



# **RULE BOOK (2016)**

## ABOUT US

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## 2016 BOARD OF DIRECTORS

NAME	ROLE	PHONE NUMBER	CONTACT ABOUT...
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Matt Larsen	Treasurer	952-212-9361	Super Modified
Jessica Thron	Secretary	763-232-3504	Club business, scheduling, contracts, etc.
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Andy Peterson		952-467-3134	Super Mods and Sportsman Modified
Andy Purfeerst		715-307-8320	Sports Stock and Off the Lawn
Duane VanHeukelom		715-425-1419	Diesel and Stock Altered

## MEMBERSHIP FEES

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

## AWARDS

GSGTP recognizes pullers (members and non-members alike) by offering awards to winners in each class. The dollar amount of the award varies by how many tractors pull in the class.

### 4 OR MORE TRACTORS PER CLASS

- 1st Place: \$50
- 2nd Place: \$35
- 3rd Place: \$25

### 3 OR LESS TRACTORS PER CLASS

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

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## **ELIGIBILITY**

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- A. Contest is open to two wheel drive, rear wheel drive and rubber-tired tractors. No recapped tires, no dual wheels, chains, studs, or paddle tires are permitted.
- 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. Stock and Stock Altered, the minimum age is 6 yrs old AND they must be able to control the tractor, for Sports Stock, Pro Stock, Sportsman Modified and Super Modified classes the minimum age is 12 years old AND they must be able to control the tractor. The 1400#, 1700# and 1800# the minimum age is 16 AND they must be able to control the tractor.
- C. All vehicles are subject to safety, carburetor, fuel, and engine (cubic inch, camshaft, valve, etc.) checks by officials for compliance with GSGTP rules. Passing of safety inspection, shall be required at each GSGTP sanctioned event, prior to allowing the vehicle to compete.
- D. Any competitor refusing to have their vehicle inspected for eligibility shall not be allowed to enter and/or pull in the class(es) in question until legality is established.
- E. All drivers should be clean and neatly attired. Tractors should be clean and painted.
- F. It is mandatory that all drivers attend any driver meetings that may be held by the promoter and/or GSGTP officials. At the discretion of the GSGTP official, a driver who does not attend a driver meeting may be disallowed to compete during the accompanying session of pulling.
- G. No portion of tractor may interfere with the hitch of the sled during the pull. Chain and kill switch cable must be easily hookable without interference. Provided that they cause none of the previously mentioned interference, weight bracket/weights may extend a maximum of 6" behind the rear of the rear tire.
- H. No vehicle may exceed 6' in width, nor shall any portion extend more than 8' in front of center of the rear axle.
- I. Judgment calls by event officials are final and non-appealable.
- J. Engine may not be used as a primary support structure for the vehicle. Engine may not be used as part of frame.
- K. Front tires must track within the tread of the rear tires.

## **II EVENT RULES AND CONSIDERATIONS**

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### **II.A ENTRY**

1. Scratching from a class previous to its start shall constitute a refund of entry fee.
2. Scratching from a class after it has begun shall not constitute a refund.
3. Pulling position will be determined by a random drawing at the time of contest entry.

### **II.B VEHICLE OPERATIONS**

1. All vehicles must be operated in a safe manner at all times. Vehicles are limited to one rider. This is to include tow and maintenance vehicles.
2. Driver will remain in seat for duration of pull attempt.
3. During active competition, driver will have at least one hand on the steering wheel. No hand may grasp edge of fender for duration of pull attempt.
4. Flagman will stop any pull attempt considered unsafe.
5. Driver must be on seat at all times while engine is running.

### **II.C CLOTHING**

1. Drivers of all vehicles must wear DOT approved or SNELL rated helmets with chin straps fastened. GSGTP recommends the use of eye protection.
2. Drivers of vehicles running fuel other than gas, 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 underwear, head sock, and gloves not required for any class, however, GSGTP recommends them for use with any non-Stock competition vehicle.
4. Fire resistant driver's shoes required to be worn while competing on any vehicle that has a driver protection cage. GSGTP recommends them for use with any non-Stock competition vehicle.
5. Drivers of Stock and Stock Altered vehicles must wear a minimum of long pants, shirt and closed-toe shoes or boots. GSGTP recommends the use of SFI rating 3-2A/1 clothing for all competitors.
6. If a driver of a Stock or Stock Altered vehicle is wearing a jacket, it must be closed.

### **II.D WEIGHTS/WEIGH-IN**

1. All vehicles must have stationary weight brackets. No weight in either seat or hook point. 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, have sufficient fuel, oil and water if applicable 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. At the discretion of track officials, an allowance may be given for an imperfect scale, however, there will be no leniency on the accepted weight.
3. Neither weights nor weight brackets are to be used as bumpers.

### **II.E 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. 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.
4. A weight transfer sled which conforms to the rules set forth by WPI/GSGTP and/ or NASOA will be utilized in competition.
5. 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.F CONTEST PROCEDURES**

1. Contestants must pull in the position drawn. In case of mechanical breakage which has been confirmed by a track official, contestant may drop to last position. If breakage is not evident, puller may drop 6 positions - this will constitute the puller's first attempt to pull and therefore will only have one remaining attempt to compete. From the moment that both track and sled are prepared for competition, the puller has 3 minutes to hook and make his/her attempt to pull.
2. Each driver has the right to have the sled spotted to a particular location on the starting line. The driver or assigned crew member is responsible to clearly request the location before the sled is returned to the starting line. In the case of a second attempt, a second location may be requested. Entire sled must be within the chalk lines at the start of pull attempt. No official pull may be started beyond the starting

line nor in back of the starting line. All sleds must be started in gear and with front of sled even with 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.
4. On any re-pull caused by contest malfunction, the competitor may either re-hook immediately or drop 6 positions.
5. Competitor will be able to drop to last if breakage occurs on his/her first attempt and he/she has let off the throttle previous to crossing the 75 ft. line. Puller will be eligible for 1 more attempt.
6. Any disqualification on first attempt bars a second attempt (see test puller). Should the class be restarted, the competitor disqualified (during the course of competition) will be allowed to re-pull in the position drawn.
7. If a class is restarted, all competitors having pulled previously will (in descending order) have the same options as the number one or test puller (see test puller). In the case of a restart, it is the competitor's responsibility to alert the track officials of his/her decision.
8. If the last competitor in the class has difficulties, this puller will have 6 minutes to hook to the sled and make their first attempt to pull.
9. If a vehicle is legal when hooked to a sled and breakage occurs while under the green flag, the pull will be measured.
10. All vehicles must be in neutral/park while being hitched and unhitched to/from sled.
11. All pulls must start with a tight chain.

## **II.C 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 immediately hook again for another potential two attempts or
  - c. refuse their distance and pull again in the sixth position. NOTE: Sixth position is defined as the position immediately following the next 5 competitors and their attempts.

## GOPHER STATE GARDEN TRACTOR PULLERS (GSGTP)

3. If the test puller has mechanical problems during his/her test pull (before first official pull), the track official may grant the competitor the option of dropping to sixth position or to last position.
4. Only the test puller and only on his/her test pull, will the competitor have the option of dropping an out of bounds disqualification.
5. If a class is restarted, all competitors having pulled previously will (in descending order) have the same options as the number one or test puller.
6. 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 drop six positions.

### **II.H PULL-OFF**

1. A "floating finish line" may be used at the discretion of the head official and the sled operator in a pull-off situation only. The added distance shall be 10' maximum. Extended boundaries must be clearly marked. Competitors must be informed of floating finish line prior to the pull-off. This is an option and is not required at any event.
2. Order of pull-off will be in the order which the vehicles made full pulls (or tied distances).
3. In pull-off situations, the competitor does not have the option of dropping six positions, with the only exceptions being: if the pull-off is not run on the same track, or with the same sled, or on the same day, or contest malfunction. A rain delay will constitute a judgment call on the part of the GSGTP official, in regards to the degree in which the track has changed.
4. If a pull-off is not completed because of rain, curfew etc., purse monies and points for the places involved will be divided evenly among all those qualified for the pull-off.
5. In the case of a second pull-off, if all competitors qualified wish not to hook again, the points and purse for the places involved will be divided evenly.
6. Pullers eligible for a pull-off (who have no substantial proof of being broken), do not make an honest attempt to pull, he/she shall receive the same points as the top vehicle that did not qualify for the pull-off.

### **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. Any class canceled after 2/3 of the scheduled entries have pulled shall be considered a completed class for establishing if 1/2 of the classes of a session have run.
3. Purse money will be paid to those classes that are completed according to the results for those who have hooked. Those who did not hook in the class will share any remaining purse equally. Purse money for classes that do not compete will be divided equally at the time of cancellation.
4. If less than 1/2 of the session has been completed and the promoter does not refund the gate, admission the promoter shall pay purse to those entered in the canceled classes on the same formula described in rule #3 above.
5. If less than 1/2 of the session has been completed and the promoter does refund gate, purse will be paid in completed classes only. In classes where 2/3 of those entered have pulled, the purse for that class shall be paid only to those who have hooked according to results. Those who did not hook will receive a refund of entry fees. For classes not started or not 2/3 completed, competitors shall receive a refund of paid entry fees.
6. 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 only inclement weather points (15 points to replace hook points).
7. The head official, 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.
8. If a promoter adds (GSGTP approved) unscheduled classes, including inclement weather classes, to those already scheduled, the unscheduled classes will follow the scheduled classes. Exception: elimination rounds - due to the number of entries in a scheduled class.
9. If a rained out class is rescheduled on a date other than the originally scheduled pull dates, points will be given accordingly.
10. If a session is canceled more than 24 hours prior to the start time, no points will be given for that session.
11. If a session is canceled prior to the start time and the promoter retains no ticket revenue, competitors will receive a refund of paid entry fees, but no other financial compensation.
12. Any class not completed for any reason will be treated as a rained out class.

### III CAUSES FOR DISQUALIFICATION (DQ)

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1. Decisions of the event officials are final. Arguing with event officials could result in event disqualification or suspension. Upon second occurrence, membership can be revoked for one year from date of second occurrence. NOTE: WPI/GSGTP office will review each of these cases, and dependent upon severity, may hand out fines and/or suspensions.
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. Delays of contest will result in disqualification.
4. Unsportsmanlike conduct will result in disqualification.
5. Using edge of fender as a grasp point to obtain "leaning leverage," will result in disqualification. Sturdy handles may be installed on fenders for this purpose.
6. 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.
7. Depositing of any equipment onto the track during the course of competition (breakage excluded) will result in disqualification.
8. 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.
9. Any contestant attempting to leave under the red flag will be disqualified.
10. Any loss of ballast weight during the course of competition will result in disqualification.
11. Failure to have all safety equipment in place (including driver suit, helmet, etc.).
12. Deliberate attempt to cause slack in the chain while under the green flag, is reason for disqualification.
13. 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, a puller and or vehicle may be placed on temporary suspension. Possible causes include, but are not limited to arguing with event officials, fighting, alcohol or drug abuse during an event, illegal vehicle advantages, unsportsmanlike conduct, unsafe behavior, etc.
2. Suspension can range from 1 to 5 pulls within a 350 mile range of puller's home address.

## **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.
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 \$25 for the first item, \$10 for each additional item in question. 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.

## **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 WPI/ 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**

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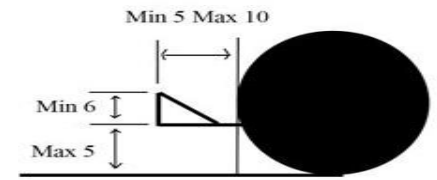
NOTE: Compact Diesel and Mini Rod vehicles, (including 4-cylinders) must also comply with additional or overriding rules in section VII, General Rules – Mini Rod / Compact Diesel Tractor.

- 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.

**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.

**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.

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### J. Fuel

- J1. Alcohol (Methanol): It is a liquid with a mild odor at ambient temperatures. It is sold in two US Federal Grades: A and AA. Note: Methanol is tested and certified at GSGTP events through the application of various methods of chemical analysis as considered appropriate by Fuel Check personnel. Any deviation from these standards in the fuel sample will result in disqualification.
  - J1.a Each grade is acceptable for use in GSGTP competition.
  - J1.b Maximum specific gravity for GSGTP competition: .7928.
- J2. Gasoline: Gasoline is a mixture of hydrocarbons. It is a good electrical insulator, which is called dielectric. Its relative effectiveness as an insulator is represented by its "Dielectric Constant" (DC). The average DC for the hydrocarbons that comprise gasoline is 2.025. This is defined as a reading of 0 with the GSGTP Fuel Check meter. To compensate for possible temperature differences of gasoline, which can cause slight variations in the DC, the maximum acceptable meter reading is +5, with 0 as the reference reading. A gasoline that has a DC reading that is greater than 2.3 will cause the meter reading to be outside this range. The addition of compounds containing nitrogen and/or oxygen may produce a mixture with a DC reading that is greater than 2.3. Most gasoline will meet these criteria. It is recommended that unknown gas be checked before use in competition.
- J3. Diesel Fuel: Diesel fuel is defined by the GSGTP as a pure hydrocarbon. The GSGTP will evaluate diesel fuel using only the dielectric constant value. That value shall be determined by the GSGTP fuel check meter only. The GSGTP fuel check meter shall use only Cyclohexane to establish the zero reference point for determining all diesel fuel dielectric constant values. Diesel fuel to be used in GSGTP competition shall have a dielectric value of no greater than 4.9, nor a value of no less than 3.1. The use of additives containing oxygen, such as nitromethane, propylene oxide, dioxin, MTBE alcohol, or nitrous oxide, are strictly prohibited. These additives, and others of oxygen-bearing family, will significantly change the dielectric constant value of any diesel fuel. Diesel fuel with dielectric constant values that fall outside the GSGTP standards will not be allowed for use in competition.
- 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.
    - M1.b Diesel system shall be deemed acceptable if it at least prevents the building of boost.
  - M2. Kill switch shall be located at the rear of the vehicle in a position that will allow for easy attachment/detachment. The switch must be located 14" (+or - 2 in.) above hook point and within 6" either direction of center.
  - M3. Break-away kill switches must have a minimum 1 1/2 in. diameter solid ring (ring no less than 1/8 in. cross section thickness) attached to them.
  - M4. Spiral type rings must be welded at each end to make ring solid. The cable from the sled must be attached to this ring.
  - M5. Ring attaching portion of kill switch and mounting bracket(s) must be able to withstand 32 pounds of pull when switch is pulled. All single pin breakaway switches must be able to pivot left or right of center.
  - M6. Kill switch ring must be secured with a single nylon tie wrap (1/8 in.). The tie wrap must be broken for a re-pull. Competitor will be responsible for replacing the kill switch mechanism and securing the tie wrap once kill switch is checked by tech official.
  - M7. If vehicle has a kill switch or air shutoff located in a legal position, and during the pull attempt it is pulled and the nylon strap is broken and presiding official inspects and finds switch capable of operating properly under normal conditions, the vehicle will be allowed to re-pull immediately or drop six positions. The decision to drop must be made before the vehicle leaves the track. It is the competitor's responsibility to see that the switch is checked by the official before his vehicle leaves the track.

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- 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. NOTE: The only exception to the steel flywheel rule shall be in the Sportsman Mini Rod and Compact Diesel divisions. As it is difficult to purchase mass production steel flywheels for some of the 4cyl. engines involved, cast iron flywheels may be used if they are accompanied by additional shielding that is outlined in section VII, item G.
- O. Tow Hitch: A front mounted tow hitch on a non-Mini Rod/Compact Diesel competition vehicle must have a minimum 2 1/2" opening. Tow hitch must be built from a non-cast material. Minimum thickness: 1/8". Maximum thickness: 1/2". Maximum size: 4" x 4". Tow hitch will not be considered part of vehicle total overall length.
- P. Ignition Points: Any vehicle ignition system utilizing points must have a plastic or metal cover over the points to inhibit the chance of fire.
- Q. Aux. Starters: Starter carts shall incorporate a cover over the battery terminals to prevent accidental arcing.
- R. Breather Tubes: Breather tubes must exit forward of the rear tires. Breather tubes must be vented below the head of that engine and extend down to the engine pan.
- S. Superchargers - All GSGTP Divisions
  - S1. Must utilize aluminum studs to mount the supercharger to the intake manifold.
  - S2. Must utilize a supercharger restraint system.
    - S2.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.
    - S2.b The top attachment bracket to be sandwiched between the lower surface of the injector body and the upper surface of the supercharger case.
    - S2.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.
- T. 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.
- U. Shielding



NOTE: Compact Diesel and Sportsman Mini Rod (including 4-cyl.) must also comply to additional or overriding rules in section VII.

- U1. Cast Blocks: Must have scatter shield opposite the camshaft side of the motor.
  - U1.a It must be of a minimum 1/16" steel or .090" aluminum.
  - U1.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.
- U2. 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.
- U3. 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.
- U4. 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.
- U5. Snowmobile Clutches: Snowmobile type sheaves (both primary and second ary) must be shielded radially, 360 degrees with a 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.
- U6. 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.
- U7. 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.
- U8. 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.
- U9. 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.
- U10. 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.
- U11. 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 tailshaft housing, covering top and sides extending 2" below the lowest point of the transmission OR covered with scatter blanket.

- U12. 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".
- U13. 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.
- U14. 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.
- U15. Intercoolers: Pressurized intercoolers must be shrouded 360 degrees with a minimum 1/16" (.060") steel or equivalent aluminum, except for inlet and exhaust.
- U16. 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. Required on all overhead valve engines in Stock Altered or Sport Stock classes. Restraint(s) to be built from 1/4" steel or 3/8" aluminum and attached to cylinder block or chassis below base of cylinder in at least 2 points on opposite sides of cylinder. Devise or method used to fasten restraint must be capable of retaining cylinder assembly in its normal location if separated from block. Restraint not required on after-market ductile iron or fabricated billet blocks and jugs.
- V. Aviation, Industrial, Military, Commercial, Marine, and Diesel Engines: No engine flywheel, torque converter, or clutch assembly may rotate faster than the crankshaft speed.
- W. 2 hooks per tractor per clubs discretion.

## **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.

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### 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. Tow Hitch: all vehicles are required to have a tow hitch on the front of their vehicles.

- E1. The hitch can extend no more than 6" beyond the foremost portion of the vehicle.
- E2. The tow hitch will not be included when measuring the length of the vehicle.
- E3. The hitch must have a 2 1/2" hole, preferably positioned horizontally and strong enough to push or pull the vehicle at its heaviest weight.

### F. Damper: A bolt is required in the crankshaft to retain damper assembly.

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

- G1. The use of torque converters and automatic transmissions will be permitted.

- G2.** 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.
- G3.** No gray cast metal allowed in any flywheel or clutch components. All vehicles using a clutch will be required to have steel billet or aluminum billet flywheel with the following mechanical properties: (a) tensile strength of 60,000 psi (b) yield strength of 40,000 psi. Exception: Due to the inability to obtain production billet flywheels for many 4-cylinder combinations, it will be acceptable to use a stock flywheel for such a combination, IF shrouded 360 degrees from the rear of the engine block to the rear of the clutch area. Shield to be made from a minimum 1/4-inch steel and mounted no more than 1/2-inch from bellhousing and covered with scatter blanket as described in [rule no. 2] in this section.
- G4.** Lenco type planetary transmissions (excluding reverser) must be covered with a scatter blanket as described in rule no. 2 in this section.
- G5.** All vehicles using an automatic transmission must be equipped with a positive reverse-gear lockout.
- G6.** Bellhousing liners are very highly recommended.
- G7.** 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.
- G8.** 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

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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.

**G9.** No chemical milling allowed.

**G10.** 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.

**G11.** 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.

**G12.** There must be five bolts used to secure the transmission to the bellhousing with a 3/8" minimum diameter.

**G13.** All bell housings must be flush on the inside surface.

**G14.** 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.

**G15.** Titanium approved for bellhousing.

## IX CLASSES

This section provides class-specific rules. Except where noted, rules stated in a class-specific section may override those stated in General Rules (pg. 17) or General Rules – Mini Rod / Compact Diesel Tractor (pg. 17).

The table below is a summary of a minimal set of considerations across classes. It does not replace the need to read and review other class-specific rules.

CLASS	MAX. TIRE SIZE	WEIGHT
Off the Lawn	Dirt: 24 x 12 x 12	900
	Tar: 12 x 12 x 12	1100
Stock	26 x 12 x 12	950
		1050
Stock Altered	26 x 12 x 12	1000
		1050
Sport Stock	26 x 12 x 12	1000
		1050
Pro Stock / Super Stock	26 x 12 x 12	950
		1050
Sportsman Modified	26 x 12 x 12	1100 ( > 801CC)
		1150 ( < 801CC)
Super Modified	Dirt: 26 x 12 x 12	1150
	Tar: 12" Wide, 84" circumference	1250
1400# Open Unlimited	Dirt: 26 x 12 x 12	1400
	Tar: 12" Wide, 84" circumference	
1800# Economy V8 Mini Rod	31 x 15.5 x 15	1800
1900# Mini Rod	34 x 18 x 15	1900

## **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.
- 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. Tractor must be governed to pull
- F. Max tire size allowed is 12x12x24. Turf tires only, bar lug tires must go to stock class and are not allowed on asphalt. Gator tires and 12X12X26 must go to stock class.
- G. Engine RPM must be governor controlled. Maximum rpm will be rated at the maximum horsepower when multiple ratings given. Horse Power Rating:
  - G1. 14 hp and under: 4,000 rpm
  - G2. 16 hp is 3800 rpm
  - G3. 18 h.p. 3600 rpm 20 hp and up is 3400 rpm
  - G4. 23 hp is the max allowed in the class
- H. No fabricated hitches over 11" If you have a stock hitch and the height is higher than 11", than a clevis will be used.
- I. 2 hooks per tractor
- J. No cutting or syphoning on tires allowed.

## **IX.C STOCK**

Winner for both the 950# and 1050# class are required to go back to the scale at the end of the class to verify their weight, hitch height and also to be tacked by 2nd and 3rd place pullers.

- A. Factory stock, commercially available, garden tractor with cast block engine. Engine, chassis, and sheet metal must be from a factory produced garden tractor and maintain stock appearance.
- 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 in Stock class rules.
- C. Modifications to clutch, driveline, and transaxle assembly are allowed to prevent breakage. Gear ratio modifications are also allowed.
- D. Use of locked rear-ends not allowed.



- E. No welding or modifying of block or cylinder head for performance reasons. Cylinder head must maintain stock combustion chamber lip at head gasket.
- F. Maximum bore size: .030 overbore from manufacturer's standard specification. Piston must be flush or below deck of block.
- G. No fabricated intake manifolds, carburetor stand-offs, Donuts, or 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 for engine model, horsepower, and configuration.
- I. Engine RPM must be governor controlled. Maximum rpm will be rated at the maximum horsepower when multiple ratings given. 16 hp and under is 4000 rpm, 18 hp 3600 rpm 20 hp and up is 3400 rpm. 23 hp is the max allowed in the class.
- J. RPM's will be off the crank shaft. 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. No port altering, grinding, or polishing allowed. Ports must remain as cast.
- M. Billet steel or billet aluminum flywheel allowed. No welding or machining of stock cast flywheels.
- N. Must be equipped with all safety devices including rear stabilizer/bumper bars, kill switch, deadman throttle, and fire extinguisher.
- O. Maximum hitch height: 13 inches.
- P. Maximum tire size: 26x12x12. Larger tire allowed if factory available on that model tractor.
- Q. All factory shielding or equivalent must be in place.
- R. Chassis may not be lengthened or altered to accept non-original engine. Must maintain original wheel base.
- S. Gasoline or diesel fuel only.
- T. Maximum distance from furthest point forward from center of rear axle: 96 in.
- U. Maximum combined weight of vehicle and driver: 1050 lbs.
- V. Promoter may separate class by total weight, maximum horsepower, or age limit.
- W. No Cepex, pitbull, Vogel or lawntech tires.
- X. All tractors must be equipped with a starter or starting method on tractor. No starter carts.
- Y. No frame modifications allowed with the exception of a notch for flywheel per club discretion.
- Z. Any commercially available motor replacement is to fit without any modifications

## **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. No aftermarket/ recasts blocks
- C. No welding or externally visible modifications to block or cylinder head.
- D. Maximum bore size: .040 over manufacturer's standard specification or max cubic inch 36.5.
- E. Stock crankshaft stroke must be maintained.
- F. Stand Offs no longer than 1".
- G. Carburetor must be stock appearing for engine manufacturer. Maximum air restricting venturi diameter: 1.0" for alcohol and 1.2" for gas. Air flow must be controlled by throttle shaft actuated butterfly in stock location. No air may enter intake after 1.0 inch restriction.
- H. Maximum camshaft regrind spec:.330 inch lift at zero lash. Maximum valve diameter: 1.380 inches.
- I. Stock appearing hood and grill required. May switch to another factory sheet metal, but must maintain stock appearance.
- J. Billet steel or aluminum flywheels required. No rpm limit.
- K. Must be equipped with all safety devices including rear stabilizer/bumper bars, kill switch, deadman throttle, and fire extinguisher.
- L. Maximum hitch height:13 inches.
- M. Maximum tire size: 26 x 12.00 x 12.
- N. Engine and driven components must be shielded per requirements in section VI, item U for this class.
- O. Stock block engines bored .040 over manufacturer's standard specification and all OHV engines require a cylinder head restraint devise. Refer to section VI, item U for entire rule.
- P. Maximum wheelbase: 56 inches. Any garden tractor chassis having a stock wheelbase of 56 inches or longer must retain the stock wheelbase. Chassis may be altered to accept non-original engine, but must remain at stock length.
- Q. Gasoline only.
- R. Maximum distance from center or rear axle to furthest point forward: 96 inches.
- S. Maximum combined weight of vehicle and driver: 1000lbs and 1050 lbs.

## IX.E SPORT STOCK

### A. Chassis Rules/Flat Head Engines

- A1. One or two cylinder, flat head, air cooled, naturally aspirated, cast block, four cycle engine. Engine block, transaxle, and chassis must be OEM available in a commercial garden tractor. No aftermarket / recasts blocks
- A2. Engine components must remain in original position. Original measurement from center of crankshaft to top deck of block must be maintained.
- A3. Stock crankshaft stroke must be maintained.
- A4. Maximum bore size: .060 over manufacturer's standard specification.
- A5. Maximum total engine displacement: 45 cu.in.
- A6. 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.
- A7. Billet steel or aluminum flywheel and/or starter pulley required.
- A8. Maximum tire size: 26x 12.00 x 12.
- A9. 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.
- A10. Maximum wheel base: 56 inches. Any garden tractor chassis having a stock wheelbase of 56 inches or longer must retain stock wheelbase.
- A11. Maximum distance from center of rear axle to farthest point forward: 96 inches.
- A12. Engine and driven components must be shielded per requirements in section VI, item U for this class.
- A13. Stock block engines bored .040 and over manufacturer's standard specification and all OHV engines require a cylinder head restraint device. Refer to IX. General Rules, section VI, item U for entire rule.
- A14. Tractor must have a stock appearing hood and grill (nose piece). Switching to another factory sheet metal is permissible.
- A15. Gasoline or alcohol fuel only.
- A16. Maximum combined weight of tractor and driver: 1050 lbs.

### B. Sport Stock OHV Engines - Rated 18 HP and below

- B1. One or two cylinder, naturally aspirated, cast block engine. Engine must be available in an OEM produced garden tractor.

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- B2. Must retain stock cylinder head and valves for engine configuration and horsepower rating.
- B3. Maximum cylinder bore size: .030 over manufacturer's standard specification.
- B4. Maximum total engine displacement: 38.5 cubic inches.
- B5. Stock crankshaft stroke must be maintained. Piston travel must be flush or below deck of block.
- B6. All other chassis, engine, and safety rules listed for the Sport Stock class must be followed.

## **IX.F** PRO STOCK / SUPER STOCK

- 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 [Shielding] for this class.
- I. Stock block engines bored .040 and over manufacturer's standard specification require a cylinder head restraint device. Refer to section VI, item U for entire rule.
- J. Maximum tire size: 26x12.00x12.
- 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.
- P. Maximum weight of vehicle and driver: 50.5 cu. in. Pro Stock or Super Stock: 1050 lbs., 30.5 cu. in. Super Stock: 950 lbs.

## **IX.G SPORTSMAN MODIFIED**

- A. Weight of vehicle and driver: 801CC and over 1100 lbs. 800CC and under 1150 lbs.
- B. Must be naturally aspirated, unless diesel. Diesel limited to 2 turbos.
- C. Maximum tire size: 12" wide rim and an 84" Max circumference. This is for asphalt only. Dirt tires max size is 26x12x12.
- D. Gasoline, diesel, or alcohol fuels.

## **IX.H SUPER MODIFIED**

- 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: 12" wide rim with a max of 84" circumference. This is for Asphalt tires only. Dirt tires the max size is 26x12x12
- D. Gasoline, diesel, or alcohol fuels.
- E. Maximum weight of vehicle and driver: 1150, 1250 lbs.
- F. Turbine Engines: All Super Modified rules apply for chassis, tire size, and maximum combined weight limit with the following turbine engine limits.
  - F1. Gas turbine engine with a factory horsepower rating of 320 hp. or less.
  - F2. Turbine engine must be a production built engine, governor controlled not to exceed factory rpm and temperature limits.
  - F3. 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.
  - F4. Turbine air intakes must be screened with metal screen that has openings no larger than 3/16".
  - F5. 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.
  - F6. 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.

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- F7. 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.
- F8. Turbine engine must be equipped with two separate overspeed protection devices for power turbine wheel(s). Turbine engine overspeed shutdown required.
- F9. Tractors powered with a turbine engine must have a stock appearing garden tractor hood and grill, (nose piece).
- F10. All other chassis, engine, and safety rules listed for the Super Modified class must be followed.
- G. All turbine engines must be inspected and certified by GSGTP Technical Services prior to registering or competing at a sanctioned event.

### **IX.I 1400# OPEN UNLIMITED**

- A. Max tire size is 26x12x12 for Dirt tires. Asphalt tire the max size is 12" rim with a circumference of 84"
- B. Must follow all safety rules in general rules section.
- C. Any new tractors must have 1 pole loop role bar, current tractors will be grandfathered in.

### **IX.J 1800# ECONOMY V8 MINI ROD**

- A. Any engine with less than 510 cubic inch.
- B. One carburetor only. Naturally aspirated. Exhaust must be straight up. Fuel must be gas only, no alcohol or nitrous.
- C. Outside size no wider than 6 ft and no longer than 8 ft including weights from center of rear axle to front of tractor. Must have fenders. Two front and two rear engine mounts and one transmission mount.
- D. Shielding: Harmonic balancers, belts and fans must be covered 360 degrees with 1/8 inch steel or ¼-inch aluminum. Engine shields, from front to back, with 1/8 inch steel or ¼ inch aluminum.
- E. Automatic transmissions, drive shaft hoops, and clutch bell housings. Use Sema approved blanket or shielded with 1/8-inch steel or ¼ inch aluminum.
- F. Tire size: 15 X 15.5 X 31
- G. Roll bars/cage 1.25" minimum tubing is required. Lap belt is also required.
- H. Garden tractor appearing sheet metal (hood and grill) is preferred.

**IX.K 1900# MINI ROD**

- A. 1800 Mini Rod: 8 cylinders, naturally aspirated, up to 510 cubic inch.
- B. May use steel or aluminum flywheels with any type or number of carburetors. Exhaust must be straight up.
- C. Fuel may be gas or alcohol, no nitrous. All forms of nitro methane are illegal.
- D. Outside size no wider than 6 ft and no longer than 8 ft including weights from center of rear axle to front of tractor. Tractor must have fenders. Two front and two rear engine mounts and one transmission mount.
- E. Shielding: Harmonic balancers, belts and fans must be covered 360 degrees with 1/8-inch steel or 1/4-inch aluminum. Use engine shields, from front to back, with 1/8-inch steel or 1/4 inch aluminum.
- F. Automatic transmissions, drive shaft hoops, and clutch bell housings, Use Sema approved blanket or shielded with 1/8 inch steel or 1/4 inch aluminum.
- G. Maximum tire size: 34x15x18
- H. Roll bars/cage 1.25" minimum tubing is required. Lap belt is also required.
- I. Garden tractor appearing sheet metal (hood and grill) is preferred.