INSTRUCTIONS FOR THE END PLAY MEASURING TOOL EMPI PT# 5760

This tool has been designed to replace the use of a dial indicator when checking the crankshaft end-play. This end-play movement is controlled by the use of three shims, which go over the end of the crankshaft between the rear main bearing and the flywheel. These shims come in five thicknesses allowing for end-play adjustment. Consult your manual for the proper specifications and methods of installation of these shims.

TO MEASURE END PLAY MOVEMENT:

1. Clean the engine case around one of the top bolt holes used to connect the engines to the transaxle. This provides for a clean flat surface on which to bolt the end-play checking tool.
2. Use the bolt provided to attach the tool to the engine case through the top hole you have just cleaned around. (Be sure the fine threaded bolt on the tool is backed out so as not to touch the flywheel).
3. With the crank pulley belt removed, push the pulley in toward the engine. This in turn moves the flywheel out away from the case.
4. With your fingers, lighten down the fine threaded bolt until it just touches the flywheel. Also with your fingers, turn down the jam nut so that it is just snug enough to keep the fine threaded bolt from turning accidentally.
5. Without rotating the crankshaft, pull the pulley away from the case which moves the flywheel in toward the case. This creates a gap between the flywheel and the fine threaded bolt. It may be necessary to keep pressure on the pulley to prevent it from moving back in toward the case.
6. Measure the gap between the flywheel and adjustment bolt with a feeler gauge set. Start with the smallest size slipping it through it through the gap. Work your way up in sizes until you have three progressive sizes: one that fits loose. The next that fits with a slight drag. The third will not go through. The middle size with the slight drag is the correct gap measurement. This gap measurement is the end-play measurement.

NOTE:

- End play should be between .003 and .005 inches.
- The wear limit is .006 inches.

CAUTION:

- Keep the crankshaft end-play within the prescribed range.
- Excessive end-play can cause early wear or failure of the main bearings and could thereby damage other engine parts. Too little end-play can cause the engine to seize up.

DIRECTIONS:

1. Remove the flywheel and reinstall it with only two shims.
   NOTE:
   - Shims come in five thicknesses, 0.24mm (.0095 in), 0.30mm (.0118 in), 0.32mm (.0126 in), 0.34mm (.0134 in), and 0.36mm (.0142 in) sizes are attached on new shims. You have to check the thicknesses of old shims with a micrometer.
2. Measure end-play again.
3. Compute how thick the third shim must be in order to bring the end-play with specifications.
4. Install the three-shim combination. Then install the oil seal and the flywheel.
5. Give the end-play a final check.