**PRO FARM CLASS**

**2023 RULES**

 **8500 # (1) and 8500# (2)**

**A. ENGINES

 1. No engine larger than 466 c.i.d. (+ or – 1 percent) Diesel fuel only.**

 **2. Unlimited RPMS

 3. Brand of engine must match brand of tractor.

 4. Engine must mount to tractor rear end with no modification.

 5. Engine head must be OEM agricultural type (no aftermarket head) for the brand engine.

 6. No overhead cams allowed. Maximum 2 valves per cylinder.

B. MANIFOLDS

 1. OEM intake and exhaust manifolds for same brand block and same series engine.

 2. Manifold spacers (between manifold and head) may be 1” maximum.**

 **3. No after market headers or manifolds.

 4. No Intercoolers/Aftercoolers.

 5. If an OEM intercooler manifold is used it must be disconnected from all cooling means, and all holes welded shut.**

 **6. Only one pipe and one inlet point from turbo outlet to intake manifold allowed. Air pipe from**

 **Turbo to intake manifold must be routed in shortest path possible.**

 **7. No pop-off valves/blow-off valves mounted on the intake pipe, compressor housing or intake**

 **Manifold.**

**C. COMPUTERS

 1. No computers allowed that would control any mechanical operation of the tractor.

 2. No electronic fuel injectors or metering devices will be allowed.**

 **3. Data Loggers allowed.**

 **D. TURBO

 1. One STOCK out of the box Garret GT4202 (3” x 3”) with no modifications of any type or style. NO other turbo will be allowed. No coatings allowed. Cartridge must be an unaltered part number: CHRA 712402-8 or CHRA 451888-11. Intake housing must be an unaltered part number 757708-2. Only factory MAP width enhancement groove allowed. Exhaust housings for this turbo must be unaltered and be one of the following part numbers: 757707-1, 757707-2, 757707-3, or 757707-4.

 2. Turbo spacer (between turbo and exhaust manifold) may be a maximum of 3” with angle permitted with a maximum allowance of .130” total gasket material.

 3. No waste gates allowed.

 4. Only one pipe and one inlet point from turbo outlet to intake manifold allowed. Air pipe from turbo to intake manifold must be routed in shortest path possible.

 5. No pop-off valves/blow-off valves mounted on the intake pipe, compressor housing, or intake manifold.

Note: Before competing, all Pro Farm turbos must be disassembled for certification by GPTP tech officials. Turbos must be reassembled in front of official before turbo will be certified. Turbo will then be sealed on intake and exhaust side with GPTP seal. GPTP seal must be in place before being allowed to compete. Turbo must be sealed within 4 hooks, if not puller will not be allowed to pull.

Note: If turbo seal(s) is broken for any reason GPTP official must inspect and certify both intake and exhaust sides of turbo at same time and reseal before being allowed to compete again.

E. INJECTION PUMP

 1. 13 mm P-Pump maximum.

 2. 3000 series, or 7100 series cases only.

 3. No aftermarket housings allowed.

 4. Only one plunger per cylinder.**

 **F. FUEL

 1. DIESEL FUEL ONLY

 2. No compressed air, nitrous oxide, propane, or nitro-methane allowed.**

 **3. No oxygen carriers or combustion accelerators allowed in fuel.

 4. Fuel subject to random testing at any time by tech officials.**

 **5. Water sample port must be after pump (pressure side) T-fitting with ball valve recommended.**

 **6. Water sample must be taken with engine running.**

 **G. WATER INJECTION

 1. Water injection allowed.

 2. No alcohol (i.e. methanol, ethanol, and etc.)

 3. Water with oil lubricant only.

 4. Water samples are subject to freeze test.

 5. Water subject to random testing at any time by tech officials.

H. OEM CHASSIS shall consist of the following:

 1. The engine block must be mounted and connected to clutch/transmission housing in same manner as intended by OEM.

 2. Maximum wheelbase: 114 in. (center of rear to center of front spindle).

 3. Maximum distance from centerline of rear axle to furthest point forward: 13 ft.

 4. Wide front ends are mandatory.

 5. Front end skies are required.
 a. Front skies must support the weight of the tractor.
 b. Skies must be mounted in line with the frame rails and be of equal strength material.
 c. Skies must be centered under the front axle and securely mounted and braced to the chassis.
 d. Maximum ground clearance is the bottom of the wheel rim not to exceed 4 inches.

Note: Skies plates are recommended but not required, and should be 4 inches wide and 12 inches long with a minimum 6 inch curve when measured from the front most part of the rolled edge.

 6. No component tractors allowed.

I. TIRES

 1. Tire size of 20.8 x 38 or 24.5 x 32 (optional) any cut or any style.

 2. Radial or bias ply.

 3. Double cut tires allowed.**

**J. HITCH

 1. Maximum hitch height will be 20”.

 2. Minimum hitch length will be 18”.

 3. Drawbars must be constructed so in the event of drawbar breakage, the drawbar supports do not pull from a top link or brace above the centerline of the rear axle of the tractor.

 4. Hitch must be stationary in all directions, be at least one inch thick, and have a 3”x3 ½” hole.**

 **K. TOW HITCH (OPTIONAL)

 1. Competing tractors are allowed to have a tow hitch on the front of the tractor.

 2. The hitch may extend no more than 6 inches beyond the farthest front portion of the tractor.

 3. The hitch will not be included when measuring the length of the tractor.

 4. The hitch should have a 3 inch diameter hole and strong enough to tow the tractor in its heaviest
class.

L. EXHAUST SYSTEM

 1. No rain caps or curved pipes allowed.

 2. Must have (2) 3/8-inch bolts (Grade 5) in horizontal portion of exhaust pipe. Bolts to be installed 90 degrees to each other, within 1 inch of each other.

M. STABILIZER BARS

 1. Stabilizer bars are required, and must be able to support the weight of the tractor in the heaviest class pulled.

 2. Bars are to be a minimum of 32 inches back from the center of rear axle.

 3. Pads must not be more than 10 inches off the ground, with a minimum of 20 inches allowed from the outside of one pad to another. Pads must be a minimum of 25 square inches each.

 4. Stabilizer bar and bar assembly is not to be mounted to the drawbar and drawbar assembly.

N. SAFETY

 1. Complete roll cages (SFI 47.1) and 5 point SFI harness required ( 3 Bar).

 2. A DOT approved helmet with a face shield is required.**

 **3. A full single layer fire suit required.**

 **4. SFI equivalent Neck Brace required.**

 **5. All tractors will be required to have SFI steel flywheel. Certification paper will need to be signed.

 6. A clutch blanket is required and must:

 a. be a 6 strap SFI 4.2 blanket.
 b. be a minimum of 17 inches wide .
 c. overlap a minimum of 6 inches.**

 **7. Tractor must have either:

 a. Safety tie bars mounted to rear axle housing with at least (4) axle housing bolts and extending forward of flywheel area and fastened to side of block or main frame with at least (2) 5/8” bolts, OR,
 b. A one-piece frame extending from front of tractor to rear axle housing mounting bolts.
 c. Safety blankets must be on the inside of the tie-bars.

 8. Side deflection shields are required and must:

 a. be made of metal no thinner than 0.060” thickness.
 b. extend the complete length of block casting and be securely fastened.
 c. be easily removable (winged Dzus type or cotter type hood pins).

Note: Use of bolts with nuts, screws, locks are discouraged. (Reason - ease of access in case of emergency – fire, run-off, etc.)

 9. Mechanical air shut off with hook up ring on rear of tractor will be required.(can be checked**

 **any time).**

**10. A 3-way dump valve is required ahead of the injection pump. This valve is to be operated by a cable on the dash.

11. All tractors must have fenders. Top of fender must extend no less than 6 inches over the top of**

**the rear tires.**

**12. Plate under balancer.**

1. **Must be made of metal not thinner than .060 inches.**
2. **Restraints to contain balancer(tabs)**

 **13. Suggested 3/8” steel cable around block between #1 and #2 cylinder, minimum 1 foot overlap.**

 **O. WEIGHT

 1. The Pro Farm class will compete at 8500# (1) and 8500# (2).**

 **P. Pro Farm rules will be locked from 2023 thru 2028 pulling season. With the exception to add or**

 **Change Safety rules.**