



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
- #3 Phillips Head
- 5/16" Nutdriver
- 1/2", 9/16" & 14mm Combination wrenches
- 3/16" & 5/16" Allen wrench
- T45 & T50 Torx wrenches
- Snapping pliers
- 3/8" Ratchet, extensions
- 1/2" & 9/16" Sockets
- 3/4" Deep Socket

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

STOCK EXHAUST SYSTEM REMOVAL

1. Remove the seat, locate the rear O2 sensor connector and unplug the sensor from the harness. Remove the battery and feed the sensor cable end through the frame. NOTE: Pay attention to wire routing for re-installation. Refer to service manual for proper battery removal.
2. Unplug the front sensor (located behind the rectifier) from harness and feed the end of the wire through the frame, freeing it from motorcycle.
3. On FLSTC, FLSTF, and FLSTN (floorboard models), loosen the right hand floor board mounting bolts to gain clearance for exhaust removal and installation.
4. If equipped, unbolt the carriage bolt and clamp attached to the bracket under the right side transmission cover.
5. On FLSTF, FXS and FLSTN (foot peg models), you will need to remove the right side passenger footpeg and hanger, as this is attached to the exhaust mount bracket. Replace the passenger foot peg assembly using the 3/8" x 2 1/2" Allen bolt (supplied).
6. Loosen the heat shield clamps on both front and rear exhaust pipes.
7. Remove the two mounting nuts from each head pipe, located at the cylinder head.
8. Remove the nuts attaching the exhaust mount bracket to the frame.
9. Remove the entire exhaust system and set it aside.
10. Remove the two lower mounting studs from the frame using the 3/4" deep socket (Figure 1).
11. If equipped, remove the bracket from under the right side transmission cover.
12. Using 14mm wrench, carefully remove the O2 sensors from the stock header and save them for re-use with the new system.
13. Carefully remove exhaust port flanges and circlips from the stock exhaust system using snapping pliers. NOTE: Replace bent or damaged circlips.
14. Remove stock exhaust gaskets and replace them with the supplied exhaust gaskets. NOTE: Replacement gaskets HD Screaming Eagle #17048-98 or equivalent.

FIGURE 1

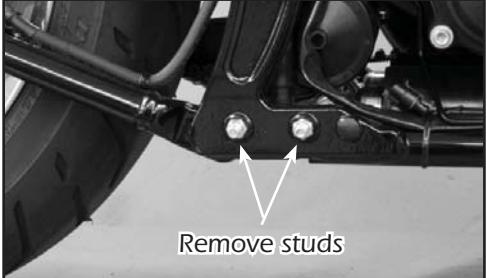


FIGURE 2



FIGURE 3

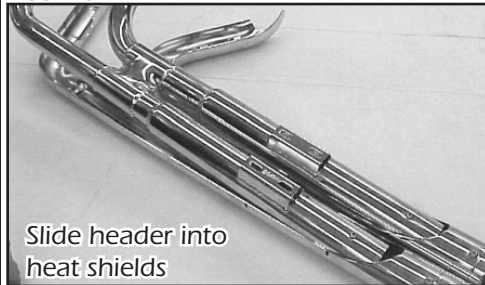


FIGURE 4

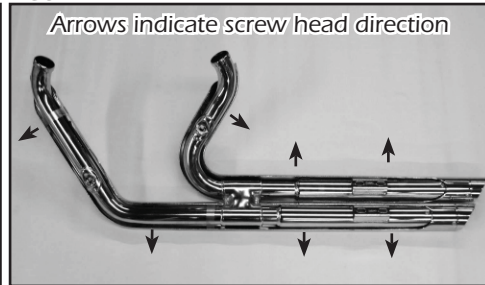
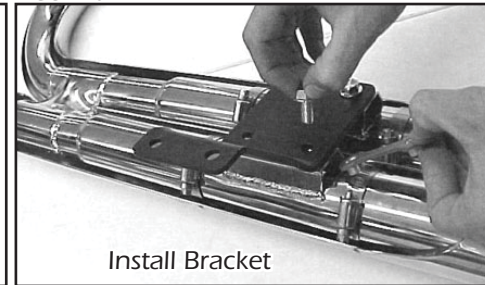


FIGURE 5



FIGURE 6



VANCE & HINES EXHAUST SYSTEM INSTALLATION

1. Remove header and heat shields from protective packaging. NOTE: Removal of end cap 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 2).
2. Slide header into heat shields tail end first, engaging end caps (Figure 3).
3. Install end caps (if removal was necessary) into tail end of each heat shield engaging head pipe and heat shield. Align mounting hole with end cap hole. Install and tighten 1/4"-20 button head screws. NOTE: Removable thread locking compound is recommended.
4. Install each hose clamp by feeding tail end of clamps into heat shield clips. Use #20 hose clamps (supplied) on head pipes and #28 hose clamps (supplied) on muffler sections. Take note of location of clamp screw head direction (Figure 2 & 4). Screw head must be accessible when system is installed on motorcycle for adjustment purposes.
5. Apply a small amount of anti-seize compound to the threads of the O2 sensors removed from the stock head pipes and install them into the new head pipes. NOTE: Install O2 sensor with gray connector (short) in the front head pipe and the O2 sensor with black connector (long) into rear head pipe. Be careful not to get anti-seize on sensor tip, it may affect sensor function.
6. Install circlips and flanges from stock system onto the new head pipe (Figure 5).
7. Attach mounting bracket (Stamped 330-P)(supplied) using four 5/16"x5/8" flange bolts and two nut plates (supplied). Slide nut plates inside brackets that are welded to the backside of each muffler (Figure 6). Leave them loose at this time. Use this procedure for both upper and lower muffler mounting positions.
8. Install complete assembly into exhaust ports (rear port first). Use stock flange nuts, do not tighten at this time. Install exhaust bracket to motorcycle frame rail using two 3/8"x3/4" flange bolts (supplied). Do not tighten at this time.
9. Tighten cylinder port exhaust flange nuts on front and rear cylinders. Now tighten the 5/16"x5/8" flange bolts (supplied) and the 3/8"x3/4" flange bolts (supplied) attaching the bracket to the frame.
10. Feed connector for the rear O2 sensor (Black) through the frame and under the seat. Re-install battery, plug the sensor into the stock wiring connector.
11. Feed connector for the front O2 (Gray) sensor through the frame and into the holder on the frame behind the rectifier. Plug the sensor into the stock wiring connector.
12. Re-tighten floor board mounting bolts on models so equipped.
13. Be sure to tighten all hardware before starting motorcycle.
14. After installation and before starting the motorcycle, completely clean pipes and mufflers with warm soapy water and a clean soft cloth that will not leave a 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 warm soapy water and a soft cloth. Dry with clean towel to remove any 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. 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

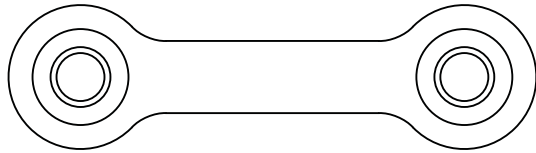


Quiet baffle P/N 21869 is available for this system. The quiet baffle will lower the sound level by 2-3db on average. Contact your local dealer to order.

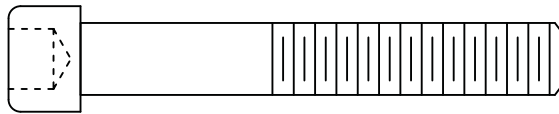
PLEASE NOTE: Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation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



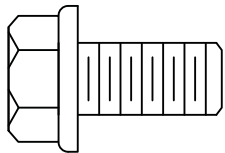
PACKING LIST



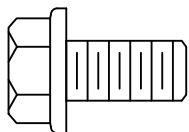
Nut plate x 2



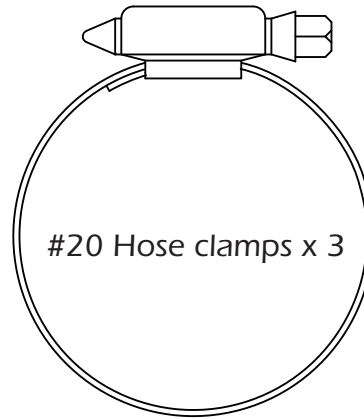
3/8" x 2-1/2" Allen bolt x 1



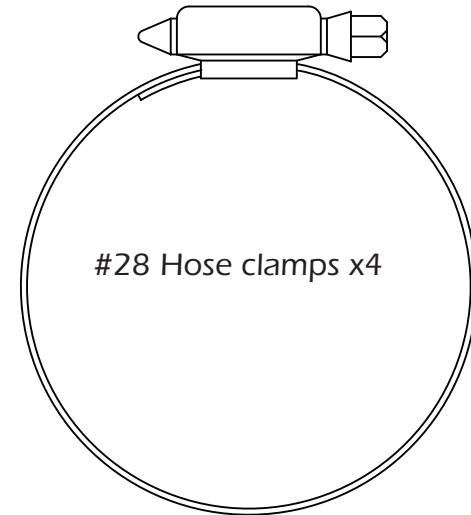
3/8" x 3/4" Flange bolts x 2



5/16" x 5/8" Flange bolts x 4



#20 Hose clamps x 3



#28 Hose clamps x4



Exhaust Gaskets x 2

PARTS NOT SHOWN:

- 330-P Bracket x1
- D462FC Head pipe x1
- D460HC Front heat shield x1
- D461HC Rear 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.

MORE POWER : LESS NOISE

ALL PARTS SHOWN ARE ACTUAL SIZE

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) 921-7461 / TECHNICAL: (562) 926-5291 / FAX: (562) 802-0110
VANCEANDHINES.COM