



## S&S Power Tune Duals For Touring Models 1995-2008 (PN 550-0003 & 550-0142)

### 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.

**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.

**INTRODUCTION**

These instructions describe the procedure for properly installing S&S® Power Tune Duals. Review instructions carefully before beginning, as they contain important information. Please retain for future reference.

**NOTES:**

- This system may not be compatible with swing arm pivot suspension stabilizers.
- Right side floorboard must be mounted in the lowest position.
- On pre- 1999 models the brake pedal may need to be modified to gain additional clearance from the heat shield.



**Ground and cornering clearance may be reduced. Clearance will be reduced when bikes are fitted with shorter shocks.**

**TOOLS REQUIRED**

- Ratchet handle
- 6" extension
- 1/2" box wrench
- 7/16" box wrench
- 15mm box wrench
- 1/4" or 5/16" nut driver
- 1/2" socket
- 3/16" Allen wrench
- 5/16" Allen wrench
- 3/8" Allen wrench
- 9/16" box wrench
- In-Lb torque wrench
- Ft-Lb torque wrench

**KIT CONTENTS - SEE PICTURE 1**

Description	Qty
1. Header pipe assembly	1
2. Crossover pipe	1
3. Front heat shield (N/S)	1
4. Rear heat shield (N/S)	1
5. Left heat shield (N/S)	1
6. Torca/AccuSeal Clamp	1
7. Heat shield clamps	9
8. Crossover Spacer Weldment	2
9. Oil pan washers	4
10. 1/4-20 x 3.50 oil pan bolts	4
11. O2 plugs	2
12. O2 plug washers	2
13. Floorboard spacers	2
14. Exhaust port gaskets	2

**Supplies:**

- 243 Loctite®.
- Muffler clamps may need to be replaced

**PROCEDURE**

- 1- Remove saddlebags.
- 2 Remove rear mounting bracket bolt, and loosen front mounting bracket bolt on right floorboard. Swing floor board down and forward to provide access to exhaust pipes.
- 3- Remove mufflers, save clamps (Harley-Davidson® states clamps are not reusable, but we have found that they normally work fine. We recommend applying anti seize to the threads of used clamps.) See step 19.
- 4- Disconnect the O2 sensors (2007-'08). Remove exhaust headers. Save the 5/16-24 hex flange port nuts. it may be necessary to remove head sheilds to access flange nuts on some models.
- 5- Remove and save exhaust flanges and retaining rings from old exhaust headers. Use an external snap ring pliers on retaining rings.
- 6- Remove and discard the rear exhaust bracket that is mounted to the top of the transmission. This bracket will not be needed. Remove transmission end cover to access fasteners (1999-'06). Replace screws.
- 7- Remove the left side exhaust/starter bracket. Replace screws.
- 8- Remove and discard four of the 1/4" socket heads closest to the rear of the oil pan (leave center rear screw in place).
- 9- Remove and discard exhaust old port gaskets. Install new gaskets provided in the kit.
- 10- Install flanges and retaining rings on new exhaust headers. Install oxygen sensors and/or supplied plugs/gaskets at this time. Use anti-seize on threads.
- 11- Install new header system. Seat front pipe first then rear. A firm pull rearward on the rear header, while keeping the front header seated, may be necessary to clear the rear head casting. Be careful not to damage gaskets. Install saved 5/16-24 hex flange nuts, but do not fully tighten nuts yet.
- 12- Install the supplied Torca/AccuSeal pipe clamp on the expanded end of the crossover pipe with the open end down and the nut facing out (cannot be installed later).
- 13- Position the crossover pipe under the oil pan and slide its expanded end onto the end of the front header pipe.
- 14- Align the slots in the crossover pipe mounting brackets with the oil pan mounting bolt holes. Install the four 1/4-20 x 3.50" hex cap screws, 1/4" flat washers and the two crossover spacer weldments. Use 243 Loctite on the threads. Torque the fasteners to 100 in-lbs.
- 15- Torque the port flange nuts evenly to 100 in-lb. Do not tighten the Torca clamp until the heat shields are in place.



**To ensure there are no leaks and the system is properly aligned the front and rear port nuts must be evenly torqued.**

- 16- Clean header pipes and crossover (see step 22).
- 17- Insert worm gear clamps into slots on the back side of the heat shields. All clamp screws except the upper two on the rear shield should be positioned so the screw heads can be accessed from the front or bottom of the headers. Tip: Insert clamps halfway into the slots and bend the ends outward to ease installation over header pipes.

- 18- Install heat shields. Engage tabs and gears of worm gear clamps. Position screw heads for easiest access and tighten with a 1/4" or 3/16" nut driver or screwdriver.
- 19- Install mufflers. Torque left and right muffler and header/crossover supplied Torca/AccuSeal clamp to 25 ft-lb. Make sure header/crossover clamp does not contact frame. **Tip:** Use anti-seize on threads of used muffler clamps. If they clamp down securely they don't need to be replaced, however they may be stretched and require replacement.
- 20- Place the provided floorboard spacers between the frame and floorboard brackets and install in the lowest position. Apply Loctite® and use the 3/8" Allen wrench to tighten the bolts. Next, install the floorboard to the brackets with the original fasteners.
- 21- Reconnect oxygen sensor electrical plugs.
- 22- Before operating motorcycle, clean pipes and mufflers with soap and water or window cleaner. Any grease or oil will permanently burn onto pipes. Dry thoroughly.

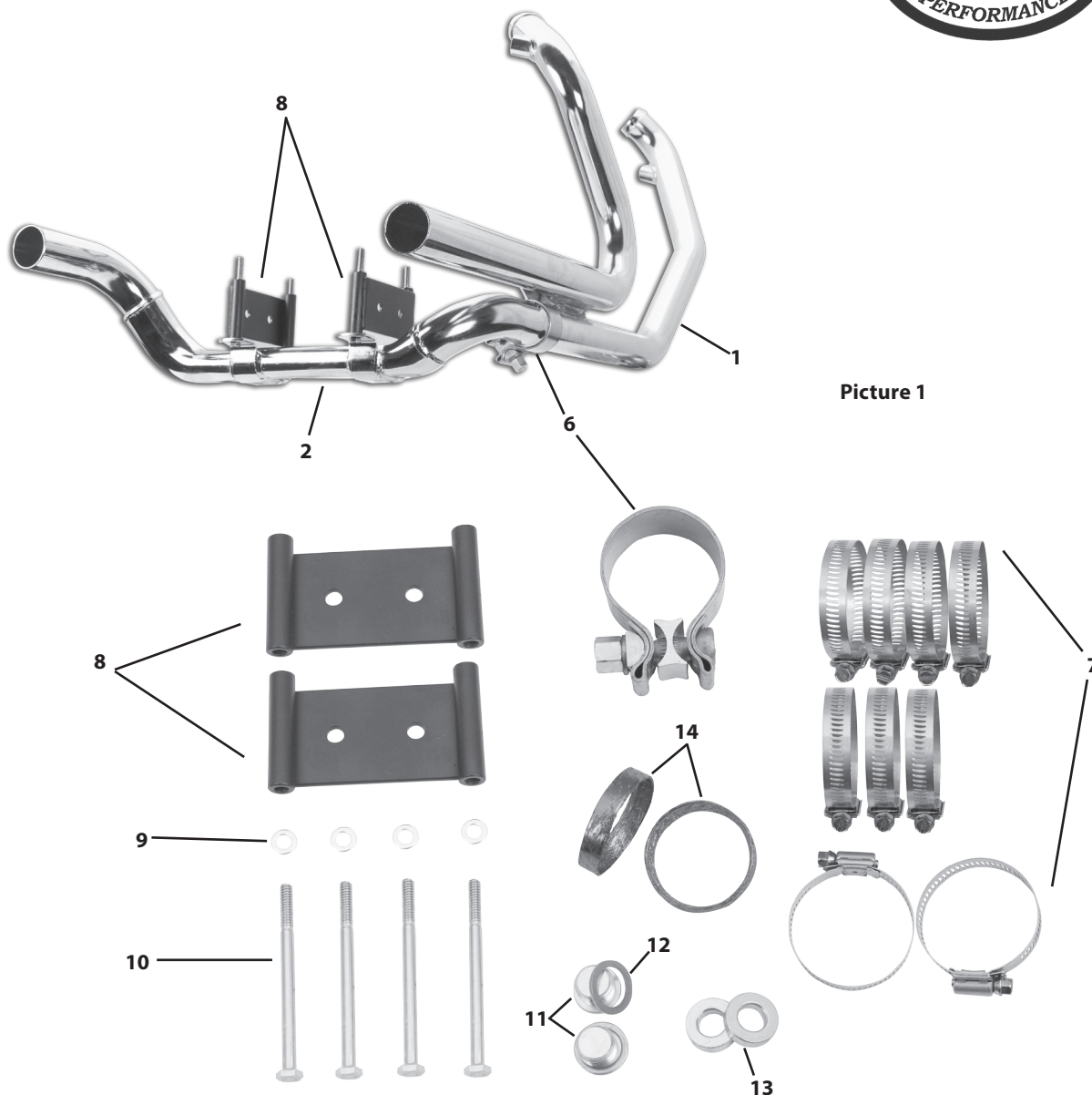
23-USE AND CARE: Wash your accessories with the same care you use when washing your motorcycle. Use mild soap and water. DO NOT use harsh chemicals, abrasive cleaners, or high pressure washers.

**CAUTION**

- Cover ends of mufflers when washing motorcycle. Mufflers may internally corrode if saturated with water and allowed to sit.

**WARNING**

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



Picture 1