2024 Briggs 206 Category Rules



Approved Engines: The Briggs & Stratton LO206 Canadian Engine is built for the Canadian market and has a unique technical specification. The only LO206 engines that are eligible for Canadian competition are identified with a special embossed stamp on the engine block and cylinder head. Engines that do not bear the official special embossed stamp cannot be used.



- Engine Components: Only the original equipment Briggs & Stratton LO206 #124332-8201 or #124332-8202 engine is allowed. All parts must be unaltered Briggs & Stratton LO206 parts specifically made for this engine by Briggs and Stratton. No aftermarket parts to be used. Both Briggs & Stratton engine seals (2 of them) must be present with both the fastener and seal in "as shipped" from the factory location and condition. Any defined tampering with the fasteners or damage to the wire/seal itself (example: delaminated hologram) are grounds for disqualification. Take proper care of your seals to ensure their integrity.
- Headers and Muffler: Header must be RLV Model 5506 or Model 5507 only. Exhaust header to cylinder bolts or nuts must be safety wired. Header support brace is mandatory. Additional bracing may not be welded to the pipe. Silencer must be only RLV B91XL, Part Number 4104, with round baffle holes only. Safety wiring of the silencer to header is mandatory. All 4 baffles must remain unaltered and the hole size can be verified using a no-go pin of .1295". Exhaust gases may only exit through the muffler baffles. Muffler must be mounted on the header in a way that does not allow exhaust to leak at this joint. The exhaust header and silencer surfaces must be completely wrapped with non-asbestos insulation material starting approximately 3 to 4 inches from the exhaust flange.
- Fuel: Only Gasoline no greater than 94 octane sold at Canadian roadside fuel stations open to the public. The addition of fuel additives is not permitted. No E85 Flex Fuel permitted.

Carburetor: Carburetor Venturi measurements are to be taken from both the inlet and outlet sides of the Venturi. A slight chamfer around the choke bore ID (air horn) may be present. 1.149" no go TECH TOOL A7. If a carburetor is suspect, Technical Inspectors may also use any appropriate tool they see fit to make precise measurements. Any carburetor that does not meet the Venturi specifications listed in these regulations is deemed to be illegal. Slide must remain B&S stock unaltered. Slide cutaway to be measured on flat surface. .075" no go Tech Tool A10. Idle pilot jet must remain completely stock and clearly identified with its original etched or stamped '32' as shipped from B&S. Main jet must also remain completely stock and clearly identified with its original etching or stamped '95' as shipped from B&S. B&S stock unaltered aluminum needle is required part number 555602 marked #BGB. Metal choke cover must remain in place but may be secured with silicone or epoxy sealer. Additional pin punching is allowed to tighten choke cover. Air must only enter the engine from the natural air filter horn of the carburetor.



• <u>Carburetor (Continued)</u>: The B&S stock carburetor part #555658 is the only carburetor permitted. No alterations allowed unless stated on this page below. All parts will be



compared to a stock known B&S part for eligibility. This includes the nozzle, emulsion tube, jets, float, float needle and all other carburetor parts. It is allowed to adjust the float height by means of bending the small tab on the float arm.

o All Classes EXCEPT Senior Stock

- Require the installation of the locking cap Part #555726 on the carburetor slide cover. It is not permitted to run the classes without the specified slide and locking cap. The locking cap must be tightened.
- <u>Carburetor Slide Optimization:</u> Optimization of the slide opening is permitted. The only allowable method of slide optimization is by removing material from the throttle cap in the area shown in the graphic on the right. Slide opening must not exceed the appropriate "no go" specification as per class regulations.
 CAUTION – The risk of exceeding the allowable limit on

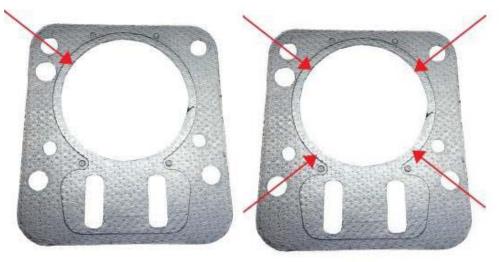
the slide opening could lead to an unnecessary DQ.

<u>Fuel Pump:</u> The only fuel pump, B&S part number 808656, is legal for competition. All other pumps are prohibited. It is prohibited to pulse from the intake manifold. Spacing of the Fuel Pump must be less than .75" off of the control plate, B&S #555699, Measurement is from the base of the control plate to the bottom of the fuel pump. Vertical mounting or mounting the fuel pump upside down is NOT allowed. The fuel pump must be pulsed from a pulse fitting mounted on the oil fill fitting located on the engine side cover. Aftermarket one-piece filler/pulse fittings such as shown on the right are permitted. A fuel pump return line to the fuel tank is prohibited. Use of an inline fuel filter is highly recommended. Only a single fuel filter is allowed. It can <u>only</u> be mounted inline between the fuel tank and fuel pump. The fuel filter itself is a non-tech item.

• <u>Air Filter:</u> The only air filter permitted is the Briggs and Stratton Green Air Filter #555729. No modification to the filter element is permitted. The addition of Briggs and Stratton pre-filter #557096 only is allowed.



- <u>Crankcase and Carburetor Breather Catch Containers:</u> A crankcase overflow tube must be fitted. A carburetor overflow tube must be fitted. Both tubes must run to a securely mounted catch container. The catch-container must be vented to atmosphere.
- <u>Cylinder Head:</u> The ONLY head casting for the LO206 is the 'RT-1', cast into the head just off the head gasket surface (towards the rear of the engine, PTO side). The overall head thickness is 2.430". Cylinder head must be "as cast". Factory machining marks left on the head are technical inspection items. Hard carbon may be scraped from head before measuring. Depth of shallow area of 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 cylinder head. Depth at floor of combustion chamber is .341" minimum. No deburing, machining, honing, grinding, polishing, sanding, media blasting, etc. The transition from intake bowl to port must have factory defined machining burr at this junction. No addition or subtraction of material in any form or matter. No alterations of any kind may be made to the intake or exhaust ports. Intake Port: Maximum diameter measurement: 0.918" max. Tech Tool A6. Exhaust Port AS CAST. Exhaust Outlet: 0.980" Tech Tool A6.
- <u>Head Gasket:</u> Unaltered B&S part #555723 is the only head gasket allowed. Minimum thickness allowed is .049". Measurement must be performed using a micrometer. Readings are taken from inside the cylinder hole of the gasket closest to the combustion chamber (see diagram). Four measurements must be taken with 3 meeting the minimum thickness of .049".



• <u>Valve Train:</u> Valve maintenance permitted (valve job). Valve seats must remain with the factory specification of 30 and 45 degree angles only. Valve seats of additional angles and/or excessive material removed when compared to the factory stock is prohibited. Intake valve seat diameter inside: 0.972".Tech Tool A2. Exhaust valve seat diameter inside: 0.850". Tech Tool A1. 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". Briggs & Stratton heat disperser, P/N 555690 can be installed in the exhaust bolt boss per factory instructions. Retainer flange thickness 0.055" to 0.075" maximum. Both intake and exhaust must have OE stock Briggs & Stratton valve keepers. No machining, polishing, easing, or titanium valves allowed. Only unaltered Briggs & Stratton part #555552 (exhaust) and #555551 (intake) valves permitted.

Intake Valve		
Minimum Weight of Valve	27.8 grams	
Diameter of valve stem	.246" to .247"	
Diameter of valve head	1.055" - 1.065"	Tech Tool A17
Diameter of valve seat	.972" ID Maximum	
Valve length	Minimum 3.3655"	
Height from angle of valve face to top of the valve	.057" Minimum	Tech Tool A26
Exhaust Valve		
Minimum Weight of Valve	27.2 grams	
Diameter of valve stem	.246" to .247"	
Diameter of valve head	.935" to .945"	Tech Tool A18
Diameter of valve seat	.850" ID Maximum	
Valve length	Minimum 3.3655".	
Height from angle of valve face to top of the valve	.060" Minimum	Tech Tool A27

Valve Springs are single coil stock, unaltered Briggs & Stratton part # 26826. Must be identical in appearance to factory part and have 4.00 to 4.75 coils in stack. Spring Wire Diameter: .103" to .107". Valve spring length: .930" max – Tech Tool A15. Inside diameter: .615" to .635".

Rocker Arms must be stock B&S part # 555711 or #797443 and may not be altered in any way. Rocker arms must be stamped with B&S Logo. Rocker arm overall length -2.820" min. Rocker arm #555711(U.S.) must be used with rocker stud #694544(U.S.). Rocker arm #797443(metric) must be used with rocker stud #797441(metric). Rocker studs must be stock, unaltered B&S part #694544 U.S. (1/4-28 thread) or

#797441 Metric (M8 x 1.00 thread) and in stock location.

Rocker Ball must stock Briggs & Stratton. Diameter .590" min. to .610" maximum. Tech Tool A16. Rocker arm mounting positions may not be altered in any manner. No helicoiling of mounting holes. No bending of studs.

Rocker arm stud plate must be bolted to the head with one, OEM stock Briggs & Stratton gasket only - no alterations. Maximum thickness of gasket is .060". Rocker plate to head fastener holes must remain stock .289" max. Rocker arm – overall length 2.820" minimum.

 <u>Valve Train (Continued)</u>: Must be unaltered stock Briggs & Stratton part #555531. b. Push rod length 5.638 minimum inches to 5.658" maximum. Tech Tool A5. Push rod diameter .185" minimum to .190" maximum.

- <u>Flywheel:</u> Stock Briggs & Stratton part #555683 only. No modifications are allowed to the flywheel. The minimum weight of the flywheel, fins and attachment bolts is 4 pounds 1 ounce. No machining, glass beading, sand blasting, painting or coating of flywheel is allowed. A flywheel fan, Briggs & Stratton part #692592, with broken fins must be replaced.
- Ignition System: Stock, unaltered flywheel key with the Briggs & Stratton logo is required. Width of the key allowed is .1825"-.1875". No offset keyways allowed. Unaltered Briggs & Stratton stock ignition part #555718 is mandatory. Only "GREEN" ignition module allowed. Maximum RPM: 6,150. 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 and/or bolt holes may not be altered.

<u>Spark Plug Options</u>:[1] B&S unaltered factory spark plug part number #555737 Champion RC12YC with Briggs Logo on Insulator or [2] AutoLite AR3910X unaltered OEM spark plug (B&S P/N #84005196) "AutoLite" and "AR3910X" identification on the insulator is permitted. Spark plug must have the "AutoLite" and "AR3910X" identification on the insulator is permitted. Sealing washer must be in place as from factory. Only the OEM Briggs & Stratton part #555714 Spark Plug Boot is permitted. The Briggs & Stratton ignition switch and wires must remain in stock location. It is not permitted to alter the OEM wiring.

- <u>Starter:</u> Only Briggs & Stratton part # 695287, must be intact. Starter maybe rotated. No taping or covering of the rewind shroud is permitted.
- <u>Shrouds & Covers:</u> All pieces of the engine cooling shroud/blower housing and control panel must be stock Briggs & Stratton and properly installed. Engine Shroud may be painted any color. Engine shroud, covers, and control panel must be intact and not modified. Any bolt, with the exception of the head bolt and blower housing, that is used to secure sheet metal shrouds and covers may be replaced with larger diameter bolts.
- <u>Use of Helicoils</u>: It is permitted to use Helicoil thread inserts for shrouds, valve cover, oil drain, oil fill holes, blower housing, and exhaust pipe attachment studs on the head and lower brackets.
- <u>Clutch:</u> Open to any centrifugal drum or dry disc clutch. (Except for Box Stock where ONLY DRUM CLUTCH is Allowed)

The Technical Officials may at their sole discretion, at any time, replace a competitor's sealed engine or component thereof. Failure to comply is grounds for exclusion.



These Regulations are the Only Regulations for the L0206 component. Only the Briggs & Stratton Racing Department in Milwaukee can make changes to the technical specifications herein, provided they are first approved by ASN Canada FIA.

Changes, corrections, addendums, etc. will be published only by ASN Canada FIA and become effective on a date specified.

The manufacturer Briggs & Stratton and their dealers and their agents are not authorized to alter, verbally or otherwise, any rule herein. Should any Briggs & Stratton literature, catalogues, manuals, videos, etc. be different than these regulations, these regulations take precedence. Any rules published by Briggs & Stratton for use in other countries are not applicable in Canada.

Unless these rules state that you can do it, you cannot do it.

The LO206 genuine engine products and service parts are available only through the Canadian distributor and authorized Canadian dealers. Engines, and parts thereof new or used, purchased from private sources may not meet these regulations and may not pass Technical Inspection at an event.

Enquiries can be addressed to: Power Source Canada 2815 Bristol Circle, Unit 1 Oakville, ON Canada L6H 6X5 Tel 905-829-0006 Fax 905-829-8611 Email info@powersourcecanada.ca Toll Free Customer Service: 1-800-663-9700

Please note that these rules are general guidelines. If you are chosen for tech, please do so without confrontation. Refusing tech will result in you being suspended for the next 2 complete race events (rain outs do not count toward the suspension). If any confrontation is given you will forfeit your finish and point for the day. If chosen, please take kart directly to the designated tech area where there will be a track official to watch your equipment. No work may be performed on kart at this time. Driver/owner of kart being teched and tech official only permitted in the tech area during tech sessions. It is not the responsibility of the tech inspector to reassemble engine post tech. If you are deemed illegal you will be given "one week" to correct any illegal findings. First offence you will forfeit your finish and points for the day. Second offence forfeits finish and points and will not be permitted to race next scheduled race day (rain outs do not count towards the suspension). Third offence to be determined by track owner. Any issues that are questionable will be discussed by the tech inspector and track owner and decision will be made in the best interest of both parties.