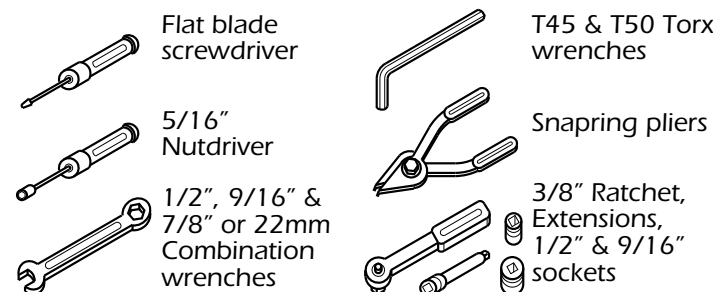


Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any 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**

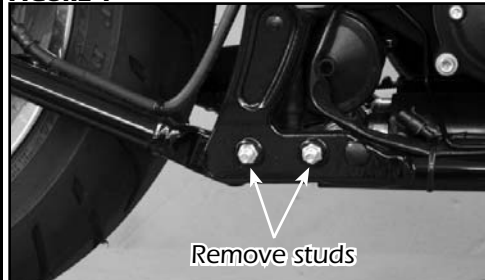
**STOCK EXHAUST  
SYSTEM REMOVAL**

1. 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 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. NOTE: This exhaust system requires the removal of both passenger footpegs for all models.

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. Assistance may be required.
10. If equipped, remove the bracket from under the right side transmission cover.
11. 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.
12. Remove the two lower mounting studs from the frame (Figure 1).
13. 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.

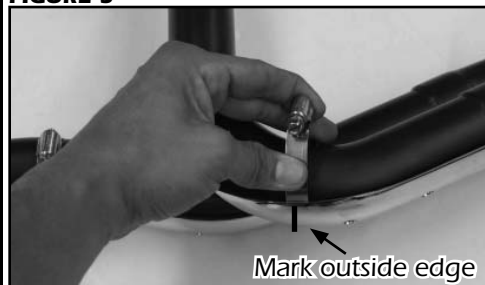
**FIGURE 1**



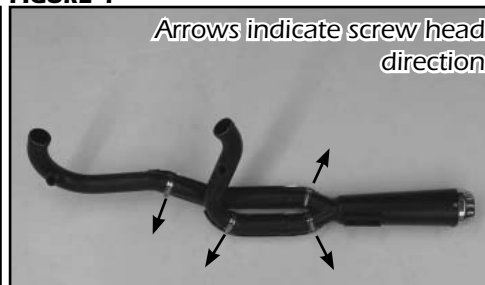
**FIGURE 2**



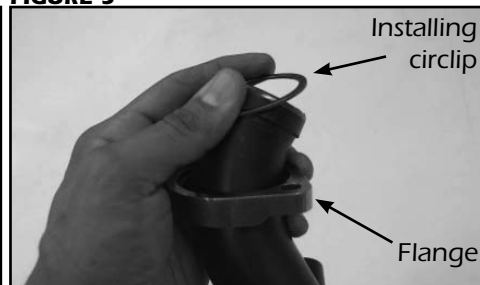
**FIGURE 3**



**FIGURE 4**



**FIGURE 5**



**FIGURE 6**



## VANCE & HINES EXHAUST SYSTEM INSTALLATION

1. This exhaust system is not compatible with the stock air cleaner backing plate, an aftermarket air cleaner kit is recommended.
2. Attach mounting bracket 443-P to frame using two 3/8" x 3/4" flange head bolts (supplied) (Figure 2). If equipped, plastic plugs must be removed.
3. 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).
4. Lay head pipes into their respective heat shields.
5. Install #20 hose clamps by feeding tail end of clamps into heat shield clips (Figure 3). Take note of screw head direction (Figure 4). Screw head must be accessible when system is installed on motorcycle for adjustment purposes.
6. Apply a small amount of anti-seize compound to the threads of 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.
7. Install exhaust port flanges and circlips (from stock system) onto head pipes (Figure 5).
8. 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.
9. Slide the nut plate (supplied) into the bracket that is welded to the back side of the muffler. Loosely install two 5/16" x 5/8" flange head bolts (supplied) (Figure 6).
10. Tighten the exhaust port flange nuts and 5/16" flange head bolts.
11. Tighten all hose clamps securing heat shields.
12. 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.
13. Install a new nylon cable tie (supplied) to hold the wires onto the frame in the original location.
14. 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.
15. Tighten the floor board mounting bolts on models so equipped.
16. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
17. Be sure to tighten all hardware before starting your motorcycle.
18. After installation and before starting your motorcycle, completely clean pipes and mufflers with warm soapy water and a clean soft cloth. Dry with a clean towel. NOTE: any residue, oil, or fingerprints will stain the black coating. Do NOT use anything abrasive to clean the pipes as it may remove the finish.

## 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, P/N 61001. Contact your local dealer or call (562) 921-0071 to order. Visit [fuelpakfi.com](http://fuelpakfi.com) for more information.

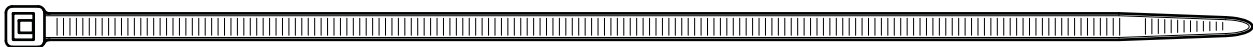
Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

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.

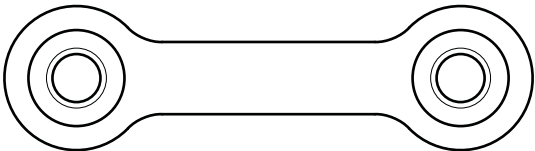


PACKING LIST

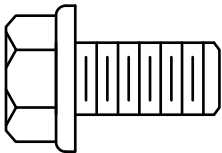
ALL PARTS SHOWN ARE ACTUAL SIZE



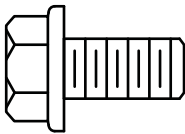
Nylon cable tie x 1



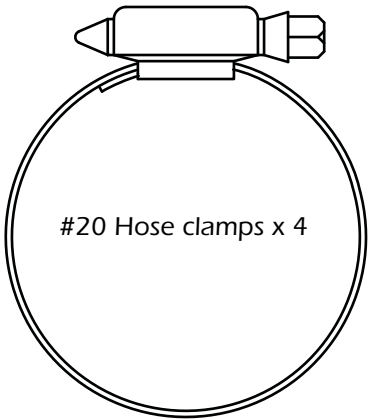
Nut plate x 1



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



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



#20 Hose clamps x 4

PARTS NOT SHOWN:

443-P	Bracket	x1
R105FP	Head pipe assembly	x1
R100HC	Front heat shield	x1
R101HC	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 motors 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.



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**VANCEANDHINES.COM**