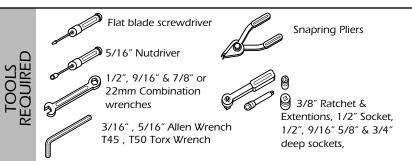
#### HARLEY-DAVIDSON<sup>®</sup> SOFTAIL STRAIGHTSHOTS 2-2 INSTALLATION INSTRUCTIONS PART# 17817





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.

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.



## READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

- **NOTE:** These instructions are written for late model motorcycles equipped with O2 sensors. Please contact our customer service department for all other applications. (Use sensor plug kit #16925).
- 1. Under the oil tank on the right hand side, locate the rear O2 sensor connector. Unplug sensor and feed the end of wire through the frame freeing it from motorcycle. NOTE: Pay attention to wire routing for re-installation.
- 2. Open the plastic cover above the rectifier on front of the frame to gain access to the front O2 sensor connector. Unplug sensor from harness. Remove cable tie holding wire to frame and feed the end of the wire through, freeing it from motorcycle.
- 3. On FLSTC, FLSTF, FLSTN and FLSTSC models, loosen the right hand floor board mounting bolts to gain clearance for exhaust removal and installation.
- 4. Loosen the heat shield clamps on both front and rear exhaust pipes.
- 5. Remove the two mounting nuts from each head pipe, located at the cylinder head.
- 6. Remove the nuts attaching the exhaust mount bracket to the frame.

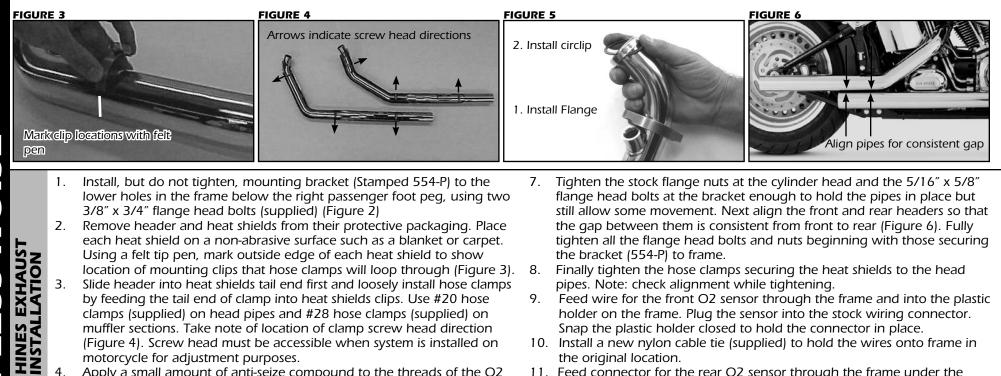
- On FLSTN, FLSTF and FXSTD models, you will need to remove the right side 7. passenger footpeg and hanger, as this is attached to the exhaust mount bracket. Remove hanger, and replace the passenger foot peg assembly using the 3/8" x 2 1/2" Allen bolt (supplied).
- 8. If equipped, unbolt the carriage bolt and clamp attached to the bracket under the right side transmission cover.
- Remove the entire exhaust system and set it aside. 9.
- 10. If equipped, remove the bracket from under the right side transmission cover.
- 11. 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.
- 12. Remove the two lower mounting studs from the frame (Figure 1).
- 13. Carefully remove exhaust port flanges and circlips from the stock exhaust system using snapring 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.







Page 1 of 4



- 10. Install a new nylon cable tie (supplied) to hold the wires onto frame in the original location.
- 11. Feed connector for the rear O2 sensor through the frame under the oil tank on the right hand side. Plug the sensor into the stock wiring connector.
- 12. Re-tighten floor board mounting bolts on models so equipped.
- 13. Be sure to tighten all hardware before starting motorcycle.
- 14. After installation and before starting the motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave a residue. 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

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.

motorcycle for adjustment purposes.

- 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.
- Make sure there are no exhaust leaks at the junction of the exhaust pipes and cylinder head. 4. We recommend replacing gaskets if they are worn.

### **VANCE & HINES OPTIONAL ACCESSORIES**



#### FUEL MANAGEMENT:

Apply a small amount of anti-seize compound to the threads of the O2

sensors and install them into the new head pipe. NOTE: Be careful not

Install circlips and flanges from stock system onto the new head pipes

Beginning with the front cylinder, install the front head pipe (D585)into

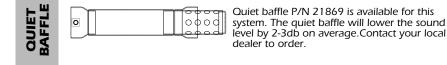
the exhaust port using stock flange nuts. Slide nut plate into bracket welded to muffler body and secure to mounting bracket using two 5/16"

x 5/8" flange head bolts. Now repeat these steps with the remaining

to get anti-seize on sensor tip, it may affect sensor function.

Take the guess work out of fuel injection with Fuelpak Fuel Management.

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.

FUELPAK

32

5.

6.

(Figure 5).

header assembly (D586)

#### HARLEY-DAVIDSON® SOFTAIL STRAIGHTSHOTS 2-2 INSTALLATION INSTRUCTIONS PART# 17817



x1

x1

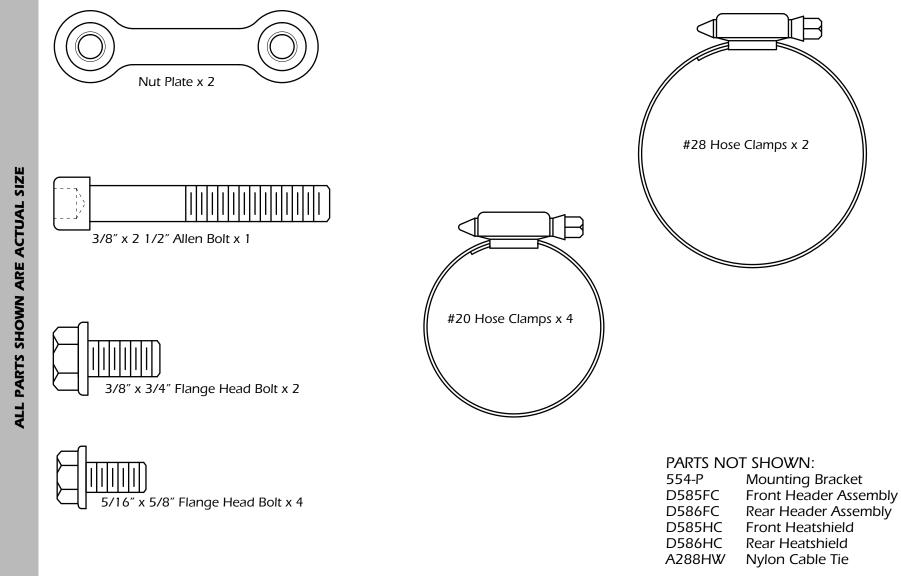
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#### PACKING LIST



#### 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.

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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.

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.

Vance & Hines puts everything within reach.