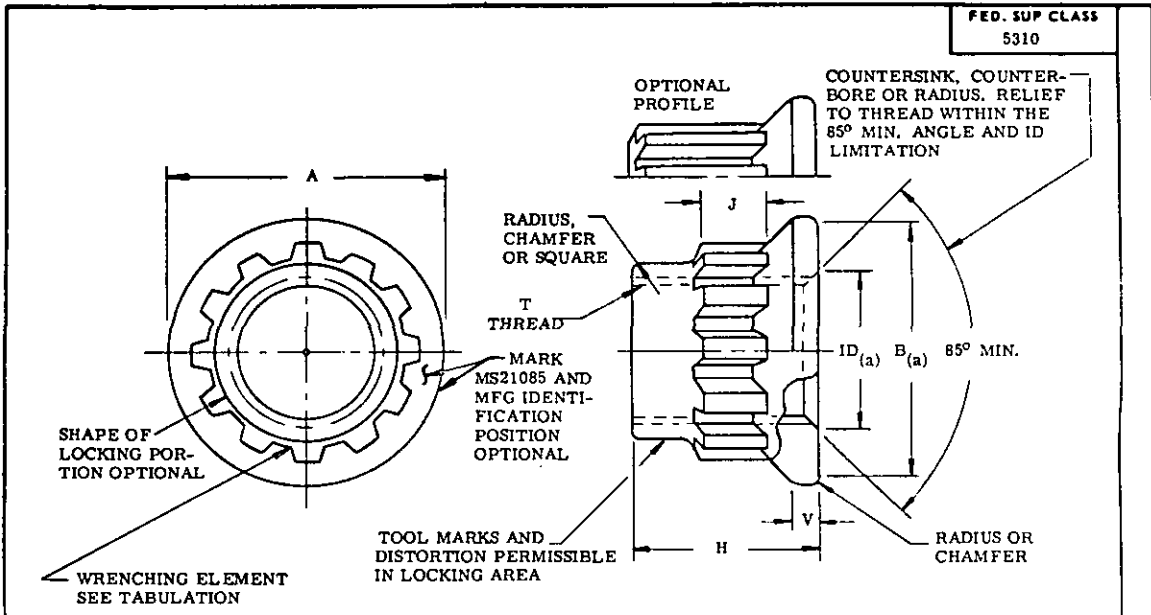


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This military standard is mandatory for use by all Departments & Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.



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5310

**NOTES:**

1. MATERIAL: ALLOY STEEL, AMS 6304, AMS6485 AND AMS6487.
2. HARDNESS: ROCKWELL C48 MAX
3. SURFACE TEXTURE: BEARING SURFACE 125 IN ACCORDANCE WITH ANSI (ASA) B46.1-1962.
4. PLATING: CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 2, DRY FILM LUBRICATED NUTS IN ACCORDANCE WITH QQ-P-416, TYPE AND CLASS OPTIONAL, IF THE NUTS MEET THE SALT SPRAY REQUIREMENTS OF QQ-P-416, TYPE II.
- (A) 5. LUBRICANT: LUBRICANT APPROVED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION. LUBRICANTS, EXCEPT DRY FILM LUBRICANTS, SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN THE PROCUREMENT SPECIFICATION. ~~FOR USAF APPLICATIONS, NUTS TREATED WITH DRY-FILM-LUBRICANTS SHALL NOT BE UTILIZED IN INTEGRAL-FUEL-TANKS.~~
6. THREADS: MIL-S-8879 BEFORE LUBRICATION.
7. WRENCHING ELEMENT: PER MS33787. DRIVERS PER MIL-W-8982.
8. PERPENDICULARITY: BEARING SURFACE SHALL BE NORMAL WITH PITCH DIAMETER OF THREAD WITHIN X WHEN CHECKED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
9. DIMENSIONS IN INCHES: DIMENSIONS APPLY BEFORE LUBRICATION
10. DESIGN USAGE INFORMATION: THESE NUTS ARE DESIGNED TO BE USED WITH MS21296 BOLTS AND MS21299 WASHERS.

**EXAMPLE OF PART NUMBERS:**

MS21085-04 = .2500-28 NUT, CADMIUM PLATED, SOLUBLE LUBRICANT.  
 MS21085L04 = .2500-28 NUT, CADMIUM PLATED, DRY FILM LUBRICATED.

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

(A) DENOTES CHANGES

P.A. NAVY - AS Other Cust USAF - 11 ARMY - AV	TITLE	MILITARY STANDARD
	NUT, SELF-LOCKING, STEEL, 260 KSI Ft <sub>u</sub> , 450°F., FLANGED, MS33787 WRENCHING ELEMENT	MS21085
PROCUREMENT SPECIFICATION MIL-N-8984	SUPERSEDES:	SHEET 1 OF 2

APPROVED 28 JAN 1972 REVISED (A) 15 MARCH 1978

DD FORM 1 SEP 67 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PROJECT NO. 5310-0997

PLATE NO. 15222



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5310

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DASH NUMBER		NOMINAL SIZE	"T" THREAD	MS33787 ELEMENT NUMBER	A	B <sub>(a)</sub>		ID <sub>(a)</sub>	
NON-DRY LUB	DRY LUB					MAX	MIN	MAX	MIN
03	L03	NO. 10	.1900-32UNJF-3B	8	.377	.337	.220	.190	
04	L04	1/4	.2500-28UNJF-3B	10	.481	.441	.280	.250	
05	L05	5/16	.3125-24UNJF-3B	12	.588	.548	.342	.312	
06	L06	3/8	.3750-24UNJF-3B	16	.701	.661	.405	.375	
07	L07	7/16	.4375-20UNJF-3B	18	.821	.771	.473	.438	
08	L08	1/2	.5000-20UNJF-3B	20	.933	.883	.535	.500	
09	L09	9/16	.5625-18UNJF-3B	24	1.041	.991	.597	.562	
10	L10	5/8	.6250-18UNJF-3B	26	1.154	1.104	.660	.625	
12	L12	3/4	.7500-16UNJF-3B	30	1.375	1.325	.785	.750	
14	L14	7/8	.8750-14UNJF-3B	36	1.592	1.542	.910	.875	
16	L16	1	1.0000-12UNJF-3B	40	1.810	1.760	1.035	1.000	

DASH NUMBER		H MAX	V MIN	J MIN	X	ULTIMATE AXIAL STRENGTH LB MIN (b)	APPROX WEIGHT LB/100
NON-DRY LUB	DRY LUB						
03	L03	.250	.025	.095	.003	5,640	.30
04	L04	.315	.033	.125	.003	10,100	.59
05	L05	.405	.041	.156	.003	16,000	1.00
06	L06	.490	.049	.188	.003	24,700	1.90
07	L07	.570	.057	.219	.003	33,500	2.70
08	L08	.650	.065	.250	.003	44,600	4.40
09	L09	.730	.073	.281	.004	56,600	6.20
10	L10	.810	.081	.313	.004	70,800	8.70
12	L12	.980	.098	.375	.004	103,000	14.00
14	L14	1.140	.114	.438	.005	140,000	23.00
16	L16	1.300	.130	.500	.006	183,000	33.00

- (a) MINIMUM BEARING AREA BASED ON A BEARING STRESS OF 115 KSI.
- (b) AXIAL STRENGTH DETERMINED FROM FORMULA  $W_a = F_{tu}A$  WHERE A IS THE CROSS SECTIONAL AREA, IN SQUARE INCHES, BASED ON THE MAXIMUM PITCH DIAMETER OF BOLT THREAD,  $F_{tu}$  IS 260 KSI AND  $W_a$  IS THE AXIAL STRENGTH IN POUNDS.

APPROVED 28 JAN 1972 REVISED A FOR CHANGES SEE SHEETS 1

P.A. NAVY - AS Other Cust USAF - 11 ARMY - AV	TITLE	MILITARY STANDARD
	NUT, SELF-LOCKING, STEEL, 280 KSI F <sub>tu</sub> , 450°F., FLANGED, MS33787 WRENCHING ELEMENT	<b>MS21085</b>
PROCUREMENT SPECIFICATION MIL-N-8984	SUPERSEDES:	SHEET 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PLATE NO. 15320

