



INSTRUCTIONS

-J03501

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SCREAMIN' EAGLE PRO TWIN CAM PERFORMANCE CAM KITS

GENERAL

It is **strongly advised** that an authorized Harley-Davidson dealer install this kit. Special tools are required for proper installation.

Kit Numbers

25464-06, 25465-06, 25474-06, 25475-06, 25482-10, 25483-10, 25494-10, 25503-10, 25602-10, 25638-07, 25400117

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

Installing this kit requires separate purchase of the following items from a Harley-Davidson dealer (see Table 1):

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

A cam cover gasket (Part No. 25244-99A) is needed.

Separate purchase of a Cam Spacer Kit (Part No. 25928-06) is recommended. This kit contains five different spacers to achieve proper sprocket alignment.

SE-258, 260, 259E, 263E, 266E, 585 and RX-267 cams **cannot be used** with original equipment (OE) valve springs. Coil binding will result. See the Screamin' Eagle Pro catalog for the proper valve springs to fit your application.

EFI models require ECM calibration (priced separately).

⚠ 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 refers to service manual information. A service manual for this year/model motorcycle is required for this installation. One is available from a Harley-Davidson dealer.

Kit Contents

Table 2. Kit Numbers and Performance Cams

Kit Number	SE Pro Twin Cam Performance Cam
25464-06	SE-204 Cam
25465-06	SE-211 Cam
25474-06	SE-258 Cam
25475-06	SE-260 Cam
25482-10	SE-259E Cam
25483-10	SE-263E Cam
25494-10	SE-266E Cam
25503-10	SE-254E Cam
25602-10	RX-267 Cam
25638-07	SE-255 Cam
25400117	SE-585 Cam

There are no service parts available for these kits.

NOTE

This engine-related performance part is intended for High Performance or Racing applications. It 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

Preparation

⚠ 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)

Disconnect both battery cables, negative battery cable first.

High Performance Camshafts

Installation of this kit requires removal and reinstallation 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 (Part No. 25244-99A).



Measuring Piston-to-Valve Clearance

NOTE

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

1. Apply 3 mm (1/8 in) layer of clay to crowns of pistons in areas where valves meet pistons.
2. See the service manual. Assemble the heads and valvetrain. Tighten cylinder studs to torque specified. Make sure that the pushrods can be spun with fingertips before rotating the engine.
3. Rotate engine through two complete revolutions by hand.
4. Remove heads and measure clay at its thinnest point.

NOTE

Clay must measure 2.032 mm (0.080 in) 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 3.43 mm (0.135 in).

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

Measuring Valve-to-Valve Clearance

NOTE

Wait ten minutes before turning the engine after installing pushrods. This wait allows tappets to bleed down and prevents bent pushrods or valves.

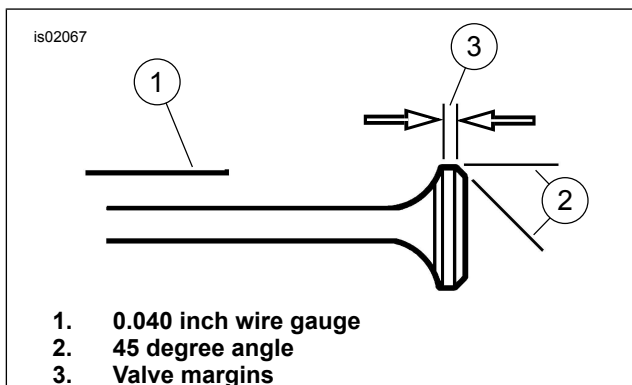


Figure 1. Beveling Valve Heads

1. Rotate the engine so both valves of the front cylinder are partially open. Shine a light through the exhaust port. Look through the spark plug hole to view the valves. If necessary, rotate to the point where the exhaust and intake valve heads cross (both valves off their seats by an equal amount).

NOTE

See Figure 1. If it is necessary after inspection to grind the intake and exhaust valves in order to meet the 1.016 mm (0.040 in) clearance between the two valve heads, measure the margins (3):

- 0.787 mm (0.031 in) minimum margin on exhaust valves, and
 - 0.381 mm (0.015 in) minimum margin on intake valves.
2. A 1.016 mm (0.040 in) clearance is required between the two valve heads. Use a 1.016 mm (0.040 in) 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

⚠ 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 both battery cables, positive battery cable first.