## Semi Stampede / Unc's Fall Brawl 2025 Rules

All event rules must be fully respected without exception by the competitors and their mechanics.

Any violation or disrespect toward the rules will automatically result in disqualification of the truck for that specific event.

# 1. Respect Toward Officials and Volunteers

 Any disrespectful gestures or comments of any kind toward an official or volunteer could lead to disqualification and removal from event.

# 2. Alcohol and Drugs

 Any consumption of drugs and/or alcohol will result in disqualification of the racer and their truck.

## 3. Registration for the Event

No registrations will be accepted on the morning of the races.

# 4. Truck Specifications for Races

- The truck must have a minimum weight of 7,000 kg (15,432 lbs).
- Heavy truck frame with three axles touching the ground, <u>ALL</u> equipped with brakes.

## 5. Truck Inspection by Track Officials

- Verification will be carried out by an event-chosen mechanic.
- Officials, the racer, their mechanic, and the truck owner may be present during verification.
- Truck inspection is mandatory prior to the races and thereafter at the
  discretion of the track officials. Each racer has the responsibility to go to
  the track inspection tent which will be identified and fixed during the event.

A refusal to inspect will result in disqualification of the truck and its driver. Truck must have inspection sticker before being allowed to test on track.

- All Trucks are subject to random inspection before, during and after the race weekend.
- The mechanic and/or the official will have the racer or his mechanic to open the engine's hood to ensure the engine and truck is compliant. If the racer does not have a mechanic. It will be his responsibility to find one who can perform the task.
- If any components need removed to allow verification, this will be done by the racer or his mechanic.

#### 6. Number of Persons in the Truck

- Only the co-pilot is allowed in the truck.
- Exception 1: Immediate family (wife and children).
- Exception 2: A person who has won a ride via a draw must wear an NHRA, IHRA, or NTTPA-approved fire-resistant suit and helmet.

## 7. Pit Meeting

- All drivers must attend the drivers' meeting personally.
- No team member may attend in place of the driver.
- If a driver is absent when their name is called, they will not be allowed to race.

## 8. Repair Time

- Managed by event officials in collaboration with event staff.
- 30 minutes allowed for repairs (plus 5 additional minutes if safety materials must be removed for repairs).
- One repair time per day per category (Bobtail or Loaded).

- In the finals, repair time is limited to 15 minutes.
- Withdrawn racers retain their repair time, but it is not transferable overnight.

## 9. Lane Change

In the finals, switching of lanes is mandatory.

### 10. Automatic Transmissions

Automatic transmissions are NOT allowed in A or B class.

#### 11. Protests

- Protests may be filed with a \$500 USD fee for A, B, and C class.
- If the protested truck passes inspection, the fee is awarded to the truck owner.

### 12. Truck Protection Requirements (A & B Classes)

- For Class A and B trucks, the following protection system must be installed
- The bellhousing must not be visible from the outside. (Cover the top
  of the frame with a plate to prevent any drive shaft parts from
  coming out.).
- Under the bell-housing a  $\frac{1}{2}$ " thick Kevlar blanket or conveyor belt must be installed and attached to each side of the frame or drop down to 6 inches from the ground.
- A Kevlar blanket,  $\frac{1}{2}$ " thick conveyor belt or a  $\frac{1}{4}$ " thick plate must be installed from the start of the bellhousing and proceed to the end of the transmission to prevent parts from exiting the truck. all of which must be approved by the truck inspector.
- Conveyor belt or a metal plate rings for the drive shaft securely attached to the frame of the truck.
- This protection starts at the engine and goes to the first differential.

- A and B class must have some kind of protection to stop the Compressor wheel from exiting outside of the hood. (The cold side is an aluminum housing so please come up with a way to secure the wheel in case the shaft breaks. Kevlar covers, rubber belt or even a metal scatter cage around it will be sufficient)
- $2 \frac{3}{8}$ " grade 5 bolts cross bolts must be on exhaust side of turbo within 6" of turbo.
- The addition of weight on the back must be secured to the frame. It must appear stock. (Removable weights will not be allowed).

### 13. Truck Compliance

- It is the racer's responsibility not to race if their truck is mechanically unsafe.
- Non-compliant trucks have until 30 minutes before the drivers' meeting on race day to comply.
- If a truck is non-compliant after racing begins, it is immediately disqualified and may NOT move to a lower class.

#### CLASS-SPECIFIC RULES

#### A Class Rules

- Diesel engine up to 19 liters, max 8 cylinders.
- Max 2 turbos OR 1 turbo + blower (1071 or Procharger F-3-136 equivalent).
- No compressor wheel should be visible.
- · One injector per cylinder.

- A DOT legal fire extinguisher is mandatory at all times.
- Water injection is permitted (100% pure water, no alcohol or methanol).
   Random samples may be taken.
- A positive air shut-off is mandatory.
- The engine block and the head must be tied with steel cable between the 2nd and 3rd cylinders through the air at the exhaust port of the manifold. The cable should be at least  $\frac{3}{8}$ " thick with 2 crosby style clamps at the splice and should have a clearance of approximately 4".
- A green light in the windshield must be switched on to signal race readiness.
- The bellhousing must not be visible from the outside (Cover the top of the frame with a plate to prevent any drive line parts from coming out.).
- A conveyor belt or a metal plate, rings for the drive shaft attached to the frame of the truck. This protection starts at the engine and goes to the first differential minimally.
- Fuel tanks must also be protected.
- The addition of weight on the back must be secured to the frame. It must appear stock. (Removable weights will not be allowed).
- An external backing alarm must be installed on the truck.

#### **B** Class Rules

- Turbo inlet max 82.50 mm, compressor wheel max 81mm inducer, 116mm exducer.
- Compressor cover with a map groove / surge groove cannot exceed .200 of an inches in width.
- Map groove/surge grove must be located inside the 82.50mm section of the compressor housing only. No other air supply is accepted

- When a seal is fixed the mechanic will keep a log of the numbers fixed to the trucks.
- No visible modifications beyond original parts.
- Caterpillar Acert compound turbo engine will be allowed. The competitor must provide the inspector with the technical data sheet for the components linked to the engine serial number (liters. turbo. injector. etc.).
- Waste Gates are permitted on B class trucks. (Before installing an electronic controlled wastegate remember laptops are still not permitted in the cab)
- Air intake system can be modified through hood or other with an air inlet pipe with a maximum diameter of 7 inches.
- A positive air shut off is mandatory on all B class trucks.
- It is permitted to add only one fuel pump. Either mechanical (hydraulic) or electric (FASS, air dog).
- The fuel cooler can't exceed 14 and a quarter inch in length x 6-inch in height x 1 and a half inches thick. ex (copper transmission cooler style)
- One ECM allowed (Pittsburgh Power Box or equivalent is permitted).
- Only one free air cooler (no fans, no ice coolers) allowed.
- Electric fan for the engine radiator is allowed.
- Common rail engines are NOT allowed (subject to future review).
- Before racing, an injector will be pulled for inspection, A maximum of 16 liters.
- No injection allowed (water, windshield washer fluid, etc.).
- No laptop or electronic device inside the truck.
- Waste gates allowed but electronically controlled waste gates must comply with no-laptop rule.

- The bellhousing must not be visible from the outside (Cover the top of the frame with a plate or Kevlar blanket to prevent any drive line parts from coming out.).
- A conveyor belt or a metal plate, rings for the drive shaft attached to the frame of the truck. This protection starts at the engine and goes to the first differential minimally.
- Fuel tanks must also be protected.
- A green light in the windshield must be switched on to signal race readiness.
- The addition of weight on the back must be secured to the frame. It must appear stock. (Removable weights will not be allowed).
- An external backing alarm must be installed on the truck.
- No generator or addition of a combustion engine attached to truck will be accepted.
- · ALL Trucks must have a working DOT approved fire extinguisher on board

#### C Class Rules

- Smoke IS allowed.
- Journal-bearing turbos only (NO ball-bearing or racing turbos). Turbo inlet max 82.50mm, compressor wheel max 81mm inducer, 116mm exducer.
- Drive shaft loops must be installed in such a way that breakage will protect fuel tanks from being punctured.
- Caterpillar Acert twins will be allowed.
- No aluminum center-section turbos.
- No added waste gates or liquid-cooled turbos.
- Top 3 Caterpillar-powered C-class trucks may have an injector pulled for size inspection. A maximum of 16 liters.
- Air filters can be removed or modified but all original piping must be connected.
- Max RPM: 2400 nothing over will be tolerated.

- No electronic modifications (Pittsburgh Power Box, resistors, etc.). No power boxes should be found in cab. Subject to random inspection.
- No injection allowed (water, nitrous, etc.).
- No laptops inside the truck.
- If a C-class truck exceeds 2400 RPM in Free-for-All, it MUST meet B-class safety requirements.
- ALL trucks must have a DOT approved fire extinguisher on board.
- Must have a mechanically safe truck.
- In case of a doubt there will be inspection and will be disqualified if the truck does not meet the standards.
- A green light must be installed in the windshield and must be switched on to signal that driver is ready to start.
- An external backing alarm must be installed on the truck.

### C Mechanical Class Rules

- Single turbo only unless specified by manufacturer per truck vin number.
- 15.0 liter inline 6 or V8's up to Mack E9 16.4 liter is the maximum displacement.
- No electric fuel pumps permitted. i.e. fass, air dog, or aeromotive.
- · Must use oem fuel supply.
- Caterpillar 3406C Peec must have factory un-altered electronic control unit (ECU) attached to engine. No laptops or electronic devices permitted inside of the truck that can adjust the ecu.
- No fuel coolers
- Fuel lines and fittings from the high pressure pump to the nozzles can not be oversized or bored out to a larger inside diameter.
- No electric engine fans.
- Twin turbo is permitted ONLY if it came equipped from the factory per VIN. Build sheet or documents with matching ESN must be presented to inspection officials.

- Ceramic manifolds are permitted
- Smoke is allowed
- Maximum RPM is 2450
- NO TYPES OF INJECTION WILL BE TOLERATED. I.e. propane, alcohol, methanol, N.O.S
- Must have brakes that are operational.
- Truck must have a backup alarm
- Truck must have drive shaft loops to protect fuel tanks from breakage.

# Additional Safety Requirements for ALL Trucks

- All trucks must have a working DOT approved fire extinguisher on board.
- An external backup alarm must be installed.
- A green light in the windshield must be switched on before the race starts.
- Drive shaft loops must be installed to protect fuel tanks from breakage.

#### Protest

- Anyone who believes that a racer does not comply with the rules may file a protest. Protest fee is \$500 USD for classes A, B and C.
- The person or team will remain anonymous. If the truck being protested passes inspection the money will be given to the truck owner.
- A track official may ask for a random inspection in that instance there will be no money given.