

**ASN Canada FIA**



# **Canadian Karting Regulations Briggs & Stratton Racing Class LO206 Canadian Engine**

**To be read and applied in conjunction with Canadian Karting  
Regulations  
Book 1 – Sporting Regulations  
Book 2 – Technical Regulations**

**Effective January 1, 2016**

**ASN CANADA FIA IS THE GOVERNING BODY OF MOTORSPORT IN CANADA  
APPOINTED BY  
THE FÉDÉRATION INTERNATIONALE DE L'AUTOMOBILE**



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# Briggs & Stratton LO206 Canadian Engine

## 2016 Regulations

**NOTE: Changes from 2015 have a left Red Border**

### About the Briggs & Stratton LO206 Canadian Engine



The Briggs & Stratton LO206 factory sealed engine platform is designed, engineered and hand-built in Milwaukee, Wisconsin exclusively for racing to provide a high level of consistency for the user.

Tailored for both the new driver and the mature driver, progressing from one class to another is accomplished easily and economically by changing an inexpensive carburetor slide or carburetor slide/ignition module combination. This feature allows an engine to have a useful life with normal maintenance.

Simplistically, an engine can be taken out of its box, fitted to the appropriate class chassis following the rules contained herein, and be ready for the track.

### The Briggs & Stratton LO206 Canadian Engine Eligibility



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.

### These Regulations Are the Only Regulations

These technical regulations are to be utilized in conjunction with ASN Canada FIA Karting Regulations available at [www.asncanada.com](http://www.asncanada.com) in the KartSport section.

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.

Briggs & Stratton 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.***

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## 1. Briggs & Stratton Canadian LO206 Engine Availability

The LO206 engine products and service parts are available only through the Canadian distributor and authorized Canadian dealers.

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 <a href="mailto:info@powersourcecanada.ca">info@powersourcecanada.ca</a>	Power Source Canada (B.C.) 300 - 1628 Derwent Way Delta, B.C., V3M 6R9 Tel 800.663.9700 Fax 800.563.1361 Toll Free Customer Service: 1-800-663-9700
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## 2. Factory Engine Sealing

There are two custom Homeland Security Tier III rated seals installed at the factory. Tampering with the seals is not permitted. Should the seals be tampered with, the engine is no longer eligible for competition.



Seals can have either a black anodized or bare aluminum finish on both main body ends as shown.

PLEASE NOTE THAT, STARTING IN 2015, A PROPRIETARY CABLE CONTAINING A BLACK STRAND WILL BE IMPLEMENTED.

Should an engine require dismantling for any reason that requires breaking of the seals, contact Briggs and Stratton at Email: [briggsracing@basco.com](mailto:briggsracing@basco.com)

## 3. ASN National Classes Technical Configurations

Class	Class Weight	Engine Package	Technical Configuration
Reference Rule #29 regarding ignition modules			
Junior	300	LO206 with carb lock	RLV pipe Part #5507 Briggs Yellow Slide .570 opening Briggs Part #555741
Senior	340	LO206	RLV pipe Part #5507 Briggs Stock slide Part #555590
Masters	375	LO 206	RLV pipe Part #5507 Briggs Stock Slide Part #555590

## 4. Club Classes Technical Configurations Example

Clubs are free to alter the class specifications and weights to suit their club driver licencing protocols and event programs.

Class	Engine Package	Technical Configuration
Reference Rule #29 regarding ignition modules		
"Cadet"	LO206 Junior with carb lock	RLV pipe Part #5507 Briggs Black Slide .310 opening. Part #555732 Briggs Ignition Part 555725 Black 4,150 RPM Limiter (plus or minus-50 RPM)

"Junior 1"	LO206 with carb lock	RLV pipe Part #5507 Briggs Green Slide .490 opening Briggs Part #555740
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Cadet, Junior and Junior 1 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.



## 5. Carburetor Slide Optimization

Optimization of the slide opening in Briggs & Stratton Cadet, Junior 1 and ASN National Junior classes 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.



A support video aid is available from Briggs and Stratton in the video section at <http://www.briggsandstratton.com/engines-racing/videos/slide-restrictor-system/>

CAUTION – The risk of exceeding the allowable limit on the slide opening could lead to an unnecessary DQ.

## 6. Briggs and Stratton Technical Inspection Tools

Briggs and Stratton have made available a number of tools for the convenience of technical checking of components when necessary. They are indicated throughout the rule thusly: **Tech Tool #**. The tools are available from:

Sox Racing, 2223 Platt Springs Rd.,  
West Columbia, SC 29169, (803) 791-7050

Refer to separate document illustrating the Technical Inspection Tools.

The document is available at [www.asncanada.com](http://www.asncanada.com) in the KartSport section.

## 7. General Rules

- a. The terms stock, original equipment, OEM, unaltered, etc, refer to Original Equipment supplied by Briggs & Stratton.

- b. Only the original equipment Briggs & Stratton LO206 #124332-8201 or Junior 206 #124332-8202 engine is allowed in the classes recommended herein.
- c. All parts must be unaltered Briggs & Stratton LO206 parts specifically made for this engine by Briggs and Stratton. No aftermarket parts to be used unless specified in these regulations.
- d. All parts are subject to comparison with a known stock part.
- e. All engine safety and regulations must be followed according to ASN Canada FIA karting regulations. Example: Chain guards.
- f. 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.
- g. Briggs & Stratton 206 classes must have a serialized block. Exception: For early built engines without a block serial number the engine identification sticker must be in place and legible. If the sticker is illegible or missing, the engine must be tagged with a suitable sticker or seal approved by the technical inspector. Seals are to be installed to the existing Briggs and Stratton seal located on the forward PTO side of the engine.

## **8. Briggs & Stratton Engine Paint Marking**

The following specific locations should be Paint Marked at Events:

- Exhaust bolt to exhaust flange
- Flywheel shroud bolt to shroud
- One carburetor retaining nut to carburetor
- One carburetor spacer retaining bolt to cylinder head
- One exposed head bolt to the head
- One valve cover bolt to valve cover
- Carburetor float bowl retaining screw to carburetor body
- Centered carburetor drain plug to bowl

## **9. Things That Are NOT Permitted**

- a. Addition or subtraction of material in any form or matter.

Exception – Optimization of the slide opening in Briggs & Stratton Cadet, Junior 1 and ASN National Junior classes is permitted per section 5.

Exception For Valve Maintenance : Valve seats must remain factory specification with one 45 degree angle only. Multi-angle valve seats are not permitted. Grinding of valve stem or excessive material removal is prohibited.

- b. "Blueprinting" unless stated herein.

- c. Modification to or the machining of any parts in order to bring them to stated minimum/maximum specification, (or for any reason).
- d. Machining or alteration of any kind to the engine or replacement parts unless specifically stated herein.
- e. Deburring, machining, honing, grinding, polishing, sanding, media blasting, etc.
- f. Sandblasting or glass-beading any interior engine surfaces.
- g. No device may be used that will impede, or appear to impede, airflow to the engine cooling system.

**10. Engine Ignition Switch**

The Briggs & Stratton ignition switch and wires must remain in stock location. It is not permitted to alter the OEM wiring.

**11. Engine Air Filter**

The only air filter permitted is the Briggs and Stratton Green Air Filter Part #555729. No modification to the filter element is permitted. The addition of Briggs and Stratton pre-filter #557096 is allowed.

A protective shield may be attached for wet-weather competition provided that the shield does not create any ram-air effect.



**12. Engine Fuel**

Premium Gasoline no greater than 94 octane sold at normal roadside fuel stations open to the public. The addition of fuel additives in any manner is not permitted. Fuel source may be specified in event supplementary regulations.

**13. Engine Oil**

High-quality synthetic oil is recommended.

The addition of oil additives in any manner is not permitted.

**14. Crankcase and Carburetor Breather Catch Containers**

a. Crankcase Overflow Tube

A crankcase oil overflow tube must be fitted. It must run from the crankcase breather to a catch container.

The catch-container must be vented to atmosphere.

b. Carburetor Overflow Tube

The carburetor must have an overflow tube that goes into a catch container.

The carburetor catch container must be vented to atmosphere.

## 15. Fuel Pump

Only fuel pump, B&S part number 808656, is legal for competition. This fuel pump can be identified by the Briggs & Stratton diamond logo on the pump face. All other pumps are prohibited.



It is prohibited to pulse from the intake manifold.

Relocation of the fuel pump is legal as long as it is spaced to less than 3/4 inch off of the control plate, B&S #555699, in a similar location that is both safe and secure. 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. The use of silicone sealant on the brass vent is permitted. A fuel pump return line to the fuel tank is prohibited.

A fuel filter is to insure that dirt and contamination within your fuel system does not impact your carburetors performance. This is not a tech item.

## 16. Shrouds & Covers

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, 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.

### Side Cover Fastener Changeover

B&S LO206 will be going to a SEMS fastener on the side cover.

On the left in the photo is the CURRENT fastener. On the right is the newer SEMS fastener with the integrated washer. Both fasteners are legal.



## 17. Use of Helicoils

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.

## 18. Carburetor & Intake Manifold

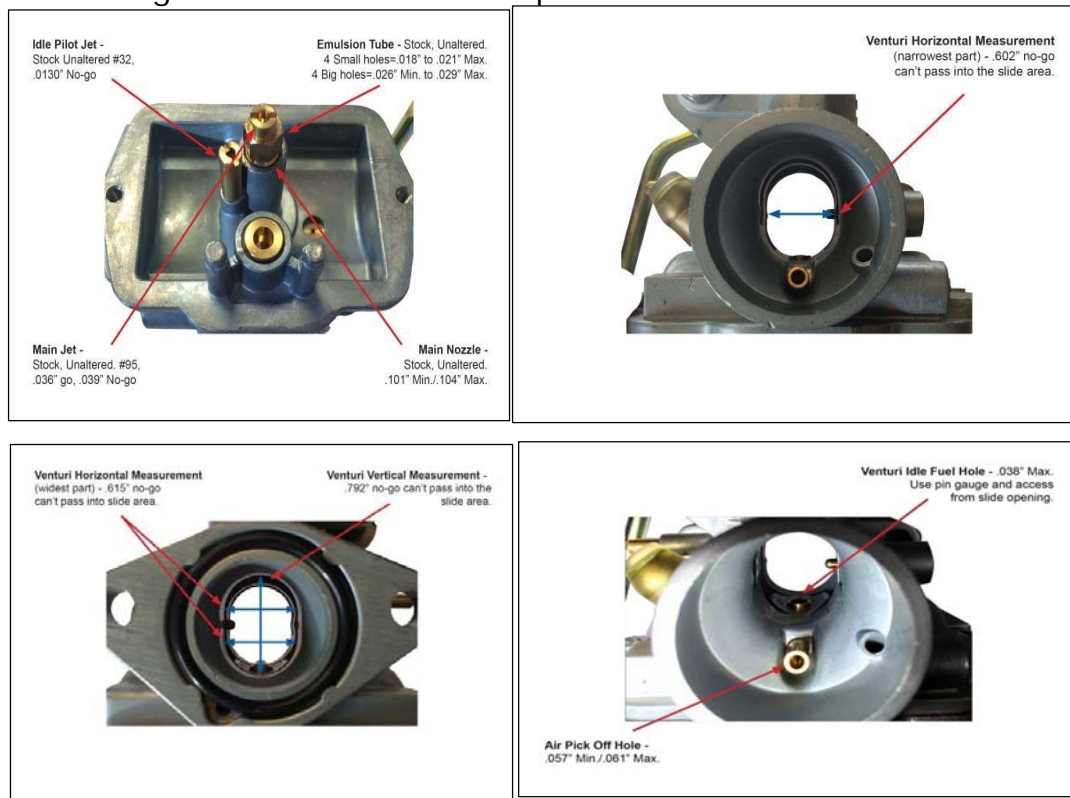
The B&S stock carburetor part #555658 is the only carburetor permitted.



'Walbro', 'Briggs' diamond logo and/or #590890 etched in the body are additional visual indicators. No alterations allowed unless stated 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 carb parts. It will be allowed however to adjust the float height by means of bending the small tab on the float arm.

Slide must remain B&S stock unaltered. Slide cutaway to be measured on flat surface. .075 no go **Tech Tool A10**.

B&S stock unaltered aluminum needle is required part number 555602 marked #BGB. Needle to be inspected using **Tech Tool A4**. Needle, when placed in tool A4, should not protrude through the other side. If needle protrudes through the block it is out of specification.



NOTE: Slide openings should be measured only with the Briggs & Stratton slide tool listed on the tool reference chart.

<u>Class</u>	<u>Max. Slide Height</u>
.350 Kid Kart	.310 Opening (Long BLACK)
.450 Novice	.342 Opening (PURPLE)
.440 Cadet	.440 Opening (RED)
Junior 1 Club	.490 Opening
(GREEN) Junior 2 LEGACY	.520
Opening (BLUE) ASN Nat. Junior	.570
Opening (YELLOW)	

## 19. Technical Items Description

Technical Item	Description	Tech Tool
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a. Needle Jet C-clip	Needle Jet C-clip must be properly installed but may be installed at any of the 5 factory settings on the needle jet.	
b. Throttle cable cap	Throttle cable cap on the top of the carburetor must be used and properly installed in tight position.	
c. Choke	Choke: OEM unaltered, but lever may be fastened open with a spring, rubber band, wire, etc.	
d. Idle pilot jet	Idle pilot jet – #32, hole size is .0130" no go.	
e. Main jet	Main jet – #95, hole size is .0380" plus/minus 0.036 Go, 0.039 NoGo.	
f. Main nozzle and Emulsion tube	Main nozzle – OEM stock unaltered – hole size = .101 min and .104 max inches. No drilling, reaming, slotting or oblonging of hole. Emulsion tube – OEM stock unaltered: 4 small holes = .018 min inches to .020 max inches 4 big holes = .026 min inches to .029 max inches.	
g. Venturi Measurement	Venturi Measurement: Vertical: .792 max inches.	A8
	Horizontal: .615 max inches at widest part	A8
	Horizontal: .602 max inches at narrowest part.	A20
h. Air pick off hole	Air pick off hole - .057 Go, .061 NoGo	A9
i. Throttle bore	Throttle bore – Must be as cast and bore max diameter = .874 inches.	A7
j. Venturi idle fuel hole	Venturi idle fuel hole = .036 inches max	
k. Air filter	Air filter: Only GREEN air filter, part # 555729 is allowed. Filter adapters are not allowed, filter must attach directly to carburetor air horn	
l. Carburetor overflow	Carburetor overflow: Must be vented to a catch container.	
m. O-Ring	O-Ring part number Briggs part # 555601 is required and must be unaltered.	
n. Intake manifold	Intake manifold – max length = 1.740 inches min to 1.760 inches max	A12
	Intake manifold – bore diameter = .885 inches min to .905 inches max	A11
o. Choke Bore	1.149	A7
p. Carburetor Slide Cutaway	.075 NoGo	A10
q. Widest part of Combustion Chamber	2.640	A30

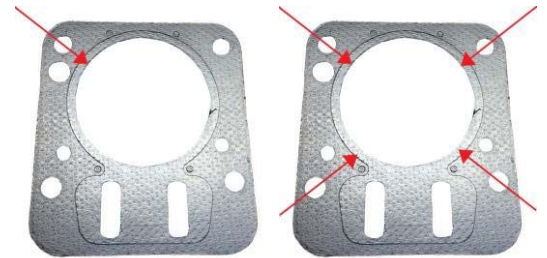
## 20. Cylinder Head

- The ONLY head casting for the LO206 herein 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 .340 inch minimum.

- f. Inspect retainers for alterations that would increase valve spring pressure. Retainer flange thickness 0.055 to 0.075 maximum. Both intake and exhaust must have OE stock Briggs & Stratton valve keepers.
- g. Unaltered Briggs & Stratton part #555552 (exhaust) and #555551 (intake) can be checked for appearance, weight, and dimensions.  
No machining, polishing, easing, or titanium valves allowed.  
Valve surface must be unaltered factory ground and have one 45 degree sealing surface only.  
There will be no other angles ground on any part of the valve.  
**Tech Tool A22.**
- h. 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".

## 21. Head Gasket

- a. Unaltered B&S part #555723 is the only head gasket allowed.
- b. 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".



## 22. Ports

- a. No deburring, 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 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: 0.918 inches max.  
**Tech Tool A6.**
- d. Exhaust Port AS CAST. Exhaust Outlet: 0.980 – **Tech Tool A6.**
- e. 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.

- f. Intake valve seat diameter inside: 0.972 inches.  
**Tech Tool A2.**
- g. Exhaust valve seat diameter inside: 0.850 inches.  
**Tech Tool A1.**

## 23. Valves

### i. Intake valve

Minimum Weight of Valve	<b>27.8 grams</b>
Diameter of valve stem	.246 to .247 inches
Diameter of valve head	1.055 to 1.065 inches <b>Tech Tool A17</b>
Diameter of valve seat	.972 inches ID maximum
Valve length	Minimum 3.3655 inches
Height from angle of valve face to top of the valve	.057 inches minimum <b>Tech Tool A26</b>

### ii. Exhaust valve

Minimum Weight of Valve	<b>27.2 grams</b>
Diameter of valve stem	.246 to .247 inches
Diameter of valve head	.935 to .945 inches <b>Tech Tool A18</b>
Diameter of valve seat	.850 inches ID maximum
Valve length	Minimum 3.3655 inches
Height from angle of valve face to top of the valve	.060 inches minimum <b>Tech Tool A27</b>

## 24. Valve Springs

- a. 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.
- a. Spring Wire Diameter: .103 to .107 inches
- b. Valve spring length: .930 max inches – **Tech Tool A15**
- c. Inside diameter: .615 to .635 inches

## 25. Rocker Arms, Rocker Ball and Rocker Arm Studs

- a. Rocker arms must be unaltered stock Briggs & Stratton part #691230 (US) or #797443 (metric) and must not be altered in any way.
- B&S has made a permanent adjustment to the final trim die resulting in the small tab highlighted in the image below being

reduced. This does not impact performance or require any attention. The new minimum simply reflects the reduction of the tab as shown.



Rocker Arm – overall length 2.825 inches minimum. Can be checked using a dial caliper.



- b. Rocker studs must be stock, unaltered stock Briggs & Stratton part #694544 (US) or 694544 (metric) and in stock location.
- c. Rocker Ball must stock Briggs & Stratton. Diameter .590 inch min. to .610 inch maximum. **Tech Tool A16.**
- d. Rocker arm mounting positions may not be altered in any manner. No helicoiling of mounting holes. No bending of studs.
- e. 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 inches.
- f. Rocker arm – overall length **2.820** inch minimum. Can be checked with a pair of dial calipers..

## 26. Push Rods

- a. Push rods must be unaltered stock Briggs & Stratton part #555531.
- b. Push rod length 5.638 minimum inches to 5.658 maximum inches. **Tech Tool A5.**
- c. Push rod diameter .185 minimum inches to .190 maximum inches.

## 27. Engine Block

- a. Engine block must be unaltered “as cast” Briggs & Stratton factory machined condition. There must be no addition or subtractions of metal or any substance to the inside or outside of the cylinder block.

- b. Both (2) Briggs & Stratton engine seals 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. It is recommended that you wrap your seals (using a plastic bag, etc.) to prevent exposure to harsh solvents such as carb cleaner, etc..

- c. Deck gasket surface finish is not a tech item. Piston pop up can be .005 inches maximum. Piston pop-up to be checked with flat bar in center of piston parallel to piston pin. **Tech Tool A25.**

Angle milling or peak decking is not allowed.

- d. Carbon build-up can be removed before pop-up is measured as long as material is not removed from the piston.

Exception – Competitors can deburr the manufacturing part number/marks IF needed as long as:

- Removal does not extend beyond the defined script area.
- De-burring does not extend below the original piston surface area.
- The original part numbers and script are still clearly visible.

- e. Cylinder bore dimension: - Briggs & Stratton stock bore is 2.690 inches. Allowance for wear is permitted up to 2.693 inches maximum for entire length top to bottom.

- f. Maximum stroke is 2.204”. Push piston down to take up rod play. Check stroke on BDC to TDC. **Tech Tool A21.**

## 28. Valve Lift

Valve Lift: Camshaft check is taken at the top of the valve spring retainers. With the lash set at zero, the movement of the valve spring retainers may not exceed the following: Intake and exhaust: .255 inches maximum.

## 29. Camshaft Profile Limits

Measured at the push rod. Push gently down on dial indicator stem to ensure that there is no lash when push rods are going down.

Intake lift		Exhaust lift	
0.006	59 to 51 BTDC	0.006	101 to 93 BBDC
0.020	19 TO 12 BTDC	0.020	59 TO 55 BBDC
0.050	.5 TO 4.5 ATDC	0.050	43 TO 39 BBDC
0.100	17 TO 21 ATDC	0.100	26 TO 22 BBDC
0.150	33.5 TO 37.5 ATDC	0.150	9 TO 5 BBDC

Intake lift		Exhaust lift	
0.175	43 TO 47 ATDC	0.175	1 TO 5 ABDC
0.200	54 TO 58 ATDC	0.200	11.5 TO 15.5 ABDC
0.225	68 TO 72 ATDC	0.225	25 TO 29 ABDC
MAX LIFT	0.257	MAX LIFT	0.259
MIN LIFT	0.252	MIN LIFT	0.252
0.225	38 TO 34 BBDC	0.225	76 TO 72 BTDC
0.200	24.5 TO 20.5 BBDC	0.200	62.5 TO 58.5 BTDC
0.175	14 TO 10 BBDC	0.175	52 TO 48 BTDC
0.150	4.5 TO .5 BBDC	0.150	42 TO 38 BTDC
0.100	12 TO 16 ABDC	0.100	25.5 TO 21.5 BTDC
0.050	29 TO 33 ABDC	0.050	8.5 TO 4.5 BTDC
0.020	45.5 TO 49.5 ABDC	0.020	8 TO 12 ATDC
0.006	83 to 91 ABDC	0.006	47 TO 55 ATDC

### 30. Flywheel

- a. No modifications are allowed to the flywheel.
- b. The minimum weight of the flywheel, fins and attachment bolts is 4 pounds 1 ounce.
- c. Stock Briggs & Stratton part #555683 only. No machining, glass beading, sand blasting, painting or coating of flywheel is allowed.
- d. A flywheel fan, Briggs & Stratton part #692592, with broken fins must be replaced.
- e. Stock, unaltered flywheel key with the Briggs & Stratton logo is required. Width of the key allowed is .1825"-.1875". No offset keyways allowed.

### 31. Ignition System

- a. Unaltered Briggs & Stratton stock ignition part #555718 is mandatory. Only "GREEN" ignition module allowed. Maximum RPM: 6,150.

**Exception** – Club Cadet LO206 class requires the use of unaltered Briggs & Stratton stock ignition part #555725 (BLACK in color). Maximum RPM: 4,150 with 50 RPM tolerance.

- 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 and/or bolt holes may not be altered.
- c. **Spark plug**: Only the B&S unaltered factory spark plug part number #555737 Champion RC12YC is permitted. Spark plug must have the Champion and Briggs & Stratton logo as well as the

RC12YC identification on the insulator. Sealing washer must be in place as from factory.

- d. **Magneto air gap** is non-tech (recommended clearance .0140")
- e. **Ignition timing:** Maximum of 30 degrees BTDC.
- f. **Spark plug connector:** Only the OEM Briggs & Stratton part #555714 is permitted.

### 32. Crankcase

Crankcase and cover must be Briggs & Stratton stock, unaltered, "as cast in factory" condition. No alterations or subtractions of metal or any other substance to crankcase cover.

### 33. Clutch

- a. Club Cadet and Novice class must use the supplied Max-Torque clutch, part #555727.  
No alteration to the clutch is allowed, except for springs and Max-Torque long key hub.
- b. Club Junior 1, National Junior, Senior, and Masters classes can run any rim centrifugal clutch with a maximum of 9 springs and 6 shoes.
- c. No alteration to clutch allowed, except springs, weights and key.
- d. Clutch coolers are not allowed.

### 34. Recoil Starter

Briggs & Stratton part # 695287, must be retained, as produced and intact. Starter maybe rotated.

### 35. Exhaust Header

- a. Header must be RLV Model 5507 for all classes.
- b. Gasket and/or silicone allowed to seal header to head.
- c. Studs or bolts are permitted to fasten exhaust header to cylinder head. Bolts or nuts must be safety wired.
- d. Header support brace is mandatory. The addition of a mechanical support bracket is permitted provided that there is no alteration whatsoever to the shape or dimensions of the exhaust configuration. The additional bracing may not be welded to the pipe.
- e. Helicoiling of the exhaust fastening threaded holes is allowed and is recommended.
- f. Any modification for or use of an O2, EGT, CO2 sensor is prohibited.





### **36. Exhaust Silencer**



Silencer must be RLV B91XL, Part Number 4104, with round baffle holes only. Safety wiring of the silencer to header is recommended.

### **37. Exhaust Protection**

The exhaust header and silencer must be wrapped with non-asbestos insulation material starting approximately 3-4 inches from the exhaust flange.

### **38. LO206 online support resources**

Please refer to [www.Briggsracing.com](http://www.Briggsracing.com) for a host of resources. Due to the sealed nature of this engine we highly recommend reading and viewing important documents and videos to insure a great racing experience. The on-line resources are assistive information with no regulatory value.

### 39. Torque Specification Guideline

Description	Wrench / socket size	Torque
Air Guard	7mm	40-50 lb-in. (4.5-5.6 Nm)
Blower Housing	10mm & 3/8"	60-110 lb-in. (7-12.5 Nm)
Carburetor (to manifold)	10mm	80-110 lb-in. (9-12.4 Nm)
Connecting Rod	T27	115-120lb-in. (13 Nm)
Cylinder Head Bolts	10mm	200-220 lb-in. (20-27 Nm)
Exhaust Brace Screws	10mm	95-125 lb-in. (11-14 Nm)
Exhaust Stud	10mm	95-125 lb-in. (11-14 Nm)
Flywheel Nut	15/16"	55-75 ft-lbs. (74.5-101 Nm)
Flywheel Fan	10mm	180-240 lb-in. (20-27 Nm)
Intake (to cylinder)	5mm Allen	70-90 lb-in. (8-10.2 Nm)
Oil Drain Plug	3/8"	100-125 lb-in. (11-14 Nm)
PVL Module	7mm	20-35 lb-in. (2.3-4 Nm)
Rocker Arm Stud	7/16"	90-120 lb-in. (10-14 Nm)
Rocker Arm Plate	10mm	70-90 lb-in. (7.9-10.1 Nm)
Rocker Arm Set Screw	1/8" Allen	50-70 lb-in. (5.6-7.9 Nm)
Spark Plug	5/8" Deep	95-145 lb-in. (11-16.4 Nm)
Slide Cover	10mm	95-125 lb-in. (11-14 Nm)
Starter Gear	#2 Phillips	35-53 lb-in. (4-6 Nm)
Top Control Plate	10mm	70-90 lb-in. (8-10 Nm)
Valve Cover	10mm Lower & 3/8"	30-60 lb-in. (3.5-7 Nm)