

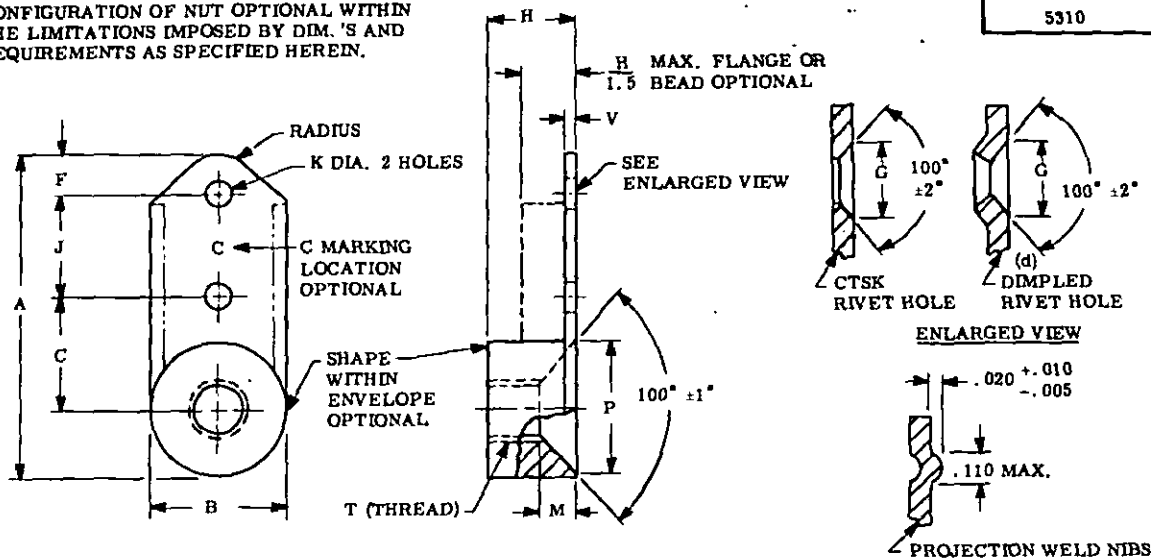
USER SYMBOLS:  
ARMY - EL, MI  
NAVY - OS

REVIEWER SYMBOLS:  
NAVY - SM  
USAF - 99  
ARMY - MI  
DLA - IS

"Revision/issue information is current as of the date of this document. Per future coordination of changes to this document, strict circulation should be based on the information in the current DDISS."

DISTRIBUTION STATEMENT: APPROVED FOR PUBLIC RELEASE. DISTRIBUTION IS UNLIMITED. 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 retooling use shall be made from this document.

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



T (a) THREAD SIZE	A MAX.	B MAX. MIN.	C ±.005 MIN.	F	G DIA. ±.010 MAX.	H (b)	J (c)	K (d) DIA. ±.005 REF. ±.000	M	P DIA. ±.005	V MAT'L MAX.	AXIAL STRENGTH LBS. MIN.	WEIGHT LBS/100 MAX.
.1640-32UNJC-3B	.097	.442 .380	.344	.100	.200	.272	.312	.098	.084	.365	.047	1,720	.43
.1900-32UNJF-3B	1.013	.453 .408	.344	.100	.200	.281	.312	.098	.093	.411	.047	2,480	.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	.768 .681	.500	.125	.230	.422	.312	.130	.156	.686	.065	7,390	1.17

- (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:

- MATERIAL: CORROSION RESISTANT STEEL, (A286) AMS 5525, AMS 5735, OR AMS 5737.
- PLATING: ON 800° F NUTS ONLY: SILVER PLATE ALL THREADED SURFACES ON NUT PER AMS 2410. THREADS SHALL SHOW COMPLETE COVERAGE. SILVER PLATING ON ALL OTHER SURFACES OPTIONAL. TARNISHING OR DISCOLORATION OF SILVER NOT CAUSE FOR REJECTION.
- HARDNESS: ROCKWELL C49 MAXIMUM.
- LUBRICANT: ONLY 450° F NUTS, DRY FILM LUBRICANT IN ACCORDANCE WITH MIL-N-25027 FOR USAF-  
(D) APPLICATIONS. NUTS TREATED WITH DRY FILM LUBRICANTS SHALL NOT BE USED IN INTERNAL FUEL SYSTEMS.
- DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED.
- SURFACE ROUGHNESS IN ACCORDANCE WITH ASA B46.1-1962 (ANSI). UNLESS OTHERWISE SPECIFIED, THE SURFACE ROUGHNESS SHALL NOT EXCEED 125 MICRO INCHES.
- PERFORMANCE: SEE PROCUREMENT SPECIFICATION, EXCEPT 450° F DRY FILM LUBRICATED NUTS LIMITED TO FIVE REUSE CYCLES.
- 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 QPL25027 SHALL BE USED.

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.

(E) DENOTES CHANGES

P.A. NAVY - AS	TITLE	MILITARY STANDARD
Other Cust USAF - 11 ARMY - AV	NUT, SELF-LOCKING, PLATE, ONE LUG, 100° CSK, LOW HEIGHT, CRES, 125 KSI F <sub>U</sub> , 450° & 800° F	MS21054
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 683	SHEET 1 OF 2

FED. SUP CLASS  
5310USER SYMBOL:  
ARMY - EL MI  
NAVY - OSREVIEW SYMBOL:  
NAVY - SH  
USAF - 99  
ARMY - MI  
DLA - IS"Review/user information is current as of the date of this document.  
For future coordination of changes to this document, draft circulation  
should be based on the information in the current QDDISS."This military standard is mandatory for use by all Departments  
& Agencies at the Department of Defense. Selection for all new  
engineering and design applications and for repetitive use shall  
be made from this document.

T THREAD SIZE	DASH NUMBERS					
	800° F			450° F		
	PLAIN HOLES	CTSK OR DIMPLED HOLES	WELDING PROJECTION	PLAIN HOLES	CTSK OR DIMPLED HOLES	WELDING PROJECTION
.1640-32UNJC-3B	-08	-08K	-08W	L08	L08K	L08W
.1900-32UNJF-3B	-3	-3K	-3W	L3	L3K	L3W
.2500-28UNJF-3B	-4	-4K	-4W	L4	L4K	L4W
.3125-24UNJF-3B	-5	-5K	-5W	L5	L5K	L5W

EXAMPLE OF PART NUMBER:

MS21054 L4K

NUT DASH NUMBER

BASIC PART NUMBER

.2500-28UNJF-3B NUT, SELF-LOCKING,  
ONE LUG, CRES., 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 C08	MS21054-08
C08K	-08K
- - -	-08W
C08M	L08
C08MK	L08K
- - -	L08W
C3	-3
C3K	-3K
- - -	-3W
C3M	L3
C3MK	L3K
- - -	L3W
C4	-4
C4K	-4K
- - -	-4W
C4M	L4
C4MK	L4K
- - -	L4W
C5	-5
C5K	-5K
- - -	-5W
C5M	L5
C5MK	L5K
NAS 683 - - -	MS21054 L5W

INTERCHANGEABILITY RELATIONSHIP: MS 21054 NUTS CAN UNIVERSALLY REPLACE NAS 683 NUTS OF LIKE MATERIAL, THREAD SIZE, PLATING, LUBRICANTS (SILVER PLATE OR DRY FILM LUBRICANT), RIVET SPACING, AND FASTENING METHOD (PLAIN RIVET HOLES, DIMPLED, COUNTERSUNK RIVET HOLES OR PROJECTION WELDING), BUT NAS 683 NUTS CANNOT UNIVERSALLY REPLACE MS 21054 NUTS.

APPROVED 21 JUL 64 REVISED E FOR CHANGES SEE SHEET 1

P.A. NAVY - AS Other Cust	TITLE NUT, SELF-LOCKING, PLATE, ONE LUG, 100° CSK, LOW HEIGHT, CRES, 125 KSI FtU, 450° & 800° F	MILITARY STANDARD MS21054
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 683	SHEET 2