

EASTERN MISSOURI TRUCK PULLERS DEISEL CLASS RULES: 2023

All classes subject to general rules unless stated otherwise below!

All Rules are at the discretion of the tech committee and the tech committee has final say on interpretation of all rules.

All vehicles must be ready for inspection with full access to all areas to be inspected.

All Pullers in classes above True Stock Turbo Must Wear, Full face DOT Approved helmet, SFI fire jacket, fire pants, fire gloves, fireproof shoes including leather footwear.

All pullers in True Stock Turbo class must wear a helmet.

TRUE STOCK TURBO DIESEL - 8500 LBS:

ENGINE: Limited to light duty diesel engines factory installed in one ton or smaller trucks only.

DRIVETRAIN: Transmission, transfer case and axles must have been commercially available in a one ton or smaller truck.

BODY: Must have complete interior, dash, and all seats. Complete OEM floorboard and bed floor mandatory. The body must be an OEM truck body, including the full bed floor. The body must retain full sheet metal. Aftermarket hoods are permitted. The hood must be closed and securely latched while the vehicle is hooked to the sled. The complete OEM firewall and complete OEM floor pan are mandatory. Dually vehicles must have dually bed.

INTERIOR: A complete interior including dashboard, door panels, etc. is mandatory. All factory controls (lights, signals, windows, wiper, etc.) must be retained and be operative as per tech official. Must have two matching and fully upholstered front seats. The use of hand-throttle controls is prohibited. If the vehicle is equipped with heavily tinted driver's side window the window must be rolled down during the hook.

DRIVERS RESTRAINT SYSTEM: The OEM restraint system is mandatory and must be worn.

STREET EQUIPMENT: Complete headlight and taillight assemblies are mandatory and must be operative- one headlight may be removed for air flow. Complete OEM windshields and

windows are mandatory. Windows must be operative per factory specifications; that is, they must open and close via OEM electrical or mechanical means.

BATTERIES: The batteries must be securely mounted. Must be in stock location.

INDUCTION: Limited to stock single turbo charger (6.4 Power Stroke may run factory compounds with factory inducer size). Turbo must be mounted in stock location. Max allowed size of compressor wheel will be 63.5mm. Aftermarket and billet wheels PROHIBITED. Inducer bore must be a true bore- no plugs or reducers. Compressor wheel must protrude into inducer bore. Must measure the same size before and after MAP groove- no clipped wheels allowed. All air must enter through the inducer bore. Inducer bore will be measured with go-no-go gauge or plug and bore will be checked with bore scope or caliper set to specification. The plug is 2.550" Tech inspector has final discretion on turbo ruling.

Turbo will be checked. It is the pullers responsibility to gain access to turbo for tech inspector.

EXHAUST: No hood stacks allowed. Exhaust must exit past the driver's compartment.

FUEL: #2 DIESEL FUEL ONLY. No propane, water methanol or nitrous oxide allowed. No fuel cells.

Fuel Injection Pump: Stock appearing fuel system- No dual injection pump or HPOP allowed. No AG governors allowed on P7100. Aftermarket electric lift pumps allowed (FASS, AIR DOG etc.). Hand throttle prohibited.

COOLING SYSTEM: Radiators must be in the stock location and be of at least stock size. Block must circulate coolant freely- no hard-filled blocks allowed.

HITCH: 26" max hitch height. Receiver (Reese) style hitch only- no draw bar hitches allowed. Hitch may be bolted or welded to frame for mounting and must be stationary in all directions. No extension or any part of hitch may extend beyond the center line of rear axle housing. A hitch may be mounted below or between frame rails. No bracing to axle allowed. The hook point must be no closer than 44" of center line of rear axle. Hook point must be located rearward of tailgate location. No trick hitches. Tech officials have the final ruling on hitch. Must have a 3" wide by 3 3/4" deep opening. No twisted clevis. The receiver stub must be of solid stock and secured with a minimum 5/8" grade 8 bolt or pin.

SUSPENSION: OEM suspension only. Rear suspension compression stops (blocks) will be

allowed. Rear suspension may be blocked solid via bolt in modifications only. Air bags allowed. The compressor MUST BE disconnected if so equipped.

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 providing 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 vehicles height with suspension modifications is permitted. Traction bars and devices are permitted; they must be bolted 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. All rear suspensions must use at least one working shock absorber per wheel. Minimum 3 leaf springs per side. No suspension travel is necessary. Blocks must be bolted only- blocks may not be welded to frame or axle.

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.

TIRES: 35-inch max tire height- 12.50-inch max width-DOT tires only. Factory equipped dually permitted- all 6 tires are limited to a maximum 8" of tread width. Must run dually wheels on front axle. Dual rear wheels prohibited on single rear wheel trucks.

BALLAST: 8500 lbs. max weight. Ballast can be added to truck but must be secured. No weights in front floorboard area. No hanging weights forward of the front bumper with the bumper in the stock location. No loaded front bumpers. Minimum clearance of 8" from bottom of weights to the ground.

HOT STOCK DIESEL - 8500 LBS:

ENGINE: Limited to light duty diesel engines factory installed in one ton or smaller trucks only.

DRIVETRAIN: Transmission, transfer case and axles must have been commercially available in a one ton or smaller truck. **Must have a safety shield or blanket over automatic transmission. Must have safety bell housing or blanket over bell housing of manual transmission.**

BODY: Must have complete interior, dash, and all seats. Complete OEM floorboard and bed floor mandatory. The body must be an OEM truck body, including the full bed floor. The body must retain full sheet metal. Aftermarket hoods are permitted. The hood must be closed and securely latched while the vehicle is hooked to the sled. The complete OEM firewall and complete OEM floor pan are mandatory. Dually vehicles must have dually bed.

INTERIOR: A complete interior including dashboard, door panels, etc. is mandatory. All factory controls (lights, signals, windows, wiper, etc.) must be retained and be operative as per tech official. Must have two matching and fully upholstered front seats. The use of hand-throttle controls is prohibited. If the vehicle is equipped with heavily tinted driver's side window the window must be rolled down during the hook.

DRIVERS RESTRAINT SYSTEM: The OEM restraint system is mandatory and must be worn.

STREET EQUIPMENT: Complete headlight and taillight assemblies are mandatory and must be operative- one headlight may be removed for air flow. Complete OEM windshields and windows are mandatory. Windows must be operative per factory specifications; that is, they must open and close via OEM electrical or mechanical means.

BATTERIES: The batteries must be securely mounted. Must be in stock location.

INDUCTION: Limited to stock appearing single turbo charger (6.4 Power Stroke may run factory compounds with factory inducer size). Turbo must be mounted in stock location. Max allowed size of compressor wheel will be 63.5mm. Aftermarket and billet wheels permitted. Inducer bore must be a true bore- no plugs or reducers. Compressor wheel must protrude into inducer bore. Must measure the same size before and after MAP groove- no clipped wheels allowed. All air must enter through the inducer bore. Inducer bore will be measured with go-no-go gauge or plug **and checked for true bore with borescope or caliper set to spec.** The plug is 2.550" Tech

inspector has final discretion on turbo ruling. **No individual runner intakes allowed. The cylinder head must remain factory width and length.**

Turbo will be checked. It is the pullers responsibility to gain access to turbo for tech inspector.

EXHAUST: No hood stacks allowed. Exhaust must exit past the driver's compartment. **Two 3/8-inch diameter bolts must be installed through the exhaust pipe in a cross pattern within an inch of each other as close to the turbo as is practical. Exhaust must exit in an upward direction only.**

FUEL: #2 DIESEL FUEL ONLY. No propane, water methanol or nitrous oxide allowed. No fuel cells.

Fuel Injection Pump: The use of multiple high-pressure common-rail fuel pumps is allowed. No ag governors allowed. Aftermarket electric lift pumps allowed (FASS, AIR DOG etc.). Hand throttle prohibited.

COOLING SYSTEM: Radiators must be in the stock location and be of at least stock size. Block must circulate coolant freely- no hard-filled blocks allowed.

HITCH: 26" max hitch height. Receiver (Reese) style hitch only- no draw bar hitches allowed. Hitch may be bolted or welded to frame for mounting and must be stationary in all directions. No extension or any part of hitch may extend beyond the center line of rear axle housing. A hitch may be mounted below or between frame rails. No bracing to axle allowed. The hook point must be no closer than 44" of center line of rear axle. Hook point must be located rearward of tailgate location. No trick hitches. Tech officials have final ruling on hitch. Must have a 3" wide by 3 3/4" deep opening. No twisted clevis. The receiver stub must be of solid stock and secured with a minimum 5/8" grade 8 bolt or pin.

SUSPENSION: OEM suspension only. Rear suspension compression stops (blocks) will be allowed. Rear suspension may be blocked solid via bolt in modifications only. Air bags allowed. The compressor MUST BE disconnected if so equipped.

SUSPENSION FRONT: The upper mounting point for strut assemblies must be in a factory location. Adjustable caster/camber pillow ball mounts are permitted. The lower control arm may be strengthened providing 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 vehicles height with suspension modifications is permitted. Traction bars and devices are permitted; they must be bolted 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. All rear suspensions must use at least one working shock absorber per wheel. Minimum 3 leaf springs per side. No suspension travel is necessary. Blocks may be bolted only- blocks may not be welded to frame or axle.

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.

TIRES: 35-inch max tire height- 12.50-inch max width-DOT tires only. Factory equipped dually permitted- all 6 tires are limited to a maximum 8" of tread width. Must run dually wheels on front axle. Dual rear wheels prohibited on single rear wheel trucks.

BALLAST: 8500 lbs. max weight. Ballast can be added to truck but must be secured. No weights in front floorboard area. No hanging weights forward of the front bumper with the bumper in the stock location. No loaded front bumpers. Minimum clearance of 8" from bottom of weights to the ground.

DRIVESHAFT LOOPS: All trucks must have at least six-inch-wide u-joint shields around the rear u-joint constructed of at least ¼ STEEL OR 3/8 ALUMINUM that will safely contain the u-joint and the end of the rear shaft. All shields must be securely mounted to the vehicle. All front shaft u-joints that are visible from the side of the truck must be shielded to contain the u-joint and the end of the shaft. One safety hoop or chain is required to secure the rear driveshaft in event of breakage.

SAFTEY: Vehicle must be equipped with an air inlet shut off or electronic engine kill safety switch at rear of vehicle. SFI balancer or safety shield surrounding balancer.

WORK STOCK DIESEL- 8500LBS:

WEIGHT: 8500lbs weight with driver included.

BALLAST: Front weight bracket and suitcase weights are permitted. No weight boxes. Weights in bed must be secured. Weights may be no more than 60 inches forward of the centerline of the front axle and minimum of 8" from the bottom of the weights to the ground. Loss of weight under the green flag will result in disqualification.

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

BODY: The body must be an OEM truck body, including the full bed floor. The body must retain full sheet metal. Metal aftermarket hoods are permitted. The hood must be closed and securely latched while the vehicle is hooked to the sled. The complete OEM firewall and complete OEM floor pan are mandatory.

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.

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

COOLING SYSTEM: Radiators must be in the stock location and be of at least stock size. Block must circulate coolant freely- no hard-filled blocks allowed.

DRIVELINE: An OEM transmission and transfer case are mandatory. They must have been an option on a one ton or smaller pickup. May have aftermarket internals.

DRIVERS 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 ¼ STEEL OR 3/8 ALUMINUM that will safely contain the u-joint and the end of the rear shaft. All shields must be securely mounted to the vehicle. All front shaft u-joints that are visible from the side of the truck must be shielded to contain the u-joint and the end of the shaft. One safety hoop or chain is required to secure the rear driveshaft in event of breakage.

ENGINE: The engine is limited to a stock-appearing, OEM make-specific compression ignition engine. The engine is limited to any diesel engine available in a 1 ton or smaller pickup; i.e., transplanting a Cummins engine into a Ford is allowed. Individual runner (plenum) intakes are prohibited. Deck plates are prohibited. Electric water pumps allowed. Electric cooling fans allowed. All other accessories must be powered by factory belting.

EXHAUST: The exhaust must exit rearward of the driver compartment. Stacks exiting through the hood or fender well are prohibited. Two 3/8-inch diameter bolts must be installed through the exhaust pipe in a cross pattern within an inch of each other as close to the turbo as is practical. Exhaust must in an upward direction only.

FUEL: Fuel limited to #1 #2 diesel only. Soy/Bio-diesel fuel is permitted. Off-road diesel fuel is prohibited. Use of any oxygen extenders prohibited.

FUEL INJECTION PUMP: The use of multiple high-pressure common-rail fuel pumps is allowed. No ag governors allowed. Hand throttle prohibited.

HITCH: The hitch must be a receiver type hitch- frame mount or draw bar type hitch allowed. The hook point must be no closer than 44" of center line of rear axle. Maximum hitch height will be 26" measured at inside rear of opening and must have a minimum of a 3.75" x 3.0" opening to adequately accommodate sled hook. Hitch must be easily accessed and be stationary in all directions. Hitch (draw bar tube) must not exceed a maximum of 10-degree angle in relation to frame rail. No hitch supports or adjusters, if fastened to rear axle housing, shall be above the center line of rear axle. Pivot pin of drawbar or any bracing can be no farther forward than center line of the rear axle. Tech officials have final ruling on hitch! Must have a 3" wide by 3 ¾" deep opening. No twisted clevis. The receiver stub must be of solid stock and secured with a minimum 5/8" grade 8 bolt or pin.

INTERIOR: A complete interior including dashboard, door panels, etc. is mandatory. All factory controls (lights, signals, windows, wiper, etc.) must be retained and be operative as per tech official. Must have two matching and fully upholstered front seats. The use of hand-throttle

controls are prohibited. If the vehicle is equipped with heavily tinted driver's side window the window must be rolled down during the hook.

REAR-END: Non-OEM rear-end housing is prohibited. The rear end must have been an option on a one ton or smaller pickup. Rear axle bolts must be covered by a cap or shield.

STREET EQUIPMENT: Complete headlight and taillight assemblies are mandatory and must be operative- one headlight may be removed for air flow. Complete OEM windshields 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 a factory location. Adjustable caster/camber pillow ball mounts are permitted. The lower control arm may be strengthened providing 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 vehicles height with suspension modifications is permitted. Traction bars and devices are permitted; they must be bolted 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. All rear suspensions must use at least one working shock absorber per wheel. Minimum 3 leaf springs per side. No suspension travel is necessary. Blocks may be bolted only- blocks may not be welded to frame or axle.

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 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. Must have a safety shield or blanket over transmission.

TRANSMISSION MANUAL: Non-OEM transmissions are prohibited. Aftermarket internal components are permitted. Must have safety bell housing or blanket over bell housing.

TURBOCHARGER: May use only one of the following; S300 or Factory Appearing . 6.4-liter Ford Power Stroke engines may run the factory compounds utilized on the engine.

Open S300 BorgWarner based (No Precision, Garrett etc.) T4 flange max with correct T4 bolt pattern. Must be S300 front to back (front cover, cartridge, and turbine housing). Max 4" compressor inlet, no billet center sections, no welded exhaust housings. Exhaust housing must be made visible for tech inspection. No S400 components allowed.

Factory Appearing must run factory front and rear cover. May run a BorgWarner S300 center section (No Garrett or Precision etc.).). Max 4" compressor inlet, no billet center sections, no welded exhaust housings. Exhaust housing must be made visible for tech inspection. No S400 components allowed.

WATER INJECTION: Water injection is prohibited. All system components must be unplugged and/or removed from the truck per tech inspectors' request. Nitrous Oxide is prohibited along with other oxygen extenders and the use of Propane is prohibited. All system components must be removed from the truck.

WHEELBASE: The vehicle must retain the original factory wheelbase and track width. Dual wheel permitted with a maximum tire width size of 12.5 on all six tires. Must be properly and securely mounted to the rear axle. At the discretion of the tech official.

TIRES: The tires must be DOT street tires with a max tire size 35x12.50-inch on single wheel vehicles. Dual vehicles shall be limited to 33x12.50 on all 6 tires . Cut tires is prohibited.

SAFTEY: Vehicle must be equipped with an air inlet shut off or electronic engine kill safety switch at rear of vehicle. SFI balancer or safety shield surrounding balancer.

If class is combined with 2.6 class weight limit will be 8,000 lbs.

2.6 SMOOTH BORE DIESEL-8000LBS:

WEIGHT: Maximum weight **8000lbs** with driver.

BODY AND CHASIS: OEM Chassis is mandatory. The vehicle must retain the full OEM chassis. Wheel tubs, back half conversions, and tube chassis are prohibited. Must retain factory OEM wheelbase for make and model of body, not to exceed 158 inches.

The body must be an OEM truck body including the full bed floor. No flatbeds permitted. The body must retain the full sheet metal. After market hoods permitted. The hood must be closed and securely latched when hooked to the sled.

ENGINE: Complete engine must have stock appearance except where otherwise noted in these rules. Maximum engine size will be 460 ci. The engine must be in an OEM location for the body to be used. The engine must have a 3/8" diameter cable surrounding the engine block. Cable is to be positioned between #1 and #2 cylinders and is to pass through manifolds. Cable will have 4-6 inches of slack. Two cable clamps at cable splice are required.

The cylinder head must be an OEM or OEM replica for brand of engine. Outside of cylinder head must measure factory width and length. No billet heads of any material. The head must retain factory OEM valve angle. No deck plates permitted.

HITCH: Hook point to be no closer than 44" of centerline of rear axle. Maximum hitch height of 24" with a minimum of 3.75"x3" opening. The hitch must be stationary in all directions. The hitch must be frame mounted. The use of Reese style hitches is prohibited. Hitch must not exceed 25-degree angle from pivot point to hook point. No hitch supports or adjusters fastened to rear axle housing shall be above center point of rear axle. The pivot pin of drawbar can be no further forward than the centerline of rear axle. Must have a 3" wide by 3 3/4" deep opening. No twisted clevis.

INDUCTION: Turbo is limited to 2.6" inducer bore. Bore must be smooth. No MAP Width Enhancement Groove (MWE) allowed. The compressor wheel must protrude into 2.6" bore for 1/8". Bore will be checked with a 2.605" turbo plug. Plug must not be able to enter inducer bore and contact wheel. Turbo is limited to 2.6" inducer bore. Bore must be smooth. No MAP Width Enhancement groove (MWE) allowed. Compressor wheel must protrude into 1. 2.6" bore for 1/8". Bore will be checked with a 2.605" turbo plug. Plug must not be able to enter inducer bore and contact wheel. All vehicles must be equipped with upward pointing exhaust located either directly behind cab or out of truck hood. Two 3/8" diameter bolts must be placed through the exhaust pipe in a cross pattern within one inch of each other and within 12 inches of turbo. Air to Air intercooler only. No cooling device allowed for intercooler. No ice boxes. Puller's responsibility to gain access to turbo for tech inspection. No water injection allowed.

BALLAST: Front hanging weights are allowed, not to exceed 60 inches forward from the centerline of front axle and minimum of 8" from the bottom of the weights to the ground. Weight Boxes allowed and must have rollers on the bottom of box. Ballast may be added to the bed of truck but must be securely fastened.

SAFETY: All trucks must have at least a six-inch-wide u-joint shield around the rear u-joint constructed of at least 5/16-inch steel or 3/8 aluminum that will safely contain the u-joint and the end of the driveshaft. All shields must be securely mounted to the vehicle. Any front shaft u-joints that can be visibly seen from side of truck must be shielded to contain the u-joint and the end of the driveshaft. A complete OEM firewall is required. The complete OEM floor pan is mandatory. The Vehicle must maintain a complete firewall. Seatbelt/restrain must be worn. Safety switches (rain cap or guillotine) must shut off air to diesel engines. The switch will be securely mounted to the back of the vehicle. A 2 inch or bigger solid ring must be attached to the end of switch. Ring must be zip tied to switch bracket. The switch must also be able to be activated in the cab while the driver is secured in the vehicle. Hand throttles permitted.

FUEL: Diesel fuel only. No propane or N2O or any other oxygen enhancers allowed.

Fuel Injection Pump: Maximum of one P pump up to P7100 allowed. 13MM plunger limit. Ag governors permitted. The use of multiple high-pressure common rail fuel pumps is allowed.

DIFFERENTIALS: OEM rear and front ends required. Must have come factory in a one ton or smaller vehicle. Axle shields are required. Shield to be .060" thickness steel or aluminum. A hole may be cut in one shield to allow operation of hub lock.

STEERING: Hydraulic steering permitted.

BRAKES: Must have two hydraulic brakes.

SUSPENSIONS: Suspension (Rear) - The upper mounting point for strut assembly must be in the factory location. Adjustable caster/camber pillow ball mounts are permitted. The lower control arm may be strengthened provided the factory mounting points are maintained. Strut tower braces, lower tie bars, sway bars, and limit straps are permitted. Traction bars and devices are permitted. Raising or lowering of vehicle height with suspension modifications is permitted but must be bolted on only. Welds permitted for attachment to frame and axle only. Blocked suspension permitted. No air bags. Rear suspension may be made solid. Must have a 3-way dump valve. Must be able to be pulled from the driver's seat.

TIRES: Tires must be DOT approved with maximum size of 35x12.50. No studded tires or tire chains. No alterations to the tires permitted. No bar or terra tires. Dual wheels are prohibited.

TRANSMISSION: OEM transmission and transfer case must be used. Must have come factory in one ton or smaller vehicle. Non-OEM transmissions prohibited. Aftermarket torque converters,

valve bodies, and internal components are permitted. SFI bell housing and/or SFI blow proof bell housing or SFI blanket type shield must be used.

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