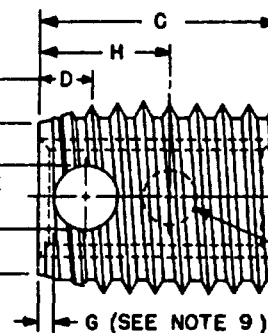
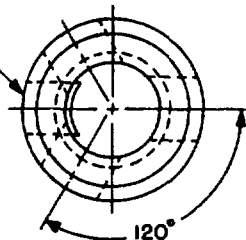
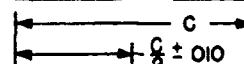
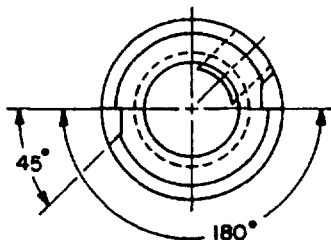


FED SUP CLASS
5340NYLON LOCKING
ELEMENT

SEE NOTE 5

CHAMFER
(SEE NOTE 6)NYLON LOCKING
ELEMENT

SEE NOTE 5

CHAMFER
(SEE NOTE 6)NYLON LOCKING
ELEMENT

2 CUTTING FLUTES (SEE NOTE 13)

OPTIONAL DESIGNS

NOTES:

- (F) 1. **MATERIAL:** Carbon steel, AISI 1117, in accordance with Fed. Std. No. 66. Corrosion-resisting steel, type 303 and 303MA, annealed condition, hot or cold finish (as rolled) in accordance with Fed. Std. No. 66.
2. **HEAT TREATMENT:** Carbon steel inserts shall be case hardened to a depth of .003-.005 inch with a hardness of Rockwell 15N75 minimum.
3. **PROTECTIVE COATING:** Carbon steel inserts shall be cadmium plated in accordance with QQ-P-416, Type II, Class 3. Corrosion-resisting steel inserts shall be passivated in accordance with QQ-P-35.
4. **THREADS:** Internal threads shall be in accordance with Screw Thread Standards for Federal Services, Handbook H28. External threads shall be self-tapping and have a 60° thread approximating American National form.
5. **DIMENSIONS:** All dimensions are in inches. "D" dimension refers to the tapered portion of the external thread (pilot length). "E" dimension refers to the small end of the tapered portion of the external thread (pilot diameter).
6. **CHAMFER:** Chamfer internal and external threads to one thread length.
7. **PART NUMBER:** The MS part number consists of the MS number, plus the dash number. Example: MS35914-125. For internal thread lock, add "L" after the dash number. Example: MS35914-125L.
8. **LOCKING ELEMENT:** Nylon locking element is available only for inserts having a specified "H" dimension.
9. "G" dimension equals approximately 60% of external thread pitch.
10. Thin wall inserts are supplied in corrosion-resisting steel only. No internal lock is available.
11. Referenced documents shall be of the issue in effect on date of invitations for bid.
12. For design feature purposes, this standard takes precedence over procurement documents referenced herein.
13. Cutting flutes shall extend beyond the 2nd full thread.

P. A.	WC	TITLE	MILITARY STANDARD
Other Cust.	99 (F)	INSERT, SCREW THREAD- THREAD CUTTING	MS35914
PROCUREMENT SPECIFICATION MIL-I-45916	SUPERSEDES		SHEET 1 OF 3

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5340-1217

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.

REVIEWER AR, AT, AV, EA, IS
USER MI

APPROVED 16 OCT 1957 REVISED (A) 23 JUN 1960 (B) 23 APR 1965 (C) 25 APR 1969 (D) 21 JUL 1972 (E) 24 JUL 1975 (F) 20 SEPT 77

TABLE I REGULAR WALL								FED SUP CLASS 5340	
DASH NO.*		INTERNAL THREAD (-3B)	EXTERNAL THREAD (SEE NOTE 4)	C LENGTH ±.010	D		E DIA +.002 -.008	F DIA ±.010	H ±.010
CARBON STEEL	COR RES STEEL				MAX	MIN			
125	141	.086-56UNC	9/64-48	.188	.050	.040	.123	.055	.109
201	251			.156	.050	.040		.055	.094
202	252			.125	.040	.032		.047	----
126	142	.086-64UNF	9/64-48	.188	.050	.040	.123	.055	.109
101	143	.112-40UNC	11/64-40	.234	.054	.044	.148	.062	.125
203	253			.187	.054	.044		.062	.115
204	254			.156	.049	.039		.055	----
102	144	.112-48UNF	11/64-40	.234	.054	.044	.148	.062	.125
103	145	.138-32UNC	7/32-32	.281	.068	.058	.191	.078	.156
205	255			.218	.068	.058		.078	.125
206	256			.187	.056	.048		.070	----
104	146	.138-40UNF	7/32-32	.281	.068	.058	.191	.078	.156
105	147	.164-32UNC	1/4-32	.328	.068	.058	.222	.078	.188
207	257			.250	.068	.058		.078	.135
208	258			.218	.056	.048		.070	----
106	148	.164-36UNF	1/4-32	.328	.068	.058	.222	.078	.188
107	149	.190-24UNC	19/64-24	.375	.092	.082	.259	.109	.219
108	150	.190-32UNF	19/64-24	.375	.092	.082	.259	.109	.219
211	261			.296	.092	.082		.109	.172
212	262			.250	.069	.059		.094	----
109	151	.250-20UNC	3/8-20	.484	.109	.097	.332	.125	.281
110	152	.250-28UNF	3/8-20	.484	.109	.097	.332	.125	.281
215	265			.375	.109	.097		.125	.203
216	266			.312	.099	.089		.109	----
111	153	.3125-18UNC	15/32-18	.562	.123	.110	.420	.141	.312
112	154	.3125-24UNF	15/32-18	.562	.123	.110	.420	.141	.312
219	269			.469	.123	.110		.141	.250
220	270			.375	.113	.102		.125	----
113	155	.375-16UNC	9/16-16	.687	.137	.121	.510	.156	.375
114	156	.375-24UNF	9/16-16	.687	.137	.121	.510	.156	.375
223	273			.562	.137	.121		.156	.281
224	274			.437	.126	.113		.141	----
115	157	.4375-14UNC	41/64-14	.781	.160	.140	.581	.188	----
116	158	.4375-20UNF	41/64-14	.781	.160	.140	.581	.188	----
117	159	.500-13UNC	47/64-13	.906	.185	.160	.668	.219	.500
118	160	.500-20UNF	47/64-13	.906	.185	.160	.668	.219	.500
227	277			.750	.185	.160		.219	.391
228	278			.562	.165	.143		.188	----
119	161	.5625-12UNC	13/16-12	1.000	.198	.170	.742	.234	----
120	162	.5625-18UNF	13/16-12	1.000	.198	.170	.742	.234	----
121	163	.625-11UNC	29/32-11	1.125	.213	.183	.827	.250	----
122	164	.625-18UNF	29/32-11	1.125	.213	.183	.827	.250	----
231	281			.937	.213	.183		.250	----
232	282			.687	.192	.166		.219	----
123	165	.750-10UNC	1-5/64-10	1.375	.240	.205	.993	.281	----
124	166	.750-16UNF	1-5/64-10	1.375	.240	.205	.993	.281	----
235	285			1.125	.240	.205		.281	----
236	286			.812	.208	.178		.234	----

* Lined out dash numbers are INACTIVE FOR NEW DESIGN AFTER 24 JUL 1975

INTERCHANGEABILITY

The slotted type inserts covered by dash numbers 1 thru 26 and 41 thru 66 given in previous revisions of this standard are cancelled after 23 April 1965 and superseded by dash numbers 101 thru 126 and 141 thru 166, respectively, given in the current revision of this standard.

P A	WC	TITLE	MILITARY STANDARD
Other Cust	99	INSERT, SCREW THREAD- THREAD CUTTING	MS35914
PROCUREMENT SPECIFICATION MIL-I-45916	SUPERSEDES	SHEET 2 OF 3	

APPROVED 16 OCT 1957 REVISED ⑤ For changes see Sheet 1.

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REVIEWER AR, AT, AV, EA, IS
USDR. MI

FED SUP CLASS
5340TABLE II
THIN WALL

DASH NO. COR RES STEEL	INTERNAL THREAD (-3B)	EXTERNAL THREAD (SEE NOTE 4)	C LENGTH ±.010	D		E DIA +.002 -.005	F DIA ±.010
				MAX	MIN		
301 302 303	.112-40UNC	5/32-40	.234 .187 .156	.054 .054 .046	.044 .044 .038	.136	.062 .062 .055
304 305 306	1/8-32UNC	3/16-32	.281 .218 .187	.068 .068 .064	.058 .058 .054	.160	.078 .078 .070
307 308 309	.164-32UNC	7/32-32	.328 .250 .218	.068 .068 .064	.058 .058 .054	.191	.078 .078 .070
310 311 312	.190-32UNF	17/64-32	.375 .296 .250	.092 .092 .084	.082 .082 .074	.237	.109 .109 .094
313 314 315	.250-28UNF	11/32-28	.484 .375 .312	.109 .109 .099	.097 .097 .089	.310	.125 .125 .109
316 317 318	.3125-24UNF	13/32-24	.562 .469 .375	.123 .123 .113	.110 .110 .102	.368	.141 .141 .125
319 320 321	.375-24UNF	1/2-20	.687 .562 .437	.137 .137 .126	.121 .121 .113	.457	.156 .156 .141
322 323 324	.500-20UNF	5/8-18	.906 .750 .562	.185 .185 .165	.160 .160 .143	.576	.219 .219 .188

TABLE III
RECOMMENDED HOLE SIZES

INTERNAL THREAD	REGULAR WALL						THIN WALL	
	FOR HIGH STRENGTH LIGHT ALLOYS OF LESS THAN AVERAGE MACHINABILITY, CAST IRON, MALLEABLE IRON AND MILD STEEL		FOR MEDIUM STRENGTH LIGHT ALLOYS OF AVERAGE MACHINABILITY, CAST IRON AND HIGH STRENGTH THERMOSETTING PLASTICS		FOR LOW STRENGTH LIGHT ALLOYS OF EXCELLENT MACHINABILITY, THERMOPLASTICS AND THERMOSETTING PLASTICS		FOR ALL STRENGTH ALLOYS, CAST IRON, MALLEABLE IRON AND ALL PLASTICS	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
.086 .112 .138 .164	.134 .162 .207 .238	.131 .159 .203 .234	.131 .159 .203 .234	.129 .156 .198 .230	.129 .156 .198 .230	.127 .152 .194 .226	----- .146 .175 .206	----- .140 .169 .200
.190 .250 3125 375	.281 .356 .447 .538	.275 .349 .440 .530	.275 .349 .440 .530	.270 .343 .433 .521	.270 .343 .433 .521	.264 .336 .425 .514	.252 .330 .390 .479	.246 .322 .381 .469
.4375 500 .5625 .625 .750	.613 .704 .780 .871 1.039	.605 .694 .769 .859 1.026	.605 .694 .769 .859 1.026	.594 .684 .759 .847 1.013	.594 .684 .759 .847 1.013	.585 .674 .748 .835 1.000	----- .605 ----- ----- -----	----- .591 ----- ----- -----

NOTE Hole preparation for locking inserts - Countersink to outside diameter of insert with 60° included angle.

P A. WC Other Cast 99	TITLE INSERT, SCREW THREAD- THREAD CUTTING	MILITARY STANDARD MS35914
PROCUREMENT SPECIFICATION MIL-I-45916	SUPERSEDES.	SHEET 3 OF 3

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

REVIEWER: AR, AT, AV, EA, IS
USER MI

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APPROVED 16 OCT 1957 REVISED 16 OCT 1957 For changes see Sheet 1.