

TNT Motor Swap ½ ton Truck Demo Derby Rules

The rules written below are designed for Motorswap Truck Derby. This class is being promoted as a fun class to smash trucks. This should be a simple but safe build. This should be a one time through inspection type build and if you are caught with several major issues, you will be loaded. We cannot stress this enough. If you have any questions with the rules, CALL FIRST. Do NOT assume anything, do NOT play any grey areas. PLEASE READ AND ADHERE TO THE GENERAL DEMO DERBY RULES. All classes must follow those general rules as well that is posted onto the website. Read those!! The official's decision is final. Call or text Logan Sorensen @ 231-343-8868 for building questions. If you have a pre-ran truck and have a question about fixing something it must be ran through Logan before you show up at the show.

Trucks Allowed:

1. Any full size ½ ton Pickup, SUV, Suburban, Full Size Bronco or Durango. 4 Wheel Drive vehicles allowed but the front drive shaft must be removed.

General Preparation:

1. All glass, plastic and pot metal must be removed. Nothing to remain in the bottom of the doors or tailgate.
2. Front dash may be removed.
3. Driver door panel can be left in place.
4. All outer hardware must be removed – door handles, mirrors, chrome, molding, fiberglass, etc.
5. All flammable material must be removed.
6. All airbags must be removed.
7. The computer can be relocated within the engine compartment only and secured with spray foam. They cannot be moved inside the cab or the cowl.
8. Front seat must be securely bolted to the floor. They cannot be bolted to the frame.
9. Driver door must be painted white.
10. MUST have working seatbelts.
11. Receiver trailer hitches must be cut flush with frame brackets.
12. Step bumper must have trailer ball plate cut out.
13. Rear seats and rear decking needs to be removed in all vehicles.
14. A rollover bar is mandatory. This must be placed behind the driver seat (single bar inside the vehicle design or on pickups the rollover bar can go from the cowl to the bed. It cannot be attached to the frame and must be located within the first 2 foot of the front of the bed of pickup.

Fuel Tanks/Battery:

1. Factory fuel tanks must be removed.
2. For pickups, the fuel cell must be located in the bed of the truck in the center of the bed and directly behind the cab. They must be secured safely. We cannot express the need for the tank to be secured.
3. Fuel tank protector is allowed but cannot extend more than 2 foot past the tank. It can be bolted or welded to the box only and not to the frame. It has to be more than 10" away from the rear axle.
4. Battery must be moved inside the cab, secured tightly and covered.
5. Suburbans/SUVs, etc. the fuel cell must be located behind the driver seat area within the middle seat area. Holders are allowed and the tank protector must be the size of the fuel cell.
6. Properly rated fuel lines must be used.
7. Electric fuel pumps are allowed but if it doesn't shut off with the key, then a switch must be mounted and marked clearly.
8. No factory fuel tanks in the bed. Must use a fuel cell.

Body Preparation:

1. Must have windshield protection. This can be chain, wire, or a bar. This must be attached to the cowl area and the roof.
2. Doors must be secured by wire or chain in a max of 6 spots and none of these spots can go around the frame. No loose doors allowed.
3. All doors can be welded with 12" total of weld on vertical Seams only. Driver door is allowed to be welded solid. This is for safety reasons.
4. Door plate is allowed on the driver door and highly recommended in addition to the required heavy door protection.
5. No welding anywhere else unless it is specifically states that you are allowed to.
6. No shortening, shaping, pre-bending, notching of frames.
7. Hoods must be in place and operational.
8. Hoods must have a 12" x 12" hole in the hood in case of a fire. Extra holes in the hood not required if you use headers and the holes are 12" x 12".
9. Hoods are allowed to have a single washer per hole for the wire. The washer cannot be bigger 2 inches and ¼" thick.
10. Hoods may be mounted with up to 6" of 2"x 2" x ¼" thick angle iron in a maximum of 4 spots. The angle iron may only be welded sheet metal to sheet metal (hood and fender only). Up to 5/8" bolts allowed only.
10. Sheet metal (Fenders for tire clearance, etc) can be cut but nothing is to be added.

11. No bolting of the fenders together.

12. Body mounts cannot be changed, altered, etc. DON'T EVEN TOUCH THEM. Exception: You may use a 5/8" x 30" long threaded rod for core support mounting purposes. You may have up to a 6" core support spacer (It may not be welded if metal). Max with 3 nuts, 3 5/8" store bought washers and 3- 5"x5" 1/4" thick plates per rod. Threaded rod must be straight vertical, no bends or angle pieces.

Bumpers:

1. Any factory automotive bumpers are allowed

2. No homemade/aftermarket bumpers. Example: you may run a loaded factory bumper. You MAY NOT put a replica bumper inside a factory skin.

3. Bumpers can be seam welded

4. Bumpers may be loaded but must be completely inside the envelope of the bumper skin. You may cover the vent holes with no more than 1" overlap on the vent holes.

5. Bumpers may be welded on. This is to prevent them from falling off onto the track. Bumpers can have up to a 3" wide strap maximum of 1/4" thick. You are allowed 2 straps per each side of the vehicle. Strap can be welded on any 2 sides of the frame and you may only weld these straps a maximum of 2" onto the frame and 2" onto the bumper. Do not add anything inside the frame. Do not cover any holes with the exception of any in the first 2" of the frame.

Pickup Specific Rules:

1. Tailgates can be either wired or welded but not both.

2. If wired, 6 spots, double stranded max. Strands cannot go around the frame. 2 spots may go around the bumper.

3. Tailgates can be welded shut with 4 (2 on each side) plates maximum size of 3" x 3" plate that is 1/4" inch thick maximum. They cannot be welded to the bumper. This rule is designed to keep the tailgates from falling off and not strengthening the vehicle.

4. Tailgates are allowed to be dropped from their stock positions.

5. No flatbeds allowed.

6. Bed must be in stock position. No smashing down of bed sides. No pre-bending allowed.

7. Beds must be either welded or bolted to the cab. You cannot do both. If you bolt the bed, you can have up to 4 spots with washers being no bigger than 4". If you weld, you are allowed a maximum of 2 straps (3 inch wide by 1/4" thick) on each side. Straps can be touching 3" on the cab and 3" on the bed AND cannot be welded across any door seams.

Suburban/SUV Specific Rules:

1. Driver door can be welded. All other doors cannot be welded. You are allowed up to 6 spots maximum with chain or 9 wire. This can be a single wrap of chain or double stranded wire. Back lift gate door strands cannot go around the frame and 2 spots maximum going around the back bumper.

2. No smashing in the sides or tailgates.

Drivetrain:

1. Engine swap allowed

2. Basic lower engine cradle is allowed with a front plate and pulley protector. May not go above the heads.

3. Slider driveshafts are allowed.

4. No Distributor Protectors. No Mid-Plates are allowed.

5. Rear ends are allowed to be welded for positive traction.

6. Headers are allowed.

7. You may run any motor mount. Maximum mounting area allowed is 8" x 8".

8. A basic slide over Transmission brace is allowed. No Steel Bells are allowed though.

9. Any rear end is allowed. Must be mounted in the factory position. May not strengthen vehicle in any way.

Tires:

1. Any tire combo allowed

2. No studded tires or split rims

3. No dually tires allowed.

Steering & Suspension:

1. Truck must bounce

2. No strengthening suspension

3. Vehicles must sit level

4. Only factory springs for the year, make and model of the truck. Do not change them or alter them.

5. Minimum height at both bumpers is 19" high and maximum height is 26". Note: this must be maintained no matter what tires you run. No exceptions.

6. Stock manufactured tie rods for that particular vehicle only. No over sized tie rod ends are allowed.
7. Do not alter the tie rods in any way.

Driver Compartment:

1. A 4 point cage is recommended for your safety. This is not designed to strengthen the vehicle. Only 2 down legs are allowed but must be mounted in the front doors only and must be vertical and also, may be attached to the top of the frame. Example, they may not be used as kickers. Cages may be gusseted but must be on the inside of the cage. Cage must remain in the drivers cab with exception of the gas tank protector.
2. Cages must be higher than 5" from the floor. It must be more than 3" away from any part of the drivetrain.
3. Cages for all vehicles with back doors- Cage cannot be further than 10" from the driver door pillar.