

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.



PAR	RTS LIST						
NO.	Part No.	Description	Qty.	NO.	Part No.	Description	Qty.
1	D374RB-S	Muffler can assembly	1	9	A527HW	M18 O2 bung plug	2
2	D1122FB	Front head pipe assembly	1	10	A283HW	3/8-16 low profile SHCS	2
3	D1123FB	Rear head pipe assembly	1	11	1169-P	Mount bracket	1
4	A240HW	5/16-18 X 5/8" FHS	2	12	A527HW-P	Floor board spacer	1
5	A195HW	Dogbone nut plate	1	13	A107HW	5/16" SAE flat washer	3
6	A644ST	18-12mm O2 adaptor	2	14	A121HW	18mm x 24mm washer	2
7	A115SP	Dirt Sport Spring	2	15	A345HW	5/16-18 X 1 1/2" bolt	3
8	A260SP	Spring puller	1	16	71001	6IN O2 extension lead	1





STOCK EXHAUST SYSTEM REMOVAL

- 1. For O2 sensor equipped models (06-17), remove seat to gain access to rear oxygen sensor connector. Unplug sensor and feed end of wire through frame to free it from motorcycle. **NOTE:** Pay attention to wire routing for re-installation.
- 2. For 2006 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 the heat shield clamps on both the front and the rear head pipes.
- 4. Remove two cylinder exhaust port flange nuts from each head pipe, located at the cylinder head.
- 5. If equipped, remove the front head pipe clamp carriage bolt.
- 6. Remove the bolt that attaches the mufflers to the frame mounting bar.
- 7. Remove the complete exhaust system and set aside (assistance may be required).
- 8. Remove the stock mounting bar and the studs in the transmission cover.
- 9. Position the muffler support bracket over mounting location to determine which bolts to remove (Figure 1). Install removed bolt in the top hole left vacant by the new bracket.
- Carefully remove the flanges and circlips from the stock exhaust system using snap ring pliers. NOTE: Replace bent or damaged circlips. (Recommended replacement exhaust port gaskets, HD #65324-83B).
- 11. Carefully remove stock oxygen sensors. They will be re-used on the new system.

VANCE & HINES EXHAUST INSTALLATION

- 1. Attach the muffler support bracket to transmission and tighten to 12-15ft/lb. Torque using three 5/16" x 1 1/2" hex head bolts and washers (items 13 & 15) (Figure 1).
- 2. Install the mid control spacer (item 12) on motorcycles equipped with mid controls using 2x 3/8-16 low profile SHCS (item 10) (Figure 2).
- 3. Remove head pipes from protective packaging. Apply a small amount of anti-seize compound to the threads of the oxygen sensors and install them into the new head pipe. NOTE: For 2006 to 2011 models or models using 18mm wideband oxygen sensors, install sensor directly into head pipe. For 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.) For all models not using oxygen sensors, install 18mm plug with copper crush washer.
- 4. Install exhaust port flanges and circlips (from stock system) onto head pipes.
- 5. Using stock flange nuts, carefully install head pipes into exhaust ports, starting with the rear cylinder. Assistance may be required. **NOTE:** Do not tighten at this time.
- 6. Install muffler assembly onto head pipes. Attach muffler assembly to installed bracket and secure with 5/16-18 flange bolts & dog bone nut plate (supplied).
- 7. Install springs using supplied spring puller. There should be about a 2" gap between the spring tabs (Figure 3).
- 8. Tighten exhaust port flange nuts and 5/16" flange head bolts at the bracket.

VANCE & HINES EXHAUST INSTALLATION CONTINUED

- 9. 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.
- 10. For 2006 to 2011 models, put the toothed edge of the wiring holder into the slot in frame. Re-install rectifier so that it fits under tooth of wiring holder, keeping it in place in the frame. Tighten both the bolts.
- 11. Install a new cable tie (supplied) to hold wires in original location.
- 12. Feed connector for rear oxygen sensor through frame and into the under seat compartment. Plug sensor into stock wiring connector. For 2006 to 2011 models, use supplied O2 extension lead (item 16).
- 13. Reinstall the seat.
- 14. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage. **NOTE:** On some mid control models, rear brake pedal height may need to be adjusted to achieve clearance to rear head pipe when brake is engaged. Use the following steps to adjust brake pedal height.
 - 1. Remove muffler and front head pipe.
 - 2. Remove bolts securing the brake pedal bracket to the frame.
 - 3. Remove pin and disengage brake rod from brake pedal.
 - 4. Loosen the brake rod jam nut next to the master cylinder.
 - 5. Rotate the brake rod counter clockwise lengthening the brake rod 3-5 turns.
 - 6. Tighten the jam nut securely.
 - 7. If necessary, ensure the drain hole in the rubber boot is positioned to the bottom.
 - 8. Re-install brake pedal bracket to the frame using spacer and low profile allen screws.
 - 9. Re-install front head pipe and muffler then check brake pedal clearance.
 - 10. If necessary, repeat adjustment until brake pedal does not contact rear head pipe when the brake is applied.
 - **Caution:** When adjusting brake control rod, never allow more than six threads to be exposed between control rod and jam nut. If six (6) threads are visible past the jam nut, there is insufficient break rod thread engagement into the master cylinder push rod. This could cause the brake rod to separate from the push rod, making the rear brake inoperative.
- **15.** Be sure to tighten all hardware before starting your motorcycle.

EXHAUST CARE (STAINLESS)

- 1. When installing a new set of stainless 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 (glass cleaner, alcohol, acetone, etc...) before starting the motorcycle.
- 2. It is considered normal for stainless steel exhaust systems to discolor due to heat.
- 3. High performance engine tuning utilizing a dyno will likely result in severe discoloration.
- 4. Avoid long periods of idling as this can cause discoloration. Intake leaks can cause the engine to run lean and overheat and this could lead to discoloration.
- 5. 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.

THE NEXT GENERATION OF FUEL MANAGEMENT IS HERE

The Fuelpak FP3 will revolutionize fuel management for all new Harley-Davidson models now using the HDLAN (CAN Bus) system. Connecting wirelessly by Bluetooth to iPhone or Android Smartphones, Fuelpak FP3 uses Flash technology to recalibrate engine parameters and mapping for Vance & Hines exhaust systems downloaded from the expansive library of calibrations developed by Vance & Hines.

- Smartphone App User Interface (iOS and Android)
- Recalibrates ECM by Flash Tuning
- Autotune Feature for Added Tuning Precision
- Displays Live Sensor Data
- App Links Direct to Customer Service Site

FITMENT NOTES:

- FUELPAK FP3 IS COMPATIBLE WITH CAN BUS MODELS ONLY (TOURING, SOFTAIL, DYNA & SPORTSTER)
- FUELPAK FP3 IS NOT COMPATIBLE WITH V-ROD MODELS.
- MAPS ARE CURRENTLY AVAILABLE FOR: SPORTSTER, DYNA, SOFTAIL, TOURING AND TRIKE MODELS.
- MAPS FOR 110CI CVO MODELS COMING SOON.

EMISSIONS NOTICE:

FUELPAK IS INTENDED FOR RACING USE ONLY, AND IS NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON POLLUTION-CONTROLLED VEHICLES.

