

Bolt Diameter	Head and Wrench Size		Size	Recommended Torque (Ft.lb)			Recommended Torque (N.m)			Recommended Torque (Inch Pounds)		
	Hex Bolt - Lag Bolt - Square Bolt	Heavy Hex Bolt		Grade 2	Grade 5	Grade 8	Grade 2	Grade 5	Grade 8	Grade 2	Grade 5	Grade 8
	1/4"	7/16" or 3/8"		-	1/4"	4	6.3	9	5	9	12	48
5/16"	1/2"	-	5/16"	8	13	18	11	18	24	96	156	216
3/8"	9/16"	-	3/8"	15	23	33	20	31	45	180	276	396
7/16"	5/8"	-	7/16"	24	37	52	33	50	71	288	444	624
1/2"	3/4"	7/8"	1/2"	37	57	80	50	77	108	444	684	960
9/16"	13/16"	-	9/16"	53	82	115	72	111	156	636	984	1380
5/8"	15/16"	1-1/16"	5/8"	73	112	159	99	152	216	876	1344	1908
3/4"	1-1/8"	1-1/4"	3/4"	125	200	282	170	271	382	1500	2400	3384
7/8"	1-5/16"	1-7/16"	7/8"	129	322	454	175	437	616	1548	3865	5449
1"	1-1/2"	1-5/8"	1"†	188	483	682	255	655	925	2256	5797	8185

Bolt Diameter	Head and Wrench Size		Size	Recommended Torque (Ft.lb Anti-seize .7 factor)			Recommended Torque (N.m Anti-seize .7 factor)			Recommended Torque (Inch Pounds Anti-seize .7 factor)		
	Hex Bolt - Lag Bolt - Square Bolt	Heavy Hex Bolt		Grade 2	Grade 5	Grade 8	Grade 2	Grade 5	Grade 8	Grade 2	Grade 5	Grade 8
	1/4"	7/16" or 3/8"		-	1/4"	3	4	6	4	6	9	34
5/16"	1/2"	-	5/16"	6	9	13	8	12	17	67	109	151
3/8"	9/16"	-	3/8"	11	16	23	14	22	31	126	193	277
7/16"	5/8"	-	7/16"	17	26	36	23	35	49	202	311	437
1/2"	3/4"	7/8"	1/2"	26	40	56	35	54	76	311	479	672
9/16"	13/16"	-	9/16"	37	57	81	50	78	109	445	689	966
5/8"	15/16"	1-1/16"	5/8"	51	78	111	69	106	151	613	941	1336
3/4"	1-1/8"	1-1/4"	3/4"	88	140	197	119	190	268	1050	1680	2369
7/8"	1-5/16"	1-7/16"	7/8"	90	225	318	122	306	431	1084	2705	3814
1"	1-1/2"	1-5/8"	1"†	132	338	477	178	458	647	1579	4058	5730



Grade 2



Grade 5



Grade 8



Grade L9 (R)