# 4x4 TRUCK PULL

# <u>Saturday, July 24, 2021 – 7:00pm (Rain Date July 25)</u>

#### Classes:

#### <u>Premiums:</u>

1. Showroom Gas	5 -	Trophy Class
2. Work Stock Ga	S 2	1 <sup>st</sup> - \$75; 2 <sup>nd</sup> - \$50; 3 <sup>rd</sup> - \$25
3. Super Street G	as Small Block	1 <sup>st</sup> - \$350; 2 <sup>nd</sup> - \$250; 3 <sup>rd</sup> - \$175
4. Super Street G	as Big Block	1 <sup>st</sup> - \$350; 2 <sup>nd</sup> - \$250; 3 <sup>rd</sup> - \$175
5. Street Diesel 8	500 lb.	1 <sup>st</sup> - \$250; 2 <sup>nd</sup> - \$150; 3 <sup>rd</sup> - \$100; 4 <sup>th</sup> \$75; 5 <sup>th</sup> \$50
6. 2.6 Pro Street	Diesel	1 <sup>st</sup> - \$350; 2 <sup>nd</sup> - \$250; 3 <sup>rd</sup> - \$150; 4 <sup>th</sup> - \$100; 5 <sup>th</sup> - \$75
7. Limited Pro Sto	ock Diesel	1 <sup>st</sup> - \$600; 2 <sup>nd</sup> - \$400; 3 <sup>rd</sup> - \$300; 4 <sup>th</sup> - \$200; 5 <sup>th</sup> \$100
8. Street Legal Se	mi :	1 <sup>st</sup> - \$150; 2 <sup>nd</sup> - \$100; 3 <sup>rd</sup> - \$75
9. Pro Street Sem	ii .	1 <sup>st</sup> - \$300; 2 <sup>nd</sup> - \$200; 3 <sup>rd</sup> - \$100

**ENTRY FEE: \$20.00** per person at Cornwall Road gate, includes 1 hook; \$10 per additional hook. Weekly pass or Weekly Track Pass are not good at Cornwall Road gate.

# ALL CLASSES WITH LESS THAN 5 ENTRIES WILL HAVE THE TOTAL PRIZE MONEY FOR THE CLASS REDUCED BY 50%. FOR THE SUPER STREET GAS SMALL BLOCK CLASS IF THERE ARE MORE THAN 5 IN THE CLASS THE CLASS MAY BE SPLIT INTO A SMALL BLOCK AND BIG BLOCK CLASS.

#### **Class 1: Showroom Gas**

Weight: 6,500 lbs. – Trophy Class

- 1. Absolute Factory Original "If you have to ask, the answer will be NO"
- 2. Must pull from an unmodified Reese style hitch. Max height 24 in. & must have a 3 ¾ hole or a twisted clevis horizontal to the ground.
- 3. Weight in bed only and it MUST be Secure.
- 4. May have an aftermarket Cat-Back Exhaust System.

#### Class 2: Work Stock Gas

Class designed for daily driven on the road full size trucks.

Weight: 6,500 lbs. Gas Trucks Only

- 1. Weight may be added in the bed of the truck and must be securely fastened.
- 2. Internal engine parts must be stock. If engine does not sound stock you will not be allowed to pull in this class. Judges decision is final!
- 3. Headers allowed, must have street legal exhaust system.

- 4. Computer chips and reprogramming is allowed.
- 5. Suspension may not be blocked ladder bars allowed. Airbags must be empty and disconnected. Factory installed suspension stops only.
- 6. Must be licensed and inspected for state truck is registered in.
- 7. No bumpers of excessive weight. Snow plow frames (must be operational) and factory built winch bumpers are acceptable as long as they do not add excessive weight.
- 8. Aluminum intake and one four barrel carb. Allowed. No high rise, ram or cross ram intakes.
- 9. Must pull from an unmodified Reese style hitch. Max height 26 in. & must have a 3 in. hole or a twisted clevis horizontal to the ground.
- 10. Body, hood, bed and fenders must meet OEM specifications. Flat beds must be street legal. Beds must have full floor. All window glass must be in place. Doors and windows must function up and down. No Plexiglas windows.
- 11. OEM, Transmission transfer case and front and rear-end housings are mandatory. They must have been an option on a one-ton or smaller pickup.
- 12. Tires must be street legal tires with DOT number on the sidewall. Tread pattern may not be cut. Dual rear tires may be used in competition.
- 13. Wheelbase of truck must be original wheelbase for the body being used.

# Class 3 & 4: Super Street Gas

If more than 5 small block trucks the class will be split into 2 classes (3 & 4) and you can run more than one class with them.

#### CLASS REQUIREMENTS

Weight:

6300 lbs. maximum weight with driver. All vehicles must cross the scales prior to participating. Fuel and water may not be added after crossing the scales – except if qualified for a pull-off.

#### Ballast:

Additional added weight is permitted. Hanging weights and brackets may not extend more than 195 inches from the centerline of the rear axle. Trucks with longer wheelbases are welcome to participate and may place weights securely fastened inside the engine compartment, but not inside the cab.

## Body/Chassis:

Truck exterior must be stock in appearance. Body and frame must match. No mini truck body or frames (i.e. Ranger, Dakota, s-10).the complete truck body must have factory sheet metal and factory glass windows. the cab must have O.E.M. firewall and O.E.M. floor for safety. Wooden flatbeds are permitted. Fiberglass hoods and fiberglass hood scoops are permitted. Fiberglass body panels are not permitted unless they are O.E.M factory parts for the make and model of the truck and used as the manufacturer intended.

Frame/Suspension:

Factory 1 ton or less full size truck O.E.M. frames are required. Altering the frame length is not permitted. Frame strengthening such as gusseting and ladder bars is acceptable. No tube frames or homemade frames are accepted. a solid blocked rear suspension is permitted. 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. lift kits are acceptable. If air bags are used valve must be at bag.

#### Wheelbase:

The vehicle must retain the original factory wheelbase (+/- 1"); the wheelbase must be compatible to the body used.

#### Engine:

Engine must remain behind the radiator. Radiator must be in the stock location. No aluminum engine blocks are permitted unless O.E.M. Cast iron blocks only, aluminum intakes are permitted. Any cast iron or conventional type aluminum cylinder heads permitted. No sheet metal, or tunnel ram intakes permitted. Dry

sump oiling systems permitted. Dominator carbs are permitted. No turbos, superchargers, injection, EFI, split or dual carbs. One spark plug per cylinder. Open headers are approved. Engine exhaust must be routed in following ways:

- 1). Engine exhaust may be routed vertically up thru the vehicles hood. The exhaust must be minimum 6" higher than the hood when the hood is in the closed position.
- 2). Exhaust routed under the vehicle must exit under the cab and put before the rear axle.
- 3). Factory type Configuration

Swaps between manufacturers are not permitted.

Kill Switch:

All trucks must be equipped with a kill switch. A true street truck which is still licensed, inspected and legal for the street may be permitted to pull without a kill switch with Tech Officials approval.

#### Fuel and Fuel Tanks:

Gasoline is the only type fuel permitted. Turbo-blue and cam-2 are permitted. No propylene oxide additives or the like. Fuel tanks must in the stock location or may be in the bed. Exception: fuel tanks may also be mounted on the front, but must be completely enclosed within the weight box and not visible. In this case a manual fuel shutoff (ball valve easily accessible from the front part of the truck) is required on the weight box.

#### Nitrous Oxide:

Nitrous oxide is prohibited. All other oxygen extenders are prohibited. System components must be removed from the truck.

#### Batteries:

Batteries must be securely mounted; batteries must either be in the stock location or these may be moved into the bed or they may also be mounted on the front, but must be completely enclosed within the weight box and not visible. In this case a manual battery disconnect (easily accessible from the front part of the truck) is required on the weight box.

#### Cooling System:

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

Hitch:

The hitch must be stationary in all directions. The hitch's height from the ground may not exceed 26 inches. The length of the hitch measured from the center of the rear axle to the hitch point may be no shorter that 27% of the actual wheelbase of the truck and a maximum of 36" in length. All hitch mounting points must be located below the frame rails. The area where the hook point is must be free and clear of any obstructions. A truck may compete with a Reese style hitch or may pull from the bumper as long as it meets the 27% rule. The hooking point must have a minimum 3.75 inch inside diameter opening. No lever, pivot, axis, or other types of "trick" hitches are permitted. No vertical hitches, all hitches must be 33 degrees or less parallel to the ground. A second hitch is not required in this class.

Tires:

Maximum tire size 36×14.5. All tires must carry a D.O.T. number on the side wall, D.O.T. number must be easily read from the outside of the tire. No dual wheels, studded tires, tire chains or any tire not specifically intended for street use are not permitted. Use of dirt deflectors is prohibited.

Tire Altering:

No cut, altered or sharpened tires are permitted.

Brakes:

Front hydraulic brakes are mandatory. Driveline brakes accepted.

Driveline:

Transmission and transfer case and front and rear differentials must be O.E.M. and available in a one ton (or smaller) pick-up truck.

Driveshaft Loops:

- Required on all trucks that are not licensed for the highway.
- Required on all trucks that are not properly inspected for the highway. Trucks must be at least six inches wide u-joint shields around the rear u-joints constructed of at least ¼ inch steel or 3/8 inch aluminum that will safely contain the u-joint and the ends of each shaft. In addition there will be at least one shaft loop in the middle of the drive 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.

Flywheel Shield (Manual Transmissions):

- Required on all trucks that are not licensed for the highway.
- Required on all trucks that are not properly inspected for the highway. All vehicles equipped with a manual transmission must have a flywheel shield. Applications for which a flywheel shield is not available may use a properly attached 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.

Transmission, Manual:

Non-OEM transmissions are prohibited. A clutch meeting minimum SFI spec 1.1 or 1.2 is mandatory on all vehicles. All transmissions must be clutch assisted. Sequential shifters are prohibited.

Automatic Transmission Blanket:

- Required on all trucks that are not licensed for the highway.
- Required on all trucks that are not properly inspected for the highway. Must use a properly attached 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.

Driver Restraint System:

The OEM restraint system is mandatory and must be utilized during competition.

Helmet:

Motor sport type helmet is required for all drivers of trucks.

#### Fire Suit:

SFI approved fire jacket, long pants and leather shoes are recommend for all drivers of trucks that are not currently licensed, insured and inspected for street use.

#### Event Operation:

Driver's window must be rolled completely up while competing. Other windows on the truck may be lowered. Passengers are not permitted in the truck at any time either in the pits or on the track.

Credentials:

- All drivers must have a valid state driver's license.
- Trucks in this class do not have to be licensed or inspected or insured.
- Any street licensed truck that chooses to enter this class must be fully licensed and insured.

## Class 5: Street Diesel 8500 lb.

- Driver must have a valid state issued Driver's License. Vehicle must be street legal, have current state inspection sticker and license plate, NO DEALER TAGS. Vehicle must be in the same physical condition as at the time it was inspected for current highway use. Registration card and license plate must match.
- Engine must be compression ignition engine factory produced for 1 ton or smaller diesel pick-up trucks. Engine swaps between manufacturers is prohibited. Must run original OEM intake manifold. Aftermarket programmers and chips allowed. Aftermarket air to air intercoolers are allowed.
- Turbo must be factory stock appearing, installed on 1 ton or smaller pickup truck and must be in factory location. Turbo does not have to be model year specific (for example he351 is permitted on 12 valve) but cannot cross manufacturers lines. No bushings of any type permitted. Turbocharger is

limited to 2.500 inlet. 2.550 is max. allowed measurement. No stepped, tapered, oval or oblong bores permitted. No obstructions to interfere with measuring the bore will be permitted. 6.4 Power stroke and 6.7 Scorpion may utilize stock twin turbo configuration, 2.590 bore size max. No Borg Warner/holset or any other hybrid turbos will be permitted. All air must enter the compressor thru the bore or unmodified factory map groove. All competitors will be responsible to make compressor wheel accessible for tech. Please have tools required to do this (this includes lb7 intake horn and 6.7 power stroke). If you don't know how, learn. If you don't have tools get some.

- 4. Maximum truck weight including driver is 8500lbs. Added weights for pulling and drag racing must be mounted and secured in bed of truck. Front mounted weights are not allowed. All trucks must be weighed before class begins.
- 5. Front bumpers must be OEM. Lower brackets for snow plow frames are permitted. No modifications that add weight are permitted. No aftermarket heavy front bumpers permitted.
- 6. Fuel must be #1/#2 diesel fuel only. Soy/Biodiesel fuel is permitted. No other combustible material (nitrous, propane, etc.) may be injected into turbocharger or any part of air intake system. Water injected is not permitted. All nitrous, propane and water injection systems must be removed from vehicle.
- 7. The fuel injection pump is limited to a single, stock appearing pump. Lift pumps are permitted.
- 8. All vehicles must have 4-wheel hydraulic brake system in good working condition.
- 9. Headlights cannot be removed for air duct lines.
- 10. Hitch must be a "Reese" style hitch. Reinforcements are permitted but are not allowed forward of the centerline of the rear axle. The hooking point must be the rear-most point on the vehicle. Hitch point cannot exceed 26 inches in height before, during or after the pull. Hitch must be a minimum of 3.00 inch wide x 3-3/4 inch opening for the sled hook. NO "Trick" hitches will be allowed. Hitch must be bolted to bottom of the frame only. No draw bars allowed.
- 11. Vehicles must have OEM firewall and floor. Only holes allowed are those for brakes, clutch, transmission controls and wiring.
- 12. Wheels and tires must have DOT approved number on sidewall. No cutting, grooving, shaping or sharpening of tire tread is permitted. No studded tires or chains allowed. On factory dual wheeled trucks only a 10 inch tire tread maximum width per tire and 35 inches tall. 35 x 12.50 tires maximum on single wheel trucks. No dual wheels allowed on factory single wheeled trucks. Max. track width is 102".
- 13. All vehicles must have OEM working suspension, front and rear, with a minimum of 1 inch compression travel. Bolt on traction bars are permitted. Air bag lines must be disconnected. Any truck with lift kit higher than 3 inches must have driveshaft loops and universal joints shields to cover the entire universal joint before competing in sled pulling event.
- 14. Wheelbase and width of truck must be unaltered for the truck being used.
- **15**. Truck and driveline being used (including front and rear axle, clutch, transmission, transfer case and drive shaft) must have been originally produced for diesel engine one ton or smaller pick-up truck.
- **16.** Engine and radiator must be in original location as intended by manufacturer.

- 17. Frame, body, hood, bed and fenders must meet OEM specifications. Flat beds must be State Street Legal. Beds must have full floor. All window glass must be in place. Doors and windows must function up and down. No Plexiglas windows.
- 18. All engine fans must be OEM shrouded.
- **19.** 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.
- 20. Exhaust must exit behind the cab. A stack or turn up on factory style configuration is recommended.

# Class 6: 2.6 Pro Street Diesel

- 1. Maximum weight 8000#
- 2. 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 172 inches.
- 3. The body must be 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 sled.
- 4. Complete engine must have stock appearance except where otherwise noted in these rules. Maximum engine size will be 460ci. Engine must be in OEM location for the body used. 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 slack. Two cable clamps at cable splice are required.
- 5. Cylinder head must be OEM or OEM replica for brand of engine. Outside of cylinder head must measure factory width and length. No billet heads of any material. Head must retain factory OEM valve angle. No deck plates permitted.
- 6. 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. Hitch must be stationary in all directions. Hitch must be frame mounted. The use of reese style hitch is allowed with reinforcements. Hitch must be centerline of rear axle or behind. Hitch must not exceed 25 degree angle of rear axle. Pivot pin of drawbar can be no further forward than the centerline of rear axle.
- Turbo is limited to a 2.6" inducer bore. Bore must be smooth. No MAP Width Enhancement groove (MWE) allowed. 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.
- 8. All vehicles must be equipped with upward pointing exhaust located either directly behind cab or out of truck hood. Two 3/8 inch 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.

- Front hanging weights are allowed, not to exceed 60 inches forward from the centerline of front axle.
   Ballast may be added in the bed of truck but must be securely fastened. Maximum weight 8000 pounds. Fuel cell/battery allowed in front weight box.
- 10. All trucks must have at least six-inch-wide u-joint shield around the rear u-joint constructed of a least 5/16 inch steal or 3/8 aluminum that will safely contain the u-joint and the end of the driveshaft. All shields must be securely mounted to vehicle. Any front shaft u-joints that can be visibly seen from the side of the truck must be shielded to contain the u-joint and the end of the driveshaft.
- 11. A fire extinguisher system is permitted. 2.5#fire extinguisher must be securely mounted within reach of driver. A complete OEM firewall is required.
- 12. All drivers must have valid driver license and full SFI fire suite including helmet. Seatbelt/restraint must be worn.
- 13. The complete OEM floor pan is mandatory. Vehicle must maintain a complete firewall. Additional gauges and pillar pods are permitted.
- 14. Hand throttles permitted. Diesel fuel only. No propane or NO2 or any other oxygen enhancers allowed.
- 15. 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 legal.
- 16. OEM rear and front ends required. Must have come factory in a one ton or smaller vehicle.
- 17. 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.
- 18. Safety switch (rain cap or guillotine) must shut off air to diesel engines. Switch will be securely mounted to back of vehicle. A 2 inch or bigger solid ring must be attached to end of switch. Ring must be zip tied to switch bracket. Switch must also be able to be activated in cab while driver is secured in vehicle.
- 19. Hydraulic steering permitted.
- 20. Suspension: The upper mounting point for strut assembly must be in 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 are permitted but must be bolt on only. Welds permitted for attachment to frame and axle only. Blocked suspension permitted. No air bags. Rear suspension may be made solid.
- 21. Tires must be DOT approved with maximum size of 35x12.50. No studded tires or tire chains. No alterations to tires permitted. No bar or terra tires.
- 22. Dual wheels are prohibited.
- 23. OEM transmission and transfer case must be used. Must have come factory in a one ton or smaller vehicle.
- 24. Non-OEM transmissions prohibited. Aftermarket torque converters, valve bodies, and internal components are permitted.
- 25. SFI bell housing and/or SFI blow proof bell housing or SFI blanket type shield must be used.
- 26. Water injection is prohibited.

27. Air to Air intercooler only. No cooling device allowed for intercooler. No ice boxes.

# Class 7: Limited Pro Stock Diesel Trucks

- 1. The OEM chassis is mandatory. The vehicle must retain the full OEM chassis. Wheel tubs, back half conversions, tube chassis are prohibited. Maximum wheelbase 158" and 102" maximum width.
- The body must be the 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 while hooked to the sled.
- 3. Front hanging weights are allowed, not to exceed 60 inches forward of the centerline of the front axle. This will be measured by center of the front wheels to end of weight assembly. Ballast may be added in the bed of the truck, but securely fastened. Maximum weight 8000#.
- 4. All drivers must have valid state driver's license and full SFI fire suit which includes helmet (See General Rules). Seatbelt/restraint system must be worn.
- 5. All trucks must have at least six inch wide u-joint shields 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 rear driveshaft. 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.
- 6. The engine is limited to stock appearing, engine can be interchanged between Dodge, Ford, and GM as long as they came in a one ton truck or less from the factory. Complete engine must have stock appearance except where otherwise noted in these rules. Front of engine block can be no farther forward than 17" of centerline of front axle. Engine must have cable surrounding engine block and head. The cable is 3/8 diameter located between #1 and #2 cylinders. Cables must pass through manifolds. Cable will have 4 to 6 inches of slack. There will be two clamps at splice.
- 7. Cylinder head must be OEM o OEM replica for the brand engine. Outside of cylinder head must measure factory width and length, Head must retain OEM valve angle.
- 8. 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, within 12 inches of the turbo.
- 9. A fire extinguisher system is permitted. 2.5 #Fire extinguisher must be securely mounted. A complete OEM firewall is mandatory.
- 10. The complete OEM floor pan is mandatory.
- 11. Hand throttles permitted. Diesel fuel only. (See Fuels for specs.) No propane or NO2 permitted or any other oxygen enhancers. Racing fuels cells permitted.
- 12. Maximum of one p7100 pump limited to one plunger per cylinder. The use of multiple high pressure common rail fuel pumps is legal. Power stroke engines may utilize a second HPOP.
- 13. Hook point to be no closer than 44" of centerline of rear axle, hitch height maximum of 26", with a minimum of 3.75x3.0" opening. Hitch point must be easily accessed. No "trick" type hitches permitted. Hitch must be stationary in all directions. Hitch must be frame mounted. Hitch must be

centerline of rear axle or behind. Hitch must not exceed a maximum of 25° angle from pivot point to hook point. No hitch supports or adjusters fastened to the rear axle housing shall be above the centerline of the rear axle. Pivot pin of drawbar can be no farther forward than the centerline of the rear axle.

- 14. Axle shields are required. Shield to be .060" thickness steel or aluminum. Shield may not be mounted to axle ends or hub bolts. A hole may be cut in one to allow locking in of hubs.
- 15. A spring loaded safety switch (rain cap or guillotine) must shut-off air to the engine. The cable will be securely mounted to the back of the vehicle. The cable will terminate in a two inch diameter solid ring, which the zip tie will tie to a rigid point on truck. For any cases of re-pull, zip tie must be broken.
- 16. Hydraulic steering permitted.
- 17. Suspension 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 castor or camber. Strut tower braces, lower tie bars, and limit straps permitted. Traction bars and devices permitted. Lowering or raising the vehicle height with suspension modifications permitted; must be bolt on only, welds permitted for attachment to frame or axle housing. Sway bars, limit straps and camber kits permitted. Traction bars and devices permitted. Blocked suspension permitted. No air bags.
- 18. Must be DOT approved tire. Maximum height 35 inches. No studded tires or chains. No alterations to tires permitted. No bar or terra tires. No front duals on front axle.
- 19. (3.0) Drivetrain will consist of the following: Any front axle, transmission, transfer case, rear axle permitted. No planetaries permitted.
- 20. SFI bell housing and/or SFI blow proof bell housing required.
- 21. (3.0) The turbocharger is smooth faced intake housing, limited to a 3.0" inlet, (no map ring) with all air entering through the 3.0" intake opening. Intake wheel must protrude 1/8<sup>th</sup> inch inside of opening. The inlet will be measured using a 3.005" plug. The plug must not be able to enter the inducer bore.
- 22. Water injection is prohibited. All components must be removed from the truck.
- 23. Water to air Intercoolers are allowed. Dumbing/draining intercoolers without a catch pan within 100 feet of track is prohibited.

# Class 8: Street Legal Semi

This class is for street legal, licensed semi-trucks. This is truly an OPEN class for all semi-trucks, but it is definitely NOT a PURE STOCK class. Weight of Truck: 22,000 lb. Maximum

1. All entries must be a Street Licensed Semi Truck. The owner must furnish a current registration card for the vehicle at the time of registration and the driver must have a valid CDL license. Truck must be capable of pulling a trailer on the highway.

- 2. Ballast is not permitted at any point on the chassis. Special trucks, such as oil field trucks that carry additional weight not normally found on a "road ready" truck are not permitted on this class.
- 3. Batteries must be securely mounted. They may not be mounted in the driver compartment, or forward of the radiator support.
- 4. Trucks must have a minimum of 66" from the center of the tandems to the first structural obstruction such as the bunk, toolbox, cab, etc. This is the minimum swing clearance needed to pull a trailer.
- 5. The driver is the only person allowed to ride in the cab while vehicle is on pulling track. The driver may not leave the seat while the vehicle is on the pulling track. All direction will be taken from the flagman on the track.
- 6. Driver must use seatbelt and shoulder harness if the vehicle is so equipped, when hooked to the sled.
- 7. Engine must be stock appearing. Engines in the truck must have been available in a class 8 series truck.
- 8. Exhaust must be directed away from the fuel tank and driver and exit upward. Two 3/8 inch diameter bolts must be installed through the exhaust pipe in a cross pattern within one inch of each other as close to the final turbo as is practical.
- 9. A fire extinguisher is mandatory. A fire extinguisher system is permitted.
- 10. Normal pump diesel is the only fuel permitted in the class.
- 11. Alteration/modification/replacement of the (OEM) original factory fuel pump is not permitted. No fuel pump may be modified with Sigma parts. A Cummings engine must have a Cummins fuel pump A Detroit must have Detroit Fuel pump A Cat must have a Cat fuel pump. Electronic engines must remain electric. No mechanical fuel pumps permitted on electronic engines.
- 12. All engines turning 4500 RPM and higher must be equipped with a harmonic balancer or damper meeting SFI Spec 18.1.
- 13. Hitch height is to be determined by promoter. Hitch must work from the fifth wheel with the fifth wheel centered between centerline of the front axle to the center of the two axles.
- 14. No further forward then the center of the front axle and no further back then center between the two axles.
- 15. 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, window, wipers, etc.) must be retained and be operative. The use of hand-throttle controls is prohibited.
- 16. 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.
- 17. 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.
- 18. The use of air bags is permitted. However no air may be added to or removed from the air bags while the truck is hooked to the weight transfer machine. The height of the hitch must remain the same from start to finish. Any change in the hitch height will be cause for disqualification. Chaining or blocking of drive axles is not permitted.
- 19. The tires must be DOT street tires. Cut tires are prohibited.

- 20. Transmission must have been available in a class 8 truck from factory.
- 21. A single turbocharger is the maximum permitted. \*EXCEPTION An NTC 475 Cummins factory twin turbo set-up and 2006, 2007, and 2008 Cat twin turbo is permitted with the factory-installed twin turbo set-up and absolutely no modifications are allowed.
- 22. Water injection in any form is not permitted. No ether, alcohol, nitrous or other combustible (propellant) liquid or combustible material may be injected into the turbocharger or any part of the air intake system.

#### Class 9: Pro Street Semi

- 1. The class is open to three axle truck tractors with tandem drive axles. Driving steer axle not allowed. Trucks are to maintain a 'street ready' appearance. Vehicle license and inspection are not required.
- 2. The weight of the driver and vehicle not to exceed 22,000 lbs. Trucks may be split weighed at events that do not have a scale long enough to weigh the whole truck at once. If one truck in the class needs to be split weighed due to its length, all trucks in the class will be split weighed. When Split weighing, the suspension must not be chained and air bags must all have the same pressure in them at the time the truck is weighed. In the case of a solid rear axle suspension, the air pressure in the front drive air bags must remain the same when weighing the front and rear of the truck. A 1% variation in the weight of each truck will be used when split weighing.
- 3. Trucks with air ride suspension must be equipped with chains or some type of limiting device on both drive axles to prevent the height of the frame from changing during the pull. Limiting device must not have any 'give' built in. Solid rear drive axle suspension permitted, however front drive must be chained or limited. Chains or limiting devices must be tight (no slack) when the hitch is measured. Four short chains or cables from the side of the frame down to the axle housings is recommended. No chains and binders going up and over the frame rails allowed. Maximum air pressure in the suspension airbags must be limited to 80 psi by installing an air pressure regulator in the leveling valve supply line. An air pressure gauge mounted at the regulator in a visible position must be present to check air pressure. This is done to prevent breakage of the suspension limiting device or failure of the airbags due to an over pressure condition. Breakage or failure of a chain or limiting device while hooked to the sled will be cause for disqualification.
- 4. Puller must supply their own hitching device. Hitches must pull from a standard fifth wheel. Center of fifth wheel must be located in a position between the center of the front drive axle and the center point between the drive axles. There must be a minimum of 66" of unobstructed area from the center of the fifth wheel forward to the first obstruction (cab, sleeper toolbox, headache rack etc.). Hitch cannot be longer than 7 feet measured from center of rear axle to hook point. Hitch must have an adjustment range from 20" down to 16" with suspension in the 'pull ready' position. Hook point must have a 3.5" hole. Hitch height will be measured with suspension inflated and chains or limiting devices. Tight.

- Extra ballast weight is permitted. Weights or brackets cannot interfere with hooking the sled to the hitch. Weights or brackets cannot extend more than 51" rearward past the center of the rear drive axle. Weights on front of truck cannot extend more than 24" forward of the stock forward most point.
- 6. Engine must be a make and model that was commercially available in a class 8 truck. Internal modifications to increase the displacement are permitted. A single turbocharger is permitted with a maximum intake wheel inducer size of 4.100". Turbo size will be checked using a 4.200" plug. Turbo cannot be bushed from a larger size. No oval shaped inducer bores. Compressor wheel must extend into the inducer bore and cover the map groove. Factory style map width-enhancement groove is permitted; no other means for air to get to the compressor wheel are permitted.
- 7. Water only injection is permitted. No ether, methanol, propane or any other flammables or combustion enhancers are allowed in any form. Commercially available diesel fuel is the only fuel allowed.
- 8. Truck must be equipped with a SFI approved clutch/flywheel assembly. Engine bell housing must be shielded 360 degrees with any one of the following: a SFI approved shield; SFI approved scatter blanket(s) securely fastened and overlapped at least 6".
- 9. One scatter shield must be on all universal joints beyond the rear of the transmission. Scatter shield must be a solid construction, 5/16" thick steel minimum and be able to contain debris or direct debris toward the ground. Scatter shields not required on the inter-axle driveshaft provided the top of the frame between the rears is securely covered with minimum 1/8" aluminum or steel. One drive shaft loop must be installed on any drive shaft over 36 inches long including those with a carrier bearing. Driveshaft loop should be near the center of the shaft and be capable of keeping the shaft from coming out of the vehicle in the event of breakage.
- 10. A minimum of one 4" diameter clear light must be on the rear of the truck, must be activated by transmission when shifted into neutral. Truck must be equipped with a transmission activated neutral start switch or a clutch switch so that the starter will not engage unless the transmission is in neutral or the clutch is fully depressed.
- 11. Working rear wheel brakes are required on both drive axles. Parking brake chambers are required on at least one drive axle.
- 12. Exhaust must discharge vertically, turnout style pipes allowed. Through the hood exhaust stacks ALLOWED. Two minimum 3/8" diameter bolts must be installed in the exhaust pipe after the turbo at a 90 degree angle, within 1 inch of each other.
- 13. An emergency engine air shut off is required. Shutoff must be capable of being operated from the driver's seat. A 2" diameter ring must be at the rear of the truck to operate the shutoff from the sled. Ring must be as close to center of the truck as possible.
- 14. Engine driven cooling fans must have fiberglass blades, metal blades not allowed. Fan must be inside a shroud.
- 15. Engine and radiator must be in the original OEM location.
- **16.** Truck must be equipped with a master electrical disconnect switch mounted near the driver's side door steps and easily accessible to someone on the ground.