SECTION 8 - GENERAL ENGINE RULES AND TECHNICAL PROCEDURES

Governing Philosophy of the Burris National Speedway Series Technical Regulations

The rules set forth are designed to be a guide for technical inspectors to insure fair competition within the Burris National Speedway Series. While the BNSS encourages innovation and engineering within its technical guidelines, certain modifications deemed to be against the spirit and intent of rules set forth shall be declared illegal. It is the sole discretion of the technical inspector and race director to decide if any modification outside of the rules laid down here will be deemed illegal for competition. Any means of introducing air to the engine, except from the inlet of the carburetor is illegal. Any means of modifying the engine or exhaust system to introduce air or bleed of exhaust gasses is illegal.

8.1 Gasoline General Rules - All 2 and 4 cycle engine classes designated “Gasoline only” will use commercially available roadside gasoline with a maximum of 93 octane. For major events or where a spec fuel is desired the hosting track should specify where the source fuel is to be obtained. This can be fuel supplied at the track or a nearby service station. All 2 cycle classes to use Burris Castor and/or Blend with 6 oz/gal being the nominal oil to fuel ratio.

8.1.1 2 Cycle Gas Tech -The tech inspector will draw one gallon of fuel from the source of race spec fuel. The inspector will add 6 ounces of Burris Castor to the fuel sample. The sample will be kept in a shaded, cool location, under the control of the tech inspector. A Digitron meter must be set to 000 using the controlled sample. BNSS recommends zeroing the meter with spec fuel as opposed to using the cyclohexane method due to the potential for error due to regent contamination and other environmental factors. Use of a single oil brand allows greater accuracy in the test results.

8.1.2 4 Cycle Gas Tech - The tech inspector will draw one gallon of fuel from the source of race spec fuel. The sample will be kept in a shaded, cool location, under the control of the tech inspector. A Digitron meter must be set to 000 using the controlled sample. BNSS recommends zeroing the meter with spec fuel as opposed to using the cyclohexane method due to the potential for error due to regent contamination and other environmental factors.

8.1.3 Competitors are allowed plus or minus 10 on the meter. Competitors are eligible for one re-check following a failed test.

8.2 Methanol Test General Rules-100% methanol with no additives or oil is the only fuel allowed in Methanol specified classes.

8.2.1 For major events or where a spec fuel is desired the hosting track should specify where the source fuel is to be obtained. This can be fuel supplied at the track by the promoter or an approved vendor. Comparison testing can be done with a hydrometer or by the water test described below.

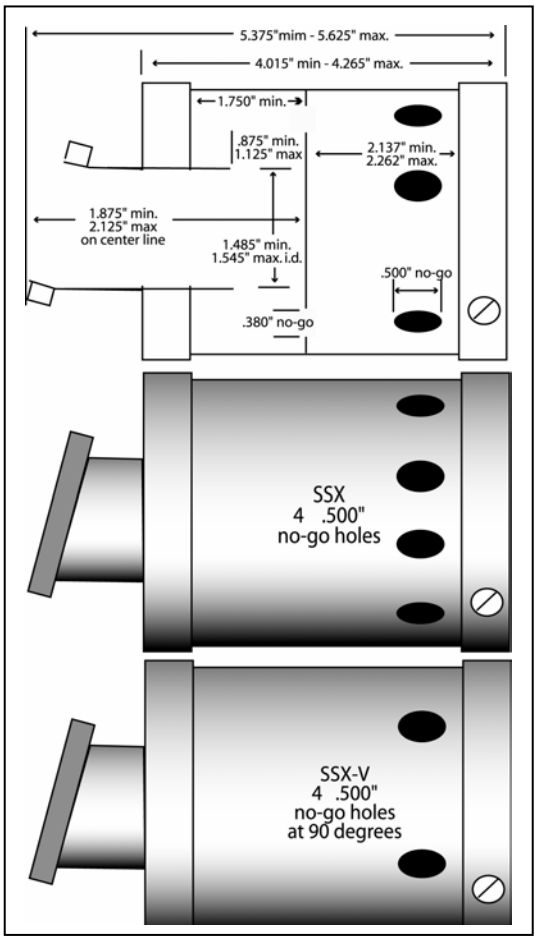
8.2.2 Methanol water test. Using a clean glass bottle, fill with less than half of the bottle’s volume with methanol. Fill with the same amount of distilled water. Mix thoroughly and let set for five minutes. If the test sample shows cloudiness, milkiness or contains precipitates, the participant’s fuel is illegal.

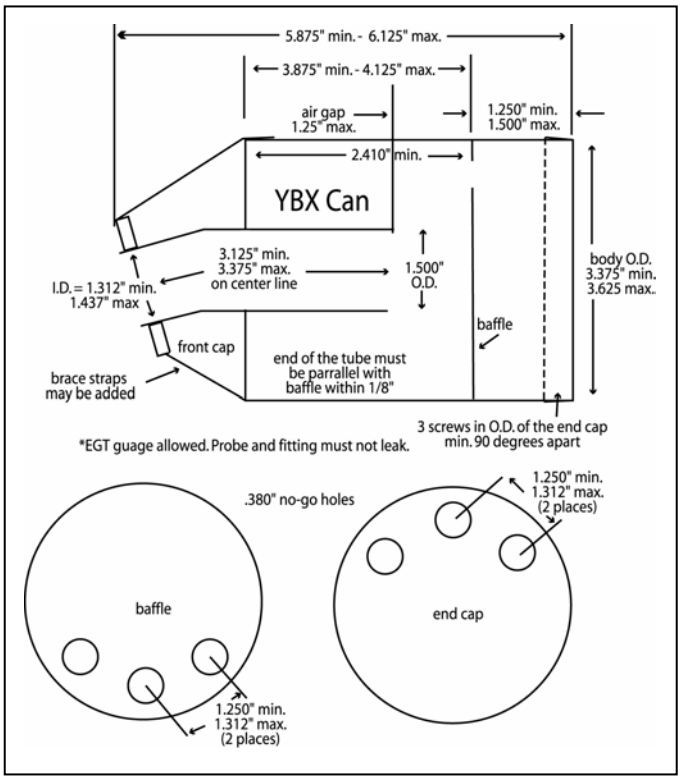
8.2.3 A pump-around fuel distribution system is a satisfactory replacement for a hydrometer test or the water test.

8.3 4 Cycle Exhaust Systems: The exhaust system must be of a fixed design and cannot be adjusted while the kart is in motion. (i.e. no slippy pipes) Length is non tech. Loop pipes OK. System may consist of one to three pieces (header, connector tube and tail pipe) plus a silencer (if required). Exhaust pipe/header may not extend past rear bumper (including silencer, where applicable) Studs allowed to attach the header to

cylinder head. Sealer and gaskets non-tech. If a silencer is required the RLV Model B-91XL* (Pt# 4104) is the only approved model. * Also referred to as B-91

8.4 2 Cycle Exhaust Systems: The exhaust system must be of a fixed design and cannot be adjusted while the kart is in motion. (i.e. no slippy pipes). The pipe must fit the factory dimensions and specifications. No modifications permitted. EGT probes and fittings are non-tech. Safety wire to secure the end piece of the system is non-tech. A loose exhaust can on a kart during a competitive event is cause for a black flag.





8.5 Combustion Chamber Volume

Testing Procedure - Extreme care must be used to obtain accurate and reliable results.

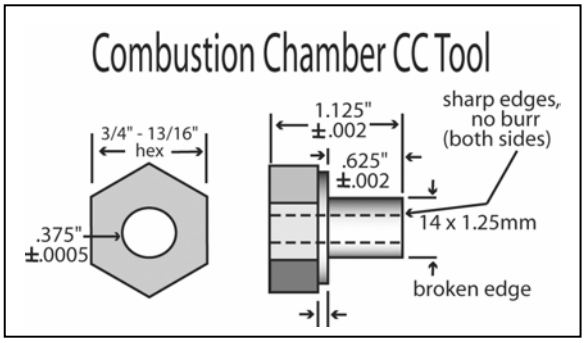
8.5.1 Fill a 25cc (.1cc calibration) burette with Automatic Transmission Fluid. Care must be taken to allow trapped air bubbles to escape. Flush the air from the stopcock and outlet.

8.5.2 Install the combustion chamber measuring plug and torque to 90 in. lbs. Roll the piston to approximately .100 before top dead center.

8.5.3 Fill the combustion chamber with the designated amount (24cc for F200, 11cc for KT100) of ATF from the burette.

8.5.4 Roll the piston up through top dead center. If any oil escapes the top of the combustion chamber plug, the engine is illegal.

*special note-engine must be removed from the kart and combustion chamber plug hole be in a vertical position.



8.6 Briggs 5 hp Jr. Restrictor Plates. Flat style only with sharp edge. No bevelled or swaged holes. Maximum hole diameter is as follows; Purple = .425”, Turquoise = .500” and Gold = .575”.