



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
- 1/4" & 5/16" Nutdriver
- 1/2", 9/16" & 7/8" or 22mm Combination wrenches
- 5/32", 3/16" & 5/16" Allen wrench
- T45 & T50 Torx wrenches
- Snapping pliers
- 3/8" Ratchet, extensions
- 1/2", 9/16" Sockets, and 15mm deep socket

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

**STOCK EXHAUST
SYSTEM REMOVAL**

NOTE: These instructions are written for late model motorcycles equipped with O2 sensors. If you are installing these pipes on a bike which is not equipped with O2 sensors, ignore all instructions which reference them. Additionally you will need to purchase an O2 sensor block off kit P/N 16925.

1. Under the oil tank on the right hand side, locate the rear O2 sensor connector. Unplug sensor and feed the end of wire through the frame freeing it from motorcycle. NOTE: Pay attention to wire routing for re-installation.
2. Open the plastic cover above the rectifier on front of the frame to gain access to the front O2 sensor connector. Unplug sensor from harness. Remove cable tie holding wire to frame and feed the end of the wire through, freeing it from motorcycle.
3. On FLSTC, FLSTF, FLSTN and FLSTSC models, loosen the right hand floor board mounting bolts to gain clearance for exhaust removal and installation.
4. Loosen the heat shield clamps on both front and rear exhaust pipes.
5. Remove the two mounting nuts from each head pipe, located at the cylinder head.

6. Remove the nuts attaching the exhaust mount bracket to the frame.
7. On FLSTN, FLSTF and FXSTD 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).
8. If equipped, unbolt the carriage bolt and clamp attached to the bracket under the right side transmission cover.
9. Remove the entire exhaust system and set it aside.
10. 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.
11. Remove the two lower mounting studs from the frame (Figure 1).
12. Carefully remove exhaust port flanges and circlips from the stock exhaust system using snapping pliers. NOTE: Replace bent or damaged circlips. Check exhaust port gasket condition. Recommended replacement exhaust port gaskets, Harley part number: 17048-98 or 65324-83A.

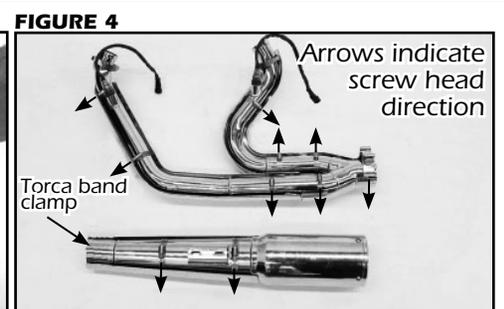
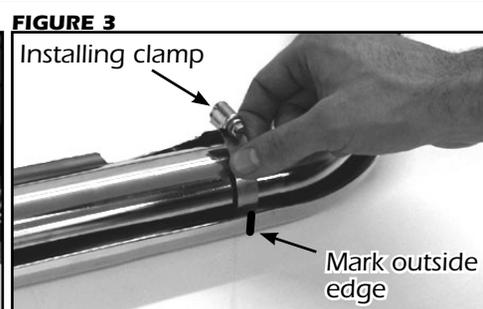
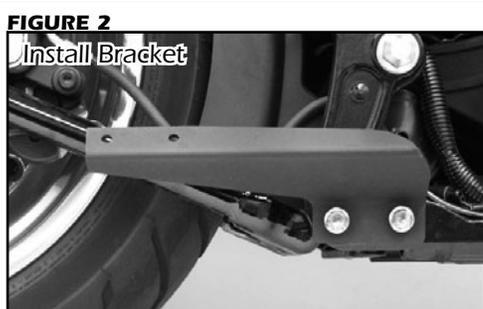
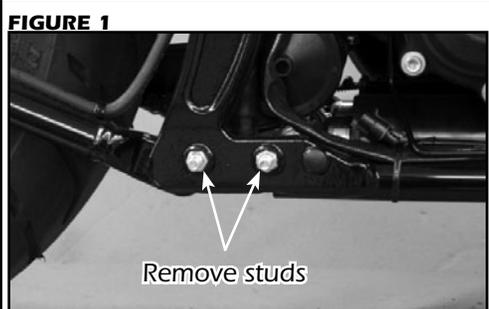


FIGURE 5

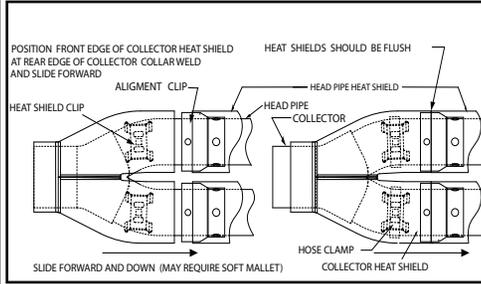


FIGURE 6

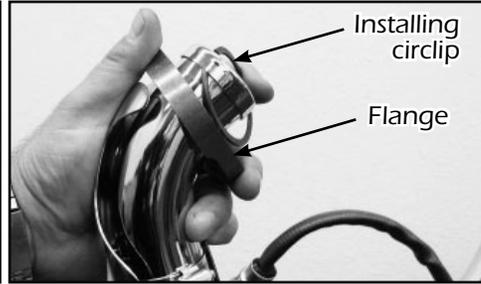


FIGURE 7

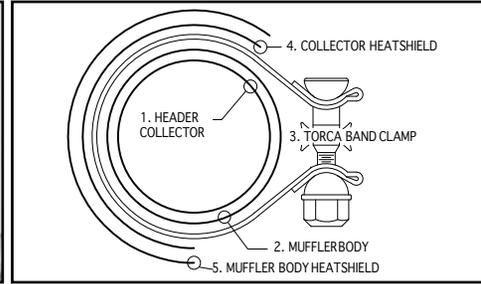
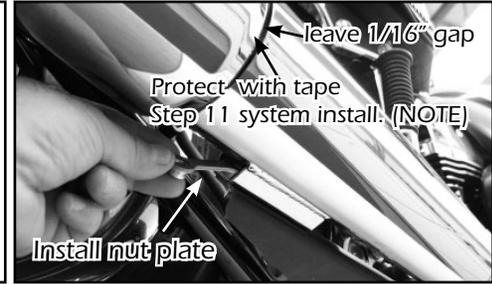


FIGURE 8



1. Attach mounting bracket 581-P to frame using two 3/8" x 3/4" flange head bolts (supplied)(Figure 2). If equipped, 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. 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).
3. Lay head pipes into their respective heat shields.
4. Install # 24 hose clamps on the both collector end heat shield clips and #20 hose clamps into all other heat shield clips by feeding through the tail end of clamps (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: Do not tighten at this time.
5. Apply a small amount of anti-seize compound to the threads of the oxygen sensors and install them into the new head pipe. NOTE: Be careful not to get anti-seize on sensor tip, it may affect sensor function.
6. 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: Do not tighten at this time.
7. Place torca band clamp (supplied) onto header collector and under collector heat shield (Figures 4 & 7).
8. Install exhaust port flanges and circlips (from stock system) onto head pipes (Figure 6).
9. 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.
10. Install muffler assembly onto rear of header assembly and under collector heat shield and into torca band clamp(Figure 7).
11. Slip the muffler body heat shield (stamped D734HC) from front to back onto the muffler body (stamped D731RC) (Figure 4) and secure with a #44 hose clamp in the front and a #56 hose clamp in the rear. (Figure 4) NOTE: Use a low tack tape (painters tape or equivalent) to protect the transition on the muffler body (D731RC) between tapered section and 5" round end section (Figure 8). Do not tighten at this time.
12. 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) (Figure 8).
13. Tighten the exhaust port flange nuts and the torca band clamp.
14. Tighten hose clamps securing header heat shields and collector heat shield making sure that they are flush. (Figure 5)
15. Tighten muffler body heat shield and leave about 1/16" even gap on the rear between heat shield and muffler body (Figure 8).
16. Feed wire for the front oxygen sensor through the frame and into the plastic holder on the frame. Plug the sensor into the stock wiring connector. Snap the plastic holder closed to hold the connector in place.
17. Install a new nylon cable tie (supplied) to hold the wires onto the frame in the original location.
18. Feed connector for the rear oxygen sensor through the frame under the oil tank on the right hand side. Plug the sensor into the stock wiring connector.
19. Tighten the floor board mounting bolts on models so equipped.
20. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
21. Be sure to tighten all hardware before starting your motorcycle.
22. After installation and before starting motorcycle, remove protective tape and completely clean pipes and mufflers with cleaning solvent 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 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. 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.

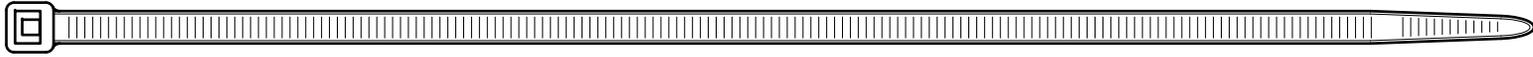
**QUIET
BAFFLE**

Quiet baffle P/N 21903 is available for this system. The quiet baffle will lower the sound level by 2-3db on average. Contact your local dealer to order.

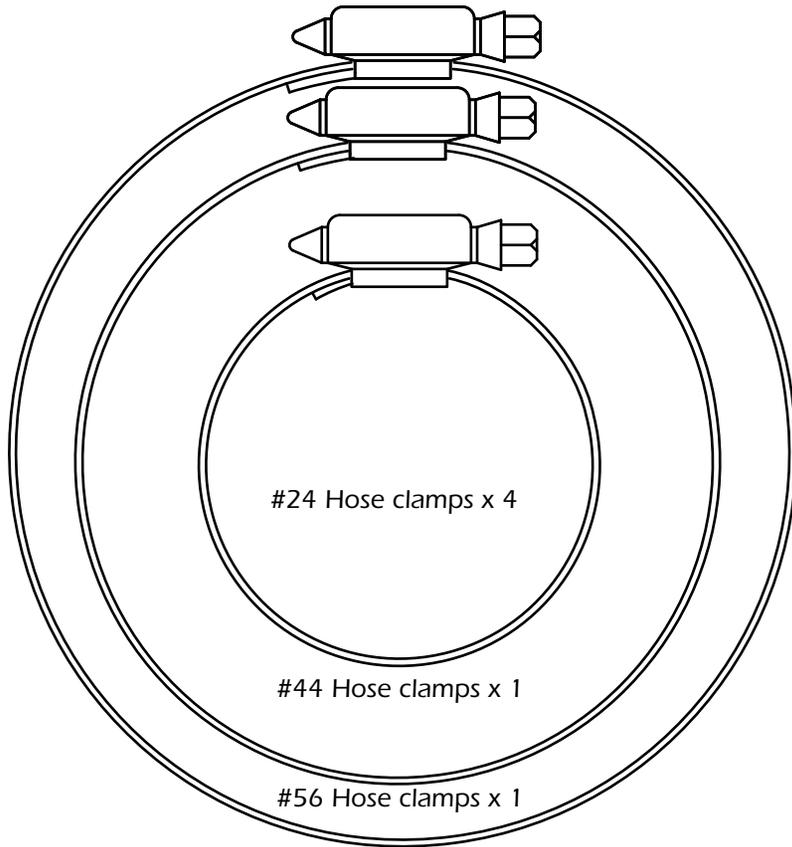
PLEASE NOTE: Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation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



PACKING LIST



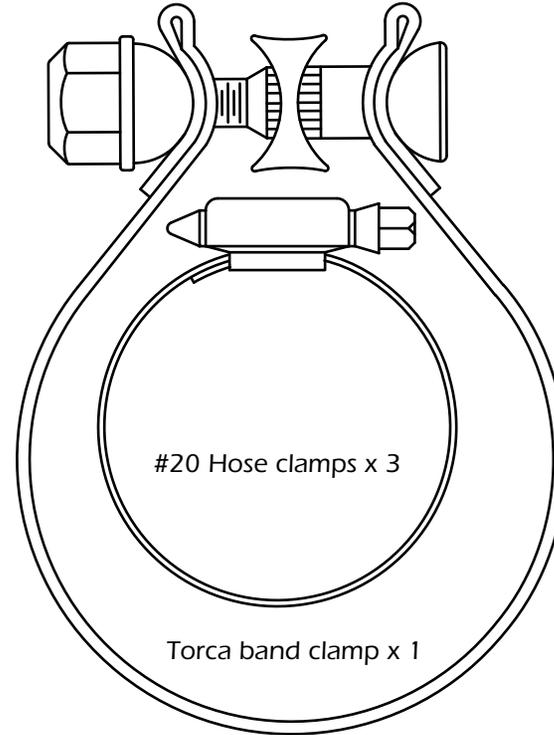
Nylon cable tie x 2



#24 Hose clamps x 4

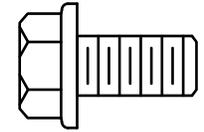
#44 Hose clamps x 1

#56 Hose clamps x 1

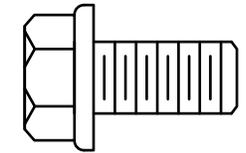


#20 Hose clamps x 3

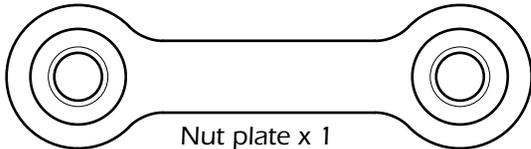
Torca band clamp x 1



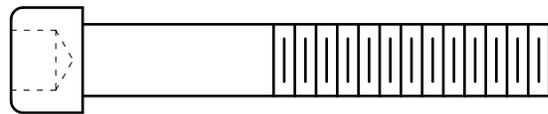
5/16" x 5/8" Flange bolt x 2



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



Nut plate x 1



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

PARTS NOT SHOWN:

581-P	Bracket	x1
D615FC	Header	x1
D731RC	Muffler body	x1
D615HC	Front heat shield	x1
D616HC	Rear heat shield	x1
A200HC	Collector heat shield	x1
D734HC	Muffler body heat shield	x1

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ALL PARTS SHOWN ARE ACTUAL SIZE

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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