



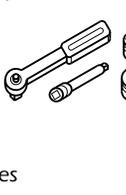
**MORE POWER : LESS NOISE**



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**

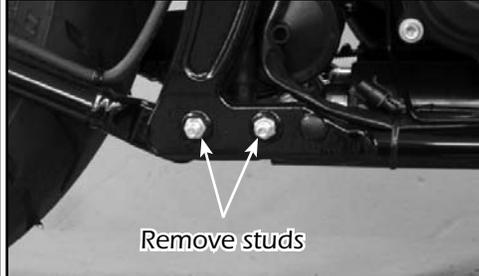
-  Flat blade screwdriver
-  #3 Phillips Head Nutdriver
-  1/2", 9/16" & 14mm Combination wrenches
-  3/16" & 5/16" Allen wrench
-  T45 & T50 Torx wrenches
-  Snapping pliers
-  3/8" Ratchet, extensions, 1/2", 9/16" Sockets, and 3/4", 15mm deep sockets

**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. Examine stock exhaust gaskets and replace them if they are damaged or torn. NOTE: Replacement gaskets HD 65324-83B or equivalent.

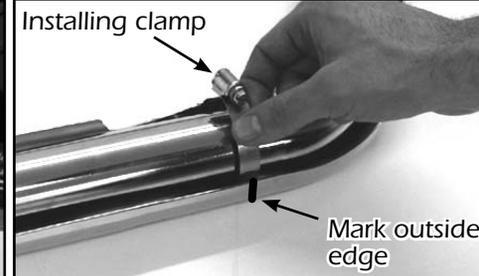
**FIGURE 1**



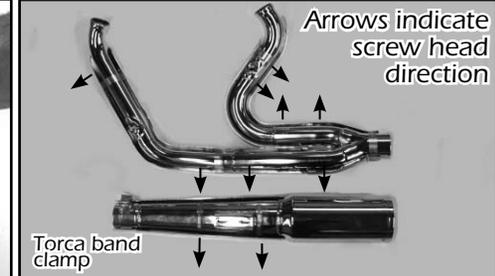
**FIGURE 2**



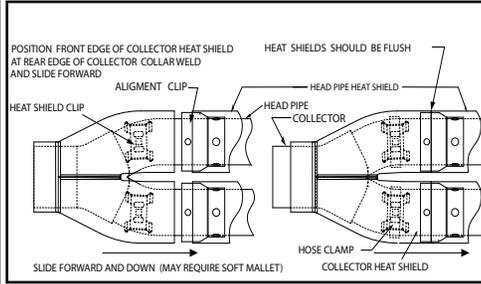
**FIGURE 3**



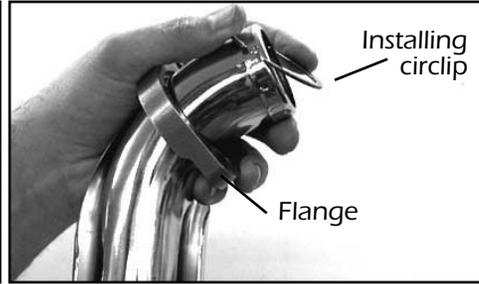
**FIGURE 4**



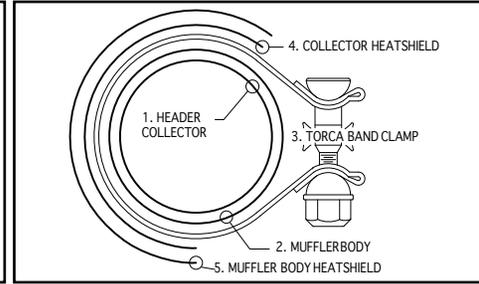
**FIGURE 5**



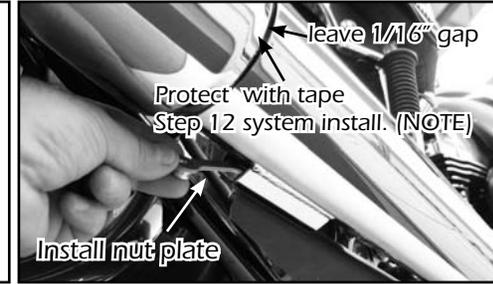
**FIGURE 6**



**FIGURE 7**



**FIGURE 8**



**Note: Black Ceramic exhaust systems require special care during installation. Applying low tack tape (painters or equivalent) to edges or areas where movement or scratching can occur during installation can be very helpful.**

1. Attach mounting bracket 581-P to frame using two 3/8" x 3/4" flange head bolts (supplied) (Figure 2). NOTE: If equipped, the plastic plugs must be removed
2. Remove head pipes and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as a blanket or carpet large enough to fully protect heat shields. Using a pencil, lightly mark the outside edge of each heat shield to show location of mounting clips that hose clamps will loop. (Figure 3).
3. Lay head pipes into their respective heat shields. Use care when installing the #24 and #20 hose clamps to avoid damaging the coating; install by carefully feeding through the tail end of clamps. Install # 24 hose clamps on the four heat shield clips located closest to the collector end of the heat shield. The #20 hose clamps are inserted into the three other heat shield clips. (Figure 3). Take note of clamp screw head direction (Figure 4). Screw head must be accessible when system is installed on motorcycle for adjustment purposes. NOTE: To avoid excessive movement of heat shield during installation, only finger tighten at this time.
4. Apply a small amount of anti-seize compound to the threads of the oxygen sensors and install them into the new head pipe. NOTE: Install O2 sensor with the gray connector (short) into the front head pipe and the O2 sensor with the black connector (long) into the rear head pipe. Be careful not to get anti-seize on the snsr tip, it may affect sensor function
5. Install exhaust port flanges and circlips (from stock system) onto head pipes (Figure 6). NOTE: Use care when installing flanges, using a low tack tape (blue painters or equivalent) if necessary to protect the edges of the heat shields from damage
6. Using stock flange nuts, carefully install head pipes into exhaust ports, starting with the rear cylinder. Assistance may be required. NOTE: Do not tighten at this time.
7. Slide the nut plate (supplied) into the bracket that is welded to the back side of the muffler. Loosely install two 5/16" flange head bolts (supplied) through 581-P bracket into nut plate.
8. Install Torca band clamp with bolt facing down (supplied) onto end of muffler body (Figure 3 and 7).

9. Install collector heat shield onto header by sliding it on from the rear (Figure 5). NOTE: Do not force collector heat shield directly onto header from the side, damage to collector heat shield will result. Attach collector heat shield with two #24 hose clamps (supplied). NOTE: Finger tighten at this time.
10. Holding the muffler Body (D733RP) in a vertical position (large end down) slip the muffler body heat shield (stamped D739HP) onto the muffler body from front to back and secure with a #44 hose clamp in the front and a #56 hose clamp in the rear. (Figure 4) NOTE: Use care when installing heat shield to avoid damaging the muffler body coating. Use a low tack tape (painters tape or equivalent) to protect the transition on the muffler body (D730RC) between tapered section and 4.5" round end section during installation. Finger tighten the hose clamps at this time to prevent the heat shield from excessive movement. (Figure 4).
11. Install muffler assembly onto collector of header assembly (Figure 7). Attach muffler assembly to installed bracket and secure with 5/16" Flange head bolts (Supplied).
12. Tighten muffler body heat shield and leave about 1/16" even gap on the rear between heat shield and muffler body (Figure 8). Make sure top edge of heat shield is aligned with centerline of muffler body to maintain acceptable clearance.
13. Tighten the exhaust port flange nuts, nut plate bolts, Torca band clamp and 5/16" flange head bolts at the bracket.
14. Tighten hose clamps securing header heat shields and collector heat shield making sure that they are flush. (Figure 5)
15. Feed wire for the rear O2 sensor (Black) through the frame and under the seat. Re-install battery, plug the sensor into the stock wiring connector.
16. Feed connector for the front oxygen sensor (Gray) through the frame and into the holder on the frame behind rectifier. Plug the sensor into the stock wiring connector.
17. Tighten the floor board mounting bolts on models so equipped.
18. Be sure to tighten all hardware before starting your motorcycle.
19. After installation and before starting motorcycle, remove protective tape and 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 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](http://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 21904 is available for this system. The quiet baffle will lower the sound level by 2-3db on average. Contact your local dealer to order.

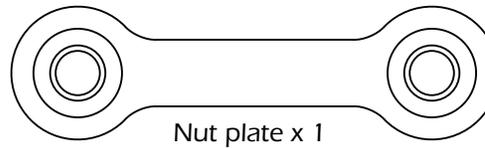
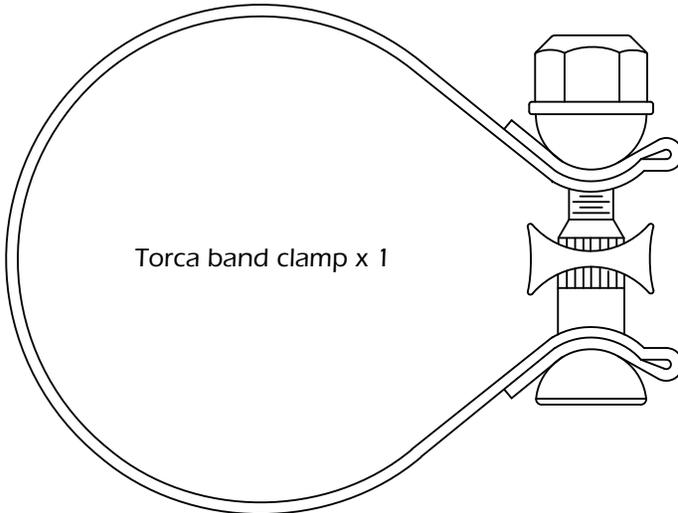
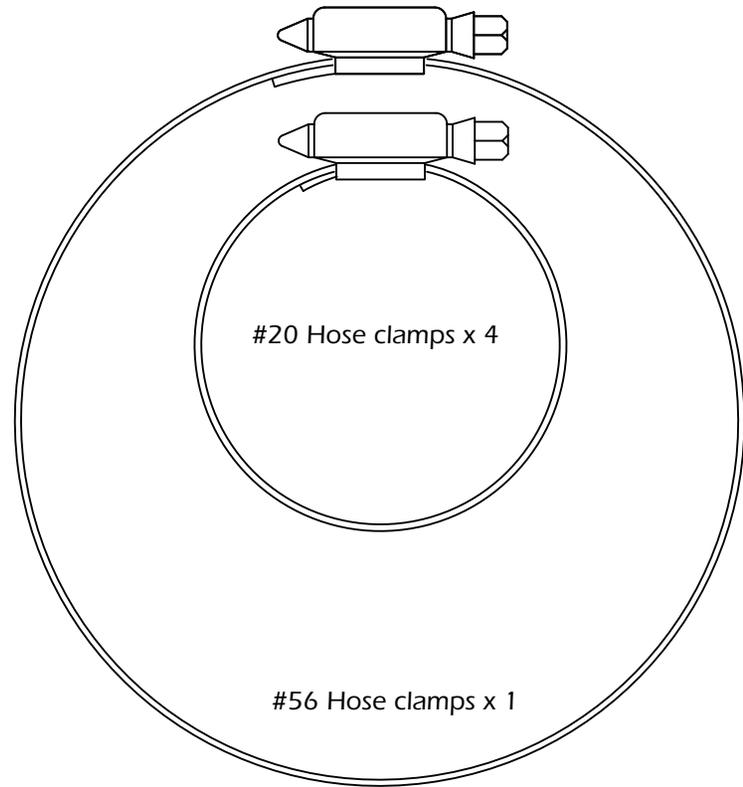
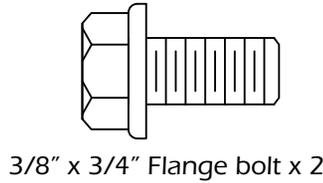
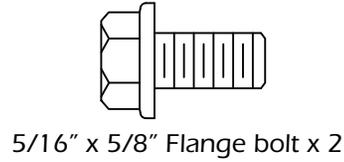
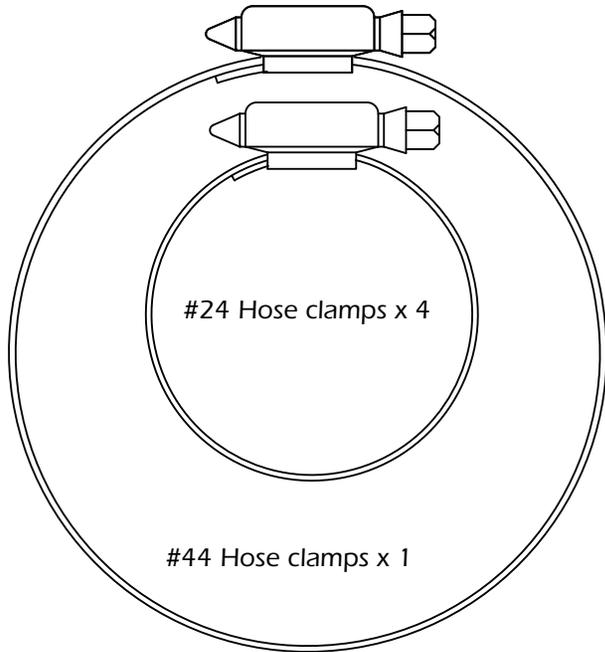
PLEASE NOTE: Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation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



**PACKING LIST**

**MORE POWER : LESS NOISE**

ALL PARTS SHOWN ARE ACTUAL SIZE



**PARTS NOT SHOWN:**

- |        |                          |    |
|--------|--------------------------|----|
| 581-P  | Bracket                  | x1 |
| D650FC | Header                   | x1 |
| D733RP | Muffler body             | x1 |
| D652HP | Front heat shield        | x1 |
| D653HP | Rear heat shield         | x1 |
| A205HP | Collector heat shield    | x1 |
| D739HP | Muffler body 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](http://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

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