

## **5500 V-8 Hot Rods**

### **Rules in place 2019 - 2020 - 2021 Seasons**

**PREFACE:** The pulling tractor must appear OEM stock to the eye, rims are excluded. The only exceptions are V-8 engine, air cleaner through the hood, and relocated aftermarket gas tank forward of front grill of tractor.

#### **1. Drivers**

- A. All contestants enter at their own risk.
- B. All drivers must be at least 16 years old, with legal proof in their possession.
- C. Each tractor will be allowed one hook per class.
- D. All General Rules apply.

#### **2. Tractors**

- A. They must be naturally aspirated. No turbos or blowers, tunnel rams allowed. (See 2 J.)
- B. Must be a 1965 or older, and of a North American Brand Name, including full model run out.
- C. Must be two-wheel drive, Radial rear tires are allowed, no duals, chains, or steel wheels.
- D. Tubular side frame allowed, must be fully covered (completely skinned over) and look stock appearing.
- E. If your tractor does not have a frame past the bell housing and is considered a safety issue by the TTPA Board, you must get approval to changes. You must submit a drawing of the change you want, and you must have full board approval. If approved, modifications & additional material will be constructed to look as if it was factory built. It must be reinforced for safety and have as normal to stock appearance as possible. Board approved modified frames must be rigid and cannot flex. NOTE: (You MUST have full board approval to change or modify any part of your frame). Period!
- F. Frame cannot be lengthened or shortened beyond what was OEM factory available. The tractor's overall length cannot be altered, and this includes the wheelbase, housing and or frame rails, etc. (SEE 2 E).
- G. May pull in any gear. Torque amplifiers may be used.
- H. Transmission: Transmission may have aftermarket gears however; they must be OEM stock appearing!
- I. Rear End: Must use OEM. Example; Farmall M may use ring & pinion out of a W-6, Oliver has several different ring & pinion gears for 88/Super 88 model. No after Market Ring & Pinions can be made or used.
- J. No forced air, fans, cowl induction or any air injection allowed. Air Filter may protrude through the hood and be NO HIGHER THAN 8" from the point of protrusion through the hood to the top of the filter, or filter lid.
- K. Air filters are allowed through top or side of hood.
- L. OEM (factory location / original tractor gas tank) are not allowed for use. Must be equipped with aftermarket aluminum gas tank, located and fastened forward of the tractor's front grill.

#### **3. Fuel**

- A. Gasoline only. No Alcohol, Funny Fuel / Oxygenated fuels, Nitromethane, Nitrous, Diesel, or LP.
- B. Gasoline ~ (V-8 Hot Rods) 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 NTPA Fuel Check meter. To compensate for possible temperature differences of gasoline, which can cause slight variations in the D.C., 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 this criteria. Note: *Chemical spot test will be used when applicable.*

C. Fuel Rule Violation:

- 1<sup>st</sup> offense - Verbal warning (Lifetime)
- 2<sup>nd</sup> offense - General Rule # 1 - A applies

4. Engines:

- A. Any Combination of Bore & Stroke is allowed to meet 410 Maximum Cubic Inch!
- B. Engines will be allowed to have 410 cubic inches or less, **with 1.5% for rehones.** Only the listed below OEM engines will be allowed.
  - 1) All American made small blocks that are industry accepted by the name small blocks are legal.
  - 2) 400 Pontiac std. or smaller bore, and std. 3.75 stroke crank.
  - 3) 389 Pontiac with the std. 3.75 crank – may be bored to attain 410 max cubic inches.
  - 4) Ford 351 and 400 M are allowed.
  - 5) 360 FE Mopar
  - 6) Merlin & Dart & ETC aftermarket blocks are allowed
  - 7) Small block Hemi's allowed.
  - 8) Chrysler 383
  - 9) LS cast iron block with OEM aluminum heads for cast iron block.
- C. Aftermarket heads allowed. **Cast Aluminum heads allowed. (Steel aftermarket heads only.)**
- D. No aluminum blocks.
- E. Canted valve heads allowed.
- F. No Big Blocks are allowed, including any Chrysler Hemi's
- G. Exhaust system –
  - 1) All headers must discharge vertically up, **1 foot past the hood.**
  - 2) ~~Header maximums; primary 1 7/8 (1.875) x 3 1/2 inch collector (O.D. measurement)~~
  - 3) ~~Collector headers only.~~
- H. Engine RPM –
  - 1) Tractor engines will have a 7000 maximum RPM limit.
  - 2) Tractors may use any make of RPM limiter.
  - 3) Boxes have to be in plain view of officials.
  - 4) Boxes may not be tampered / modified. Rivets must be original. If you drill a rivet out, you will have to buy a new box. If factory sealant / sticker is broken, a new box is mandatory.
  - 5) Only the wiring per MSD's wiring diagram will be allowed, and must be plainly visible. No other wires may be attached to any of the MSD factory wires other than as specified per MSD's wiring diagram.

5. Carburetors

- A. Carburetor: Any 750 CFM style Maximum or 4150 HP series allowed. Pro Form, Quick Fuel or Holley aftermarket centers are allowed. No milling, or modifications allowed. The carburetor must measure 1.400 at top, 1.700 at bottom, and .380 through booster. Carburetors will be tech checked by Tech Rep.

6. Tires / Rims; Front and Rear

- A. Rear – Maximum tire size is 18.4 x 38 bar lug farm type **(If someone wants to try 16.9 x 42 the class is ok with it).**
- B. Rear – May use any rim width rims – may be aluminum

7. Hitches

- A. Modified tractor rules for hitch apply.

- B. Hitch may be no higher than 20 inches.
- C. No closer than 18 inches from the center of the rear axle to hitching point.
- D. Drawbars must be rigid in all directions.
- E. All hitches must be rigid vertically. Hitch must be flat, and have a minimum of a 3" X 3 3/4" diameter hole. Note: (See General Rules).

## 8. Safety

- A. Working breakaway Kill Switch. Must shut down the ignition system and electric fuel pump.
  - B. Must have a minimum of a charged 2.5lb fire extinguisher. Fire extinguisher must be in arms reach of driver and visible to track official/tech.
  - C. All tractors must have side shields made of at least 1/8" steel or 1/4" aluminum covering from the bottom of the head to the bottom of the oil pan.
  - D. Tractor must have rigid seat with a vertical back support. No spring cushion.
  - E. Must have a minimum of 200 lb. of movable weight/ballast with driver in the seat.
  - F. Only electric fans may be used. No stock bladed fans may be used.
  - G. All drive couplings must be covered 360 degrees with a minimum of 1/4 inch thick steel, or 1/2 inch aluminum shielding.
  - H. Flywheel, Clutch, and or Flex Plate must be SFI approved. Must have an SFI approved bell housing/transmission safety blanket.
  - I. Driver must wear a full face DOT helmet, SFI fire suit, head sock, gloves, and shoes.
  - J. Wheelie bar pads must extend at least 4 inches behind the vertical edge of the back tires, on 5 inch pads, also must be able to support the weight of the tractor in the weight class.
  - K. All tractors must have fenders. The original fenders can be moved from stock location.
  - L. Driver must remain seated during the pull.
  - M. Driver must signal to track official that tractor is out of gear when hitching and unhitching from the sled.
  - N. Must have fully functional brakes that can stop the tractor under power.
  - O. All weights must be stationary and safely secured to the tractor. If anything should fall off the tractor while hooked to the sled, you will be disqualified (weights or parts).
    - 1) May use ratchet straps.
    - 2) Steel bars recommended
  - P. SFI Roll Cages are mandatory and must be built to SFI Specification. (See SFI Roll Cage Specification).
  - Q. Must have SFI approved neck brace. (Roll Cage padding is optional).
  - R. Seat must be racing style seat and have head rest. Note: (See roll cage SFI build spec sheet).
  - S. Must have 5 pt. harness with detachable steering wheel. (Added for 2009 season)
  - T. Recommended for 2009 and mandatory for 2010. All vehicles will complete an SFI Certification Form to be filled out by the driver with all SFI numbers to have on file in the TTPA Trailer pre-2010 season.
  - U. Must use a SFI harmonic balancer on the crankshaft.
  - V. No pressurized fuel tanks.
  - W. All throttles will use the Dead Man type – See General Rule # 25.
  - X. Foot Throttle must be (Push-Pull) with Toe Clip for pull back ability.
  - Y. Where automatic transmissions are used and have a clearance problem and can't put a blanket on, you can use a minimum of 1/4 steel properly fashioned and security anchored. It must cover from bell housing/motor face to tail housing bolts.
9. Weights must not exceed rearward beyond rear tires, vertical edge, and cannot be more than 11 feet from the center of the rear axle the furthest point forward.

## 10. Front Ends:

- A. Wide front ends only. Front tire centerline will track within the rear tires.
- B. May build homemade front axles.

11. All V-8 Hot Rod tractors must be equipped with a (clear lens & bulb) back-up light. This must function (activate) when the driver shifts into reverse, while the engine is running. This clear back-up light shall be mounted somewhere to the far rear of the tractor, and must be within 12" of center line of tractor.
12. All V -8 tractors must be equipped with a Neutral Switch that will only allow tractors to start when the clutch is fully compressed (disengaged) downward / in. Example: Your clutch shall be totally compressed as to activate the neutral switch to function. (Slipper Clutch: Shifter must activate neutral switch) Automatic Transmission: Switch must be on shifter.
13. All rules will be in place for 3 years, **post 2021 season.**

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## Revision Log ~

Rule revisions #9 and #10 dated 5-12-02

Revision Date: 10/14/04 revised & added (#2 C-F-G) (#4 B & D) (#8 H-S-T) (# 10) per class member review, and Approved by TTPA Board 11/20/04.

2007 - 2009 Rule Revisions as of 12/8/06; 2J, 4A-6, 4F-6, 4F-1, 4F-6, 8M – 12/8/06, Class Member's to change name of class to 5500 V-8 Hot Rod Class

2009 Revisions: 10/10/09

- Added to Rule 3 - Funny Fuel / Oxygenated fuels banned
- Added 2 - D -Tubular side frame allowed, must be fully covered (fully skinned over) and look stock appearing.
- Added 2 - K - air filters are allowed – top or side of hood OK.
- Added 2 - L Aftermarket gas tanks & location per Board. 11/21/09 – Safety Rule.
- Take out (delete) Mopar 383 and 400 as small blocks allowed.
- Added 4 - B - 4 Ford 351 and 400 M are allowed.
- Added 4- B -7 Small Block Hemi's allowed.
- Deleted 2008 Carburetor rules, rewrote to now Rule #5-A: Any 750 CFM style maximum or Etc. (See above complete rule).
- Deleted 6- B - Rear – No Triple cut tires allowed.
- Rule 7 - E - Deleted hitch diameter from 3.5 inch hole, to; 3" X 3 ¼. Diameter Hole.
- Rule 8- I - Added full face DOT helmet.
- Rule 8 - P Deleted NTPA Roll Cage Specification and added SFI Roll Cage Specification.
- Rule 8 – R Added Seat must be racing style seat and have head rest.
- Rule 8 - S -Added 5 pt. harness w/detachable steering wheel.
- Rule 8 – T - SFI Certification Forms must be on file pre 2010 pulling season.
- Rule 8 – Q - Must have neck brace. Padded cage optional.
- Added to Rule 8 - B Fire extinguisher must be in arms reach of driver and visible to track tech.
- Added to rule #11 Back-up light on rear of tractor must be a clear lens and bulb, must be within 12" of center line of tractor.
- New or Revised Rules for 2010 through 2012 - See 2009 revisions, or grey shaded areas.
- Board Approval ~ 1<sup>st</sup> Reading on 11/21/09 & 2<sup>nd</sup> Reading 01/29/10

2013 Revisions: 10/27/2012 ~

- Class voted to leave the rules as is for 3 years, post 2015 Pulling Season.
- Board Approved 10/27/2012 ~ 1<sup>st</sup> Reading & 11/17/2012 ~ 2<sup>nd</sup> Reading.

2015 Revisions ~ 10/17/2015

- Added Engines #8 Chrysler 383 & #9 ~ LS Cast Iron Block W/OEM Alum Heads For Cast Iron Block & D ~ Deleted or Heads & #G-1 ~ vertically up & #H-2 ~ Any make of RPM limiter, Deleted must, MSD product & Deleted #6 ~ RPM magnet
- Added Carburetors #5-A ~ Quick Fuel
- Class approved 10/17/2015 & Board Approved ~ 1<sup>st</sup> Reading 10/24/2015 & 2<sup>nd</sup> Reading 01/30/2016
- #13 ~ All Rules for 3 years post 2018.

2017 Revisions ~ 02/11/2017 Board Approved

- Revised ~ 02/11/2017 ~ Fuel Rule #3 - B & C

2019 Revisions ~ 10/20/2018 ~ Board Approved 1<sup>st</sup> Reading & 01/19/2019 2<sup>nd</sup> Reading ~

- Added #4-B ~ with 1.5% for rehones
- Added #4-C ~ Cast Aluminum Heads Allowed
- Added #4-G-1 ~ 1 foot past hood
- Deleted #4-2 & 3 ~ Header Maximum 1-7/8 x 3-1/2 & Collector headers only
- Added #6-A ~ if someone wants to try 16.9 x 42 class is ok
- Revised #13 ~ Rules for 3 years 2019 - 2021

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