



Torque Chart for ASTM A193 Grade B7 Studs

Figures given are a guide only and are based on 70% yield Torque for Specified Lubricant (ft./lb.)

Bolt Size (INS)	Nut Size (INS)	Minimum Yield Strength PSI	Bolt tension (lbs)	Molybdenum Disulfide u=0.06	Molybdenum Lead Oxide graphite u=0.085	Copper & Graphite u=0.100	Nickel & Graphite u=0.110	API SA2 u=0.117	Machine Oil u=0.160	Dry Steel u=0.4
3/4	1 1/4	106,000	24,856	146	192	220	239	252	314	783
7/8	1 7/16	106,000	34,293	231	305	350	381	402	501	1,250
1	1 5/8	106,000	44,981	343	455	522	568	598	746	1,865
1 1/8	1 13/16	106,000	58,622	491	655	753	819	865	1,081	2,792
1 1/4	2	106,000	74,068	676	906	1,044	1,135	1,201	1,505	3,808
1 3/8	2 3/16	106,000	91,316	902	1,214	4,500	1,526	1,613	2,026	5,149
1 1/2	2 3/8	106,000	110,369	1,172	1,583	1,830	1,995	2,110	2,654	6,772
1 5/8	2 9/16	106,000	131,226	1,499	2,034	2,355	2,568	2,717	3,423	8,764
1 3/4	2 3/4	106,000	153,888	1,873	2,548	2,953	3,221	3,410	4,301	11,043
1 7/8	2 15/16	106,000	178,353	2,304	3,142	3,643	3,977	4,213	5,317	13,685
2	3 1/8	106,000	204,621	2,796	3,821	4,434	4,844	5,131	6,482	16,719
2 1/8	3 5/16	106,000	232,694	3,353	4,591	5,333	5,827	6,173	7,805	20,171
2 1/4	3 1/2	106,000	262,571	3,980	5,457	6,343	6,934	7,347	9,297	24,067
2 3/8	3 11/16	106,000	294,252	4,680	6,426	7,475	8,173	8,662	10,968	28,434
2 1/2	3 7/8	106,000	327,727	5,457	7,504	8,733	9,552	10,125	12,827	33,300
2 3/4	4 1/4	95,000	362,012	6,567	9,054	10,546	11,542	12,237	15,519	40,384
3	4 5/8	95,000	434,028	8,522	11,774	13,724	15,025	15,935	20,226	52,738
3 1/4	5	95,000	512,574	10,829	14,987	17,483	19,146	20,310	25,799	63,181
3 1/2	5 3/8	95,000	597,647	13,518	18,739	21,871	23,958	25,420	32,311	84,511
3 3/4	4 3/4	95,000	689,249	16,619	23,068	26,937	29,490	31,322	39,834	104,322
4	6 1/8	95,000	787,381	20,161	28,017	32,731	33,074	38,073	48,444	127,008
4 1/4	6 1/2	75,000	704,242	19,069	26,548	31,027	34,014	36,103	45,956	120,604
4 1/2	6 7/8	75,000	932,023	22,644	31,532	36,865	40,419	42,909	54,641	143,518
4 3/4	7 1/4	75,000	884,957	26,621	37,103	43,392	47,583	50,518	64,354	169,163
5	7 5/8	75,000	983,046	31,039	43,294	50,646	55,548	58,979	75,153	197,694
5 1/4	8	75,000	1,086,288	35,920	50,137	58,668	64,354	68,334	87,100	229,265
5 1/2	8 3/8	75,000	1,194,686	41,287	57,666	67,493	74,045	78,630	100,248	264,029
5 3/4	8 3/4	75,000	1,308,237	47,165	65,913	77,162	84,661	89,911	114,659	302,141
6	9 1/8	75,000	1,426,942	53,574	74,911	87,713	96,247	102,221	130,386	343,753

"u" is the coefficient of friction for the lubricant