



ENGINE BREAK-IN OIL

You've already chosen the best engine components – now you can finally break them in properly. Rather than rely on a mega oil company or a snake oil blend to protect your premium COMP Cams® engine components, our engineers developed the new Engine Break-In Oil to provide critical engine protection needed during initial performance engine break-in.

Tested and proven by the COMP Cams® R&D team, this ZDDP-enhanced formula gives your engine maximum life and increased performance potential. It does this by combining the perfect blend of additives to improve surface mating in all critical areas of your engine.

- Proprietary formula includes ZDDP (Zinc and Phosphorous), Molybdenum and detergents
- Improves surface mating for all critical areas in your engine
- Multi-viscosity mineral base oil compatible with methanol and high octane race fuels
- Ideal for flat and roller tappet valve trains; high performance and all-out race engines

Part #	Description	Size
1590	10W30 Engine Break-In Oil	1 Qt.
1590-12	10W30 Engine Break-In Oil	(12) 1 Qt. Bottles
1590-Pallet	10W30 Engine Break-In Oil	(84) Case Pallet
1591	15W50 Engine Break-In Oil	1 Qt.
1591-12	15W50 Engine Break-In Oil	(12) 1 Qt. Bottles
1591-Pallet	15W50 Engine Break-In Oil	(84) Case Pallet



A product of **Endure**
PERFORMANCE LUBRICANTS

GM GEN IV VVT CAM PHASER LIMITER KITS

Cam phasers are computer-controlled cam gears that automatically optimize camshaft timing based on an engine's current rpm and are currently used in 2007 and newer GM Gen IV VVT (Variable Valve Timing) engines. Engine oil is pressure fed to the cam phasers through a series of passageways in the cylinder heads and camshafts. The engine computers control solenoids that adjust this oil flow into and out of the phaser's control chambers, giving the ability to retard the cams up to 60 crank degrees (52° for 2009-Present).

While this technology provides benefits such as fuel efficiency and the ability to always be in the best position for maximum power, regardless of engine rpm, it does present some limitations when it comes to performance camshafts. With such a wide range of valve timing movement, there is very little piston to valve clearance, which limits you to small cam profiles with little overlap.

The COMP Cams® Cam Phaser Limiter Kits for 2007 and later GM Gen IV VVT engines restrict the range of cam timing movement to only 20 degrees (22° for 2009-Present), thus providing the necessary valve clearance for serious performance cams with tighter lobe separations – all while still utilizing the benefits of VVT technology. The resulting upper-rpm gains are some of the largest we've ever seen from a camshaft swap without sacrificing any bottom end or mid-range performance.

Part #	Description
5456	GM Gen IV 2007-08 VVT Cam Phaser Limiter Kit
5460	GM Gen IV 2009-Present VVT Cam Phaser Limiter Kit

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