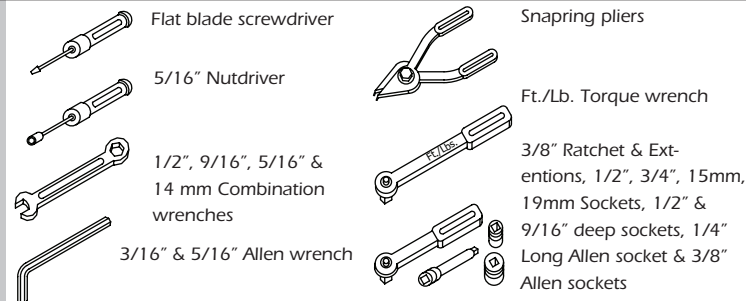




Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any 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. Remove right side cover.
2. Loosen the pinch clamp bolt on the front end of muffler(s). NOTE: On OE two into one right side only exhaust systems, there is no left side removal of mufflers required.
3. Remove the two 5/16" bolts and washers that mount the muffler(s) to the saddlebag supports.
4. Remove the stock mufflers with sliding hangers and set them aside. NOTE: It may be necessary to use a penetrating lubricant to loosen the muffler from the head pipe.
5. Locate and unplug the O2 sensor wires from the wiring harness (Grey and Black connectors located behind right side panel) and remove cable ties holding wires 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.
6. Remove the right hand driver and passenger floor boards..
7. 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. Loosen the heat shield clamps on both front and rear exhaust pipes.
10. Remove the nut and carriage bolt holding the front head pipe to the bracket on the transmission housing.
11. Remove the two mounting nuts from each head pipe, located at the cylinder head. Carefully remove the head pipes and set them aside. This may be easier if the heat shields are loosened first.
12. Using a 14mm wrench, carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.
13. Replace the bracket on the transmission housing with new bracket (stamped 810-P) (supplied) and torque to 13-16 ft. lbs. Use 1/4" long allen socket to tighten indicated bolt (Figure 1).
14. 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.
15. Check condition of exhaust gaskets and replace if worn or damaged.

FIGURE 1

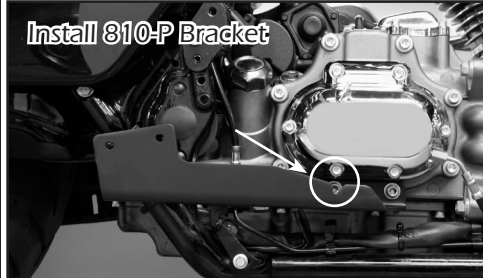


FIGURE 2

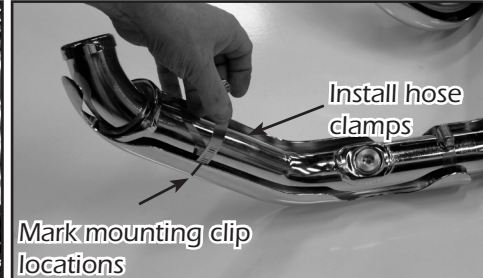


FIGURE 3

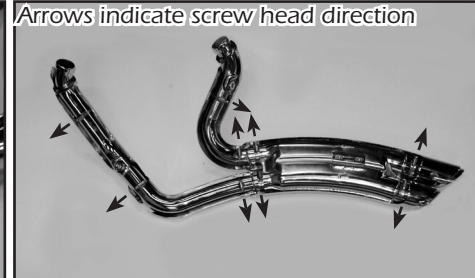


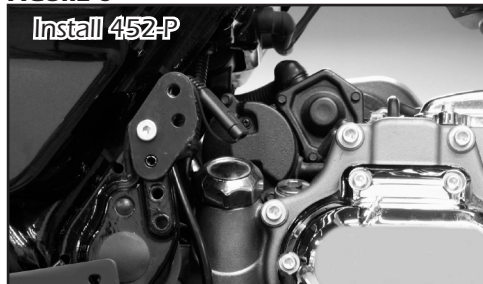
FIGURE 4



FIGURE 5



FIGURE 6



1. 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).
2. Lay header assembly into header heat shields, muffler heat shields will be installed later. Loosely install the #20 hose clamps (supplied) into mounting clips (Figure 2). NOTE: Screw heads should be accessible when the system is installed on motorcycle for adjustment purposes (Figure 3). Do not tighten at this time.
3. Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new head pipes, (Grey connector into front head pipe, Black connector into rear head pipe). If your system uses 18mm O2 sensors then install the O2 sensors directly into the O2 port. If equipped with the smaller 12mm O2 sensors install the provided adapter into the O2 port first, then install the O2 sensor. NOTE: Be careful not to get anti-seize on sensor tip, it may affect sensor function.
4. Install circlips and flanges from stock system onto both new head pipes (Figure 4).
5. Using stock flange nuts, carefully install head pipes onto motorcycle. Do not tighten at this time.
6. Use the nut plate and 5/16" x 5/8" flange bolts (supplied) to attach the header assembly to the bracket. Tighten the exhaust port flange nuts and the 5/16" x 5/8" flange head bolts.
7. Install the muffler heat shields on the header assembly (long on top, short on bottom) using the #36 hose clamp on slanted end and #28 hose

8. clamp on the other. Adjust muffler heat shields for a 1/4" gap between the heat shield and exhaust tip (Figure 5) and tighten all the hose clamps.
8. Install a supplied 3/8" lock washer on both of the supplied 3/8"-16 bolts (3" and 1 1/4"). Using these bolts re-install the floor board using the 3" long bolt with the heavy round spacer (A471HW) with the stock nut on the forward mount and the 1 1/4" long bolt with the heavy spacer with pin (A473HW) on the rear mount. NOTE: 2009-2011 CVO models will require an alternate screw length due to an additional spacer. Recommended bolt is 3/8"-16 x 1 1/2".
10. Re-install the right hand passenger floor board using the supplied relocater bracket (Stamped 452-P), low profile allen bolt and lock washer (supplied). NOTE: This bracket should only be mounted in the highest possible position on the bike frame (Figure 6).
11. Route O2 sensor wires away from hot areas of the motorcycle. Plug the O2 sensor wires back into the wiring harness, grey into grey, black into black. Re-install the right side panel.
12. Re-install saddlebags.
13. Be sure to tighten all hardware before starting your motorcycle.
14. 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 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 a soft cloth and cleaning solvent that will leave no 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, P/N 61003. Contact your local dealer or call (562) 921-0071 to order. Visit fuelpakfi.com for more information.

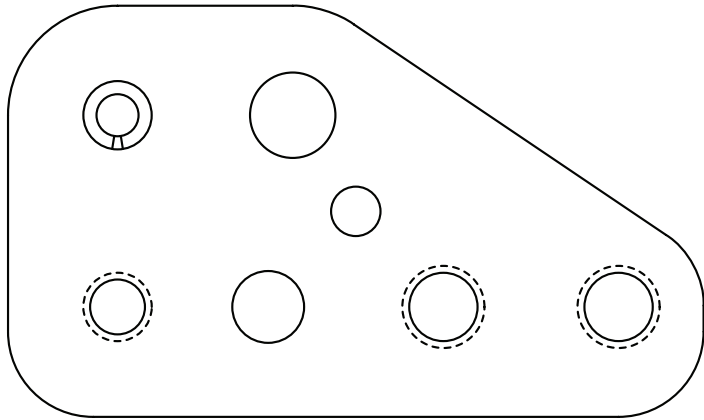
Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

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.

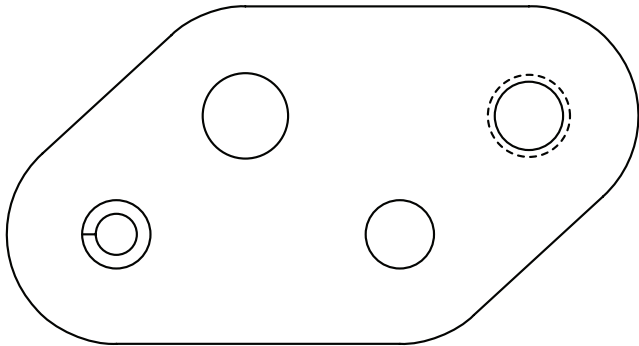
ALL PARTS SHOWN ARE ACTUAL SIZE



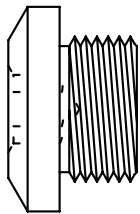
PACKING LIST



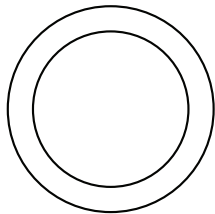
2010 Passenger Footpeg Relocator Bracket x 1



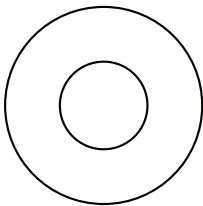
Passenger Footpeg Relocator Bracket x 1



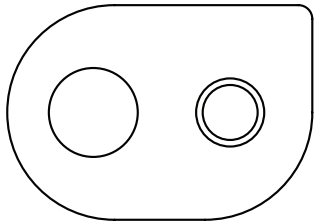
18MM O2 Plug x 2



18mm Copper Washer x 2



Floor Board Spacer
Rear x 1



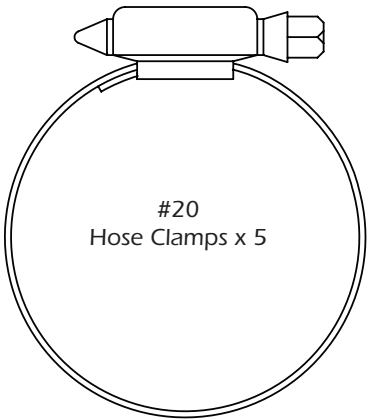
Floor Board Spacer
front x 1

WARRANTY

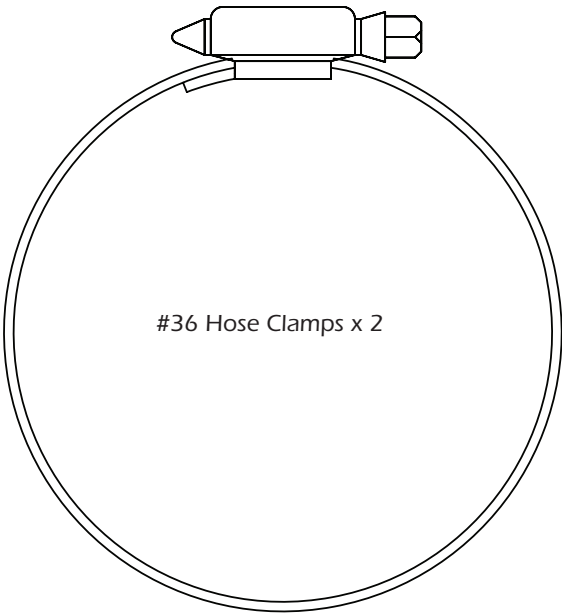
Vance & Hines exhaust systems are warranted against defects in material and workmanship for a period of 90 days from the date of purchase from an authorized dealer. This warranty does not cover discoloration of chrome finishes. This warranty is limited to the repair or replacement of a product proven 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.



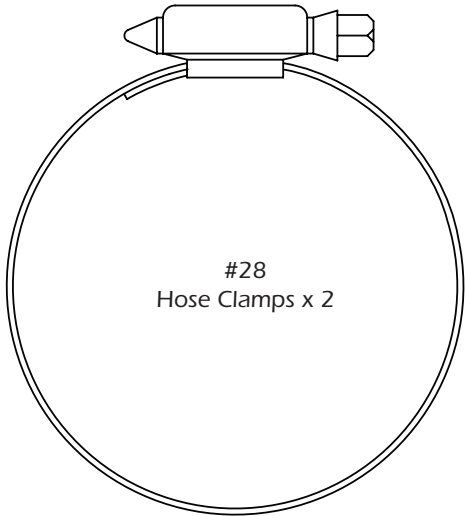
PACKING LIST



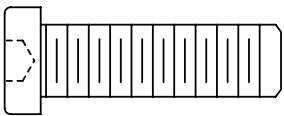
#20
Hose Clamps x 5



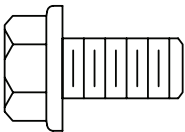
#36 Hose Clamps x 2



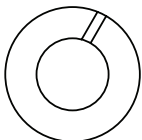
#28
Hose Clamps x 2



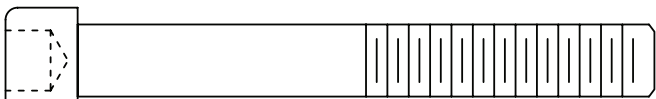
3/8" x 1 1/4" Low Head Allen Bolt x 1



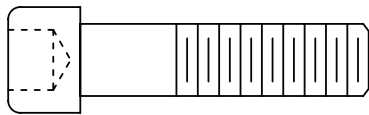
5/16" x 5/8" Flange Head
Bolts x 2



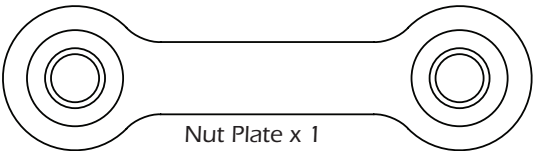
3/8" Lock Washer x 3



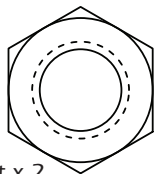
3/8"-16 x 3.0" Socket Head Capscrew



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



Nut Plate x 1



18 - 12MM Adapter Insert x 2

PARTS NOT SHOWN:

810-P	Bracket	X1
D662FC	Front head pipe	X1
D662HC	Front heat shield	X1
D663HC	Rear heat shield	X1
D644HC	Front muffler heat shield	X1
D645HC	Rear muffler heat shield	X1

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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.

