



# **United States Super Trucks North Series, LLC**

## **2008 Rules**

## **General Policies**

The United States Super Trucks North Series, LLC Management will resolve any disagreement over technical questions or operations. Any complaints, disputes, questions or problems must be immediately reported after the event to USST Management. Continuous developments in USST racing may necessitate changes. USST Management reserves the right to assign, award or dictate number assignments.

## **Qualifying**

- Each USST Truck may qualify once. Qualifying refers to time trials or qualifying heats, whichever event occurs first.
- Qualifying order will be determined by a drawing of a numbered chip. The truck that features the chip number will qualify first and then followed by the next highest truck number. If there is not a matching truck and chip, the closest number higher than the drawn chip will qualify first then proceed with the next highest.
- A driver may swap with a USST truck that has qualified. However the driver must start in the rear. Driver may improve start position by running qualifying race and/ or semi.
- Failure to time trial or run preliminary races will exclude truck from the feature field.
- Truck/ driver must run all preliminary events to maintain feature starting position.
- Exception to this rule based on damage or inability to complete by approval of USST Management.
- When available, an alternative to all features will be selected. Order of time trials, finish of preliminary races or top point driver in current point basis will be used in selection of preliminary races or top point driver in current point basis will be used in selection of alternate.
- An alternate starting field may be selected if a qualified truck fails to join the field at "One to Go".
- The driver who time trials the truck must drive it in the racing program.
- A driver may not jump trucks once the race has started.
- No drivers may be relieved without prior approval by USST Management.
- All drivers must receive a USST I.D. card that must be presented each time when entering pits.
- No driver may participate in any race event without being properly registered. All fees and registrations will be doubled for anyone violating this rule.

## **Inclement Weather –Race Cancellations**

In the event of a cancelled race due to inclement weather, another race date may be scheduled. United States Super Trucks North Series will not reschedule a race date less than two weeks from the regularly schedule date that was cancelled. This two week reschedule provides proper notification to drivers, crew, sponsors and affiliated associates.

## **Safety Rules**

At anytime, before, during or after an event, United States Super Trucks North Series officials may require additional measures or equipment or make additional determinations, as they deem to further reduce the risk to competitors.

All trucks are subject to a minimum specification inspection at any time. It is the responsibility of the driver to prepare each truck **FREE** of defects and in safe racing condition.

Each pit crew must have approved fire extinguisher in ready reach for any emergency.

## **Truck Safety Requirements**

A quick release type approved safety belt of no less than three (3) inches in width is compulsory. Both ends must be fastened to roll cage with no less than 3/8 inch hardened bolts. The belt must come from behind the driver. Shoulder harness inertia reel not allowed. Belts must show manufacture's date within two (2) years for the USST North series.

A padded head restraint with approved installation required. Center top of steering post must be padded with at least two inches of resilient material

All trucks must have approved 5 lbs or greater fire extinguisher installed.

Driver's seat must be fastened to the frame and must be located a minimum of eight (8) inches from the inside of the closest driver's door bar. Rib rest shall remain flexible, not reinforced and no fiberglass seats.

All competitors' helmets must meet the specifications set forth in title 49, code of federal regulations, part 571, federal motor vehicle safety standard number 571.218 or meet the specifications, in ANSI A90.1b-1979, and meet SNELL requirements. Minimum SNELL SA-2000 rating required.

## **Window Nets**

Window nets are required and must be used at all times.  
A quick release method of mounting is mandatory.  
Window nets must be approved ribbon or mesh type.  
Window net must fall down when released.  
Helmet right side nets recommended.

## **Driver's Attire**

Flame retardant gloves are mandatory in the USST North series, to be worn at all times on track.

- \$50.00 fine for first violation
- \$100.00 fine for second violation
- Suspension for third violation

All drivers must be protected at all times, with a recommended flame resistant driving suit of minimum of a 2 piece top & bottom or undergarments.

Recommended individual personal protection

- *Hans or Hutchins device is recommended*
- On board fire system with 2 nozzles
- Single layer suit with complete underwear
- Multiple layer driving suits
- Nomex driving shoes
- Nomex socks
- Full face helmet
- Racing seat head rest
- High density roll bar padding
- Cage helmet net
- Collapsible steering column

**(IF YOU FEEL THAT YOUR TEAM CANNOT MEET THESE  
REQUIREMENTS PLEASE CONTACT THE UNITED STATES SUPER  
TRUCKS NORTH SERIES MANAGEMENT TEAM)**

## **Technical Inspections**

The United States Super Truck North Series has the right to perform inspection upon race vehicles for safety precautions before and after a race event or qualifying. This is to ensure safety, fairness and a fair racing event for drivers, owners, crew, sponsors, fans, sponsors and spectators.

2008 will bring a new procedure for technical inspections. Upon completion of the race events the top three finishing positions will report to the designated Technical Inspection shed of the track. The top three trucks will be scaled with drivers. The top three drivers will then draw 2 numbered chips at random. These numbered chips will coincide with the technical inspection list. All drivers are given fair and legal inspections based upon the chips they have chosen.

## **Truck Specifications**

### **Wheelbase & Tread Width**

Wheelbase: 108"-112".

Maximum Tread width: 65" +/- 1", measured center to center of tires at spindle height.

**All other truck series allowed to run in USST North Series with Management approval.**

### **Chassis**

Metric chassis allowed at 108" wheelbase with full frame (A.R.T.S Trucks) Tube or stock stub allowed. Fabricated chassis frame rails must be a minimum of 2-inch by 3-inch .125 wall tubing. Minimum ground clearance 3 ½" with driver!

### **Roll cage**

All Roll cage tubing must be 1.75" - .090 wall thickness. Welded gussets required on all joints. Left side door bar deflector plates must be at least .125" steel required.

### **Suspension**

Conventionally mounted 5-inch springs or coil over type suspensions Steel, aluminum or fiberglass bodied shocks. Maximum retail price \$200.

**(Penske model 7100 series shocks will be allowed, but will be monitored for rebuild components)**

(1) Shock and (1) spring per wheel. Rear suspension must be solidly mounted. No rubber bushings. No lift bar, fifth coil or other spring or rubber loaded suspension allowed. (No rear stabilizer Bars).

**Spindles and Hubs**

Any steel spindles allowed. Aftermarket hubs with 5/8<sup>th</sup> wheel studs required. No Gun-drilled studs permitted. **25 lb weight penalty for wide 5 hubs.**

**Steering**

Rack and Pinion or steering box with center link style required. Quick release steering hub required. Collapsible steering shaft recommended but not mandatory.

**Rear End**

Stock or rear spur gear type quick change units with steel tubes, No mini type quick change. Maximum camber 1/2 degree.

Ratchet type differentials will not be permitted.

One piece straight spine drive plates only, Drain plugs must be safety wired. Gun drilled axles not allowed.

**Brakes**

Four wheel brakes required at all times. Single or dual piston calipers (allowed on all chassis). Four (4) piston calipers allowed. Maximum diameter 12 1/4" rotors 1 1/4" thickness on front, no drilling permitted. No floating rotors allowed, ABS units or brake recirculation systems. Only one brake bias adjusting per truck.

**Engine Location**

GM Engines must be located so that the furthest forward spark plug is no more than 2" behind the front axle centerline.

***Ford or Chrysler must have approval by USST Management.***

Crankshaft centerline 10" minimum ground clearance.

## **Engines**

### **Cranks**

Cast 50-lb. sportsman type magnetic cranks only. Stock stroke for block. Unaltered except for normal cleanup and balancing. Cranks should not be gun drilled, contoured or sculptured.

### **Rods**

Magnetic forged sportsman type connecting rods only. No titanium, aluminum or H-beam rods. 6" maximum length. 560 grams minimum weight.

### **Pistons**

Any flat top or reverse dome (dished) piston may be used. Valve relief may be cut into piston. No portion of the piston may protrude above the top of the block.

### **Camshaft/Valve Train**

Any magnetic steel camshaft with a maximum 1/2" (.500) lift measured at the valve retainer. Stock diameter magnetic steel hydraulic or solid flat tappets only. No mushroom or roller tappets. No stud girdles or rev kits. Standard timing chain only. No gear drive or belt drive. Full roller rocker arms allowed on GM vortec style head, Ford N351 and Mopar W2. All other heads must use stock stamped rocker arms.

### **Heads**

Cylinder heads must be a stock steel production only. No angle plug, bowtie or 461X heads. No aftermarket heads.

Limited to two valves per cylinder. No titanium valves or valve retainers permitted.

Combustion chamber intake and exhaust ports must be in the original 'as cast' configuration. Three angle valve jobs permitted.

Valves must be stock size and in stock location and at stock angle.

Maximum valve diameter measured across the face: Intake 2.02"; exhaust 1.60".

Stock type valve spring diameter only. Screw in studs and guide plates allowed. 10.8:1 maximum compression ratio as measured on the 'whistler'. Ford 'N351' and Mopar 'W2' Economy short valve (P4529446) heads are experimental only. Must call for approval.

Any evidence of sanding, polishing, relieving, grinding, porting, chemical treating, ceramic work, abrasive blasting, alteration of the original form or the addition of material to the ports or combustion chambers is strictly forbidden. No external sanding, grinding, or removal of I.D. number or symbols.

### **Intake Manifold**

Aluminum intakes unmodified in any way include GM; Edelbrock (non-Vortec) 2101 & 2975. Vortec must use 7116 dual plane. Wieand 7546 or 7547. Ford (N351 or OE Windsor head) M-9424-C358, M9424- Z351; Edelbrock 2181 or 7181 or (OE Windsor head) 2980, 2981. Mopar; Edelbrock 2176 or 2915. W2 head must use Wieand 8015.

Any evidence of sanding, polishing, relieving, grinding, porting, chemical treating, abrasive or water blasting, ceramic work, addition of material or any alteration to original form is forbidden.

Wegener ZZ4 crate motor must be as produced by manufacture, Ignition: MSD ignition allowed. Mounting on right side of dash required. Carburetor: Holley 750—HP P/N 80541-1 required (Wegener spec carburetor). 1" Carburetor Adapter plate allowed.

Gm Crate engine 88958604 must be as produced by the Manufacturer. Maximum 2" set back.

Ignition: MSD ignition allowed. Mounting on right side of dash required. Carburetor: Holley 650—HP P/N 80541-1 required. 1" Carburetor Adapter plate allowed.

No ceramic or chemical coatings allowed in engine internal areas of intake manifold, exhaust manifold and cylinder heads, engine oiling system, drive train or suspension. Ceramic piston coating is permitted. No carbon fiber components or coated products allowed (Helmet material acceptable as a helmet only).

### **Carburetor/Spacer**

Carburetor: Holley 650—HP P/N 80541 or the Wegener 750 spec carburetor-1 required.

Must be as produced and un-altered by Holley specs.

May use open top type air box with 2x16 opening at back of hood only, no pans, air boxes or other devices taking air from the front of the truck are allowed. Standard boosters only and must be tightly mounted.

Epoxying or safety wiring of boosters recommended. Air horn may be removed. No other visible modifications allowed on carburetor.

No vacuum leaks. No turtles or other induction performance enhancing devices. No other systems allowed. Two (2) returns spring mandatory. An over-center throttle stop is recommended.

### **Exhaust**

Headers allowed on all engines Maximum retail value \$650. No stainless steel collectors. Exhaust must exit behind driver and under car or through the right side body panels. Mufflers are mandatory. Maximum of 2 mufflers allowed. No custom, homemade headers allowed. No ceramic components or chemical coatings allowed in exhaust.

### **Clutch, Transmission & Drive Shaft**

Automatic Transmissions allowed (No direct drive units allowed). Stock Transmission with operating reverse gear required. Counter gear must be driven by input shaft. (Made for racing clutch required) minimum 5 ½" (3 disk clutch allowed). 25lb weight penalty for 5 ½" clutch. Carbon fiber clutch disks not permitted. Minimum diameter 2 ½" steel or aluminum driveshaft required. Safety hoop required on front half of driveshaft. Driveshaft must be painted bright reflective color.

### **Radiator/Cooling**

Radiator must be mounted in front of engine, between front frame horns. Fan protection and overflow tank located in engine compartment required. Water pump must be stock type in stock location. Antifreeze is not allowed.

### **Fuel & Fuel Cell**

15 gallon Fuel cell complete with 11 gauge material or heavier container, interior bladder, foam baffle and rollover valve required. Fuel cell must be mounted behind rear axle between frame rails. Bottom of fuel cell must be minimum 10" from ground. No plastic fuel cells allowed. Steel gas lines must be mounted outside driver's compartment. All vents must have valve to eliminate leakage.

## **Weight Rules**

Mid-Am Style Truck w/ Mid Am Motor = 2950 lbs  
Mid Am Style Truck w/ GM Crate Engine = 2700 lbs

Coil over Truck w/Gm Crate engine = 2700 lbs  
Coil over Truck w/Wegener ZZ4 engine = 2700 lbs  
Coil over Truck w/GM ZZ4 350HP Crate engine = 2700 lbs

Add 25lbs for wide 5 hubs  
Add 10 lbs for aluminum drive shaft  
Add 25 lbs for 5 ½ clutch  
Add 25 lbs for 4 piston calipers  
Deduct 35lbs for 8.5" Coleman clutch

Gas allowance; heat races 15lbs, Feature event 50 lbs.

58% left side weight Maximum, apply at all times on coil over trucks. All weights include driver in seat.

Ballast must be painted white and lettered with car number. Fines will be handed if numbers are not painted on weight ballast. \$25 per Ballast not painted this will go into points fund for 2008 season.

## **Battery**

12 volt systems max.  
Batteries must be mounted in front of rear axles securely.  
Battery positive post disconnect switch recommended

## **Safety Fines**

- \$25 per Un-Painted Weight
- \$25 No Safety Wired Transmission or Rear-End Plugs

Not wearing flame retardant gloves

- \$50.00 fine for first violation
- \$100.00 fine for second violation
- Suspension for third violation

Not wearing Hans or Hutchins device

- \$100 fine for first violation
- \$150 fine for second violation
- Suspension for third violation

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REQUIREMENTS CONTACT THE USST MANAGEMENT TEAM)**

All paid fines will be placed into the 2008 points fund.

The United States Super Trucks North Series, LLC has the authority to alter, change, and refurbish any rules by when needed. Upon any changes in the rules, policies or specifics, notification will be given to owners, drivers and crew. Changes will be available via email, telephone messages for those without email access, and posted on the USST website, [www.usstracing.org](http://www.usstracing.org).

**Proposed Changes for 2009 Season**

- 7 ¼ clutch assy minimum requirement
- All Engines to be certified by USST series Engine Builder