

REV N/C 4/08

INSTRUCTION SHEET FOR TOOL #952

BALANCER SHAFT ALIGNMENT GAUGE TOOL

USE ON ALL TWIN CAM "B "MODEL SOFTAIL ENGINES 2000 - PRESENT



PARTS AVAILABLE SEPARATELY				
۱o.	Qty.	Description	Part No.	
1	1	MAIN BODY	952-6	
2	1	EARLY GAUGE, 2000-2006	952-4	
3	1	LATE GAUGE, 2007 TO PRESENT	952-5	
4	1	THUMB SCREW	2022	
5	1	SPRING	2021	
6	1	RETAINING RING	2023	
7	1	SHORT GAUGE SCREW	2297	
8	1	LONG GAUGE SCREW	2024	
9	1	INSTRUCTION SHEET	952-IS	

TWIN CAM "BETA"

This tool is a must have for maintaining a long life on your balancer's drive chains and bearings. It will take all the guesswork out of setting up your sprocket and chain alignment on all "B" Twin Cam Softail engines. Treat this tool with great care, just as you would treat a micrometer.

NOTE: PLEASE READ ALL INSTRUCTIONS COMPLETELY & THOROUGHLY 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, 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.

JIMS® IS NOT RESPONSIBLE FOR DAMAGE, INJURY, SAFETY, AND QUALITY OF YOUR WORK!

Perform all work per H-D service manual for appropriate year and model of the motorcycle you will be repairing.

ASSEMBLING TOOL GAUGE NO.952 FOR INSPECTION OF "B" ENGINES 2000 THRU 2006

- A. JIMS tool No. 952, may have been assembled at JIMS with either an early or late gauge (shoe), installed at the gauging end of tool. See Fig 1.
- **B.** Each gauge (shoe) is mill engraved with either an "E" for early (2000-2006) No. 952-4 or an "L" for late (2007-present) No. 952-5.
- C. Look at the bottom side of the gauge (shoe) to locate the one that is already mounted in the front lower end of main body arm of tool. If it is engraved with an "E", then all that is needed to make this ready for service will be is check that screw No. 2024 is torqued to 25 in-lbs. See Fig 1.

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REV N/C 4/08

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INSTRUCTION SHEET FOR TOOL #952

- **D.** If your inspection of installed gauge (shoe) shows that it is engraved with an "L", you will need to remove it and install the engraved "E" gauge (shoe) then torgue screw No. 2024 to 25 in-lbs.
- E. For your convenience we have provided a holder screw, No.2247, that can be used to hold the gauge (shoe) to the side arm of tool. You may mount the gauge (shoe) that is not being used for checking. See Fig 2.

ASSEMBLING TOOL GAUGE NO.952 FOR **INSPECTION OF "B" ENGINES** 2007 TO PRESENT

- **A.** Follow the above assembly following lines A thru E, but this time you will be installing the gauge (shoe) engraved with an L.
- INSPECTING BALANCER SHAFT ALIGNMENT USING TOOL GAUGE NO. 952 SET UP WITH THE "E" ENGRAVED NO. 952-4 GAUGE (SHOE) FOR INSPECTION OF "B" ENGINES 2000 THRU 2006
- 1. Apply a small amount of clean oil to the tools center holder threads and the threads at the end of gear shaft pinion shaft. Gently slide alignment tool over gear shaft with shoulder resting on timing chain gear. Hand tighten thumb screw No. 2022 onto gear shaft (pinion shaft) until it bottoms on the shoulder screw, just enough to remove any wiggle. See Fig 3.
- Note: Only finger tighten the thumb screw at the top of tool. If it will not thread in smoothly do not force it. Remove any material from the threads of gear shaft that may not allow tool to be installed.
- 2. Gently rotate Platform end of tool from the balancer shaft sprocket face to sprocket face. See Fig 4.
- Note: Do not allow tool gauge (shoes) to bang into the sprocket, this can and will cause damage to the tool and sprockets.
- 3. Alignment must be within .014" as indicated by the steps on the bottom of the gauge (shoe.) The gauge shoe outside step must clear the top surface of the sprocket while







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REV N/C 4/08

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INSTRUCTION SHEET FOR TOOL #952

the inside step of gauge shoe must not pass over the sprocket edge. To adjust alignment, refer to your H-D[®] service and parts manual to replace the spacer behind the front balancer sprocket.

INSPECTING BALANCER SHAFT ALIGNMENT USING TOOL GAUGE NO.952 SET UP WITH THE "L" EN-GRAVED NO. 952-5 SHOE, FOR INSPECTION OF "B" ENGINES 2007 TO PRESENT.

Note: Make sure you have installed gauge (shoe) No. 95205 engraved with an "L" per instructions out lined under; Assembling tool gauge No. 952 for Inspection of "B" engines 2007 to present



1. Apply a small amount of clean oil to the tools center holder threads and the threads at the end of gear shaft (pin-

ion shaft.) Gently slide alignment tool over gear shaft (pinion shaft) with shoulder resting on timing chain gear. Hand tighten thumb screw No. 2022 onto gearshift (pinion shaft) until it bottoms on the shoulder screw, just enough to remove any wiggle. See Fig 3.

- Note: Only finger tighten the thumb screw at the top of tool, if it will not thread in smoothly do not force it. Remove any martial from the threads of gear shaft that may not allow tool to be installed.
- 2. Gently rotate the tool from sprocket face to sprocket face. See Fig 4.
- Note: Do not allow tool gauge shoes to bang into the sprocket, this can and will cause damage to the tool and sprockets.
- **3.** Alignment must be within .019" as indicated by the steps on the bottom of the gauge shoe. The gauge shoe outside step must clear the top surface of the sprocket while the inside step of gauge (shoe) must not pass over the sprocket edge. To adjust alignment, refer to your H-D service manual to replace the spacer behind the front balancer sprocket.

See JIMS catalog for a complete listing of all Engine and Transmission Tools.

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