

# TORQUE WRENCH SETTINGS

## Engine Td5

TORQUE DESCRIPTION	METRIC	IMPERIAL
ACE pump bolts.	25 Nm	(18 lbf.ft)
A/C compressor bolts.	25 Nm	(18 lbf.ft)
Alternator support bracket to cylinder head bolts.	25 Nm	(18 lbf.ft)
Alternator/vacuum pump oil feed pipe union.	10 Nm	(7 lbf.ft)
Camshaft cover to camshaft carrier bolts.	10 Nm	(7 lbf.ft)
Camshaft sprocket to camshaft bolts.	37 Nm	(27 lbf.ft)
Centrifuge cover bolts.	10 Nm	(7 lbf.ft)
Centrifuge oil drain pipe to sump bolts (or nuts).	10 Nm	(7 lbf.ft)
Centrifuge to oil drain pipe bolts.	10 Nm	(7 lbf.ft)
Centrifuge to oil cooler housing bolts.	25 Nm	(18 lbf.ft)
CKP sensor bolt.	10 Nm	(7 lbf.ft)
Coolant pipe bolt.	50 Nm	(37 lbf.ft)
Connecting rod bolts. Final torque - turn through 80 degrees°	20 Nm	(15 lbf.ft)
Crankshaft pulley bolt.	455 Nm	(336 lbf.ft)
Crankshaft pulley TV damper bolts.	80 Nm	(59 lbf.ft)
Crankshaft rear oil seal housing bolts.	10 Nm	(7 lbf.ft)
Cylinder head bolts initial tighten	30 Nm	(22 lbf.ft)
Cylinder head bolts final tighten, then a further 90°, then a further 180° and finally a further 45°.	65 Nm	(48 lbf.ft)
Dipstick tube to camshaft carrier bolt.	10 Nm	(7 lbf.ft)
Drive plate (automatic transmission) to crankshaft bolts.	115 Nm	(85 lbf.ft)
EGR pipe clamp to cylinder head bolt.	25 Nm	(18 lbf.ft)
EGR pipe to exhaust manifold Allen screws.	10 Nm	(7 lbf.ft)
Engine mounting (front) to cylinder block bolts.	48 Nm	(35 lbf.ft)
Engine mounting (front) to chassis nuts.	85 Nm	(63 lbf.ft)
Engine mounting bracket (rear, LH & RH) to gearbox bolts.	85 Nm	(63 lbf.ft)
Engine mounting bracket (rear, LH & RH) nuts	48 Nm	(35 lbf.ft)
Flywheel to crankshaft (manual transmission) bolts, then a further 90°	40 Nm	(30 lbf.ft)
Front crossmember bolts.	26 Nm	(20 lbf.ft)
Fuel connector block bolts.	25 Nm	(18 lbf.ft)
Fuel cooler to inlet manifold bolts.	25 Nm	(18 lbf.ft)
Gearbox housing to engine bolts.	50 Nm	(37 lbf.ft)
Heater pipe to cylinder head bolts.	25 Nm	(18 lbf.ft)
Main bearing cap bolts then a further 90°.	33 Nm	(24 lbf.ft)
Oil cooler housing to cylinder block bolts.	25 Nm	(18 lbf.ft)
Oil cooler pipe clip bolts.	10 Nm	(7 lbf.ft)
Oil filter adaptor housing to oil cooler housing bolts.	25 Nm	(18 lbf.ft)
Oil pick-up strainer screws.	10 Nm	(7 lbf.ft)
Oil pressure switch.	10 Nm	(7 lbf.ft)
Oil pump drive sprocket bolt.	25 Nm	(18 lbf.ft)
Oil pump pressure relief valve plug.	25 Nm	(18 lbf.ft)
Oil pump and stiffener assembly to cylinder block bolts.	13 Nm	(10 lbf.ft)
Oil sump to cylinder block bolts.	25 Nm	(18 lbf.ft)
Oil sump to gearbox bell housing bolts.	13 Nm	(10 lbf.ft)
PAS pump bracket bolts.	27 Nm	(20 lbf.ft)
PAS pump pulley bolts.	27 Nm	(20 lbf.ft)
Rocker arm adjusting screw locknuts.	16 Nm	(12 lbf.ft)

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Rocker shaft bolts.	32 Nm	(24 lbf. ft)
Timing chain adjustable guide bolt.	25 Nm	(18 lbf.ft)
Timing chain cover bolts.	27 Nm	(20 lbf.ft)
Timing chain cover to cylinder block stud.	7 Nm	(5.2 lbf.ft)
Timing chain fixed guide retaining pin.	25 Nm	(18 lbf.ft)
Timing chain cover to cylinder head nut and bolt.	25 Nm	(18 lbf.ft)
Timing chain fixed guide (M6) bolt.	10 Nm	(7 lbf.ft)
Timing chain fixed guide (M10) bolt.	45 Nm	(33 lbf.ft)
Timing chain lubrication jet bolt.	10 Nm	(7 lbf.ft)
Timing chain tensioner.	45 Nm	(33 lbf.ft)
Torque converter to drive plate (automatic transmission) bolts.	50 Nm	(37 lbf.ft)
Turbocharger heatshield bolts.	10 Nm	(7 lbf.ft)
Turbocharger oil feed pipe banjo bolt.	25 Nm	(18 lbf.ft)
Turbocharger to exhaust manifold nuts.	30 Nm	(22 lbf.ft)
Vacuum pump oil feed pipe to cylinder head union.	10 Nm	(7 lbf.ft)
Viscous fan nut.	45 Nm	(33 lbf.ft)