

A Division of Thiessen Products, Inc.

INSTRUCTION SHEET FOR TOOL NO. 947

REAR WHEEL COMPENSATOR BEARING REMOVER AND INSTALLER

Use to remove and install new compensator bearings after rear pulley is removed from the rear wheel drive bowl. The tool will center and guide the installer plug with the center of the pulley for safe bearing installation.

No.947 - Use on all 2008 to present V-Rod[®], XL, FL, and 2015 Street 500/750.

Perform all work according to H-D[®] Service Manual for appropriate year and model motorcycle you will be repairing. See JIMS[®] catalog for a complete listing of all engine, transmission, and suspension tools. **JIMS Tools needed to perform this service:**

- 1. No. 923 Belt Tension Gauge
- 2. No. 918 Chain and Belt Alignment Tool
- 3. No. 964 FL Power Train Alignment Tool for 1993 to 2008 FL
- 4. No. 904 Center Jack
- 5. No. 936 Tire Rotator Tool
- 6. No. 970 3RD Hand Axle Locker Tool
- 7. No. 906 Rear Axle Nut torque adapter

Other Tools needed to perform this service

- 1. 2 ton press
- 2. ¹/₂" Torque Wrench, to 110 ft./lbs.
- 3. 36mm, 1/2 " Drive socket
- 4. 1/2" extension, 8" long
- 5. All hand tools needed to remove rear wheel and compensator sprocket pulley.

Note: Follow H-D[®] Service Manual for year and model bike when removing, installing, and torquing rear axle nut, including belt adjustment.



PARTS AVAILABLE SEPARATELY			
NO.	QTY.	DESCRIPTION	PART NO.
1	1	BASE	947-1
2	1	SLEEVE	947-3
3	1	DRIVER	947-2
4	1	INSTRUCTION SHEET	947-IS

NOTE: PLEASE READ ALL INSTRUCTIONS COMPLETELY BEFORE PERFORMING ANY WORK! IF YOU DO NOT KNOW WHAT YOU ARE DOING, DO <u>NOT</u> DO IT!

No information in this instruction sheet pertaining to motorcycle repair is represented as foolproof or even altogether safe. Even something safe, done incorrectly or incompletely can and will backfire. You and only you are responsible for the safety of your repair work and for you understanding the application and use of repair equipment, components, methods and concepts. Each and every step this tool is designed to do must be carefully and systematically performed safely by you. All information listed in this instruction sheet has been tested, re-tested and used daily in JIMS[®] Research and Development Department.

ALWAYS WEAR SAFETY GLASSES OR OTHER FACE AND EYE PROTECTION SUCH AS FULL FACE SHIELD. JIMS. IS NOT RESPONSIBLE FOR DAMAGE, INJURY, OR YOUR WORK. JIMS. IS NOT RESPONSIBLE FOR THE QUALITY AND SAFETY OF YOUR WORK.

Performance Parts For Harley-Davidson Motorcycles





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REMOVING BEARING

1. Raise motorcycle so wheel can be removed using JIMS[®] No. 904 Center Jack. Remove rear wheel and pulley according to your H-D[®] Service Manual.

Caution: Tie bike down so it cannot and will not fall over.

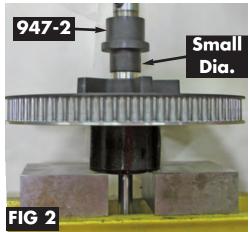
- 2. Place tool base No. 947-1 with sleeve No. 947-3 slipped over the short pin side of base tool. Place this assembly on a set of flat bars (at least 1" thick) resting in the center of press with the long side pin of base tool between them. The base tool is positioned directly centered under the ram of the press. See Fig 1 and parts list on page 1.
- 3. Next place pulley over base tool assembly with sleeve No. 947-3 going through the center of bearing to be removed, with inside of pulley facing up. See Fig 2.
- 4. Place driver tool No. 947-2 with its small diameter over base pin assembly and facing the bearing on 2008 touring models. On 2009 to present touring models the driver tool will press against the pulley spacer. Make sure the complete assembly is centered in press. See Fig 2.
- 5. Start applying pressure, checking alignment of the press and tool until bearing falls free into base.

INSTALLING NEW BEARING

BEARING INSTALLATION 2008 MODELS

- Place Tool base No. 947-1 with sleeve No. 947-3 slipped over the long pin side of base tool. Place this assembly on a flat bar resting in the center of the press with assembly centered under ram of press. See Fig 3.
- 2. Place pulley over base tool assembly with sleeve No. 947-3 going through center of pulley. The outboard side of pulley must be facing up. Apply lubricant to ID of pulley and OD of new bearing. Slip new bearing over base tool assembly with spacer side of bearing down.
- 3. Place driver No. 947-2 with large diameter facing down, resting on new bearing. Make sure the complete assembly is centered in press and begin applying pressure, checking alignment of press to bearing and tool. Press until bearing has stopped on the face of base. **See Fig 5.**







CAUTION: WEAR SAFETY GLASSES OVER YOUR EYES. SEE JIMS[®] CATALOG FOR HUNDREDS OF TOP QUALITY PROFESSIONAL TOOLS. THE LAST TOOLS YOU WILL EVER NEED TO BUY.

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- **Note:** Due to the bearings split race it is not possible to feel if bearing is good or bad. A good bearing will feel rough when tested in this manner.
- 4. Use JIMS Tire Rotator Tool No. 936 and No. 923 Belt Tension Gauge to make final belt adjustments. Follow H-D Service Manual to reassemble rear wheel and pulley.
- Note: Use JIMS No. 970 3d Hand Axle Locker Tool when torquing axle nut.

BEARING INSTALLATION 2009-PRESENT MODELS

- Place tool base No. 947-1 with sleeve No. 947-3 slipped over the short pin side of base tool. Place this assembly on flat bar resting in the center of the press with assembly centered under ram of press.
- 2. Place pulley over base tool assembly with sleeve No. 947-3 going through center of pulley. The outboard side of pulley must be facing up. Apply lubricant to ID of pulley and OD of both new bearings. Slip spacer over sleeve and down into sprocket bore with small diameter facing down. **See Fig 4.**
- **3.** Set first bearing into place, then driver No. **947-2** with large diameter facing down and against outer bearing race. Make sure the complete assembly is centered in press and begin applying pressure, checking alignment of press to bearing and tool. Press until bearing contacts the sprocket counterbore. **See Fig 5**.
- 4. Repeat with second bearing.
- 5. Check that new bearings roll freely and make sure bearings are fully seated.
- 6. Use JIMS Tire Rotator Tool No. 936 and No. 923 Belt Tension Gauge to make final belt adjustments. Follow H-D Service Manual to reassemble rear wheel and pulley.

Note: Use JIMS No. 970 3d Hand Axle Locker Tool when torquing axle nut.





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