

SPECIFICATIONS 1GR-FE LUBRICATION TORQUE SPECIFICATIONS

OIL AND OIL FILTER

Part Tightened	N*m	kgf*cm	ft.*lbf
Oil pan drain plug x No. 2 oil pan sub-assembly	40	408	30
Oil filter sub-assembly x Oil cooler assembly	18	184	13

OIL PRESSURE SWITCH

Part Tightened	N*m	kgf*cm	ft.*lbf
Oil pressure switch assembly x Oil pan sub-assembly	15	153	11

OIL PRESSURE SENSOR

Part Tightened	N*m	kgf*cm	ft.*lbf
Oil pressure sender gauge assembly x Oil pan sub-assembly	15	153	11

OIL PUMP

Part Tightened	N*m	kgf*cm	ft.*lbf	in.*lbf
Relief valve plug x Oil pump cover	49	500	36	
Oil pump cover x Timing chain cover assembly	9.1	93		81
Oil pump outlet pipe x Timing chain cover assembly	9.1	93		81
Oil pan sub-assembly x Cylinder block	for bolt A, B and nut	21	214	15
	for bolt C	10	102	7
Manual transmission x Cylinder block	37.3	380	28	
Rear water by-pass joint x Cylinder head sub-assembly	for bolt	10	102	7
	for nut	9.0	92	80
Clutch tube x Cylinder head sub-assembly	8.0	82		71
Water hose sub-assembly x Bracket	5.0	51		44
No. 1 fuel pipe sub-assembly and No. 2 fuel pipe sub-assembly x Cylinder head cover	9.0	92		80
No. 7 engine wire x Bracket	8.4	86		74
No. 1 cooler refrigerant suction hose x Cylinder block (w/ Air Conditioning System, for LHD)	9.5	97		84
Idler pulley bracket x Cylinder block (w/o Air Conditioning System)	25	255	18	

ENGINE OIL COOLER

Part Tightened	N*m	kgf*cm	ft.*lbf
Oil cooler assembly x Oil filter bracket sub-assembly	68	693	50