JIMS® No. 5806 INNER CAM BEARING REMOVER/INSTALLER IS DESIGNED FOR USE ON MILWAUKEE EIGHT® FOUR VALVE ENGINES.

**Note:** Always wear safety glasses or other face and eye protection such as a full face shield. JIMS is not responsible for damage, injury, or your work. JIMS cannot be held liable for the quality and safety of your work.

Only use the supplied 1-1/4” ¼-20 thumbscrews provided. Using shorter thumbscrews may cause serious damage to the case threads.

**Cam Bearing Removal Instructions**

1. Refer to H-D® Service Manual for removal of cam and tappets. Many of JIMS® tools are required when performing work in the cam chest area. See JIMS® catalog or view online at www.jimsusa.com.

2. Lubricate the threads on the No. **5806-3** Cam Bearing Puller, with light machine oil. Position the flanged end over the cam bearing and tap until seated with a dead blow hammer. Light strikes only! Once fully seated, you will be able to freely slide the No. **5806-3** Cam Bearing Puller, back and forth slightly. The puller should not come free of the bearing easily.

3. Insert the No. **5806-4** Dowel Pin into the center of the No. **5806-3** Cam Bearing Puller, until fully seated. Approximately 1/4”-1/2” of the No. **5806-4** Dowel Pin will remain visible once fully seated.

4. Carefully place the No. **5806-1** Cam Bearing Puller, over the cam chest with the engraved side out and the word “REMOVE” towards the bottom of the case. Align the UNTHREADED hole with the end of the No. **5806-3** Cam Bearing Puller, and guide the No. **5806-3** Cam Bearing Puller, through the hole.

5. Align the four holes marked “R” with the cam chest screw holes. Install the 4, No. **5806-5** 1/4-20 Thumbscrews and tighten hand tight only.

6. Place the No. **1099** Brass Flat Washer over the No. **5806-3** Cam Bearing Puller, then screw the No. **1098** 3/4-
16 nut down until hand tight against the No. 1099 Brass Flat Washer.
7. Place a 9/16" wrench on the hex end of No. 5806-3 Cam Bearing Puller, to hold it in place. Using a 1-1/8" wrench, slowly turn the No. 1098 3/4-16 nut clockwise until the bearing is removed.
8. Remove the 4, No. 5806-5 1/4-20 Thumbscrews. Remove No. 1098 3/4-16 nut and No. 1099 Flat Brass Washer. Remove No. 5806-4 Dowel Pin. Remove and discard old cam bearing.

Cam Bearing Installation Instructions

1. Refer to H-D® Service Manual for removal of cam and tappets. Many of JIMS® tools are required when performing work in the cam chest area. See JIMS® catalog or view online at www.jimsusa.com.
2. Lubricate the threads on the No. 1024 Screw with light machine oil.
3. Thread the No. 1024 Screw into the large threaded hole on the No. 5806-1 Cam Bearing Puller, R/I marked “I”. Install until there is approximately 3/4”- 1” of the No. 1024 Screw protruding past the backside of the No. 5806-1 Cam Bearing Puller.
4. Thread the No. 2190 Cam Bearing Driver Tool, onto No. 1024 Screw on the back side of the Plate. Press No. 5806-2 Driver onto the No. 2190 Cam Bearing Driver Tool, until fully seated.
5. Place the new cam bearing with the numbered side facing the No. 5806-2 Driver, with the rounded edge side facing engine. Lubricate the outer bearing surface with Sunnen Press Lube or equivalent.
6. Carefully place the No. 5806-1 Cam Bearing Puller, over the cam chest with the engraved side out and the word “INSTALL” towards the bottom of the case.
7. Align the four holes marked “I” with the cam chest screw holes. Install the 4, No. 5806-5 1/2-20 Thumbscrews and tighten hand tight only.
8. Ensure the new cam bearing is still in place by observing through the large bearing removal hole marked “R”.
9. Using a 3/4” wrench, turn No. 1024 Screw clockwise by hand only. DO NOT use impact tools for this. Ensure bearing is correctly aligned with the cam bearing bore before trying to press in place.
10. Continue tightening the No. 1024 Screw until the No. 5806-2 Driver contacts the engine case. DO NOT OVERTIGHTEN. The Cam Bearing should be set to the proper depth after this operation.
11. Remove the 4, No. 5806-5 1/4-20 Thumbscrews and place them in the provided storage holes. Remove No. 5806-2 Driver and No. 2190 Cam Bearing Driver Tool, from the No. 1024 Screw. Remove the No. 1024 Screw from No. 5806-1 Cam Bearing Puller. Wipe down entire tool and store appropriately.