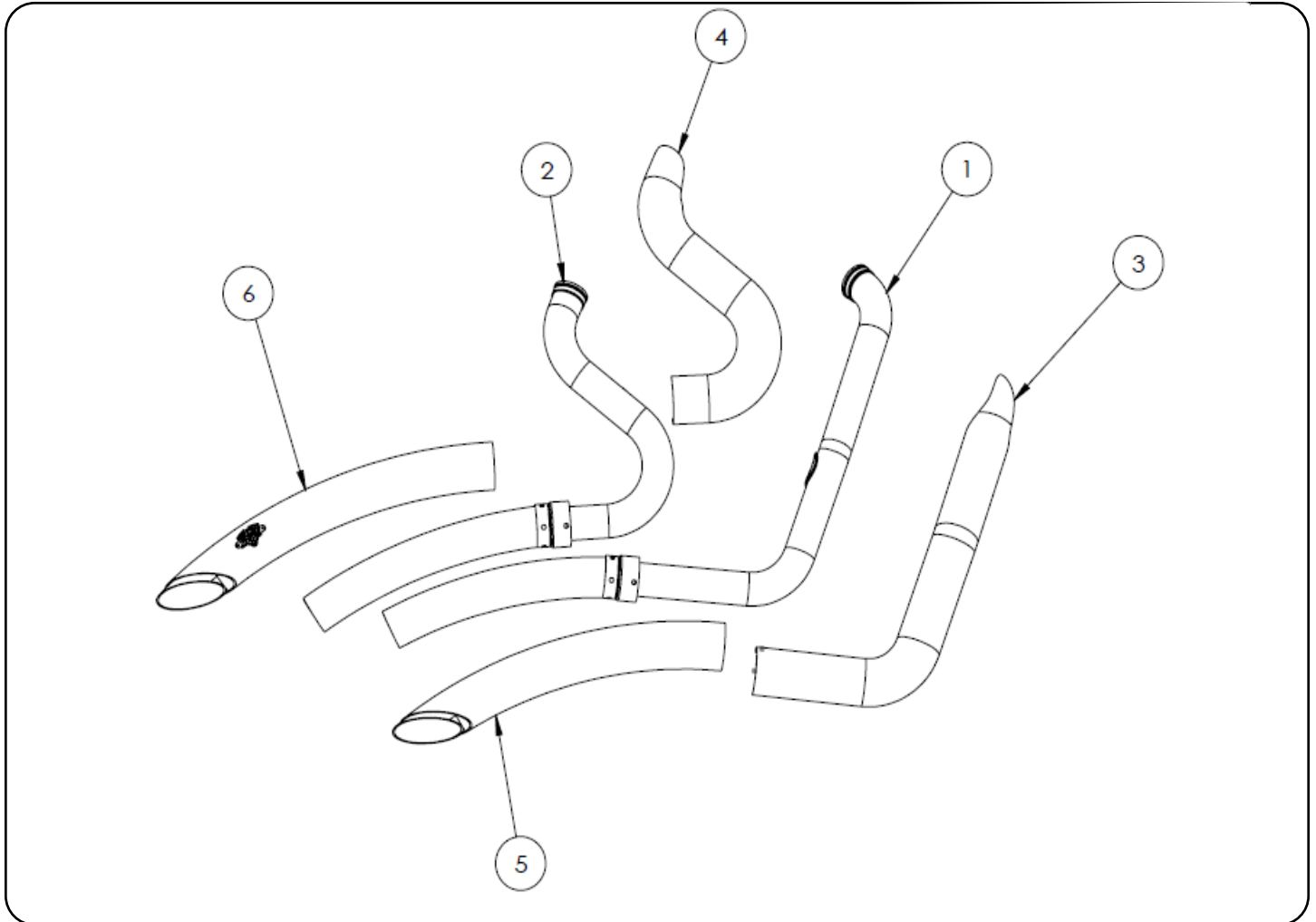


Congratulations, you have purchased the finest exhaust system available for your motorcycle. Your Vance & Hines exhaust is designed and crafted for performance, quality, and style. Please follow the instructions below, check exhaust system for missing or damaged parts and if you need any assistance please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

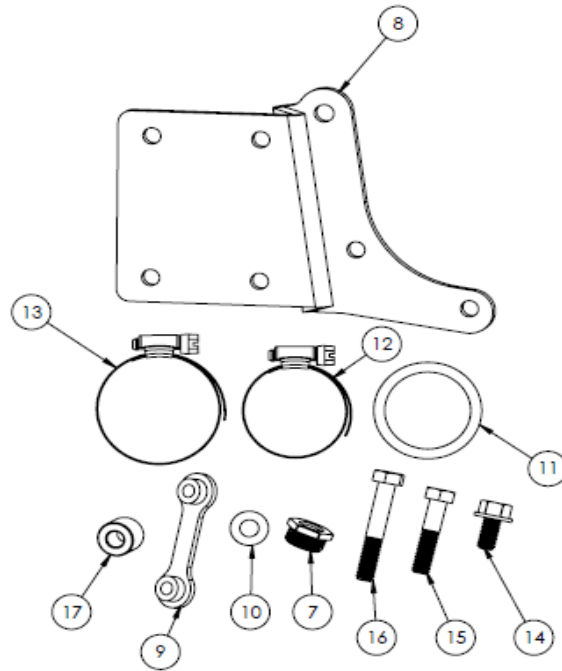
FOR CLOSED COURSE COMPETITION USE ONLY. NOT INTENDED FOR STREET USE.



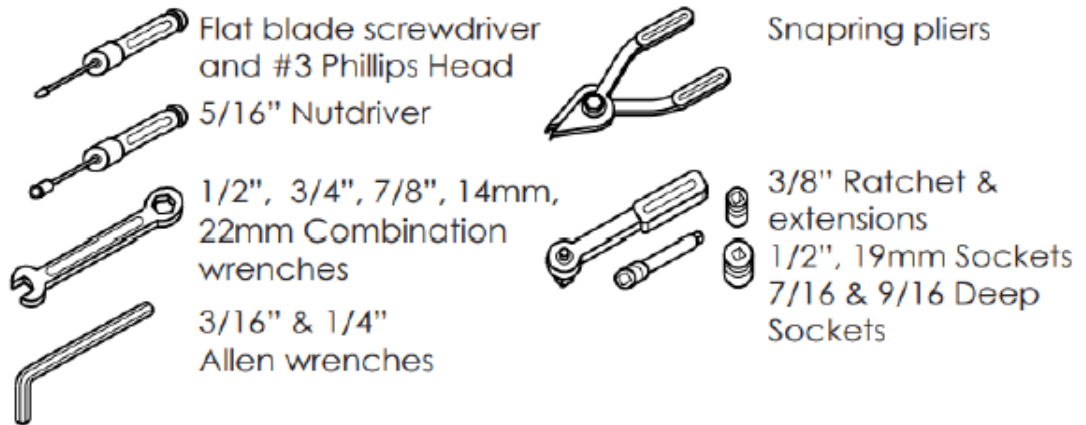
PARTS LIST

NO.	PART NO.	Description	QTY
1	D448FP	Front Head Pipe	1
2	D449FP	Rear Head Pipe	1
3	D535HP	Front Heat Shield	1
4	D538HP	Rear Heat Shield	1
5	D322HP-S	Front Muffler Heat Shield	1
6	D325HP-S	Rear Muffler Heat Shield	1
7	A644ST	18-12mm O2 Adaptor	4
8	391-P	Bracket	4
9	A195HW	Dog Bone Nut Plate	2
10	A107HW	Washer 5/16IN Flat Zinc	4
11	A167HW	Exhaust Gasket	1
12	A270HW	81-1.75IN Hose Clamp	5
13	A272HW	1.31-2.25IN SS Hose Clamp	4
14	A240HW	5/16"-18 X 5/8" FB	4
15	A345HW	5/16-18 X 1.5IN. Cap Screw	3
16	A503HW	5/16-18 X 2IN. Cap Screw	1
17	D115ST-P	Dyna Bracket Spacer	1

HARDWARE



TOOLS REQUIRED



STOCK EXHAUST SYSTEM REMOVAL

NOTE: These instructions are written for late model motorcycles equipped with O2 sensors. If you are installing these pipes on a bike which is not equipped with O2 sensors, ignore all instructions which reference them. Additionally you will need to purchase an O2 sensor block off kit P/N 16925.

1. Remove seat to gain access to rear oxygen sensor connector. Unplug sensor and feed end of wire through frame so that it is free from motorcycle. NOTE: Pay attention to wire routing for re-installation.
2. For 2010 to 2011 models remove two bolts holding rectifier onto front of frame (near front tire). Open plastic cover to gain access to front oxygen sensor connector. Unplug sensor from harness and feed end of wire through to free it from motorcycle. For 2012 to later models the connector is located under the rectifier at the front of the motorcycle.
3. Loosen heat shield clamps on both the front and rear head pipes.
4. Remove front head pipe clamp bolt.
5. Remove the bolt that attaches rear head pipe clamp to mounting bar.
6. Remove two cylinder exhaust port flange nuts from each head pipe, located at the cylinder head.
7. Remove the complete exhaust system and set aside. Assistance may be required.
8. Remove stock mounting bar and the studs in the transmission cover.
9. Remove left bolt below the transmission cover. Position mounting bracket 391-P over mounting location to determine which bolts to remove (Figure 1). Install this bolt in the top hole left vacant by the new bracket.
10. Carefully remove the flanges and circlips from the stock exhaust system using snapping pliers. NOTE: Replace bent or damaged circlips.
11. Remove stock exhaust gaskets and replace them with the supplied exhaust gaskets. NOTE: Replacement gaskets HD Screaming Eagle #17048-98 or equivalent.
12. Remove stock oxygen sensors and set them aside for they will be re-used.

VANCE & HINES EXHAUST INSTALLATION

1. Attach mounting bracket 391-P to transmission and tighten to 12-15 Ft/Lb torque. (Figure 1). NOTE: 2006 to 2007 models use three 5/16" x 1-1/2" hex head bolts and washers. 2008 to 2011 models use three 5/16" x 1-1/2" hex head bolt, washers, 11/16" spacer between the bracket and transmission in top hole. 2012 and later models use one 5/16" x 2" hex head bolt, washers 11/16" spacer in top hole and two 5/16" x 1-1/2" hex head bolts and washers in remaining holes.
2. Remove head pipes from their protective packaging and install circlips and flanges from the stock system onto both new head pipes (Figure 2).
3. Apply a small amount of anti-seize compound to the threads of the oxygen sensors and install them into the new head pipe sensors and install them into the new head pipe. NOTE: 2006 to 2011 models or models using 18mm wideband oxygen sensors install sensor directly into head pipe. 2012 to later models install supplied 18mm to 12mm oxygen sensor adapter then install 12mm oxygen sensors (Grey connector into front head pipe, Black connector into rear head pipe.)

VANCE & HINES EXHAUST INSTALLATION CONTINUED

4. Remove heat shields from their protective packaging. Place each heat shield on a non-abrasive surface such as a blanket or carpet. Using a felt tip pen, mark outside edge of each heat shield to show location of hose clamp mounting clips (Figure 3).
5. Lay head pipes (D418FC & D419FC) into head pipe heat shields (D400HC & D403HC) respectively. Make sure alignment clip on head pipe fits inside heat shield. Loosely install #20 hose clamps by feeding tail end of clamp into heat shield clips (Figure 3). Take note of screw head direction (Figure 4). Screw head should be accessible when system is installed on motorcycle for adjustment purposes. NOTE: Do not tighten at this time.
6. Using stock flange nuts, carefully install head pipes into exhaust ports (Assistance may be required). NOTE: Do not tighten at this time.
7. Slide nutplates inside brackets that are welded to backside of each muffler body (Figure 5). While holding nutplates in place, attach muffler bodies to mounting bracket 391-P using four 5/16"x 5/8" flange head bolts (supplied). Leave them loose at this time.
8. Align pipes on motorcycle so that the gap between the two muffler bodies is consistent from front to rear and tighten exhaust port flange nuts (Figure 6).
9. Tighten flange bolts securing muffler bodies to mount bracket 391-P.
10. Using the #28 hose clamps install the muffler heat shields with the D308HC on the front head pipe and the D309HC on the rear. Take note of screw head direction (Figure 4). NOTE: Do not tighten at this time.
11. Adjust the heat shields to get the best alignment at the seam where they touch (Figure 6) and tighten all the hose clamps.
12. Feed wire for front oxygen sensor through frame and into plastic holder on frame. Plug sensor into stock wiring connector. Snap plastic holder closed to hold connector in place.
13. Put toothed edge of wiring holder into slot in frame. Re-install rectifier so that it fits under tooth of wiring holder, keeping it in place in frame. Tighten both bolts.
14. Feed connector for rear oxygen sensor through frame and into underseat compartment. Plug sensor into stock wiring connector.
15. Re-install seat.
16. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.
17. Be sure to tighten all hardware before starting your motorcycle.
18. After installation and before starting 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

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

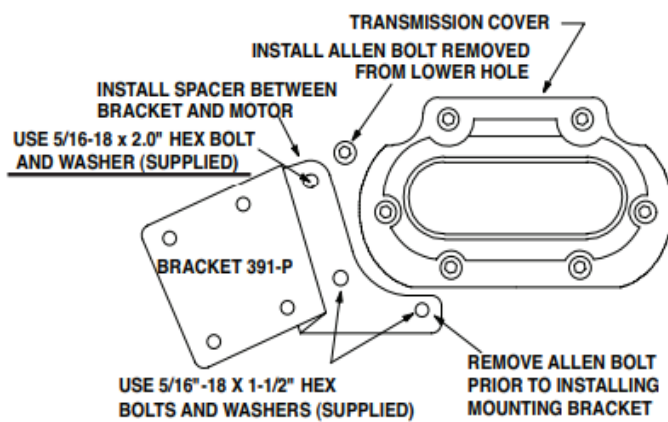


FIGURE 2

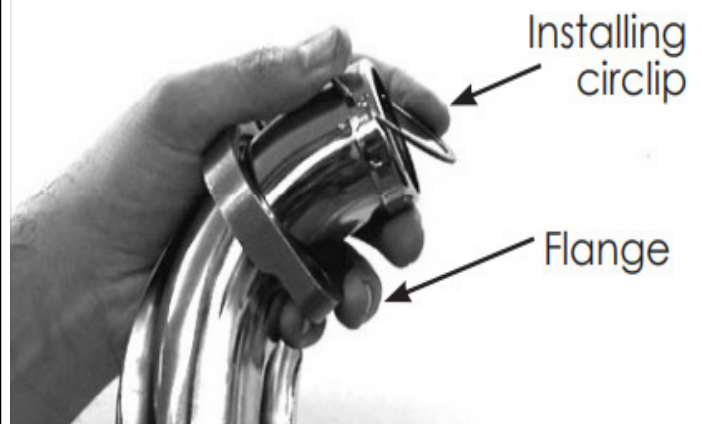


FIGURE 3

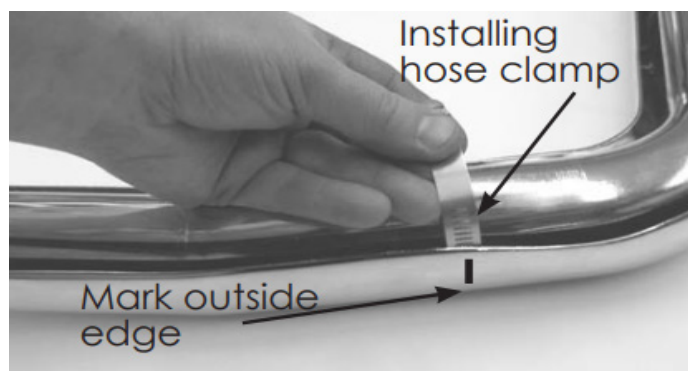


FIGURE 4

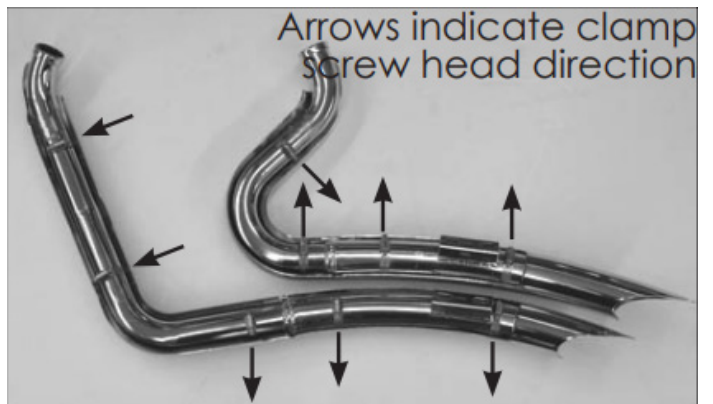
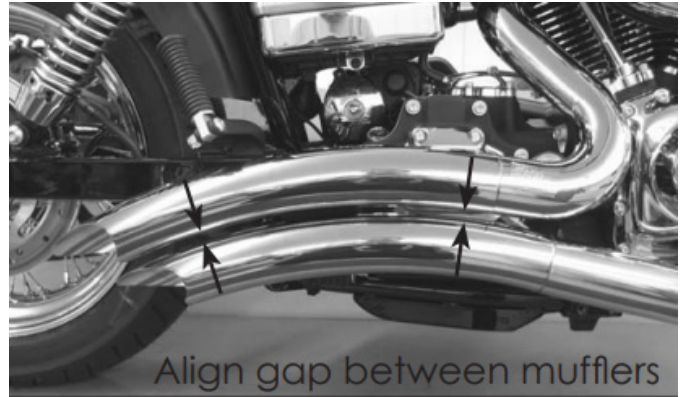


FIGURE 5



FIGURE 6



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.

13861 ROSECRANS AVENUE / SANTA FE SPRINGS, CA 90670
SALES: (562) 921-5388
TECHNICAL: (562) 926-5291
FAX: (562) 802-0110

vanceandhines
.com