

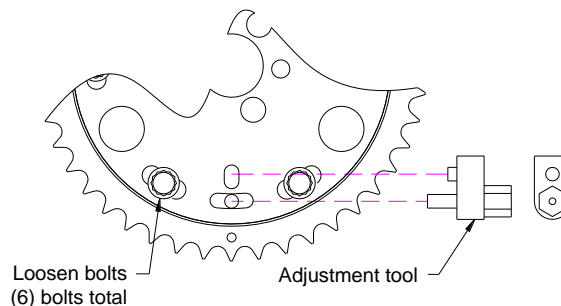
## Installation Instructions Cloyes® Quick Adjust™ Timing System

**Notes:** If you are using the 3-keyway crank sprocket and using the advanced keyway, the maximum camshaft advance will be 8° and maximum retard will be 4°. If using the retard keyway, the maximum advance will be 4° and maximum retard will be 8°. Remember that the camshaft angle is half of the crankshaft angle (Refer to the 3-keyway crank sprocket installation instructions).

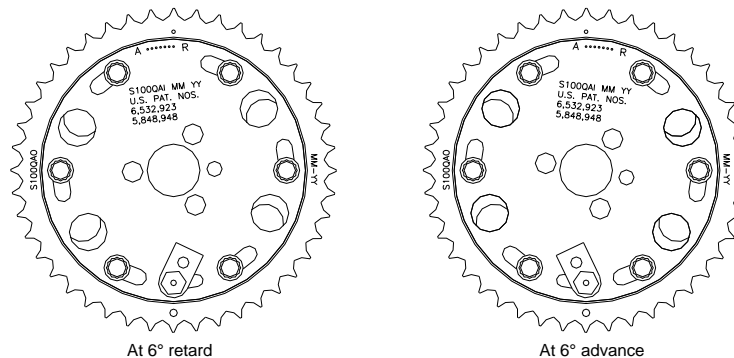
**If Supplied: Install the Camshaft Thrust Bearing:** The bearing has two races, an inner indexing race and an outer rotating race. You must install the bearing with the inner race indexed against the machined surface of the sprocket. **Failure to install correctly will cause a severe wear issue!** When installed correctly the outer race will rotate freely.

The Cloyes® Patented Quick Adjust™ Timing System allows the installer to adjust the camshaft timing up to 12°. Some camshaft manufacturers instruct the user to advance or retard camshaft timing to enhance the characteristics of their camshaft. By loosening six bolts and using the adjusting tool provided, the user can infinitely adjust the camshaft timing up to 6° advance or 6° retard.

To adjust the timing, loosen the six bolts that clamp the inner member of the camshaft sprocket to the outer member about 1/4 turn counterclockwise. Insert adjustment tool into the slots provided. The short shaft of the adjustment tool will be inserted into the short slot. The long shaft will be inserted into the long slot and hole (Refer to illustration below).



After the tool is inserted into the slots, use a 3/8 wrench to rotate the tool. There are seven timing marks indicated with an A and an R on the ends. Each timing mark is approximately 2° and is lined up with a single alignment mark on the outer camshaft sprocket member (Refer to illustration below).



After the timing has been adjusted, remove the adjusting tool from the cam sprocket. Tighten the six bolts to 13-15 ft-lb.

**Note: The above illustrations are GM camshaft sprockets. However, the adjustments are the same for a Ford or Chrysler applications.**