



A Division of Thiessen Products, Inc.

INSTRUCTION SHEET FOR TOOL #947

REAR WHEEL COMPENSATOR BEARING REMOVER AND INSTALLER

Use to remove and install the new compensator ball bearing after the rear pulley is removed from the rear wheel drive bowl. This bearing is now positioned with the rubber isolators in the 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[®]s, XL, & FL.

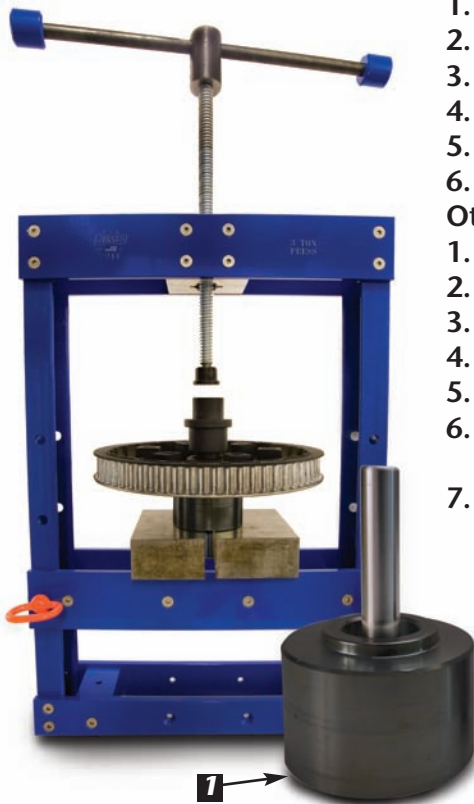
Perform all work according to H-D[®] Service Manual for appropriate year and model for the motorcycle you will be repairing. See JIMS[®] catalog for a complete listing of all engine, transmission, and suspension tools.

JIMS Tools needed to perform this service:

1. No.923 Belt Tension Gauge (for belt drives)
2. No.918 Chain and Belt Alignment Tool
3. No.964 FL Power Train Alignment Tool, Use on 1993 to 2008 FL
4. No.904 Bike Center Jack
5. No.936 Tire Rotator Tool
6. No.970 3RD Hand Axle Locker Tool

Other Hand Tools needed to perform this service

1. No.944 A good quality 2 ton press, (JIMS 3 ton press shown).
2. 1/2" Torque Wrench, to 110 ft. lb.
3. 1-7/16", 1/2 " Drive socket
4. Or 1- 7/16" torque adapter
5. 1/2 extension 8" long
6. Also all the hand tools needed to remove rear wheel and compensator sprocket pulley.
7. Please follow H-D[®] Service Manual for your year and model 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	947-2
3	1	DRIVER	947-3
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 NOT 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

555 DAWSON DRIVE, CAMARILLO, CA 93012 PHONE 805-482-6913 • FAX 805-482-7422

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REMOVING BEARING

1. Raise motorcycle so wheel can be removed using JIMS® Bike Center Jack No. 904. Remove rear wheel and rear 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. 947-2 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 (sprocket) over base tool assembly with sleeve No. 947-2 going through the center of bearing to be removed, with inside of pulley facing up. **See Fig 2.**
4. Place driver tool No. 947-3 with its small diameter over base pin assembly and facing down to the bearing on 2008 touring models being removed. On 2009 touring models and later 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

1. Remove all foreign material (old bearing, mud or crud) from any previous usage of tool. Inspect the pulley's bearing bore to be clear of any dirt, old grease, etc. Inspect the new bearing being installed for not, being out of round, any deep gouges, cracks, and for being straight. Inspect for any imperfection that may cause any failures of pulley.
2. Apply a small amount of lube to the pulley's I.D. (bearing bore) and O.D. of the new bearing.
3. Place tool base No. 947-1 with sleeve No. 947-2 slipped over the long pin side of base tool. Place this assembly on a flat bar (at least 1" thick) resting in the center of press with assembly centered under ram of press and new bearing. **See Fig 3.**



FIG 1

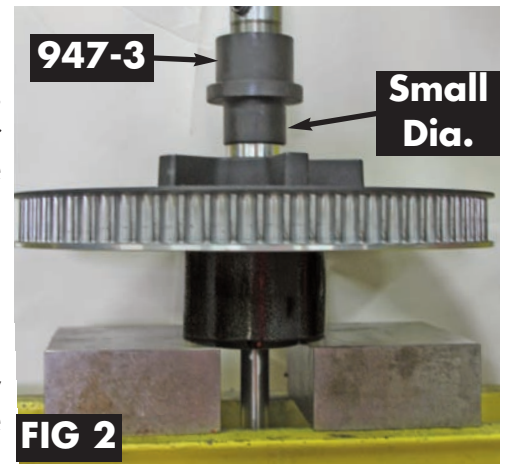


FIG 2



FIG 3

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

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4. On 2009 to present touring models install pulley spacer into position with lip upward as shown. **See Fig 4.**
5. Next place pulley (sprocket) over the base tool assembly with sleeve No. 947-2 going through the center of pulley, with inside of pulley facing up. Slip new bearing over base tool assembly (spacer side of bearing down) until it is resting squarely over bearing bore of pulley. **See Fig 5.**
6. Place driver tool No. 947-3 with its large diameter facing down over base pin assembly resting on the O.D. of the new bearing. Make sure the complete assembly is centered in press. Start applying pressure, checking alignment of press to bearing and tool, until bearing has stopped on the face of base. **See Fig 5.**

**FIG 4**

Note: Check that new bearing will roll freely, also making sure it seated fully.

Use JIMS Tire Rotator Tool No. 936 and Belt Tension Gauge No. 923 (for belt drives)

Note: Follow H-D® Service Manual. Use JIMS No. 970, the 3rd hand axle locker tool, when torquing axle nut.

**FIG 5**

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