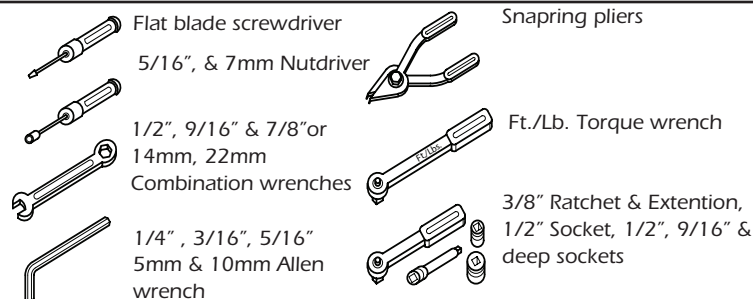




Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any 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. Remove both left and right saddlebags and set them aside.
2. For 2010-2013 models remove the right side panel to gain access to the O2 connections. For 2009 models locate and unplug the O2 sensor wires from the wiring harness and remove cable tie holding front wire to frame.
3. Unplug the O2 sensor wires (Grey and Black connectors under the right side panel) from the wiring harness and remove cable ties 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.
4. Loosen the bolt from the pinch clamp on the front end of each muffler.
5. Remove the two 5/16" bolts that mount the muffler to the saddlebag supports. Repeat this step on the opposite muffler.
6. Remove the stock mufflers with sliding hangers and set them aside. Two 5/16" bolts and one hanger will be re-used. NOTE: It may be necessary to use a penetrating lubricant to loosen the muffler from the head pipe.
7. Remove the right hand floor board then the passenger floor board or foot peg if so equipped.
8. Loosen head pipe clamp connecting the left side muffler to the header and the mount bracket on the backside of the oil pan. Remove the crossover section of head pipe and head pipe clamp (OE dual muffler systems only).
9. Remove the mount clamp located behind the oil pan, set the 1/4"-20 x 3/4" screws aside for reuse.
10. Install the crosspipe support bracket (stamped 748-P)(supplied) at the stock mount clamp location behind the oil pan with the stock 1/4"-20 x 3/4" screws (Figure 6). **NOTE:** Do not fully tighten at this time.
11. Loosen the nut and carriage bolt holding the head pipe assembly to the bracket on the transmission housing.
12. Loosen the heat shield clamps on both front and rear exhaust pipes.
13. Remove the two flange mounting nuts from each head pipe, located at the cylinder head. Carefully remove the head pipes and set them aside.
14. Using a 14mm wrench, carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.
15. Carefully remove the exhaust port flanges and circlips from the stock exhaust system using snapping pliers. **NOTE:** If circlips look bent or twisted, replace them.
16. Replace the bracket on the transmission housing with new bracket (stamped 747-P)(supplied) tighten enough to hold bracket in place but allow for adjustment later. (Figure 1). **NOTE:** Check clearance between bracket 747-P and OEM wiring harness and adjust if necessary.
17. Remove the stock exhaust gaskets and replace them with the V&H exhaust gaskets (supplied).

FIGURE 1

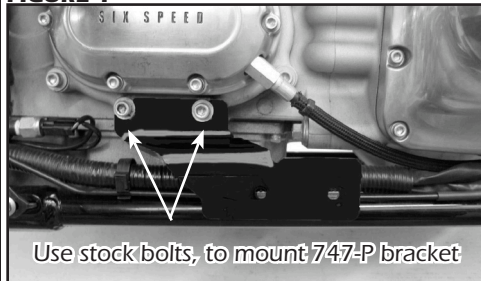


FIGURE 2

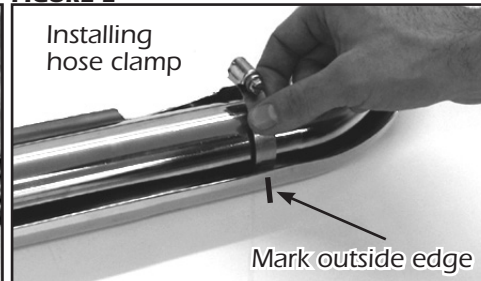


FIGURE 3

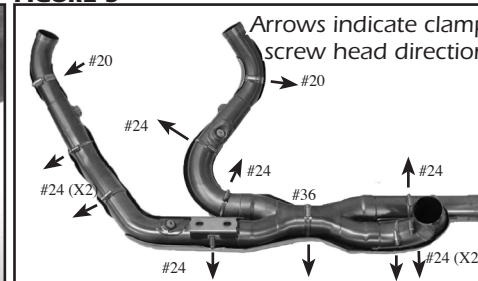


FIGURE 4

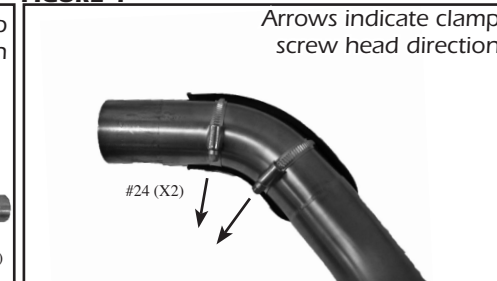


FIGURE 5

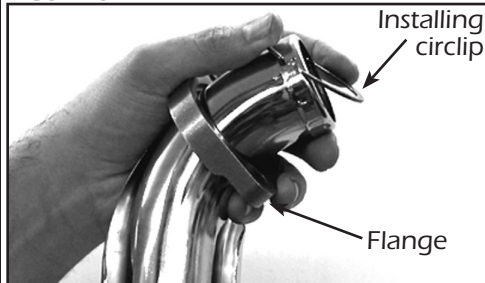


FIGURE 6

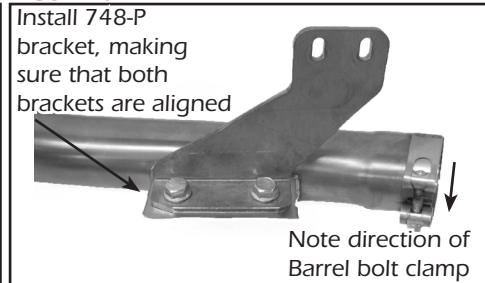


FIGURE 7

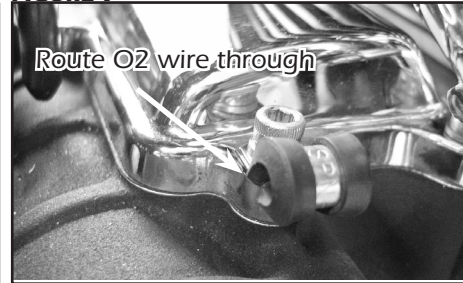


FIGURE 8



VANCE & HINES EXHAUST SYSTEM INSTALLATION

- Remove header assembly and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as 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 2).
NOTE: Remove O2 sensor plugs from your new V&H system: 18mm plugs-2009; 12mm plugs-2010 to 2012
- The header assembly (D675FB) will require heat shields stamped D670HB, D672HB, D676HB, D677HB, D679HB, D680HB & D681HB. The remaining heat shield D678HB will be used on the crosspipe header (D307RB)
- Lay header assembly into heat shields and loosely install the #20 hose clamps & #24 hose clamps (supplied) into mounting clips (Figure 3 & 4). Screw heads should be accessible when the system is installed on motorcycle for adjustment purposes. Do not tighten at this time.
- Install collector heat shield (stamped D676HB) onto collector. Do not force collector heat shield directly onto header heat shields from the side, damage to collector heat shield will result. Attach collector heat shield with (1) #36 hose clamp. **NOTE:** Do not tighten at this time, it can be installed after header is installed if desired.
- Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new header assembly (Grey connector into front headpipe, Black connector into rear headpipe).
NOTE: Be careful not to get anti-seize on sensor tip, it may affect sensor function.
- Install circlips and flanges from stock system onto the new header pipes (Figure 5).
- Using stock flange nuts, carefully install the header assembly onto motorcycle. Finger tight only at this time.
- Use the nut plates and 5/16" x 5/8" flange bolts (supplied) to attach the header to the bracket. Make adjustments to the bracket as necessary to insure proper alignment.
- Use 1/4" Allen wrench to tighten one or both transmission bolts to hold bracket alignment. Remove header and fully tighten transmission bolts to 13 - 16 ft/lb
- Again, using stock flange nuts, carefully re-install the header assembly onto motorcycle. Do not tighten at this time.
- Use the nut plates and 5/16" x 5/8" flange bolts (supplied) to attach the header to the bracket.
- Carefully slip the end of D307RB crossover assembly & barrel bolt clamp (supplied) into the expanded portion of the tube and using the remaining nut plate and 5/16" x 5/8" flange head bolts (supplied) attach the crosspipe to the 748-P bracket.
- Install RH 757-P & LH 758-P Muffler support brackets (supplied) into the rubber grommets on the saddlebag support brackets.
- Install RH muffler assembly onto collector outlet tube of header assembly, using the barrel bolt clamp to secure it. Slip Nutplate behind muffler bracket. Attach muffler assembly to 757-P bracket and secure with two 5/16" flange head bolts into nutplate. Do not tighten at this time.
- Slip the muffler cone heat shield (stamped D682HB) from front to back onto the RH muffler body and secure with a #28 hose clamp. **NOTE:** Use a low tack tape (painters tape or equivalent) to protect the transition on the muffler heat shield (D675HB) between tapered cone section and 4.0" round end section during installation. Do not tighten the hose clamps at this time
- Repeat for the Left hand side. Do not tighten at this time.
- Now tighten the your new exhaust system following this sequence. (1) Head flange nuts (2)Front and Rear 2-1/8" heat shield hose clamps, (3) Front header bracket, (4) Muffler body to support bracket, (5) Front and Rear 2-1/2" heat shield hose clamps, (6) Set location & tighten collector heat shield hose clamp (7) barrel bolt clamps on both mufflers, (8) Set location & tighten the muffler cone heat shields hose clamp
- Tighten the stock 1/4"-20 screws securing the bracket to the oil pan and the flange head bolts securing the crosspipe to the bracket.
- Be sure to check that all fasteners including the hose clamps on the heat shields are tight.
- Route the front (Grey) O2 sensor wire along OE path and plug into the Grey connector. Route the rear (Black) O2 sensor along the top of the transmission along the OE path and plug into the Black connector. Secure wires to the frame using supplied nylon cable ties. Remove one right rear screw securing transmission top cover. Re-install it with the supplied wire fastener capturing the rear O2 wire, securing the wire away from exhaust pipes. (Figure 7).
- Install a 3/8" lock washer on both of the 3/8"-16 bolts. Using these bolts re-install the floor board using the 3/8"-16 x 3" bolt with A471HW spacer on the forward mount and the 3/8"-16 x 1-3/4" bolt with A472HW spacer on the rear mount. (Figure 8) **NOTE:** 2010-2011 CVO Models will require alternate screw length due to additional spacer. Recommend screw length is 3/8"-16 x1-1/2" long socket head cap screw, V&H part # A100HW.
- Re-install the right side passenger floorboard, saddlebags and right side panel.
- Be sure to tighten all hardware before starting your motorcycle.
- After installation and before starting the motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave residue. **NOTE: Any residue, oil, or fingerprints will stain the stainless steel when the metal heats up.**

EXHAUST CARE - HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST SYSTEM

- When installing a new set of stainless pipes, make sure your hands are clean and free of oil. After installation, thoroughly clean pipes with a soft cloth and cleaning solvent that will leave no residue (acetone, glass cleaner, alcohol, etc...) before starting the motorcycle.
- It is considered normal for Stainless Steel exhaust systems to discolor due to heat.
- High performance engine tuning utilizing a dyno will likely result in severe discoloration.
- 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 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 2

#24
Hose Clamps x 11

#20
Hose Clamps x 3

Barrel bolt Clamps x 3

18mm S.S. Plug w/
gasket x 2

12mm S.S. Plug w/
gasket x 2

#36
Hose Clamp x 1

Nut plate x 4

3/8\"-16 x 3\" Socket Head Capscrew x 1

3/8\"-16 x 1-3/4\" Socket Head Capscrew x 1

5/16\" Flange
Head Bolt x 8

3/8\" Lock
Washer x 2

PARTS NOT SHOWN:

757-P	RH Muffler support bracket	x1
758-P	LH Muffler support bracket	x1
747-P	Header Bracket	x1
748-P	Tranny Bracket	x1
A472HW	Spacer w/ Pin	x1
A471HW	Spacer	x1
D305RB	RH Muffler	x1
D306RB	LH Muffler	x1
D307RB	Crossover Assembly	x1
D675FB	Header Assembly	x1
D670HB	2.125\" Front Heatshield	x1
D672HB	2.125\" Rear Heatshield	x1
D676HB	Collector Heatshield	x1
D677HB	2.50\" Front Heatshield	x1
D678HB	Crossover Heatshield	x1
D679HB	2.50\" Rear Heatshield	x1
D680HB	2.50\" Outlet Heatshield	x1
D681HB	2.50\" Straight Heatshield	x1
D682HB	Muffler Meg Heatshield	x2
A167HW	Exhaust Gaskets	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 & stainless 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.



13861 ROSECRANS AVENUE / SANTA FE SPRINGS, CA 90670
SALES: (562) 921-5388 / TECHNICAL: (562) 926-5291 / FAX: (562) 802-0110
VANCEANDHINES.COM