

REVIEWER: EAIS, MI, NS, PA, WV  
USER: ATEL GL, MC, ME, MU, DS

FED. SUP CLASS  
5305

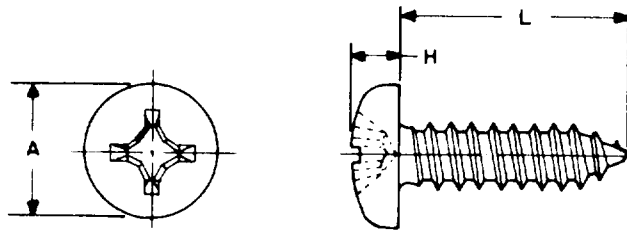


TABLE I

NOMINAL SIZE		.086	.112	.138	.164	.190	.250						
THREADS PER INCH		32	24	20	18	16	14						
A HEAD DIA	MAX MIN	.167 .155	.219 .205	.270 .256	.322 .306	.373 .357	.492 .473						
H HEAD HEIGHT	MAX MIN	.062 .053	.080 .070	.097 .087	.115 .105	.133 .122	.175 .162						
L LENGTH	TOL	(A) DASH NUMBER											
		CARBON STEEL	CRES STEEL	CARBON STEEL	CRES STEEL	CARBON STEEL	CRES STEEL	CARBON STEEL	CRES STEEL	CARBON STEEL	CRES STEEL	CARBON STEEL	CRES STEEL
.188	.0031	1	1C										
.250		2	2C	12	12C	22	22C						
.312		3	3C		13C	24	23C						
.375		4	4C	14	14C	24	24C	34	33C	44	44C		
.500				15	15C	25	25C	35	35C	45	45C	65	65C
.625	.0047			16	16C	26	26C	36	36C	46	46C	66	66C
.750				17	17C	27	27C	37	37C	47	47C	67	67C
.875						28	28C	38	38C	48	48C	68	68C
1.000						29	29C	39	39C	49	49C	69	69C
1.250								40	40C	50	50C	70	70C
1.500								41	41C	51	51C	71	71C
1.750									52	52C	72	72C	
2.000									53	53C	73	73C	
2.250											74	74C	
2.500											75	75C	

NOTES:

- (A) 1. **MATERIAL:** Carbon steel shall be AISI 1016, 1018, 1019, 1021, 1022 or 1024 (hardened) in accordance with Fed. Std. No. 66. Corrosion-resisting steel shall be AISI 410 (hardened) in accordance with Fed. Std. No. 66.
- (A) 2. **PROTECTIVE COATING:** Carbon steel shall be cadmium plated in accordance with QQ-P-416, Type II, Class 3. Corrosion-resisting steel shall be passivated in accordance with QQ-P-35.
- 3. **THREADS:** The threads shall be in accordance with procurement specification.
- 4. **RECESS:** The recess shall be in accordance with MS9006.
- 5. **HOLE SIZES:** For approximate hole sizes see MS24632.
- 6. **DIMENSIONS:** All dimensions are in inches, unless otherwise specified.
- 7. **PART NUMBER:** The MS part number consists of the MS number, plus the dash number. Example: MS51861-12
- 8. Referenced documents shall be of the issue in effect on date of invitations for bid.
- 9. For design feature purposes, this standard takes precedence over procurement documents referenced herein.
- (A) 10. Supersedes AN530, MS24617, MS24618, MS24621, MS24622, MS24641, and MS24642; BCX3.1, BCX3.2, BCX5.1, BCX5.2, BQX3.1 and BQX5.1.

U.S. GOVERNMENT PRINTING OFFICE: 1981-703-023/4316

APPROVED 27 AUG 1969 REVISED (A) 15 MAY 1975

P. A. WC Other Cust YD 82	TITLE <b>SCREW, TAPPING-THREAD FORMING, TYPE AB, PAN HEAD, CROSS-RECESSED</b>	<b>MILITARY STANDARD</b>
PROCUREMENT SPECIFICATION FF-S-107	SUPERSEDES SEE NOTE 10	<b>MS51861</b>
		SHEET 1 OF 3

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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.

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(A) INTERCHANGEABILITY TABLES

The screws covered by the following dash numbers of MS24637 and MS24638 are cancelled after 25 February 1963. The screws covered by the following dash numbers of MS24641, MS24642 and AN530 are cancelled after 15 August 1963. The screws covered by the following dash numbers of MS24617 and MS24618 are cancelled after 27 August 1969. The screws covered by the following dash numbers of MS24621 and MS24622 are cancelled after 15 May 1975. The cancelled screws cannot always replace the superseding screws and should be used until existing stock is depleted. Use only the superseding screws of MS51861 for design and engineering. Replacement shall be in accordance with these tables.

TABLE II

DASH NUMBERS						
CANCELLED					SUPERSEDING	
AN530	MS24617	MS24621	MS24637	MS24641	MS51861	
---	---	1	---	1	**	
2-3	2R3	2	---	2	1	
2-4	2R4	3	---	3	2	
---	---	4	---	4	3	
---	---	5	---	5	4	
---	---	7	---	10	**	
4-4	4R4	8	1	11	12	
---	---	9	---	12	**	
4-6	4R6	10	2	13	14	
4-8	4R8	11	3	14	15	
---	---	4	---	---	16	
---	---	5	---	---	17	
---	---	14	---	21	**	
6-4	6R4	15	10	22	22	
---	---	16	---	23	**	
6-6	6R6	17	11	24	24	
6-8	6R8	18	12	25	25	
6-10	6R10	19	13	26	26	
6-12	6R12	20	14	27	27	
6-14	6R14	21	15	---	28	
6-16	6R16	22	16	---	29	
6-20	6R20	23	---	---	**	
6-24	6R24	24	---	---	**	
---	---	27	---	34	**	
---	---	28	---	35	**	
8-6	8R6	29	22	36	34	
8-8	8R8	30	23	37	35	
8-10	8R10	31	24	38	36	
8-12	8R12	32	25	39	37	
8-14	8R14	33	26	40	38	
8-16	8R16	34	27	41	39	
8-20	8R20	35	28	42	40	
8-24	8R24	36	29	---	41	
8-28	8R28	37	---	---	**	
8-32	8R32	38	---	---	**	
8-36	8R36	39	---	---	**	
8-40	8R40	40	---	---	**	
---	---	66	---	46	**	
---	---	41	---	47	**	
10-6	10R6	42	33	48	44	
10-8	10R8	43	34	49	45	
10-10	10R10	44	35	50	46	
10-12	10R12	45	36	51	47	
10-14	10R14	46	37	52	48	
10-16	10R16	47	38	53	49	
10-20	10R20	48	39	54	50	
10-24	10R24	49	40	55	51	
10-28	10R28	50	41	56	52	
10-32	10R32	51	42	57	53	
10-36	10R36	52	---	---	**	
10-40	10R40	53	---	---	**	
---	---	41	---	---	**	
---	---	42	---	45	**	
---	---	43	---	46	**	
---	---	44	---	47	**	
---	---	45	---	48	**	
---	---	46	---	49	**	
---	---	47	---	50	**	
---	---	48	---	51	**	
---	---	54	---	60	**	
---	---	55	56	61	65	
14-10	14R10	54	56	62	66	
14-12	14R12	55	57	63	67	
14-14	14R14	56	58	64	68	
14-16	14R16	57	59	65	69	
14-20	14R20	58	60	66	70	
14-24	14R24	59	61	67	71	
14-28	14R28	60	62	68	72	
14-32	14R32	61	63	69	73	
14-36	14R36	---	64	---	74	
14-40	14R40	---	65	---	75	

\*\* NO REPLACEMENT

REVISED (A) FOR CHANGES SEE SHEET 1  
APPROVED 27 AUG 1969

REVIEWER EA, JS, MI, NS, PA, WV  
USER AT EL, GL, MC, ME, MJ, OS

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P.A. WC	TITLE	MILITARY STANDARD
Other Cust YD 82	SCREW, TAPPING-THREAD FORMING, TYPE AB, PAN HEAD, CROSS-RECESSED	MS51861
PROCUREMENT SPECIFICATION FF-S-107	SUPERSEDES SEE NOTE 10 PAGE 1	SHEET 2 OF 3

(A)  
TABLE III

FED. SUP CLASS  
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DASH NUMBERS						
CANCELLED					SUPERSEDING	
AN530	MS24618	MS24622	MS24638	MS24642	MS51861	
---	---	1	1	---	1	**
C2-3	C2R3	1	2	---	2	1C
C2-4	C2R4	2	3	---	3	2C
---	---	3	4	---	4	3C
---	---	4	5	---	5	4C
---	---	7	7	---	10	**
C4-4	C4R4	8	8	1	11	12C
---	---	9	9	---	12	13C
C4-6	C4R6	10	10	2	13	14C
C4-8	C4R8	11	11	3	14	15C
---	---	12	---	4	---	16C
---	---	13	---	5	---	17C
---	---	14	---	---	21	**
C6-4	C6R4	16	15	10	22	22C
---	---	17	16	---	23	23C
C6-6	C6R6	18	17	11	24	24C
C6-8	C6R8	19	18	12	25	25C
C6-10	C6R10	20	19	13	26	26C
C6-12	C6R12	21	20	14	27	27C
C6-14	C6R14	22	21	15	---	28C
C6-16	C6R16	23	22	16	---	29C
C6-20	C6R20	---	23	---	---	**
C6-24	C6R24	---	24	---	---	**
---	---	---	27	---	34	**
---	---	27	28	---	35	33C
C8-6	C8R6	28	29	22	36	34C
C8-8	C8R8	29	30	23	37	35C
C8-10	C8R10	30	31	24	38	36C
C8-12	C8R12	31	32	25	39	37C
C8-14	C8R14	32	33	26	40	38C
C8-16	C8R16	33	34	27	41	39C
C8-20	C8R20	34	35	28	42	40C
C8-24	C8R24	35	36	29	---	41C
C8-28	C8R28	---	37	---	---	**
C8-32	C8R32	---	38	---	---	**
C8-36	C8R36	---	39	---	---	**
C8-40	C8R40	---	40	---	---	**
---	---	---	66	---	46	**
---	---	---	41	---	47	**
C10-6	C10R6	39	42	33	48	44C
C10-8	C10R8	40	43	34	49	45C
C10-10	C10R10	41	44	35	50	46C
C10-12	C10R12	42	45	36	51	47C
C10-14	C10R14	43	46	37	52	48C
C10-16	C10R16	44	47	38	53	49C
C10-20	C10R20	45	48	39	54	50C
C10-24	C10R24	46	49	40	55	51C
C10-28	C10R28	47	50	41	56	52C
C10-32	C10R32	48	51	42	57	53C
C10-36	C10R36	---	52	---	---	**
C10-40	C10R40	---	53	---	---	**
---	---	49	---	---	---	**
---	---	50	---	45	---	**
---	---	51	---	46	---	**
---	---	52	---	47	---	**
---	---	53	---	48	---	**
---	---	54	---	49	---	**
---	---	55	---	50	---	**
---	---	56	---	51	---	**
---	---	---	54	---	60	**
---	---	58	55	56	61	65C
C14-10	C14R10	59	56	57	62	66C
C14-12	C14R12	60	57	58	63	67C
C14-14	C14R14	61	58	59	64	68C
C14-16	C14R16	62	59	60	65	69C
C14-20	C14R20	63	60	61	66	70C
C14-24	C14R24	64	61	62	67	71C
C14-28	C14R28	65	62	63	68	72C
C14-32	C14R32	66	63	64	69	73C
C14-36	C14R36	---	64	---	---	74C
C14-40	C14R40	---	65	---	---	75C

\*\* NO REPLACEMENT

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