

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 DODISS SPECIFIED IN THE SOLICITATION MIL-N-25027

PREPARING ACTIVITY DLA-IS		CUSTODIANS ARMY- AV NAVY- AS		AIR FORCE- 11 DLA-		REVIEW 82		USER CR MI		PROJECT NUMBER 5310-1955		DISTRIBUTION STATEMENT	
						<b>MILITARY SPECIFICATION SHEET</b> TITLE NUT, SELF-LOCKING PLATE, TWO-LUG, REDUCED RIVET SPACING, LOW HEIGHT, STEEL, 125 KSI F <sub>U</sub> , 450F						SPECIFICATION SHEET NUMBER <b>MS21069</b> 1 FEB 94 REV C	
						SUPERSEDING MS21069 F 30 SEPT 87 (SEE NOTE 5) AMSC- N/A FSC 5310						Page <u>1</u> of <u>2</u>	

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PREVIOUS EDITIONS ARE OBSOLETE

TABLE 1 DASH NUMBERS AND DIMENSIONS

DASH NUMBERS		T		A		B		D		F		G		H		J		K		P		V		AXIAL STRENGTH LBS/MIN		WEIGHT LBS/100	
PLAN RIVET HOLES	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT	NON-DRY FILM LUBRICANT	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX
-02	-	-	-	410	162	140	-	071	-	110	250	066	130	035	440	05											
-03	L03	-	-	425	184	140	-	071	-	125	263	066	143	035	550	08											
-04	L04	-04K	L04K	630	260	140	-	089	200	143	408	098	166	040	750	11											
-06	L06	-06K	L06K	661	285	195	-	089	200	171	437	098	206	047	1,130	14											
-08	L08	-08K	L08K	692	297	230	168	100	200	250	468	098	248	047	1,720	18											
-3	L3	-3K	L3K	724	328	298	194	100	200	250	500	098	274	047	2,460	26											
-4	L4	-4K	L4K	766	414	380	254	100	200	281	562	098	344	055	4,580	40											
-5	L5	-5K	L5K	1,006	505	475	317	125	230	328	718	130	417	065	7,390	77											
-6	L6	-	-	1,116	614	580	379	125	230	344	828	130	505	075	11,450	186											

① DENOTES CHANGE(S)

INCH-POUND

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

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## REQUIREMENTS

Form Approved  
OMB No 0704-0188

- (G) 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), 4140 (UNS G41400) AND 4140 (UNS G41400) IN ACCORDANCE WITH ASTM A29
- 2 FINISH CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416 TYPE II CLASS 3. 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 MICROINCHES 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
- (G) 8 EDGES BREAK ALL SHARP EDGES AND REMOVE ALL BURRS
- 9 COUNTERBORE/COUNTERSINK ON SIZE .164 AND LARGER THREAD RELIEF SHALL BE .062 MINIMUM ON SIZE .138 AND SMALLER COUNTERSINK TO .00" DIAMETER
- 10 PART NUMBER THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I

EXAMPLE MS21069L4K

DASH NUMBER

BASIC MS NUMBER

MS21069L4K INDICATES NUT SELF-LOCKING PLATE TWO LUG REDUCED RIVET SPACING LOW HEIGHT STEEL 125 KSI Flu 450F 250-28UNF-3B, DRY FILM LUBRICATION COUNTERSUNK OR DIMPLED RIVET 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 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 (DODDIS) 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 MS3358B. ONLY NUTS FOR WHICH THERE ARE QUALIFIED PRODUCTS LISTED ON QPL 25027 SHALL BE USED
- MS21069 SUPERSEDES NAS697

## INTERCHANGEABILITY RELATIONSHIP

MS21069 NUTS CAN UNIVERSALLY REPLACE NAS697 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 NAS697 NUTS CANNOT UNIVERSALLY REPLACE MS21069 NUTS

## INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS	CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS697X02	MS21069-02	NAS697X3K	MS21069-3K
NAS697A02	MS21069L02	NAS697A3K	MS21069L3K
NAS697X03	MS21069-03	NAS697X4	MS21069-4
NAS697A03	MS21069L03	NAS697A4	MS21069L4
NAS697X04L	MS21069-04	NAS697X4K	MS21069-4K
NAS697A04L	MS21069L04	NAS697A4K	MS21069L4K
NAS697X04LK	MS21069-04K	NAS697X5	MS21069-6
NAS697A04LK	MS21069L04K	NAS697A5	MS21069L6
NAS697X06L	MS21069-06	NAS697X5K	MS21069-6K
NAS697A06L	MS21069L06	NAS697A5K	MS21069L6K
NAS697X06LK	MS21069-06K	NAS697X6	MS21069-6
NAS697A06LK	MS21069L06K	NAS697A6	MS21069L6
NAS697X08	MS21069-08		
NAS697A08	MS21069L08		
NAS697X08K	MS21069-08K		
NAS697A08K	MS21069L08K		
NAS697X3	MS21069-3		
NAS697A3	MS21069L3		

PREPARING ACTIVITY DLA-IS

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REVIEW 82

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DISTRIBUTION STATEMENT

A. Approved for public release distribution is unlimited

## MILITARY SPECIFICATION SHEET

TITLE

NUT, SELF-LOCKING, PLATE TWO LUG,  
REDUCED RIVET SPACING, LOW HEIGHT  
STEEL, 125 KSI Flu, 450F

SPECIFICATION SHEET NUMBER

MS21069

1 FEB 94

REV G

SUPERSEDING

MS21069 F 30 SEPT 87 (SEE NOTE 5)

AMSC-

N/A

FSC 5310

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