



PERFORMER-LINK TIMING CHAIN & GEARS

CATALOG # 7800 SERIES

INSTALLATION INSTRUCTIONS

- **PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY FROM BEGINNING TO END BEFORE INSTALLING YOUR TIMING CHAIN**
Check the listing on the box back or the Edelbrock catalog to be sure that you have the correct part number for your application. 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 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. If you have any questions, please contact us at our Technical Hotline at 1-800-416-8628, 7:00am-5:00pm, Monday through Friday, PST.

- **TIMING CHAIN AND GEAR KEYWAYS:**

The Edelbrock crankshaft sprocket is manufactured with three keyways (except street legal sets #7802, #7809, and #7814). Each keyway is marked with a geometrical symbol indicating a standard straight-up or zero (● or "0"), advanced (▲ or "A"), or retarded (■ or "R") camshaft position (See Figures 3 through 8, showing each installed position). In many cases, being able to retard or advance a camshaft enables you to be more exact when installing a camshaft for a specific application. Advancing or retarding a camshaft can shift the power range to a lower or higher RPM. Advancing a camshaft will move the torque to a lower RPM, while retarding a camshaft will move the torque to a higher RPM. For persons not familiar with camshaft function, we suggest the standard installation position.

NOTE: If the timing symbol on your stock crankshaft sprocket is in line with the keyway, use Figures 3, 4, or 5 when installing your Edelbrock timing chain and gears. If the timing symbol on your stock crankshaft sprocket is not in line with the keyway, use Figures 6, 7, or 8 when installing your Edelbrock timing chain and gears.

CAUTION:

Edelbrock Performer-Plus camshafts have been engineered and ground to produce optimum performance when installed in the straight-up zero position only. **DO NOT** install a Performer-Plus or Performer-RPM camshaft in an advanced or a retarded position. When using Performer-Link Timing Chain and Gears (7800 Series) with Edelbrock cam and lifter kits, straight-up timing alignment is achieved. If any other timing gear set is used, it is necessary to check camshaft position for correct timing alignment. This requires indexing the camshaft with a degree wheel to verify timing alignment. OEM or non-Edelbrock timing timing gear sets are not recommended for use with Edelbrock camshafts.

- Performer roller chain sets are engineered to operate up to 6500 rpm.
- Never hammer directly on chain or sprockets. You can crack the hardened links and pins and cause early failures.

- **SPECIAL INSTRUCTIONS FOR #7820**

For 1962-64 vehicles discard original spacer and thrust plate and use Ford thrust plate #C90Z-6269-A.

For 1965-72-1/2 vehicles use existing thrust plate.

For 1972-1/2-84 vehicles discard original 2-piece eccentric and use 1-piece eccentric Ford #C3AZ-6287-B (original 2-piece eccentric may be used with #7811). Use existing thrust plate.

All years: Do not re-install original oil slinger.

- **USE A SLEEVE** for installations that require hammering (see Figure 1). A brass drift punch may be used if you carefully alternate blows on either side of the sprocket to avoid cocking.

- Never stretch the chain with a screwdriver.
- Check for clearance between the timing chain and block and between the chain and front cover before reassembly.
- Be sure that both cam and crank sprockets are exactly in line. Misalignment can cause chain to break (see Figure 2).

YES

NO

Figure 1 - Use a sleeve to install press-fit sprockets

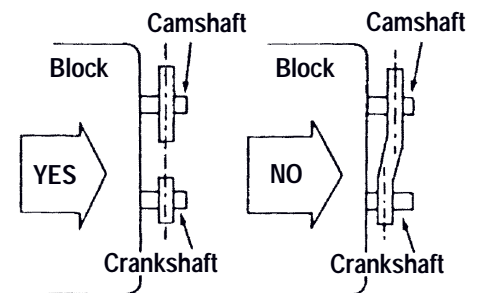
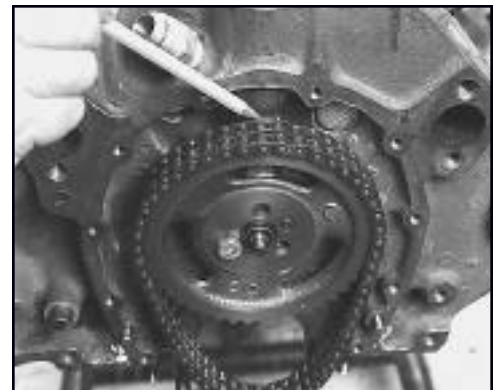


Figure 2 - Check alignment of chain to ensure that both sprockets are correctly installed

- **SPECIAL INSTRUCTIONS FOR #7800 S/B Chevy**

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



• **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. Many engine families (Chevrolet, Pontiac, etc.) will be at TDC of number 1 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 anyway to adjust the lifter pre-load for all cylinders. TDC of number 1 (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 finger as you rotate the crankshaft towards TDC. TDC will be indicated by the timing marks on the harmonic balancer.

1. Keyway marked with ● or 0 (zero) is for standard "straight-up" timing.
2. Keyway marked with ▲ or A is to advance cam timing 4°.
3. Keyway marked with ■ or R is to retard cam timing 4°.

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 crank and the cam. "Eyeballing it" can lead to timing errors.

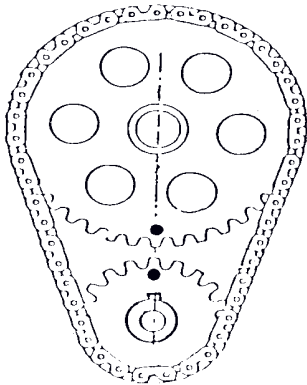
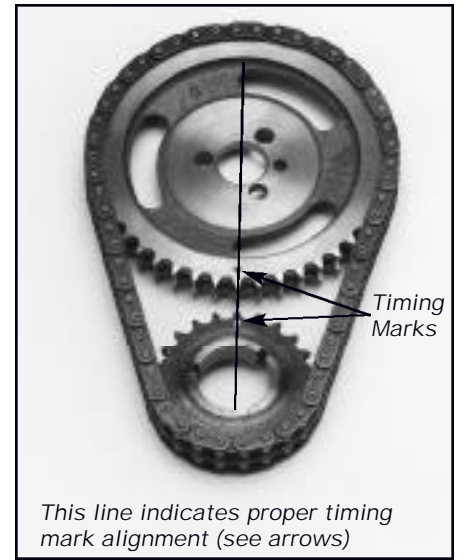


Figure 3
Standard

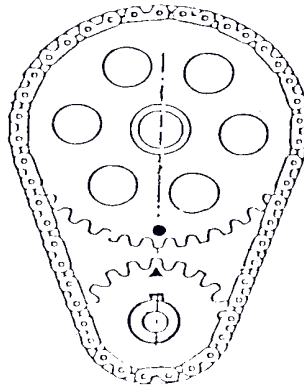


Figure 4
4° Advance

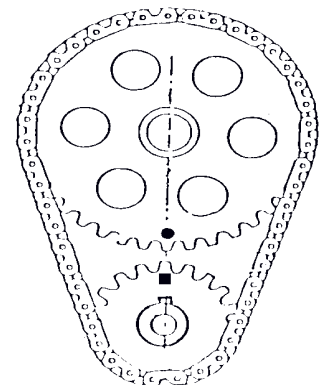


Figure 5
4° Retard

Figures 3-4-5 are typical of Ford V8 chain alignment.

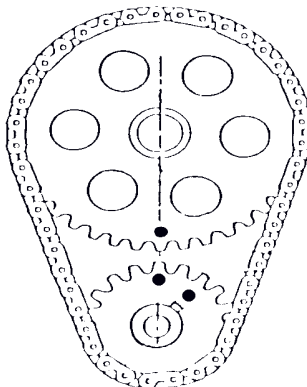


Figure 6
Standard

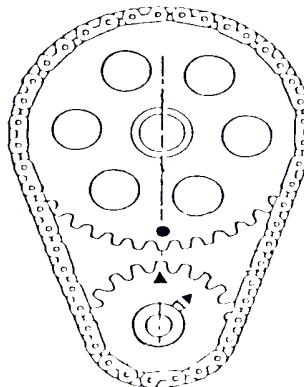


Figure 7
4° Advance

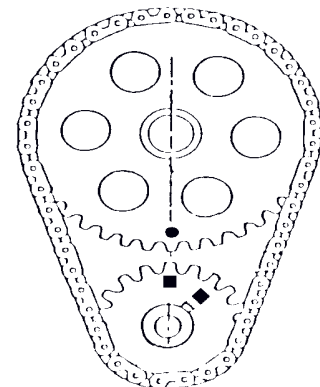


Figure 8
4° Retard

Figures 6-7-8 are typical of Chevrolet, Chrysler and AMC V8 chain alignment.