

FED SUP CLASS
5305

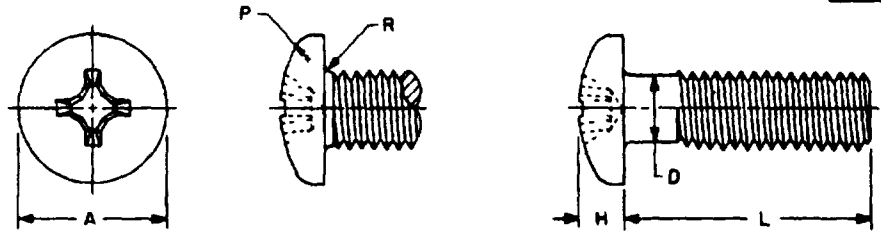


TABLE 1

NOMINAL SIZE	#2	#4	#6	#8	#10	1/4	5/16	3/8
THREADS PER 1/4" (UNF-2A)	64	48	40	36	32	28	24	24
D BODY DIAMETER (F)	MAX .0860 MIN .0717	MAX .1120 MIN .0925	MAX .1380 MIN .1141	MAX .1640 MIN .1399	MAX .1900 MIN .1586	MAX .2500 MIN .2127	MAX .3125 MIN .2712	MAX .3750 MIN .3287
A HEAD DIAMETER	MAX .167 MIN .155	MAX .219 MIN .205	MAX .270 MIN .256	MAX .322 MIN .306	MAX .373 MIN .357	MAX .492 MIN .473	MAX .615 MIN .594	MAX .740 MIN .716
H HEAD HEIGHT	MAX .062 MIN .053	MAX .080 MIN .070	MAX .097 MIN .087	MAX .115 MIN .105	MAX .133 MIN .122	MAX .175 MIN .162	MAX .218 MIN .203	MAX .261 MIN .244
P HEAD RADIUS	MIN .010	MIN .010	MIN .015	MIN .015	MIN .020	MIN .035	MIN .040	MIN .040
R FILLET RADIUS	MAX .013	MAX .017	MAX .021	MAX .025	MAX .029	MAX .038	MAX .047	MAX .056
* TENSILE STRENGTH, LBS-MIN (F)	235	395	605	880	1,200	2,180	3,480	5,260
L LENGTH	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
.125	+0 -.031	201	211	224	239	276	292	307
.188		202	212	225	240			
.250		203	213	226	241			
.312		204	214	227	242			
.375	+0 -.031	205	215	228	243	261	277	293
.438		206	216	229	244	262	278	294
.500		207	217	230	245	263	279	295
.625		208	218	231	246	264	280	296
.750	+0 -.062	209	219	232	247	265	281	297
.875		210	220	233	248	266	282	298
1.000		211	221	234	249	267	283	299
1.250		212	222	235	250	268	284	300
1.500	+0 -.094	213	223	236	251	269	285	301
1.750		214	224	237	252	270	286	302
2.000		215	225	238	253	271	287	303
2.250		216	226	239	254	272	288	304
2.500	+0 -.094	217	227	240	255	273	289	305
2.750		218	228	241	256	274	290	306
3.000		219	229	242	257	275	291	307
3.250		220	230	243	258	276	292	308

For notes see sheet 2

(F) For changes see sheets 1 and 4

REVISEN AT, AV, S, ME, MI, MU, NSA
 I SER GL, MC, SM, YD
 This military standard is mandatory 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.

APPROVED 25 JUN 1953 REVISED (A) 5 APR 1962 (B) 18 JUN 1962 (C) 22 OCT 1964 (D) 10 DEC 1964 (E) 21 MAY 1969 (F) 22 OCT 1970

P A WC Other Code AS 82	TITLE SCREW, MACHINE-PAN HEAD, CROSS-RECESSED, CARBON STEEL, CADMIUM PLATED, UNF-2A (IN./MM)	MILITARY STANDARD
		MS 35207
PROCUREMENT SPECIFICATION FF-3-92	SUPERSEDES See note 11	SHEET 1 OF 4

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

NOTES

- 1 **MATERIAL** Carbon steel in accordance with Fed Std No 66
- 2 **PROTECTIVE COATING** Cadmium plated in accordance with QQ-P-416, type II, class 3
- 3 **THREADS** The threads shall be in accordance with Screw-Thread Standards for Federal Services, Handbook M28
- 4 **THREAD LENGTH** Screws 2 000 inches long and shorter shall have complete threads extending to within two threads of the bearing surface of the head, or closer if practicable. Longer screws shall have a minimum thread length of 1 750 inches
- 5 **RECESS** The recess shall be in accordance with MS9006
- 6 **DIMENSIONS** All dimensions are in inches
- 7 **PART NUMBER** The MS part number consists of the MS number, plus the dash number
Example MS35207-201
- 8 **TENSILE STRENGTH** Based on 60,000 PSI minimum ultimate tensile strength. Load pounds are calculated by the stress areas indicated in Screw-Thread Standards for Federal Services, Handbook M28.
9. Referenced documents shall be of the issue in effect on date of invitations for bid.
- 10 For design feature purposes, this standard takes precedence over procurement documents referenced herein
- 11 **SUPERSEDES** MS35205, MS35209, MS35211, MS35222, MS35224, MS35226, MS35228, and in part MS24584(USAF), MS35357, MS35359 thru MS35362, MS35364 thru MS35366, AN520 and AN526.

REVISER AT, AV, IS, ME, MI, MU, NSA
USER CL, MC, SM, TD

TABLE II - INTERCHANGEABILITY

Screws covered by the following cancelled dash numbers are cancelled after 5 April 1962. The cancelled screws cannot always replace the new screws and should be used until existing stocks are depleted. Use only the new screws for design and replacement. Replacement shall be in accordance with this table.

PART NUMBERS											
CANCELLED		NEW	CANCELLED		NEW	CANCELLED		NEW	CANCELLED		NEW
MS35205	MS35222	MS35207	MS35205	MS35222	MS35207	MS24584	MS35222	MS35207	MS24584	MS35222	MS35207
MS35207	MS35224		MS35207	MS35224		MS35207	MS35224		MS35207	MS35224	
MS35209	MS35226		MS35209	MS35226		MS35209	MS35226		MS35209	MS35226	
MS35211	MS35228		MS35211	MS35228		MS35211	MS35228		MS35211	MS35228	
1	1	201	27	30	230	51	59	259	79	89	289
2	2	202	28	31	231	52	60	260	--	90	290
3	3	203	29	32	232	53	61	261	--	91	291
4	4	204	30	33	233	54	62	262	80	92	292
5	5	205	31	34	234	55	63	263	81	93	293
6	6	206	32	35	235	56	64	264	82	94	294
7	7	207	33	36	236	57	65	265	83	95	295
8	8	208	34	37	237	58	66	266	84	96	296
9	9	209	35	38	238	59	67	267	85	97	297
-	10	210	36	39	239	60	68	268	86	98	298
10	11	211	37	40	240	61	69	269	87	99	299
11	12	212	38	41	241	62	70	270	88	100	300
12	13	213	39	42	242	63	71	271	89	101	301
13	14	214	40	43	243	64	72	272	90	102	302
14	15	215	41	44	244	65	73	273	91	103	303
15	16	216	42	45	245	--	74	274	92	104	304
16	17	217	43	46	246	--	75	275	--	105	305
17	18	218	44	47	247	66	76	276	--	106	306
18	19	219	45	48	248	67	77	277	93	107	307
19	20	220	46	49	249	68	78	278	94	108	308
20	21	221	47	50	250	69	79	279	95	109	309
--	22	222	48	51	251	70	80	280	96	110	310
--	23	223	49	52	252	71	81	281	97	111	311
21	24	224	50	53	253	72	82	282	98	112	312
22	25	225	--	54	254	73	83	283	99	113	313
23	26	226	--	55	255	74	84	284	100	114	314
24	27	227	--	56	256	75	85	285	101	115	315
25	28	228	--	57	257	76	86	286	102	116	316
26	29	229	--	58	258	77	87	287	103	117	317
						78	88	288	104	118	318
									105	119	319

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APPROVED 25 JUN 1953 REVISED (A) 5 APR 1962 (B) 18 JUN 1962 (C) 22 OCT 1964 (D) 10 DEC 1964 (E) 21 MAY 1969 (F) FOR CHANGES SEE SHEETS 1 AND 4

PA WC Other Cont AS 82	TITLE SOREW, MACHINE-PAN HEAD, CROSS-RECESSED, CARBON STEEL, CADMIUM PLATED, UNF-2A (IN /MM)	MILITARY STANDARD MS35207
PROCUREMENT SPECIFICATION FF-S-92	SUPERSEDES See note 11	SHEET 2 OF

TABLE III - INTERCHANGEABILITY

The screws covered by dash numbers given in AN520 in part and AN526 in part are canceled/
inactivated after the approval date of Revision C indicated on this document. Use the dash numbers
given in the preceding sheets. The canceled screws cannot always replace the new screws and should
be used until existing stocks are depleted. Use only the new screws for design and replacement.
Replacement shall be in accordance with this table.

PART NUMBERS		PART NUMBERS		PART NUMBERS		PART NUMBERS	
CANCELED	NEW	CANCELED	NEW	CANCELED	NEW	CANCELED	NEW
AN520-0R2		AN520-5R22		AN520-10R26		AN526-036R12	MS35207-247
-0R3		-5R24		-10R28	MS35207-270	-036R14	-248
-0R4		-5R26		-10R30		-036R16	-249
-0R5		-5R28		-10R32		-036R18	*
-0R6		-6R4	MS35207-226	-10R36		-036R20	-250
-0R7		-6R5		-10R40		-036R22	*
-0R8		-6R6	-228	-10R44		-036R24	-251
-1R2		-6R7	-229	-10R48		-036R26	*
-1R3		-6R8	-230	-416R6		-036R28	-252
-1R4		-6R10	-231	-416R7		-036R30	*
-1R5		-6R12	-232	-416R8		-036R32	-253
-1R6		-6R14	-233	-416R10		-036R36	-254
-1R7		-6R16	-234	-416R12		-036R40	-255
-1R8		-6R18		-416R14		-036R44	-256
-2R3	MS35207-202	-6R20	-235	-416R16		-036R48	-257
-2R4		-6R22		-416R18		-1032R4	-259
-2R5		-6R24	-236	-416R20		-1032R5	-260
-2R6		-6R26		-416R22		-1032R6	-261
-2R7		-6R28	-237	-416R24		-1032R7	-262
-2R8		-6R30		-416R26		-1032R8	-263
-2R10		-6R32	-238	-416R28		-1032R9	*
-2R12		-6R36		-416R30		-1032R10	-264
-3R3		-6R40		-416R32		-1032R12	-265
-3R4		-6R4	-241	-416R36		-1032R14	-266
-3R5		-6R5	-242	-416R40		-1032R16	-267
-3R6		-6R6	-243	-416R44		-1032R18	*
-3R7		-6R7	-244	-416R48		-1032R20	-268
-3R8		-6R8	-245			-1032R22	*
-3R10		-6R10	-246	AN526-640R4	MS35207-226	-1032R24	-269
-3R12		-6R12	-247	-640R5		-1032R26	*
-4R3	-212	-6R14	-248	-640R6		-1032R28	-270
-4R4	-213	-6R16	-249	-640R7		-1032R30	*
-4R5	-214	-6R18		-640R8		-1032R32	-271
-4R6	-215	-6R20	-250	-640R9		-1032R36	-272
-4R7	-216	-6R22		-640R10		-1032R40	-273
-4R8	-217	-6R24	-251	-640R12		-1032R44	-274
-4R10	-219	-6R26		-640R14		-1032R48	-275
-4R12	-219	-6R28	-252	-640R16		-428R6	-277
-4R14	-220	-6R30		-640R18		-428R7	-278
-4R16	-221	-6R32	-253	-640R20		-428R8	-279
-4R18		-6R36	-254	-640R22		-428R9	*
-4R20	-222	-6R40	-255	-640R24		-428R10	-280
-4R22		-6R44	-256	-640R26		-428R12	-281
-4R24	-223	-6R48	-257	-640R28		-428R14	-282
-4R26		-10R4	-259	-640R30		-428R16	-283
-4R28		-10R5	-260	-640R32		-428R18	*
-5R4		-10R6	-261	-640R36		-428R20	-284
-5R5		-10R7	-262	-640R40		-428R22	*
-5R6		-10R8	-263	-640R44		-428R24	-285
-5R7		-10R10	-264	-640R48		-428R26	*
-5R8		-10R12	-265	-636R4		-428R28	-286
-5R10		-10R14	-266	-636R5		-428R30	*
-5R12		-10R16	-267	-636R6		-428R32	-287
-5R14		-10R18		-636R7		-428R36	-288
-5R16		-10R20	-268	-636R8		-428R40	-289
-5R18		-10R22		-636R9		-428R44	-290
-5R20		-10R24	-269	-636R10		-428R48	-291

* No Replacement

REVIEWER AT: AV, IS, ME, MI, MU, MSA
USER GL, MC, SM, YD

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APPROVED 25 JUN 1953 REVISED (A) 5 APR 1962 (B) 18 JUN 1962 (C) 22 OCT 1964 (D) 10 DEC 1964 (E) 21 MAY 1969 (F) FOR CHANGES SEE SHEETS 1 AND 4

P.A.	WC	TITLE	MILITARY STANDARD
Other Cont	AS	SCREW, MACHINE-PAN HEAD, CROSS-RECESSED, CARBON STEEL, CADMIUM PLATED, UNF-2A (IN./MM)	MS 35207
PROCLAMATION SPECIFICATION	FF-S-92	SUPERSEDES	SHEET 3
		SEE NOTE 11	

FED SUP CLASS
5305

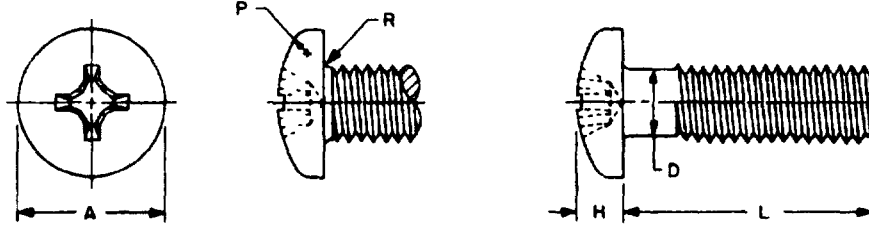


TABLE 11
METRIC TRANSLATION OF TABLE 1

NOMINAL SIZE	INCH MM	#2 2 164	#4 2 845	#6 3.505	#8 4 166	#10 4.826	1/4 6 350	5/16 7 938	3/8 9 525	
THREADS PER 25.4 MM (UNF-2A)		64	48	40	36	32	28	24	24	
D BODY DIAMETER	MAX MIN	2 184 1 821	2 845 2 350	3 505 2 696	4 166 3 553	4 826 4 028	6 350 5 403	7 938 6 888	9 525 8 349	
A HEAD DIAMETER	MAX MIN	4 242 3 937	5 563 5 207	6 859 6 502	8 179 7 772	9 474 9 068	12 497 12 014	15 621 15 088	18 796 18 186	
H HEAD HEIGHT	MAX MIN	1 575 1 346	2 032 1 778	2 464 2 210	2 921 2 667	3 378 3 099	4 445 4 115	5 537 5 156	6 629 6 198	
P HEAD RADII	MIN	254	254	381	381	508	889	1 016	1 016	
R FILLET RADIUS	MAX	330	432	533	635	737	965	1 194	1 422	
* TENSILE STRENGTH, KGS-MIN		107	180	275	400	545	990	1 580	2 390	
L LENGTH	TOLERANCE	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	
3 175	-0.787	201	211	224	239	256	276	292	307	
4 775		202	212	225	240					
6 350		203	213	226	241					
7 925		204	214	227	242					
9 525	-0.787	205	215	228	243	261	277	292	307	
11 125		206	216	229	244	262	278	293		
12 700		207	217	230	245	263	279	294		
15 875		208	218	231	246	264	280	295		
19 050	+0	209	219	232	247	265	281	296	309	
22 225		210	220	233	248	266	282	297	310	
25 400		-1 575		221	234	249	267	283	298	311
				222	235	250	268	284	299	312
31 750	-2 388		223	236	251	269	285	300	313	
38 100			237	252	270	286	301	314		
44 450			238	253	271	287	302	315		
50 800			254	272	288	303	316			
57 150	+0		255	273	289	304	317	318	319	
63 500			256	274	290	305				
69 850			257	275	291	306				
76 200										

NOTE All dimensions are in millimeters (MM), unless otherwise specified

(F) ENTIRE SHEET REVISED

REVISION AT AV 15 ME MI MU NSA
 1 SER GL MC SH YD

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APPROVED 25 JUN 1953 REVISED A 5 APR 1962 B 18 JUN 1962 C 22 OCT 1964 D 10 DEC 1964 E 21 MAY 1969 F FOR CHANGES SEE SHEETS 1 AND 4

P A Other Com AS 82	TITLE SCREW, MACHINE - PAN HEAD, CROSS-RECESSED, CARBON STEEL, CADMIUM PLATED, UNF-2A (IN/MM)	MILITARY STANDARD MS35207
PROCUREMENT SPECIFICATION FF-S-92	SUPERSEDES See note 11	SHEET 4 OF

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE