

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE  
 DEPARTMENT OF DEFENSE

THE REQUIREMENTS FOR MANUFACTURING THE PRODUCT(S) DESCRIBED HEREIN SHALL BE THE SUBJECT OF THIS SPECIFICATION SHEET AND THE RESULT OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE ADDRESS SPECIFIED IN THE SOLICITATION: MIL-N-25027

Form Approved  
 OMB No. 0704-0188

VIEW A

VIEW A

CONFIGURATION OF NUT OPTIONAL WITHIN THE LIMITATIONS IMPOSED BY DIMENSIONS AND REQUIREMENTS SPECIFIED HEREIN.

DIMPLED OR DTSK RIVET HOLES

MAX FLANGES 1/15 OR BEAD OPTIONAL

SHAPE OF LOCKING PORTION OPTIONAL

SHAPE OF CORNER OPTIONAL MAY BE SQUARE, ROUNDED OR DTSK WITHIN THE LIMITS OF  $\phi P$  SEE REEF B

RADIUS

#K 2 HOLES

T  
THREAD SIZES

DASH NUMBERS

DASH NUMBERS	PLAIN RIVET HOLES		COUNTERSINK OR DIMPLED RIVET HOLES		T THREAD SIZES	A		B		Z/ C	D MIN	E MIN	F MIN	G MAX	H MAX	J MAX	K MAX	P MAX	V MAX	W MAX	AXIAL STRENGTH LBS/MIN	WEIGHT LBS/100
	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT		MAX	MIN	MAX	MIN													
-06	L0B	-08K	L0BK	L0BK	.164-32 UNJC-3B	.486	.297	.235	.234	.164	.100	.200	.250	.210	.095	.248	.047	.437	1,720	.23		
-3	L3	-3K	L3K	L3K	.190-32 UNJF-3B	.521	.328	.298	.250	.194	.100	.200	.250	.219	.088	.274	.047	.437	2,460	.28		
-4	L4	-4K	L4K	L4K	.250-28 UNJF-3B	.591	.414	.380	.281	.254	.100	.200	.281	.219	.098	.344	.055	.437	4,580	.45		
-5	L5	-5K	L5K	L5K	.3125-24 UNJF-3B	.747	.505	.475	.359	.317	.125	.230	.328	.269	.130	.417	.065	.537	7,390	.78		
-6	L6	-6K	L6K	L6K	.375-24 UNJF-3B	.858	.614	.580	.414	.378	.125	.230	.344	.289	.130	.505	.075	.537	11,450	1.05		

(D) DENOTES CHANGE(S)

INCH-POUND

PREPARING ACTIVITY: DLA-15 CUSTODIANS: ARMY- AV NAVY- AS AIR FORCE- II DLA-	<b>MILITARY SPECIFICATION SHEET</b>	SPECIFICATION SHEET NUMBER <b>MS21086</b> 28 MAR 95 REV 0
REVIEW: CR, MI, 99 (D) USER: PROJECT NUMBER: 5310-204B	TITLE <b>NUT, SELF-LOCKING, PLATE, SIDE BY SIDE, REDUCED RIVET SPACING, LOW HEIGHT, STEEL, 125 KSI Flu, 450F</b>	SUPERSEDING MS21086 C 1 FEB 94 (SEE NOTE 5)
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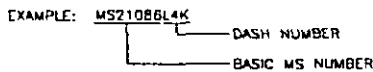
MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.  
 CENTER OF THE TAPPED HOLE SHALL NOT DEVIATE IN ANY DIRECTION FROM THE CENTER OF THE PLATE NUT AS DETERMINED BY THE RIVET HOLES BY MORE THAN .005.  
 DIMPLED RIVET HOLE TOLERANCE FOR "K" IS  $\pm .015$  - .000.

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DOCSID SPECIFIED IN THE SOLICITATION: MIL-N-25027

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**REQUIREMENTS:**

1. **MATERIAL:** CARBON STEEL, COMPOSITIONS 1035 (UNS G10350), 1040 (UNS G10400), AND 1050 (UNS G10500) IN ACCORDANCE WITH ASTM A827 OR QQ-S-700; 1042 (UNS G10420), IN ACCORDANCE WITH ASTM A29, ALLOY STEEL, GRADES 4130 (UNS G41300), 4340 (UNS G43400) AND 8740 (UNS G87400), IN ACCORDANCE WITH ASTM A29.
2. **FINISH:** CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416 TYPE II, CLASS 2. FOR DRY FILM LUBRICATED NUTS, THE TYPE AND CLASS ARE OPTIONAL IF THE NUTS MEET THE SALT SPRAY REQUIREMENTS OF QQ-P-416 TYPE II.
3. **DIMENSIONING AND TOLERANCING:** DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M.
4. **HARDNESS:** 49 HRC, MAX.
5. **THREADS:** THREADS PER LUBRICATION IN ACCORDANCE WITH MIL-S-8879.
6. **SURFACE TEXTURE:** SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL NOT EXCEED 125 MICRONS, IN ACCORDANCE WITH ANSI/ASME B46.1.
7. **LUBRICANT:** DRY FILM LUBRICANT APPROVED IN ACCORDANCE MIL-N-25027. NON-DRY FILM LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN MIL-S-8802.
8. **EDGES:** BREAK ALL SHARP EDGES AND REMOVE ALL BURRS.
9. **COUNTERBORE:** ON SIZE .164 AND LARGER, THREAD RELIEF SHALL BE .062 MINIMUM.
10. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.



MS21086L4K INDICATES: NUT, SELF-LOCKING, PLATE, SIDE BY SIDE, REDUCED RIVET SPACING, LOW HEIGHT, STEEL; 125 KSI F<sub>u</sub>, 450 F; .250-28 UNJF-3B, DRY FILM LUBRICANT; COUNTERSUNK OR DIMPLED HOLES.

**NOTES**

1. ALL DIMENSIONS ARE IN INCHES.
- Ⓓ 2. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS DOCUMENT AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS DOCUMENT SHALL TAKE PRECEDENCE.
- Ⓓ 3. UNLESS OTHERWISE SPECIFIED, ISSUES OF REFERENCED DOCUMENTS ARE THOSE IN EFFECT AT THE TIME OF SOLICITATION.
4. 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 3A EXTERNAL THREADS. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MS33588. ONLY NUTS FOR WHICH THESE ARE QUALIFIED PRODUCTS LISTED ON QPL 25027 SHALL BE USED.
5. MS21086 SUPERSEDES NAS1067 IN PART.

**INTERCHANGEABILITY RELATIONSHIP**

MS21086 NUTS CAN UNIVERSALLY REPLACE NAS1067 NUTS OF LIKE MATERIAL, THREAD SIZE, PLATING LUBRICANTS (DRY FILM OR NON-DRY FILM), RIVET SPACING AND FASTENING METHOD (PLAIN RIVET HOLES; DIMPLED OR COUNTERSUNK RIVET HOLES OR PROJECTION WELDING), BUT THESE NAS1067 NUTS CANNOT UNIVERSALLY REPLACE MS21086 NUTS.

**INTERCHANGEABILITY TABLE**

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS1067X0B	MS21086-08
NAS1067X0BK	MS21086-08K
NAS1067A0B	MS21086L08
NAS1067A0BK	MS21086L08K
NAS1067X3	MS21086-3
NAS1067X3K	MS21086-3K
NAS1067A3	MS21086L3
NAS1067A3K	MS21086L3K
NAS1067X4	MS21086-4
NAS1067X4K	MS21086-4K
NAS1067A4	MS21086L4
NAS1067A4K	MS21086L4K
NAS1067X5	MS21086-5
NAS1067X5K	MS21086-5K
NAS1067A5	MS21086L5
NAS1067A5K	MS21086L5K
NAS1067X6	MS21086-6
NAS1067A6	MS21086L6

PREPARING ACTIVITY: DLA-IS CUSTODIANS: ARMY- AV      NAVY- AS AIR FORCE- II      DLA-	<b>MILITARY SPECIFICATION SHEET</b> TITLE NUT, SELF-LOCKING, PLATE, SIDE BY SIDE, REDUCED RIVET SPACING, LOW HEIGHT, STEEL, 125 KSI F <sub>u</sub> , 450F	SPECIFICATION SHEET NUMBER <div style="text-align: right; font-size: 1.2em; font-weight: bold;">MS21086</div> <div style="text-align: right; font-size: 0.8em;">28 MAR 85 REV D</div> SUPERSEDING MS21086 C    1 FEB 94 (SEE NOTE 5)
REVIEW: CR, MI, 99 Ⓓ USER PROJECT NUMBER: 5310-2048	AMSC-    N/A                          FSC 5310	
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