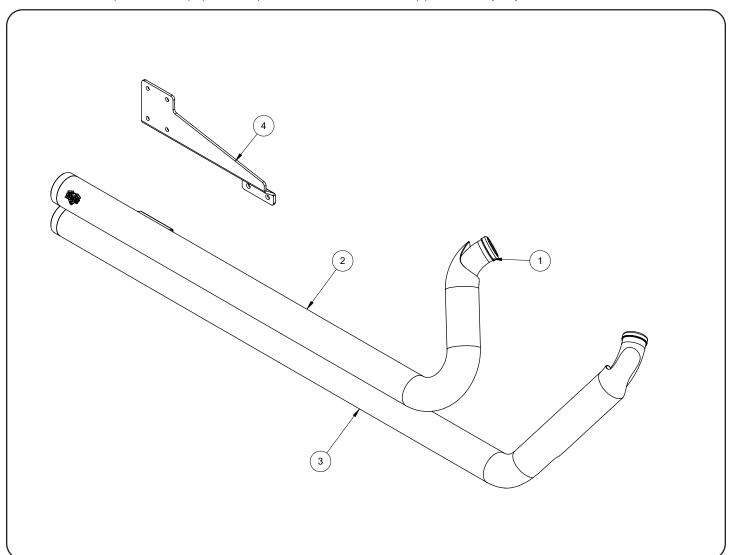


# INSTALLATION INSTRUCTIONS: HARLEY-DAVIDSON 2012-2017 SOFTAIL BIG SHOTS LONG PCX PART# 17323

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 and a perfect fit. Please follow the installation instructions below and if you have any questions, please call our technical support line at (562) 926-5291.

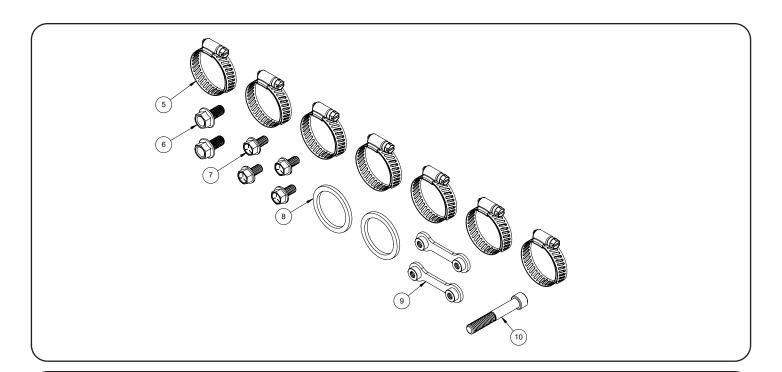


# **PARTS LIST**

	NO.	Part Number - Description	Qty.
	1	D466FC - HEAD PIPES	1
	2	D466HC - REAR HEAT SHIELD	1
	3	D465HC - FRONT HEAT SHIELD	1
	4	331-P - MOUNT BRACKET	1
Ī	5	A270HW - #20 HOSE CLAMP	7

NO.	Part Number - Description	Qty.
6	A290HW - 3/8-16 X .75" FHS	2
7	A240HW - 5/16"-18 X .625" FHS	4
8	A167HW - EXHAUST GASKET	2
9	A 195HW - DOGBONE NUT PLATE	2
10	A101HW - 3/8-16 X 2.5 SHCS	1

Page 1 of 6 RevA



## **TOOLS REQUIRED**



Flat Blade Screwdriver #3 Philips Head 5/16" Nutdriver



3/8" Drive Ratchet, Extensions

1/2" & 9/16" Sockets 3/4" Deep Socket



Allen Wrenches: 3/16",

5/32"

Torx Wrenches: T45,

**T50** 



**Snapring Pliers** 



1/2", 9/16", & 14mm Combination Wrenches

## **OEM SYSTEM REMOVAL**

- 1. Remove the seat, locate the rear O2 sensor connector and unplug the sensor from teh harness. Remove the battery and feed the sensor cable end through the frame. NOTE: Pay attention to wire routing for re-installation. Refer to service manual for proper battery removal.
- 2. Unplug the front sensor (locaated behind the rectifier) from harness and feed the end of the wire through the frame, freeing it from motorcycle.
- **3.** On FLSTC, FLSTF, and FLSTN (floorboard models), loosen the right hand floorboard mounting bolts to gain clearance for exhaust removal and installation.

Page 2 of 6 RevA

# OEM System Removal (continued)

- **4.** If equipped, unbolt the carriage bolt and clamp attached to the bracket under the right side transmission cover.
- 5. On FLSTF, FXS, and FLSTN (foot peg models), you will need to remove the right side passenger foot peg and hanger, as this is attached to the exhaust mount bracket. Replace the passenger foot peg assembly using the 3/8"-16 x 2.5" Socket head screw (supplied).
- 6. Loosen the heat shield clamps on both front and rear exhaust pipes.
- 7. Remove the two mounting nuts from each head pipe, located at the cylinder head.
- 8. Remove the nuts attaching the exhaust mount bracket to the frame.
- 9. Remove the entire exhaust system and set it aside.
- **10.** Remove the two lower mounting studs from the frame using the 3/4" deep socket (Figure 1).
- 11. If equipped, remove the bracket from under the right side transmission cover.
- **12.** Using 14mm wrench, carefully remove the O2 sensors from the stock header and save them for re-use with the new system.
- 13. Carefully remove the exhaust port flanges and circlips from the stock exhaust system using snapring pliers. NOTE: Replace bent or damaged circlips.
- **14.** Remove stock exhaust gaskets and replace them with the supplied exhaust gaskets. NOTE: Replacement gaskets HD Screaming Eagle #17048-98 or equivalent.

## **VANCE & HINES EXHAUST SYSTEM INSTALLATION**

- 1. Remove header and heat shields from protective packaging. NOTE: Removal of end cap may be required. Place each heat shield on a non-abrasive surface sych as a 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. Slide header into heat shields tail end first, engaging end caps (Figure 3).
- 3. Install end caps (if removal was necessary) into tail end of each heat shield engaging head pipe and heat shield. Align mountin hole with end cap hole. Install and tighten 1/4"-20 button head screws. NOTE: Removable thread locking compound is recommended.
- **4.** Install each hose clamp (supplied) by feeding tail end of clamps into heat shield clips. Take note of location of clamp screw head direction (Figure 2 & 4). Screw head must be accessible when system is installed on motorcycle for adjustment purposes. Align end tips evenly and tighten hose clamps.
- **5.** 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. NOTE: Install O2 sensor with gray connector (short) in the front head pipe and O2 sensor with black connector (long) into rear head pipe. Be careful not to get anti-seize on sensor tip, it may affect sensor function.
- 6. Install circlips and flanges from stock system onto the new head pipe (Figure 5).

Page 3 of 6 RevA

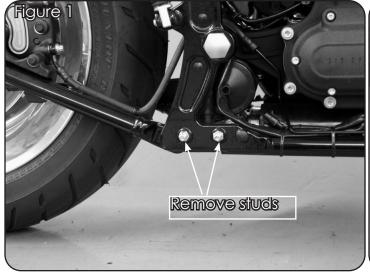
#### **VANCE & HINES EXHAUST SYSTEM INSTALLATION**

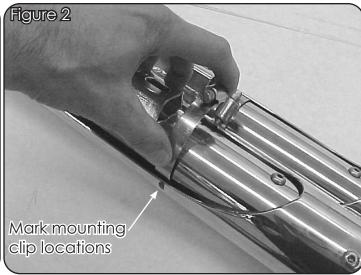
- 7. Attach mounting bracket (331-P) (supplied) using four 5/16-18 x 5/8" flange bolts and two dogbone nut plates (supplied). Slide nut plates inside brackets that are welded to the backside of each muffler (Figure 6). Leave them loose at this time. Use this procedure for both upper and lower muffler mounting positions.
- 8. Install complete assembly into exhaust ports (rear port first). Use stock flange nuts, do not tighten at this time. Install exhaust bracket to motorcycle frame rail using two 3/8"-16 x 3/4" flange bolts (supplied). Do not tighten at this time.
- 9. Tighten cylinder port exhaust flange nuts on front and rear cylinders. Now tighten the 5/16"-18 x 5/8" flange bolts (supplied) and the 3/8"-16 x 3/4" (supplied) attaching the bracket to the frame.
- **10.** Feed connector for the rear O2 sensor (black) through the frame and under the seat. Re-install battery, plug the sensor into the stock wiring connector.
- 11. Feed connector for the front O2 sensor (gray) sensor through the frame and into the holder on the frame behind the rectifier. 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 installtion and before starting the motorcycle, completely clean pipes and mufflers with warm soapy water 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.

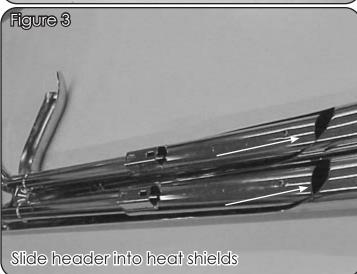
## **EXHAUST CARE - HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST SYSTEM**

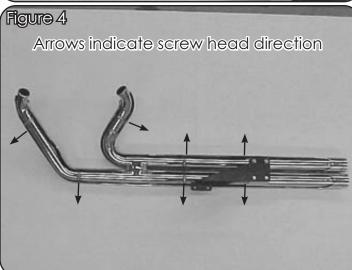
- 1. When installing a new set of chrome pipes, make sure your hands are clean and free of oil. After installation, thoroughly clean pipes with warm soapy water and a soft cloth. Dry with clean towel to remove any residue (chrome wax / polish, glass cleaner, alcohol, ammonia, etc.) before starting the 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 leak at the junction of the exhaust pipes and cylinder head. We recommend replacing gaskets if they are worn.

Page 4 of 6 RevA













#### **Emissions Notice:**

In California, in order to meet Air Resources Board emissions requirements, certain aftermarket part applications have been identified as replacements, and others have received ARB Executive Orders. All other emissions related aftermarket parts are for competition use only. A list of replacement parts and EO parts, and corresponding fitment is provided at vanceandhines.com/california.

#### Warranty:

All Vance & Hines products are warranted against defects in material and workmanship for a period of 90 days. This warranty does not cover discoloration or rust. This warranty shall be limited to the repair or replacement of the product, which may be proven defective under normal use. Vance & Hines will not warranty any system that has been abused, misused, improperly installed or modified.

Dealers or distributors are not authorized to make dispositions binding upon Vance & Hines. Vance & Hines will not be responsible for any labor charges incurred in removing or replacing any system under warranty. A return authorization number and a copy of the original purchase invoice must accompany all returns. Parts returned without a return authorization may be refused.

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