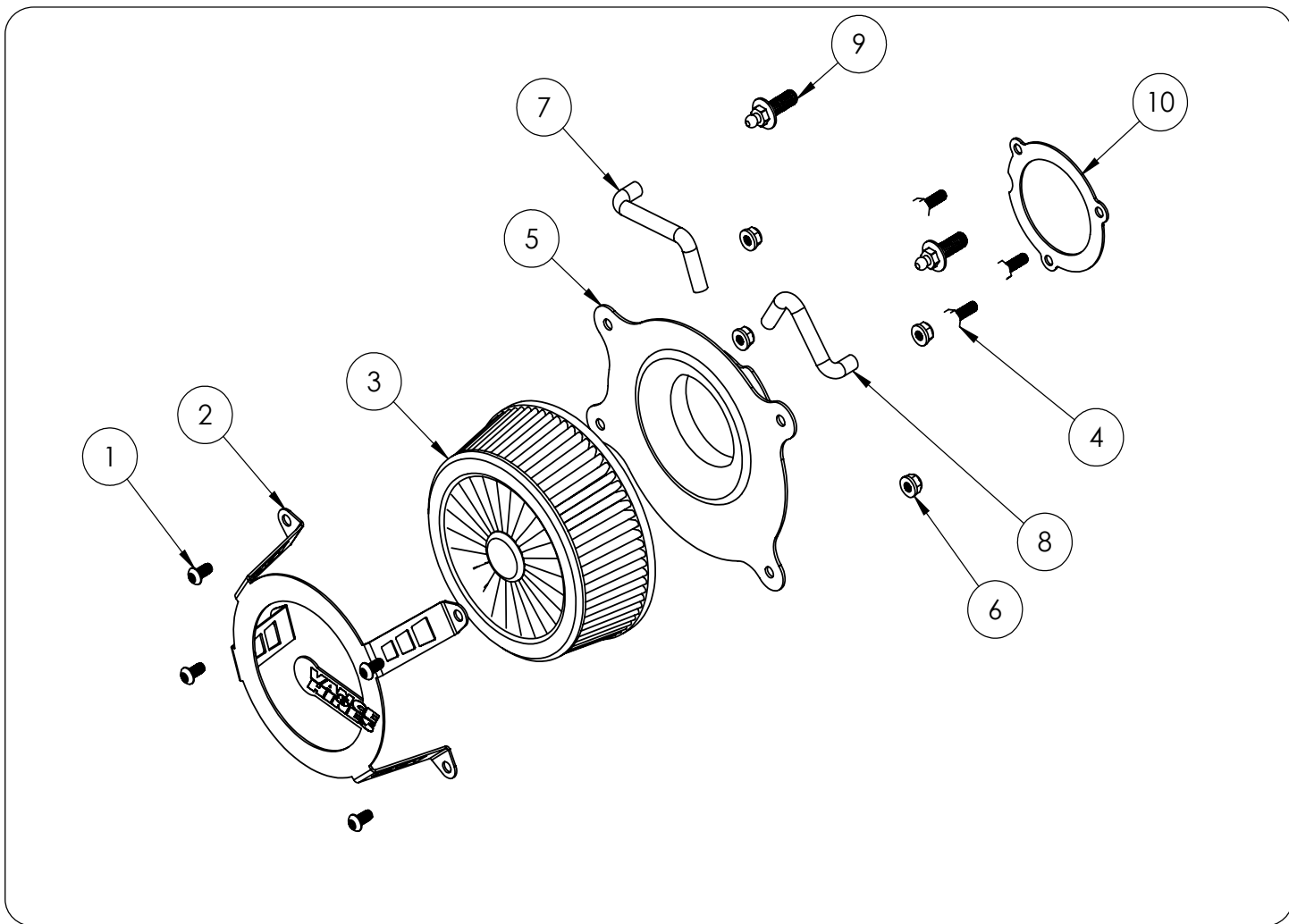




# INSTALLATION INSTRUCTIONS: HARLEY-DAVIDSON 17-22 TOURING/18-22 SOFTAIL VO2 **CAGE FIGHTER** AIR INTAKE PART# 40366, 70366

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

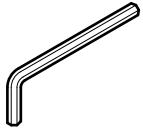
Exempt from emissions tampering regulations under CARB EO# D-632-7 for 2017-2022 Harley-Davidson Touring and 2018-2022 Softail models



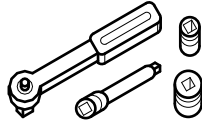
## PARTS LIST

NO.	Description	Qty.			
1	1/4-20 x 1/2" Button Head Hex	4	7	Rear Breather Hose	1
2	<b>Cage Fighter</b> Air Filter Cover	1	8	Front Breather Hose	1
3	Air Filter	1	9	1/2-13 UNC-2A Breather Bolt	2
4	1/4-20 x 1/2" Hex Head Screw	3	10	Throttle Body Gasket	1
5	Venturi Backing Plate	1			
6	Serrated Nuts	4			

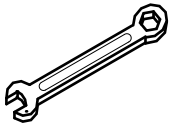
## TOOLS REQUIRED



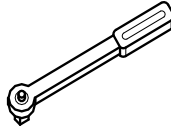
**T27 Torx Wrench**  
**3/16" Allen,**  
**5/32" Allen**



**1/4" or 3/8" Drive Ratchet**  
**7/16" Hex Socket and 5/16"**



**Combination Wrench**  
**7/16"**



**Inch-Pound Torque**  
**Wrench**

**Loctite 243 (blue)**

## OEM SYSTEM REMOVAL

1. Begin by removing the OE air filter cover. On some models the cap screw may be covered by a vanity cover. Carefully pull this cover off carefully as it is held on by Velcro.
2. This will expose the filter element, which is then removed by taking out the three Torx head cap screws.
3. Remove the breather hoses from the cylinder head breather bolts by gently pulling on them.
4. Now remove the backing plate and gasket from the throttle body by unbolting the cylinder head breather bolts. **NOTE:** Be sure that the gasket surface is clean and dry and that no gasket material remains stuck to it.

**NOTE:** If you own a 2021-Later "S" model Touring or 17-Later CVO or 18-Later "S" model Softail, please note that separate purchase of the induction module bracket from Harley Davidson, P/N 16400049 is necessary and must be purchase prior to installation of this air intake system.

## V&H AIR INTAKE INSTALLATION

1. For a clear understanding of this installation, it is best to refer to the exploded view diagram while reading these instructions.
2. When installing or servicing the air cleaner, apply Loctite 243 (blue) to threads of all fasteners.
3. Install the two cylinder head breather bolts (**10**). **NOTE:** Tighten the cylinder head breather bolts to 120-144 in-lbs (13.6-16.3 Nm).
4. Install the rear and front breather hoses (**8**) & (**9**) through the top two holes in the venturi backing plate (**6**), aligned as shown.
5. Using the three 1/4"-20 x 1/2" hex head screws (**5**) install the gasket (**11**) onto the throttle body. Only thread in the hex head screws halfway
6. Sandwich the Cage Fighter cover (**2**), the air filter (**3**) and the venturi backing plate (**5**) using the button head cap screws (**1**) and serrated nuts (**6**). **NOTE:** Make sure to orient the air filter so that the metal fin is hidden behind the Vance & Hines logo on the air filter cover.
7. Take the assembly and slide the backing plate over the three hex head screws (**5**) on the throttle body. Rotate clockwise to lock the assembly in place. Ensure the Vance & Hines logo is level and tighten the hex head screws. **NOTE:** Torque the screws to 55-60 in-lb (6.2-6.8 Nm).
8. After 100 miles check to be sure that all bolts are still tight. Periodically ensure that these screws remain tight.

**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](http://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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