

FED SUP CLASS  
5340NO OF COILS FROM END OF  
INSERT TO CENTER OF GRIP  
COIL OR COILSK NO OF SIDES  
PER GRIP COILEND OF COIL MAY BE  
SQUARE OR ANGULAR

NO OF FREE COILS

L NO OF GRIP COILS

FREE OUTER DIA

OF WIRE SECTION TO BE  
SQUARE WITH AXIS WITHIN  $50^\circ$ NOTCH TO BE ON TOP  
FACE OF FIRST COILTO BE MEASURED  
 $30^\circ$  FROM TANGFIRST COIL DIA TO MEET  
FREE DIA  $210^\circ$  FROM TANG  
WITHIN  $20^\circ$ STAGGERED GRIP LOCATIONS  
OF LOCKING SIDESNOTCH TO BE ON EDGE  
OF FIRST COIL

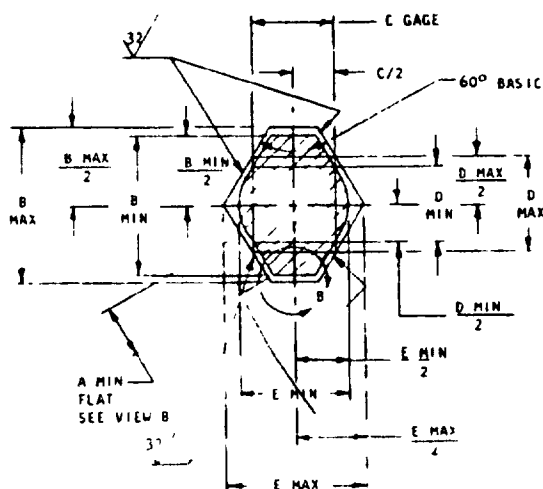
P TOTAL NO OF SIDES

S NO OF GRIP  
COILS

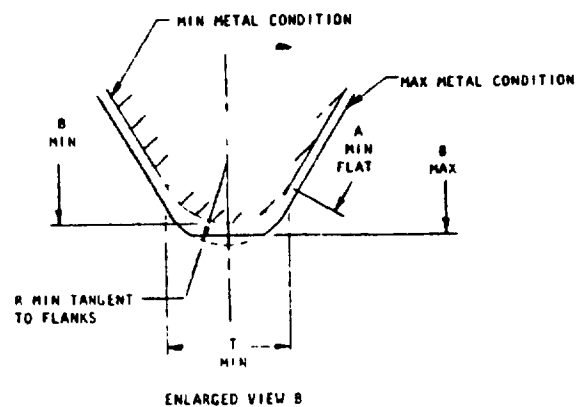
OPTIONAL DESIGN FEATURES

PIN

INSERT

NOTCH  
(OPTIONAL ON FACE  
OR SIDE OF COIL)TANG SHAPE OPTIONAL SHALL  
FIT WITHIN  $\frac{1}{16}$ " SLOT OF PIN  
DIA  $\frac{1}{16}$ "CENTRAL TO  $\frac{1}{2}$ " WITHIN .002 FOR SIZE 138  
TO 4375 INCL AND .005 FOR SIZE 500 AND  
OVER

SECT A-A



ENLARGED VIEW B

(E) FOR CHANGES SEE SHEETS 4 AND 5

This military standard is approved for use by all Departments  
and Agencies of the Department of Defense. Selection for all  
new engineering and design applications and for repetitive use  
shall be made from this document, when applicable.

P A USAF - 11

Other Cost  
Army - AV

TITLE

INSERT SCREW THREAD COARSE AND FINE SCREW LOCKING  
MELICAL COIL CRES

MILITARY STANDARD

MS21209

PROCUREMENT SPECIFICATION  
NIL 1 8846

SUPERSEDES

SHEET 1 OF 5

DD FORM 672-1 (Coordinated)

EDITION OF 1 SEP 67 MAY BE USED

1 SEP 67 5340 1270

APPROVED 17 JUL 61 REVISED A 12 JUN 66 B 20 JUN 66 C 28 JUN 71 D 20 NOV 72 E 21 FEB 78

## COARSE THREAD SERIES

FED SUP CLASS  
5340

1 DIAMETER NOMINAL LENGTH						1 5 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO	LENGTH (REF)	WEIGHT LBS/100	M +1 COIL	N +1/4 COIL	DASH NO	LENGTH (REF)	WEIGHT LBS/100	M +1 COIL	N +1/4 COIL	
086-56	C0210	086	0051	1 500	3 00	C0215	129	0084	2 625	5 250	
099-48	C0310	099	0077	1 4375	2 875	C0315	148	0125	2 500	5 000	
112-40	C0410	112	0121	1 375	2 750	C0415	168	0196	2 375	4 750	
125-40	C0510	125	0154	1 625	3 250	C0515	188	0250	2 250	5 500	
138-32	C0610	138	0243	1 375	2 750	C0615	207	0384	2 375	4 750	
164-32	C0810	164	0355	1 750	3 500	C0815	246	0556	3 000	6 000	
190-24	C1-10	190	0573	1 4375	2 875	C1-15	285	0899	2 500	5 000	
216-24	C2-10	216	077	1 750	3 500	C2-15	324	119	3 000	6 000	
250-20	C4-10	250	145	1 6875	3 375	C4-15	375	196	2 875	5 750	
3125-18	C5-10	3125	232	2 000	4 000	C5-15	469	369	3 3125	6 625	
375-16	C6-10	375	391	2 1875	4 375	C6-15	562	625	3 625	7 250	
4375-14	C7-10	4375	667	2 250	4 500	C7-15	656	943	3 6875	7 375	
500-13	C8-10	500	794	2 4375	4 875	C8-15	750	1 316	3 9375	7 875	
5625-12	C9-10	5625	1 235	2 5625	5 125	C9-15	844	1 961	4 125	8 250	
625-11	C1010	625	1 515	2 6250	5 250	C1015	938	2 439	4 250	8 500	
750-10	C1210	750	2 778	2 9375	5 875	C1215	1 125	4 000	4 6875	9 375	
875-9	C1410	875	4 545	3 125	6 250	C1415	1 312	6 250	5 000	10 000	
1 000-8	C1610	1 000	5 882	3 1875	6 375	C1615	1 500	9 091	5 0625	10 125	
1 125-7	C1810	1 125	8 392	3 0625	6 125	C1815	1 688	12 928	4 9375	9 875	
1 250-7	C2010	1 250	10 487	3 500	7 000	C2015	1 875	16 070	5 625	11 250	
1 375-6	C2210	1 375	14 505	3 250	6 500	C2215	2 062	22 264	5 250	10 500	
1 500-6	C2410	1 500	17 563	3 625	7 250	C2415	2 250	26 915	5 750	11 500	

2 DIAMETER NOMINAL LENGTH						2 5 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO	LENGTH (REF)	WEIGHT LBS/100	M +1 COIL	N +1/4 COIL	DASH NO	LENGTH (REF)	WEIGHT LBS/100	M +1 COIL	N +1/4 COIL	
086-56	C0220	172	0117	3 6875	7 375	C0225	215	015	5 9375	9 625	
099-48	C0320	198	0174	3 625	7 250	C0325	248	0224	5 750	9 375	
112-40	C0420	224	0272	3 375	6 750	C0425	280	0348	5 500	8 875	
125-40	C0520	250	0345	3 875	7 750	C0525	312	044	6 125	10 000	
138-32	C0620	276	0525	3 4375	6 875	C0625	345	0666	5 4375	8 875	
164-32	C0820	328	0776	4 1875	8 375	C0825	410	1008	6 5625	10 750	
190-24	C1-20	380	1330	3 5625	7 125	C1-25	475	172	5 6875	9 250	
216-24	C2-20	432	172	4 1875	8 375	C2-25	540	208	6 4375	10 625	
250-20	C4-20	500	308	4 000	8 000	C4-25	625	385	6 375	10 375	
3125-18	C5-20	625	510	4 625	9 250	C5-25	781	658	7 250	11 875	
375-16	C6-20	750	867	5 000	10 000	C6-25	938	1 064	7 875	12 875	
4375-14	C7-20	875	1 250	5 125	10 250	C7-25	1 094	1 667	8 000	13 125	
500-13	C8-20	1 000	1 852	5 500	11 000	C8-25	1 250	2 273	8 625	14 125	
5625-12	C9-20	1 125	2 632	5 750	11 500	C9-25	1 406	3 226	9 000	14 750	
625-11	C1020	1 250	3 448	5 875	11 750	C1025	1 562	4 348	9 125	15 000	
750-10	C1220	1 500	5 263	6 500	13 000	C1225	1 875	6 667	10 000	16 500	
875-9	C1420	1 750	8 333	6 875	13 750	C1425	2 188	10 000	10 625	17 500	
1 000-8	C1620	2 000	12 500	7 000	14 000	C1625	2 500	14 286	10 750	17 750	
1 125-7	C1820	2 250	17 464	6 8125	13 625	C1825	2 812	22 000	10 6875	17 500	
1 250-7	C2020	2 500	21 653	7 6875	15 375	C2025	3 125	27 236	11 8125	19 500	
1 375-6	C2220	2 750	30 122	7 1875	14 375	C2225	3 438	37 981	11 1875	18 375	
1 500-6	C2420	3 000	36 268	7 9375	15 875	C2425	3 750	45 620	12 1875	20 125	

3 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO	LENGTH (REF)	WEIGHT LBS/100	M +1 COIL	N +1/4 COIL
086-56	C0230	258	0183	8 1875	11 875
099-48	C0330	297	0271	7 875	11 500
112-40	C0430	336	0423	7 500	10 875
125-40	C0530	375	0536	8 375	12 250
138-32	C0630	414	0807	7 4375	10 750
164-32	C0830	492	125	9 0625	13 250
190-24	C1-30	570	219	7 8125	11 375
216-24	C2-30	648	279	8 9375	13 125
250-20	C4-30	750	490	8 750	12 750
3125-18	C5-30	938	806	10 000	14 625
375-16	C6-30	1 125	1 316	10 875	15 750
4375-14	C7-30	1 312	2 000	11 000	16 125
500-13	C8-30	1 500	2 857	11 625	17 125
5625-12	C9-30	1 688	4 000	12 125	17 875
625-11	C1030	1 875	5 263	12 500	13 375
750-10	C1230	2 250	8 333	13 625	20 125
875-9	C1430	2 625	12 500	14 375	21 250
1 000-8	C1630	3 000	16 670	14 625	21 625
1 125-7	C1830	3 375	26 536	14 4375	21 250
1 250-7	C2030	3 750	32 819	16 0625	23 750
1 375-6	C2230	4 125	45 839	15 0625	22 250
1 500-6	C2430	4 500	54 972	16 5625	24 500

P.A. USAF - 11	TITLE	MILITARY STANDARD
Other Cost	INSERT SIZE THREAD LBS PER COIL HELICAL COIL CRES	MS21209
Army - AV		
PROCUREMENT SPECIFICATION	SUPERSEDES	SHEET OF
MIL-1-8846		2

DD FORM 672-1 (Coordinated)

EDITION OF 1 SEP 57 MAY BE USED

APPROVED 17 JUL 61 REVISE (E) 21 Feb 78

Review  
Activities

Army - MI, JR, EL  
Air Force - 99  
DLA - 13

User  
Activities

Army - AS, OS  
Air Force -  
DLA -

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FED SUP CLASS

5340

## FINE THREAD SERIES

1 5 DIAMETER NOMINAL LENGTH						1 5 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO	LENGTH (REF)	WEIGHT LBS/100	N +1 COIL	N +1/4 COIL	DASH NO	LENGTH (REF)	WEIGHT LBS/100	N +1 COIL	N +1/4 COIL	
099-56	F0310	099	0051	1 6875	3 375	F0315	148	0084	2 8125	5 625	
112-48	F0410	112	0099	1 6875	3 375	F0415	168	0160	2 8125	5 625	
138-40	F0610	138	020	1 750	3 500	F0615	207	0304	3 000	6 000	
164-36	F0810	164	0325	1 9375	3 875	F0815	246	0502	1 250	6 500	
190-32	F1-10	190	0474	2 0625	4 125	F1-15	285	0784	3 4375	6 875	
250-28	F4-10	250	109	2 500	5 000	F4-15	375	155	4 125	8 250	
3125-24	F5-10	312	180	2 750	5 500	F5-15	469	284	4 4375	8 875	
375-24	F6-10	375	259	3 4375	6 875	F6-15	562	420	5 500	11 000	
4375-20	F7-10	438	459	3 3125	6 625	F7-15	656	699	5 3125	10 625	
500-20	F8-10	500	595	3 9375	7 875	F8-15	750	909	6 1875	12 375	
5625-18	F9-10	562	826	4 000	8 000	F9-15	844	1 266	6 250	12 500	
625-18	F1010	625	1 010	4 500	9 000	F1015	938	1 562	7 0625	14 125	
750-16	F1210	750	1 695	4 875	9 750	F1215	1 125	2 564	7 5625	15 125	
875-14	F1410	875	2 564	4 9375	9 875	F1415	1 312	4 000	7 750	15 500	
1 000-12	F1610	1 000	3 875	4 8125	9 625	F1615	1 500	6 063	7 500	15 000	
1 125-12	F1810	1 125	4 917	5 5625	11 125	F1815	1 688	7 572	8 625	17 250	
1 250-12	F2010	1 250	6 254	6 250	12 500	F2015	1 875	9 502	9 6875	19 375	
1 375-12	F2210	1 375	7 359	6 875	13 750	F2215	2 062	11 276	10 6875	21 375	
1 500-12	F2410	1 500	8 799	7 625	15 250	F2415	2 250	13 850	11 750	23 500	

2 5 DIAMETER NOMINAL LENGTH						2 5 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO	LENGTH (REF)	WEIGHT LBS/100	N +1 COIL	N +1/4 COIL	DASH NO	LENGTH (REF)	WEIGHT LBS/100	N +1 COIL	N +1/4 COIL	
099-56	F0320	198	0117	4 000	8 000	F0325	248	0182	6 375	10 375	
112-48	F0420	224	0222	3 9375	7 875	F0425	280	0285	6 3125	10 250	
138-40	F0620	276	0408	4 1875	8 375	F0625	345	0512	6 5625	10 750	
164-36	F0820	328	0680	4 5625	9 125	F0825	410	0857	7 0625	11 625	
190-32	F1-20	380	112	4 750	9 500	F1-25	475	140	7 500	12 000	
250-28	F4-20	500	212	5 6875	11 375	F4-25	625	276	8 8125	14 500	
3125-24	F5-20	625	397	6 125	12 250	F5-25	781	490	9 500	15 625	
375-24	F6-20	750	553	7 500	15 000	F6-25	938	709	11 625	19 125	
4375-20	F7-20	875	917	7 3125	14 625	F7-25	1 094	1 250	11 1875	18 500	
500-20	F8-20	1 000	1 234	8 4375	16 875	F8-25	1 250	1 563	12 9375	21 375	
5625-18	F9-20	1 125	1 695	8 5625	17 125	F9-25	1 406	2 128	13 1875	21 750	
625-18	F1020	1 250	2 083	9 625	19 250	F1025	1 562	2 632	14 625	24 250	
750-16	F1220	1 500	3 448	10 3125	20 625	F1225	1 875	4 348	15 6875	26 000	
875-14	F1420	1 750	5 263	10 5625	21 125	F1425	2 188	6 667	16 0625	26 625	
1 000-12	F1620	2 000	8 188	10 250	20 500	F1625	2 500	10 406	15 750	26 000	
1 125-12	F1820	2 250	10 227	11 6875	23 375	F1825	2 812	12 882	17 8125	29 500	
1 250-12	F2020	2 500	12 750	13 125	26 250	F2025	3 125	15 998	19 875	33 000	
1 375-12	F2220	2 750	15 194	14 4375	28 875	F2225	3 438	19 111	22 0625	36 500	
1 500-12	F2420	3 000	18 571	15 5125	31 625	F2425	3 750	23 352	24 0625	39 875	

3 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO	LENGTH (REF)	WEIGHT LBS/100	N +1 COIL	N +1/4 COIL
099-56	F0330	297	0234	8 625	12 625
112-48	F0430	336	0346	8 5625	12 500
138-40	F0630	414	0616	9 0625	13 250
164-36	F0830	492	1034	9 6875	14 250
190-32	F1-30	570	170	10 125	14 875
250-28	F4-30	750	338	11 9375	17 625
3125-24	F5-30	938	602	12 875	19 000
375-24	F6-30	1 125	862	15 625	23 125
4375-20	F7-30	1 312	1 493	15 1875	22 500
500-20	F8-30	1 500	1 857	17 4375	25 875
5625-18	F9-30	1 688	2 564	17 6875	26 250
625-18	F1030	1 875	3 030	19 750	29 375
750-16	F1230	2 250	5 263	21 1875	31 500
875-14	F1430	2 625	7 692	21 6875	32 250
1 000-12	F1630	3 000	12 815	21 250	31 500
1 125-12	F1830	3 375	15 536	24 0625	35 750
1 250-12	F2030	3 750	19 246	26 750	39 875
1 375-12	F2230	4 125	23 028	29 5625	44 000
1 500-12	F2430	4 500	26 203	32 3125	48 125

Review  
Activities  
Army - MI, AR, EL  
Navy -  
Air Force - 99  
DLA - 15

User  
Activities  
Army - AS, OS  
Navy -  
Air Force -  
DLA -

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PA US-F - 11	TITLE	MILITARY STANDARD
Other Cost Army - AV	INS-PT. SCREW THREAD, COARSE AND FINE SCREW JACKING HELICAL COIL LINES	MS 21209
PROCUREMENT SPECIFICATION MIL-I-8346	SUPERSEDES	SHEET OF 3

DD FORM 672-1 (Coordinated)

EDITION OF 1 SEP 67 MAY BE USED

APPROVED 17 JUL 61 REVISED E 21 Feb 78

FED SUP CLASS  
5340

## INSERT DIMENSIONS COARSE THREAD

NOMINAL THREAD SIZE	A MIN	B MIN	C MAX	D GAGE	E MIN	F MAX	G MIN	H MAX	I MIN	J MAX
086-56	.0027	.0161	.0193	.00893	.0112	.0116	.0126	.0156	.110	.115
099-48	.0043	.0196	.0226	.01042	.01313	.01353	.0152	.0182	.128	.137
112-40	.0068	.0241	.0271	.0125	.01584	.01624	.0189	.0219	.144	.159
125-40	.0068	.0241	.0271	.0125	.01584	.01624	.0189	.0219	.158	.173
138-32	.0076	.0295	.0338	.01563	.01985	.02030	.0233	.0273	.178	.193
164-32	.0076	.0295	.0338	.01563	.01985	.02030	.0233	.0273	.205	.220
190-24	.0120	.0410	.0449	.02083	.02656	.02706	.0305	.0365	.244	.259
216-24	.0120	.0410	.0449	.02083	.02656	.02706	.0305	.0365	.270	.285
250-20	.0164	.050	.0540	.02500	.03198	.03248	.0378	.0438	.310	.330
3125-18	.0176	.056	.060	.02778	.03528	.03608	.0416	.0486	.380	.400
375-16	.0215	.0636	.0677	.03125	.04009	.04059	.0477	.0547	.452	.472
4375-14	.0267	.0730	.0770	.03571	.04689	.04739	.0545	.0625	.526	.551
500-13	.0273	.0758	.0829	.03846	.04946	.04996	.0593	.0673	.597	.622
5625-12	.0334	.0861	.0900	.04187	.05363	.05413	.0649	.0729	.669	.694
625-11	.0351	.0909	.0980	.04545	.05855	.05905	.0715	.0795	.742	.767
750-10	.0462	.1007	.1079	.05000	.06445	.06495	.0795	.0875	.881	.906
875-9	.0466	.1124	.1199	.05556	.07167	.07217	.0892	.0972	1.022	1.052
1 000-8	.0544	.1264	.1350	.06250	.08069	.08119	.1004	.1094	1.166	1.196
1 125-7	.0645	.1451	.1546	.07143	.09229	.09279	.1160	.1250	1.315	1.355
1 250-7	.0645	.1451	.1546	.07143	.09229	.09279	.1160	.1250	1.443	1.483
1 375-6	.0775	.1695	.1799	.08333	.10775	.10825	.1368	.1458	1.598	1.643
1 500-6	.0775	.1695	.1799	.08333	.10775	.10825	.1368	.1458	1.727	1.772

NOMINAL THREAD SIZE	G MIN	H MAX	I MIN	J MAX	K MIN	L MAX	P MIN	S +1/4 COIL	R MIN	T MIN
086-56	.067	.085	.75°	.150°	.103	.111	4	1	.0032	.0056
099-48	.070	.090	.75°	.150°	.128	.137	4	1	.0038	.0065
112-40	.070	.105	.25°	.100°	.144	.159	4	1	.0045	.0073
125-40	.078	.108	.25°	.100°	.158	.173	4	1	.0045	.0078
138-32	.091	.135	.25°	.100°	.178	.193	4	1	.0056	.0098
164-32	.117	.152	.20°	.100°	.205	.220	4	1	.0056	.0098
190-24	.138	.183	.20°	.90°	.244	.259	4	1	.0075	.0130
216-24	.154	.189	.20°	.90°	.270	.285	4	1	.0075	.0130
250-20	.187	.238	.20°	.80°	.310	.330	5	1	.0090	.0156
3125-18	.227	.291	.20°	.80°	.380	.400	5	1	.0100	.0174
375-16	.271	.354	.20°	.80°	.452	.472	6	1	.0113	.0195
4375-14	.318	.416	.20°	.80°	.526	.551	6	1	.0129	.0223
500-13	.349	.463	.20°	.80°	.597	.622	6	1	.0139	.0240
5625-12	.401	.521	.20°	.80°	.656	.676	6	1	.0150	.0260
625-11	.428	.572	.20°	.80°	.727	.747	6	1	.0164	.0284
750-10	.453	.635	.60°	.120°	.840	.885	6	1	.0180	.0312
875-9	.500	.734	.60°	.120°	.991	1.026	6	1	.0200	.0347
1 000-8	.526	.781	.60°	.120°	1.115	1.170	6	1	.0226	.0391
1 125-7	.557	.843	.60°	.120°	1.260	1.315	6	1	.0258	.0446
1 250-7	.629	.937	.60°	.120°	1.366	1.416	6	1	.0258	.0446
1 375-6	.689	1.093	.60°	.120°	1.545	1.598	7	1	.0301	.0521
1 500-6	.811	1.187	.60°	.120°	1.626	1.727	7	1	.0301	.0521

NOMINAL THREAD SIZE	X + .001 - .000	Y + .001 - .000	Z + .000 - .001
086-56	-	-	-
099-48	-	-	-
112-40	-	-	-
125-40	-	-	-
138-32	.045	.020	.101
164-32	.045	.020	.127
190-24	.061	.020	.142
216-24	.064	.025	.168
250-20	.073	.028	.193
3125-18	.082	.034	.250
375-16	.093	.039	.302
4375-14	.112	.056	.355
500-13	.125	.076	.411
5625-12	.142	.086	.468
625-11	.156	.114	.521
750-10	.186	.117	.625
875-9	.186	.156	.750
1 000-8	.250	.156	.844
1 125-7	-	-	-
1 250-7	-	-	-
1 375-6	-	-	-
1 500-6	-	-	-

NOMINAL THREAD SIZE	X + .001 - .000	Y + .001 - .000	Z + .000 - .001
099-56	-	-	-
112-48	-	-	-
138-40	-	-	-
164-36	-	-	-
190-32	.052	.020	.153
250-28	.060	.020	.208
3125-24	.070	.024	.265
375-24	.070	.024	.328
4375-20	.088	.046	.380
500-20	.090	.046	.422
5625-18	.100	.066	.500
625-18	.100	.089	.563
750-16	.109	.087	.679
875-14	.125	.135	.794
1 000-12	-	-	-
1 125-12	-	-	-
1 250-12	-	-	-
1 375-12	-	-	-
1 500-12	-	-	-

P.A. USAF - 11

Other Cust

Army - AV

TITLE

INSERT SCREW THREAD COARSE AND FINE SCREW LOCKING  
HELICAL COIL CRES

MILITARY STANDARD

MS21209

PROCUREMENT SPECIFICATION  
MIL-1-8846

SUPERSEDES

SHEET 4 OF

DD FORM 672-1

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED 17 JUL 61 REVISED (E) 21 Feb 78

Review: Army - AF, AR, EL  
Activities: Navy -  
Air Force - 99  
DLA - 13

User: Army - AS, OS  
Activities: Navy Force -  
DLA -

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document, when applicable.



FED SUP CLASS  
8340

## INSERT DIMENSIONS FINE THREAD

NOMINAL THREAD SIZE	A MIN	B MIN MAX	GAGE MIN MAX	D MIN MAX	E MIN MAX	F MIN MAX
099-56	0027	0163	0103	00893	0112	0116
112-48	0041	0196	0226	01042	01313	01351
138-40	0068	0241	0271	01250	01584	01624
164-36	0059	0261	0301	01389	01764	01804
190-32	0076	0295	0338	01563	01985	02030
250-28	0085	0347	0387	01786	02270	02320
3125-24	0120	0410	0449	02083	02656	02706
375-24	0120	0410	0449	02083	02656	02706
4375-20	0164	500	0540	02500	03198	03248
500-20	0164	500	0540	02500	03198	03248
5625-18	0176	0560	0600	02778	03558	03608
625-18	0176	0560	0600	02778	03558	03608
750-16	0215	0636	0677	03125	04009	04059
875-14	0267	0730	0770	03571	04589	04639
1 000-12	0334	0861	0900	04167	05363	05413
1 125-12	0334	0861	0900	04167	05363	05413
1 250-12	0334	0861	0900	04167	05363	05413
1 375-12	0334	0861	0900	04167	05363	05413
1 500-12	0334	0861	0900	04167	05363	05413

NOMINAL THREAD SIZE	G MIN MAX	H MIN MAX	J MIN MAX	K MIN MAX	L MIN MAX	P MIN MAX	S +1/4 COIL	R MIN MAX	T MIN MAX
099-56	072	090	75	150	131	146	4	1	0032
112-48	060	095	75	150	147	162	4	1	0038
138-40	100	130	25	100	173	193	4	1	0045
164-36	117	147	20	100	204	224	4	1	0050
190-32	131	182	15	90	236	256	5	1	0056
250-28	178	244	15	75	306	326	5	1	0064
3125-24	209	291	15	75	380	400	6	2	0075
375-24	240	353	15	75	448	468	6	2	0075
4375-20	287	416	15	75	524	549	6	2	0090
500-20	318	479	15	75	592	617	6	2	0090
5625-18	354	541	15	75	666	691	6	2	0100
625-18	386	588	15	75	733	758	6	2	0100
750-16	464	557	15	75	876	901	7	2	0113
875-14	495	604	15	75	1 021	1 051	8	2	0129
1 000-12	526	728	15	75	1 169	1 199	8	2	0150
1 125-12	557	819	10	70	1 304	1 334	8	2	0150
1 250-12	679	941	10	70	1 344	1 374	8	2	0150
1 375-12	689	1 001	10	70	1 469	1 504	10	2	0150
1 500-12	811	1 123	10	70	1 594	1 629	11	2	0150

NOMINAL LENGTH NOMINAL LENGTH EQUALS MINIMUM THROUGH HOLE LENGTH WITHOUT COUNTERSINK AND WITH INSERT LOCATED 1/4 TO 1/2  
THREAD PITCH BELOW TOP SURFACE  
THE NUMBER OF FREE COILS OF THE INSERT ARE COUNTED 90° FROM TANG FOR ALL SIZES  
MATERIAL STEEL, CORROSION RESISTANT, SEE PROCUREMENT SPECIFICATION  
THREAD INSERT, WHEN ASSEMBLED IN BASIC TAPPED HOLE AS SPECIFIED ON STANDARD MS33537, SHALL PRODUCE A FINISHED  
THREAD MEETING THE REQUIREMENTS OF HANDBOOK H-28 AND SHALL ACCEPT EXTERNAL THREADED PARTS WHICH ARE THREADED  
TO MIL-S-7742 OR MIL-S-8879

SURFACE ROUGHNESS: ANSI B46 1-1962  
DIMENSIONS IN INCHES, APPLY BEFORE PLATING UNLESS OTHERWISE SPECIFIED, TOLERANCES LINEAR DIMENSIONS ± .010 ANGULAR  
DIMENSIONS ± 5°  
COLOR IDENTIFICATION (a) BARE INSERTS - DYED RED  
(b) DRY FILM LUBRICATED - DARK GREY  
(c) CADMIUM PLATED - OLIVE DRAB

LUBRICANT DRY FILM LUBRICANT SHALL BE IN ACCORDANCE WITH MIL-L-8937  
PLATING CADMIUM PLATING SHALL BE IN ACCORDANCE WITH QQ-P-416, TYPE II, EXCEPT THE THICKNESS SHALL BE A MAXIMUM OF 0.00  
ADD THE LETTER "L" AFTER THE PART NUMBER TO DESIGNATE A DRY FILM LUBRICANT COATED INSERT  
ADD THE LETTER "P" AFTER THE PART NUMBER TO DESIGNATE A CADMIUM PLATED INSERT  
THE MS PART NUMBER CONSISTS OF THE BASIC MS NUMBER PLUS THE DASH NUMBER  
EXAMPLE OF PART NUMBER MS21209C0415 = A SCREW LOCKING HELICAL COIL INSERT (MS21209), COARSE THREAD (C), NUMBER 4 THREAD  
DIAMETER (.04), 1.5 DIA NOMINAL LENGTH (15)  
MS21209F4-20L = A SCREW LOCKING HELICAL COIL INSERT (MS21209), FINE THREAD (F), 0.0250-28 THREAD  
DIAMETER (.04), WITH A DRY FILM LUBRICANT (L)  
MS21209F1225P = A SCREW LOCKING HELICAL COIL INSERT (MS21209), FINE THREAD (F), 0.0750-16 THREAD  
DIAMETER (.12), 2.5 DIAMETER NOMINAL LENGTH (25), WITH CADMIUM PLATING (P)

THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN  
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID

P A USAF - II Other Cost Army - AV	INTERNATIONAL INTEREST	TITLE INSERT, SCREW THREAD, COARSE AND FINE, SCREW LOCKING HELICAL COIL CRES	MILITARY STANDARD <b>MS21209</b>
PROCUREMENT SPECIFICATION MIL-1-8646		SUPERSEDES	SHEET 5 OF 5

This military standard is approved for use by all Departments and activities of the Department of Defense and for competitive use shall be made from this document, when applicable.  
 Review Activities  
 Army - MI, AR, EL  
 Navy - AS, OS  
 Air Force -  
 DLA -  
 User Activities  
 Army - MI, AR, EL  
 Navy - AS, OS  
 Air Force -  
 DLA -