



RECOMMENDED ASSEMBLY TORQUES

SAE Grade 5 Bolts and Screws - UNC Thread

SAE Grade 5 Bolts and Screws - UNC Thread		Bolt Tension Corresponding to 65% of Proof Load	Recommended Assembly Torque
Diameter	Threads Per Inch (TPI)	lbf	lbft
1/4	20	1760	7
5/16	18	2890	15
3/8	16	4290	27
7/16	14	5880	43
1/2	13	7860	66
9/16	12	10070	94
5/8	11	12480	130
3/4	10	18460	231
7/8	9	25550	373
1	8	33470	558
1.1/8	7	36700	688
1.1/4	7	46600	971
1.3/8	6	55500	1272
1.1/2	6	67600	1690
1.3/4	5	91300	2663
2	4.5	120200	4007
2.1/4	4.5	156300	5861
2.1/2	4	192400	8017
2.3/4	4	237100	10867
3	4	287100	14355
3.1/4	4	341500	18498
3.1/2	4	400600	23368
3.3/4	4	464600	29038
4	4	532900	35527

To convert kN to lbf; Multiply Kn by 224.809
To convert Nm to lbft; Multiply Nm by 0.737562

Surface Condition Torque Adjustment Factors	
Plain Steel, as supplied	x 1.0
Plain Steel, degreased	x 2.0
Zinc Plated, as supplied	x 1.0
Zinc Plated, lightly oiled	x 0.9
Galvanised, degreased	x 2.1
Galvanised, lightly oiled	x 1.1
Heavily greased	x 0.7

