A Division of Thiessen Products, Inc.

Instruction Sheet For Tool No. 5813

JIMS® No. 5813 Main Bearing Removal & Installation Tool removes and installs left and right main case bearings on Harley-Davidson Milwaukee 8 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.

JIMS No. **5813** is for use in an arbor press or hydraulic press. H-D Service Manual is recommended for this service.

Instructions for Left Case Bearing Removal

1. Follow service manual to disassemble engine down to left and right case halves.
2. Remove retaining ring from main bearing bore on inboard side case half. Remove oil seal from outboard side of case seal bore.
3. Support case half with bearing centered over tool No. **5813-1** Support with the cupped end up. The outboard side of left case must face up toward press ram.
4. Insert bearing driver No. **5813-3** through main bearing and into center bore of No. **5813-1** base.
5. Press No. **5813-3** Driver Tool until main bearing is free of case half.
6. Discard bearing.

PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
1	1	MAIN SUPPORT	5813-1
2	1	SPACER	5813-2
3	1	DRIVER	5813-3
4	1	INSTRUCTION SHEET	5813-IS

Instructions for Left Case Bearing Installation

1. Clean bearing bore of left case half with spray cleaner and blow dry. Lubricate case bore and outer bearing race of new case bearing with Sunnen Press Lube or equivalent.
2. Support left case over No. **5813-1** Case Support with cup side down and inboard case side facing up.
3. Slide No. **5813-2** Installer Plate over No. **5813-3** Bearing Driver.
4. Start bearing into bore with lettered side facing up.
5. Insert No. **5813-2** Installer with side marked "**LEFT SIDE DOWN**" facing bearing and No. **5813-3** Driver through new bearing and into No. **5813-1** Support. Center entire tool under press ram. **See Fig 1.**
6. Press No. **5813-3** Driver until resistance is felt. Bearing should be seated in case.
7. Install retaining ring, ensuring it is fully seated following H-D Service Manual.



FIG 1

Instructions for Right Case Bearing Removal

1. Follow service manual to disassemble engine down to left and right case halves.
2. Support right case bearing directly over No. **5813-1** Bearing Support with cup side up and cam cover gasket surface facing up.
3. Insert No. **5813-3** Driver through main bearing and piloted into No. **5813-1** Bearing Support.
4. Center assembly under press ram and press No. **5813-3** Driver until bearing is free of case.
5. Discard Bearing.

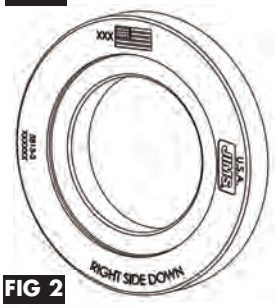


FIG 2

Instructions for Right Case Bearing Installation

1. Clean bearing bore with spray cleaner and blow dry. Lubricate bearing outer race and bearing bore with Sunnen Press Lube or equivalent in preparation for bearing installation.
2. With No. **5813-1** Support centered under press ram with cupped side down, place right case over No. **5813-1** Support with the cam gasket surface facing downward and bearing centered over the support with lettered side facing up.
3. Place No. **5813-2 I**nstaller Plate over No. **5813-3** Driver with side marked "**RIGHT SIDE DOWN**" facing toward the bearing when being pressed. **See Fig 2.**
4. Place bearing over case bore and slide No. **5813-3** Driver with No. **5813-2** Installer Plate through bearing, case, and into No. **5813-1** Support.
5. Press No. **5813-3** Driver until driver is seated against the right case.

Performance Parts For Harley-Davidson® Motorcycles

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