## Installation Instructions for 20390, 20392, 20395 & 20397 Cam Button Spacer

## **Installation Instructions:**

Designed for use with roller tappet camshafts, the purpose of the cam button spacer is to maintain the cam in the correct location in the block. This cam button spacer fits between the front of the cam and the inside of the timing cover. This spacer may be held in place by the bolt locking plate, with the large end of the cam button spacer fitting into the hole in the cam gear. In most cases, no machining is required. If you are using a late model stock type aluminum cam sprocket with plastic teeth, the center hole is die cast and may need to be machined to fit the large end of the spacer. Install the spacer, locking plate (where applicable) and bolts. Torque the bolts to 20 ft./lbs.

Check camshaft end play and maintain between .005" and .008". This must be checked with the timing cover and gasket in place, just as it would be after final assembly, without the tappets installed. It may be necessary to dent out the center of the cover in the area that would contact the spacer. This can easily be done by using a socket (or an equivalent diameter punch) the same diameter as the O.D. of the small end of the spacer.

Camshaft end play can best be checked if the engine is out of the vehicle and on an engine stand. The Welch plug that seals the back end of the cam bore needs to be removed to access the rear of the cam. Mount a dial indicator at this location to measure camshaft end play. Pry the cam forward and backward by using a screwdriver inserted into a lifter bore where a lobe on the cam would be at full lift. Be careful not to chip the lobe or the lifter bore.

If the engine is in the vehicle, there is no suitable place to mount a dial indicator to detect lateral cam movement (end play). It would then be necessary to make an educated judgment as to the end play. Just a slight noticeable movement, by feel, is all that is necessary.

