

TM



8.2 Litre Performance Parts Albuquerque, New Mexico

CUSTOM GROUND CAMSHAFT CAM TIMING INSTRUCTIONS

- ⊕ Rotate crankshaft to TDC on #1 Piston. Confirm crankshaft keyway is at a "7 o'clock" position. The timing mark (start with the 0) on the crank gear is at the "12 o'clock" position, in line with crank center and camshaft center if using a straight edge to align.
- ⊕ Rotate camshaft until false dowel hole is at the 10:30 position and the mark on the cam gear (a dimpled dot) is at the 6:00 position in line with crank center and cam center if using a straight edge to align.
- ⊕ Remove camshaft gear and slip chain on it; replace cam gear without disturbing alignment. Correct mounting bolts can be no longer than 0.625" long. If you use any longer bolt, a nasty knock will result when the bolts make contact with the block on fire up. (You cannot hear it on the engine stand).
- ⊕ Install degree wheel and pointer and set to TDC by the positive stop method. *Do not use a dial indicator to find TDC* as you can have up to 8° of error due to rod length and piston dwell.
- ⊕ Confirm correct cam phasing by putting a dial indicator on #1 intake lifter. Cad Company's cam cards instruct you to install your cam at a specific degree of lifter rise. For example, if our cam card says install cam at 10° @ 0.050" intake lifter rise, this is the actual [final] setting of the cam timing. Cad Company's True roller timing gear has extra keyways to allow you to advance or retard your cam. To advance from the straight up position remove cam gear and chain at TDC. Use easy prying to remove crank gear. Rotate gear until the keyway with the triangle "roof" is now at the 6:00 position. Replace gear by easy tapping with an aluminum or bronze object. **Never Hammer** directly on the gear!
- ⊕ The timing mark is now the Δ and the "0" is no longer used. To retard, use the same method using the keyway with the square roof, and the \blacksquare as the timing mark. The different keyways advance or retard the cam +/- 4°. Use LOCTITE™ to secure cam bolts on final assembly.

NOTE: The most common mistake with the True Roller Timing Set is the lining up of the cam gear dot and the "0" on the crank gear after installing the crank gear at the advanced keyway. If you have purchased your parts from Cad Company, you are always welcome to call to confirm that you have it correctly installed. Remember, the final check of your camshaft at 0.050" lifter rise will confirm that everything is aligned properly.

NOTE: The next most common mistake is that with the timing marks lined up, #1 is NOT at TDC compression, it is on the exhaust stroke (assuming you lined up the 'third hole' on the cam gear and flange). Rotate the engine 1 full turn before installing the distributor at #1!

- ⊕ Thank you for choosing Cad Company's Best Engineered Parts for the Cadillac 472", 500, and 425" engines. Feel free to call with any questions or suggestions _____ ☺