

Keystone Nationals Garden Tractor Pull

2026 Official Class Rules

General Pulling Rules

Any highlighted portions are updates for 2025

- ☐ We need a minimum of 5 tractors to have a class.
- ☐ The judge's decision will be final, any disagreement will result in disqualification.
- ☐ All tractors require a working fire extinguisher.
- ☐ All drivers will wear a d.o.t approved helmet.
- ☐ All drivers in the 4000 rpm classes will wear long pants and closed-toe shoes.
- ☐ Fire suits are required on all tractors running alcohol.
- ☐ No fingers or hands under the rear fenders.
- ☐ Any tractor running **over** 4000 RPM will require a fire jacket and long pants.
- ☐ All Stock motor are subject to cubic inch check
 - OHV will be pumped
 - FLATHEAD must have head removed

Consumption of drugs or alcohol is strictly forbidden and will result in disqualification.

- ☐ Pull is open to all lawn and garden tractors, rear-wheel drive with rubber tires, no chains, tracks, or dual rear wheels.
- ☐ All tractors are required to have working brakes, rear fenders, hood, and grille.
- ☐ **All tractors with flip back seats must have additional securing device to prevent seat from flipping backwards - this must be mechanically secure ie. Bolt, Chain, pin etc**
- ☐ All drive components will be properly covered, including belts, clutches, driveshafts, and flywheels.
- ☐ **No portion of the tractor can interfere with the sled hook and chain.**
- ☐ **No Obstructions of weights or wheelie bars within 6" of hitch of hook point**
- ☐ Weights cannot extend forward more than 7 feet on stock/youth, 7 feet on altered, and 8 feet on pro/super & open tractors; this is measured from the center of the rear axle.
- ☐ No tractor will be over 6 feet wide including weights.
- ☐ All tractors will have some type of wheelie bar to prevent turnover, these must be able to support the weight of the tractor & driver...wheels must be a minimum of 5 inches in diameter and 1 inch wide, skid plates must be a minimum of 1 inch wide and 4 inches long each...wheels/skids can be no less than 5 inches behind the rear tires and no higher than 5 inches from the ground...the front axle should not be able to raise more than 24 inches from its normal resting position.
- ☐ **Wheelie bar crossmembers shall not interfere with the hook chain during pull**
- ☐ Weight booms will be extended while checking hitch height.
- ☐ **Hitches shall be stationary in all directions and require a 1 1/2" hole.**

- ☐ Kill switches required on all tractors and must shut off engine ignition and electric fuel pumps. Must have a 1" Metal ring and be located within 8" of hitch point.
- ☐ Anything attached to the crankshaft will require a bolt and washer for safety.
- ☐ All weights must be safely secured, any loss of weight or parts will result in disqualification.
- ☐ Weights cannot extend more than 2 inches behind 23" & 24" tires or above the steering wheel, no weights can extend out behind or 26" tires.
- ☐ A pull starts when the flagman waves the flag and ends once the hook is removed from the hitch, any items falling off a tractor while the hook is still in the hitch can result in disqualification, this is the judges or flagman decision.
- ☐ All tractors are required to have some type of rear fenders that extend a minimum of 4 inches over the rear tires...no fingers under the fenders.
- ☐ No shifting of gears permitted.
- ☐ No nitrous oxide, blowers or superchargers allowed.... turbos allowed in pro diesel class only....no pressurized fuel tanks, no nitromethane.
- ☐ ALL DRIVERS MUST REMAIN SEATED during the pull and have always at least one hand on the steering wheel
- ☐ Anything over 4000 rpm must have dead man style throttle Engine speed must be controlled by lever or pedal.
- ☐ Drivers may stop within the first 75 feet of the run and come back and change gears one time.
- ☐ Anyone planning on aborting a run must signal the flagman by raising or waving a hand and must try to stop within the 75-foot mark.
- ☐ Pullers will be disqualified if any part of the tractor touches the boundary line during a run.... front wheels can go over the boundary and come back as long as they don't touch the line or come down on the line... Flagman has final decision
- ☐ Test puller can go out of bounds then come back to rehook in the 6th position or immediately.
- ☐ Two attempts can be made to start the sled unless it's a pull-off, one attempt in a pull-off.
- ☐ Pullers that have mechanical problems can drop to the end of the classthey will have until the end of the class plus 3 minutes to get the tractor started and hooked to the sled.
- ☐ All tractors will be pushed to the sled, this includes stock tractors.
- ☐ All tractors will be operated in a safe manner, no "hot rodding" or unsafe operations will be tolerated. Registered puller shall be the only person operating a tractor.
- ☐ NO Riders on pulling vehicle
- ☐ **All fueling will be done outside of the building, no fuel jugs are allowed in the pits, no fossil fuel heaters allowed in the pit area.**
- ☐ **NO FUEL DUMPED ON PREMISES – Suspension of one year**
- ☐ No mower decks allowed and no riders.
- ☐ All drivers must sign a waiver, any puller under 18 years of age or younger will need the parent or legal guardian sign waiver for them.
- ☐ Youth drivers shall be supervised by parent or guardian and be 14 years old and younger and be able to operate and control tractors to the satisfaction of the flagman or sled operator...this will include operation of throttle without any outside help.
- ☐ Only 1 driver can register per tractor per class.
- ☐ **Every tractor must return directly to the pits after they have completed the pull.**
- ☐ **The driver alone must be able to completely and safely operate and control their tractor in all classes exceeding 4000 RPM. In stock classes 4000 RPM or less a parent or guardian may operate the clutch at the start and finish of the pull. The driver must be able to control all other aspects of the tractor during the pull.**

- Any driver can protest a tractor in the same class for a fee of \$100. Per item, limit of 3 items....fuel, rpm, weight and hitch height a free....it is the owners responsibility to prove tractor legal to a designated official...if tractor is found illegal it will be disqualified until proven legal...anyone refusing to tear down will be disqualified until proven legal....if tractor is found legal the protested driver/owner gets to keep the \$100 protest fee...tear downs will be conducted by driver/owner with tech official present, no other outside persons shall witness teardown...teardowns will be performed at the end of the pull. Any work done on a tractor after a protest has been filed must have a tech official present.

*****Technical Official has the right to inspect pulling tractor at any time*****

Factory Stock 3600RPM 16HP Max **10" Hitch Height 1050 LBS.**

1. Single or twin cylinder
2. Gas or Race fuel with no specific gravity less than .700 or over .794 measured at 60 degrees. No additives permitted.
3. Stock appearance and stance, factory frame
4. **Front pivoting axle in factory location. Factory wheelbase.**
5. Steel wheels only, no aftermarket wheels allowed.
6. 6" or 8" diameter front wheels, 3 rib tires permitted.
7. 23x10.50x12" max rear tire size. Any bar or turf tire No cutting permitted, No pro puller tires.
8. Stock stroke for engine being used, Max over bore is .030"
9. Stock cast OEM Cam with OEM specifications, No steel or 2-piece cams.
10. Stock OEM valves and valve seats, no porting or polishing of ports.
11. No welding, grinding or polishing on the cylinder heads, no aftermarket heads.
12. OEM cast flywheel only, no cutting, welding or adding weight.
13. Stock ignition, no crank triggers.
14. 3600 RPM at full throttle 0% tolerance and OEM governed.
15. Gear and pulley changes are permitted.
16. Reverse gear required if equipped from the factory.
17. Stock OEM carb and air cleaner for engine being used, no bottom adjusters, carb spacers or velocity stacks. Chokes must be installed and operational. 1.00" max venturi. Reproduction carbs are allowed but must be a copy of the original carb.
18. No high-performance fuel pumps or regulators allowed, OEM mechanical metal or the mechanical plastic reproductions are allowed. OEM electric pumps are permitted but must be hooked to a kill switch.
19. Foot or hand throttle permitted.
20. Exhaust pipe must discharge vertically a minimum of 12" from the bend or FACTORY EXHAUST.
21. Back of the seat may not extend past rear tires, weights may not extend beyond 2" past rear tires.

16 HP 4000 RPM GOVERNED

YOUTH CLASS 14 Years & Under
10" Hitch Height 1050 LBS.

1. Stock appearing tractors with standard type 1 cylinder engine or equivalent replacement and stock appearing drive train for make and model. Changing of OEM appearing sheet metal is allowed. Only modification to chassis is to allow fitment of engine.
2. Gas or Race fuel with no specific gravity less than .700 or over .794 measured at 60 degrees. No additives permitted.
3. No aftermarket blocks permitted. Head straps and scatter shields are allowed but not required.
4. 23x10.5x12 max rear tire size. Any bar or turf tire. No cutting permitted. No pro puller tires. Aftermarket rims allowed, 6" or 8" diameter front wheels, 3 rib tires permitted.
5. Front pivoting axle in factory location. Must maintain factory stance and wheelbase.
6. Front weights cannot extend more than 7 feet, this is measured from the center of the rear axle to front of weights.
7. Maximum 10" hitch height, 16" maximum from center of rear axle to hook point. 1 1/2" diameter hole for sled hook, 1/2" thick at point of hook.
8. 4000 RPM at full throttle 0% tolerance and OEM governed. NO REV BOX
9. Stoke stroke and .030" maximum overbore for engine being used.
10. Any cam with maximum valve lift of .325" at .010" lash.
11. OEM valves and valve seats for factory rated H.P. of the engine being used. Porting and polishing allowed.
12. No welding, grinding or polishing on the cylinder head. No aftermarket heads.
13. Steel or OEM cast flywheel with no cutting, welding or adding of weight.
14. No high-performance fuel pumps or regulators allowed. OEM mechanical metal or the mechanical plastic reproductions are permitted. Low volume universal electric pumps are permitted but must be controlled by the kill switch. (NO HIGH-PERFORMANCE PUMP i.e. HOLLEY etc.)
15. OEM carburetor for engine being used. Reproduction carbs that are a copy of the original carb are permitted. Reworking of carb is permitted but no bottom adjusters. No recast carbs, carb spacers or velocity stacks allowed. Bolt on filter adapter with 1" maximum thickness is permitted. Choke removal is permitted.
16. Stock ignition, aftermarket coils and chevy type points are permitted.
17. Foot or hand throttle permitted. Deadman recommended.
18. Exhaust pipe with no muffler must discharge vertically a minimum of 12" from the bend.
19. Back of the seat may not extend past the rear tires. Weights may not extend beyond 2" of rear tires.
20. All overhead engines must use OEM valve train components (owner is responsible for tear down and to prove legality if required)
21. Youth must be 14 or younger at start of the of the season
22. A parent or guardian may operate the clutch at the start and finish of the pull. The driver must be able to control all other aspects of the tractor during the pull.

20 HP 4000 RPM GOVERNED

13" Hitch Height 1050 LBS.

1. Stock appearing tractors with standard type 2-cylinder engine or equivalent replacement and stock appearing drive train for make and model. Changing of OEM appearing sheet metal is allowed. Only modification to chassis is to allow fitment of engine.
2. 23x10.5x12 max rear tire size. Any bar or turf tire. No cutting permitted. No pro puller tires. Aftermarket rims allowed, 6" or 8" diameter front wheels, 3 rib tires permitted.
3. Gas or Race fuel with no specific gravity less than .700 or over .794 measured at 60 degrees. No additives permitted.
4. No high-performance fuel pumps or regulators allowed. OEM mechanical metal or the mechanical plastic reproductions are permitted. Low volume universal electric pumps are permitted but must be controlled by the kill switch. (NO HIGH PERFORMANCE PUMP i.e. HOLLEY etc.)
5. Front pivoting axle in factory location. Must maintain factory stance and wheelbase.
6. Front weights cannot extend more than 7 feet, this is measured from the center of the rear axle to front of weights.
7. Maximum 13" hitch height, 16" maximum from center of rear axle to hook point. 1 1/2" diameter hole for sled hook, 1/2" thick at point of hook.
8. Stock stroke and .030" maximum overbore for Flat Heads & 1mm overbore for OHV engines. No aftermarket blocks. Maximum of 40 cubic inches OHV & 50 Cubic inches FLAT HEAD
9. Any camshaft allowed with max lift of .275" at the lifter. No roller cams or roller rockers.
10. OEM Valve seats and valves for factory rated H.P. of engine being used.
11. OEM type carburetor. Reworking of the carburetor is permitted. No carburetor adaptors or velocity stacks allowed. Bolt on filter adapters with max thickness of 1" are permitted. 1.00 inch max venture diameter of single barrel carburetor and 22mm or .866 inch max venture diameter for 2-barrel carburetor. No air entering after the venture. Choke removal is permitted.
12. No aftermarket intakes allowed; plastic Kohler intakes permitted.
13. Steel or OEM cast flywheel. No cutting, welding or adding of weight.
14. Foot or hand throttle permitted. Deadman recommended
15. Exhaust pipe with no muffler must discharge vertically a minimum of 12" from the bend.
16. 4000 RPM at full throttle 0% tolerance and OEM governed.
17. OEM ignition for engine being used. No crank triggers.
18. No welding, grinding or polishing on the cylinder head. No aftermarket heads. Porting and polishing permitted.
19. Back of the seat may not extend past the rear tires. Weights may not extend beyond 2" of rear tires.

25 HP 4000 RPM GOVERNED

13" Hitch Height 1050 LBS.

1. Stock appearing tractors with standard type 2 cylinder engine or equivalent replacement and stock appearing drive train for make and model. Changing of OEM appearing sheet metal is allowed. Only modification to chassis is to allow fitment of engine.
2. 26x12x12 max rear tire size. Any bar or turf tire. No cutting permitted. No pro puller tires. Aftermarket rims allowed, 6" or 8" diameter front wheels, 3 rib tires permitted.
3. Gas or Race fuel with no specific gravity less than .700 or over .794 measured at 60 degrees. No additives permitted.
4. No high-performance fuel pumps or regulators allowed. OEM mechanical or vacuum pumps are permitted. Low volume universal electric pumps are permitted but must be controlled by the kill switch. (NO HIGH PERFORMANCE PUMP i.e. HOLLEY etc.)
5. **Front pivoting axle in factory location. Must maintain factory stance and wheelbase.**
6. Front weights cannot extend more than 7 feet, this is measured from the center of the rear axle to front of weights.
7. Maximum 13" hitch height, 16" maximum from center of rear axle to hook point. 1 1/2" diameter hole for sled hook, 1/2" thick at point of hook.
8. **Stock stroke and .030" maximum overbore for Flat Heads & 1mm overbore for OHV engines. No aftermarket blocks. Maximum of 47 cubic inches OHV or Maximum 60 Cubic Inch for FLAT HEAD**
9. Any camshaft allowed with max lift of .275" at the lifter. No roller cams or roller rockers.
10. OEM Valve seats and valves for factory rated H.P. of engine being used.
11. OEM type carburetor. Reworking of carb is permitted. No carb adaptors or velocity stacks allowed. Bolt on filter adapters with max thickness of 1" are permitted. 1.00-inch max venture diameter of single barrel carb and 22mm or .866-inch max venture diameter for 2-barrel carbs. No air entering after the venture. Choke removal is permitted.
12. No aftermarket intakes allowed; plastic Kohler intakes permitted.
13. Steel or OEM cast flywheel. No cutting, welding or adding of weight.
14. Gas or Race fuel with no specific gravity less than .700 or over .794 measured at 60 degrees. No additives permitted.
15. Exhaust pipe with no muffler must discharge vertically a minimum of 12" from the bend.
16. 4000 RPM at full throttle 0% tolerance and OEM governed.
17. OEM ignition for engine being used. No crank triggers.
18. No welding, grinding or polishing on the cylinder head. No aftermarket heads. Porting and polishing permitted.
19. Back of the seat may not extend past the rear tires. Weights may not extend beyond 26" rear tires.
20. Weights on 24" x 12" x 12" tires are permitted max of 2" beyond the tire. 26" tires weights must be flush
21. 6" or 8" diameter front wheels and tires, 3 rib tires permitted.

12 HP POOR BOYS CLASS

13" Hitch Height 1050 LBS.

1. Stock appearing lawn and garden tractors with standard type 1 cylinder engine or equivalent replacement and stock appearing drive train. Changing of OEM appearing sheet metal to

- another factory sheet metal or aftermarket is permitted. Must remain stock appearing and have a hood and grill.
2. Front axle may be moved to achieve a 52" wheelbase. Aftermarket axle allowed
 3. Front weights cannot extend more than 7 feet, this is measured from the center of the rear axle to front of weights.
 4. Pump gas, racing fuel and diesel fuel permitted. No alcohol fuels.
 5. 12 HP or less 1 cylinder Kohler, Briggs, Tecumseh, Onan, Yanmar, etc. No aftermarket blocks. No motorcycle, snowmobile or automobile engines allowed.
 6. Stock stroke and .030" maximum overbore for engine being used. Max stroke 3.250" Max bore 3.405"
 7. Stock heads permitted to be modified and resurfaced but must remain stock appearing on the outside. Recast or **Billet heads are permitted.**
 8. Crank shaft, Camshaft and Valves must remain in the factory location.
 9. .325" max lift at .010" lash camshaft
 10. Port and polishing are permitted.
 11. Billet rod and pistons are permitted.
 12. OEM Valve seats and valves for factory rated H.P. of engine being used.
 13. OEM carburetor for engine being used. Reproduction carbs that are a copy of the original carb are permitted. Reworking of carb permitted. No recast carbs or bottom adjusts allowed. Maximum 1 inch carb to block spacer and velocity stacks are permitted. Choke removal is also permitted.
 14. Aftermarket fuel pumps and regulators are permitted.
 15. Aftermarket coils, crank triggers, rev boxes, and chevy type points are permitted.
 16. Maximum 13" hitch height, 16" maximum from center of rear axle to hook point. **1 1/2" diameter hole for sled hook, 1/2" thick at point of hook.**
 17. Back of the seat may not extend past the rear tires. Weights may not extend past rear tires.
 18. Exhaust pipe with no muffler must discharge vertically a minimum of 12" from the bend.
 19. Foot or hand throttle permitted.
 20. Any type of aftermarket clutch disk, aftermarket springs, belts and pulleys are allowed. All items must be covered by shielding with the minimum thickness of 1/16" steel, 1/8" expanded steel or 1/8" aluminum.
 21. Flywheels covered by stock blower housing or equivalent are limited to a maximum of 4000 RPM. Tractors running 4500 RPM must cover the flywheel with 1/8" steel or 3/16" aluminum. Can have a factory installed governor.
 22. Stock style housing. Gear changing and welded or locked rear ends are permitted. Reverse gear may be removed.
 23. Hand brakes are permitted.
 24. 23x10.50x12" max rear tire size. Tire cutting permitted. No pro puller tires.
 25. **All competitors will wear full fire suit and helmet.**

MAX STOCK 4000 RPM GOVERNED

13" Hitch Height 1050 LBS.

1. Stock appearing tractors with standard type 1 cylinder engine or equivalent replacement. Must use a garden tractor frame and transaxle, modifications are permitted for engine installation. Sheet Metal changes are permitted.
2. Front axle modifications are permitted. Max wheelbase is 52".
3. Front weights cannot extend more than 7 feet, this is measured from the center of the rear axle to front of weights.
4. Must be a stock block Kohler, Briggs, or Tecumseh single cylinder flat head 15 HP and under with a 9-bolt head.
5. Stock stroke for the engine being used, the engine must look stock on the outside. All other internal modifications are permitted.
6. Aftermarket and billet heads are permitted but the head bolt pattern must match a stock OEM head gasket. An access hole over the piston is recommended for checking purposes.
7. Head restraint of ½" steel or 1" aluminum, securely fastened is required.
8. Scatter shield covering the entire width and height of the engine is required. Shielding must be a minimum of 1/8" steel or 3/16" aluminum. Shielding must be securely fastened on the opposite side of the cam location.
9. Aftermarket points and electronic ignition are permitted.
10. Steel or OEM cast flywheel with no cutting, welding, or adding of weight.
11. OEM type carburetor for engine being used, no recast carbs Reproduction carbs that are a copy of the original carb are permitted. Reworking of the carb is permitted. Velocity stacks, carb spacers and bottom adjusters are permitted. Choke removal is permitted.
12. No high-performance fuel pumps or regulators allowed. OEM mechanical metal or the mechanical plastic reproductions are permitted. Low volume universal electric pumps are permitted but must be controlled by a kill switch.
13. Exhaust pipe with no muffler must discharge vertically a minimum of 12" from the bend.
14. Maximum 13" hitch height, 16" maximum from center of rear axle to hook point. 1 ½" diameter hole for sled hook, 1/2" thick at point of hook.
15. 4000 RPM at full throttle 0% tolerance and OEM governed.
16. 26x12x12 max rear tire size. Cutting and pro puller tires are permitted. Aftermarket wheels are permitted, 6" or 8" diameter front wheels, 3 rib tires permitted.
17. Gas or Race fuel with no specific gravity less than .700 or over .794 measured at 60 degrees. No additives permitted.

GOVERNED 5000 SINGLE – 1050 lb.

Single cylinder four cycle flathead engines only. Engines must be Kohler, Wisconsin, Tecumseh, or Briggs. 16 HP Max. Engines must be factory productions or their OEM replacement. No Aftermarket Blocks permitted

Carburetor must be Kohler-type Carburetor must be mounted to the engine with no more than 1" spacer. Maximum carburetor venturi size 1.20" Air controlled by butterfly in stock position in carburetor, no slides, no injection, naturally aspirated only. No air entering after 1.20" restriction. Billet heads permitted Porting and polishing allowed

Must have shielding opposite side of carb. 3/16" Steel or ¼" Aluminum and head strap, all thread through finned area is acceptable

Welding permitted in the crankcase area of the block for repair.

No pressurized fuel tanks. No nitrous oxide

Racing Gasoline or Alcohol allowed. No additives.

Governed class rpm will be 5000 rpm with steel flywheel. Cast flywheel must be governed to 4500 RPM maximum.

Starter pulley must be billet steel or aluminum. Factory starter pulleys and stamp steel are not allowed

Must run a factory appearing hood and grill

Maximum wheelbase of 52", Max length of tractor is 84" from centerline of rear axle forward

Foot pegs, platforms and seats must be in stock location

Tractors must have garden tractor rear-ends Tractors must use stock garden tractor frames.

Frames must maintain factory length.

Max Tire size is 26-12x12 pro pulling tires or cut tires allowed.

GOVERNED 5000 TWIN- 1050 lbs.

OEM produced 30 HP engines (Kohler, Briggs, Tecumseh, Onan, etc.), no aftermarket blocks.

Maximum 2.740 stroke in all 30 HP Crank Engines and OEM intake manifold

Crankshaft, camshaft, and valves must be in their original position. Twin cylinder only.

Any bore, valves, cams, etc. are permitted.

Welding to jugs or blocks permitted.

Carburetor venturi may not be larger than 1.200" diameter.

Two barrel Kohler carb - must be stock venturi.

Air controlled by butterfly, in stock position. Choke may be removed.

OHV motors must run OEM Heads.

Flathead motors may run billet heads.

5000 rpm governed engines must use steel (or aluminum) flywheel.

Cast flywheel must be governed to 4500 RPM maximum.

All flat head engines must have head plates or straps. Minimum of 1/4" x 2" steel or 3/8" x 3" aluminum.

Welding or grinding is not permitted on heads.

2" Carb to manifold spacing allowed. Velocity stacks permitted.

Dead man throttle spring mandatory.

Flywheel and clutch components must be shielded with 1/8" steel or 3/16" aluminum.

26 x 12 -12" rear tires maximum. Pro-Puller tires allowed.

Racing Gasoline or Alcohol allowed. No additives. Aftermarket fuel pumps allowed.

13" hitch height, 16" maximum from center of the rear axle to hook point.

1 1/2" diameter hole for sled hook, 1/2" thick at point of hook.

Max Wheelbase is 56" Maximum length of tractor is 8 feet from centerline of rear axle forward.

Tractor must have a hood & grill; Mix & match allowed.

Rear-ends must be of a lawn and garden type but may be of a different manufacturer.

Transmission gear ratio changes or different dia pulleys are allowed. Reverse not required.

Frames must be OEM style. Welding and cutting permitted.

Rear fenders required. Fabricated fenders must be able to hold the weight of the driver.

NQS legal side shields required on all tractors.

Tractors with MSD ignition must confirm the proper chips are installed at the start of their pull.

GOVERNED 5000 TWIN STROKERS- 1050 lbs.

1. 1050 lbs. max.
2. 30 HP Block Max - Must be a garden tractor block. No recast, billet or plated heads. 60 cubic inch maximum size
3. No welding on the outside of heads. Putty permitted.
4. Stock manifolds only - 2 barrel, plastic, horizontal or vertical. Must have a factory part number. No homemade plenums. Carb/manifold spacers are allowed. Carb - 1.200 Venturi max. Single or two barrel carbs permitted
5. Factory electronic fuel injection for make and model is allowed.
6. Any ignition is allowed.
7. Electric fuel pumps allowed
8. Fuel: Gas or methanol.
9. Wheelbase 56 inches maximum.
10. Any 26x12x12 tire allowed.
11. All General Safety Rules apply.

MODIFIED TWIN (Stock OEM Head and Recast, Aftermarket Head Classes) – 1050lb.

OEM produced 30 HP engines (Kohler, Briggs, Tecumseh, Onan etc.), no aftermarket blocks.

Crankshaft and camshaft must be in their original position.

Any bore, stroke, valves, cams, etc. are permitted.

Welding and cutting to jugs or blocks are allowed.

Billet or recast heads permitted.

Ungoverned engines must use steel or aluminum flywheel.

Cast flywheel must be governed to 4500 RPM maximum.

All flat head engines must have head plates or straps. Min. of 1/4" x 2" steel or 3/8" x 3" aluminum.

Tractors must have NQS legal side shields 1/8" steel or 3/16" aluminum.

Any type of naturally aspirated induction is permitted.

Manifold may be homemade.

Electronic Fuel Injection NOT allowed.

Deadman throttle spring mandatory.

Flywheel and clutch components must be shielded with 1/8" steel or 3/16" aluminum.

26 x 12 -12" rear tires maximum. Pro-Puller tires allowed.

Racing Gasoline or Alcohol allowed. No additives.

Aftermarket fuel pumps allowed.

13" hitch height, 16" maximum from center of the rear axle to hook point.

1 1/2" diameter hole for sled hook, 1/2" thick at point of hook.

Max Wheelbase is 56" Maximum length of tractor is 96" from centerline of rear axle forward.

Tractor must have a hood & grill - Mix & match allowed.
Rear-ends must be of a lawn and garden type but may be of a different manufacturer.
Transmission gear ratio changes or different diameter pulleys are allowed. Reverse not required.
Welding and cutting permitted on frames.
Rear fenders required. Fabricated fenders must be able to hold the weight of the driver.

We will run two separate Mod Twin Classes:

Recast, Aftermarket head twins **WILL NOT** run with the stock head twins.

Stock Head twins may sign up and run in the Recast, Aftermarket Head Class if they choose to.

STOCK OEM HEAD CLASS (Stock head with no welding). On stock head engines only. Minimal epoxy will be allowed, no excessive use on the external portion of the intake port.

Maximum allowable amount would be an area of not more than 1 square inch per head.

Intake adaptors or flanges will be accepted as long as intake port opening is not moved or modified externally.

Intake port and bolt holes must maintain factory position.

If intake flanges and/or adaptors cover up the factory located intake port, intake may need to be pulled to prove it is legal. **THIS IS FOR MOD TWIN STOCK HEAD CLASS ONLY.**

13" hitch

RECAST HEAD, AFTERMARKET or WELDED STOCK OEM HEAD CLASS, 1050 lbs and 13" hitch.

NOTE: We will now allow Governed Twins to compete in this class at 6000 RPM and weigh in at 1100 lb as a weight break to compete in this division.

Governed tractors will be limited to OEM heads and a single 1.2 "

Lite Pro Stock

Nitro 30 cube run at 1000 lb 12.5" hitch

Alcohol 30 cubes can run at 1,050 lb 13" hitch

Single Cylinder four cycle flat head engines only.

Engines must be Kohler, Briggs, Tecumseh or Wisconsin

Blocks must have an OEM appearance, Midwest stock altered blocks allowed.

OEM factory deck height

Stock head bolt pattern, stock head gasket must fit over studs.

37.50" Cubic inch limit

1.20" maximum carb size, no air entering after 1.20" restriction, venturi must be round in shape.

No reverse port engines allowed, carb must bolt to the original intake port

Carburetor must be stock appearing kohler type

Billet heads allowed

Porting and polishing allowed

Alcohol only

13" hitch height

Port welding allowed, but no bore welding

All General rules apply

Pro Stock:

1050 lbs max

50.5 in.³

Single cylinder Pro-Stock is defined as having a one cylinder, air cooled four cycle flat head, two valves same side, commercially produced manufactured cast block engine. Sleeves and welding permitted. Commercially produced manufactured cast block means made by Kohler, Wisconsin, Briggs, Tecumseh and etc. If copy is being made, copied block must meet basic manufactures specs for that engine being copied. Crank and cam location, deck height, two valves same side, valve angle (maximum valve angle of 6 degrees), intake and exhaust port location and factory head gasket bolt pattern.

No reverse port engines.

A stock appearing Kohler type carburetor must be used if other than stock for the model engine being used. Stand-off pipe or ram tubes are permitted. Choke may be removed. Single carburetor only. Air restricting Venturi must be located 2.4 inches +/- .25 from the mounting surface. Venturi is not to be larger than 1.200 in diameter and must be round in shape. Air controlled by butterfly in stock position (.875) +/- .125 from the carb mounting surface. Main jet location to be 1.8 inches +/- .200 from the carb mounting surface. No slides, no injection, naturally aspirated only. Bowl should remain factory size (2.350) and appearance for Kohler type carburetors. Overall length of the carb body is not to exceed 3.500 inches.

The intent of this rule is to maintain a stock-appearing carburetor including the fuel bowl. Billet carburetors are permitted as long as they adhere to the specifications noted above. Any other configuration or newly designed carburetor must be submitted to NGTPS for review and approval prior to use.

Methanol only. See Rule 5.B

Wheelbase 56 inches maximum.

Overall length 96 inches maximum.

Top placing tractors will be checked for, but not limited to: Fuel, Deck Height, Carburetor, Cubic Inch and Factory Head Gasket Bolt Pattern. in.³: 50.500 in.³ zero tolerance. Formula for in.³ is Measured bore x measured bore x measured stroke x .785 = in.³. All bores measured 90 degrees from thrust side. Stock Head bolt pattern, stock head gasket must fit over studs or bolts.

48 cubic inch stock appearing block K-series Kohler engines will be allowed to run with the same weight/hitch as the Pro Stock. 48c.i. engines will have the same rules as the 50.5 Pro stocks, with the following exceptions. Stock Appearing Block K-Series Kohler Engine, open carburetion (no fuel injection), external welding allowed on the blocks (all-thread okay), if engine is sleeved, sleeve cannot be externally visible. Must have head/block restraint.

Super Stock:

1050 lbs max

50.5 in.³

Single cylinder Super Stock is defined as any tractor having one cylinder, air cooled four cycle, flat head, two valves same side of engine.

No reverse port engines.

Any type of Naturally Aspirated induction is permitted.

Methanol only. See Rule 5.B

Wheelbase 56 inches maximum.

Overall length 96 inches maximum.

Top placing tractors will be checked for, but not limited to: Fuel and Cubic Inch Limit. 50.500 in³. Zero tolerance. Formula for cubic inch is Measured bore x measured bore x measured stroke x .785 = Cubic Inch All bores measured 90 degrees from thrust side.

Super Stock Carbureted only:

Same rules as Super Stock but is limited to carbureted engines only

No fuel injection of any type allowed

30 Cubic Inch:

1000lbs. max

30 in.³

Single cylinder 30 Cube is defined as any tractor having one cylinder, air cooled four cycle, flat head, two valves same side of engine.

No reverse port engines.

Any type of Naturally Aspirated induction is permitted.

Methanol only. See Rule 5.B

Wheelbase 56 inches maximum.

Top placing tractors will be checked for, but not limited to: Fuel and Cubic Inch Limit. 30.000 in³. Zero tolerance. Formula for cubic inch is Measured bore x measured bore x measured stroke x .785 = Cubic Inch All bores measured 90 degrees from thrust side.

Pro V-Twin:

Maximum engine size is 45.5 cubic inches

Engines with aftermarket/and or welded stock heads will run @ 1050# with a 12.25" hitch.

Stock head engines with no welding will run @ 1050# with a 13" hitch. On stock head engines only minimal epoxy will be allowed, no excessive use on the external portion of the intake port. Maximum allowable amount would be an area of not more the 1 square inch per head. Intake manifold must bolt directly to the stock intake flange on head with a maximum of .030" thick intake gasket. Adapters or flange extensions are illegal. Switching of heads from one model and type to another is illegal.

Engine shielding rules: 1/8" steel or 3/16 aluminum on external side of cylinder extending from head gasket to frame. Shield must be attached to frame at the bottom and to the flywheel shield at the top to make rigid.

Wheelbase 56 inches maximum.

Overall length 96 inches maximum.

Engines: Must be a commercially available lawn and/or garden tractor factory air-cooled engine. Only configuration accepted is V-twin type. No reproduction blocks, must be OEM.

Carburetor: Limited to one (1) carburetor with one (1) venturi with one (1) throttle butterfly. Maximum venturi size will be 1.200". No air entering after the 1.200" restriction.

Steel flywheel mandatory, along with the general flywheel shielding rules of 1/8" steel or 3/16" aluminum 360 degrees.

Fuel: Methanol or Gas

Stock Altered:

Single cylinder four cycle flathead engines only.

Engines must be Kohler, Wisconsin, Tecumseh or Briggs.

Engine blocks must have an OEM stock appearance. The current approved blocks are the K-Series Kohler block and the MWSC Stock Altered block. Any new blocks must be submitted to the NQS for approval prior to entry.

Engines must be factory productions or their OEM replacement with factory deck height.

Stock Head bolt pattern = stock head gasket must fit over studs or bolts.

Stock Head bolt location and head bolt size.

Maximum crankshaft stroke 3.25"

Maximum engine bore 3.780"

36.5000 cubic inch limit

Maximum engine valve size 1.380

Maximum engine valve lift .330"

Maximum carburetor venturi size 1.00", no air entering after 1.00" restriction, venturi must be round in shape.

Carburetor must be mounted to the engine with no more than 1" spacer

No reverse port engines allowed carburetor must go to the original intake port.

Carburetor must be a stock appearing Kohler-type.

No aftermarket billet carburetors.

Factory bowl size

Billet heads permitted

Porting and polishing allowed

No external welding or external modifications allowed

All thread through finned area is acceptable

Welding permitted in crankcase area of the block for repair.

Methanol only.

Must run a factory appearing hood and grill.

Tractors must have garden tractor rear-ends.

Tractors must use stock appearing garden tractor frames.

The front of the engine block can not exceed 52 inches from center of the rear axle. Front pulley and crank are allowed. (Hinkle Rule)

Weight Class 1050 lbs., other weight classes may be pulled.

Wheelbase: 52 inches maximum

Top placing tractors will be checked for, but not limited to: Fuel, Bore, Stroke, Carb Size, Valve Lift & Valve Size and deck height. Cubic Inch: 36.500 Cu. In. No Tolerance. Formula for CU. IN. is Measured bore x measured bore x measured stroke x .785 = Cu. In. All bores measured 90 degrees from thrust side.

If running a factory Kohler produced block the maximum size bore will be 3.830" with a maximum cubic inch of 37.500.

Parameter	Measurement	Tolerance
Stroke	3.250"	0.010", must not exceed in ³ limit
Bore	3.780"	0.010" must not exceed in ³ limit
Carb	1.000"	0.001"
Valve Lift	0.330"	0.005"
Valve Size	1.380"	0.001"

Head Bolt Pattern: Stock Gasket must fit over head studs or bolts.

General Rules For Diesel/Open Class

- 1) All competitors will wear fire suit and helmet
- 2) All pulling vehicles will have minimum of 1lb fire extinguisher
- 3) All pulling vehicles will have working kill switch
- 4) All pulling vehicles will equipped with wheelie bars and hitch per general group rules
- 5) All tires size must be maximum 26X12X12 pro puller tires
- 6) Hitch height is 13" for open vehicles (this may be subject to change if need arises, safety etc.)
- 7) Weight class is 1150 lbs (subject to change if need arises)
- 8) Positively no hot rodding in pits
- 9) This class will be working under floating finish lines only!

Limited Pro Stock Diesel

- 1) Name switched for Box
- 2) Engine must be commercially produced with at least 1000 units built, Engines must be no more than 3 cylinders, may be

a liquid or air engine block, must have factory model and serial numbers visible and NOT ground off. ag or industrial engines only (NO AUTOMOTIVE OR MOTORCYCLE ENGINES , NO CUT DOWN CYLINDER ENGINES ALLOWED).

3) Engines will be NO more than 70 cubic inches, this will be based on factory casting numbers, No sleeving down or de stroking larger engines

4) Water injection allowed Soluble oil lube additives are permitted.

5)These engine modifications are permitted; Rods, Pistons Cams, Fuel systems

6)Engine must have OEM intake and exhaust manifolds, polishing is permitted, NO tube headers or intakes.

7)Head work is permitted on stock OEM heads. NO BILLET HEADS ALLOWED! NO OVERHEAD CAMS!! Must be indirect injection. NO CONVERTING FROM INDIRECT TO DIRECT INJECTION ALLOWED. Injectors must remain in stock location.

8)Injector and injection pump modifications allowed, NO BILLET PUMPS

9)Injection systems. Must be cam box pump , no electronic or common rail

10) Turbo charging is permitted but limited to a single turbo only, no mechanical driven turbos allowed (NO turbo compound turbos) Exhaust driven only!! Turbos will be fitted with Guillotine or spring closing rain cap shut off on the compressor inlet side of turbo, the exhaust discharge elbow pipe must have two 5/16th bolts welded at cross and exhaust must discharge vertically.

11) Electric fuel supply pumps are permitted with positive wire to have a shut off disconnect at the rear of the tractor.

12) No propane or nitrous injection allowed. Propylene oxide allowed. Bought manufactured diesel is allowed, pump diesel is allowed,

13) All tractors must be compressed injection and use diesel fuel,NO spark plugs or alcohol use for fuel.

14) Stock frames, stock appearing frames rails and tube frames are permitted, tube frames must be covered with sheet metal, Wheel base to be 56 inches maximum .

15) This class is for appearing tractors with full hood, grill and side shields, must be recognizable as a actual modern production garden tractor or small farm tractor, hood and grille can be from different make than frame and rear end has to look like a tractor.

16) Must use tractor driveline components, modifications are allowed, internal gears, gear reduction housing, and planetaries , NO CUT DOWN AUTOMOTIVE REAR ENDS

17) Full metal side shields to cover engine area, minimum

16 gauge steel, 14 gauge aluminum

18) Must run 5/16 inch cable around oil pan and over valve cover in a complete circle and connected with two cable clamps.

19) Must run billet steel flywheel

20) Clutch assembly and flywheel must be surrounded 360 degrees with 1/8 inch steel or 3/16 inch aluminum, this is to also include cast iron front balancer pulley,

21) Class weight will be 1150 lb

22) Kill switch device on rear of tractor must disconnect power from electric fuel pump along with activating air shut off.

23) Helmet, helmet face shield or goggles required, gloves are recommended

24) No belt driven cooling fans allowed, electric fans only

25) Air to air intercoolers permitted, no ice boxes are allowed

- 26) All NQS rules not in conflict with these apply.
27) Hitch height 13"

Pro Stock Diesel

1. General Rules apply,
 2. Drivers must be at least 16 years old and capable of operating the tractor in a safe manner.
 3. Helmet, fire suit having a minimum single layer rating of SFI 3.2A-1, and closed toe shoes REQUIRED. Head sock and gloves are recommended.
 4. A tractor may be entered only once per class.
 5. A pro stock diesel tractor competing in the pro stock diesel class cannot move up a class in the same event.
- Chassis:
6. Maximum wheelbase is 56 inches.
 7. Maximum distance from center of rear axle to farthest point forward is 96 inches.
 8. Tractor must have a stock appearing hood and grill (nose piece). Switching to another factory sheet metal is permissible.
 9. Must use a garden tractor rear end/transaxle. No cut down automotive rear ends or Panzers.
 10. Must have a "dead man" throttle. Throttle shaft must have return spring in case of a breakage in linkage.
 11. ALL TRACTORS MUST HAVE a functional breakaway kill switch. Kill switch device must be mounted on rear of tractor and must disconnect power to electric fuel pump along with activating turbo air shut off. (Refer to diagram in back of book)
 12. All tractors must have fenders to protect the driver from the rear tires. Fenders should extend at a minimum of 4 inches out over the tires. All tractors must have at least a 3-inch seat back.
 13. Wheelie bars must be rigid in all directions and able to support the tractor and driver in the heaviest class. Each skid shoe must be a minimum of 1.5'x 2" or the use of 5" round wheels 1' wide is allowed. Tractor must have 2 skid shoes or 2 wheels. The wheelie bars must be a minimum of 5" from the rearmost part of the tire and maximum of 10". The bars must be a maximum of 5' from ground to bottom of skid shoes or wheels. A vertical bumper bar 6" in height in rear most position is required. Weights on back of tractor must be contained up to 1" before the end of the wheelie bars. (Refer to diagram in back of book)
 14. Maximum hitch height is 13", Must provide own clevis or straight flat plate with 1 ½" hole with a dead man zone of 3" on each side of the hitch. Hitch must be rigid in all directions. The kill switch must be centered approximately 10"-12" above the hitch in this area. (Refer to diagram in back of book)
 15. ALL TRACTORS MUST HAVE a minimum of a 1 lb. fully charged fire extinguisher on board, in reach of operator. A functional gauge on the fire extinguisher is REQUIRED.
- Engine:
16. Engine will be no more than 3 cylinders. May be liquid or air cooled.
 17. Engine will be no more than 75 cubic inches.
 18. Water injection will be allowed.
 19. Engine modifications are permitted: Rods, Pistons, Cam and Fuel System.

20. Engine must have a block casting model and serial numbers visible.
 21. Engine must have OEM intake manifolds and exhaust manifolds, polishing is permitted.
 22. Head work is permitted on stock heads. No billet heads. No overhead cams.
 23. Injector and injector pump modifications allowed. No billet injector pumps.
 24. Turbo charging is permitted, but limited to one turbo only.
 - a. Turbo will be fitted with an air shut off on the compressor inlet side of the turbo.
 - b. Exhaust "L" of turbo must have a minimum of 5/16" inch cross bolts center welded in elbow with exhaust to discharge vertically.
 25. Electric fuel pump supply is permitted with positive power wire to have a dis-connect at the rear of the tractor.
 26. No propane or nitrous of any kind will be permitted.
 27. Engine Shielding Rules: Minimum thickness of 16 gauge steel on external side of cylinder extending from head gasket to frame. Shield must be attached to the frame at the bottom and the block at both upper corners.
 28. Must run ¼ inch cable around oil pan over top of valve cover in a complete circle connected with minimum of two cable clamps.
 29. No Fin or Cast Flywheels.
 30. Clutch assembly and flywheel must be surrounded 360 degrees with 1/8 inch steel or 3/16 inch aluminum.
- Tires and Wheels:
31. Maximum tire size: 26 x 12.00 x12 alterations allowed.
- *Note: If there are not at least 3 Pro-Diesel tractors to make a class at an event, these tractors may pull with the Limited Pro-Diesel class with a disadvantage of hitch and weight to be determined at that time

Motorcycle / Open Class 1150#

- 1) Drivers must be at least 15 years old
- 2) 4 cylinders maximum, must be motorcycle or snowmobile engines only!! No car or Marine type engines
- 3) Exhaust must exit 45 *vertical
- 4) Maximum width 55" from outside of tires
- 5) Maximum wheel base 90" center axle to front spindle center
- 6) Must have working kill switch
- 7) Alcohol fuel allowed, no nitromethane or nitrous oxide allowed
- 8) Hitch height 13"
- 9) Tire size 26X12X12, pro pullers allowed
- 10) Must have rear fenders to protect drivers' legs and other body parts, DRIVERS MUST REMAIN SEATED AT ALL TIMES!
- 11) Weight class 1150lbs
- 12) NO FORCED INDUCTION UNLESS ON DIESEL ENGINES - NO TURBO OR SUPERCHARGER UNLESS DIESEL FUEL