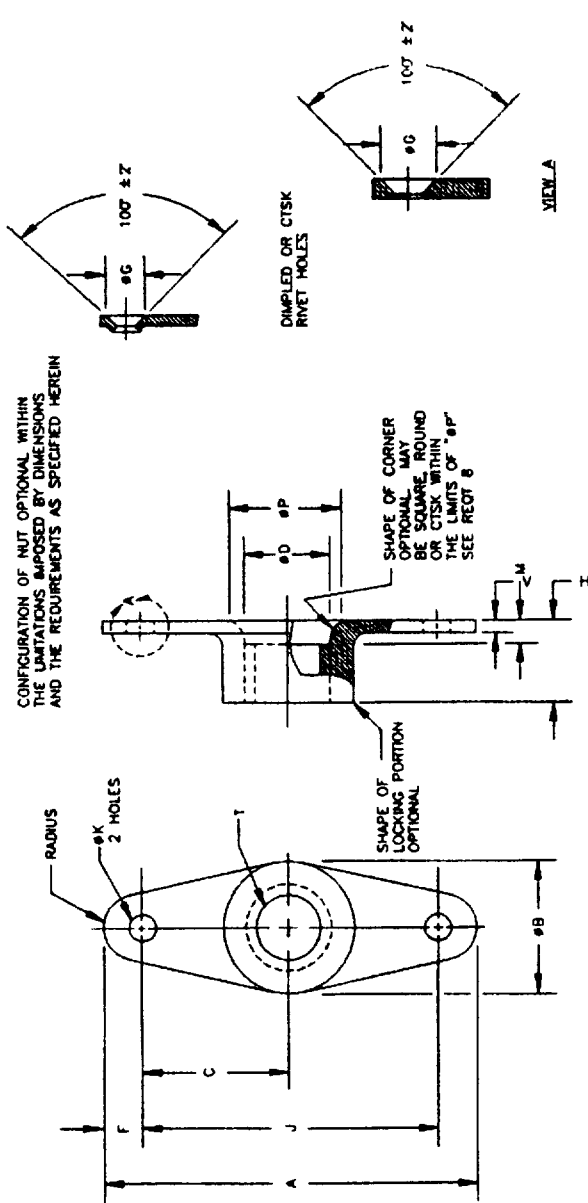


THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION MIL-N-25027

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

Form Approved  
OMB No 0704-0188



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

DIMPLED OR CTSK RIVET HOLES

SHAPE OF CORNER OPTIONAL MAY BE SQUARE, ROUND OR CTSK WITHIN THE LIMITS OF "ØP" SEE REPT Ø

SHAPE OF LOCKING PORTION OPTIONAL

(F) DENOTES CHANGE(S)

INCH-POUND

TABLE 1 DASH NUMBERS AND DIMENSIONS

DASH NUMBERS	PLAIN RIVET HOLES		COUNTERSINK OR DIMPLED RIVET HOLES		THREAD SIZE	A MAX	ØB MIN MAX	C MIN MAX	ØD MIN	F MIN	H/J MAX	K Z/ + .005 - .000	M MIN	ØP MAX	Y MAX	ADVAL STRENGTH LBS/IN LBS/100	WEIGHT LBS/100
	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT	NON-DRY LUBRICANT	DRY LUBRICANT													
-04	L04	---	L04K	---	.112-49 UNAC-38	948	.195	344	---	.100	.200	.888	---	.188	.047	750	14
-06	L06	---	L06K	---	1.98-32 UNAC-38	948	.265	344	---	.100	.200	.888	---	.208	.047	1,150	18
-08	L08	---	L08K	---	1.64-32 UNAC-38	948	.297	344	1.68	.100	.200	.888	---	.248	.047	1,720	28
-3	L3	---	L3K	---	1.80-32 UNAF-38	948	.328	344	1.84	.100	.200	.888	---	.274	.047	2,480	39
4	L4	---	L4K	---	2.50-24 UNAF-38	1,280	.414	500	2.54	.100	.200	.888	---	.344	.045	4,390	53
5	L5	---	L5K	---	3.125-24 UNAF-38	1,280	.505	485	5.00	.125	.250	1.000	---	.417	.045	7,390	80
-8	L8	---	L8K	---	3.75-24 UNAF-38	1,282	.614	500	3.78	.125	.250	1.000	---	.505	.078	11,450	131
-7	L7	---	---	---	4.375-20 UNAF-38	1,477	.728	685	5.42	.156	.300	1.125	---	.602	.085	15,450	184
-8	L8	---	---	---	5.00-20 UNAF-38	1,602	.859	708	6.25	.156	.300	1.250	---	.682	.115	21,110	260
-8	L8	---	---	---	5.625-18 UNAF-38	1,727	.953	802	6.68	.156	.300	1.375	---	.703	.115	26,810	370
-10	L10	---	---	---	6.25-18 UNAF-38	1,852	1.016	844	7.50	.156	.300	1.500	---	.758	.115	34,130	560

1/ MINIMUM 1/4" IF NOT SPECIFIED. LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.  
2/ CENTER OF THE DIMPLED HOLE SHALL NOT BE MORE THAN 1/16" FROM THE CENTER OF THE HOLE.  
3/ DIMPLED RIVET HOLE TOLERANCE FOR "ØK" IS +.015 - .000

PREPARING ACTMITY DLA-IS  
CUSTODIANS ARMY- AV NAVY- AS  
AIR FORCE- 11 DLA-

REVIEW 82  
USER CR, MI  
PROJECT NUMBER 5310-1944

DISTRIBUTION STATEMENT

MILITARY SPECIFICATION SHEET  
TITLE  
NUT, SELF-LOCKING, PLATE, TWO-LUG,  
LOW HEIGHT, STEEL, 125 KSI Ftu, 450F

SPECIFICATION SHEET NUMBER  
MS21047 1 FEB 84  
REV F

SUPERSEDING  
MS21047 E 30 SEPT 87 (SEE NOTE 5)

AMSC- N/A FSC 5310

A. Approved for public release distribution is unlimited

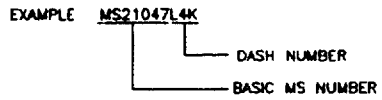
Page 1 of 2

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

REQUIREMENTS

- 1 **MATERIAL** CARBON STEEL, COMPOSITIONS 1035 (UNS G10350) 1040 (UNS G10400) 1050 (UNS G10500) IN ACCORDANCE WITH ASTM A827 OR QQ-S-700 COMPOSITION 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 BEFORE 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 WITH 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/COUNTERSINK** ON SIZE 164 AND LARGER COUNTERBORE THREAD "D" DIAMETER X 0.62 DEEP MINIMUM THREAD RELIEF, ON SIZE 138 AND SMALLER COUNTERSINK TO "P" DIAMETER WITHIN THE LIMITS OF D, P AND M
- 10 **PART NUMBER** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE 1



MS21047L4K INDICATES NUT SELF-LOCKING, PLATE TWO LUG LOW HEIGHT, STEEL 125 KSI Ftu, 450F, 250-28UNJF-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 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 (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN
- 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 JA EXTERNAL THREADS. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MS33588 ONLY NUTS FOR WHICH THERE ARE QUALIFIED PRODUCTS LISTED ON OPL 25027 SHALL BE USED
- 5 MS21047 SUPERSEDES AN362, AN366 NAS680 NAS1023 IN PART

PREPARING ACTIVITY DLA-15 CUSTODIANS ARMY- AV NAVY- AS AIR FORCE- 11 DLA- REVIEW 82 USER CR, MI PROJECT NUMBER 5310-1944	<b>MILITARY SPECIFICATION SHEET</b> TITLE NUT, SELF-LOCKING, PLATE TWO-LUG, LOW HEIGHT, STEEL, 125 KSI Ftu, 450F	SPECIFICATION SHEET NUMBER	
		MS21047	1 FEB 94 REV F
		SUPERSEDING MS21047 E 30 SEPT 87 (SEE NOTE 5)	
DISTRIBUTION STATEMENT		AMSC- N/A	FSC 5310

A. Approved for public release distribution is unlimited Page 2 of 1

INTERCHANGEABILITY RELATIONSHIP

MS21047 NUTS CAN UNIVERSALLY REPLACE AN362 AN366 NAS680 AND NAS1023 NUTS OF LIKE MATERIAL THREAD SIZE LUBRICANT (DRY FILM OR NON-DRY FILM LUBRICANT) AND FASTENING METHOD (PLAIN RIVET HOLES DIMPLED OR COUNTERSUNK RIVET HOLES) BUT THESE AN362, AN366 NAS680, AND NAS1023 NUTS CANNOT UNIVERSALLY REPLACE MS21047 NUTS

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBER	SUBSTITUTIVE PART NUMBER	CANCELLED PART NUMBER	SUBSTITUTIVE PART NUMBER
NAS1023A04	MS21047L04	NAS1023A5	MS21047L5
NAS1023A04K	MS21047L04K	NAS1023A5K	MS21047L5K
NAS1023AX04	MS21047-04	NAS1023AX5	MS21047-5
NAS1023AX04K	MS21047-04K	NAS1023AX5K	MS21047-5K
NAS1023A06	MS21047L06	NAS1023A6	MS21047L6
NAS1023A06K	MS21047L06K	NAS1023A6K	MS21047-6
NAS1023AX06	MS21047-06	NAS1023A7	MS21047L7
NAS1023AX06K	MS21047-06K	NAS1023A7	MS21047-7
NAS1023A08	MS21047L08	NAS1023A8	MS21047L8
NAS1023A08K	MS21047L08K	NAS1023AX8	MS21047-8
NAS1023AX08	MS21047-08	NAS1023A9	MS21047L9
NAS1023AX08K	MS21047-08K	NAS1023AX9	MS21047-9
NAS1023A3	MS21047L3	NAS1023A10	MS21047L10
NAS1023A3K	MS21047L3K	NAS1023AX10	MS21047-10
NAS1023AX3	MS21047-3	---	---
NAS1023AX3K	MS21047-3K	---	---
NAS1023A4	MS21047L4	---	---
NAS1023A4K	MS21047L4K	---	---
NAS1023AX4	MS21047-4	---	---
NAS1023AX4K	MS21047-4K	---	---

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS			SUBSTITUTIVE PART NUMBERS	CANCELLED PART NUMBERS			SUBSTITUTIVE PART NUMBERS
---	---	---	MS21047-04	---	AN366F1032B	---	MS21047L3
---	---	NAS680X04K	MS21047-04K	---	---	NAS680A3K	MS21047L3K
---	---	NAS680A04	MS21047L04	AN362F42B	AN366F42B	---	MS21047-4
---	---	NAS680A04K	MS21047L04K	---	AN366F428B	---	MS21047-4
AN362F832	AN366F832	---	MS21047-06	---	---	NAS680X4K	MS21047-4K
---	AN366F832B	---	MS21047-06	AN362F428	AN366F428	NAS680A4	MS21047L4
---	---	NAS680X06K	MS21047-06K	---	AN366F428B	---	MS21047L4
AN362F832	AN366F832	NAS680A06	MS21047L06	AN362F524	AN366F524	NAS680A4K	MS21047L4K
---	AN366F832B	---	MS21047L06	---	AN366F524B	---	MS21047-5
---	---	NAS680A06K	MS21047L06K	---	---	---	MS21047-5
AN362F832	AN366F832	---	MS21047-08	---	---	NAS680X3K	MS21047-5K
---	AN366F832B	---	MS21047-08	AN362F524	AN366F524	NAS680A5	MS21047L5
---	---	NAS680X08K	MS21047-08K	---	AN366F524B	---	MS21047L5
AN362F832	AN366F832	NAS680A08	MS21047L08	---	---	NAS680A5K	MS21047L5K
---	AN366F832B	---	MS21047L08	AN362F624	AN366F624	---	MS21047-6
---	---	NAS680A08K	MS21047L08K	---	AN366F624B	---	MS21047-6
AN362F1032	AN366F1032	---	MS21047-3	AN362F624	AN366F624	NAS680A6	MS21047L6
---	AN366F1032B	---	MS21047-3	---	---	---	MS21047L6
---	---	NAS680X3K	MS21047-3K	---	AN366F624B	---	MS21047L6
AN362F1032	AN366F1032	NAS680A3	MS21047L3	---	---	NAS680A7	MS21047L7

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PREPARING ACTIVITY DLA-15 CUSTODIANS ARMY- AV NAVY- AS AIR FORCE- 11 DLA- REVIEW 82 USER CR, MI PROJECT NUMBER 5310-1844	MILITARY SPECIFICATION SHEET TITLE NUT, SELF-LOCKING, PLATE, TWO-LUG, LOW HEIGHT, STEEL 125 KSI Flu 450F		SPECIFICATION SHEET NUMBER <b>MS21047</b> 1 FEB 84 REV F	
	SUPERSEDING MS21047 E 30 SEPT 87 (SEE NOTE 5)		AMSC- N/A FSC 5310	
	DISTRIBUTION STATEMENT A. Approved for public release distribution is unlimited			Page 3 of 3