

INSTRUCTION SHEET FOR PART NO.1361G,1362G, 1363G, 1364G, 1361, 1362, 1363, & 1364

JIMS® EVOLUTION CAMSHAFT USE ON ALL EVO ENGINES 1984-1999



To complete our line of valve train components, JIMS® now offers cam shafts. We have been making valve train components for decades and have compiled countless hours of data that apply to camshaft design. Our R&D staff along with race teams and hundreds of hours of Dyno testing has helped us develop the cams of the future. First, these cams are made with JIMS® high standards with Billet Aerospace quality steel accurately machined on state of the art CNC machine centers. Second, along with our Dyno test data, we have thousands of test miles on the road. JIMS® Cams are designed to provide increased horse power and torque along

with an improved ramp design for longevity and quiet operation.

WARNING: Disconnect battery to prevent accidental starter operation. Refer to H.D service manual.

To Disassemble:

critical areas.

- 1. Remove exhaust system to access removal of cam cover.
- 2. Remove rocker covers as per H.D. service manual. **NOTE:** To avoid removing the rocker boxes: To access the cam, you may want to use JIMS® tool No.1066. Follow instructions with tool.
- 3. Remove pushrods and pushrod covers.
- 4. Remove front and rear tappet block assemblies.
- 5. Drill out rivets and remove ignition outer cover. Remove sensor plate.
- 6. Remove ignition rotor screw and rotor.
- 7. Remove cam cover using JIMS® tool No.2243.
- 8. Remove cam, spacer washers, (if equipped) and thrust washer.
- 9. Clean all gasket surfaces and inspect cam gear bushing for wear or damage. Refer to H.D. service manual. If in doubt, replace them. **NOTE:** On cams No.1362G, 1363G, 1364G clearance must be checked on the rear—intake cam—lobe tip. You must have clearance between the tip and the bearing boss. Make clearance by removing material from the bearing boss. Cover all areas to keep metal chips out of bearings and other
- 10. Remove needle bearing in case. Use JIMS® cam bearing puller No.95760-TB.
- 11. Install new cam bearing (Supplied with cam). Use JIMS® cam bearing installer tool No.2188. After installation of bearing, check bearing. Use JIMS® cam bearing Go/No Go gauge No.2249.
- 12. Also check cam bearing and bushing alignment using JIMS® tool No,2280.

CAUTION: WEAR SAFETY GLASSES. EXCESSIVE FORCE MAY DAMAGE PARTS! ,SEE JIMS® CATALOG FOR OVER 100 OTHER TOP QUALITY PROFESSIONAL TOOLS. THE LAST TOOLS YOU WILL EVER NEED TO BUY.

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To Assemble:

- 1. Use new gasket and assemble cam shaft with thrust washers installed. The spacing washer has been eliminated on 1988 and later Big Twins. If the cam does not have a spacing washer, purchase and install 25555-85 (.050) spacer. Install cover with new gasket in places and at least (4) cover screws, Tighten screws to 90-120 In-Lbs. Torque. Measure cam shaft end play between cam and thrust washer with thickness gauge through tappet guide hole in gear case. End play should be .001"-.016". Replace spacing washer to get proper end play.
- 2. Secure cover. Tighten screws to 90-120 Lb / In torque.
- 3. Check tappet to tappet block clearance on all higher lift cams, No.1362, No.1363, No.1364. This is done by installing one tappet block at a time and rotating the motor over while watching for contact between the tappet roller and the top of the tappet slot. Through the other open tappet block hole, clearance should be .035-.045. To make clearance, machine or carefully file the slot.
- 4. Install tappet blocks and tappets. Use JIMS® tappet block alignment tool No.33443-84.
- 5. Adjust pushrods. Jims recommends using worksaver adjustable pushrods No.2380. Adjust as per instructions with pushrods.
- 6. Assemble the remainder of the gear case in the reverse order of disassembly. If the rocker boxes were removed. Reinstall rocker boxes using proper torque specifications. Consult H.D. service manual.

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