

# Vermont V8 Minis

## Driver Eligibility:

1. General rules apply.
2. Driver must be 16 years of age or older. Those under 18 years of age must have written parental/guardian permission.
3. VTPA Minis follow the NTPA and ASTTQ rules and guidelines for safety, competition, chassis, engines, shielding, and safety unless otherwise stated in the following rules.

## Safety:

1. VTPA registered competitor driver must be in the seat at all times when vehicle is running or being started and must have complete control at all times.
2. Helmet: Full face Snell 90 rating or SFI rating 41.2. NO modifications or alterations of the helmet are allowed with the exception for safety modifications.
3. Head sock or helmet skirt: Single layer Nomax driving gloves, driving suit of SFI rating 3.2A-1 minimum. 360 degree neck collar SFI speck 3.3 or Hahn's device. Fire resistant shoes, NO leather boots. All protective clothing MUST be SFI approved.
4. Seat and driver restraint system must be securely fastened to roll cage independently mounted from chassis.
5. Roll cages to meet or exceed SFI rating 47.3.
6. Vehicle must have a quick release or swing away steering wheel.
7. Must have a neutral start switch. Automatics MUST be in park. SCS or Lenco type transmissions MUST be in neutral.
8. MUST have reverse light with a minimum one visible to driver and one at rear. Lights can be clear or have white lens.
9. Vehicles with on board batteries or electric fuel pumps MUST have a battery disconnect switch mounted at the front of tractor so that a track official can kill power in the event of an accident.
10. Vehicle MUST have a five point driver restraint system that is quick release and be securely fastened during competition. Failure to use restraint is grounds for disqualification.
11. Vehicle must have a 2½ pound B/C fire extinguisher or a 16 oz cold fire extinguisher, fully charged, with working gauge and in a convenient place reachable by operator.
12. Blankets: Automatic transmissions MUST be equipped with an SFI rated 4.1 blanket. The blanket must extend from rear of engine block to front of tail housing. It must be fastened forward securely with 2 straps on each side, one above and one below the crank shaft centerline. The blanket should have a 6" overlap. Straps must be 2"

wide, with not more than 1" spacing between each strap. The opening at the bottom of the transmission must be closed by steel plate, original steel plate is accepted. All Lenco type and planetary type transmissions, excluding reverser must have an SFI rated 4.1 blanket.

13. Fuels: Legal fuels are: Ethanol, Methanol, Water, Diesel, Aviation gas, Gasoline, or Propane gas. Oxygen carriers and combustion accelerators are PROHIBITED. Illegal fuels are Nitromethane, including nitrous oxide and propylene, as fuel or additive. NO pressurized fuels allowed, except in UL approved pressure tanks or fuel cells.
14. Clutches and cans must have current verification papers valid for two consecutive years.
15. Kill switches: Electric fuel pumps must be tied to safety kill switch.
16. Any competitor or crew member under the influence of an intoxicating agent, drug or having a measureable blood alcohol content during competition activities shall be considered under the influence and be barred from any further involvement with VTPA and may face fines and/or suspension.

### **Chassis:**

1. Tread width (footprint) not to exceed 72" or 6' measured at the widest point of tire touching the ground.
2. NO portion of tractor shall exceed 96" or 8' in length from center of rear wheels to farthest point forward on tractor (weights, tires, fuel tanks, and toe hooks).
3. Front skid plates MUST be one of two types. Type 1 – Center mounted, must be a minimum of 10" wide with rolled edge front and rear. Must be a minimum of 4" in length and securely mounted to front axle and/or frame. Must be on center and must equal in strength to frame rails and/or front end. Type 2 - In line with each frame rail (on both sides), equal in strength to frame rail material. Must be securely mounted and braced to chassis, minimum of 2" wide and 10" long with minimum of 2" curve on front of skid. BOTH TYPES MUST extend down a minimum of 2" to what it is attached to. BOTH TYPES MUST be able to support the weight of vehicle with a jack.
4. Drive line shielding for drive train, excluding transmissions or gear boxes, must be enclosed in 5/16" steel minimum or 3/8" aluminum round in shape. Inside diameter not to exceed 2" larger than outside diameter of largest drive train item. If U-joints are used in the drive shaft application, the shielding must be 5/16" steel or 3/8" aluminum with a 1/8" steel insert in the aluminum. Insert to be a minimum of 6" in width and centered over the joint.
5. Draw bars and hitching device to be one piece construction with a

minimum of 1" solid steel construction. NO hollow tubing allowed. The hook point is to have a minimum 2" and a maximum 2 ¼" round hole. Material around the hole to be a minimum 3/4" thick steel. Maximum height is 13" to the point of hook and measured from a flat level surface.

6. Tire size is limited to 18.4 x 16.1 with a maximum 143" circumference when mounted on an 18" rim and inflated to 10 psi. The ground patch is not to exceed 19" on original tread.
7. Wheelie bars: wheelie bars and hitch height same as NTPA specifications.

### **Engines-Class A:**

1. Automotive type engines. Only 2 valves and one spark plug per cylinder. Automotive engine is an engine available in a passenger vehicle. Maximum 8 cylinders, and/or replica of this engine that is able to swing and run a stock crank shaft.
  - a. Stock bore spacing must be maintained for OEM block that the engine is based on (i.e. Chevy, Ford, Dodge, etc)
2. 380 cubic inch maximum for all super charged engines, inline valve wedge head only.
  - a. 575 cubic inch maximum for all naturally aspirated engines, 14 degree valve engine maximum for big block engines. (Grandfather rule is in place for the Aggravation Tractor). If engine configuration (i.e. block or rotating assembly) needs to be replaced than those components will have to conform to current engine specifications. Class A Mini's follow the existing rules such as big blocks naturally aspirated engines no larger than 575 cubic inch and no super chargers. Small blocks can be super charged up to 380 cubic inch.
3. Blower/Supercharger limited to 8-71 maximum supercharger size. Supercharger size is to be determined by rotor length. For 380 cubic inch small blocks with 6-71s maximum overdrive is 18% faster than crankshaft. For 8-71s the maximum overdrive is 10% faster than the crankshaft.
4. If an engine is not defined by manufacturer as small block designation that such engine is limited to 671 with 0% overdrive or the same speed as crankshaft. Owner/driver will have to provide valid written documented information from manufacturer as to the engine's designation of small block. It is not up to VTPA.
5. NO high helix rotors allowed. Rotors must be standard helix. Maximum of 60 degrees total pitch over the length of the rotor and no modified configurations of superchargers. One supercharger per engine, no multistage or stacking of superchargers. Supercharger case width limited to 11.25" at its widest point, no variable speed or

- multispeed superchargers allowed. Supercharger must be mounted with aluminum studs only. No other stud material will be accepted.
6. Supercharger restraint consists of 4 SFI approved straps, one on each corner of the engine with each strap securely fastened to the engine by its own bracket.
  7. Turbos or other forms of forced induction will be looked at by VTPA Officials and determined if such configuration will be allowed to run and with what restrictions.
  8. No. 5 inch bore spacing big blocks Chevrolet allowed.

**Engines-Class B:**

1. Class B Limited Minis: big blocks up to 468 cubic inch, cast iron blocks only. May run cast iron or cast aluminum heads on big blocks, NO Big Chiefs, NO Pontiac heads on Chevrolet big blocks. Single or dual carbureted or injected. Small blocks up to 410 cubic inch cast iron or aluminum blocks and heads allowed. Naturally aspirated, single or dual carbureted or injected.

**Weights:**

1. Ballast and safety equipment must be secured on the tractor. If they fall off, you will be disqualified.

**Weight Classes:**

2050 lbs with driver.