

SERVICE BULLETIN



M-1148A

JULY 12, 2004

INNER PRIMARY MAINSHAFT OIL SEAL CHANGE

Purpose

The purpose of this service bulletin update is to encourage dealers to pay particular attention to Twin Cam vehicles built just before the oil seal change was incorporated in production (see **Motorcycles Affected** below).

The new seal is an improved design. The part number of this new seal is 12052A. The current service manual procedure is still correct but there are certain precautions that must be taken when installing the new oil seal.

NOTE

Use all existing inventory of 12052 seals before using the new 12052A seal.

Motorcycles Affected

This new seal fits all Big Twin models built since 1984. The new seal went into production on 2004 model year vehicles on approximately 2/4/04. Pay particular attention to vehicles produced between 10/1/2003 and 2/1/2004.

Required Dealer Action

- Vehicles built between 10/1/2003 and 2/4/2004: At the 1,000 mile service, check behind inner primary housing in the mainshaft seal area for any sign of wet oil. If in doubt, use Black Light Leak Detector Kit (Part No. HD-35457) or similar tool to diagnose.
 - If any sign of wet oil is detected, replace 12052 oil seal with 12052A oil seal. While performing this procedure, verify correct bearing race position, check for damage or wear, and replace all related gaskets and seals.
 - If the area is dry, you can be confident that the integrity of the mainshaft seal has not been compromised, and you do not need to replace the oil seal.
- Notify service personnel of the following precautions to take when performing the oil seal installation procedure.
 - See Figure 1. Note the difference in appearance between the old and new oil seals. The new seal is installed in the same orientation as the old seal; with the lip garter spring facing toward the mainshaft bearing.

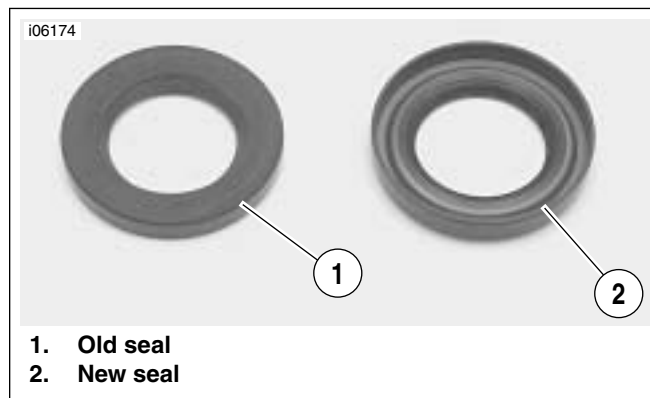


Figure 1. Comparison of Old and New Oil Seals

IMPORTANT NOTE

In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO.1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO
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- b. See Figure 2. The lip garter spring side of the new oil seal is also identified by the words "OIL SIDE".

NOTE

To facilitate installation of the oil seal, coat the outer diameter of the seal with clean engine oil just prior to installation.

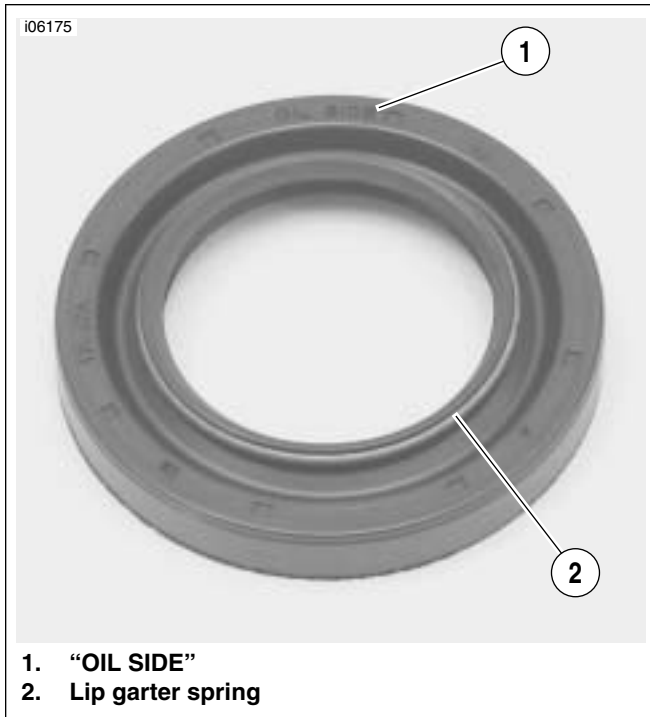


Figure 2. Lip Garter Spring Side of New Oil Seal Identified by the Words "OIL SIDE"

Installation Procedure

1. Lubricate the O.D. of the **new** seal with clean engine oil.
2. See Figure 3. Using a suitable seal driver, press squarely on the outer edge of the seal carrier to start the seal into the primary housing.

CAUTION

Install oil seal with a seal driver that will press only against outer rim of oil seal, not against inner area. Damage to inner area of seal can result in an oil leak.

3. See Figure 4. Continue pressing oil seal until its outer edge is flush with machined surface of inner primary housing.

NOTE

The correct depth of the seal is reached when the outer edge of the seal carrier is flush with the machined surface of the primary housing.

CAUTION

Do not press seal below surface of primary housing. If seal is pressed in too far, seal can contact mainshaft bearing inner race. Damage to the seal can result in an oil leak.

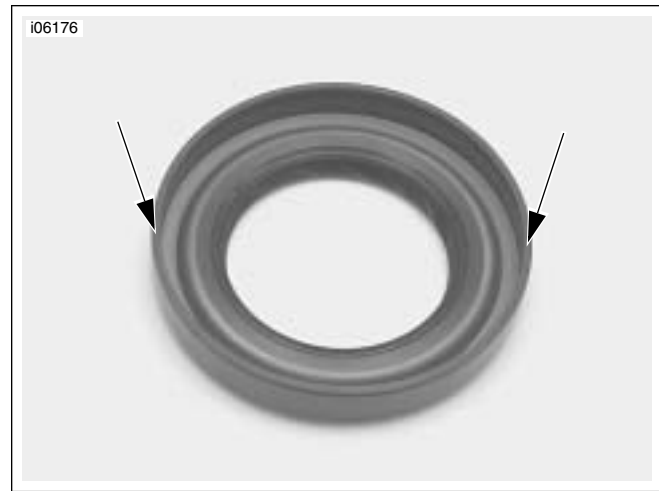


Figure 3. Correct Method of Installing New Oil Seal: Press Only on Rim of Seal Carrier



Figure 4. Oil Seal Properly Installed in Inner Primary Housing