



# UNIQUE MOTOR SPORTS, INC.

## USA DEMOLITION DERBIES AND FIGURE 8

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## USA MOTORSWAP RULES

### GENERAL PREPARATION

- Any rear-wheel-drive (RWD) car is allowed unless otherwise stated within this rule. NO trucks, vans, El Caminos/Rancheros, T-top cars, hearses, four-wheel-drive (4WD), all-wheel-drive (AWD), ambulances, or limousines allowed. NO leaf-spring station wagons allowed. Chrysler Imperials, Suicide-door Lincolns, Checker Cabs, or "Old Iron" station wagons newer than 1958 will not be allowed.
- All interior plastic, upholstery, trim panels, etc must be removed. Nothing to remain in the bottom of the doors or trunk. This includes all carpet material. No broken glass inside of doors or other loose material anywhere inside the vehicle.
- Front dash can remain in the vehicle or be removed. Any dash components or molding that can become loose must be removed. (Example: Radio, heater control, dash bezel, etc.)
- Driver door panel can be left in place or suitably replaced. Driver's door must have padding of some type.
- All outer hardware must be removed. (Example: All glass, door handles, mirrors, chrome, molding, fiberglass, etc.) Front windshield must be removed.
- All flammable material must be removed.
- ALL airbags must be completely removed. Unplugging/cutting airbag wires only not allowed!
- The ECM/PCM can be relocated and secured. Securing engine computer may not strengthen vehicle in any fashion. Spray foam is okay to secure.
- Driver's seat must be securely bolted to the floor. Must have a working and approved driver's seat belt or harness.
- All seats except the driver seat and the passenger seat must be removed from the vehicle. This includes all fold-down seats/rear decking in wagons. Rear seats must be completely removed from the vehicle. Area where seats were removed must also be empty and clear of material.
- Stock fuel tank and battery must be removed.

### BODY PREPARATION

- All vehicles must run a hood and mounted in stock location. Hood sheet metal must stay over top of fans.

- Hoods will be opened for inspection. Do not secure hood until after you pass inspection! Hood securing will be done immediately after inspection when you line up in the staging area.
- Hood must have a minimum 12" x 12" access hole for inspection and safety. (10) total 3/8" maximum bolts, nuts, and store bought washers may be used to bolt inner and outer hood sheetmetal together around inspection hole(s).
- Trunk lids must have (2) 6" x 6" minimum access holes for inspection. Each hole may use (5) total 3/8" maximum bolts, nuts, and store bought washers to bolt inner and outer trunk lid sheet metal together around inspection holes; (10) bolts total on the trunk lid.
- Sunroofs must be covered, no exceptions.
- Shaping/pre-bending/creasing trunk lid is allowed. Shaping/pre-bending/creasing of rear quarters is allowed. Absolutely no wedging trunk.
- No "sedagons" fresh or pre-ran. You may only crease the front fenders & rear quarter panels, but not wedge them. Quarter panels must remain upright and may not be doubled in any way.
- Drawing in the lower rear quarter panel is allowed, this material may NOT be folded or lapped past the outside edge of the frame rail; it may not be pulled in past the frame rails and layered or folded on top/over onto itself.
- Trunk lids may be dished. The front inside portion of the speaker deck must remain vertical. Rear quarter/trunk wedging to be measured at the furthest rear body mount. From the top of the frame rail at the body mount to the top of the rear quarter panel and/or trunk lid can be no less than 12".
- Absolutely NO rust repair to the body unless it is strictly inside the drivers compartment area. (This must be approved, photos of rusted areas will be required BEFORE repairs are made!)
- Hoods may be secured in (6) locations maximum, sheet metal to sheet metal only. A combination of (6) securing locations total using these options:
  - **Option 1** - Hoods may use (2) 1" maximum bolts/threaded rods to secure front of hood down. These locations may also replace front core support body mounts and extend up through the hood to secure. (**See also Frame & Bumpers Rules for more information**). (1) 6" x 3/8" maximum washer may be used on top of hood per side at the core support mount location. Do not get excessive with welding or bolting! If using this method you may only use (4) additional securing locations on the hood. Bolts/threaded rod count as (2) securing locations of (6) total.
  - **Option 2** - Double strand #9 wire, seat belt, cable, or 3/8" maximum chain may be used. Securing locations may not wrap around or tie into frame rails or suspension in any way. Sheet metal to sheet metal only.
  - **Option 3** - 2" long, 2" x 2" x 1/4" angle iron may be welded to sheet metal only. Angle iron to be used in matching pairs to secure hood. Angle iron may have (1) 1/2" maximum bolts with store bought washers per angle iron matching pair.
- Trunk lids and tailgates may be secured shut in (8) locations maximum using double strand #9 wire, seat belt, cable, 3/8" chain, bolts, or welded. A combination of securing techniques is allowed. This must be sheet metal to sheet metal securing only, and may not wrap around or tie into frame in any way.
- If bolting trunk lid down, (1) 1/2" maximum bolt per location may be used through the quarter panel drip ledge/rail to secure trunk lid. A maximum of 4" x 4" x 1/4" washers may be used per securing location.
- If trunk lid is welded down, a maximum of (8) 4" x 4" x 1/4" plates may be used, sheet metal to sheet metal only. (These plates may not be cut into pieces).
- If the speaker deck is removed, (2) securing locations may be used at the wheel tub/package tray area to secure trunk lid down.

- Station Wagons ONLY: If you remove your tailgate may have (6) places of #9 wire 2 strands max, must be behind axle, sheet metal to sheet metal only, roof to floor. Pillars must remain intact and on the car at all times.
- Driver's door may be welded solid. Remaining doors may be secured using (1) option:
  - **Option 1** - Excluding driver's door, all other doors may be welded 5" on, 5" off, on vertical seams only with 3" x 1/8" maximum material. If welding, no other securing methods may be used. Any excess door plate or weld will be completely removed.
  - **Option 2** - Excluding driver's door, all other doors may use (10) locations of #9 wire, seat belt, cable, or chain anywhere per door to secure. These securing locations must not secure to/route around any part of cage or frame. Securing must be sheet metal to sheet metal only. If securing doors with this option, no welding on doors is permitted.
- A 1/4" maximum driver's door skin is allowed and may be completely welded. Driver's door skins are not to exceed a maximum of 3" past the front driver's door seam. (Door skins are highly recommended). No other doors may be plated/skinned.
- The passenger front door may have a maximum 1/8" x 18" piece of strap steel, 3" past each front door seam. This plate must be centered on the door at bumper height. Welding on passenger door plate must conform to the 5" on, 5" off welding rule. This is for driver's safety only, do not get excessive!
- #9 wire, chain, cable, seatbelt, or maximum of (2) pieces of 3" x 1/4" flat bar material may be used in attached on to the roof sheet metal. Any part of this must remain 5" away from any part of the drivetrain, roll cage, halo bar, or roof signs at any time. If using (2) metal straps, (2) additional straps attaching the vertical straps together, these straps may attach horizontally to vertical straps, and must retain the 5" clearance rule.
- Maximum of (5) 3/8" bolts may be used in each wheel well opening, sheet metal to sheet metal only and using store bought nuts and washers only.
- the windshield area. A maximum of 3" attached to the cowl/dash sheet metal and maximum of 3" No internal bracing of body panels, no doubling body panels. No interior seam welding. No added material anywhere to body or frame!
- A 3/4" maximum size store-bought washer may be welded to sheet metal in each #9 wire/cable location.
- All excess holes in firewall must be covered with a non-flammable material.

## SUSPENSION/STEERING

- (2) 2" x 4" x 1/4" plate may be welded per upper A-arm to frame the lock front suspension and maintain ride height. Only '03 and newer Ford cars may use the (2) plates on either the upper OR lower A-arms; both plates may be used on the upper A-arm, or both on the lower A-arm, not (1) on each. All plates used to lock suspension must be welded to the A-arm to be considered an "A-arm plate".
- Front shocks may be used but must be mounted in factory location, or shock must be completely removed. No solid shocks or threaded rod shocks allowed!
- '03 and newer Ford cars may use a strut riser/spacer but must bolt into factory location. These risers/spacers cannot be welded into place or strengthen the frame or suspension in any way.
- 26" front ride/bumper height. 14" rear ride/bumper height on coil spring rear suspension cars, 16" rear/bumper height on leaf spring cars must be maintained. Front and rear measurements will be directly behind the bumper at the bottom of the frame rail or the bottom of the bumper itself, whichever measurement is the lowest.

- Store bought “twist-in” style spring spacers are permitted, absolutely no homemade spacers or blocks/spacers on top of the springs. Absolutely no added material inside of the coil pocket area!
- Changing front or rear coil springs to a stiffer OEM passenger car coil spring is permitted.
- Rear coil springs may be wired in to place with double-strand #9 wire or clamped. Securing may not strengthen frame.
- Locking rear suspension/ride height is allowed. It may be accomplished with (2) options:
  - **Option 1)** A single 3/8" chain may be used from rear-end to frame. 3" maximum chain link length. Only (1) link per side welded to the frame or hump plate. Chain must be positioned on the curved portion of the frame hump, not ahead of or behind the hump where frame flattens. No welding of any other chain links. No additional welding or material is allowed.
  - **Option 2)** Maximum of (1) 1" threaded rod may be used per side from rear-end to factory shock location on frame only. Threaded rod shocks may NOT be used to pinch body and frame, sheetmetal must be cut away. (2) 3" maximum diameter washers may be used on threaded rod shock mounting.
- Aftermarket steering columns are allowed. 1" maximum diameter steering column shafts allowed. '03 and newer Ford cars must use a factory rack and pinion.
- All suspension may be replaced but MUST be OEM passenger car or truck origin, meaning stock automotive manufactured parts (Chrysler, GM, Ford, etc) must be used. No custom, aftermarket, or homemade suspension. All suspension and steering must remain stock unless otherwise stated in rules.
- Upper A-arms may be interchanged w/ automotive OEM parts as long as they are able to be bolted on. You may cut/trim to make them fit but no welding on a-arms, brackets, etc. A-arm must bolt on factory brackets of the frame, no drilling new holes or enlarging existing holes. (**Example:** 79-91 Ford A-arms being installed on a 98-02. Cut the mounting bar out and trim the edges of A-arms).
- **NO** aftermarket spindles allowed! No altering, adding material, or welding to spindles.
- Aftermarket steering, pedals and shifters are allowed.
- Leaf springs Cars: Maximum of (5) leaf springs per side with an OEM stagger, do not invert, flip, or re-stack springs. Leaf spring cars will have 2 options:
  - **Option 1)** (1) 10"x4" hump plate allowed. If using this method, NOT more than (1) clamp or double-strand of #9 wire ahead of the rear axle around the leaf spring pack per side, (2) clamps or double-strand of #9 wire behind the rear axle around the leaf pack per side. If using clamps, they must be OEM in nature to that era of vehicle, do not use heavy duty or homemade clamps.
  - **Option 2)** If NOT using hump plates, (3) clamps or double-strand #9 wire ahead of the rear axle around the leaf pack per side, (3) clamps or double-strand #9 wire behind the rear axle per side. If using clamps, they must be OEM in nature for that era of vehicle, do not use heavy duty or homemade clamps.
- Tie-rods may be reinforced with (1) of these options:
  - **Option 1)** Stock sleeve may be replaced with a maximum of 1" OD pipe/solid tapered rod and must use a stock-type tie-rod end. Spindle or drag link may NOT be reamed for a larger tie-rod end.
  - **Option 2)** Factory adjustment sleeve and tie-rod ends may be welded and reinforced with steel. Tie-rod must have stock-type ends. Spindle or drag link may NOT be reamed for a larger tie-rod ends. A store bought washer may be placed over the seam of the tie-rod and welded.
- Aftermarket rear trailing arms are allowed. Solid rear trailing arms are allowed. Maximum of 2" x 3" tube that is no longer than factory rear trailing arms.

- '98 and up watts-links conversion - UPPER BRACKET conversion will be allowed ONLY in the following way: Upper trailing arm brackets must be bolted in. They must be (2) separate brackets with maximum of 6"x 12"x 3/8" thick max with (5) 5/8 bolts, nuts and store bought washers per bracket. (4 corner bolts and 1 center bolt in upper bracket). (Photo below of approved style upper brackets).



- Upper brackets may only be bolted to frame package tray area above rear axle and bolts may not go through or attach to body or be attached/strengthen any other part of the car. No welding to upper brackets/mounts.
- '98 and up watts-links conversion - LOWER BRACKET will be allowed ONLY in the following way: (1) piece of 3" square tube 3"x 3"x 3/8" maximum per side of frame may be used to build the bracket or similar dimension aftermarket lower bracket. (Photo below of approved aftermarket lower bracket). It must be attached with a 1/2" weld bead maximum to the inboard of the frame at the point where trailing arms are mounted. Drill a hole through the tube and through (1) thickness/layer of the frame (inboard side). A-arm must be bolted into place. No other bolts will be allowed to mount this bracket. No factory mounting brackets will be allowed to mount the trailing arms. No "pocketing" or "pinning" lower bracket through to the outboard side of frame. If using watts-links suspension conversion, factory brackets must be trimmed off the frame.



- Upper ball joints must be bolted in with the OEM orientation. You may have a maximum of (4) 1/4" bolts to replace rivets or original bolts, additionally (4) 1" tack welds per upper ball joint, 1/4" weld bead maximum, will be allowed. Thread in upper ball-joint may be used to replace original upper ball joint but MUST be installed in same fashion as an OEM upper ball joint. DO NOT abuse ball joint installation/welding or you will be changing them! (Photo below for example of thread-in upper-ball joint)



- All lower ball joints must be OEM-type for that make/model of lower A-arm, they must press in or bolt into place in the OEM orientation. Additionally, (4) 1" tack welds per ball lower ball joint, 1/4" weld bead maximum, will be allowed. Absolutely no reaming of ball-joint holes on spindle. DO NOT abuse the ball joint installation/welding or you will be changing them!
- Any tire/rim combo is allowed. No tires taller than 30".
- Sway bar may be used but must use OEM mounts on bottom of frame. Sway bar may be bent and bolted down directly to lower A-arms. Sway bar may not be attached or welded to any other part of frame, suspension, or drivetrain.

## **BRAKES & TIRES**

- Vehicle must have working brakes at all times and have the ability to stop.
- Any tire/rim combo is allowed. No tires taller than 30".
- Bead locks/bead protectors are allowed.
- (4) wheels max per vehicle, no dual tires.
- No split rims or studded tires. Solid and foam filled tires allowed.
- Wheel weights must be removed.
- Tubes and outer tire flaps/skins are allowed.
- Valve stem protectors are allowed but must be deemed safe.

## **FRAME & BUMPERS**

- Frame and body must match generation/era of car. (**Example:** 79-97 Ford frame under a 79-97 body, 98-02 Ford frame under a 98-02 body, etc.) If using a convertible frame, it must be used under a convertible body, a same generation/era car hardtop must be welded on. No station wagon frame under sedan body, or sedan frame under station wagon body.
- Frame shaping, contouring, forming, or folding is NOT allowed with the exception the rear frame reliefs/notches to achieve the rear of the car to roll/pack.
- NO welding, bolting, wiring or adding any material/substance to strengthen frames. - At Inspectors discretion, frames will be drilled, ground on, or wiped down. Absolutely NO painting or spraying any material on/in frames or welds. Any excess frame welding will result in COMPLETELY REMOVING the added weld or material, or forfeiting to participate.
- '79-'02 Ford cars may cut the (3) firewall "crushbox" tabs/flaps to "tilt/tip" the front frame and reweld the frame tabs/flaps with a single pass 1/2" maximum weld. DO NOT over-weld or abuse this rule! Absolutely no added material to achieve frame tilt.
- "Cold-bending" front frame is allowed. No other tilting/tipping allowed to the car anywhere.
- Maximum of 6" tall core support spacers using 3" x 3" x 1/4" maximum material. 3/4" threaded rod may be used from bottom of frame up through core support and used to secure hood down. 3" x

1/4" maximum washer used on rod below the frame, and a 6" x 3/8" maximum washer on top of the hood. Absolutely no welding of core support spacer, threaded rod, or washers to the frame.

- Using (1) method of body mount options is allowed:
  - **Option 1** If all the body mounts are left stock, (4) total body mount bolts using 3/4" maximum threaded rod may be added. Added mounts may pass through (2) layers of the body maximum, using pre-existing frame holes or mounted to the side of the frame. Added mounts may only be installed vertically and not be attached into any part of the cage. Added mount bolts/threaded rod may be 14" long maximum. (2) 3" x 3" x 1/4" maximum diameter washers may be used at added mounts. These washers may not be welded in any way. Broken/rusted-out OEM body mount bolts may be replaced with factory length 3/8" bolts with 3/8" store-bought washers. You must drill out the factory bushing and still use it in the factory position if repairing a broken/rusted-out OEM body mount bolt. Added mounts must still maintain a 1" space between body and frame.
  - **Option 2** If body mounts are changed, maximum 5/8"x 6" bolts may be used. 3" diameter maximum body mount spacers may be used to space body from frame, these spacers must maintain a minimum of 1" space between the body and the frame. The body mounts may only go through one layer of the body with the exception of (2) in the trunk which are allowed to go vertically up through the trunk lid and (2) at the core support that may go up through the hood. Maximum of (4) washers and (4) nuts at each core support and trunk mount. Maximum of (2) washers and (2) nuts each on all other body mounts. Washers to not exceed 3" x 3" x 1/4" and the bottom washer must remain inside the frame. All body mount washers must be "free-floating" and not welded to body or frame.
- Absolutely no welding in body mount locations on the frame, this may result in body mount removal and/or disqualification.
- Bumpers may be welded to end of frame rail. Bumpers may be "hard-nosed" to end of frame. No shortening of rear frame rails. Bumper shocks must match make/model of the car. Shocks may be collapsed or pushed into frame and welded. Shocks may be plug-welded to the frame no further back than 8" from the back of the bumper.
- '03 and newer Ford cars are not allowed bumper shocks.
- Front frames may be shortened no further back than the front of the core support body mount hole. No moving or relocating the core support mount or mount bracket.
- Homemade, aftermarket/replica, or loaded OEM bumpers allowed. Bumpers cannot have sharp or protruding edges. Points may be no further than a OEM Chrysler New Yorker "Pointy" front bumper.
- Front and rear bumper bracket/plate options - (If bumpers cannot be mounted in one of these ways, the driver must call and have mounting method pre-approved).
  - **Option 1** If applicable, OEM brackets/shocks to proper make/model of car may be used and in factory position. OEM brackets may be continuously welded from front of the bracket back 8" maximum. No additional welding allowed past 8". Cars equipped with shocks and brackets may collapse shocks and weld. Brackets and shocks may be welded to bumper.
  - **Option 2** If no bumper brackets are used, or car is not equipped with bumper brackets, (1) 8" x 4" x 1/4" plate may be welded to the first 8" of the front and rear frame for bumper mounting purposes. (1) plate per front rail attached to the bumper, (2) plates per rear rail attached to the bumper. These bumper plates MUST contact the bumper and use a 1/2" weld bead maximum.
- Front bumper brackets on the front of the car, rear bumper brackets on the rear of the car.
- (2) pieces of 3/8" maximum chain per side may be BOLTED from the frame/bracket to the bumper, this is only to keep the bumper from completely falling off. Maximum of 3" chain link length.

- (1) 22" x 6" x 1/4" hump plate allowed per side. Hump plates may either be straight across or contoured, not both! 1/2" weld bead maximum. If using "Tee-Pee" plates, they will be measured before manipulation. All hump plates must be installed on the outboard side of the frame (outside toward tires). Hump plates must be a minimum of 3" away from rear axle/brackets at all times. Hump plate may NOT be attached to the body or drivetrain in any way.
- Fresh "Metric" and O3 and newer Ford cars (listed at top of rule sheet) will be allowed (1) 4" x 6" x 1/4" additional plate anywhere per frame rail. If you need rust repair to the frame, this will count as a plate. This plate will also count toward the total amount of "Fix-It-Plates" on the car. "Old Iron" will NOT get any fresh plates.
- Pre-ran cars will be allowed a maximum of (3) "Fix-It-Plates" per frame rail. These plates may be 4" x 6" x 1/4" or 5" x 5" x 1/4". Plates will not be allowed to be cut apart or manipulated into different shapes or dimensions, they must fit measurement criteria with 90-degree square edges.
- "Fix-It-Plates" must be welded to frame only, do not attach to body, driveline, or cage in any way! 1/2" weld bead maximum on all "Fit-It-Plates".

## DRIVETRAIN

- Any engine/transmission combo allowed. Engine swaps are allowed. (**Example:** Chevy engine/transmission in a Ford car). Swapping from fuel injection to a carburetor is allowed.
- OEM or aftermarket engine mounts are allowed. Any type of mount used must have a bolt going through a rubber bushing. Mounting area 8" x 8" maximum in factory position. No solid or fully welded mounts allowed, do not abuse this rule. Mounts cannot strengthen car.
- (1) 3/8" maximum chain per side of engine as a "hold-down" may be used. Maximum of (2) links per chain welded to the engine cradle/saddle only (not to side rails) with a 1/2" wide weld bead maximum. 3" maximum chain link length.
- A steel or aluminum bell housing and a transmission brace is allowed. No part of the brace may be more than 4" wider, taller, or longer than the transmission. Transmission brace may attach to the single lowest bolt on the rear of each cylinder head ONLY. Transmission brace may not attach in any other way, do not abuse this rule!
- There MUST be a 1" space between the transmission/transmission brace and the crossmember. No welding of the 1" transmission mount/spacer to crossmember, transmission, or transmission brace. 1" space must be rubber, neoprene, or similar material to act as a mount and may be bolted into place.
- An OEM crossmember and mount or 2" x 2" x 1/4" tube maximum crossmember may be used. A 4" x 4" x 1/4" crossmember mounting pad may be welded to the frame with 1/2" weld bead maximum.
- A basic front plate and lower engine cradle is allowed. Lower cradle may not be above the cylinder heads of the engine. Front pulley protector is allowed. Cradle may not go further back than 4" past the 8" engine mounting pad location.
- For USA and Unique shows only you will be allowed distributor protector but it can not be used to strengthen the car in any way. and at no point can it touch any sheetmetal or cage or you will be disqualified. You can not connect your front plate lower cradle to your mid-plate or distributor protector. **This only applies to the USA and Unique rules that run this ruleset.**
- A carburetor protector is allowed but must not extend further back than 16" measured from the front of the engine block. Carburetor protector may only attach straight down to the intake bolts and may not be attached to transmission brace, bell housing, or adapter/mid-plate in any way. If



carburetor protector is past specified point, firewall will be cut out to 5" past the widest parts of the engine.

- A "BOP-Style" adapter/mid-plate is allowed, but must not extend past edge of transmission bell housing 2" in any direction. Do not abuse this rule!
- A fan shroud will be allowed but must be constructed of non-flammable, flexible material. No steel or engine/cradle mounted fan shrouds. Fan shroud can not strengthen the car in any way!
- Any rear differential allowed. Welded and locked differentials are allowed.
- Rear-end braces will be allowed. Rear end brace must be a minimum of 5" away from any part of the frame on fresh or pre-ran cars. Pinion brakes are allowed.
- Stock type or slider driveshafts allowed.
- Exhaust must exit straight down under vehicle past the drivers seat, or straight up through the hood.
- Aftermarket shifters and brake/gas pedals are allowed.
- Radiator must mount in factory location or be removed. Spray foam will be allowed, but if it is too excessive it will be completely removed.
- No homemade radiators allowed. Overflow tanks are allowed inside the engine compartment only.
- Radiator protectors are allowed. Protectors may be 1/8" maximum flat material and no wider than 1" past the factory core support radiator opening. When mounting radiator protector only (1) option is allowed:
  - **Option 1)** - A total of 12" of weld can be used to secure radiator protector. No bolting is allowed if this method is used.
  - **Option 2)** - (10) 5/16" bolts may be used to secure radiator protector. Store bought nuts and washers only. No welding is allowed if this method is used.
- Radiators can be spray foamed in place.
- Electrical fans are allowed.
- '03 and newer Ford cars may run a manufactured aftermarket bolt-in style engine cradle. (Photo

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