Briggs and Stratton 206 – Starters Guide
The 206 engine platform was designed and engineered exclusively for racing. Each engine is hand-built in Milwaukee, Wisconsin using dedicated tooling and dies to provide a level of consistency unmatched in the industry today.

The 206 is intended to simplify racing, from hitting the track to the tech process needed to ensure a level playing field at the end of the day. In combination with Briggs & Stratton Racing’s slide restriction system a complete racing ladder can be developed by simply changing a carburetor slide and/or by a slide and ignition change. With the base engine the basis for today’s ‘box stock’ classifications, the 206 engine gives racer’s and tracks the ability to have one engine, from start to finish.

All Briggs & Stratton (B&S) racing engines are manufactured solely for sanctioned racing only. B&S does not recommend the products referenced herein to be used for an application outside of sanctioned racing as serious injury or death could result.

This rule package has been prepared by Briggs & Stratton Racing and is intended to establish the basis for the technical control of the classes in which the 206 and 206 contact your sanctioning body.

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

Each racer is solely responsible to check and maintain engine legality per this published rule set.
This rule package covers all engine related technical specifications. For all other regulations beyond the engine please refer or contact your sanctioning body.

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1. Briggs & Stratton Racing Class Structure

The following class structure chart is intended as a reference only. Sanctioning bodies and organizations can alter the class structures to suit their driver licensing protocols.

<table>
<thead>
<tr>
<th>Class</th>
<th>Age</th>
<th>Weight (Pounds)</th>
<th>Engine Package</th>
<th>Technical Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kids Kart .350 Restrictor</td>
<td>Per sanctioning body/club regulations</td>
<td>Junior 206</td>
<td>RLV pipe (#5507) Slide (#555728)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with carb lock</td>
<td>4,100 RPM Rev Limiter</td>
<td></td>
</tr>
<tr>
<td>Novice .450 Restrictor</td>
<td>Per sanctioning body/club regulations</td>
<td>206</td>
<td>RLV pipe (#5506 or 5507)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with carb lock</td>
<td>'Purple' slide (#555735)</td>
<td></td>
</tr>
<tr>
<td>Cadet -.440</td>
<td>Per sanctioning body/club regulations</td>
<td>206</td>
<td>RLV pipe (#5506 or 5507)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with carb lock</td>
<td>'Red' Slide (#555733)</td>
<td></td>
</tr>
<tr>
<td>Junior 1 CLUB- .490</td>
<td>Per sanctioning body/club regulations</td>
<td>206</td>
<td>RLV pipe (#5506 or 5507)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with carb lock</td>
<td>'GREEN' Slide (#555740)</td>
<td></td>
</tr>
<tr>
<td>Junior 2 LEGACY .520</td>
<td>Per sanctioning body/club regulations</td>
<td>206</td>
<td>RLV pipe (#5506 or 5507)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with carb lock</td>
<td>'Blue' Slide (555734)</td>
<td></td>
</tr>
<tr>
<td>ASN Nat. Junior -.570</td>
<td>Per sanctioning body/club regulations</td>
<td>206</td>
<td>RLV pipe (#5506 or 5507)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with carb lock</td>
<td>'Yellow' Slide (555741)</td>
<td></td>
</tr>
<tr>
<td>Briggs &amp; Stratton 206 Senior</td>
<td>Per sanctioning body/club regulations</td>
<td>206</td>
<td>RLV pipe (#5506 or 5507)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stock Slide (#555590)</td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>Per sanctioning body/club regulations</td>
<td>206</td>
<td>RLV pipe (#5506 or 5507)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stock Slide (#555590)</td>
<td></td>
</tr>
</tbody>
</table>

Cadet, Novice, Junior 1, Junior 2 and National Junior classifications 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. A seal can be utilized at the discretion of the organizer, or alternatively painted by the technical officials.
Optimization of the slide opening in Briggs & Stratton Cadet, Novice, Junior 1, Junior 2 and National Junior classes is permitted. The only allowable method of slide optimization is by removing material from the throttle cap area highlighted in RED. The use of multiple gaskets and/or machining of the slide is prohibited.

Slide opening must not exceed the appropriate ‘no go’ specification as per class regulations. For information on slide optimization see video section at www.BriggsRacing.com

CAUTION – The risk of pushing the limit on the slide opening is an unnecessary DQ. For every .010” of slide opening, due to the efficiency limitations of this engine, is less than .1 hp. Give yourself a buffer because it makes no measurable performance differences.

2. These Regulations Are the Only Regulations
   a. Only the B&S Racing Department in Milwaukee can make changes to the technical specifications herein.
   b. B&S dealers and their agents are not authorized to alter, verbally or otherwise, any technical specifications or competition rule herein.
   c. Should any B&S literature, catalogues, manuals, videos, etc. be different than these regulations, these regulations take precedence.
   d. Changes, corrections, addendums, etc. will be submitted to sanctioning bodies and posted at www.karting.com for republication and will become effective on a date specified.

3. Briggs & Stratton 206 Product Availability
   The 206 engine products and service parts are available only through the authorized Briggs & Stratton Racing dealers.
   A list of authorized dealers can be found at www.karting.com

4. 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 206 #124332-8201 or Junior 206 #124332-8202 engines are allowed in the classes recommended herein.
   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. This includes specified and mandated aftermarket parts. Example: RLV exhaust and Silencer.

   e. For ALL other regulations, general safety, etc., contact your sanctioning body. Example: Chain guards.
f. The tech official, at their sole discretion, may at any time replace a competitor’s sealed engine, carburetor, or head assembly with another sealed engine or known stock part. Failure to comply is grounds for disqualification.

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.

h. Standard organizational protest procedures can allow for short block inspection (seal removal) if a new, replacement short block, p/n 555715 is offered in replacement. Competitor short block to be forfeited to the series or club as terms of this procedure.

5. Things That Are NOT Permitted

a. Tampering of the factory installed engine seals (2).

b. Addition or subtraction of material in any form or matter.
   a. Exception – Valve maintenance (valve job). Valve seats must remain with the factory specification of 30 and 45 degree angles only. Valve seats of additional angles and/or angles not comparable to the factory stock of 30 and 45 degrees are not permitted. Grinding of valve stem or excessive material removal prohibited.
   b. Exception – Optimization of the slide opening in Briggs & Stratton Cadet, Novice, Junior 1, Junior 2 and ASN National Junior classes are permitted per section 1 guidelines.

c. “Blueprinting” unless stated herein.

d. Modification to or the machining of any parts in order to bring them to stated minimum/maximum specification, (or for any reason).

e. Machining or alteration of any kind to the engine or replacement parts unless specifically stated herein.

f. Deburring, machining, honing, grinding, polishing, sanding, media blasting, etc.

g. Sandblasting or glass-beading any interior engine surfaces.

h. No device may be used that will impede, or appear to impede, airflow to the engine cooling system.
6. Engine Sealing
There are two custom, Homeland Security Tier III rated seals 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. Should an engine require dismantling for any reason that requires breaking of the seals, contact Briggs & Stratton at: Briggs & Stratton Racing – Email: Briggsracing@basco.com

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.

7. Technical Inspection Tools
Briggs & 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 #. See Section 38 for tool description. The tools are available from:
Sox Racing • 2223 Platt Springs Rd. • West Columbia, SC 29169 • (803) 791-7050

8. Engine Ignition Switch
The B&S ignition switch and wires must remain in stock location. It is not permitted to alter the OEM wiring.

9. Engine Air Filter
The only air filter permitted is the Briggs & Stratton Green Air Filter Part #555729. No modification to the filter element is permitted.

A protective shield may be attached for wet-weather competition. It is not permitted for the protective shield to create any ram-air effect.

10. 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 dispensing location may be specified in Event Supplementary Regulations.
11. Engine Oil
High-quality synthetic oil within a 10W-20 range recommended. No oil additives are permitted.

Factory Recommendation- Briggs & Stratton 4T Synthetic Racing Oil is engineered exclusively for the rigors of high revving, air-cooled racing engines (available through both Briggs Racing and Amsoil dealers). The use of ‘karting’ or ‘automotive’ oils is not recommended as many are hydroscopic in nature, offer limited protection over time, and/or were engineered for pressure, not splash lube systems. The use of these oils can induce engine failure and/or accelerate wear.

12. Oil Breather
Oil breather must vent to a catch container.

13. Oil Catch Container
An oil overflow catch system is mandatory. Overflow tube must run from the crankcase breather to a catch container. The catch-container must be vented to atmosphere.

14. Carburetor Overflow
Carburetor overflow must be vented to a catch container.

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. Cooling Shrouds, Covers and Blower Housings
All pieces of the engine cooling shroud/blower housing and control panel must be stock B&S and properly installed.

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.
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.

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

<table>
<thead>
<tr>
<th>Technical Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Needle Jet C-clip</td>
<td>Needle Jet C-clip must be properly installed but may be installed at any of the 5 factory settings on the needle jet.</td>
</tr>
<tr>
<td>b. Throttle cable cap</td>
<td>Throttle cable cap on the top of the carburetor must be used and properly installed in tight position.</td>
</tr>
<tr>
<td>c. Choke</td>
<td>Choke: OEM unaltered, but lever may be fastened open with a spring, rubber band, wire, etc.</td>
</tr>
<tr>
<td>d. Idle pilot jet</td>
<td>Idle pilot jet – #32, hole size is .0130” no go.</td>
</tr>
<tr>
<td>e. Main jet</td>
<td>Main jet – #95, hole size is .0380” 0.036 go, 0.039 no go</td>
</tr>
<tr>
<td>f. Main nozzle and Emulsion tube</td>
<td>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 .021 max inches 4 big holes = .026 min inches to .029 max inches.</td>
</tr>
<tr>
<td>h. Air pick off hole</td>
<td>Air pick off hole - .057 go .061 no go</td>
</tr>
<tr>
<td>i. Throttle bore</td>
<td>Throttle bore – Must be as cast and bore max diameter = .874 inches.</td>
</tr>
<tr>
<td>j. Venturi idle fuel hole</td>
<td>Venturi idle fuel hole = .038 inches max</td>
</tr>
<tr>
<td>k. Air filter</td>
<td>Air filter: Only GREEN air filter, part # 555729 is allowed. Filter adapters are not allowed, filter must attach directly to carburetor air horn</td>
</tr>
<tr>
<td>l. Carburetor overflow</td>
<td>Carburetor overflow: Must be vented to a catch container.</td>
</tr>
<tr>
<td>m. O-Ring</td>
<td>O-Ring part number B&amp;S part # 555601 is required and must be unaltered.</td>
</tr>
<tr>
<td>n. Intake manifold</td>
<td>Intake manifold – max length = 1.740 inches min to 1.760 inches max Intake manifold – bore diameter = .885 inches min to .905 inches max</td>
</tr>
<tr>
<td>o. Choke Bore</td>
<td>1.149</td>
</tr>
<tr>
<td>p. Carb Slide Cutaway</td>
<td>.075 no go</td>
</tr>
<tr>
<td>q. Widest part of Combustion Chamber</td>
<td>2.640</td>
</tr>
</tbody>
</table>
19. Cylinder Head
   a. The ONLY head casting for the B&S 206 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 minimum thickness is 2.430”.
   b. Cylinder head must be “as cast”. Factory machining marks left on the head gasket surface are a tech item.
   c. Hard Carbon may be scraped from head before measuring.
   d. 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.
   e. Depth at floor of combustion chamber is .340 inch minimum.
   f. Inspect retainers for alterations that would increase valve spring pressure - .055 to .075 maximum flange thickness. Both intake and exhaust must have OE stock B&S valve keepers.
   g. Unaltered B&S part #555552 (exhaust) and #555551 (intake) can be checked for appearance, weight, and dimensions. No machining, polishing, easing, or alterations of any kind allowed. Valve surface must remain as factory, with one single 45 degree face. No other additional angles allowed on any part of the valve. **Tech Tool A22**.
   h. Valve Guides: Replacement of valve guides with B&S part #555645 only is allowed. Maximum depth from the head gasket surface to the intake valve guide is 1.255”.

20. 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”.

21. 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 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 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 valve seat) = .952 no go

**Tech Tool A2**

i. Exhaust valve seat diameter inside = maximum .850 inches. **Tech Tool A1.**

### 22. Valves

#### a. Intake valve

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

#### b. Exhaust valve

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

### 23. Valve Springs (updated 2/2/16)

#### a. Valve Springs are single coil stock, unaltered B&S part #26826. Must be identical in appearance to factory part and have 4.00 to 4.75 coils in stack.

#### b. Spring Wire Diameter: .103 to .107 inches

#### c. Valve spring length: .940 max inches **Tech Tool A15**

#### d. Inside diameter: .615 to .635 inches

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

#### a. Rocker arms must be unaltered stock B&S part #691230 (US) or #797443 (metric) and will not be altered in any way.

#### b. Rocker studs must be stock, unaltered stock B&S part #694544 (US) or #797441 (metric) and in stock location
c. Rocker Ball must B&S stock. Diameter .590 inch min. to .610 inch maximum. **Tech Tool A16.**

d. Rocker arm mounting positions may not be altered in any manner. No heli-coiling of mounting holes. No bending of studs.

e. Rocker arm stud plate must be bolted to the head with one, OEM stock B&S 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.

**25. Push Rods**

a. Push rods must be unaltered stock B&S 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.

**26. Engine Block**

a. Engine block must be unaltered “as cast” B&S 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) B&S 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 and then again checked 90 degrees 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 will not be bored oversize

f. Cylinder bore will not be re-sleeved.

g. Cylinder bore position is not be moved or angled in any manner.

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

i. Maximum stroke is 2.204”. Push piston down to take up rod play. Check stroke on BDC to TDC. **Tech Tool A21.**
27. Valve Lift
   a. Maximum valve lift is checked from the top of the valve spring retainer. Valves must be adjusted to zero clearance.
   b. Valve Lift: Camshaft check is taken at 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.

28. 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.

   **NOTE:** Due to the extended life of the engine, a single point on each lobe can be off by a maximum of 2 degrees without issue, the exception being on the .006” check, both intake and exhaust.

<table>
<thead>
<tr>
<th>Intake lift</th>
<th>Exhaust lift</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.006</td>
<td>0.006</td>
</tr>
<tr>
<td>0.020</td>
<td>0.020</td>
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29. 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 B&S part #555683 only. No machining, glass beading, sand blasting, painting or coating of flywheel is allowed.
   d. A flywheel fan, B&S part #692592, with broken fins must be replaced.
   e. Stock, unaltered B&S flywheel key with the B&S logo is required. Width of the key allowed is .1825”-.1875”. No offset keyways allowed.
30. Ignition System
   a. **Unaltered B&S stock ignition** part #555718 is mandatory. Only “GREEN” ignition module allowed. Maximum RPM: 6,150.
      Exception – Cadet Junior 206 class requires the use of unaltered B&S stock ignition part #555725 (BLACK in color). Maximum RPM: 4,150.
   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 of .016”)
   e. **Ignition timing**: Maximum of 30 degrees BTDC
   f. **Spark plug connector**: Only the OEM B&S part #555714 is permitted.

31. Crankcase

   Novice class must run the supplied Max-Torque clutch, Part #555727. No alteration to the clutch is allowed, except springs and clutch key are non-tech.

32. Clutch

   a. Novice class must run the supplied Max-Torque clutch, Part #555727. No alteration to the clutch is allowed, except springs and clutch key are non-tech.
   b. Junior 1, Junior 2, Senior, and Masters Classes can run any rim centrifugal clutch with a maximum of 9 springs and 6 shoes. No alteration to clutch allowed, except springs. Clutch coolers are not allowed.
   c. Refer to your sanctioning body general rules for mandatory chain guard guidelines.

33. Starter

   Recoil starter, B&S part # 695287, must be retained, as produced and intact. Starter maybe rotated.

34. Exhaust Header

   a. Header must be RLV Model 5507 or 5506 for all classes.
   b. Header length:
      a. 5507 will measure 18.75” +/- .25” along the short side using a 0.250” wide tape measure.
      b. 5506 will measure 17.50” +/- .25” along the short side using a 0.250” wide tape measure.
   c. Gasket and/or silicone are allowed to seal header to head. (One gasket maximum)
   d. Studs or bolts are permitted to fasten header to head. **Bolts or nuts must be safety wired.**
e. Helicoiling of the exhaust is allowed.
f. Supplied header support brace is mandatory. The addition of a mechanical support bracket (no welding involved) is allowed provided that there are no alterations to the shape or dimensions of the exhaust configuration.
g. Any modification for or use of an O2, EGT, CO2 sensor is prohibited.

35. Exhaust Silencer

Silencer must be RLV B91XL (part number 4104) with round baffle holes only. Safety wiring of the silencer to header is mandatory. All three baffles must remain unaltered and hole size can be verified using a no-go pin gage of .1285.

36. Exhaust Protection

The header must be completely wrapped (360 degrees) with a non-asbestos, approved insulation material or sleeve starting approx. 3 inches from the exhaust flange but MUST extend to where the stock supplied RVL support (welded or clamped) meets the header.

37. Torque Specification Guideline

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>WRENCH / SOCKET SIZE</th>
<th>TORQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Guard</td>
<td>7mm</td>
<td>40-50 lb-in. (4.5-5.6 Nm)</td>
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<tr>
<td>Blower Housing</td>
<td>10mm &amp; 3/8&quot;</td>
<td>60-110 lb-in. (7-12.5 Nm)</td>
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<tr>
<td>Carburetor (to manifold)</td>
<td>10mm</td>
<td>80-110 lb-in. (9-12.4 Nm)</td>
</tr>
<tr>
<td>Cylinder Head Bolts</td>
<td>10mm</td>
<td>200-220 lb-in. (20-27 Nm)</td>
</tr>
<tr>
<td>Exhaust Brace Screws</td>
<td>10mm</td>
<td>95-125 lb-in. (11-14 Nm)</td>
</tr>
<tr>
<td>Exhaust Stud</td>
<td>10mm</td>
<td>95-125 lb-in. (11-14 Nm)</td>
</tr>
<tr>
<td>Flywheel Nut</td>
<td>15/16&quot;</td>
<td>55-75 ft-lbs. (74.5-101 Nm)</td>
</tr>
<tr>
<td>Flywheel Fan</td>
<td>10mm</td>
<td>180-240 lb-in. (20-27 Nm)</td>
</tr>
<tr>
<td>Intake (to cylinder)</td>
<td>5mm Allen</td>
<td>70-90 lb-in. (8-10.2 Nm)</td>
</tr>
<tr>
<td>Oil Drain Plug</td>
<td>3/8&quot;</td>
<td>100-125 lb-in. (11-14 Nm)</td>
</tr>
<tr>
<td>PVL Module</td>
<td>7mm</td>
<td>20-35 lb-in. (2.3-4 Nm)</td>
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<tr>
<td>Rocker Arm Stud</td>
<td>7/16&quot;</td>
<td>90-120 lb-in. (10-14 Nm)</td>
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<tr>
<td>Rocker Arm Plate</td>
<td>10mm</td>
<td>70-90 lb-in. (7.9-10.1 Nm)</td>
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<tr>
<td>Rocker Arm Set Screw</td>
<td>1/8&quot; Allen</td>
<td>50-70 lb-in. (5.6-7.9 Nm)</td>
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<tr>
<td>Spark Plug</td>
<td>5/8&quot; Deep</td>
<td>95-145 lb-in. (11-16.4 Nm)</td>
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<tr>
<td>Starter Gear</td>
<td>#2 Phillips</td>
<td>35-53 lb-in. (4-6 Nm)</td>
</tr>
<tr>
<td>Top Control Plate</td>
<td>10mm</td>
<td>70-90 lb-in. (8-10 Nm)</td>
</tr>
<tr>
<td>Valve Cover</td>
<td>10mm Lower &amp; 3/8&quot;</td>
<td>30-60 lb-in. (3.5-7 Nm)</td>
</tr>
</tbody>
</table>

38. Technical Inspection Tools

Refer to separate document illustrating the Technical Inspection Tools

39. IMPORTANT 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.

Located online:

a. 206 Engine tips and guide supplement – A must to print out and read BEFORE installing your engine!
b. Carburetor tuning guide – Understand your carburetor to get the most out of your 206.
c. Videos:
   a. Proper clutch installation – Properly installing your clutch will prevent the possibility of crankshaft damage.
   b. Setting the float height – A simple video highlighting a necessary technique to insure a properly tuned carburetor.
   c. Setting, measuring, and optimizing your junior slide restrictor.
NO COMPROMISES. 
At the end of the day the effort you put into racing directly determines your outcome. You wouldn’t compromise on your approach to racing, so why would you with your oil? What if there was an oil engineered specifically for high-revving, air-cooled racing engines, methanol or gas fuels, that gives you the power of a lite oil yet the wear protection of a heavy oil? What if that oil also had the added benefits of wear protection and a corrosion inhibitor to safeguard your investment during, between, and after the season was over?

Introducing the Briggs & Stratton 4T Full Synthetic Oil Custom Engineered by AMSOIL.

- Maximum Horsepower
- Outstanding Wear Protection
- Exclusively Synthetic Formulation
- Exhaustively Tested on the Dyno and on the Track
- Designed for High Revving, Air-Cooled Racing Engines

Available through any participating Briggs & Stratton Racing Dealer or your Briggs & Stratton nearest to you (Part Number GBS2960)
BEFORE OPERATING ENGINE

- Read entire Operating & Maintenance Instructions AND the instructions for the equipment this engine powers.*
- Failure to follow instructions could result in serious injury or death.

THESE INSTRUCTIONS CONTAIN SAFETY INFORMATION TO
- Make you aware of hazards associated with engines
- Inform you of the risk of injury associated with those hazards, and
- Tell you how to avoid or reduce the risk of injury

OPERATOR SAFETY

SAFETY AND CONTROL SYMBOLS

- Fire
- Moving Parts
- Oil
- Toxic Fumes
- Slow
- Fast
- Stop
- Explosion
- Shock
- Fuel
- Kickback
- Wear Eye Protection
- Chemical
- Hazardous
- Read Manual
- Hot Surface
- Frostbite

The safety alert symbol ⚠️ is used to identify safety information about hazards that can result in personal injury. A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

DANGER indicates a hazard which, if not avoided, will result in death or serious injury.

WARNING indicates a hazard which, if not avoided, could result in death or serious injury.

CAUTION indicates a hazard which, if not avoided, could result in minor or moderate injury.

NOTICE indicates a situation that could result in damage to the product.

WARNING

Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.

When Adding Fuel
- Turn engine off and let engine cool at least 2 minutes before removing the fuel cap.
- Fill fuel tank outdoors or in well-ventilated area.
- Do not overfill fuel tank. To allow for expansion of the fuel, do not fill above the bottom of the fuel tank neck.
- Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
- Check fuel lines, tank, cap, and fittings frequently for cracks or leaks. Replace if necessary.
- If fuel spills, wait until it evaporates before starting engine.

When Starting Engine
- Ensure that spark plug, muffler, fuel cap and air cleaner (if equipped) are in place and secured.
- Do not crank engine with spark plug removed.
- If engine floods, set choke (if equipped) to OPEN/RUN position, move throttle (if equipped) to FAST position and crank until engine starts.

When Operating Equipment
- Do not tip engine or equipment at angle which causes fuel to spill.
- Do not choke the carburetor to stop engine.
- Never start or run the engine with the air cleaner assembly (if equipped) or the air filter (if equipped) removed.

When Changing Oil
- When you drain the oil from the top oil fill tube, the fuel tank must be empty or fuel can leak out and result in a fire or explosion.

When Transporting Equipment
- Transport with fuel tank EMPTY or with fuel shut-off valve OFF.

When Storing Fuel Or Equipment With Fuel In Tank
- Store away from furnaces, stoves, water heaters or other appliances that have pilot lights or other ignition sources because they can ignite fuel vapors.

* Briggs & Stratton does not necessarily know what equipment this engine will power. For that reason, you should carefully read and understand the operating instructions for the equipment on which your engine is placed.
SAFETY

WARNING
Starting engine creates sparking. Sparking can ignite nearby flammable gases. Explosion and fire could result.

• If there is natural or LP gas leakage in area, do not start engine.
• Do not use pressurized starting fluids because vapors are flammable.

WARNING
Engines give off carbon monoxide, an odorless, colorless, poison gas. Breathing carbon monoxide can cause nausea, fainting or death.

• Start and run engine outdoors.
• Do not start or run engine in enclosed area, even if doors or windows are open.

WARNING
Rapid retraction of starter cord (kickback) will pull hand and arm toward engine faster than you can let go. Broken bones, fractures, bruises or sprains could result.

• When starting engine, pull the starter cord slowly until resistance is felt and then pull rapidly to avoid kickback.
• Remove all external equipment/engine loads before starting engine.
• Direct-coupled equipment components such as, but not limited to, blades, impellers, pulleys, sprockets, etc., must be securely attached.

WARNING
Running engines produce heat. Engine parts, especially muffler, become extremely hot. Severe thermal burns can occur on contact. Combustible debris, such as leaves, grass, brush, etc. can catch fire.

• Allow muffler, engine cylinder and fins to cool before touching.
• Remove accumulated debris from muffler area and cylinder area.
• It is a violation of California Public Resource Code, Section 4442, to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the exhaust system is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order. Other states or federal jurisdictions may have similar laws. Contact the original equipment manufacturer, retailer, or dealer to obtain a spark arrester designed for the exhaust system installed on this engine.

WARNING
Unintentional sparking can result in fire or electric shock. Unintentional start-up can result in entanglement, traumatic amputation, or laceration.

Fire hazard

Before performing adjustments or repairs:
• Disconnect the spark plug wire and keep it away from the spark plug.
• Disconnect battery at negative terminal (only engines with electric start).
• Use only correct tools.
• Do not tamper with governor spring, links or other parts to increase engine speed.
• Replacement parts must be of the same design and installed in the same position as the original parts. Other parts may not perform as well, may damage the unit, and may result in injury.
• Do not strike the flywheel with a hammer or hard object because the flywheel may later shatter during operation.

When testing for spark:
• Use approved spark plug tester.
• Do not check for spark with spark plug removed.

Each racer is solely responsible to check and maintain engine legality per the rule set they compete under.

Due to the conditions inherent in racing, Briggs & Stratton does not warrant race engines or parts.
**ANIMAL SPECIFICATIONS**

**GENERAL SPECS**

**Model:** 124332  
**Type:** 8003-01 – Animal  
8202-01 – LO 206  
8203-01 – M Series  
**Displacement:** 12.48 Cu. in. - 205cc  
**Design:** Slant, 30 degree Overhead Valve  
**Bore:** 2.6875/2.6885 in.  
**Stroke:** 2.2 in.  
**Compression Ratio:** 8.5 to 1  
**Factory Timing:** 29 degrees BTDC

**SPECIAL TOOL REQUIREMENTS**

General Model 12 Manual Part No. 276781  
Flywheel Holder Tool Part No. 19433  
PVL™ Flywheel Puller Part No. 19584

**RACING SPECIFICATIONS**

PVL™ Ignition Module Gap - .010/.014 (.15/.36mm)  
**Digital Rev Limiter:** Max. 12,000 RPM - Part No. 555681  
Max. 6,100 RPM - Part No. 555718  
Max. 4,100 RPM - Part No. 555725

**HIGHLIGHTED FEATURES**

- Dual Ball-Bearing, RACING Reinforced Cylinder  
- Squeeze-Cast, T-7 Heat Treated, Racing Rod  
- Ground Cam w/ Compression Release  
- High-Silicon Valve Springs  
- PVL™ Digital Ignition System  
- Racing Only Intake Port  
- Walbro™ Round - Slide Carburetor  
- Interface Sealing Solutions Fire-ring head gasket (Animal/WF only)  
- Racing Crankshaft w/ Induction-Hardened Crankpin  
- Custom Cam Ground, Barrel-Faced Piston  
- Chrome-Faced, Racing Ring Package  
- Nitrided Dished Exhaust Valve  
- Automotive 3-Piece Valve Retainer System  
- Beefy Rocker Arm Stud Nuts  
- Carbon Steel Crankshaft w/Induction hardened crankpin

**OPTIONAL PERFORMANCE PARTS**

- High - G/Force Breather Bypass System - Part No. 555688  
- Magnetic Drain Plug - Part No. 691663  
- Gearbox Splined Crankshaft - Part No. 555722  
- 6-1 Gearbox Complete - Part No. 555721 (page 9)  
- Electric Starter Kit - Part No. 555703  
- Fuel Filter - Part No. 394358S  
- 206 Stator Lighting System (snowmobile) - Part No.555773

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Oil - Briggs & Stratton Racing recommends using ONLY 14 ounces of Briggs & Stratton 4T full-synthetic racing oil. Briggs & Stratton 4T was specially engineered and tested in conjunction with Briggs & Stratton to protect your investment from the rigors of racing without compromising performance or longevity. Air-cooled, splash lube oil system along with strict manufacturing tolerances and component materials require oil engineered for the task. We do NOT recommend the use of automotive oils as these products were engineered for pressure lubed systems and the lower operating temperatures. We also strongly recommend against the use of ‘karting’ labeled oils as PAG based oils are extremely hydroscopic by nature (attract water), have a low solubility and TBN, and vaporize within the range of our operating temperatures. Briggs & Stratton 4T Racing oil, p/n GBS2960, is available through your local Briggs Racing or Amsoil dealer.
ANIMAL cylinder assembly
(Engine Model Series 124432)

ANIMAL ENGINES

555660 Piston Assembly
555661 Piston Assembly
555662 Piston Assembly
555663 Piston Assembly

555664 Ring Set
555665 Ring Set
555666 Ring Set
555667 Ring Set

555692 Ring Set
555693 Ring Set
555694 Ring Set

555692 Ring Set (.010" Over Compression Ring)
555693 Ring Set (.020" Over Compression Rings)
555694 Ring Set (.030" Over Compression Ring)

55513 Ring Set
55514 Ring Set
55515 Ring Set

555688 High-G/Force Bypass Assembly
(Contains .007, .012, .018, & .025)

555680 Cylinder Shield (Black)
795334 Cylinder Shield (Silver)

699483 Screw
(Cylinder Shield - M4 x .7)

555140 Bushing/Seal Kit
692600 Breather Tube

792723 Flywheel Nut†
(M6 x 1.5 - 6H)
299819s Oil Seal*
(Magneto Side)

557137 Crankshaft

691664 Hex Head 1" Screw
(Connecting Rod - Animal/206)
791784 Hex Head 1 1/4" Screw
(Connecting Rod - World Formula)

798538 Bearing•
692600 Breather Tube

555705 Cylinder Assembly
(Contains all parts shown)

691686 Oil Drain Plug*
691663 Oil Drain Plug
(Magnetic, Optional)

557117 World Formula Billet
(Optional)

55514 Ring Set
55515 Ring Set

55513 Ring Set (.10" Over - Contains 10 Top Rings)
55514 Ring Set (.20" Over - Contains 10 Top Rings)
55515 Ring Set (.30" Over - Contains 10 Top Rings)

55513 Ring Set
55514 Ring Set
55515 Ring Set

299819s Oil Seal*
(Magneto Side)

555626 Connecting Rod
555626 Connecting Rod

695087 Timing Gear†
798538 Bearing•

281658s Oil Cap*•

692550 Oil Seal•
(PTO Side)

5555706 Crankcase Cover

555736 Hex Washer Head Metric Screw
(Crankcase Cover/Sump - M7 x 1)

276781 Repair Manual

*Included with 555705 Cylinder Assembly
(Includes all parts shown)

● Included with Respective Piston Assembly
(Includes all parts shown)

† Included with 557137 Crankshaft

• Included with 555706 Crankcase Cover
ANIMAL control bracket & gasket sets
(Engine Model Series 124432)

699479 Metric Screw
(Control Panel - M6 x 1)

555699 Control Panel

557028 Starting Switch

691885 Intake Gasket
+ 694088 Cylinder Head Plate Gasket

55728 – Junior 206 Throttle slide .285 ‘Black’
55732 – Junior 206 Throttle slide .310 ‘Black’
55733 – Club Throttle slide .440 ‘Red’
55734 – Club Throttle slide .520 ‘Blue’
55735 – CA Novice Throttle slide .342 ‘Purple’
55740 – CA Junior Club Throttle slide .490 ‘Green’
55741 – CA Junior National Throttle slide .570 ‘Yellow’

793379 Stop Wire
(Used on Type No. 8003)

692602 Stop Wire
(Rocker Switch, Used on Type No. 8001 & 8002)

*Included with 555631 Engine Gasket Set
+ Included with 555636 Valve Gasket Set

55715 – Sealed Shortblock

55526 – Carburator Locking Cap

55528 – .285” Junior Throttle Slide
55532 – .310” Junior Throttle Slide

555727 – Max-Torque Clutch, 3/4” crank, 17 tooth, 35 chain

555718 – 206 Ignition Module, 6,100 rpm limiter

555725 – Junior PVL Ignition Module, 4,100 rpm limiter

299819s Oil Seal
(Magneto Side)

692550 Oil Seal
(PTO Side)

55698 Cylinder Head Gasket
(Fire Ring)

691890 Rocker Cover Gasket

555718 – 206 Ignition Module, 6,100 rpm limiter
ANIMAL gear reduction unit
(Engine Model Series 124432)

BRIGGS & STRATTON

555721 Complete Gearbox (minus crankshaft)
555722 Splined Racing Crankshaft

ANIMAL ENGINES

792755 Gear Case Gasket

792756 Auxiliary Drive Shaft (Internal Gear)

792753 Hex Head Cap Screw (4)
(Gear Reduction Case - 5/16 - 24)

555757 Steel Gear Hub
The use of aluminum gear hubs will result in sungear keyway damage due to insufficient keyway surface area to transfer load and a material weakness that causes the hub to twist under force.

555730 Rubberized Sealing Washer

299819S Oil Seal

792746 Gear Reduction Case
(Includes 299819S Oil Seal)

792760 O-Ring

792759 Vented Oil Fill Hole Plug

792749 Oil Level Hole Plug (3)

555730 Sealing Washer

690711 Hex Head Cap Screw (4)
(Gear Reduction Cover - M8 x 1.25)

792752 Gear Reduction Seal

792750 Oil Drain Hole Plug

690587 Timing Gear

792759 Vented Oil Fill Plug

Vented Oil Fill Plug Position Important:
The vented oil fill plug in the cover must mount in the 12 o'clock position.

1/2"}

555724 Crankshaft

299819S Oil Seal

792760 O-Ring

792749 Oil Level Hole Plug (3)

555730 Sealing Washer

690711 Hex Head Cap Screw (4)
(Gear Reduction Cover - M8 x 1.25)

11 mm

12 mm

11 mm

8 mm

555730 Rubberized Sealing Washer

IMPORTANT
Engine seal must be removed before installing this gearbox.
For support videos, engine carburetor setup and general guides please visit www.BriggsRacing.com. Stop by and take advantage of our racing forums to ask others questions and advice as well.

Due to the conditions inherent in racing, Briggs & Stratton does not warrant race engines or parts.
206 RACING CLASS STRUCTURE AND SLIDE INFORMATION

Briggs & Stratton Racing Class Structure

<table>
<thead>
<tr>
<th>Class</th>
<th>Age</th>
<th>Weight (Pounds)</th>
<th>Engine Package</th>
<th>Technical Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadet .310 Restrictor</td>
<td></td>
<td></td>
<td>Junior 206 with carb lock</td>
<td>RLV pipe (#5507) Slide (#555728) 4,100 RPM Rev Limiter</td>
</tr>
<tr>
<td>Novice .342 Restrictor</td>
<td></td>
<td></td>
<td>206 with carb lock</td>
<td>RLV pipe (#5506 or 5507) ‘Yellow’ slide (#555735)</td>
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<tr>
<td>Junior 1 LEGACY Club - .440</td>
<td></td>
<td></td>
<td>206 with carb lock</td>
<td>RLV pipe (#5506 or 5507) ‘Red’ Slide (#555733)</td>
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<tr>
<td>Junior 1 CLUB - .490</td>
<td></td>
<td></td>
<td>206 with carb lock</td>
<td>RLV pipe (#5506 or 5507) ‘Green’ Slide (#555740)</td>
</tr>
<tr>
<td>Junior 2 LEGACY .520</td>
<td></td>
<td></td>
<td>206 with carb lock</td>
<td>RLV pipe (#5506 or 5507) ‘Blue’ Slide (555734)</td>
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<tr>
<td>ASN Nat. Junior - .570</td>
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<td>206</td>
<td>RLV pipe (#5506 or 5507) Stock Slide (#555590)</td>
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<tr>
<td>Briggs &amp; Stratton 206 Senior</td>
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<td>206</td>
<td>RLV pipe (#5506 or 5507) Stock Slide (#555590)</td>
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<tr>
<td>Masters</td>
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Slide Height Openings

<table>
<thead>
<tr>
<th>Class</th>
<th>.310 Opening</th>
<th>.342 Opening</th>
<th>.440 Opening</th>
<th>.520 Opening</th>
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</thead>
<tbody>
<tr>
<td>Logo</td>
<td>Purple Slide</td>
<td>Blue Slide</td>
<td>Red Slide</td>
<td>Yellow Slide</td>
</tr>
</tbody>
</table>

Racer Measurement Tool

- 7.8 mm drill blank (.307)
- ‘R’ drill blank (.339)
- 7/16" drill blank (.437)
- 33/64" drill blank (.516)

These net power curves are to be used as a guide for initial gearing and clutch recommendations. Net performance values have been obtained and corrected in accordance with SAE J1349 Engine Power Test Code - Net Power Rating. Net power values are taken with exhaust and air cleaner installed. These have been obtained from test results of a limited number of engines and have not been proven to be statistically significant. Given the wide array of factors which can affect engine performance such as, but not limited to, final engine trim (air cleaner, exhaust, sanctioning body rule variances), equipment set-up, application limitations, ambient operating conditions (temperature, humidity, altitude), etc. These curves are intended as a reference for gearing and clutch setup only.

Briggs & Stratton Racing | Post Office Box 702
Milwaukee, WI 53201 - 0702 USA
BRIGGSRACING.COM
Briggs & Stratton Racing Carburetor Tips and Reference Guide

Animal, 206, and M-series
PZ-22

World Formula
PZ-26

Version (REV. -)
All information provided is intended for use as a guideline for basic operation, tuning, and maintenance of the PZ slide valve carburetor used on your Briggs & Stratton® race engine.

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SAFETY

As with any carburetor or fuel system, care must be taken to avoid fire from leaking or spilled fuel. Be sure all gaskets and seals are in good condition and properly assembled. Dispose of any drained or spilled fuel. Check condition of fuel lines and connections before every use. Fuel must be drained from the system if vehicle or engine is not stored or transported in a level position.

It is necessary to check the carburetor slide for free movement through the full range of travel any time the carburetor has been removed, installed, or adjusted and before starting the engine. Remove air filter and visually confirm the slide valve is fully closed as the throttle is released. Work the throttle control from closed to fully open and watch for any sticking or hang-up. Engines could start with an open throttle resulting in a runaway vehicle. Always install the correct return spring for the carburetor and use an additional return spring on the throttle pedal as needed.

Motorsports are dangerous and can lead to injury or death.
TUNING

Rich and Lean: An internal combustion engine needs a specific ratio or mixture of air and fuel for best performance. This mixture is delivered by the carburetor. In the following discussion numerous references will be made to the air and fuel mixture (air/fuel ratio) being rich or lean. Rich refers to a mixture with an excess of fuel. Lean refers to a mixture with an excess of air.

**Float height**

Parts involved:
- Float
- Inlet Needle

The float height controls the fuel level in the float bowl. This adjustment determines the point at which the inlet needle opens as the fuel level drops in the bowl. Float height is usually measured with the float bowl removed and is specified from the carburetor body to an edge or surface on the float. The float should be resting on the inlet needle but not depressing the spring under the needle stem when this measurement is taken. To adjust, carefully bend the tab where it makes contact with the inlet needle.

The float height should be adjusted before any other adjustments are made. A higher fuel level will cause a richer mixture and possibly excess overflow from the vents. A lower fuel level will cause a leaner mixture and could lead to an engine miss or cut-out while cornering. Start at the specified height and change as needed for best performance on different type of tracks.

The float drop should also be checked. The proper adjustment will prevent the needle from pulling too far out of the inlet seat and becoming stuck in the open position.
Idle and Low Speed

Parts involved:
- Idle Speed Screw
- Idle Mixture Screw
- Pilot Jet (Idle Jet, Slow Jet)

Carburetor tuning at idle and low speed is accomplished by adjusting the Idle Mixture Screw, the Pilot (or Idle) Jet, and Idle Speed Screw. These adjustments will control idle speed, idle quality, and initial responsiveness/acceleration of the engine.

The screw in the center of the side of the carburetor body is the Idle Speed adjustment. This screw holds the throttle slide valve open slightly to obtain the desired engine rpm at closed throttle. Turning the idle speed screw clockwise will increase rpm. Turning counter-clockwise will decrease rpm.

The Pilot Jet is screwed into the carburetor body and is located inside the float bowl. (See photo, next page.) The Pilot Jet meters the amount of fuel entering the low speed circuit. A larger or smaller jet will change fuel flow accordingly. The size of the jet in millimeters is stamped on it.

The Idle Mixture Screw can be either an air or fuel adjustment so it should be determined what type of change you are making. A mixture screw on the air filter side of the PZ22 carburetor is an air-only adjustment so opening the screw (turning counterclockwise) will increase the air bleed and lean the mixture. The mixture screw on the engine side of the PZ26 carburetor is a fuel adjustment. Opening the screw will allow more fuel into the engine for a richer mixture.

For an initial setting, gently turn the mixture screw in until it lightly seats or stops. Back out the specified number of turns. The optimum setting of the mixture screw will usually result in the highest rpm with the throttle closed. As the amount of fuel is varied the engine rpm will also vary. With throttle closed and engine warm and running at or slightly above desired idle speed, slowly turn the Idle Mixture Screw in or out to obtain the highest rpm. Then set the idle speed screw to obtain the desired rpm.

If a smooth idle cannot be set with the idle mixture screw between ¼ to 2-¼ turns out, or if the engine does not respond to adjustment, a different size Pilot Jet may be needed. The pilot jet, also called idle or slow jet, controls the amount of fuel at idle and throttle positions up to ¼ open. If the mixture needle cannot be leaned out enough, a smaller Pilot Jet should be installed. A larger jet should be installed if the mixture is too lean. The proper Pilot Jet size will allow a satisfactory setting with the mixture screw.
Midrange/Part Throttle

Part involved:
- Jet Needle
- Main Nozzle (Needle Jet)
  - Throttle Slide Valve

The Jet Needle primarily controls fuel flow between 10% and 75% throttle opening. The Jet Needle is the long narrow needle in the center of the throttle slide valve. The needle can be seen when the throttle is opened. It is held in place in the center of the throttle slide by a V-shaped clip.

The Jet Needle has five notches and a C-clip which determines the position of the needle in the slide based on which notch the clip is placed in. By varying the height of the needle in relation to throttle opening, the amount of taper of the needle in the main nozzle will change the fuel mixture.

To richen the part throttle operation, move the clip to the next lower notch. This will hold the needle farther out of the main nozzle and allow more fuel into the air stream. To lean part throttle operation move the clip to the next higher position. The notch at the top of the needle would be considered the first position (leanest). Needle taper reference letters are stamped on the needle for identification.

RAISING THE NEEDLE IN THE SLIDE = RICHER MIXTURE
LOWERING THE NEEDLE IN THE SLIDE = LEANER MIXTURE

High Speed/Full Throttle

Parts Involved:
- Main Jet

The Main Jet controls the fuel flow at throttle positions of one-half to full throttle. The Main Jet is located inside the float bowl and is screwed into the bottom of the Emulsion Tube in the center of the carburetor body. The jet size or diameter in millimeters is stamped on the jet. A larger diameter jet allows more fuel flow and a richer mixture.

Altitude and weather conditions can affect the engine operation enough to require changing the size of the Main Jet. High air temperature, humidity, or altitude could require a smaller Main Jet. Low temperature, humidity, or altitude would require a larger diameter Main Jet.

Animal, 206, and M-series

World Formula

RUNNING THE ENGINE WITH AN IMPROPER MAIN JET COULD RESULT IN A LOSS OF POWER, HIGH ENGINE TEMPERATURES, OR ENGINE DAMAGE.
TUNING TIPS
Gasoline is the typical fuel used for internal combustion engines. In some racing applications methanol alcohol is used for fuel. When using alcohol the engine must consume approximately twice as much fuel as with gasoline. For this reason some parts need to be replaced for proper tuning. The main nozzle, main and pilot jets, and the jet needle need to be replaced with the proper size.

If a carburetor has been working well and then develops a problem, the most likely cause is dirt or contamination in the carburetor. Dirt can plug jets or get stuck in the inlet needle and cause flooding. It will save time in the long run to be sure you are working with a clean carburetor.

If the engine performance seems to change or idle/low speed running seems erratic, check for loose carburetor and manifold mounting bolts or leaking gaskets or seals. This can cause a vacuum leak and lean condition.

Symptoms of a rich mixture are:
- Black smoke or popping in the exhaust
- A “flat” running engine or dull sound
- Runs worse as engine warms

Symptoms of a lean mixture are:
- High cylinder head or exhaust temperature
- Backfire/popping from the carburetor
- Runs better with partial choke
- Surging or cutting out
- Pinging or rattling sound from engine under load

The Pilot Jet, Idle Mixture Screw and Jet Needle will have the most effect on acceleration from closed throttle. A slightly rich idle mixture may help acceleration.

Moving the position of the Jet Needle clip is a good quick adjustment for a change in air temp. This will help with throttle response and corner exit.

The Main Jet will have the greatest effect at wide open throttle but will also affect mid-range operation. After a Main Jet change it may be necessary to move the Jet Needle position for best results.

The optimum float height setting may change from track to track. A rough track or an engine misfire in certain corners may require a float adjustment. If the carburetor can be rotated on the manifold, it may help to turn the carburetor a few degrees to compensate for a problem corner or for oval tracks.

SET-UP
The throttle/pedal ratio is an item that can be tailored to suit the driver’s style and benefit overall engine performance. By changing the distance from the pedal pivot to the point the throttle cable or linkage attaches to the pedal, the carburetor action can be slowed down to help throttle control on a slick or rough track or smooth out a choppy driver.

IT IS IMPORTANT TO HAVE A FIXED STOP ON THE THROTTLE PEDAL.
This will reduce wear on the throttle cable and carburetor. Remove the air filter and visually confirm that the throttle slide reaches the wide open position just as the pedal hits the stop. The slide should also fully close with some slack in the cable with the pedal released. Idle speed cannot be set if the pedal is holding the slide partially open.

Seal the pedal end of the cable housing from dirt. Dirt will migrate up the throttle housing especially on a dirt track. Grit or debris on the slide could cause sticking. A rubber cap can be used on the end of the cable housing with a small hole through it for the cable to slide through. A dab of silicone could also be used at the end of the cable housing. The cable housing should also be sealed by the rubber boot on the top of carburetor cap.

For the cable hook-up, remove the cover, spring and slide assembly. USE CAUTION while unscrewing the cover as it will have spring tension behind it. Make a note of the orientation of the slide valve. The small groove on the side will align with a small guide pin in the bore. Thread the cable first thru the boot and cover, then thru the center of the spring and finally thru the top of the slide and hook the ball end under the bottom of the slide. (See photo.)

The hose attached to the bottom of the carburetor is for fuel overflow from the bowl. It should be routed down for proper draining.

Fuel pressure requirements are 1-3 psi.
**MAINTENANCE**

**Draining carburetor**
The carburetor should be “purged” of alcohol at the end of every day of running. Alcohol is very corrosive and will cause a lot of problems if left in the carb. The fuel line should be unhooked at the carburetor and the bowl drain screw opened to drain any fuel in the system. Another option is to run the engine on gasoline until it stalls. This will flush any alcohol out of the system. The carburetor should also be drained at least at the end of the season when running gasoline.

**Filters**
Always use an inline fuel filter to prevent contamination inside the carburetor. Air filters should fit the carburetor properly and be kept clean.

**Bowl gasket**
When reinstalling the float bowl you may find the gasket does not fit properly. If the gasket is too small it can be stretched to fit the groove. If it is wet it may swell slightly and can be set aside to dry and return to the proper size. If you are doing a lot of disassembly for tuning it may help to have extra gaskets.

**Cleaning/Inspection**
Once a year the carburetor should be disassembled for cleaning and inspection. Look for wear on the jet needle and inlet tip. Inspect and/or replace o-rings and seals. If cleaning is necessary a toothpick will work for clearing any holes such as jets. Remove the Inlet Needle and use a Q-tip to clean the inside of the inlet seat. Compressed air is also useful to remove contamination. The pilot jet has a very small metering orifice. If it cannot be blown out it will likely need to be replaced.

Always use a stop on the gas pedal. This reduces wear on the carburetor and the chance of a stuck throttle.

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**SPECIFICATIONS & EXPLODED VIEWS**

**World Formula**
- Main Jet: 96
- Pilot Jet: 38
- Main Nozzle Diameter: 2.6
- Jet Needle: CDB/3rd notch
- Mixture Screw: 1 turn
- Float Height: 14mm (.550in)

**Animal, 206, and M-series**
- Main Jet: 95
- Pilot Jet: 32
- Main Nozzle Diameter: 2.6
- Jet Needle: BGB/2nd notch
- Mixture Screw: 1 ½ turn
- Float Height: 22.0mm (.860in)
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Join the Conversation – Post questions, talk to other racers and dealers at www.BriggsRacing.com
THE 16 COMMON MISTAKES, A PREVENTATIVE GUIDE
By David Klaus – Director, Briggs Racing

The 206 crate engine is built from a dedicated platform engineered and designed for racing. Even engineered for a brutal environment and built by hand to assure the highest level of craftsmanship, the experience you have still comes down to making the right choices. This simple guide is intended to help you navigate through the most common mistakes so that you can enjoy what racing is all about!

The common mistakes that a racer makes:

1. Not setting the float level upon first installing your engine resulting in poor engine performance.
   - After our labor of love leaves us your local parcel carrier will push, shove, and possibly even drop your engine changing the factory float setting in your carburetor.
   - Float height is critical to engine performance as it controls the amount of fuel in your carburetor bowl by controlling the opening and closing of the inlet needle (fuel supply from your fuel pump). Too much fuel can cause bogging or a sluggish throttle response. Whereas not enough fuel will elevate your engine operating temperatures and top end performance will suffer as the engine starves for fuel.
   - On our website, [www.BriggsRacing.com](http://www.BriggsRacing.com), we have a video tutorial on how to set your float height.
   - Also under the documents tab of our 206 section is a carburetor tuning guide. Print this out and put it in your toolbox. The PZ carburetor is a very easy to tune but knowledge is power so please take the time to read and understand.

2. Using the wrong choice of oil which can leads to premature wear, internal rust, and even failure.
   - The choice of oil you use will play one of the largest roles in the performance and longevity of your engine. We recommend using only Briggs & Stratton 4T synthetic racing oil as it was specifically engineered for your race engine. 4T is readily available through any Amsoil or BriggsRacing dealer.
   - Do not:
     - Use ‘karting’ oils as many are simply a compressor lubricant and food coloring. They offer very limited protection, are prone to water contamination, and have a TBN of zero. This base oil is not used in any other form of racing and/or combustion engine because of these severe limitations.
     - Use car or ‘race’ oils designed for automotive use. This category of oil is engineered for pressure lube systems. When used in a splash lube system they tend to foam/froth greatly reducing their ability to protect. In addition, automotive oils are engineered for the lower operating temperatures of a liquid cooled verses air cooled environment.
3. Allowing your clutch to ‘float’ WILL lead to crankshaft damage.
   - Clutch manufacturers offer generic recommendations not necessarily knowing what engine or application their clutches will be used on.
   - Allowing the clutch to float on your 206 engine will overloads the keyway (too much torque spread over too small of surface area) and will result in keyway damage.
   - Our crankshaft is carbon steel and even so the design of most clutches offer an insufficient surface area to transfer load. In order to prevent keyway damage the clutch hub HAS to be locked against the shoulder of the crankshaft.
   - We have a video on www.BriggsRacing.com on how to properly installing your clutch.

4. Installing your exhaust system in a bind which can result in either the bracket or exhaust pipe failure.
   - When installing your exhaust always start with the cylinder head fasteners first. IF the brace does not fit flat against the cylinder head mounting boss use the washers provided to take up the space and or bend the brace carefully to fit flush. If any excess force is used installing the brace and/or exhaust fasteners this WILL over stress the exhaust system leading to breakage and/or the exhaust fasteners at the head to strip out. Bringing each fastener to final torque will naturally create a bind. Take your time and do not use the force of an impact to make the exhaust ‘fit’. Slowly work to final torque by alternating fastener torque in steps, increasing torque in stages.

5. Overwrapping your exhaust system.
   - Sanctioning bodies mandate that your header system be wrapped with an approved exhaust material. When installing wrap it is important to make sure that you do not double wrap or excessively overlap of this material. This will insulate the exhaust trapping in excessive heat which can impact the strength and life of your exhaust. Do not start your header wrap until 3 inches above where the flange meets the cylinder head. Wrapping closer to the flange will trap heat elevating head temperatures that could lead to exhaust valve seat warping and/or head gasket failure.

6. Not checking valve lash after the initial break-in period.
   - After your engine goes through several heat cycles valve lash has a tendency to grow as component stresses from manufacturing are relieved. We recommend that lash is checked during the first 30-60 minutes of initial run time.
   - We have a video on www.BriggsRacing.com on how to set your valve lash.

7. Running at the rev limiter in slide restricted classes.
   - When air is restricted an engine’s peak torque and horsepower occur earlier in the power band. The greater the restriction, the lower in the rpm range peak horsepower and torque will occur. Peak horsepower for the unrestricted 206 is around 5,600 rpm whereas the Green slide restrictor peak horsepower is at 4,800 rpm. Gearing past 5,300 rpm, given that the peak is 4,800 rpm with a Green slide, will result in slower lap times. Gear for the power band, not the rev limiter.
8. Using a ¼” aluminum offset motor mount plate and offsetting the motor mount plate too far.
   • Excessively offsetting an engine offers very little engine stability and amplifies vibration by acting as a ‘springboard’. Engine stresses compound as the natural engine motion (which we have engineered for) falls on one plane, the flexing of the chassis on multiple planes, and your engine’s crankshaft load changes as chain tension varies as your chassis flexes.
   • Install the engine with no more than a ¾ inch offset. When a ‘typical’ ½ inch plate is used and offset beyond ¾”, strain gauge tests shows up to a 20% increase in vibration measured at the valve cover. This is a TREMENDOUS amount of additional vibration without taking into account any common additional sources of vibration (track surface, tire balance, bent axles, etc.). Vibration accelerates fatigue causing component failure and fastener torque loss.
   • Just because an engine mount allows for a greater offset doesn’t mean you should do it! The greater the offset the more harmonics and stress on your engine block and side cover.
   • Most ½ inch aluminum engine mounting plates are also machined for weight reduction allow even greater flex as the very rigidity needed is stripped away to save an ounce.
   • Use a QUALITY mount. The BEST on the market is the Odenthal mount. It allows for greater offset without sacrificing rigidity. Another system would be the PMI engine mount with the ¾” engine plate verses the standard ½” plate. Typically we would not offer brand recommendations but the foundation that your engine sits on is critical to success.

9. Not oiling your Green air filter before using.
   • Your Green air filter is a premium filter that uses oil to effectively trap and prevent debris from entering your engine. It must be oiled before initial use (it shipped dry) and we recommend using Green air filters oil recharging system. For instructions on how to clean and oil your air filter please check out www.Greenfilterusa.com. Your oil filter is your only barrier to preventing debris from entering your engine. This is one of the BEST filters available but it needs to be properly oiled in order to offer you the best protection possible.

10. Not installing a fuel filter.
    • Your fuel source has dirt in it, your tank has dirt in it, and installing a fuel filter will prevent debris from entering your carburetor where it can clog a jet or prevent proper fuel delivery. All of which usually happens during a race as you agitate your fuel.
11. Not properly storing your engine.
   - Today’s fuel has ethanol in it. Ethanol is corrosive and attracts water. Left in your carburetor over a period of time it will form zinc and aluminum oxide as it reacts with the materials around it. Aged fuel will also ‘varnish’ on carburetor parts over time. With some simple steps this mess can be prevent.
     - Fuel stabilizer – Check to make sure the addition of stabilizer (specific to ethanol fuel) does not impact the approach that your track or series uses to tech fuel.
     - After an event remove the fuel line feed at the pump, open up your bottom bowl drain, and let gravity remove all the fuel into an approved fuel gas. Retighten your drain screw and take some WD-40 and spray it into your fuel line. Use enough so that it drains into your carburetor and coats internal parts for protection. Reinstall and secure your fuel line to the pump.
     - If you are done for the season I would follow this same process AND leave Briggs 4T in your crankcase. Most ‘karting’ oils attract water and leaving them in your engine over a winter will cause rust and acid etching. Acid formation is a by-product of combustion that gets past the rings combining with water attracted by PAG based ‘karting’ oils. Briggs 4T has a high TBN (ability to neutralize engine combustion by-products) along with a premium rust inhibitor.
     - As we are talking about fuel please use all safety precautions and only perform ‘pickling’ your engine after it has cooled down and away from any ignition sources.

12. Not focusing on your chassis setup first.
   - There is a natural assumption we as racers have that lap times are solely connected with the performance of the engine. If something changes or we aren’t up to speed it has to be engine.
   - While engine issues can happen it is important to learn how to diagnose and isolate ALL variables that could lead to a performance change. Most of the time it will not be engine related. Learning the dynamics of chassis set-up, the impact of a changing track surface, kart condition (bearings, axle, alignment, etc.), and the ‘feel’ of what the kart is doing from your ears to your butt in the seat will allow you to piece together from the symptoms what the cause is.
   - The number one issue new racers make is misunderstanding cause and effect. That is perfectly natural and we all go through this learning curve.
     - A simple example: I can’t get my engine to run over 5,800 rpm!
       - Was it earlier in the day?
       - Is it only in certain corners (left or right) or on parts of the track?
       - What changed?
         - You hit a curb?
           - Your engine mount shifted causing misalignment and/or chain tension issues?
           - Has it changed the toe-in of your kart in the process?
           - Is your frame is cracked or bent?
Is your axle bent?
- Has something else loosened up on your kart (from bearing carrier to a seat strut)?
- There is more rubber down on the track as conditions have changed?
  - This could be causing your chassis to bind
  - A bind can also cause too much chassis or engine mount flexing making your chain or clutch alignment to change.
- Attention to the changing variables is one of the keys to identifying and efficiently resolving problems. While the engine could be the factor work through a systematic process to isolate your root cause. Assumptions, as they say........lol

13. Improperly plumbing your valve cover catch can.
- Another sanctioning body standard is that engine vents must be contained into a ‘catch can’ system to prevent oil from reaching the track surface. When installing your system it is important NOT to restrict the free flow of air to the valve cover vent or at your catch can to the atmosphere (open to the air).
- The function of the valve cover vent is to allow the pressure created from the piston travel to exit and enter the engine as needed. It also helps promote oil distribution to the valve train area.
- Make sure that your line is not pinched and/or restricted by even so much as a zip tie.
- Your catch can HAS to have sufficient ventilation to the atmosphere.
- A pinched line or a catch can that is improperly ventilated will create back pressure. Back pressure can impact engine performance (sluggish) and in extreme cases lead to gasket failure and/or excessive oil out of your fuel pump vent as the pressure has to go somewhere.
- Use a quality vent line with a thicker side wall to prevent collapsing or pinching common when using cheap fuel line.

14. Oil pump routing and installation.
- Pulsing from the crankcase requires some finesse but done properly will be problem free. Some of the key points:
  - The pulse line from the engine needs to be short and direct, allowing any oil mist that migrates towards the pump to harmlessly and naturally drain back into your crankcase. Do not have low spots where oil can pool in your line and prevent the pump from functioning properly.
  - The most common issue with pulsing from the crankcase is excessive oil exiting the pump vent (the small, circular brass piece).
  - Causes:
    1. Too much oil in the engine. We recommend 13 ounces of Briggs & Stratton 4T.
    2. Too much crankcase back pressure. If your valve cover breather is restricted the pressure HAS to go somewhere. This pressure commonly forcing oil through your pump and out of the brass vent on your pump.
a. Review your catch can system for restrictions. Drill another hole or two in the top of your catch can, check for a pinched line anywhere from the cover to the catch can. Even a zip tie used to hold your line in place can pinch.

- A strong suggestion to help reduce any mist from exiting your fuel pump vent: If you find yourself with an issue, clean the oil from your pump vent and using either nail polish or silicone put a ‘dab’ on the screen itself. This ‘dap’ can completely cover the brass vent screen without negatively impacting the function or life of the pump. This will naturally act as a restriction to the amount of air allowed to pass through. That will lower the velocity of the air passing through and its ability to carry oil mist with it.

15. General maintenance.
- Although the 206 is engineered for racing and life some due diligence on your part to address issues before they become problems (and cost you money).
  - Some recommended checks:
    1. Exhaust system – Every time you come off of the track check your exhaust fasteners and safety wire. Left unchecked, a lose fastener will destroy a thread and a loose silencer will increase vibration and fatigue. Also check for any gasket leaks at the same time. A gasket leak can elevate head temperatures causing head gasket failure or head warping if not caught soon enough.
    2. Other preventative quick checks: Head bolts, oil drain plugs, and engine mounts
      a. Engine mounts tend to loosen up with chassis flex and kissing curbs leading to chain misalignment. This not only can lead to gear damage but also puts additional force on the crankshaft and side cover joint.
      b. Head Bolts – Regularly throughout the weekend check your head bolts for torque when the engine is COLD (220 lb.-in). Head bolts are exposed to severe heat which can be compounded by factors beyond the engine (chassis bind, chain misalignment, exhaust gasket leak, etc.). Left unchecked a loose head bolt can cause a head gasket leak. Any head gasket leak will cause a performance loss but severe enough and exhaust gases over time can destroy both the head and cylinder surface.
      c. Drain fill plugs – If not torqued properly, well, enough said.

16. Not tapping into the awesome community of 206 racers to gain knowledge and ask questions.
- Racing has a learning curve. We all start with ZERO knowledge and through reading, asking questions, and meeting friends at the track we reach learn. Don’t get discouraged, this is a family and we share a common passion. While I might or might not end a weekend on the podium (usually not) it’s the comradely, friendships, fun and adrenaline that you can’t find anywhere else.
  - Join our Briggs & Stratton Racing Facebook page as well as other 206 enthusiast pages.
  - Stop by our website and ask a question on our forum (www.BriggsRacing.com).