



Installation Instructions: S&S 55mm Performance Manifold Kit for Harley-Davidson® M8 models

DISCLAIMER:

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, especially in states where pollution laws may apply. 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.

Exempt from emissions tampering regulations under CARB EO# D-355-39 for all 2017–2021 touring and 2018–2021 Softail® models

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.

1. Remove the stock throttle body and intake manifold following the factory service manual for the particular bike you are working on.
2. With the stock throttle body and intake manifold removed, remove the fuel rail, stock fuel injectors, MAP sensor, manifold flanges and seals if they have not been already. Set these aside as you will re-use them.
3. Clean the manifold mounting surface of the cylinder heads to assure a positive manifold seal.

NOTE: You won't put fuel rail and injectors in the manifold until the manifold is installed loosely in the motor.

4. Place manifold flanges on the manifold, flat side toward the manifold and bevel toward head.
5. Install new manifold o-ring seals with the beveled side toward the flange and the flat side outward so that it contacts the cylinder head. **Picture 1** illustrates the o-ring seal installed.



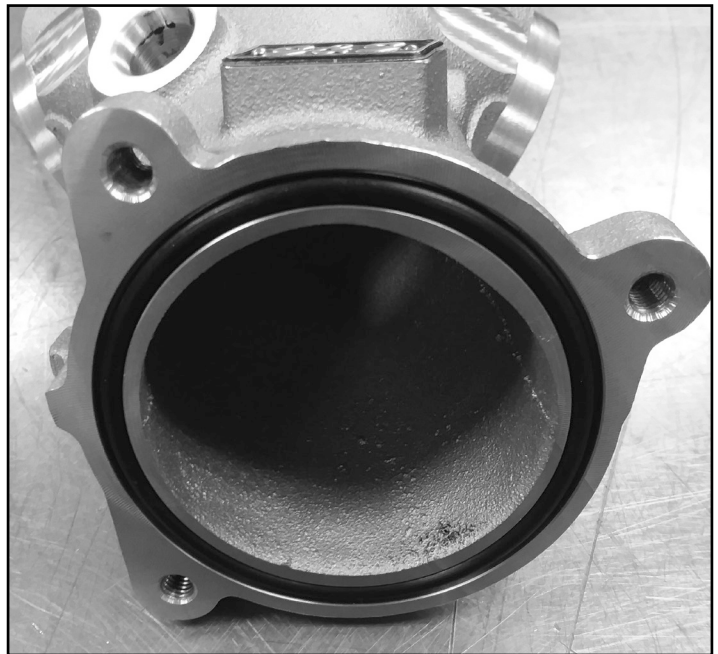
Picture 1

6. Install manifold on bike loosely.
7. Install the fuel rail and injectors into the manifold. Apply blue threadlocker to the threads of the fuel rail bolts, install and torque to 100 in-lbs.
8. Lubricate the o-ring on the MAP sensor and install it in the S&S manifold. Apply blue thread locker to the screw that was removed that holds the MAP sensor in and tighten the screw to 20 in-lb. See **Picture 2**.



Picture 2

9. Pass the four bolts through the manifold flanges and thread into the head. Snug bolts up but leave loose, you will tighten later once the throttle body and back plate are installed.
10. Install the supplied o-ring into the manifold as illustrated in **Picture 3**.



Picture 3

11. Install the throttle body onto the manifold.
12. Install the air cleaner assembly per the manufacturer's installation instructions
13. Once the air cleaner is installed go back and finish tightening the four manifold bolts that were left loose upon installation.
14. Apply the included label containing the CARB EO number to the frame down tube above or below the factory label. Do not cover up any portion of the factory label. See **Picture 4**



Picture 4