

INSTRUCTIONS

2024-09-04



CAMSHAFT DRIVE GEAR RETENTION KIT

GENERAL

Instruction sheet is also available electronically. To verify you are using the most current version available, do one of the following:

· Go to Refer to: h-d.com/isheets

J03756

· Scan QR code in upper left corner of the instruction sheet

NOTE

This instruction sheet **may have a Supplemental Video** to assist installer in clarifying a certain part of the assembly. A linked video would be located at the end of this instruction sheet.

Kit Number

25566-06

Models

This kit fits 2006 and later Dyna model motorcycles and 2007 and later models equipped with a Twin Cam 96 engine.

Additional Parts Required

A 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)

When installing the camshaft cover, the original camshaft cover gasket must be replaced with a **new** Camshaft Cover Gasket (Part Number 25244-99A). This part is available from a Harley-Davidson Dealer.

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

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 1. Kit Contents

Description (Quantity)	Part Number
Cap screw, flanged hex head	Not Sold Separately
5/16-18 x 0.75 in. long, Grade 8	
with Driloc adhesive	
Washer, heat treated	Not Sold Separately
0.312 in ID, 0.12 in. thick	

Table 1. Kit Contents

Description (Quantity)	Part Number
Cap screw, flanged hex head	Not Sold Separately
3/8-24 x 1.62 in. long, Grade 8	
with Driloc adhesive	
Washer, heat treated	6294
0.38 in ID, 0.22 in. thick	

INSTALLATION

A WARNING

Use Harley-Davidson replacement fasteners. Aftermarket fasteners can adversely affect performance, which could result in death or serious injury. (00013a)

- Both camshaft sprocket flange bolts are specially hardened, and the flat washers have a specific diameter and ground surfaces. Use only the parts provided in this kit when performing this installation.
- Aftermarket fasteners may not have the specific properties needed to perform properly in this application.

NOTE

Replace the original camshaft cover gasket with a new camshaft cover gasket (purchased separately) when re-installing the camshaft cover.

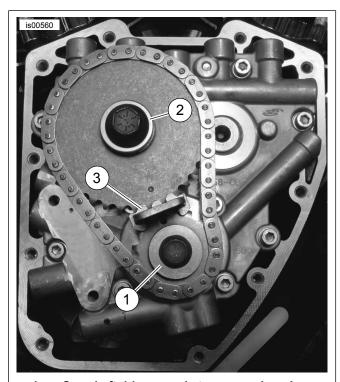
NOTE

Before installing the camshaft sprocket bolts, remove any residual lock patch in the bolt holes with the proper-sized thread chaser.

Refer to BOTTOM END OVERHAUL; ASSEMBLY; COVER AND CAM SUPPORT PLATE in the ENGINE section of the Service Manual. When fastening the camshaft drive sprockets to the ends of the crankshaft and rear camshaft, use the procedures in **this** instruction sheet in place of those in the Service Manual.

- Apply a thin film of clean H-D 20W50 engine oil to both sides of the two **new** flat washers from the kit, and the bottoms of the heads of the **new** bolts.
- 2. See Figure 1.. Start the smaller flange bolt (1) with flat washer to secure the crank sprocket to the end of the crankshaft, but do not tighten.
- Start the larger flange bolt (2) with flat washer to secure the primary camshaft sprocket to the end of the camshaft, but do not tighten.
- Position the CRANKSHAFT/ CAMSHAFT SPROCKET LOCKING TOOL HD-47941 (3) between the crank and primary camshaft sprockets to prevent rotation. The handle of the tool is stamped "Crank" and "Cam" to verify proper orientation.

- 5. Alternately tighten the crankshaft- and primary camshaft-sprocket flange bolts to 15 ft-lbs (20.3 Nm).
- 6. Loosen each flange bolt one full turn (360 degrees).
- 7. Final tighten the rear camshaft sprocket bolt to 40 ft-lbs (54 Nm).
- 8. Final tighten the crank sprocket bolt to 24 ft-lbs (32.5 Nm).
- Remove the sprocket locking tool. Follow the instructions in the Service Manual for installing the primary camshaft-chain tensioner.



- Camshaft drive sprocket screw and washer on crankshaft
- 2. Camshaft drive sprocket screw and washer on rear camshaft
- Crankshaft/ camshaft sprocket locking tool HD-47941

Figure 1. Camshaft Drive Sprocket Attaching Hardware and Locking Tool

2/2 J03756