# SCREAMIN' EAGLE 64MM RACE HEAVY BREATHER KIT

### **GENERAL**

# **Kit Numbers**

29000065

#### Models

For model fitment information, see the P&A Retail Catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

#### NOTES

This kit is intended for race applications only. Engine-related performance parts are intended FOR THE EXPERIENCED RIDER ONLY.

Running an engine with out an air cleaner can result in severe engine damage.

### NOTE

This engine related performance part is not legal for use on pollution controlled motor vehicles. This kit may reduce or void the Limited Vehicle Warranty coverage. Engine related performance parts are intended for the experienced rider only.

### **Additional Parts Required**

The Screamin' Eagle 64mm Pro High Flow EFI Throttle Body Kit (Part Number 27300033) is required for this installation.

LOCTITE® 243 (Blue) Threadlocker and Sealant is needed for proper installation of this kit.

# **A**WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

#### NOTES

This instruction sheet references service manual information. A service manual for your model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

The following caution and note apply to EFI models only.

### NOTICE

You must recalibrate the ECM when installing this kit. Failure to properly recalibrate the ECM can result in severe engine damage. (00399b)

### NOTE

See a Harley-Davidson dealer for ECM (Electronic Control Module) calibration.

### **Kit Contents**

See Figure 1 and Table 1.

### **INSTALLATION**

# **AWARNING**

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

# **AWARNING**

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

 Refer to the service manual and follow the instructions given to remove the seat and disconnect the battery cables, negative (-) cable first. Retain all seat mounting hardware.

# **A**WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

### Original Equipment (OE) Air Cleaner Removal

**For EFI (fuel-injected) models:** Have a Harley-Davidson dealer recalibrate the ECM prior to air cleaner installation.

- Remove the air cleaner backplate following the instructions in the service manual. The remaining parts can be discarded.
- See Figure 1. Remove and discard induction module bracket (B).

# **Back Plate Installation**

### NOTE

When servicing the air cleaner, apply Loctite 243 (blue) to all threaded fasteners (both male and female threads).

- Remove the backing from the adhesive side of the backplate gasket (11). Carefully align the holes, and install the gasket on the induction module side of the backplate.
- Apply a small amount of Loctite to the backplate mounting screw (15) threads. Use the four screws (15) to fasten the

throttle body to the backplate (12). Tighten the screws to 55-60 in-lbs (6.2-6.8 Nm).

- Install the **new** O-rings (13) in the grooves around the breather screw holes on induction module side of the backplate (12).
- Insert the breather screws (10) through the backplate.
   Apply a small amount of Loctite to the breather screw threads and the mating tapped holes in the cylinder head, then install the screws into the cylinder head.
- 8. Alternately tighten the two breather screws to 120-144 inlbs (13.6-16.3 Nm).
- Lubricate the O-rings (9) with clean engine oil or white lithium grease.

Install the O-rings onto the breather plugs. Press the breather plugs (8) into the breather screw cavities.

### Air Filter Element and Air Tube Installation

- With the countersunk holes facing outward, slide the mounting ring (6) all the way onto the intake tube (7), up to the flange.
- 11. Place the gasket (11) against the opposite side of the flange.
- 12. Align the holes in the gasket with the mounting ring (6) holes and notches in the intake tube flange.
- Apply a small amount of Loctite to the threads of the three flat head screws (5).
- Secure the intake tube, mounting ring and gasket to the backplate, and tighten the screws to 50-60 in-lbs (6.2-6.8 Nm).
- 15. Obtain the chrome band clamp cover (4), adhesive ring (3), and air filter element package (2) from the kit.
- 16. Remove the backing from one side of the adhesive ring (3), center the ring on the inner surface of the band clamp cover and press the ring evenly and firmly into place.
- Remove the air filter element and band clamp from the package (1). Loosen the band clamp (2) as needed to allow removal or repositioning.

### NOTES

For proper adhesion, degrease the area on the backside of the filter element where the adhesive ring will be mounted.

Check the Screamin' Eagle® logo on the chrome filter element end cap. For best appearance, place the band clamp and chrome band clamp cover onto the filter element flange so the screw slot will be accessible but the screw mechanism hidden from view when the filter is installed to the intake tube with the logo upright.

- 18. Remove the backing from the remaining side of the adhesive ring, and press the chrome band clamp cover onto the large end of the air filter element.
  - Position the band clamp onto the filter element flange, inside the chrome cover flange with the band clamp screw mechanism in the cover flange cutout.
- Install the air filter element onto the intake tube approximately 5/8 inch (16 mm). Check that the filter element end cap logo is upright, and the band clamp screw mechanism

is hidden from view, yet the screw slot is accessible for tightening.

Tighten the clamp around the filter element flange to 30-40 *in-lbs* (3.4-4.5 Nm).

### NOTE

Riding a motorcycle equipped with an exposed oiled air filter under rainy conditions IS NOT RECOMMENDED.

20. Install the rain sock (16) over the air filter element.

# **A**WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

 Refer to the service manual and follow the instructions given to connect the battery cables, positive (+) cable first, and install the seat.

# WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

### **Air Filter Element Maintance**

 Inspect the air filter element every 5000 miles (8000 km), or more often under dusty conditions.

#### **NOTES**

The use of cleaning, drying or oiling methods or products other than those shown will damage the filter and void the manufacturer's warranty.

K&N<sup>®</sup> Air Filter Cleaner is available from a Harley-Davidson dealer, either alone (1 qt/0.95 L sprayer bottle, 99883-88T) or a 12 fl oz/0.35 L sprayer bottle as part of the Filter Care Service Kit (99850-92T).

K&N® Air Filter Oil is also available from a Harley-Davidson dealer, either alone (12.25 oz/347 gram aerosol can, 99882-88T) or a 6.5 oz/184 gram aerosol can as part of the Filter Care Service Kit.

DO NOT OVER-OIL THE AIR FILTER. Over-oiling may interfere with the proper performance of the engine and/or certain engine components. If oil is still draining or dripping from the filter media twenty minutes after oiling, clean and oil the filter element again.

- To clean the element:
  - Loosen the hose clamp retaining the air filter element assembly to the air tube. Separate the element from the air tube.
    - Tap the element to dislodge any loose dirt, then gently brush with a soft bristle brush.
  - b. Spray air filter cleaner liberally onto the cotton filter media and let soak for ten minutes, OR

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- roll or soak the cotton filter media in a shallow pan of air filter cleaner. Remove immediately, and let soak for ten minutes.
- c. Rinse off the filter media (flowing from the **clean** side to the dirty side), with low-pressure tap water.
- d. After rinsing, shake off all excess water, and let the filter media air dry. DO NOT use compressed air or a heat gun to speed drying.
- e. After the filter media is **completely** dry, EITHER spray air filter oil along each pleat, once only, holding the spray nozzle approximately 3 inches (76 mm) away from the media, OR

carefully use a squeeze bottle to deposit oil along each pleat, once only.

# Let the oil absorb into the filter media for twenty minutes before proceeding.

After twenty minutes, inspect the filter media, and carefully apply oil to any remaining visible white spots on the filter media, and allow to absorb.

3. Install the air filter element onto the intake tube approximately 5/8 inch (16 mm). Check that the filter element end cap logo is upright.

Tighten the clamp around the filter element flange to 30-40 **in-lbs** (3.4-4.5 Nm).

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# **SERVICE PARTS**

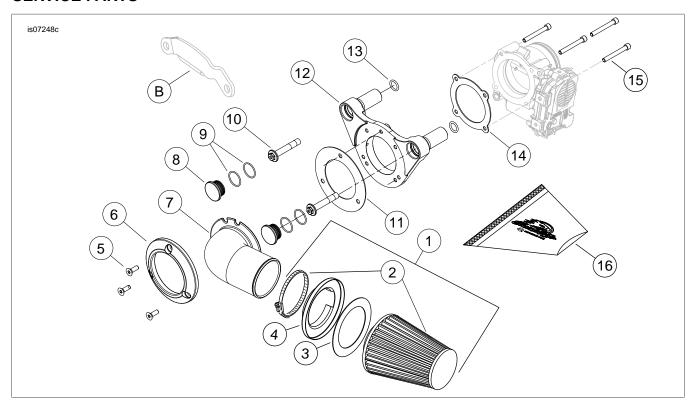


Figure 1. Service Parts: Screamin' Eagle 64mm Race Velocity Stack Kit

**Table 1. Service Parts Table** 

Item	Description (Quantity)	Part Number
1	Air cleaner filter kit, includes items 2 through 4 Air cleaner filter kit, compact (Kit 28716-10), includes items 14 through 16	29702-08A 28714-10
2	<ul><li>Filter element</li><li>Band clamp</li></ul>	Not Sold Separately Not Sold Separately
3	Adhesive ring	Not Sold Separately
4	Cover, band clamp (chrome)	Not Sold Separately
5	Socket flat head, hex screw	2986
6	Mounting ring	29826-08A
7	Intake tube, chrome	29739-08
8	Plug (2)	29830-05A
9	O-ring (4)	10925
10	Breather screw (2)	29400047
11	Gasket	25700028
12	Backplate, machined	29000038
13	O-ring, #2-113 (2)	11292
14	Gasket, throttle body	27200004
15	Screw, TORX® socket head 1/4-20 x 2 inch (4)	94576-98
16	Rain sock, air filter Rain sock, compact air filter	29493-05 28715-10
Items mentio	ned in text, but not included in kit:	·
А	Original equipment breather screw (2), purchase if necessary	
В	Induction module bracket (remove and discard)	

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