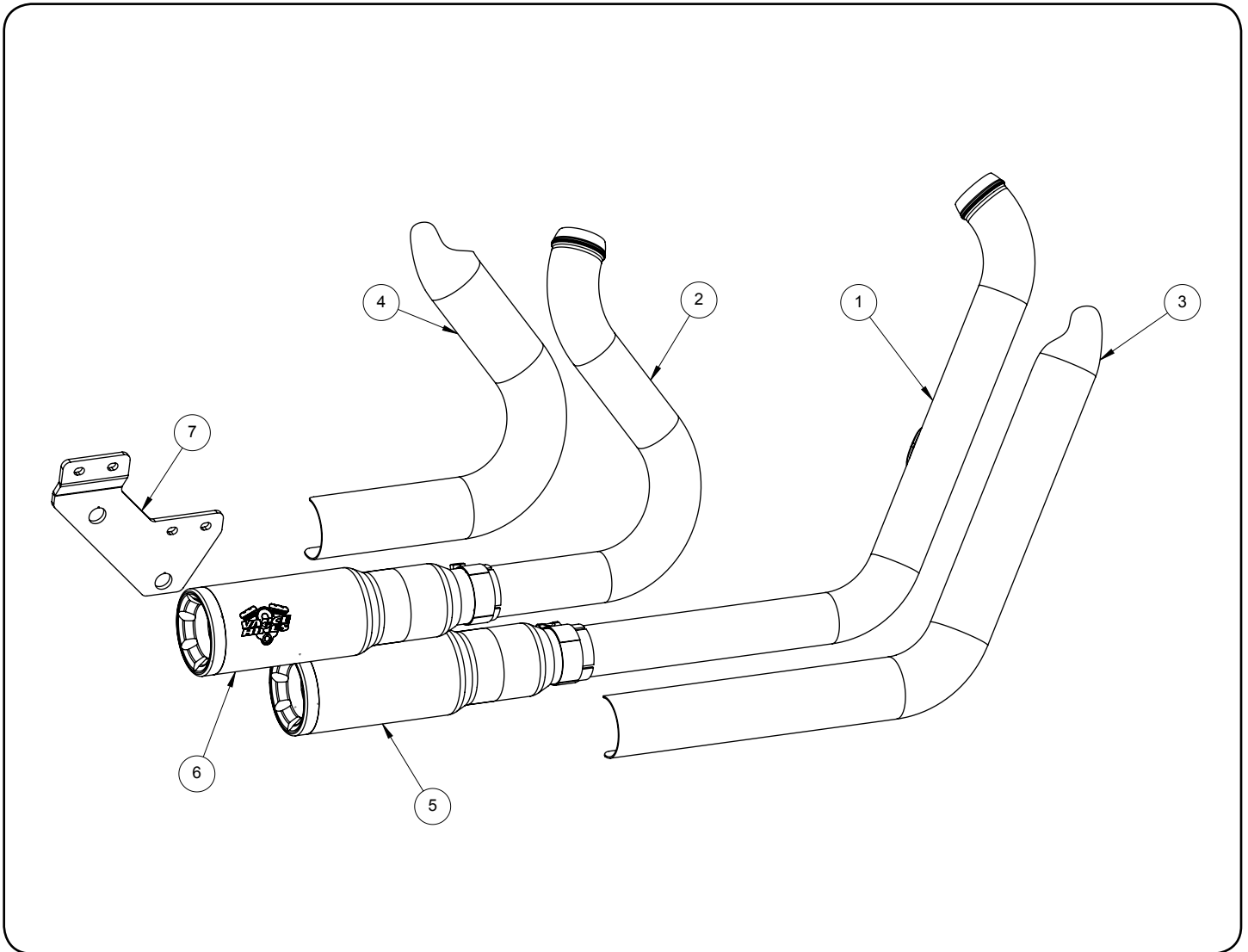


INSTALLATION INSTRUCTIONS: 2018 HARLEY-DAVIDSON SOFTAIL STREET BOB MINI GRENADES PART# 16878 / 46878

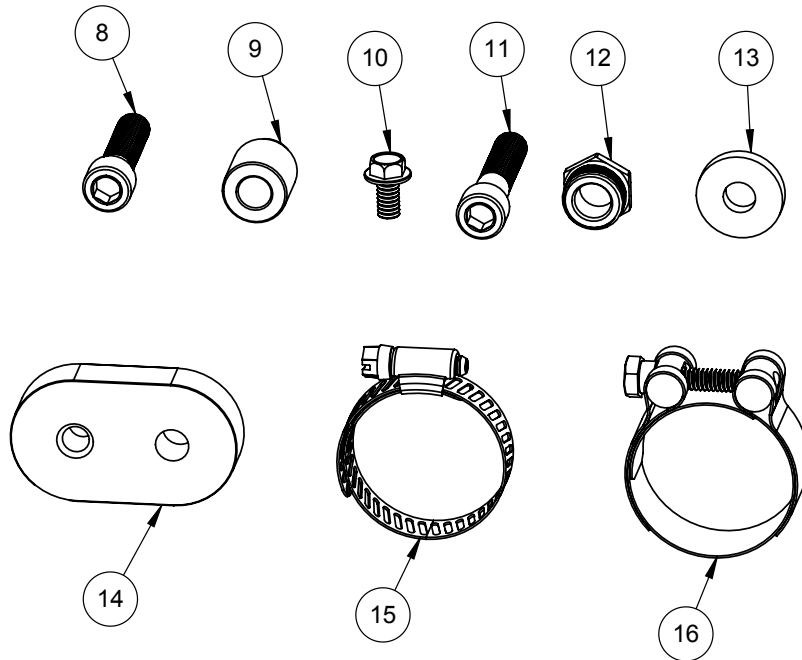
Congratulations, you have purchased the finest exhaust system available for your motorcycle. Your Vance & Hines exhaust is designed and crafted for performance, quality, and style. Please follow the instructions below, check exhaust system for missing or damaged parts and if you need any assistance please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



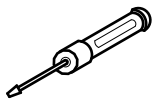
PARTS LIST

NO.	PART NO.	Description	Qty.
1	D1110FC	Front Head Pipe	1
2	D1111FC	Rear Head Pipe	1
3	D1110HC / D1310HP	Front Heat Shield	1
4	D1111HC / D1311HP	Rear Heat Shield	1
5	D588RC / D688RP	Front Muffler	1
6	D589RC / D689RP	Rear Muffler	1
7	1153-P	Mounting Bracket	1
8	A743HW	3/8-16 X 1-1/2" SHCS Bolt	3
9	A750ST-P	Mounting Bracket Spacer	2
10	A139HW	1/4-20 X 1/2" Flange Bolt	4
11	A470HW	3/8-16 X 1.75" SHCS Bolt	2
12	A644ST	18-12mm O2 Adapter	2
13	A311HW	3/8 X 1 X 3/16" Washer	2
14	1157-A	RHS Footpeg Adapter	1
15	A270HW	No. 20 1.75" Hose Clamp	6
16	A328HW	2" Band Clamp	2

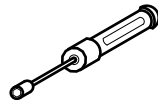
HARDWARE



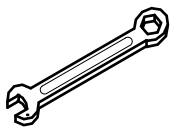
TOOLS REQUIRED



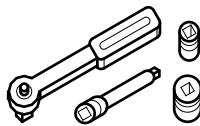
Flat Head Screwdriver



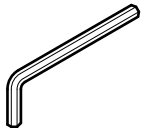
5/16 Nut Driver



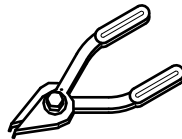
Combination Wrenches:
1/2", 9/16", 14mm,
19mm



3/8" Drive Ratchet w/ 4" extension
1/2", 9/16" Deep Sockets
1/4" Allen Socket
10mm, 19mm Socket



Allen Wrenches:
1/4", 5/32", 3/16", 5/16"
Torx: T45



Snap Ring Pliers

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 Floor board models, loosen the right-hand floor board mounting bolts to gain clearance for the exhaust removal and installation.
- 4.** On Mid Mount models, remove the forward brake rod bolt and remove the mid mount foot peg bracket.
- 5.** Loosen the heat shield clamps on both the front and rear exhaust pipes.
- 6.** Remove the two mounting nuts from each head pipe, located at the cylinder head.
- 7.** Remove the bolts attaching the mufflers to the mounting bracket.
- 8.** Remove the entire exhaust system and set it aside.
- 9.** Remove the stock mounting bracket.
- 10.** Carefully remove the exhaust port flanges and circlips from the stock exhaust system using the snap ring pliers. NOTE: Replace bent or damaged circlips.
- 11.** Carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.
- 12.** Check the condition of the exhaust gasket and replace if worn or damaged. Harley-Davidson part number 65324-83B.

VANCE & HINES EXHAUST INSTALLATION

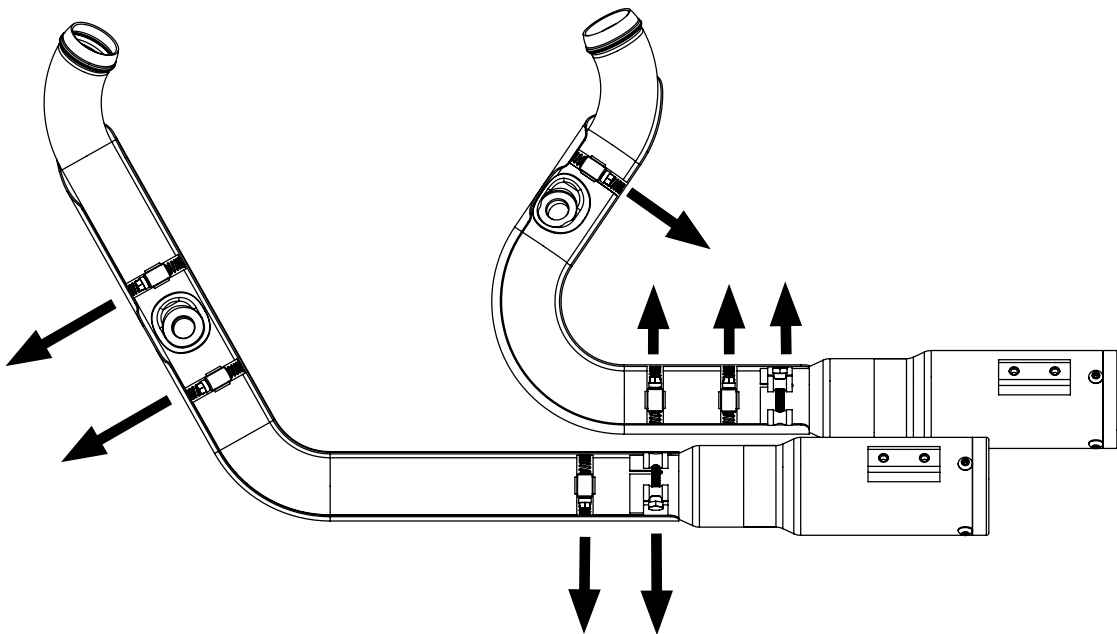
NOTE: Use appropriate Harley-Davidson service manual procedures when referring to exhaust installation.

1. Position the mounting bracket 1153-P over the stock mounting bracket location. Attach the mounting bracket 1153-P to the frame using the supplied bolts and washers. Hand tighten only at this time.
2. 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 to lightly mark the 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.
3. Lay the head pipes into heat shields and loosely install hose clamps by feeding tail end of the hose clamps into heat shield clips. Take note of screw head direction. **Figure 2.** Screw heads should be accessible when system is installed on motorcycle for adjustment purposes. NOTE: Do not tighten at this time.
4. Install circlips and flanges from the stock system onto both the new head pipes.
5. Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new head pipe. Install supplied 18mm to 12mm oxygen sensor adapter then install 12mm oxygen sensors.
6. Install the front header assembly into the front exhaust port first. Use the stock flange nuts, do not tighten at this time.
7. Install the rear header assembly into the exhaust port. Use the stock flange nuts, do not tighten at this time.
8. Slide muffler barrel clamp (supplied) onto inlet side of muffler assembly with bolt head to the inside and facing down (front muffler) and inside pointing up (rear muffler with logo). **(Figure 1)** Install front muffler assembly onto header assembly. Use the 1/4-20 x 1/2" flange bolts (supplied) to attach the muffler to the bracket. Do not tighten at this time. Repeat for rear muffler.
9. Tighten the exhaust system nut, bolts, and clamps in the following sequence: (1) Head flange nuts (x4), (2) Muffler body 1/4" flange head bolts, (3) Barrel band clamps, (4) Mounting bracket bolts, (5) Front and rear heat shield hose clamps. Make sure the head pipes and mufflers are aligned parallel.
10. Route O2 sensor wires away from hot areas of the motorcycle. Plug the O2 sensor wires back into the wiring.
11. On floor board models, re-install and tighten the floor board mounting bolts.
12. On mid mount models, re-install mid mount foot peg bracket with spacers and new hardware.
13. For passenger footpeg mounting, remove the upper plug on the frame and re-install the footpeg into the frame using the footpeg adapter, 1157-A.
14. Be sure to tighten all hardware before starting motorcycle. After installation and before starting the motorcycle, completely clean pipes and mufflers with soapy water and a clean soft cloth. NOTE: Any residue, oil, or fingerprints will stain the finish when the metal heats up.

FIGURE 1



FIGURE 2



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 (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 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 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.

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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