# Instruction 510-0215 09-22-14

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# Installation Instructions: S&S® Super Sidewinder 2 into 1 Exhaust System for 1993–2015 Touring 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.

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 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.

#### **HEADER KIT CONTENTS:**

2:1 Muffler Front Header Rear Header Front Heat Shield Rear Heat Shields	(1) (1) (1) (1)	Early Transmission Bracket (1993–2006 models) bracket is stampe with an "5" (1) Late Transmission Bracket (2007–2013 models) bracket is stampe with an "6" (1)	(1)
Heat Shield Clamps	(9)	L-Bend Transmission Bracket	(1)
Muffler Clamps	(2)	5/16"-18x3/4" Hex Bolt	(4)
18mm 02 plug	(2)	5/16"-18 Hex Nut	(2)
18mmm 02 gasket	(2)	5/16" Flat Washer	(4)
12mm 02 plug	(2)	Exhaust Port Gasket	(2)

(2)

#### **END CAP KIT CONTENTS:**

End Cap	(1)
Mounting Bolts	(2)
Loctite® 262 5mL	(1)

## **TOOLS NEEDED:**

12mm 02 gasket

716 Allen Wiench	72 Deep Socket, 74 Drive
¼" Allen Wrench	1/4" Drive Extensions
¾" Allen Wrench	1/4" Drive Ratchet
7/16" Combination Wrench	15mm Deep Socket, ¾" Drive
1/2" Combination Wrench	3/8" Drive Ratchet
%16" Combination Wrench	1/4" Nutdriver or Straight
	Screwdriver

14" Doop Socket 1/" Drive

# **Supplies Needed:**

Anti-Seize

#### Attention Installer (if other than owner):

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

#### Introduction:

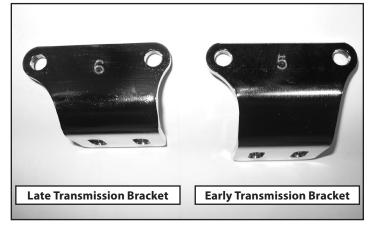
These instructions describe the procedure for properly installing the S&S Super Sidewinder 2 into 1 exhaust system. Review instructions carefully before beginning as they contain important information. Please retain for future reference.

#### **All Models:**

**NOTES:** Right side floorboard must be mounted in the lowest position.

## **Procedure:**

- 1. Remove saddlebags
- 2. Remove right front floorboard and brackets.



Picture 1

- 3. Remove existing exhaust system, save port flanges, retaining rings, port flange nuts,  $O_2$  sensors (if any) and left side muffler mounting bracket and hardware. Make a note of which pipe each 02 sensor came out of.
- 4. Remove transmission exhaust mount, save screws and washers.
- 5. Remove old exhaust port gaskets
- 6. Install new supplied exhaust port gaskets.
- 7. Install flanges and retaining rings on new headers with flange countberbore facing the exhaust port.
- 8. Install  $O_2$  sensors in the correctly sized holes, and plug remaining holes with supplied plugs and gaskets. Stock 2006 and earlier models will not have  $O_2$  sensors, so all four holes will be plugged. Use anti- seize on threads.
- Install the appropriate transmission bracket, see Picture 1, using the saved screws. Apply Loctite supplied in the end cap kit and torque to 13-18 ft\*lbs.
- 10. Loosely install the L-Bend transmission bracket with its flange facing forward and down to the top side of the new transmission bracket with the supplied 5/16"-18 x 3/4" hex cap screws, washers and nuts. **See Picture 2.**
- 11. Apply anti-seize to the front and rear exhaust port studs and loosely install the front exhaust header pipe using the saved flange nuts. Make sure the front pipe bracket is on top of the L-Bend transmission bracket. **See Picture 3, next page.**
- 12. Install the front heat shield with the supplied worm drive clamps. Position the clamps so that the screw heads will be hidden but accessible for tightening. Do not tighten the clamp closest to the muffler at this time.
- 13. Loosely install the rear header using the saved flange nuts. Its U-brackets will nest under the front U-brackets and on top of the transmission L-bracket. **See Picture 3, next page.**
- 14. Loosely install the two supplied  $\frac{5}{6}$ "-18 x  $\frac{3}{4}$ " hex cap screws and flat washers.
- 15. Coat the threads of the new muffler clamps with anti-seize. Install the clamps on the muffler inlets with nut facing outward and down. Rotate the outside clamp inward as far as it will allow. Make sure the inner clamp is accessible.
- 16. Slide the muffler onto the headers. The muffler is correctly installed when the rear axle nut is centered in the relief indentation in the muffler. **See Picture 4.**
- 17. Installed the saved muffler bracket
- 18. Torque the port nuts first then all of the header mounting hardware. Apply Loctite provided in the end cap kit to all of the 5/16" mounting hardware (remove one at a time). **NOTE:** The headers tend to sag before tightening. Pull and hold the system outward to insure proper alignment is achieved when tightened. Make sure that



Picture 2



Picture 3



Picture 4

no part of the header system comes in contact with the frame or any of its components.

- 19. Install the rear shield. Position the clamps so that the screw heads will be hidden but accessible for tightening.
- 20. Tighten the rear clamp of the front heat shield.
- 21. Torque the muffler to header clamps.
- 22. Reinstall the floorboard in the lowest position. Use provided Loctite on all the hardware.
- 23. Reconnect the  $O_2$  sensor electrical plugs. Note that 12mm  $O_2$  sensors are color coded. Front sensor has a grey connector and the rear has a black connector.
- 24. Before operating the motorcycle, clean pipes and muffler with soap and water or window cleaner. Any grease or oil will permanently burn onto the pipes. Dry thoroughly.

**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.



Carefully read the enclosed Important Notice sheet. Re-jetting and or recalibration may be required.



Check all mounting hardware to be sure it is tight before and after first operation of motorcycle. Periodically check tightness of all mounting hardware.



Cover ends of muffler when washing motorcycle. Muffler may internally corrode if saturated with water and allowed to sit.

