

Capscrew Marking and Torque Values

Usage	Much Used	Much Used	Used at Times	Used at Times
	To 1/2 – 69,000	To 3/4 – 120,000	To 5/8 – 140,000	150,000
Capscrew Diameter	To 3/4 – 64,000	To 1 – 115,000	To 3/4 – 133,000	
& Minimum Tensile Strength PSI	To 1 – 55,000			
Quality of Mat'l	Indeterminate	Min. Commercial	Med. Commercial	Best Commercial
SAE Grade Number	1 or 2	5	6 or 7	8
CAPSCREW HEAD M Manufacturer's market These are all SAE Gra	rs may very.			
Capscrew Body Size (Inches) - Thread	Torque Ft-Lb (kg m)	Torque Ft-Lb (kg m)	Torque Ft-Lb (kg m)	Torque Ft-Lb (kg m)
1/4 - 20	5 (0.69)	8 (1.11)	10 (1.38)	12 (1.66)
- 28	(0.83)	10 (1.38)		14 (1.94)
5/16 - 18	11 (1.52)	17 (2.35)	19 (2.63)	24 (3.32)
-24	13 (1.80)	19 (2.63)		27 (3.73)
3/8 - 16	18 (2.49)	31 (4.29)	34 (4.70)	44 (6.09)
- 24	20 (2.77)	35 (4.84)		49 (6.78)
				/11/14/681
7/16 - 14	28 (3.81)	49 (6.78)	55 (7.61)	70 (9.68)
7/16 - 14 - 20	30 (4.15)	55 (7.61)	· · · ·	78 (10.79)
7/16 - 14 - 20 1/2 - 13	30 (4.15) 39 (5.39)	55 (7.61) 75 (10.37)	55 (7.61) 85 (11.76)	78 (10.79) 105 (14.52)
7/16 - 14 - 20 1/2 - 13 - 20	30 (4.15) 39 (5.39) 41 (5.67)	55 (7.61) 75 (10.37) 85 (11.78)	85 (11.76)	78 (10.79) 105 (14.52) 120 (16.60)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21)	· · · ·	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12 - 18	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05) 55 (7.60)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21) 120 (16.60)	85 (11.76) 120 (16.60)	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44) 170 (23.51)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12 - 18 5/8 - 11	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05) 55 (7.60) 83 (11.48)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21) 120 (16.60) 150 (20.75)	85 (11.76)	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44) 170 (23.51) 210 (29.04)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12 - 18 5/8 - 11 - 18	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05) 55 (7.60) 83 (11.48) 95 (13.14)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21) 120 (16.60) 150 (20.75) 170 (23.51)	85 (11.76) 120 (16.60) 167 (23.10)	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44) 170 (23.51) 210 (29.04) 240 (33.19)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12 - 18 5/8 - 11 - 18 3/4 - 10	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05) 55 (7.60) 83 (11.48) 95 (13.14) 105 (14.52)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21) 120 (16.60) 150 (20.75) 170 (23.51) 270 (37.34)	85 (11.76) 120 (16.60)	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44) 170 (23.51) 210 (29.04) 240 (33.19) 375 (51.86)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12 - 18 5/8 - 11 - 18 3/4 - 10 - 16	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05) 55 (7.60) 83 (11.48) 95 (13.14) 105 (14.52) 115 (15.90)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21) 120 (16.60) 150 (20.75) 170 (23.51) 270 (37.34) 295 (40.80)	85 (11.76) 120 (16.60) 167 (23.10) 280 (38.72)	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44) 170 (23.51) 210 (29.04) 240 (33.19) 375 (51.86) 420 (58.09)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12 - 18 5/8 - 11 - 18 3/4 - 10 - 16 7/8 - 9	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05) 55 (7.60) 83 (11.48) 95 (13.14) 105 (14.52) 115 (15.90) 160 (22.13)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21) 120 (16.60) 150 (20.75) 170 (23.51) 270 (37.34) 295 (40.80) 395 (54.63)	85 (11.76) 120 (16.60) 167 (23.10)	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44) 170 (23.51) 210 (29.04) 240 (33.19) 375 (51.86) 420 (58.09) 605 (83.67)
7/16 - 14 - 20 1/2 - 13 - 20 9/16 - 12 - 18 5/8 - 11 - 18 3/4 - 10 - 16	30 (4.15) 39 (5.39) 41 (5.67) 51 (7.05) 55 (7.60) 83 (11.48) 95 (13.14) 105 (14.52) 115 (15.90)	55 (7.61) 75 (10.37) 85 (11.78) 110 (15.21) 120 (16.60) 150 (20.75) 170 (23.51) 270 (37.34) 295 (40.80)	85 (11.76) 120 (16.60) 167 (23.10) 280 (38.72)	78 (10.79) 105 (14.52) 120 (16.60) 155 (21.44) 170 (23.51) 210 (29.04) 240 (33.19) 375 (51.86) 420 (58.09)

Notes:

1. Always use the torque values listed above when specific torque values are not available.

2. The above is based on use of clean and dry threads.

3. Reduce torque by 10% when engine oil is used as a lubricant.

4. Reduce torque by 20% if new plated capscrews are used.