REVIEWER SYMBOLS: NAVY - AS, DLA - IS, ARMY - AR, MI
USER SYMBOLS: ARMY - ER

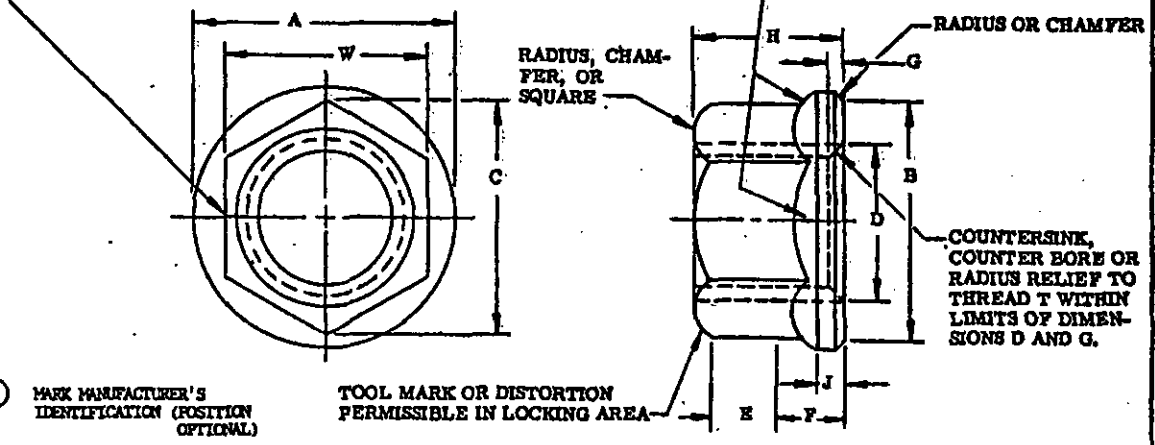
"Review/user information is current as of the date of this document. For future coordination of changes to this document, draft standardization should be based on the information in the current DODISS."

AMSC N/A

DESIGN OF WRENCHING PAD FACES BETWEEN WRENCHING CORNERS IS OPTIONAL IF THE WRENCHING CORNERS ARE WITHIN THE LIMITS OF E, W, AND C BEFORE LUBRICATION AND THE LIMIT OF THE AREA BETWEEN THE CORNERS IS WITHIN THE MAXIMUM LIMIT OF W FOR THE E LENGTH OF WRENCHING CORNERS, BEFORE LUBRICATION

CONCAVED OR CONICAL SURFACE BETWEEN TOP OF RING BASE, WRENCHING CORNERS, AND AREA BETWEEN CORNERS.

FED. SUP CLASS 5310



(K) MARK MANUFACTURER'S IDENTIFICATION (POSITION OPTIONAL)

TABLE I

SIZE DASH NO.	(a) THREAD T	A MAX DIA	B MIN DIA	C MIN	D DIA MAX	D DIA MIN	(d) E MIN	(e) F MIN	G MAX	G MIN
-02	.086-56UNJC-3B	.167	.137	.138	.106	.086	.045	.019	.021	.004
-04	.1120-40UNJC-3B	.206	.176	.171	.142	.112	.050	.028	.027	.005
-06	.1380-32UNJC-3B	.244	.214	.207	.168	.138	.055	.039	.031	.006
-08	.1640-32UNJC-3B	.290	.260	.244	.194	.164	.060	.041		
- 3	.1900-32UNJF-3B	.330	.290	.277	.220	.190	.065	.043		
- 4	.2500-28UNJF-3B	.420	.386	.347	.280	.250	.090	.057	.036	.007
- 5	.3125-24UNJF-3B	.520	.482	.419	.342	.312	.120	.077	.042	.008
- 6	.3750-24UNJF-3B	.620	.575	.491	.405	.375	.125	.089		

SIZE DASH NO.	H MAX	H MIN	J MIN	(c) W ACROSS FLATS MAX	W ACROSS FLATS MIN	(b) X	(g) AXIAL STRENGTH LB MIN	WEIGHT LB/100 MAX	(f) WRENCHING TORQUE TEST VALUES IN. LB. MIN
-02	.100	.080	.010	.127	.122	.0025	660	.020	5
-04	.125	.103		.188	.150	.003	1,110	.050	10
-06	.141	.115		.190	.181		1,670	.080	20
-08	.188	.125	.015	.221	.213		2,490	.150	30
- 3		.154		.252	.243		3,470	.180	60
- 4	.219	.204	.019	.316	.304		6,200	.350	150
- 5	.268	.251	.023	.378	.367	.004	9,820	.600	330
- 6	.282	.267	.030	.440	.430		15,200	.800	530

(K) (a) THREADS BEFORE LUBRICATION PER MIL-S-8879. ~~THREADS IN ACCORDANCE WITH MIL-S-7742 ARE ACCEPTABLE UNTIL 31 DECEMBER 1969.~~
(b) BEARING SURFACE SHALL BE SQUARE WITH PITCH DIA WITHIN X WHEN MEASURED IN ACCORDANCE WITH MIL-N-25027.
(c) DIMENSION ACROSS FLATS INCLUDES DEFORMATION OF SELF LOCKING DEVICE.
(d) MINIMUM LENGTH OF EACH WRENCHING CORNER.
(e) MINIMUM DISTANCE FROM THE WASHER FACE OF THE NUT TO THE BEGINNING OF THE MINIMUM LENGTH E OF EACH WRENCHING CORNER.
(f) NUT SHALL BE TESTED FOR WRENCHING TORQUE BY THE USE OF A BOX OR SOCKET WRENCH.
(g) TEST BOLTS SHALL BE 180,000 PSI MIN.

(K) DENOTES CHANGES

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 BIDS, OR REQUEST FOR PROPOSAL, EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.

APPROVED 24 SEP 59 — REVISED (F) 12 DEC 1969 (G) 14 JUN 71 (H) 15 MARCH 1978 (J) 31 OCTOBER 1980 (K) 30 NOV 88

PA	TITLE	MILITARY STANDARD
NAVY AS Other Cust USAF - 99 ARMY - AV	INTERNATIONAL INTEREST	NUT, SELF-LOCKING, 450°F, REDUCED HEXAGON, REDUCED HEIGHT, RING BASE, NON-CORROSION RESISTANT STEEL
		MS21042
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: AN303, AN364, AN365, MS20364, MS20365, MS21040, NAS 679 INPART, NAS 1021, INPART NAS 1022 INPART AND NAS 1291 INPART	SHEET 1 OF 2

DD FORM 1 SEP 67 672-1 (Coordinated) — PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE. — PLATE NO. 16320

Project No. 5310-1301

FED. SUP CLASS 5310

TABLE II

INTERCHANGEABILITY TABLE

CANCELLED AND INACTIVATED PART NUMBERS													SUBSTITUTIVE PART NUMBERS
AN363	AN364	AN365	MS20364	MS20365	MS21040	NAS 679	NAS 1021		NAS 1022		NAS 1291		
---	---	---	---	---	---	---	---	---	---	---	---	X02	MS21042 02
---	---	---	---	---	---	---	---	---	---	---	---	-02	MS21042 L02
---	---	-440C	---	-440C	-04	X04W, X04	AX04	---	---	---	---	X04	MS21042 -04
---	---	---	---	---	L04	A04	---	A04	---	---	---	-04	MS21042 L04
---	---	-448C	---	---	---	---	---	---	---	---	---	---	NONE
-632	-632C	-632C	-632C	-632C	-06	X06W, X06	AX06	---	AX06	---	---	X06	MS21042 -06
---	-640C	-640C	---	---	---	---	---	---	---	---	---	---	NONE
---	---	---	---	---	L06	A06	---	A06	---	A06	---	-06	MS21042 L06
-832C	-832C	-832C	-832C	-832C	-08	X08W, X08	AX08	---	AX08	---	---	X08	MS21042 08
---	---	---	---	---	L08	A08	---	A08	---	A08	---	-08	MS21042 L08
---	-836C	-836C	---	---	---	---	---	---	---	---	---	---	NONE
-1024	---	-1024C	---	---	---	---	---	---	---	---	---	---	NONE
-1032	-1032C	-1032C	-1032C	-1032C	-3	X3W, X3	AX3	---	AX3	---	---	X3	MS21042 -3
-420	---	-420C	---	---	---	---	---	---	---	---	---	---	NONE
---	---	---	---	---	L3	A3	---	A3	---	A3	---	-3	MS21042 L3
-428	-428C	-428C	-428C	-428C	-4	X4W, X4	AX4	---	AX4	---	---	X4	MS21042 -4
---	---	---	---	---	L4	A4	---	A4	---	A4	---	-4	MS21042 L4
-518	---	-518C	---	---	---	---	---	---	---	---	---	---	NONE
-524	-524C	-524C	-524C	-524C	-5	X5	AX5	---	AX5	---	---	X5	MS21042 -5
---	---	---	---	---	L5	A5	---	A5	---	A5	---	-5	MS21042 L5
-616	---	-616C	---	---	---	---	---	---	---	---	---	---	NONE
-624	-624C	-624C	-624C	-624C	-6	X6	AX6	---	AX6	---	---	X6	MS21042 -6
---	---	---	---	---	L6	A6	---	A6	---	A6	---	-6	MS21042 L6
---	---	---	---	---	-7	---	---	---	---	---	---	---	NAS679 X7
---	---	---	---	---	L7	---	---	---	---	---	---	---	NAS679 A7
---	-720C	---	-720C	---	---	---	---	---	AX7	A7	---	---	SEE MS21245
---	-820C	---	-820C	---	---	---	---	---	AX8	A8	---	---	SEE MS21245
---	-918C	---	-918C	---	---	---	---	---	AX9	A9	---	---	SEE MS21245
---	-1018C	---	-1018C	---	---	---	---	---	AX10	A10	---	---	SEE MS21245
---	-1216C	---	-1216C	---	---	---	---	---	AX12	A12	---	---	SEE MS21245
---	-1414C	---	-1414C	---	---	---	---	---	AX14	A14	---	---	SEE MS21245
---	-1614C	---	-1614C	---	---	---	---	---	---	---	---	---	NAS1022 A17
---	-1812C	---	-1812C	---	---	---	---	---	AX18	A18	---	---	SEE MS21245
---	-2012C	---	-2012C	---	---	---	---	---	AX20	A20			SEE MS21245

NOTES:

(K) 1. MATERIAL: STEEL UNS G10350 (AISI C1035) PER AMS 5080, QQ-S-700
UNS G10420 (AISI C1042)
UNS G10500 (AISI 1050) PER AMS 5085
UNS G40270 (AISI 4027) PER ASTM A322
UNS G40370 (AISI 4037) PER ASTM A322, A331, A519, A547, AMS 6300
UNS G86300 (AISI 8630) PER AMS 6280, 6355, 6530, 6550
UNS G87400 (AISI 8740) PER AMS 6322, 6323, 6325, 6327, 6358

2. FINISH: PLATING. CADMIUM PLATED IN ACCORDANCE WITH QQ-P-416 TYPE II, CLASS 2. DRY FILM LUBRICATED NUTS IN ACCORDANCE WITH QQ-P-416; TYPE AND CLASS ARE OPTIONAL IF THE NUTS WILL MEET THE SALT SPRAY REQUIREMENTS OF QQ-P-416, TYPE II.

3. LUBRICANT: DRY FILM OR NON-DRY FILM IN ACCORDANCE WITH MIL-N-25027. OTHER LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN PROCUREMENT SPECIFICATION. ~~FOR USAF APPLICATIONS, NUTS TREATED WITH DRY FILM LUBRICANTS SHALL NOT BE UTILIZED IN INTEGRAL FUEL TANKS.~~

(K) 4. HARDNESS: 49 HRC MAX

(K) 5. REMOVE ALL SHARP EDGES AND BURRS.

6. SURFACE TEXTURE IN ACCORDANCE WITH ANSI B46.1

7. UNLESS OTHERWISE SPECIFIED THE SURFACE ROUGHNESS SHALL NOT EXCEED 125 MICROINCHES.

8. DIMENSIONS IN INCHES.

9. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MS33538.

10. LETTER L BEFORE FIRST DASH NUMBER DESIGNATES DRY FILM LUBRICATED NUTS.
EXAMPLE OF PART NUMBERS MS21042L4-2500-28 NUT, CADMIUM PLATED, DRY FILM LUBRICATED.
MS21042-4-2500-28 NUT, CADMIUM PLATED, NOT DRY FILM LUBRICATED.

☆ CERTAIN PROVISIONS (THE DIMENSIONS ACROSS THE WRENCHING FLATS) OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENT ABCC AIR STD 17/2. WHEN REVISION, OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL AFFECT OR VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES, IF REQUIRED

(K) BIDS SHALL BE SOLICITED ONLY FROM THE MANUFACTURERS OR DISTRIBUTORS LISTED ON QPL-25027

APPROVED 24 Sep 59 REVISED (K) FOR CHANGES SEE SHEET 2

REVIEWER SYMBOLS: NAVY-AS, ARMY-AR, MI, DLA-IS

USER SYMBOLS: ARMY-ER

"Review/user information is current as of the date of this document. For future coordination of changes to this document, draft simulation should be based on the information in the current DODISS."

AMSC N/A

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P.A.	TITLE	MILITARY STANDARD
NAVY AS; Other Cust: USAF-99, ARMY-AV	INTERNATIONAL INTEREST *	NUT, SELF-LOCKING, 450°F, REDUCED HEXAGON, REDUCED HEIGHT, RING BASE, NON-CORROSION RESISTANT STEEL.
PROCUREMENT SPECIFICATION: MIL-M-25027	SUPERSEDES: AN363, AN364, AN365, MS20364, MS20365, MS21040, NAS679 IN PART NAS 1021, IN PART NAS1022 AND NAS1291 IN PART	MS21042
		SHEET 2 OF 2

DD FORM 1426 672-1 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE. PLATE NO. 15320