



Torque Chart for ASTM A193 Grade B7 Studs

Figures given are a guide only and are based on 50% 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	17,754	104	137	157	171	180	224	559
7/8	1 7/16	106,000	24,495	165	218	250	272	287	258	893
1	1 5/8	106,000	32,129	245	325	373	406	427	533	1,332
1 1/8	1 13/16	106,000	41,873	351	468	538	586	618	772	1,994
1 1/4	2	106,000	52,906	483	647	746	811	858	1,075	2,729
1 3/8	2 3/16	106,000	65,226	644	867	1,029	1,098	1,152	1,447	3,678
1 1/2	2 3/8	106,000	78,836	837	1,131	1,307	1,425	1,507	1,896	4,837
1 5/8	2 9/16	106,000	93,733	1,071	1,463	1,683	1,834	1,941	2,445	6,260
1 3/4	2 3/4	106,000	109,920	1,338	1,830	2,109	2,301	2,436	3,072	7,886
1 7/8	2 15/16	106,000	127,396	1,646	2,244	2,602	2,861	3,009	3,798	9,775
2	3 1/8	106,000	146,158	1,997	2,729	3,167	3,460	3,665	4,630	11,942
2 1/8	3 5/16	106,000	166,210	2,396	3,279	3,809	4,126	4,409	5,575	14,408
2 1/4	3 1/2	106,000	187,561	2,843	3,896	4,531	4,963	5,248	6,641	17,191
2 3/8	3 11/16	106,000	210,188	3,343	4,590	5,339	5,838	6,187	7,834	20,310
2 1/2	3 7/8	106,000	234,098	3,898	5,360	6,238	6,823	7,232	9,162	23,786
2 3/4	4 1/4	95,000	258,580	4,691	6,467	7,533	8,244	8,741	11,086	28,846
3	4 5/8	95,000	310,020	6,078	8,410	9,803	10,732	11,382	14,447	37,670
3 1/4	5	95,000	366,124	7,735	10,706	12,488	13,676	14,507	18,428	48,129
3 1/2	5 3/8	95,000	426,891	9,656	13,306	15,622	17,113	18,157	23,079	60,366
3 3/4	4 3/4	95,000	492,321	11,871	16,477	19,241	21,084	22,373	28,453	74,516
4	6 1/8	95,000	562,415	14,401	20,012	23,379	25,624	27,196	34,603	90,720
4 1/4	6 1/2	75,000	503,038	13,631	18,963	22,162	24,296	25,788	32,826	86,146
4 1/2	6 7/8	75,000	565,731	16,174	22,523	26,332	28,871	30,649	39,029	102,513
4 3/4	7 1/4	75,000	632,112	19,015	26,506	30,994	33,986	35,084	45,967	120,831
5	7 5/8	75,000	702,176	22,171	30,924	36,176	39,677	42,128	53,681	141,210
5 1/4	8	75,000	775,920	25,657	35,812	41,906	45,967	48,810	62,214	163,761
5 1/2	8 3/8	75,000	853,347	29,491	41,190	48,209	52,809	56,164	71,606	188,592
5 3/4	8 3/4	75,000	934,466	33,609	47,061	56,116	60,472	64,222	81,899	215,815
6	9 1/8	75,000	1,019,244	58,267	53,608	62,662	68,748	73,015	93,133	245,538

"u" is the coefficient of friction for the lubricant