RULE BOOK 2023 - 2025

Publication Date Spring 2023



TRUCK AND TRACTOR PULLING AT ITS FINEST!

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NOTE: We strive to keep the rules on the website as up to date as possible but if you are planning on participating in an event or building a pulling vehicle with SWOTPA, please check with the association president or class representative to ensure you have the proper class rules and specifications.

General Information

- 1. Each member that is a point collector with Southwestern Ontario Tractor Pullers Association (SWOTPA) will follow the association rules regardless of changes the sponsor/promoter may make.
- 2. Membership to the Southwestern Ontario Tractor Pullers Association will be \$150 for drivers and \$45 for general members (those who are not driving but want to be in the pits and at track side). There will be a \$40 insurance fee per hook for non-members and those who do not meet class specifications.
- 3. Membership Fees and Class Prize money will be subject to change upon review of the executive during the three (3) seasons that the 2023-2025 Rule Book is in effect.
- 4. Sanctioned classes are as follows:
 - ➤ 6500lb Light Hot Farm Tractors
 - > 7500lb Light Hot Farm Tractors
 - > 8000lb Hot Farm Tractors
 - 9000lb Hot Farm Tractors
 - ➤ 6500lb Light Limited Pro Stock Tractors
 - > 7000lb Light Limited Pro Stock Tractors
 - ➤ 8000lb Limited Pro Stock Tractors
 - 9000lb Limited Pro Stock Tractors
 - ➤ 9300lb Super Farm Tractors
 - ➤ 10,000lb Super Farm Tractors
 - ➤ 2WD Super Modified Trucks
 - ➤ 4WD Super Stock Trucks Class 1
 - ➤ 4WD Super Stock Trucks Class 2
 - ➤ 4WD 8000lb Modified Street Diesel Trucks

Event Procedures

- 1. The classes listed in these rules are the only classes that are sanctioned by SWOTPA for points.
- 2. Vehicles are limited to two classes for collecting points and prize money.
- 3. The Secretary will use an electronic number generator before each pull to determine pulling position.
- 4. Each vehicle may only be entered by one driver per class.

Points

1. Points will be calculated in the following manner.

Each member will receive:

Show Points - 10 points per class + Place points.

- \Rightarrow 1st 15 points
- \Rightarrow 2nd 14 points
- \Rightarrow 3rd 13 points
- \Rightarrow 4th 12 points
- \Rightarrow 5th 11 points
- \Rightarrow 6th down decrease 1 point per place.
- If there are more than 20 competitors in a class, the points will be adjusted accordingly in all weight classes for that pull.
- If a pulling vehicle is the only one to hook in a sanctioned class, then that vehicle would get first place points. There must be 3 vehicles in a class to receive full prize money. With only 1 or 2 pulling vehicles, it would be up to the promoter to decide how much money they would receive.
- Show Points will be given to a vehicle that has legally registered in the event but for some reason after registration is unable to hook the sled. (10 Points)
- 2. Points will be calculated in the position the member places, excluding any non-member which may place inbetween (i.e., member 1st, non-member 2nd, member 3rd); the member in 1st place will get points for first place and member in 3rd place will receive points for 2nd place, excluding the non-member. (See appendix at back of book for samples of points calculations)
- 3. Members will begin collecting points with the first pull after a competing membership has been paid. All prior hooks will not be calculated in the points.
- 4. In the event of a point tie at the end of the year, calculation will be done by calculating the total distance pulled for the year to break the tie. The vehicle totaling the greatest distance will be placed ahead of the other puller.
- 5. In the event that a test puller declines their test hook in their first scheduled class and is unable to return due to breakage, the puller will receive their show points only for that class.
- 6. If a vehicle breaks in the first scheduled class and is unable to return for the second scheduled class, the vehicle will receive last place + show points.
- 7. For those classes where there is an RPM limit, and the RPM is exceeded, that vehicle will receive last place points. If there are more than one vehicle that has exceeded the RPM limit, the vehicle that has exceeded the highest RMP will be placed in last place and the next highest will be placed second last and so on.
- 8. For those classes where there is an RPM limit; and a vehicle that exceeds the RPM limit and another vehicle that cannot compete in their 2nd scheduled event for whatever reason; the vehicle that has competed will be placed before the vehicle that was unable to compete at all.

Prize Money

- 1) Prize money will be paid out per cheque following a minimum of two events. Some events may contain payment for three events depending on how the schedule works out.
- 2) Prize money per class will be subject to change throughout the three-year period that this rule book is in effect at the review of the executive.
- 3) At the time of printing, the class prize money paid is:
 - 6500lb Light Hot Farm \$350
 - 7500lb Light Hot Farm \$350
 - 8000lb Hot Farm \$650
 - 9000lb Hot Farm \$650
 - 6500lb Light Limited Pro Stock \$650 (minimum 3 tractors)
 - 7000lb Light Limited Pro Stock \$650 (minimum 3 tractors)
 - 8000lb Limited Pro Stock \$675 (minimum 3 tractors)
 - 9000lb Limited Pro Stock \$675 (minimum 3 tractors)
 - Super Farm 1st class \$1200 (minimum 3 tractors)
 - Super Farm 2nd class \$1200 (minimum 3 tractors)
 - 4WD Super Stock Trucks 1st class \$650 (minimum 3 trucks only top six spots paid)
 - 4WD Super Stock Trucks 2nd class \$650 (minimum 3 trucks only top six spots paid)
 - 4WD Super Modified Trucks –\$2200 Maximum
 - 8000lb Street Modified 4WD Diesel Trucks \$650.00
 - Super Modified 2WD Trucks \$2800 Maximum

Contest Operations

- 1. Drivers must be a minimum of 16 years of age to pull.
- 2. All vehicles are to have a competent operator in the driver's seat when being started and while running.
- 3. All pulls will operate with two flagmen. The starting flagman will be responsible for the readiness of the track, the vehicle, and the competitor up to the 100' mark, ensuring a tight chain and giving the green flag. The second flagman will be responsible for the remainder of the track, giving the red flag and deemed the track official unless otherwise stated.
- 4. Each hook is to begin with a tight chain and a green flag.
- 5. When the flagman raises the red flag, the competitor MUST STOP IMMEDIATELY, regardless of whether the sled has stopped moving or not.
- 6. While being hitched or unhitched, all competitors are to be in neutral or park and the driver MUST indicate this has been done by raising the hands.
- 7. The first competitor (test puller) of each class may choose to drop that hook and hook again. If so, the competitor will go to the 3rd or last pulling position and the first hook will not be counted. The decision to hook again must be made BEFORE the vehicle is unhitched from the sled by informing the track official. IF PULLER DOES NOT LET TRACK OFFICIAL/ANNOUNCER KNOW WHETHER HE OR SHE IS KEEPING THE HOOK OR NOT, PULLER WILL FORFEIT THE CHANCE TO PULL AGAIN.
 - a) If the weight transfer sled has been changed, the puller has the option to return immediately as test puller.
- 8. Drivers are required to remain seated at all times while pulling with seat belts on.
- 9. The driver is the only one permitted on the vehicle while pulling or while moving in the pit area.
- 10. When a class is called, each competitor in that class will line up in the staging area after being cleared by the scale operator and will not leave this staging area until your pull is complete. If for any reason you have to leave the area, you will have to be cleared through the scale operator again.
- 11. If the laser beam is accidentally cut off before the final reading is taken and the sled has been moved, the competitor will be required to pull again.
- 12. If any part of the pulling equipment including the measuring device or sled breaks or has to be changed during the class, the class will be restarted.
- 13. If in the middle of a class, we have rain changing the conditions of the track, the entire class will start over.
- 14. NO ALCOHOLIC BEVERAGES or other intoxicants will be permitted in or around the track, nor will there be any tolerance for intoxication before a puller is scheduled to hook.
- 15. ALL CLASSES require a helmet to be worn while pulling.
- 16. Any puller caught going over idle speed while in the pit area will be disqualified and asked to load his/her pulling vehicle. SEE DISQUALIFICATION RULES #1. This also applies to any vehicle that pullers or part of their team is using in the pits.
- 17. A 20-pound fire extinguisher is to be readily available in the track area.
- 18. Spectators are NOT to be on or crossing the track when a pull is in operation.
- 19. All spectators are to be back at least 35' from the edge of the track. Track must be at least 35' in width.

20. Pull offs:

- a) A full pull will be 310feet.
- b) A class will be run between the class and the pull-off.
- c) In limited cases, (e.g.: imminent bad weather, time constraints) the decision may be made by the executive and promoter to run a floating finish.
- d) You can only pull in the position you finished in the class to get into the pull off. There is no test puller in a pull off and puller MAY NOT DROP.
- e) There will always be a floating finish in a pull off, unless otherwise instructed. Check with a track official to determine the distance. Your pull will not end at the 310' marker.
- f) One attempt only in a pull off situation

General Rules All Divisions

- All vehicles must have working brakes, air shut off or ignition kill switch, fuel shut off, or fuel bypass valve 3"
 white reverse light, neutral safety switch or clutch pedal starter safety switch, electrical power shut off
 accessible to track official on the left-hand side of vehicle.
- Clutch housing safety blanket required in all classes except light Hot farm and Hot farm. Refer to rules specific to those classes for Safety Blanket requirements.
- All tractor classes are required to have engine side shields attached minimum thickness of .060" steel or aluminum.
- 4. All vehicles in the Light Limited Pro Stock, Limited Pro Stock, and Super Farm classes will require an additional inner side shield made of 1/8-inch steel or titanium or 1/4-inch aluminum inside the current side shields. This shield is independent of the current side shields and must be attached to the vehicle frame using a minimum of 5/16 inch fasteners at both ends and the centre on the bottom and to the engine block at both ends (bolted solid or with a length of 5/16-inch chain) at deck height on the top. This shield must extend from the bottom of the head to the centerline of the crankshaft and extend the full length of the block on each side of the engine.
- 5. Turbocharged engines are required to have one cable that must surround the engine block and head. This cable must be placed between first and second cylinder through exhaust manifold port area. For engines with more than 1 cylinder head a cable must surround each head between exhaust manifold ports (Super Farm tractors will follow the most recent version of the NTPA rules)
 - a) Cable must be a minimum of 3/8-inch thickness.
 - b)Cable must have a minimum of 4 clamps alternating at the splice.
 - c) Cable must have approximately 4 inches of slack
- 6. Tractor exhaust systems must be vertical. All tractors must have two (2) 3/8 grade 5 bolts in the horizontal portion of the pipe, through the exhaust pipe as close to the turbo as possible. Bolts are to be installed at 90 degrees and within 1-inch of each other (Super Farm tractors will follow the most recent version of the NTPA rules)
- 7. All pulling vehicles must be equipped with a Dead Man Throttle
- 8. The "D" hitch is to be rigid and mounted solidly to the frame. No side-to-side movement. It must be solid and cannot be fastened to wheelie bar. No top links permitted.
- 9. "D" hitching device: diameter of the hole, round or square, is a minimum of 3" wide and 3-3/4" long. From the rear point of the hole to the rear point of the hitching device is a maximum of 1-1/2".
- 10. The hitch point must be clear and visible for hooking up the sled.
- 11. Roll Cages must meet the SFI standards applicable to the weight class but do not need to be NTPA certified. See individual class rules to determine if a Roll Cage is Mandatory or not.
- 12. Drivers of vehicles that use a roll cage must wear 5-point harness.
- 13. Drivers of vehicles that use a roll cage must wear an SFI Fire suit with applicable rating for class and type of fuel used, SFI Fire gloves, fire boots, balaclava and neck brace.
- 14. Any Secondary or safety hitch mush have a cover plate bolted in place to prevent accidental hooking to that point.

Mandatory Safety Equipment

These items are required on all vehicles in sanctioned classes.

- ➤ Fire extinguisher
- ➤ Kill switch for ignition and electric fuel pump.
- > Air shutoffs for diesel engines that can be activated from the driver's seat and/or by the sled connection.
- > Specifications for air shut off/kill switch sled connection must meet the rules for kill switches listed in the NTPA rule book including but not limited to:
 - 2-inch solid ring of 1/8" cross sectional material
 - Tractor mounting location with in 6 inches of the rear centre of the vehicle and a minimum of 48 inches above the ground.
- ➤ White reverse light
- > Helmet Rated Snell 90 or better

Disqualification Rules

- 1. Competitor not operating in a safe manner at all times while on the grounds.
- 2. Consumption of alcoholic beverages or other intoxicants PRIOR to pulling.
- 3. Any vehicle that touches the white chalk boundary while pulling.
- 4. Loss of ballast weight or equipment under the green flag.
- 5. Excessive loss of fluids or liquids while pulling unless due to an internal breakage.
 - Excessive is defined as any steady or intermittent stream discharged on the track or a spot equivalent to more than 8" in diameter.
- 6. If a track official reports a complaint of unsportsmanlike conduct to the association and the complaint is found valid, the puller(s) will forfeit accumulated points and will be suspended for the rest of the season.

Protest Procedures

- 1. The protest fee is \$500.
- 2. The protest may be put forth by an individual or group, but all protestors must be members of that class.
- 3. Members will have 30 minutes from the time the vehicle being protested completes their hook, to complete the Protest Form available from the secretary-treasurer and present the completed form with the protest fee to the head track official.
- 4. The head track official shall notify the president, vice-president & Head Tech Official that a protest has been entered. The head track official will also be responsible for forwarding the protest fee to the secretary or treasurer.
- 5. The executive committee will review the protest. The protestor and the protested will be notified of the decision verbally within 7 days and in writing within 10 days.
- 6. If the protest is found to be valid, the protest fee, less the cost of any required inspection and applicable fees for inspection, shall be returned to the protesting member(s).
- 7. If the protest is found to be invalid, the protest fee, less the cost of any required inspection and applicable fees for inspection, shall be awarded to the protested member. Costs for parts and labour will also be paid by protesting member(s) if the vehicle is found to be legal.

Light Hot Farm Tractor Class Rules

Class Representative: Huey Levasseur Alternate: TBD

Drawbar Height: 20 inches Drawbar Length: 18 inches

Maximum Weights: 6500lbs (ready to hook)

7500lbs (ready to hook)

All Light Hot Farm tractors will follow all General Rules that pertain to them.

SWOTPA will be enforcing the RPM rule for both the Light Hot Farm and the Hot farm classes. An RPM box will be mounted on the transfer sled to monitor this.

Class Rules

1. Tractors will be inspected before first pull and may be inspected at any event.

- 2. No FWD tractors permitted.
- 3. Each tractor can be entered only once per class.
- 4. Helmets are mandatory.
- 5. It is mandatory that all tractors be equipped with a Deadman's throttle. A fuel compatible fire extinguisher must be within reach of the operator.
- 6. Manufactured front axles are permitted.
- 7. Narrow front ends are **not** permitted.
- 8. Single and double cut Agricultural tires are permitted, Radial tires permitted. No Puller Tires
- 9. No Rear Aluminum rims permitted.

Engine Rules

- 10. Maximum engine displacement will be 360 cu in turbocharged. For parent block (non sleeved) engines there will be a +1% max above stock displacement to allow for damage of cylinder bore.
- 11. Engine must follow the heritage lines of the tractor. No automotive or truck engines with the exception that a 12V Cummins Truck engine may be used in place of a CDC engine.
 - Heritage lines are set out in the following.
 - •CNH includes Case, Case IH, IH, Ford, New Holland
 - •AGCO includes Allis Chalmers, Cockshutt, Deutz Allis, Massey Ferguson, Massey Harris, Minneapolis Moline, Oliver, White
- 12. Engine must be in the stock location.
- 13. Engine modifications permitted but must be contained in stock appearing components.
- 14. Turbocharger size limited to 2.5-inch inlet and 3.0-inch outlet measured at the face of the wheels.
- 15. No water injection systems permitted.
- 16. No charge air coolers, pre or post coolers or ice are permitted.
- 17. No Secondary fuels
- 18. Injection pump must be in the stock location but may be replaced by up to a "P" series inline injection pump Oversized injectors and lines are permitted.
- 19. The addition of one fuel lift pump is permitted.
- 20. Tractor must have engine side shields Minimum .060" thickness steel or aluminum.
- 21. Maximum RPM is 3100 Tractors are to be equipped with a single magnet pickup installed on the engine from balancer or on the flywheel and wired to the rear of the tractor. All tractors will have their senders

connected to the remoter tachometer on the sled at every pull Tractors exceeding 3100 RPM will receive last place points according to the amount over the limit from the Lowest amount over to the Highest amount over.

Example: 3105 RPM second last place points

3110 RPM last place points

No matter how they placed in the pull, footages do not matter when the tractor is over RPM.

22. Gas and LP motors are permitted one carb. Electronic ignition is permitted. No fuel injection permitted on spark ignition engines.

Chassis

- 23. Hood, grille, fuel tank (if fuel tank is part of sheet metal appearance) must be stock appearing. Fenders are mandatory.
- 24. Aftermarket fuel tanks are permitted.
- 25. Exhaust must point straight up. Turbo tractors must have two Grade 5 3/8" bolts installed in the pipe at 90-Degrees and within 1" of each other, in the horizontal portion of the pipe, as close to turbo as possible.
- 26. Maximum drawbar height is 20" to the top of hitching device. Minimum length is 18" from centre of rear axle to point of hook and fixed in all directions.
- 27. D-ring hitching device: the diameter of the square or oval hole is a minimum of 3" wide x 3.75" long. From the rear point of the hole to the rear point of the hitching device is a maximum of 1.5" and a minimum thickness of .75" and a maximum thickness of 1.25"
- 28. Wheelie bars are Mandatory:
 - A. 10" above ground max.
 - B. The back of the wheelie bar is to extend minimum of 6" behind outer radius of tire.
 - C. Pads must be minimum of 5"x5" and spaced a minimum of 20" from outside of each pad and must be able to support the heaviest weight of the tractor.
- 29. No weight frame or weight may extend more than 11' forward from center of rear axle.
- 30. Up to 50% of added weight will be permitted behind rear axle **not** extending past outer radius of rear tires.
- 31. All tractors must use Steel Flywheel and clutch assembly or a flywheel and clutch assembly that is SFI certified.
- 32. Any power shift transmission with more than 2 possible forward speeds requires an approved scatter blanket. Clutch blankets must be of the same design and meet the criteria as set out in the SFI 4.2 Specifications and must be in good condition. Current blanket date is not required.
- 33. Exposed drive shafts must be shielded 360 degrees with ½" Steel material anchored to frame or cast tub of the tractor at each end of the shield. Shielding needs to have no more than ¾" clearance between driveline and inside of shield.
- 34. All tractors **MUST** have a dead man throttle.
- 35. Diesel engine air shutoffs are required, and a connection located at the rear center of the tractor. When pulled it must limit the air going into the intake of the tractor. Air shutoffs must be able to be engaged from the rear center of the tractor and by the operator of the tractor when sitting in the seat. A fuel dump or bypass valve is mandatory between the filter(s) and injection pump as close to the injection pump as possible and is to be able to be operated by the driver while seated.
- 36. Ignition shutoffs required on gas or LP tractors. A connection must be located at the rear centre of tractor to activate the shut off. See General rules for specifications.
- 37. Ladder bars and roll cages are permitted. If the tractor is equipped with a roll cage the driver must wear a 5-point harness and fire suit including proper boots, gloves, balaclava, and neck brace.

Hot Farm Tractor Class Rules

Class Representative: Kevin Hardy Drawbar Height: 20 inches Drawbar Length: 18 inches

Maximum Weights: 8000lbs (ready to hook)

9000lbs (ready to hook)

All Hot Farm tractors will follow all General Rules that pertain to them.

SWOTPA will be enforcing the RPM rule for both the Light Hot Farm and the Hot farm classes. An RPM box will be mounted on the transfer sled to monitor this.

Class Rules

- 1. Tractors will Follow all General rules and are to be inspected before the first pull and may be inspected at any event.
- 2. **No** FWD tractors permitted. or dual wheels permitted.
- 3. Each tractor can be entered only once per class.
- 4. Helmets are mandatory.
- 5. Wide front axles only No Tricycle front ends, fabricated front axles are permitted.
- 6. It is mandatory that all tractors be equipped with a Deadman's throttle. A fuel compatible fire extinguisher must be within reach of the operator.
- 7. No aluminum rims, front or back, Single, and double cut agricultural tires are permitted, no puller tires permitted.

Engine Rules

- 8. Maximum engine displacement will be 410 cu in, De cubed engines are not permitted.
- 9. Engine must be stock block for the model tractor with externally stock OEM head, OEM intake and OEM exhaust systems, excluding filter and muffler. A manufacturer replacement engine is permitted but must be with the original stock appearing injection pump.
- 10. Stock injection pump may be replaced with up to a 3000 series P pump. Oversized injectors and lines are permitted.
- 11. Engine must be cubic inch checked and sealed before the pulling season or first appearance of vehicle during the pulling season. If the seal is broken the vehicle must be rechecked before pulling again. The seal will consist of a wire going through two drilled oil pan bolts. Engine must be checked by appointed tech committee.
- 12. Only one Turbocharger permitted, and it must have a stock footprint.
- 13. Turbocharger size limited to 2.75-inch inlet and 3.0-inch outlet measured at the face of the wheels.
- 14. Turbocharger must be a fixed geometry design. Map width enhancement permitted. Map ring dimension limited to a .200" slot. **No** ball bearing, or water cooling of turbocharger permitted.
- 15. Turbocharger adapter plates may be used to reposition the turbocharger if necessary.
- 16. Turbocharger is not to be exposed outside of the hood and side shields.
- 17. No water injection or mixing of fuels is permitted.
- 18. No charge air coolers, pre or post coolers or ice are permitted unless it is OEM for that model of tractor.
- 19. The addition of one fuel lift pump is permitted.

- 20. Gas engines are permitted 1 carburetor. A 4-barrel carburetor is permitted but no mechanical or electronic fuel injection is permitted.
- 21. Electronic ignition is permitted, on gas engines.
- 22. Oil cooler eliminators are permitted.
- 23. Aftermarket oil filter housing, fuel filter housings are permitted. Aftermarket crossover pipes are permitted.
- 24. Electric water pump is permitted.
- 25. Electric cooling fans are recommended.
- 26. Maximum RPM is 3100 Tractors are to be equipped with a single magnet pickup installed on the engine from balancer or on the flywheel and wired to the rear of the tractor. All tractors will have their senders connected to the remoter tachometer on the sled at every pull Tractors exceeding 3100 RPM will receive last place points according to the amount over the limit from the Lowest amount over to the Highest amount over.

Example: 3105 RPM second last place points

3110 RPM last place points

27. No matter how they placed in the pull, footages do not matter when the tractor is over RPM.

Chassis Rules

- 28. Tractor exhaust systems must exit upwards vertically. Turbo tractors must have 2 Grade 5 3/8" bolts in the horizontal portion of the pipe as close as possible to the turbocharger, installed at 90 degrees to each other and within 1" of each other.
- 29. Diesel engine air shutoffs are required, and a connection located at the rear center of the tractor. When pulled it must limit the air going into the intake of the tractor. Air shutoffs must be able to be engaged from the rear of the tractor and by the operator of the tractor when sitting in the seat. A fuel dump or bypass valve is mandatory between the filter(s) and injection pump as close to the injection pump as possible and is to be operated by the driver while seated.
- 30. Tractors must have stock appearing hood, floorboards, fenders, grill, and frame rails mounted in the original location for that model tractor.
- 31. Clutch housing, transmission housing and rear end must be for that model tractor. Tires and wheels may be changed. Outboard brakes are permitted. All listed components must be in original locations.
- 32. Maximum drawbar height is 20" to the top of the hitching device. Minimum drawbar length is 18" from the center of the rear axle to the point of hook (see General Rules –Vehicles) D-ring hitch made of 1" minimum thickness steel that has a minimum 3" wide X 3.75" long hole.
- 33. Up to 50% of added weight will be permitted behind rear axle **but not** extending past outer radius of rear tires. Front weights must be hung on stock sized weight bracket in original position with no fabricated extensions.
- 34. Wheelie Bars are required. Bars must extend 2" beyond the edge of the rear tires. Stabilizer pads must be a minimum of 24" from the outside of the one to the outside of the other, a minimum of 24 square inches each and a maximum height of 8" off the ground when parked on a flat surface. Vertical bars are to extend up from the rear edge of the pad a minimum of 12" and are to be of equal strength material to the rest of the bars. Bars are to be capable of supporting the tractor weight in the heaviest class entered. No wheels permitted.

35.	All tractors must have a functioning seat belt and seat belt must be worn while hooked to the pulling sled. Ladder bars and roll cages are permitted. If the tractor is equipped with a roll cage the driver must wear a 5-point harness and fire suit.
36.	Any power shift transmission with more than 2 possible forward speeds requires an approved scatter blanket. Clutch blankets must be of the same design and meet the criteria as set out in the SFI 4.2 Specifications and must be in good condition. Current blanket date is not required.

Light Limited Pro Stock Tractor Class Rules

Class Representative: Doug Ruston Alternate: TBD

Drawbar Height: 20 inches Drawbar Length: 18 inches

Maximum Weights: 6500lbs (ready to hook)

7000lbs (ready to hook)

Light Limited Pro Stock (6500/7000lb) weights will include the 200lb. moveable weight.

Class Rules

1. Tractors in the 6500/7000-pound classes must have any Agricultural vehicle engine block. Must remain same manufacturer (i.e.: John Deere tractor, John Deere engine), no crossing of manufacturer lines. NO truck engines.

- 2. Narrow front-end (tricycle) IS NOT PERMITTED.
- 3. Any wide front end is permissible providing it is of sufficient strength.
- 4. It is mandatory that all tractors be equipped with a Deadman's throttle. A fuel compatible fire extinguisher must be within reach of the operator.

Engine Rules

- 5. Engine size: Engines must not exceed stock 410 cubic inches for the 6500 and 7000 lb. classes. (i.e., No stock engine with manufacturer cubic inch larger than 410 cubes will be permitted.) Subject to a one-year trial period there will be an exemption for the AC 426 Block to be decubed to 408 inches cubed.
- 6. Turbocharger specifications-Compressor inlet measurement to be measured at the face of the wheel, a maximum of 2.6" diameter 1/8" (0.125") into 2.6" opening Turbine outlet 3.0" exhaust outlet. Map width enhancement/ map ring of turbo permitted with a max 0.200-inch width.
- 7. Donut reducers must be welded or Loctite in place, no set screws.
- 8. Only OEM manifolds can be used (provision to adapt turbocharger to exhaust manifold if required) No headers / custom manifolds permitted. Provisions for weld on V-band connections at crossover inlet pipe connection to intake manifold is permitted.
- 9. Intercoolers are NOT permissible.
- 10. Fuel pumps are to be limited up to a P-series only.
- 11. In the 6500/7000 lb classes, all gas tractors will be permitted one carburetor, any size, OR mechanical fuel injection.
- 12. Fuels permitted:
 - In a pressurized application either diesel or gasoline may be used.
 - No secondary fuels of any type.
- 13. Tractors will be permitted to use water-soluble oil for cooling purposes. No secondary fuel permitted to be injected with water/oil mix.

Chassis Rules

14. Tractor exhaust systems must be vertical. All tractors must have two (2) 3/8, grade 5 bolts in horizontal position through the exhaust pipe as close to the turbo as possible. Bolts are to be installed at 90 degrees and within 1-inch of each other.

- 15. Tractor drawbars are to be maximum of 20" from the top of the hitching device to the ground. The minimum drawbar length is 18" from the centre of the rear wheel to the point to the hook.
- 16. All extra weights are to be securely fastened on brackets. Weights are permitted behind the rear axle but cannot protrude beyond the rear tires or interfere with the hitching apparatus. Rubber tarp straps are not accepted as tie downs.
- 17. All tractors must have steel flywheel and approved 6-strap clutch blanket. Clutch blankets must be of the same design and meet the criteria as set out in the SFI 4.2 Specifications and must be in good condition. Current blanket date is not required.
- 18. Maximum rear tire size: 24.5x32-inches with 48 lugs with a maximum of 210-inch circumference or 20.8 X 38 inch with a maximum of 220-inch circumference, when inflated to 10 psi.
- 19. All tractors must have ladder bars.
- 20. Tractors will be required to have sample valves installed on both on both fuel and water lines.
- 21. Wheelbase: Maximum wheelbase 114in. (center of front spindle) Maximum distance from centerline of rear axle to furthest point forward 13ft. excluding the tow hitch.

MANDATORY Safety requirements for all tractors

- Three-way dump valve for diesel tractors
- Spark ignition engines to have kill switch for ignition system and electric fuel pump.
- Side shields, including inner secondary side shields see General Rules, All Divisions
- Air shutoffs for diesel tractors
- 6-strap Clutch blankets (no car blankets) Clutch blankets must be of the same design and meet the criteria as set out in the SFI 4.2 Specifications and must be in good condition. Current blanket date is not required.
- Exposed turbo chargers must be covered with minimum 0.060 thick steel.
- Roll cages (3-bar for all tractors)
- 5-point harness
- Detachable steering wheel
- Rotating mass on front of engine must be shrouded as per NTPA rules. (This became effective for the beginning of the 2021 pulling season)

Limited Pro Stock Tractor Class Rules

Class Representative: Ron Tetreault

Drawbar Height: 20 inches Drawbar Length: 18 inches

Maximum Weights: 8000lbs (ready to hook)

9000lbs (ready to hook)

Limited Pro Stock classes (8000/9000lbs) weights will include the 200lbs moveable weight.

Class Rules

- Engine/chassis must remain same manufacturer (i.e.: John Deere tractor, John Deere engine), no crossing of manufacturer lines.
- 2. Narrow front-end (tricycle) IS NOT PERMITTED.
- 3. Any wide front end is permissible providing it is of sufficient strength.
- 4. Each tractor can be entered only once per class.
- 5. Helmets are mandatory.
- 6. It is mandatory that all tractors be equipped with a Deadman's throttle. A fuel compatible fire extinguisher must be within reach of the operator.

Engine Rules

- 7. Engine size: For classes 8000 pounds and up, engines must not exceed stock 515 cubic inches. No de-cubing permitted.
- 8. Turbo Charger will be Maximum 3" inlet x 3" outlet. No map width enhancement ring. Can have compressor wheel Protrude into intake housing.
- 9. Intake/exhaust manifolds are to be stock. Exhaust with turbo mount provisions for all engines.
- 10. Fuel pumps are to be limited up to a P-series only.
- 11. Stock fuel only. No secondary fuels of any type. Biodiesel is an approved fuel.
- 12. Tractors will be permitted to use water-soluble oil for cooling purposes. No secondary fuels to be injected with oil/water mixture.
- 13. Intercoolers not permissible

Chassis Rules

- 14. Tractor Exhaust systems must be vertical. All tractors must have two (2) 3/8, Grade 5 bolts in horizontal portion of the exhaust pipe as close to the turbo as possible. Bolts are to be installed at 90 degrees and within 1-inch of each other.
- 15. Tractor drawbars are to be maximum of 20" from the top of the hitching device to the ground. The minimum drawbar length is 18" from the centre of the rear wheel to the point to the hook.
- 16. All extra weights are to be securely fastened on brackets. Weights are permitted behind the rear axle but cannot protrude beyond the rear tires or interfere with the hitching apparatus. Rubber tarp straps are not accepted as tie downs.
- 17. All tractors must have steel flywheel and approved 6-strap clutch blanket. Clutch blankets must be of the same design and meet the criteria as set out in the SFI 4.2 Specifications and must be in good condition. Current blanket date is not required.

- 18. Maximum rear tire size: 24.5x32-inches with 48 lugs with a maximum of 210-inch circumference, when inflated to 10psi.
- 19. All tractors must have ladder bars.
- 20. Tractors will be required to have sample valves installed on both fuel and water lines.
- 21. Wheelbase: Maximum wheelbase 114in. (center of front spindle)
- 22. Maximum distance from centerline of rear axle to furthest point forward 13ft. excluding the tow hitch.

MANDATORY Safety requirements for all tractors

- Three-way dump valve for diesel tractors
- Side shields, including inner secondary side shields see General Rules, All Divisions
- Air shutoffs for diesel tractors
- 6-strap clutch blankets (no car blankets) Clutch blankets must be of the same design and meet the criteria as set out in the SFI 4.2 Specifications and must be in good condition. Current blanket date is not required.
- Exposed turbo chargers must be covered with a minimum 0.060" steel.
- Roll cages (3-bar for all tractors)
- 5-point harness
- Detachable steering wheel
- Rotating mass on front of engine must be shrouded as per NTPA rules. (This became effective for the beginning of the 2021 pulling season)

Super Farm Tractor Class Rules

Class Representative: Jason Podolinsky Alternate: Steve Adams

Drawbar Height: 20 inches Drawbar Length: 18 inches

Maximum Weights: 9300lbs (ready to hook) 10,000lbs (ready to hook)

1. The Super Farm class will run as per National Tractor Pull Association (NTPA) rules.

- 2. The following exceptions apply for tractors that will only be pulling the SWOTPA circuit.
 - a. The roll cage and mounting must be NTPA certifiable but does not have to be NTPA certified.
 - b. The skid plate as described in the NTPA rule book will not be mandatory.
 - c. Blankets must be certifiable (current NTPA Rule Book Clutch).
 - d. Clutch and flywheel must be inspected annually. Either a SWOTPA Self Declaration form or NTPA Inspection sheets are acceptable.
- 3. Rotating mass on front of engine must be shrouded as per NTPA.

The following are the rules reprinted from a current NTPA Rule Book

Chassis

It shall consist of the following:

- 1. The stock engine block or OEM block that will operate with the stock crankshaft for that model without any alterations for chassis mounting.
- 2. Tractors using a full frame must locate engine at or above centerline of rear axle. Tractors with cast tub (belly) type frame (i.e., Oliver, White, John Deere) permitted to remove structure from front of transmission housing forward. Full frame extending from front of tractor to rear axle-housing bolts must be used to replace tub in this application. Engine block and clutch housing must remain in original position from centerline of rear axle to rear of block not to exceed 60 inches (even if OEM model is farther forward more than 60 inches, i.e., new style John Deere). Engine block must be mounted solidly to full frame at both front and rear.
- 3. All engines must be secured and held rigid to OEM chassis. Engine cannot move independent of rear end/transmission housing.
- 4. The stock transmission housing or manufacturer's replacement and the stock final drive housing or manufacturer's replacement.
- 5. The OEM engine block cannot be modified externally, except for normal repair or for mounting of fuel injection pumps.
- 6. Internal webbing and water jacket must remain intact with provisions to re-bore engine block may be provided.
- 7. Any alterations to the chassis shell or the stock appearance must have the written approval of NTPA Technical Services before the tractor in question will be considered a legal NTPA entry.

Note: The criteria used by the board will be the retention of stock appearance.

- 8. The chassis and frame must remain stock from the rear of the engine block to the rear of the tractor.
- 9. The clutch housing, transmission case, rear end housing, and axle housing must be OEM, with no aluminum replacements.

- 10. OEM Chassis identified as any tractor with engine block mounted and connected to clutch/transmission housing in same manner as intended by OEM. Engine must remain in original location forward from centerline of rear axle and mounted solidly as located by OEM manufacturer.
- 11. Wheelbase: Maximum wheelbase: 114 inches (center of front spindle). Maximum distance from centerline of rear axle to furthest point forward: 13 feet. (this will apply to all Pro Stock Tractors)
- 12. One-piece engine main cap bearings permitted. One-piece main cap not considered a girdle.

Engines

- 1. No engine larger than 640 cubic inches (+ or 1 percent)
- 2. Engine head must be OEM agricultural type for that brand engine.
- 3. No overhead cams permitted.
- 4. Manifolds
 - a. OEM head and manifolds for same brand block and same series engine.
 - b. OEM intake and exhaust manifold assembly only. No spacers between manifold and head.
 - c. No altered or modified manifolds, i.e., tubing or box type manifolds.
 - d. No Intercoolers/Aftercoolers.
 - e. If an OEM intercooler manifold is used it must be disconnected from all cooling means.
 - f. No CO2 or other means of cooling the air in the piping or manifold. No ice filled or ice cooled device onboard tractor of any kind. All engine air must enter the inlet of the turbo at ambient air temp and humidity. Inlet air may not be drawn thru or across and type of cooling device.

Note: Alteration for turbo mounting permitted

- g. V-8 Engine Configurations: Turbo must be mounted to an OEM exhaust manifold from same brand engine (i.e., Cat engine, Cat exhaust manifold). Fabricated adapter pipes from OEM exhaust manifolds on cylinder heads to turbo manifold section permitted.
- h. Note: This doesn't change anything for the 6-cylinder engines.

5. Turbo

- a. Exhaust bolt pattern no larger than 2.750 inches by 3.5 inches, or 69 mm x 88 mm.
- b. No altering of a housing to accommodate a smaller base, e.g., T-18A95 with a small base welded to it.

Intake:

Map width enhancement is permitted. Maximum map width limits of .200" MWE groove must be inside neck area where intake covered is measured at 3 inches.

Compressor wheel must protrude into the three-inch opening at least 1/8 inch.

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

Exhaust:

All turbine wheel tips of wheel must protrude into 3 inch opening at least 1/8 inch.

All air must exit through the 3-inch opening.

Turbine wheel exhaust blade to be so less than 2.90 inches 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.

No Wastegates permitted.

No variable geometry turbos permitted.

6. The maximum size pump for diesel injection is a p-pump. Only one plunger per cylinder.

Tires

1. Maximum 48 lugs permitted on 24.5x32 with a maximum of 210-inch circumference, when inflated to 10 psi. Tread width not to exceed 25 inches.

Other

1. Tractor exhaust systems must be vertical. Turbo tractors with no muffler must have two (2) ½", grade 5 bolts in horizontal position through the exhaust pipe as close to the turbo as possible. Bolts are to be installed at 90 degrees and within 1-inch of each other.

http://ntpapull.com/publications/ntpa-rulebook

Two Wheel Drive Super Modified Truck Class Rules

Class Representative: Doug Stutt

Drawbar Height: 30 inches Drawbar Length: 18 inches

Maximum Weight: 6200lbs (ready to hook)

1. Trucks will follow OTTPA rules (see OTTPA web site for rules)

- 2. A mix of Naturally aspirated and Blower Engines
- 3. A safety inspection will be mandatory before being permitted to hook to the sled.
- 4. Trucks will pull 6200lbs including the 200lbs movable weight.
- 5. The driver's seat may be placed anywhere within the driver's compartment.
- 6. A Halon extinguisher system is not needed in a 2wd flip body truck as long as the engine is naturally aspirated and running on gasoline. (Motion made at the December 1, 2013, meeting)

http://www.ottpa.net/rules2wd.html

Four Wheel Drive Super Stock Truck Class Rules

Class Representative: Jim Middleton

Drawbar Height: 24 inches

Drawbar Length: 34% of the wheelbase (minimum)

Maximum Weight: 6000lbs (per hook) (ready to hook)

NOTICE: These rules are intended to effectively be the same as the rules for the 4x4 (4WD) Super Stock Trucks for Ontario Truck and Tractor Pullers Association (OTTPA) Any 4x4 Super Stock truck built to meet OTTPA rules can be expected to meet these rules, and will be permitted to pull in 4x4 Super Stock at SWOTPA events provided the pulling fee is paid, or the driver buys a membership in SWOTPA, and the vehicle passes SWOTPA technical inspection. Conversely, it is expected that any truck built to these rules, will be able to compete at OTTPA events subject to technical inspection by that association. This does not guarantee that any particular vehicle will meet the rules or be permitted to compete. It is the sole responsibility of any individual intending to compete with a truck in 4x4 Super Stock at any of these events, to ensure that they meet all the requirements of that particular event. Particular attention shall be made to general safety rules of each club.

No changes to these rules will be entertained until January 1, 2026 except as follows:

- a) Changes to harmonize with OTTPA, provided they do not contravene any safety rules of SWOTPA.
- b) Other new changes by OTTPA prior to January 1, 2026. Any such changes shall be reviewed and approved by majority vote by SWOTPA Executive and 4x4 Super Stock class members.
- c) Any safety rules deemed necessary by SWOTPA must be approved by majority vote by SWOTPA Executive and Four-Wheel Drive Super Stock Class members.
- I. All vehicles must meet all applicable "SWOTPA General Rules" in addition to the rules below.
- II. Total weight of vehicle, "ready to pull", shall not exceed 6000 pounds. "Ready to Pull" means complete with all required safety equipment, fuel for the pull, moveable weights and driver complete with all required safety apparel.
- III. Only SWOTPA members will collect points.
- 1. After market manifolds, carburetors and headers are allowed. Roller camshafts and roller tip rocker arms are allowed.
- 2. Must be naturally aspirated with single carburetor (venturi type). No fuel injection. Alcohol is allowed. No pressurized fuel. No diesel engines.
- 3. Inside the frame headers, pipes must exit behind the cab. Outside the frame headers can exit straight, behind the cab. Headers may exit vertically through the hood. Vertical headers must be within 10 degrees of plumb.
- 4. Weight boxes or weight bars must be securely fastened. No portion of the weights or weight box or bars to extend forward more than 60 inches from the centerline of front axle. Weight box and weights must be left in stationery position while the vehicle is in motion down the track.
- 5. Ladder bars are only allowed on leaf type suspension. Coil suspension must have coil located over the centerline of axle with radius arms not to exceed 30 inches in length. Front axle ladder bars not to exceed 30 inches in length, measured from the axle centre line to pivot point. Frame rails shall be OEM only. No scissor type frames allowed. No tubular frames are allowed (except OEM). All frames shall be automotive style only. All trucks must have a working suspension comprised of factory production style springs and shackles. Rear suspension shall be leaf spring only.
- 6. All suspension spacer blocks must be a maximum of 8 inches in length.
- 7. Hitch to be connected to the frame only and shall be rigid in all directions. Height is to be a maximum of 24-inches from the top of the hook point to the ground. Hitch length must be a minimum of 34% of the wheelbase and measured from the centerline of the rear axle to the hook point. No drawbar angle can be greater than the angle of the sled chain. Acceptable angle = 0 degrees to a maximum of 30 degrees from the ground.

- 8. Engine mounts can be stock type or solid. If stock type mounts are used a 3/8-inch engine chain is required on drivers' side only. Chain shall be mounted so as to prevent excessive rotation of engine in the event that a motor mount breaks. The driver's side #2 spark plug shall not be located forward of the center line of the front axle.
- 9. No aluminum blocks or heads (cast iron or steel only).
- 10. Drop box transfer cases are not allowed. OEM Production type transmission and transfer case only.
- 11. Tires must be D.O.T. legal and stamped D.O.T. and not cut or shaved in any way. No bar or tractor lug design allowed. Tires must be a maximum of 35 inches in diameter. No Dual Tires
- 12. Limited to 526 CID (cubic inch displacement) engine size.
- 13. All driveshaft "U" joints must have protective covers made out of ¼-inch steel or 3/8" aluminum. Covers must completely encircle the U-joint and cover the full length of the joint. Rear driveshaft must have at least one safety loop approximately mid-way between front and rear "U"-joint. Safety loop shall be a minimum of 1" wide and 1/4" thick steel.
- 14. Backup lights must be functional and operate as designed by the manufacturer. No manual backup light switch devices are acceptable. Rear kill switch must disable the ignition and electric fuel pumps. Minimum 2-inch steel ring.
- 15. Standard transmission must have a steel bell housing, complete with commercially available or 3/16-inch block plate. Block plate bolts must be Grade 8 with a minimum of 6 bolts, or all available holes must have bolts. A 0.090" thick liner is also recommended. Clutch and flywheel must be SFI approved. Owner must sign a guarantee of compliance and verification form for all Clutch, flywheel, bellhousings and engine flex plates.
- 16. Automatic transmissions must have SFI approved flex plate and use full blankets properly installed from front to back. Blanket shall extend from back of the block to the rear of the planetary. SFI approved flex plate cover, SFI approved transmission shields are acceptable in lieu of a blanket.
- 17. All trucks must have neutral safety switch.
- 18. Clutch pedal must be fully depressed to activate starter.
- 19. Harmonic balancer must be SFI approved or covered with 1/4-inch-thick steel or 3/8-inch aluminum shielding covering entire balancer circumference.
- 20. No engine driven fan blades.
- 21. Side shields 1/8-inch steel or 3/8-inch aluminum to cover the entire block that the frame doesn't.
- 22. Must use steel cab. No complete fiberglass bodies are allowed. Fiberglass panels e.g., doors, fenders, box panels and hoods are allowed.
- 23. Trucks with lift bodies must have the body in lowered position before vehicle can be moved under its own power. Lift bodies must have a safety lock to hold up the body.
- 24. Rear axle shields are mandatory on all Super Stock Trucks. Shields must be at least 0.060 inches thick. Shields must cover minimum diameter of axle end.
- 25. No fuel tanks are allowed under the hood of the pulling vehicle.
- 26. Fire Extinguisher, at least 2.5 pounds, must be in cab of truck and be compatible to the fuel being used.
- 27. All 4-Wheel Drive trucks shall have a box liner or tonneau cover. If tonneau cover is used, cover shall also cover tailgate area of box.

Four Wheel Drive Super Modified Truck Class Rules

Class Representative: Jim Middleton

Drawbar Height: 26 inches for supercharged / 27 inches for naturally aspirated. See rule #3 below under Drawbars for length specifications.

Weight: 6200lbs (ready to hook)

Body Chassis:

- 1. Vehicle must have a hood, grill and fenders in place as intend by manufacturer.
- 2. Vehicle body must be or have been available from the dealer as mass produced.
- 3. Vehicle must maintain original appearance.
- 4. Vehicle must have complete outer shell (doors, fenders, hood body sides).
- 5. Cab and bare chassis or flatbed not allowed.
- 6. All doors and hoods to e functional unless tilt bodies. Tilt bodies without working doors must have external lifting device.
- 7. Truck doors must have a single latch design allowing the door to be operated from inside and outside.
- 8. Vehicles with less than stock size window openings must have an escape hatch with a minimum size of 17" by 18".
- Air shock type devices are allowed as long as there are no lines or controls going to and from them.
- 10. Adjustable front suspension stops must be mechanical. Pneumatic, hydraulic, electrical adjustable straps are not allowed.
- 11. Vehicles must have safety glass or Plexiglas in windshield and rear window Factory tint is permitted.
- 12. Stained or smoked glass is not allowed.
- 13. Tinted windows that impair the track officials view of the driver's compartment are not allowed.
- 14. Vehicles in this class must have vertical bumpers at the rearmost point of the vehicle. Bottom of the bumper must be a minimum of 8" inches vertically must be rigid.
- 15. Hood Line variance: original hood line should be kept and a 3" maximum clearance opening will be allowed for speed equipment.

Drawbars:

- 1. No drawbar angle greater than the angle of the sled chain. Acceptable angle =0degrees to a maximum of 33 degrees.
- 2. Drawbar height is 26" for supercharged and turbo diesel trucks and 27" for naturally aspirated.
- 3. Drawbar length form the center point of the rear axle to the hook point to be minimum of 30% of wheelbase NO SHORTER
- 4. Drawbars shall be constructed so that in the event of drawbar breakage the draw bar supports do not pull form a top link or brace above the centerline of the rear axle. Support must be within 6" of point of hook can be closer.
- 5. Drawbars at the point of hook need to be minimum 1" thick steel plate to a maximum of 1 ½" x 1 ½" square or 1 ½" round steel stock with an oblong shape 3 ¾ long by 3" wide minimum to a maximum 3 ¾" hole.
- 6. Drawbars that have provisions to be made shorter than legal length are not acceptable.
- 7. All Drawbars must be approved by the tech Official

Driveline/driveline shielding:

- 1. Vehicle must have three (3) round metal loops shielding each driveshaft.
 - a) 360-degree loop must be a minimum of 3/8 inch aluminum or 5/16-inch steel, ³/₄ inch wide or wider and not more than 2 inches from the shaft in any direction
 - b) End loops to be placed no farther than 6 inches from the universal joints with third loop in the center of the
 - c) May use a solid tube (3/8-inch aluminum or 5/16-inch steel) to meet the above requirements.

- 2. If planetary reductions at wheels are used the following driveline shielding criteria will apply. No cast metal.
 - a) All remaining drivetrain excluding additional manual transmissions, must be enclosed in 5/16-inch minimum steel or 3/8-inch aluminum, round inside diameter not to exceed 2 inches more than the outside diameter of the largest universal joint, fastened every 6 inches or closer with 3/8 inch or larger bolts, grade #5 or butt and seam welded and securely mounted to the vehicles frame. Applies to all vehicles with exposed driveshaft. No more than 1/4inch of end of drivelines shall be visible with driveline shieling in place. If U joints are used in any drive shaft application the shielding must be 5/16-inch steel or 3/8-inch aluminum with 1/8-inch steel inset in aluminum. The Shield must be a minimum of 6 inches wide.
 - b) All FWD vehicles engine /automatic transmissions combinations must have either: Two front engine mounts, tow rear engine mounts and a support saddle for rear of transmission with ½ inch maximum clearances
 - c) OR two front engine mounts, support saddle at the rear of engine with ½ inch clearance and a mount at rear of transmission. This is to prevent engine or transmission form dropping if breakage occurs.
- 3. Driveshaft's between engine and transfer case must have solid shielding a minimum of 3/8 inch aluminum, or 5/16-inch steel.
- 4. Vehicle must have a 360-degree metal shield around the universal joints, 3/8-inch aluminum or 5/16-inch steel. Minimum width of 6 inches. If a split design is used mount as in Rule 2a above
- 5. Axle and hub bolt shield required except where planetary; final drives are used.
 - a) Shield must be at least 0.060 inch thick.
 - b) Minimum diameter of axles ends or hub bolts to be covered on both front and rear axles.
 - c) Mounting shield cannot be mounted to axle end or hub bolts.
 - d) A hole may be installed in center of front shield so lock can be operated as long as hub end or axle bolts are covered.
 - e) No counter balancers permitted in driveline.
- 6. Trucks must have front brakes that will control the vehicle.

Engine:

- 1. Vehicles are limited to a single automotive type engine. Automotive engine is any engine or its replica available in a passenger car or pickup truck. Maximum 10 cylinders. A replica to be considered legal must accept and swing a stock crankshaft. Acceptable engines to include Dodge V-10 and Ford V-10 and pickup diesels. Theses engines must follow the rest of the rules related to cubic inch displacement, head configuration and pressure stages. Maximum of 650 cu.in. Motor naturally aspirated or 500CI supercharged.
- 2. Diesel powered vehicles will be permitted to pull in SMFWD class but are <u>not</u> allowed to accumulate points.
- 3. Diesel turbo maximum 466 Cubic inch
- 4. Automotive type block Alum. Or cast iron allowed.
- 5. All motors with wedge style heads may use up to an 871 supercharger but heads must accept stock valve covers (supercharged only) -40% maximum overdrive allowed on blower.
- 6. Vehicles are limited to two valves per cylinder head and one spark plug per cylinder except for 5.9ci Cummins engine.
- 7. Blowers or turbo limited to one pressure stage.
- 8. All superchargers must be mounted to the intake manifold by use of aluminum studs only (No Steel studs allowed)
 - a) Supercharger restraint system is mandatory and shall consist of four separate straps, one on each corner of the supercharger, with each strap securely fastened to the engine by means of its own attachment bracket. The top bracket to be sandwiched between the lower surface of the injector body and the upper surface to the supercharger case. The bottom attachment bracket for each strap shall be connected to the engine by a minimum of a 5/16-inch bolt or stud, grade 5 or better.
 - b) Supercharger drive components must be shrouded on the top and sides with 0.060-inch metal. Blower bets shield must be wider than all components, idler belt, pulleys, etc. and extend to the bottom of the bottom pulley or below.
 - c) Turbocharger must be completely shrouded except for inlet and exhaust pipes with steel or aluminum at least .060-inch thickness. Body panels are appropriate shrouding if turbo is not visible from outside of vehicle.
- 9. Acceptable fuels are gasoline, diesel and alcohol.
- 10. Engine must be in stock location which is defined as being within engine compartment as manufactured behind stock grill and in front of stock firewall.

- 11. Vehicle may run without a radiator and engine may be moved forward but the entire engine must stay behind the grill. Entire engine to mean anything that is bolted to the engine block.
- 12. Except for high performance type starters with crank shaft drive, rear of engine block may not be moved forward of centerline of front axle.
- 13. Automotive engines must run 2 valves per cylinder and 1 spark plug per cylinder.
- 14. Fuel injection (and carburetors) and headers may protrude through the hood.
- 15. Vehicle must have vertical exiting exhaust. Height of pipe must be a minimum of one foot above the bend. Vertical is defined as "being in plumb" with a 10-degree variance in any direction permitted.
- 16. Engine to be shielded on both sides form bottom to top of block and the entire length of the block. Shield must be 60 thou. Material or greater and be securely mounted.
- 17. Engines that use harmonic balancers must use SFI approved balancer.
- 18. Throttle return springs, 2 per carb. or injector.
- 19. Turbo chargers: Max diameter to be 3.25 inch with 2 grade 5, 3/8" bolts placed in the exhaust in a cross pattern within 1" of each other directly after the turbo charger.
- 20. Diesel: no fuel is to be injected in any other way than the fuel injection pump.
- 21. Diesel: Water injection is permitted, alcohol, methanol and other flammables are prohibited. Commercially available pump lube is allowed.
- 22. Diesel: A 3-way driver operated fuel dump valve is required in the fuel system and must divert fuel form the injection pump back to the fuel tank.
- 23. Diesel: a sled and driver operated spring loaded emergency air shut off is mandatory. The cable must terminate into a two-inch diameter steel ring at the rear of vehicle.

Frames:

- 1. May be different than the make and model of the truck body.
- 2. Must be main supporting member of the chassis, OEM truck frame.
- Tubular steel frame is allowed.
- 4. Centre of wheels cannot exceed plus or minus 6 inches of the fender wells for wheelbase being used which means that a vehicle may run up to a maximum of 133-inch wheelbase.
- 5. Wheels must be in fender wells as described above. Body may be stretched in the middle to accommodate this.
- 6. The outside edge of the tire on the narrow axle must overlap the centerline of the tire on the wide axle by at least one inch.
- 7. Maximum wheelbase cannot be longer than 133 inches.
- 8. Weights to be no more than 60 inches from the center line of the front axle.
- 9. Solid rear suspension only.

Hitch:

- 1. Truck must have floor bed cover.
- 2. Truck may compete without tailgate or rear door(s) for greater hook point visibility.
- No portion of the truck may interfere with the sled, chain or hook during the pull or while being hooked or unhooked.
- 4. An area 5 inches wide and 12 inches high immediately above the drawbar must be free pf all obstructions (including weights, wheelie bars and second drawbar) for ease of hooking and unhooking. If Body extends more than 12 inches behind point of hook, the open area must be 18 inches above drawbar and 24 inches wide at rear most point of body.
- 5. Vehicle must have a tow hitch on front of vehicle:
 - a) It can extend no more than 6 inches ahead of the farthermost front portion of the vehicle.
 - b) It will not be counted when measuring the length of the vehicle.
 - c) It must have a 3-inch diameter hole, positioned horizontally.
 - d) It must be strong enough to push or pull the vehicle at its heaviest weight.
 - e) It is to be used only for pushing or pulling the vehicle.

Safety:

- 1. Vehicle must have a complete firewall (no holes except for controls)
- 2. Vehicles that do not have working doors must carry an onboard halon fire system with minimum of three (3) nozzles located within the driver's compartment/engine compartment. Truck with working doors must carry a 2.5-pound ABC or 1.5-pound Halon fire extinguisher convenient to the driver.
- 3. Flip-top or funny car type vehicles must have body in lowered position before vehicle may be moved under its own power.

- 4. Flip-top bodies must have a safely lock to hold up the body.
- 5. Body may be raised to start engine and may stay in raised position while engine is running as long as vehicle in not in motion.
- 6. At NO time will vehicle be running without someone in the driver seat.
- 7. Operator's compartment.
- a) No fuel tanks, fuel pressure gauges, fuel pumps, batteries and or fuel lines are allowed in the operator's compartment.
- b) It the fuel tank is located behind the driver; a fire barrier is required form the firewall to the rear of the driver's seat. (0.060-inch aluminum or steel is acceptable fuel barrier material.)
- Vehicles must use wheels not more than 6 inches off the ground, within 6 inches of the forward most part of the vehicle.
 - a) Wheels must be a minimum of 6 inches in diameter by 2 inches wide.
 - b) Wheels must support the weight of the vehicle.
 - Wheels must be raised or removed for the purpose of ground clearance when vehicle is not on <u>competition</u> track.
 - d) Wheels must be at least 3 feet apart.
- 9. Weights must be safely secured to vehicle and must not extend forward more than 60 inches from the centerline of the front axle.
- 10. Trucks must have a rear kill switch and backup light.
- 11. Trucks must have a neutral safety switch to prevent the vehicle form starting in gear.

Tires:

Maximum tire size to be 112 inches circumference when inflated to 30 psi with original bar. Not to exceed 17 inches in width before cutting. NO dual wheels. Bar tires only.

Bellhousing and transmission:

- 1. Bellhousing to be SFI 6.2 or 6.3 with a 3/16" steel block plate.
- 2. Clutch and flywheel must be SFI 1.1 or 1.2 approved.
- 3. Automatic transmissions must have a SFI 4.1 or 4.2 scatter blanket covering the bellhousing and tranny body.
- 4. Owner must sign a guarantee of compliance and verification form for the Bellhousing and Clutch.

Additional Rules:

- 1. Pullers will be on the honour system for weight with offsite scales.
- 2. No trucks may bump up into class without complying with these rules.
- 3. Complete fire suits are mandatory including balaclava fireproof gloves and boots SFI 3.2A/1
- 4. |Lap Belts must be worn during the pull.

Light Limited Super Stock National Tractor Non-Circuit Class Rules

(Not a SWOTPA Class at this time)

Weight: 6200lbs with a 50lb weight variance allowed at the scales

Engine: Engine crankcase, block, and cylinder head must be of the same manufacture or factory replacement and can be used in any agricultural transmission and rear end that used that brand of engine or through its company mergers used that brand of engine.

Example:

CNH = AGCO = Case Oliver Farmall Moline International White

Case IH Massey Ferguson

Ford AC
New Holland Deutz

- 1. Must be OEM engine block, no Billet steel or aluminum blocks.
- 2. Engine must match brand of tractor.
- 3. Rear of engine must be in stock location for make and model of rear end and transmission housing, with a maximum tolerance of a 1" adapter plate.
- 4. A 1% tolerance will be given on cubic inch limitations to allow for normal engine wear.
- 5. No V-8 Engines permitted.
- 6. No Overhead cams allowed.
- 7. The largest fuel system allowed is a "P"-pump with one plunger per cylinder and one injector per cylinder.
- 8. No electronically controlled fuel system allowed.
- 9. No secondary source of fuel (liquid or gas) or oxygen enhancer allowed.
- 10. Water injection allowed with oil lubricant only, no additives allowed in injection water, and water will be subject to testing.
- 11. Computer can only be used for data acquisition, may not be able to control engine timing, or fuel delivery.
- 12. No traction control.
- 13. Exhaust must be discharged vertically; no rain caps or curved pipes at outlet allowed, and exhaust pipes must be securely fastened to tractor.
- 14. Exhaust pipes must have two 3/8" grade five bolts set within 1" at 90 degrees to each other at least one foot below opening in the exhaust.
- 15. Harmonic balancer must be shielded with at least 1/8" metal underneath the front of the block and secured to the frame with four 3/8" bolts.
- 16. Engines must have one 3/8" safety cable completely surrounding the block and head passing between the first and second cylinders, through the exhaust manifold port area, with a minimum of four clamps at all splices with 4-6 inches of slack.
- 17. Diesels must have a spring-loaded closing mechanism air shutoff. To be deemed acceptable, when activated the shutoff mechanism must prevent boost of engine. The kill switch must be mounted securely to the back of the tractor and have a 2-inch diameter ring (minimum 1/8" thick). Operator must also be able to operate from the driver seat.
- 18. Alcohol engines must have a kill switch to disable the ignition.'-
- 19. Diesel fuel system must have manual three-way dump valve installed ahead of the injection pump, to be operated by the operator from the driver seat.
- 20. Must have "Dead Man" throttle with two return springs that automatically returns to idle when released by operator.
- 21. No mechanical fans allowed.
- 22. Flywheel will be made of steel or aluminum and be SFI approved, absolutely no cast iron allowed, and all clutch assemblies will be steel and SFI approved. No cast iron.

Diesel Engine Options:

- 1. Maximum of 315 cubic inches for twin turbo charged diesel engines with Intercoolers. (Turbo(s) must be staged)
- 2. This engine combination can run a maximum of two (2) 3X4 smooth bore turbo(s). No MAP enhancement.
- 3. Maximum of 360 cubic inches for twin turbo charged diesel engines and no intercooler or after cooler allowed. (Turbo(s) must be staged)
- 4. This engine combination can run a maximum of two (2) 3X4 smooth bore turbo(s). No MAP enhancement.
- 5. Maximum of 410 cubic inches for single turbo charged diesel engines. Intercoolers allowed.
- 6. This engine combination can run a maximum of one (1) 3X4 turbo with MAP enhancement.
 - a. 0.200 MAP enhancements
 - b. No forward-facing MAP.
- 7. Maximum of 470 cubic inches for single turbo charged diesel engines. No intercoolers allowed. (The 478CI Hercules engine will be legal to run in its factory combination 0% variance on CID)
- 8. This engine combination can run a maximum of one (1) 3.4X4 smooth bore turbo.
- 9. For the 2017 season a sing le 3X 4 turbo with MAP enhancement will be legal for the 470CI diesel engine, Max of .200 MAP with no forward-facing enhancement. The 3.4X 4 smooth bore turbo is on a trial basis and will be re-evaluated at the end of the season. In the 2018 season this engine combination will move to only a smooth bore turbo.

Alcohol Engine Option:

- 1. Maximum of 370 cubic inches for single turbo charged alcohol engines. No intercoolers allowed.
- 2. This engine combination can run a maximum of one (1) smooth bore 3X4 Turbo.

Turbo Restrictions:

- 1. All turbo compressor and exhaust wheels must protrude into the housing no less than $1/8^{th}$ of an inch.
- 2. The compressor wheel must measure no larger than 3 inches at the face of the wheel.
- 3. Diesel engines that will be allowed to run a 3.4X4 smooth bore turbo, the compressor wheel must protrude into the housing 1/8th of an inch and the compressor wheel must measure no larger than 3.400" at the face of the wheel.
- 4. No superchargers allowed.
- 5. Turbocharger(s) must be under stock hood or shrouded end to end and 360 degrees around with .060" thick metal. Turbocharger(s) must also be shrouded if under a fiberglass or plastic hood.

Cylinder Heads:

- 1. Cast iron OEM cylinder heads only. No billet or re-cast cylinder heads allowed.
- 2. Cylinder head must match the engine block.
- 3. Valves must maintain the factory angle, lateral movement of valves ONLY. Valves must seat in the bottom of the OEM head on all 6- cylinder engines.
- 4. Cylinder heads are limited to two (2) valves per cylinder.
- 5. One spark plug per cylinder ONLY.
- 6. Only one (1) plate will be permitted between the top of the block and the bottom of the cylinder head, with a maximum thickness of 1.125 inch.

Chassis:

- 1. Maximum length 13 feet measured from center of rear axle to forward most point, excluding tow hook.
- 2. Maximum wheelbase 114 inches.
- 3. OEM tractor rear end, transmission and axle housings only will be accepted, no component tractors allowed.
- 4. No type of front-end suspension will be allowed; swivel axle front ends will be accepted.

- 5. Allow tractors with cast tub (belly)-type frame (i.e., Oliver, Cockshutt, White) to remove complete frame from front of transmission housing. The engine and clutch housing to remain in original location and mounted solid as intended by original manufacturer, with motor mounts in the front and rear of the engine. No engine cradles.
- 6. Once the tub is removed the rear of the engine cannot be exceed 60 inches from the center of the rear axle.
- 7. Tractors that have removed the tub (belly)-type frame will be required to have 100lbs of non-movable weight mounted onto the belly of the tractor.
- 8. Oliver style tractors must also run a SFI 6.2 or 6.3 bellhousing with SFI inspection sticker in place. If they continue to run the OEM bellhousing, they will be required to run a 6 buckle 4.1 SFI rated blanket.
- 9. All housings must stay in place, bolted rigid in all other chassis.
- 10. Auxiliary transmission will be permitted.
- 11. Skid plate must be mounted in-line with each frame rail and extend from the center of the front axle forward (on both sides) equal in strength to frame rail material. Skid must be securely mounted and braced to the chassis. Skid plate surface to be a minimum of 4 inches wide and 12 inches long with a minimum 6-inch curve when measured from the front most part of rolled edge. Note: Skid plate must be able to support the weight of the front end when checked with a jack. Maximum ground clearance is bottom of wheel rim not to exceed 4 inches with front tires in normal operating position.
- 12. Tractors must have a full running frame rail from the axle housing to the front of the tractor or tie bars running from the axle housing to the frame. The tie bars must be able to support the weight of the tractor with all of the bolts from the transmission housing removed.

Hitches:

- 1. All hitches will be minimum 3 ½ inches long X minimum 3 inches wide at the hook point. Vertical thickness of hitch will be a maximum of 1 ½ inch minimum 1-inch cross-sectional thickness. Hitch will be no shorter than 18" measured from the center of the rear axle to the hooking point.
- 2. Maximum hitch height 20"
- 3. Wheelie bars independent of hitch. Must be able to lift tractor with a jack under pad in heaviest class tractor participates in. Pad to be no more than 10" above ground and should be minimum length of 32" from center of axle when set at the 10-inch maximum height.
- 4. If the drawbar has provisions to be made SHORTER than the legal length (18 inches from the center of the rear axle) then it is not acceptable as a legal drawbar.

Tires:

- 1. Maximum tire size 30.5 X 32
- 2. Minimum tire size 24.5 X 32

Fuel:

- 1. Acceptable fuels are diesel fuel, alcohol and gasoline.
- 2. No oxygen carriers or combustion accelerators will be permitted.
- 3. No ether starting aid can be on tractor.

Safety:

- 1. Complete fire suit, fireproof gloves, head sock and fire shoes are required. Must meet SFI spec 3.3c. All drivers will be required to use a SFI approved 3.3 neck collar.
- 2. All competitors will wear a full-face helmet, Snell 2005 rating or better.
- 3. All tractors will have SFI approved clutch/flywheel assembly. No cast iron.
- 4. All tractors will use a six buckle 4. 1 SFI approved safety blanket.
- 5. A safety light system is required. A white automotive quality light, minimum of 2" in diameter, must be directly mounted above or below the safety kill switch at the rear of the tractor.
- 6. The light is to be activated by a shift lever such that it will only be illuminated when the tractor is in reverse.
- 7. Must have at least 2 ½ lb Fire extinguisher and be convenient to the operator.
- 8. Roll cage is required to meet SFI 47 .1 requirement. A 5-point SFI harness is required.
- 9. Side panels, firewall, and fenders are required on all tractors.
- 10. The fenders must be constructed so that when the driver is secured in the competition position no part of the driver's body can touch the tire.

Appendix – Points Calculations

Class with non-points collecting vehicles registered:

Place	Member or Non-member	Points Awarded
1 st	Member	25
2 nd	Member	24
3 rd	Non-member	0
4 th	Member	23
5 th	Non-member	0
6 th	Member	22

Class with one or more vehicles breaking in first class with measurable distance:

Place	Member or Non-member	Points
		Awarded
1 st	Member	25
2 nd	Member	24
3^{rd}	Member	23
4 th	Member	22
Broke	Member	21
Broke	Member	21

Both Hot Farm Classes when tractor rpm readings have exceeded 3100 rpm

Place	Rpm below 3100 placing based on distance pulled. RPM Above 3100 placing based on RPM amount over 3100	Points Awarded
1 st	285 feet 3050 rpm	25
2 nd	283 feet 3010 rpm	24
3 rd	278 feet 3075 rpm	23
4 th	265 feet 3080 rpm	22
5th	298 feet 3150 rpm	21
6th	301 feet 3175 rpm	20
7th	288 feet 3300 rpm	19