

-J06314

2016-10-07

# SCREAMIN' EAGLE MILWAUKEE-EIGHT STAGE 3 KIT

# GENERAL

### **Kit Number**

92500056, 92500057

### Models

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

### **Installation Requirements**

This kit requires the separate purchase of a SE high flow air cleaner kit. See SE Pro catalog for available kits.

This kit also requires the separate purchase of the Cam Drive Retention Kit (25566-06) which is available from a Harley-Davidson dealer.

Separate purchase of Cam Spacer Kit (25928-06) is recommended. This kit contains five different spacers to achieve proper sprocket alignment.

See appropriate sections in service manual for the special tools required to install this kit.

Proper installation of this kit also requires ECM recalibration contact a Harley-Davidson dealer.

#### 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)

#### 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 to Figure 3, and Table 1 to Table 3.

#### NOTE

Engine-related performance parts are intended FOR THE EXPERIENCED RIDER ONLY.

### REMOVAL

### **Prepare for Service**

- 1. Raise the vehicle.
- 2. Disarm security system.

3. Remove seat. Refer to CHASSIS in service manual.>

#### 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)

- 4. Remove main fuse. Refer to the service manual.
- 5. Remove fuel tank. Refer to FUEL SYSTEM in service manual.

### **Remove Engine Components**

- 1. Remove existing air cleaner assembly. Refer to AIR CLEANER REMOVAL in service manual.
- 2. Remove existing exhaust system. Refer to EXHAUST SYSTEM REMOVAL in service manual.

#### NOTE

The following steps are provided as an outline of the process. Follow all steps outlined in appropriate ENGINE sections in service manual.

- 3. Disconnect harness connections from induction module and remove induction module.
- 4. Twin-Cooled: Drain coolant system.
- 5. Disconnect harness connections from cylinder head.
- 6. Remove coolant or oil manifold from engine.
- 7. Remove rocker covers, rocker arms, pushrods, and pushrod tubes.
- 8. Remove cylinder heads, cylinder and pistons.
- 9. Remove tappet covers, anti-rotation devices and tappets.
- 10. Remove cam cover, cam plate and camshaft.
- 11. Remove inner cam bearing.
- 12. Remove existing clutch spring. Refer to CLUTCH REMOVAL in service manual.

### INSTALLATION

### Install Engine and Clutch Components

#### NOTE

The following steps are provided as an outline of the process. Follow all steps outlined in appropriate ENGINE sections in service manual.

- 1. Install clutch springs from kit. Refer to CLUTCH INSTALLATION in service manual.
- 2. See Figure 3. Install camshaft needle bearing (4).
- 3. See Figure 1 through Figure 3 Install camshaft into engine and reassemble cam plate. Refer to appropriate ENGINE sections in service manual.

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- 4. Verify camshaft to crankshaft timing marks are properly aligned.
- 5. Install lifters provided in kit, anti-rotation device, tappet cover gaskets provided in kit and tappet covers.
- 6. Install pistons and cylinders provided in kit. Follow instructions provided with piston and cylinder kit.
- 7. Replace original equipment valve spring on cylinder heads with Screamin' Eagle valve springs provided in the kit.
- 8. Install cylinder heads using **new** flange nuts included in kit.
- 9. Install pushrod tubes and pushrods.
- 10. With piston at approximately BDC on power stroke, install rocker arms. Alternately tighten screws to pull rocker shaft down evenly.
- 11. Install rocker covers onto engine.
- 12. Re-verify camshaft to crankshaft timing marks are properly aligned and install cam cover.
- 13. Install induction module.
- 14. Connect wire harness connections to engine and induction module.
- 15. Install coolant/oil manifold to cylinder heads.
- 16. Install exhaust system. Refer to EXHAUST SYSTEM INSTALLATION in service manual.
- 17. Install air cleaner assembly. Refer to AIR CLEANER INSTALLATION in service manual.

# SERVICE PARTS

# **Final Assembly**

- 1. Install fuel tank. Refer to FUEL SYSTEM in service manual.
- 2. Install main fuse. Refer to the service manual.
- 3. **Twin-Cooled:** Fill coolant system and purge air per service manual instructions.

#### 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)

4. Install seat. Refer to CHASSIS in service manual.

#### NOTICE

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

- 5. Recalibrate ECM with proper calibration for configuration. See Dealer for details.
- 6. Start and run engine. Repeat several times to verify proper operation.

### Operation

See the owner's manual for BREAK-IN RIDING RULES.

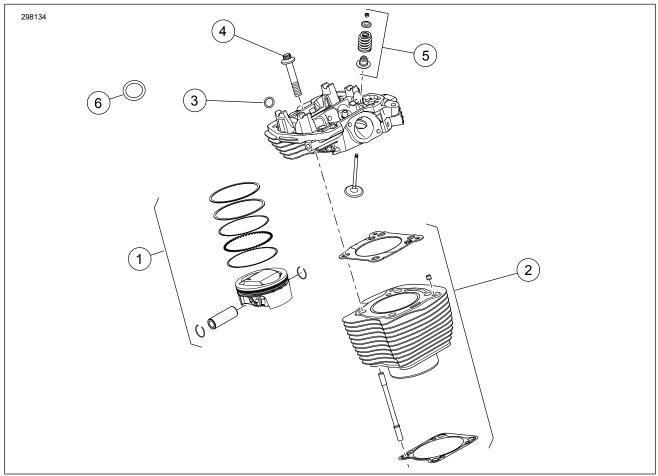


Figure 1. Service Parts: Screamin' Eagle Milwaukee-Eight Stage 3 Kit

Item	Description	Quantity	Part Number
1	Piston kit, 114 in <sup>3</sup>	1	21900084
1	Piston kit, 117 in <sup>3</sup>	1	21900087
2	Cylinder Kit (Hog Black)	1	16800120
2	Cylinder Kit (Black Granite)	1	16800125
3	O-ring, coolant manifold	4	11900090
4	Flange nut	8	10200303
5	Performance valve spring kit		18100080
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For Pistor	n kit (1) components, refer to instruction sheet J07	056.	

• For Cylinder kit (2) components, refer to instruction sheet J06226.

• For Valve Spring (5) components, refer to instruction sheet J06305.

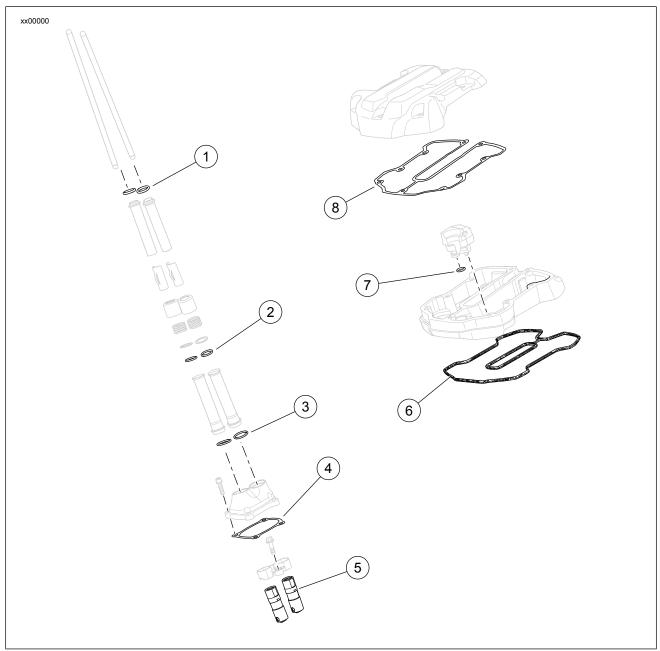


Figure 2. Service Parts, Valve Train: Screamin' Eagle Milwaukee-Eight Stage 3 Kit

Table 2.

Item	Description	Quantity	Part Number
1	O-ring	4	11293
2	O-ring	4	11132A
3	O-ring	4	11145A

ltem	Description	Quantity	Part Number
4	Gasket, lifter cover	2	25700362
5	Lifter kit, high capacity	1	18572-13
6	Gasket, lower rocker cover	2	25700425
7	O-ring, breather	2	11900116
8	Gasket, upper rocker cover	2	25700372

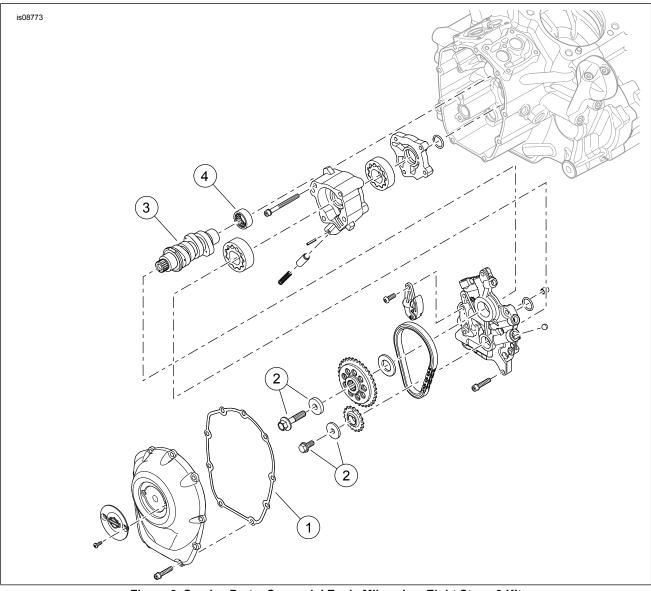


Figure 3. Service Parts: Screamin' Eagle Milwaukee-Eight Stage 3 Kit

Table	3.	Service	Parts

ltem	Description	Quantity	Part Number
1	Gasket, cam cover	1	25700370
2	Camshaft drive sprocket retention kit	1	25566-06
3	Camshaft, SE8-498	1	25400202
4	Bearing, needle	1	9298A