

Instruction 510-0629  
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## Installation Instructions: S&S Sidewinder 2 Into 1 Exhaust for 1995–2009 Harley-Davidson® Touring Models (550-0776 & 550-0777)

### DISCLAIMER:

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. Not legal for sale or use on EPA pollution controlled vehicles originally equipped with catalyst.

\*Qualified manufacturer declared emissions replacement part on FL touring models listed below.

California Models:

Fuel Injected Non-CVO FL Touring Model Years: 1995-2003 and 2007

CVO FL Touring Model Years: 2000-2003

49 State Models:

Fuel Injected Non-CVO FL Touring Model Years: 1995-2005 and 2007-2009

CVO FL Touring Model Years: 2000-2005

### 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.*

### 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.

### 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 saddlebags.
2. Remove mufflers.
3. Remove right front floorboard and mounting brackets.
4. Remove heat shields and disconnect the oxygen sensors.

**FOR 1995–2008 MODELS USE STEPS 5–9 BELOW:  
FOR 2009 MODELS START WITH STEPS 11–15 BELOW:**

5. Loosen the clamp on the rear head pipe near rear cylinder. Remove the left side section of the exhaust pipe.
6. Remove the nut and bolt securing the clamp that holds the header to the side of the transmission. Remove the nuts from the front and rear header flange at cylinder head. Remove rear cylinder portion of header first, then front cylinder portion.
7. Remove transmission housing bracket, do not re-install hardware at this time.
8. Remove rear crossover pipe support bracket from inner primary housing, tighten start bolts to 13–15 lb/ft.
9. Remove and save oxygen sensors, retaining rings and flanges from stock header.
10. Continue to Step 16.

**FOR 2009 MODELS START WITH STEP 11 BELOW.**

11. Remove the factory crossover pipe clamp and bracket from the back of the transmission. Re-install the ¼" socket head screws using Loctite®. The bracket and clamp may be discarded.
12. Remove the nut and bolt securing the header to the side of the transmission.
13. Remove the nuts from the front and rear header flange at the cylinder head. Remove header.
14. Remove transmission housing bracket, do not re-install hardware at this time.
15. Remove and save oxygen sensors, retaining rings and flanges from stock header.
16. Remove stock exhaust port gaskets. Install new supplied conical gaskets to avoid leaks (*HD® 65324-83B or S&S 106-5029 gaskets must be used for a proper seal.*)
17. Install flanges and retaining rings on new exhaust header. Masking tape or zip ties can be used to prevent header flanges from contacting heat shields once they are installed. Oxygen sensors and supplied adaptors should be installed at this time as required using anti-seize on all threads. (*550-0375 adaptor is used with 2010-2016 model oxygen sensors.*)
18. Reuse the stock transmission bracket hardware to install the transmission support bracket. Use the longer support bracket (#14) for 1995–'06 models and the shorter support bracket (#13) for 2007–'16 models. Tighten the bolts to 15–18 lb./ft..



**Picture 1**

19. Install rear header heat shield, then connect and loosely tighten the hose clamps. Position screw heads according to part diagram arrows. Repeat the process for the front cylinder heat shield. Slide support clamp halves between header and heat shield as shown in **Picture 1**.
20. Apply anti-seize to exhaust studs, and loosely install the header using supplied 5/16-24 flange nuts. Seat the rear pipe first then the front. Exert a firm pull forward on the front pipe, while keeping the rear pipe seated. Be careful not to damage exhaust port gaskets. Do not fully tighten the flange nuts yet. Align with transmission bracket and install carriage bolt (#15) through transmission bracket and support clamp halves. Loosely install flanged hex nut on transmission side clamp bracket (#13 or #14 depending on model year).
21. Locate two 5/16" flanged bolts (#22) and muffler clamp (#7). Apply Loctite® to the bolts and anti-seize to the threads of the muffler clamp and install the muffler at the rearmost position. Muffler bracket should align side to side and up and down with the saddlebag support rear mounting bracket without stress. Tighten the bracket bolts.
22. Tighten the transmission side mount flanged nut to 15-18 lb/ft.
23. Torque the port flange nuts evenly to 100–120 lb/in. Torque nuts evenly to ensure there are no leaks.
24. Use a piece of cardboard or other protective material to protect muffler finish. Install collector heatshield. Slide collector heat shield forward to engage heat shield tabs with the header heat shields.
25. Set heat shield clearance gap to muffler by sliding muffler forward. Ensure that there is 0.080–0.125" clearance between heat shield and muffler body to maintain a gap between parts to prevent damage to coating. After determining final muffler position, tighten heat shield clamp to 100-120 lb-in. and tighten muffler clamp to 42 lb-ft.
26. For 95-08 models, use the two identical spacers (#18) and the ½" bolts (#21). For 09–16 Models, use the unique spacers (#18 and #19) and ¾" bolts (#20 and #21) while installing floorboard in lowest position.
27. Reconnect oxygen sensor electrical plugs.
28. Before operating motorcycle, clean pipes and muffler with soap and water or window cleaner. Any grease or oil will permanently burn onto pipes. Dry thoroughly.
29. Check all mounting hardware to be sure it is tight before and after first operation of motorcycle. Periodically, check tightness of all mounting hardware.

**Replacement Parts:**

- |   |                  |
|---|------------------|
| 1. Header, assembly, 2:1, Sidewinder®, weldment, 2007-'16 touring models .....        | <b>551-0705</b>  |
| 2. Muffler, Assembly, 2:1, Sidewinder   |                  |
| Chrome .....  | <b>551-0403</b>  |
| Black.....  | <b>551-0394</b>  |
| 3. Collector, heat shield, chrome, 2017-'18 M8 touring .....                          |                  |
| Chrome .....  | <b>551-0379</b>  |
| Black.....  | <b>551-0381</b>  |
| 4. Heat shield, front, 2:1, Sidewinder®, chrome, 1995-'16 touring models              |                  |
| Chrome .....  | <b>551-0709</b>  |
| Black.....  | <b>551-0715</b>  |
| 5. Heat shield, rear, 2:1, Sidewinder®, chrome, 1995-2016 touring models              |                  |
| Chrome .....  | <b>551-0712</b>  |
| Black.....  | <b>551-0717</b>  |
| 6. Clamp, header mount, 2:1, chrome plate, mild steel, 11 gauge, M8 2017 touring..... | <b>551-0361</b>  |
| 7. Clamp, muffler, band style, 2.5".....  | <b>551-0135</b>  |
| 8. Clamp, hose, worm drive, SAE #20 (qty. 3).....                                     | <b>551-0527</b>  |
| 9. Clamp, hose, worm drive, SAE #40 .....   | <b>551-0402</b>  |
| 10. Clamp, hose, worm drive, SAE #24 (qty. 3) .....                                   | <b>500-0791</b>  |
| 11. Adapter, oxygen sensor, 12mm to 18mm, stainless steel .....                       | <b>550-0375</b>  |
| 12. Gasket, exhaust, tapered, stainless steel, 1984-up bt, 1986-up xl .....           | <b>106-5029</b>  |
| 13. Bracket, header mount, 2:1, powdercoated, black, 2007-'16 touring models .....    | <b>551-0719</b>  |
| 14. Bracket, header mount, 2:1, powdercoated, black, 1995-'06 touring .....           | <b>551-0786</b>  |
| 15. Bolt, Carriage, 3/8-16 x 1-1/4".....  | <b>500-0553</b>  |
| 16. Nut, HSFH, 3/8-16 .....   | <b>500-0554</b>  |
| 17. Nut, HSFH, 5/16-24 unf-2b x .283", Zinc, steel.....                               | <b>50-5025-S</b> |
| 18. Washer, spacer, floor board.....  | <b>551-0401</b>  |
| Spacer, floorboard, 95-08 Touring.....  | <b>551-1131</b>  |
| 19. Spacer, floor board, powdercoated, black .....                                    | <b>551-0399</b>  |
| 20. Screw, shc, 3/8-16 x 1-3/4", zinc, steel .....                                    | <b>500-0789</b>  |
| 21. Screw, shc, 3/8-16 x 2-3/4", zinc, steel .....                                    | <b>500-0790</b>  |
| Screw, SHC, 1/2-13 x 1-3/4".....  | <b>500-1135</b>  |
| 22. Screw, hh, flg, serrated, 5/16-18 x 1/2" .....                                    | <b>500-0744</b>  |
| 23. dB reducer.....   | <b>551-0026</b>  |
| 24. Endcap, Sidewinder 2-1 .....  | <b>551-0395</b>  |

