

Crankshafts



Ford 4.0L 6 Cylinder SOHC and DOHC Crankshafts

Although we have been building high performance engines since 1978, it wasn't until 2004 that we began development work on the Ford 4.0L DOHC 6 cylinder turbocharged engine. We witnessed numerous catastrophic engine failures after consumers had undertaken simple modifications such as free flowing exhausts and cold air intake systems to otherwise stock vehicles, so it became apparent there was a need for us to engineer some hard core solutions to address inherent factory weaknesses.

The crankshafts in high performance Ford 6 cylinder engines operate in quite a hostile environment. With a long stroke of almost 4" (99.31mm) spread out over 7 main bearing journals, they are subjected to enormous torsional moments, which is understandable when considering combustion (compressive) forces of a typical 800HP engine operating at 7500 RPM are in the order of 7-8 tons of pressure per cylinder, occurring 62 times per second. And we are making around double this power level!

Over the last 20 years we have refined the heat treatment methodologies of nodular iron cranks to provide a considerable increase in fatigue resistance, making them a reliable and cost effective crankshaft for moderate performance applications.

And for the all out race engine, our billet steel cranks are just the ticket, but if you wish to change displacement we can custom make a crank to suit your exact requirements - any stroke, any crank flange PCD, any snout size.....the choice is yours.



#306170 – Stage 1 prepped Nodular iron crank

Stage 1 crankshaft suit Ford 6 cyl. Crank tested, ground/micropolished journals, chamfered oil holes and balanced.

#306170-RB – Stage 1 prepped Nodular iron crank

Stage 1 crankshaft suit Ford 6 cyl. Crank tested, ground/micropolished journals, chamfered oil holes and balanced. Customers unit.

#306171 – Stage 2 prepped Nodular iron crank

Stage 2 crankshaft suit Ford 6 cyl. Crank tested, stress relieved, tempered, reground/micropolished journals, chamfered oil holes and balanced.

#306172 – Stage 3 prepped Nodular iron crank

Stage 3 crankshaft suit DOHC Ford 6 cyl. Crank tested, stress relieved, gas nitrided, tempered, reground/micropolished journals, chamfered oil holes and balanced.

#306173 – Billet steel crankshaft – custom

Billet crankshaft suit Ford 6 cyl. Custom built - any stroke, and bearing size. Centre counterweighted, straight-shot oiling and triple heat treatment.

#306174 – Billet steel crankshaft – DOHC engines only

Billet crankshaft suit Ford DOHC 6 cyl. Std stroke (99.31mm), standard crankpin diameter and width. Centre counterweighted, straight-shot oiling, standard 6 bolt crank flange PCD, triple heat treatment and balanced.