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#### 14025 Cty Hwy G Viola, Wisconsin 54664

Phone: 608-627-1497 • Fax: 608-627-1488 Technical Service Phone: 608-627-TECH (8324) Technical Service Email: sstech@sscycle.com Website: www.sscycle.com



# Installation Instructions: S&S Stealth Air Cleaner Kit for 1991-2018 XL Motorcycles

#### **DISCLAIMER:**

Many S&S parts are designed for high performance, closed course, racing applications and are intended for the very experienced rider only. The installation of S&S parts may void or adversely affect your factory warranty. In addition such installation and use may violate certain federal, state, and local laws, rules and ordinances as well as other laws when used on motor vehicles used on public highways. Always check federal, state, and local laws before modifying your motorcycle. It is the sole and exclusive responsibility of the user to determine the suitability of the product for his or her use, and the user shall assume all legal, personal injury risk and liability and all other obligations, duties, and risks associated therewith.

NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES

Not legal for sale or use on any EPA pollution controlled motor vehicle.

#### **SAFE INSTALLATION AND OPERATION RULES:**

Before installing your new S&S part, it is your responsibility to read and follow the installation and maintenance procedures in these instructions and follow the basic rules below for your personal safety.

- Gasoline is extremely flammable and explosive under certain conditions and toxic when breathed. Do not smoke. Perform installation in a well ventilated area away from open flames or sparks.
- If motorcycle has been running, wait until engine and exhaust pipes have cooled down to avoid getting burned before performing any installation steps.
- Before performing any installation steps, disconnect battery to eliminate potential sparks and inadvertent engagement of starter while working on electrical components.
- Read instructions thoroughly and carefully so all procedures are completely understood before performing any installation steps.
   Contact S&S with any questions you may have if any steps are unclear or any abnormalities occur during installation or operation of motorcycle with an S&S part on it.
- Consult an appropriate service manual for your motorcycle for correct disassembly and reassembly procedures for any parts that need to be removed to facilitate installation.
- Use good judgment when performing installation and operating motorcycle. Good judgment begins with a clear head. Don't let alcohol, drugs or fatigue impair your judgment. Start installation when you are fresh.
- Be sure all federal, state and local laws are obeyed with the installation.
- For optimum performance and safety and to minimize potential damage to carb or other components, use all mounting hardware that is provided and follow all installation instructions.
- Motorcycle exhaust fumes are toxic and poisonous and must not be breathed. Run motorcycle in a well ventilated area where fumes can dissipate.

#### **IMPORTANT NOTICE:**

Statements in this instruction sheet preceded by the following words are of special significance.



WARNING

Means there is the possibility of injury to yourself or others.



CAUTION

Means there is the possibility of damage to the part or motorcycle.

#### NOTE

Other information of particular importance has been placed in italic type.

S&S recommends you take special notice of these items.

#### WARRANTY:

All S&S parts are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of twelve (12) months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at S&S's option if the parts are returned to us by the purchaser within the 12 month warranty period or within 10 days thereafter.

In the event warranty service is required, the original purchaser must call or write S&S immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action.

A part that is suspect of being defective must not be replaced by a Dealer without prior authorization from S&S. If it is deemed necessary for S&S to make an evaluation to determine whether the part was defective, a return authorization number must be obtained from S&S. The parts must be packaged properly so as to not cause further damage and be returned prepaid to S&S with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. If after an evaluation has been made by S&S and the part was found to be defective, repair, replacement or refund will be granted.

#### **ADDITIONAL WARRANTY PROVISIONS:**

(1) S&S shall have no obligation in the event an S&S part is modified by any other person or organization.

(2) S&S shall have no obligation if an S&S part becomes defective in whole or in part as a result of improper installation, improper maintenance, improper use, abnormal operation, or any other misuse or mistreatment of the S&S part. (3) S&S shall not be liable for any consequential or incidental damages resulting from the failure of an S&S part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in non-conforming condition, or for any other breach of contract or duty between S&S and a customer.

#### **Kit Contents:**

- Mini Teardrop AC Cover
- QTY of 2 Pan Head 1/4" x 20 Screws
- Filter
- QTY of 3 Backplate Screws
- Backplate

- O-ring
- · Velocity Stack
- · QTY of 2 Gaskets
- QTY of 2 Breather Hoses
- Backplate Bracket
- QTY of 2 Breather Bolts

## A WARNING A

- •The safety of the motorcycle rider is dependent of proper installation of this product. If you are not certain of your capabilities or do not have the correct tools for this installation, please consult a shop to have it done. Improper installation of this product could result in injury or death to the rider.
- •Be sure to disconnect the battery of your motorcycle before starting on this procedure. Accidental starting of the motorcycle could cause injury to you or others around you during the installation.

#### Disassembly

#### **Stock Air Cleaner Removal**

- **1.** Disconnect the negative battery cable from the motorcycle and route it away from any metal parts in the area.
- **2.** Remove the stock air cleaner assembly following your service manual for the specific year and model bike you are working on.
- **3.** If your bike is electronic fuel injected (EFI), remove the stock steel bracket from the throttle body. **See Picture 1.**

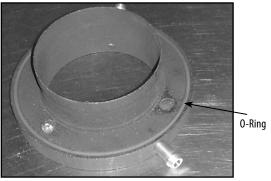


Picture 1

#### Installation

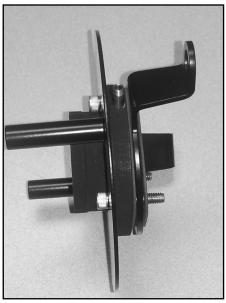
#### Installing the S&S Stealth AC Kit

1. Locate the velocity stack and o-ring. Apply a light amount of grease to the o-ring and put into the o-ring groove of the velocity stack. See **Picture 2.** 



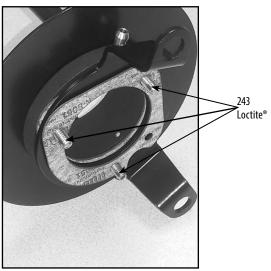
Picture 2

- **2.** Locate the backplate, bent bracket, 2 gaskets, 3 ¼ x 20 screws, velocity stack with o-ring installed.
- **3.** Pass the three ½ x 20 screws through the backplate, velocity stack, gasket, bracket, and gasket. **See Picture 3.**



Picture 3

4. Apply a drop of 243 blue Loctite® to the three screws. Picture 4.



Picture 4

**5.** Fit the backplate assembly to the carburetor or throttle body and thread each screw in finger tight.

Throttle

Body Support Bracket **6.** Locate the two ½ x 13 breather bolts and apply a drop of 243 blue Loctite® to the threads and pass them through the bracket and tighten with fingers into the heads. **See Picture 5**.



Picture 5

- 7. Now that everything is positioned, evenly hand tighten the  $\frac{1}{4}$  x 20 screws and then the  $\frac{1}{2}$  x 13 breather bolts. Finish torque the  $\frac{1}{4}$  x 20 screws to 72 in.-lbs and the  $\frac{1}{2}$  x 13 breather bolts to 10 ft.-lbs.
- **8.** Locate the two breather hoses and attach to the breather bolts and the barbs on the velocity stack adapter. **See Picture 6.** Breather hoses may need trimmed to fit properly.



Picture 6

Locate the two air cleaner cover screws included in the kit (Picture
 the two air cleaner cover screws included in the kit (Picture
 the threads.



Picture 7

**10.** Insert the filter into the Mini Teardrop cover so the filter seats in the pocket on the inside of the cover. **See Pictures 8 & 9** 



Picture 8



Picture 9

**11.** Align the cover/filter assembly with the mounting screw holes in the Stealth back plate. Install the air cleaner cover screws with a Phillips screwdriver. **See Picture 10.** Tighten the screws to 72 in-lb with a torque wrench.



Picture 9

### **Replacement Parts**

1.	Cover	
	Chrome	170-0367
	Gloss Black	170-0366
2.	Filter, Kit, Air, Stealth, Standard Pleated	170-0126
3.	Screw,PH,1/4-20 x 1",Black,Stainless Steel	50-0310-S
	Screw,PH,1/4-20 x 1",Nickel,Stainless Steel	50-0072
4.	Service Kit (Includes #s 5, 6, 7, 8, 9, 10, 11, & 12)	
5.	Screw,SHCS,1/4-20 x 1-1/4",Zinc	50-0008
6.	Backplate	
7.	0-ring	N/A
8	Spacer	
9.	Hose, Breather, 90;, Single Bore Tuned Induction, 250" ID, Duro 75	19-0178A
10.	Breather screw	N/A
11.	Bracket	N/A
12.	Gasket,Backplate,1991-up xl/bt	106-6022

