

INCH-POUND

MS21072G  
AMENDMENT 1  
11 December 1995

MILITARY SPECIFICATION SHEET

NUT, SELF-LOCKING, PLATE, ONE LUG, REDUCED RIVET  
SPACING LOW HEIGHT, CRES, 125 KSI F<sub>tu</sub> 450°F AND 800°F

This amendment forms a part of MS21072G, dated 1 February 1994, and is approved for use  
by all Departments and Agencies of the Department of Defense.

PAGE 1, TABLE I, COLUMN T

Delete Dimension "3.215" and substitute with ".3125" on thread size.

Custodians:  
Army - AV  
Navy - AS  
Air Force - 99

Preparing Activity:  
DLA-IS

(Project No. 5310-2211)

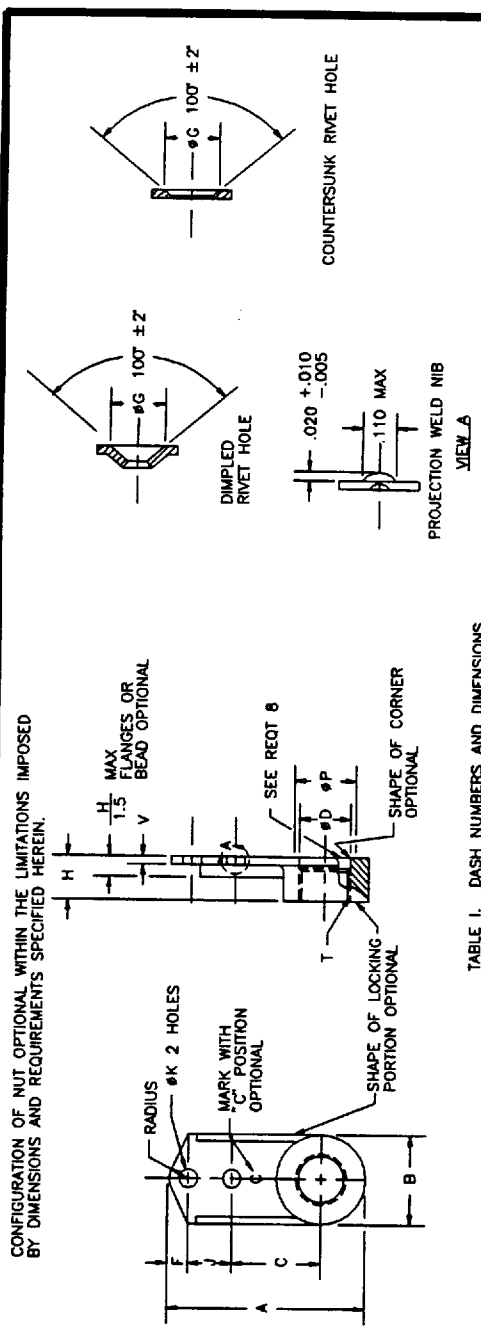
AMSC N/A

FSC 5310

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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

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 DDSSS SPECIFIED IN THE SOLICITATION:



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

TABLE 1. DASH NUMBERS AND DIMENSIONS

DASH NUMBERS	450F		800F		T THREAD SIZES	A MAX	B MIN	C ±.005	F MIN	G ±.010	H MAX	J ±.002	K ±.005	V MAX	AXIAL STRENGTH LBS/INCH	WEIGHT LBS/100	
	PLAIN HOLES	WELDING PROJECTION	PLAIN HOLES	CTS/K OR DIMPLED HOLES													WELDING PROTECTION
L02	-	L02W	-02	-	-02W	.507	.164	.140	.125	.071	.110	.219	.066	.130	.035	440	.06
L03	-	L03W	-03	-	-03W	.535	.184	.140	.133	.071	.125	.219	.066	.143	.035	550	.09
L04	L04K	L04W	-04	-04K	-04W	.667	.260	.140	.203	.089	.200	.219	.098	.166	.040	750	.12
L06	L06K	L06W	-06	-06K	-06W	.684	.265	.195	.218	.089	.200	.219	.098	.206	.047	1,130	.15
L08	L08K	L08W	-08	-08K	-08W	.716	.297	.235	.234	.168	.200	.250	.219	.248	.047	1,720	.23
L3	L3K	L3W	3	3K	-3W	.745	.328	.298	.250	.194	.200	.250	.219	.274	.047	2,460	.27
L4	L4K	L4W	4	4K	-4W	.822	.414	.380	.281	.254	.200	.281	.219	.344	.055	4,580	.46
L5	L5K	L5W	5	5K	-5W	1.026	.505	.475	.359	.317	.230	.328	.269	.417	.065	7,390	.85
L6	L6K	-	6	-	-6W	1.139	.614	.580	.414	.379	.230	.344	.269	.505	.075	11,450	2.04

Form Approved  
OMB No. 0704-0188

1/ MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.  
2/ 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.  
3/ DIMPLED RIVET HOLE TOLERANCE FOR "K" IS +.015 -.000  
4/ SPACE WILL NOT PERMIT COUNTERSINK.

(G) DENOTES CHANGE(S)

INCH-POUND

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

REVIEW: 82  
USER: CR, MI  
PROJECT NUMBER: 5310-1961

MILITARY SPECIFICATION SHEET

TITLE  
NUT, SELF-LOCKING, PLATE, ONE LUG,  
REDUCED RIVET SPACING, LOW HEIGHT,  
CRES, 125KSI FTU, 450F AND 800F

SPECIFICATION SHEET NUMBER  
MS21072 1 FEB 94  
REV G

SUPERSEDING  
MS21072F 30 SEP87 (SEE NOTE 5.)

AMSC- N/A FSC 5310

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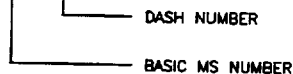
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Form Approved  
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REQUIREMENTS:

1. **MATERIAL:** CORROSION RESISTANT STEEL, TYPE A286, (UNS S66286) IN ACCORDANCE WITH AMS5525, AMS5732 OR AMS5737.
- ② 2. **FINISH:** ONLY 800°F NUTS: SILVER PLATE ALL THREADED SURFACES OF NUT ELEMENT IN ACCORDANCE WITH AMS 2410. THREADS SHALL SHOW COMPLETE COVERAGE. SILVER PLATING ON ALL OTHER SURFACES OPTIONAL TARNISHING OR DISCOLORATION OF SILVER NOT CAUSE FOR REJECTION.
3. **DIMENSIONING AND TOLERANCING:** DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M.
4. **HARDNESS:** 49HRC, MAX.
5. **THREADS:** THREADS BEFORE LUBRICATION IN ACCORDANCE WITH MIL-S-8879.
6. **SURFACE TEXTURE:** SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL NOT EXCEED 125 MICROINCHES, IN ACCORDANCE WITH ANSI/ASME B46.1.
7. **LUBRICANT:** ONLY 450°F NUTS: DRY FILM LUBRICANT IN ACCORDANCE WITH MIL-N-25027.
8. **CONTERBORE/COUNTERSINK:** ON SIZE .164 AND LARGER, THREAD RELIEF SHALL BE .062 MINIMUM; ON SIZE .0138 AND SMALLER, COUNTERSINK TO "P" DIAMETER.
9. **PERFORMANCE:** SEE PROCUREMENT SPECIFICATION, EXCEPT 450°F DRY FILM LUBRICATED NUTS LIMITED TO FIVE REUSE CYCLES.
10. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

EXAMPLE: MS21072L4K



MS21072L4K INDICATES: NUT, SELF-LOCKING, PLATE, ONE LUG, REDUCED RIVET SPACING, LOW HEIGHT, CRES; 125 KSI FTu, 450 DEGREES F; DRY FILM LUBRICATION, .250-28 UNJF-3B; 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 (DODDISS) 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 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.
5. MS21072 SUPERSEDES NAS696

INTERCHANGEABILITY RELATIONSHIP

MS21072 NUTS CAN UNIVERSALLY REPLACE NAS696 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 NAS696 NUTS CANNOT UNIVERSALLY REPLACE MS21072 NUTS.

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS696C02	MS21072-02
NAS696C02M	MS21072L02
NAS696C03	MS21072-03
NAS696C03M	MS21072L03
NAS696C04	MS21072-04
NAS696C04LM	MS21072L04
NAS696C06L	MS21072-06
NAS696C06LM	MS21072L06
NAS696C08	MS21072-08
NAS696C08M	MS21072L08
NAS696C3	MS21072-3
NAS696C3M	MS21072L3
NAS696C4	MS21072-4
NAS696C4M	MS21072L4
NAS696C5	MS21072-5
NAS696C5M	MS21072L5
NAS696C6	MS21072-6
NAS696C6M	MS21072L6

PREPARING ACTIVITY: DLA-IS  
 CUSTODIANS: ARMY- AV NAVY- AS  
 AIR FORCE- 11 DLA-  
 REVIEW: 82  
 USER: CR, MI  
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SPECIFICATION SHEET NUMBER 1 FEB 84  
**MS21072** REV G  
 SUPERSEDING  
 MS21072F 30 SEP87 (SEE NOTE 5.)  
 AMSC- N/A FSC 5310

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