

Document Number: TTI4003.00
 Revision/Date: 00/July 19, 2011
 Page: 1 of 1
 Submitted by: Trent Bourgeois
 Issued By: Chris Gulitti



Document Type:
DOCUMENT

DR REFERENCE ONLY Title: **Torque Chart for ASTM A193 Grade B7 Studs (100% Yield)**

NOTES: This torque chart are recommended standard values for the ASTM A193 Grade B7 Studs with a 100% yield and in no way make Torque Tools Inc. liable or responsible for your application. Please consult your fastener and/or lubricant manufacture for specific torque values.

Bolt Diameter	Nut Size	Moly Lube 0.085	Nickel Lube 0.110	Copper Lube 0.100	Oil 0.160	Dry 0.400
3/4	1 1/4	208	342	314	448	1118
7/8	1 7/16	330	544	500	716	1786
1	1 5/8	490	810	746	1066	2664
1 1/8	1 13/16	702	1170	1076	1544	3888
1 1/4	2	966	1622	1492	2150	5440
1 3/8	2 3/16	1288	2180	2000	2894	7356
1 1/2	2 3/8	1674	2850	2614	3792	9274
1 5/8	2 9/16	2142	3668	3364	4890	12520
1 3/4	2 3/4	2676	4602	4218	6144	15776
1 7/8	2 15/16	3292	5682	5204	7596	19550
2	3 1/8	3994	6920	6334	9260	23884
2 1/8	3 5/16	4790	8324	7618	11150	28816
2 1/4	3 1/2	5686	9906	9062	13282	34382
2 3/8	3 11/16	6686	11676	10678	15668	40620
2 1/2	3 7/8	7796	13646	12476	18324	47536
2 3/4	4 1/4	9382	16488	15066	22170	57692
3	4 5/8	13974	21464	19606	28894	75340
3 1/4	5	15470	27352	24976	36856	96258
3 1/2	5 3/8	19312	34226	31244	46158	149032
3 3/4	5 3/4	23742	42169	38482	56906	172292
4	6 1/8	27262	48590	44324	65652	181440
4 1/4	6 1/2	28802	51248	46758	69206	205026
4 1/2	6 7/8	32348	57742	52664	78058	

Document Number: TTI4004.00
 Revision/Date: 00/July 19, 2011
 Page: 1 of 1
 Submitted by: Trent Bourgeois
 Issued By: Chris Gulitti



Document Type:
DOCUMENT

Title:

OR REFERENCE ONLY Torque Chart for ASTM A193 Grade B7 Studs (80% Yield)

NOTES: This torque chart are recommended standard values for the ASTM A193 Grade B7 Studs with a 80% yield and in no way make Torque Tools Inc. liable or responsible for your application. Please consult your fastener and/or lubricant manufacture for specific torque values.

Bolt Diameter	Nut Size	Moly Lube 0.085	Nickel Lube 0.110	Copper Lube 0.100	Oil 0.160	Dry 0.400
3/4	1 1/4	166	272	252	358	894
7/8	1 7/16	264	434	400	572	1428
1	1 5/8	392	648	596	852	2132
1 1/8	1 13/16	560	936	860	1234	3110
1 1/4	2	772	1298	1194	2150	4352
1 3/8	2 3/16	1030	1744	1600	2316	5884
1 1/2	2 3/8	1338	2280	2090	3034	7420
1 5/8	2 9/16	1714	2934	2690	3912	10016
1 3/4	2 3/4	2140	3682	3374	4916	12620
1 7/8	2 15/16	2634	4546	4164	6076	15640
2	3 1/8	3196	5536	5068	7408	19108
2 1/8	3 5/16	3832	6658	6094	8920	23052
2 1/4	3 1/2	4548	7924	7248	10624	27506
2 3/8	3 11/16	5348	9340	8542	12534	32496
2 1/2	3 7/8	6236	10916	9980	14658	38028
2 3/4	4 1/4	7504	13190	12052	17736	46152
3	4 5/8	11178	17170	15684	23114	60272
3 1/4	5	12376	21880	19980	29484	77006
3 1/2	5 3/8	15450	27380	24994	36926	89658
3 3/4	5 3/4	18994	33734	30784	56906	119224
4	6 1/8	21810	38872	35458	52520	137832
4 1/4	6 1/2	23040	40998	37406	55364	145152
4 1/2	6 7/8	25878	46192	42090	62464	164020

Document Number: TTI4005.00
Revision/Date: 00/July 19, 2011
Page: 1 of 1
Submitted by: Trent Bourgeois
Issued By: Chris Gulitti



Torque Tools^{Inc.}
Pneumatic & Hydraulic Bolting Equipment
Sales • Service • Rentals • Calibrations

Document Type:
DOCUMENT

Title:

OR REFERENCE ONLY Torque Chart for ASTM A193 Grade B7 Studs (70% Yield)

NOTES: This torque chart are recommended standard values for the ASTM A193 Grade B7 Studs with a 70% yield and in no way make Torque Tools Inc. liable or responsible for your application. Please consult your fastener and/or lubricant manufacture for specific torque values.

Bolt Diameter	Nut Size	Moly Lube 0.085	Nickel Lube 0.110	Copper Lube 0.100	Oil 0.160	Dry 0.400
3/4	1 1/4	145	239	219	313	782
7/8	1 7/16	231	380	350	501	1250
1	1 5/8	343	567	522	746	1864
1 1/8	1 13/16	491	819	753	1080	2721
1 1/4	2	676	1135	1044	1505	3808
1 3/8	2 3/16	901	1526	1400	2025	5149
1 1/2	2 3/8	1171	1995	1829	2654	6491
1 5/8	2 9/16	1499	2567	2354	3423	8764
1 3/4	2 3/4	1873	3221	2952	4300	11043
1 7/8	2 15/16	2304	3977	3642	5317	13685
2	3 1/8	2795	4844	4433	6482	16718
2 1/8	3 5/16	3353	5826	5332	7805	20171
2 1/4	3 1/2	3980	6934	6343	9297	24067
2 3/8	3 11/16	4680	8173	7474	10367	28434
2 1/2	3 7/8	5457	9552	8733	12826	33275
2 3/4	4 1/4	6567	11541	10546	15519	40384
3	4 5/8	9781	15024	13724	20225	52738
3 1/4	5	10829	19146	17483	25799	67380
3 1/2	5 3/8	13518	23958	21870	32310	84511
3 3/4	5 3/4	16619	29517	26937	39834	10432
4	6 1/8	20161	35873	32730	48444	12700
4 1/4	6 1/2	19083	34013	31026	45956	12060
4 1/2	6 7/8	22643	40419	36864	54640	14351

Document Number: TT14006.00
 Revision/Date: 00/July 19, 2011
 Page: 1 of 1
 Submitted by: Trent Bourgeois
 Issued By: Chris Gulitti



Document Type:
DOCUMENT

Title:
OR REFERENCE ONLY Torque Chart for ASTM A193 Grade B7 Studs (60% Yield)

NOTES: This torque chart are recommended standard values for the ASTM A193 Grade B7 Studs with a 60% yield and in no way make Torque Tools Inc. liable or responsible for your application. Please consult your fastener and/or lubricant manufacture for specific torque values.

Bolt Diameter	Nut Size	Moly Lube 0.085	Nickel Lube 0.110	Copper Lube 0.100	Oil 0.160	Dry 0.400
3/4	1 1/4	125	205	188	269	671
7/8	1 7/16	196	326	300	430	1072
1	1 5/8	294	485	447	640	1598
1 1/8	1 13/16	421	702	645	926	2333
1 1/4	2	579	973	895	1290	3264
1 3/8	2 3/16	773	1308	1200	1736	4414
1 1/2	2 3/8	1004	1704	1568	2275	5564
1 5/8	2 9/16	1285	2200	2018	2934	7512
1 3/4	2 3/4	1605	2761	2530	3686	9465
1 7/8	2 15/16	1975	3409	3122	4557	11730
2	3 1/8	2396	4152	3800	5556	14330
2 1/8	3 5/16	2874	4994	4570	6690	17289
2 1/4	3 1/2	3411	5943	5437	7969	20629
2 3/8	3 11/16	4011	7005	6406	9400	24372
2 1/2	3 7/8	4677	8181	7485	10994	28521
2 3/4	4 1/4	5629	9892	9039	13302	34615
3	4 5/8	8384	12780	11763	17336	45204
3 1/4	5	9282	16411	14985	22113	57754
3 1/2	5 3/8	11587	20535	18746	27694	72438
3 3/4	5 3/4	14245	25300	23089	34143	89419
4	6 1/8	15301	27227	24842	36767	96397
4 1/4	6 1/2	16357	29154	26594	39391	103375
4 1/2	6 7/8	19408	34654	31598	46834	123015

Document Number: TTI4007.00
 Revision/Date: 00/July 19, 2011
 Page: 1 of 1
 Submitted by: Trent Bourgeois
 Issued By: Chris Gulitti



Document Type:
DOCUMENT

OR REFERENCE ONLY Title: **Torque Chart for ASTM A193 Grade B7 Studs (50% Yield)**

NOTES: This torque chart are recommended standard values for the ASTM A193 Grade B7 Studs with a 50% yield and in no way make Torque Tools Inc. liable or responsible for your application. Please consult your fastener and/or lubricant manufacture for specific torque values.

Bolt Diameter	Nut Size	Moly Lube 0.085	Nickel Lube 0.110	Copper Lube 0.100	Oil 0.160	Dry 0.400
3/4	1 1/4	104	171	157	224	559
7/8	1 7/16	165	272	250	358	893
1	1 5/8	245	405	373	533	1332
1 1/8	1 13/16	351	585	538	772	1944
1 1/4	2	483	811	746	1075	2720
1 3/8	2 3/16	644	1090	1000	1447	3678
1 1/2	2 3/8	837	1425	1307	1896	4637
1 5/8	2 9/16	1071	1834	1682	2445	6260
1 3/4	2 3/4	1338	2301	2109	3072	7888
1 7/8	2 15/16	1646	2841	2602	3798	9775
2	3 1/8	1997	3460	3167	4630	11942
2 1/8	3 5/16	2395	4162	3809	5575	14408
2 1/4	3 1/2	2843	4953	4531	6641	17191
2 3/8	3 11/16	3343	5838	5339	7834	20310
2 1/2	3 7/8	3898	6823	6238	9162	23768
2 3/4	4 1/4	4691	8244	7533	11085	28846
3	4 5/8	6987	10732	9803	14447	37670
3 1/4	5	7735	13676	12488	18428	48129
3 1/2	5 3/8	9656	17113	15622	23079	60365
3 3/4	5 3/4	11871	21084	19241	28453	74516
4	6 1/8	14401	24295	23379	32826	86146
4 1/4	6 1/2	13631	25624	22162	34603	90720
4 1/2	6 7/8	16174	28871	26332	39039	102513

Document Number: TTI4008.00
 Revision/Date: 00/July 19, 2011
 Page: 1 of 1
 Submitted by: Trent Bourgeois
 Issued By: Chris Gulitti



Document Type:
DOCUMENT

FOR REFERENCE ONLY Title: **Torque Chart for ASTM A193 Grade B7 Studs (40% Yield)**

NOTES: This torque chart are recommended standard values for the ASTM A193 Grade B7 Studs with a 40% yield and in no way make Torque Tools Inc. liable or responsible for your application. Please consult your fastener and/or lubricant manufacture for specific torque values.

Bolt Diameter	Nut Size	Moly Lube 0.085	Nickel Lube 0.110	Copper Lube 0.100	Oil 0.160	Dry 0.400
3/4	1 1/4	83	136	126	179	447
7/8	1 7/16	132	217	200	286	714
1	1 5/8	196	324	298	426	1066
1 1/8	1 13/16	280	468	430	617	1555
1 1/4	2	386	649	597	1075	2176
1 3/8	2 3/16	515	872	800	1158	2942
1 1/2	2 3/8	669	1140	1045	1517	3710
1 5/8	2 9/16	857	1467	1345	1956	5008
1 3/4	2 3/4	1070	1841	1687	2458	6310
1 7/8	2 15/16	1317	2273	2082	3038	7820
2	3 1/8	1598	2768	2534	3704	9554
2 1/8	3 5/16	1916	3329	3047	4460	11526
2 1/4	3 1/2	2274	3962	3624	5312	13753
2 3/8	3 11/16	2674	4670	4271	6267	16248
2 1/2	3 7/8	3118	5458	4990	7329	19014
2 3/4	4 1/4	3752	6595	6026	8868	23076
3	4 5/8	5589	8585	7842	11557	30136
3 1/4	5	6188	10940	9990	14742	38503
3 1/2	5 3/8	7725	13690	12497	18463	44829
3 3/4	5 3/4	9497	16867	15392	26260	59612
4	6 1/8	10905	19436	17729	27682	68916
4 1/4	6 1/2	11520	20499	18703	28453	72576
4 1/2	6 7/8	12939	23096	21065	31232	82010