

## CLASS E: 2.5 Turbo Diesel Class 8000#

This Diesel class is designed for pick up trucks with a wide variety of performance upgrades. Trucks must be 4 wheel drive.

- **See General Pull Rules**
- Hanging front weights are permitted. If used, **Ballast** must be secured. Weights/bracket must not extend more than 60" from center line of the axle. Weight boxes are prohibited. Weights and brackets must be removable by hand. Final decisions will be made the the pull committee.
- **Batteries** must be securely mounted. They may not be located in the driver compartment or forward of the radiator core support.
- **Body** must be the OEM truck body including the full bed floor. The body must retain full sheet metal. The complete OEM firewall and complete OEM floor pan is mandatory. A factory installed pickup bed or commercial style aftermarket bed must be installed. No flat beds are permitted.
- Four wheel hydraulic functional **Brakes** are mandatory. Fully functional factory 4 wheel.
- OEM **Chassis** is mandatory. Engine must be in the OEM location. Vehicle must retain the full OEM chassis. Wheel tubs, back half conversions, tube chassis, etc, are prohibited.
- **Cooling System**: Radiators must be in stock location and be of at least stock size.
- **Credentials**: All drivers must have a valid state driver license.
- **Driveline**: An OEM transmission and transfer case are mandatory. They must have been an option on a one ton or smaller pickup.
- **Driver Safety Restraint System**: OEM restraint system or SFI approved 5 point harness is mandatory and must be worn.
- **Driveshaft Loops**: All trucks must have at least (6") wide u-joint shields around all u-joints on rear drive shafts constructed of at least ¼ steel or ¾ aluminum that will safely contain the u-joints and the ends of drive shafts. Any u-joints on the front axle that can be seen from front or side of truck must be shielded the same as all other u-joints. All shields must be securely mounted to the vehicle.
- The **Engine** is limited to a stock appearing, OEM compression engine, available from the factory in a one ton or smaller truck. Cubic inch limit of 444 CI. Block must circulate coolant freely. No hard filled blocks. Water pumps may be factory or electric powered. All factory belt driven accessories, excluding the air conditioning compressor, must be retained and powered via the crankshaft by a standard serpentine "V" belt. Electric cooling fans are permitted. No individual runner intake manifolds. (Example: ZZ-customs.) Belt driven alternator. No deck plates.
- All vehicles must be equipped to direct **Exhaust** upward. The exhaust must exit rearward of the driver's compartment. Stacks exiting through the fender well & hood are prohibited. Two (2) ¾ 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 possible. This will be teched. Bolt heads welded to the pipe or sheet metal screws to mimic this will be grounds for disqualifications.
- A **Fire Extinguisher System** is permitted. It must be securely mounted. All vehicles must have at least a 2 ½ lb extinguisher with working gauge mounted within the driver's reach.
- The **Fuel** must be pump #1, #2 diesel or Soy/Biodiesel. Fuel must be commercially available. A fuel cell may be used in place of the factory fuel tank, but must be mounted in factory location or securely mounted in bed.
- The **Fuel Injection Pump** is limited to cylinder number specific (ie 6 cylinder pump on a 6 cylinder motor). The use of multiple high pressure common rail fuel pumps or HPOP's are permitted. P pumps that are allowed are the P3000 and the P7100. Ag governors are allowed. No Sigma or 12 cylinder pumps allowed.
- All engines turning more that 4500 RPM must be equipped with a **Harmonic Balancer** or dampner meeting SFI Spec 18.1
- The **Hitch** must be a REECE receiver-style hitch. Reinforcements are permitted. Reinforcements must not extend forward of the centerline of the rear axle and must remain inside the frame rails. 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. Bumper may be notched or removed. The hitch's height from the ground may not exceed 26". The hooking point must have a max. Of 3" by 3 ¾ " inside opening for the sled hook. The hooking point must be a min. Of 44" from the center of the rear axle, to the end of the hole where the hook touches metal to be pulled from, this is the hooking point.
- **Intercoolers:** Factory style or aftermarket air to air replacement only in stock location. Water to air coolers are prohibited. Any means of cooling the air before the engine except the air to air cooler is prohibited. NO USE OF ICE OR WATER.
- A complete **Interior** including dashboard and door panels is mandatory. Aftermarket seats are permitted, they must be fully upholstered. The use of hand-throttles are permitted. Aftermarket gauges are allowed.
- Trucks are required to have **Kill Switch** located on the back of the truck, located near the hooking point. On trucks with an electric injection fuel pumps it must have an electric shut off or disconnect for the injection pump on the back of the truck. For trucks with manual injection pumps they must have an air guillotine of the spring loaded type, no butterfly type to kill the air intake to the engine. It is recommended to have an air shut off on all trucks. Kill switch failure will result in disqualification.
- **Nitrous Oxide** is prohibited. No other oxygen extenders are allowed. Propane is prohibited. All system components must be removed from the truck. No pressurized bottles.

- Non OEM **Rear-End** housings are prohibited. The rear end housings must have been for a one ton or smaller pickup. Rear axle bolts must be covered with a cap or shield.
- **Safety Equipment** : All drivers must wear a helmet, and a SFI 3.2a approved fire jacket and long pants, not necessarily fire suit pants.
- The vehicle must retain the full, original OEM factory **Steering Gear**. The vehicles must retain the original OEM power assistance, if it was so equipped. Additional stabilizers are permitted. Non OEM power assist methods are prohibited.
- **Street Equipment** Complete headlight and taillight assemblies are mandatory and must be operative, except the right front headlight may be removed for air inlet to engine. Complete OEM windshield all other windows are mandatory. Driver window must be able to operate per factory specs. They must open and close via electrical or mechanical means.
- **(Front)** The factory **Suspension** configuration must be retained. Modification to the front suspension that would alter the original location is not permitted. Strut tower braces, lower tie bars, sway bars and limit straps are permitted. Traction bars and devices are permitted. Air shocks are prohibited.
- **(Rear)** An OEM style **Suspension** is mandatory. Traction bars and devices are permitted, they must be bolt on only, welds are permitted for attachment to the frame or axle housing. Traction bars if installed must have a chain, cable or some type of safety device mounted one foot from the front support to catch the bar in case of failure. Control arms may be strengthened or replaced providing all original mounting points are retained and used. Sway bars, lower tie bars, limit straps and camber kits are permitted. The rear suspension can be solid with a removable block. Air bag spring assist and air shocks are prohibited.
- The **Tires** must be DOT street tires. Cut tires are prohibited. The vehicle must retain the original factory wheelbase and track width. 35" max x 12.50. No chains or studs. Single tires. NO DUALS.
- Non OEM **Transfer Case** are prohibited. It must have been an option on a one ton or smaller pickup truck.
- **Automatic** Non OEM **Transmissions** are prohibited. The transmission must have been an option for a one ton or smaller truck. Aftermarket torque converters, valve bodies and internal components are permitted. Transmission brakes are prohibited. Any non-OEM floor mounted auto. shifter must be equipped with a spring loaded positive reverse lockout device to prevent the shifter from accidentally being put into reverse. A functional neutral safety switch is mandatory. Vehicle must not start in gear. All transmission lines must be metallic or high pressure type hose. All auto. transmissions must be equipped with a transmission shield meeting SFI spec 4.1 and must be labeled accordingly. A blanket type shield must be used and appropriately labeled as meeting SFI spec 4.1

- and must extend from the rear of the engine block to the rear of the tail housing with a min of 6" overlap where it is fastened. All vehicles using an auto. transmission must be equipped with a flex plate meeting SFI spec 29.1.
- **Manual** Non OEM **Transmissions** are prohibited. The transmission must have been an option on a one ton or smaller truck. Aftermarket internal components are permitted. A clutch meeting minimum SFI spec 1.1 or 1.2 is mandatory on all engines. All manual transmissions must be clutch assisted. Sequential shifters are prohibited. All transmissions must have a flywheel shield labeled as meeting minimum SFI spec 6.3 or greater. Applications for which an SFI spec flywheel shield is not available may use any properly attached SFI 4.1 or 4.2 blanket that completely covers the bell housing. It must be attached to the rear of the engine block and extend rearward to the transmission with a minimum of 6" overlap where it is fastened. All transmissions or clutch pedals will have a safety interlock switch so that vehicle will not start in gear.
- **Turbo** S-4, GT42, HX50 and turbos of this type is the largest turbo allowed. T-4 mounting flange is the largest allowed. Billet compressor wheels are allowed. A single .200" MWE groove maximum allowed. No stepped or clipped wheels. No step down covers. No forward facing MWE groove. Air must change direction to enter the MWE groove. This will be checked by putting a 1/16" diameter pin against the back side of the inducer bore parallel with the turbo shaft. The pin must NOT protrude into the MWE groove. Inducer bore must be non-removable. All air must go through the 2.5" inducer bore and MWE groove. No tapered or egg shaped inducer bore allowed. The wheel must protrude minimum of 1/8" into the 2.5" part of the inducer bore. Covers will be plugged from the back side to verify where the wheel protrudes is a maximum of 2.5". Turbo checked with a 2.550" plug. MWE groove will be checked. \*6.4 Powerstrokes will be permitted to run modified turbos, as long as the atmosphere turbo does not exceed the OEM straight bore dimensions (2.59").
- **Water Injection** is prohibited. All system components must be removed from truck. The vehicle must retain the original factory **Wheelbase** and track width. Cab and chassis trucks may not exceed 172" center to center of axles. Front dual-wheel spacers may be used only with accompanying positive-offset dually style wheels.