# Instruction 510-0660

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# Installation Instructions: Shadow Pipe for Sidewinder 2-1 for 1995–'08 Harley-Davidson® Touring Models

#### **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.

The words Harley®, Harley-Davidson®, H-D®, Sportster®, Evolution®, and all H-D part numbers and model designations are used in reference only. S&S Cycle is not associated with Harley-Davidson, Inc.

#### **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.

#### **ATTENTION INSTALLER (if other than owner):**

Please forward this instruction sheet to the purchaser of this product. These instructions also contain valuable information necessary to the end user.

#### **Tools Needed:**

¼" drive ratchet½" box wrench¼" drive ¾6" socket½" box wrench¼" drive 6" extension%6" box wrench¾6" Allen wrench14mm box wrench¼" Allen wrench15mm box wrench

5/16" nut driver or flat screwdriver

#### **PROCEDURE**

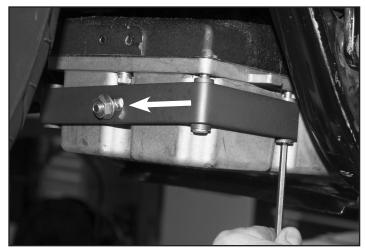
1. Unpackage the kit and inspect for any damage or missing parts. Organize the components of the kit and compare to the parts list on the last page to ensure nothing is missing.

**NOTE:** Instructions are assuming that the stock system has been removed for install of S&S® Sidewinder® 2-1. See those instructions first.

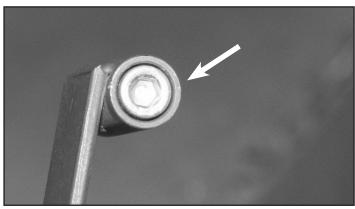
- 2. Remove saddlebags.
- 3. Remove the four ¼" socket head cap screws closest to the rear ofthe oil pan (leave the rear center screw in place). Locate the oil pan mounting bracket, the 4, ¼"-20 x 1%" socket head cap screws andone of the 5/16" carriage bolts. Loosely place the carriage bolt in the slot of the bracket with threaded end facing out as shown in **Picture 1.** Apply Loctite® to the screws and install the bracket under the oilpan. **See Picture 1.** Note that the screws must be countersunk in the bracket. **See Picture 2.**
- 4. Torque the ¼" screws to 100 in\*lbs.
- 5. Install the crossover pipe P-clamp onto the crossover pipe in the orientation shown in **Picture 3**. Use pliers to close the ends of the clamp. Loosely install the 5/16" carriage bolt and hex flange nut but do not fully tighten yet.
- 6. Position the crossover pipe under the oil pan. Locate the 5/16" hex flange nut and loosely fasten the crossover pipe
- 7. P-clamp to the transmission bracket with the carriage bolt.
- 8. Locate the 5/16" hex flange nut and loosely fasten the crossover pipe P-clamp to the transmission bracket with the carriage bolt.
- 9. Apply anti-seize to the left side muffler clamp threads. Install muffler shell.
- Ensure the left side muffler shell is properly aligned and tighten all
  fasteners beginning at the mufflers and move forward to the head
  pipe flanges.
  - Muffler clamps and 3/8" hex flange nut are torqued to 25 ft\*lbs
  - 5/16" hex flange nuts are torqued to 18 ft\*lbs
- 11. Locate the heat shield clamps and place in the heat shield clips. Orient the screw heads so that they are easily accessible when the shield is installed. Install the shield and tighten the clamps.
- 12. Before operating the motorcycle, clean the heat shields and mufflers with soap and water or window cleaner. Any oil or fingerprints may permanently burn into the coating if not removed.

#### **USE AND CARE:**

Wash your accessories with the same care you use when washing your motorcycle. Use mild soap and water. DO NOT use abrasive chemicals or cleaners, or high pressure washers.



Picture 1



Picture 2



Picture 3

## **Replacement Parts**

1.	Tube, crossover, power tune dual, Weldment, 1995-2008 Touring (1 Req)	551-0077
2.	Shield, left, power tune dual, 1995-2016 Touring (1 Req) Chrome	
3.	Bracket, Assembly, Transmission, Pan, Power Tune Dual, 1995-2008 Touring (1 Req)	551-0126
4.	Screw,SHC,1/4-20 x 17/8",Zinc Plated (4 Req)	500-0641
5.	Bolt, carriage, 5/16"-18 x 3/4"	500-0555
6.	Clamp, P-Style, Crossover, Power Tune Dual Header, 1995-2008 Touring (1 Req)	551-0120
7.	Nut, Flanged, Serrated, 5/16"-18 (2 Req)	50-5053-S
8.	Clamp, Hose, Worm Drive, #20 (2 Req)	551-0527
9.	Band style clamp	551-0028

