

MATPA 2012 Rules

OEM Driveline 3.0 Turbo Diesel

Engine:

Compression ignition engines only.
Must be in stock location intended by manufacturer.
Must be from a vehicle rated 1 ton or less.
Limited to 460 cubic inches.
Must run on #2 diesel or Biodiesel.
Nitrous Oxide is prohibited.
Propane is prohibited.
Methanol is prohibited.
Water injection is allowed.
Fuel system limited to 1 P pump with single plunger per cylinder OR two CP3 style pumps for common rail engines.
No Sigma pumps allowed.

Exhaust:

Must exit vertically.
Must have two 3/8" bolts mounted in a cross pattern, no more than one inch apart within 6" of the final turbine wheel.

Turbo(s):

Maximum of two turbos allowed.
Maximum of a 3" opening allowed on the opening of the atmospheric turbo.
Map width enhancement not to exceed .250".
Compressor wheel must protrude into the bore 1/8".
Intake housing may not exceed three inches.
Turbo mounting plates are permitted.

Driveline Shielding:

Universal joints must be shielded 360 degrees with 3/8" thick aluminum or 5/16" thick steel. Shield must be 6" long and centered on universal joint.

Each driveshaft will have a minimum of one loop that is solidly constructed and placed in the center of the driveshaft.

All intermediate shafts between transmission and transfer case must be totally enclosed in 3/8" aluminum or 5/16" steel. Only 1/4" of the shaft ends can remain visible.

Axle shields are required and must be .060" thick steel or aluminum. Shields cannot be mounted to the axle ends or hub bolts. One may have a hole the minimum size required to lock/unlock a hub.

Ballast:

Vehicle (with driver) cannot weigh more than 8000 lbs.

All ballast must be properly secured.

Front weights are allowed and to be no more than 60" from the centerline of the front axle to the farthest point forward.

Any ballast that is not properly secured and falls onto the track will be grounds for disqualification from event.

Safety:

All vehicles must be equipped with a minimum of a 2 pound ABC dry chemical fire extinguisher, fully charged, in working condition, and within easy reach of the operator.

All drivers must wear a helmet with a chin strap fastened that meets one of the following standards (Snell 1980, Canada Standards Association, DOT, Z-90).

Fire suits (Jackets and pants) will be mandatory.

Fire suits will be a minimum of a single layer SFI approved material.

Vehicle must have a vertical bumper to prevent the vehicle from passing over the buckboard of the sled. The bottom of the bumper is to be a minimum of 24 inches from the ground and extend a minimum of 8 inches vertically and must be of rigid construction and securely mounted to vehicle.

Transmission:

Must be from a passenger vehicle rated at one ton or less.

All vehicles require a working neutral safety switch.

All vehicles require a reverse light operated by the transmission or linkage.

It is required that vehicles with automatic transmissions utilize at least a 6 strap SFI approved blanket or an SFI approved Kevlar shield.

It is required that vehicles with Manual transmissions utilize an SFI approved bellhousing.

No cast iron flywheels or clutches permitted.

Driveline:

Vehicle must be 4 wheel drive.

Front and rear axles must be from a passenger vehicle rated at 1 ton or less.

Transfer cases must be from a passenger vehicle rated at one ton or less.

No quick change gears allowed in any differential or transfer case.

No planetary allowed in axle.

Frame/Chassis:

Stock frames required (1 ton or less)

Frames can be reinforced or modified, but no tubular frames allowed.

No modification to frame that alter wheelbase.

No portion of the vehicle may interfere with the sled, chain, or hook during the pull or while being hooked/unhooked.

The area around the drawbar must be free of all obstruction.

Body:

Must have a full size steel or OEM type body. The bed of the truck must have a complete metal floor OR 200lbs placed behind the centerline of the rear axle AND a cover to conceal the bed.

No tilt bodies allowed.

All doors must be fully functional with functional windows.

Driver's compartment:

No batteries allowed in driver's compartment.

No radiator, heat exchanger, or water hoses allowed in driver's compartment.

No fuel lines allowed in driver's compartment.

OEM firewall required.

All vehicles must have a complete firewall (no holes except for controls and must be kept to the smallest size possible).

Hand throttles (with spring return) are allowed.

Toe strap recommend on foot operated throttles.

Tires/Wheels:

Any D.O.T. tire allowed up to 35".

No cut or altered tires allowed.

No pulling tires allowed.

Factory sized dual tires permitted.

Removing one set of inner OR outer dual tires is allowed or a traditional tire and rim may be substituted.

Tires with studs and/or chains will not be allowed.

Hitch:

All drawbars and hitching devices (including second draw bars) will be constructed of steel.

The drawbar must have a 3.5" inch round hole minimum.

Cross section of hitch point is to be a minimum of 1 inch thick.

Hitches cannot be shorter than 27% of the wheelbase when measured from the centerline of the rear axle to the point of hook.

No trick hitches and no cam type rear ends allowed.

Drawbar must be rigid in all directions when hooked to sled.

Maximum height from the ground to the hook point is 26 inches (this height is determined by the MATPA hitch measuring device).

The maximum angle allowed on the drawbar portion of hitch is 33 degrees.

All drawbars are to be measured at the time of weigh in. No air pressure is to be altered in ANY tire(s) after drawbar is measured.

Suspension:

Front suspension: Must be OEM style and 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.

Rear suspension: A solid suspension is permitted, but must still use OEM mounting points.

Brakes:

All vehicles must have 4 working brakes (2 front and two rear) operating off the factory brake pedal.

Fuel Tanks:

Fuel cells allowed if properly installed.

Kill switch/Air Shutoff:

Air shutoff required on all trucks.

A cable to operate the air shutoff must be placed in the rear of the vehicle within easy reach of the drawbar and must have a 2" diameter ring. It is recommended that the cable operate a fuel shutoff as well.