Form Approved
OMB No. 0704-0188

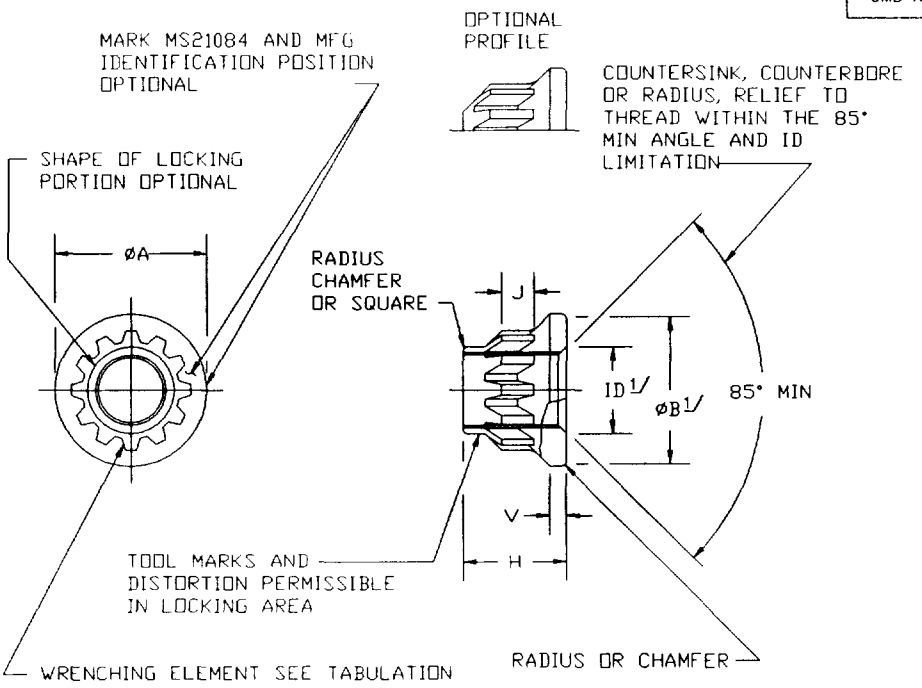

TABLE I.

NOMINAL SIZE	DASH NUMBER		"T" THREAD	MS33787 ELEMENT NUMBER	ØA MAX	ØB 1/ MIN	ID 1/		H MAX	V MIN	J MIN	X	ULTIMATE 1/ AXIAL STRENGTH LB MIN	APPROX WEIGHT LB/100
	NON-DRY LUB	DRY LUB					MAX	MIN						
NO. 10	03	L03	.1900-32UNJF-3B	8	.346	.306	.220	.190	.190	.021	.084	.003	3,910	.21
1/4	04	L04	.2500-28UNJF-3B	10	.439	.399	.280	.250	.250	.028	.110	.003	6,980	.42
5/16	05	L05	.3125-24UNJF-3B	12	.534	.494	.342	.312	.312	.034	.138	.004	11,100	.72
3/8	06	L06	.3750-24UNJF-3B	14	.634	.594	.405	.375	.375	.041	.165	.004	17,100	1.10
7/16	07	L07	.4375-20UNJF-3B	18	.733	.693	.473	.438	.438	.048	.193	.005	23,200	1.90
1/2	08	L08	.5000-20UNJF-3B	20	.833	.793	.535	.500	.500	.055	.220	.005	30,900	2.80
9/16	09	L09	.5625-18UNJF-3B	22	.929	.889	.597	.562	.562	.062	.248	.005	39,200	3.80
5/8	10	L10	.6250-18UNJF-3B	24	1.030	.990	.660	.625	.625	.069	.275	.006	49,000	5.10
3/4	12	L12	.7500-16UNJF-3B	30	1.224	1.184	.785	.750	.750	.083	.330	.007	71,100	9.20
7/8	14	L14	.8750-14UNJF-3B	34	1.419	1.379	.910	.875	.875	.096	.385	.008	97,100	14.00
1	16	L16	1.0000-12UNJF-3B	38	1.620	1.570	1.035	1.000	1.000	.110	.440	.009	126,000	20.00
1 1/16	18	L18	1.1250-12UNJF-3B	44	1.822	1.772	1.160	1.125	1.125	.124	.495	.010	162,000	29.00
1 1/4	20	L20	1.2500-12UNJF-3B	48	2.022	1.972	1.285	1.250	1.250	.138	.550	.011	202,000	40.00
1 3/8	22	L22	1.3750-12UNJF-3B	52	2.221	2.171	1.410	1.375	1.375	.151	.605	.012	247,000	52.00
1 1/2	24	L24	1.5000-12UNJF-3B	56	2.423	2.373	1.535	1.500	1.500	.165	.660	.013	296,000	67.00

1/ MINIMUM BEARING AREA BASED ON A BEARING STRESS OF 115 KSI.
2/ 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 KSI AND W_a IS THE AXIAL STRENGTH IN POUNDS.

Ⓐ ENTIRE SPECIFICATION REVISED

INCH-POUND

PREPARING ACTIVITY: DLA-IS
CUSTODIANS: ARMY- NAVY-SH
AIR FORCE- 99 DLA-
REVIEW:
USER:
PROJECT NUMBER: 5310-2117

MILITARY SPECIFICATION SHEET

TITLE
NUT, SELF-LOCKING, STEEL, 180 KSI Ftu, 450°F, FLANGED, MS33787 WRENCHING ELEMENT

SPECIFICATION SHEET NUMBER
MS21133 21 JULY 95 REV A

SUPERSEDING
MS21133 30 JUN 89

AMSC-N/A FSC -5310

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

DD Form 672, MAY 88 PREVIOUS EDITIONS ARE OBSOLETE

Form Approved
OMB No. 0704-0188

REQUIREMENTS:

1. MATERIAL: ALLOY STEEL, (UNS R30035) AMS 6304, AMS 5844, AMS 5845, AMS 5758 AND AMS 7468.
2. HARDNESS: ROCKWELL C48 MAX.
3. SURFACE TEXTURE: BEARING SURFACE ROUGHNESS AVERAGE RATING 125 IN ACCORDANCE WITH ANSI/ASME B46.1.
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 WILL MEET THE SALT SPRAY REQUIREMENTS OF QQ-P-416, TYPE II.
5. LUBRICANT: LUBRICANT APPROVED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION. LUBRICANTS, EXCEPT DRY FILM LUBRICANTS, SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN THE PORCUREMENT 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. PART NUMBER: THE PART NUMBER SHALL CONSIST OF THE BASIC MS SHEET NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

   EXAMPLE OF PART NUMBERS:
   MS21133-04 .2500-28 NUT, CADMIUM PLATED, SOLUBLE LUBRICANT.
   MS21133-1.04 .2500-28 NUT, CADMIUM PLATED, DRY FILM LUBRICATED.

NOTES:

1. DIMENSIONS IN INCHES: DIMENSIONS APPLY BEFORE LUBRICATION
2. DESIGN AND USAGE INFORMATION: THESE NUTS ARE DESIGNED TO BE USED WITH MS21134 BOLTS AND MS21206 WASHERS.
3. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS DOCUMENT AND THE REFERENCES CITED HEREIN, THE TEXT O
4. UNLESS OTHERWIISE SPECIFIED, ISSUES OF REFERENCED DOCUMENTS ARE IN EFFECT AT THE TIME OF SOLICITATION.

PREPARING ACTIVITY: DLA-IS CUSTODIANS: ARMY- NAVY- SH AIR FORCE- 99 DLA- REVIEW: USER: PROJECT NUMBER: 5310-2117	MILITARY SPECIFICATION SHEET TITLE NUT, SELF-LOCKING, STEEL, 180 KSI Ftu, 450°F, FLANGED, MS33787 WRENCHING ELEMENT	SPECIFICATION SHEET NUMBER MS21133 21 JULY 95 REV A SUPERSEDING MS21133 30 JUN 89 AMSC- N/A FSC -5310

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

DD Form 672, MAY 88 PREVIOUS EDITIONS ARE OBSOLETE