



# Installation Instructions: Race Only Qualifier 2-1 Exhaust For 2017-2023 Harley-Davidson® Touring Models (550-1107, 550-1109)

## 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.

DISCLAIMER:FOR CLOSED COURSE COMPETITION USE ONLY. NOT INTENDED FOR STREET USE. LEGAL IN CALIFORNIA ONLY FOR RACING VEHICLES WHICH MAY NEVER BE USED, OR REGISTERED OR LICENSED FOR USE, UPON A HIGHWAY. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT.

## 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.

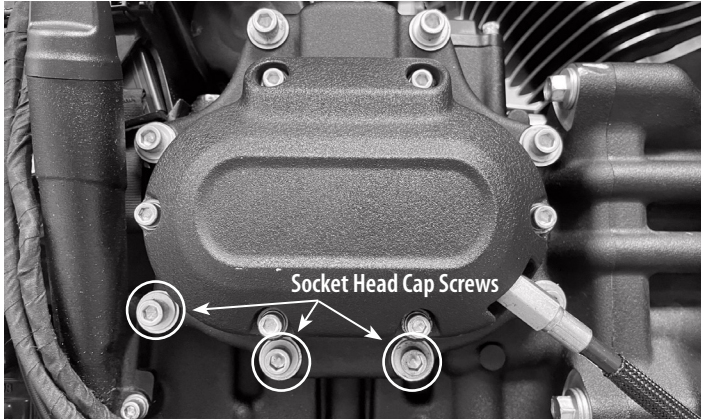
In the event warranty service is required, the original purchaser must call or write S&S immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action.

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.

1. Remove the stock exhaust system and mounting brackets from your motorcycle following your factory service manual. If you haven't already removed your oxygen sensors from the headers, do so now.
2. Remove the snap rings and flanges from your stock header system and exhaust gaskets from the heads.
3. Remove the three stock socket head cap screws from the transmission side cover as illustrated in Picture 1.



Picture 1

4. Locate the S&S exhaust bracket. See picture 2



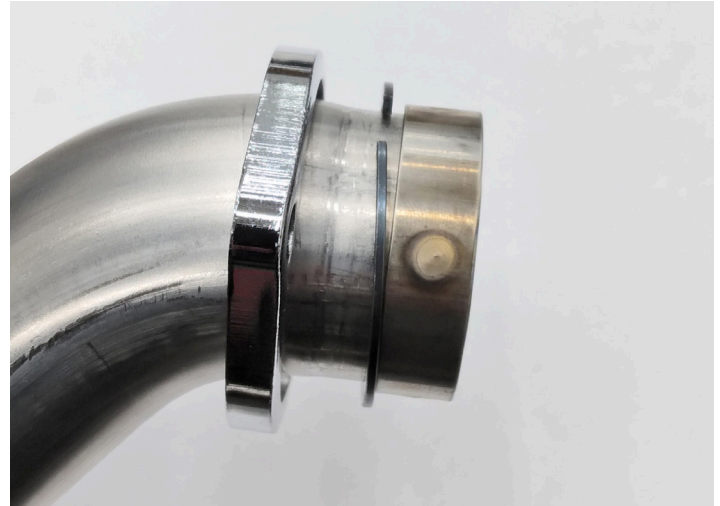
Picture 2

5. Install provided S&S exhaust bracket using supplied 5/16-18 x 1-1/2" socket head cap screws and washers using thread locker and torque to 15-18 lb./ft. See picture 3



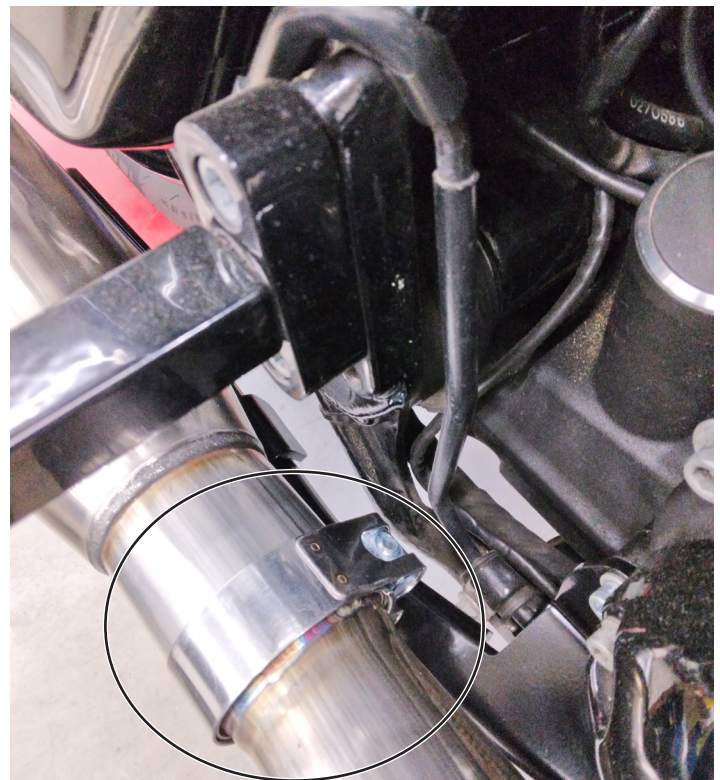
Picture 3

6. Install the supplied exhaust gaskets in the cylinder head exhaust ports.
7. Install the flanges and snap rings to the headers as illustrated in Picture 4.

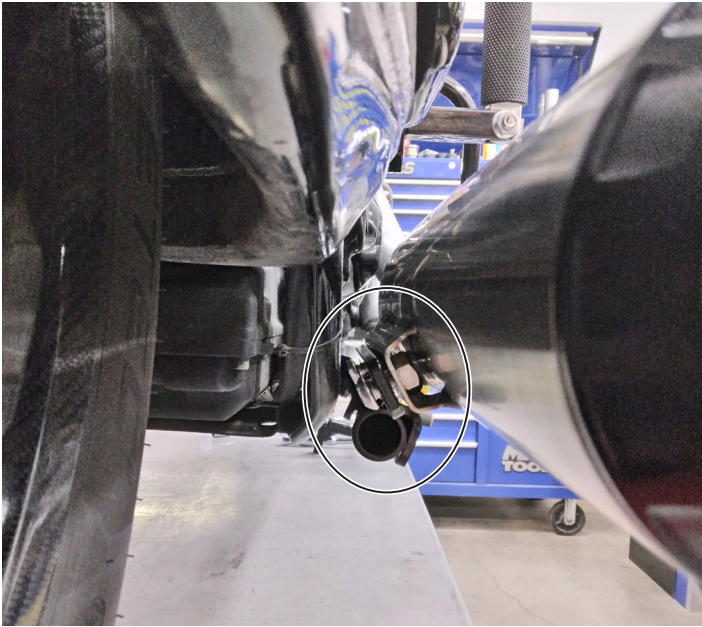


Picture 4

8. Apply anti-seize to exhaust studs, and loosely install the new header using the supplied 5/16-24 hex flange nuts. Do not fully tighten the flange nuts yet.
9. Install muffler clamp over muffler inlet, making sure that screw head is accessible Picture 5. Slide muffler onto header until muffler bracket is close to transmission bracket. Locate two M8 button head stainless bolts thread locking compound. Install the 2 button head screws through the bracket and into the muffler Picture 6.



Picture 5



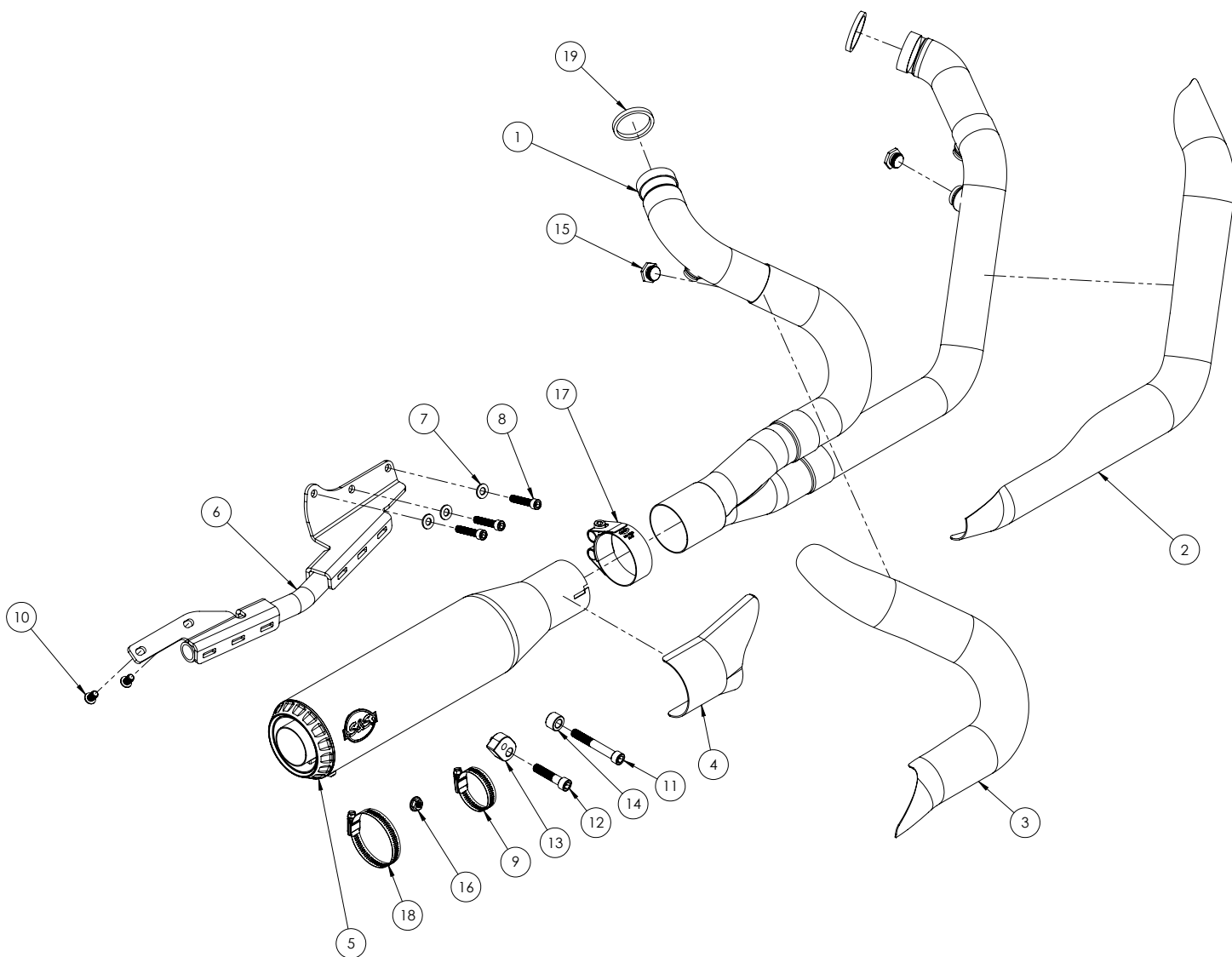
*Picture 6*

10. Once the header is all in place, evenly snug up all fasteners. Finish torque the M8 button head screws that go to the muffler to 15 lb./ft
11. Torque muffler clamp to 15-18 lb./ft
12. Torque the exhaust port flange nuts evenly to 100-120 lb./in
13. Install all three heat shields onto the headers and collector. Picture 7 shows the final install and approximate gap between each.



*Picture 7*

14. Reinstall floorboard using supplied spacers. Use the supplied  $\frac{3}{8}$ " x  $2 \frac{3}{4}$ " socket head cap screw in the rear mounting location. Use the supplied  $\frac{3}{8}$ " x  $1 \frac{3}{4}$ " socket head cap screw in the front mount location. Tighten floorboard mounting hardware to 35-40 lb./ft.
15. Wipe down exhaust to remove all grease, dirt and fingerprints prior to starting the bike.



1. Header Pipe .....	551-2171	7. Flat Washer .....	50-7034
2. Front Heat Shield		8. HSCS Screw .....	106-4401
a. Stainless .....	551-2173	9. Hose Clamp .....	500-0791
b. Black .....	551-2174	10. BCH Screw.....	500-1354
3. Rear Heat Shield		11. SCH Screw .....	500-0790
a. Stainless .....	551-2176	12. SCH Screw .....	500-0789
b. Black .....	551-2177	13. Floor Board Spacer .....	551-0399
4. Collector Heat Shield		14. Spacer Washer .....	551-0401
a. Stainless .....	551-2144	15. M18 Plug .....	551-0122
b. Black .....	551-2145	16. HSFH Nut .....	50-5025-S
5. Muffler Assembly		17. Band Style Muffler Clamp .....	551-1272
a. Stainless .....	551-2147	18. Hose Clamp .....	551-0402
b. Black .....	551-2148	19. Exhaust Gasket .....	551-2161
6. Muffler Bracket, Black .....	551-2163		