

FASTENER TORQUE RECOMMENDATIONS

Listed are the recommended torque values for most ARP fasteners. Recommended torque is equal to 75% of the fastener's yield strength. **THE TORQUE VALUES REPRESENTED HERE ARE INTENDED TO BE FOR GENERAL INFORMATION, NOT FOR SPECIFIC INSTALLATIONS.** In special instances, where supplied instructions deviate from the torque values recommended here, always follow the instructions. Simply read down to

the correct fastener size, then across to find the torque value for your application. Stud torque values are based on the coarse thread yield strength and torque being applied to the fine thread i.e. (7/16-14 into the block and torque applied to 7/16-20 threaded nut). **NOTE: ALWAYS LUBRICATE FASTENERS PRIOR TO APPLYING TORQUE TO ENSURE ACCURATE READINGS.**

Recommended Torque to Achieve Optimum Preload (Clamping Force)

Using ARP Moly Assembly Lubricant or 30-wt. oil - Torque (ft./lbs.) - Preload (lbs.)

Note: For those using Newton/meters as a torquing reference, you must multiply the appropriate ft./lbs. factor by 1.356.

Thread Size and Type	Fastener Tensile Strength (PSI)								
	170,000/180,000 (1,171 N/mm ²)			190,000/200,000 (1,309 N/mm ²)			220,000 (1,515 N/mm ²)		
	Torque w/30 wt. oil <i>not recommended</i>	Torque w/ARP Moly	Preload	Torque w/30 wt. oil <i>not recommended</i>	Torque w/ARP Moly	Preload	Torque w/30 wt. oil <i>not recommended</i>	Torque w/ARP Moly	Preload
1/4" stud	12	10	3,804	14	11	4,280	15	12	4,755
1/4-20	13	10	3,804	14	11	4,280	16	13	4,755
1/4-28	14	11	4,344	16	13	4,887	18	14	5,430
5/16" stud	25	20	6,264	28	22	7,047	32	25	7,830
5/16-18	26	21	6,264	29	23	7,047	32	26	7,830
5/16-24	28	22	6,948	32	25	7,817	35	28	8,685
3/8" stud	45	35	9,276	50	39	10,436	56	44	11,595
3/8-16	46	36	9,276	51	41	10,436	57	45	11,595
3/8-24	50	39	10,512	57	44	11,826	63	49	13,140
7/16" stud	71	56	12,720	80	63	14,310	89	70	15,900
7/16-14	73	58	12,720	82	65	14,310	91	72	15,900
7/16-20	80	62	14,220	90	70	15,998	100	78	17,775
1/2" stud	108	84	16,992	122	95	19,116	135	105	21,240
1/2-13	111	88	16,992	125	99	19,116	138	110	21,240
1/2-20	122	95	19,164	137	107	21,560	152	119	23,955
9/16" stud	156	122	21,792	175	137	24,516	195	152	27,240
9/16-12	159	126	21,792	179	142	24,516	199	158	27,240
9/16-18	174	136	24,312	196	153	27,351	217	170	30,390
5/8" stud	214	167	27,072	241	187	30,456	268	208	33,840
5/8-11	220	174	27,072	247	196	30,456	275	217	33,840
5/8-18	243	189	30,660	273	212	34,493	303	236	38,325
6mm stud	10	9	2,900	—	—	—	—	—	—
6mm x 1.0	11	9	2,900	—	—	—	—	—	—
8mm stud	25	20	6,250	28	22	7,050	32	25	7,830
8mm x 1.25	25	20	6,250	28	22	7,050	—	—	—
10mm stud	54	42	10,600	70	60	12,015	68	53	13,350
10mm x 1.25	54	42	10,600	—	—	—	—	—	—
10mm x 1.50	50	38	9,500	—	—	—	—	—	—
11mm stud	80	63	14,220	90	71	15,998	100	79	17,775
12mm stud	97	77	15,540	109	86	17,483	122	96	19,425