



# TWIN STATE SPEEDWAY'S 2012 SUPER STREET RULES/CRATE ENGINE POLICY

TSS RESERVES THE RIGHT TO MODIFY OR ADJUST THIS POLICY AS T.S.S. FEELS A NEED TO. IF YOU FEEL THAT YOU INTERPET THIS POLICY DIFFERENT THAN T.S.S. OFFICIALS DO, ASK NOW.GBDF9-24-12

**TSS will seal any new G.M. # 88958602, # 1925-8602 or 88958603 engines that are in an unopened crate from GM. There will be a fee for this.** {Contact Tech.} Any engine that does not have documented T.S.S., R.P.M., or Butler & MacMaster seals will receive a weight penalty and must use a R.P.M. part # 1500 restrictor plate. {See weights.} All crate engines must be run as produced by GM. All crate engines must be register with TSS head tech. There is no tolerance for modifications to these GM crate engines. Any engine that TSS feels to be out of G.M. specs will be taken for an outside evaluation. If the engine passes the evaluation the Speedway will pay all fees. If it fails the owner of the engine will be responsible for all expenses incurred to do the evaluation. TSS reserves the right to randomly take any crate engine for a dyno check and evaluation. T.S.S. strongly recommends all competitors to buy their engines from R.P.M. @ 1-802-524-7406. This will save a lot of time and the cost of inspections and sealing.

1. The only crate engines allowed in the Super Streets at T.S.S. is the G.M. Part # 88958602, G.M. part # 1925-8602, {second generation 602} and the G.M. Part # 88958603.
2. These engines must be used as manufactured by G.M. **except for the following rocker arms. All rocker arms must be either the OEM stock stamped steel GM part # 10089648 or GM roller rocker part # 12367345 or G M roller rocker set # 1237083 or the Scorpion # 1035 BL. These rocker arms are 1.50 Ratio.**
3. The only carburetors allowed on the GM # 88958602 and the G. M. # 1925-8602 is the four barrel **Speed Demon Barry Grant** Carb. Part #1282010 **650 C.F.M.** with no prefixes or suffixes added to the part number and the Holley 650 cfm carburetor Part # 80541-1 with no prefixes or suffixes added to the part number. **These carburetors must meet all gauge, pin, and visual checks that T.S.S. or people appointed by T.S.S. do. The only modifications allowed are the changing of the fuel jets in the metering block, the power valves, the squirters, the accelerator pump cam and external linkages to make the carburetor work.** A one inch spacer plate will be allowed on these engines. One .075 thick gasket will be allowed on the top and bottom of this spacer.
4. The only carburetor allowed on the GM # 88958603 is a Holley # 4412. A one inch carburetor adaptor plate is allowed. A .075 inch gasket is allowed on the top and the bottom of the plate. These carburetors must fit all gauge and visual checks that T.S.S. or people appointed by T.S.S. do.
5. **All carburetors must fit T.S.S. gauge, pin, and visual checks that T.S.S. or a person appointed by T.S.S. does.**
6. **Any 88958603, 88958602 or 1925-8602 engine that does not have approved seals for T.S.S. must use a R.P.M. Part # 1500 restrictor plate and follow the weights listed in weights. One 0.075 gasket on the top and bottom of the plate.**
7. Any work that requires breaking any engine seal must be done with TSS Tech or an approved engine rebuilder. TSS recommends Rick's Performance Machine. There will be a fee if TSS works with the competitor to repair your engine. If you cut your seal or seals or remove the G.M. seals your engine must be disassembled by an approved TSS engine rebuilder/repairer and repair anything that is found out of spec. and resealed before the engine is allowed to compete at T.S.S. These engines must be run on a dyno. No excuses.

8. Do not attempt to do any modifications to this engine. If any modifications are discovered at any time, by T.S.S. or any approved engine builder – repairer the minimum penalty is listed below.
9. All money and points for the race meet that the violation is discovered in will be taken away. All previously accumulated points will be taken away and a maximum fine of \$1000.00. The driver of the car will start at the rear of the qualifiers and features for a minimum of three weeks.
10. All fines must be paid to T.S.S. in full before the driver, owner, or engine is eligible to compete.
11. The owner of any crate engine that fails any dyno and/or physical checks/tests that TSS does. The owner will pay all the fees that are incurred. The engine will be disassembled as far as one of TSS approved engine builder feels a need to correct the issue/issues. The engine must be resealed at the owner's expense. If the engine that is being checked passes all checks and inspections, the speedway will pay all the expenses incurred.
12. All engines that are taken will be returned no later than four days from the day the engine is taken if it passes all inspection. If the engine fails the owner of the engine will be called and must pick their engine up at the approved engine builder that it was inspected by and must pay all expenses that are incurred before they get their engine back.

## 2012 SUPER STREET RULES

THESE RULES ARE TO BE USED AS A GUIDE. T.S.S RESERVES THE RIGHT TO MODIFY OR ADJUST THESE RULES AS NEEDED. ALL WEIGHTS WILL BE ADJUSTED IF NEED BE.

Since it would be nearly impossible and impractical to list within these rules all the modifications, adaptations, or infractions, it will be understood that: If it is not covered in these rules below ask. In addition, Twin State Speedway reserves the right to fine, suspend, withhold money and/or points from anyone who is out of the line of these rules, or any rule infractions. T.S.S. reserves the right to modify, delete, amend, or update these rules as need be. THE MOST IMPORTANT RULE HERE IS THE "INTERPRETATION RULE" IF YOU FEEL THAT YOU INTERPRET THE RULE DIFFERENT THAN T.S.S. OFFICIALS DO ASK NOW.

### **ELIGIBLE MODELS:**

Any American made passenger car body with a minimum wheelbase of 101". The wheel base must be a minimum of 104" and a maximum of 108.1" on all chassis. The only full frame chassis allowed is a metric 108.1" wheelbase frame. The after market replacement metric frame is allowed. All cars with Camaro snouts must use a front steer snout. Tube snouts are allowed. All frames, snouts and roll cages must be magnetic steel.

### **ENGINE LOCATION:**

1. The number one sparkplug hex can be no further back than the center line of the upper ball joints.
2. Any chassis that has the engine further back than rule #1 will receive a minimum 50 pound weight penalty to the right side frame rail after the car meets weight for the option that the car is running.
3. The engine must be centered in the chassis in the engine bay.
4. The minimum crankshaft center line height is 10" to the ground.

### **WEIGHT:**

1. All cars will be weighed before any race and meet the weights as listed below.
2. Any 602, 8602 or 603 crate engine that does not have documented seals by T.S.S., R.P.M., or Butler & MacMaster must weigh a min. of 3100# and have a max. 52.5% left side weight and be raced as produced by GM. These engines are going to be checked in the same manner as all GM crate engines.
4. All weights are with the driver in his/her seat with hands on the steering wheel, in race ready position. All weights are before any race.
3. All metric frame cars with three point rear suspension without a sealed crate engine will weigh a minimum of 2950 lbs. with a maximum of 55% left side weight.
4. All metric frame cars with three point rear suspension, with a sealed crate engine will weigh a minimum of 2900 lbs. with a maximum of 56% left side weight.
5. All Camaro snouted cars without a sealed crate engine will weigh 2950 lbs. with a maximum of 55% left side weight.
6. All cars with a Camaro snout with a sealed crate engine, and three point rear suspension, will weigh a minimum of 2900 lbs. with a maximum of 56% left side weight.
7. All tube frame cars with a documented T.S.S., R.P.M., or Butler McMaster sealed G.M. crate engine will weigh 3000 lbs. minimum with a maximum 54.5% left side.
8. All tube frame cars with a steel heads that meets T.S.S. rules will weigh 3050 lbs. minimum and a maximum 53.5% left side weight
9. A 0.25% tolerance on total weight will be allowed.
10. All weights will be monitored and subject to adjustment.

11. No car can be lifted before any weigh-in. All cars will start the race with the air pressure in the tires the way the car went through the pre-race weigh-in.

**BODY:**

1. Any o.e.m. appearing aftermarket body or home made body.
2. Any down force body may be asked to add total weight and remove left side weight. {TSS discretion}
3. All bodies must have a rubber nose piece, full lexan windshield, and the rear body area enclosed with no holes. No exposed bumpers.
4. All interior sheet metal must be a minimum of 22-gage 0.031 magnetic steel or .040 aluminum.
5. All roofs must be a minimum of 46" from the ground measured back 10" from the top center of the windshield. Roof veins allowed with a six inch maximum vein on the driver's side and 2 inch maximum vein on the passenger's side.
6. Firewalls must completely seal off the driver from the engine bay and trunk area. There must be a flat area where the shifter comes through the floor.
7. All bottoms of fenders, doors, wheel wells, and rocker panels must be rolled or bent inward towards chassis.
8. Air filter may be through the hood. A maximum height of 6" is allowed for all air filter elements. All hoods must be on the car unless the car has been in an accident and the hood mounting hardware is damaged and can't be repaired.
9. The only rub rails allowed are the Five Star # 000-2100 or a similar polycarbonate. These rails must be attached directly to the side of the body. {No tubing allowed under these rails.}
10. Aftermarket 10" high x the width of the trunk spoiler allowed. Side skirts and center bracing allowed. The spoiler, skirts and bracing must be clear lexan unless it is an aluminum aftermarket such as a Five Star Typical 5"x60". Spoilers must attach directly to rear bumper cover area. The maximum spoiler height is 45" from the top of the spoiler to the ground. A one inch angle on the top of the spoiler is allowed.
11. The maximum height for the rear quarters at the bumper cover/deck lid intersection will be 36".

**CHASSIS:**

1. All snouts, uni-bodies, frames, and cages must be magnetic steel.
2. Any chassis with a Camaro snout must use a minimum of 2" x 3" steel box tubing when fabricating the center bay. Rear frame rails from the center of the rear rearward may be replaced with a minimum of 2"x2" steel box tubing for the rear clip.
3. All tube frame cars must be a minimum 2"x3" steel box tubing from front springs to the rear springs. The minimum tubing allowed from the springs forward and rearward from the springs will be a minimum of 2"x2" steel box tubing.
4. Metric frame chassis may box the center bay or replace it with a minimum of 2" x 3" steel box tubing. Rear frame rails from the center of the rear rearward may be replaced with minimum 2"x2" steel box tubing.
5. Three-point rear suspension allowed on all chassis. All cars may use either, an o.e.m. lower trailing arm, a fabricated lower trailing arm or an aftermarket one. The upper 3rd link may be o.e.m. or aftermarket.
6. The pan hard bar must have a 3/4" heim joint mounted on each end and be a one piece metal unit.
7. All pan hard bars must be located behind the rear end housing.
8. The upper third link must be mounted to the rear end housing. Truck arms allowed. No floating brackets.
9. Bottom of frame will have a minimum of 4" ground clearance at all times. No lifting the car at any time.
10. Racing springs allowed. Conventional jacking bolts or coilover eliminator allowed on all four springs. No coil over's. Leaf spring cars may have adjustable lowering blocks and shackles. All coil springs will have a minimum 5" O.D. All springs must be magnetic steel.
11. The front sway bar must be a one piece OEM appearing bar. Frame mounts may be adjustable.
12. Tubular A-frames allowed. An approved piece of chain may be used on the lower front suspension and attach to the frame.
13. All spindles must be magnetic steel. The front brake rotors and hubs may be aftermarket. OEM appearing steel single piston brake calipers.
14. All chassis must have magnetic steel steering box, idler arm, and drag link. After market tie rods and heim joints allowed.
15. All lower control arms must be the same length left to right. {64.5" tread width measured from the center of the wheel}
16. Any ball joints or mono balls.
17. Lower A-frame mounting holes may be modified.
18. The only take apart, rebuildable or adjustable shocks that are allowed is the QA1 stock mount steel FC Series or the 50 series re-valveable and rebuildable. All parts that are used to rebuild, or adjust these shocks must be the original parts offered by QA1 and available to every one by QA1 or its dealers. The only part that can be modified is the bleed hole in the piston. It may be re-drilled. The FC series shocks may have extensions or spacers on the top or bottom. Only one shock per wheel allowed. No shock will cost any more than \$120.00

racers net new for everyone. No aluminum, coil over or threaded body shocks allowed. Shocks must be steel body. TSS reserves the right to confiscate any shock for evaluation. If any shock fails to meet the specs listed above, the owner of the shock/shocks will be responsible for all fees that are incurred. If any shock is found out of spec. their will be a penalty.

19. A fuel cell is mandatory. The fuel cell must be in the trunk area and as close to the back of the rear end as possible. All cars must have a fuel cell bar. The bar location will be under the back of the car and behind the fuel cell. The bottom of the bar must be below the bottom of the fuel cell and a minimum of 24" wide and fabricated from 1 3/4" minimum tubing. A 1 3/4" tubing brace must be welded at each end of the bar. Approximately 45° to the frame rails. No add on wt. allowed on any part of the fuelcell mounts or bars. There must be a metal frame under the fuel cell with a minimum of three 1" x 1" [minimum dimension allowed] magnetic steel box tubing pieces. The top of the fuel cell must be mounted securely with 4 - 1" metal straps with two going in each direction. All fuel cells must have a rollover valve in the cell or the vent line. Maximum capacity: 22 gallons. Fuel cell must be enclosed in a 22 gage steel 0.031" thick magnetic steel container. The bottom of the fuel cell container will be no lower than 8" from the ground with the chassis at race height.

20. Any magnetic steel driveshaft allowed.

21. Aftermarket radiators allowed. No coolers allowed inside the radiator tanks. A shroud must cover the top of the fan if mechanical fan is used. Electric fans allowed.

22. Steel racing wheels mandatory. 8" maximum width allowed.

23. American Racer Tires:

American Racer 704x225x70x15

American Racer 704x235x70x15

### **ENGINES / DRIVETRAIN:**

American made blocks only. No aluminum or soft metal blocks allowed. G.M. 350 C.I. block only.

All blocks other than the crate engines will be allowed .040 overbore, including wear.

1. Any 3 ring flat top piston allowed. Valve relief may be milled into the piston. No portion of the piston may protrude above the block.

2. Steel o.e.m. appearing correct dimension magnetic steel rods for block used. Stock length, 5.7" for Chevy.

3. OEM stock production crankshaft or Scat replacement cast steel 9000 series crankshaft allowed, part numbers 9-10526 or 9-10442. Normal balancing allowed. No grinding, lightening, or machining other than what is listed below will be allowed. The journals may be polished. Crankshaft must be correct dimension and weight for block used. The crankshaft journals will be no more than 0.030 undersize. All strokes must be 3.480" to 3.950". All crankshafts will be 48# minimum weight. CRANKSHAFTS WILL BE CHECKED, if TSS feels a need to.

4. Lifters must be solid or hydraulic and the correct OD for block used. The o.d. measurement is .842. No roller or mushroom lifters allowed. NO CAMSHAFT WILL HAVE A LIFT GREATER THAN .466 AT EITHER THE INTAKE OR EXHAUST VALVE. VALVE LASH WILL BE SET AT .000 WHEN MEASURING THE LIFT. NO CAMSHAFT WILL HAVE A LIFT GREATER THAN .30666 AT THE CAMSHAFT. The valve lift and cam will be measured at the valve and cam.

5. Roller rockers allowed. All rocker arms must be independent of each other. Stud girdles allowed. All engines must use a maximum 1.52" ratio rocker arm.

6. No gear drive or belt drive timing components allowed.

7. Fuel pump must be in stock OEM location. No electric fuel pumps.

8. After market belt driven water pumps allowed. Must be in OEM location.

9. Aftermarket alternator allowed, if any alternator is used, it must be bolted to the engine. No alternator will be built into the water pump. No smog pumps.

10. All power steering pumps must be bolted to engine.

11. All distributors must be a cast housing H.E.I. No billet housings, external coils, or ignition boxes. All parts to make the distributor function must be under the cap of the distributor. The firing order must be correct for block used.

14. After-market wet sump pan allowed.

15. Starters must be in OEM location on the block and mounted in the same direction as an O.E.M. starter.

16. A minimum O.D. dimension of 6 3/4" harmonic balancers will be permitted.

17. Electronic switching devices or sensors will not be permitted on the harmonic balancer, crankshaft, flywheel or rear end.

18. Only one standard automotive 12 volt battery, not to exceed 13.5 volts will be permitted.

### **CLUTCH / TRANSMISSION:**

1. The total weight for clutch disc, pressure plate and flywheel will be a minimum of 30 lbs. The minimum dimension for clutch disc and pressure plate is 10.4". The pressure plate and flywheel must be OEM stock appearing for block used. No multi-disc clutches allowed. Solid center clutch disks are allowed. The late model crate engine will use flywheel part #14088646 or a magnetic steel replacement. Wt. must be equivalent.

2. No automatic transmissions.

3. All transmissions must be OEM production stock for engine used. All gears must work. No lightning of any internal transmission parts. No modifications. All transmissions must be stock. The key word here is stock.

**REAR ENDS:**

1. Floaters, conventional quick change, {with a minimum of a 10" ring gear} straight rears and o.e.m. rear ends allowed.

2. Aluminum tubes. Deduct 1/2% left side wt. The maximum tread width allowed is 64-1/2" measured at the center of the wheels. All rotors must be steel. Spools mandatory.

3. All rear ends must be locked. A spool is mandatory.

**BRAKES:**

1. Disc brakes allowed. Any stock appearing steel single piston caliper allowed. All rotors must be steel vein type with a min. thickness of 1.00". All mounting brackets must be attached solidly to the rear end housing. After market pedals and master cylinders allowed.

**NON GM CRATE HEADS:**

1. Casting numbers must document that the casting used is a minimum of 70 cc's with the intake valves no larger than 1.940, and exhaust valves no larger than 1.500.

2. The only heads allowed are (OUT OF THE BOX) 70 cc or more OEM stock steel production cylinder heads or World Products Inc. part number 4350 or 4360 stock (OUT OF THE BOX). No bow tie, angle plug, turbo, vortex or any other after-market heads allowed.

3. All non GM crate engine heads may be milled to a minimum of 70 cc. machined for screw in studs, guide plates and drill pushrod guide holes. NO GRINDING, BEADING, DIPPING, ACIDING, HAMMERING, PEANING, HONING, SALTING or anything else that you can think of. These heads will be checked and confiscated if a second opinion is needed.

4. Valve guides may be replaced. Valve guides must be left at OEM height in all the ports. All valves guides and valves must be the correct angle for casting used.

5. Any valve seals allowed.

6. The max. OD Valve springs allowed is 1.250. The largest intake valve allowed is 1.940". The largest exhaust valve allowed is 1.50". No cut back angels on valves. All valves must be OEM dimension. No lightweight or titanium valves allowed. One angle on the valve, and three angles allowed on valve seat. All valve spring retainers must be magnetic steel.

**Twin State Speedway's Non Crate Engine Head Rule:**

Work allowed on the valve seat is as follows:

No angle cuts, metal removal, or enlarging of the ports allowed below the top of the valve seat to a depth greater than:

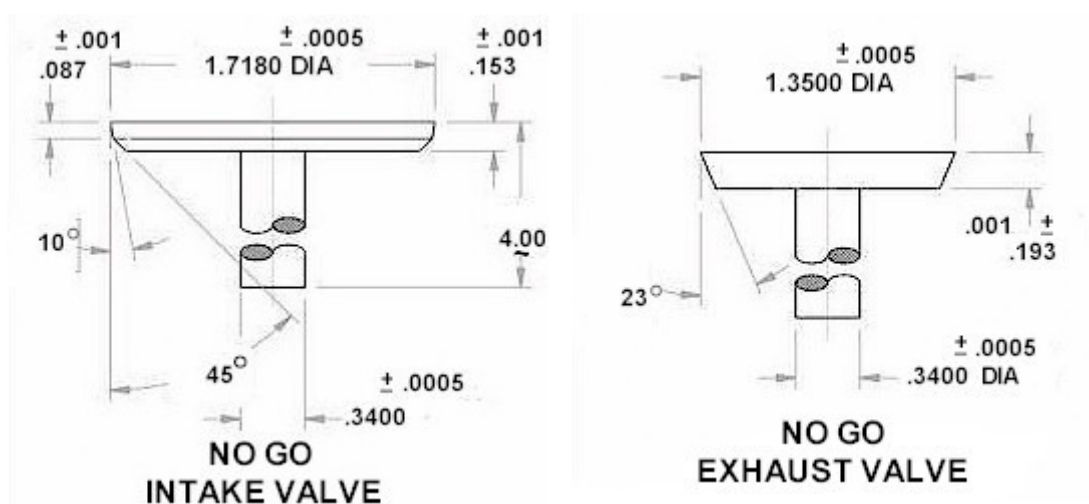
.171 From the top of the valve seat to top of the gauge in the intake valve port side of head.

.121 From the top of the valve seat to top of the gauge in the exhaust valve port side of head.

Measurements will be strictly enforced by the use of Twin State Speedway's no-go gauge.

Exhaust: 1.350" OD of gauge on exhaust.

Intake: 1.718" OD of gauge on intake.



## CARBURETOR / SPACER / AIR CLEANER:

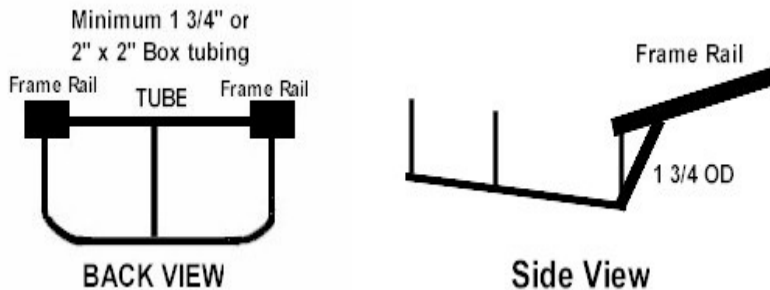
1. One Holley #4412, 500 CFM carburetor mandatory on all non crate engines. Choke butterfly and shaft may be removed. Holley externally changeable jet fuel bowl may be used. Any power valve allowed. Accelerator pump may be changed. Idle holes may be drilled in the butterflies. The butterfly screws may be trimmed flush with the throttle shaft. No other modifications will be allowed. The carburetor will be checked with T.S.S. gauges. No Holley performance parts.
2. A 1" thick carburetor adapter allowed on all non crate engines with one .075" gasket per side. Any air filter housing allowed. No added air inlets to air cleaner. Only one air filter allowed with a maximum of 6 inches in height is allowed.
3. Cold air boxes allowed.

## INTAKE MANIFOLD:

1. The only intake manifold allowed will be the Edelbrock Performer 2101. All intakes must be stock out of the box. No modifications allowed. All sand castings marks and parting lines must be visible. All crate engines must use the intake that the engine is sealed with from the manufacturer.

## EXHAUST:

1. Headers must be street type chassis headers or conventional up and over. All four primary tubes must exit into one single collector. There must be one collector for the left side of the engine and one collector for the right side of the engine. No merge or pyramid collectors allowed. Balance tubes allowed.
2. Mufflers required. One muffler for each header collector or two into one allowed after the collectors. Any muffler/exhaust that T.S.S. officials feel is too loud will be required to change them before the next race meet. All exhaust pipes must exit behind the driver under the car with turn downs, or exit out the rear of the right door. All exhaust that exits the door must have a box mounted to the door for the exhaust. All exhaust that exits out the door will be at least 1" inside the box.



## FUEL CELL BAR

### Paint and Lettering:

1. All cars must be numbered. All numbers must be confirmed with Twin State Speedway. Numbers must be painted on both doors and roof, and be a minimum of 18" high. Roof number must be read from the passenger side of the car. All numbers will be distinctly contrasting to the car color. All cars except Modified cars must have their car number on the upper right hand corner of the windshield, with a minimum height of 6" in white. All numbers will be subject to visual approval by the head scorer.
2. To be appointed a number you must call or email the speedway.
3. All cars except the modifieds must have their total wt. and left side weight on the bottom passenger's side of the windshield.

If there is any question of any of the rules listed, please do not hesitate to call for official information. Call the speedway days @ (603) 543-3160 or Tech. @ [603] 558-4963. There will be a fee for your T.S.S. license.