

SECTION XVI

Modified Semi Class

GENERAL RULES

1. Vehicle must be stock appearance for that year, model and make of truck.
2. All competition vehicles must have a firewall between the engine compartment and the driver's compartment. No holes except for controls. Holes must be no larger than one-half inch larger in diameter than the control that passes through.
3. Driver in POINT EVENTS must wear an approved fire suit and an approved helmet. Driver must wear driving shoes or leather boots. No sneakers or tennis shoes are permitted. Driving gloves are required and a fireproof head sock must be worn.
4. All competition vehicles must have universal joints shields. Any shaft longer than 90 inches must have safety loops. Driveline shields must be 360 degrees with a minimum of 5/16-inch steel.
5. Fans must have fiberglass blades. A complete shroud must encircle the fan area (360 degrees) and be securely attached. A heavy fiberglass shroud is highly recommended.
6. All vehicles must have working brakes on one set of axles.
7. All exhaust systems must discharge vertically. No rain caps are permitted. Turbo-charged engines must have two 3/8-inch grade 5 bolts in some portion of the exhaust pipes. These bolts must be installed 1 inch of each other and at a 90-degree angle to each other.
8. A fire extinguisher (minimum 2.5-pound dry-powder type) is required and must be in working order with gauge fully charged.
9. All vehicles must be equipped with a securely fastening lap belt with a quick-opening clasp. The lap belt must be used when the vehicle is hooked to the sled.
10. All vehicles must be in neutral when being hitched and unhitched from the weight sled. Driver's hands must be off the steering wheel and visible to the track official at the same time.

AXLES

1. Only tandem drive axle semi-trucks will be permitted to compete. No front wheel drive will be permitted. No single axle trucks. No dump trucks. No specialty trucks (wee-drilling, wreckers, boom trucks, etc.) will be permitted to compete.
2. Airbags or air springs and/or all mechanical lift mechanism on front steering axles are NOT permitted.
3. The rear drive axle must be secured tightly by chain or other device to the frame to maintain the legal hitch height while hooked to the sled; no devices may be used that may alter the hitch height while semi is pulling. Chain binders are NOT permitted. At no time may rear axles lose contact with the ground while the truck is hooked to the sled.

ENGINE AND TRANSMISSION

1. One production-available commercial truck engine ONLY will be permitted. Engine must have been available in road use trucks. No multi-engine vehicles may enter any competition. No non-commercial truck engines (car, pick-up truck, military, aircraft, etc.) are permitted. No specialty engines such as Arias, Keith Black, Rodeck, etc. are permitted. NOTE: The legality of the Cummins QSK-19 has been approved for the Semi Series since 1998 and is non-contestable.
2. Only two (2) air stages are permitted on the engine – turbo-charger (or) super chargers.
3. Turbo-chargers must be shielded by a minimum of 5/16-inch fiberglass, or 1/8-inch aluminum hood. Turbo-chargers located outside will follow super stock tractor rules.
4. Ether bottles used as starting aids only may be permanently mounted to the vehicle using an OEM system. All lines must be completely visible and traceable.
5. Transmissions and rear ends must be commercial semi-truck factory components.
6. All engines must have suitable side shields in place.
7. All automatic transmissions must be covered and protected by an approved scatter blanket.
8. All competition vehicles are required to have steel clutch assemblies. No cast assemblies permitted. All bell housings must be covered with and protected by an approved blanket.
9. Flywheels are to be steel plate or steel billet and are subject to an annual or semi-annual review.
10. Only mechanically activated clutches are permitted.
11. Pulling vehicles must be equipped with an operating starter interrupter switch that will allow starter engagement only in the neutral position.
12. A diverter valve that will permit fuel to return to the fuel tank in the case of an emergency is required.

HITCH

1. All Semi trucks are required to have a frame mounted hitch assembly. Hitch can have no connection to rear axle or bumper bar assembly.
2. Hitch may be no shorter than 34 inches, measured from the center of the rear axle to the point of hook, and no longer than 30 percent of the wheelbase.
3. A minimum of 3 ¾ inch hole required for chain hook.
4. Hitch must be a minimum of three square inches of total material (steel) at any point. This includes the area of the pin with the pin removed.
5. The hook point can be no more than two inches from the back edge of hitching device.
6. Maximum hitch height 18 inches and be adjustable from 16-20 inches. The area 5 inches wide and 12 inches high directly above drawbar must be free of all obstruction (including weights).
7. No chains or cables are permitted.
8. Trucks are required to pull from the standard 46-inch sled chain.

KILL SWITCH

1. All vehicles must have an operable kill switch on the right side of hitch and located directly in line with the point of hook. A minimum of a 2-inch solid ring is required for connection

with a minimum of 1/8-inch cross sectional thickness. The sled cable will be attached to this ring.

2. On all diesels, the kill switch must activate the air shut-off. Shut-off must be placed ahead of any turbo chargers. A cable may be used for this purpose, but must have positive-type enclosed cable for the shut off. This cable must be 100% free of any obstructions. The cap must have a spring-loaded closing mechanism. System to be deemed acceptable must at least prevent any building of boost. It is recommended that a gasket/seal arrangement be used to more effectively shut off all air flow. Control for the driver will not be the same as for the sled.
3. Diesel engines with an electric fuel pump must have a break-away plug that will attach to the kill cable. This break-away plug must break all contact to the fuel pump and cause the fuel pump to immediately stop.
4. Diesel engines are required to install a minimum of a manual ball shut-off ahead of the fuel supply that can be operated within easy reach of the driver.
5. On all spark ignition engines, the kill switch must break or ground the ignition. Vehicles equipped with spark ignition and electric fuel pumps must also break current to the fuel pump.
6. All semi-trucks running for POINTS must be equipped with a master electrical disconnect.
7. Ignition engine must have a bar-type master shut-off switch within easy reach of the driver.
8. Kill switch ring must be secured with a single nylon tie wrap (1/8").

TIRES

1. All tires must be road use approved tires and available to the public. Dual wheels and dual tires must be used on the rear axles. No chains or cables permitted. No cutting of tires is permitted. Maximum tire size limited to: 11X24.5X8.25 (or) 10X22X8.25.
2. No split rim or wedge lug type wheel allowed. No spoke type wheels. Wheels must be bud type.

WEIGHTS or ADDED BALLAST

1. Maximum weight for any truck will be 20,000 pounds. Scales will be used at all POINT events.
2. Weights cannot extend rearward more than 51 inches from the center of the rear axle (weights included).
3. Weights cannot extend more than 24 inches from the farthest point forward of the vehicle.
4. Weights must be securely mounted. If weight hits the track during competition (under the green flag), vehicle will be disqualified.
5. Weights must not interfere with the hooking of the sled to the hitch.
6. No moveable weights are permitted during competition (such as hydraulic controlled weight racks or boxes).

WATER INJECTION SYSTEMS

Alcohol in any form is strictly banned from use in NSPA Pulling Series. The water injection system may be tested at any time to determine the presence of alcohol.

FUEL TESTING PROCEDURES

1. All forms of nitro-methane including nitrous oxide and propylene are illegal as a fuel or as a fuel additive for pulling competition. Legal fuels for diesel engines are diesel fuel, soluble oil and water. NOTE: Two-cycle oil has also been used in the past and will be permitted in 2016.
2. Officials have the right to check fuel at any event and at any time that they deem necessary.
3. Any registered competitor may file a protest along with a cash fee of \$500.00 to force a fuel check on any competitor at any time. Costs of conducting a 'lab testing' may be deducted from the protest fee.
4. The engine must be running when the fuel sample is collected. It is mandatory that a qualified driver be seated behind the wheel during the process.