



Softail Longshots HS Exhaust System Part #17813

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! Please follow the installation instructions below and if you have any questions, feel free to call our technical help line (562) 926-5291.

Attention Installer: (if other than owner): Please forward this instruction sheet to the purchaser of this product. These instructions contain valuable information necessary to the end user.



STOCK EXHAUST SYSTEM REMOVAL

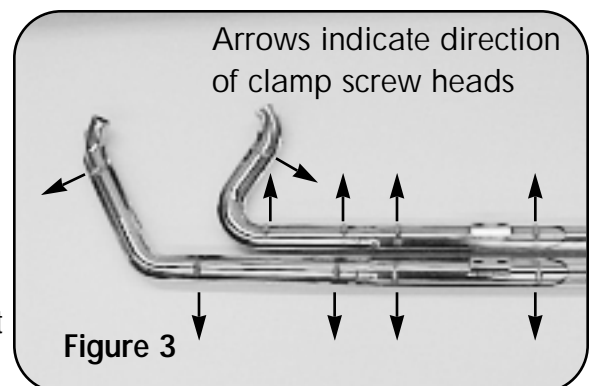
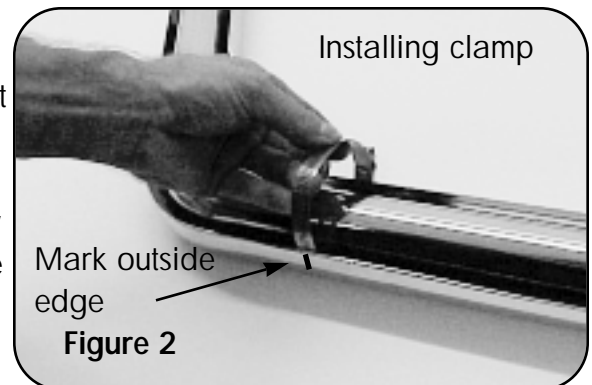
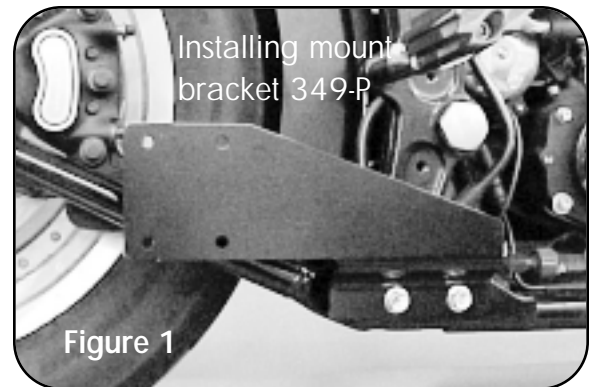
1. On FLSTN, FLSTF, FLSTH and FLSTC loosen the right hand floor board mounting bolts to gain clearance for exhaust removal and installation.
2. Loosen the heat shield clamps on both front and rear exhaust pipes.
3. Loosen the crossover pipe clamp, located between the front and rear head pipe. (Not necessary on 2000-up models).
4. Remove the two mounting nuts from each head pipe, located at the cylinder head.
5. Remove the bolts attaching the mufflers to the frame.
6. Remove the entire exhaust system and set it aside.
7. Remove the two allen bolts securing the head pipe bracket located under the transmission cover. Reinstall the two

bolts without the bracket and torque to 18-20 ft. lbs.

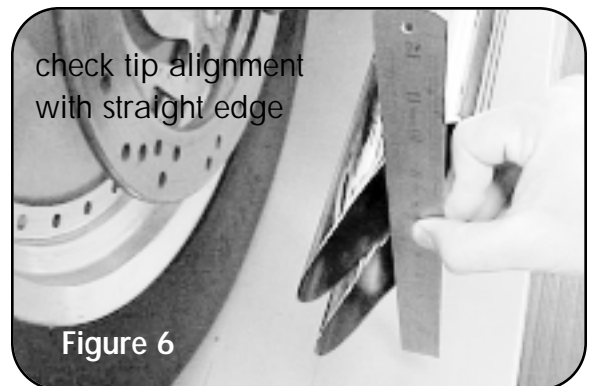
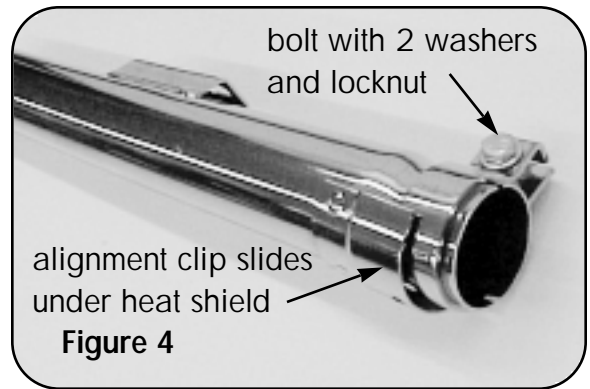
7. On pre 2000 models remove the lower mounting bar.
8. FLSTN, FLSTF and FXSTD models have an upper mounting bar that must be removed in addition to the lower bar. On pre 2000 models go to step #9, on 2000-up models go to step #10.
9. Remove the right passenger foot peg bolt. Position the motorcycle on the side stand with a floor jack under the swing arm pivot bolt on the right hand side. Raise the jack just enough to take the weight off the pivot bolt, remove the bolt and stock mounting bar. Reinstall the pivot bolt and torque to 120 -150 ft. lbs. Reinstall the passenger foot peg using the 1/2" x 3" Allen bolt and 1-5/8" length spacer (supplied).
10. Using a #50 Torx driver, remove the three mounting bolts, and set the mounting bar aside. (Two of the bolts are visible, the third is accessed by removing the right hand passenger foot peg.) Replace the foot peg using the 3/8" x 2 1/2" Allen bolt and 3/4" length spacer (supplied).
11. The bolts and spacers used in the above steps may also be used on all Softail models to space the right rear foot peg away from the exhaust.
12. Carefully remove the flanges and circlips from the stock exhaust system using snapping pliers (save for reuse).
NOTE: If circlips look bent or twisted replace them with new circlips.

VANCE & HINES EXHAUST SYSTEM INSTALLATION

1. Check condition of stock exhaust gaskets. Replace if damaged or worn. Vance & Hines recommends you replace your gaskets with Screamin' Eagle gaskets part number 17048-98.
2. Install circlips and flanges from the stock system onto both new head pipes.
3. Install, but do not tighten, supplied mounting bracket (stamped 349-P) to the two lower holes in the frame below the right passenger footrest, using two 3/8" x 3/4" flange bolts (supplied) (Figure 1).
4. Remove head pipes and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as a blanket or carpet. Using a felt tip pen, mark outside edge of each heat shield to show location of hose clamp mounting clips (Figure 2).
5. Lay head pipes into heat shields and loosely install hose clamps by feeding tail end of clamp into heat shield clips (Figure 2). Take note of screw head direction (Figure 3). Screw head should be accessible when system is installed on motorcycle for adjustment purposes. Use #20 hose clamps for head pipe areas and #28 hose clamps for muffler areas.
6. Using stock flange nuts, carefully install head pipes into exhaust ports (Assistance may be required). **NOTE: Do not tighten at this time.**
7. Starting with the front pipe, install large clamp onto muffler bodies. Loosely install 5/16" x 1-1/4" bolt and locknut with washers onto clamp (Figure 4). Slide muffler bodies onto head pipes. **NOTE: Take care to slide heat shield alignment clips under head pipe heat shields.**



8. Slide nut plates inside bracket that is welded to backside of muffler bodies (Figure 5). While holding nut plates in place, attach muffler bodies to mounting bracket 349-P using four 5/16"x 5/8" flange head bolts (supplied). Leave them loose at this time. **NOTE:** Muffler body brackets should align with edge of mounting bracket 349-P.
9. Repeat for rear head pipe.
10. Tighten cylinder port exhaust flange nuts on front and rear cylinders.
11. Align muffler bodies so they are level and parallel when viewing from the right side of the bike, and tighten the flange bolts on both mufflers. **NOTE:** Adjust angle of bracket 349-P to aid alignment with head pipes.
12. Tighten flange bolts securing mount bracket 349-P to frame.
13. Tighten clamps securing muffler bodies to head pipes.
14. Install hose clamps into muffler body heat shields. Note direction of clamp heads (Figure 3).
15. Slide heat shields onto muffler bodies and align with heat shields on head pipes. **NOTE:** Muffler heat shields should align straight up and down with each other, (length and rotation) and should butt together with head pipe heat shields (Figure 6).
16. Tighten all heat shield clamps.
17. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
18. Retighten floor board mounting bolts on models so equipped.
19. **Be sure to tighten all hardware before starting motorcycle.**



RE-JETTING INSTRUCTIONS


Re-jetting the carburetors will result in realizing the "full" potential of this performance exhaust system. Vance & Hines offers jet kits for most applications. For fuel injected models, we recommend the use of Vance & Hines Fuelpak part number 61001.

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.


Option

On fuel injected models this system will work with Vance & Hines Fuelpak part number 61001. Order it today from your dealer or go to vanceandhines.com for more information.

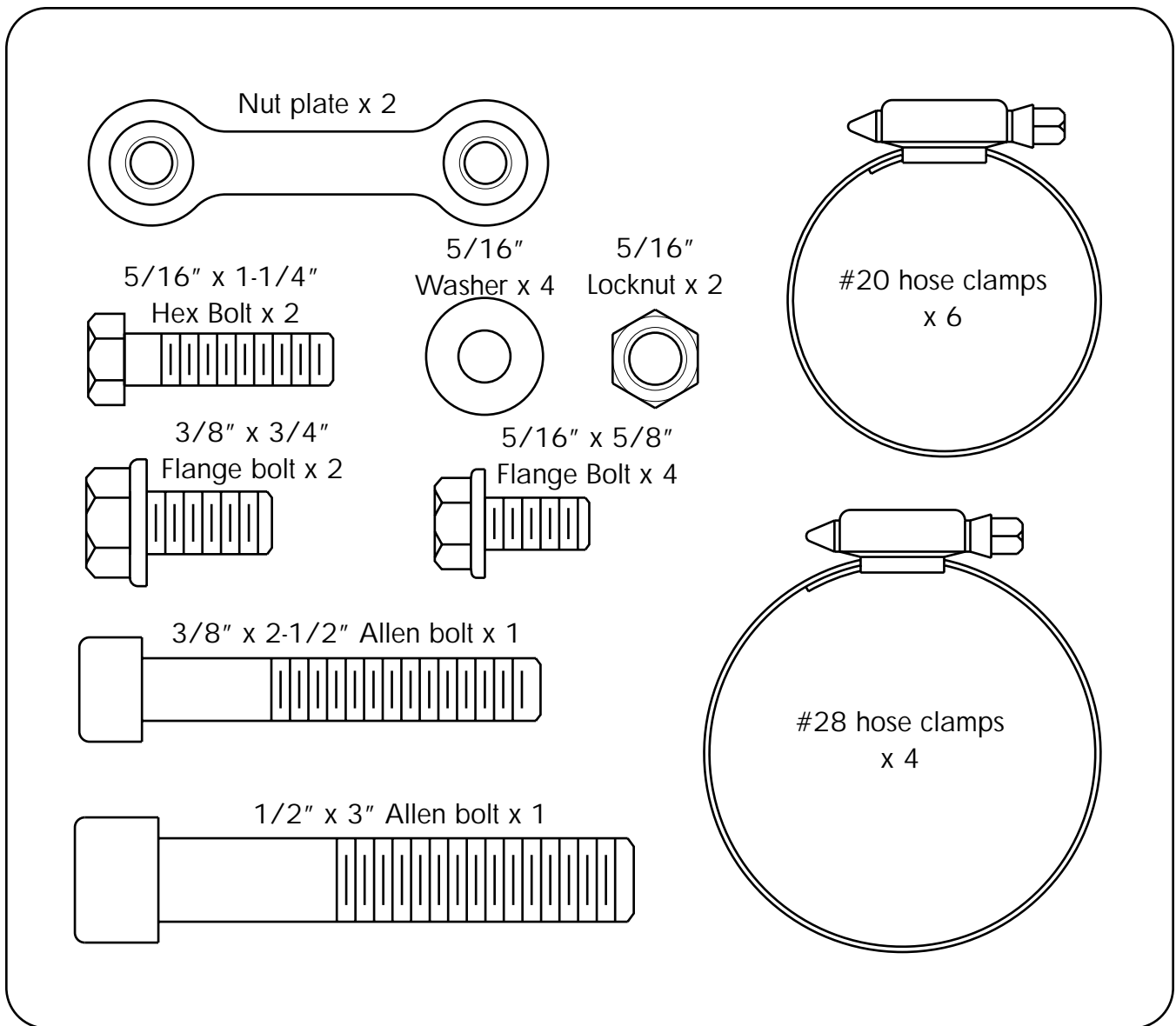


Option

Vance & Hines also offers Quiet baffles for this system, part number 21869. This will lower the sound level 2-3db on average. Order it today from your dealer or go to vanceandhines.com for more information.



PACKING LIST (All parts actual size)



HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST PIPES

1. Follow owner's manual instructions regarding use of the choke (starter enricher). If left on longer than recommended, discoloration may be accelerated.
2. Avoid long periods of idling.
3. Intake leaks can cause engine to run lean and overheat, thus turning the pipes blue.
4. Make sure there are no exhaust leaks at the junction of the exhaust pipe and cylinder head.
5. When installing a new set of chrome pipes, make sure your hands are clean and free of oil. After installation, thoroughly clean pipes with a cleaning solvent that will leave no residue (glass cleaner, alcohol, ammonia, etc.) before starting the motorcycle.

WARNING!

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

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