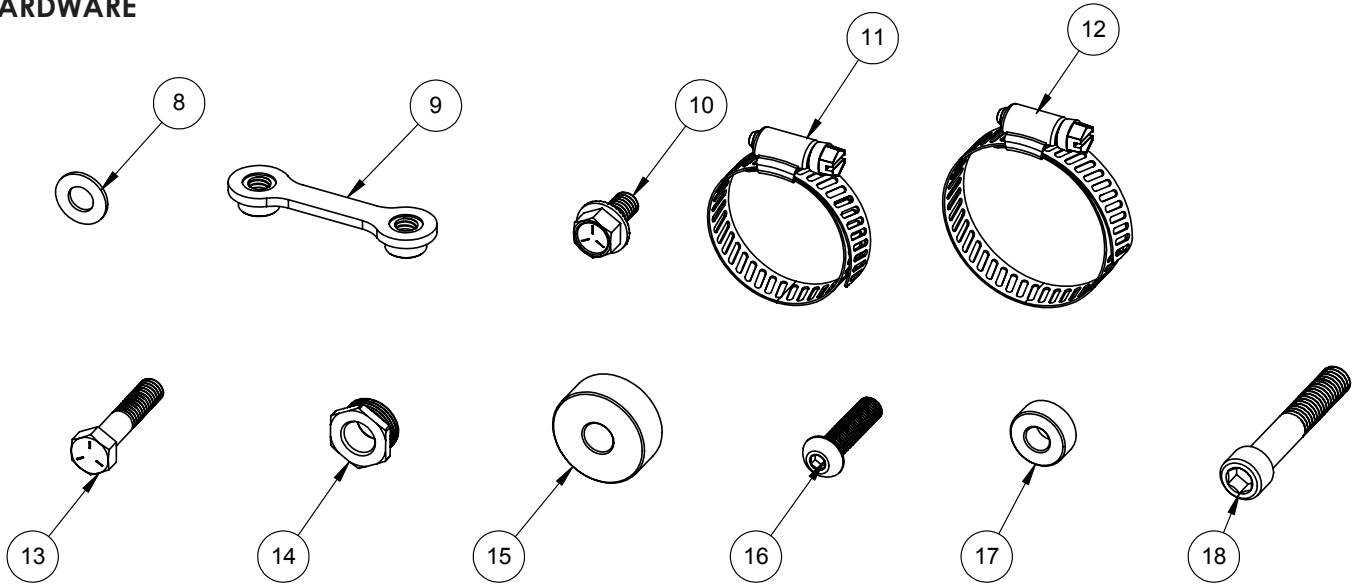
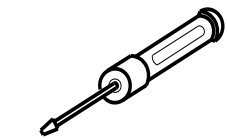


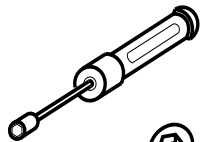
HARDWARE



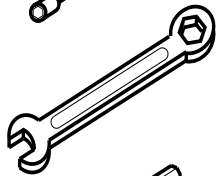
TOOLS REQUIRED



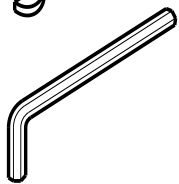
Flat blade screwdriver



5/16" Nutdriver

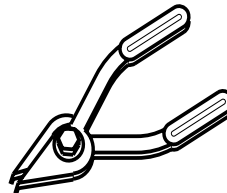


1/2" & 14mm
Combination Wrenches

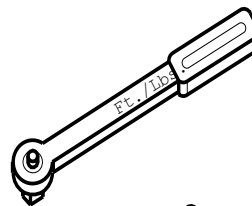


3/16" & 5/16" Allen
wrench

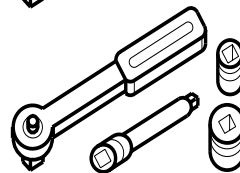
T45 Torx
T27 Torx



Snapping Pliers



Ft.Lb. Torque Wrench



1/4" Ratchet &
Extensions

1/2" & 3/4" Sockets

1/2" Deep sockets

5/32", 3/16", 1/4", & 5/16"
Allen Sockets

STOCK EXHAUST SYSTEM REMOVAL

1. Locate the rear O2 sensor connector. Remove the two bolts holding the right side cover in place and gently pull cover off bike. **NOTE:** Pay attention to the wire routing for re-installation.
2. Locate the front O2 sensor connector. Unplug the sensor and feed the end of the wire through the frame, freeing it from the motorcycle.
3. On models with floorboards, loosen the right-hand floor board mounting bolts to gain clearance for the exhaust removal and installation.
4. Loosen the heat shield clamps on both the front and rear exhaust pipes.
5. Remove the two mounting nuts from each head pipe, located at the cylinder head.
6. Remove the bolts attaching the mufflers to the mounting bracket.
7. Remove the entire exhaust system and set it aside.
8. Remove the stock mounting bracket.
9. Carefully remove the exhaust port flanges and circlips from the stock exhaust system using the snap ring pliers. **NOTE:** Replace bent or damaged circlips.
10. Carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.
11. Check the condition of the exhaust gasket and replace if worn or damaged. Harley-Davidson part number 65324-83B.

VANCE & HINES EXHAUST INSTALLATION

NOTE: Use appropriate Harley-Davidson service manual procedures when referring to exhaust installation.

1. Remove the bottom two bolts from the transmission cover. Position the mounting bracket 1141-P over the mounting location to determine which bolts to remove.
2. Attach the mounting bracket 1141-P to the transmission using 5-16"-18 x 1.5" Hex Bolts (Supplied) and washers. Tighten to 22-25 ft-lbs. (**Figure 1**)
3. Remove head pipes and heat shields from their protective packaging. Place each heat shield on a non-abrasive surface such as a blanket or carpet. For Chrome use a felt tip pen and for black systems use a pencil, lightly mark outside edge of each heat shield to show location of mounting clips where hose clamps will loop through. **NOTE:** Pencil marks can be erased if care is taken not to harm coating.
4. Lay header assemblies into heat shields and loosely install the #20 hose clamps (supplied) into mounting clips. Screw heads should be accessible when the system is installed on motorcycle for adjustment purposes (**Figure 4**). Do not tighten at this time. **NOTE:** Muffler heat shields will be installed after pipes are on the motorcycle.
5. Apply a small amount of anti-sieze compound to the threads of the oxygen sensors and install them into the new head pipe. Install supplied 18mm to 12mm oxygen sensor adapter then install the 12mm oxygen sensors.
6. Install flanges and circlips from stock system onto the new header pipes.

VANCE & HINES EXHAUST INSTALLATION CONTINUED

7. Using stock flange nuts, carefully install the header assemblies onto the motorcycle. Finger tighten only at this time.
8. Use the nut plates and 5/16" x 5/8" flange bolts (supplied) to attach the pipes to the bracket. Do not tighten at this time.
9. Align pipes on motorcycle so the gap between the two muffler bodies is consistent from front to rear. Tighten the exhaust port flange nuts and the 5/16" x 5/8" flange bolts.
10. Using the #28 hose clamps (supplied) install the muffler heat shields beginning with the D344HC (D1322HP) on the front head pipe followed by the D309HC (D1323HP-S) on the rear head pipe. Screw heads should be accessible for adjustment purposes (**Figure 4**). Finger tighten only at this time.
11. Adjust all heat shields for the best alignment at the seam where they meet and tighten all hose clamps. (**Figure 2**)
12. Tighten the right-hand floor board mounting bolts.
13. Route O2 sensor wires away from hot areas of the motorcycle. Plug the O2 sensor wires back into wiring.
14. For mid controls: Install spacers A740ST to foot peg mount using the 3/8-16 x 2.25 SHCS. Install spacer A745HW-P onto brake lever linkage using 5/16-24 x 1.25 BHCS.
15. Be sure to check that all fasteners including the hose clamps on the heat shields are tight. (See torque specifications in Harley-Davidson service manual).
16. After installation and before starting the motorcycle. For Chrome: completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave residue. For Black: completely clean pipes and mufflers with warm soapy water and a clean soft cloth that will not leave residue. **NOTE:** Any residue, oil, or fingerprints will stain the finish when the metal heats up.

EXHAUST CARE (CHROME)

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 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.

EXHAUST CARE (BLACK)

1. When installing a new set of black 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 a clean towel to remove any residue before starting the motorcycle. Do NOT use anything abrasive to clean the pipes.
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.

FIGURE 1

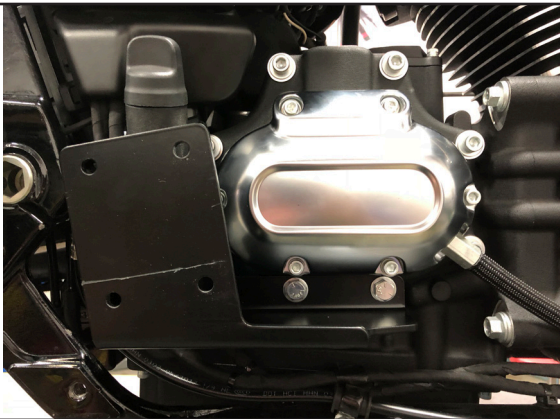


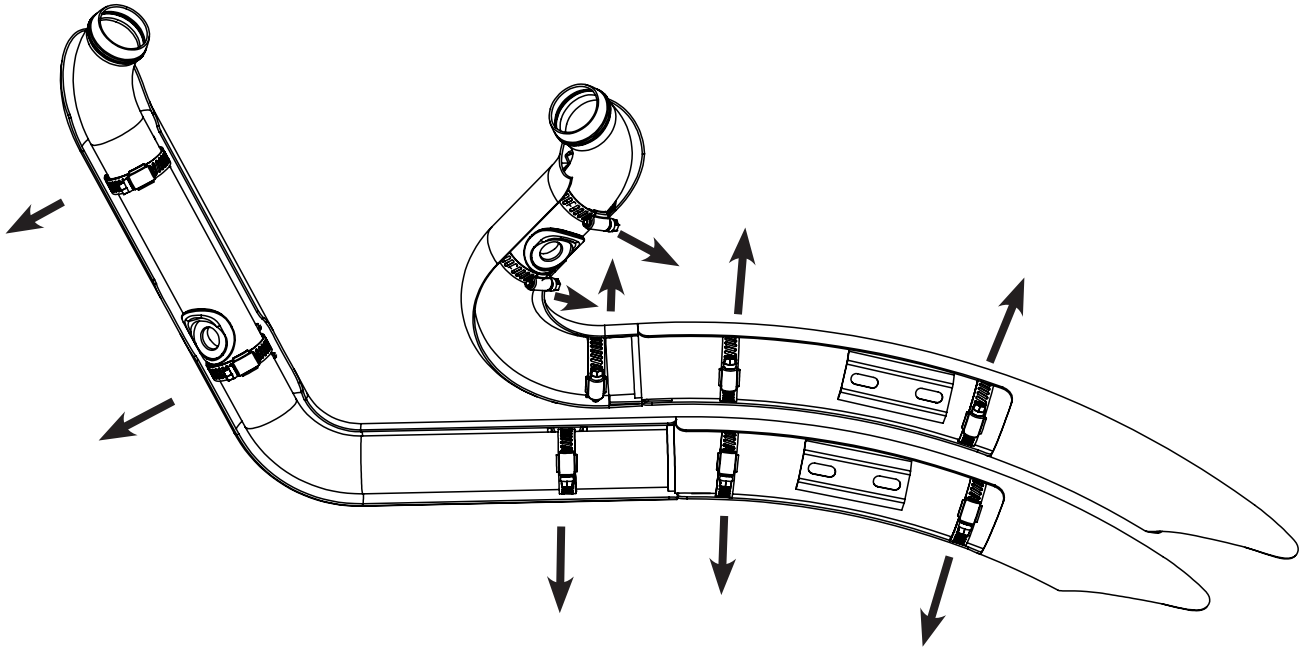
FIGURE 2



FIGURE 3



FIGURE 4



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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