



INSTRUCTIONS

J04956

2009-05-20



SCREAMIN' EAGLE XL 883 TO 1200 STAGE 1 CONVERSION KIT

GENERAL

Kit Number

29784-07A

Models

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

Additional Parts Required

This kit requires the separate purchase of the following tools which are available from a Harley-Davidson dealer.

- Piston Pin Lock Ring Remover/Installer HD-34623-C
- Piston Pin Remover HD-42320-A
- Piston Support Plate HD-42322

Proper installation of this kit requires the use of Digital Technician™ at a Harley-Davidson dealer.

⚠ 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 to Figure 3 and Table 1 to Table 3.

NOTE

Installation of this kit by an authorized Harley-Davidson dealer will not impact your limited vehicle warranty.

This Big Bore Stage 1 kit is intended for High Performance applications only. This engine related performance part is legal for sale or use in California on pollution controlled motor vehicles. Engine related performance parts are intended for the experienced rider only.

For 2007 Models: The Product Information Label contained in this kit is a requirement of the California Air Resource Board (CARB) emission regulation. Place the label on the right side of the frame directly beneath the VIN sticker. This label is not required outside the state of California.

For 2008 and later Models: A new emissions tune-up label is included as a requirement of the California Air Resource Board (CARB) emissions regulation. Place the new label over the upper part of the original emissions tune-up label. This replacement label is not required outside the state of California.

The air cleaner contained in this kit is designed to perform with this kit only. Any other combination of components is not confirmed to be legal for street use.

REMOVAL

NOTE

If vehicle is equipped with Harley-Davidson Smart Security System, see Owner's Manual for instructions to disarm the system.

⚠ 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)

1. Remove left side cover and maxi-fuse. Refer to main fuse in service manual.
2. Remove existing air cleaner assembly. Refer to appropriate section in service manual.
3. Remove cylinder heads, cylinders, and pistons. Refer to appropriate sections in service manual.
4. Remove clutch components. Refer to appropriate section in service manual.

INSTALLATION

Install Engine and Clutch Components

NOTE

The 1200 cc pistons have an arrow on the top of the piston. This arrow must face the front of the engine when piston is installed. There is no front cylinder piston or rear cylinder piston. New pistons can be installed in either cylinder.

Check piston rings for proper side clearance and end gap. Be sure end gaps of adjacent rings are installed 90 degrees apart.

1. Install high performance cylinder heads, cylinders, and pistons from kit. Refer to appropriate sections in service manual.
2. Install clutch components. Replace original gaskets, O-rings, and seals with new components from kit. Refer to appropriate section in service manual.
3. Install air cleaner assembly. Refer to instructions included with Air Cleaner Kit (29042-04C) on Instruction Sheet J04954.

Recalibrate ECM

NOTICE

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

Download the new ECM calibration using the Digital Technician™ at a Harley-Davidson dealer.

SERVICE PARTS

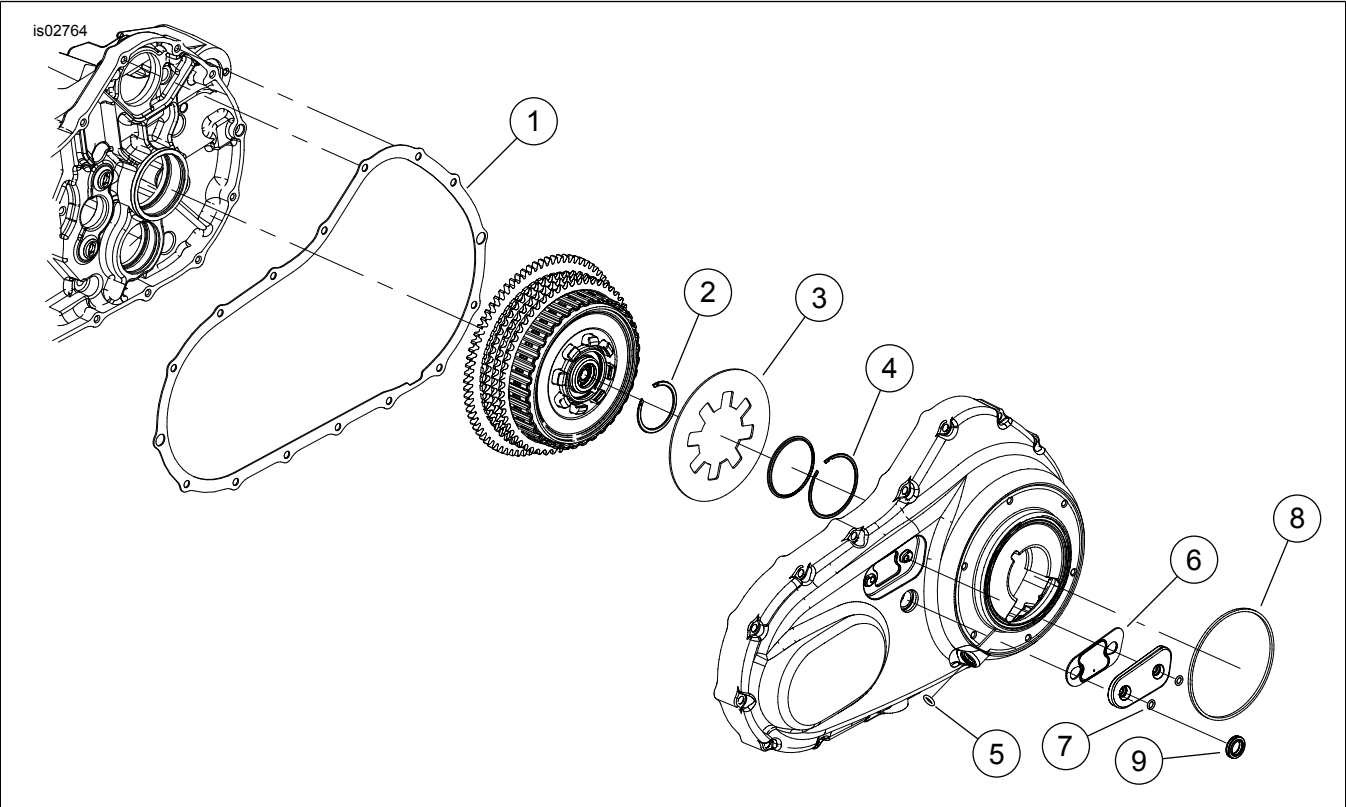


Figure 1. Service Parts: Screamin' Eagle XL 833 to 1200 Stage 1 Conversion Kit

Table 1. Service Parts: Screamin' Eagle XL 833 to 1200 Stage 1 Conversion Kit

| Item | Description (Quantity) | Part Number | Item | Description (Quantity) | Part Number | |
|------|------------------------|-------------|------|------------------------------|-------------|-----------------------------|
| 1 | | | | Gasket, primary cover | 34955-04 | 6 6 3 K n- n er |
| 2 | | | | Retaining ring, clutch plate | 37909-90 | 7 0 1 Q Q |
| 3 | | | | Spring, clutch plate | 37924-04A | 8 6 3 K n- n er |

Return to Service

Install main fuse and left side cover.

OPERATION

Refer to BREAK-IN RIDING RULES in owner's manual for instructions to break-in the motorcycle.

Table 1. Service Parts: Screamin' Eagle XL 833 to 1200 Stage 1 Conversion Kit

| Item | Description (Quantity) | Part Number | Item | Description (Quantity) | Part Number |
|------|------------------------|-------------|------|------------------------|-------------|
| 4 | | | | Retaining ring | 37908-90 |
| 5 | | | | O-ring, clutch cable | 11179 |

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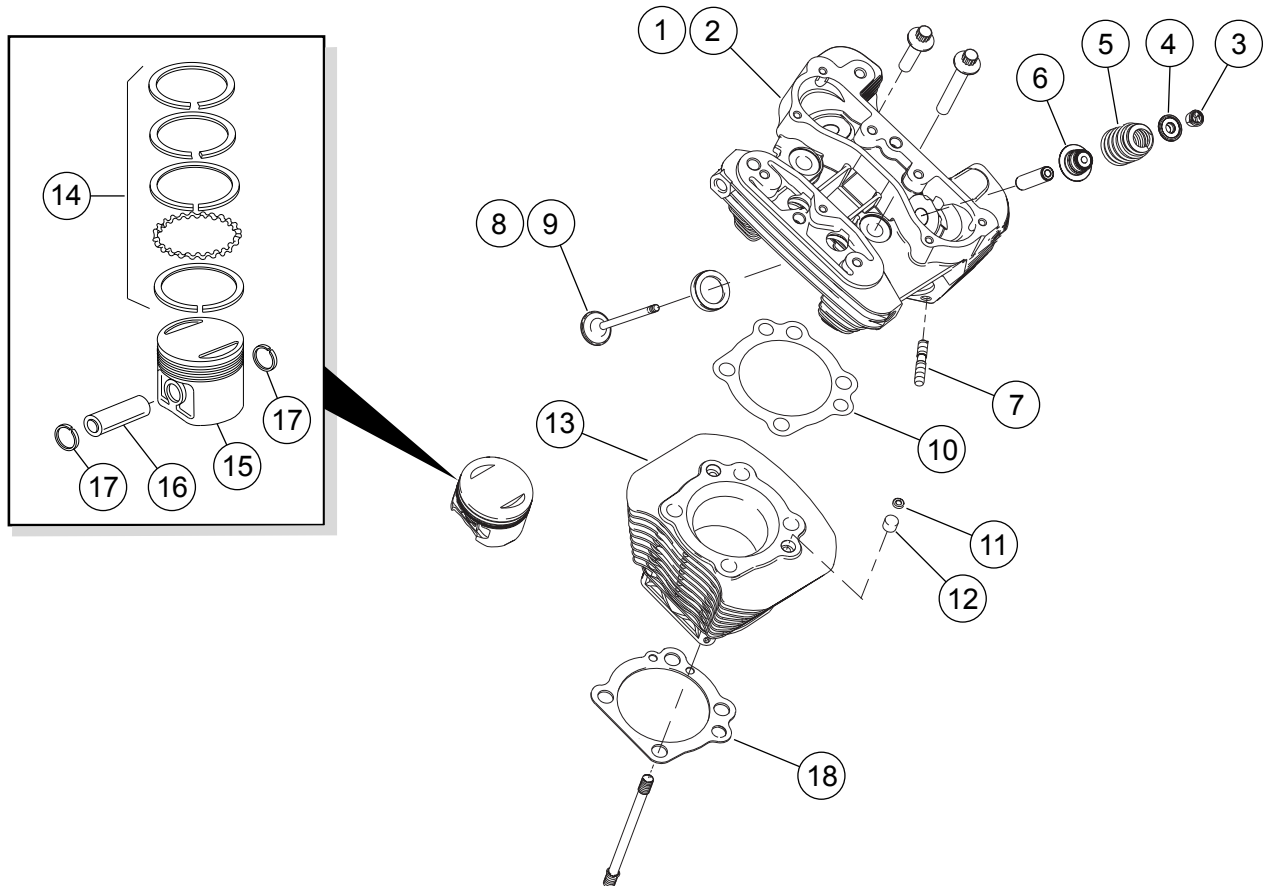


Figure 2. Service Parts: Screamin' Eagle XL 833 to 1200 Stage 1 Conversion Kit

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| Item | Description (Quantity) | Part Number | Item | Description (Quantity) | Part Number |
|------|---------------------------------|-------------|------|-----------------------------------|-------------|
| 1 | Cylinder head, rear | 16666-07 | 12 | Dowel (4) | 16573-83A |
| 2 | Cylinder head, front | 16667-07 | 13 | Cylinder (2) | 16553-04A |
| 3 | Keeper, valve collar (8) | 18260-02 | | Piston Kit (includes items 14-17) | 22223-04 |
| 4 | Collar, valve spring, upper (4) | 18258-02 | 14 | • Piston Ring Set (2) | 21948-02 |
| 5 | Spring, valve (4) | 18245-02 | 15 | • Piston (2) | 22650-04A |
| 6 | Seal, valve (4) | 18094-02A | 16 | • Piston pin (2) | 22765-02 |
| 7 | Stud, exhaust port (4) | 16715-83 | 17 | • Retaining ring (4) | 22589-83B |
| 8 | Valve, intake (2) | 18690-02 | 18 | Gasket, cylinder base (2) | 16789-04 |
| 9 | Valve, exhaust (2) | 18691-02 | 19 | Seal, intake manifold (Not Shown) | 26995-86B |
| 10 | Gasket, cylinder head (2) | 16770-84F | 20 | Seal, exhaust (Not Shown) | 17048-98 |
| | | | 11 | O-ring, cylinder stud insert (4) | 26432-76A |

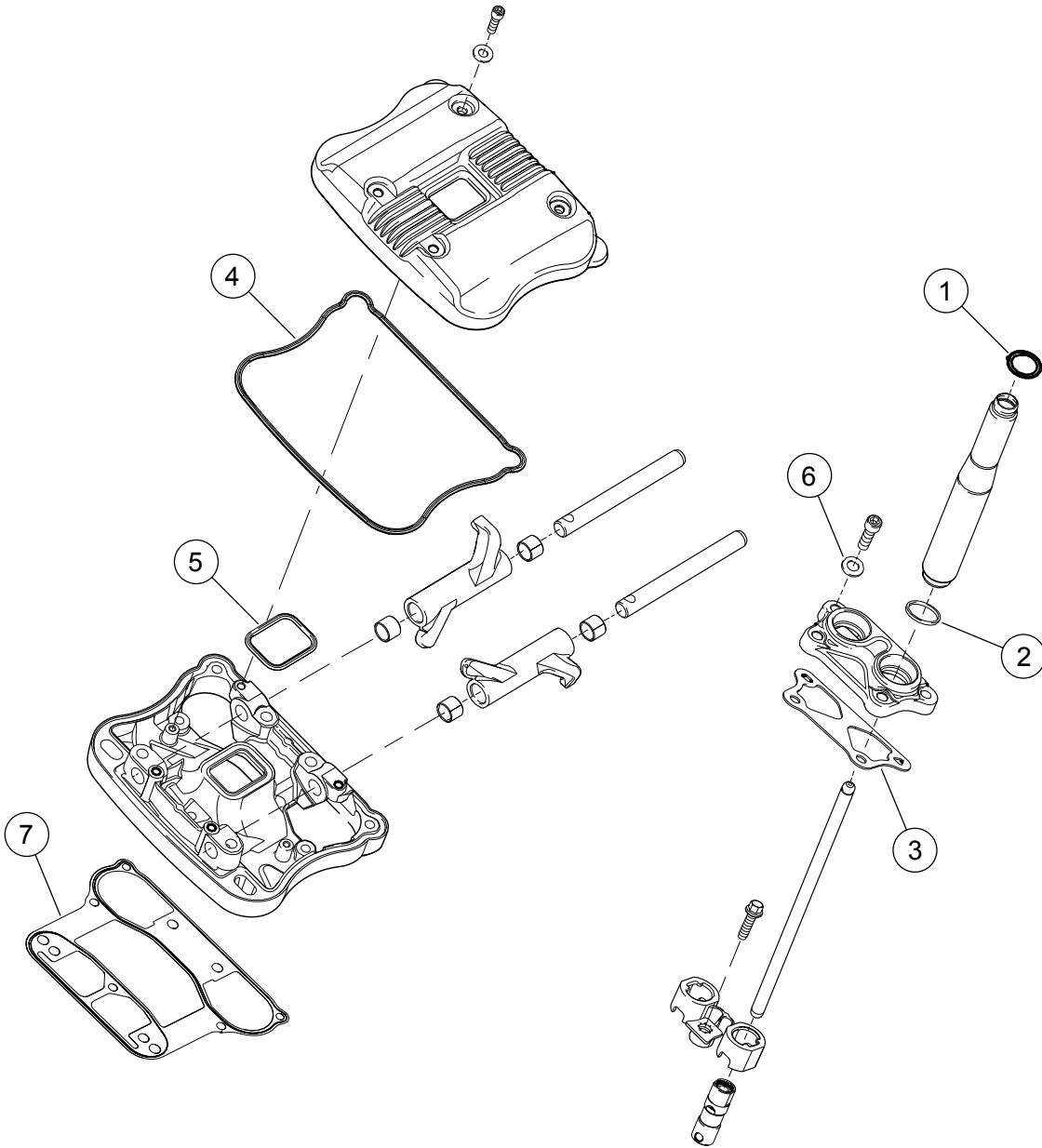


Figure 3. Service Parts: Screamin' Eagle XL 883 to 1200 Stage 1 Conversion Kit

Table 3. Service Parts: Screamin' Eagle XL 883 to 1200 Stage 1 Conversion Kit

| Item | Description (Quantity) | Part Number | Item | Description (Quantity) | Part Number |
|------|---------------------------------|-------------|------|---------------------------------|-------------|
| 1 | O-ring, push rod, upper (4) | 11190 | 5 | Gasket, rocker cover, inner (2) | 17695-07 |
| 2 | O-ring (4) | 11377 | 6 | Seal washer, rocker cover (8) | 6589 |
| 3 | Gasket, tappet cover (2) | 17976-04 | 7 | Gasket, rocker box (2) | 16800-84A |
| 4 | Gasket, rocker cover, lower (2) | 17362-07A | | | |