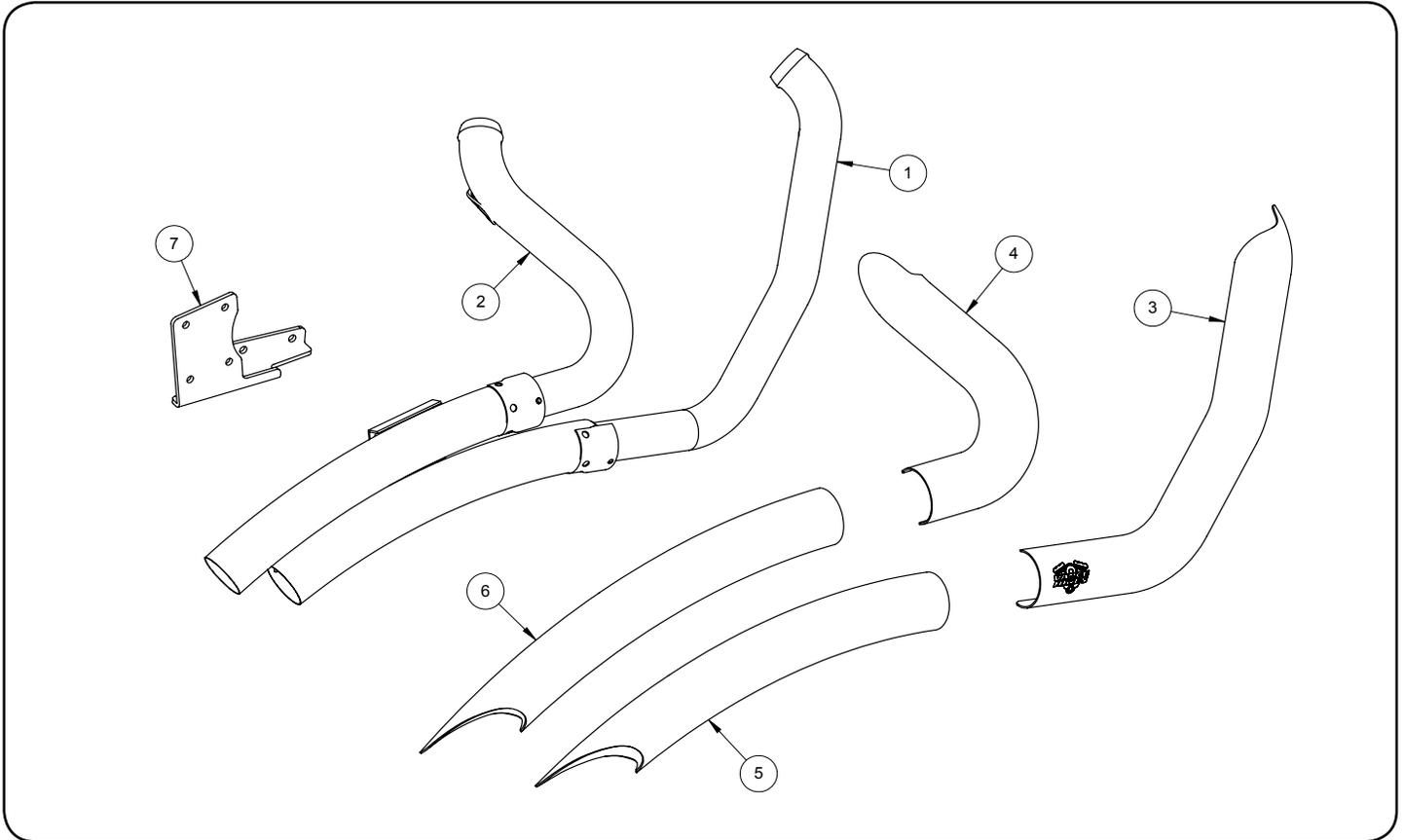


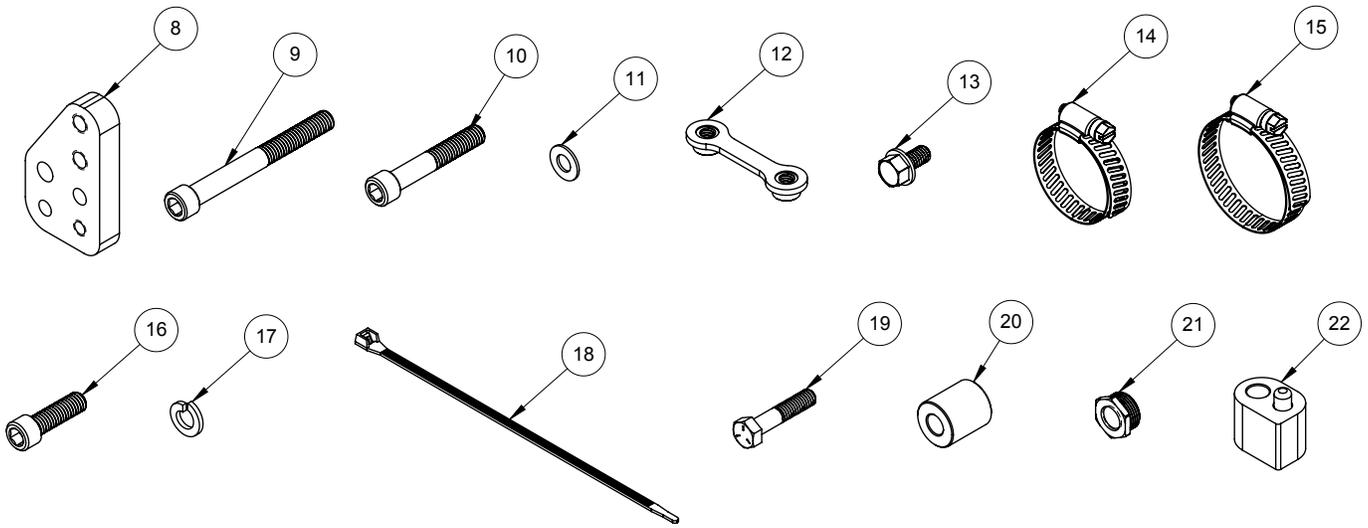
Congratulations, you have purchased the finest exhaust system available for your motorcycle. Your Vance & Hines exhaust is designed and crafted for performance, quality, and style. Please follow the instructions below, check exhaust system for missing or damaged parts and if you need any assistance please contact our technical support line (562) 921-7461.



### PARTS LIST

NO.	PART NO.	CH./BLK.	Description	Qty.
1	D890FC / D892FP		Front Header	1
2	D891FC / D893FP		Rear Header	1
3	D890HC / D892HP		Front Heat Shield	1
4	D891HC / D893HP		Rear Heat Shield	1
5	D308HC / D322HP		Front Muffler Heat Shield	1
6	D309HC / D323HP-S		Rear Muffler Heat Shield	1
7	1107-P		Mount Bracket	1
8	579-P		Foot Peg Adaptor	1
9	A828HW		3/8"-16 x 3.5" SHCS	1
10	A826HW		3/8"-16 x 2.25" SHCS	1
11	A107HW		5/16" Washer	2
12	A195HW		Nut Plate	2
13	A240HW		5/16"-18 x 5/8" FHS	4
14	A270HW		.81-1.75" #20 Hose Clamp	6
15	A272HW		1.31-2.25" #28 Hose Clamp	4
16	A283HW		3/8"-16 x 1.25" SHCS	1
17	A286HW		3/8" Lock Washer	3
18	A288HW		Nylon Cable Tie	1
19	A345HW		5/16"-18 x 1.5" Hex Bolt	2
20	A902HW		Spacer	1
21	A644ST		18-12mm O2 Adaptor	2
22	A667HW		Spacer	1

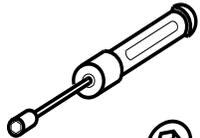
## HARDWARE



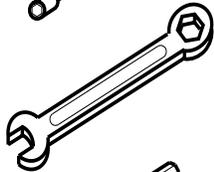
## TOOLS REQUIRED



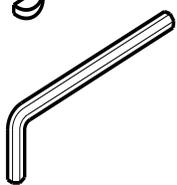
Flat blade screwdriver



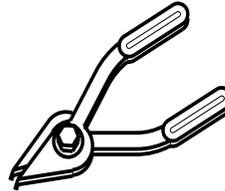
5/16" Nutdriver



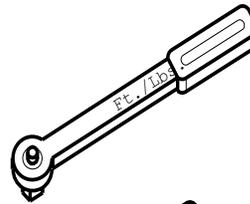
1/2", 9/16" & 14mm  
Combination Wrenches



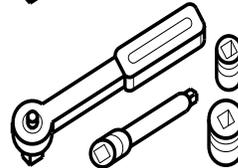
3/16" & 5/16" Allen  
wrench



Snapping Pliers



Ft.Lb. Torque Wrench



1/4" Ratchet &  
Extensions

7/32", 1/2", 3/4" Sockets

1/2", 9/16", 5/8", &  
15mm deep sockets

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

## STOCK EXHAUST SYSTEM REMOVAL

1. Remove right saddlebag and set aside. Remove the right side panel.
2. Loosen the pinch clamp bolt on the front end of muffler(s).
3. Remove the two bolts and washers that mount the muffler(s) to the saddlebag supports.
4. Remove the stock muffler(s) and set aside. **NOTE:** It may be necessary to use a penetrating lubricant to loosen muffler(s) from the head pipe.
5. Locate and unplug the O<sub>2</sub> 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 side floor board.
7. Remove the right side passenger floor board. (If equipped)
8. Loosen head pipe clamp connecting the left side muffler to the rear crossover header and the mount bracket on the backside of the oil pan. Remove the crossover section from the head pipe and the head pipe clamp.
9. Remove the mount clamp located behind the oil pan. The mount and bolts will not be re-used.
10. Remove nut from front headpipe mounting bracket and stud located to the right of the transmission cover.
11. Loosen the heat shield clamps on both front and rear exhaust pipes.
12. Remove the two flange mounting nuts from each head pipe, located at the cylinder head. Carefully remove the head pipes and set aside.
13. Remove stud that was mentioned in step 10.
14. Carefully remove the O<sub>2</sub> sensors from the stock head pipes and save for re-use with the new system.
15. 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.

## VANCE & HINES EXHAUST INSTALLATION

1. Check the exhaust gaskets for damage, and replace if necessary. Part# 65324-83B
2. Remove transmission side cover. Remove two lower transmission housing bolts.
3. Install the mounting bracket to the transmission housing using the 5/16" washers and 5/16"-18 x 1.5" hex bolts. Torque to 13-16 ft-lbs. (**Figure 1**)
4. Re-install transmission cover.
5. Remove front and rear headers and all heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as blanket or carpet. For Chrome: 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 5**). For Black, using a pencil only, mark the outside edge of each heat shield to show location of hose clamp mounting clips.

## VANCE & HINES EXHAUST INSTALLATION CONTINUED

6. 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 5**). Do not tighten at this time.  
**NOTE:** Muffler heat shields will be installed after pipes are on the motorcycle.
7. 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 ( Grey connector into the front head pipe, Black connector into the rear head pipe.) Models using 18mm wideband oxygen sensors install the sensor directly into the head pipe.
8. Install flanges and circlips from stock system onto the new header pipes.
9. Using stock flange nuts, carefully install the header assemblies onto the motorcycle. Finger tighten only at this time.
10. 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.
11. 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.
12. Using the #28 hose clamps (supplied) install the muffler heat shields beginning with the D308HC on the front head pipe followed by the D309HC on the rear head pipe. Screw heads should be accessible for adjustment purposes (**Figure 5**). Finger tighten only at this time.
13. Adjust all heat shields for the best alignment at the seam where they meet and tighten all hose clamps. (**Figure 2**)
14. Using the 3/8" lock washers (supplied) on each of the 3/8"-16 (2.25" & 3.5" long) socket head cap screws (supplied), re-install the right hand side floor board with the two machined spacers (supplied) on the forward mount (A902HW) and back mount (A667HW). (**Figure 3**) **NOTE:** Machined spacers are located between the floor board supports and the floor board mount plate.
15. Re-install the right hand passenger floor board using the supplied relocater bracket stamped 579-P, low profile allen bolt and lock washer (supplied). **NOTE:** This bracket should only be mounted in the highest position on the bike frame, and the floorboard should be mounted in the upper two bracket holes (**Figure 4**).
16. Route the front (Grey) O2 sensor wire along OE path and plug into the Grey connector. Route the rear (Black) O2 sensor along the top of the transmission along the OE path and plug into the Black connector. Secure wires to the frame using supplied nylon cable ties.
17. Re-install the saddlebags.
18. 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).
19. 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.

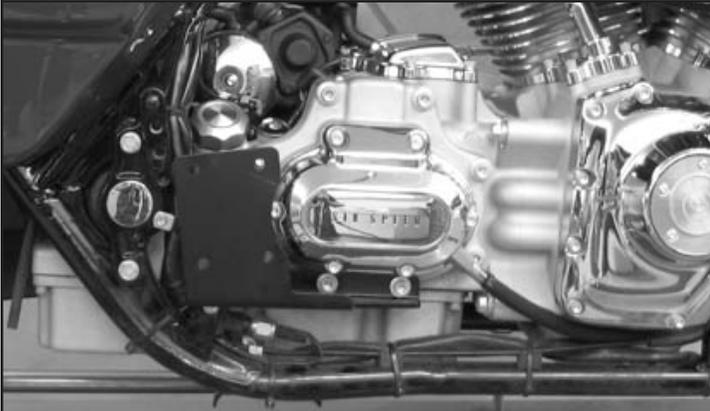
### **EXHAUST CARE (CHROME)**

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**



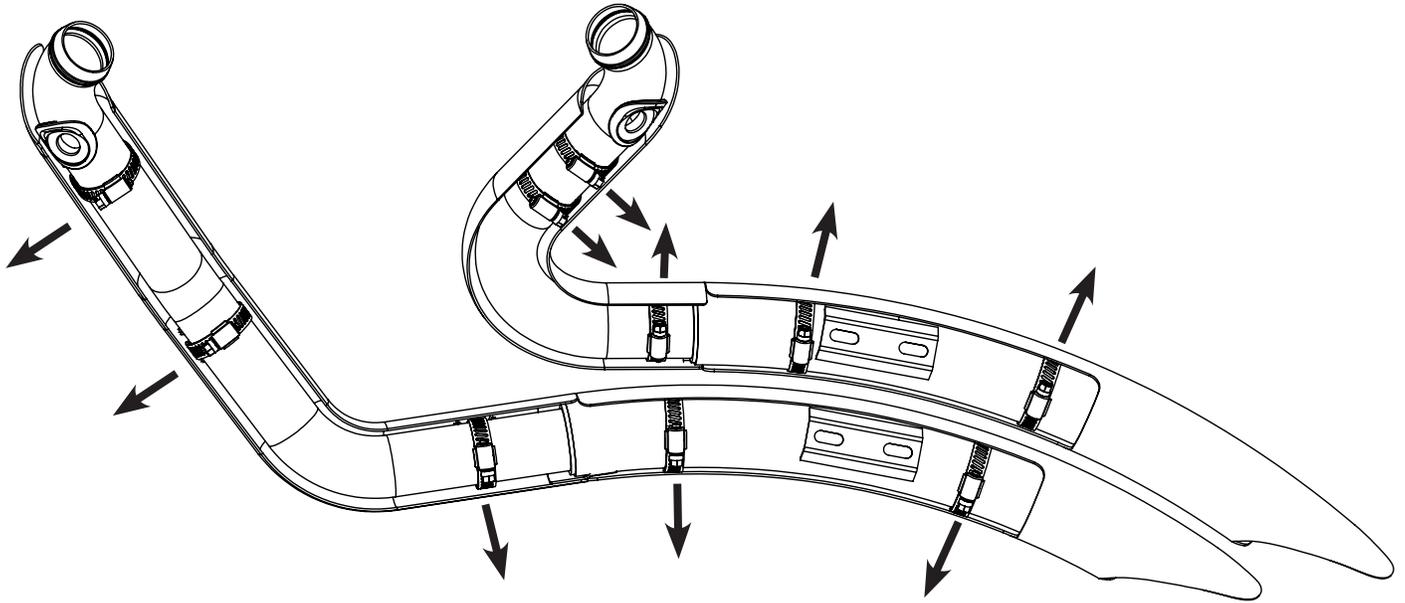
**FIGURE 3**



**FIGURE 4**



**FIGURE 5**



**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](http://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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