

618 MINI TRACTOR PULLERS

2024 Rules

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GENERAL TRACTOR AND SAFETY RULES

- All tractors must have full hoods, securely fastened fenders, and adequate steering.
- Fuel tanks, and fuel lines must be securely fastened and have proper caps and clamps.
- All starter pulleys must have adequate nuts, bolts, and washers screwed in the end of the crankshaft to retain a loose pulley. Stock classes may use cast iron or pressed steel pulleys, all other classes must use billet steel or aluminum.
- Stock classes must have factory shielding. All other tractors must have scatter shields that cover all rotating parts of the engine and driveline.
- All tractors must have a working kill switch with a ring or loop minimum of 1" diameter mounted on rear of tractor in a position to hook to the sled.
- All tractors must have rear anti-turnover devices sufficient to support the weight of the tractor. A minimum of two wheels or two steel pads must be no less than 5" from the ground and 5" from the rear of the tractor tires to the center of the pads.
- All modified single cylinder tractors must have cylinder head restraints of sufficient strength to prevent the head and/or the cylinder from blowing upward in case of failure. This is recommended for stock tractors also.
- Hitch will be horizontal and stationary. Hitch will not be more than 1" in thickness and must have a 1-1/2" hold for hook. Hitch height will be 13 inches for all classes.
- All weight and weight brackets must be secured to the tractor. Front weights must not extend more than 8ft from the center of the rear wheels. Rear weights must not extend past the rear tires.

- All tractors must have an exhaust that discharges vertically. No Side Discharges that point towards spectators.
- Motorcycle tractors exhaust must discharge in the vertical direction above the tractor or can discharge out the back of the tractor between the tires pointed towards the sled pan.

TRACK SAFETY RULES

- All tractors must start from a tight chain.
- All drivers must remain seated and always keep one hand on the steering wheel during the pull.
- Helmets must be worn in all classes. No open toed shoes, sandals, flip flops
- Fire extinguishers are mandatory on all tractors running on alcohol fuel. Fire extinguishers are recommended for all classes.
- All drivers running alcohol fuel are required to wear a minimum of a fire jacket.
- All drivers must be capable of operating tractor on track, including starting, stopping, and forward control. Adults may assist youth in operating the clutch/brakes, throttle, etc in kids, stock, and 250cc classes.
- Drivers must be 16 years of age or older to participate in non Stock classes, 48 cubic inch, 50.5 cubic inch, Pro Twins, 3 Cyl Diesels, V8, and Outlaw classes (Except 250cc), unless approved by the 618 director.
- Helmets, fire suits, and fire extinguishers that are mandatory cannot be taken off as weights.
- Drivers who are not signed up at the start of a class WILL NOT GET TO PULL
- All Judges/Flagman's decisions are FINAL.
- All tractors will draw for positions. All tractors will pull in the order drawn. If the tractor is not ready when they are called, that tractor will pull when ready or within three minutes after the last tractor.
- A tractor may only be entered and driven by one driver and may only run once per class.
- Drivers will have two attempts to move the sled. Must pull past the point of no return (50') to start an official pull.
- A driver may stop prior to crossing the 50' mark and restart one time only.
- Pulls may be measured electronically or mechanically. Regardless of how pulls are measured, all decisions of track officials are final.
- The track will be graded between pulls as possible.
- Weights must be changed before hitch height is checked. Driver must be in seat with helmet before any measurements of hitch is taken.

- Immediately after unhooking, all tractors must go across the scale in front of the announcer's stand to have weight checked. It is the driver's responsibility to make sure they weigh correctly after pulling. Overweight tractors will be disqualified.
- All persons, other than the driver, helper, 618 staff and judges, are to be off the track before any tractor pulls.
- In case of sled weight change, the tractor will be allowed to shift or change weight. Tractor may re-weigh if necessary.
- 618 committee will reserve the right to refuse to let any individual hook to the sled for any reason.
- The rules committee has the right at any time to inspect any tractor to ensure it is passing all rules of its class.
- The driver must keep the tractor under control at all times and operate it safely at all times on and off the track.
- Sled weight will be determined by sled operator by the third tractor pulled in each class.
- The first puller has the option to turn down their first pull and re-hook at the end of the class. First pullers must make an attempt to move the sled before turning down and coming back.
- Any act or manner of driving, which would cause bodily injury to the driver or the spectators, will be grounds for disqualifications.
- If a weight or part falls off any tractor after passing the point of no return (50') the tractor will be disqualified. This includes if a weight bounces off after clutching the tractor at the end of track. The pull is not considered over until the tractor is unhooked from the sled.
- Weights cannot be in a dangerous position on tractor and must be securely fastened.
- If the tractor tire goes over the boundary line, tractor will be disqualified.
- Any class not listed will follow appropriate NQS or NGTP rules

SINGLE CYL STOCK CLASS RULES

- Engine must be factory production using stock manufacturer components, 4-cycle single air-cooled engine.
- Wheelbase maximum: 56 inches
- Factory frames to be used, alterations may be made but length and width of frame cannot be changed. Modifications to frame for motor fitment are allowed. Aftermarket or other brand sheet metal swaps are permitted as long as it is securely fastened and from a garden tractor. (Example, John Deere Sheet metal on cub frame)
- Two valves per cylinder. Stock valve size for engine and horsepower it's used on valve and seat may be cut with a 3-angle seat.
- Only direct bolt up stock style OEM or aftermarket carburetors, aftermarket carbs must be "stock appearing" All fuel adjustment screws must be in stock location.
- Throttle must run through working governor with a 4000 RPM limit.
- Fuel must be pump gas, aviation, racing gasoline only.
- Maximum of .030 over bore.
- No port and polish
- No billet pistons-must use OEM or OEM replacement.
- Stock or billet rod with cut out for insert bearing of the manufacturer length is acceptable.
- Regrind of cams allowed max lift .330
- Crankshafts must be stock stroke only.
- Cylinder heads must be stock. No billet heads.
- Must use stock ignition system. Aftermarket coils are acceptable. No Crank Trigger Ignitions
- No sleeving block down to smaller size.
- You may use a steel flywheel.

STOCK TWIN Class Rules

- 4250 RPMS Max governor controlled.
- Stock or billet rod with cut out for insert bearing of the manufacturer length is acceptable.
- Maximum of .030 over bore.
- Re grind cams allowed up to .245 lift.
- Adjustable Flywheels allowed.
- Stock Heads only.
- Electric Fuel Pumps allowed.
- Carb spacers, velocity stacks, and standoffs allowed.
- Stock, stock appearing, or aftermarket direct bolt on carburetors only.
- No alcohol.
- Stock valve diameter.
- Billet, aluminum, or Steel flywheels allowed.

12 Open RPM and 16 Open RPM

- General and stock single rules apply except as noted.
- Stock block no aftermarket.
- Stock valve size.
- Open RPM-Governor can be removed.
- May use electric fuel pump.
- May use billet rods.
- Must use a Steel Flywheel.
- Must run scatter shield or side shielding.

SINGLE CYL STOCK ALTERED

- Single cylinder four cycle flathead engines only.
- Engine blocks must have an OEM stock appearance.
- Engines must be factory productions of 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.
- 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 only. No building up of ports.
- Must run a factory appearing hood and grill. Tractors must have garden tractor rear ends and use stock garden tractor frames. Frames must maintain factory length.
- Wheelbase: 56 inches maximum.

48 CUBIC INCH

- Single cylinder only... Any bore and stroke combination that does not exceed 48 CI.
- You may use only one carburetor, with only one venturi of any type, no fuel injection.
- Wheelbase: 56 inches maximum.
- Factory OEM frames to be used, alterations may be made but length and width of frame can't be changed.

50.5 PRO STOCK

- 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. Sleeve 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 manufacturers spec's 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.
- 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 permitted. Choke may be removed. Single carburetor only. Air restricting venturi must be in stock position and carburetor not to be larger diameter than 1.200". Air controlled by butterfly in stock position in carburetor, no slides, no injection, naturally aspirated only. No air entering after 1.200" restriction. Venturi must be round in shape.
- Methanol only.
- All tractors must have hood and grill. Any frame allowed including tube frames.
- Wheelbase 56 inches maximum.
- Aftermarket blocks such as Woolam or Jones blocks allowed.

NOTE: A mixed class will be run if there are two or less tractors in the 48 or 50.5 pro stock classes. Tractor will use their respective modified class rules. The 48 cubic inch class will be allowed to pull with the Pro-Stock class using the 48 cubic inch carburetor.

3 CYLINDER DIESEL

- Engine must be a factory 3 cylinder air or liquid cooled diesel (no cut down 4 cylinder engines).
- 75 cubic inch limit.
- Maximum overall length will be 96", maximum overall wheelbase will be 56".
- Water injection permitted, water or water-soluble oil mixture only.
- Stock head for engine make and model, no external welding except for repair.
- No overhead cam engines.
- Stock OEM intake and exhaust manifold. Porting and polishing allowed – no tube manifolds.
- Engine block model and serial numbers must be visible.
- Stock or Component frame with stock appearing garden, compact or farm tractor sheet metal with full engine shields (side shields must be a minimum of 1/16" steel or aluminum). Tube chassis must be covered with sheet metal.
- No billet fuel injector pumps or electronic fuel injection.
- Limited to one turbo, no size restriction.
- No intercoolers or ice boxes.
- Kill switch must shut off electric fuel pump and shut air off on compressor side of turbo.
- Exhaust "L" of turbo must have minimum of 5/16" cross in elbow with exhaust to discharge vertically.
- No propane or nitrous of any kind.
- Must run 1/4" cable around oil pan over top of valve cover in between #1 and #2 cylinder in a complete circle connected with cable clamps (minimum of two clamps).
- Steel flywheel required with flywheel inspection hole in bell housing.
- Flywheel, front cast pulleys and clutch must be shielded 360 degrees with 1/8" steel or 3/16" aluminum. SFI approved scatter blankets also acceptable.
- No belt driven cooling fans allowed, must be electric fans.

750 CC (16 VALVE) CLASS 1250 LBS

- Only one motorcycle engine allowed.
- Length 8ft. from center of back axle to furthestmost point forward (wheelie bars and safety devices excluded).
- Maximum tire size of 26"x12"x12".
- Chains must be covered.
- Fuel is open (stock OEM fuel injection allowed). No nitrous or nitro.
- Any carburetor allowed.
- 750cc maximum – NO TOLERANCE.
- No 4-wheel drives, dual wheels or chains in any class.
- No snowmobile motors.
- Safety Anti Rollover and chain guard on back.
- "See General Rules"

BIG MOTOR / LITTLE TIRE 1150CC CLASS 1300 LBS

- All general rules of motorcycle classes (listed under 750cc) apply to this class including the following:
- 1150cc maximum – NO TOLERANCE
- Maximum tire size is 26"x12"x12".

LIGHT OUTLAW 1350 LBS

- All general rules of motorcycle classes (listed under 750cc) apply to this class including the following:
- Tires may have up to 15 inch rims.
- No cc limit.
- 4 cycle automobile engines are allowed. Any type of carburetion allowed.
- 4 cylinder limit.
- Turbo and blowers allowed.

HEAVY OUTLAW 1400 LBS

• All general rules of motorcycle classes (listed under 750cc) apply to this class including the following:

- Tires may have up to 15 inch rims.
- No cc limit. Multiple engines allowed.
- 4 cycle automobile engines are allowed. Any type of carburetion allowed.
- 4 cylinder limit.
- Turbo and blowers allowed.

ANTI-ROLLOVER DEVICE

(REQUIRED IN ALL MOTORCYCLE CLASSES)

- From the ground to 3" above hitch.
- Must extend 8" out from rear of tires.
- From ground to skid pad can be no more than 5".
- Must have four points of contact to the frame.
- Must have skid pads. No wheels allowed.
- Weights cannot be hung from anti-rollover device.
- Can be detachable.

250CC Rules

- 250cc engine max
- 4 stroke only
- 8 and 10 horse single cylinder (open modified)
- 7ft from center of rear axle
- 18in from center of rear axle back on weights
- 8in wheel 18x9.50x8 tire max (cut tires allowed)
- Hitch must not extend behind rear tires
- 13in hitch height
- Wheelie bars 5in behind tire, no higher than 5in from ground

V8 Mini Rods

- Tractors are to be powered by automotive piston driven engines not to exceed 410 cubic inches (small block).
- After market aluminum and cast-iron heads will be allowed if of stock design and mass produced by factory on V8 engine.
- Fuel injection, turbo chargers and super chargers are NOT allowed.
- No blowers or 204 tunnel RAM intakes. After market intakes for 4-barrel carburetors can be used.
- Single carburetor of any size. Natural aspiration only.
- Tractors shall be equipped with a minimum 2.5lb dry chemical fire extinguisher in working order and in reach of the driver while seated.
- *Max tire size:*
- 1850lb class 34.0 x 15.0
- 1950lb class 18.4 x 16.1
- 2050lb class 18.4 x 16.1
- 31.5 x 15.0 tires can be used in all classes
- Maximum length of tractor from center of rear axle to farthest point forward, including weights is 8ft.
- Maximum width of tractor is 7ft on the outside of rear tires. (tire to tire)
- Tractors must be equipped with skid type devices (wheelie bars) to prevent tip over. (No wheels or rolling devices will be allowed.) Wheelie bars cannot be attached to the hitch in any way. Wheelie bars cannot interfere with hitching point or sled. Wheelie bars shall be equipped with a minimum 3in x 5in skid pads a minimum of 12in apart. Wheelie bars must be adequate enough to support the complete weight of the tractor.

- Tractors must be equipped with positive action, solid rotor automotive design steering with a maximum of 1/4 turn play of free travel. Chain or cable steering is not allowed.
- Tractors are required to have an engine kill safety switch capable of killing engine in case of chain breakage or hitch breakage. Kill switch should be located 1in center of hook point and must have 1.5in ring for connection to sled.
- All tractors are required to have a roll cage adequate enough to support the weight of the tractor and a 5 point harness to secure the driver.
- Tractors must have adequate brakes for the size of the tractor. Brakes must be in good working order.
- Exhaust must discharge upward (vertically) within 10 degrees of plumb. No rain caps.
- Racing fuel is allowed. Alcohol may be used but a fire suit is required.
- All weights must be mechanically secured to the tractor in a safe area and must not exceed rearward beyond tires or 18in beyond center of rear axle. Rubber cords, strings, wire, etc will be not allowed to hold weights on the tractor.
- Weights should not be attached in a manner above or beside the hitch that will interfere with the hooking or unhooking of the sled chain.
- Any part or object lost on the track during a pull will result in a disqualification. (weights, cigarettes, etc)
- All hitches shall be steel and rigid in all directions with an opening horizontal to the ground. The point where the sled chain is hooked to the drawbar must be behind the center of the rear wheels. Aluminum hitches are not allowed.
- The only aluminum components that can be used are wheels, frame, intake, heads, rear ends, and transmissions.
- Encumbering brackets that could give the puller an advantage over other tractors can not be used on hitches.
- Maximum hitch height on all tractor classes will be 13in from the ground.
- Dual wheels, 4WD, narrow front ends, chains, or recapped tires will not be allowed in any class.
- Front wheels should track within the tracks of the rear wheels.
- All tractors must have a seat with an adequate backrest.
- Tractors shall be clean of oil, fuel, etc., that may be a potential fire hazard. (subject to Safety Committee discretion)
- Automatic transmissions, u-joints, exposed drive train parts and automatic flywheels must be shielded 360 degrees with one of the following: scatter blankets, SFI approved scatter shield, 3/16 steel or 1/4in aluminum.
- Manual transmissions must have a steel or billet flywheel and must be contained in explosion proof bell housing, 3/16in steel or 1/4in aluminum. Manual transmissions and u-joints must be covered with 3/16in steel, 1/4in aluminum, or equivalent floor pans and shields.

- Harmonic balancers must be shielded 360 degrees with a minimum 3/16in steel and have adequate retainer to prevent forward loss.
- Chain drives must be shielded 360 degrees with a minimum 3/16in steel. Any drive shafts must be shielded 360 degrees with a minimum 3/16in steel
- Engine driven cooling fans are not allowed.
- The belt on belt driven water pumps must be shielded 360 degrees with a minimum 1in wide by 1/16in thick steel shroud to be no more than 1in from belt.
- Tractor throttles must be designed forward open, rearward closed, and be self returning to idle when released. All throttles must have adequate springs to return throttle to idle without aid of driver.
- Tractors must have engine side plates 1/16in steel or 1/8in aluminum installed 3in above top of crankshaft and 2in below.
- Tractors must have adequate fenders between drivers and rear wheels to prevent driver from coming into contact with tires at any time while sitting on the tractor. Legs and feet must also be included in the shielding.
- Tractors with automatic transmissions must have reverse lockout device.
- Tractors must have a neutral start switch to prevent tractor from starting while in gear.
- These rules are subject to change at any time by the rules and safety committee pending any issues that might arise.

CLASS LIST AND WEIGHTS

*250CC 850 LBS

*10HP Kids 950 lbs

*12 HP Kids 1000 lbs

*16 HP Open Rpm Kids 1050 lbs

*Stock Altered 1050lbs

*Stock Twins 1050lbs

*48/50.50 Cube 1050lbs (Will separate if enough for separate classes)

*12 Stock 1050lbs

*12 Open Rpm 1050lbs

*16 Stock Open Rpm 1050lbs

*Pro Twins 1 (45CI Stock Heads) 1050lbs

*Pro Twins 2 (Big Block/Pro Heads) 1050lbs

*1050 lbs Open (Open RPM Stock Twins/Any Single to include SA/48/50.5)

*750CC 1250lbs

*BMLT 1300lbs

*Light Outlaw 1350

*Heavy Outlaw 1400

*V8 1950lbs

*V8 2050lbs

*3CYL Diesel 1200lbs

*Open/3Cyl Diesel 1200lbs (Any garden tractor that weighs 1200)