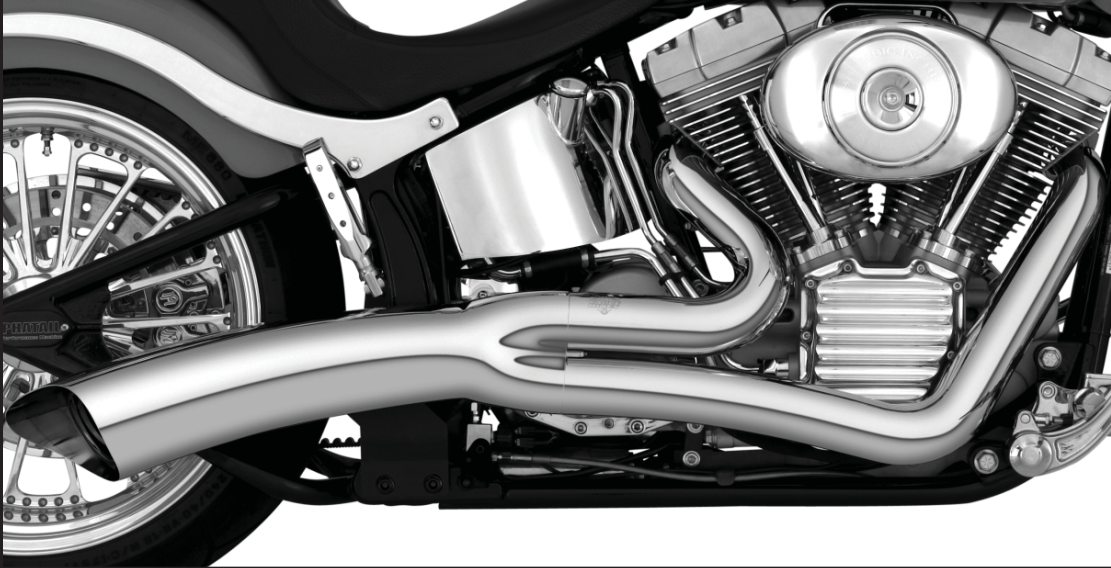




MORE POWER : LESS NOISE



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
- 5/16" Nutdriver
- 1/2", 9/16" & 14mm Combination wrenches
- 3/16" & 5/16" Allen wrenches
- T45 & T50 Torx wrenches
- Snapping pliers
- 3/8" Ratchet, Extensions, 1/2" & 9/16" sockets
- 3/4" deep socket

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

STOCK EXHAUST SYSTEM REMOVAL

1. Remove the seat and 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 the 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 mounting bracket. NOTE: The footpeg will be installed later
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 the 14mm wrench, carefully remove the stock O2 sensors from the stock header and save them for re-installation on 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. Remove stock exhaust gaskets and replace them with the supplied exhaust gaskets. NOTE: Replacement gaskets HD Screaming Eagle #17048-98 or equivalent.

FIGURE 1

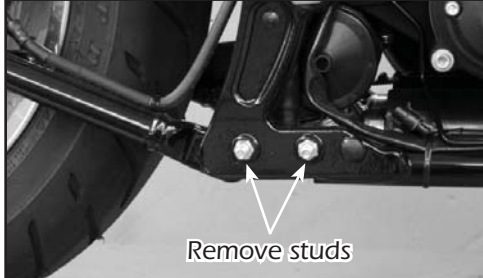


FIGURE 2

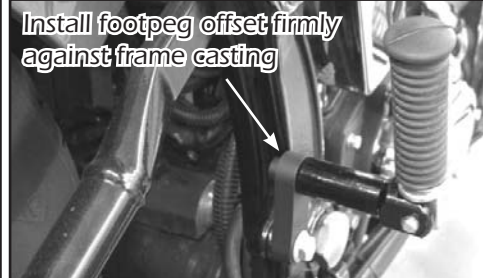


FIGURE 3

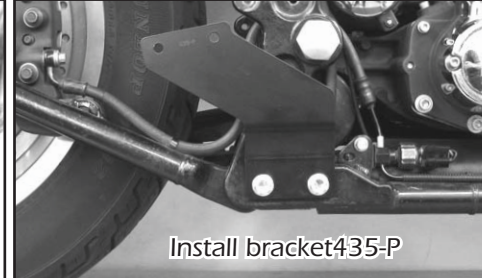


FIGURE 4



FIGURE 5

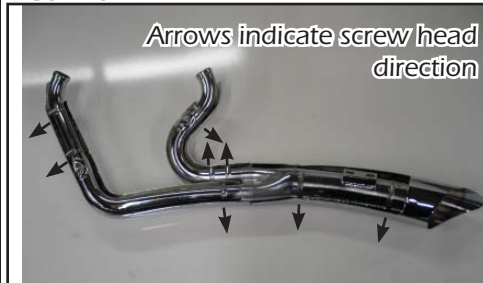


FIGURE 6

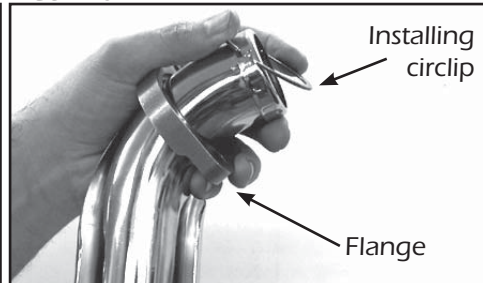
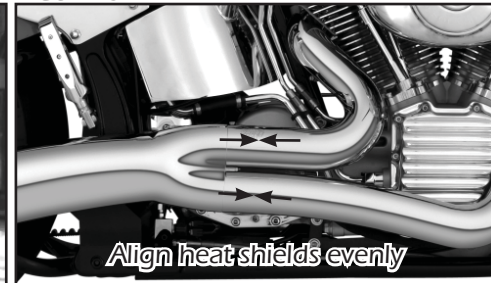


FIGURE 7



FIGURE 8



VANCE & HINES EXHAUST SYSTEM INSTALLATION

1. 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.
2. 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.
3. 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).
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 4). Take note of clamp screw head direction (Figure 5). Screw head must be accessible when system is installed on motorcycle for adjustment purposes.
6. Using #56 hose clamps (supplied) and, following the same procedures as steps 3, 4 & 5 install the muffler body heat shield onto muffler body.
7. Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new head pipe. NOTE: Install O2 sensor with gray connector (Short) into the front head pipe and the O2 sensor with the black connector (long) into rear head pipe. Be careful not to get anti-seize on sensor tip, it may affect sensor function.
8. Install exhaust port flanges and circlips (from stock system) onto head pipes (Figure 6).
9. 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.
10. 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).
11. Tighten the exhaust port flange nuts and 5/16" flange head bolts.
12. Tighten all hose clamps securing heat shields. NOTE: Align head pipe heat shields evenly with muffler heat shield (Figure 8).
13. Feed connector for the rear O2 sensor (Black) through the frame and under the seat. Re-install battery. Plug the sensor into the stock wiring connector.
14. Feed the connector for the front O2 sensor (Gray) through the frame and into the holder on the frame behind rectifier. Plug sensor into the stock wiring connector.
15. Tighten the right floor board mounting bolts on models so equipped. NOTE: Three 1" x 3/16" washers are supplied to space the floor board away from the front heat shield if necessary.
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 motorcycle, completely clean pipes and mufflers with warm soapy water and a clean soft cloth. Dry with towel to remove any 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 warm soapy water and a soft cloth. Dry with clean towel to remove any 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.

ACCESSORIES

Left Hand Passenger Peg Riser: P/N 16927
Allows use to raise left passenger peg to match right

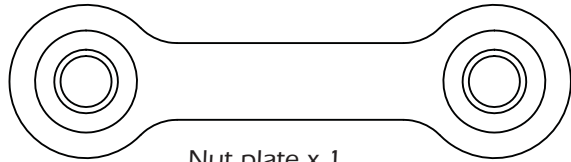
PLEASE NOTE: Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation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



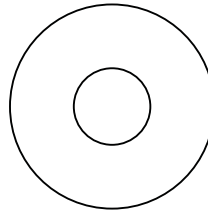
PACKING LIST

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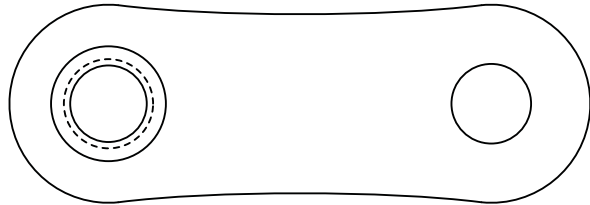
ALL PARTS SHOWN ARE ACTUAL SIZE



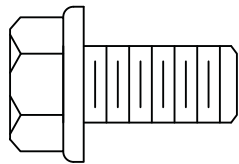
Nut plate x 1



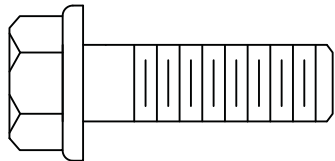
1" x 3/16" Washers x 3



Footpeg offset bracket x 1



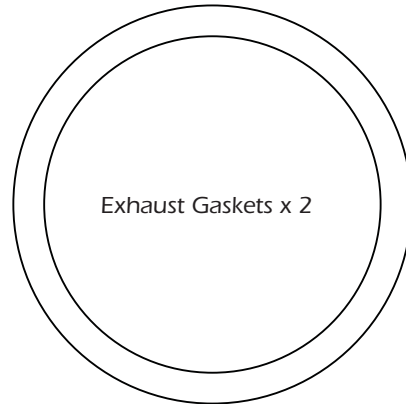
3/8" x 3/4" Flange bolts x 2



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

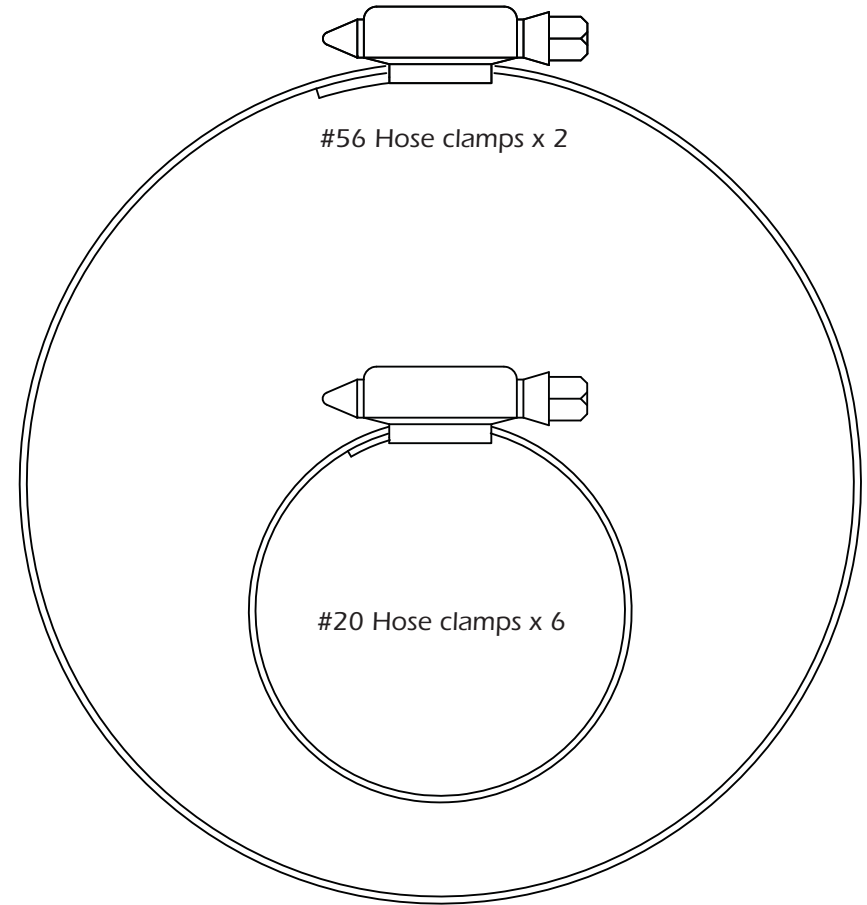
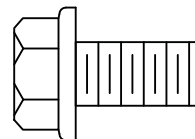


3/8" X 2-1/2" Allen bolt x 1



Exhaust Gaskets 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
D492FC	Head pipe assembly	x1
D480HC	Front heat shield	x1
D481HC	Rear heat shield	x1
D483HC	Muffler 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

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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