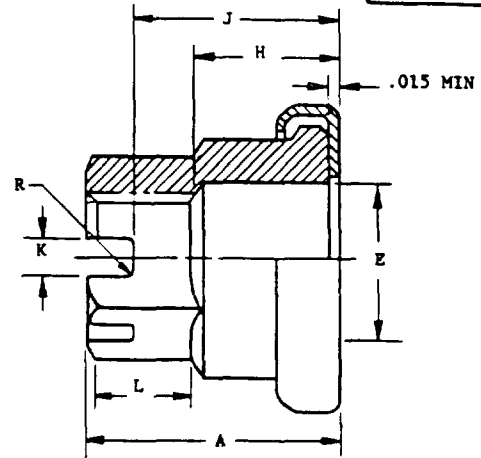
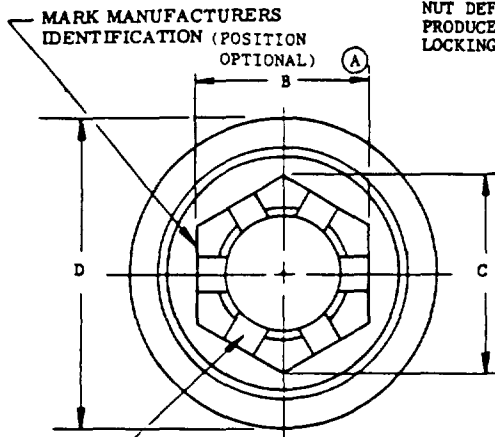


UPPER PORTION OF  
NUT DEFORMED TO  
PRODUCE SELF-  
LOCKING ACTION



OPPOSITE SLOTS SHALL CONCIDE WITHIN  
.005, AND SLOT AXIS SHALL BE WITHIN  
.005 OF THREAD P. D.

USER SYMBOLS:

REVIEWER SYMBOLS:

\*Review/user information is current as of the date of this document.  
For future coordination of changes to this document, draft circulation  
should be based on the information in the current DDISS.

| SIZE<br>DASH<br>NO. | (a)<br>THREAD    | A     |       | B     |       | C     | D     | (b)(c) E |       | H    |      | J    |      | K    | L    |        |     |
|---------------------|------------------|-------|-------|-------|-------|-------|-------|----------|-------|------|------|------|------|------|------|--------|-----|
|                     |                  | MAX   | MIN   | MAX   | MIN   |       |       | DIA      |       | MAX  | MIN  | MAX  | MIN  |      |      | ± .015 | MIN |
|                     |                  |       |       |       |       |       |       | MAX      | MIN   | MAX  | MIN  | MAX  | MIN  |      |      |        |     |
| -3                  | .1900-32UNJF-3B  | .374  | .344  | .252  | .243  | .277  | .475  | .240     | .230  | .161 | .141 | .279 | .259 | .065 | .110 |        |     |
| -4                  | .2500-28UNJF-3B  | .405  | .375  | .316  | .306  | .347  | .545  | .309     | .299  | .192 | .172 | .316 | .296 | .085 | .125 |        |     |
| -5                  | .3125-24UNJF-3B  | .436  | .406  | .378  | .367  | .419  | .625  | .395     | .385  | .223 | .203 | .347 | .327 |      | .130 |        |     |
| -6                  | .3750-24UNJF-3B  | .482  | .452  | .440  | .430  | .491  | .695  | .460     | .450  | .238 | .218 | .378 | .358 |      | .130 |        |     |
| -7                  | .4375-20UNJF-3B  | .513  | .483  | .504  | .494  | .562  | .770  | .529     | .519  | .269 | .249 | .409 | .389 | .140 | .130 |        |     |
| -8                  | .5000-20UNJF-3B  | .576  | .546  | .566  | .556  | .633  | .910  | .614     | .604  | .301 | .281 | .472 | .452 |      | .150 |        |     |
| -9                  | .5625-18UNJF-3B  | .670  | .640  | .692  | .680  | .775  | 1.065 | .686     | .676  | .332 | .312 | .550 | .530 |      | .165 |        |     |
| -10                 | .6250-18UNJF-3B  | .819  | .789  | .755  | .743  | .846  | 1.128 | .758     | .748  | .406 | .386 | .633 | .613 |      | .185 |        |     |
| -12                 | .7500-16UNJF-3B  | .951  | .921  | .880  | .868  | .987  | 1.268 | .915     | .905  | .450 | .430 | .765 | .745 | .171 | .220 |        |     |
| -14                 | .8750-14UNJF-3B  | 1.058 | 1.028 | 1.005 | .993  | 1.130 | 1.480 | 1.065    | 1.055 | .495 | .475 | .871 | .851 |      | .288 |        |     |
| -16                 | 1.0000-12UNJF-3B | 1.202 | 1.162 | 1.130 | 1.118 | 1.272 | 1.692 | 1.215    | 1.205 | .544 | .524 | .984 | .964 |      | .333 |        |     |

- (a) THREADS PER MIL-S-8879
- (b) CONCENTRICITY: "E" DIAMETER TO BE CONCENTRIC TO THREAD P. D. WITHIN .005-TIR
- (c) WASHER I. D. MAY BE .005 LESS THAN "E" MIN.

| SIZE<br>DASH<br>NO. | R<br>MAX | ULTIMATE<br>TENSILE<br>STRENGTH<br>LB, MIN | MAX<br>WEIGHT<br>LB/100 |
|---------------------|----------|--|-------------------------|
| -3                  |          | 1.230                                      | .62                     |
| -4                  | .035     | 2.290                                      | .81                     |
| -5                  |          | 3.700                                      | 1.00                    |
| -6                  |          | 5.720                                      | 1.30                    |
| -7                  | .053     | 7.720                                      | 1.60                    |
| -8                  |          | 10.550                                     | 2.50                    |
| -9                  |          | 13.400                                     | 4.40                    |
| -10                 |          | 17.060                                     | 5.60                    |
| -12                 | .062     | 25.010                                     | 7.20                    |
| -14                 |          | 34.220                                     | 11.00                   |
| -16                 |          | 45.000                                     | 14.00                   |

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.

(A) DENOTES CHANGES

AMSC N/A  
DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE. DISTRIBUTION IS UNLIMITED.  
This military standard is approved for use by all Departments & Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

|  |   |                                     |
|--|---|-------------------------------------|
| P. A.<br>NAVY - AS<br>Other Cust<br>USAF - 99<br>ARMY - AV | TITLE<br>NUT, SELF-LOCKING, CASTELLATED, HEXAGON,<br>C'BORED, CAPTIVE WASHER,<br>450° F | MILITARY STANDARD<br><b>MS14146</b> |
| PROCUREMENT SPECIFICATION<br>*MIL-N-25027                  | SUPERSEDES  | SHEET 1 OF 2                        |

USER SYMBOLS:

REVIEWER SYMBOLS:

"Review/scr. information is current as of the date of this document. For future coordination of change to this document, direct circulation should be based on the information in the current DD013."

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NOTES:

- (A) 1. MATERIAL: NUT - STEEL UNS G10420 (AISI C1042)  
WASHER - CRES UNS S30200 (AISI 302) PER AMS 5515, 5516, 5636, 5637, 5688  
UNS S32100 (AISI 321) PER AMS 5510, 5557, 5559, 5570, 5645, 5689
- 2. PROTECTIVE TREATMENT: NUT-CADMIUM PLATE PER QQ-P-416,  
PLUS MOLYBDENUM DISULFIDE DRY FILM  
LUBRICANT, PLATING TYPE AND CLASS OPTIONAL  
IF THE NUTS MEET SALT SPRAY REQUIREMENT OF  
QQ-P-416, TYPE II  
WASHER - PASSIVATE IN ACCORDANCE WITH QQ-P-35.
- 3. THREADED ELEMENT SHALL ROTATE FREELY IN AND AGAINST THE WASHER.
- 4. BREAK ALL SHARP EDGES AND REMOVE BURRS AND SLIVERS.
- 5. SURFACE TEXTURE IN ACCORDANCE WITH ANSI B46. 1 SHALL NOT EXCEED  
125 MICRO INCHES.
- 6. DIMENSIONS IN INCHES.
- 7. THESE NUTS ARE FOR USE WITH SELF-RETAINING SHEAR BOLTS AND MAY BE USED AT  
TEMPERATURE 450°F AND BELOW. FOR DESIGN USAGE LIMITATIONS SEE MS33602.  
NUTS ARE TO BE INSTALLED IN ACCORDANCE WITH MS33540.
- \* 8. PERFORMANCE: PER MIL-N-25027, EXCEPT NUTS SHALL MEET THE LOCKING  
TORQUE REQUIREMENTS OF MIL-N-25027 FOR 5 CYCLES AT  
ROOM TEMPERATURE AND AFTER BAKE AT 450°F WHEN TESTED  
ON BOLTS OR STUDS CROSS DRILLED IN THREADS PER NAS 1103  
SERIES.

EXAMPLE OF PART NUMBER.

MS14146-4 = .2500-28 NUT, CADMIUM PLATED WITH CRES, CAPTIVE WASHER.

- 9. QUALIFIED PRODUCTS: ONLY NUTS FOR WHICH THERE ARE QUALIFIED PRODUCTS  
LISTED ON QPL 25027 SHALL BE USED FOR DESIGN.

- (A) BIDS SHALL BE SOLICITED ONLY FROM THE MANUFACTURERS OR DISTRIBUTORS LISTED ON QPL-25027.

APPROVED 7 DEC 73 REVISED (A) FOR CHANGES SEE SHEET 2

|  |   |                   |
|--|---|-------------------|
| P. A.<br>NAVY - AS<br>Other Cust<br><br>USAF - 99<br>ARMY - AV | TITLE   | MILITARY STANDARD |
|  | NUT, SELF-LOCKING, CASTELLATED, HEXAGON,<br>C'BORED. CAPTIVE WASHER.<br>450 F | MS14146           |
| PROCUREMENT SPECIFICATION<br>* MIL-N-25027                     | SUPERSEDES  | SHEET 2 OF 2      |

DD FORM 672-1 (Coordinated)  
MAR 72

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PLATE NO 2308