#### 8000 LB 2.6 SMOOTHBORE DIESEL

# Maximum weight

• 8,000 lbs

### Chassis

- OEM Chassis is mandatory. The vehicle must retain full OEM chassis.
- Wheel tubs, back-half conversions, and tube chassis are prohibited.
- The lengthening of the frame allowed up to 158". Longer trucks (158" 172") must maintain OEM measurements for the body being used.

## **Body**

- The body must be an OEM truck body, including the full bed floor.
- No flatbeds are permitted.
- The body must retain the full sheet metal.
- Aftermarket hoods are permitted. The hood must be closed and securely latched when hooked to the sled.

## **Engine**

- Maximum cubic inch 460. The engine must be in OEM locations for the body used.
- No aftermarket blocks permitted.
- Engine must haver 3/8 cable surrounding #1 and #2 cylinders and must pass through the manifolds. 2 cables at splice with 4-6 inches of slack.

# **Cylinder**

- The cylinder head must be OEM or OEM replica for a brand of engine.
- Outside of cylinder head must measure factory width and length.
- No billet heads of any material. Head must retain full factory OEM valve angle.
- No desk plates are permitted.
- Side draft and aftermarket intake manifolds are allowed.

#### Hitch

- The hook point is to be no closer than 44' to the centerline of the rear axle.
- Maximum hitch height of 24" with a minimum of 3.75"x3" opening.
- The hitch must be stationary in all directions.
- The hitch must be frame-mounted.
- The use of Reese-style hitches is prohibited.
- The hitch must be the centerline of the rear axle or behind.
- The hitch must not exceed 25-degree angle from the pivot point to the hook point.
- Drawbar height adjustment link, if attached to the rear differential housing, the attaching point must be at the axle centerline or below.
- The adjusters must go down from the drawbar. The adjusters can only go straight downward vertically or toward read differential housing.
- No slotting of holes for adjuster attachment. No hitch supports or adjusters fastened to rear axle housing shall be above center point of rear axle. Pivot pin of drawbar can be no further forward than the centerline of rear axle.

#### Turbo

• Turbo is limited to a 2.6" inducer bore. Bore must be smooth.

- No MAP width Enhancer groove (MWE) allowed.
- The compressor wheel must protrude into a 2.6" bore for 1/8". The bore will be checked with a 2.605" turbo plug. Plug must be able to enter inducer bore and contact wheel.

### Exhaust

- All vehicles must be equipped with upward pointing exhaust located either directly behind cab or out of truck hood.
- Two 3/8-inch diameter bolts must be placed through the exhaust pipe in a cross pattern within one inch of each other and withing 12 inches of the turbo.

## **Hanging Weight**

• Front hanging weights are allowed, not to exceed 60 inches forward from the centerline of the front axle. Ballast must be added in the bed or truck, but must be securely fastened.

## **U-joint**

- All trucks must have at least six-inch-wide U-joint shield around the rear U-joint constructed of at least 5/16-inch steel or 3/8 aluminum that will safely contain the U-joint and the end of the driveshaft.
- All shields must be securely mounted to the vehicle.
- Any front shaft U-joints that can be visibly seen from the side of the truck must be shielded to contain the U-joint and the end of the driveshaft.
- All U-joints must be shielded 360 degrees with a 3/8" thick aluminum with 1/8" steel liner or 5/16" thick steel.
- Shield will be 6 inches long minimum and centered on u-joint.
- Inside diameter of shield will be no more than 2 inches larger than the u-joint.

#### Safety

- A fire extinguisher system is permitted 2.5# fire extinguisher must be securely mounted within reach of the driver. A complete OEM firewall is required.
- All drivers must have a valid driver's license.
- Full SDI fire suit, including helmet.
- Seatbelt/restraint must be worn.
- The complete OEM floor pan is mandatory.
- Vehicle must maintain a complete firewall. Additional gauges and pillar pods are permitted.

## Throttle

 Hand throttles permitted. Diesel fuel only (see fuels page for specs) No propane or NO2 or any other oxygen enhancers allowed.

## **Fuel System**

- Maximum of one P7100 pump (2 5/8" W x 62 9/16" L x 8 3/16" H main pump body), limited to one plunger per cylinder.
- The use of multiple high pressure comm rail fuel pumps is allowed.
- Ford Power stroke engine must utilize a second HPOP.
- Electronic fuel injection is permitted. A 3-way dump valve mounted before the injection is mandatory which can be operated by the driver while strapped in the seat.

#### **Front End**

• OEM rear or front ends required. Must have come factory in a one ton or smaller vehicle.

• Axle shields are required. Shield to me .060" thickness steel or aluminum. A hole may be cut in one shield to allow operation of hub lock.

# **Safety Switch**

- Safety switch (rain cap or guillotine) must shut off air to diesel engines.
- Switch will be securely mounted to the back of vehicle.
- A 2 inch or bigger solid ring must be attached to end of switch. Ring must be zip tied to switch bracket.
- Switch must also be able to be activated wile driver is secured in cab.

# **Hydraulic steering**

Hydraulic steering is permitted

## Suspension

- The upper mounting point for strut assembly must be in factory location.
- Adjustable caster/camber pillow ball mounts are permitted.
- The lower control arm may be strengthened, provided the factory mounting points are maintained. Strut tower braces, lower tie bars, sway bars, and limit straps are permitted. Traction bars and devices are permitted.
- Raising or lowering of vehicle height with suspension modifications is permitted but must be bolt-on only.
- Welds are permitted for attachment to the frame and axle only.
- Blocked suspension permitted.
- No air bags.
- The rear suspension may be made solid.

# Tires

- Tires must be DOT-approved with a maximum size of 35x12.50.
- No studded tires or tire chains.
- No alterations to DOT tires are permitted.
- No sanding, siping, shaving, grooving, or burnouts.
- Excessive wear or modification to OEM configuration is not allowed and will be subject to tech officials' review.
- No bar or terra tire 63.
- Maximum tire size to be 112 inch circumference, when inflated to 30 PSI with the original bar, not to exceed 18 inches in width before cutting.
- Maximum of four tires permitted.

# **Dual Wheels**

• Dual wheels are prohibited.

### Transmission

- OEM transmission and transfer case must be used. It must have come from the factory in a one-ton or small vehicle.
- Non-OEM transmission is prohibited. Aftermarket torque converters, valve bodies, and internal components are permitted.
- SFI bell housing and/or SFI blow proof bell housing or SFI blanket type shield must be used.
- Water injection is prohibited.

 Air-to-air intercooler only. No ice or water is permitted in/on the truck during competition.

## **Fuel Systems**

- Any fuel injection pump is allowed.
- The use of multiple high-pressure common rail fuel pumps is allowed.
- Ford Powerstroke engine may utilize a second HPOP.
- Electronic fuel injection is permitted.
- A 3-way dump valve mounted before the injection pump is mandatory, which can be operated by the driver while strapped to the seat.
- No fuel lines or tanks are permitted inside of the truck cab, unless securely mounted in a marine box.
- Fuel limited to diesel fuel.
- No alcohol, nitrous, propane, or any oxygen-enhancing agents are allowed.

### **Front Weights**

• Must be more than 60" from the centerline of the front axle to the forward post and securely fastened.

### **Drive Train**

- Will consist of the following: Any front axle, any transfer case, and any rear axle.
- No planetaries permitted.

## **Axle Shields**

- Are required.
- Shield to be .060" thickness steel or aluminum.
- Shield not to be mounted to axle ends or hub bolts.
- A hole may be cut in one to allow the locking of hubs

# **Cast Iron Clutches**

- No cast iron clutches or flywheels are permitted.
- Must be SFI approved.
- Trucks with automatic transmissions refer to general rules.

#### **SFI Bell Housing**

• SFI bell housing blankets and/or SFI blow proof bell housing required.

## **Intermediate Shafts**

• All intermediate shafts between the transmission and transfer case will be totally enclosed in 3/8" aluminum or 5/16" steel ¼" of shaft may be visible.

The tech official has the final ruling on any rules the day of the event.

MUST WEAR A HELMET AND HAVE A FIRE EXTINGUISHER INSIDE THE TRUCK.
NO RIDERS. DRIVERS ONLY. A TRUCK CAN ONLY BE REGISTERED TO ONE CLASS AND ONE DRIVER.