

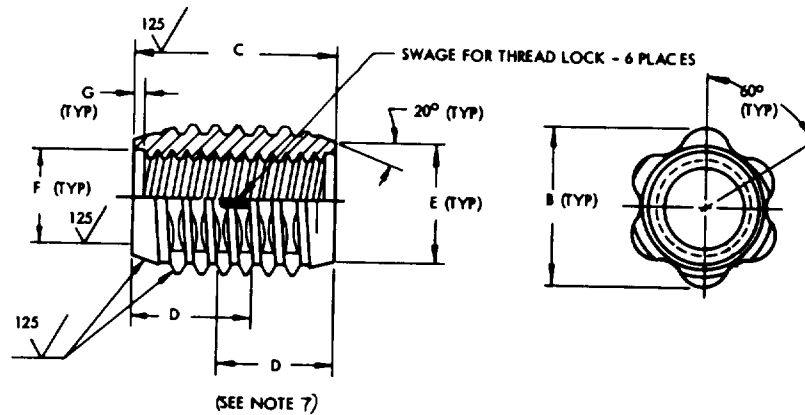
FED. SUP CLASS  
**5340**REVIEWER: AT, IS, NSA, S5  
(SER: AS, AV, EL, GL, MC, ME, MI, M)

TABLE I  
TYPE I - SHORT LENGTH INSERTS  
COARSE AND FINE INTERNAL THREADS

DASH NO.	A INTERNAL THREAD	B ± .004	C LENGTH ± .010	E ± .005	F ± .003	G ± .005
-101	.086-56 UNC-3B					
* -102	.086-64 UNF-3B	.138	.120	.112	.088	.015
-103	.112-40 UNC-3B					
* -104	.112-48 UNF-3B	.172	.160	.137	.114	.015
-105	.138-32 UNC-3B					
* -106	.138-40 UNF-3B	.216	.190	.177	.141	.015
-107	.164-32 UNC-3B					
* -108	.164-36 UNF-3B	.253	.220	.202	.167	.015
-109	.190-24 UNC-3B					
-110	.190-32 UNF-3B	.280	.250	.234	.192	.015
-111	.250-20 UNC-3B					
-112	.250-28 UNF-3B	.370	.310	.295	.254	.015
-113	.3125-18 UNC-3B					
-114	.3125-24 UNF-3B	.449	.370	.368	.312	.025
-115	.375-16 UNC-3B					
-116	.375-24 UNF-3B	.552	.440	.449	.377	.025

\* Not manufactured

THESE INSERTS ARE MANUFACTURED UNDER UNITED STATES PATENTS NO. 3,200,691, WHICH EXPIRES ON 17 AUGUST 1982, AND NO. 3,202,195, WHICH EXPIRES ON 24 AUGUST 1982. THE GOVERNMENT DOES NOT HAVE A ROYALTY FREE LICENSE. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

(A) FOR CHANGES SEE SHEETS 1 THRU 3

P.A.	WC	TITLE	MILITARY STANDARD
Other Cost	82	INSERT, SCREW THREAD - THREAD FORMING	MS 51836
PROCUREMENT SPECIFICATION	MIL-I-45916	SUPERSEDES:	SHEET 1 OF 3

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

This military standard is mandatory 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.

APPROVED 1 DEC 67 REVISED (A) 25 APR 1969

FED. SUP. CLASS  
5340TABLE II  
TYPE I - LONG LENGTH INSERTS  
COARSE AND FINE INTERNAL THREADS

DASH NO.	A INTERNAL THREAD	B ± .004	C ± .010	D ± .015	E ± .005	F ± .003	G ± .005
-201	.086-56 UNC-38	.138	.160	--	.112	.088	.015
* -202	.086-64 UNF-38						
-203	.112-40 UNC-38	.172	.190	.130	.137	.114	.015
* -204	.112-48 UNF-38						
-205	.138-32 UNC-38	.216	.220	.160	.177	.141	.015
* -206	.138-40 UNF-38						
-207	.164-32 UNC-38	.253	.250	.170	.202	.167	.015
* -208	.164-36 UNF-38						
-209	.190-24 UNC-38	.280	.300	.210	.234	.192	.015
-210	.190-32 UNF-38			.200			
-211	.250-20 UNC-38	.370	.370	.260	.295	.254	.015
-212	.250-28 UNF-38			.230			
-213	.3125-18 UNC-38	.449	.470	.310	.368	.312	.025
-214	.3125-24 UNF-38			.290			
-215	.375-16 UNC-38	.552	.560	.370	.449	.377	.025
-216	.375-24 UNF-38			.340			

TABLE III  
TYPE III - LONG LENGTH INSERTS  
COARSE AND FINE INTERNAL THREADS

DASH NO.	A INTERNAL THREAD	B ± .004	C ± .010	D ± .015	E ± .005	F ± .003	G ± .005
-301	.086-56 UNC-38	.138	.190	.120	.112	.088	.015
* -302	.086-64 UNF-38						
-303	.112-40 UNC-38	.172	.230	.150	.137	.114	.015
* -304	.112-48 UNF-38						
-305	.138-32 UNC-38	.216	.280	.190	.177	.141	.015
* -306	.138-40 UNF-38						
-307	.164-32 UNC-38	.253	.330	.210	.202	.167	.015
* -308	.164-36 UNF-38						
-309	.190-24 UNC-38	.280	.370	.240	.234	.192	.015
-310	.190-32 UNF-38			.230			
-311	.250-20 UNC-38	.370	.490	.320	.295	.254	.015
-312	.250-28 UNF-38			.290			
-313	.3125-18 UNC-38	.449	.560	.340	.368	.312	.025
-314	.3125-24 UNF-38			.340			
-315	.375-16 UNC-38	.552	.680	.430	.449	.377	.025
-316	.375-24 UNF-38			.400			

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P.A. NO. Other Code -2	TITLE INSERT, SCREW THREAD - THREAD FORMING	MILITARY STANDARD MS 51836
PROCUREMENT SPECIFICATION MIL-1-45-16	SUPERSEDES	SHEET 2 OF

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED 1 DEC 67 REVISED (A) FOR CHANGES SEE SHEETS 1 THRU 3

FED SUP CLASS  
5340REVIEWER: AT, IS, NSA, F5  
USER: AS, AV, EL, GL, MG, ME, MI, MU

## NOTES:

- (A) 1. MATERIAL: STEEL, CARBON PER FEDERAL STANDARD NO. 66.  
STEEL, CORROSION RESISTANT, CLASS 303, GOLD FINISH PER FEDERAL STANDARD NO. 66.  
BRASS, PER QQ-B-626.
2. PROTECTIVE COATING: STEEL, CARBON, SHALL BE CADMIUM PLATED PER QQ-P-416, TYPE II, CLASS 3.  
STEEL, CORROSION RESISTANT, SHALL BE PASSIVATED PER QQ-P-45.  
BRASS SHALL BE BLACK OXIDE COATED PER MIL-F-495.
3. THREADS: INTERNAL THREADS SHALL BE IN ACCORDANCE WITH SCREW THREAD STANDARDS FOR FEDERAL SERVICES, HANDBOOK H25, CLASS 3B.  
EXTERNAL THREADS HAVE A SPECIAL FORM AND PITCH.
- (A) 4. SURFACE ROUGHNESS: SURFACES MARKED 125 MICROINCHES SHALL BE IN ACCORDANCE WITH USAS B46.1.
5. HARDNESS: STEEL, CARBON, ROCKWELL B94-100.  
STEEL, CORROSION RESISTANT, ROCKWELL C23-32.  
BRASS, ROCKWELL B78-83.
6. LUBRICATION: INSERTS WITH SELF-LOCKING INTERNAL THREADS SHALL BE DRY FILM LUBRICATED PER MIL-L-5937.
- (A) 7. DIMENSIONS: ALL DIMENSIONS ARE IN INCHES AND ARE AFTER PROTECTIVE COATING OR TREATMENT, BUT PRIOR TO DRY FILM LUBRICANT.  
"D" DIMENSION REFERS TO DISTANCE THROUGH INTERNAL THREAD LOCK.
- (A) 8. CONCENTRICITY: EXTERNAL AND INTERNAL THREADS SHALL BE CONCENTRIC IN ACCORDANCE WITH THE PROCUREMENT SPECIFICATION.
9. PART NUMBER: THE MS PART NUMBER CONSISTS OF THE MS NUMBER PLUS THE DASH NUMBER.  
  
ADD "B" IN LIEU OF "DASH" FOR BRASS.  
ADD "U" IN LIEU OF "DASH" FOR CARBON STEEL.  
ADD "L" AS SUFFIX TO DASH NUMBER FOR INTERNAL THREAD LOCK.  
  
EXAMPLES: MS51836-208 INSERT, CRES STEEL, NON-LOCKING, MEDIUM LENGTH.  
MS51836B208 INSERT, BRASS, NON-LOCKING MEDIUM LENGTH.  
MS51836U208 INSERT, CARBON STEEL, NON-LOCKING MEDIUM LENGTH.  
MS51836-208L INSERT, CRES STEEL, INTERNAL THREAD LOCK, MEDIUM LENGTH.
- (A) 10. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
- (A) 11. REFERENCED DOCUMENTS SHALL BE OF THE SAME ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
12. INSTALL INSERT PER MS51837.
13. LOCKING FEATURE AVAILABLE ONLY IN CORROSION-RESISTANT STEEL INSERTS IN MEDIUM AND LONG LENGTHS.
14. THESE INSERTS ARE MANUFACTURED UNDER UNITED STATES PATENTS NO. 3,200,691, WHICH EXPIRES ON 17 AUGUST 1982, AND NO. 3,202,195, WHICH EXPIRES ON 24 AUGUST 1982. THE GOVERNMENT DOES NOT HAVE A ROYALTY FREE LICENSE.

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APPROVED 1 DEC 67 REVISED (A) FOR CHANGES SEE SHEETS 1 THRU 3

P.A. Other Cost	WC 82	TITLE INSERT, SCREW THREAD - THREAD FORMING	MILITARY STANDARD <b>MS51836</b>
PROCUREMENT SPECIFICATION MIL-I-45916	SUPERSEDES:	SHEET 3 OF	

DD FORM 672-1 (Coordinated)

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