1. To install a new outer cam bushing use JIMS Tool no.1012-70TB bushing installer.

2. Refer to H-D® or Clymer Service Manual and JIMS® instruction sheet #1012-IS for removing and installing JIMS® bushing #25581-70.

3. Newly installed cam bushings must be line reamed from the inner cam bearing.

4. If using the right case half for alignment: with new cam bearing installed in right case apply a small amount of lube to the non cutting portion of line ream that is going through cam bearing.

5. Carefully slide ream through cam bearing. If JIMS tool #1023-70 line reamer will not go through inner cam bearing (we highly recommend using a Torrington® bearing) it most likely has an I.D. of .8128 or smaller. Most all of the cams for 1970 and later are ground to .8120 to .8125, so it is possible you only have .0003 clearance. The way we know this is JIMS tool #1023-70 has a shaft size of .813, it is advisable to try a new bearing. Apply a small amount of light oil to the entire cutting end of reamer.

6. Assemble cam cover to right case with at best 5 mounting screws, torque to 90 in-lbs.

7. Use a 3/4" 12 point socket to turn reamer clockwise with a light inward pressure until the reamer is through the bushing completely. Note: Most cams including H-D® are ground at the bushing diameter to 1.001 +.0005/.0000.

8. This ream will give you a bushing clearance of approximately .0008 to .0015. If you would like a little more clearance run the lubed reamer through the bushing one more time as described in #7. See H-D® Service Manual for specifications.

9. Your bushing is now lined reamed to within .0004 or better to centerline of the right case bearing.

10. Wash all bushing metal from cover and tool.

11. Store this precision tool as you would one of your micrometers for lifetime of service.