



## Installation Instructions: Power Tune Dual Headers

### DISCLAIMER:

This header pipe is applicable to 2017–'20 Harley-Davidson® touring models when purchased as a component included with an S&S compliant exhaust system package with mufflers

### 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' 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.

**NOTE**- Right side floorboard must be mounted in the lowest position.



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

**Tools Needed:**

1/4 " drive ratchet	10mm Allen wrench
1/4" drive 1/2" socket	5/16" nut driver or flat screwdriver
1/4" drive 7/16" socket	7/16" box wrench
1/4" drive 6" extension	1/2" box wrench
3/16" Allen wrench	9/16" box wrench
1/4" Allen wrench	14mm box wrench
5/16" Allen wrench	15mm box wrench
6mm Allen wrench	22mm box wrench

**PROCEDURE**

The following installation procedure assumes that a stock exhaust system is being removed. If the bike you are working on has something other than the factory exhaust system, you may need to source some of the fasteners listed below.

1. Remove saddlebags.
2. Remove mufflers.
3. Remove right front floorboard and mounting brackets.
4. Remove heats shields and disconnect the oxygen sensors.
5. Remove the factory crossover pipe clamp and bracket from the back of transmission. Only the 1/4" socket head screws will be re-used. The other parts are no longer needed.
6. Remove the exhaust port flange nuts, and flange nut that secures the header to the side clamp. Remove the exhaust header. Save the 5/16-24 hex flange nuts and the stock side clamp from the front pipe.
7. Remove and save oxygen sensors, retaining rings and exhaust flanges from old exhaust header.
8. Remove and discard exhaust port gaskets. Install new conical gaskets supplied in the kit.



**New conical port gaskets (H-D 65324-83B) (S&S 106-5029) must be used to avoid leaks.**

9. Install flanges and retaining rings on new exhaust header. Oxygen sensors and supplied adaptors should be installed at this time. Use anti-seize on all threads.
10. Clean header pipes and crossover
11. 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.

12. Install heat shields. Connect and loosely tighten all worm gear clamps. Position screw heads for easiest access and tighten with a 5/16" nut driver or screwdriver.

*Note* - install the left heat shield so that the straight end is toward the muffler and the rounded end faces forward and down.

13. Apply anti-seize to exhaust studs, and loosely install the new header using new 5/16-24 hex flange nuts. Seat 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 gaskets. Do not fully tighten the flange nuts yet.
14. Install the factory side clamp on the front header. Apply thread locking compound to the bolt and loosely install the flange nut, but do not fully tighten at this time.
15. Locate the crossover pipe (5) and install two clamp pieces (7 and 8) onto crossover tube. Insert carriage bolt, but do not tighten at this time, to allow left to right adjustment of the clamp.
16. Install the supplied pipe clamp on the expanded end of the crossover pipe with the bolt facing forward and the bolt head facing down (cannot be installed later).



**Picture 1**

17. Position the crossover pipe under the oil pan and slide its expanded end onto the end of the front header pipe. Do not fully tighten the pipe clamp at this time.
18. Locate the 1/4" socket head cap screws from Step 5, apply thread locking compound, and secure the crossover P-clamp to the back of the transmission. Torque screws to 100-120 in\*lbs.
19. Locate the 5/16" bolts and muffler clamps from Step 2, apply thread locking compound to the bolts and anti seize to the threads of the muffler clamps, install muffler clamps, and install the mufflers. Muffler rear brackets should align side to side and up and down with the saddle bag support rear mounting brackets without stress, adjustment of the crossover pipe slip joint may be necessary.
20. Align mufflers, making sure front to back and rotational alignment is equal. Tighten muffler exhaust clamps to 18 lb/ft. Tighten P-clamp carriage bolt to 18 lb./ft.
21. Tighten the pipe clamp on the crossover pipe. For proper seal, the clamp should slightly (~1/16") overhang the end of the expanded crossover pipe. Make sure the clamp does not contact the frame.
22. Tighten the flanged nut on the factory side clamp to 15 to 18 ft-lb.

23. Torque the port flange nuts evenly to 100-120 in-lbs. To ensure there are no leaks and the system is properly aligned the front and rear port nuts must be evenly torqued.
24. Reinstall front floorboard in lowest position.
25. Reconnect oxygen sensor electrical plugs.
26. 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
27. Check all mounting hardware to be sure it is tight before and after first operation of motorcycle. Periodically, check tightness of all mounting hardware.

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

**Power Tune Dual Header Replacement Parts**

1. Pipe, header, power tune dual, header pipe weldment, .....551-0198
2. Gasket, exhaust, tapered, stainless steel, (2 Req) ..... 106-5029
3. Adapter, oxygen sensor, 12mm to 18mm, stainless steel (2 Req)..... 550-0375
4. Tube, Crossover, Power Tune Dual, Weldment .....551-0229
5. Shield, Left  
 Chrome ..... 551-0115  
 Black..... 551-0116
6. Nut, HSFH, 5/16-18 UNC-2B x .283", Zinc, Steel .....50-5053-S
7. Clamp, Exhaust, Male, Double Hole, 1.75" Diameter .....551-0567
8. Clamp, Exhaust, Female, Double Hole, 1.75" Diameter .....551-0568
9. Bolt, Carriage, 5/16-18 x 3/4" ..... 500-0555
10. Clamp, Hose, Worm Drive, SAE #28 (9 Req) ..... 551-0124
11. Clamp, Muffler, Band Style, M8-1.25 x 40mm Bolt, 1.75" Diameter .....551-0977
12. Shield, front, power tune dual,  
 Chrome .....551-0206  
 Black.....551-0207
13. Shield, rear, power tune dual,  
 Chrome .....551-0213  
 Black..... 551-0214
14. Nut, HSFH,5/16-24..... 50-5025-S
15. Stock front header side clamp (shown for placement only) .....N/A

**Not Shown**

- Hardware kit, power tune dual, header  
 Includes items 2, 3, 4, 7, 8, and 9..... 551-0215

