

# SECTION X

## 2.5 Diesel Class

### **Overview:**

The Street Diesel (2.5) class is designed for street able pickup trucks (full-bodied diesel pickup trucks). Valid DOT registration and license plates are mandatory. The vehicle must be four-wheel drive. One truck to one class., you cannot pull the same truck in a different class during the same event.

**Designations:** "2.5" followed by competition number.

**Apparel:** A shirt and full length jeans are required. **NO SHORTS!**

**Helmet:** A helmet is required for this class.

**Driver Restraints:** The OEM restraint system is mandatory and must be worn.

**Fire Extinguisher:** A fire extinguisher system is required.

**Credentials:** All drivers must have a valid state driver's license.

### **VEHICLE/CHASSIS**

**Weight Breaks:** 8,000 lbs. maximum including driver. After you have gone over the scales, you may not work on your truck unless an NSPA tech is present and you are not violating the class rules. Ballast is permitted. Front hanging weight is permitted. No weights permitted in the cab of the truck. Final safety decisions rest with the NSPA Technical Department.

**Hitch:** The hitch must be a receiver style hitch, reinforcements are permitted. Reinforcements must not extend forward of the center line of the rear axle. Trick hitches are prohibited. Trick hitches will be determined by the Tech Official. The hooking point must be the rear-most point on the vehicle and must be rearward of the stock location of the tailgate. The hitch must be horizontal to the ground and stationary in all directions. Bumpers may be notched or removed. The hitch's height from the ground may not exceed 26 inches. The hooking point must have a minimum 3.00 X 3.50 inch inside diameter opening for the sled hook. The hooking point will be measured to the center of the clevis loop. Then center of the hook point must be no less than 44 inches from the centerline of the rear axle.

**Body:** The body must be the OEM truck body, including full bed. The body must retain full sheet metal. Metal aftermarket hoods are permitted. Fiberglass hoods must be shielded on the underneath side with sheet metal or aluminum skin a minimum of 0.60 inches thick. The hood must be closed and securely latched while the vehicle is hooked to the sled. The complete OEM firewall is mandatory. The complete OEM floor plan is mandatory.

**Street Equipment:** Complete headlight and taillight assemblies (all) are mandatory and must be operative, and must be installed during competition. Complete OEM windshield and all other windows are mandatory. Windows must be able to operate per factory specifications, they must open and close by electric or mechanical means.

**Interior:** A complete interior, including dashboard, door panels, headliner, etc., is mandatory. Two matching front seats are mandatory. Aftermarket seats are permitted; they must be fully upholstered. All factory controls (lights, signals, horn, windows, wipers, etc.) must be retained and functional.

**Brakes:** Four wheel hydraulic brakes are mandatory and functional.

**Chassis:** The OEM chassis is mandatory. The engine must be in the OEM location for the body used. The vehicle must retain the full OEM chassis. Wheel tubs, back-half conversions, tube chassis, etc. are prohibited.

**Steering:** The vehicle must retain full, original OEM steering gear. The vehicle must retain the original OEM power assistance, if it was so equipped. Additional stabilizer bars are permitted. Non-OEM power assist methods are prohibited.

**Tires:** The tires must be DOT street tires. 35-inch max. Cut tires are prohibited. No chains or studs.

**Wheelbase:** The vehicle must retain the original factory wheelbase and track width. If dual rear wheels are used, they must be factory type positive offset front and rear. In basic terms, the axles must be factory type 1-ton.

## **DRIVELINE**

**Driveline:** An OEM transmission and transfer case are mandatory. They must have been an option on a one-ton or smaller pickup.

**Drive Shaft Loops:** Any U-joint that is visible from the side of the truck must be shielded to contain the U-joint and the end of the shaft. Recommended to be at least six-inch-wide U-joint shields around the rear U-joint constructed of at least ¼" steel or 3/8" aluminum will safely contain the U-joint.

**Rear-End:** Non-OEM rear-end housings are prohibited. It must have been an option on a one-ton or smaller pickup. Rear axle bolts must be covered by a cap or shield. For class M H/E, the rear-end must be the model supplied with the vehicle as manufactured.

**Transfer Case:** Non-OEM transfer cases are prohibited. The transfer case must have been an option on a one-ton or smaller pickup truck. For class M H/E, the transfer case, if any, must be the model supplied with the vehicle as manufactured.

**Transmission-Automatic:** Non-OEM transmissions are prohibited. Aftermarket torque converters, valve bodies and internal components are permitted. Transmission brakes are prohibited. Any non-OEM floor mounted automatic transmission shifter must be equipped with a spring-loaded positive reverse lockout device to prevent the shifter from accidentally being put into reverse gear. A functional neutral safety switch is mandatory. All transmission lines must be metallic or high-pressure-type hose.

**Transmission-Manual:** Non-OEM transmissions are prohibited. Aftermarket internal components permitted.

## **SUSPENSION**

**Suspension-Front:** The upper mounting point for strut assemblies must be in the factory location. Adjustable caster/camber pillow ball mounts are permitted. The lower control arm may be strengthened provided factory-mounting points to chassis are maintained. The lower mounting point for the strut assembly may be modified for improved caster or camber. Strut tower braces, lower tie bars, say bars, and limit straps are permitted. Traction bars and devices are permitted.

**Suspension-Rear:** An OEM-style suspension is mandatory. Lowering or raising the vehicle height with suspension modifications is permitted. Traction bars and devices are permitted. All OEM suspension mounting points must be retained and used. Sway bars, limit straps, and camber kits are permitted. Rear may be solid but must be removable. Airbag spring assistance is permitted; airbag compressors must be disconnected.

## **ENGINE**

**Fuel:** The fuel must be #1/#2 diesels only. Soy/biodiesel fuel is permitted. Off-road diesel fuel is prohibited.

**Fuel Injection/Constant Pressure Pump:** The fuel injection pump is limited to cylinder number specific (I.E. 6-cylinder pump on a 6-cylinder motor). The p3000 and the p7100. Ag governors are allowed. No Sigma or 12 cylinder pumps allowed.

**Fuel Tank:** The OEM fuel tank is mandatory and must be used. Racing fuel cells are prohibited and must be removed from the vehicle. Over size fuel tanks are permitted.

**Nitrous Oxide:** Nitrous oxide is prohibited. No other oxygen extenders are allowed. All system components must be removed from the truck.

**Propane:** Propane is prohibited. All system components must be removed from the truck.

**Water Injection:** Water injection is prohibited. All system components must be removed from the truck.

**Batteries:** The batteries must be securely mounted and in the factory location.

**Cooling System:** Radiators must be in the stock location and be of at least stock size.

**Exhaust:** All vehicles must be equipped to direct exhaust upward. The exhaust must exit rearward of the driver's compartment. Stacks exiting through the hood or fender are prohibited. If the muffler or catalytic converter have been changed from the stock, two (2) 3/8-inch diameter bolts must be installed through exhaust pipe in a cross pattern within one (1) inch of each other and as close to the turbo as practical. This will be teched. Bolt heads welded to the pipe, or sheet metal screws to mimic this will be grounds for disqualification.

**Turbocharger:** Vehicles are limited to two turbochargers. If two turbochargers are used, they must be in a compound configuration with only one atmosphere turbocharger. In no case can the high pressure turbocharger be larger than the atmosphere turbocharger. The atmosphere turbocharger must fit the rules listed below:

S-4, GT 42, HX 50, LLY, and turbo of this type is the largest turbo allowed. T-4 mounting flange is the largest allowed. Turbos must be a true 2.5 charger. No clipped wheels or step down covers. Billet compressor wheels are allowed. A single .200 inch MWE groove maximum allowed. Inducer bore must be non-removable. All air must go through the 2.5 inducer bore and the MWE groove. The wheel must protrude into the 2.5 bore 1/8 inch. Turbo will be checked with a 2.550 plug or internal calipers. The vehicle driver will be responsible for making the compressor wheel accessible on the atmosphere turbocharger for the tech personnel to make appropriate measurements. Inducer bore diameter will be measured using a plug or calipers. If the plug fits you will be moved to the appropriate class. Any provisions allowing air to the compressor wheel other than the inducer bore or MWE groove are prohibited.