#### 466 Tractor

### **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 parent/guardian permission.

#### Safety:

- All operators must wear an approved racing helmet (minimum Snell rating 90). Full faced face helmet is MANDATORY. Fire suits MANADATORY minimum requirements for fire suit, Nomax rating of SFI 3.2A-1 (single layer). Head sock, fire retardant gloves and fire retardant shoes or leather work boots are MANDATORY.
- 2. It is MANDATORY that the tractor has a FACTORY roll over protection (ROPS) bar a roll cage that is at least as high as the top of the driver's head/helmet. No JUNK is allowed. Rollover protection must be fastened by at least two points to the rear axle housing. Rollover protection must be able to lift one rear wheel when pulled horizontally from the top of the cage without damage to the cage. It is MANDATORY to have a 5-point harness.
- 3. All Tractors MUST have air shut off (diesel) or ignition shut off (gasoline) that has a hook up ring at the rear of the tractor to be connected to transfer sled. Kill switch must be within 6" of center and no more than 48" above hitch. It is MANDATORY that an electric assist fuel pump be tied to the kill switch. All Tractors will be REQUIRED to be shut off by factory ignition or throttle shut off. All diesel engines must have a 3-way fuel valve (dump valve). (Explanation: NO stalling of engine while in gear for shut off.) Air shut off or ignition shut off must be within reach of driver with 5-point harness buckled. Will be checked during inspection or at discretion of officials.
- 4. It is MANDATORY that all Tractors have an SFI approved clutch and flywheel. Owner/operator needs to sign SFI release form verifying SFI clutch and flywheel are used in tractor. It is MANDATORY to install frame connecting ladder bars. Frame connectors must be secured adequately from final drive housing to forward of bell-housing and flywheel. Frame connectors must meet VTPA criteria: able to support tractor with engine disconnected from rear housing. SFI 4.1 or 4.2 rated, 6 strap blanket is MANDATORY.
- 5. Stabilizer bars or wheelie bars are REQUIRED and must meet VTPA specifications (refer to diagram in back of book).
- 6. A tractor is REQUIRED to have at least a fully charged 2 ½ lb fire

- extinguisher on board in reach of operator. A functional gauge on the fire extinguisher is REQUIRED.
- 7. The third link of three-point hitches will not be used in any way to stabilize the draw bar. There must be a dead man zone of 18" in height and 6" wide from the top of the draw bar.
- 8. All tractors are required to have front skid shoes. Front skid shoes must able to support tractor in the event of tire, rim, spindle or axle failure. Skid shoes must be directly underneath frame rails. Pipes must be minimum 2" OD, chromoly tubing must have a minimum .095" thickness, mild steel must have a minimum .125" wall thickness. Front skid shoes must be cross braced and be able to support the weight of tractor in the heaviest class. Bottom of skid shoes to have maximum of 4" ground clearance. Skid shoes must be securely attached to tractor.
- 9. NO narrow front ends. It is MANDATORY that all front ends are no less than 36" between front tires.
- 10. Harmonic balancer shielding must be built to contain harmonic balancer in the event of crank shaft failure or balancer explosion. Shielding must be 360 degrees plus appropriate shielding in front. Frame rails may be used as part of the shielding.
- 11. It is mandatory to have engine side shields of .090" steel or .125" aluminum. OEM steel fan shroud is mandatory. If the fan guard is plastic or fiberglass, it is required to have a side shield cover the fan. Electric fans are exempt.
- 12. MANDATORY: 2 clamps with 3/8" cable between #1 and #2 cylinders completely around top of head and bottom of block with a 3" slack.
- 13. NO u-bolted hubs.
- 14. Tractor must have dead man throttle.
- 15. Driver cable operated 3-way fuel shutoff valve.
- 16. Driver cable operated air shutoff in addition to sled shutoff cable.

# **Chassis/Engines:**

- Tractors are stock appearing tractors with enhancements to create more horse power and pulling ability than similar stock models.
- 2. 466 cubic inch displacement. 2% tolerance.
- 3. Turbo 3.0 inlet, .200 map ring grove width. No bushings or slugs. No waste gates/ no variable geometry turbo.
- 4. Any intake allowed, exhaust manifolds OEM only.
- 5. Cast or remanufactured cylinder heads allowed, must maintain OEM length and width for engine application. Valves must remain OEM angle. 2 valves per cylinder.
- 6. Water injection allowed.

- 7. No intercoolers/ ice boxes. No ice onboard during pull.
- 8. All turbo chargers must have 4 3/8 bolts 90 degrees from each other in the exhaust as close to the turbo as possible.
- 9. Intake manifold pipe maximum size 3.75" measured on the outside of the pipe, one pipe only.
- 10. Fuel must be pump #1, #2, or soy/biodiesel allowed.
- 11. Neutral light: need to have clear lensed, 2.5" to 3" diameter neutral light that is visible to person hooking on rear of tractor, must be within 6" of center and no more than 48" above hitch. Light must be lit when tractor is in neutral.
- 12. Maximum injection pump allowed, P7100.

#### **Hitches:**

1. Draw bar must not exceed 20" in height. Draw bar must be stationery in all directions. No clevises. There will be a dead man zone of 3" on either side of draw bar. Minimum length of draw bar is 22" from center line of axle housing and a maximum of 36" from center line of axle housing.

#### Tires:

- 1. Rubber tires only
- 2. Tire size: 20.8x38 max tire size

### **Added Weight:**

1. All weight must be safely secured to the tractor, and not to interfere with hitch. Weight is not to exceed 24" forward of the front must portion of the tractor. Any ballast or external parts lost while hooked to the sled will be cause for disqualification. No weights may be moved from one tractor to another competing in the same class during that class. No portion of tractor may interfere with sled or sled hitch during a pull. Hitch needs to be visible for hitching and unhitching.

## Weight Classes:

- 1. All tractors weighed at event.
- 2. Weight Classes: to be determined.