

Sportster Custom Straightshot Exhaust System Part #16811

Congratulations, you have purchased the finest exhaust system available for your motorcycle. Your VANCE & HINES exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style! **Important**: Read the installation instructions carefully <u>before</u> you begin removing any parts from your motorcycle and if you have any questions, feel free to call our technical help line at (562) 926-5291.

REMOVING THE STOCK EXHAUST SYSTEM

- 1. Loosen the heat shield clamps on both front and rear exhaust pipes.
- 2. Remove the two mounting nuts from each head pipe, located at the cylinder head.
- 3. Remove the nut that mounts the front muffler to the engine, located below the rear brake master cylinder.
- 4. Remove the bolt that mounts the rear muffler to the mounting bar.
- 5. Remove the entire exhaust system and set it aside.
- 6. Carefully remove the flanges and circlips from the stock exhaust system using snapring pliers.

Note: If circlips look bent or twisted replace them with new circlips.

INSTALLING YOUR NEW VANCE & HINES EXHAUST SYSTEM

- 1. Vance and Hines recommends you replace your exhaust gaskets with Sceamin' Eagle gaskets part number 17048-98.
- 2. Install the circlips and flanges from the stock system on to both of the new head pipes.
- 3. Unscrew all of the hose clamps (supplied) until they are completely loose. Mark the top edge of both heat shields with the location of the mounting clips that are welded to the backside. Position the front heat shield over the head pipe and feed the tail end of the hose clamps into the clips. Be sure that each hose clamp is engaged with both clips. Repeat this step with the rear heat shield. **Note:** The screw end of the hose clamp should be accessible, but not visible when pipe is mounted on the bike.
- 4. Install the front head pipe using the stock nuts, do not tighten at this time.
- 5. Install the rear head pipe using the stock nuts, do not tighten at this time.
- 6. Install one muffler clamp (supplied) over the inlet (notched end) of each muffler.
- 7. Identify the front and rear muffler mounting brackets. The front bracket is stamped with the number **305** and the rear muffler bracket is stamped **213**.
- 8. Install the front muffler mounting bracket to the stud on the engine (where the stock muffler mounted) and fasten using the stock nut (leave loose at this time). The bracket will bend inward towards the center of the motorcycle when installed correctly. **Note:** You may need to move the wires and hoses on the lower frame rail to decrease the possibility of them chaffing on the bracket bolts.
- 9. Slip one of the mufflers onto the front head pipe. Slide one dog bone shaped nut plate (supplied) under the bracket that is welded to the backside of the muffler. Attach the muffler to the mounting bracket using the 5/16" flange head bolts (supplied) leave them loose at this time.
- 10. Attach the rear mounting bracket to the rear muffler. Slide one dog bone shaped nut plate (supplied) under the bracket that is welded to the backside of the muffler. Attach the bracket to the muffler using two of the 5/16" flange head bolts (supplied), leave them loose at this time. **Note:** The single hole in the bracket will point downward and slightly forward when installed correctly.

- 11. Slip the rear muffler onto the rear head pipe, align the muffler mounting bracket to the rear most hole in the stock mounting bar. Install a 5/16" x 3/4" hex head bolt with one flat washer under the head of the bolt and one washer under the loc-nut (all hardware supplied). Leave the bolt loose at this time. **Note:** The muffler bracket mounts to the inside of the mounting bar.
- 12. Adjust the mufflers and/or heat shields so they match flush where the two parts meet each other. Refer to figure #2.
- 13. Align the mufflers so they're parallel when viewing from the right hand side of the motorcycle. Tighten the 5/16" flange bolts on both mufflers.
- 14. Tighten the two nuts on both the front and rear head pipes at the cylinder head.
- 15. Tighten the muffler clamps on the inlet end of each muffler.
- 16. Tighten the bolt that mounts the rear muffler to the mounting bar.
- 17. Tighten the nut that mounts the front muffler to the engine.
- 18. Rotate the hose clamps on both heat shields so they're accessible with a screw driver and tighten them evenly.
- 19. Be sure to tighten all hardware before starting your motorcycle.

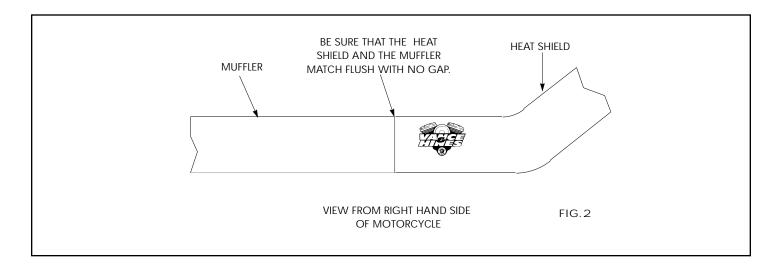
RE-JETTING INSTRUCTIONS

Re-jetting the carburetor will result in realizing the "full" potential of this performance exhaust system. Vance & Hines offers jet kits for most applications.

PLEASE NOTE:

Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation instructions.

WARNING! VANCE & HINES DOES NOT WARRANTY ANY CHROME PRODUCTS AGAINST DISCOLORATION.



For information about other Vance and Hines products visit our web site at vanceandhines.com

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