

BAKER HIGH TORQUE BEARING KIT

INSTALLATION INSTRUCTIONS FOR BAKER PN 189-56

OVERVIEW

The 34091-85 inner bearing race has been used on Big Twins since 1985. The inner primary bearing rides on this race. By design, this race press-fits onto the transmission mainshaft. This system works fine for stock engines. 100 HP+ engines will make this race walk on the mainshaft. If it walks inboard, it will damage the main drive gear seal and cause a transmission oil leak. If it walks outboard, it will cause a primary oil leak. Our high torque bearing kit eliminates this condition.

FITMENT

1985-2007 Big Twin Models

INCLUDED PARTS

- Precision honed bearing, PN 205-SFF-H
- Seal, PN 9758



HIGH TORQUE BEARING KIT, PN 189-56, FIGURE 1

DISSASSEMBLY

- 1. Starting with the basics and for your safety, DISCONNECT BOTH BATTERY TERMINALS (FAILURE TO DUE SO COULD RESULT IN PERSONAL INJURY). Always disconnect the negative terminal first.
- 2. Drain the primary fluid; remove the inner and outer primary per your Factory Service Manual.
 - Removal of foot controls, floor board assembly and or rear exhaust pipe might be required in order to remove your primary components.
- **3.** Using a inner race puller tool (*BAKER PN TOOLB-56* or equivalent) remove the bearing race from the mainshaft following your Factory Service Manual.



DO NOT USE A CUT OFF WHEEL TO REMOVE THE MAINSHAFT RACE. THE CUT OFF WHEEL COULD CUT INTO THE MAINSHAFT CAUSING A WEAK / STRESS POINT IN THE SHAFT. THIS STRESS POINT COULD BREAK UNDER CERTAIN LOAD CONDITIONS CAUSING PERSONAL INJURY AND DAMAGE TO THE MOTORCYCLE.

IF USING THIS KIT ON A 2006-07 CRUISE DRIVE MODEL; BEFORE PROCEEDING, CHECK TO MAKE SURE THAT BEARING IS A SLIP FIT ON THE MAINSHAFT. IF BEARING DOES NOT SLIDE ON THE MAINSHAFT, DO NOT PROCEED. CALL OUR TECH SUPPORT LINE.

PRIMARY PREP

- 1. Clean the inner primary around the bearing and seal, if you have access to a parts washer, clean the primary inside and out.

BEARING REMOVAL, FIGURE 2

- Remove the bearing seal and the snap rings. There
 are 2 snap rings, an inside and outside one which retain the bearing. USE SAFTEY
 GLASSES AND CAUTION WHILE REMOVING THE SNAP RINGS. DO NOT DISCARD
 THE SNAP RINGS AS YOU WILL NEED THEM FOR ASSEMBLY.
- **3.** Using a 1-1/2" socket press the bearing out of the inner primary, starting from the inside of the primary; see figure 2.
- **4.** With the bearing removed from the primary, clean the bore and snap rings using a shop rag with brake cleaner or lacquer.

PRIMARY PREP CONTINUED ON NEXT PAGE

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5. Using a little oil coat the bearing bore and install the inner snap ring. Using a press and a 1-1/2" socket, press the new bearing in from the outside of the inner primary; press until the bearing is seated on the inner snap ring, figure 3 & 4



TAKE YOUR TIME WHILE PRESSING IN THE BEARING. DO NOT PRESS IN THE BEARING TOO FAR AND DO NOT FORCE BEARING INTO POSITION. YOU WILL CAUSE DAMAGE TO THE BEARING, SNAP RING AND OR PRIMARY.

6. Install the outer snap ring to retain the bearing; snap ring removed in step 2. Apply a thin coating of oil on the seal and install using a rubber mallet; walk around the seal until it's flush with the outside of the inner primary, figure 5.

INSTALLATION

- Following your Factory Service Manual, install the inner primary. CARE IS TO BE TAKEN WHEN SLIDING THE INNER PRIMARY OVER THE MAINSHAFT SO THAT IT DOES NOT DAMAGE THE SEAL.
- 2. Install the clutch with chain, sprocket and outer primary per the Factory Service Manual.
- **3.** Fill the primary with 1 quart (32 fl. oz.) of primary fluid. On 2006-07 Cruise Drive Models fill primary with 45 fl. oz. of primary fluid.
- Install the remaining parts, floor boards, controls, exhaust etc. per your Factory Service Manual. You're done.

DISCLAIMER

It is the sole responsibility of the user to determine the suitability of this product for his or her use, and the user shall assume all legal, personal injury risk and liability and all other as well as all other obligations, duties and risks associated therewith.



BEARING INSTALLATION, FIGURE 3



INSIDE OF PRIMARY SHOWN, FIGURE 4



SEAL INSTALLED, FIGURE 5