

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
-  5/16" Nutdriver
-  1/2" & 9/16" Combination wrenches
-  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. If equipped, loosen the floor boards to gain clearance for exhaust removal and installation.
2. Loosen heat shield clamps on both the front and rear head pipes.
3. If equipped, loosen crossover pipe clamp, located between front and rear head pipes.
4. Remove two cylinder exhaust port flange nuts from each head pipe, located at the cylinder head.
5. Remove the bolts that attach mufflers to the frame.
6. Remove the complete exhaust system and set aside. Assistance may be required.
7. Remove stock mounting bars, brackets and studs (if equipped).
8. On early models equipped with upper mounting bar attached at swing arm pivot bolt, go to step 9. If upper mounting bar is attached with two torx bolts (not swing arm bolt) go to step 10.
9. Remove right side 1/4"-20 bolt which holds lower fender in place. The fender will flex outwards allowing removal of right passenger foot peg

- bolt. Park the motorcycle on its side stand. Position a floor jack under right hand frame tube of the motorcycle below swing arm pivot bolt. Raise jack just enough to take the weight off swing arm pivot bolt. Remove swing arm pivot bolt and stock upper mounting bar. Replace swing arm pivot bolt and torque to 120 ft. lbs. Reinstall 1/4"-20 fender bolt.
10. Using a T50 torx driver, remove the three mounting bolts and mounting bar. Two of the bolts are visible, the third also attaches right hand passenger foot peg pivot and is accessed by removing foot peg. NOTE: This exhaust system requires the removal of both passenger footpegs for all models.
 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

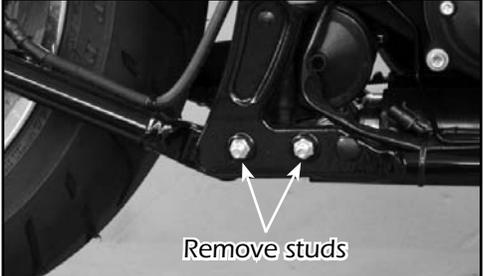


FIGURE 2



FIGURE 3

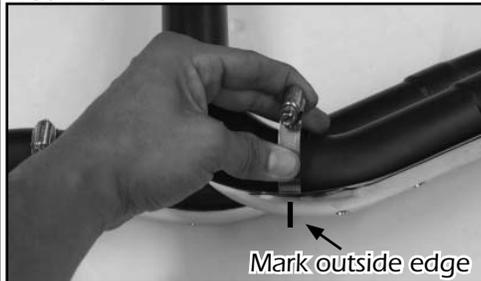


FIGURE 4

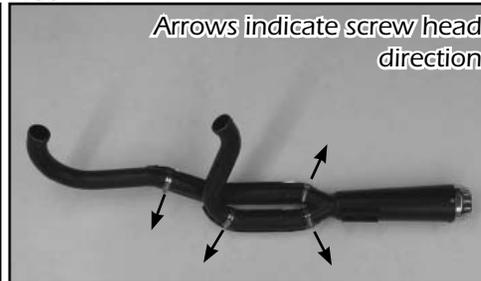


FIGURE 5

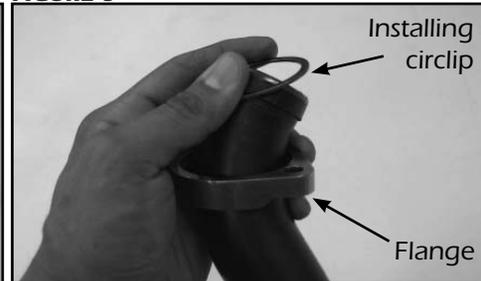


FIGURE 6



VANCE & HINES EXHAUST SYSTEM INSTALLATION

1. 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. Install exhaust port flanges and circlips (from stock system) onto head pipes (Figure 5).
7. 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.
8. 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).
9. Tighten the exhaust port flange nuts and 5/16" flange head bolts.
10. Tighten all hose clamps securing heat shields.
11. Tighten the floor board mounting bolts on models so equipped.
12. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
13. Be sure to tighten all hardware before starting your motorcycle.
14. 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



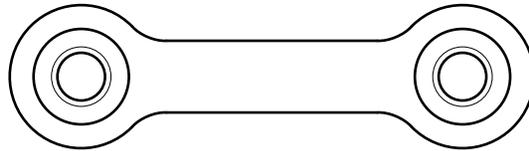
FUEL MANAGEMENT:

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 for more information.

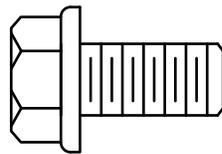
Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

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.

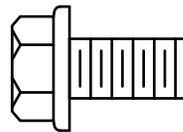
PACKING LIST



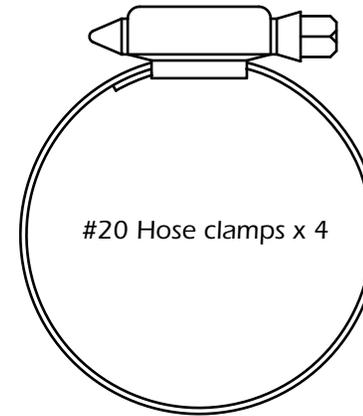
Nut plate x 1



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
R100FP	Head pipe assembly	x1
R100HC	Front heat shield	x1
R101HC	Rear 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

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