

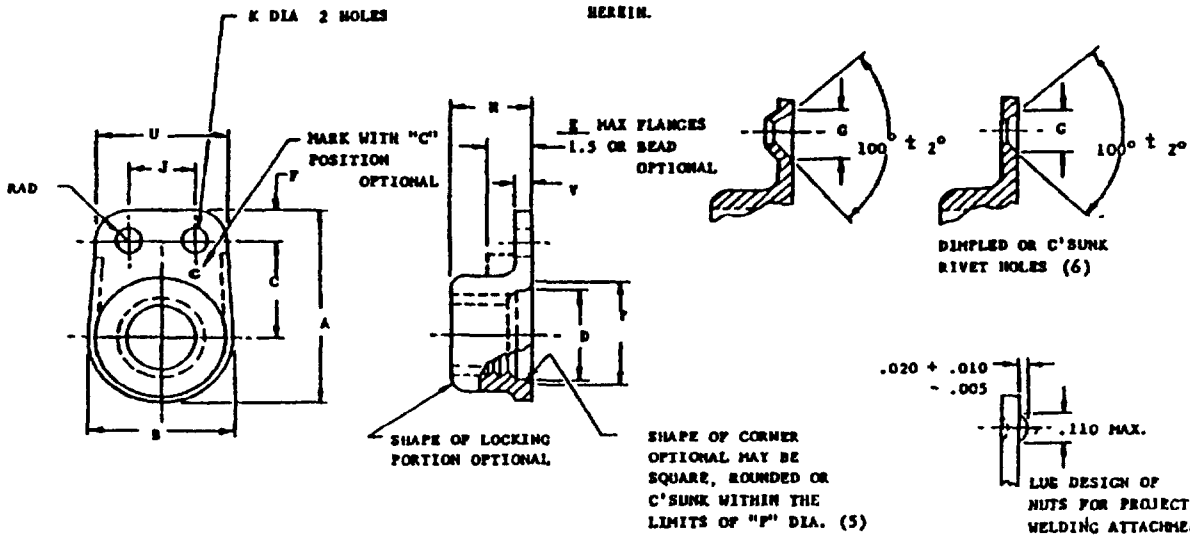
REVIEWER SYMBOLS:
 DJ - IS
 USAF-99

Review/user information is current as of the date of this document.
 For failure analysis, refer to this document, draft annotation
 should be based on the information in the current DD FORM 1573.
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Approved for use by all users.
 Description: This is a standard for all new
 design applications and for reworking old parts
 to meet new requirements.
 AMSC N/A

FED SUP CLASS
 5310

CONFIGURATION OF NUT OPTIONAL
 WITHIN THE LIMITATIONS IMPOSED BY
 DIM. 'B' AND REQUIREMENTS AS SPECIFIED
 HEREIN.



| (1) (2) THREAD SIZE | A MAX. | B | | C + .005 | D MIN | (3) | | G DIA ± .010 | U MAX | J + .002 | K (6) DIA + .005 - .000 | F DIA MAX | V MAX | AXIAL STRENGTH LBS MIN | WEIGHT LBS/100 |
|---------------------------|-----------|------|------|-------------|----------|----------|----------|--------------------|----------|-------------|----------------------------------|-----------------|----------|---------------------------------|-------------------|
| | | MAX | MIN | | | H MAX | F MIN | | | | | | | | |
| 8-32 UNC-3B | .486 | .297 | .235 | .234 | .168 | .250 | .100 | .200 | .437 | .219 | .098 | .248 | .047 | 1720 | 23 |
| 10-32 UNF-3B | .521 | .328 | .298 | .250 | .194 | .250 | .100 | .200 | .437 | .219 | .098 | .274 | .047 | 2460 | 28 |
| 1/4-28 UNF-3B | .591 | .414 | .380 | .281 | .254 | .281 | .100 | .200 | .437 | .219 | .098 | .344 | .055 | 4580 | 45 |
| 5/16-24 UNF-3B | .747 | .505 | .475 | .359 | .317 | .328 | .125 | .230 | .537 | .269 | .130 | .417 | .065 | 7390 | 78 |
| 3/8-24 UNF-3B | .856 | .614 | .580 | .414 | .379 | .344 | .125 | .230 | .537 | .269 | .130 | .505 | .075 | 11450 | 105 |

- (1) THREADS IN ACCORDANCE WITH MIL-S-8879 BEFORE LUBRICATION
- (2) THREADS IN ACCORDANCE WITH MIL-S-7742 ARE ACCEPTABLE UNTIL 31 DECEMBER 1969.
- (3) MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENT OF SPECIFICATION
- (4) CENTER OF TAPPED HOLE SHALL NOT DEVIATE IN ANY DIRECTION FROM THE CENTER OF THE PLATE NUT AS DETERMINED BY THE RIVET HOLES BY MORE THAN .005.
- (5) ON SIZE NO. 8 AND LARGER COUNTERBORE THREAD "D" DIA. X.062 DEEP MIN. THREAD RELIEF ON SIZE NO 6 AND SMALLER C'SINK TO "F" DIA. WITHIN THE LIMITS OF F AND D.
- (6) DIMPLED RIVET HOLE TOLERANCE FOR "K" IS +.015 - .000.

(A) MATERIAL: CORROSION RESISTANT STEEL, (A286) AMS5735 OR AMS5737 OR AMS 5525.
 HARDNESS: ROCKWELL C49 MAX

PLATING: 800°F NUTS. SILVER PLATE IN ACCORDANCE WITH AMS2410. PLATE THICKNESS, MEASURED ON ANY EXTERNAL SURFACE OF THE NUT, SHALL NOT BE LESS THAN 0.0002 IN. THREADS SHALL SHOW COMPLETE COVERAGE BUT THICKNESS REQUIREMENT ON THREAD IS WAIVED. NO SILVER PLATE ON WELD NIBS.

LUBRICANT: 450° NUTS, DRY FILM LUBRICANT IN ACCORDANCE WITH MIL-N-25027. FOR USAF APPLICATIONS NUTS TREATED WITH DRY FILM LUBRICANTS SHALL NOT BE USED IN INTERNAL FUEL SYSTEMS. (NO SILVER PLATE).

(B) MAGNETIC PERMEABILITY: SHALL BE LESS THAN 2.0 (AIR=1.0) FOR A FIELD STRENGTH H=200 OERSTEDS USING A MAGNETIC PERMEABILITY INDICATOR PER MIL-I-17214

DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED.

(C) DESIGN AND USAGE LIMITATIONS: THESE NUTS ARE DESIGNED TO DEVELOP THE TENSILE STRENGTH OF BOLTS AND SCREWS WITH AN ULTIMATE TENSILE STRENGTH OF 125 KSI BASED ON THE CROSS SECTION AREA AT THE BASIC ROOT DIAMETER OF THE THREADS. THESE NUTS ARE DESIGNED TO BE USED ON JA EXTERNAL THREADS. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MS33588.

PERFORMANCE: SEE PROCUREMENT SPECIFICATION, EXCEPT 450°F DRY FILM LUBRICATED NUTS LIMITED TO FIVE REUSE CYCLES

SURFACE ROUGHNESS IN ACCORDANCE WITH ANSI/ASME B46.1, UNLESS OTHERWISE SPECIFIED, THE SURFACE ROUGHNESS SHALL NOT EXCEED 125 MICRO INCHES.

(D) INTERCHANGEABILITY RELATIONSHIP: MS21087 NUTS CAN UNIVERSALLY REPLACE MS1067 NUTS OF LIKE MATERIAL, THREAD SIZE, LUBRICANT (SILVER PLATE OR DRY FILM LUBRICANT), AND FASTENING METHOD (PLAIN RIVET HOLES; DIMPLED OR C'SUNK RIVET HOLES; OR PROJECTION WELDING). BUT THESE MS1067 NUTS CANNOT UNIVERSALLY REPLACE MS21087 NUTS.

(B) DENOTES CHANGES

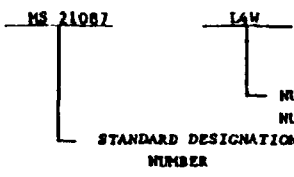
| | | |
|---|---|--|
| P A NAVY - AS Other Cust USAF - 11 ARMY - AV | TITLE NUT, SELF-LOCKING, PLATE, SIDE BY SIDE REDUCED RIVET SPACING, LOW HEIGHT, CRES, 125 KSI FTU, 450° & 800° F. | MILITARY STANDARD MS21087 |
| | PROCUREMENT SPECIFICATION MIL-N-25027 | SUPERSEDES IN PART MS1067 (STATUS NOTE) |

APPROVED 5 APR 65
 REVISED (A) 15 FEBRUARY 1979 (B) 25 FEB 91

- ① BIDS SHALL BE SOLICITED ONLY FROM THE MANUFACTURERS LISTED ON QPL-25027.
- ② IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
- ③ REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODIDS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.

| THREAD SIZE | DASH NUMBERS | | | | | |
|---------------|--------------|-------------------------------|--------------------|-------------|-------------------------------|--------------------|
| | 450°F | | | 800°F | | |
| | PLAIN HOLES | COUNTER SUNK OR DIMPLED HOLES | WELDING PROJECTION | PLAIN HOLES | COUNTER SUNK OR DIMPLED HOLES | WELDING PROJECTION |
| 8-32UNC-3B | L08 | L08K | L08W | -08 | -08K | -08W |
| 10-32UNF-3B | L3 | L3K | L3W | -3 | -3K | -3W |
| 1/4-20UNF-3B | L4 | L4K | L4W | -4 | -4K | -4W |
| 5/16-24UNF-3B | L5 | L5K | L5W | -5 | -5K | -5W |
| 3/8-24UNF-3B | L6 | | L6W | -6 | -6 | -6W |

EXAMPLE OF PART NUMBERS



1/4-20UNF-3B NUT SELF LOCKING, ALL METAL
DRY FILM LUBRICANT, C'SUNK OR DIMPLED RIVET
HOLES, 450°F.

Revision/issue information is current as of the date of this document.
 If there are changes to this document draft the revision.
 It will be done when the information in the current DODIDS.
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 AMSC N/A

APPROVED 5 April 65 REVISED (B) FOR CHANGES SEE SHEETS 1 AND 2

| | | | |
|--|---|--------------------------|---------|
| P A NAVY - AS Other Cust USAP - 11 ARMY - AV | TITLE NUT, SELF-LOCKING, PLATE, SIDE BY SIDE REDUCED RIVET SPACING, LOW HEIGHT, CRES, 125 KSI FTU, 450° & 800° F. | MILITARY STANDARD | |
| | | MS21087 | |
| PROCUREMENT SPECIFICATION MIL-H-25027 | SUPERSEDES IN PART HNS1063 (STATUS NOTE) | SHEET 2 | OF 2 |