CAM BUSHING REAMER
Reams Cover and Case Cam Bushings

(Note: Accurate reaming to hold the best center line is at a stable room temperature of 70°-75°Fahrenheit or 22°-22.4°Celsius. Use on Big Twin 1936-1969)

JIMS® now offers a bushing reamer kit that will line ream the cam case bushing, as well as the cover bushing. This reamer tool will ream the inner cam bushing, and outer cam bushing, to a finish size of about .0008" to .0015", over cam size, for the use of a needle-bearing style cams. Once the case inner cam bushing is reamed to size, the cam cover (with new bushing installed) can be line reamed from the newly reamed inner cam bushing to the outer cam cover bushing. This will insure a true centerline for your cam shaft.

Reaming Cam Bushings (Inner and Outer) 1936-1957
1. Refer to H.D.® Service Manual for specifications and to remove cam cover. Note: Mount case on JIMS® Motor Stand #1006T for all work to be performed. If crankcase is not disassembled, use any good right side crankcase 1958-1969 (for reaming outer cam cover bushing only), with a new bearing #9058 installed in right case.
2. Remove cam cover case bushing using JIMS® Tool #2281.
3. Use JIMS® #1011-36TB cam bushing installer drill jig to install and pin bushings.
4. If both cam bushings are to be reamed, start by reaming bushing in right case first.
5. Install reamer #1721-3 into sub plate #1721-2 with cutting end out. Apply a small amount of lube to the reamer shaft, and use JIMS® Cutting Fluid #1237 on cutting portion of reamer.
6. Install sub plate to case using four lubed #2408 screws. Tighten to 90 in/lbs torque.
7. Start reamer in bushing and turn clockwise with a light inward pressure until reamer is through bushing completely.
8. Remove sub plate #1721-2. Clean and lube reamer and install shaft end in case bushing that you have just reamed. Relube cutter end of reamer with JIMS® Cutting Fluid #1237.
9. Install cam cover with new bushing, with your cam cover screws lubed. Use at least four screws, and torque to 90 in/lbs.
10. Start reamer in bushing and turn clockwise with light inward pressure until reamer stops at the bottom of cam cover. Continue to turn reamer clockwise while pulling back to remove reamer. Your cam cover and case bushings are align reamed perfectly.
11. Store oiled reamer in a safe place to prevent damage.

Reaming Cam Cover Bushing 1958-1969
1. Refer to H.D.® Service Manual for specifications and to remove cam cover. Note: If crankcase is not disassembled, use any good right side crankcase 1958-1969 for reaming outer cam cover bushing only, with a new bearing #9058 installed in right case.
2. With a new JIMS® Bushing #25581-36 installed with JIMS® Tool #1011-36TB in outer cam cover...
3. Apply a small amount of lube to the shaft of reamer, and use JIMS® Cutting Fluid #1237 on cutting portion of reamer. Slip the shaft end of reamer through bearing in right case. Install cam cover to be reamed with four of your lubed cam cover screws and torque to 90 in/lbs.
4. Start reamer in bushing and turn clockwise with light inward pressure until reamer stops at the bottom of cam cover. Continue to turn reamer clockwise while pulling back to remove reamer. Your cam cover and case bushings are align reamed perfectly.