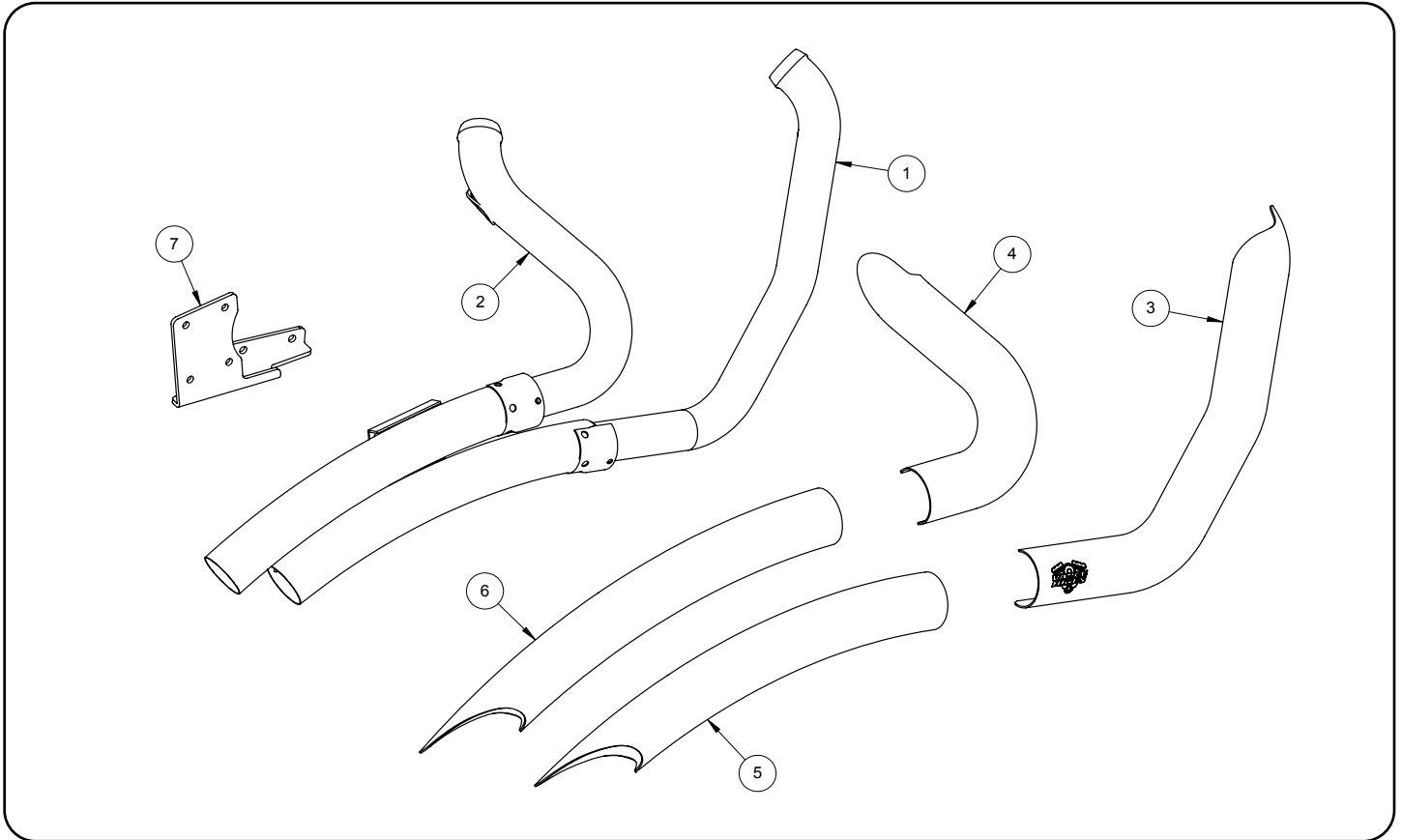


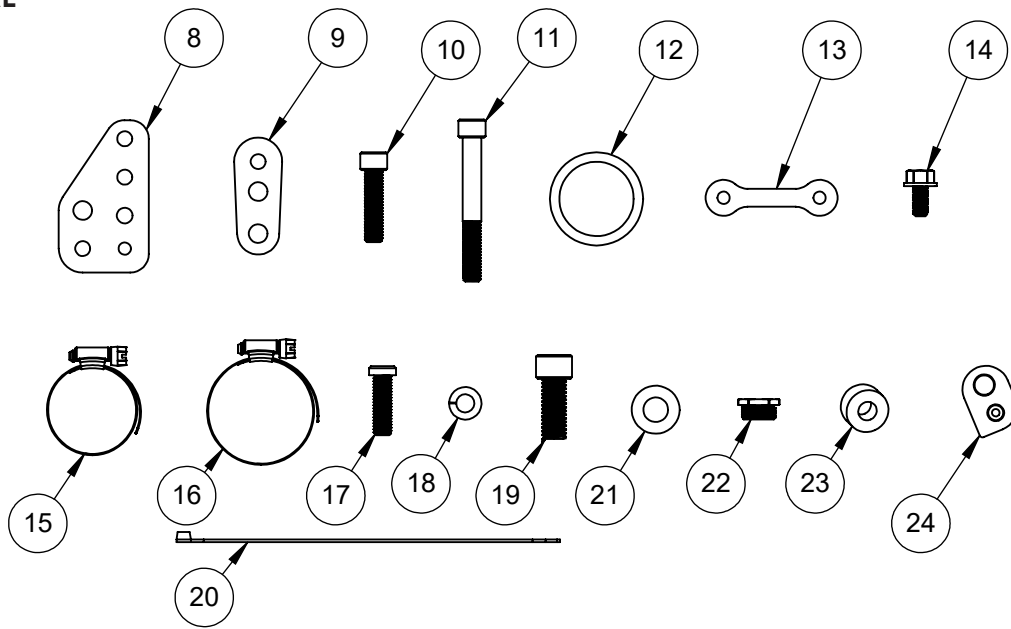
Congratulations, you have purchased the finest exhaust system available for your motorcycle. Your Vance & Hines exhaust is designed and crafted for performance, quality, and style. Please follow the instructions below, check exhaust system for missing or damaged parts and if you need any assistance please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



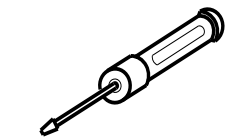
PARTS LIST

NO.	PART NO.	Description	Qty.
1	D810FC	Front Header	1
2	D811FC	Rear Header	1
3	D810HC	Front Heat Shield	1
4	D811HC	Rear Heat Shield	1
5	D308HC	Front Muffler Heat Shield	1
6	D309HC	Rear Muffler Heat Shield	1
7	508-P	Mount Bracket	1
8	579-P	Foot Peg Adaptor	1
9	593-P	Floor Board Spacer	1
10	A100HW	3/8"-16 x 1.5" SHCS	1
11	A102HW	3/8"-16 x 3.0" SHCS	1
12	A167HW	Exhaust Gasket	2
13	A195HW	Dogbone Nut Plate	2
14	A240HW	5/16"-18 x 5/8" FHB	4
15	A270HW	.81-1.75" #20 Hose Clamp	5
16	A272HW	1.31-2.25" #28 Hose Clamp	4
17	A283HW	3/8"-16 x 1.25" Lo-Pro SHCS	1
18	A286HW	3/8" Split Washer	3
19	A287HW	1/2"-13 x 1.25" SHCS	2
20	A288HW	Cable Tie	1
21	A312HW	1/2" Washer	4
22	A644ST	18-12mm O2 Adapter	2
23	A471HW	Floor Board Spacer	1
24	A672HW	Floor Board Spacer	1

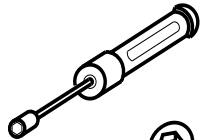
HARDWARE



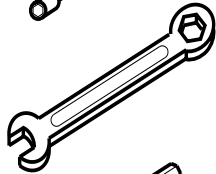
TOOLS REQUIRED



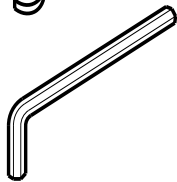
Flat blade screwdriver



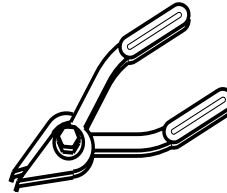
5/16" Nutdriver



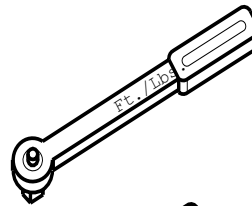
1/2", 9/16" & 14mm
Combination Wrenches



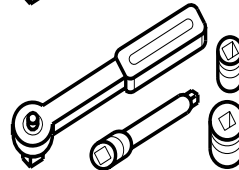
3/16" & 5/16" Allen
wrench



Snapping Pliers



Ft.Lb. Torque Wrench



3/8" Ratchet & Extensions

1/2", 3/4" Sockets

1/2", 9/16", 5/8" Deep
Sockets

1/4" & 3/8" Allen Sockets

STOCK EXHAUST SYSTEM REMOVAL

1. Remove both left and right saddlebags and set aside. Remove the right side panel.
2. Loosen the pinch clamp bolt on the front end of muffler(s). **NOTE:** On OE 2-into-1 right-side only exhaust systems, there is no left side removal of mufflers required.
3. Remove the two bolts and washers that mount the muffler(s) to the saddlebag supports.
4. Remove the stock muffler(s) with sliding hangers 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 O₂ 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 (OE dual muffler systems only).
9. Loosen the heat shield clamps on both front and rear exhaust pipes.
10. Remove the nut and carriage bolt holding the front head pipe to the bracket on the transmission housing.
11. Remove the two mounting nuts from each head pipe, located at the cylinder head. Carefully remove the head pipes and set them aside. This may be easier if the heat shields are loosened first.
12. Carefully remove the O₂ sensors from the stock head pipes and save for re-use with the new system.
13. Replace the bracket on the transmission housing with new bracket (stamped 508-P) (supplied) and torque to 13-16 ft. lbs. Use ball end of Allen wrench to tighten indicated bolt (Figure 1).
14. 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.
15. Remove stock exhaust gaskets and replace them with included gaskets. V&H kit #22899 (see accessories) is available for future use.

VANCE & HINES EXHAUST INSTALLATION

1. Remove head pipes and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as 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. Lay head pipes into heat shields and loosely install the #20 hose clamps (supplied) into mounting clips (Figure 8). **NOTE:** Muffler heat shields will be installed after pipes are on the motorcycle. Screw heads should be accessible when the system is installed on motorcycle for adjustment purposes (Figure 8). Do not tighten at this time.

VANCE & HINES EXHAUST INSTALLATION CONTINUED

3. Apply a small amount of anti-sieze compound to the threads of the oxygen sensors and install them into the new head pipe. 2010 and later models 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.)
4. Install circlips and flanges from stock system onto both new head pipes (Figure 3).
5. Using stock flange nuts, carefully install head pipes onto motorcycle. Do not tighten at this time.
6. Use the nut plates and 5/16" x 5/8" flange bolts (supplied) to attach the pipes to the bracket (Figure 4). Do not tighten at this time.
7. Align pipes on motorcycle so the gap between the two muffler bodies is consistent from front to rear (Figure 5). Tighten the exhaust port flange nuts and the 5/16" x 5/8" flange head bolts.
8. 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 8). Do not tighten at this time.
9. Adjust all heat shields for the best alignment at the seam where they meet (Figure 6) and tighten all the hose clamps.
10. Using two 1" x 3/16" large washers (supplied) on each of the two 1/2" x 1 1/4" allen bolts (supplied), re-install the right hand floor board.
11. Install Spacer (593-P), on floor board support plate. Remove the left 3/8" capscrew only and place the spacer onto floor board support plate aligning the holes in the spacer with those on the support plate. Re-install the 3/8" capscrew into the original hole securing spacer. NOTE: You may use the 3/8"-16 x 1 1/2 bolt (supplied) to temporarily hold spacer alignment while tightening the 3/8" capscrew.
12. Install a 3/8" lock washer (supplied) on both of the 3/8"-16 bolts (supplied). Using these bolts re-install the floor board using a 3/8"-16 x 3" bolt with TWO spacing washers (supplied) on the forward (right) mount and the 3/8"-16 x 1 1/2" bolt with ONE spacing washer (supplied) on the rear (left) mount. NOTE: Spacing washers are located between the floor board supports and floor board mount plate. On CVO Models, a 3/8"-16 x 1-1/2" socket head cap screw (not supplied) should be used from the inside on the right mount rather than the 3/8"-16 x 3" provided bolt.
13. 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 possible position on the bike frame, and the floorboard should be mounted in the upper two bracket holes (Figure 7).
14. Re-install left hand passenger floor board.
15. Route O2 sensor wires away from hot areas of the motorcycle. Use the nylon cable ties (supplied) to secure the O2 sensor wires to the frame. Plug the O2 sensor wires back into the wiring harness, grey into grey, black into black. Re-install the right side panel.
16. Re-install saddlebags.
17. Be sure to tighten all hardware before starting your motorcycle.
18. After installation and before starting the motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave residue. NOTE: Any residue, oil, or fingerprints will stain the chrome when the metal heats up.

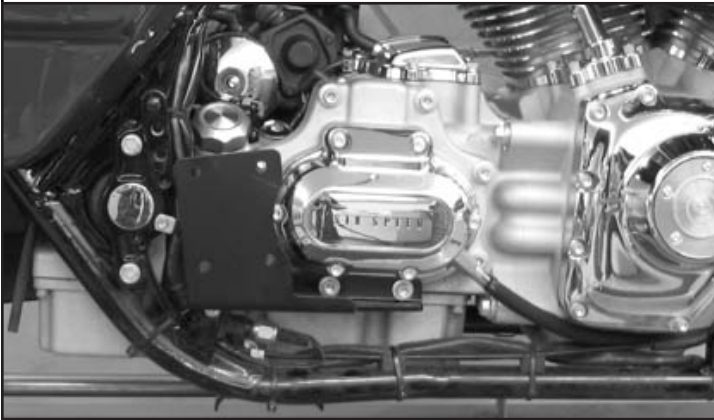
EXHAUST CARE (CHROME)

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)

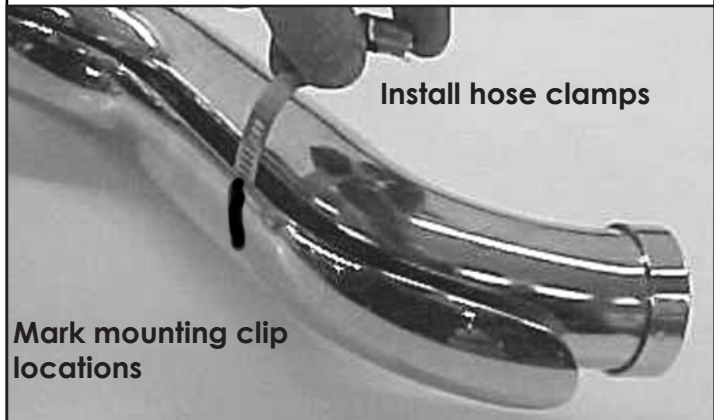
1. When installing a new set of black pipes, make sure your hands are clean and free of oil. After installation, thoroughly clean pipes with warm soapy water and a soft cloth. Dry with a clean towel to remove any residue before starting the motorcycle. Do NOT use anything abrasive to clean the pipes.
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



Install 508-P Bracket

FIGURE 2



Install hose clamps

Mark mounting clip locations

FIGURE 3

Install circlips and flanges



FIGURE 4



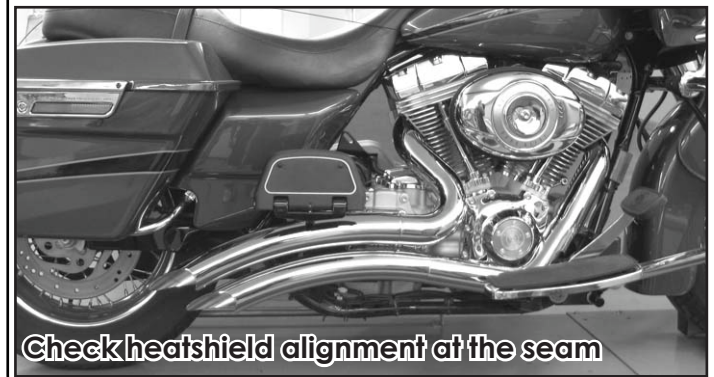
Install nut plate

FIGURE 5



Align pipes to have a consistent gap

FIGURE 6

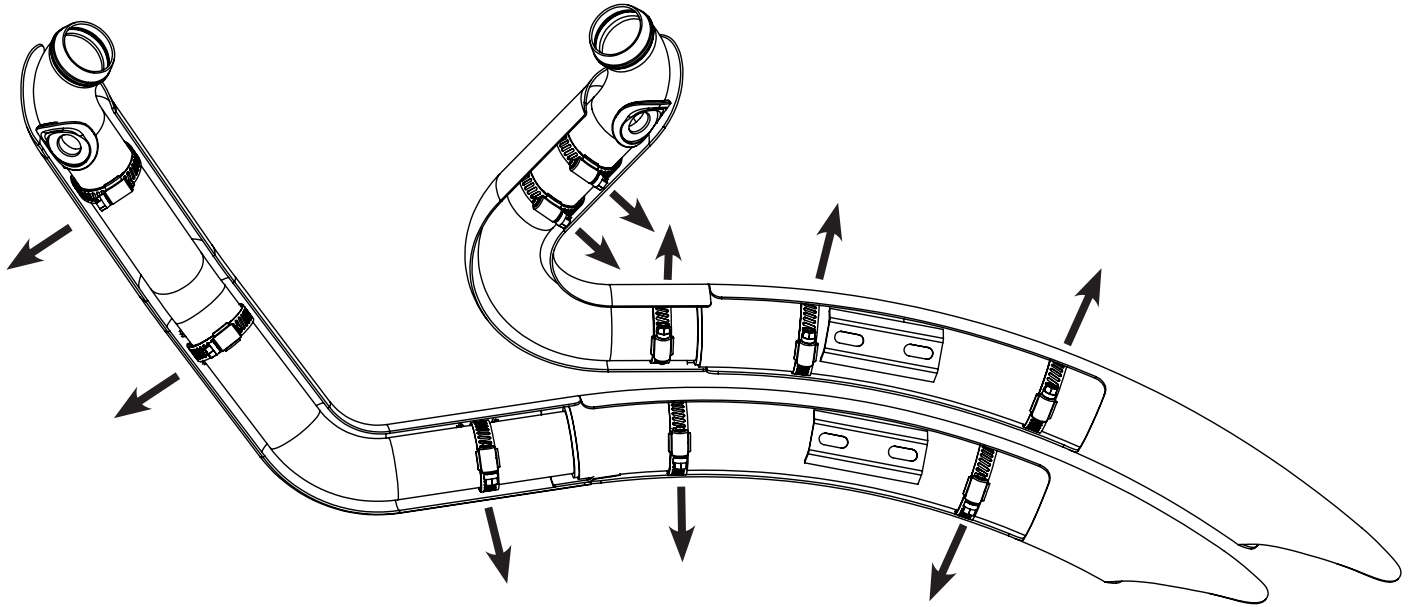


Check heatshield alignment at the seam

FIGURE 7



FIGURE 8



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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