

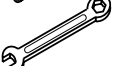



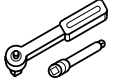
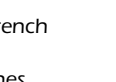




Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any 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
-  5/16" Nutdriver
-  1/2", 9/16" & 7/8" or 22mm Combination wrenches
-  3/16" & 5/16" Allen wrench
-  T45 & T50 Torx wrenches
-  Snapping pliers
-  3/8" Ratchet, extensions
-  1/2" & 9/16" Sockets

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

**STOCK EXHAUST
SYSTEM REMOVAL**

1. Under the oil tank on the right hand side, locate the rear oxygen 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 oxygen 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 FLSTD and FLSTF 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. Remove the entire exhaust system and set it aside.
9. 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.
10. Remove the two lower mounting studs from the frame (Figure 1).
11. 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 1

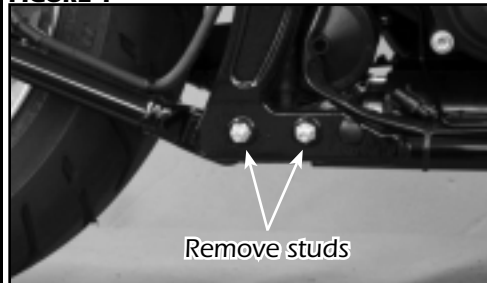


FIGURE 2

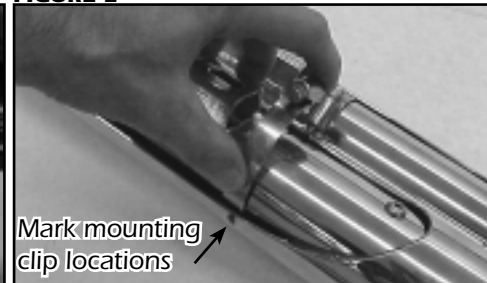


FIGURE 3

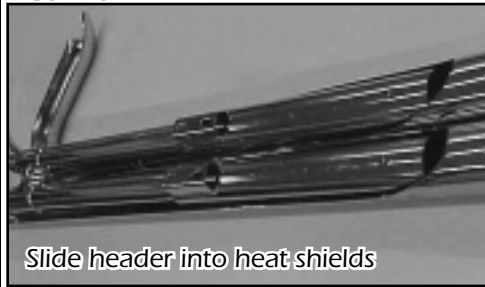


FIGURE 4

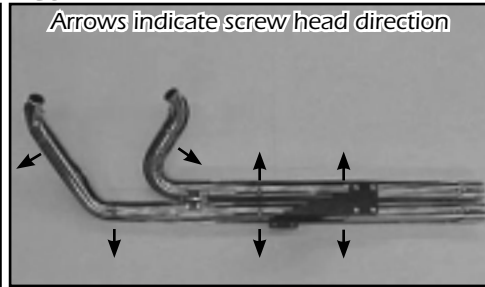
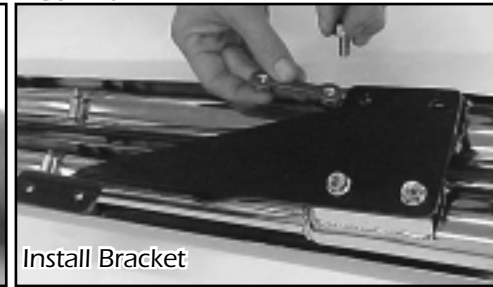


FIGURE 5



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. Screw head must be accessible when system is installed on motorcycle for adjustment purposes. Align end tips evenly and tighten hose clamps.
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 circlips and flanges from stock system onto the new head pipe (Figure 5).
7. Attach mounting bracket (Stamped 331-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 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.
11. Install a new nylon cable tie (supplied) to hold the wires onto frame in the original location.
12. 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.
13. Re-tighten floor board mounting bolts on models so equipped.
14. Be sure to tighten all hardware before starting motorcycle.
15. After installation and before starting the motorcycle, 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 the new Fuelpak Fuel Management System, P/N 61001. Contact your local dealer or call (562) 921-7461 to order. Visit vanceandhines.com for more information.

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.

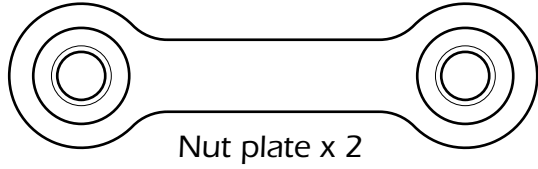
PLEASE NOTE:

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

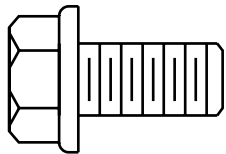
ALL PARTS SHOWN ARE ACTUAL SIZE



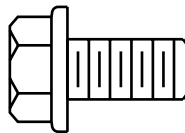
Nut plate x 2



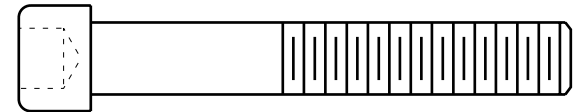
#20 Hose clamps x 7



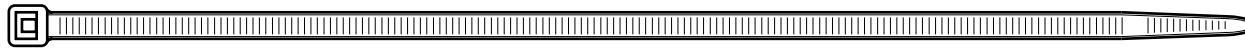
3/8"x3/4" Flange bolts x 2



5/16"x5/8" Flange bolts x 4



3/8"x2-1/2" Allen bolt x 1



Nylon cable tie x 1

PARTS NOT SHOWN:

- 331-P Bracket x1
- D465FC Head pipe x1
- D465HC Front heat shield x1
- D466HC 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.



Big Radius

SM	24024
MD	24025
LG	24026
XL	24027
XXL	24028

Sideshots Vertical

SM	24029
MD	24030
LG	24031
XL	24032
XXL	24033

V-Rod

SM	24034
MD	24035
LG	24036
XL	24037
XXL	24038

Sideshots Cubed

SM	24039
MD	24040
LG	24041
XL	24042
XXL	24043

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