

Torque Chart for ASTM A193 Grade B7 Studs

Torque for Specified Lubricant (ft./lb.)

(Figures given are a guide only and are based on 50% yield)

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	106000	17754	104	137	157	171	180	224	559
7/8	1 7/16	106000	24495	165	218	250	272	287	358	893
1	1 5/8	106000	32129	245	325	373	406	427	533	1332
1 1/8	1 13/16	106000	41873	351	468	538	586	618	772	1994
1 1/4	2	106000	52906	483	647	746	811	858	1075	2729
1 3/8	2 3/16	106000	65226	644	867	1029	1098	1152	1447	3678
1 1/2	2 3/8	106000	78836	837	1131	1307	1425	1507	1896	4837
1 5/8	2 9/16	106000	93733	1071	1463	1683	1834	1941	2445	6260
1 3/4	2 3/4	106000	109920	1338	1830	2109	2301	2436	3072	7886
1 7/8	2 15/16	106000	127396	1646	2244	2602	2861	3009	3798	9775
2	3 1/8	106000	146158	1997	2729	3167	3460	3665	4630	11942
2 1/8	3 5/16	106000	166210	2396	3279	3809	4126	4409	5575	14408
2 1/4	3 1/2	106000	187561	2843	3896	4531	4963	5248	6641	17191
2 3/8	3 11/16	106000	210188	3343	4590	5339	5838	6187	7834	20310
2 1/2	3 7/8	106000	234098	3898	5360	6238	6823	7232	9162	23786
2 3/4	4 1/4	95000	258580	4691	6467	7533	8244	8741	11086	28846
3	4 5/8	95000	310020	6078	8410	9803	10732	11382	14447	37670
3 1/4	5	95000	366124	7735	10706	12488	13676	14507	18428	48129
3 1/2	5 3/8	95000	426891	9656	13306	15622	17113	18157	23079	60366
3 3/4	5 3/4	95000	492321	11871	16477	19241	21084	22373	28453	74516
4	6 1/8	95000	562415	14401	20012	23379	25624	27196	34603	90720
4 1/4	6 1/2	75000	503038	13631	18963	22162	24296	25788	32826	86146
4 1/2	6 7/8	75000	565731	16174	22523	26332	28871	30649	39029	102513
4 3/4	7 1/4	75000	632112	19015	26506	30994	33986	35084	45967	120831
5	7 5/8	75000	702176	22171	30924	36176	39677	42128	53681	141210
5 1/4	8	75000	775920	25657	35812	41906	45967	48810	62214	163761
5 1/2	8 3/8	75000	853347	29491	41190	48209	52809	56164	71606	188592
5 3/4	8 3/4	75000	934466	33609	47061	56116	60472	64222	81899	215815
6	9 1/8	75000	1019244	58267	53608	62662	68748	73015	93133	245538

"u" is the coefficient of friction for the lubricant

Torque Tools, Inc.

22920 WILLOWCREEK STABLES • SPRING, TX. 77389 • PHONE 281-320-8677 • FAX 281-320-8678