

## TORQUE WRENCH SETTINGS

Engine - Not Turbo Models	Nm	lbf ft	kgf m	Engine - Turbo Models Only	Nm	lbf ft	kgf m
Camshaft nut	88	65	8.9	Brake servo vacuum pipe banjo bolt	50	37	5.1
Connecting rod big-end:				Camshaft locating plate to crankcase	11	8	1.1
bolts	50	37	5.1	Camshaft nut	88	65	9.0
nuts	45	33	4.6	Carburettor to manifold nuts	22	16	2.2
Crankshaft pulley nut	102	75	10.3	Coolant drain plug	37	27	3.7
Cylinder head nuts:				Coolant temperature transmitter	54	40	5.5
Emission control engine	54	40	5.5	Connecting rod big-end nuts	45	33	4.6
850,1000,1100 and 1275	68	50	6.9	Crankshaft pulley nut	142	105	14.5
Cylinder side cover	4.7	3.5	0.5	Cylinder head bypass plug	16	12	1.7
Clutch spring housing to pressure plate set screws	22	16	2.2	Cylinder head nuts * t	75	55	7.6
Driving strap to flywheel set screw	22	16	2.2	Front plate to bearing cap:			
Flywheel centre bolt	152	112	15.5	1/4 in setscrews	7	5	0.7
Flywheel housing bolts and stud nuts	25	18	2.5	Front plate to crankcase:			
Gudgeon pin clamp screws	32	24	3.2	5/16 in setscrews	22	16	2.2
Heater control to cylinder head	11	8	1.1	Gearbox adaptor plate	25	18	2.5
Main bearing bolts	85	63	8.7	Main bearing bolts *	85	65	8.7
Manifold to cylinder head nuts	19	14	1.9	Manifold to cylinder head nuts	22	16	2.2
Oil pump bolts	11	8	1.1	Oil filter	11	8	1.1
Oil pipe banjo	52	38	5.3	Oil pressure switch	25	18	2.5
Oil filter head nuts	19	14	1.9	Oil pipe to crankcase banjo bolt	75	55	7.6
Oil pressure release valve - dome nut	59	43	5.9	Oil pump bolts	11	8	1.1
Rocker cover	4.7	3.5	0.5	Oil pressure relief valve cap nut	61	45	6.1
Rocker shaft bracket nuts	32	24	3.2	Rocker cover	4	3	0.4
Spark plugs	25	18	2.5	Rocker shaft bracket nuts	32	24	3.3
Timing cover and front plate:				Spark plugs	25	18	2.5
1/4 in dia. U.N.F. bolts	7	5	0.7	Sump drain plug	38	28	3.9
5/16 in dia. U.N.F. bolts	16	12	1.7	Sump screws	11	8	1.1
Top engine tie rod - Nyloc nut	23	17	2.4	Throttle cable trunnion screw	1	9 lbf in	0.1
Water pump bolts	22	16	2.2	Timing cover to front plate:			
Water outlet elbow nuts	11	8	1.1	1/4 in bolts	7	5	0.7
Coolant temperature transmitter	22	16	2.2	5/16 in dia. bolts	16	12	1.7
				Water outlet elbow nuts	22	16	2.2
				Water pump bolts	22	16	2.2

<b>Turbo charger:</b>			
to Exhaust manifold	38	28	3.8
to Exhaust elbow	21	15	2.1
<b>Oil drain:</b>			
Housing and engine adaptor setscrews	22	16	2.3
Oil feed reducer, adaptor, banjo bolt	15	11	1.5
to Wastegate bracket, compressor pipe setscrew	22	16	1.6
Plenum chamber to carburetter	22	16	1.6
Heat shield, diffuser pipe to plenum chamber	11	8	1.1
Non-return valve to manifold	25	18	2.5
Throttle cable trunnion screw	1	9 lbf in	0.1

\* Thread lightly oiled

† Correct tightening procedure must be followed

<b>Engine Mountings</b>			
$\frac{3}{8}$ in U.N.C. screws	40	30	4.1
M8 screws	30	22	3.0
M10 screws	45	33	4.6
M12 bolts	72	53	7.3
<b>Gearbox - manual - All Models</b>			
Drain plug	34	25	3.5
Third motion shaft bearing retainer screws	18	13	1.8
First motion shaft nut	203	150	20.7
Third motion shaft nut	203	150	20.7
Gearbox case to crankcase	8	6	0.8
<b>Gearbox case studs:</b>			
$\frac{3}{8}$ in dia. U.N.C.	11	8	1.1
$\frac{5}{16}$ in dia. U.N.C.	8	6	0.8
<b>Gearbox case stud nuts:</b>			
$\frac{3}{8}$ in dia. U.N.F.	34	25	3.5
$\frac{5}{16}$ in dia. U.N.F.	25	18	2.5
<b>Bottom cover set screws - <math>\frac{1}{4}</math> in dia.</b>			
U.N.C. (change speed tower)	8	6	0.8
Speedometer drive housing nuts	25	18	2.5
<b>Gearbox - automatic</b>			
Converter centre bolt	152	112	15.5
Converter (six central bolts)	29	21	2.9
Converter drain plugs	27	20	2.8
Converter housing bolts	25	18	2.5
Differential driving flange securing bolts	59	43	5.9
Gear train bearing caps	16	12	1.7
Drain plug - brass sealing washer	38	28	3.8
Drain plug - fibre or nylon sealing washer - re-torque after 1500 km; 1000 miles	40	30	4.1
Gear train carrier strap	16	12	1.7
Governor to auxiliary pump housing bolts	18	13	1.8
Kickdown control assembly to gearbox casing (on nylon housing)	7	5	0.7
Oil filter bowl	19	14	1.9
Input shaft nut	95	70	9.7
Servo unit securing bolts	23	17	2.3

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	Nm	lbf ft	kgf m		Nm	lbf ft	kgf m
<b>Gearbox - automatic (continued)</b>				<b>Suspension FRONT</b>			
Top and reverse clutch hub nut	203	150	20.7	Hub ball joints:			
Gearbox to engine securing nut	16	12	1.7	Nut	52	38	5.3
Valve block securing bolts	14	10	1.4	Ball pin housing	102	75	10.3
Valve block bolts (securing three sections)	10	7	1.0	Hub nut - drive shaft (up to 1984)(align to next split pin hole):			
$\frac{5}{16}$ in U.N.F. bolts	26	19	2.6	except 1275 GT	81	60	8.3
$\frac{3}{8}$ in U.N.F. bolts	41	30	4.1	1275 GT	203	150	20.7
<b>Final drive - Not Turbo Models</b>				Hub nut - drive shaft (1984 onwards) - TWO HOLES (align to next split pin hole)			
Driven gear to differential cage	81	60	8.3	Hub nut - drive shaft (1984 onwards) - ONE HOLE (tighten to specified torque then tighten further, if necessary, to align nut with split pin hole)	262	193	26.2
Driving flange to differential nut (align to next split pin hole)	95	70	9.7	Drive shaft coupling 'U' bolts	14	10	1.4
End cover bolts (differential housing)	25	18	2.5	Tie-rod to lower arm	26	19	2.6
<b>Final drive - Turbo Models Only</b>				Tie-rod to body bracket			
Differential housing:				Upper arm pivot shaft nut	72	53	7.3
$\frac{1}{16}$ U.N.F. nuts	25	18	2.5	Lower arm pivot shaft nut	45	33	4.5
$\frac{3}{8}$ U.N.F. nuts	34	25	3.5	Tower bolt (later single type)	68	50	6.9
End cover bolts (differential housing)	25	18	2.5	<b>REAR</b>			
Final drive gear to differential cage	65	48	6.0	Hub nut (align to next split pin hole)	81	60	8.3
<b>Steering</b>				Radius arm pivot shaft nut			
Steering-column/rack pinion clamp bolt	16	12	1.7				
Steering lever to hub	45	33	4.5	<b>Brakes</b>			
Steering wheel nut	47	35	4.8	Caliper retaining bolts	52	38	5.3
Tie-rod ball pin nut	30	22	3.0	Disc to driving flange	57	42	5.8
Tie-rod ball joint to rack locknut	52	38	5.3	Backplate to radius arm bolts	28	20	2.8
Steering-rack 'U' bolts	15	11	1.5	Master cylinder reservoir flange screws	7	5	0.7
Steering-column clip bracket to column clip and parcel self shear bolt, min	19	14	1.9	Cylinder body outlet plugs	39	28	3.9
<b>Road wheels</b>				Pressure differential warning actuator end plug - (type integral with master cylinder)			
Wheel nuts				Pressure failure switch	19	14	1.9
(steel)	63	45	6.4	Pressure failure switch body end plug	35	26	3.6
(alloy)	50	37	5.1	Inertia valve plug	63	45	6.4

<b>Electrical - Not Turbo Models</b>	<b>Nm</b>	<b>lbf ft</b>	<b>kgf m</b>
<b>Distributor:</b>			
plate retaining screws .....	11	8	1.1
clamp bolt .....	3.4	2.5	0.3
Alternator shaft nut .....	39	28	3.9
<b>Electrical - Turbo Models Only</b>			
<b>Alternator:</b>			
adjusting link to alternator .....	12	9	1.2
adjusting link to front plate .....	37	27	3.7
bracket to crankcase .....	22	16	2.2
pulley nut .....	37	27	3.7
top fixings .....	22	16	2.2
Distributor fork clamp screw .....	21	15	2.1
Starter motor to flywheel housing .....	37	27	3.7
<b>Mini City E, Mini HLE and Mayfair models</b>			
<b>ENGINE</b>			
Flywheel housing nuts and bolts .....	25	18	2.5
Clutch pressure plate to flywheel bolts .....	25	18	2.5
Flywheel retaining bolt .....	152	112	15.5
First motion shaft nut .....	203	150	20.7
Top engine tie rod - Nyloc nut .....	23	17	2.4
<b>Model year - 1984 on</b>			
<b>Suspension</b>			
Hub nut - drive shaft (1984 onwards) - <b>TWO HOLES</b> (align to next split pin hole) .....			
	203	150	20.7
Hub nut - drive shaft (1984 onwards) - <b>ONE HOLE</b> (tighten to specified torque then tighten further, if necessary, to align nut with split pin hole) .....			
	262	193	26.2
Nut upper damper fixing .....	37	27.5	3.8
Nut lower damper fixing .....	48	35	4.8
<b>Road wheels</b>			
Wheel nuts (alloy wheels):			
Not Turbo Models .....	50	37	5.1
Turbo Models Only .....	57	42	5.8

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