

Two-Eight Class

The *Two-Eight* class is designed for streetable pickup trucks (full-bodied diesel pickup trucks). The vehicle must be four-wheel drive.

Weight breaks:

8000 lbs. Weight is with driver.

REGULATIONS

Ballast:

Ballast is permitted. Hanging weights may not extend more than 60 inches from the centerline of the front axle.

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 must be the OEM truck body, including the full bed floor. The hood must be closed and securely latched while the vehicle is hooked to the sled.

Brakes:

Four-wheel hydraulic brakes are mandatory.

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.

Driveshaft Loops:

All trucks must have at least six inch wide u-joint shields around the rear u-joint constructed of at least 1/4 inch steel or 3/8 inch aluminum that will safely contain the u-joint and the end of the rear shaft. All shields must be securely mounted to the vehicle. Any front shaft 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.

Engine:

The engine block must have been available as a factory option on a one-ton or smaller pickup truck. The use of concrete or other block fillers is prohibited.

Exhaust:

All vehicles must be equipped to direct exhaust upward. Two 3/8 inch diameter bolts must be placed through the exhaust pipe in a cross pattern within one inch of each other as close to the turbo as is practical.

Fire Extinguisher System:

A fire extinguisher system is mandatory (minimum of 2.5 lbs. dry powder type) and must be fully charged. It must be securely mounted and within reach of driver.

Firewall:

The complete OEM firewall is mandatory.

Floor:

The complete OEM floor pan is mandatory.

Fuel:

The fuel must be pump #1/#2 diesel only. Soy/Biodiesel fuel is permitted. Off-road diesel fuel is prohibited.

Fuel Injection Pump:

The fuel injection pump is limited to a stock-appearing, OEM engine make-specific pump only. Dual high-pressure common-rail fuel pumps or HPOPs are permitted. The P7100 injection pump, if equipped, must utilize a stock-appearing governor.

Hitch:

The hitch must be a "Reese"-style category five (5) hitch; reinforcements are permitted and must be within the confines of the hitch structure. 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 3.50 inch inside diameter opening for the sled hook. The hooking point will be measured to the center of the clevis loop.

Intercoolers:

Air to air intercoolers only; water to air is prohibited.

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.

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.

Rear End:

Non-OEM rear-end housings are prohibited. The rear end 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 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. Traction bars and devices are permitted; they must be bolt on only; welds are permitted for attachment to frame or axle housing. Control arms may be strengthened or replaced, provided all original mounting points are retained. Strut tower braces, lower tie bars, sway bars, limit straps, and camber kits are permitted. The rear suspension must maintain a minimum compression travel of one inch. All rear suspensions must use at least one working shock absorber per wheel.

Tires:

The tires must be DOT street tires. Cut tires are prohibited.

Tow Vehicles:

Tow vehicles are prohibited.

Transfer Case:

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

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 or 29.3 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.

Turbocharger:

The vehicle is limited to a single turbocharger; the inducer bore on the compressor housing may be no larger than 2.8 inches measured at the smallest diameter area of the compressor housing. A bushing may be used to downsize the compressor housing ahead of the wheel. If a bushing is used, it must be round, at least $\frac{3}{4}$ inch long. A stock map width enhancement (MWE) groove is allowed. No MWE groove will be allowed that has a width greater than $\frac{1}{4}$ inch. All provisions allowing air to the wheel other than via the bore and the MWE groove are prohibited.

Water Injection:

Water injection is prohibited.

Wheelbase:

The minimum allowed wheelbase is 90 inches; the maximum allowed is 180 inches. The maximum wheelbase variation from left to right is one inch; the measurement will be made using an X pattern (LF-RR and RF-LR). The maximum allowed tread width is 102 inches.

**All final Technical Decisions are made by Thunder in Muncie Technical Staff.