



# INSTRUCTIONS

-J05183

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## SCREAMIN' EAGLE "HEAVY BREATHER" RACE VELOCITY STACK KIT

### GENERAL

#### Kit Numbers

29400013

#### Models

For model fitment information, see the P&A Retail Catalog or the Parts and Accessories section of [www.harley-davidson.com](http://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.**

#### Additional Parts Required

LOCTITE® 243 (Blue) Threadlocker and Sealant is needed for proper installation of this kit. A 0.5 mL pack of Loctite 243 is included with this kit. A 6.0 mL tube (Part No. 99642-97) is available from a Harley-Davidson dealer.

Proper installation of this kit requires breather screws (Part No. 29465-08), which are OE equipped on 2008 and later Touring models. If the motorcycle is not equipped with these breather screws, separate purchase is required.

#### 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

#### WARNING

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

#### 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)**

1. 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.

#### 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.

2. Remove the air cleaner backplate following the instructions in the service manual. Retain the two breather screws (A) removed from the backplate (see Figure 1). The remaining parts can be discarded.
3. See Figure 1. Remove and discard induction module bracket (B).

### Back Plate Installation

#### NOTE

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

4. Install the **new** O-rings (11) in the grooves around the breather screw holes on induction module side of the backplate (10).
5. Remove the backing from the adhesive side of the backplate gasket (12). Carefully align the holes, and install the gasket on the induction module side of the backplate.

6. Insert the breather screws (removed in Step 2) through the backplate. Apply a small amount of Loctite (13) to the breather screw threads and the mating tapped holes in the cylinder head, then install the screws into the cylinder head. **DO NOT** tighten completely at this time.
7. Apply a small amount of Loctite to the backplate mounting screw (9) threads. Install the screws all the way through the backplate and gasket until the screw threads are captured in the induction module. **DO NOT** tighten completely at this time.
8. Alternately tighten the two breather screws to 120-144 **in-lbs** (13.6-16.3 Nm).
9. Lubricate the O-rings (7) with clean engine oil or white lithium grease.  
Install the O-rings onto the breather plugs. Press the breather plugs (6) into the breather screw cavities.
10. Tighten the three backplate mounting screws to 55-60 **in-lbs** (6.2-6.8 Nm).

### Velocity Stack and Air Tube Installation

11. With the countersunk holes facing outward, slide the mounting ring (5) all the way onto the intake tube (3), up to the flange.
12. Place the gasket (8) against the opposite side of the flange.
13. Align the holes in the gasket with the mounting ring (5) holes and notches in the intake tube flange.

14. Apply a small amount of Loctite to the threads of the three flat head screws (4).
15. Secure the intake tube, mounting ring and gasket to the backplate, and tighten the screws to 55-60 **in-lbs** (6.2-6.8 Nm).
16. Install the velocity stack (2) onto the intake tube until velocity stack bottoms out on tube. Position velocity stack so that the set screw (1) is located towards the inside of the tube closest to the engine.  
Tighten the set screw to 30-40 **in-lbs** (3.4-4.5 Nm).

### **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)**

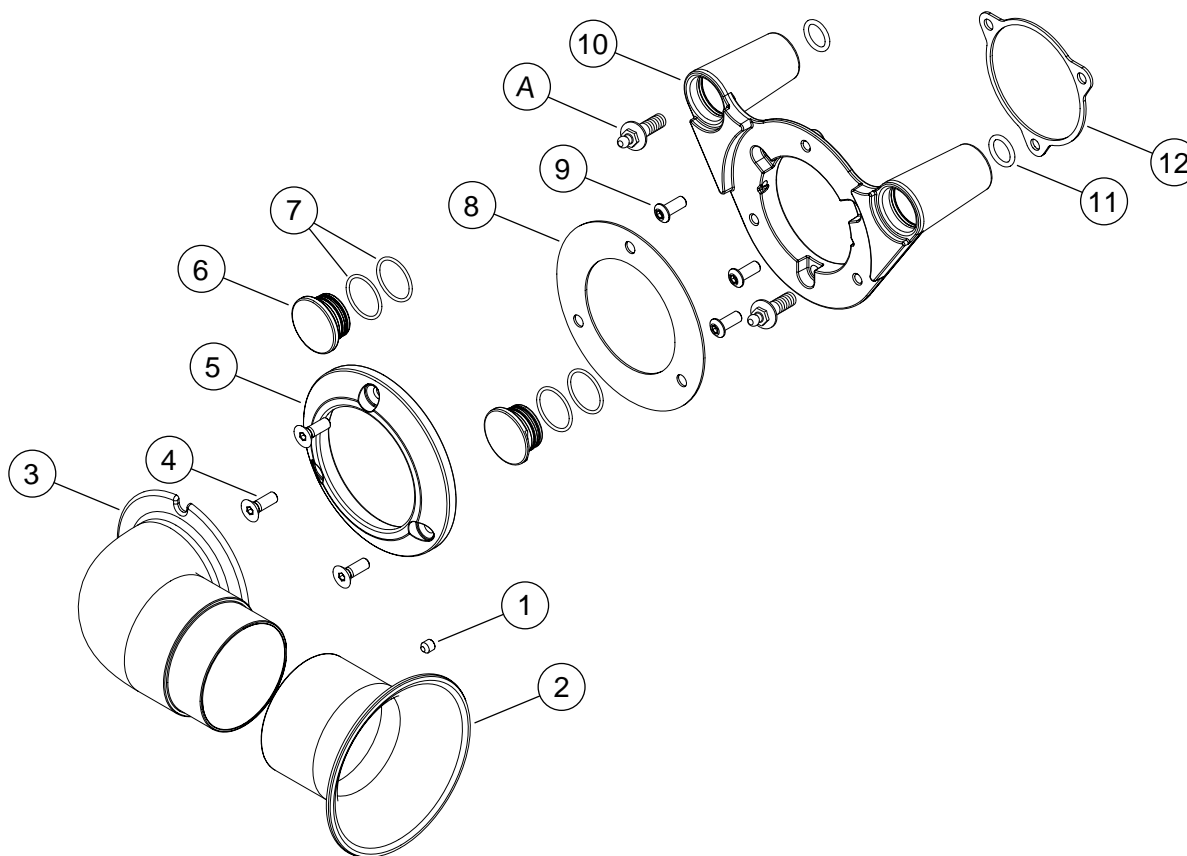
17. Refer to the service manual and follow the instructions given to connect the battery cables, positive (+) cable first, and install the seat.

### **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)**

## SERVICE PARTS

is06615



**Figure 1. Service Parts: Screamin' Eagle Heavy Breather Race Velocity Stack Kit**

**Table 1. Service Parts Table**

Item	Description (Quantity)	Part Number
1	Cup point, hex drive set screw	4695
2	Velocity stack	27200001
3	Intake tube, machined	29400012
4	Screw, flat head hex drive (3)	2986
5	Mounting ring	29826-08A
6	Plug (2)	29830-05A
7	O-ring (4)	10925
8	Gasket	25700028
9	Hex socket, button head screw (3)	926
10	Backplate, machined	29000014
11	O-ring, #2-113 (2)	11292
12	Gasket, throttle body	27300031
13	Loctite® 243 Blue, 0.5 ml tube	94635-98
<b>Items mentioned in text, but not included in kit:</b>		
A	OEM breather screw (2) (purchased separately if missing)	29465-08
B	Induction module bracket (not shown)	