

Oil Pumps & Components



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High performance Ford 6 cylinder DOHC engines need a high performance oil pump, and Atomic has engineered the answer. We produce billet steel oil pump gears to replace the powdered metal OE gears and also supply fully prepped pumps or can rebuild your own.

Ford DOHC, 2J Toyota and various Nissan oil pumps are Gerotor design pumps which are driven directly off the snout of the crankshaft and subsequently are subjected to twisting moments that increase substantially with RPM. These torsional forces cause the oil pump drive gear to be thrust clockwise and anti clockwise, which eventually leads to the failure of the gear. The torsional moments are of a higher frequency and greater amplitude in manual gearbox equipped cars due to them being "on and off" the throttle more often during gear changes, downshifting etc.

Ford DOHC 6 cylinder oil pumps fail for 2 reasons: The original equipment (OE) gears are made from powdered metal and lack the structural integrity to withstand the stresses created in high revving engines. Secondly, Gerotor pumps produce pressure and volume almost proportional to engine speed, so high revs equals higher volumes of oil. These larger volumes cannot be adequately managed in a standard oil pump and hydraulic oil pressure can split the pump body open (click on image>>).

Atomic Engineers addressed both of these issues when designing an oil pump for performance Ford DOHC applications and subsequently our pumps are designed and tested to 7500 RPM and beyond.

Our #306751 and #306751-RB oil pumps features precision cut billet steel gears, high flow pressure bypass circuitry, fully blueprinted and clearanced and also include a hard anodized billet end plate to provide thrust wear resistance.

Crack in Factory Housing



#306750

Billet oil pump gears only suit Ford BA-on 6 cyl



#306751

Oil pump suit Ford BA-on 6 cyl DOHC engine



#306751-RB

Oil pump suit Ford BA-on 6 cyl DOHC engine - customer's oil pump exchange