

Recommended torque tensions

The torque tensions below apply to components lubricated lightly with clean engine oil before they are fitted.

Description	Thread size	Torque		
		Nm	lbf ft	kgf m
Cylinder head assembly				
Setscrews, cylinder head	1/2 UNF	See section 12		
Fasteners, rocker shaft brackets:				
- Aluminium bracket	M12	40	30	4,1
- Cast iron bracket	M12	75	55	7,6
Cap nuts, rocker cover	M12	20	15	2,1
Piston and connecting rod assemblies				
Nuts, connecting rods	1/2 UNF	125	92	12,7
Setscrews, connecting rods	1/2 UNF	155	114	15,8
Banjo bolts, piston cooling jets	3/8 UNF	27	20	2,8
Crankshaft assembly				
Setscrews, main bearings	5/8 UNF	265	196	27,0
Setscrews, crankshaft pulley	7/16 UNF	115	85	11,8
Cap screws, damper to crankshaft pulley	M8	35	26	3,6
Setscrews, rear oil seal housing to cylinder block	M8	22	16	2,2
Cap screws, rear oil seal housing to bridge piece	M8	18	13	1,9
Setscrew, idler gear hub of balancer unit	M12	93	68	9,5
Nut, drive gear of balance weight	1/2 UNF	82	60	8,4
Setscrews, rear cover of balancer frame	M10	54	40	5,5
Setscrews, oil transfer plate	M10	30	22	3,1
Setscrews, oil pump to balancer frame	M8	22	16	2,2
Setscrews, balancer to cylinder block	M10	54	40	5,5
Timing case and drive assembly				
Setscrews, timing case to cylinder block	M8	22	16	2,2
	M10	44	33	4,5
Setscrews, hub of idler gear	M10	44	33	4,5
Setscrew, camshaft gear	M12	78	58	8,0
Setscrews, timing case cover to timing case	M8	22	16	2,2
Nuts, timing case cover to timing case	M8	22	16	2,2
Aspiration system				
Nuts, turbocharger to manifold	M10	44	33	4,5
Lubrication system				
Plug, lubricating oil sump	3/4 UNF	34	25	3,5
Setscrews, oil pump to front bearing cap	M8	22	16	2,2
Setscrews, cover for oil pump	M8	28	21	2,9
Fasteners, lubricating oil sump	M8	22	16	2,2
Fuel system				
Nuts, high-pressure fuel pipes	M12	18	14	1,9
Setscrews, atomiser	M8	12	9	1,2
Setscrews, fuel lift pump	M8	22	16	2,2
Nut for gear of fuel injection pump	M14	80	59	8,2
Nuts for flange of fuel injection pump	M8	22	16	2,2
Cooling system				
Setscrews, fan drive housing to timing case	M10	44	33	4,5
Setscrews, fan drive pulley to hub	M8	22	16	2,2
Setscrews, fan	M8	22	16	2,2
	M10	44	33	4,5

Description	Thread size	Torque		
		Nm	lbf ft	kgf m
Flywheel and housing				
Setscrews, flywheel to crankshaft	1/2 UNF	105	77	10,7
Setscrews, flywheel housing to cylinder block	M10	44	33	4,5
	M12	75	55	7,6
Electrical equipment				
Nut, alternator pulley:				
- CAV AC5RA and AC5RS	5/8 UNF	55	40	5,6
- Lucas A127	M17	60	45	6,3
Fuelled start aid to induction manifold	7/8 UNF	31	23	3,1
Auxiliary equipment				
Nut, compressor drive gear:				
- 6,4 mm (0.25 in) thick nut	3/4 UNF	80	59	8,2
- 10 mm (0.4 in) thick nut	3/4 UNF	130	95	13,3
Nuts for gears of auxiliary drive assembly:				
- 6,4 mm (0.25 in) thick nut	3/4 UNF	80	59	8,2
- 10 mm (0.4 in) thick nut	3/4 UNF	130	95	13,3
	M20	130	95	13,3