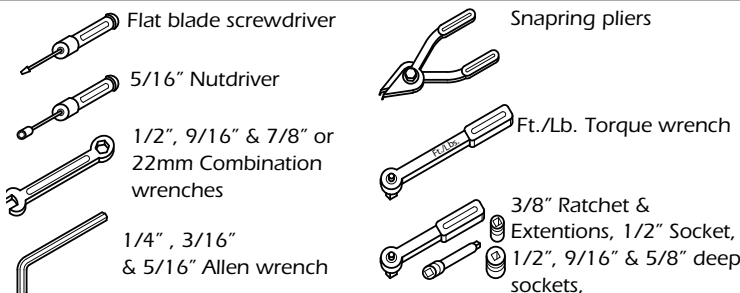




Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any questions, please call our technical support line at (562) 926-5291.

Attention installer (if other than owner), please forward this instruction sheet to the owner of this product. These instructions contain valuable information to the end user.

TOOLS REQUIRED



READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

STOCK EXHAUST SYSTEM REMOVAL

1. Remove both left and right saddlebags and set them aside.
2. Loosen the bolt from the pinch clamp that attaches the front end of each muffler to the headers.
3. Remove the two 5/16" bolts that mount the muffler to the saddlebag support frame and the OE hanger bracket. Repeat this step on the opposite muffler.
4. Remove the stock mufflers and the OE hanger brackets and set them aside. NOTE: It may be necessary to use a penetrating lubricant to loosen the muffler from the head pipe.
5. Find and unplug the O2 sensor wires from the wiring harness and remove cable tie holding front wire to frame. Feed the end of the wires through the frame so they are free from the motorcycle. NOTE: Pay attention to wire routing for re-installation.
6. Remove the right hand floor board.
7. Remove the right hand passenger floor board.
8. Remove the section of the crossover pipe connecting the left side muffler to the header and then remove the crossover pipe mount bracket on the backside of the oil pan. Save the 1/4"-20 x 3/4" screws for re-use.
9. Loosen the nut and carriage bolt holding the front head pipe to the bracket on the transmission housing.
10. Loosen the heat shield clamps on both front and rear exhaust pipes to gain better access to the header flange nuts.
11. Remove the two flange mounting nuts from each head pipe, located at the cylinder head (these will be re-used). Carefully remove the head pipes and set them aside.
12. Using a 7/8" or 22mm wrench, carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.
13. Carefully remove the exhaust port flanges and circlips from the stock exhaust system using snapping pliers. NOTE: If circlips look bent or twisted, replace them.
14. Replace the OE bracket on the transmission housing with new bracket (stamped 514-P)(supplied) and torque to 13-16 ft. lbs. (Figure 1).
15. Carefully remove the stock exhaust gaskets, and replace them with the supplied exhaust gaskets.

FIGURE 1

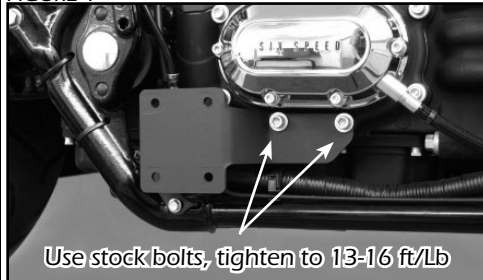


FIGURE 2



FIGURE 3



FIGURE 4

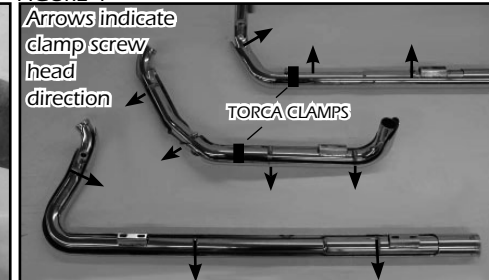
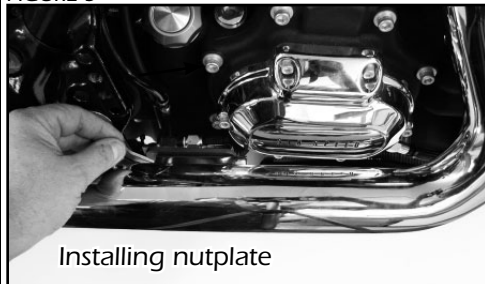


FIGURE 5



Installing nutplate

FIGURE 6

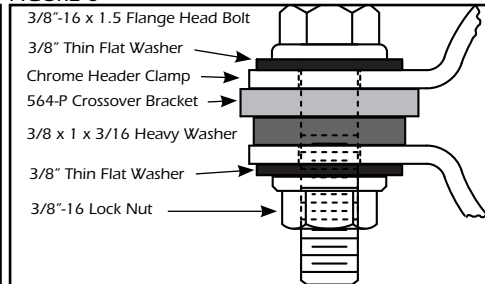
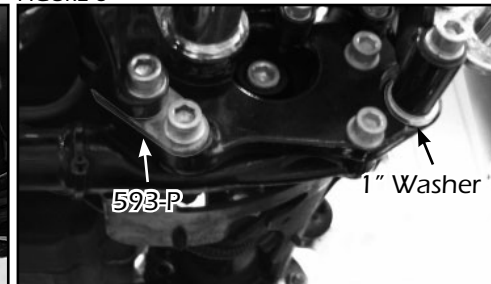


FIGURE 7



FIGURE 8



VANCE & HINES EXHAUST SYSTEM INSTALLATION

1. Install mounting brackets 523-P right side and 524-P left side (supplied) into rubber grommets in the saddle bag support frame by sliding tabs in from the front. NOTE: Lubrication may be required to make installation easier. (Figure 2)
2. Install the crossover bracket (564-P) on the oil pan using stock hardware in the same location as the stock bracket removed earlier. (Figure 8) NOTE: Do not fully tighten at this time.
3. Remove head pipes and heat shields from protective packaging. (NOTE: Removal of the end caps from D580HC and D581HC may be required). 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 mounting clips that hose clamps will loop through (Figure 3).
4. Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new head pipes. NOTE: Be careful not to get anti-seize on sensor tip, it may affect sensor function.
5. Assemble the front header pieces (D559FC, D561FC) using a TORCA band clamp (nut facing down) (supplied). NOTE: Tighten clamp enough just to hold the assembly together.
6. Lay the front cylinder head pipe assembly (D559FC, D561FC) into it's heat shield (D565HP) and loosely install the hose clamps (supplied) into mounting clips (Figure 3). The smaller #20 hose clamps are used on the head pipe, the larger #28 are used on the muffler body. NOTE: Screw heads should be accessible when the system is installed on motorcycle for adjustment purposes (Figure 4). Do not tighten at this time.
7. Lay the rear cylinder head pipe (D580FC) into it's heat shield (D582HP), and install the hose clamps as in step #6.
8. First install flanges and then install the circlips from the stock system onto both new head pipes. Using stock flange nuts, carefully install head pipes onto motorcycle. Do not tighten at this time.
9. Install the nut plates and 5/16" x 5/8" flange bolts (supplied) to attach the pipes to the bracket 514-P (Figure 5) and the mounting bracket 523-P. Do not tighten at this time.
10. Align pipes on motorcycle so the gap between the two heat shields is parallel where they run together. Tighten the exhaust port flange nuts and the 5/16" x 5/8" flange head bolts and finally the Torca band clamp.
11. Assemble the left muffler. First slide the header clamp A223CC (supplied) over the end of the crossover head pipe (D558FC). Next assemble crossover and stub (D558FC, D556RC) together using a TORCA band clamp (nut facing down) (supplied). NOTE: Tighten the band clamp just enough to hold assembly together.
12. Lay the left muffler assembly (D558FC, D556RC) into it's heat shield (D583HP) and install the hose clamps as in step #6.
13. Install TORCA Band Clamp (supplied), with the nut facing down, on the short side expanded end of the front head pipe (D561FC) (Figure 7).
14. Install the left muffler assembly - Slip the end of D558FC into the expanded end of the front header assembly and using the 5/16" x 5/8" bolts and nut plate (supplied) secure the left muffler assembly (D558FC, D556RC) to the left bracket 524-P
15. Referring to Figure 6 - Fasten the crossover pipe to the crossover bracket using supplied hardware. First place the crossover bracket between the arms of the header clamp. Next insert the 3/8"-16 x 1.5 flange head bolt with a 3/8" thin flat washer through the header clamp, crossover bracket, heavy 3/8" washer and once again the arm of the header clamp. Lastly install a 3/8" thin flat washer and 3/8"-16 lock nut. NOTE: Do not tighten at this time.
16. Align the the left header assembly so it is level with the right side and tighten (in this sequence) the TORCA band clamp at the muffler body, the 3/8"-16 nut and bolt enough to hold the 564-P bracket and A223CC clamp together firmly. NOTE: There should be a slight movement between the pipe and clamp. Next tighten the screws holding bracket to oil pan to factory specs. Finally tighten the TORCA band clamp at the front header assembly.
17. Install end caps (if removal was required) and secure with the 1/4"x20 screws removed earlier. NOTE: Removable thread locking compound on 1/4"x20 screws recommended, end caps must go into muffler body.
18. Check alignment of the heat shields and fully tighten all hose clamps, make adjustments as required.
19. Plug the O2 sensor wires back into the wiring harness and route wires away from hot areas of the motorcycle. Use the nylon cable tie (supplied) to secure the front O2 sensor wire to the frame.
20. Install Spacer (593-P), on floor board support plate (Figure 8). Remove the left 3/8" socket cap screw only and place the spacer onto floor board support plate aligning the holes in the spacer with those on the support plate. Re-install the 3/8" socket cap screw into the original hole capturing spacer. NOTE: You may use the 3/8" stock socket cap screw to temporarily hold spacer alignment while tightening the 3/8" socket cap screw.
21. Install a 3/8" lock washer (supplied) on the 3/8"-16 x 3" socket cap screw (supplied). Using this bolt re-install the floor board with ONE 1" spacing washer (supplied) (Figure 8) on the forward (right) mount. NOTE: Spacing washer are located between the floor board supports and floor board mount plate. On CVO Models, a 3/8"-16 x 1-1/2" socket cap screw (not supplied) should be used from the inside on the right mount rather than the 3/8"-16 x 3" provided bolt.
22. Re-install the right side passenger floor board and both saddle bags
23. Be sure to tighten all hardware before starting your motorcycle.
24. After installation and before starting your motorcycle, completely clean pipes and mufflers with warm soapy water and a clean soft cloth. Dry with a clean towel. NOTE: any residue, oil, or fingerprints will stain the black coating. Do NOT use anything abrasive to clean the pipes as it may remove the finish.

EXHAUST CARE - HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST SYSTEM

1. When installing a new set of black pipes, make sure your hands are clean and free of oil. After installation, thoroughly clean pipes with warm soapy water and a soft cloth. Dry with clean towel to remove any residue before starting the motorcycle. Do NOT use anything abrasive to clean pipes.
2. Avoid long periods of idling as this can cause discoloration.
3. Intake leaks can cause the engine to run lean and overheat, this could lead to discoloration.
4. Make sure there are no exhaust leaks at the junction of the exhaust pipes and cylinder head. We recommend replacing gaskets if they are worn.

VANCE & HINES OPTIONAL ACCESSORIES

FUELPAK



FUEL MANAGEMENT:

Take the guess work out of fuel injection with Fuelpak Fuel Management. Contact your local dealer or call (562) 921-0071 to order. Visit fuelpakfi.com for more information. Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

QUIET BAFFLE

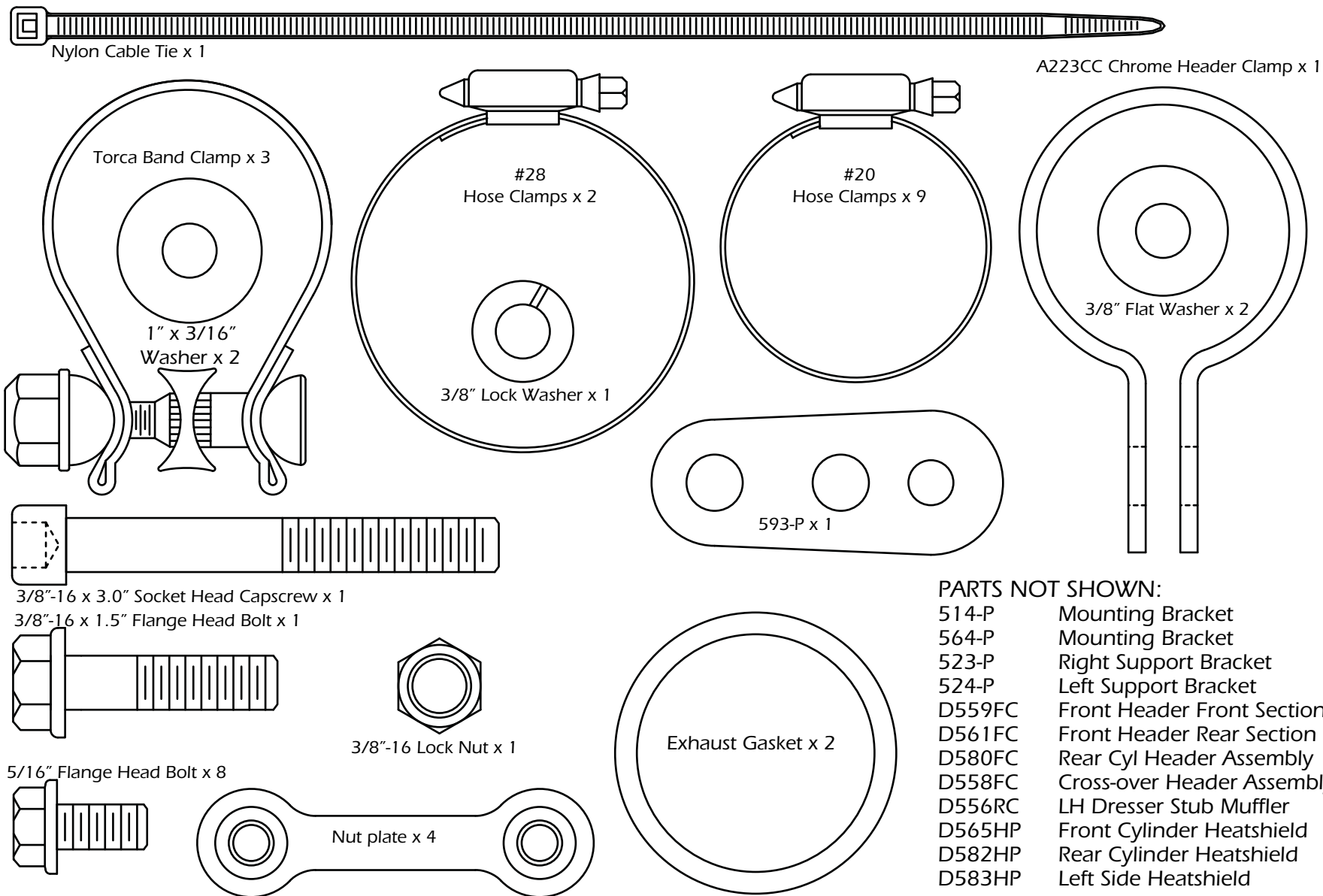


Quiet baffle P/N 21869 is available for this system. The quiet baffle will lower the sound level by 2-3db on average. Contact your local dealer to order.

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.



PACKING LIST



PARTS NOT SHOWN:

514-P	Mounting Bracket	x1
564-P	Mounting Bracket	x1
523-P	Right Support Bracket	x1
524-P	Left Support Bracket	x1
D559FC	Front Header Front Section	x1
D561FC	Front Header Rear Section	x1
D580FC	Rear Cyl Header Assembly	x1
D558FC	Cross-over Header Assembly	x1
D556RC	LH Dresser Stub Muffler	x1
D565HP	Front Cylinder Heatshield	x1
D582HP	Rear Cylinder Heatshield	x1
D583HP	Left Side Heatshield	x1

WARRANTY

Vance & Hines exhaust systems are warranted against defects in material and workmanship for a period of 90 days from the date of purchase from an authorized dealer. This warranty does not cover discoloration of chrome finishes. This warranty is limited to the repair or replacement of a product proven to be defective from normal use. Vance & Hines exhaust systems are designed to fit and operate on OEM motor and chassis. This warranty does not cover any product subject to abuse, misuse, improper installation or modification.

FUEL MANAGEMENT

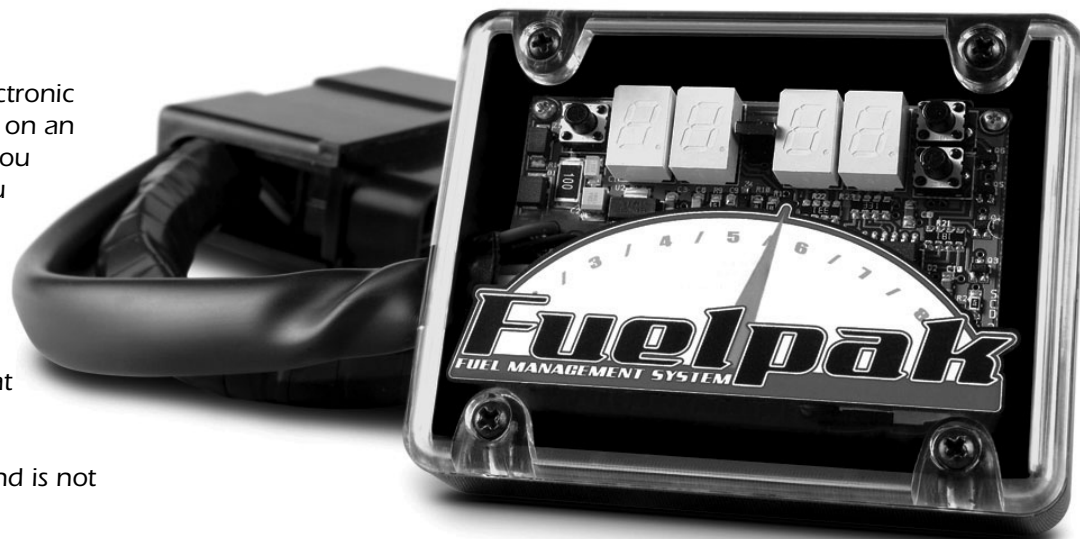
GET THE MOST OUT OF YOUR RIDING EXPERIENCE...

AN AFTERMARKET EXHAUST SYSTEM IS ONLY YOUR FIRST STEP, NOW YOU NEED FUEL MANAGEMENT.

NOW YOU NEED FUELPAK.

Your fuel injected Harley-Davidson® is equipped with an ECU (electronic control unit) that's programmed to deliver fuel to the motor based on an air/fuel ratio for a stock air filter and stock exhaust system. When you install a performance exhaust system, your airflow changes, so you need a fuel management system that adjusts your air/fuel ratio to match the changes. That fuel management system is Fuelpak. Fuelpak adds and takes away fuel, allowing for a more precise range of refinement in your air/fuel ratio. Get the perfect fuel management combination with your Vance & Hines exhaust system, get Fuelpak. For more information visit the tuning center at fuelpakfi.com

NOTICE: Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.



BILLET SLASH-CUT TIPS - 16921



For even more style, customize your exhaust system with the Billet Slash-cut end tips.

FISHTAIL TIPS - 16923



Fishtail end tips are 100% designed and manufactured by Vance & Hines and include the same level of quality and performance as our exhaust systems.

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VANCEANDHINES.COM