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AMSC N/A

REVIEWER ACTIVITIES:
AIR FORCE-82
DLA-15

USER ACTIVITIES:
ARMY-CR,MI

P.A. NAVY-AS Other Cus: ARMY-AV AIR FORCE-11	INTERNATIONAL INTEREST	TITLE NUT, SELF-LOCKING, PLATE, CORNER, LOW HEIGHT, STEEL, 125 KSI Ft _u , 450°F
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES	NAS 684, NAS 1027 IN PART

MILITARY STANDARD
MS21055

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DD FORM 672-1 (COORDINATED)

5310-1535

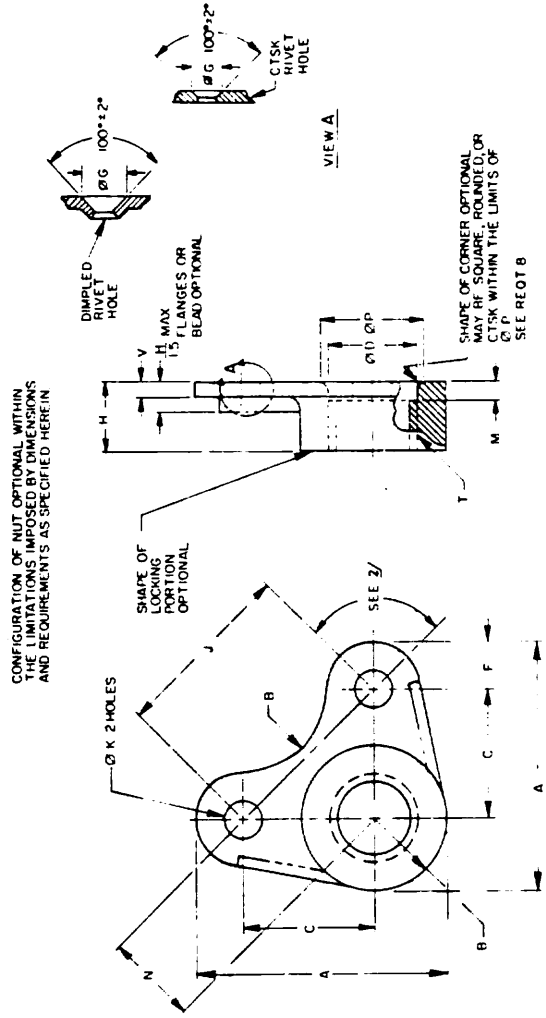


TABLE 1. UNSI NUMBERS AND DIMENSIONS

UNSI NUMBER	PLAIN RIVET		DIMPLED RIVET OR NON-DRY FILM LUBRICANT		T THREAD SIZE	A MAX	B MIN	C MIN	D MIN	E MIN	F MIN	G MIN	H MIN	I MIN	J MIN	K MIN	L MIN	M MIN	N MIN	O MIN	P MIN	Q MIN	R MIN	S MIN	T MIN	U MIN	V MIN	W MIN	X MIN	Y MIN	Z MIN	AXIAL STRENGTH LBS/MIN	HEIGHT LBS/100				
	MIN	MAX	MIN	MAX																																	
-04	L04	-04K	L04K	-04K	.112-40 UNJF-3B	.637	.120	.105	.344	---	.100	.200	---	.270	.486	.098	---	.270	.166	.206	.047	---	.270	.166	.206	.047	---	.270	.486	.098	---	.270	.166	.206	.047	750	.20
-06	L06	-06K	L06K	-06K	.110-32 UNJF-3B	.617	.133	.108	.344	---	.100	.200	---	.270	.486	.098	---	.270	.166	.206	.047	---	.270	.166	.206	.047	---	.270	.486	.098	---	.270	.166	.206	.047	1,110	.25
-08	L08	-08K	L08K	-08K	.104-28 UNJF-3B	.617	.149	.125	.344	---	.100	.200	---	.270	.486	.098	---	.270	.166	.206	.047	---	.270	.166	.206	.047	---	.270	.486	.098	---	.270	.166	.206	.047	1,730	.28
-1	L1	-1K	L1K	-1K	.190-12 UNJF-3B	.651	.164	.145	.344	---	.100	.200	---	.270	.486	.098	---	.270	.166	.206	.047	---	.270	.166	.206	.047	---	.270	.486	.098	---	.270	.166	.206	.047	2,460	.29
-4	L4	-4K	L4K	-4K	.270-78 UNJF-3B	.852	.207	.185	.500	---	.100	.200	---	.270	.486	.098	---	.270	.166	.206	.047	---	.270	.166	.206	.047	---	.270	.486	.098	---	.270	.166	.206	.047	4,580	.58
-5	L5	-5K	L5K	-5K	.3125-24 UNJF-3B	.914	.248	.216	.500	---	.125	.230	---	.344	.707	.130	---	.344	.216	.248	.065	---	.125	.230	---	.344	.707	.130	---	.344	.216	.248	.065	7,370	.85		
-6	L6	-6K	L6K	-6K	.375-24 UNJF-3B	.968	.307	.270	.500	---	.125	.230	---	.344	.707	.130	---	.344	.270	.307	.062	---	.125	.230	---	.344	.707	.130	---	.344	.270	.307	.062	11,450	1.31		
-7	L7	-7K	L7K	-7K	.4375-20 UNJF-3B	1.101	.361	.340	.562	---	.150	.270	---	.344	.707	.130	---	.344	.361	.361	.062	---	.150	.270	---	.344	.707	.130	---	.344	.361	.361	.062	15,450	1.84		
-8	L8	-8K	L8K	-8K	.500-20 UNJF-3B	1.214	.417	.398	.625	---	.156	.270	---	.344	.707	.130	---	.344	.417	.417	.062	---	.156	.270	---	.344	.707	.130	---	.344	.417	.417	.062	21,110	4.80		
-10	L10	-10K	L10K	-10K	.625-18 UNJF-3B	1.417	.505	.482	.750	---	.156	.270	---	.344	.707	.130	---	.344	.505	.505	.062	---	.156	.270	---	.344	.707	.130	---	.344	.505	.505	.062	34,110	8.60		

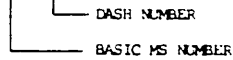
MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF IDENTIFICATION.
 CENTER OF THE TAPPED HOLE SHALL NOT DEVIATE IN ANY DIRECTION FROM THE CENTER OF THE PLATE; NUT AS DETERMINED BY THE RIVET HOLES BY MORE THAN .005".
 DIMPLED PIVOT HOLE TOLERANCE FOR Ø P IS ±.015 ±.000.

APPROVED 21 JUL 64 REVISED 30 SEP 87

REQUIREMENTS:

1. MATERIAL: CARBON STEEL, COMPOSITIONS 1035 (UNS G10350), 1040 (UNS G10400) AND 1050 (UNS G10500) IN ACCORDANCE WITH QQ-S-635; 1042 (UNS G10420), IN ACCORDANCE WITH ASTM A29. ALLOY STEEL, GRADES 4130 (UNS G41300), 4340 (UNS G43400) AND 8740 (UNS G8740) IN ACCORDANCE WITH ASTM A29.
2. FINISH: CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416 TYPE II, CLASS D. FOR DRY FILM LUBRICATED NUTS, THE TYPE AND CLASS ARE OPTIONAL IF THE NUTS MEET THE ZALT 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: 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 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. COUNTERBORE/COUNTERSINK: ON SIZE .164 AND LARGER, COUNTERBORE THREAD "D" DIAMETER X .062 DEEP MINIMUM THREAD RELIEF; ON SIZE .138 AND SMALLER, COUNTERSINK TO "P" DIAMETER WITHIN THE LIMITS OF D, P AND M.
9. PART NUMBER: THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE 1.

EXAMPLE: MS21055LAK



MS21055LAK INDICATES: NUT, SELF-LOCKING, PLATE, CORNER, LOW HEIGHT, ALLOY STEEL; 125 KSI F_{tu}, 450° F; .250-28 UNF-3B; DRY FILM LUBRICANT

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 (DOSS), 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.

USER ACTIVITIES:
ARMY - CR, MI

REVIEWER ACTIVITIES:
AIR FORCE - 82
DLA - IS

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APPROVED 21 JUL 64 REVISED (F) FOR CHANGES SEE PAGES 1, 2 AND 3

P. A. NAVY-AS Other Code ARMY-AV AIR FORCE-11	INTERNATIONAL INTEREST	TITLE NUT, SELF-LOCKING, PLATE, CORNER, LOW HEIGHT, STEEL, 125 KSI F _{tu} , 450° F	MILITARY STANDARD
			MS21055
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 684 NAS 1027 IN PART	PAGE 2 OF 3	

INTERCHANGEABILITY RELATIONSHIP

MS21055 NUTS CAN UNIVERSALLY REPLACE NAS684 AND NAS1027 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 NAS684 AND NAS1027 NUTS CANNOT UNIVERSALLY REPLACE MS21055 NUTS.

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS	CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS	CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS684X06	MS21055-06	NAS1027A04	MS21055L04	NAS1027A5	MS21055L5
NAS684X06K	MS21055-06K	NAS1027A04K	MS21055L04K	NAS1027A5K	MS21055L5K
NAS684A06	MS21055L06	NAS1027AX04	MS21055-04	NAS1027AX5	MS21055-5
NAS684A06K	MS21055L06K	NAS1027AX04K	MS21055-04K	NAS1027AX5K	MS21055-5K
NAS684X08	MS21055-08	NAS1027A06	MS21055L06	NAS1027A6	MS21055L6
NAS684X08K	MS21055-08K	NAS1027A06K	MS21055L06K	NAS1027A6K	MS21055-6
NAS684A08	MS21055L08	NAS1027AX06	MS21055-06	NAS1027AX6	MS21055L7
NAS684A08K	MS21055L08K	NAS1027AX06K	MS21055-06K	NAS1027AX7	MS21055-7
NAS684XJ	MS21055-3	NAS1027A08	MS21055L08	NAS1027A8	MS21055L8
NAS684XJK	MS21055-3K	NAS1027A08K	MS21055L08K	NAS1027A8K	MS21055-8
NAS684AJ	MS21055L3	NAS1027AX08	MS21055-08	NAS1027A10	MS21055L10
NAS684AJK	MS21055L3K	NAS1027AX08K	MS21055-08K	NAS1027AX10	MS21055-10
NAS684X4	MS21055-4	NAS1027A3	MS21055L3		
NAS684X4K	MS21055-4K	NAS1027A3K	MS21055L3K		
NAS684A4	MS21055L4	NAS1027AX3	MS21055-3		
NAS684A4K	MS21055L4K	NAS1027AX3K	MS21055-3K		
NAS684XS	MS21055-5	NAS1027A4	MS21055L4		
NAS684XSJ	MS21055-5K	NAS1027A4K	MS21055L4K		
NAS684A5	MS21055L5	NAS1027AX4	MS21055-4		
NAS684A5K	MS21055L5K	NAS1027AX4K	MS21055-4K		
NAS684X6	MS21055-6				
NAS684A6	MS21055L6				
NAS684X7	MS21055-7				
NAS684A7	MS21055L7				

USER ACTIVITIES:
ARMY-CR,MI

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AIR FORCE - B2
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			MS21055	
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 684, NAS 1027 IN PART	PAGE 3 OF 3		

DD FORM 672-1 (COORDINATED) 1 MAY 73

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5310-1535