



## VICTOR-LINK TIMING CHAIN AND GEARS

For Small Block Chevrolet Engines

Catalog #7880

### INSTALLATION INSTRUCTIONS

- PLEASE study these instructions, and the General Instructions, carefully before installing your new timing chain.
- DESCRIPTION: True Rolling timing chain and gear sets are products of quality material and workmanship. They offer the ultimate in durability, performance, and low friction operation.

NOTE: For timing chain and gear installation, we suggest that you check the manufacturer's service manual or Motors, Chilton's or Mitchell manuals for correct installation procedure pertaining to your type, year, and model vehicle. The main cause of timing chain and camshaft installation problems is failure to apply the proper torque to the camshaft sprocket bolts. The correct torque value is given in the service manual, and we highly recommend the use of a thread-locking compound such as Loc-Tite™ or equivalent.

#### TIMING CHAIN AND GEAR KEYWAYS:

The Edelbrock crankshaft sprocket is manufactured with nine keyways. Each keyway is marked with a symbol indicating a standard straight-up (0), advanced (A2, A4, etc), or retarded (R2, R4, etc.) camshaft position. (See Figures 1 through 3, showing typical installed positions). In many cases, being able to retard or advance the camshaft enables you to be more exact when installing the camshaft for a specific application. Advancing or retarding the camshaft can shift the power range to a lower or higher RPM. Advancing the camshaft will usually move the torque curve to a lower RPM, while retarding the camshaft will usually move the torque curve to a higher RPM. For persons not familiar with camshaft function, we suggest the standard "straight-up" installation position.

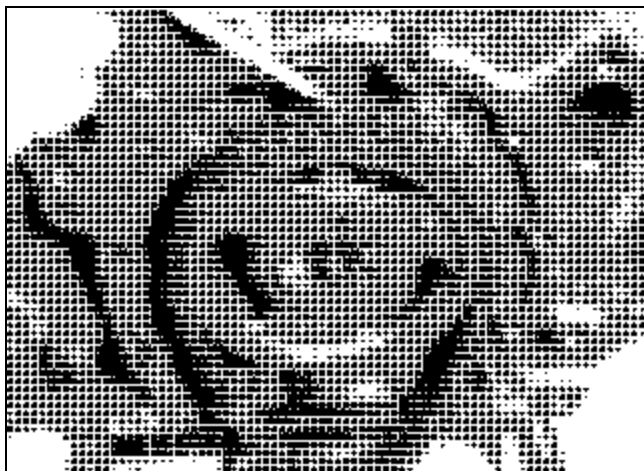
NOTE: When the timing marks on the cam sprocket and crank sprocket are aligned, the keyway of the crankshaft sprocket will be at about the 2:00 o'clock position. Therefore, to install the camshaft "straight up" (0°), install the crankshaft sprocket using the "0" keyway, then align the "0" timing mark on the crankshaft sprocket with the timing mark on the camshaft sprocket. Use the same procedure regardless of the timing position you choose. The corresponding timing mark will always be about 3 sprocket teeth counterclockwise from the keyway.

#### CAUTION:

- Victor-Link roller chain sets are engineered to operate up to 8500 RPM.
- Never hammer directly on the chain or sprockets. You can crack the hardened links and pins, causing early failures.
- USE A SLEEVE for installations that require hammering, such as driving the crankshaft sprocket onto the crankshaft snout. A brass drift punch may be used if you carefully alternate blows on either side of the sprocket to avoid cocking.
- Check for clearance between the timing chain and engine block, as well as between the timing chain and front cover before reassembly.
- Be sure that both cam and crank sprockets are exactly in line. Misalignment can result in chain failure.

#### SPECIAL INSTRUCTIONS:

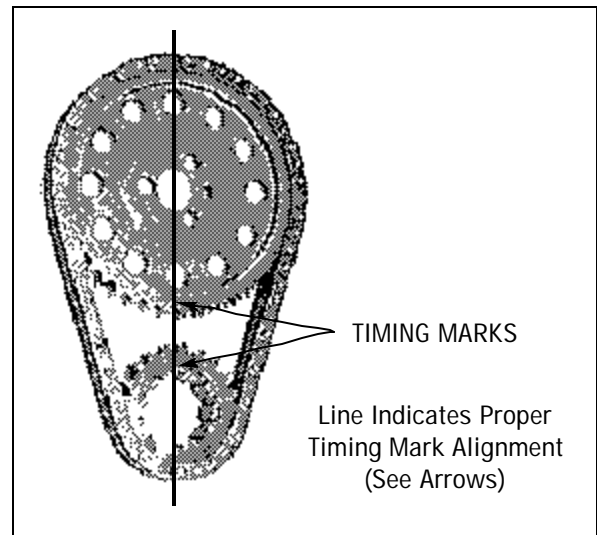
On some late model engine blocks, it will be necessary to check clearance behind the cam sprocket (with the chain on the sprocket) and engine block at the 12 o'clock position. (See photo below). Make sure that the chain clears oil galley bosses on the block with the chain and sprocket in the rearward most position. Grind or machine block for clearance if necessary. Clean block thoroughly before assembly.



• **TIMING MARK ALIGNMENT:**

NOTE: Alignment of the timing marks as shown below does not always indicate Top Dead Center (TDC) of the number 1 cylinder on the compression stroke. Chevrolet engines will be at TDC of the number 1 cylinder on the exhaust stroke and the crankshaft will have to be rotated one full turn before the distributor can be installed and timed. If you are installing a new camshaft, the crankshaft will have to be rotated already to adjust the lifter preload for all cylinders. TDC of the number 1 cylinder (compression) can be determined by observing that both intake and exhaust valves are closed. Or, with the spark plugs removed, by feeling compression buildup with your thumb plugging the spark plug hole as you rotate the crankshaft towards TDC. TDC will be indicated by the timing marks on the harmonic balancer.

1. Keyway marked with 0 (zero) is for standard "straight-up" timing.
2. Keyways marked with A2, A4, A6, or A8 are to advance cam timing by the number of degrees indicated.
3. Keyways marked with R2, R4, R6, or R8 are to retard cam timing by the number of degrees indicated.



NOTE: It is advisable to use a ruler or other straight-edge to help determine that the timing marks are properly lined up on the centerline between the crankshaft and camshaft. "Eyeballing" it can lead to serious timing errors and possible timing set and/or engine damage.

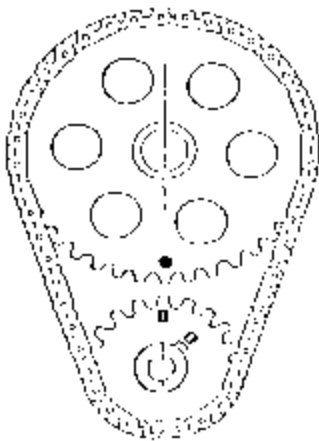


FIGURE 1  
Standard

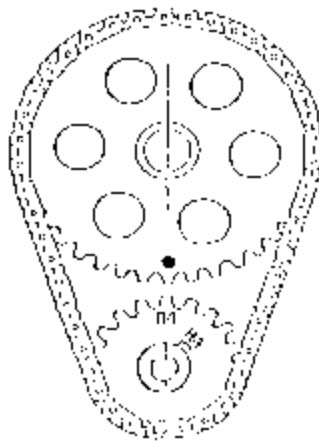


FIGURE 2  
4° Advance

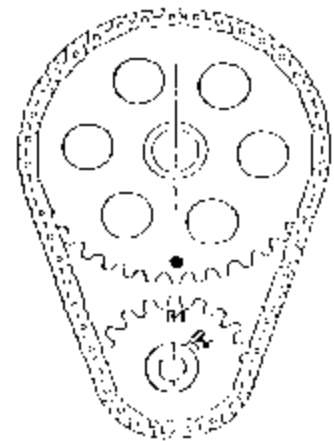


FIGURE 3  
4° Retard

Figures 1, 2, & 3 are typical of Chevrolet timing mark alignment.