

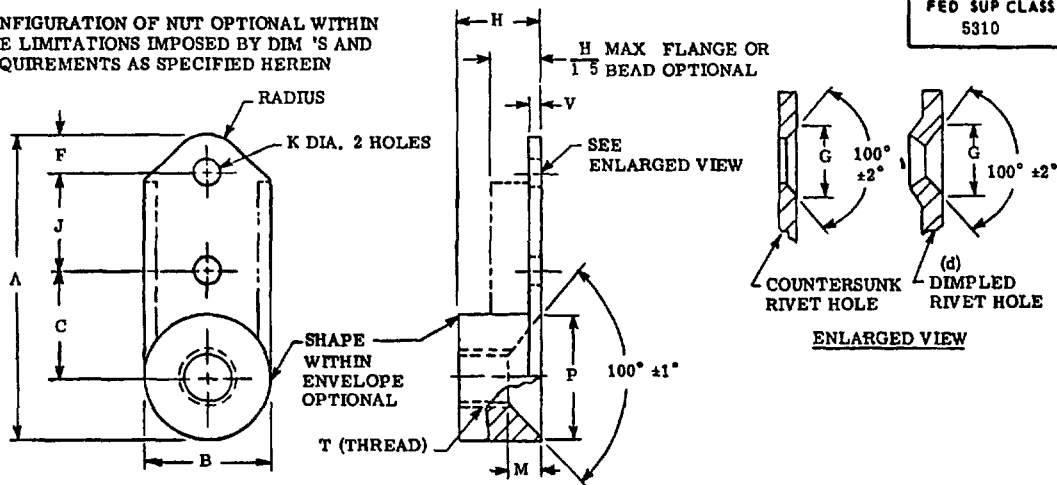
USER SYMBOLS:  
ARMY - EL, MI

REVIEWER SYMBOLS:  
NAVY - AS  
USAF - 11  
ARMY - AV  
DSA - ES

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For future coordination of changes to this document, draft circulation  
should be based on the information in the current DD0153."

This military standard is mandatory for use by all Departments  
& Agencies of the Department of Defense. Selection for all new  
engineering and design applications and for repetitive use shall  
be made from this document.

CONFIGURATION OF NUT OPTIONAL WITHIN  
THE LIMITATIONS IMPOSED BY DIM 'S AND  
REQUIREMENTS AS SPECIFIED HEREIN



T THREAD SIZE	(a) A MAX.	B MAX. MIN.	C ± .005	F MIN.	G DIA ± .010	H (b) MAX. ± .002	J (c) ± .002	K DIA. ± .005 REF - .000	M	P DIA. ± .005	V MAT'L MAX.	AXIAL STRENGTH LBS MIN.	WEIGHT LBS/100 MAX
1640-32UNJC-3B	.997	.422 .360	.344	100	200	.272	.312	.098	.084	.365	.047	1,720	43
1900-32UNJF-3B	1.013	.453 .406	.344	100	200	.281	.312	.098	.093	.411	.047	2,460	44
2500-28UNJF-3B	1.252	.619 .535	.500	100	200	.340	.312	.098	.121	.540	.055	4,580	86
3125-24UNJF-3B	1.340	.766 .681	.500	125	230	.422	.312	.130	.156	.586	.065	7,390	117

(a) THREADS BEFORE LUBRICATION PER MIL-S-8879

(b) MINIMUM "H" NOT SPECIFIED LIMITED ONLY BY STRENGTH REQUIREMENTS

(c) 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

(d) DIMPLED HOLE TOLERANCE FOR "K" IS + .015, - .000 AFTER FORMING.

#### NOTES

- 1 MATERIAL ALLOY STEEL.
- 2 PLATING 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 HARDNESS: ROCKWELL C49 MAXIMUM.
- 4 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-7502 FOR USAF APPLICATIONS, NUTS TREATED WITH DRY FILM LUBRICANTS SHALL NOT BE USED IN INTERNAL FUEL SYSTEMS APPLICATIONS.
- 5 DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED
- 6 SURFACE ROUGHNESS IN ACCORDANCE WITH ASA B46 1-1962 (ANSI) UNLESS OTHERWISE SPECIFIED, THE SURFACE ROUGHNESS SHALL NOT EXCEED 125 MICRO INCHES.
7. 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 A CROSS SECTIONAL AREA AT THE BASIC ROOT DIAMETER OF THE THREAD. 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.

#### INTERCHANGEABILITY RELATIONSHIP

MS21053 NUTS CAN UNIVERSALLY REPLACE NAS 683 NUTS OF LIKE MATERIAL, THREAD SIZE, PLATING LUBRICANTS (DRY FILM, OR NON DRY FILM), RIVET SPACING, AND FASTENING METHOD (PLAIN RIVET HOLES, DIMPLED, COUNTERSUNK RIVET HOLES OR PROJECTION WELDING) BUT NAS 683 NUTS CANNOT UNIVERSALLY REPLACE MS21053 NUTS.

FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN  
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID

(D) DENOTES CHANGES

P A. NAVY - AS Other Cust USAF - 11 ARMY - AV	TITLE NUT, SELF-LOCKING, PLATE, ONE LUG, 100° CSK LOW HEIGHT, ALLOY STEEL, 125 KSI F <sub>U</sub> , 450° F	MILITARY STANDARD <b>MS21053</b>
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES NAS 683	SHEET 1 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PROJECT NO. 5310-0972

APPROVED 21 JUL 64  
REVISED (A) 12 FEB 65  
(B) 4 NOV 1966  
(C) 20 APR 71  
(D) 15 MARCH 1978

FED SUP CLASS  
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T THREAD SIZE	DASH NUMBERS			
	450° F NON DRY FILM LUBRICATED		450° F DRY FILM LUBRICATED	
	PLAIN HOLES	CTSK OR DIMPLED HOLES	PLAIN HOLES	CTSK OR DIMPLED HOLES
1640-32UNJC-3B	-08	-08K	L08	L08K
1900-32UNJF-3B	-3	-3K	L3	L3K
2500-28UNJF-3B	-4	-4K	L4	L4K
3125-24UNJF-3B	-5	-5K	L5	L5K

## EXAMPLE OF PART NUMBER

MS 21053

L4K

NUT DASH NUMBER

BASIC PART NUMBER

2500-28UNJF-3B NUT, SELF LOCKING, ONE  
LUG, ALLOY STEEL, 125 KSI, 450° F, DRY  
FILM LUBRICATED, WITH COUNTERSUNK OR  
DIMPLED RIVET HOLES

INTERCHANGEABILITY TABLE			
CANCELED PART NUMBERS		SUBSTITUTIVE PART NUMBERS	
NAS 683			
NAS 683	X08	MS 21053	-08
	X08K		-08K
	A08		L08
	A08K		L08K
	X3		-3
	X3K		-3K
	A3		L3
	A3K		L3K
	X4		-4
	X4K		-4K
	A4		L4
	A4K		L4K
	X5		-5
	X5K		-5K
	A5		L5
NAS 683	A5K	MS 21053	L5K

APPROVED 21 JUL 64 REVISED (D) FOR CHANGES SEE SHEETS 1 AND 2

P A. NAVY - AS Other Cust USAF - 11 ARMY - AV	TITLE NUT, SELF-LOCKING, PLATE, ONE LUG, 100° CSK, LOW HEIGHT, ALLOY STEEL, 125 KSI F <sub>U</sub> , 450° F	MILITARY STANDARD
		MS21053
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES NAS 683	SHEET 2