





## 7. TIGHTENING TORQUE FOR STANDARD BOLTS AND NUTS

### 7.1 TIGHTENING TORQUE

Screws, bolts and nuts whose tightening torques are not specified in this workshop manual should be tightened according to the table below.

#### A. TIGHTENING TORQUE FOR STANDARD BOLTS AND NUTS

Grade Unit Nominal Diameter	No grade 4T  			7T 			9T 		
	N·m	Kgf·m	lbf·ft	N·m	Kgf·m	lbf·ft	N·m	Kgf·m	lbf·ft
M 6 (6 mm, 0.24 in.)	7.85	0.80	5.79	9.80	1.00	7.24	12.3	1.25	9.1
	~	~	~	~	~	~	~	~	~
M 8 (8 mm, 0.31 in.)	9.30	0.95	6.87	11.2	1.15	8.32	14.2	1.45	10.5
	~	~	~	~	~	~	~	~	~
M 10 (10 mm, 0.39 in.)	17.7	1.8	13.0	23.6	2.4	17.4	29.4	3.0	21.7
	~	~	~	~	~	~	~	~	~
M 12 (12 mm, 0.47 in.)	20.5	2.1	15.2	27.4	2.8	20.2	34.3	3.5	25.3
	~	~	~	~	~	~	~	~	~
M 14 (14 mm, 0.55 in.)	39.2	4.0	29.0	48.1	4.9	35.5	60.8	6.2	44.9
	~	~	~	~	~	~	~	~	~
M 16 (16 mm, 0.63 in.)	45.0	4.6	33.2	55.8	5.7	41.2	70.5	7.2	52.1
	~	~	~	~	~	~	~	~	~
M 18 (18 mm, 0.71 in.)	62.8	6.4	46.3	77.5	7.9	57.2	103	10.5	76.0
	~	~	~	~	~	~	~	~	~
M 20 (20 mm, 0.79 in.)	72.5	7.4	53.5	90.1	9.2	66.5	117	12.0	86.8
	~	~	~	~	~	~	~	~	~
M 22 (22 mm, 0.87 in.)	108	11.0	79.6	124	12.6	91.2	167	17.0	123
	~	~	~	~	~	~	~	~	~
M 24 (24 mm, 0.94 in.)	125	12.8	92.5	147	15.0	108	196	20.2	144
	~	~	~	~	~	~	~	~	~
M 27 (27 mm, 1.06 in.)	167	17.0	123	196	20.0	145	260	26.5	192
	~	~	~	~	~	~	~	~	~
M 30 (30 mm, 1.18 in.)	191	19.5	141	225	23.0	166	303	31.0	224
	~	~	~	~	~	~	~	~	~
M 36 (36 mm, 1.42 in.)	245	25.0	181	275	28.0	203	343	35.0	254
	~	~	~	~	~	~	~	~	~
M 42 (42 mm, 1.65 in.)	284	29.0	210	318	32.5	235	401	41.0	297
	~	~	~	~	~	~	~	~	~
M 48 (48 mm, 1.89 in.)	334	34.0	246	368	37.5	272	490	50.0	362
	~	~	~	~	~	~	~	~	~
M 56 (56 mm, 2.21 in.)	392	40.0	289	431	44.0	318	568	58.0	420
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\* The figures on the table above are indicated the top of screw of bolt.