

Recommended Torque to Achieve Optimum Preload
(clamping force) Using ARP Moly Assembly Lubricant or
30-wt oil

Torque = (ft/lbs.), Preload = (lbs.)

Thread Size and Type	Fastener Tensile Strength (PSI)								
	170,000 (1171N/mm ²)			190,000 (1309 N/mm ²)			220,000 (1515N/mm ²)		
	Torque w/30wt oil	Torque w/ARP Moly	Preload	Torque w/30wt oil	Torque w/ARP Moly	Preload	Torque w/30wt oil	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	23,995
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	38,840
5/8-11	220	174	27,072	247	196	30,456	275	217	38,840
5/8-18	243	189	30,660	273	212	34,493	303	236	38,325
10mm Stud	54	42	10,680	61	48	12,015	68	53	13,350
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