Kids Kart Club Sprint Engine Rules Addendum

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1. General Rules

- a) The terms stock, original equipment, OEM, unaltered, etc refer to Original Equipment supplied by Briggs and Stratton.
- b) Only the original equipment Briggs & Stratton 206 #124332-8201 (aka LO206) engines are allowed
- c) All parts must be unaltered Briggs & Stratton 206 parts specifically made for this engine by Briggs & Stratton. No aftermarket parts to be used unless specified in these regulations.
- d) All parts are subject to comparison with a known stock part.

2. Things that are NOT permitted

- a) Tampering of the factory installed engine seals (2).
- b) "Blueprinting" unless stated herein.
- c) Modification to or the machining of any parts.
- d) Deburring, machining, honing, grinding, polishing, sanding, media blasting, etc.
- e) Sandblasting or glass-beading any interior engine surfaces.
- f) No device may be used that will impede, or appear to impede, airflow to the engine cooling system
- g) We only see black and white. If you think its "Gray" talk to the club president to clarify. THERE IS NO GRAY!

3. Engine Sealing

There are two custom made - installed at the factory, Tampering of the seals is not permitted. Should the seals be tampered with, the engine is no longer eligible for competition.

4. Engine Air Filter

Any air filter is allowed

5. Fuel Pump

- a) As supplied by SP Kart Parts or,
- b) Briggs & Stratton part number 808656 is legal for competition

A fuel filter is not required but highly recommended to insure that dirt and contamination within your fuel system does not impact you carburetors performance. The fuel filter itself is not a tech item but only one fuel filter is legal for use and it can only be located between the fuel tank and the fuel pump inlet (not between the pump outlet and carburetor).

6. Cooling Shrouds, Covers and Blower Housings

All pieces of the engine cooling shroud/blower housing and control panel must be stock Briggs & Stratton and properly installed. Rewind housing and cooling shroud(air guard) must remain stock as painted from the factory. Engine shroud may be painted any color. Any bolt, with the exception of the head bolt, that is used to secure sheet metal shrouds and covers may be replaced with larger diameter bolts. No taping or covering of the rewind shroud is permitted.

7. Use of Helicoils

It is permitted to use Helicoil thread inserts for the shrouds, valve covers, oil drain, oil fill holes, blower housing, and exhaust pipe attachment studs on the head and lower brackets.

8. Carburetor & Intake Manifold

- a) The Briggs & Stratton stock carburetor part #555658 is the only carburetor permitted. "Walbro", "Briggs" diamond logo and/or #590890 etched in the body are the additional visual indicators.
- b) NO alterations allowed. This includes the nozzle, emulsion tube, jets, float, float needle and all other carburetor parts.
- c) Idle pilot jet must remain completely stock and be clearly identified with its original etched or stamped "32" as shipped from Briggs and Stratton.
- d) Main jet must also remain completely stock and be identified with its original etching or stamped "95" as shipped from Briggs & Stratton
- e) Throttle cable cap on the top of the carburetor must be properly installed and secured in the fully tight position.
- f) Metal choke cover must remain in place but may be secured with silicone or epoxy sealer.
 - a. Additional pin punching is allowed to tighten choke cover.
- g) Air must only enter the engine from the natural air filter horn of the carburetor. Air entering through any other method is illegal.

9. Cylinder Head

- a) The ONLY head casting for the Briggs & Stratton 206 herein is the "RT-1", cast into the head. Thickness is 2.430". This is a tech item.
- b) Depth of shallow area of the combustion chamber must be .030 inch minimum. This measurement to be taken with a depth gage on both the combustion side and spark plug side of the cylinder head.
- c) Both intake and exhaust must have OE stock Briggs & Stratton valve keepers.
- d) Valve Guides: Replacement of valve guides with Briggs & Stratton part #555645 only is allowed. Maximum depth from the head gasket surface to the intake valve guide is 1.255".
- e) Valve springs must be stock as supplied with engine.

10. Head Gasket

- a) Unaltered Briggs and Stratton part #555723 is the only head gasket allowed.
- b) Minimum thickness allowed is .049". Measurement must be performed using a micrometer.

11. Ports

- a) No de-burring, machining, honing, grinding, polishing, sanding, media blasting, etc.
- b) The transition from intake bowl to port must have factory defined machining burr at this junction. No addition or subtraction of the material in any form or matter. No alterations of any kind may be made to the intake or exhaust ports.
- c) Intake port: Maximum diameter measurement -= .918 inches max. Tech Tool A6.
- d) Exhaust Port AS CAST. Exhaust Outlet .980 Tech Tool A6.
- e) Valve seats intake and exhaust: Must remain factory specification with one 30 and one 45 degree angle only. Valve seats of additional angles and/or angles not comparable to the factory stock are not permitted.
- f) Valve maintenance permitted (Valve Job). Valve seats must remain with the factory specification of the 30 and 45 degree angles only. Valve seats of additional angles and/or excessive material removed when compared to the factory stock is prohibited.
- g) Intake valve seat diameter inside = maximum .972 inches. Tech Tool A2.
- h) Intake port pocket bowl(area just below the valve seat) =.952
- Exhaust valve seat diameter inside maximum .850 inches.

12. Valves

- a) Intake Valve
 - a. Weight 27.8 grams
 - b. Valve stem diameter .246 to .247 inches
 - c. Valve head diameter 1.055 to 1.065 inches
 - d. Height from angle of the valve face to top of the valve .057
 - e. Valve length 3.3655 inches.
- b) Exhaust valve
 - a. Weight 27.2 grams
 - b. Valve stem diameter .246 to .247 inches
 - c. Valve head diameter .935 to .945 inches
 - d. Diameter of valve seat .850 inch ID maximum
 - e. Height from the angle of the valve to top of the valve .060 inches.
 - f. Valve length 3.3655 inches

13. Push Rods

- a) Push rods must be unaltered stock Briggs & Stratton part #555531
- b) Push rod length 5.638 to 5.658 inches
- c) Push rod diameter .185 to .190 inches checked in 3 spots

14. Fly Wheel

- a) Stock Briggs & Stratton part #555683 only. No machining, glass beading, sand blasting, painting or coating of the fly wheel is allowed
- b) Minimum fly wheel weight is 4 pounds 1 ounce
- c) Stock unaltered fly wheel key only. Width of .1825 to .1875 inches.
- d) Flywheel fan Briggs & Stratton Part #692592 only. Broken fans must be replaced.

15. Ignition Systems

- a) Unaltered Briggs & Stratton stock ignition part #555718 is mandatory. Only "GREEN" ignition module is allowed. Maximum 6150 RPM.
- b) Coil or its position, other than air gap may not be altered in any way. Coil mounting bolts must be stock and cannot be altered in any way to advance or retard timing. Attachment bolts or bolt holes may not be altered.
- e) Flywheel fan Briggs & Stratton Part #692592 only. Broken fans must be replaced.

16. Clutch

- a) Only SP Kart Parts supplied MaxTorque clutch is allowed. PN: 21-12-0003
- b) No Aluminum parts, machining, polishing, or modifications allowed
- c) Clutch springs supplied by SP Kart Parts ONLY!