







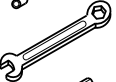



MORE POWER : LESS NOISE



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

-  Flat blade screwdriver
-  Snapping pliers
-  5/16" Nutdriver
-  Ft./Lb. Torque wrench
-  1/2", 9/16" & 7/8" or 22mm Combination wrenches
-  3/8" Ratchet & Extensions, 1/2" Socket, 7/16", 1/2" & 9/16" deep sockets, 1/4" & 3/8" Allen sockets
-  3/16" & 5/16" Allen wrench
-  T45 & T50 Torx wrenches

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 on the front end of each muffler.
3. Remove the two 5/16" bolts that mount the muffler to the saddlebag supports. Repeat this step on the opposite muffler.
4. Remove the stock mufflers with sliding hangers 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 both passenger floor boards.
8. Loosen the heat shield clamps on both front and rear exhaust pipes.
9. Loosen the rear head pipe clamp located behind the rear cylinder. Remove the section of head pipe connecting the left side muffler.
10. Remove the nut and carriage bolt holding the front head pipe to the bracket on the transmission housing.
11. Remove the two mounting nuts from each head pipe, located at the cylinder head. 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. Remove the rear cylinder bracket by removing the two starter mounting bolts. Re-install bolts and torque to 13-16 ft. lbs. (Figure 1).
14. Replace the bracket on the transmission housing with new bracket (stamped 451-P)(supplied) and torque to 13-16 ft. lbs. Use ball end of Allen wrench to tighten indicated bolt (Figure 2).
15. 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. Check condition of stock exhaust gaskets. Replace if worn or damaged. (Recommended replacement exhaust port gaskets, Screamin' Eagle part number 17048-98).

FIGURE 1



FIGURE 2



FIGURE 3

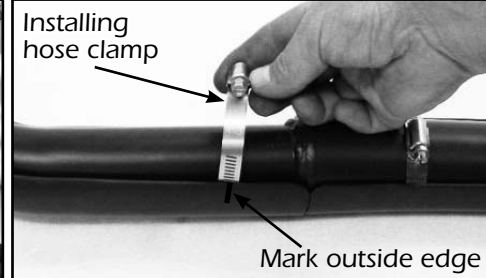


FIGURE 4

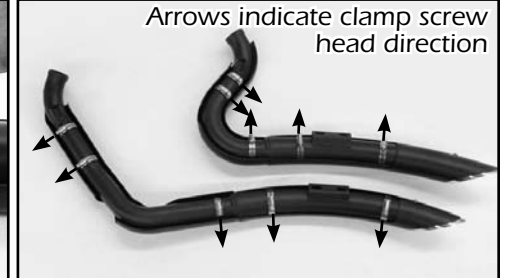


FIGURE 5

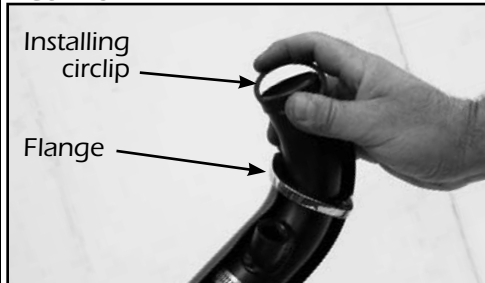


FIGURE 6



FIGURE 7

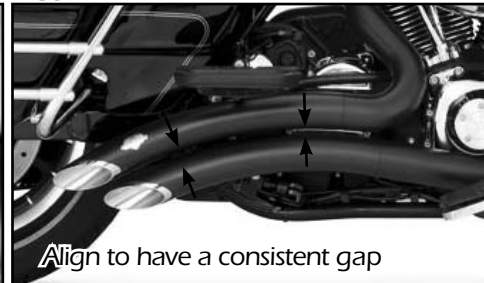


FIGURE 8



VANCE & HINES EXHAUST SYSTEM INSTALLATION

1. 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 pencil, lightly mark outside edge of each heat shield to show location of mounting clips where hose clamps will loop through (Figure 3) NOTE: Pencil marks can be erased if care is taken not to harm coating.
2. Lay head pipes (D540FP & D541FP) into head pipe heat shields (D540HP & D541HP) respectively. Make sure alignment clip on head pipe fits inside heat shield. Loosely install #20 hose clamps by feeding tail end of clamp into heat shield clips (Figure 3). Take note of screw head direction (Figure 4). Screw head should be accessible when system is installed on motorcycle for adjustment purposes. NOTE: Do not tighten at this time.
3. Using the #28 hose clamps install the muffler heat shields with the D322HP on the front head pipe and the D325HP on the rear. Take note of screw head direction (Figure 4). NOTE: Do not tighten at this time.
4. Install circlips and flanges from the stock system onto both new head pipes (Figure 5).
5. Apply a small amount of anti-seize compound to the threads of the oxygen 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.
6. Using stock flange nuts, carefully install each head pipe into its exhaust port, starting with the rear cylinder. Assistance may be required. NOTE: Do not tighten at this time.
7. Slide nutplates inside brackets that are welded to backside of each muffler body (Figure 6). While holding nutplates in place, attach muffler bodies to mounting bracket 351-P using four 5/16"x 5/8" flange head bolts (supplied). Leave them loose at this time.
8. Align pipes on motorcycle so that the gap between the two muffler bodies is consistent from front to rear and tighten exhaust port flange nuts (Figure 7).
9. Using two 1" x 3/16" large washers (supplied) on each of the two 1/2" x 1 1/4" allen bolts (supplied), re-install the right hand floor board.
10. Re-install the right hand passenger floor board using the supplied relocater bracket (Stamped 452-P) (Figure 8), Low profile allen bolt and lock washer (supplied). NOTE: This bracket should only be mounted in the highest possible position.
11. Re-install left hand passenger floor board. OPTIONAL KIT: If you would like to raise the left hand passenger floor board to match the right please order Vance & Hines kit number 16931.
12. 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.
13. Re-install saddlebags.
14. After installation and before starting your motorcycle, completely clean pipes and heat shields 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.
15. Be sure to tighten all hardware before starting motorcycle. We also recommend checking that the Chrome end cap screws are tight from time to time.

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.

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.



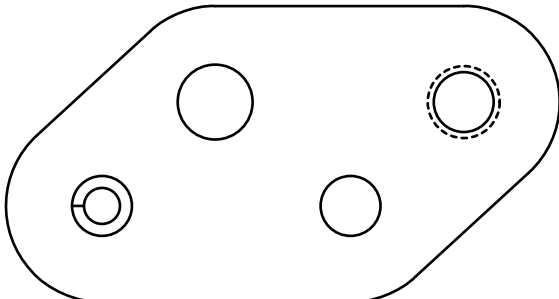
PACKING LIST

MORE POWER : LESS NOISE

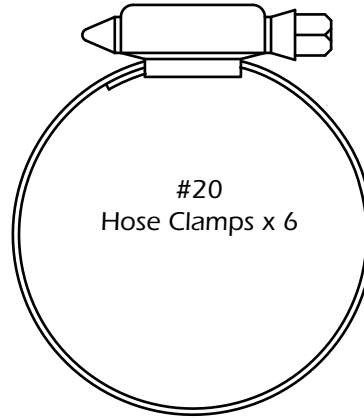
ALL PARTS SHOWN ARE ACTUAL SIZE



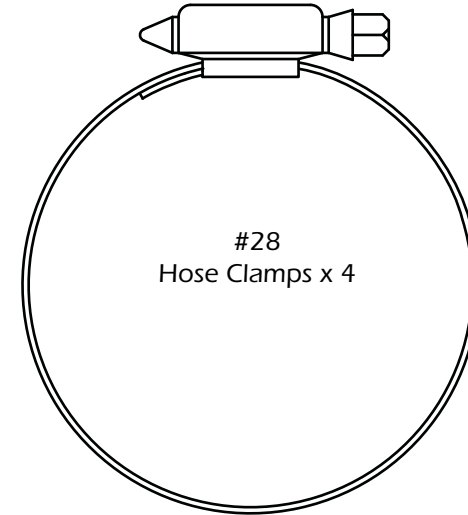
Nylon Cable Tie x 1



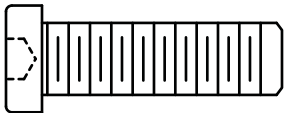
452-P Floor board Relocator Bracket x 1



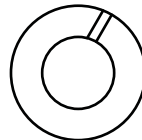
#20
Hose Clamps x 6



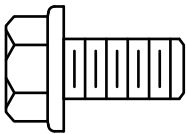
#28
Hose Clamps x 4



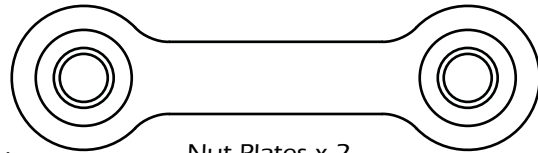
3/8" x 1 1/4" Low Allen Bolt x 1



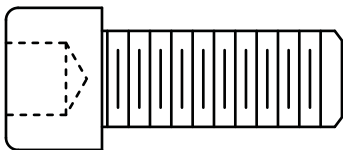
3/8" Lock Washer x 1



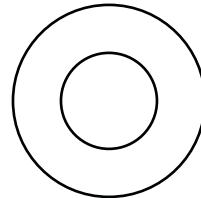
5/16" x 5/8" Flange Head
Bolts x 4



Nut Plates x 2



1/2" x 1 1/4" Allen Bolts x 2



1" x 3/16"
Washers x 4

PARTS NOT SHOWN:

451-P	Bracket	x1
D540FP	Front head pipe assy	x1
D541FP	Rear head pipe assy	x1
D540HP	Front heat shield	x1
D541HP	Rear heat shield	x1
D322HP	Front muffler heat shield	x1
D325HP	Rear muffler heat shield	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.



MORE POWER : LESS NOISE

13861 ROSECRANS AVENUE / SANTA FE SPRINGS, CA 90670
SALES: (562) 921-5388 / TECHNICAL: (562) 926-5291 / FAX: (562) 802-0110
VANCEANDHINES.COM