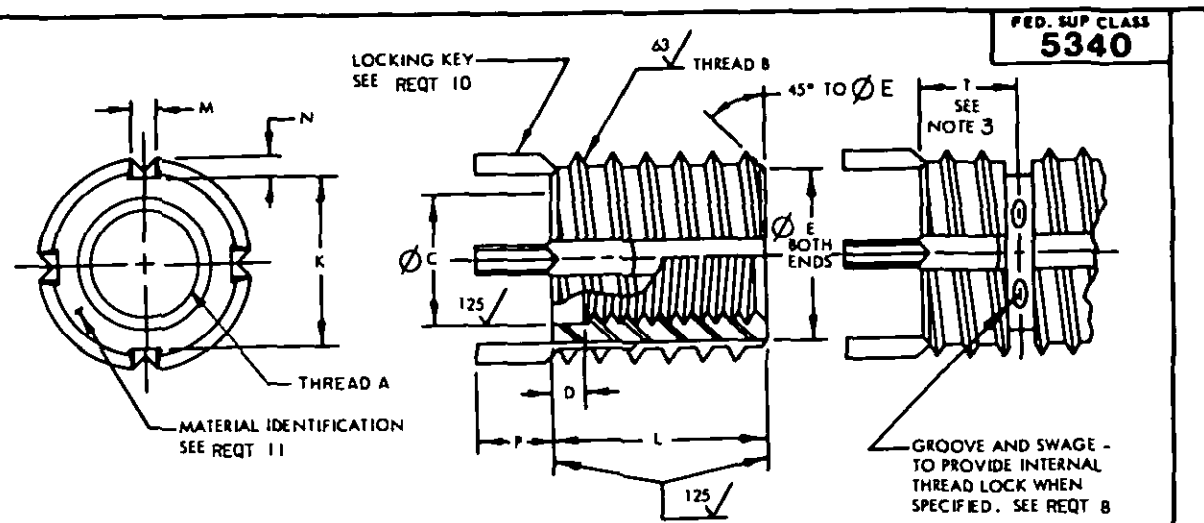


User activities:  
ARMY - ER, AT, ME  
NAVY - MC

Review activities:  
ARMY - AV, GC  
NAVY - FC  
AF - 82, 11  
NSA - 15  
DCA - 15

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 when applicable.



FED. SUP CLASS  
**5340**

TABLE I (COARSE INTERNAL THREADS)

DASH NO.	A' INTERNAL THREAD UNJC-3B		B EXTERNAL THREAD MOD MINOR DIA		Ø C	D	Ø E	K	L	KEY DIMENSIONS			T
	SIZE	MINOR DIA	SIZE	MINOR DIA						M ± .002	N ± .004	P ± .015	
-101	.1900-24	.1600 .1494	.4375-14UNC-2A	.383 .375	.196	.070	.375	.349 .341	.312	.068	.040	.130	.220
-102	.2500-20	.2121 .2013	.5000-13UNC-2A	.440 .432	.257	.070	.430	.411 .403	.375	.068	.040	.190	.220
-103	.3125-18	.2690 .2584	.5625-12UNC-2A	.503 .495	.316	.070	.495	.473 .465	.437	.068	.040	.190	.220
-104	.3750-16	.3251 .3142	.6250-11UNC-2A	.565 .551	.380	.070	.550	.536 .528	.500	.068	.040	.190	.250
-105	.4375-14	.3795 .3680	.6875-11NS-2A	.625 .615	.445	.100	.615	.598 .590	.625	.068	.040	.190	.280
-106	.5000-13	.4368 .4251	.8125-16UN-2A	.752 .744	.507	.100	.745	.724 .716	.668	.068	.040	.190	.280
-107	.5625-12	.4914 .4814	.8750-14UNC-2A	.815 .807	.578	.100	.805	.786 .778	.812	.068	.040	.250	.320
-108	.6250-11	.5474 .5365	1.0000-12UNF-2A	.924 .916	.640	.100	.915	.855 .845	.875	.103	.070	.250	.330
-109	.7500-10	.6646 .6526	1.2500-12UNF-2A	1.175 1.165	.765	.100	1.165	1.105 1.095	1.125	.103	.070	.250	--
-109L	.7500-10	.6646 .6526	1.2500-12UNF-2A	1.175 1.165	.765	.100	1.165	1.105 1.095	1.250	.103	.070	.250	.490
-110	.8750-9	.7801 .7668	1.3750-12UNF-2A	1.300 1.290	.888	.100	1.290	1.230 1.220	1.250	.103	.070	.250	--
-110L	.8750-9	.7801 .7668	1.3750-12UNF-2A	1.300 1.290	.888	.100	1.290	1.230 1.220	1.375	.103	.070	.250	.490
-111	1.0000-8	.8933 .8783	1.5000-12UNF-2A	1.424 1.416	1.016	.100	1.415	1.355 1.345	1.375	.103	.070	.250	--
-111L	1.0000-8	.8933 .8783	1.5000-12UNF-2A	1.424 1.416	1.016	.100	1.415	1.355 1.345	1.500	.103	.070	.250	.550

(B) ENTIRE STANDARD REVISED

P.A. Other Cont	AR AS 99	TITLE INSERT, SCREW THREAD - LOCKED IN, KEY LOCKED, EXTRA HEAVY DUTY	<b>MILITARY STANDARD</b> <b>MS51832</b>
PROCUREMENT SPECIFICATION MIL-I-45914	SUPERSEDES:	PAGE 1	OF 3

APPROVED 1 DEC 1967 REVISED (A) 25 NOV 1970 (B) 7 DEC 84

FED. SUP CLASS  
**5340**

TABLE II (FINE INTERNAL THREADS)

DASH NO.	A INTERNAL THREAD UNJF-3B		B EXTERNAL THREAD MOD MINOR DIA		Ø C ± .005	D ± .010	Ø E ± .010	K	L ± .015	KEY DIMENSIONS			T ± .030
	SIZE	MINOR DIA	SIZE	MINOR DIA						M	N	P	
										± .002	± .004	± .015	
-201	.1900-32	.1675 .1596	.4375-14UNC-2A	.383 .375	.196	.070	.375	.349 .341	.312	.068	.040	.130	.220
-202	.2500-28	.2229 .2152	.5000-13UNC-2A	.440 .432	.257	.070	.430	.411 .403	.375	.068	.040	.190	.220
-203	.3125-24	.2799 .2719	.5625-12UNC-2A	.503 .495	.316	.070	.495	.473 .465	.437	.068	.040	.190	.220
-204	.3750-24	.3418 .3344	.6250-11UNC-2A	.565 .551	.380	.070	.550	.536 .528	.500	.068	.040	.190	.250
-205	.4375-20	.3970 .3888	.6875-11NS-2A	.625 .615	.445	.100	.615	.598 .590	.625	.068	.040	.190	.280
-206	.5000-20	.4591 .4513	.8125-16UN-2A	.752 .744	.507	.100	.745	.724 .716	.688	.068	.040	.190	.280
-207	.5625-18	.5166 .5084	.8750-14UNC-2A	.815 .807	.578	.100	.805	.786 .778	.812	.068	.040	.190	.320
-208	.6250-18	.5788 .5709	1.0000-12UNF-2A	.924 .916	.640	.100	.915	.855 .845	.875	.103	.070	.250	.330
-209	.7500-16	.6977 .6892	1.2500-12UNF-2A	1.175 1.165	.765	.100	1.165	1.105 1.095	1.125	.103	.070	.250	--
-209L	.7500-16	.6977 .6892	1.2500-12UNF-2A	1.175 1.165	.765	.100	1.165	1.105 1.095	1.250	.103	.070	.250	.490
-210	.8750-14	.8152 .8055	1.3750-12UNF-2A	1.300 1.290	.888	.100	1.290	1.230 1.220	1.250	.103	.070	.250	--
-210L	.8750-14	.8152 .8055	1.3750-12UNF-2A	1.300 1.290	.888	.100	1.290	1.230 1.220	1.375	.103	.070	.250	.490
-211	1.0000-12	.9298 .9189	1.5000-12UNF-2A	1.424 1.416	1.016	.100	1.415	1.355 1.345	1.375	.103	.070	.250	--
-211L	1.0000-12	.9298 .9189	1.5000-12UNF-2A	1.424 1.416	1.016	.100	1.415	1.355 1.345	1.500	.103	.070	.250	.550

**REQUIREMENTS:**

- MATERIAL:** STEEL, CORROSION-RESISTANT, TYPE 303(UNS S30300) IN ACCORDANCE WITH AMS 5640M-79 OR ASTM A582-80.  
STEEL ALLOY, GRADE 4140(UNS G41400) IN ACCORDANCE WITH MIL-S-5626.  
STEEL, CORROSION-RESISTANT, TYPE A286(UNS S66286) IN ACCORDANCE WITH AMS 5737J-83.  
LOCKING KEYS: STEEL, CORROSION-RESISTANT, TYPE 302(UNS S30200) IN ACCORDANCE WITH QQ-W-423.
- PROTECTIVE COATING OR TREATMENT:** ALLOY STEEL SHALL BE CADMIUM PLATED IN ACCORDANCE WITH QQ-P-416, TYPE 11, CLASS 3. CORROSION-RESISTANT STEEL SHALL BE CLEANED, DESCALED AND PASSIVATED IN ACCORDANCE WITH ASTM A380-78.
- LUBRICATION:** INSERTS WITH SELF-LOCKING INTERNAL THREAD SHALL BE DRY FILM LUBRICATED IN ACCORDANCE WITH MIL-L-8937.
- SURFACE ROUGHNESS:** MACHINED SURFACES SHALL BE IN ACCORDANCE WITH ANSI B46.1-78.
- THREADS:** INTERNAL THREADS SHALL CONFORM TO MIL-S-8879. EXTERNAL THREADS SHALL CONFORM TO FED-STD-H2B/2 EXCEPT MINOR DIAMETERS SHALL BE MODIFIED AS SPECIFIED HEREIN.

P.A. AR	TITLE	MILITARY STANDARD
Other Cust AS 99	INSERT, SCREW THREAD - LOCKED IN, KEY LOCKED, EXTRA HEAVY DUTY	<b>MS51832</b>
PROCUREMENT SPECIFICATION MIL-I-45914	SUPERSEDES:	PAGE 2 OF 3

APPROVED 1 DEC 1967 REVISED (B) FOR CHANGES SEE PAGES 1, 2 AND 3

User activities:  
NAVY - EE, AT, ME

Review activities:  
NAVY - AT, AV, GC  
ARMY - FORGE - 82, 11  
AF - 13

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User activities  
ARMY - ER, AT, ME  
NAVY - MC

Review activities  
NAVY - BU, AV, GE  
AIR FORCE - 82, 11  
DCA - 15

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 when applicable.

6. HEAT TREATMENT: ALLOY STEEL INSERTS SHALL BE HEAT TREATED TO 160,000 PSI F<sub>tu</sub> MINIMUM IN ACCORDANCE WITH MIL-H-6875.
7. HARDNESS: ALLOY STEEL 4140 SHALL HAVE A HARDNESS RANGE OF 36-40 HRC.
8. PART NUMBER: THE PART NUMBER CONSISTS OF THE MS NUMBER PLUS THE DASH NUMBER AND THE FOLLOWING AS APPLICABLE:  
ADD "CA" IN LIEU OF DASH FOR CRES A286.  
ADD "A" IN LIEU OF DASH FOR ALLOY STEEL 4140.  
ADD "L" AS SUFFIX TO DASH NUMBER FOR INTERNAL THREAD LOCK FOR -101 THROUGH -108 AND -201 THROUGH-208 ONLY.  
EXAMPLE: MS51832 CA 102L-INSERT, CRES A286, .2500-20 UNJC-38 INTERNAL THREAD, WITH INTERNAL THREAD LOCK FEATURE.
9. INSERTS SHALL BE FREE FROM ALL HANGING BURRS AND SLIVERS WHICH MIGHT BECOME DISLOADED UNDER USAGE.
10. INSERTS WITH INTERNAL THREAD SIZE .1900 SHALL BE SUPPLIED WITH TWO (2) LOCKING KEYS SPACED 180° APART. ALL OTHER SIZES SHALL BE SUPPLIED WITH FOUR (4) LOCKING KEYS SPACED 90° APART.
11. MARKING: CRES 303 HAS NO IDENTIFYING MARKS, ALLOY STEEL 4140 SHALL BE IDENTIFIED ON TOP OF INSERT BY TWO (2) PARALLEL DASH MARKS.  
CRES A286 SHALL BE IDENTIFIED ON TOP OF INSERT BY ONE DASH MARK.
12. ALL DIMENSIONS ARE AFTER PROTECTIVE COATING OR TREATMENT.
13. FILLETS ARE .015 R MAX.
14. TOLERANCE ON ANGLES IS ± 2°.
15. BREAK SHARP EDGES .003 - .015 UNLESS OTHERWISE SPECIFIED.

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. INSTALLATION OF INSERT SHALL BE IN ACCORDANCE WITH MS51835.
3. DISTANCE TO CENTER OF INTERNAL THREAD LOCK.
4. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
5. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BIDS, OR REQUEST FOR PROPOSAL, EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.

APPROVED 1 DEC 1967 REVISED (B) FOR CHANGES SEE PAGES 1, 2 AND 3

P.A. Other Cost	AR AS 99	TITLE INSERT, SCREW THREAD - LOCKED IN, KEY LOCKED, EXTRA HEAVY DUTY	MILITARY STANDARD <b>MS 51832</b>
PROCUREMENT SPECIFICATION MIL-I-45914	SUPERSEDES:	PAGE 3 OF 3	