

NASM21074

## ADOPTION NOTICE

NASM21074, "NUT, SELF-LOCKING, PLATE, CORNER, REDUCED RIVET, SPACING, LOW HEIGHT, CRES, 125 KSI FTU, 450° AND 800°F", was adopted on 7 FEBRUARY 2000 for use by the Department of Defense (DoD). Proposed changes by DoD Activities must be submitted to the DoD Adopting Activity: Defense Supply Center Philadelphia, ATTN: DSCP-ILEA, 700 Robbins Avenue, Philadelphia, PA 19111-5096. DoD Activities may obtain copies of this standard from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. The private sector and other Government agencies may purchase copies from the AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1250 EYE STREET, N. W., WASHINGTON, DC 20005-3924.

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DLA-IS

## Adopting activity:

DLA-IS  
(Project 5310-2577)

AMSC N/A

FSC 5310

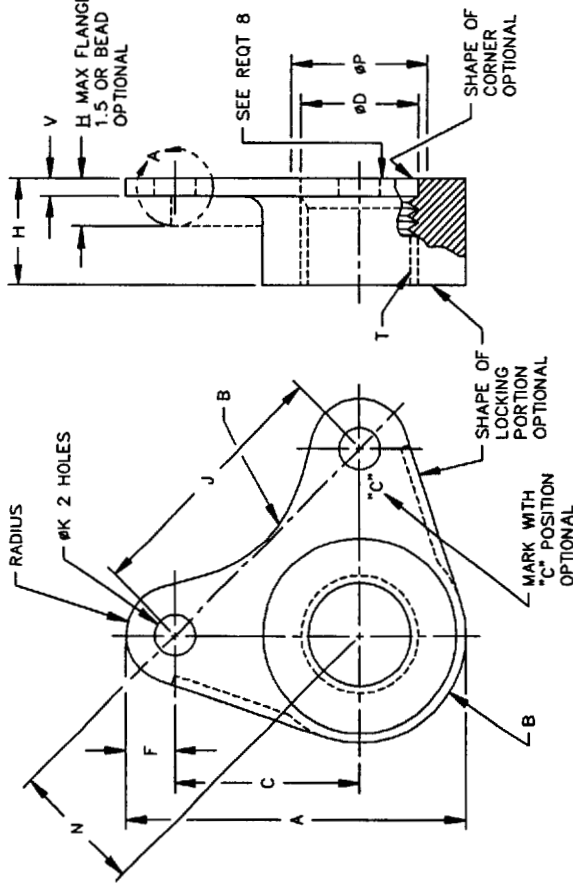
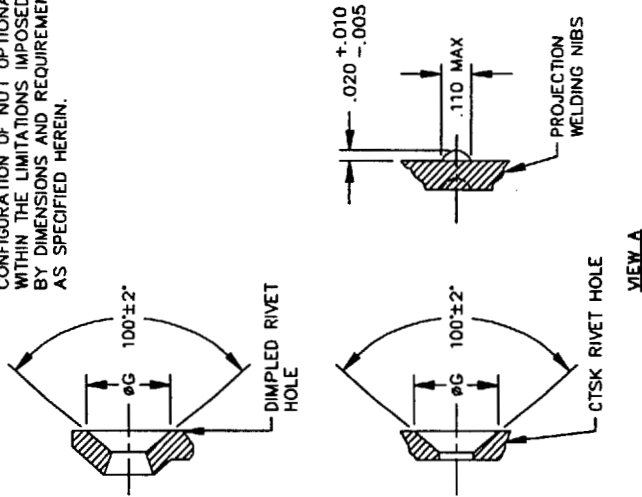
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CONFIGURATION OF NUT OPTIONAL WITHIN THE LIMITATIONS IMPOSED BY DIMENSIONS AND REQUIREMENTS AS SPECIFIED HEREIN.



VIEW A

TABLE I DASH NUMBERS AND DIMENSIONS

DASH NUMBERS	450F			BOOF			T THREAD SIZES	A MAX	B		C ±.005	D MIN	F MIN	G ±.010	H 1/ MAX	J ±.002	K 3/ ±.005	N MAX	P MAX	V MAX	AXIAL STRENGTH LBS MIN	WEIGHT LBS/100
	PLAIN HOLES	CTS OR DIMPLED HOLES	WELDING PROJECTION	PLAIN HOLES	CTS OR DIMPLED HOLES	WELDING PROJECTION			MAX	MIN												
L02	~	L02W	-02	~	-02W	~	.086-56UNJ-C-38	.288	.092	.061	.125	~	.071	2/	.110	.177	.066	.120	.130	.035	440	.07
L03	~	L03W	-03	~	-03W	~	.099-48UNJ-C-38	.316	.125	.092	.138	~	.089	2/	.125	.196	.066	.130	.143	.035	550	.09
L04	L04K	L04W	-04	-04K	-04W	~	.112-40UNJ-C-38	.448	.156	.096	.203	~	.089	2/	.143	.287	.098	.215	.166	.040	750	.11
L06	L06K	L06W	-06	-06K	-06W	~	.138-32UNJ-C-38	.463	.156	.121	.218	~	.089	2/	.171	.308	.098	.232	.205	.047	1,130	.14
L08	L08K	L08W	-08	-08K	-08W	~	.164-32UNJ-C-38	.497	.163	.125	.234	.168	.100	2/	.200	.331	.098	.210	.248	.047	1,720	.21
L3	L3K	L3W	-3	-3K	-3W	~	.190-32UNJ-F-38	.526	.176	.156	.250	.194	.100	2/	.250	.354	.098	.215	.274	.047	2,460	.26
L4	L4K	L4W	-4	-4K	-4W	~	.250-28UNJ-F-38	.603	.222	.200	.281	.254	.100	2/	.281	.398	.098	.233	.344	.065	4,580	.45
L5	L5K	L5W	-5	-5K	-5W	~	.3125-24UNJ-F-38	.757	.273	.250	.359	.317	.125	2/	.328	.508	.130	.280	.417	.065	7,390	.80
L6	~	L6W	-6	~	-6W	~	.375-24UNJ-F-38	.870	.331	.305	.414	.379	.125	2/	.344	.585	.130	.303	.505	.075	11,450	1.92

FED SUP CLASS  
5310

1/ MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.

2/ SPACE WILL NOT PERMIT COUNTERSINK.

3/ DIMPLED RIVET HOLE TOLERANCE FOR ø"K" IS +.015, -.000.

LIST OF CURRENT SHEETS

NO	REV
1	NEW
2	NEW
3	NEW

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS21074, REVISION F. PART NUMBERS REMAIN MS21074.

CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE



PROCUREMENT SPECIFICATION  
MIL-N-25027

TITLE  
NUT, SELF-LOCKING, PLATE, CORNER,  
REDUCED RIVET SPACING, LOW HEIGHT,  
CRES, 125 KSI Ft<sub>u</sub>, 450°F & 800°F

CLASSIFICATION  
PART STANDARD

NASM21074  
SHEET 1 OF 3

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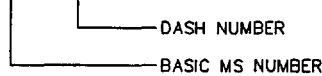


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REQUIREMENTS:

- MATERIAL:** CORROSION RESISTANT STEEL, TYPE A286, (UNS S66286) IN ACCORDANCE WITH AMS5525, AMS5732 OR AMS5737.
- FINISH:** ONLY 800F NUTS: SILVER PLATE ALL THREADED SURFACES OF NUT ELEMENT IN ACCORDANCE WITH AMS2410. THREADS SHALL SHOW COMPLETE COVERAGE. SILVER PLATING ON ALL OTHER SURFACES OPTIONAL. TARNISHING OR DISCOLORATION OF SILVER NOT CAUSE FOR REJECTION.
- LUBRICANT:** ONLY 450F NUTS: DRY FILM LUBRICANT IN ACCORDANCE WITH MIL-N-25027.
- DIMENSIONING AND TOLERANCING:** DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M.
- HARDNESS:** 49HRC, MAX.
- THREADS:** THREADS BEFORE LUBRICATION IN ACCORDANCE WITH MIL-S-8879.
- SURFACE TEXTURE:** SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL NOT EXCEED 125 MICROINCHES, IN ACCORDANCE WITH ANSI B46.1.
- COUNTERBORE/COUNTERSINK:** ON SIZE .164 AND LARGER, THREAD RELIEF SHALL BE .062 MINIMUM; ON SIZE .138 AND SMALLER, COUNTERSINK OR RADIUS WITHIN "P" DIAMETER.
- PERFORMANCE:** SEE PROCUREMENT SPECIFICATION, EXCEPT 450F DRY FILM LUBRICATED NUTS LIMITED TO FIVE REUSE CYCLES.
- PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

EXAMPLE: MS21074 L4K



MS21074L4K INDICATES: NUT, SELF-LOCKING, PLATE, CORNER, REDUCED RIVET SPACING, LOW HEIGHT, CRES, 125 KSI Ft<sub>u</sub>, 450F, DRY FILM LUBRICATION, .250-28 UNJF-3B, COUNTERSUNK OR DIMPLED HOLES.

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- 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.
- 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.
- 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 THERE ARE QUALIFIED PRODUCTS LISTED ON QPL 25027 SHALL BE USED.~~

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SHEET 2

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INTERCHANGEABILITY RELATIONSHIP

MS21074 NUTS CAN UNIVERSALLY REPLACE NAS698 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 NAS698 NUTS CANNOT UNIVERSALLY REPLACES MS21074 NUTS.

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS698C02	MS21074-02
NAS698C02M	MS21074L02
NAS698C03	MS21074-03
NAS698C03M	MS21074L03
NAS698C04L	MS21074-04
NAS698C04LK	MS21074-04K
NAS698C04LM	MS21074L04
NAS698C04LMK	MS21074L04K
NAS698C06L	MS21074-06
NAS698C06LK	MS21074-06K
NAS698C06LM	MS21074L06
NAS698C06LMK	MS21074L06K
NAS698C08	MS21074-08
NAS698C08K	MS21074-08K
NAS698C08M	MS21074L08
NAS698C08MK	MS21074L08K
NAS698C3	MS21074-3
NAS698C3K	MS21074-3K
NAS698C3M	MS21074L3
NAS698C3MK	MS21074L3K
NAS698C4	MS21074-3
NAS698C4K	MS21074-3K
NAS698C4M	MS21074L4
NAS698C4MK	MS21074L4K
NAS698C5	MS21074-5
NAS698C5K	MS21074-5K
NAS698C5M	MS21074L5
NAS698C5MK	MS21074L5K
NAS698C6	MS21074-6
NAS698C6K	MS21074-6K
NAS698C6M	MS21074L6
NAS698C6MK	MS21074L6K

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