

## **Tractor (PPL)**

1. All engine blocks must remain in original location as intended by the manufacturer. Sheet metal to be stock length and location must be stock appearing
2. Tractors must have grill and hood in place as intended by manufacturer.
3. Tractors must have stock block, agricultural type block, OEM replacement block. No automotive blocks permitted. Maximum of 8 cylinders permitted. Approved recasted/ after-market block suppliers; (Hypermax, D&R, E-burg Components, Lemke, Chaos Fabrication).
4. Maximum wheelbase is 114" and maximum length is 13' 28 from the center of the rear axle to forward most part of the tractor.
5. Up to four (4) turbo-chargers permitted, but only three (3) pressure stages permitted.
6. All turbocharged engines on tractors will have one cable totally surrounding the engine block and head. The cable will consist of 3/8" diameter and located between the first and second cylinders. Cable must pass through the manifold areas. Cable will have four (4) to six (6) inches of slack. There will be a minimum of four (4) clamps at all splices. Maximum of 2 valves per cylinder. A second cable minimum of 3/8" diameter position on front half of engine. Cable will have four (4) to six (6) inches of slack. There will be a minimum of four (4) clamps at all splices.

**OR**

- All inline turbocharged engines are required to have a cable placed between the first and second cylinder through exhaust manifold port area. Cable must be a minimum of one (1) 3/8 manufactured pendant line with a rating of at least 3000 lb or more with a tag from the manufacture that indicated the rate load capacity with swaged sockets.
7. A deflection shield between driver and engine from top of hood and top of transmission housing or clutch housing is required. Deflection shield will go from side shield to side shield. This will help provide a barrier during a flash fire.
  8. All tractor engines are required to shield all rotating mass mounted on the front of the crankshaft. Shield to be frame rail to frame rail by a minimum .125 aluminium or steel fastened to the frame on each side by two evenly spaced bolts. (3/8-inch Grade 5 minimum.)
  9. All tractors are required to have an approved bell housing blanket that meets the following specifications: 20 ply ballistic nylon or 20 ply Kevlar style 713 betting construction. At least seventeen (17) inches wide and long enough around the bell housing with six (6) inches of overlap, secured with a two (2) inch wide nylon web straps, with a steel "d" ring on one end and sewn the length of the blanket, except overlap area and long enough to pass back through the "d" ring and to be tied in a saddle cinch and with four (4) two inch nylon webs retaining strips, each at the front and back of blanket.
  10. All tractors will run a safety tie bar system or a onepiece frame rail secured to the rear axle housing.
  - 10a. Tie bars will be mounted with at least four (4) axle housing bolts.

10b. Tie bars will extend forward of bell housing area and 29 be fastened to side of the block with a minimum of two (2) 5/8 bolts.

10c. Tie bars will be of sufficient strength to support weight of the tractor with the bolts used to split tractor removed.

10d. All safety blankets will be mounted inside safety tie bar system.

11. On cast iron OEM chassis a 1/2" steel spacer plate is permitted for clutch clearance.

12. Only mechanical activated clutches permitted.

### **Light Pro Stock Tractors**

1. All OEM chassis rules (No component chassis allowed), including shielding, safety, & SFI requirements, apply to this class plus the following rules.

2. Maximum tire size not to exceed 24.5x32.

3. Maximum weight 8500 lbs.

4. No engine larger than 540 cid. OEM replacement blocks permitted. Must have PPL approval.

5. Cast or manufactured cylinder head will be accepted. Cylinder head must retain OEM length and width for the engine application. Valves must remain OEM angle for engine application. No overhead cams allowed. Maximum 2 valves per cylinder.

6. Diesel fuel only. P-7100 injection pump is the largest allowed. (2-5/8"W X 9-9/16"L X 8-3/16" H main pump body) Only one plunger per cylinder allowed.

7. Turbo: All exhaust will exit through a 4.5" opening in the exhaust housing. Exhaust wheel must protrude 1/8th inch inside bore.

8. No inner/after coolers allowed. No CO2 or any other means of cooling the air in the piping or manifold. No ice filled or ice cooled devices onboard tractor of any kind. All engine air must enter the inlet of the turbo at ambient air temp & humidity. Inlet air may not be drawn through or across any type of cooling device.

### **Super Farm**

1. Maximum weight permitted 9,500

2. Maximum tire size is 24.5" X 32".

3. Maximum cubic inch limit is 640. Maximum of 8 cylinders permitted.

4. Any cast or manufactured cylinder head will be accepted. Cylinder head must retain OEM width and length for the engine application. Valves must retain OEM angle for engine application. 2 valve per

cylinder maximum. Cylinder head must retain OEM bolt pattern for exhaust manifold and intake. The stock exhaust manifold and intake bolt pattern must be used to attach the exhaust manifold and intake. No overhead cams permitted.

5. Intake manifold: Maximum inlet size 3.75" measured on the outside diameter. One inlet pipe only.

6. OEM exhaust manifolds for that model and series engine only permitted on cylinder head

7. Intercoolers are permitted with the use of water and/or ice only.

### **Chassis**

8A. Components are not permitted.

8B. OEM rear-end, transmission, and engine must be in stock location, bolted and secured to OEM chassis.

8C. Engine cannot move independent or rear-end/ transmission housing(s).

8D. Stock transmission housing or manufacturer's replacement and stock final drive housings or manufacture's replacement.

8E. Chassis and frame must remain stock from rear of engine block to the rear of tractor.

8F. Tie bars are mandatory or full frame must be mounted rigid to engine, transmission, and final drive housings.

9. Fuel Systems: Largest fuel injection pump allowed will be a P-pump OE housing with only one plunger per cylinder. No aftermarket pump housings permitted.

### **10. Turbos:**

10A. Altering of a turbo housing to accommodate a smaller foot or base will not be permitted.

10B. Exhaust housing and exhaust manifold bolt pattern shall be no larger than 2.75 X 3.5 inches.

### **12 Intake:**

- Map width enhancement is allowed. Maximum map width .200". MWE groove must be inside neck area where intake covered is measured at 3"

- Compressor wheel must protrude into three inch bore.

- Intake housing to be no larger than three inches at the face of the wheel.

### **13 Exhaust:**

- All turbine wheel blades to protrude into three inch bore. All air must exit through 3" opening. No map width enhancements on exhaust housing permitted.

- Turbine wheel exhaust blade to be no less than 2.90" in diameter at intersection of turbine wheel face and tip diameter.

- Turbine housing to be no larger than three inches at intersection of turbine wheel face and tip diameter.

- Exhaust housing will be measured at intersection of turbine wheel face and tip diameter.

14. No waste gates will be permitted.

15. No variable geometric turbos permitted.

16. All other tractor rules apply.