

07/112

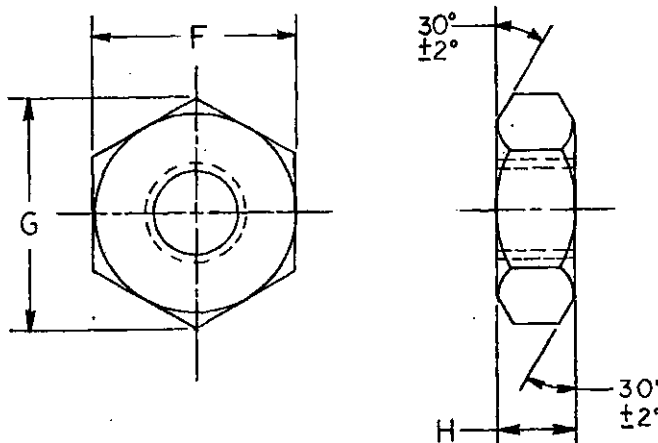
FED. SUP CLASS  
5310

TABLE 1. DASH NUMBERS AND DESIGN CONFIGURATIONS

DASH NUMBER					THREAD SIZE	F WIDTH ACROSS FLATS		(H) G WIDTH ACROSS CORNERS		H THICKNESS	
CARBON STEEL	CRES STEEL	BRASS	COPPER SILICON ALLOY			MAX	MIN	MAX	MIN	MAX	MIN
CAD	PHOS										
222	23	224	225	226	.0860-56UNC-2B	.187	.180	.217	.205	.066	.057
242	43	244	245	246	.1120-40UNC-2B	.250	.241	.289	.275	.098	.087
262	63	264	265	266	.1380-32UNC-2B	.312	.302	.361	.344	.114	.102
282	83	284	286	287	.1640-32UNC-2B	.344	.332	.397	.378	.130	.117
202	103	204	205	206	.1900-24UNC-2B	.375	.362	.433	.413	.130	.117
2252	-	2254	2255	2256	.2500-20UNC-2B	.437	.423	.505	.482	.193	.178
2312	-	2314	2315	2316	.3125-18UNC-2B	.562	.545	.650	.621	.225	.208
2382	-	2384	2385	2386	.3750-16UNC-2B	.625	.607	.722	.692	.257	.239

## REQUIREMENTS:

1. MATERIAL. STEEL, CARBON, SHALL BE IN ACCORDANCE WITH PROCUREMENT SPECIFICATION. STEEL, CORROSION RESISTANT, SERIES 302 THRU 305 (UNS S30200 THRU UNS S30500), AND TYPES 316 (UNS S31600), 317 (UNS S31700) AND 347 (UNS S34700), IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.  
BRASS, ALLOY 462 (UNS C46200) OR 464 (UNS C46400) IN ACCORDANCE WITH QQ-B-837 OR ALLOY 360 (UNS C36000), IN ACCORDANCE WITH QQ-B-826.  
COPPER SILICON ALLOY, 651 (UNS C65100), IN ACCORDANCE WITH QQ-C-591.

2. MAGNETIC PERMEABILITY. CORROSION RESISTANT STEEL FASTENERS SHALL HAVE A MAGNETIC PERMEABILITY OF 2.00 MAXIMUM (AIR=1.00) AT A FIELD STRENGTH OF H=200 OERSTEDS USING A MAGNETIC INDICATOR IN ACCORDANCE WITH MIL-I-17214.

(H) DENOTES CHANGES

P.A. AR Other Cust 99	INTERNATIONAL INTEREST	TITLE NUT, PLAIN, HEXAGON, MACHINE SCREW UNC-2B	MILITARY STANDARD MS35649
PROCUREMENT SPECIFICATION FF-N-836	SUPERSEDES: AN340 IN PART, AN341 IN PART, MS20341 IN PART, MS16210 (SHIPS)		PAGE 1 OF 3

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.  
This military standard is approved for use by all Departments and Agencies of the Department of Defense.  
Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

USER ACTIVITIES:  
ARMY-AT, MI  
NAVY-MC, OS, YD  
NSA-NS

REVIEWER ACTIVITIES:  
ARMY-AT, EA  
AIR FORCE-82  
DLA-IS

AMSC N/A DD FORM 1 MAY 73 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5310-1661

APPROVED 22 DEC 55  
REVISED (H) 12 FEB 88

FED. SUP. CLASS  
53103. PROTECTIVE COATING AND SURFACE TREATMENT.

STEEL, CARBON-CADMIUM PLATING OR PHOSPHATE COATING IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

(H) STEEL, CRES - CLEANED, DESCALED IN ACCORDANCE WITH ASTM A380 AND PASSIVATED IN ACCORDANCE WITH QQ-P-35.

BLACK OXIDE COATING IN ACCORDANCE WITH MIL-C-13924, CLASS 4.

BRASS - BLACK OXIDE COATED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

TIN PLATED IN ACCORDANCE WITH ASTM B545, .0001 INCH THICK.

SILVER PLATED IN ACCORDANCE WITH QQ-S-365, .0001 INCH THICK.

NICKEL PLATED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

4. THREADS. THE THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 21.

- (H) 5. PART NUMBER. THE PART NUMBER SHALL CONSIST OF THE BASIC MS SHEET NUMBER FOLLOWED BY A DASH NUMBER TAKEN FROM TABLE 1, FOLLOWED BY THE FINISH CODE LETTERS ("B" FOR BLACK OXIDE), ("N" FOR NICKEL PLATED), ("S" FOR SILVER PLATED), ("T" FOR TIN PLATED) EXCEPT THAT NO FINISH CODE SUFFIX SHALL BE PERMITTED WITH CADMIUM PLATE OR PHOSPHATE COATING.

EXAMPLE: MS35649-225B

FINISH CODE (SEE REQ 3)

"B" BLACK OXIDE

"N" NICKEL PLATED

"S" SILVER PLATED

"T" TIN PLATED

NO CODE LETTER FOR CADMIUM PLATE OR PHOSPHATE COATING (SEE TABLE 1)

SINCE DASH NUMBER DOES NOT ALLOW ANY OTHER ADDITIONAL FINISH COATING

DASH NUMBER

BASIC MS SHEET NUMBER

MS35649-225B INDICATES - NUT, PLAIN, HEXAGON, MACHINE SCREW, THREAD SIZE .0860-56UNC-2B; BRASS, BLACK OXIDE COATED.

MS PART NUMBERS FOR BRASS NUTS SINCE MS35649 REVISION F HAVE REQUIRED A "B" IN THE PART NUMBER TO INDICATE BLACK OXIDE COATING. PRIOR TO MS35649 REVISION F, PAST REVISIONS DID NOT REQUIRE THE "B" IN THE BRASS NUT PART NUMBER TO DENOTE BLACK OXIDE COATING. IN EITHER CASE I.E., FORMER PRACTICE (WITHOUT THE "B") OR PRESENT PRACTICE (WITH "B") THE MS35649 PART NUMBER FOR BRASS NUTS REQUIRE BLACK OXIDE COATING.

## NOTES:-

- DIMENSIONS ARE IN INCHES.
- NUTS SHALL BE FREE OF ALL LOOSE OR HANGING BURRS AND SLIVERS WHICH MIGHT BECOME DISLODGED UNDER USAGE.
- NUTS SPECIFIED HEREIN ARE TYPE 11, STYLE 13 IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
- IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
- REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DoDISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.

P.A.	AR	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust	99		NUT, PLAIN, HEXAGON, MACHINE SCREW, UNC-2B	MS35649
PROCUREMENT SPECIFICATION	FF-N-836	SUPERSEDES:	AN340 IN PART, AN341 IN PART, MS20341 IN PART, MS16210 (SHIPS)	PAGE 2 OF 3

FOR CHANGES SEE PAGES 1 AND 2  
REVISED (H)  
APPROVED 22 DEC 55

USER ACTIVITIES:  
ARMY -AT, MI  
NAVY -MC, OS, YD  
NSA -NS

REVIEWER ACTIVITIES:  
ARMY -AV, EA  
AIR FORCE -82  
DLA -IS

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.  
This military standard is approved for use by all Departments and Agencies of the Department of Defense.  
Instructions for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

AMSC/NA

DD FORM 1 MAY 53 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5310-1661

USER ACTIVITIES:  
ARMY-AT, MI  
NAVY-MC, OS, YO  
NSA - NS

REVIEWER ACTIVITIES:  
ARMY-AV, EA  
AIR FORCE-82  
DLA - 1S

**DISTRIBUTION STATEMENT A.** Approved for public release; distribution is unlimited.  
This military standard is approved for use by all Departments and Agencies of the Department of Defense.  
Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

AMSC N/A

05410

FED. SUP CLASS  
5310

## INTERCHANGEABILITY TABLES OF CANCELLED AND SUPERSEDING PART NUMBERS

THE FOLLOWING DASH NUMBERS AS GIVEN IN THE ORIGINAL ISSUE OF THIS STANDARD ARE CANCELLED AFTER 8 SEP 1966. THE CANCELLED NUTS SHOULD BE USED FOR MAINTENANCE PURPOSES UNTIL EXISTING STOCK IS DEPLETED. USE ONLY THE SUPERSEDING NUTS FOR NEW DESIGN.

TABLE II

DASH NUMBERS							
CANCELLED MS35649	SUPERSEDING MS35649	CANCELLED MS35649	SUPERSEDING MS35649	CANCELLED MS35649	SUPERSEDING MS35649	CANCELLED MS35649	SUPERSEDING MS35649
21	222	44	244	65	265	86	286
22	222	45	245	66	265	101	202
24	224	46	245	81	282	102	202
25	225	61	262	82	282	104	204
26	225	62	262	84	284	105	205
41	242	64	264	85	286	106	205
42	242						

THE FOLLOWING DASH NUMBERS OF AN340, AN341, MS16210 AND MS20341 ARE CANCELLED AFTER 17 APR 1968. THE CANCELLED NUTS SHOULD BE USED FOR MAINTENANCE PURPOSES UNTIL EXISTING STOCK IS DEPLETED. USE ONLY THE SUPERSEDING NUTS OF MS35649 FOR NEW DESIGN.

TABLE III

DASH NUMBERS					DASH NUMBERS		
CANCELLED					CANCELLED		SUPERSEDING
AN340	AN341	MS16210	MS20341	MS35649	AN340	MS16210	MS35649
2	-	-	2S	222	-	12	287
C2	-	1	2C	224	10	-	202
B2	-	-	-	225	C10	5	204
-	-	-	2A	225T	B10	-	205
-	-	-	2B	225S	-	13	206
-	-	9	-	226	416	-	2252
4	-	-	4S	242	C416	6	2254
C4	-	2	4C	244	B416	-	2255
B4	-	-	-	245	-	14	2256
-	4	-	4A	245T	516	-	2312
-	-	-	4B	245S	C516	7	2314
-	-	10	-	246	B516	-	2315
6	-	-	6S	262	-	15	2316
C6	-	3	6C	264	616	-	2382
B6	-	-	-	265	C616	8	2384
-	6	-	6A	265T	B616	-	2385
-	-	-	6B	265S	-	16	2386
-	-	11	-	266			
8	-	-	8S	282			
C8	-	4	8C	284			
B8	-	-	-	286			
-	8	-	8A	286T			
-	-	-	8B	286S			

P.A. Other Cost 99	INTERNATIONAL INTEREST	TITLE NUT, PLAIN, HEXAGON, MACHINE SCREW, UNC-2B	MILITARY STANDARD MS 35649
PROCUREMENT SPECIFICATION FF-N-836	SUPERSEDES: AN 340 IN PART, AN 341 IN PART, MS20341 IN PART, MS16210 (SHIPS)		PAGE 3 OF 3

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5310-1661

APPROVED 22 DEC 55 REVISED (H) FOR CHANGES PAGES 1 AND 2