



## Installation Instructions: S&S Mk45 4½" Slip-On Mufflers For 1995–Up Harley-Davidson® Touring Models

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

\*Qualified Manufacturer Declared Replacement Part on models not originally equipped with mufflers containing catalyst. Applicable models shown below.

California FL Models:

Fuel Injected MY 1995-2003, 2007, and 2009-2016

CVO MY 2000-2003, 2009-2016

49 State FL Touring Models:

Carbureted MY 1995-2005

Fuel Injected MY 1995-2005, 2007-2016

CVO MY 2000-2005, and 2009-2016

### 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.

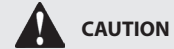
### IMPORTANT NOTICE:

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 Steps

### 1. Tools Required:

- ½" and ⅝" Combination Wrench
- ⅜" Drive Ratchet with 4" Extension
- ½" Standard Socket
- ⅝" Deep Well Socket

### 2. Removal of Stock Mufflers:

- a. Remove the saddlebags and set aside
- b. Loosen the muffler clamps on the front of each muffler.
- c. Remove and discard the ⅝" bolts that secure the mufflers to the saddle bag supports. New fasteners are included in the hardware kit.
- d. Remove the stock mufflers. The application of penetrating oil on the muffler/head pipe joint and a slight rocking motion will allow for easier muffler removal. Remove and discard the stock muffler clamps.

### 3. S&S Muffler Installation:

- a. Identify the right and left mufflers. S&S Mk45 mufflers have clearance dimples in both mufflers. When the mufflers are installed, the clearance dimples always go to the inside, toward the axle.
- b. Apply anti-seize to the threads of the new muffler clamps, included in the hardware pack, and install the clamps onto the mufflers. The nut of the clamp should be on the inside of the muffler and facing down.
- c. Slide each muffler onto the correct header pipe. If there are burrs on the pipe, removing them with a file or emery cloth will make muffler installation easier.
- d. Attach rear muffler hanger tabs to mufflers with ⅝" bolts and washers from the hardware kit, and tighten to 18 ft-lb.

- e. Make sure the mufflers are aligned vertically and that the ends are even. Tighten the muffler clamps to 40-44 ft-lb.
- f. Thoroughly clean the mufflers and exhaust system before starting the motorcycle. Any oil residue or finger prints on the chrome will cause permanent stains once the system heats up.
- g. Re-install the saddle bags.
- h. After the first test ride and after the bike has cooled down, re-check torque of the muffler clamps.

**NOTE** - S&S MK45 mufflers are shipped with dB reducers that are SAE J2825 compliant. For drag strip use, these baffles are easily removable. This will result in more exhaust noise.

## HELPFUL HINTS TO MAINTIAN FINISH OF EXHAUST PIPES AND MUFFLERS

- Make sure ignition timing is set correctly. Air filters must be serviced at regular intervals.
- Intake air leaks can cause engine to run lean and overheat, and thus discolor pipes.
- Make sure there are no exhaust leaks at the junction of the cylinder head and the exhaust pipe.
- Use fans to ensure that the exhaust system is not over heated when Dyno tuning.
- Avoid long periods of idling.
- Follow closely your owner's manual instructions regarding use of the starting enrichener on carbureted bikes. If left on longer than recommended, discoloration may be accelerated.
- Avoid the use of pressure washers, harsh chemicals or abrasive cleaners. If water gets into muffler during washing, remove moisture to prevent corrosion. Start engine to warm up exhaust system.

## Replacement Parts For S&S Mk45 4½" Mufflers

### 1. 4.5" Muffler assembly

- left chrome ..... 551-0020
- right chrome ..... 551-0021
- left black ..... 551-0022
- right black ..... 551-0023

### 2. End cap

- Thruster chrome ..... 550-0634A
- Thruster black - highlight machined ..... 550-0629A
- Tracer chrome ..... 550-0636A
- Tracer black - highlight machined ..... 550-0632A

- 3. Main baffle assembly, 4.5" muffler ..... 551-0007
- 4. dB reducer secondary baffle (screws not included) .. 551-0026
- 5. Insulation, 4.5" muffler ..... 551-0003
- 6. Button head cap screw, Stainless, ¼"-20x⅜" ..... 500-0441
- 7. Hardware kit, muffler clamps and screws (N/S) ..... 551-0027

