



# RULE BOOK (2020)



## ABOUT US

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## 2020 BOARD OF DIRECTORS

NAME	ROLE	PHONE NUMBER	CONTACT ABOUT...
Matt Larsen	President	952-212-9361	Super Modified, Mini rods
Matt Creswick	Vice President	515-451-3876	Pro & Super Stock, website
Chris Morgan	Treasurer	507-440-1981	Mod Stock, Stock Altered, PST
Jessica Thron	Secretary	763-232-3504	Club business, scheduling, contracts, etc.
Ryan Hodgman		507-259-4112	Off the lawn and stock
Doug Ulrick		320-420-2099	Super Mods
Andy Peterson		612-597-7872	Mini Rods, Super Mods, Sportsman Modified
Rick Jensen		651-248-4275	Sled & All Classes

## MEMBERSHIP FEES

- \*\$25 for Household Membership, includes 2 tractors
- \*\$15 for Single Membership, includes 1 tractor
- \$15 per hook for members
- \$20 per hook for non-members
- Off the lawn: Member or non-member is \$15 per hook (winner \$10)
- \*\$5 for each additional tractor

## AWARDS

GSGTP recognizes pullers (members and non-members alike) by offering awards to winners in each class. Monetary awards will be the same for all classes, contingency winnings will be awarded at the banquet.

- 1st Place: \$35
- 2nd Place: \$25
- 3<sup>rd</sup> Place: \$15

\*Points Contingency based on 75% net profit minus estimated startup cost for the next season. Contingency money for paid members receiving points for current season. Off the lawn is excluded from contingency payouts. Contingency payouts will be based on the number of hook points for the current season and checks will be handed out at the season's awards banquet.

EXHIBITION (must be approved by sled operator)  
\$5 per hook

## Points

1 <sup>st</sup> place	10 hook points	+ 10 place points	20 points
2 <sup>nd</sup> place	10 hook points	+ 9 place points	19 points
3rd place	10 hook points	+ 8 place points	18 points
4rd place	10 hook points	+ 7 place points	17 points
5th place	10 hook points	+ 6 place points	16 points
6th place	10 hook points	+ 5 place points	15 points
7th place	10 hook points	+ 4 place points	14 points
8th place	10 hook points	+ 3 place points	13 points
9th place	10 hook points	+ 2 place points	12 points
10th place	10 hook points	+ 1 place points	11 points
11 <sup>th</sup> place and up	10 hook points only		10 points

1. If tractor is broke but present it will receive hook points (no refund of registration if you want the points if you don't want the points refund will be given).

## II.I INCLEMENT WEATHER

1. A session of pulling will be called a completed show if 1/2 of the sanctioned classes have been run.
2. Purse money will be paid to those classes that are completed according to the results for those who have hooked.
3. In any class in which all entered competitors do not get an official chance to compete, all competitors entered in that class, with the competition vehicle on grounds and ready to compete, will receive 10 hook points.
4. The GSGTP Board of Directors, promoter and event director shall be the only involved parties in determining if and when an event shall be stopped because of inclement weather or track conditions.
5. Any class not completed for any reason will be treated as a rained-out class.
6. If pull is canceled after scheduled start time tractors present will receive hook points. If the pull is canceled before the scheduled start time no points will be awarded.

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## I ELIGIBILITY

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- A. Contest is open to two wheel drive, rear wheel drive tractors
- B. Drivers under the age of 18 must have a parental/guardian signed consent form on file (this is only necessary to be signed once per season) and the parent/guardian must be present at the pull. Mod Stock and Stock Altered, the minimum age is 6 yrs. old. Sports Stock and Pro Stock minimum age is 12 and Mini-Rod and Super Modified classes the minimum age is 15 yrs. old. The Open Classes minimum age is 16. In ALL classes driver must maintain control of the tractor at all times.
- C. All vehicles must pass a safety inspection by a GSGTP official annually. GSGTP inspection decal must be displayed near the kill switch on rear of the tractor. Refusal of inspection disqualifies eligibility.
- D. It is mandatory that all drivers attend any driver meetings.
- E. No vehicle may exceed 6' in width, nor shall any portion extend more than 8' in front of center of the rear axle.
- F. Judgment calls by GSGTP/event officials are final and non-appealable.
- G. Engine may not be used as a primary support structure for the vehicle. Engine may not be used as part of frame.

## II EVENT RULES AND CONSIDERATIONS

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### II.B ENTRY

- 1. Scratching from a class previous to its start shall constitute a refund of entry fee. If tractor hooks to sled no refunds allowed.
- 2. Pulling position will be determined by a random drawing at the time of contest entry.

### II.C VEHICLE OPERATIONS

- 1. All vehicles must be operated in a safe manner at all times.
- 2. Driver will remain in seat, feet must be in contact with floorboard, driver will have at least one hand on the steering wheel. No hand may grasp edge of fender for duration of pull attempt.
- 3. Flagman/sled operator will stop any pull attempt considered unsafe.
- 4. Driver must be within an arm's length of tractor at all times while engine is running.

## II.D CLOTHING

1. Drivers of all vehicles must wear DOT approved or SNELL rated helmets with chin straps fastened.
2. Drivers of vehicles stock altered-mini rod must wear driver suits zipped and/or closed to their fullest extent including throat flap. Must show patch proving a minimum SFI rating of 3-2A/1 or proof of equal protection.
3. Fire resistant driver's shoes required to be worn while competing on any vehicle that has a driver protection cage.
4. Drivers of Stock and Stock Altered vehicles must wear a minimum of long pants, shirt and closed-toe shoes or boots.

## II.E WEIGHTS/WEIGH-IN

1. All vehicles must have stationary weight brackets. All weights must be secured to vehicle. Weights are not to extend more than 6" beyond the rear of the rear tire, nor shall they be positioned more than 8' in front of the center of the rear axle.
2. Weigh-in will occur before pull is attempted. Vehicle must have all safety equipment in place and driver in the seat. No adding of fuel or weights unless reweighing. Weights may however be relocated without repercussion. No vehicle exceeding class weight will be allowed past scales.
3. Weights and weight brackets must have min 1" ground clearance while making pull attempt.
4. All tractors must be scaled as they are ready to pull down the track.

## II.F TIRES

1. Minimum tread depth on slicks 1/16". Visible depth or tread across full face of tire.
2. No additives on face of tires
3. 12" maximum wide rim on mod stock through open unlimited. Off the lawn – stock rim width

CLASS	MAX. TIRESIZE	WEIGHT
Off the Lawn	24 x 12 x 12	900
	Turf tires only	1100
Mod Stock	26 x 12 x12	950
		1050
Stock Altered	26 x 12 x 12	1050A
		1050B
Sport Stock	26 x 12 x 12	1050A
		1050B
Pro Stock / PST	Dirt: 26 x 12 x 12	1050A
	Tar: 84" circumference 12" wide	1050B
Super Modified	Dirt: 26 x 12 x 12	1100 ( > 801CC)
	Tar: 84" circumference 12" wide	1150 ( < 801CC)
Super Modified	Dirt: 26 x 12 x 12	1150
	Tar: 84" circumference 12" wide	1250
Open Unlimited	Dirt: 26 x 12 x 12	1450
	Tar: 84" circumference 12" wide	
1650 Open Unlimited	Max Tar 32x14.5xXX	1650
	Max Dirt: 34x18x15	
1900# Mini Rod	Max tar 32x14.5xXX	1950 (<370 cu in)
	Max Dirt: 18.4 x 16.1	
Forced Induction	Max Tar 32x14.5xXX	1900
	Max Dirt 31x15.5x15	



## II.G NO MAN'S LAND & OPERATION POSITIONS

1. If there is no barrier, distance from track to crowd will be a minimum of 25' that is to include a 10' "no man's land".
2. If there is a barrier, distance from barrier to crowd will be a minimum of 10' that may include the required 10' "no man's land".
3. There will be a 2' safety line on both sides of pulling track. On first offense if tractor crosses safety line under power driver will be disqualified for remaining classes of that days event. Second offense tractor loses all points accrued during the season.
4. During active competition, the only personnel inside of "no man's land" shall be track officials, active competitor and sled operator. ONLY active competitor's pit crew and other properly credentialed people are allowed between "no-man's land" and crowd.
5. A weight transfer sled which conforms to the rules set forth by WPI/GSGTP and/ or NASOA will be utilized in competition.
6. Anyone assigned to an operation position, shall remain on that duty for the entire class (i.e. flagman, measuring crew, sled operator, scale operator).

## II.H CONTEST PROCEDURES

1. Contestants must pull in the position drawn. In case of mechanical breakage contestant may drop to last position. This will constitute the pullers first attempt to pull and therefore will only have one remaining attempt to compete.
2. Each driver has the right to have the sled spotted to a particular location on the starting line.
3. Each competitor will be allowed two attempts to make a measurable pull. An attempt is defined as moving the sled 1" or further. On first attempt, if the competitor lets off on the throttle before reaching the 75 ft. line, the competitor will get a second attempt, even if he/she went beyond the 75 ft. line. If no attempt is made to back off the throttle, no second attempt will be granted. Any disqualification on first attempt bars a second attempt.
4. On any re-pull caused by contest malfunction, the competitor may either re-hook immediately or drop to last.
5. If a class is restarted, the next puller in order will have test puller option; tractors that have pulled will drop to the end of the class.
6. If the last competitor in the class has difficulties, this puller will have 3 minutes to hook to the sled and make their first attempt to pull.
7. All vehicles must be in neutral/park while being hitched and unhitched to/from sled.
8. All pulls must start with a tight chain.

## II.I TEST PULLER

1. The competitor pulling in first position of each class, as determined by draw at time of entry is considered the test puller.
2. Provided that the weight transfer is deemed right, the test puller may:
  - a. accept their distance or
  - b. refuse their distance and drop to last in the class.
3. It is the competitor's responsibility to inform the finish flagman as to his/her decision to take or drop the test pull. Leaving the track without informing the official(s) of his/her decision, forces the assumption that the test puller wishes to accept their distance.

## II.J PULL-OFF procedure

1. A "floating finish line" will be used.

## III CAUSES FOR DISQUALIFICATION (DQ)

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1. Decisions of the event officials are final. Arguing with event officials or unsportsmanlike conduct could result in event disqualification or suspension. Upon second occurrence, membership can be revoked for one year from date of second occurrence.
2. Any competitor or any member of his/her crew found to be under the influence of an intoxicating agent, drug, or having a measurable blood alcohol content during contest activities shall be barred from any further involvement or participation in the event and may face suspension, fines, or termination of license.
3. Excessive loss of liquid onto the track by a pulling vehicle, either while hooked to the sled at the starting line and not moving, or while in forward motion, and not due to internal breakage may result in disqualification. Excessive is defined as any steady or intermittent stream discharge on to the track, or a spot equivalent to more than 8" in diameter.
4. Depositing of any equipment onto the track during the course of competition (breakage excluded).
5. During the course of competition, vehicle may not touch boundary lines or disqualification will result. Sled may go out of bounds and not result in disqualification.
6. Any contestant attempting to leave under the red flag.
7. Failure to have all safety equipment in place (including driver suit, helmet, etc.)
8. Any practice utilizing competition vehicle, tow vehicle or other event related equipment, before, during or after the event, at the event site, which the GSGTP official considers both deliberate and unsafe.

## IV PENALTIES

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1. If deemed necessary, the GSGTPboard will determine penalties.

## V PROTESTS

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### V.A PROTEST PROCEDURES

1. Verbal protest must be made within 5 minutes after the end of the class in question. This must be followed by the formally written protest which must be delivered to the entry clerk within 30 minutes. Forms are to be made available by the promoter or GSGTP official.
2. The protest must specifically identify the nature of the violation.
3. The protested tractor can be pulled in other classes at that event before submitting to be checked.
4. Tear down is by owner or owner's mechanic. This process may be completed with the only witnesses being the owner, owner's mechanic and the GSGTP official. This must be completed the day of the event.
5. If protested driver will not submit vehicle for inspection, he/she will be considered illegal. An illegal vehicle must be proven legal before being allowed to compete again.

### V.B PROTEST FEE

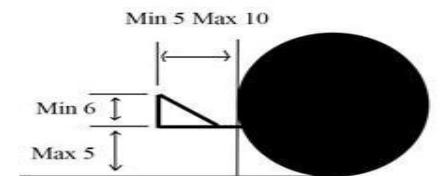
1. A tear down protest consists of a deposit of \$100 for any external item. \$500 for any engine/transmission/rear end tear down (mod stock – super stock \$250). This deposit must be made at the time of protest. Protest may be made by any competitor in the same class as the vehicle in question.
2. For each protested item found to be legal, the protester shall forfeit the corresponding deposit. If said engine is illegal, the owner will forfeit all winnings and entry fees of the day for all classes that the vehicle would be in violation. The deposit for all items proven illegal will be returned to the protester. The GSGTP official's decision is FINAL.

### V.C APPEALS

1. The GSGTP official shall decide the protest as promptly as possible and shall inform the parties to the protest decision.
2. If either of the parties do not accept the decision of the GSGTP official, the protest may be appealed (within 10 days of the official's decision) to the GSGTP office for a final decision.
3. The purse of the involved portion of the event will be escrowed until a final determination has been made or the time period for filing an appeal has expired.

## VI GENERAL RULES

- A. Seats: All vehicles must have a secure seat. Seat may not extend behind rear tires. Seat must have a back, which stands a minimum of 3" above the top of the seat surface.
- B. Steering/Brakes: All vehicles must have functional steering and brakes. Rear wheel brakes required on all vehicles except when factory garden tractor transaxle brake is used.
- C. Fire Extinguisher: All vehicles must have a fully charged, functional fire extinguisher with a gauge, within easy reach of the driver. Minimum size: 1 1/2 lbs. dry chemical or 1 lb. halon.
- D. Throttle: All vehicles must be equipped with a "dead man throttle," with the rear-most position being idle.
- E. Exhaust
  - E1. Must discharge vertically (+ or - 10 degrees) upward and extend at least 12" from the exhaust port.
  - E2. Exceptions to this rule are the use of stock mufflers or rear engine tractors, which may discharge out the back. Exhaust must be securely attached.
- F. Fenders: All vehicles must have sturdy, safely secured fenders that will protect the driver from the tires.
- G. Stabilizer/Bumper Bars: Must be installed on all vehicles in all classes.
  - G1. The device must consist of two separate assemblies, each equipped with either a skid plate or a wheel.
    - G1.a Skid plates to be at least 2" wide x 3" long.
    - G1.b Wheels to be at least 1" wide and 4" in diameter.
    - G1.c Back edge of skid plate or center of wheel must be at least 5" but not more than 10" behind a line drawn vertical at rear face of tire. Maximum distance from ground to bottom edge of wheel or skid pad: 5".
    - G1.d One stabilizer bar shall be on each side of the tractor with the combination of the two strong enough to support the weight of the tractor when a jack is placed under them to raise the tractor when weighted to maximum weight for competition class with driver.
    - G1.e Bumper bars must be incorporated into each independent stabilizer bar. Bumper bar must extend 6" vertical from the rear most tip of skid pad or back edge of wheel. The top of the vertical bar must be braced forward to stabilizer bar or chassis. Stabilizer/ bumper bar set must be at least 8" apart. Bumper bars must be constructed strong enough to prevent buck board of sled from coming in contact with rear tires.
- H. Drawbars: All vehicles must have a drawbar that is constructed from non-cast material and is stationary in all directions. Minimum drawbar thickness at hook point: 3/8", maximum 3/4". Point of hook minimum opening: 1 3/4" round hole, maximum 2" hole.
  - H1. Minimum 1/2" cross section thickness required around any opening machined or manufactured into drawbar assembly. Minimum diameter of any attaching round stock or pivot pin: 1/2". Minimum of 5-3/8", Grade #5 bolts or equivalent welding strength required to secure drawbar assembly to differential housing or chassis.
  - H2. Distance from hook point to back edge of drawbar not to exceed 3/4" thick. Drawbar to be parallel within 10 degrees and not more than 13 in. above the ground.



## GOPHER STATE GARDEN TRACTOR PULLERS (GSGTP)

- H3. Area 5 in. wide and 12 in. high immediately above the drawbar must be free of all obstructions including weights and weight brackets for ease of hooking and unhooking chain.
- H4. Maximum drawbar height is 13". Minimum drawbar length is 6". Drawbar length is measured from the center of the rear axle to the point of hook.
- I. Fuel Lines: All vehicles must have fuel lines that are either routed and suspended to keep them away from hot engine components or steel braided lines.
- J. Fuel
  - J1. Alcohol (Methanol):
  - J2. Gasoline:
  - J3. Diesel Fuel:
  - J4. Illegal Fuels
    - J4.a All forms of nitromethane (including nitrous oxide and propylene oxide) as a fuel or fuel additive for pulling.
    - J4.b Any oxygen improving chemical or agent is illegal in all divisions of GSGTP.
    - J4.c No pressurized fuels allowed.
- K. Fuel Shut-off: all vehicles must have a manual fuel shutoff valve on low pressure side.
- L. Fuel Tanks: No fuel tank(s) to be mounted to engine unless factory mounted in Stock and Stock Altered classes only. All fuel tanks to be vented away from engine and exhaust.
- M. Kill Switch: A kill switch must be incorporated into all competition vehicles. Switch must be capable of immediately shutting down the engine as well as electric fuel pump(s), in case of accidental separation from the sled during the course of competition.
  - M1. On diesel engines, the kill switch must activate the air shutoff. No electrically operated air shutoffs.
    - M1.a Diesel system must have a spring loaded air shut-off device activated by a cable.
  - M2. Kill switch shall be located at the rear of the vehicle in a position that will allow for easy attachment/detachment.
  - M3. Break-away kill switches must have a minimum 1" loop.
- N. Flywheels/Starter Pulleys: Flywheels and starter pulleys of any engine when maximum RPM is un-governed and/or more than 4000 rpm, must be of billet steel or aluminum (no cast material allowed).
  - N1. No welded fins, no stamped steel pulleys.
  - N2. Any starter pulley or starter drive attached to exposed end of crankshaft must have a retaining device bolted to crankshaft to prevent pulley or drive from coming off.
- O. Ignition Points: Any vehicle ignition system utilizing points must have a plastic or metal cover over the points to inhibit the chance of fire.
- P. Aux. Starters: Starter carts shall incorporate a cover over the battery terminals to prevent accidental arcing.
- Q. Superchargers - All GSGTP Divisions
  - Q1. Must utilize aluminum studs to mount the supercharger to the intake manifold.
  - Q2. Must utilize a supercharger restraint system.
    - Q2.a The restraint system shall consist of 4 separate straps, one on each corner of the supercharger, with each strap securely fastened to the engine by means of its own attachment bracket.

Q2.b The top attachment bracket to be sandwiched between the lower surface of the injector body and the upper surface of the supercharger case.

Q2.c The bottom attachment bracket for each strap shall be connected to the engine by a minimum of (1) 5/16" (Grade 5) bolts or studs.

R. Injector Butterfly Shafts: Must have dual return-to-idle arms and springs, one on each side. Diesel engines must have an external visible return-to-idle spring on the fuel injection pump throttle arm.

#### S. Shielding

S1. Cast Blocks: Must have scatter shield opposite the camshaft side of the motor.

S1.a It must be of a minimum 1/16" steel or .090" aluminum.

S1.b Minimum dimensions must be from the bottom of engine to 4 1/2" above the center line of the crankshaft and must be at least 7" in width.

S1.c 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.

S2. Shield must be attached to the chassis at bottom and under hood at top in a secure manner.

NOTE: This rule shall not be in effect for engines where the maximum engine rpm is governor controlled to 4,000 rpm or less.

S3. Roller Chains: All drive chains must be shielded radially, top, front and rear, with a minimum 1/16" (.060") steel. Shield must be wider than chain.

S4. Drive Belts: All drive belts must be shielded radially, top, front and rear, with a minimum 1/16" (.060") steel. Shield must be wider than belt.

S5. Snowmobile Clutches: Snowmobile type sheaves (both primary and secondary) must be shielded radially, 360 degrees with minimum 1/8" steel. Shield must be wider than the drive unit and be securely mounted. This shielding may be incorporated with the belt shielding.

S6. Motorcycle Engines: Any rotating mass attached to crankshaft must be enclosed top, sides, and exposed end with a minimum 1/8" (.125) steel or 1/4" (.250) aluminum. Shield must be within 1/2" of housing and securely attached to engine block or chassis.

S7. Flywheel/Clutch: Stock Altered, Sport Stock, Pro Stock, Super Stock, vehicles must have flywheel and clutch assemblies enclosed 360 degrees with a minimum 1/8" (.125") steel or equivalent.

S8. Turbochargers: All exposed turbochargers or portions thereof must be shrouded 360 degrees with a minimum of 1/16" (.060") steel except for inlet and exhaust.

S9. Turbocharged Exhaust: All turbocharged engines must have two 3/8" bolts, grade #5 or stronger, in the vertical portion of exhaust pipe. Bolts to be installed 90 degrees to each other, within 1" of each other.

S10. Superchargers: All supercharger drive components must be shrouded on the top and sides with 1/16" (.060") steel. The shield is to be wider than the drive belt, pulleys, etc. and securely mounted.

S11. Automatic Transmissions: Non-Mini Rod tractors that utilize an automatic transmission, must have a minimum 1/8" steel or 1/4" aluminum shield from the back of the block to the tail shaft housing, covering top and sides extending 2" below the lowest point of the transmission OR covered with scatter blanket.

S12. Open Class: All Open class vehicles must have clutch covered 360 degrees with 3/16" (.187") steel or 1/4" (.250") aluminum and have minimum 1/8" (.125") end plates with a maximum

center diameter hole of 6".

- S13. Driveshafts: All Modified and Open class vehicles must have round metal loops shielding drive shaft. Maximum of 1' between loops, minimum of 2 loops. The 360 degree loops must be a minimum of 1/4" (.250) aluminum or 3/16" (.187") steel, 3/4" wide and not more than 1 1/2" from the shaft in any direction. Acceptable to use a solid tube (1/4" aluminum or 3/16" steel) to meet the above requirements.
- S14. U-joints: All U-joints must be shielded 360 degrees with 1/4" (.250") aluminum or 3/16" (.187") steel. The minimum length shall be not less than 1/2" greater than the U joint assembly.
- S15. Intercoolers: Pressurized intercoolers must be shrouded 360 degrees with a minimum 1/16" (.060") steel or equivalent aluminum, except for inlet and exhaust.
- S16. Cylinder Head Restraint: Required on each cylinder head on any cast, OEM stock block, flat head engine bored to .040" or more over manufacturer's standard specification.  
Restraint not required on after-market ductile iron or fabricated billet blocks and jugs.
- T. Aviation, Industrial, Military, Commercial, Marine, and Diesel Engines: No engine flywheel, torque converter, or clutch assembly may rotate faster than the crankshaft speed.

## VII GENERAL RULES – MINI ROD / COMPACT DIESEL TRACTOR

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- A. Engine Shielding
  - A1. A deflection shield extending the complete length of the block casting is required on both sides of engine. Shielding must be a minimum of .060" steel or aluminum, and be securely fastened.
  - A2. Piston-powered aircraft, industrial or military/commercial type marine engines must have a minimum of .120" thick side shields. This may be in one or two layers.
  - A3. Shields must be solid engine mounts, filters, steering rods, fuel injection pumps, etc. may not be used as shielding. Shielding may cover or pass behind starter or fuel pump.
  - A4. Solid frame rails with no holes may serve as part of or all of shield, provided that it covers the required area of block casting.
  - A5. Shielding on all V or Y-type engines (including marine and aircraft) must extend from base of head or the uppermost part of the piston and travel to 2" below bottom center of crankshaft throw, and be securely fastened.
  - A6. Shielding on inline engines shall extend from the bottom of head (top of block) to 2" below bottom center throw of crankshaft.
  - A7. Side shields must be mounted independently of the engine block. Engine mount, block saver plate and header mounting, or chassis mounting is acceptable.
  - A8. Engine driven cooling fans must be completely shrouded with a minimum 1/16" (.060") steel or aluminum. Electric fans shall be excluded from this rule.
- A. Engine Mounts: Engine/automatic transmission combinations must have 2 front engine mounts, 2 rear engine mounts, and a support saddle for rear of transmission, with 1/2" maximum clearance; or 2 front engine mounts, support saddle at rear of engine, with 1/2" clearance, and a mount at rear of transmission.
- B. Brakes: All competing vehicles must be equipped with functional rear wheel brakes. Driveline brakes allowed in addition to rear wheel brakes. All driveline brake components, including caliper

assembly, must be radially shielded 360 degrees with 3/8" steel and both ends must be closed with 1/8" steel or greater.

- C. Driveline: Driveline must be enclosed in minimum 5/16" steel or 3/8" aluminum, round, inside diameter not to exceed 2" more than the outside diameter of the largest universal joint, fastened every 6" or closer, with 3/8" or larger (Grade 5) bolts, or butt and seam welded, and securely mounted to vehicle's frame. Applies to all Mini Rods and Compact Diesel Tractors with exposed drive shaft. No more than 1/4" of end of driveshaft shall be visible with driveline shielding in place.

NOTE: If U joints are used in any driveshaft application, the shielding must be 5/16" steel or 3/8" aluminum with 1/8" steel insert in aluminum. The insert must be a minimum of 6" wide.

#### D. Drawbar

- D1. Drawbars shall be constructed so that in the event of drawbar breakage, the drawbar supports do not pull from a top link or brace above the center line of the rear axle of the vehicle. Any vehicle with the drawbar hold up device above the centerline of the rear wheels must have a single pin break away type (slide out) drawbar. The holdup/down device is to be within 6" maximum forward of hook point.
- D2. Drawbars must be rigid in all directions. All drawbars must be within 10 degrees of parallel to the ground.
- D3. Drawbar and hitching device to be one piece totally constructed with a minimum of 1" solid steel material. No hollow tubing is permitted. Front point drawbar is to have a minimum of 1/2" cross sectional thickness at any point, including the area of the pin with the pin removed. Minimum 1/2" pin.
- D4. The point of hook is to have a minimum 2" round hole, maximum 2 1/4" hole. The thickness of the material around the hole to be a minimum 3/4" and point of hook to be no more than 3/4" cross sectional thickness at back edge.
- D5. No portion of vehicle may interfere with sled, chain or hook during a pull or while being hooked or unhooked.
- D6. Area 5" wide and 12" high immediately above the drawbar must be free of all obstructions (including weights and weight brackets) for ease of hooking and unhooking.
- D7. Vehicles with second drawbars must have second drawbar hole covered.
- D8. Maximum drawbar height is 13". Minimum drawbar length is 6". Drawbar length is measured from the center of the rear axle to the point of hook.
- D9. Drawbar and stabilizer bars are not to be connected.
- D10. Drawbar distance from center of rear axle cannot change during pull.
- D11. GSGTP recommends that the drawbar not be used when tying the competing vehicle to the tow vehicle.

#### E. Automotive Clutches, Flywheels and Automatic Transmissions

- E1. The use of torque converters and automatic transmissions will be permitted.
- E2. All torque converters and automatic transmissions must be covered with a scatter blanket that extends from the rear of engine block to the front of tail housing. Blanket must be fastened forward securely with two straps on each side, one above crankshaft centerline and one below crankshaft centerline. Blanket should have 6" of overlap. Straps must be not less than 2" wide with not more than 1" spacing between each strap.



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- E3. All vehicles using an automatic transmission must be equipped with a positive reverse-gear lockout.
- E4. Clutch can liner thickness to be 1/8" 4130 moly. Liner is secured to the can by drilling and tapping a single 1/4" hole through the bottom of the clutch can. If the liner does not fit, the liner length can be cut off to fit the depth of the can, so that the liner begins directly behind the starting ring gear (if one is used). It must extend the full length of the can until the back of the clutch begins to taper. If starter ring gear is not used, can liner must then extend from block saver plate rearward to where the can taper begins. Stand adjustment slot in liner should be cut directly under slot in can.
- E5. No lightening holes allowed on the transmission face of the bellhousing. One cooling hole allowed, maximum 1" in diameter on the face of bellhousing. Bellhousing may not be welded or repaired in the explosion area of the bellhousing. Opening in bellhousing for clutch release fork must be shielded on side, top, bottom, and rear with 1/4" steel no less than six inches wide. The frame of tractor may be used for the side shield. The top, rear, and bottom must be fastened to the frame and/or the bellhousing flange with a minimum of six (6) Grade #8, 3/8" bolts. The rear shield may have a hole large enough to allow operation of clutch rod linkage. No part of shield may be welded to or bolted to the bellhousing and shield must conform to the contour of the bellhousing.
- E6. The inspection/maintenance hole (i/m hole) in the bellhousing shall not extend farther forward at its top edge than flush with the cross-shaft hole nor farther downward at its bottom edge than to allow one 1/2" bolt diameter edge distance for the fastening holes in both the bellhousing and the i/m hole cover. The length of the i/m hole shall be no more than 8 1/2" and the ends of the hole shall be smoothly and fully radiused to produce an oval shape.
- E7. There shall be (12) 5/6" grade #5 or better cap screws securing the cover to the bellhousing. The cover must have a plate or fillet that fits flush inside of the housing. The cover and fillet must be steel. The fillet must be welded to the cover and all bolts must be flush to the inside.
- E8. There must be five bolts used to secure the transmission to the bellhousing with a 3/8" minimum diameter.
- E9. All bell housings must be flush on the inside surface.
- E10. All engines with a bellhousing and clutch will run a full block plate, either a commercially available unit, or minimum 3/16" steel or minimum 1/4" aluminum with five 3/8" grade #5 bolts evenly spaced on the bottom of the bellhousing.

## VIII CLASSES

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This section provides class-specific rules. Except where noted, rules stated in a class- specific section may override those stated in General Rules (pg. 8) or General Rules – Mini Rod / Compact Diesel Tractor (pg. 12).

### IX. B OFF THE LAWN

All off the lawn classes do not get the first hook option.

- A. You must have wheelie bars if your hitch is above the center line of the axel or you use balance weights or if you have an adjustable hitch. (wheelie bars must meet spec in general rules if equipped)
- B. There are two classes for off the lawn: 900# and 1100#. This is tractor and driver with weights and safety equipment.
- C. All drivers must wear a helmet.
- D. Weights must be secure.
- E. Max tire size allowed is 24x12x12. Turf tires only, bar lug tires must go to mod stock class and are not allowed on asphalt. Gator tires and 26x12x12 must go to mod stock class.
- F. Engine RPM must be governor controlled. Maximum rpm will be rated at the maximum horsepower when multiple ratings given. Horse Power Rating:
  - F1. 14 hp and under: 4,000 rpm
  - F2. 16 hp is 3800 rpm
  - F3. 18 hp. 3600 rpm 20 hp and up is 3400 rpm
  - F4. 23 hp is the max allowed in the class
- G. No fabricated hitches over 11" If you have a stock hitch and the height is higher than 11", than a clevis will be used.
- H. Maximum 2 hooks per tractor
- I. No cutting or syphoning on tires allowed.

### IX.C MOD STOCK

- A. Factory stock, commercially available, garden tractor with cast block engine. Engine, chassis, and sheet metal must be from a factory produced garden tractor. If the tractor came with belt drive, it must remain belt drive. Strengthening will be allowed. (Installing a Dart rear end is considered strengthening). Frame brand dictates transaxle setup-not sheet metal. Sheet metal can be changed from one brand to another. (John Deere on Cub Frame) but frame cannot be altered. Reproduction sheet metal is allowed.
- B. Must use only OEM available, unaltered parts for engine manufacturer and configuration. No performance improving alterations to chassis or engine parts allowed unless specifically noted.
- C. Modifications to clutch, driveline, and transaxle assembly are allowed to prevent breakage. Gear ratio modifications are also allowed. Pulleys and gears can be changed throughout the season, but all tractors will remain 3 speeds with a working reverse. Tractors with multiple speeds will still need to have a working reverse.
- D. Use of locked rear-ends not allowed.

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- E. No welding or modifying of block or cylinder head for performance reasons (this includes epoxy and JB weld). Cylinder head must maintain stock combustion chamber lip at headgasket. No port altering, grinding or polishing allowed. Ports must remain cast. Stock head gasket required for all V-Twins.
- F. Maximum bore size: .030 overbore from manufacturer's standard specification. Piston must be flush or below deck of block. After market piston and rod is allowed for the one cylinder engines only, but must remain stock crankshaft.
- G. No fabricated intake manifolds, carburetor stand-offs or donuts. Only one stock intake gasket is allowed. No velocity stacks. Must be stock air-cleaner or nothing at all.
- H. Carburetor must be stock, unaltered, and unpolished. Choke butterfly and shaft can be removed. Air restricting venturi must not exceed stock size.
- I. Engine RPM must be governor controlled if required. Maximum RPM will be rated at the maximum horsepower when multiple ratings given. 14hp and under is open rpm, 16hp 4400 rpm, 18hp 4000 rpm, 20hp and up is 3600 rpm. 23hp is the max allowed in the class.
- J. RPM's will be measure off the crankshaft. There will be no average allowed and there will be no tolerance.
- K. Diesel engines must be governor controlled to factory RPM specification. No injection pump alterations allowed.
- L. Billet steel or billet aluminum flywheel required if operating above 4000 RPM. No welding or machining of stock cast flywheels.
- M. Must be equipped with all safety devices including rear stabilizer/bumper bars, kill switch, Deadman throttle, and fire extinguisher. See General Rules for additional safety requirements.
- N. Maximum hitch height: 13 inches
- O. Maximum tire size 26x12x12. Larger tire allowed if factory available on that model of tractor.
- P. All factory shielding or equivalent must be in place if running factory stock RPM. If above 4000 RPM additional shielding is required. See general rules for requirements.
- Q. Chassis may not be lengthened or altered to accept non-original engine. Notching of frame will be allowed for ring gear flywheels. Must retain original wheel base. Any commercially available motor replacement is to fit without any modifications. Front axle can be moved within the factory frame 52" max. Rear axle must remain in stock location unless stock wheelbase is longer than 52". Front axle can be factory or tube type.
- R. Diesel fuel or Gasoline with a maximum octane rating of 110, no alcohol, methanol or E-85.
- S. No pro tires.
- T. Starter carts are allowed. Billet steel or billet aluminum pulley required if operating above 4000 RPM. No starter generators allowed if operating above 4000 RPM.
- U. Maximum combined weight of vehicle and drive 1000 and 1050lbs

## IX. D STOCK ALTERED

- A. Commercially available garden tractor with cast block engine. Engine block, chassis, and sheet metal must be from factory produced garden tractor and maintain stock appearance.
- B. All engine parts used must meet OEM dimensions and specifications for size and location. Non-stock ignition systems allowed.
- C. Recasts blocks allowed crankshaft, camshaft, valves and bore must be in stock locations.
- D. No welding or externally visible modifications to block or cylinder head.
- E. Maximum bore size: 3.78" or max cubic inch 36.5.
- F. Stock crankshaft stroke must be maintained at 3.25".
- G. Stand Offs no longer than 1".
- H. Carburetor must be stock appearing for engine manufacturer.

- H1. Maximum air restricting venturi diameter: 1.0" for Alcohol 1.2" for Gas.
- H2. Air flow must be controlled by throttle shaft actuated butterfly in stock location.
- H3. No air may enter intake after venturi restriction.
- I. Maximum camshaft regrind spec:.330-inch lift at zero lash. Maximum valve diameter: 1.380 inches.
- J. Stock appearing hood and grill required. May switch to another factory sheet metal, but must maintain stock appearance.
- K. Billet steel or aluminum flywheels required. No rpm limit.
- L. Must be equipped with all safety devices including rear stabilizer/bumper bars, kill switch, Deadman throttle, and fire extinguisher.
- M. Maximum hitch height:13 inches.
- N. Maximum tire size: 26 x 12 x 12.
- O. Engine and driven components must be shielded per requirements in section VI, item S for this class.
- P. Maximum wheelbase: 52 inches. Any garden tractor chassis having a stock wheelbase of 52 inches or longer must retain the stock wheelbase. Chassis may be altered to accept non-original engine, but must remain at stock length.
- Q. Maximum combined weight of vehicle and driver: 1050 lbs. and 1050 lbs.

## IX.E SPORT STOCK

- A. Chassis Rules/Flat Head Engines
  - A1. Flathead Singles 49CI, flathead Twins 45CI and V-Twins 39CI, no external welding on heads. No valve restrictions, naturally aspirated, cast block, four cycle engine. Engine block, transaxle and chassis must be OEM available in a commercial garden tractor.
  - A2. Engine components must remain in original position. Original measurement from center of crankshaft to top deck of block must be maintained.
  - A3. (not used)
  - A4. Must be OEM engine or copy (Julian block, Jones or Woolam)
  - A5. Stock appearing carburetor for engine manufacturer required. Maximum air restricting venturi limit: 1.200 inches. Air flow must be controlled by throttle shaft actuated butterfly in stock location. No air may enter intake port after 1.200 restriction.
  - A6. Billet steel or aluminum flywheel and/or starter pulley required.
  - A7. Maximum tire size: 26x 12 x 12.
  - A8. Chassis and transaxle must be from an OEM produced garden tractor. Lengthening of stock chassis allowed provided frame remains stock appearing and the same material type, size, and dimensions as stock are used.
  - A9. Maximum wheel base: 56 inches. Any garden tractor chassis having a stock wheelbase of 56 inches or longer must retain stock wheelbase.
  - A10. Engine and driven components must be shielded per requirements in section VI, item S for this class.
  - A11. Stock block engines bored .040" and over manufacturer's standard specification require a cylinder head restraint devise. Refer to IX. General Rules, section VI, item S for entire rule.
  - A12. Tractor must have a stock appearing hood and grill (nose piece). Switching to another factory sheet metal is permissible.
  - A13. Gasoline or alcohol fuel only.

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- A14. V-twins must retain stock cylinder head and valve diameter for engine configuration and horsepower rating.
- A15. V-twin stock crankshaft stroke must be maintained. Piston travel must be flush or below deck of block.
- A16. Weight limits for the class are 1050#A & B

### IX. F PRO STOCK / PST

- A. Single cylinder, air cooled, naturally aspirated, four cycle, flat head engine.
- B. Maximum engine displacement: Pro Stock: 50.5 cu. in. Super Stock: 30.5 and/or 50.5
- C. Promoter may choose any combination of tractor classes by cu. in.
- D. Pro Stock crankshaft and camshaft must be in original position.
- E. Pro Stock must maintain original measurement from center of crankshaft to top deck of block and original head bolt pattern.
- F. Carburetor size and fuel injection limits by class.
  - F1. Pro Stock: Stock appearing carburetor limited to a maximum air restricting venturi size of 1.200 in. Air flow must be controlled by throttle shaft actuated butterfly in stock location. No air may enter intake after 1.200 in. restriction.
  - F2. Super Stock: Open carburetion and injection limits.
- G. Billet steel or aluminum flywheel and/or starter pulley required.
- H. Engine and driven components must be shielded per requirements in section
- I. Stock block engines bored .040 and over manufacturer's standard specification require a cylinder head restraint device. Refer to section VI, item S for entire rule.
- J. Maximum tire size: 26x12x12 Dirt, 84" max circumference tar tire.
- K. Maximum wheelbase: 56 inches. Any garden tractor chassis having a stock wheelbase of 56 inches or longer must retain the stock wheelbase for that model tractor.
- L. Maximum distance from center of rear axle to farthest point forward to be 96 inches.
- M. Chassis and transaxle must be from an OEM produced garden tractor. Lengthening of stock chassis allowed provided frame remains stock appearing and the same material type, size, and dimensions as stock are used.
- N. Tractor must have a stock appearing hood and grill (nose piece). Switching to another factory sheet metal is permissible.
- O. Gasoline or alcohol fuel only.

### X. PST

- A. All General and safety rules apply, must be 12 years of age
- B. Maximum weight of vehicle and driver: 50.5 cu. in. Pro Stock or Super Stock: 1050 lbs., 30.5 cu. in. # with a 12.5" hitch. Pro V-twin stock head with no welding tractors run 1000# and 12.5" hitch and 39 cubic inch V-twin can run at 1050# with 13" hitch.
- C. 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 block (all thread okay), if engine is sleeved, sleeve cannot be externally visible. Must have head/block restraint.
- D. These rules can be changed in order to promote fairness of the type's tractors at any time during

the season.

## IX. G SUPER MODIFIED

1. 1100 lbs. class Weight of vehicle and driver: 801CC and over 1100 lbs. 800CC and under 1150 lbs.
2. 1150, 1250 lbs. class Maximum weight of vehicle and driver: 1150, 1250 lbs.
  - A. Maximum engine displacement: 1500 cc (91.5 cu.in.).
  - B. Must be naturally aspirated, unless diesel. Diesel limited to 2 turbos.
  - C. Maximum tire size: 84" circumference. This is for Asphalt tires only. Dirt tires the max size is 26x12x12
  - D. Gasoline, diesel, or alcohol fuels.

## IX.H 1450/1650# OPEN UNLIMITED

- A. Max tire size for 1450# is 26x12x12 for Dirt tires. Asphalt tire the max size 84" circumference
- B. Max dirt tire size for 1650# is 34x18x15 Asphalt max tire size is 32x14.5xXX
- C. Must follow all safety rules in general rules section.
- D. All automotive tractors must have roll cage.
- E. Turbine Engines: All Super Modified rules apply for chassis, tire size, and maximum combined weight limit with the following turbine engine limits.
- F. Gas turbine engine with a factory horsepower rating of 320 hp. or less.
- G. Turbine engine must be a production built engine, governor controlled not to exceed factory rpm and temperature limits.
- H. Any turbine engine exceeding 8000 rpm on output shaft will not be allowed to use a clutch and flywheel assembly or automatic transmission. All driveline brake components, including caliper assembly, must be radially shielded 360 degrees with 1/4" steel and both ends must be closed with 1/8" steel or greater.
- I. Turbine air intakes must be screened with metal screen that has openings no larger than 3/16".
- J. A turbine engine must be equipped with an external shroud completely enclosing engine. Shroud to be made from no less than 1/4" steel or aluminum. Factory installed external shrouds allowed if material is equal to or greater in size and/or strength of external shroud specification.
- K. Shroud must incorporate a flange at each end that extends radially inward from the shroud to within 1" of engine casing. A 1/2" air gap between the engine and the ID of the flange must be maintained for air circulation inside the shroud.
- L. Flanges may be scalloped out to clear tubing, accessories, brackets, etc., and may be either rolled edges of the shroud or steel rings attached by welding or riveting to the shroud. Shroud must extend at least 3 in. beyond each end of turbine section unless limited by exhaust housing or other permanently attached engine components.
- M. Turbine engine must be equipped with two separate over speed protection devices for power turbine wheel(s). Turbine engine over speed shutdown required.
- N. Tractors powered with a turbine engine must have a stock appearing garden tractor hood and grill, (nose piece).
- O. All other chassis, engine, and safety rules listed for the Super Modified class must be followed.
- P. All turbine engines must be inspected and certified by GSGTP Technical Services prior to

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registering or competing at a sanctioned event.

### IX. I 1900 # MINI ROD

- A. 8 cylinders, naturally aspirated, up to 510 cubic inch. Engines less than 370CI weigh 1950lbs. Engines with forced induction no more that 370ci and must weigh 1900lbs. (max tire naturally aspirated dirt 31x15xXX max tire tar 32x14.5xXX)
- B. May use steel or aluminum flywheels with any type or number of carburetors. Exhaust must be straight up.
- C. Automatic or planetary gear transmissions, drive shaft hoops, and steel clutch bell housings or Use SEMA approved blanket or shielded with 1/8 inch steel or 1/4 inch aluminum.
- D. (Not Used)
- E. Roll bars/cage 1.25" OD (.09 minimum thickness) tubing is required. Lap belt is also required.