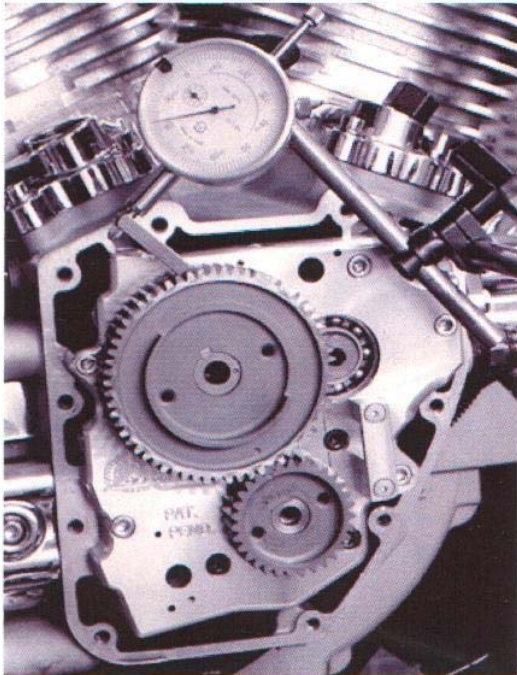


Additional Gear Drive Installation Procedures



Inner Cam Gear Alignment

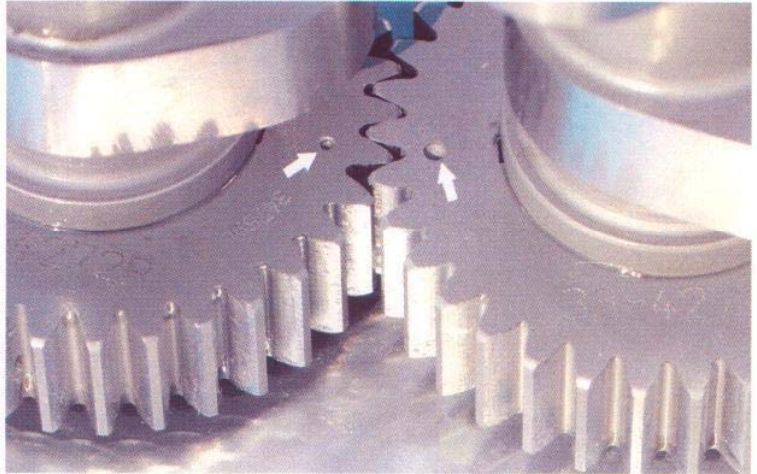


Figure 2

1. **YOU MUST CHECK CRANK RUN-OUT AT PINION END OF CRANKSHAFT!!!**
2. No oil or lube on gears while doing these lash/gear check procedures.
3. Make sure inner cam gear timing marks are lined up as in photo. (Figure 2)
4. Install cam plate and cams into block and torque to specs. Do not install crank/pinion drive gear at this time.
5. Install aluminum or wooden drift approximately .835 diameter and approximately 6" long into front exhaust lifter hole and press firmly to lock down front cam shaft. Zero dial indicator and check for backlash while moving rear outer cam gear back and forth. Clearance should be .000 to .001 maximum. Check backlash every 90 degrees of rotation of rear cam drive gear. Inner rear cam gears are available in oversize and undersize.
6. Install crank pinion gear and align timing marks together. While holding pinion gear firmly, check backlash at outer drive cam gear every 90 degrees of rotation. Backlash should be .000 to .001. Oversize and undersize outer cam drive gears are available. (see Figure 1)
7. Failure to check these clearances will result in excessive whine or excessive valve train noise. **CLEARANCE CHECK PROCEDURE MUST BE DONE PRIOR TO ENGINE START UP!!**