

THIS DOCUMENT IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. IT IS THE POLICY OF THE DEPARTMENT OF DEFENSE TO MAKE AVAILABLE TO THE PUBLIC INFORMATION THAT IS NOT OTHERWISE PROTECTED BY PATENT OR COPYRIGHT. THIS DOCUMENT IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. IT IS THE POLICY OF THE DEPARTMENT OF DEFENSE TO MAKE AVAILABLE TO THE PUBLIC INFORMATION THAT IS NOT OTHERWISE PROTECTED BY PATENT OR COPYRIGHT.

FULL HEAD

UNDERCUT HEAD (SHORT LENGTH NOTE)

FED. SUP. CLASS.
5305

NOMINAL SIZE	#4(.112)	#6(.138)	#8(.164)	#10(.190)	#12(.216)	#14(.242)							
THREADS PER INCH	24	18	16	12	11	10							
MAJOR DIAMETER D	.114 MAX .110 MIN	.141 MAX .136 MIN	.168 MAX .162 MIN	.194 MAX .188 MIN	.221 MAX .215 MIN	.254 MAX .248 MIN							
MINOR DIAMETER C	.083 MAX .078 MIN	.102 MAX .096 MIN	.123 MAX .116 MIN	.133 MAX .126 MIN	.162 MAX .155 MIN	.189 MAX .178 MIN							
HEAD DIAMETER A	.225 MAX SHARP .207 MIN SHARP .195 ABS MIN	.279 MAX SHARP .251 MIN SHARP .244 ABS MIN	.332 MAX SHARP .308 MIN SHARP .292 ABS MIN	.385 MAX SHARP .359 MIN SHARP .340 ABS MIN	.438 MAX SHARP .410 MIN SHARP .389 ABS MIN	.491 MAX SHARP .461 MIN SHARP .437 ABS MIN							
FULL HEAD	HEAD HEIGHT H REF	.067	.083	.100	.116	.148							
	RECESS DIAMETER M MAX	.128	.174	.189	.204	.263							
	RECESS DIAMETER M MIN	.115	.161	.176	.191	.270							
	RECESS DEPTH T MAX	.059	.105	.121	.136	.171							
UNDERCUT HEAD	RECESS DEPTH T MIN	.073	.088	.098	.113	.148							
	RECESS WIDTH N MIN	.018	.029	.031	.032	.036							
	HEAD HEIGHT H1 MAX	.047	.059	.070	.081	.104							
	RECESS DIAMETER M1 MAX	.038	.048	.058	.068	.088							
UNDERCUT HEAD	RECESS DIAMETER M1 MIN	.116	.149	.174	.189	.250							
	RECESS DEPTH T1 MAX	.078	.136	.151	.179	.237							
	RECESS DEPTH T1 MIN	.062	.078	.106	.121	.136							
	RECESS WIDTH N1 MIN	.018	.021	.029	.031	.032							
DRIVER SIZE	1	2	2	2	3	3							
LENGTH L	TOLERANCE	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN
1/4		1		12		24		35					
5/16		3		13		25		36					
3/8	±1/32	4		14		26		37					
1/2		5		15		27		38		49		60	
5/8		6		16		28		39		51		61	
3/4				17		29		40				62	
7/8				18								63	
1						30		41				64	
1-1/4						31		42				65	
1-1/2	±3/64							43				66	
1-3/4								44					
2													

MATERIAL: STEEL, CASE HARDENED OR HEAT TREATED, TO MEET PERFORMANCE REQUIREMENTS OF PROCUREMENT SPECIFICATION
PROTECTIVE COATING: CADMIUM PLATED, SPECIFICATION QQ-P-416, TYPE II, CLASS 3.

DIMENSIONS: ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
PART NUMBER: THE MS PART NUMBER CONSISTS OF THE MS NUMBER, PLUS THE DASH NUMBER. EXAMPLE: MS24615-1.
SHORT LENGTHS: LENGTHS ABOVE DOTTED LINE HAVE FINE PITCH THREADS AND UNDERCUT HEADS AS INDICATED.
THREADS: THREAD TYPES TO BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF PROCUREMENT SPECIFICATION.
HOLE SIZES: FOR APPROXIMATE HOLE SIZES SEE MS24631.

NOTES:
(1) REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
(2) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

THIS DOCUMENT HAS BEEN PROMULGATED BY THE DEPARTMENT OF DEFENSE AS THE MILITARY STANDARD TO LIMIT THE SELECTION OF THE ITEM, PRODUCT, OR DESIGN COVERED HEREIN IN ENGINEERING, DESIGN AND PROCUREMENT. THIS STANDARD SHALL BECOME EFFECTIVE NOT LATER THAN 90 DAYS AFTER THE LATEST DATE OF APPROVAL.

CUSTOMERS
A - ORD
N - SHIPS

OTHER INT.
A - CEQSIGHT
N - MOONY
N -

PROCURING SPECIFICATION
FY-S-107

MILITARY STANDARD

SCREW, TAPPING, THREAD FORMING, TYPE A, FLAT
COUNTERSUNK HEAD, CROSS RECESSED, STEEL, CARBON,
CADMIUM PLATED

REVISIONS

MS24615

SHEET 1 OF 1

DD FORM 672-1

REVISED
APPROVED OCT 59

NOTES.—When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government hereby makes no responsibility, nor any obligation, whatsoever, and the fact that the Government may have furnished, furnished, or is in any way supplying the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner limiting any liability or any other person or corporation, or abridging any right or protection for maintenance, use, or sale of any patented invention that may in any way be related thereto.

This military standard is approved by the Department of Defense and is mandatory on all activities. Subsequent to all correspondence and design applications and for repetitive use shall be made from this document.

FED. SUP CLASS
5305

The screws covered by the following dash numbers listed in MS24615 are cancelled after 25 Feb 1963. Use the dash numbers given in Sheet 1. The cancelled screws cannot always replace the superseding screws and should be used until existing stocks are depleted. Use only the superseding screws for design and engineering. Replacement shall be in accordance with the table below.

CROSS REFERENCE	
CANCELLED	SUPERSSEDED BY
MS 24615	MS 24615
DASH NO.	DASH NO.
1	1
2	3
3	4
4	5
5	6
10	13
11	14
12	15
13	16
14	17
15	18
21	24
22	25
23	26
24	27
25	28
26	29
27	30
28	31
29	32
30	33
31	34
32	35
33	36
34	37
35	38
36	39
37	40
38	41
39	42
40	43
41	44
42	45
43	46
44	47
45	48
46	49
47	50
48	51
49	52
50	53
51	54
52	55
53	56
54	57
55	58
56	59
57	60
58	61
59	62
60	63
61	64
62	65
63	66

(A) ENTIRE STANDARD REVISED

P.A. Other Code NO (REPL) SHIPS NMA	TITLE SCREW, TAPPING-THREAD FORMING, TYPE A, FLAT 82° COUNTERSUNK HEAD, CROSS RECESSED, STEEL, CARBON, CADMIUM PLATED	MILITARY STANDARD MS24615
PROCUREMENT SPECIFICATION JT-S-107	SUPERSSEDED MS24615	SHEET 2 OF 2

DD FORM 672-1

APPROVED 5 Oct 59 REVISED (A) 25 Feb 1963