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SCREAMIN' EAGLE "HEAVY BREATHER - ELITE" PERFORMANCE AIR CLEANER KIT

GENERAL

Kit Numbers

29400172, 29400173, 29400285

Models

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

This kit fits 50 mm electronic throttle control induction modules only.

NOTE

These kits are intended for High Performance applications only. Engine-related performance parts are intended FOR THE EXPERIENCED RIDER ONLY.

Installation Requirements

Loctite[®] 243 (Blue) Threadlocker and Sealant (Part No. 99642-97) is required for proper installation of this kit.

▲ 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)

NOTE

This instruction sheet refers to service manual information. A service manual for your year/model motorcycle is required for this installation. One is available from a Harley-Davidson dealer.

NOTICE

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

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

Kit Contents

See Figure 1 and Table 1.

INSTALLATION

A WARNING

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. Remove seat. Disconnect both battery cables, negative battery cable first. Save 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

Have a Harley-Davidson dealer recalibrate the ECM before air cleaner installation.

- Remove the air cleaner backplate following the instructions in the service manual.
- See Figure 1. Remove and discard support induction module bracket (A).

"Heavy Breather - Elite" Air Cleaner Installation

NOTE

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

- Install ACR clip (8) and screws (9). Tighten the ACR clip screws to 3.4-4.5 N·m (30-40 in-lbs).
- Remove the backing from the adhesive side of the induction module backplate gasket (10). Align the holes. Install the gasket on the backplate (6).
- 3. Install the **new** square rings (7) in the counterbore around the breather screw holes on the induction module side of the backplate.
- Align the holes in the induction module with the holes in the backplate.
- 5. Apply a small amount of Loctite to the backplate mounting screw (11) threads. Insert the screws through the backplate and into the induction module until the screw threads are engaged. DO NOT tighten now.

- Install the new O-rings (5) in the counterbore around the breather screw holes on the air cleaner side of the backplate.
- Insert the breather screws (4) through the backplate. Apply a liberal amount of Loctite to the breather screw threads and the mating tapped holes in the cylinder head. Install the screws into the cylinder head. DO NOT tighten now
- Alternately tighten the two breather screws to 13.6–16.3 N·m (120–144 in-lbs).
- 9. Tighten the three backplate mounting screws to 6.2–6.8 N·m (55–60 **in-lbs**).

Air Filter Element and Intake Tube Installation

NOTE

- · This air filter is PRE-OILED and ready to install.
- For best appearance, keep the band clamp screw mechanism hidden from view. However, leave the screw slot accessible for tightening.
- 1. Line up the holes in the gasket (3) with the holes in the intake tube (2) flange.
- Apply a small amount of Loctite to the threads of the three flat head screws (1).
- Secure the intake tube and gasket to the air cleaner backplate, and tighten the screws to 6.2–6.8 N⋅m (55–60 in-lbs).
- Remove the air filter element (13) and band clamp (12) from the package. Loosen the band clamp as necessary allow removal or repositioning.

NOTE

Install the rain sock over the air filter element in wet or rainy conditions to prevent water intrusion.

- 5. Install the air filter element onto the intake tube until it is fully seated in the groove. Check that the filter element medallion is parallel. Keep the band clamp screw mechanism hidden from view. However, leave the screw slot accessible for tightening. Tighten the clamp around the filter element flange to 5.1–6.2 N·m (45–55 in-lbs).
- 6. Install the rain sock (19) 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. Install seat.

A 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 Maintenance

NOTE

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

K&N[®] Air Filter Cleaner is available from a Harley-Davidson dealer, either alone [0.95 L (1 qt) sprayer bottle, Part No. 99883-88T] or a 0.35 L (12 fl oz) sprayer bottle as part of the Filter Care Service Kit (Part No. 99850-92T).

K&N Air Filter Oil is also available from a Harley-Davidson dealer, either alone [347 g (12.25 oz) aerosol can, Part No. 99882-88T) or a 184 g (6.5 oz) aerosol can as part of the Filter Care Service Kit.

DO NOT OVER-OIL THE AIR FILTER. Over-oiling can interfere with the proper performance of the engine and/or certain engine components. If oil is still draining or dripping from the filter media 20 minutes after oiling, clean and oil the filter element again.

- Inspect the air filter element every 5000 miles (8000 km), or more often under dusty conditions. Replace air filter element every 50,000 miles (80,000 km).
- 2. 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.
 - b. Remove screw (18) and medallion (16).
 - Tap the element to dislodge any loose dirt. Gently brush with a soft bristle brush.
 - d. Spray air filter cleaner liberally onto the cotton filter media and let soak for ten minutes, OR roll or soak the cotton filter media in a shallow pan of air filter cleaner. Remove immediately, and let soak for ten minutes.
 - e. Rinse off the filter media (flowing from the **clean** side to the dirty side), with low-pressure tap water.
 - f. 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.
 - g. After the filter media is completely dry, EITHER spray air filter oil along each pleat, once only, holding the spray nozzle approximately 76 mm (3 in) 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 20 minutes before proceeding. After 20 minutes, inspect the filter media. Carefully apply oil to any remaining visible white spots on the filter media. Allow oil to absorb.
 - Install medallion and screw.

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3. Install air filter element with clamp onto the intake tube until it is fully seated into the groove. Check that the element medallion is parallel to the motorcycle. Tighten the clamp around the filter element flange to 3.4–4.5 N·m (30–40 in-lbs).

SERVICE PARTS

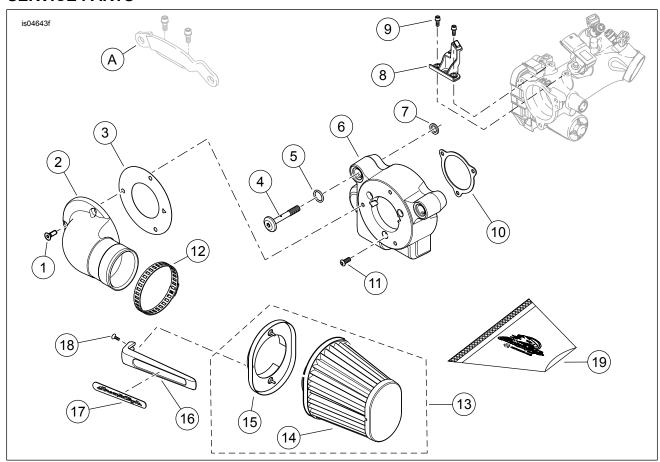


Figure 1. Service Parts: Screamin' Eagle "Heavy Breather - Elite" Performance Air Cleaner Kit

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Screw, flat head (3)	2986
2	Intake tube, chrome	29000075
	Intake tube, black	29000062
3	Gasket	2900063
4	Breather screw (2)	29400142
5	O-ring (2)	11900040
6	Backplate, machined, chrome	61300311
	Backplate, machined, black	61300312
7	Square ring (2)	11900042
8	Clip, ACR retention	16325-10
9	Screw (2)	4705
10	Gasket, backplate	29241-08
11	Screw, button head (3)	926
12	Band clamp	10074
13	Air cleaner filter kit (chrome trim), includes items 14-15	29400141
	Air cleaner filter kit (black trim), includes items 14-15	27300139
14	Filter element	Not sold separately
15	Cover, band clamp	Not sold separately
16	Intake medallion (chrome)	14100583
	Intake medallion (black)	14100894
17	Medallion insert	14100574
18	Screw	10200235
19	Rain sock, air filter	29400122
Items mentioned in text, but not included in kit:		
Α	A Induction module bracket (remove and discard)	

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