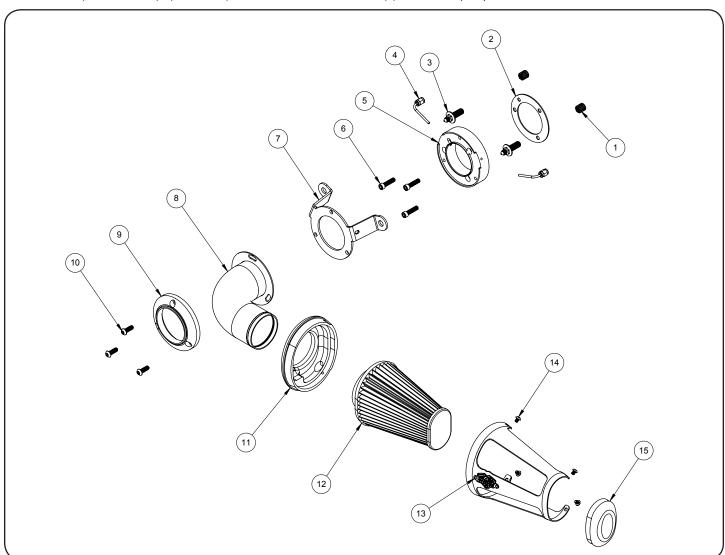


INSTALLATION INSTRUCTIONS: HARLEY-DAVIDSON SPORTSTER 90 DEGREE AIR INTAKE PART# 70029/70039/40029

Congratulations, you have purchased the finest air intake system for your motorcycle on the market. Your Vance & Hines Air Intake system is designed and crafted for maximum performance and a perfect fit. Please follow the installation instructions below and if you have any questions, please call our technical support line at (562) 926-5291.



PARTS LIST

NO.	Description	Qty.
1	Cylinder Head Inserts	2
2	Throttle Body Gasket	1
3	Breather Bolt	2
4	Breather Tube	2
5	Mounting Spacer	1
6	1/4-20 x 1IN. SHCS	3
7	Backing Plate	1

8	90 Deg. Ø2.5 Tube	1
9	Front Flange Cover	1
10	1/4-20 x 3/4 IN. BHCS	3
11	Rear Filter Cover	1
12	Air Filter & Hose Clamp	1
13	Filter Cage	1
14	10-24 x 1/4 IN. BHCS	4
15	Front Filter Cover	1

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T27 Torx wrench T3/8" Drive Ratchet 7/16" and 5/32" Allen Socket Inch-pound Torque wrench T27 Torx wrench T3/8" Drive Ratchet 7/16" and 5/32" Allen Socket Tory wrench Tary Blade Screwdriver Ruler/Tape Measure Loctife 243 (Blue)

OEM SYSTEM REMOVAL

- 1. Take off the air filter cover by removing the two countersink screws in the filter cover.
- 2. This will expose the filter element, which is then removed by taking out the three Torx head cap screws.
- 3. Remove the two breather bolts that secure the backing plate to the cylinder heads.
- **4.** Now remove the backing plate and gasket from the throttle body. **NOTE**: Be sure that the gasket surface is clean and dry and that no gasket material remains stuck to it.
- 5. Remove the support bracket from the throttle body.
- 6. None of the OEM parts will be reused for this installation.

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AIR INTAKE KIT INSTALLATION

- 1. For a clear understanding of this installation it is best to refer to the exploded view diagram while reading these instructions.
- 2. Install the two Cylinder head inserts using the following method. Thread a 3/8"-16 bolt through the insert and thread both the bolt and insert completely into the breather hole in such a way that it is flush to the cylinder head, then remove the 3/8"-16 bolt leaving the inserts in place.
- 2. Align and install the mounting spacer(#2) and throttle body gasket(#1) onto the throttle body with the three 1/4-20 x 7/8" SHCS(#3) tightening to 55-60 In-Lbs (6.2-6.8 Nm). Apply Loctite 243 (Blue) to the threads of the fasteners.
- 3. <u>CAUTION!</u>: Wrap the 90 degree tube with masking tape to prevent any surface scratches. See **Figure 1**.
- **4.** Slide the front flange cover (#8) over the 90 degree tube (#7). Be careful not to scratch the tube while the cover sweeps along the pipe. See Figure 2.
- 5. Attach the filter cage(#13) to the front filter cover(#14) with two 10-24 x 1/4 BHCS(#12). Tighten the screws to 17.1-22.8 In-Lbs. (1.9-2.6 Nm.) See Figure 3.
- 6. Next, slip the filter cage over the air filter and attach the filter cage to the rear filter cover with two 10-24 x 1/4 in BHCS. (#12). Align the hose clamp so that it is towards the bottom pocket of the rear cover and accessible when the cover is on. Tighten the screws to 17.1-22.8 In-Lbs (1.9-2.6 Nm.) See Figure 4.
- 7. Slide the air filter assembly onto the 90 degree elbow to the point of the masking tape. Do not fully tighten the hose clamp, so that it is adjustable when it is on the bike. **NOTE:** Do not go past the masking tape, to prevent the masking tape from being caught underneath the rear cover.
- 8. Using the three 1/4"-20 x 3/4" button head cap screws (#9) align the air filter assembly and the backing plate (#4) to the mounting spacer (#5) as shown. Make sure the components are aligned before tightening to 55-60 in-lbs (6.2-6.8 Nm). See Figure 5. NOTE: Align the rotation of the elbow before tightening down the screws.
- **9**. Align the air filter assembly parallel with bike and securely tighten the hose clamp.
- 10. Install the breather bolts(#5) through the backing plate and into the cylinder heads. Tighten the breather bolts to 120-144 In-Lbs (13.6-16.3 Nm).
- 11. Install the breather tubes(#6) through the backing plate and into the mounting spacer. Attach and tighten the breather tubes to the breather bolts. See Figure 6.
- 12. Remove the masking tape from the 90 Degree elbow.
- **13.** After 100 miles check to be sure that these bolts are still tight. Periodically ensure that these screws remain tight.

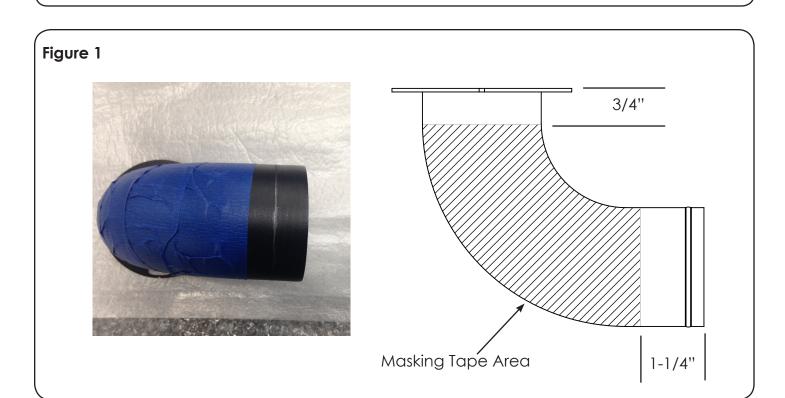
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CHROME CARE

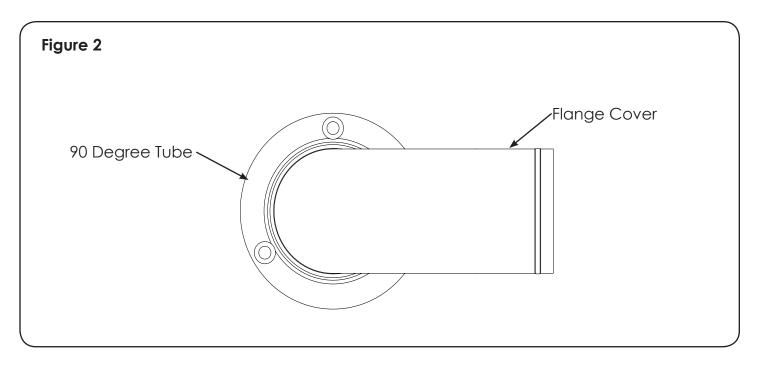
When installing the chrome intake, make sure your hands are clean and free of oil. After installation, thoroughly clean cover with a soft cloth and cleaning solvent that will leave no residue (chrome wax / polish, glass cleaner, alcohol, ammonia, etc.) before starting the motorcycle.

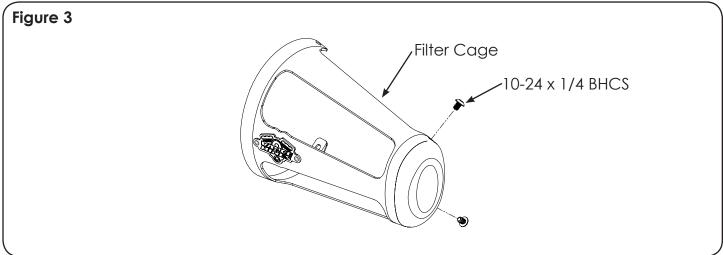
BLACK CARE

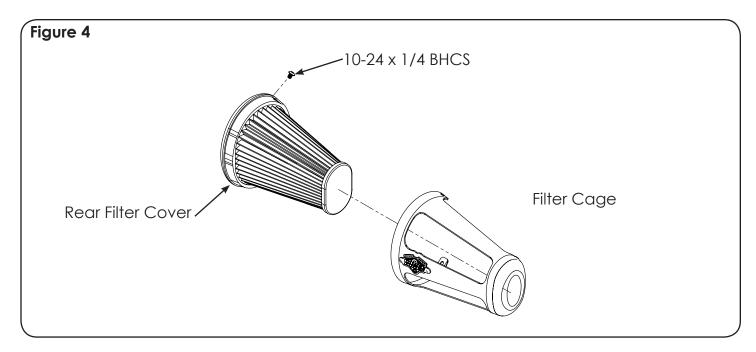
When installing the black intake, make sure your hands are clean and free of oil. After installation, thoroughly clean cover with warm soapy water and a clean soft cloth, taking care not to wet the filter element. Dry with clean towel to remove any residue before starting the motorcycle. Do NOT use anything abrasive to clean cover.

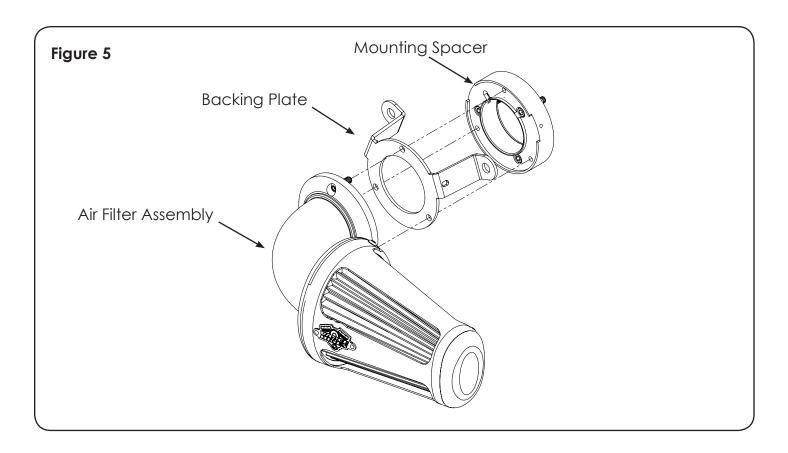


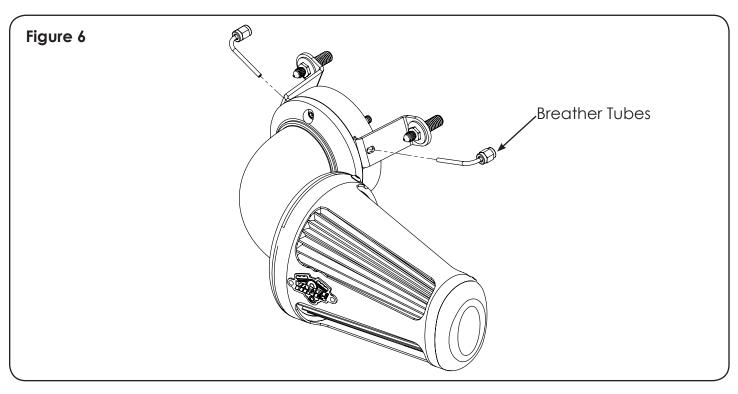
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The Fuelpak FP3 will revolutionize fuel management for all new Harley-Davidson models now using the HDLAN (CAN Bus) system. Connecting wirelessly by Bluetooth to iPhone or Android Smartphones, Fuelpak FP3 uses Flash technology to recalibrate engine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

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- 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 110CL 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.



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

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