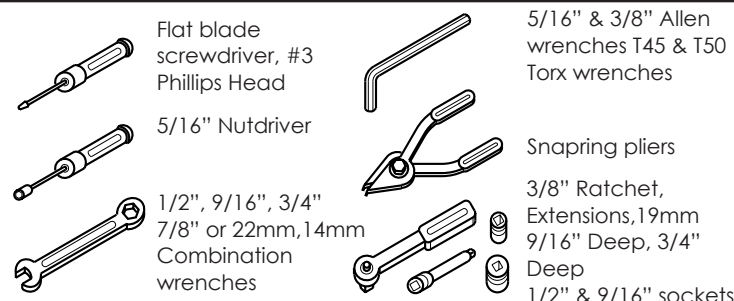




Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any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

O2 SENSOR EQUIPPED MODELS (2007 - PRESENT)

1. Rear O2 Sensor, Locate the O2 sensor connector, unplug the connector from the main harness and feed the wire through the frame to free it from the motorcycle. Pay attention to wire routing for re-installation. NOTE: For 2007 to 2011 Models the connector is located under the oil tank, on the right side. For 2012 & later Models the connector is located under the seat, remove both the seat and battery for access.
2. Front O2 sensor, locate the O2 sensor connector at the front of the motorcycle, unplug connector from harness, and free the sensor lead from the motorcycle. NOTE: For 2007 to 2011 Models, Open the plastic cover above the rectifier to gain access to the sensor plug, cut the cable ties holding the sensor wire to frame.
3. On models with floor boards, remove the right hand floor board mounting bolts to gain clearance for exhaust removal and installation.
4. Remove the right side passenger footpeg and hanger. Leave the footpeg and hanger off, additional reinstallation instructions to follow.
5. Unbolt the carriage bolt and clamp attached to the bracket located under the right side transmission cover.
6. Loosen the heat shield clamps on both front and rear exhaust pipes.
7. Remove the two mounting nuts from each head pipe.
8. Remove the nuts attaching the exhaust mounting bracket to the frame.
9. Remove the exhaust system and set it aside. Assistance may be required.
10. Carefully remove the O2 sensors from the stock head pipes.
11. Remove the stock mounting bars, brackets and/or studs.
  - a. PRE 2000 Models: Remove the lower mounting bar. Remove the right side 1/4" bolt which holds the lower fender in place to allow removal of the right passenger foot peg. Place the motorcycle on its side stand and loosen the swing arm pivot bolt nut. Position a floor jack under the right hand frame tube just below the swing arm pivot bolt. Using assistance, carefully raise the jack just enough to take the weight off the swing arm bolt and remove the swing arm pivot bolt and the stock upper mounting bar. Replace the swing arm pivot bolt and torque to 135 FT/LB. Re-install the right passenger foot peg using the 1/2"x3" capscrow with the 1 5/8" spacer and 1/4" bolt to secure fender.
  - b. 2000 & Later Models: Using a T50 Torx driver, remove the three mounting bolts and mounting bar. Two of the T50 bolts are visible, the third also attaches the right hand passenger peg and is accessed by removing the foot peg.
12. Carefully remove exhaust port flanges and circlips from the stock exhaust system using snapping pliers. NOTE: Replace bent or damaged circlips.
13. Replace the exhaust gaskets with the supplied gaskets.

FIGURE 1

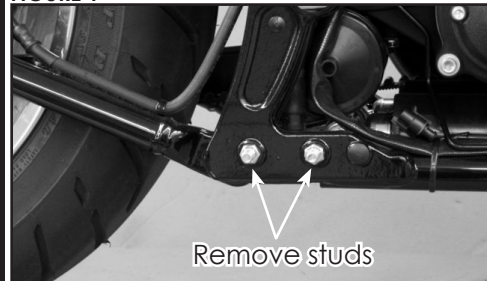


FIGURE 2

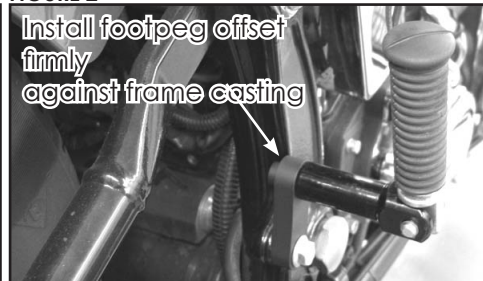


FIGURE 3



FIGURE 4

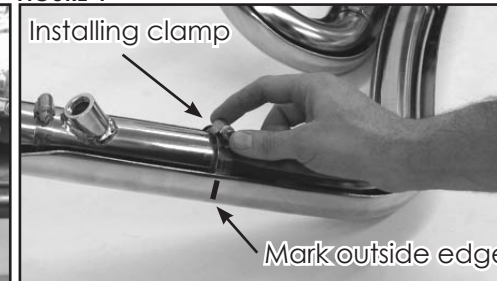


FIGURE 5



FIGURE 6

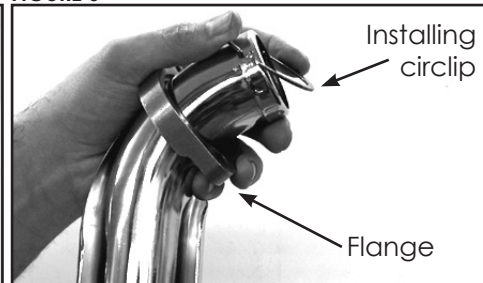


FIGURE 7



FIGURE 8



- Replace the passenger footpeg and hanger using the supplied footpeg offset bracket, 3/8" x 1-1/4" flange head bolt and 3/8" x 2-1/2" Allen bolt (Figure 2). NOTE: The threaded insert on the footpeg offset bracket should rest firmly against the frame casting, be sure to tighten this bolt firmly and check from time to time. OPTIONAL KIT: If you would like to raise the left hand passenger footpeg to match the right please order Vance & Hines kit number 16927. On 1986 to 1999 models the passenger footpeg will be eliminated.
- Attach mounting bracket 435-P to frame using two 3/8" x 3/4" flange head bolts (supplied) (Figure 3). If equipped, plastic plugs must be removed.
- Remove head pipe assembly and head pipe 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 4).
- Lay head pipes into their respective heat shields.
- Install #20 hose clamps by feeding tail end of clamps into heat shield clips (Figure 4). Take note of clamp screw head direction (Figure 5). Screw head must be accessible when system is installed on motorcycle for adjustment purposes.
- Using #56 hose clamps (supplied) and, following the same procedures as steps 3, 4 & 5 install the muffler body heat shield onto muffler body.
- Apply a small amount of anti-seize compound to the threads of the oxygen sensors and install them into the new head pipe. NOTE: 2007 to 2011 models or models using 18mm wideband oxygen sensors install sensor directly into head pipe. 2012 to 2014 models install supplied 18mm to 12mm oxygen sensor adapter then install 12mm oxygen sensors (Grey connector into front head pipe, Black connector into rear head pipe.) All models not using oxygen sensors install 18mm plug with copper crush washer.
- Install circlips and flanges from stock system onto both new head pipes (Figure 5).
- Using stock flange nuts, carefully install head pipes onto motorcycle. Do not tighten at this time.
- Use the nut plate and 5/16"x5/8" flange bolts (supplied) to attach the pipe to the bracket (Figure 6). Do not tighten at this time.
- Using stock flange nuts, carefully install head pipe assembly into exhaust ports, starting with the rear cylinder. Assistance may be required. NOTE: Do not tighten at this time.
- 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 7).
- Tighten the exhaust port flange nuts and 5/16" flange head bolts.
- Tighten all hose clamps securing heat shields. NOTE: Align head pipe heat shields evenly with muffler heat shield (Figure 8).
- Route O2 sensor wires away from hot areas of the motorcycle. Plug the O2 sensor wires back into the wiring harness: For 2012 & Later, feed wire for the rear O2 sensor (Black) around the frame and under the seat. Re-install battery, plug the sensor into the stock wiring connector. Feed connector for the front oxygen sensor (Gray) around the frame and into the holder on the frame behind rectifier. Plug the sensor into the stock wiring connector. For 2007 to 2011 models, feed wire for the front oxygen sensor around 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. Install a new nylon cable tie to hold the wires onto the frame in the original location. Feed connector for the rear oxygen sensor around the frame under the oil tank on the right hand side. Plug the sensor into the stock wiring connector.
- Re-install the right floor board using three 1" x 3/16" washers are supplied to space the floor board away from the front heat shield. On 1986 to 1999 models only two of these washers will be used.
- Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
- Be sure to tighten all hardware before starting your motorcycle.
- After installation and before starting the motorcycle, completely clean pipes and mufflers with soap and water and a clean soft cloth. NOTE: Any residue, oil, or fingerprints will stain the finish when the exhaust heats up.

### EXHAUST CARE - HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST SYSTEM

- 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.
- Avoid long periods of idling as this can cause discoloration.
- Intake leaks can cause the engine to run lean and overheat, this could lead to discoloration.
- 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



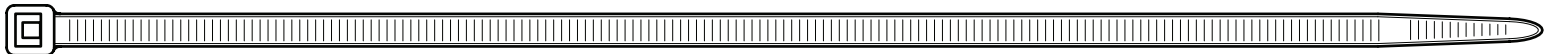
**FUEL MANAGEMENT:**  
Take the guess work out of fuel injection with Fuelpak Fuel Management. Contact your local dealer or call (562) 921-0071 to order. Visit [fuelpakfi.com](http://fuelpakfi.com) for more information. Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

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.

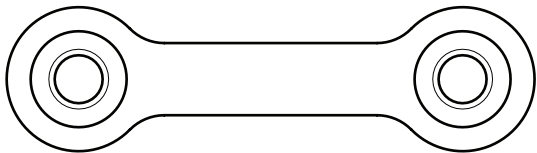
ALL PARTS SHOWN ARE ACTUAL SIZE



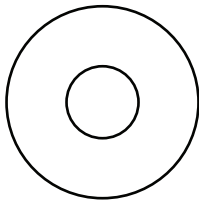
PACKING LIST



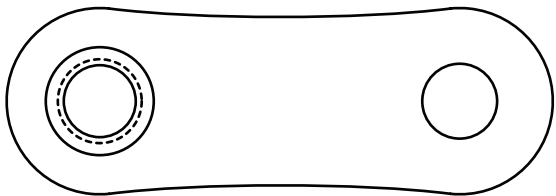
Nylon cable tie x 1



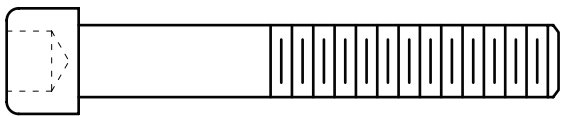
Nut plate x 1



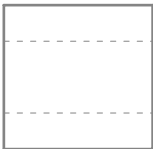
1" x 3/16" Washers x 3



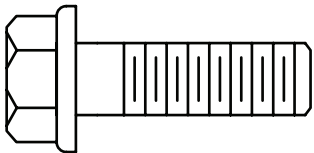
Footpeg offset bracket x 1



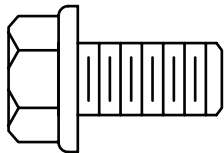
3/8" X 2-1/2" Allen bolt x 1



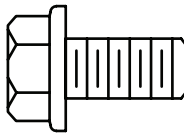
3/8" Spacer x 1  
(for '00-'06 models only)



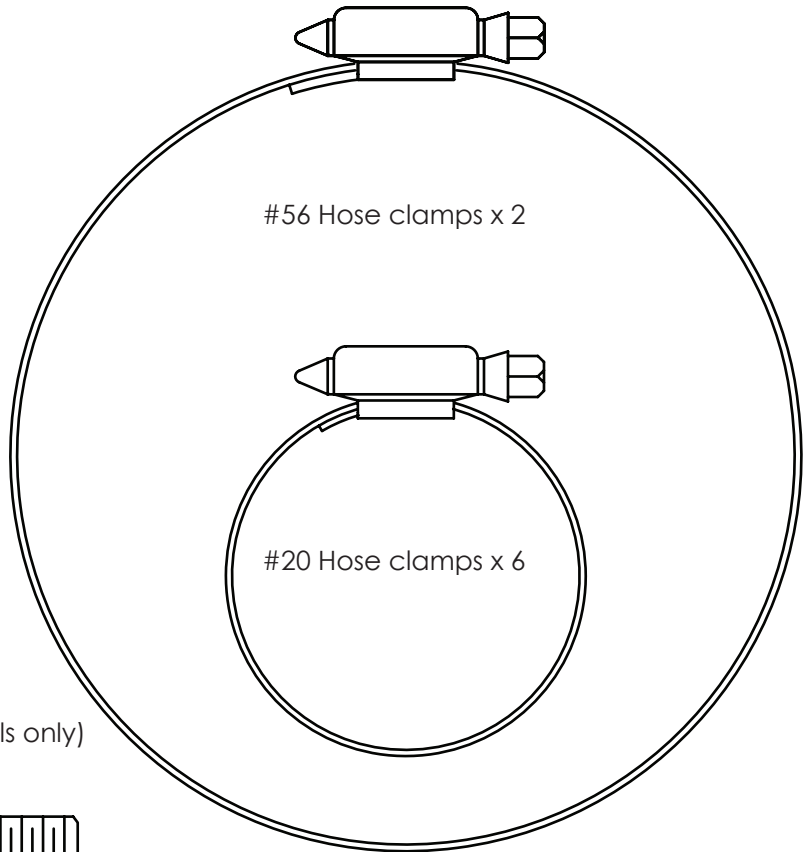
3/8" x 1-1/4" Flange bolt x 1



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



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



#56 Hose clamps x 2

#20 Hose clamps x 6

PARTS NOT SHOWN:

435-P	Bracket	x1
D820FP	Head pipe assembly	x1
D732HP	Front heat shield	x1
D733HP	Rear heat shield	x1
D730HP-S	Muffler heat shield	x1
A167HW	Exhaust Gasket	x2
A121HW	18 x 1.5 x 10mm Plug	x2
A213HW	18 Copper Washer	x2
A311HW	1" Flat Washer	x3
A644ST	18-12mm O2 Adaptor	x2

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.

