



## **2012 Rules and Regulations**



### **Thunder Stock Division**

**Saskatoon Stock Car Racing Association  
(S.S.C.R.A)  
P.O. Box 169  
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**Effective February 1, 2012**

## **RULEBOOK DISCLAIMER**

The rules and/or regulations set forth in this book are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OR SAFETY SHALL RESULT FROM THE PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official.

The race director shall be empowered to permit minor deviation from any of the specifications herein or impose any further restrictions that in their opinion do not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATIONS OF SPECIFICATIONS. Any interpretation of, or deviation(s) from these rules shall be left to the discretion of the officials. Their decision is final.

*Saskatoon Stock Car Racing Association*  
(S.S.C.R.A.)

# CODE OF ETHICS

## Purpose

To act in a professional manner so as to bring a positive image to the public and fellow members of the sport of stock car racing and to realize the need for a reasonable and responsible personal code of 'unwritten laws' since laws cannot cover all situations.

## Expectations

1. Respect MUST be had for all traffic laws and criminal codes, such as not drinking and driving.
2. No alcohol, drugs, or stimulants allowed in association with your car or team when in the public eye.
3. No verbal or physical abuse towards any person when connected with a stock car event, display or promotion.
4. When dealing with the public, courtesy and cooperation should be shown to promote the sport in a positive light at all times. For example, do not approach another person's sponsor(s).
5. All members should be clean and presentable when in any public situation.

## Definition of Behavior

Anyone who, by word or deed, impedes, jeopardizes, or in any manner hinders the smooth and orderly presentation of the racing program - or - anyone who commits, or causes to be committed, any detriments to stock car racing, the S.S.C.R.A. will consider that person(s) to have abused the privileges of membership, entry and/or admission granted by the S.S.C.R.A. and that they may be subject to the revoking of those privileges and/or disqualification as deemed proper by the Executive or designated official. Drivers are responsible for the sportsmanlike conduct of anyone in their crew and penalties incurred by a crewmember may affect the driver.

## Thunder Stock Rules

### General

1. Trucks, vans, convertibles, station wagons or old demolition derby cars are not permitted. Any CAR with a minimum wheelbase of 114 inches. **2003 and up Crown Victoria's are not allowed.**
2. **All burnables**, white metal, trailer hitches, **outer mirrors**, etc. **MUST** be removed. **Fiberglass stock front and rear body parts may remain for appearance purposes.** An aluminum oval track racing bucket seat with head support, properly mounted to the roll cage is mandatory. OEM plastic inner wheel wells must be left in place or replaced with metal inner wheel wells.
3. **All glass** except windshield **MUST** be removed. Glass windshield **MUST** be secured with 4 safety clips 1/8" X 1" X 6" steel. If windshield is replaced with Lexan, it **MUST** meet Street stock requirements. Damaged glass **MUST** pass tech inspection.
4. **Roll cage** to be a minimum 6 point plus 3 hip bars minimum extending to the inner surface of the exterior sheet metal with two vertical bars evenly spaced on driver's side. The right side door may be skinned provided a minimum two bars on passenger side of roll cage are bent to carry into the door cavity as close as possible to the outer skin of the door. 2 hip bars are mandatory on passenger side. Front hoop allowed. Only one bar permitted through front firewall to right frame rail behind upper control arm. See Diagrams A1, A2, A3 & A4. Cage to be minimum 1 1/2" schedule 40 pipe. Kit cage construction of .095" x 1 3/4" mild steel tubing **MUST** meet Street stock minimums. No galvanized pipe, threaded or cast joints. In a unibody car where the roll cage is mounted to the floorboards, the roll cage **MUST** be welded to a 6" square by 1/4" thick plate above the floorboards to a like plate underneath with 4 - 1/2" diameter bolts on each plate. Only the driver's inner door may be removed for door bars. The factory impact beam may be retained. At the discretion of the Technical Inspector, **minimal cutting** behind the driver's door on four-door vehicles is permitted ONLY for proper placement of driver's door bars (Finished work to be safe).
5. **Seat belts**: see Safety Rules.
6. **Front and rear driveshaft hoops** mandatory. 5/16" chain is recommended.
7. **No reinforcing** allowed other than one bar between frame rails behind bumper mounts. Maximum size is 2" OD
8. All parts **MUST** remain stock and in stock location to the vehicle year and model.
9. **Wheel wells** may be radiused but rear inner wheel wells **MUST** remain intact. Front inner fenders may be removed. No skinning of body parts, except driver's door per rule #4 in this section. All holes in front and rear firewalls and floorboards **MUST** be covered with minimum 22-gauge steel. Sheet metal screws are not to be used anywhere in the construction of car. No other modifications are allowed.
10. **Window net**: see General Safety Rules.
11. a) A **fuel cell** is mandatory. Fuel cell must be boxed in a 20 gauge steel container. Fuel cell **minimum mounting** **MUST** use 1" x 1" x 1/8" steel tubing (schedule 40 pipe acceptable). Mounting rails to go side to side to the frame along the cell container and front to back along the cell container, to the mount rails boxing the container. Fuel cell ground clearance to be eight inches minimum. Aluminum fuel tanks are not permitted. Any variations are subject to approval of the technical committee.
  - b) Trunk floor pan may be cut to allow installation of fuel cell. Floor pan must run tight to the fuel cell container.
  - c) Rear **fuel cell guard bar mandatory**. This bar drops down from the rear most cross member even with the lower surface of the fuel cell, running side to side, the width of the fuel cell to protect from impact damage.

12. **Lights:** see General Safety Rules.
13. **Fire extinguisher:** see General Safety Rules.
14. **Fuel Filters:** Metal cased fuel filters only.
15. **Battery fasteners MUST** be 1/8" x 1" steel strap or 3/8" diameter rod minimum. The battery **MUST** be mounted in the engine compartment on the firewall, may not be recessed. The battery cannot be mounted in the drivers' compartment or the trunk. **AGM batteries are mandatory.**
16. **All body parts MUST** be securely fastened. No parts of the body may be cut away except as access holes for mounting of the roll cage. No holes in front hood except for inspection holes not to exceed 4" in diameter, number and location of holes as approved by the technical inspector. No turned up metal around inspection hole(s).
17. **All mirrors MUST** be securely mounted and pose no safety risk.
18. **Bumpers MUST** be stock appearing. Stock rebar may be replaced with 0.095" X 1 3/4" mild steel round tube maximum. Stock bumper shock **MUST** be used and operational or tack welded max two 1/4" tack welds (not full welds). All bumpers **MUST** have a safety chain welded from the bumper to the frame.
19. **Steering column MUST** be in stock location, steering column **MUST be collapsible**, quick release steering wheel is mandatory.
20. New: **Minimum Weight:** All cars **MUST** have a minimum weight of 3600 pounds at all times. **Maximum** left side weight is 55.0% measured at any time. Weights **MUST** be taken with driver seated in seat holding steering wheel. All ballast **MUST** be securely fastened and painted white with the car number on it.

### **Suspension, Wheels and Tires**

1. All parts **MUST** remain stock to the vehicle year and model except as provided in this section.
2. **Wheel:** Passenger side steel wheel center thickness to be a minimum thickness of 3/16". All other wheels to be of steel construction in the manufacturers line minimum. 1 inch wheel nuts **mandatory** on all wheels. Rim diameter may not exceed 15 inches.
3. **Tires:**
  - a) **Only Cooper Cobra G/T radial passenger tires will be eligible for branding.** Tires **MUST** allow a 10.5 inch template to pass cleanly over the side walls when inflated to racing pressure. **The templates used by the Technical committee will be the standard. No tire softening agents allowed.**
  - b) Tires must be presented to Tech Officials for branding prior to the start of racing. Tires will be branded with the year and car number. **A maximum of eight tires per car** will be eligible for branding in **2012**. Tire brands **MUST** be visible to Tech Officials on the outer face of the tire when mounted on the car. Used tires from the previous year will be required to be branded and considered part of the total allotment.
  - c) If a tire is cut, it must be presented to Tech Officials immediately to be certified for replacement. To be eligible, the tire must have no cords visible. The Competition Committee will reserve the right to reject tires for replacement that are shaven beyond "normal standards".
  - d) Any car caught running a tire that has not been approved and branded by Tech Officials will be subject to an automatic penalty of all race points earned on that day plus 15% of year end points.
  - e) Out of town cars will be required to run a street legal DOT tire. Tires **MUST** allow a 10.5 inch template to pass cleanly over the side walls when inflated to racing pressure.
4. **Differential:** Locked, locking or posi-traction type differentials are not permitted.

5. **Springs:** Racing springs are allowed. Springs must fit in OEM spring pocket. **Adjustable spring spacer allowed in front only.** Chaining down or cutting of the springs is not permitted.
6. **Castor / Camber:** No camber allowed on left side or right rear. The maximum allowed on the right front is nine degrees negative camber.
7. **Sway bar** mounting link may be adjustable
8. The **minimum ride height** of 6.0 inches is measured from the lowest point of the frame side rail with the driver in the car as raced.

## Engine and Transmission

Beginning in 2008, engines must conform to the specifications detailed in items 1 through 11 of this section, or optionally, the GM sealed crate engine specified in item 12 may be used. A weight penalty or allowance may be made for crate engine cars as required to ensure an equal and competitive division is maintained.

### 1. STOCK DEFINITION:

Parts available from your dealer through ordinary parts catalogues may be accepted as stock. Parts ordered through dealer performance catalogues will not necessarily be considered legal. Engine location **MUST** be stock with reinforced engine mounts. A tie down strap or chain **MUST** be secured from the engine to the frame rail, or cross-mounted on the left side of the car.

2. Absolutely stock! No interchange of engine between makes. **MUST** be a Ford engine in a Ford, Chevrolet in a Chevrolet, etc. Marine parts are not permitted.

| Make of Engine | CID Max Overbore | Max Displacement | Head CC                    |
|----------------|------------------|------------------|----------------------------|
| Chevrolet 305  | 0.060            | 315cid           | 58cc                       |
| Chevrolet 327  | 0.060            | 334cid           | 67cc                       |
| Chevrolet 350  | 0.060            | 360cid           | 73cc                       |
| Dodge 360      | 0.060            | 370cid           | 64cc                       |
| Ford 302       | 0.060            | 307cid           | 54cc                       |
| Ford 351W      | 0.060            | 362 cid          | 57cc w/-13cc dished piston |
| Ford 351W      | 0.060            | 362 cid          | 64cc w/ flat top piston    |
| Ford 351C      | 0.060            | 362 cid          | 64cc                       |

3. **Carburetion:** one stock OEM production 2 bbl carburetor or 4412C Holley 500 CFM 2 bbl carburetor allowed. If Holley 4412 carburetor is used, a Canton Racing Products 85-050 adapter must be used. Space between top of manifold and bottom of carburetor including adapter plate, and gaskets shall not exceed 1.25 inches. No double end loader or other large cfm accessory carburetors. Two throttle return springs are mandatory. Removal of choke parts and changing of jets and power valve is allowed. Accelerator pump cam and nozzles may be changed. No other modifications or alterations to main body, metering blocks must be cast only, no billet carburetor parts allowed. Maximum distance between top of intake manifold and bottom of carburetor not to exceed 1 1/4".
4. **Stock air cleaner** lid and base only. A drop type base is permitted if the Holley carburetor is used. Airflow modifying pieces (element inward) are not permitted. Cold air induction is permitted. Air boxes are not permitted.
5. **Cylinder block MUST** be a cast iron OEM block with exception of permissible overbore. An OEM lifter bore **MUST** be maintained. Deburring of block and parts permitted. Block **MUST** maintain +0.015 inch deck height (GM). After market connecting rods allowed. Deburring of stock rods is permissible. Stock rod length to the OEM block being used. Harmonic balancer **MUST** be OEM style. Crankshaft **MUST** be OEM. After market cast steel crankshaft allowed. **MUST** weigh within 3% of OEM crankshaft ( OEM weights GM – 51lbs, Dodge – 56lbs,

- Ford 351 Windsor – 56 lbs, Ford 302 - 38 lbs. Ford Cleveland - 55.8 lbs.). Absolutely no aftermarket forged, race type or exotic crankshafts allowed.
6. **Piston and Connecting Rod:** Flat top or dished only, weighing a **minimum** of 1200 grams each with the wristpin, rings and bearings. All pistons **MUST** have two compression rings and an oil ring.
  7. **Camshaft:** Flat tappet hydraulic cam and lifters only. Stock OEM style push rods. No roller lifters allowed. Roller rockers are not permitted. NO gear drive or belt drive.
  8. **Cylinder Heads:** Only stock cast iron OEM castings permitted or the following stock replacement heads: Chevrolet - World Products 043600-S/R (76cc), 043610-S/R (67cc), 042650-S/R or 87 and newer 042750-S/R (58cc). Ford - World Products Windsor JR. 053030 (58cc), Dodge – TBD. Absolutely no deburring, grinding or polishing of intake or exhaust ports permitted. Chevrolet engines are restricted to 1.94 inch intake valve diameter & 1.5 inch exhaust valve diameter. All other engines **MUST** be stock for year and engine model used. Guide plates are permitted. The maximum Chevrolet valve spring diameter permitted is 1.266 inches. Composition head gaskets of no less than .026 inch compressed thickness for Chevrolet only, all other makes is .039 inch. Chevrolet Vortec, Dodge Magnum, early Ford GT-40 or 4bbl Cleveland heads not allowed.
  9. **Distributor:** Only stock distributor and stock coil allowed. No dual point systems. Electronic ignition may be used only if stock in that make. No external modules (except Ford) or external modifications. No modifications to stock mounting of module.
  10. **Intake manifold:** Only stock OEM cast iron 2BBL intakes or Edelbrock RPM Performer dual plane high rise aluminum intake (GM - #7101, Ford - #7181/7183, Chrysler - #7176) or Weiland Products dual plane high rise aluminum intake (GM – Stealth #8150, Ford – Action+ #8010 and Stealth #8023, Chrysler – Stealth #8022) allowed. No grinding or coating of any kind permitted, internally or externally. No marine intakes. With high rise intake, Canton Racing Products 85-060 adapter **must** be used. Maximum distance between top of manifold and bottom of carburetor, including adapter plate and gaskets not to exceed 1.25 inches.
  11. **Water pump:** Stock OEM cast iron water pumps only for GM engines. Ford and Chrysler engines may use stock OEM aluminum water pumps.
  12.
    - a) **Optional GM Sealed Crate Engine**  
**The following cast iron head sealed crate engine will be allowed:**  
 GM sealed Circle Track 350 Engine P/N 88958602  
 Any engine seal, which is altered or tampered with in any way from the original purchase, will be deemed illegal.  
**Mandatory Carburetor:** Holley 500 CFM Two Barrel carburetor, P/N 0-4412. Canton Racing Products 85-060 adapter **must** be used. For spacer height and carburetor information see **Carburetion**.  
 Aftermarket drop-type air cleaner base may be used to allowed hood closing clearance.  
**Mandatory Water pump:** Stock OEM cast iron only.
    - b) **Blue Print Engine Ford part # BP3472CT allowed.** Engine must be dyno tested on a local approved engine dyno. A member of the Competition committee must be present to verify complying engine specs, the engine will then be sealed before leaving the dyno facility. Any engine seal which is altered or tampered with in any way will deem the engine illegal.
  13. **Radiator** may be aftermarket, but must be mounted in stock location.
  14. **Oil pan:** Any steel oil pan that fits with no modifications to frame is permitted. Oil filter **MUST** be OEM style for block and mount in OEM location.
  15. **Fuel pump:** Stock mechanical pump only. Absolutely no electric fuel pumps. No glass or plastic fuel filters allowed. No “Cool Cans”. **The only fuel allowed is gas that is available**

**at local consumer (NO commercial) outlets. No additives, no oxygenation, no aviation fuel, no race fuel.**

16. **Transmission:** Any stock automatic transmission with mating stock converter or 3 or 4 speed manual transmission. Transmission adapter plates are not permitted. Stock clutch disk, pressure plate and flywheel. 10" minimum diameter clutch disk required. Aluminum clutch parts and aluminum flywheels are not permitted. A scatter shield or minimum 1/8" thick steel plate, 180 degree safety shield mounted over the bell housing bolted to the floor is mandatory for manual transmissions. Open rear differentials ONLY. No locked or limited slip rear ends.
17. **Exhaust: Mufflers mandatory.** Stock style OEM production cast iron manifolds only. No modifications allowed. Exhaust **MUST** exit under car, below and behind the driver with the tips point down and slightly toward the centre of the car or **Must** exit the body behind the drivers compartment ahead of the rear wheel no more than 12" above the ground. Exhaust pipe must be a maximum of 2 ½ inches max OD from the manifold to the muffler and 2 ½ inches maximum OD from the muffler to the exit One "H" pipe is allowed, minimum length 4 inches, maximum diameter 2 ½ inches OD. A maximum of eight inches of steel braided flex pipe allowed close to manifold. Any muffler may be used providing it reduces the exhaust noise below club standards. **Every car will be tested according to club procedures and any car not meeting the maximum limit of 98 decibels must meet the limit by their next race date.**
18. **Plastic fans are mandatory.** Fan **MUST** be driven by water pump. NO electric cooling fans.

# Saskatoon Stock Car Racing Association Protest Form



Race Date: \_\_\_\_\_

Division:

- |  |  |
|--|--|
| <input type="checkbox"/> Super Late Model  | <input type="checkbox"/> Thunder Stock |
| <input type="checkbox"/> Western Sportsman | <input type="checkbox"/> Mini Stock    |
| <input type="checkbox"/> Street Stock      | <input type="checkbox"/> Pro Truck     |

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**Protest Against (Name):** \_\_\_\_\_

**Protest For:** \_\_\_\_\_

**Reason for Complaint:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Protest Fee:**

- \$100 – chassis and suspension inspection or, cylinder head, intake, camshaft, exhaust and carburetor (top end) inspection or, transmission and differential ratio inspection.
- \$200 – cylinder head, intake, camshaft, exhaust, carburetor, oil pan, one connecting rod, one piston and crankshaft
- \$250 – Dyno testing of sealed crate engine for horse power rating only

**Protester's Name:** \_\_\_\_\_

**Protester's Signature:** \_\_\_\_\_

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**Cash Collected By:** \_\_\_\_\_

**Technical Inspector/  
Race Director Signature:** \_\_\_\_\_

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**Protest Results:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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⇒ **Protest forms must be turned in to the Technical Inspector or Race Director 15 minutes after the conclusion of the final race.**

⇒ **All teardowns will be arranged with all parties.**