



**2018**

# **Super Stock Rules**



# SUNSET SPEEDWAY 2018 SUPER STOCK RULES

## DISCLAIMER

This set of rules is designed as a basic guideline. All cars are subject to technical inspections by random selection at the end of each race. Any part of the car not specifically covered in these rules must remain stock.

The Super Stock division is open to any make of North American built automobile having a factory listed wheelbase of 108" or more, for the make, model and year being raced. No front wheel drive vehicles, four wheel drive vehicles, convertibles or station wagons will be allowed.

The word stock when used herein shall mean unaltered, as factory available and produced by O. E. M. for the make, model and year of the car being raced. That excludes all aftermarket "High Performance" parts, and all decisions and rulings shall be based on data obtained from the Canadian Service Data Book.

## SPECIFICATIONS

### APPEARANCE

Cars must not be excessively rusted and must be presentable in appearance. Cars that are considered unsafe or improperly prepared will be rejected by the tech committee.

### 1) BATTERY

- Must be located behind the driver's seat securely fastened and in a sealed container e.g. a marine battery container with lid if in driver's compartment.

### 2) BODY APPEARANCE

- Body must be steel or Fiber Glass stock in appearance to the original vehicle.
- When using a Fiber Glass Body it must be a template approved body as listed below
- Body height will be a minimum of 51 inches, measured 10" behind top of windshield on roof centerline (without driver).
- **APPROVED FIBER GLASS BODY TYPE and Manufacturer.**
  - 5 Star S2 Bodies
  - ULTIMATE Fiberglass
  - AR Bodies.....XYG Metric Muscle Cars or the SPORTSMAN BODY
  - Any other Fiber Glass Bodies must be approved by **Speedway CALL BEFORE YOU BUY.**
- Tires must be inside fenders & scrub rails.
- Bodies may be interchanged between make and model.

### Ground Clearance

- Minimum body height 4".
- Minimum frame height 6".

### Hood & Trunk Lid

- No hood openings allowed.
- Inner hood and trunk lid bracing may be removed.
- Five hood pins required. Three fronts and two back.
- Fiberglass hoods allowed.
- Rear spoiler allowed but may not extend beyond rear edge of rear deck panel and must follow the contour of the rear deck lid. Maximum 5" by width of rear deck.
- No side pods or bracing of rear spoiler.

### Scrub Rails

- Side bars must extend no further forward than the rear of front wheel opening, and no further rearward than front of the rear wheel opening, and must be mounted 1" above center of front & rear hub.
- Maximum 1"x 2" welded or bolted to roll cage.
- No sharp edges.
- When bolting on scrub rails, you must use carriage bolts (or round-headed bolts), if hex head bolts are used, they must be counter sunk.
- V type Lexan scrub rails allowed.

## Bumpers

- Bumpers must be mounted in stock position with no sharp edges exposed.
- After market nose and tail cones allowed.
- Chains or cables must be installed from the bumper to the frame for safety reasons.
- A fabricated bumper reinforcement may be run but stock bumper or cover must be over top.  
Tow chains or cables are required on both front and rear bumpers

## Wheel Openings

- Original wheel arches may be removed/trimmed for tire clearance.
- Inner splash aprons in the front fenders must be removed.

## Windshield

- Windshield is mandatory.
- Windshields must be safety glass or Lexan with 2 center braces and 4 safety clips –2 at top of window and 2 at bottom of window.
- No Plexiglas screens or half windshields allowed.
- The top 5" of windshield must be kept clear for Speedway division sponsors.

## Paint & Lettering

- Only those cars who have registered in the Super Stock division are permitted to pre number their car.
- Numbers must be on the sides of the car in large (minimum 18") letters in a color that clearly contrasts to the paint job on the car.
- All cars of non-members must have sides and roof clear so the number assigned by the track official can be placed on the car.
- Sponsor's name and logo may be placed any other place on the car.
- 4" number required on right front of car.
- Vulgar words and expressions are not permitted

## **3) BRAKES**

- All four wheels must be working.
- Rotors & calipers may be used from different models.
- **Dual master cylinders allowed. No penalty in 2017**
- No brake lines allowed in the driver compartment.
- Brake proportioning valve allowed.
- Rear disc brakes allowed.
- Howe cast stock replacement calipers allowed.

## **4) SUSPENSION AND ROLL CAGE**

### Roll Cage & Frame

- Must be stock steel frame with no holes drilled for lightening.
- Front and rear sub or Unibody frames must be attached with 2 x 3 hollow or box tube with a minimum wall thickness of .095.
- A full roll cage constructed out of 1 3/4 x .095 min. round steel tubing is mandatory.
- Roll cage must be symmetrical in all directions.
- A minimum of four horizontal door bars on the driver's side with a minimum of two vertical bars between each horizontal bar. "X" type bars will be allowed on passenger side.
- Left leg protection bar must be installed between the roll cage and the left front frame rail.
- Roll cage may have a 6" set back to accommodate the foot box.
- Dash bar required, along with an "X" type member across and behind driver.
- A "Petty" bar recommended running from center of cage to upper right front halo.
- A front engine bay hoop is allowed and may connect directly to main cage.
  
- Bracing running from top of cage towards the rear should extend beyond fuel cell area before attaching to rear frame rails.
- **Upper roof halo must be minimum 42" wide.**
- All welds must be electric or mig and will be subject to the approval of tech inspectors.

- No offset cages allowed.
- All roll bars in the driver's area must be properly padded and taped.
- Lower A-frames must remain in stock location for make and model of chaise.
- Upper A -frames may be relocated, any bolt pattern any length.
- Driver door bars must be filled with a minimum of 16 gauge steel.
- Front cross member may have snout removed and plated for center link clearance.
- Structural X-ing will be permitted in the following areas of the chassis.
  - Main frame rails may have X bracing under the floor in the center section of the car.
  - Rear clip may have X bracing above or under the fuel cell area.
  - Downward supports from main cage hoop to rear clip may have X bracing.
- Rear frame sections may have 2"x3" replacement tubing from top of kick-up rearward.
- Must retain original appearance.
- **Rear Arms:**
  - Upper Arms must be equal length and welded, may be repositioned but not adjustable up and down.
  - Lower Arms must be in a fixed position and not adjustable or repositioned
- **Manufactured Frames allowed Brian MacDonald, DCM or McColl OSA Stamped and serialized built replacement METRIC Chassis only.**
- **See Drawing on last page**
- **Rear suspension (GM Clip Cars originally equipped with coil spring rear suspension)**
- **An approved aftermarket third link is allowed and may be no longer than lower trailing arms. Lower trailing arms must remain in stock or magnetic steel aftermarket of the stock length +/- 0.5 inches and in stock mounts on frame**
- **Panhard bars are to be fabricated from magnetic steel. Mounting bracket must be centered on top of gear pot housing. Rod ends (Heim joints) must be steel. Bar length may be adjustable to maintain the rear axle housing centered in the chassis. Bar attachment to be fabricated from steel and mounted with the pivot point on the rear axle tube no further than the inside of the rear spring and not lower than the bottom of the axle tube. Frank bracket may be braced towards the chassis. Bar attachment to the frame bracket may be a steel or aluminum slider type. No external adjustments allowed, and any access holes to allow such adjustments must be sealed.**
- **Solid links allowed only. No rubber pucks or spring type absorbers of any kind.**

### Shocks

- After-market **steel -housed** racing shocks will be allowed. Koni, Pro non-adjustable, & QA1.
- **NO BUMP STOPS of any kind ALLOWED internal or external.**

### Suspension & Frames

- All suspension and frame components must be stock if not stated otherwise.
- No modification of stock suspension locating points unless otherwise stated.
- Wheelbase must be a minimum of 108" within ½".
- Springs and steering components may be interchanged.
- All control arm rubber bushings may be replaced with urethane or heavy plastic, steel, aluminum, or brass.
- Tubular upper control arms permitted.
- Mono-ball type bushings will not be allowed.
- Springs may be stock or after market with a minimum size of 4" outside diameter.
- OEM rubber mounting adapters on rear springs will be allowed.
- Top front and rear spring mounts may be manufactured but in stock location.
- Front and rear load bolts are permitted.
- **No aftermarket calipers or spindles.**
- **One piece aftermarket sway bars allowed and may be mounted as a slapper bar**
- **Stock center link may be interchangeable and nonadjustable.**
- **Adjustable centre link permitted (ALL56330, ALL56331, Howe #'s 23396, 23397, 23399, 23380, 233973 as produced.**
- **Spindle may be drilled to accommodate large bolt tie rod end.**
- **Sleeve type tie rod Heim end is optional**
- Leaf spring cars may add 2 inches & reinforce rear shackle.

- Leaf racing springs allowed
- Leaf spring sliders permitted.
- Front spindles GM #2 or full Chevy no stock metric. Spindale hole may be reamed to accommodate a larger ball joint.
- **Wheel Base: Wheelbase must be a minimum of 108``. 1 inch side to side**
- **Max Width to be 77 1/2" to be measured at the bulge of the tire at spindle height**
- **COOLING SYSTEM**
- No antifreeze permitted.
- An overflow can must be installed on the firewall, behind the right front tire.
- Aluminum radiators permitted and electric fans permitted.

## 6) EXHAUST SYSTEM

- Muffler(s) are mandatory.
- Exhaust pipes must exit within 18" of the rear wheels.
- Pipes to be cut flush to the body and above the frame rail or turned down at the exhaust end and exit under car.
- Exhaust pipes should be firmly mounted high enough to avoid contact with the track surface during racing conditions.
- The exhaust cannot have any sharp edges or protrude outside of the body line.
- Maximum 3" O.D. pipe size before muffler and maximum 3" after muffler.
- Magna flow muffler #11215 (2-1/4"), #11216 (2-1/2"), or #11219 (3") recommended.
- No "X" pipes, no "Y" pipes. "H" pipe allowed.

### 6(B) HEADERS

- 1 - 5/8" straight tube, no stepping, into 3" x 8" collector.
- **When using headers make sure you check dimensions of Oil Pan**
- **NO crossovers allowed**

## 7) FUEL

- Pump fuel or track fuel permitted.
- The gasoline shall not be blended with alcohols, ether or other oxygenates. It shall not be blended with aniline or its derivatives, nitro compounds or other nitrogen containing compounds.
- No NOS systems.

## 8) IGNITION & CHARGING SYSTEM

- OEM 12 volt stock ignition.
- Must consist of stock or stock replacement parts only.
- No aftermarket high performance ignition systems or printed circuit type modules.
- Charging system is optional.
- Clearly marked KILL SWITCH mandatory in main battery line or use of Ford solenoid is permitted.
- Clearly marked KILL SWITCH to the ignition on each side of the dash is mandatory.

## 9) FIREWALLS & INTERIOR

- All upholstery materials and trim and padding must be removed.
- Front and rear firewalls must have all holes and openings covered with sheet metal.
- Area between fender and firewall must be filled with sheet metal.
- Front firewall may be fabricated but must remain in stock location.
- Any holes or openings in the floor pan or trunk area must be covered with sheet metal.
- Driver's side floor pan may be replaced with a minimum of 14 gauge magnetic sheet metal in stock location.
- A fabricated interior may be used on the passenger side of car.
- **For transmission clearance floor pan may be raised 13`` above original position of drivers floor pan.**
- **Passenger side floor may drop back down to original height or maintain height of 13" to passenger door.**
- Rear firewall may be fabricated.
- Rear firewall may start behind seat at base of roll cage and extend rearward to base of rear window opening.
- Rear firewall may not exceed height of rear deck.
- Any and all fabricated interior must be built with a minimum of .022 gage magnetic sheet metal.

- **Interior mirror is permitted.**
- No fuel or brake lines or fuel filters permitted in the driver's compartment.
- No plastic gage lines.
- Roll bar padding is mandatory.
- Foot box to be within 6" of stock location

#### 10) RADIOS

- Two way Radios allowed

#### 11) DIFFERENTIAL

- Welded locked rear ends permitted.
- Steel spools are allowed.
- No posi allowed.
- Rear end housings may be interchanged year to year. (e.g. 8 ½ "rear end may be used to replace a 7 ½ "rear end ).
- A Ford 9" differential may be used.
- Hardened steel rear axle or racing steel axle **MANDATORY**.
- Optional floater rear end.
- Stock location 4 link mount.

#### 12) SAFETY

- **All Jack Stands must be PLATED on the bottom.**

##### Fire Control

- Cars must have a 2 ½ lb. minimum fire extinguisher with either a steel or aluminum head mounted in a steel mounting bracket and must be bolted down, and within driver's reach with seat belts fastened.
- Fire extinguisher must be new or serviced and inspected each year and dated no later than January 1st of the current year.

##### Fuel Cell

- Is Mandatory and must be mounted in the center of the trunk area, with filler inside trunk.
- Fuel cell maximum recommended capacity –15 gallons.
- The fuel cell must be separated from the driver's compartment by an all metal firewall.
- There can be no openings in the firewall and any holes must be filled in with metal.
- No filler neck or fuel line is permitted inside of the driver's compartment.
- The fuel cell must be firmly secured with steel straps to the floor of the trunk.
- Minimum of two straps front and back, one side to side (straps must be steel and a minimum of 1"x 1/8" flat strap or equivalent).
- A fuel cell protection bar is mandatory. Minimum 1 ¾ inch O.D. 095 inches thick.
- The bottom of the fuel cell may be no lower than 13" from the ground to bottom of cell, and must be centered in the chassis from side to side.
- No electric fuel pumps allowed unless on fuel injected vehicles.
- All filler caps must be non-vented.
- No car will be permitted to run if any sign of fuel leakage is found.
- The mounting of the fuel tank is at the discretion of the tech inspector.
- Steel cased fuel filters only.
- Cell ground strap and fuel cap attaching device are mandatory.

##### Fuel Shut Off Control

- There must be a fuel shut off valve in working order and mounted in the rear firewall or window parcel shelf accessible by safety personal.
- **It must be brightly and neatly marked "ON" and "OFF".**

##### Fire Suit

- Driver's fire suit SFI3.2A/1 is **mandatory**. Recommended SFI3.2A/5.
- Driver and suit must maintain clean looking appearance.
- Fireproof gloves are mandatory.

- Fire proof neck collar, balaclava, underwear, socks, and shoes are recommended.
- No nylon shoes allowed.

## Helmet

**A Snell 2010 SA or newer approved racing safety helmet must be worn. (Mandatory)**

### Seat

- An aluminum racing seat must be used, bolted to roll cage, not bolted to the floor.
- When mounting seat use minimum 3/8" bolts with large washers to hold racing seat to seat framework.
- Minimum of two bolts on the seat back and two bolts on the seat bottom.
- Seat must be positioned completely to the left of the centerline of the car.
- **An approved head restraint is MANDATORY.(Example – HANS DEVICE)**
- Headrest side plates recommended

### Belts & Harness

- All cars must be equipped with a quick release type, 5 point harness with a minimum 3" lap belt and shoulder harness of 3", properly affixed to the roll cage or chassis with grade 8 bolts, no less than .375 (3/8) inches in diameter.
- Head restraint strongly recommended.
- Seat belts must be clearly dated and be no more than 3 years old.

### Window Net

- Window net mandatory with minimum 3/8 inch rod. Must have quick release.

**ALL SAFETY EQUIPMENT MUST BE WORN ANYTIME DRIVER IS IN THE RACE CAR.**

## 13) TIRES

- **TRACK TIRE RULE WILL APPLY. American Racer AR 870 – 8 tires to start the season and then 1 tire every 3<sup>rd</sup> night.**
- **Tires are to be purchased from Sunset Speedway – Direct purchase from supplier unavailable.**
- **TIRE SOAKING is NOT permitted. Tire softener, conditioner, or any other substance to treat tires is not permitted. The use of solvents to enhance tire performance is completely prohibited.**

## 14) WHEELS

- Maximum rim width bead to bead - 8".
- Steel racing wheels on all four wheels mandatory.
- Minimum of 5/8" studs required.
- Wheel spacers maximum one per wheel & must be even side to side.

## 15) TRANSMISSION

### Automatic

- No racing automatics allowed.
- No aftermarket valve bodies or manual valve bodies allowed.
- Torque converter must be stock & 11" in diameter.
- Aftermarket shifter & shift kits permitted.
- All cars must have working reverse gear.
- Transmission coolers are permitted but cannot be mounted in drivers' compartment.
- Power glide transmissions allowed.

### Standard Transmission, Flywheel & Clutch Assy.

- Any manual stock OEM Steel 3 or 4 speed transmission permitted. All gears must be in working order
- Stock type steel single disc clutch and flywheel units must not be drilled or machined.
- Stock type clutch and pressure plate, minimum 10" diameter.
- Aftermarket clutch pedal allowed.
- No puck type & aluminum discs.
- Nodular or steel flywheels.
- Minimum flywheel weight of 14 lbs.
- **Must have an NHRA steel bell housing.**
- Must be mounted over the clutch and flywheel 360 degrees between the bell housing and the floor.

- No scatter shield inside the car permitted.
- At your own option, bell housing should have an inspection plate for easy inspection of clutch.
- If there is no inspection plate on the bell housing, you may be required to remove the transmission for clutch inspection.
- **Mandatory ½” hole in bell housing for turning flywheel when whistling engine.**

**Drive Shafts**

- Must be stock, steel and painted white.
- Two steel drive shaft loops to fully enclose drive shaft are mandatory.
- Loops must be no less than 2 inch wide and 1/4 inch thick and must be fastened to the chassis front and rear.

**16) CRATE ENGINES :**

- **Sealed Crate part 88958602 & 19258602**
- Engine must be sealed by factory, Stefko Race Engines or Howard Race Engines.
- Only modifications allowed are:
  - Double Roller Timing Chain.
  - 6-3/4 steel non fluid balancer.
  - 7” – 7 quart steel oil pan allowed – no upper kicks outs.
- All crate engines must meet original specifications as per G.M. Performance (9.0 -1 compression)

• **CRATE MOTOR ENGINE CLAIM**

- BASE claim.....\$5000.00
- Removal of engine by owner mandatory.....\$200.00
- With double roller timing chain     ADD .....\$400.00
- With small balancer                     ADD.....\$200.00
- With 7” Oil Pan (optional)             ADD.....\$500.00

The individual putting in the claim must be a registered DRIVER or OWNER in the Super Stock Division that competes at Sunset Speedway on a regular basis.

**Crate Motor Engine Claim cont.:**

**MOTOR WILL BE AS IT COMES FROM GM**

**Motor will be pulled the night of the claim by the Owner of the motor and the crew under the supervision of the Track Officials. The individual putting a claim to the said motor must produce a Certified Cheque or Cash to the Tech Supervisor, Brian Todish or Steve Slaughter prior to the start of the Feature Race of Class of Car the competes in.**

**Note: The Crate Motor being claimed must be used on the next racing points night.**

**17) BUILT ENGINES**

**Block Assembly**

- Only engines that were factory available for the make, model and year being run are permitted.
- No modifications to engine block, cylinder head, crankshaft, camshaft or connection rods unless specified.
- Maximum Cubic In.
  - GM- 350 plus .040 for clean-up
  - FORD- 351 “”
  - DODGE- 360 “”
  - Block may be zero decked.
  - No part of the piston can protrude above block deck.

**Pistons**

- OEM cast or forged pistons allowed.
- No high performance pistons.
- Flat top only allowed.



## Camshaft

- Hydraulic flat tappet cam only.
- No roller, solid lifter or mushroom cams allowed.
- Offset cam shaft key allowed.
- Must run stock size lifter bore for the engine being run, no sleeving.
- No belt drive systems permitted.
- Stock rocker arms only.
- No Roller Rockers.
- Hydraulic lifters must be operational

## Connecting Rod

- Stock steel.
- No 6 inch rods permitted.
- Eagle press fit 5.7" replacement connecting rods are permitted. Part # SIR5700BPLW only.

## Carburetor

- R4412-500 C.F.M. Holley factory stock produced two barrel carburetor only.
- The only changes allowed are jets; power valve and removal of choke parts.
- Mandatory two throttle return springs in opposite directions.
- Carburetor hats allowed.
- Air cleaners are mandatory.
- An accelerator toe bar mandatory.
- Air filters boxes are permitted.
- No boost venturi below the throttle plate.
- No ram air systems.
- A quick-change jet kit (part #3425 float bowl) may be used.
- No Keith Dorton performance carburetors.
- Holley factory stock measurements are as follows:
- Metering block must have the following ID# stamped on it. Factory stock #5924 or#5925. The #10570 will appear on replacement or service metering blocks.
- Metering block power valve channel restriction ports (2 holes behind the power valve) maxi. .0635"
- Metering block idle feed restriction ports (2 holes) maximum: .035"
- Metering block main passage to discharge nozzle (2 holes) maximum: .141"
- Main body high speed air bleeds (2 holes) maximum: .028"
- Main body idle speed air bleeds (2 holes) maximum .074"
- Butterfly (throttle plate) thickness: .0398" - .0438"
- Hole in butterfly: .090"-.096"
- Butterfly must have stamped on it ID#215
- Throttle shaft diameter .368"-.369"
- Throttle shaft thickness at flat of shaft: .152"
- Venturi bore diameter: 1.373"-1.377"
- Boost venturi inner bore diameter .377"-.383"
- Boost venturi outer diameter .610"-.630"
- Throttle bore diameter 1.6855"-1.6865"
- All air entering the engine for combustion purposes must enter through the air horn of the carburetor.
- The vacuum port @ the base of the Carb may plug by taping the hole and replacing it with a threaded plug.

## Compression Rule

- Maximum of 9.0 –1.

## Cylinder Heads

- Must be stock for engine being run. No head modification. NO DOUBLE BUMP

### Type Heads

- **No** 2.02 valves.
- **No** Vortec V8 heads.
- Cylinder heads may be changed from year to year provided they are not high performance.
- Stock OEM rocker arms and ratio only maximum 1.5.
- Screw in studs and guide plates are permitted.
- Valve Size:
  - GM Max. 1.94 intake and 1.60 exhaust
  - Cleveland Max. 2.04 intake and 1.65 exhaust
  - Windsor Max. 1.84 intake and 1.64 exhaust
  - Chrysler Max. 1.88 intake and 1.60 exhaust

### Intake Manifold

- 2101 Edelbrock Performer.
- **Mandatory adapters Canton 85-065 or Moroso #64964 adjustable.**

### Valves

- Valve stem diameter must be stock.
- Stainless steel or stock type valves are allowed.
- No turning of valve stems permitted.
- Undercut and light weight valves are not permitted.
- OEM rocker arms and ratio only.
- Dodge may use adjustable rockers.

### Engine Mounts

- Solid engine and transmission mounts are permitted.
- **Fuel Pump**
- Stock mechanical pumps only.

### Height

- Engine height will be a minimum of **13** inches measured from ground to center of crankshaft.
- **Engine Location: # one Spark plug of engine must be in line or ahead of upper ball joint and center in the frame**
- **Cross member may be altered to achieve this**

### Water Pump

- Stock OEM replacement pumps only.
- Aluminum pulleys allowed.

### Oil Pan

- Extra capacity aftermarket wet sump oil pans are allowed.
- **When using headers make sure you check dimensions of Oil Pan**

### **MOTORS ARE SUBJECT TO WHISTLING AND/OR TEARDOWN AT TECHNICAL DEPT. DISCRETION.**

- Built Motor \$100.00 gasket allowance
- Crate Motor \$175.00 gasket allowance & re-seal allowance.
- If motor is deemed illegal – no allowance will be paid

### **18) WEIGHT**

- 55% left and 50% rear

- No topping up with fuel after the feature.
- When adding ballast it must be in blocks of no less than 5 pounds, bolted securely, painted white, be numbered and have min. 6" ground clearance.
- **Built Motor** minimum 3075lbs. with driver
- **Crate Motor** minimum total weight 3,050 lbs. including driver...
- **Crate Motor purchased and sealed through Sunset Speedway minimum total weight 3025lbs incl. driver**
- **Standard Transmission No Penalty**
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## NOTES

# GM "METRIC" CHASSIS



