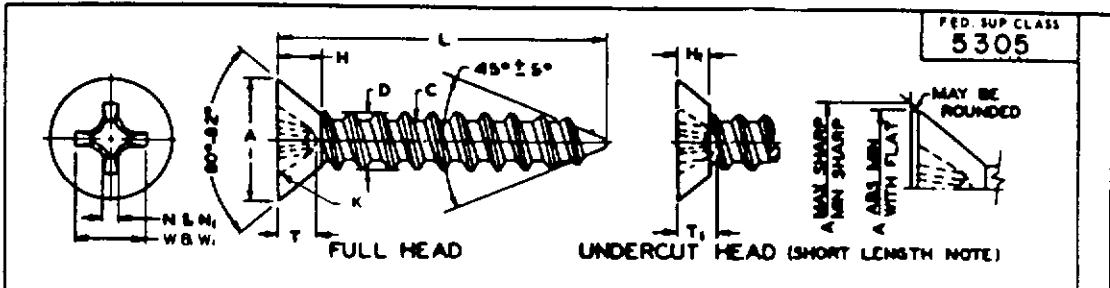


OCT 13 1969

OBSCLETE

NOTICE - 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 representation or warranty, and the fact that the Government may have furnished technical information in any way implies that the Government is not to be regarded as endorsing or in any way assuming responsibility for the use of such information in any way other than in connection with the particular procurement to which it was originally furnished.



NOMINAL SIZE		4 (.112)	6 (.138)	8 (.164)	10 (.190)	12 (.216)	14 (.242)
THREADS PER INCH		24	18	15	12	11	10
MAJOR DIAMETER D		MAX .124 MIN .110	MAX .141 MIN .130	MAX .168 MIN .162	MAX .194 MIN .188	MAX .221 MIN .215	MAX .248 MIN .242
MINOR DIAMETER C		MAX .083 MIN .078	MAX .107 MIN .096	MAX .133 MIN .116	MAX .159 MIN .126	MAX .187 MIN .155	MAX .215 MIN .178
HEAD DIAMETER A		MAX SHARP .125 MIN SHARP .107	MAX SHARP .179 MIN SHARP .164	MAX .132 MIN .108	MAX .185 MIN .160	MAX .198 MIN .189	MAX .241 MIN .237
FULL HEAD	HEAD HEIGHT H REF	.067	.083	.100	.116	.132	.148
	RECESS DIAMETER W	MAX .128 MIN .115	MAX .174 MIN .161	MAX .189 MIN .176	MAX .204 MIN .191	MAX .268 MIN .255	MAX .283 MIN .270
	RECESS DEPTH T	MAX .089 MIN .073	MAX .106 MIN .083	MAX .121 MIN .098	MAX .136 MIN .113	MAX .156 MIN .133	MAX .171 MIN .148
	RECESS WIDTH V MIN	.018	.029	.031	.032	.035	.036
	DEPTH OF GAGE PENETRATION	MAX .082 MIN .066	MAX .095 MIN .072	MAX .110 MIN .087	MAX .125 MIN .102	MAX .139 MIN .116	MAX .154 MIN .131
	HEAD HEIGHT H <sub>1</sub>	MAX .047 MIN .038	MAX .059 MIN .048	MAX .070 MIN .058	MAX .081 MIN .068	MAX .092 MIN .078	MAX .104 MIN .085
UNDERCUT HEAD	RECESS DIAMETER W <sub>1</sub>	MAX .116 MIN .103	MAX .149 MIN .136	MAX .174 MIN .161	MAX .189 MIN .176	MAX .213 MIN .200	MAX .250 MIN .237
	RECESS DEPTH T <sub>1</sub>	MAX .078 MIN .062	MAX .078 MIN .055	MAX .106 MIN .083	MAX .121 MIN .098	MAX .121 MIN .101	MAX .136 MIN .116
	RECESS WIDTH V <sub>1</sub> MIN	.018	.025	.029	.031	.030	.032
	DEPTH OF GAGE PENETRATION	MAX .071 MIN .055	MAX .064 MIN .041	MAX .095 MIN .072	MAX .110 MIN .087	MAX .104 MIN .081	MAX .119 MIN .096
RADIUS K		.020	.025	.025	.025	.030	.030
DRIVER SIZE		1	2	2	2	3	3

LENGTH	L	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
1/4			- 1 -					
5/16				- 12 -				
3/8		± 1/32	3	14	24	35		
1/2			4		25	36		
5/8			5	15	26	37		
3/4			6	16	27	38	49	60
7/8				17	28	39	50	61
1				18	29	40	51	62
1-1/4					30	41	52	63
1-1/2		± 1/64			31	42	53	64
1-3/4						43		65
2						44		66

MATERIAL: Steel, carbon, in accordance with procurement specification.  
 FINISH: Cadmium plated in accordance with Federal Specification QQ-W-416, Type II, Class 3.  
 THREADS: Thread types to be in accordance with applicable requirements of procurement specification.  
 HEAT TREATMENT: Case hardened or heat treatment to meet performance requirements of procurement specification.  
 RECESSES: Except for dimensions W, T, V, K and Depth of Gage Penetration the recess shall be in accordance with MS 9006.  
 \* SHORT LENGTHS: Lengths above dotted line have fine pitch threads and undercut heads as indicated. (Size 4 undercut head only)  
 HOLE SIZES: For approximate hole sizes see MS 24631.  
 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 MS 24615-1.  
 NOTES: (1) For design feature purposes, this standard takes precedence over procurement documents referenced herein.  
 (2) Referenced documents shall be of the issue in effect on date of invitations for bid.

ⓑ CANCELLED, SEE SHEET 2

ⓑ FOR CHANGES SEE SHEETS 1 & 2

P.A. WC	TITLE	MILITARY STANDARD
Other Cost	SCREW, TAPPING-THREAD FORMING, TYPE A, FLAT 82°	MS 24615
SH	COUNTERSUNK HEAD, CROSS RECESSED, STEEL, CARBON,	
82	CADMIUM PLATED	
PROCUREMENT SPECIFICATION	SUPPESIDES	SHEET
FF-3-107	MS 24635	1 OF 2

This military standard is approved by the Department of Defense and is mandatory on all activities. Subsequent to all engineering and design work, contractors and their subcontractors shall be made aware of this document.

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

REVISED (A) 25 Feb 1963 (B) 27 AUG 1969 APPROVED 5 Oct 59

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	SUPERSEDED 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
32	35
33	36
34	37
35	38
36	39
37	40
38	41
39	42
40	43
41	44
46	49
47	50
48	51
49	52
50	53
57	60
58	61
59	62
60	63
61	64
62	65
63	66

ⓑ CANCELLED AFTER 27 AUG 1969  
USE MS51862.  
FOR INTERCHANGEABILITY RELATIONSHIP  
SEE MS51862.

NOTICE - 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 incurs no responsibility, nor any obligation whatsoever, and the fact that the Government may have furnished technical data or in any way supplied the said drawings, specifications, or other data is not to be regarded as an endorsement or approval of the quality or any other part in connection with or concerning any rights or patent to manufacturers, or in any way particular invention that may be applied to any other purpose.

This military standard is approved by the Department of Defense and is mandatory on all activities. Sections for all new engineering and design specifications and for replacement are staff for each item this document.

APPROVED 5 Oct 59 REVISED ⓐ 25 Feb 1963 ⓑ FOR CHANGES SEE SHEETS 1 & 2.

AMO 9-2

P.A. WC Other Coat SH 82	TITLE SCREW, TAPPING-THREAD FORMING, TYPE A, FLAT 82° COUNTERSUNK HEAD, CROSS RECESSED, STEEL, CARBON, CADMIUM PLATED	MILITARY STANDARD <b>MS 24615</b>
PROCUREMENT SPECIFICATION FF-3-107	SUPERSEDES MS24615	SHEET 2 OF