

## WORK STOCK DIESEL TRUCKS {WS Diesel}

The vehicle may be two or four-wheel drive.

Weight: ~~4000~~ lbs. Weight is with driver

### **Ballast:**

Ballast is permitted. Hanging front weights are prohibited. Ballast may be added in the bed of the truck. If used, ballast must be securely fastened to the bed only. Adding weight in other areas of the truck will result in a disqualification.

### **Batteries:**

The batteries must be securely mounted. They may not be located in the driver compartment or forward of the radiator core support.

### **Body:**

The body & truck bed must be the OEM truck body, including the full bed floor and side skins both inner and outer. The body must retain full OEM sheet metal. Metal after-market hoods are permitted. Fiberglass is prohibited. The hood must be closed and securely latched while the vehicle is hooked to the sled. The complete OEM firewall and OEM floor pan is mandatory.

### **Brakes:**

Four-wheel hydraulic brakes are mandatory.

### **Bumpers:**

Front bumpers must be Unaltered Factory stock. No weighted front devices are permitted. – This includes but limited to: Homemade bumpers, Brush Guards, “Ranch Hand” type Bumpers & Winches. Lower brackets (only) for snowplows frames are permitted so long as no modifications that would add weight are present. An unaltered decorative brush guard may be permitted at the option of the head tech officials.. Trucks may NOT compete without a bumper.

### **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.

### **Cooling System:**

Radiators must be in the stock location and be of at least stock size.

### **Credentials:**

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

### **Driveline:**

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

***Driver Restraint System:***

The OEM restraint system is mandatory and must be worn.

***Engine:***

The engine shall be a stock-appearing, OEM make-specific compression ignition Engine.

***Exhaust:***

The exhaust must exit rearward of the driver's compartment. Stacks exiting through the hood or fender well are prohibited.

***Fuel:***

The fuel must be pump #1/#2 diesel only. Soy/Bio-diesel fuel is permitted. Off-road diesel fuel is prohibited. **NITROUS OXIDE is prohibited along with other oxygen extenders as well as the use of PROPANE is also prohibited. All system components MUST be removed from the truck.**

***Fuel Injection Pump:***

The fuel injection pump is limited to a stock-appearing, OEM engine model-specific pump only. The use of multiple high-pressure common-rail fuel pumps is prohibited. Powerstroke engines with a single factory turbo may utilize a second HPOP. Pumps from different years in the same engine model may be interchanged.

***Fuel System:***

The OEM fuel tank is mandatory and must be used. Racing fuel cells are prohibited and must be removed from the vehicle.

***Harmonic Balancer:***

All engines turning 4500 RPM and higher must be equipped with a harmonic balancer or damper meeting SFI Spec 18.1.

***Hitch:***

The hitch must be a receiver-style hitch; reinforcements are permitted. Reinforcements must not extend forward of the centerline of the rear axle or to the axle housing itself. Trick hitches are prohibited. **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 on 4wd units and 30 inches on 2wd units.** The hooking point must have a **minimum 3.750-inch inside diameter opening** for the sled hook. The hooking point will be measured to the center of the clevis loop.

***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 be operative. **The use of hand-throttle controls is prohibited.**

### *Rear End:*

Non-OEM rear-end housings are prohibited. It must have been an option on a one-ton or smaller pick up. Rear axle bolts must be covered by a cap or shield.

### *Steering:*

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

### *Street Equipment:*

Complete headlight and taillight assemblies (all) are mandatory and must be operative. Complete OEM windshield and windows are mandatory. Windows must be operative per factory specifications; that is, they must open and close via OEM electrical or mechanical means.

### *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, sway 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; they must be bolt-on only; welds are permitted for attachment to frame or axle housing. All OEM suspension mounting points must be retained and used. Sway bars, limit straps, and camber kits are permitted. The rear suspension must maintain a minimum compression shock travel of two inches; compression stops must be adjustable. All rear suspensions must use at least one working shock absorber per wheel. Airbag spring assistance is permitted; airbag compressors must be disconnected.

### *Tires:*

The tires must be DOT street tires. Cut tires are prohibited. Dual Wheels are permitted only on trucks with a specific OEM bed designed for this application. Maximum tire width for dual wheels is 14" total.

### *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. All vehicles with engines running 4500 RPM or more and using an automatic transmission must be equipped with a **transmission shield meeting SFI Spec 4.1 and must be labeled accordingly. A blanket-type shield is permitted; it must be appropriately labeled as meeting SFI Spec 4.1** and it must extend from the rear of the block to the front of tail housing with a minimum six inch overlap where it is fastened. All non-blanket type shields must incorporate two (or one, per manufacturer's instructions) 3/4 inch by 1/8 inch straps that bolt to the shield on each side and pass under the transmission pan unless the

transmission pan is labeled as meeting SFI Spec 4.1. **All vehicles with engines running 4500 RPM or more and using an automatic transmission must be equipped with a flex plate meeting SFI Spec 29.1 and be covered by a flex plate shield meeting SFI Spec 30.1.**

***Transmission, Manual:***

Non-OEM transmissions are prohibited. Aftermarket internal components are permitted. A clutch meeting minimum SFI Spec 1.1 or 1.2 is mandatory on all vehicles with engines running 4500 RPM or more. All manual transmissions must be clutch assisted. Sequential shifters are prohibited. All vehicles with engines running 4500 RPM or more and equipped with a manual transmission 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 a properly attached SFI 4.1 or 4.2 blanket that completely covers the bell housing; it must be attached to the block and extend rearward to the transmission with a minimum six inch overlap where it is fastened.

***Transfer Case:***

Non-OEM transfer cases are prohibited. The transfer case must have been an option on a one-ton or smaller pickup truck.

***Tuner:***

A single tuner (Edge, Bully Dog, etc) is permitted.

***Turbocharger:***

The turbocharger is limited to a stock-appearing, OEM/Factory make-specific charger only. Turbochargers from different years in the same make may be interchanged, no adapters to accept other model turbo. 6.4 liter Powerstroke engines may utilize the factory twin turbo configuration. Any cut, notched or etc. of the turbo wheels / blades will result in a disqualification. Turbo housing must be unaltered OEM/ Factory with no provision made for extra air flow and/or machining to allow larger turbo wheel in the housing. No bushing of the inducer is permitted. Aftermarket wheels in a stock unaltered housing are permitted. Failure to allow for turbo inspection will result in immediate disqualification. Any truck disqualified for this reason will be required to undergo a complete super tech prior to any further competition. Absolutely no refunds for any illegal turbo found after the class has pulled. **NOTE: If your truck consistently runs in the top three places you will be checked**

***Water Injection:***

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

***Wheelbase:***

The vehicle must retain the original factory wheelbase and track width.

**The Work Stock Diesel (WS Diesel) class is designed for daily-driven, on the road pickup trucks (full-bodied diesel pickup trucks). Valid DOT registration and license plates are mandatory. If your truck is street legal and built to the rules set forth herein, you can enter this class. Registration papers are required to prove that the truck is licensed for street use. A license plate with the current sticker tag is required to be affixed to the truck. Where applicable, a current inspection sticker is required. Trucks may be hauled to the pull. Trucks dominating the class will be moved up.**