S&S Teardrop Air Cleaner Installation Instructions for 2008-2017 Harley-Davidson® Motorcycles With Electronic Throttle Control

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.


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 a 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.
4. S&S parts are designed exclusively for use in Harley-Davidson® and other American v-twin motorcycles. S&S shall have no warranty or liability obligation if an S&S part is used in any other application.
INSTALLATION

NOTE: Included with this air cleaner kit is a label containing a CARB EO number. This label is required for use on pollution controlled motorcycles.

1. Remove stock air cleaner cover and backplate assembly.
2. Install breather bolts and banjo fittings in cylinder heads. Picture 1 shows the component order. Tighten to 16 ft/lb.

3. Measure and cut the breather hose so it will slide all the way onto both vent fittings without kinking the hose. Install breather hose on banjo fittings with spring hose clamps as shown in Picture 2.

NOTE: There are two different diameters on the banjo-style vent, so be sure the larger diameter is facing towards the head as shown in Picture 3.

4. Install backplate gasket on back side of adapter plate as shown in Picture 4.

Picture 1

Picture 2

Picture 3

Picture 4

Picture 5

Picture 6

5. Apply blue thread locker to the three ¼-20 x ½" low head socket head cap screws, and install adapter plate on the throttle body as shown in Pictures 5 & 6. Torque to 60-65 in-lbs.
6. Apply blue threadlocker to two 5/16-24 x 1/2" stainless steel low head socket head cap screws, and install breather bolt covers as shown in Picture 7.

![Picture 7]

7. Install spring clip to the short leg of the breather hose. Apply blue thread locker to the three 1/4-20 x 1/2" SHC screws. Place gasket on S&S® backplate as shown in Picture 8, and install backplate on backplate adaptor as shown in Picture 9. Once the backplate is installed, connect the breather hose to the breather tube on backplate. Adjust the position of the spring hose clamp as needed.

![Picture 8]

![Picture 9]

8. Install the filter element, over the two front cover mounting bosses and stretching it slightly to hook it over the tab to the rear of the intake hole. See Picture 10.

![Picture 10]

9. Install air cleaner cover. Apply blue threadlocker to the three Phillips head screws and fasten the teardrop cover in place as shown in Picture 11.

![Picture 11]

10. Apply the CARB EO label to the frame down tube above or below the factory label. Do not cover up any portion of the factory label. See Picture 13.
Replacement Parts for S&S® Teardrop Air Cleaner for Harley-Davidson® Motorcycles
With Electronic Throttle Control

1. Air cleaner cover
   Chrome ........................................ 17-0378
   Gloss Black .................................... 17-0384A
   Slasher ........................................... 17-0004
2. Element, pleated ................................. 106-4722
3. Backplate, assembly, air cleaner, stock EFI, 2008 Touring ................................. 106-2092
4. Screw, PH, 1/4-20 x 1", Nickel, Stainless Steel .......................... 50-0072
5. SHC, w/ Thread Lock, 1/4-20 x 1/2" .......................... 106-2084
6. Gasket, backplate, .0625" .......................... 106-1724
7. Screw, LSHC, 1/4-20 x 1/2", zinc plated ....................... 106-2037
8. Adapter, backplate ................................. 106-1716
9. Gasket, throttle body, throttle by wire, 2008-up BT ................................. 106-2643
10. Hose, vent, breather, ................................ 17-0339
11. Clamp, spring, ¾" ................................. 50-8001
12. Washer, flat, .375" x .813" x .063", zinc, steel .................. 50-7051
13. Washer, silicone coated steel ¾" .......................... 50-7055
14. Banjo fitting ....................................... 17-0350
15. Washer, silicone coated steel ½" .......................... 50-7054
17. Cover, breather screw, chrome, aluminum ...................... 106-2022