

## 7700 LIGHT LIMITED TURBO RULES

Based on Interstate Truck & Tractor Pullers (ITTP) Rules

## 1. Tractor Frame-Chassis.

- Tractors must be agricultural tractors having chassis, engine, transmission housing, differential housing, transmission, hood, and grille of one manufacturer. Tractors weighing 8200 lbs must have an OEM cast iron cylinder head, must be for series engine used,OEM cylinder head must be verified beyond any doubt in order to weigh 8200 lbs,Tractors weighing 7700lbs may have a cast iron aftermarket re-cast cylinder head. Any cylinder head not verified or in doubt will run 7700lbs. No aluminum, No overhead cams allowed. Engine, clutch, transmission, and differential housings, must be bolted together as one unit. All bolts connecting all housings must be in their stock location-OEM length & location from rear end housing to front of engine. No component powertrains. All tractors must have wide front end configuration.
- No hood alterations allowed, except by approval.
- All exhaust must discharge upwards with a minimum pipe length of 18" from the hood line. No rain caps. Exhaust pipe must be cross-bolted with two 3/8" grade five bolts with 1 inch of each other in vertical pipe and two 3/8" bolts within 2 inches or close to exhaust wheel as possible of exhaust housing. A billet cross, mounted to the exhaust housing at the exhaust wheel is acceptable in lieu of cross bolts.
- The frame and weights must not extend any further than 13 feet from center of rear axle to further most point excluding tow hook. The wheelbase must not exceed 114".
- Hitch height shall be 20". Hitch length shall be 18" minimum, from center of axle to hook point. Drawbar must be rigid in all directions No movement allowed while pulling. HITCH HOLE TO BE 3.75 x 3.0in Drawbar must be within 10 degrees of parallel to the ground. Hitch must be horizontal Not vertical. All hitch components must be steel No cast components.
- Maximum tire size 24.5" x 32" No radials. Radial tires are allowed for all other tire sizes.

## 2. Engine.

- Engine size maximum of 480 cubic inches. The finished bore size of cylinder and stroke is what's used to determine cubic inch.
- OEM fuel only Diesel pump fuel, gasoline- No accelerants. Water injection permitted - No accelerants or alcohol permitted.
- Injection pump to be limited to a maximum of P-3000 or P-7100 series pump with a mechanically operated governor, one barrel and plunger per cylinder. No aftermarket billet pumps or housings are not permitted such as the P-8700. Any pump other than the "A" line, P-3000, or P7100 will need to be approved before it's considered a legal pump. Tractor must have 3 way fuel dump valve.
- Tractor allowed one turbo charger and any manifold modifications necessary to mount the turbo charger. Manifold pressure to be single stage only. Gasoline Carburetors are limited to a maximum of 850 CFM. Mechanical Fuel injection is permitted and limited to a 70MM maximum throttle body inlet for gasoline engines.
- Homemade engine adaptor plates are not allowed.
- One Single Turbo charger must be under hood. Hood may be modified to accept the turbo charger. The maximum size of the turbocharger is not to exceed 3.4 smooth bore intake inlet, compressor wheel fins must protrude into 3.4 bore .125 of an inch. and max 4" exhaust outlet. NO Map width enhancement grooves allowed. Compressor wheel fins must enter into the compressor housing .125 of an inch. If a tech official finds a puller's turbo charger to be illegal that puller has the option to put a legal turbo charger on or make necessary changes to deem it a legal turbo charger. Only after the tech official has re-inspected the turbo can the puller be eligible for that event. Otherwise the puller is ineligible for that event. If you are caught for a second time with an illegal turbo by a tech official, you are kicked out of the class for 1 year and 10 days.
- The use of torque converters, and automatic shifts are permitted. All clutch components and flywheels are to be steel or aluminum.
- Intercoolers are legal for diesel powered tractors but are not allowed on gasoline powered tractors.

## 3. Safety rules.

■ Tractors must have working air shutoff and dead man throttle. The throttle must have at least 2 springs. The air shutoff cable must activate the air shutoff to the engine and must be positive-type enclosed cable with a minimum 2" diameter solid ring - 1/8" cross section thickness attached to it. Air shutoff must also be able to be operated manually by the operator from the seat of the tractor. Gasoline and propane powered tractors must have a shutoff switch which shuts off the spark and stops the electric fuel pump.

- Stabilizer bars are required and are to be a minimum of 32" rearward from the center of rear axle. Pads on the bottom of bars to be a minimum of 5 in. sq. and a maximum of 10" off the ground. Outside to outside width to pads to be a minimum of 20". Minimum of 12" high bumper bars required Top to be fastened to stabilizer bar framing. Do not connect hitch to stabilizer bars. Stabilizer bars must support the weight of tractor.
- Skid bars are required on front of tractor. For example: link HERE for ECS diagrams.
- Tractors must have a shield that consists of a solid barrier between the driver and any part of the rear tires. The barrier must be able to support the weight of the driver and must extend a minimum of 6" horizontally at the top, and be a minimum of 6" wide at the top.
- Harmonic balancer must be shielded to contain the balancer within the vehicle.
- A fire extinguisher is required within reach of driver.
- Driver must wear a helmet with a Snell 85 rating. <u>Fire suits mandatory</u>. <u>This includes pants and jacket</u>. 5 point safety harness is mandatory and must be worn.
- Seats must be stationary in all directions No springs, and have a minimum
  6" high back and 4" side rails.
- Tractors must have approved clutch/transmission safety blanket and engine shields. Side shield material to be minimum .060" thickness. Six strap blankets only No three strap blankets.
- Roll cages are mandatory. No roll bars will be accepted.
- Additional safety rules may be added during the pulling season.
- 4. The weight class is 7700 lbs.