

USST 2008 Technical Rules

(Southern Division)

Edited: 11/15/07

Appendix A added: 7/18/08

USST is an oval track and road course traveling series designed around full race trucks that resemble the Chevy Silverado, Ford F150, or Dodge Ram. Trucks running under USST specifications must meet specifications in this document. USST competitors will follow each track's safety rules and each track will allow USST's technical rules to govern USST competitors. USST will perform technical inspections at each race. USST will adjust rules over time based on testing and performance. USST Rules have remained largely unchanged but will be refined over time. Chassis measurements have been specified. Other Rules have been refined.

Updates, information, schedules, and news are available at the RACINXS (Racing In Excess) website <http://www.racinxs.com>. USST can be contacted at 405 787 8888 or ecaudell@racinxs.com. USST mail is received at RACINXS, Inc. 3706 Edmond Rd NE, Piedmont, OK 73078.

These rules are formatted for viewing on the website. Please go to the download page for a Microsoft Word file.

Commentary from Eric Caudell: Please note that there is also a USST North rule set that is in use for the Northern Races. The USST Northern division rules are slowly migrating towards the Southern Division direction but these are still separate rule sets for 2008. The Southern Division Rules are unchanged from 2007 and all Southern races in 2008 will be governed by the Southern rules. USST South is open to non-fundamental rule changes in the future. There are a large variety of truck chassis and it will take a few years to evolve to a single rule set. During this evolution, older chassis are grandfathered in to allow teams to use up their equipment. Tech sheets will be used and tracked for the 2008 season. This will document grandfathered items or requested changes on a truck by truck basis. Tech will be escalated for the 2008 season.

North and South agree on some fundamental principles for the future like Symmetrical Chassis, Big Springs, Clutch type transmissions, and controlling shock cost. It is our hope that both divisions can match perfectly but each group has a great financial investment in the existing equipment. To minimize cost to teams, it may take years to evolve. Over the last 5 years I have done an excellent job controlling cost and keeping the competition equal. These are still my primary goals. Thank You for your support.
Sincerely, Eric Caudell

UPDATE: 7/19/08 – SEE APPENDIX A -

Clarifications for 2008 (There are no material changes):

Engines for 2008: Multiple motor combinations have been allowed over time to enhance the growth of USST. The goal is to have all 9.5 to 1 USST/PRO and GM 604s crate engines. The long term direction The USST/PRO motor that has been in place since the inception of USST will continue to be the primary engine. The GM 604 Crate engine is allowed with a 650 or smaller carb. The 604 Crate Motor will continue to be a primary engine for the future. No other Brand Crate Motors are allowed at this time. USST is performing further research in the Ford and Dodge Crate motors. The engine setback may be adjusted for the aluminum head crate motors. The Chevy Doublehump head engine will be legal as defined in 2007. The USLMA engine will be allowed for 2008 but will begin to be phased out on a schedule to be announced. As was stated in the original rules allowing USLMA motors: USLMA motors are allowed in short track racing on 1/4 and 1/3 mile tracks. USLMA motors are not allowed on larger tracks. No new USLMA motors will be built for existing teams. Gear Rules still apply for USLMA engines. Teams must register USLMA motors with USST. USLMA motors were allowed to enable new teams with existing engines to enter USST economically. They are not our long term direction. MidAm motors in MidAm chassis are legal but must be registered with USST. No new MidAm engines. MidAm Engines are only allowed in Midam chassis.

On a temporary basis: Pre 2007 MidAm underslung chassis are allowed to be registered with USST for use in the Southern Division. In the event the rear clip requires replacement, it must be replaced with an overslung NASCAR style rear clip of 2x3 rectangular tubing. USST Fuel Cell height rules apply. USST reserves the right to govern where lead may be attached to underslung clips. Underslung chassis will, at some point be required to remove lead from underslung structure. Some mid am trucks ran unequal length trailing arms. USST will govern the length of these arms on a truck by truck basis. Minimum center to center length is 29.5 inches. USST will govern the removal of torque absorbing devices on midam chassis also.

Brake Clarification: Ex-craftsman trucks are allowed to register with USST at 3200 lbs with 4 piston brake calipers to allow them easier entry into the series. As these trucks become competitive, USST will begin to enforce the USST brake rule on a truck by truck basis. When a team is instructed to conform to the USST brake rule, the braking system must conform by the following event. Ex-craftsman trucks with super speedway rear ends will be allowed 4 piston calipers on the rear axle.

Tire Treating: USST does not allow any type of tire treatment. Steps will be taken to inspect tires. Steps such as tire impounding may be taken to confirm that tire treating is impossibility.

Historical Changes Section

Changes for 2007:

Tires for 2007: The tire for USST Southern events is the Towel City 10" wide retread on the Hoosier casing. Tires are available from Altus Speedway or RACINXS. This tires was chosen on its consistency and endurance for 5 to 6 race events. Northern events will use the New American Racer 10" tire.

Engines for 2007: The USST/PRO motor that has been in place since USST inception will continue to be the primary engine.

2007: Based on dyno testing and research, a rule known as the "Doublehump head rule" has been added. The doublehump head rule is as follows: GM engines with stock castings (except Vortech) will be exempt from the compression rule. A 600 cfm carb or smaller must be used. This rule allows the plentiful "factory stock" and "street stock" type motors common in Oklahoma to be used in USST trucks. The purpose of this rule is to have a low cost alternative for new teams or low budget teams. The basis for this allowance is that this combination will not produce the power available from the cornerstone USST/PRO 9.5 to 1 engine.

Changes for 2006:

Mandatory Spoiler Height: No more than 5 inches.

Changes for 2005:

16.12 Engine crankshaft height 11" minimum.

23.3 Must have a functional catch can installed minimum 1 quart capacity. Catch can will be sealed unit with vent. Catch can must vent on right side base of windshield in a visible area outside of body.

18.16 NASCAR Style fabricated Centerlink, Idler Arm, pitman arm, tie rod adjusters, and intermediate shafts of SCP, RHE, or other professional manufacturers allowed. Must use inner tie rod ends.

20.12 Trucks seen overflowing fuel will be sent to pits for fuel removal and moved to the back of the starting line up.

22.22 For 2005, USST is allowing the USLMA legal motor with 390 carb and maximum gear rule as set by USST. Gear Rule is subject to change at any time under USST's discretion. Gear Rule at Altus and Tulsa is 6.50 but is subject to change. Transmission must be in high gear for all oval track racing and qualifying laps. Gear Rule at Hallett is 5.00. 390 carb must pass inspection with standard guages and measure to factory specifications. Holley is the only approved manufacturer. GM 604 Crate Engine is allowed.

End of Historical Changes Section

Rule Listing

1. COMPETITION DIRECTOR

Each USST event will have a designated Competition Director to make decisions related to that event. The competition director's decision will stand for the event but can be protested by following USST's protesting rules. Any race team requiring communication to race track management will do so through the competition director.

2. TECHNICAL INSPECTORS

In the event USST technical inspectors are not present at a race, three race teams will be randomly selected to provide a technical inspector or oversee protest. A fourth and fifth team (alternate) will be selected to stand in for any teams involved in the inspections or protest. Each team will provide the name of a team member that will participate in the inspections.

USST will designate an inspection area where drivers will take their trucks directly after the feature.

3. PRIZE MONEY

Most USST racetracks are mailing pay directly to racers. Make sure your address is on file with each track unless otherwise instructed by USST or the racetrack management. USST is not responsible for filing of any documentation related to teams racing income or expenses.

4. PROTEST

4.1 Protest Fees are as follows: Remove Intake \$200, Remove one head \$400. Once the level of protest has been established, all items that can be inspected without further dismantling with tools are subject to inspection. All items that can be inspected are subject to inspection. Inspection tools such as, but not limited to, scopes, mics, cc tools, and magnets may be used.

4.2 Refusal of Protest will result in loss of points and money for the night. Drivers or Owners refusing protest will be fined \$100 and be required to post a \$200 bond at one or more of the subsequent events.

4.3 Protest must be registered with USST official within 10 minutes of the end of the feature race.

4.4 Protesting of official decisions must be submitted to USST in writing along with a \$100 protest fee. A Protest Committee will review the written protest and make a decision.

4.5 Removal of Cylinder Head protest can be avoided without penalty by having your USST engine inspected and sealed prior to assembly. Inspection seals must be in place, not tampered with, and inspection record must be on file with USST. Inspection fee of \$50 will apply.

5. USST FEES

5.1 USST teams are required to pay \$75 a year management fee to cover trade show booths, expenses, phone bills, website, mailouts, etc. Teams are not eligible for USST contingency awards, USST points, USST product specials, or USST Sponsor monies until management fee is paid.

5.2 Checks to USST should be made out to RACINXS, INC and have "USST" and their purpose denoted in the memo field.

5.3 If fee is not paid prior to April 1st, the USST Management Fee will be deducted from race pay out.

6. TRUCK NUMBER SELECTION

6.1 Truck Numbers are selected by USST members beginning with the order the 2003 USST membership fees are received at USST. USST will manage numbers from there on with a goal of eliminating duplicate numbers.

6.2 Usage of 3 digits and letters in Truck Numbers are not allowed. USST reserves these for use in events with other truck series or divisions.

6.3 USST series champions will hold a "Champion Reserve" on their truck number in the event they do not re-register a number and another team registers it. The championship team may use their Champion Reserve number at any time.

7. USST POINTS

To Be Determined Each Season.

SECTIONS 8-13 (unavailable at this time)

14. SPECS. BODY

14.1 Any 1996 or newer Chevrolet, GMC, Ford, or Dodge 1/2-ton, full-sized, conventional cab pickup truck.

14.2 No extended cab, step side, El Camino, or Ranchero body styles allowed.

14.3 Aftermarket bodies from approved manufacturers must be used. Approval must be obtained from USST to consider any other after-market body, nose, or tail. USST welcome contingency sponsor manufacturers into the approved manufacturers list.

14.4 Current approved manufacturers are:

Speedway One Racing Bodies

Five Star Bodies

ARP Race Bodies (no extended cab allowed)

RU CarCrafter Bodies

14.5 Body Mounting, roof heights, tail heights and nose heights should follow the manufacturers published diagrams with a 57" roof height. Sides of body should not be mounted lower than frame to achieve proper heights. Minimum roof heights for asphalt racing are based on a 4" frame height. Allowances to the published diagrams based on this frame height are allowed. For Example: The Five Star online specifications show a 57" roof height, 10 inches from leading edge of roof with a 5" frame height. USST min frame height is 4", therefore, a 56" roof height is acceptable.

15. SPECS. APPEARANCE

15.1 Any and all measurements shall be as referenced to the manufacturers measurements (See Measurements.)

15.2 A full Lexan/Polycarbonate windshield is required the top 8" must be painted black to simulate a visor. A rear window is required. Side wing windows are allowed, but window opening must be 20" minimum. Visor section of windshield will be used for USST drivers home state name and USST title sponsor.

15.3 The maximum bumper thickness is .120 inches. No factory bumpers will be allowed. Bumpers must be hidden behind nose and tail piece. Bumper ends must be capped or rounded to prevent unnecessary excessive damage. Maximum Bumper material is 1 3/4 round tubing .120 wall. Square tube and angle iron are allowed on bumper supports only, not actual bumper. Maximum length of bumper material outside of frame rail is 8 inches. These standards are to avoid excessive truck and driver damage from spearing.

15.4 Nerf bars are allowed on sides of truck only, but must be inside body.

2006 rules rewrite this rule: ~~15.5 Spoiler can be mounted only on rear deck. Maximum spoiler measurement from mounting point to top edge is 7 inches. Maximum spoiler width is 65 inches. Spoilers over 5 inches tall recommended to have clear lexan above 4 inches for 2003, mandatory for 2004. The 2 inches of the outer edges of spoiler may be supported with metal to top of spoiler. Spoiler may only have a two dimensional profile. No flaring allowed. Spoiler rule is under review and will likely match the Mid Am rule of 5 inches for 2005.~~

15.5 Spoiler can be mounted only on rear deck. Maximum spoiler measurement from mounting point to top edge is 5 inches. Maximum spoiler width is 65 inches.

15.6 Spoilers may have one bend only used for mounting to deck. No wicker bills.

15.7 No lateral and no vertical spoilers allowed.

15.8 Front air dam allowed minimum height 3 inches.

15.9 No holes allowed in tail gate.

15.10 All damage to bodies shall be repaired by the next event or obtain approval from a USST official.

15.11 There must be the realistic appearance of headlights, taillights, and signal lights in their original locations. This may be accomplished by either paint or decals.

15.12 Tires must be centered in wheel opening.

15.13 Floor pan will extend the full width of cab with no gaps and minimal drain holes only. Floor pan on passenger side can only be as high as center tunnel (maximum of 10 inches tall) measured from driver's floor pan.

15.14 Full front and rear firewalls are mandatory and must extend the full width of the truck with no holes or gaps.

15.15 Maximum angle of front firewall is 65 degrees.

16. SPECS. CHASSIS

16.1 Any full perimeter coil spring frame is approved for use. All frames must utilize OEM lower A frames of equal lengths.

16.2 Wheel base measurement is a minimum of 112 inches and a maximum of 114 inches.

16.3 Track width 65" max.

16.4 No leaf springs allowed.

16.5 No offset or underslung chassis allowed.

16.6 If used, the stock stub frame may be lightened or shortened to achieve proper wheel base measurement; however, frame must remain stock production to the front of rear kick up.

16.7 Fabricated front and rear clip must be minimum .095 wall thickness 2x3 inch steel tube but must maintain large type coil suspension.

16.8 Frame must extend to rear of truck body.

16.9 Fabricated frames must use 3"x4" .095 wall tubing minimum, on main frame rails. Minimum Frame Rail Length is 51 inches.

16.10 Main frame rails may be no wider than 65" measured outside to outside. Main Frame rails may be no narrower than 50" measured inside to inside.

16.11 Engine, transmission and rear axle must be centered in frame. Tolerance of 1/4" in either direction.

16.12 Engine crankshaft height 11" minimum.

16.13 Minimum Frame height 4 inches.

17. SPECS. ROLL CAGE

17.1 Minimum roll cage must be 10 points of 1-3/4 inches X .095 inches.

17.2 Minimum of four horizontal door bars on right and left side with two vertical bars between each horizontal bar. Lower horizontal bar or second horizontal must be attached to frame in two places with 1 3/4 .095 tubing. "X-ing" is not a substitution for any door bars.

17.3 Cage halo must be near the roof line so driver has ease of entry and exit. Minimum Halo Height is 47.5 inches to bottom of Main Frame Rail To accommodate body mounting and driver access. Halo minimum outside width is 40 inches.

17.4 The only exposed roll cage bars will be the support bars from halo to rear frame.

17.5 Must have a minimum of 4 bars from cage to rear of frame; 2 bars from the top of halo and 2 bars from the middle area to frame.

17.6 Upper Halo Minimum width should measure at least 40 inches at narrowest point. Maximum Halo Width 53 inches. USST approved bodies will accommodate a 53 inch halo width.

17.7 Minimum halo length from front of roll bar to front of halo is 29.25 inches.

17.8. Main Cage Left Front Down Tube to Right Front Down tube measured inside to inside (for ease of measuring) is a minimum 50 inches.

17.9 Minimum door bar width from left to right is 65.5 inches. Maximum door bar width is 70 inches to allow approved USST bodies. Door bars may not extend outside any of the 4 wheels. Right Side Door Bar must extend at least 2.75 inches outside of right main frame rail.

17.10 Minimum Cage Height to Bottom of main frame rails is 47.5 inches.

17.11 Rear Roll Bar to Front Cage Down Tube 41 inches minimum and 42 maximum as measured on frame rail (center to center of round tubing).

17.12 Top Drivers Door Bar to Bottom of Frame Rail Minimum is 26.75

18. SPECS. SUSPENSION

18.1 No rack and pinion steering allowed. No Strut Rod type suspension. Front steer chassis only must be in stock location. OEM style steering boxes only.

18.2 Front lower A-arms must be equal length OEM style. No fabricated lower A frames. No Eccentrics on lower aframe mounting points. Lower mounting points must be equal distance from chassis centerline. Eccentrics on pre-2001 chassis must be welded with a minimum 1/2 inch weld.

18.3 Upper A-arms can be tubular non-adjustable. Mounting bracket may be moved from stock location. Aluminum cross shafts OK.

18.4 Front springs must be equal distance from centerline of frame.

18.5 On a stock frame, rear springs must be in stock location. Rear springs may be located inside or outside on tubular built rear clips but must be stock type located equal distance from frame centerline.

18.6 Minimum spring diameter is 4.5 inches.

18.7 Only one shock allowed per wheel. No External Reservoir shocks. No Externally adjustable shocks.

18.8 No coil-overs or coil over eliminators allowed.

18.9 Weight-jacks (bolt-type only) on all four corners may be used.

18.10 Steering quickeners are allowed.

18.11 Only two-wheel rear drive allowed.

18.12 Any cast or forged steel spindle may be used. Brake brackets can be welded or bolted to spindle but are subject to USST inspection. No tubular spindles allowed. No aluminum spindles.

18.13 Adjustable ball joints may be used.

18.14 Outer tie rod ends may be replaced with spherical rod ends. Tie rod sleeves and swaged tubes must be steel. Minimum tube ID is 5/8 inch.

18.15 Unless specified here all other steering components must be OEM.

18.16 NASCAR Style fabricated Centerlink, Idler Arm, pitman arm, tie rod adjusters, and intermediate shafts of SCP, RHE, or other professional manufacturers allowed. Must use inner tie rod ends.

19. SPECS. BRAKES/HUBS

Aftermarket hubs, rotor hats, rotors and calipers are OK within the following parameters.

19.1 Only four-wheel brakes allowed and must be functional; no floaters allowed.

19.2 Rear disc may be used.

19.3 Caliper must be a stock replacement caliper. Caliper pistons only allowed on one side of caliper. Aluminum caliper OK. One Caliper and rotor per wheel are allowed. Rotors must be 12 inches or less outer diameter, no more than 1.25 inches thick, and no less than .750 thick. No Aluminum or Carbon fiber rotors. No cooling holes in the rotor face. Curved vein rotors OK. Aluminum rotor hats and hubs are allowed.

19.4 No Carbon fiber calipers. No aluminum or titanium fasteners. No Wide-5 lug pattern hubs allowed. No Aluminum studs.

19.5 No aluminum disc brakes allowed.

19.6 No grinding or lightening of brake components is allowed.

19.7 Maximum of two 3" cooling ducts to each caliper or one 4" duct to each caliper.

19.8 One rotor and one caliper per wheel.

19.9 Brake cooling fans are allowed.

20. SPECS. FUEL & FUEL CELL

20.1 ATL is the preferred Fuel Cell manufacturer. USST basic fuel cell rules are the following: 22 Gallons maximum size. Roll over valve or flapper valve required in vent. Mounting brackets materials must be a minimum of steel 14 guage 1 inch square tubing or 2 inch wide steel strap 1/8 inch thick. Two brackets must encircle the fuel cell on the front bottom, back, and top.

A. The preferred Fuel Cell construction is the Bladder type manufactured by companies like ATL or Fuel Safe. Bladder Type Fuel Cells are legal in USST as purchased from the manufacturer when mounted following the USST mounting recommendations. These cells must be mounted with the factory supplied safety can or equivalent subject to inspection (normally 22 guage steel).

B. The acceptable alternative is to use a non bladder type fuel cells like the ones manufactured by RCI or JAZ. These fuel cells must be mounted following the USST mounting recommendations, protected by a safety can, AND additional 12 guage or 1/8 inch shielding must be added to the sides and rear of the safety can. This additional shielding can be incorporated into mounting strap or frame as long as all thicknesses are 1/8th inch minimum.

20.2 Fuel cell may not be lower than 8.5". Lowest part of Fuel Cell, not brackets, will be measured when checking minimum fuel cell height.

20.3 Cell must be mounted in a steel canister securely fastened to frame behind rear axle.

20.4 Fuel cell must be centered in frame.

20.5 Minimum thickness of .024 gauge sheet steel will be required for fuel cell canister. The only holes allowed will be four drain holes 1/2 inch maximum in diameter.

20.6 NO PERFORATED STRAPS. A minimum of two 2-inch steel straps must secure top and bottom of fuel cell canister.

20.7 Gasoline is the only fuel allowed.

20.8 No additives of any type may be added to fuel allowed.

20.9 Only 1 gasoline filter may be used between the fuel cell and the fuel pump. No Glass or plastic filters allowed. The location and size of the filter must be acceptable to USST officials.

20.10 Icing or cooling of fuel system will not be permitted in the pit or racing areas. Pressure systems will not be permitted. Any concealed pressure type containers, feed lines, or actuating mechanisms will not be permitted, even if inoperable. Icing, freon type chemicals or refrigerant may not be used in or near the fuel system.

20.11 AN type fittings required on all fuel lines. Steel Braided hose recommended.

20.12 Trucks seen overflowing fuel will be sent to pits for fuel removal and moved to the back of the starting line up.

21. SPECS. WEIGHT

21.1 Minimum weight of 3000 lbs with driver.

21.2 USST officials have the right to weigh trucks at any time.

21.2 All trucks will be weighed before the main event, and are subject to weighing before qualifying, dashes, and heats.

21.3 Maximum left side weight 58% with driver.

21.4 Dry sump oil system, add 50 lbs for 3050 minimum.

21.5 USST racers are subject to track fines for losing lead ballast.

22. SPECS. ENGINES

22.1 Engine and body not required to match, Chevy in Ford or Dodge OK.

22.2 No six cylinder engines allowed.

22.3 All engines will be a maximum of 9.5 to 1 compression ratio. USST can determine which cylinder to check. USST inspectors will perform or oversee the compression checking process to verify tools are used properly and crankshaft/piston are positioned TDC.

To calculate compression ratio

Compression ratio = $3D \frac{V1+V2+V3+V4}{V2+V3+V4}$

V1=3D calculating swept volume (bore x bore x stroke x .7854)

V2=3D deck height volume (bore x bore x .7854 x deck height)

V3=3D gasket volume (bore x bore x .7854 x gasket thickness)

V4=3D combustion chamber volume in cubic inches (1cc =3D.061c.i.)

example: 76cc x .061=3D4.636c.i.

Note: be sure to allow for valve reliefs and subtract dome size when computing effective chamber size. To make 9.5 to 1 most 355ci engines require 87cc of total combustion chamber volume, this includes: deck, valve reliefs, gasket and cylinder head chamber.

22.4 Maximum displacement, including wear and clearance, is: 365 cubic inches. Blueprinting of engine components allowed per factory specifications. (Formula: Bore x Bore x .07854 x Stroke x 8 Cylinders =3D Total Cubic Inch Displacement.)

22.5 OEM cast iron blocks only.

22.6 Pistons may not extend above deck height, flat top or dish only.

22.7 Steel connecting rods only. No titanium or aluminum rods.

22.9 Harmonic balancer must be bolted to the crank.

22.10 Camshaft and lifters must be of a flat tappet design only. Roller camshaft, lifters, mushroom camshaft, or mushroom lifters will not be allowed. Lifters must match block i.e. no ford lifters in chevy block. Lifters must rotate individually, no rounded nose lifters.

22.11 Timing chains will be OEM type only. Double roller chain and gears will be allowed. No gear drives allowed. No belt drives.

22.12 Any cast iron cylinder head. No porting, grinding, or polishing of any type; in any location. Chevy must be a 23-degree head. Heads may be surfaced. Heads must remain in stock location. No moving or offsetting of dowels in block or heads. Pocket under valves may be opened up with cutters only up to a maximum of 80 degrees. No removing of exhaust lip on lower floor of exhaust port. Roller rockers, guide plates, and stud girdles are optional. Heads must match block manufacturer. (Examples: Any approved GM heads on any approved GM block, etc. No big block heads on small blocks or vice-versa. No Ford on GM, etc.) 1st generation Ford 351N head allowed. Ford 352 head Not allowed. Check with USST for other variations and legal casting numbers.

22.13 Mechanical fuel pump in stock location. No belt-driven fuel pumps allowed. No electric fuel pumps.

22.14 No titanium parts allowed except valve spring retainers.

22.15 No aluminum oil pans allowed. Wet or dry sump systems allowed. Dry sump tank must be located behind drivers compartment.

22.16 Intake manifold: No hand-built fabricated sheet metal or aluminum intake manifold will be allowed. Intake manifold may not be any taller than seven inches at center of carburetor pad including any gaskets and spacers. Intake may not be altered to achieve height. Intake may be port matched, but grinding may not exceed over 1" into the manifold port.

22.17 USST Carburetor is 600 cfm. Holley 4776 or 80540 are the only approved carburetors. Carburetor will be checked using a GO-NO-GO gauge. Carburetor bore, throttle plate bore, throttle shaft diameter, and booster size will be checked using a GO-NO-GO gauge. Measurements will be of factory specifications. Choke plate may be removed. Choke horn may be removed. Throttle shafts may not be modified. End of screw may be cut to shaft. Two throttle return springs mandatory. Air cleaner required but may not protrude through hood. Coolers must be located in front of front firewall.

Gauge sizes used on Holley Carbs.

4776 ~ 80540

Primary venturi size 1.253 ~ 1.253

Secondary Venturi size 1.316 ~ 1.253

Primary & Secondary Throttle Bore 1.563 ~1.563

Thickness of throttle shaft & plates .1890 ~ .1890

Booster O.D. .613 ~ .613

Booster Length .706 ~ .706

22.18 Headers may be used. Exhaust shall extend past the driver's compartment and shall not exit out right side of truck or out side panels.

22.19 Mufflers are mandatory and shall not be altered from the original manufacturer's specifications. A maximum 95 decibel (dB) reading shall not be exceeded.

22.20 Engine setback is determined from the centerline of the rear axle to the rear of engine measured at ride height. 91 inches is the minimum measurement. Centerline of engine must be of equal distance from left and right frame rails. No tolerance allowed. Check with USST for Crate Motor setback.

22.21 USST will employ a compression checking devices for motors not carrying the PRO series seal. USST reserves the right to choose which cylinder to check and to determine where true TDC exists.

22.22 For 2005, USST is allowing the USLMA legal motor with 390 carb and maximum gear rule as set by USST. Gear Rule is subject to change at any time under USST's discretion. Gear Rule at Altus and Tulsa is 6.50 but is subject to change. Transmission must be in high gear for all oval track racing and qualifying laps. Gear Rule at Hallett is 4.56. 390 carb must pass inspection with standard guages and measure to factory specifications. Holley is the only approved manufacturer.

23. SPECS. RADIATOR

23.1 Aluminum or brass radiators allowed.

23.2 No plastic radiators or side tanks allowed.

23.3 Must have a functional catch can installed minimum 1 quart capacity. Catch can will be sealed unit with vent. Catch can must vent on right side base of windshield in a visible area outside of body.

23.4 No water-type trickle system allowed.

23.5 A fan shroud is required and must cover half the blade width and completely (360 degrees) encircle the fan blades.

23.6 No antifreeze, ethylene glycol, or similar coolants allowed. Water Wetter type products are allowed are allowed.

24. SPECS. IGNITION SYSTEM

24.1 No magnetos allowed.

24.2 No crank trigger ignition allowed.

25. SPECS. TRANSMISSION

25.1 Standard production transmissions which are cataloged and available through regular dealer channels. Richmond, Borg Warner, Ford, Saginaw and Muncie brands are OK. Any other transmission must be approved by a USST official. No aftermarket clutchless or internal clutch transmissions allowed, specifically: Bert, Brinn, Falcon, Lane, ErnieGlide etc.

25.2 Must have working forward and reverse gears; in addition to a neutral position and must be able to be shifted by the driver when fully strapped in.

25.3 Maximum four forward gears.

25.4 Transmission coolers allowed.

25.5 Transmission must be centered in frame.

26. SPECS. CLUTCH/BELLHOUSING

26.1 Single, double, or triple disc clutch may be used. Clutch & Flywheel must attach to crankshaft in conventional manner and rotate with crankshaft at all times.

26.2 No cones or couplers allowed on standard transmissions.

26.3 No drilling of flywheel for the purpose of decreasing the weight.

26.4 Reverse mount starter/bellhousing may NOT be used. No accessories may be driven off the front of the transmission (example: oil pump, power steering, ect.).

26.5 If OEM type clutch is used, then an explosion proof bellhousing is required. If explosion-proof bell housing is not used, a scatter shield, not less than 1/4-inch thick, must be installed over flywheel and bellhousing area. "Clutch-flywheel flexible housing safety shield" is approved for use. The shield shall completely cover any part of the housing exposed to the driver. On all bell housings, an inspection hole must be provided for easy accessibility and inspection.

26.6 Minimum clutch diameter is 7 ¼ inches.

26.7 Automatic Transmissions MUST be vented into a catch with a minimum 1 quart capacity. Catch can must be empty before each race. Press in vent tube should be tapped and a pipe fitting to attach catch can hose. Direct Drive PowerGlide (Bushore, TCI) with crank coupler okay.

26.8 If a Non SFI flexplate is used on an automatic then a Flexplate shield is required.

27. SPECS. DRIVE SHAFT

27.1 Drive shaft must be stock type steel only, must be painted white and have truck number on it.

27.2 No aluminum or carbon fiber drive shaft allowed.

27.3 Only two u-joints allowed.

27.4 Two loops are mandatory; one front and one rear.

27.5 Minimum driveshaft tube diameter 3 inches.

28. SPECS. REAR AXLE

28.1 Any stock passenger car, 1/2-ton truck, or quick-change rear end allowed.

28.2 Rear end units may be locked.

28.3 Mini or full spools or welded rear ends are allowed.

28.4 No limited slip units, lockers, aluminum axle tubes.

28.5 Rear suspension may be 3 or 4-link type.

28.6 All control arms must run forward of rear axle to frame

28.7 Maximum length of control arms is 30 ½ inches from center to center of rod ends. Minimum length of control arms is 29 ½ inches center to center of rod ends.

28.8 Rear end control arms may be aluminum.

28.9 No torque absorbing devices allowed. This includes control arms, 3rd link, or track bar.

28.10 Panhard bar or J bar only Track Bars allowed.

28.11 Rear track width 65" max.

28.12 Floater rear-ends optional.

28.13 Wheel bolt pattern cannot be larger than 5-on-5".

28.14 Gun Drilled axles okay for vehicles over 3000 lbs.

29. SPECS. WHEELS

29.1 Any 10-inch steel wheel allowed.

29.2 Only four-inch offset wheels allowed on Fabricated or Stock Stub Chassis. Ex-ARTS chassis allowed backspacing from 2" to 4"

29.3 No bleed-off valves allowed.

29.4 No bead locks allowed.

29.5 Wheel weights must be fastened by clips, glue, and tape.

29.6 Wheels may not protrude outside fender wells.

29.7 No wide-five wheels.

29.8 All wheels must have at least five 1-inch nuts.

29.9 15x8 wheels will be allowed for some visiting truck classes but not recommended and are subject to inspection. IMCA sticker wheels will not be rejected when used as manufactured.

29.10 USST officials have the right to reject any wheel based on safety.

30. SPECS. TIRES

30.1 The mandatory tire will be determined by USST on a year by year basis. ~~The 2005 tire is the Goodyear Hooters Cup asphalt scuff available from USST only at \$30 each. Tires transported to racetracks are sold at \$35 to cover handling. All tires must be marked and cataloged by USST. If a driver is found to be using tires that have NOT been marked, they run the risk of being disqualified with a loss of points and prize money based on USST official's decision.~~

~~2006 rules strike this rule: 30.2 Tire Treating is prohibited. Tests will be made to insure NO unauthorized treatment or tampering of tire is being done. Tire treatment of any kind and/or possession of such chemicals on property is strictly prohibited. USST competitors agree to allow a maximum of 2 feature race tires of USST choice to be confiscated for testing for treatment. Tires will either be returned to team or destroyed after testing. Wheels will be returned if the tires cannot be easily dismounted at time of confiscation.~~

31. SAFETY GUIDELINES

31.1 All seats shall be high back.

31.2 The driver's seat must be securely fastened to the roll bars by four 5/16 grade 8 type bolts with fender washers on both sides of the aluminum seat and nylock nuts or lock washers.

31.3 Seat belts and shoulder harnesses of five point variety must be used and must be bolted with 1/2 grade 8 or better bolts to the roll cage structure only; NOT to the floor pan. Lap belts and shoulder harnesses are to be 3 inches in width and replaced every four years beginning with belts dated 1996. A date tag or stamp is required. Upper end of the shoulder harnesses must be securely fastened to metal supports at a point level to the driver's shoulders.

31.4 Driver side window net is mandatory.

31.5 The following safety equipment is mandatory for drivers and must be free of excessive wear;

31.5a Fire suit.

31.5b Full coverage helmet (meeting 1995 Snell standards). Snell 2000 will be required in 2005.

31.5c Fire retardant gloves.

31.5d Fire retardant shoes.

31.5e Neck Braces are required at some racing facilities and are recommended by USST. Drivers must possess a neck brace to use at the tracks requiring them.

31.6 For the protection of the driver's feet, a boxed-in area with proper bars or similar protection is highly recommended.

31.7 Ballast weight must be securely bolted in place and must be approved by a USST official. Minimum one 1/2" bolt per 25lbs. All weights must be painted white and have truck number on them.

31.8 An onboard fire extinguisher is mandatory. It must be a minimum of 2.5 lb., securely fastened within easy reach of driver.

31.9 Each pit area must have a dry chemical fire extinguisher in good working order.

31.10 Positively no sharp ends or edges on bumpers, nerf bars, fenders or wheels.

31.11 Ignition switch must be clearly marked on/off.

31.12 If any truck does not meet acceptable safety guidelines, it will not be permitted to enter competition until compliance is met.

31.13 The battery must be securely mounted in a steel frame behind the driver's compartment. The battery must be located between the trucks frame rails or the exposed sides must be covered by a steel not less than 20 guage thick.

31.14 All trucks must have loops on the front and rear for easy hook up by a wrecker. Loops may be no taller than 8 inches above bumper and no wider than the frame. Loops must be under hood or rear deck.

32. RADIOS

32.1 Two way voice communication radios, independent of car's electrical system will be permitted and are recommended.

32.2 An area will be reserved in the Pit grandstand for one crew chief or crew member with radio communications to his/her driver during ALL "A" and "B" Main events. Team uniforms bearing the truck number are recommended to allow spotters to relay messages concerning safety issues.

32.3 Trucks without radio communications are required to display a 12 inch tall 'X' on the left rear tail to warn other competitors that they do not have a spotter.

33. NON USST TRUCK CLASSES

Visiting Trucks from other series are encouraged to race with USST. The following sections are summary information and rule variations for USST events. You may not mix and match rule sets to create a "hybrid"

truck. These rule sets evolve over time to foster competitiveness. Contact USST if you have any questions. USST is motivated to get new teams to try racing with our series so we are lenient with first time teams. If you have a non-USST truck that deviates from these rules, contact us to discuss options for clearance.

A. Mid American Super Trucks:

Mid-Am Trucks may race at USST events.

Mid-Am truck chassis are legal for long term racing in USST with the following adjustments:

- Equal length rear trailing arms greater than 30 inches.
- USST Engine Rules.
- USST Tires.
- 8" wheels or 4" offset 10" wheels.
- No underslung chassis unless approved by USST.
- 3000 lbs with driver before race.

B. CNS Late Model Trucks

Contact USST to discuss running a CNS truck in a USST race.

C. Legacy ARTS Truck Classes:

An ARTS Chassis truck has won a USST race. USST is enthusiastic about the many ARTS chassis trucks being able to run competitively with USST. For 2006, the following rules apply: Subsequent races and the long term approach is as follows:

If ARTS or USRA rules with 305 or 350 iron crate Engine - Any Carb, ARTS tire, 2750 lbs. Call for status on other modifications

If USST Engine Rules - 3000 lbs with driver before race.

Nine Inch, QC, or GM rear end 3 link or 4 link.

7 1/4 minimum clutch or any automatic transmission.

8" or 10" wheels with USST tires.

Engine Setback for a full frame 108 inch wheelbase truck can be set at 91 inches from back of block to Rear End CenterLine.

D. Craftsman Trucks:

NASCAR Craftsman Truck chassis are legal in USST. USST motor rules are required. As of the 2003 season, Craftsman trucks will be allowed to compete in USST races. Craftsman Truck 9.5 wide wheels or USST 4 off wheels are allowed. USST shock rule applies. Contact USST for more details. Engine setback or 93 inches from centerline of rear axle is allowed. USST body rules may be utilized.

F. I-70 Trucks:

USST has worked to determine the equalization factors to include I-70 trucks in USST but a lack of participation has made this difficult. USST welcomes I-70 trucks. Please email USST before the race to discuss details. The GM 604 crate motor (with aluminum head) is legal. Carb Rule is as follows: Only approved USST tires allowed.

Weight is 3000 lbs with driver after race plus these cumulative adjustments.

Unequal length lower A frames: Add 50 lbs.

Offset Chassis: Add 50 lbs.

Extended Cab Body: Add 25 lbs.

Front track Greater than 65 inches but Less than 67 inches: Add 25 lbs.

Front track Greater than or equal to 67 inches: Add 50 lbs.

Wide Five Hubs: Add 25 lbs.

Appendix A - 7/18/08 Rule Clarifications

These Clarifications are effective July 2008 and will be integrated when the yearly review takes place for 2009.

Carburetors:

In short

1. 600 CFM Max for USST 9.5 to 1 motor. Holley or Holley HP.
2. 650 CFM Max for GM Crate motor. ASA Legal.
3. Grandfathered MIDAM motors currently get the 750 CFM. This is being evaluated and motors are being tracked and evaluated. All MIDAM rules apply.
4. 390 CFM max for all motors not meeting above rules. This is only for new teams and these motors must be registered with USST AND THE Maximum Rear End gear is a 6.50 Final. NO Busch carbs. USLMA Legal.

Shocks:

As stated many times, we try to keep the shock cost under control. The rule is written to eliminate expensive shocks. There have been many questions and the "spirit" of the rule was a dollar figure per shock. Now, the "spirit" is going into additional writing. "The maximum retail price of a new shock is 120 US Dollars and will be adjusted by USST Management as necessary." The used price is irrelevant. The retail price is what all the other teams would have to spend. Here are some examples of specific shocks part numbers and prices that are Legal and Illegal:

AFCO Aluminum Body 1176 Retail 157.45 ILLEGAL

AFCO Steel Blue Body 1076 Retail 89.99 LEGAL

AFCO Steel Take Apart Shock A950B Retail 144.99 ILLEGAL

PRO Smooth Aluminum Body Shock A950B Retail 144.99 ILLEGAL

PRO Threaded Aluminum Body Shock AC760B Retail 156.99 ILLEGAL

QA1 Smooth Aluminum Body Shock 6076 Retail 139.99 ILLEGAL

QA1 Steel Body Shock 5076 Retail 99.99 LEGAL

Bilstein 46 MM steel 9z5050 Retail 114.99 LEGAL

Bilstein 46 MM steel B46GNTF5 Retail 218.00 Illegal

(All Aluminum Shocks reviewed were ILLEGAL based on price)

Brakes:

The Brake rule is the same as it has been for years. Pistons pushing from 1 side only with a 12 inch Maximum rotor diameter. We are not changing to 4 piston calipers. New trucks with 4 piston caliper front brakes will be reeled after they become competitive. Weight penalties may be applied under USST's discretion.

Chassis:

Any trucks with differences from the USST rules will be weighted accordingly. If your chassis deviates from the USST design, we will reel you in as USST deems necessary.

Rough Driving:

The 2008 season has been the roughest season ever. USST will begin issuing instructions to drivers or spotters via the flagman or USST official. Rough Driving, Chop Blocking, and Mirror Driving are all offences that will begin receiving warnings and penalties. The trucks look like we race on dirt, the number of DNFs is embarrassing, and the expense of repairing the trucks is money that could be spent elsewhere. Rubbing is racing but you guys have to leave racing room on the outside and inside. USST officials have noticed many trucks crowding the outside. This will get you nosed into the wall in a hard crash when the truck you pinch hits the wall and bounces back into your tail.

All these rules are going to be enforced. Teams have been requesting this of USST. It is important to keep us on an even playing field to keep this fun, competitive, challenging, and as affordable as possible.