2024 TNT Light-Mod Fullsize Demolition Derby Rules

General Preparation

- Any year sedan or station wagon. No trucks, vans, El Caminos, T-tops, convertibles, hearses, four-wheel-drive (4WD), all-wheel-drive (AWD), limousines 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.
- <u>ALL</u> airbags must be completely removed. <u>Unplugging/cutting airbag wires only not allowed!</u>
- 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 must be removed.

Body Preparation

- All cars 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 immediatly after inspection when you line up in the staging area.
- Hood and trunk lid must have a minimum 12"x 12" access hole in them for inspection and safety.
- 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 fresh "sedagons". Pre-ran station wagons may be "sedagoned". No added metal to the trunk area of cars. Rear of wagons/"sedagons" must follow minimum 12" frame/bumper height rule.

- Trunk lids/rear hatches may be secured shut using #9 wire, seat belt, chain, or welded shut. Trunk lids/hatches may be completely welded. (2) securing locations of #9 wire, seat belt, or chain may go to rear bumper.
- Hoods may be secured in (6) locations maximum. A combination may be used totaling (6) securing locations total using these options:

Option 1: Hoods may use (2) 1" 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 1/4" maximum washer may be used on top of hood only per side. 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. Option 2: Double strand #9 wire, seat belt, or 3/8" maximum chain may be used. Securing locations may not wrap around or tie into frame rails in any way. Sheet metal

Option 3: 6" long, 2" \times 2" \times 1/4" angle iron may be used welded to sheet metal only. Angle iron to be used in matching pairs to secure hood. Angle iron may have (2) 1/2" maximum bolts per matching pair.

- Driver's door may be welded solid. Remaining doors may be welded 5" on 5" off, on vertical seams only with 3" x 1/4" maximum material. No #9 wire limit while securing doors. You can wire, seat belt, or chain bottom of doors around frame rails.
- Exterior door "skins"/plates may be used for door protection. Only both front doors may be "skinned"/plated with 1/4" maximum material and may not exceed more than 3" past each door seam.
- 10. Body mount bolts may be replaced with 1" maximum bolts/threaded rod. MUST have 1" minimum bushing/spacer between body and frame in all locations.
- No internal bracing of body panels, no doubling body panels. No interior seam welding.
- All excess holes in firewall must be covered with a non-flammable material.
- Rust repairs are allowed. You must use sheet metal thick material as repair material and may not exceed more than 1" overlap of rusted area. Leave rusty metal in place and patch over it, officials must be able to see rusted metal that is being repaired. Call and take photos before making any rust repairs!
- Pre-Ran Vehicles: Body metal repairs are allowed. No patching over bent trunk sheet metal. Call and take photos before making any repairs!

Steering/Suspension

- Aftermarket steering columns are allowed. Aftermarket hydraulic steering systems are allowed 3/4" maximum steering column shafts allowed.
- Front and rear suspension may be locked/solid.
- 2. All suspension parts <u>MUST</u> be OEM passenger car or truck origin but may be changed. Meaning stock automotive manufactured parts (Chrysler, GM, Ford, etc) must be used. No custom aftermarket or homemade suspension.
- 3. NO aftermarket spindles allowed!

to sheet metal only.

• A-arms may be locked solid or welded down using (1) 1" maximum bolt/threaded rod per side, or a 2" x 6" x 1/4" maximum steel strap on either side of A-Arm to frame.

- Tie-rods and ball joints may be aftermarket but must be stock appearing.
- Coil springs may use wired or clamped into place. Leaf springs may use (6) 2" x 1/4" maximum clamps or double wrap of #9 wire to hold leaf pack together, (3) in front of axle, (3) behind axle.
- Ride height measured from bottom of frame in front and back is maximum of 26", minimum of 12". Twist in coil spring spacers are allowed.
- Aftermarket steering, pedals and shifters are allowed.

Brakes & Tires

- Car must have working brakes at all times and have the ability to stop.
- Any tire/rim combo is allowed.
- Bead locks/bead protectors are allowed.
- (4) wheels max per vehicle, no dual tires.
- No split rims or studded tires
- 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

- Any automotive, loaded, replica, or aftermarket bumper allowed. Bumpers are not to exceed 8"x 8" in diameter construction and/or less than 4" of point spread across no less than 32" of the bumper face. No excessive pointed bumpers or sharp/protruding areas.
- Any front bumper bracket may be used on any car from the same make. Ford to Ford and GM to GM.
- You may compress bumper shocks and weld shocks, brackets, and bumpers on. 3/4" weld bead maximum.
- Front bumper brackets may use (1) of the following ways:
 - **Option 1:** (1) 14" x 3/8" maximum bumper bracket may be used, no larger than the side of the frame rail in addition to (1) 4" x 4" x 3/8" maximum plate per frame rail.
 - **Option 2:** (1) OEM bumper bracket (must meet 6" shock/bracket rule below) in addition to (2) 4" x 4" x 3/8" plates per frame rail.
- OEM bumper shocks and brackets may not be welded past 6" behind the factory core support mount hole onto the frame. If shock or bracket goes farther than 6" past core support mount hole, it must remain completely factory beyond the allotted 6" and not welded. Suicide door Lincolns and cars that have no core support mount must only go 6" past the vertical part of core support right above the frame rail when mounting the front bumper.
- Bumper plates/brackets are allowed on fresh or pre-ran cars.
- Stock frame seams may be welded from A-Arms forward.
- No shortening of frame past the center of core support mounting hole. Altering or shaping of the frame not allowed. (Fords must have 18" minimum of frame from factory A-arm bracket to back side of the bumper).
- Tipping/tilting/pitching frames allowed. No adding material.
- All factory frame holes must remain open!
- No painting or undercoating anywhere on frame.

- (1) 3" x 22" x 1/4" maximum plate may be welded to the outside of the frame rail over rear axle "humps". This plate must be contoured and centered on the hump. Call if you have any questions!
- Rust repairs are allowed. 1/8" thick material must be used to repair and must not exceed a 1" overlap of rusted area. Leave rusty metal in place and patch over it, officials must be able to see rusted metal that is being repaired. Call and take photos before making any rust repairs!
- (1) 2" x 2" x 1/4" maximum spacer welded to the core support frame mount may extend vertically no higher than the top of the core support. This is not allowed to have gussets running forward to the bumper or back to the frame. The core support mount may go through the frame and core support to the hood. Remaining 4 spots no larger than 1" all thread.

Drivertrain

- 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.
- Any rear end allowed. Ford Watts Link conversion kits allowed. Aftermarket/reinforced rear suspension arms are allowed.
- Stock type or slider driveshafts allowed.
- An engine cradle/protector, mid-plate, distributor protector, transmission brace, or bell housing allowed. Any brace/cradle/protector must attach to the factory motor mount locations.
- If using an engine protector/cradle, there are (2) options:
 - **Option 1:** A full cradle or midplate/distributor protector is allowed, you may not use "kickers" of any kind. Driveline may not attach to cage in any way.
 - **Option 2:** A lower engine cradle may be used and must mount/stop below cylinder heads. (1) 2" x 2"maximum tube "kicker" from the dash bar to the back side of the A-arm mount is allowed per side. "Kicker" bars may have a 4" x 4" x 3/8" maximum mounting plate. If using this option, there <u>MUST</u> have a 4" gap between any part of the cage and the drivetrain! No full cradle or midplate/distributor protector!
- Aftermarket or solid engine mounts are allowed. Mounting area 8" x 8" maximum in factory position.
- Exhaust must exit straight down under vehicle past drivers seat, or straight up through the hood.
- Welded differentials are allowed.
- Stock type or slider driveshafts allowed.
- Aftermarket shifters and brake/gas pedals are allowed.
- Radiator must mount in factory location or be removed.
- No homemade radiators allowed. Overflow tanks are allowed.
- Radiator protectors are allowed. Protectors may be 1/4" maximum material and no wider than the factory core support mount locations.
- Radiators can be spray foamed in place.
- Electrical fans are allowed.

Cage/Drivers Compartment

• A 4-point cage is allowed: 4" x 4" x 1/4" (or equivalent material **Example:** 2" x 6") maximum material allowed. Driver's side door bar only can be up to 16" tall material. Cage must stay

within the driver's compartment. Center bar or gussets are allowed but must be withing main cage.

- (1) down-leg/bar at each corner of cage allowed. Legs/bars may not extend past each corner of the furthest point out of cage in each direction and must be straight down and attached to sheet metal or frame. Legs/bars may not be angled in any way. All down-legs/bars may not extend or be attached any further forward than front of rocker/belly rail, or rear of rocker/belly rails.
- A rollover bar is required. This includes 2 vertical bars running up and attached over roof of vehicle with another horizontal bar. All rollover bars must be welded to bar behind seat and/or rear of door bars or run down to floor/frame counting as (2) rear down-legs/bars from cage. You may also attach the front of the rollover bar in (2) positions to the roof using 3/4" maximum bolts and 4" washers
- Must run wire, chain, seat belt, or a 2" x 2" maximum tube in the front windshield area from roof to cowl, welded or bolted. Windshield protection may be attached to dash bar or rollover bar also.
- A 3" x 3" maximum tube rear window bar is allowed. This bar may attach to roll over back and no more than 6" onto deck lid from the rear package tray/speaker deck.
- Station Wagons: Rear window bar may be: (1) 1/8" x 3" maximum strap material. It may be used from roof to lower window opening on rear hatch, or to bumper. 3" maximum mounting onto sheet metal locations.
- Stock fuel tank must be replaced with a marine type tank/approved fuel cell. Fuel tank may be securely fastened to rear driver's compartment floor metal using bolts or in a tray/holder attached from the cage.
- All fuel lines inside driver's compartment must be approved steel or braided lines and routed to prevent being cut or pinched. High pressure lines and proper fittings recommeded.
- A fuel tank tray/protector may be used. Fuel tank tray/protector must attached to main cage and be no wider than 32", it may touch rear sheet metal. Tray/protector may not be bolted or welded to body metal. All fuel tank protector bar(s) may be no closer than 6" from rear window bar.
- Transmission coolers are allowed inside the vehicle. Transmission coolers must used approved high pressure lines and proper connections. Officials must deem safe.
- (2) automobile-type battery(s) maximum allowed. Battery must be relocated to front passenger seat area or front floorboard area or mounted in a steel tray on cage away from doors. Battery(s) must be securely fastened and covered.

If you have any questions with the rules, CALL FIRST. Do NOT assume anything, do NOT play any grey areas. The official's decision is final. Call Logan Sorensen at 231-343-8868 for building questions.