

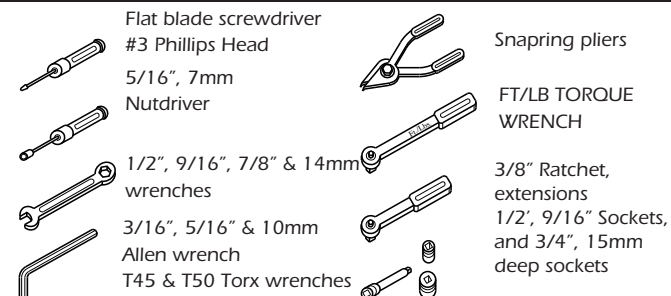
HARLEY-DAVIDSON® SOFTAIL RSD SLANT 2 INTO 1 (Works) INSTALLATION INSTRUCTIONS PART# 11811



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

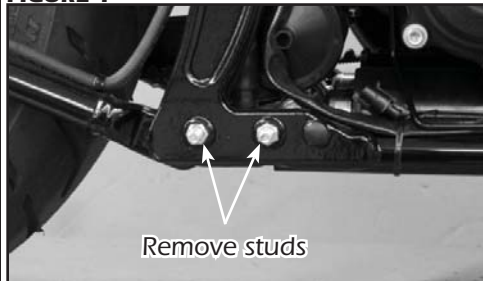
STOCK EXHAUST SYSTEM REMOVAL

1. On FLSTC, FLSTF, and FLSTN, loosen the right hand floor board mounting bolts to gain clearance for exhaust removal and installation.
2. On FLSTF, FXS and FLSTN and FXSTD, you will need to remove the right side passenger footpeg and hanger, as this is attached to the exhaust mount bracket. Re-install the right side passenger peg using the 3/8"x2 1/2" capscrew without spacer.
3. Unbolt the carriage bolt and clamp attached to the bracket located under the right side transmission cover.
4. Loosen crossover pipe clamp located between front and rear head pipes.
5. Loosen the heat shield clamps on both front and rear exhaust pipes.
6. Remove the two mounting nuts from each head pipe.
7. Remove the nuts attaching the exhaust mounting bracket to the frame.
O2 SENSOR EQUIPPED MODELS (2007-PRESENT)
8. **Rear O2 Sensor,** Locate the O2 sensor connector, unplug the connector from the main harness and feed the wire through the frame to free it from the motorcycle. Pay attention to wire routing for re-installation. NOTE: For **2007 to 2011 Models** the connector is located under the oil tank, on the right side. For **2012 & Later Models** the connector is located under the seat, remove both the seat and battery for access.
9. **Front O2 sensor,** Locate the O2 sensor connector at the front of the motorcycle, unplug connector from harness, and free the sensor lead from the motorcycle. NOTE: For **2007 to 2011 Models,** Open the plastic cover above the rectifier to gain access to the sensor plug, cut the cable ties holding

the sensor wire to frame.

10. Remove the exhaust system and set it aside. Assistance may be required,.
11. Carefully remove the O2 sensors from the stock head pipes.
12. Remove the stock mounting bars, brackets and/or studs (Figure 1).
PRE 2000 Models: Remove the lower mounting bar. Remove the right side 1/4" bolt which holds the lower fender in place to allow removal of the right passenger foot peg. Place the motorcycle on its side stand and loosen the swing arm pivot bolt nut. Position a floor jack under the right hand frame tube just below the swing a pivot bolt. Using assistance, carefully raise the jack just enough to take the weight off the swing arm bolt and remove the swing arm pivot bolt and the stock upper mounting bar. Replace the swing arm pivot bolt and torque to 135 FT/LB. Re-install the right passenger foot peg using the 1/2"x3" capscrew with the 1 5/8" spacer and 1/4" bolt to secure fender.
13. **2000 & Later Models:** Using a T50 Torx driver, remove the three mounting bolts and mounting bar. Two of the T50 bolts are visible, the third also attaches the right hand passenger peg and is accessed by removing the foot peg. Re-install the foot peg using the 3/8"x2 1/2" capscrew with the 3/4" spacer.
14. Carefully remove exhaust port flanges and circlips from the stock exhaust system using snapping pliers. NOTE: Replace bent or damaged circlips.
15. Replace the exhaust gaskets with the supplied gaskets. NOTE: Replacement gaskets, Harley-Davidson Screaming Eagle #17048-98 or equivalent

FIGURE 1



Remove studs

FIGURE 2



Install Bracket

1. Attach mounting bracket 773-P to frame using two 3/8" x 3/4" flange head bolts (Figure 2). If equipped, plastic plugs must be removed.
 2. Carefully unpack both headers (R140FB, R145FB) and muffler body (R140RB) from their respective protective packaging and place them on a non-abrasive surface such as a blanket or carpet.
 3. Install exhaust port flanges and circlips (from stock system) onto head pipes.
 4. Install both the front header heat shield (R145HB) and rear header heat shield (R140HB) by laying them on their respective headers and loosely install the #24 hose clamps into the mounting clips. Screw heads must be accessible when the system is installed on the motorcycle for adjustment purposes. NOTE: Do not tighten the hose clamps at this time.
 5. **For 2012 & Later**, feed wire for the rear O2 sensor (Black) around the frame and under the seat. Re-install battery, plug the sensor into the stock wiring connector. Feed connector for the front oxygen sensor (Gray) around the frame and into the holder on the frame behind rectifier. Plug the sensor into the stock wiring connector.
 6. **For 2007 to 2011 models**, feed wire for the front oxygen sensor around and into the plastic holder on the frame. Plug the sensor into the stock wiring connector. Snap the plastic holder closed to hold the connector in place. Install a new nylon cable tie to hold the wires onto the frame in the original location. Feed connector for the rear oxygen sensor around the frame under the oil tank on the right hand side. Plug the sensor into the stock wiring connector. (*)
 7. Using stock flange nuts, carefully install headers into exhaust ports. NOTE: Do not tighten at this time.
 8. Slip the muffler/collector assembly onto the head pipes and secure with the supplied exhaust springs using the spring puller tool.
 9. Align the mounting bracket to the megaphone, slide the nut plate inside the bracket that is welded to the backside of the muffler body and attach the muffler body to the mounting bracket using the two 5/16" x 5/8" flange head bolts. NOTE: Leave them loose to allow for adjustment.
 10. Tighten the cylinder port exhaust flange nuts on both the front and rear cylinders.
 11. Check the alignment of the muffler body then tighten the 5/16" x 5/8" flange head bolts.
 12. On models equipped with O2 sensors, Apply a small amount of anti-seize compound to the threads of the O2 sensors removed from the stock head pipes and install them into the new head pipes. On 2012 models, install O2 sensor with gray connector (short) in the front head pipe and the O2 sensor with the black connector (long) into the rear head pipe. Be careful not to get anti-seize on sensor tip, it may affect sensor function.
 13. Check Torque on stainless steel plugs with copper washers into both front and rear headers at the bung opening. (18mm at 30-44 ft/lbs / 12mm at 14ft/lbs)
 14. **On floor board models**, remove the stock bolts from the floor board and replace them with the 3/8"-16 x 1-1/4" button head capscrews with the 1/2" thick powder coated spacers between the floor board mount and the frame. Tighten the floor board mounting bolts.
 15. Be sure to tighten all hardware before starting your motorcycle.
 16. After installation and before starting motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave a residue. **NOTE: Any residue or fingerprints will stain the pipes when the metal heats up.**
- (*) Model years: 2006 to 2011 uses 18mm sensors, O2 extensions may be needed. Model 2012 & later use 12mm sensors

EXHAUST CARE - HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST SYSTEM

1. 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 motorcycle.
2. It is considered normal for Stainless Steel exhaust systems to discolor due to heat.
3. High performance engine tuning utilizing a dyno will likely result in severe discoloration.
4. 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.
5. 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



FUEL MANAGEMENT:

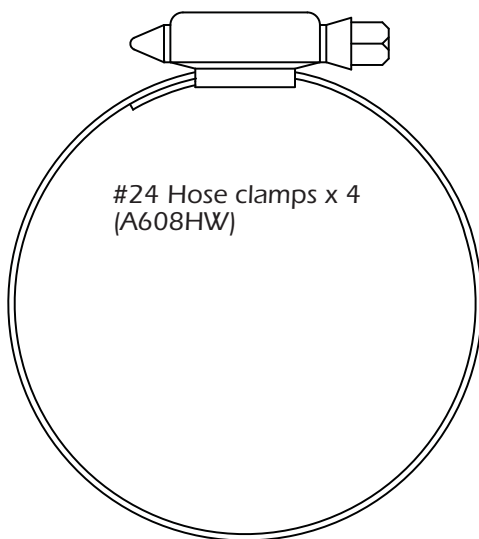
Take the guess work out of fuel injection with Fuelpak Fuel Management. Contact your local dealer or call (562) 921-0071 to order. Visit fuelpakfi.com for more information. Fuelpak is intended for racing or off-highway use only, and is not legal for sale or use in California on pollution-controlled vehicles.

#31003 18MM O2 SENSOR ELIMINATOR KIT
#71001 18MM O2 SENSOR EXTENSION KIT

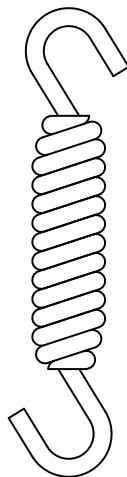
PLEASE NOTE: Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation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

PACKING LIST

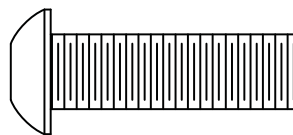
ALL PARTS SHOWN ARE ACTUAL SIZE



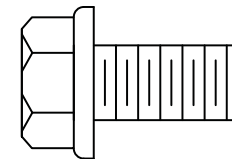
#24 Hose clamps x 4
(A608HW)



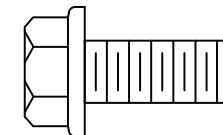
Exhaust Springs x 2
(A115SP)



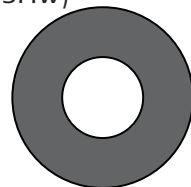
3/8" Button Head x 3
(A533HW)



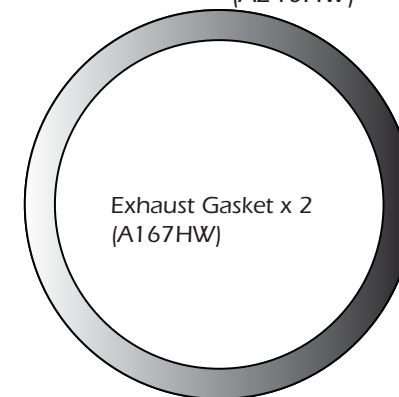
3/8" Flange bolt x 2
(A290HW)



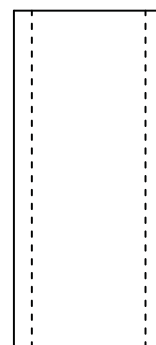
5/16" Flange bolt x 2
(A240HW)



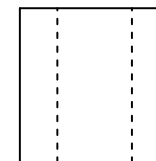
1/2" Spacer x 3
(A471HW)



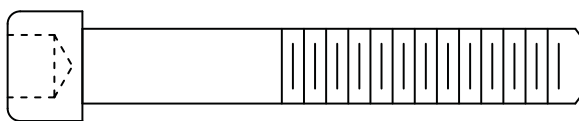
Exhaust Gasket x 2
(A167HW)



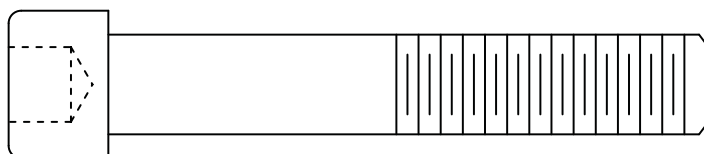
1-5/8" Spacer x 1
(Pre 2000)
(D101ST-P)



3/4" Spacer x 1
(D110ST-P)



3/8" X 2-1/2" Allen bolt x 1
(A101HW)



1/2" X 3" Allen bolt x 1 (Pre 2000)
(A285HW)



Nut plate x 1
(A195HW)

PARTS NOT SHOWN:

773-P	Bracket	x1
R140FB	Front Header	x1
R145FB	Rear Header	x1
R140RB	Muffler Body Assy	x1
R145HB	Front heat shield	x1
R140HB	Rear heat shield	x1
A260SP	Spring Puller Tool	x1

Pre-Installed:

A527HW	18mm Plug	x2
A528HW	12mm Plug	x2
A121HW	18mm Washer	x2
A127HW	12mm Washer	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 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.

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.

