

# TROPHY CUP RULES

## Revised July 2007

### **SAFETY RULES**

#### **1. Mandatory Safety Equipment**

##### **A. Snell rated SA95 or SA2000 Helmet Required**

**B.** SFI Fire suit, minimum of two (2) layers thick.

**C.** Fire resistant gloves.

**D.** Fire retardant racing shoes.

**E.** Arm restraints.

**F.** Right side head net.

**G.** Driveline hoop or restraint (no open driveline).

**H.** High back (stock car style) seat.

**I.** Padded knee guard.

**J.** All cars to be equipped with fuel bladders.

**K.** Three (3") inch, five (5) point seat belts installed in accordance to manufacturers' suggested installation.

**L.** Must use beadlock on right rear at all times.

**M.** Drag link must be tethered to the frame.

#### **2. Suggested Safety Equipment**

**A.** Windshield screens with a minimum .090 thickness.

**B.** Head rest with padding.

**C.** SFI flame retardant underwear, head sock and foot socks.

**D.** Left window net.

**E.** Helmet restraint.

**F.** Neck collar.

**G.** Steel tie rod & drag link w/ steel Hiems.

**H.** Drivers seat fuel/fume deflector.

### **CHASSIS RULES**

#### **Weight**

All cars competing with ASCS specifications cannot weigh less than 1450 lbs. with driver. All other cars must weigh a minimum of 1550 lbs. with driver when weighed as follows: Per official discretion initial weigh-in will take place prior to qualifying and there will be a mandatory weigh-in for the top three finishers immediately after finish of that event before going to your pit. Random weigh-in at any time during the program. Scales available any time for checking weight before program begins. No bolted or added on weights or ballast of any kind.

#### **Penalties**

If a car is found too light after qualifications, your time will be scratched and you will be given an opportunity to bring your car up to the required weight. Once you are reweighed and pronounced legal, your car starts on the tail of all races. If you still do not meet weight after two times across the scale, you will be disqualified for the night and lose all points and money for that event. If your car is found illegal after the feature, you forfeit all points and money for the event.

**1.** Sprint type chassis allowed. All roll cages must be made of minimum 1 1/2 x .095 wall 4130 chromoly tubing, securely welded. Maximum width of the cage at the top is 27" I.D. The following measurements are minimums. Only those areas indicated will be subject to technical inspections. Suggested material: 4130 normalized.

Top rails: 1 1/2 x .095

Bottom rails: 1 3/8 x .095 or 1 1/2 x .083

Roll cage uprights: 1 3/8 x .083

Roll cage top cross members: 1 1/2 x .095

Upper rails: 1 3/8 x .083

Rear end safety bar: 1x.038

Brace: 1 1/4 x .065

Steel torque tube safety bar: 1 x .065

2. Roll bar cage must be 2" higher than driver's head and be padded subject to the race director's approval. No bracing in the center of the top of the cage opening that would prevent a driver's ability to exit through the opening or inhibit the safety crews ability to extract the driver.
3. Hoods are required. No carbon fiber hoods, nose pieces or fuel tanks. No Gurney lips or turn outs on any body panels.
4. Tech approved belly pans or floorboards. Throttle pedal must have toe strap and return springs on linkage and at injectors or carburetor.
5. All cars will have a sprint style fuel tank w/bladder securely mounted (not by bladder cover plates), and must be able to contain 24 gallons of fuel. Main fuel line to have 1/4 turn shut off valve between tank and pump. No plastic fuel lines or fittings. Tank must be vented in a manner that it will not leak if upset. No alteration or modification to fuel cell. Must be one-piece construction of cross-link polyethylene plastic.
6. Suspension optional, but if used, it must be non-cockpit adjustable and have one working shock per wheel. Front end type optional. Steering system types are optional and need to be approved by race director. No front anti-roll/sway bar allowed.
7. Wheel base minimum of 83", with a maximum of 90". Tread minimum of 48" wide, center to center. Wheel and tread width optional; single tire and wheel only.
8. All cars must be neatly painted. Numbers should be neat and in contrasting color. Top wing numbers on the sides are mandatory and should be 16" high.
9. Steel, aluminum or Titanium rotors
10. Wheels must be approved for racing.
11. Front, rear and side nerf bars, made of minimum 1 x .065 stainless or 4130 normalized material, required at the beginning of the race program. Cars must have rear nerfs securely attached to finish a race. Front and side nerfs lost due to damage during the racing event is acceptable. All nerfs and bumpers will be attached with a minimum of 3/16" steel alloy fasteners. No pop rivets. Subject to race director approval. No titanium.
12. Lettered, on/off toggle or push/ pull switches.
13. No mirrors. No radios.

#### **BODY PANELS**

- A. Right side opening 12 inch minimum at any point and 21 inch minimum front to rear at any point.
- B. No Gurney lips or turn outs on any body panels.

#### **ENGINE RULES**

1. 360 cubic inch (maximum) standard steel blocks only. Aluminum or steel heads permitted. Valve angle will be  $23^{\circ} \pm 2$  degrees, Ford and Chrysler are the exception. Injection nozzles in heads not permitted. Maximum of eight (8) injection nozzles in manifolds only. Internal parts open. Dry sump systems permitted. Carburetor or fuel injection allowed. No blowers, superchargers or nitro-methane fuels allowed.
  - A. The valve angle and injection size will be checked at the time the engine is pumped.
  - B. Injectors must be individual stack per cylinder containing one nozzle injection design and shall not exceed 2 3/16" inside diameter. If downsized stacks or a restrictor are used, there must be at least 3" of restriction to 2 3/16" ID. If Ford or Chrysler engine is used, injectors must be sleeved at 2.100 ID. **If using ASCS heads in 2005, you may use 2 1/2 injector stacks.**
  - C. Chrysler: W7 or W9 head. No porting or polishing. 2.100 intake & 1.600 exhaust.
  - D. Ford 1 7/8" and Chrysler 1 3/4" primary exhaust tubes, minimum 29" long.

#### **A.S.C.S. Head Rules**

Spec heads, part #27-211 (Chevy), #27-223 (Ford) and #27-222 (Mopar). ASCS stamp may not be altered in any way. Intake opening no larger than original opening, except: Intake port floors and sides may be ground or polished 3/4 of an inch or no further into port than the closest edge of the closest letter of the ASCS logo. During this polishing, the left side of the letter "A" is sometimes inadvertently brushed with the polish wheel. This is permissible as long as the letter is still intact. During polishing of inlet port, polish marks may go slightly further than the 3/4 inch mark.

Intake port at no time may exceed 215 cubic centimeters. Intake port polishing will be allowed no more than 1 1/2 inches below the bottom of the original seat ring on the back side of the bowl area and no more than one inch on the short side. Polishing will be allowed in the combustion chamber area to avoid hot spot chaffing. Polishing will be allowed in exhaust ports, as long as the original ASCS logo is not affected or port shape is not altered substantially.

Absolutely no intake or exhaust port relocation, raising, enlargement or reshaping of any type. Valve angle and placement may not be altered in any way. ASCS checking fixtures to check the above specifications and dimensions will be utilized. Any internally-repaired ASCS spec head must be re-certified by Brodix.

Heads must be stock bolt size (3/8), location (no step studs) and remain within one degree of OEM angle specifications. (Must accept a stock intake manifold). No Brodix #112 heads. No 18 degree heads. No canted valve heads. No heads other than the original 23 degree valve angle ASCS heads. Titanium intake valve OK. Stainless steel exhaust OK. Titanium retainers OK.

**2.** No titanium crankshafts or rods will be allowed. There must be an inspection plug in the oil pan. Either a #12 AN fitting, or a 1" pipe plug. If a car is to be inspected and there is no inspection plug in the oil pan, it will be required to pull oil pan for inspection.

**3.** The race director has the right to pump any car in the pits at any time during the night. The top three finishers each night will be pumped.

**4.** When checking an engine's legality, pumping will prevail. If the pump shows a car illegal, a tear down is an option to prove legality.

**5.** Owners found to have illegal engines or that refuse to tear down their engine will forfeit points and money that night.

**6.** Technology: No traction control devices of any kind allowed. This includes mechanical and electronic traction control devices. No wheel speed sensors permitted. No computer-operated or controlled parts (such as fuel injections, fuel systems, etc.).

## **WING RULES**

**Note:** Intent on the wing rule is to comply with the World of Outlaws specs, except as noted below.

**1.** Top wing mandatory, maximum of 25 square feet with 30-inch side panels. Maximum center foil width 60 inches. The deepest point allowed in the top surface of the wing will be 2 1/2 inches.

**2.** Side panel maximum length is 72 inches. Side panels attached to the wing must be fabricated flat, as to have no turnouts or flaps made of more than two inches of material on the front or rear panel and no more than 1 1/4 inches on the top or bottom sideboard. All top and front wings must be fabricated of metal alloys only. No fiberglass, carbon fiber or other similar materials may be used in the basic framework (center foil and side panel) of the wing.

**3.** Center foil must be one piece. No split wings or bi-wings. Top wings must not extend beyond outside of rear tires.

**4.** Nose wing optional, if used maximum six (6) square feet. No Wicker Bills or Gurney Lips allowed on center foil. The front wing may not be cockpit or driver adjustable.

## **TIRE RULE**

**1. HOOSIER SC-15 or SC-25 on the right rear at all times.**

## **RED FLAG IS CLOSED UNLESS OFFICIAL SIGNALS OTHERWISE**

**OPEN RED:** Crew members can go to car, driver must stay in car or you will be disqualified (except for safety reasons). A single will be given for an open red.

**CLOSED RED:** No working on a car by anyone. Cars will be pushed off as soon as accident is ready to be cleared. (Example: As soon as driver is checked for injury and cars are uprighted, we will push off. Line up single-file so officials can line you up).

**CAUTION:** 2 laps will be given after last car in accident gets to work area.

All ties in overall points will revert back to qualifying times.

All races and qualifying pay points on Friday Night (except "C" main).