

**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**

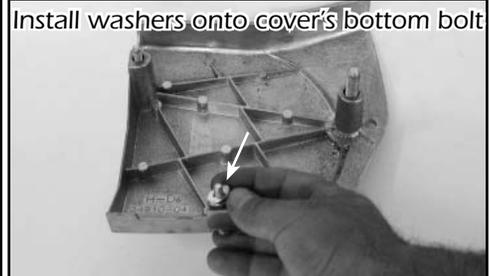
- Flat blade screwdriver
- Snapping pliers
- 5/16" Nutdriver
- Torque ratchet
- Wrenches 9/16", 1/2", & 7/8" or 22mm
- Ratchet 3/8" drive
- 3/16" & 5/16" Allen wrench & Torx socket - T30
- 9" Extension sockets 9/16" & 1/2"

**READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION**

**STOCK EXHAUST  
SYSTEM REMOVAL**

1. Find and unplug the O2 sensor wires from the wiring harness and remove nylon cable tie holding front wire to frame. Feed the end of the wires through the frame so they are free from the motorcycle. **NOTE:** Pay attention to wire routing for re-installation.
2. Loosen the heat shield clamps on both the front and rear exhaust pipes. This allows easier access to the head pipe mounting nuts.
3. Remove the two head pipe mounting nuts from each flange, located at the cylinder head.
4. Remove the clamp bolt which mounts the rear head pipe to the belt drive cover bracket.
5. Remove the two bolts from each muffler body where they attach to the mounting bar. Carefully remove exhaust pipes from the motorcycle and set aside.
6. 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.
7. Remove the drive belt cover and take the bracket off the rear cover bolt, the bracket will not be re-used (save hardware for re-use).
8. Loosen the brake rod at the rear eyelet using a T30 torx driver.
9. Remove the three mount bolts and washers attaching the exhaust mounting bar.
10. Reinstall belt cover by using stock bolts. Place two 1/4 washers on the bottom bolt (Figure 1) to give space between belt cover and transmission. Torque the 3/8" bolt to 30-33 Ft/Lbs. and the two 1/4" bolts to 80-120 In/Lbs. **Important:** Not using 1/4 washers to space cover may damage the belt and cover.
11. Re-install brake rod eyelet using removable thread locking compound (Loctite® 243 recommended). Torque to 120-180 In/Lbs.
12. 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**



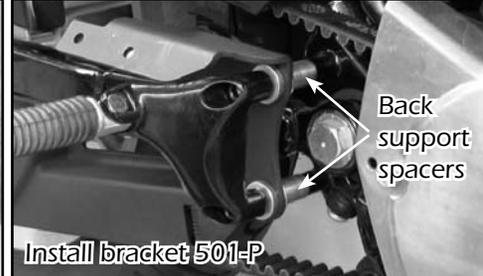
Install washers onto cover's bottom bolt

**FIGURE 2**



Install rubber grommets and spacers

**FIGURE 3**

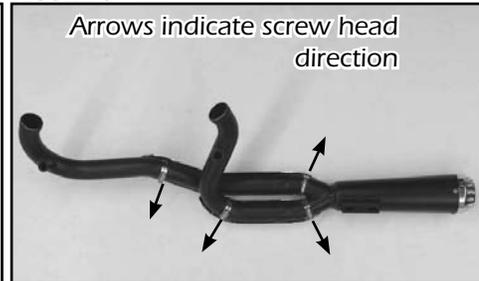


Install bracket 501-P

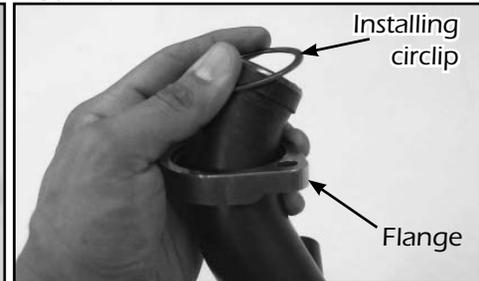
**FIGURE 4**



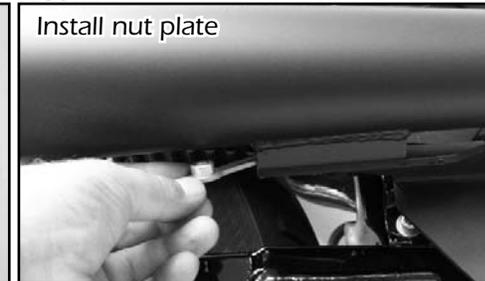
**FIGURE 5**



**FIGURE 6**



**FIGURE 7**



**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. Bracket installation. (Figures 2 and 3)
  - a. Install rubber grommets (supplied) into large holes in bracket 501-P.
  - b. Insert spacers (supplied) into grommets.
  - c. Remove passenger footpeg (if equipped) and attach mounting bracket 501-P with footpeg to frame using two 3/8" x 3" bolts, four 3/8" washers, and back support spacers (supplied) on both sides of bracket, (supplied). If bike is not equipped with a passenger footpeg remove plastic plugs and attach mounting bracket using two 3/8" x 2.5" bolts instead of using 3" bolts. NOTE: It is recommended to use medium strength locking agent on these bolts. Do not tighten at this time.
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 marker, lightly 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, being very careful not to harm black coating.
5. Install #20 hose clamps by feeding tail end of clamps into heat shield clips (Figure 3). Take note of screw head direction (Figure 5). 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 O2 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 6).
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 7).
10. Tighten the exhaust port flange nuts and 5/16" flange head bolts.
11. Tighten the bracket.
12. Tighten all hose clamps securing heat shields.
13. Plug O2 sensors back into wiring harness and route wires away from hot areas of motorcycle.
14. Install a new nylon cable tie (supplied) to hold front O2 sensor wire onto the frame.
15. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
16. Be sure to tighten all hardware before starting your motorcycle.
17. 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. 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.

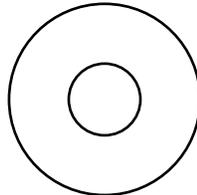
**PACKING LIST**



Nylon cable tie x1



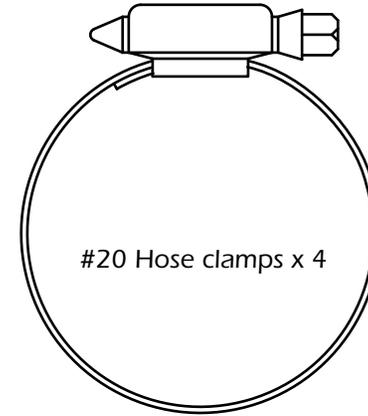
Rubber grommet x2



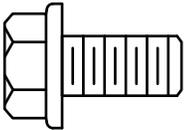
3/8" washer x4



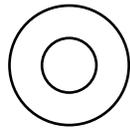
Spacer x2



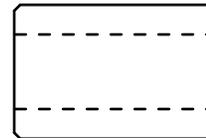
#20 Hose clamps x 4



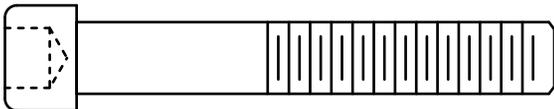
5/16" x 5/8" Flange bolts x2



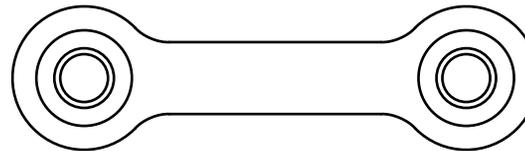
1/4" washer x2



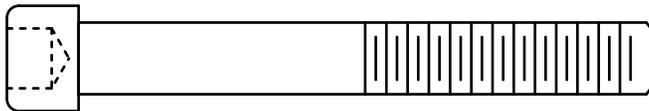
Back support spacer x2



3/8"x 2.50" Allen bolt x2



Nut plate x1



3/8"x 3.00" Allen bolt x2

**PARTS NOT SHOWN:**

501-P	Bracket	x1
R115FP	Header	x1
R100HC	Front heat shield	x1
R101HC	Rear heat shield	x1

**MORE POWER : LESS NOISE**

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](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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