer with (3) inch diameter can be welded. No welding on bottom a- arm other than nut and washer for all thread shock, ball joint rings, and bump stops for spindles. Bump stops can be no larger than (2) inches by (2) inches by (½) inch thick box tubing and cannot be longer than (2) inches. Upper a-arm can have strapping to weld arm down. One strap on front side toward bumper and one strap on back side of arm toward driver. Measurement of flat strap can be (3) inch wide, (½) inch thick, and (8) inches long. Strapping must follow contour of arm on front and back sides going down to ball joint. A-arms cannot be moved from factory location. Towers and brackets cannot be moved, welded, or altered.

Steering

Unless stated in rules, steering components must be of factory car origin and mount in factory location. You may use an adapter plate but it not strengthen the car in anyway. Aftermarket spindles are allowed. Aftermarket ball joints and rings or heim joints are allowed and can be welded to upper and lower a-arms. Ball joint sleeves and/or rings cannot exceed 3 inches tall or (3/8) inch thick and cannot be welded to the spring pocket. Aftermarket tie rods are allowed. Hydraulic steering and aftermarket columns are allowed but the mounting of these systems cannot strengthen car in anyway. Idler arms may be welded with 2 1" welds. Sway bars must be located in factory location but may be bent down and bolted to lower a-arm with a 5/8" bolt. Sway bars may be welded to the bottom of the frame with a piece of 2" by 4" by 2" long square tube. The tube may be welded as well as the sway bar to the tube. This must start within 2" of factory location.

Rear suspension

Coil spring cars – any oem automotive car coil spring is welcome. Coils springs can be wired or chained to rear and package tray (nothing excessive). Factory shock can be replaced with all thread. All thread can run thru body and act as a body mount but all thread must run thru coil spring and exit thru factory hole on package tray. Coil spring must line up with axles tubes. Rear-end must mount in factory 4-link configuration. Control arms can be replaced with maximum 2-inchwide by 4 inches tall by (¼) inch thick box tubing. Watts link conversion is allowed for any coil sprung sedan. Upper brackets must be no larger than 6-inch-tall and (12) inch wide by (3/8) inches thick material and must be two separate brackets. Each bracket can be attached with four (5/8) inch bolts max. Lower arm can be welded to frame by using a box tube welded to frame. Female tube can be no larger than (3) inches by (4) inches by (½) inch thick wall tubing that is no longer than (4) inches long. All other cars can remove factory lower bracket and replace with a box tube of same size as watts conversion. Control arms can be no longer than factory length but may be shortened. No leaf spring conversions for coil cars.

Leaf spring cars – leaf's can be (3/8) inch thick, factory length main spring to make and model of car you are running, with (1) inch stairstep down on both ends. (7) springs total with main leaf being on top of spring pack. Eyelets on main spring must be factory configuration. Leaf springs must mount as they did from factory and cannot be re-located. Shackles can be replaced with ¼" and welded to the frame in factory location and manor. Rear-end must be on top of main spring. A total of (6) clamps per side can be used. (Plates or weld on clamps) Plates for clamps cannot exceed (3) inches by (4) inches by (3/8) inch thick and can only have (2) bolts per clamp. Plates for clamps cannot connect to frame in anyway before and/or after show. Only one center pin may be used. Shocks can be replaced with all thread and can run thru frame / body in factory location. Rear-end mounting pads not to exceed (12) inches in length.

Leaf spring cars – leaf's can be (3/8) inch thick, (9) total springs.

You will be permitted to chain the rear end -1 link welded to the frame.

Wheels / tires

(4) tires max per car. Wheels and tires can be any configuration with exception of no studded or foam filled tires on rear. Tires cannot be replaced with steel paddles. (21) inch outer diameter max on bead locks.

Rust

A phone call to the head inspector must be made prior to fixing any rust on body and/or frame. Head inspector will provide direction on how repairs are to be made. The conversation will be documented. No car will be allowed to compete if rust repairs are made without having a pro-active conversation with head inspector. This rule will be strictly enforced.

Drivetrain

Any automotive engine and trans are allowed. Aftermarket driveshafts are allowed. Any rear-end is allowed. Bracing for the rear-end cannot extend more than 13" in any direction from center line of rear-end. Bracing cannot extend more than 10 inches from the center line of rear-end on the last 12 inches on ends of rear toward tires. Crossmember can be factory or a (2) inch by (3) inch by (¼) inch wall tube. Angle iron to mount cross member can be no bigger than (6) inch by (6) inch by (¼) inch thick angle iron and no longer than (8) inches. Options for mounting engine and transmission below.

Option # 1 – full cradle with aftermarket steel bell and transmission brace is allowed. Distributor protector cannot be wider than the exhaust tubes. Cradle can mount to top of engine saddle in two spots only with either a block style mount or aftermarket bushing style mount. Mount not to exceed (9) inches in length on either side. Mount cannot be recessed inside of saddle. Trans brace must form to the shape of the transmission and can only connect to motor and crossmember. Trans brace can be welded, bolted, strapped, or chained to crossmember but choose only one method. Mount on crossmember can be no wider than (15) inches and must be centered on crossmember.

Option # 2 – lower cradle with front plate and pulley protector allowed. Cradle must bolt to factory bosses on engine. Cradle can mount to top of engine saddle in two spots with aftermarket bushing style mount. No mid-plate, distributor protectors, or aftermarket bell housings allowed. Upper transmission brace is allowed. No modifications to transmission. Transmission and engine mounts must be factory style bushing mounts. For added strength, (2) inch by (2) inch by (½) inch thick box tubing kickers can be added from dash bar to behind upper a-arm. Kicker cannot be ran inside of frame and can only have a contact area of (2) inches by (2) inches welded on top side of frame only. Gussets may be added to kicker. Contact head tech for instructions.

Cradle can mount to top of engine saddle in (3) spots only (1 on each side and under the engine) with either a block style mount or aftermarket bushing style mount. Mount must not exceed 9 inches in length on either side.

2003 and newer fomoco

No shortening of front frame and must run factory body mount bracket for core support. All crush point holes must remain open. For mounting suspension and steering, see options below. (These options are not interchangeable; you can only pick one)

Option # 1 - run the aftermarket 03Nation hydraulic steering step up with the 03Nation bolt in cradle. All components must mount as 03Nation intended them to mount and can not be used to strengthen the car in any way. A single piece of (4) inch by (4) inch by $\frac{1}{4}$ thick box tubing per side can be welded from bottom of frame to lower a-arm to achieve spacing. Tube must be vertical and centered in lower a-arm. Spring pockets cannot be added to sides of frame.

Option # 2 – aftermarket bolt on cradles are allowed but must bolt too and be centered on factory bosses on frame. Cradles in center of bolt on unit must be from a fomoco car or SMW style cradle and must also be centered to factory bosses on frame. Material that is welded to cradle to bolt the unit to frame cannot exceed (3/8) inch thick. Bolt on unit cannot extend more than two inches from factory bosses in any direction and cannot be welded to frame anywhere. Brackets to mount a-arms must be from a fomoco car and must be welded on in a factory configuration. Mounting bracket to frame can only come into contact with three sides of frame with inner rail towards engine being one of them. A single piece of (4) inch by (4) inch by ½ thick box tubing per side can be welded from bottom of frame to lower a-arm to achieve spacing. Tube must be vertical and centered in lower a-arm. Spring pockets cannot be added to sides of frame.

Option #3 – weld a fomoco factory engine saddle to the inner frame rails centered between factory bosses. Factory mounting brackets from a fomoco car must be used to mount upper and lower a-arms. A single piece of (4) inch by (4) inch by ¼ thick box tubing per side can be welded from bottom of frame to lower a-arm to achieve spacing. Tube must be vertical and centered in lower a-arm. Spring pockets cannot be added to sides of frame.

Ball joint protectors can be utilized for any option but max size is (2) inch by (2) inch by (¾) inch thick box tubing. Can be no longer than (3) inches. All steering must be bolted in, not welded. Mounting of gear box to consist of (3) bolts total. A total of three (6) inch long, (½) inch diameter pipes may be used for mounting. Two of the bolts/pipes can go thru the frame and the third can be welded to frame externally. Idler arm can only be bolted thru one thickness of material or welded with (2) 1" welds. Sway bar must adhere to sway bar rule above. Deviations from these options must be approved first.

Any modifications made to cars that are not stated in the rules will result in that car not competing. All welds must not exceed ½ inch wide and must be a single pass.

You will be permitted a total of (6) 4 inch by 6 inch by ½ plates in addition to your (2) 4 inch by 4 inch plates.

Sedagons will be permitted. Wagons have the option to relocate their rear bumper.

Sheet metal stiching or patching is limited to 14 gauge material.

No cars are permitted break away suspension.