



INSTRUCTIONS

J04417

2012-07-13



SCREAMIN' EAGLE PRO 50MM EFI INDUCTION MODULE

GENERAL

Kit Number

27623-05A

Models

For model fitment information, see the Screamin' Eagle® Pro Racing Parts catalog.

NOTE

This induction module has intake runners which are 0.100" larger in diameter than all stock Twin Cam heads and early Screamin' Eagle performance cylinder heads. The intake port diameter in the cylinder heads should be 1.750". If not, an experienced engine builder can open the cylinder head ports to this diameter to be sure of a smooth transition and air-flow.

Additionally, the larger intake flanges supplied in this kit will only work with cylinder heads machined for use with the stock symmetrical intake flanges (OE since MY06). All Screamin' Eagle performance cylinder heads (except Kompressor) with kit p/n extension of -06 or later have a intake port diameter of 1.750" and are machined for use with symmetrical intake flanges.

Also, a Screamin' Eagle air cleaner kit should be installed to provide sufficient airflow to the new induction module

This engine-related performance part is intended for high-performance or racing applications and is not legal for sale or use on pollution-controlled motor vehicles. This kit may reduce or void the limited vehicle warranty. Engine-related performance parts are intended for the experienced rider only.

Additional Parts Required

Loctite® 243 (Blue) Threadlocker and Sealant (H-D Part Number 99642-97) is required for the proper installation of this kit.

NOTICE

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

NOTE

ECM recalibration is required, which can be performed with the Screamin' Eagle Race Tuner Kit or Super Tuner Kit. See a Harley-Davidson dealer or the Screamin' Eagle® Pro Racing Parts catalog.

⚠ WARNING

Rider and passenger safety depend 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. (00333b)

NOTE

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.

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.**

⚠ 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)



2. Remove the original equipment induction module per the instructions **for your model** found in the INDUCTION MODULE: REMOVAL section of the service manual with the following exception:
 - a. **For Dyna models only:** See Figure 1 and FUEL INJECTORS; REMOVAL in the service manual. Use a 10mm socket wrench to remove the screw (27) holding the fuel supply tube (14) to the original equipment fuel pod (13). Remove the fuel supply tube from the induction module by pulling it out of the fuel pod. Set the fuel supply **tube** aside for re-installation to the **new** induction module. The screw (27), O-rings (28) and sealing washer (29) can be discarded
 - b. Remove the screw (27) holding the fuel supply tube (14) to the **new** fuel pod (13). Remove the fuel supply tube from the induction module by pulling it out of the fuel pod, taking care not to damage the **new** O-rings (28) and sealing washer (29). Place a few drops of Loctite[®] 243 (Blue) on the threads of the screw. See FUEL INJECTORS; INSTALLATION in the service manual. Install the **original equipment** fuel supply tube, and the **new** O-rings and sealing washer to the **new** induction module.
3. Using the **new** intake manifold seals (2) from the kit, install the **new** induction module per the instructions **for your model** found in the INDUCTION MODULE: INSTALLATION section of the service manual with the following exception:
 - a. The two mounting flanges (1) in this kit are identical, with no need to determine the F (front) or R (rear) flange. The **new** flange can be identified by the number "44" embossed on the side facing the induction module.

⚠ 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)

4. Refer to the service manual and follow the instructions given to connect the battery cables, **positive cable first**.
5. Follow the instructions in the service manual to 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

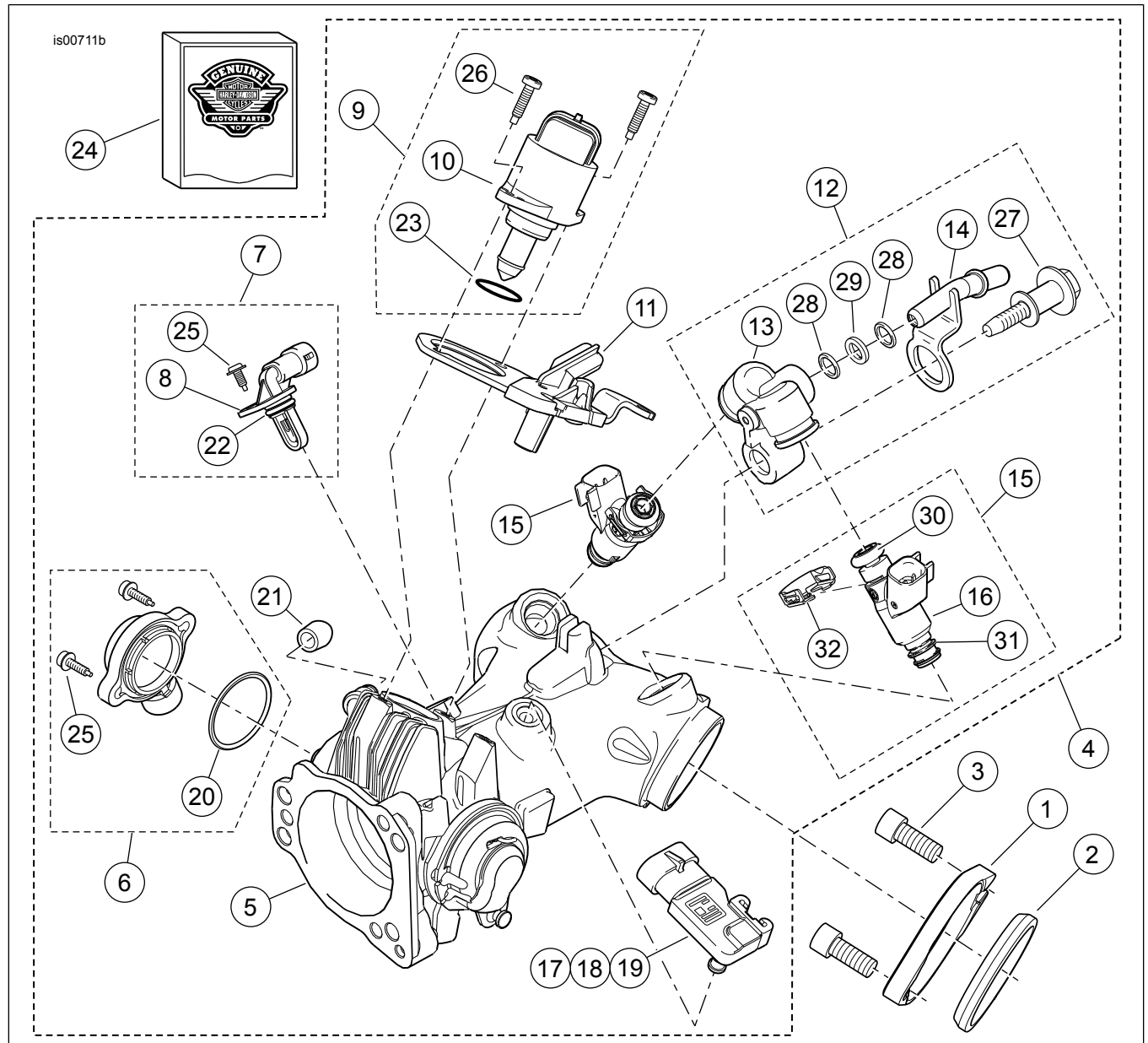


Figure 1. Service Parts, Screamin' Eagle Pro 50mm EFI Induction Module

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
1	Flange, mounting, 44mm (2)	27059-05A
2	Seal, intake manifold, 44mm (2)	27035-05
3	Cap screw, hex socket head (4)	3201WA
4	Induction module assembly, 50mm (includes items 5 through 23)	Not Sold Separately
5	• Induction module, machined (with throttle shaft, cam and valve installed)	Not Sold Separately
6	• Sensor kit, throttle position (includes sensor, and items 20, 25)	27659-06
7	• Sensor kit, intake air temperature (includes items 8, 22, 25)	27381-06
8	• Sensor, intake air temperature	Not Sold Separately
9	• Motor kit, idle air control (includes items 10, 23, 26)	27658-06
10	• Motor, idle air control	Not Sold Separately
11	• Throttle cable housing and stop	27684-06
12	• Fuel rail service kit (includes items 13, 14, 27, 28, 29)	27651-06

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
13	• Fuel pod	Not Sold Separately
14	• Tube, fuel supply	Not Sold Separately
15	• Injector assembly, fuel, high flow, 4.9 g/s flow rate (2) (includes items 16, 30, 31, 32)	27654-06
16	• Injector, fuel, high flow	Not Sold Separately
17	• Sensor, manifold air pressure (includes items 18, 19)	32417-10
18	• Sensor, manifold air pressure	Not Sold Separately
19	• Seal, manifold air pressure sensor	11291
20	• O-ring, throttle position sensor	Not Sold Separately
21	• Cap, purge tube (2)	90383-98
22	• O-ring, intake air temperature sensor	Not Sold Separately
23	• O-ring, idle air control motor	Not Sold Separately
24	Induction module service kit (includes items 25 through 32)	27655-06
25	• Screw, throttle position sensor (2), intake air temperature (1)	Not Sold Separately
26	• Screw, idle air control motor (2)	Not Sold Separately
27	• Screw, captured, fuel pod	Not Sold Separately
28	• O-ring, fuel supply tube (2)	Not Sold Separately
29	• Sealing washer, fuel supply tube	Not Sold Separately
30	• O-ring, fuel injector, high-pressure side (2)	Not Sold Separately
31	• O-ring, fuel injector, low-pressure side (2)	Not Sold Separately
32	• Clip, fuel injector (2)	Not Sold Separately