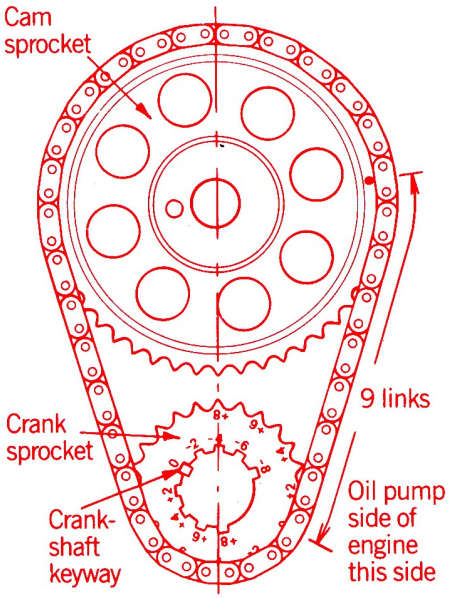
NORNDA AUTOMOTIVE

Assembly Instructions

To suit: Holden V8 253, 308

1 Standard Timing



Rotate engine until No. 1 piston is Top Dead Centre (T.D.C.) on compression stroke. No. 1 piston is located at front of the engine on driver's side. Assemble crankshaft sprocket, camshaft sprocket and chain so that zero timing dots are positioned as shown above. (9 links between dots.)

Warning: Do not use the keyway marks to time engine. Always align the crank gear tooth timing mark to cam gear timing mark.

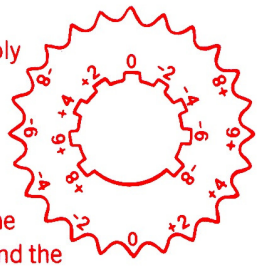
Note: Check for clearance between timing chain and oil gallery boss. On some later blocks it may be necessary to remove material from the top side of the boss for chain clearance.

Lubrication: For maximum chain life, proper chain lubrication is necessary. When R.P.M. increases, chain lubrication must also increase. In order to reduce wear, a good lubricant must form a film over the contacting surfaces. Excessive wear can cause the chain to lengthen to the point of damaging sprocket teeth and destroying the timing chain drive.

2 Advanced Timing (+2° +4° +6° +8°)

NOTE: We recommend to always degree-in the camshaft before making any timing changes.

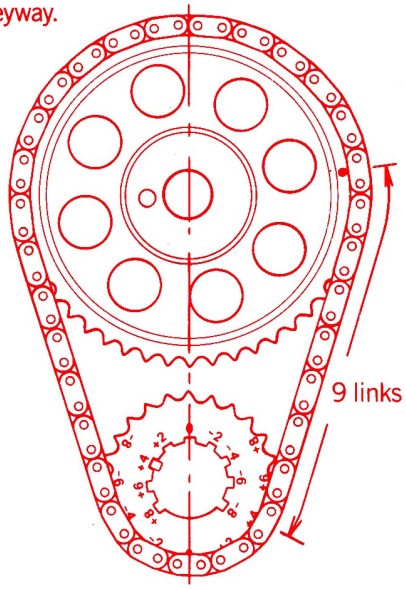
1. Before assembly carefully inspect crankshaft sprocket. Note the position of each keyway on the inside diameter and the position of the equivalent timing mark on the outside gear tooth.



2. Rotate engine until No. 1 piston is Top Dead Centre (T.D.C.) on compression stroke. No. 1 piston is located at front of the engine on driver's side. This will align the motor to accept the gears in a standard position.

3. Place camshaft sprocket and crankshaft sprocket inside the chain provided, so that there are nine links between the camshaft sprocket timing mark and the selected crankshaft sprocket timing mark.

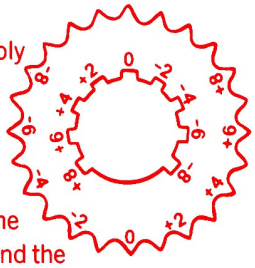
4. Rotate the crankshaft to the equivalent selected crankshaft sprocket keyway.



3 Retard Timing (-2° -4° -6° -8°)

NOTE: We recommend to always degree-in the camshaft before making any timing changes.

1. Before assembly carefully inspect crankshaft sprocket. Note the position of each keyway on the inside diameter and the position of the equivalent timing mark on the outside gear tooth.



2. Rotate engine until No. 1 piston is Top Dead Centre (T.D.C.) on compression stroke. No. 1 piston is located at front of the engine on driver's side. This will align the motor to accept the gears in a standard position.

3. Place camshaft sprocket and crankshaft sprocket inside the chain provided, so that there are nine links between the camshaft sprocket timing mark and the selected crankshaft sprocket timing mark.

4. Rotate the crankshaft to the equivalent selected crankshaft sprocket keyway.