# SCREAMIN' EAGLE PRO TWIN CAM PERFORMANCE CAM KITS

## **GENERAL**

### **Kit Number**

25464-06, 25465-06, 25474-06, 25475-06, 25638-07, 25482-10, 25483-10, 25494-10

#### Models

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

### **Additional Parts Required**

Installing these camshaft kits requires the separate purchase of the following kits from a Harley-Davidson dealer:

**Table 1. Additional Parts Required** 

Item	Part Number
Adjustable or Perfect Fit Pushrods	See Screamin' Eagle Pro catalog.
Cam Service Kit	17045-99C
Drive Gear Retention Kit	25566-06

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

The 258, 260, 259E, 263E and 266E cams cannot be used with stock valve springs, or coil bind may result. Refer to the Screamin' Eagle Pro catalog for the proper valve springs to fit your application.

## 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**

Table 2. Kit Numbers and Performance Cams

Kit Numbers	SE Pro Twin Cam Performance Cams
25464-06	SE-204 Cam
25465-06	SE-211 Cam
25474-06	SE-258 Cam
25475-06	SE-260 Cam
25638-07	SE-255 Cam
25482-10	SE-259E Cam
25483-10	SE-263E Cam
25494-10	SE-266E Cam

There are no Service Parts available with these kits.

#### NOTE

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.

## **INSTALLATION**

## **Prepare Motorcycle**

## **A**WARNING

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

## **AWARNING**

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)

Disconnect battery cables, negative (-) cable first.

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## **High Performance Camshafts**

Installation of this kit requires removal and re-installation of the cam support plate. Refer to ENGINE: BOTTOM END, Cam Support Plate, Removal and Disassembly/Assembly (Camshaft, Camshaft Bearings) in the service manual.

#### NOTE

Replace original cam cover gasket with new cam cover gasket (25244-99A).

### **Measuring Piston-to-Valve Clearance**

#### NOTE

After installing non-stock cams, check piston-to-valve clearance.

- Apply 1/8 inch layer of clay to crowns of pistons in areas where valves meet pistons.
- 2. Refer to the appropriate service manual and assemble the heads and valve train, and tighten cylinder studs to torque specified. Make sure the pushrods can be spun with fingertips before rotating the engine.
- 3. Turn engine through two complete revolutions by hand.
- 4. Remove heads and measure clay at its thinnest point.

#### NOTE

Clay must measure 0.080 inch at its thinnest point. If this measurement does not meet minimum thickness, depth of valve notches must be increased. The depth of the notches must not exceed 0.135 inch

If oversized valves are used, radial clearance should also be checked. Radial clearance of 0.050 inch (1.27 mm) is recommended.

## Measuring Valve-to-Valve Clearance

### NOTE

Wait ten minutes before turning the engine after installing push rods. This allows tappets to bleed down and prevents you from bending push rods or valves.

 Rotate the engine so that both valves of the front cylinder are partially open. Shine a light through the exhaust port and look through the spark plug hole to view the valves. Turn engine, if required, to the point where the exhaust and intake valve heads cross, where both valves are off their seats by an equal amount.

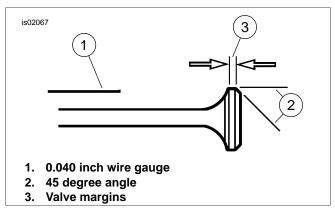


Figure 1. Beveling Valve Heads

#### NOTE

See Figure 1. If it is necessary after inspection to grind the intake and exhaust valves in order to meet the 0.040 inch clearance between the two valve heads, the margins (3) must be measured as follows: 0.031 inch minimum margin on exhaust valves and 0.015 inch minimum margin on intake valves.

- A 0.040 inch clearance is required between the two valve heads. Use a 0.040 inch wire gauge (1) to measure this distance. To adjust the clearance, grind the edges of the intake and exhaust valves at a 45° angle (2).
- 3. Repeat Steps 1 and 2 for the rear cylinder.

### **Return Motorcycle to Service**

## **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)

Connect the battery cables, positive (+) cable first.



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