

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

Review activities:
ARMY - AV, GC
NAVY - 82, 11
AF - 15
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.

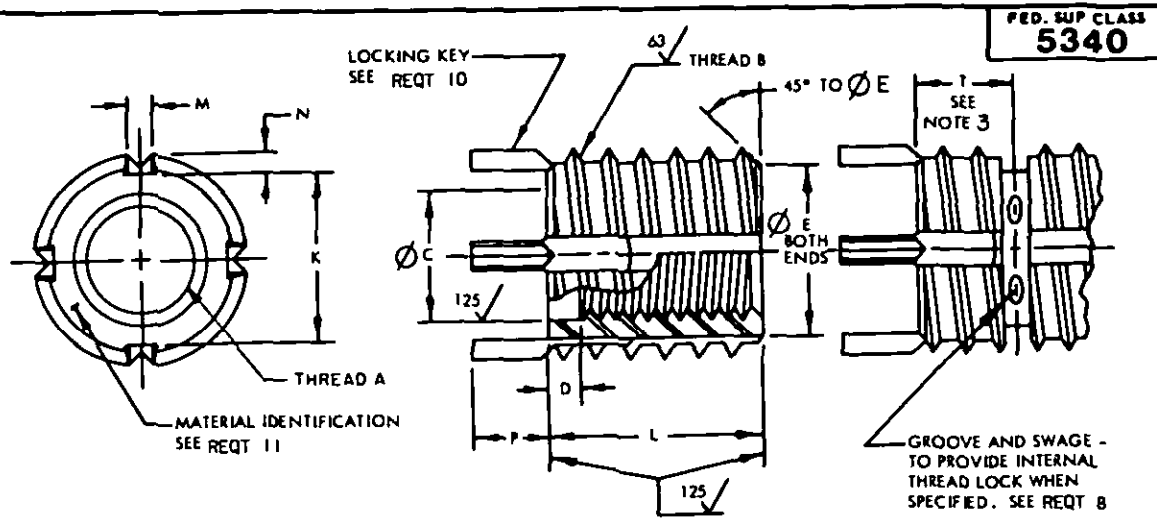


TABLE I (COARSE INTERNAL THREADS)

| DASH NO. | A' INTERNAL THREAD UNJC-38 | | B EXTERNAL THREAD MOD MINOR DIA | | ϕC | D | ϕE | K | L | KEY DIMENSIONS | | | T |
|----------|----------------------------|----------------|---------------------------------|----------------|----------|------|----------|----------------|-------|----------------|------|------|------|
| | SIZE | MINOR DIA | SIZE | MINOR DIA | | | | | | M | N | P | |
| -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 | .625-12UNC-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 | MILITARY STANDARD MS51832 |
| PROCUREMENT SPECIFICATION MIL-I-45914 | SUPERSEDES: | PAGE 1 OF 3 | |

FED. SUP CLASS
5340User activities
ARMY - ER, AT, ME
NAVY - MCReview activities
NAVY - BU, AV, GE
AIR FORCE - 82, 11
DCA - 15

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6. HEAT TREATMENT: ALLOY STEEL INSERTS SHALL BE HEAT TREATED TO 160,000 PSI F_{tu} 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 DISLOOGED 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 $\pm 2^\circ$.
15. BREAK SHARP EDGES .003 - .015 UNLESS OTHERWISE SPECIFIED.

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- INSTALLATION OF INSERT SHALL BE IN ACCORDANCE WITH MS51835.
- DISTANCE TO CENTER OF INTERNAL THREAD LOCK.
- 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 BIDS, OR REQUEST FOR PROPOSAL, EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.

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

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

5340 - 1584

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