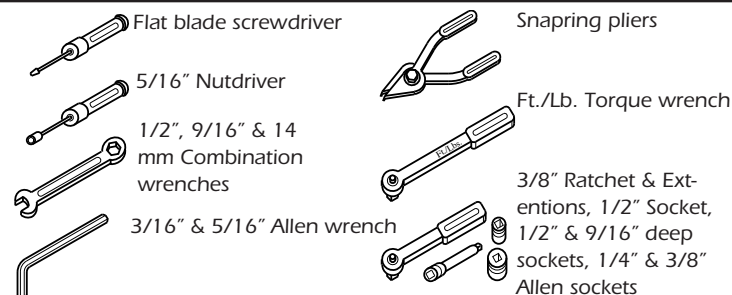




Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any 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. Remove right side cover.
2. Loosen the pinch clamp bolt on the front end of muffler(s). NOTE: On OE two into one right side only exhaust systems, there is no left side removal of mufflers required.
3. Remove the two 5/16" bolts and washers that mount the muffler(s) to the saddlebag supports.
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. Locate and unplug the O2 sensor wires from the wiring harness (Grey and Black connectors located behind right side panel) and remove cable ties holding wires 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 head pipe clamp connecting the left side muffler to the header and the mount bracket on the backside of the oil pan. Remove the crossover section of head pipe and head pipe clamp (OE dual muffler systems only).
9. Loosen the heat shield clamps on both front and rear exhaust pipes.
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. This may be easier if the heat shields are loosened first.
12. Using a 14mm wrench, carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.
13. Replace the bracket on the transmission housing with new bracket (stamped 508-P)(supplied) and torque to 13-16 ft. lbs. Use ball end of Allen wrench to tighten indicated bolt (Figure 1).
14. 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.
15. Remove stock exhaust gaskets and replace them with included gaskets. V&H kit #22899 (see accessories) is available for future use.

FIGURE 1

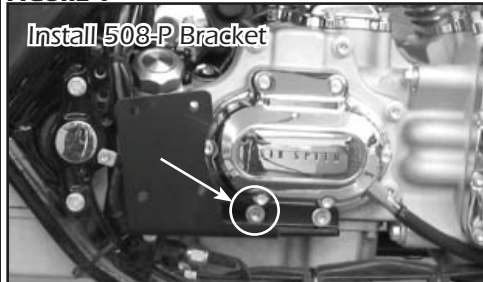


FIGURE 2

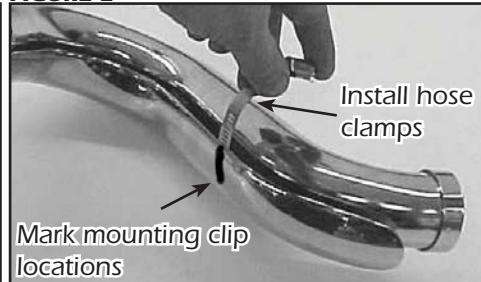


FIGURE 3

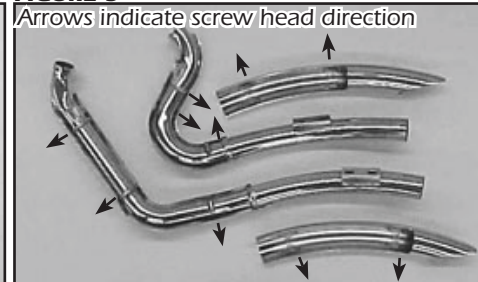


FIGURE 4



FIGURE 5



FIGURE 6

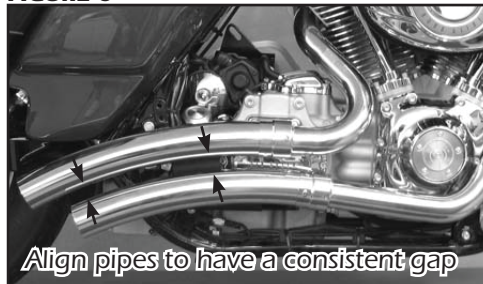


FIGURE 7

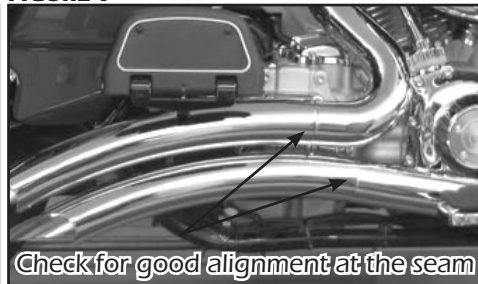


FIGURE 8



1. Remove head pipes and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as 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 2).
2. Lay head pipes into heat shields and loosely install the #20 hose clamps (supplied) into mounting clips (Figure 3). NOTE: Muffler heat shields will be installed after pipes are on the motorcycle. Screw heads should be accessible when the system is installed on motorcycle for adjustment purposes (Figure 3). Do not tighten at this time.
3. Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new head pipes, (Grey connector into front headpipe, Black connector into rear headpipe). NOTE: Be careful not to get anti-seize on sensor tip, it may affect sensor function.
4. Install circlips and flanges from stock system onto both new head pipes (Figure 4).
5. Using stock flange nuts, carefully install head pipes onto motorcycle. Do not tighten at this time.
6. Use the nut plates and 5/16" x 5/8" flange bolts (supplied) to attach the pipes to the bracket (Figure 5). Do not tighten at this time.
7. Align pipes on motorcycle so the gap between the two muffler bodies is consistent from front to rear (Figure 6). Tighten the exhaust port flange nuts and the 5/16" x 5/8" flange head bolts
8. Using the #28 hose clamps (supplied) install the muffler heat shields beginning with the D308HC on the front head pipe followed by the D309HC on the rear head pipe. Screw heads should be accessible for adjustment purposes (Figure 4). Do not tighten at this time.
9. Adjust all heat shields for the best alignment at the seam where they meet (Figure 7) and tighten all the hose clamps.
10. Install Spacer (593-P), on floor board support plate. Remove the left 3/8" capscrew 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" capscrew into the original hole securing spacer. NOTE: You may use the 3/8"-16 x 1 1/2" bolt (supplied) to temporarily hold spacer alignment while tightening the 3/8" capscrew.
11. Install a 3/8" lock washer (supplied) on both of the 3/8"-16 bolts (supplied). Using these bolts re-install the floor board using a 3/8"-16 x 3" bolt with TWO spacing washers (supplied) on the forward (right) mount and the 3/8"-16 x 1 1/2" bolt with ONE spacing washer (supplied) on the rear (left) mount. NOTE: Spacing washers are located between the floor board supports and floor board mount plate. On CVO Models, a 3/8"-16 x 1-1/2" socket head cap screw (not supplied) should be used from the inside on the right mount rather than the 3/8"-16 x 3" provided bolt.
12. Re-install the right hand passenger floor board using the supplied relocater bracket (Stamped 579-P), low profile allen bolt and lock washer (supplied). NOTE: This bracket should only be mounted in the highest possible position on the bike frame, and the floorboard should be mounted in the upper two bracket holes (Figure 8).
13. 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. NOTE: 16931 Relocation kit will not fit model years 2009 to Present.
14. Route O2 sensor wires away from hot areas of the motorcycle. Use the nylon cable ties (supplied) to secure the O2 sensor wires to the frame. Plug the O2 sensor wires back into the wiring harness, grey into grey, black into black. Re-install the right side panel.
15. Re-install saddlebags.
16. Be sure to tighten all hardware before starting your motorcycle.
17. After installation and before starting the motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave residue. NOTE: Any residue, oil, or fingerprints will stain the chrome when the metal heats up.

EXHAUST CARE - HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST SYSTEM

1. 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 soft cloth and cleaning solvent that will leave no residue (chrome wax / polish, glass cleaner, alcohol, ammonia, etc...) before starting the motorcycle.
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, P/N 61003. 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.

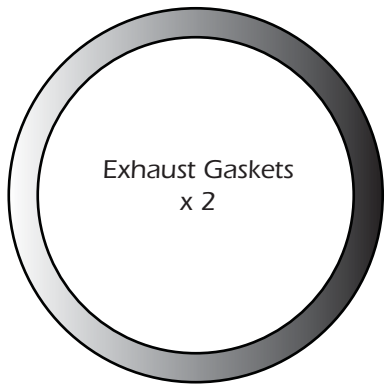
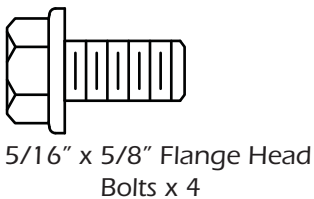
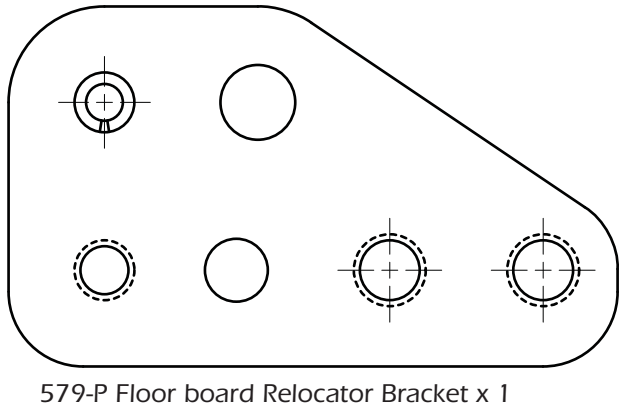
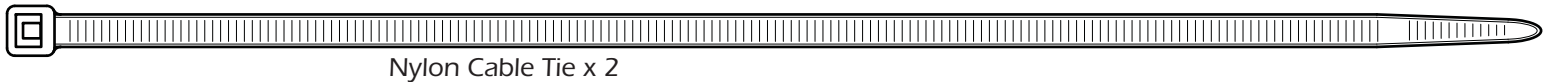
#22899 HD 2010 Exhaust Gasket Kit (pair)

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.

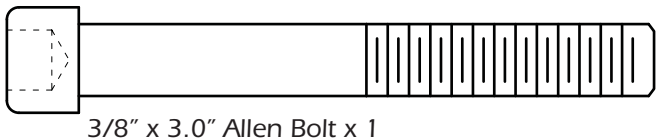
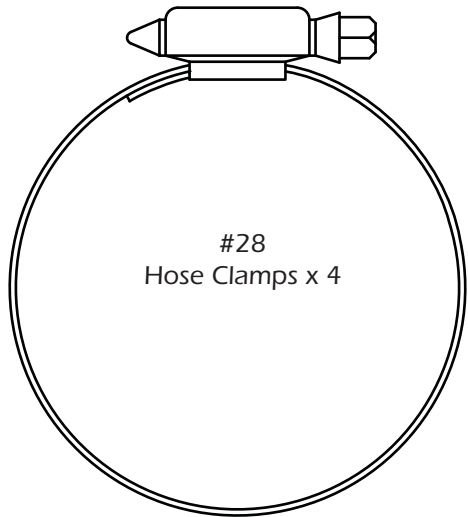
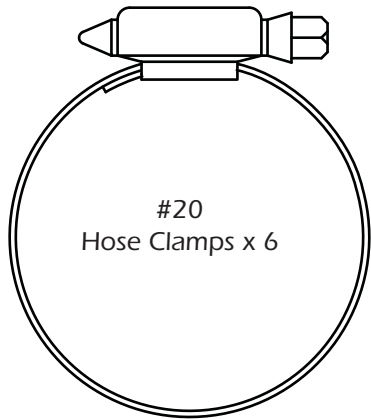
ALL PARTS SHOWN ARE ACTUAL SIZE



PACKING LIST



1" x 3/16" Washers x 3



PARTS NOT SHOWN:

508-P	Bracket	X1
593-P	Spacer	X1
D532FC	Front head pipe	X1
D533FC	Rear head pipe	X1
D532HC	Front heat shield	X1
D533HC	Rear heat shield	X1
D308HC	Front muffler heat shield	X1
D309HC	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.



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