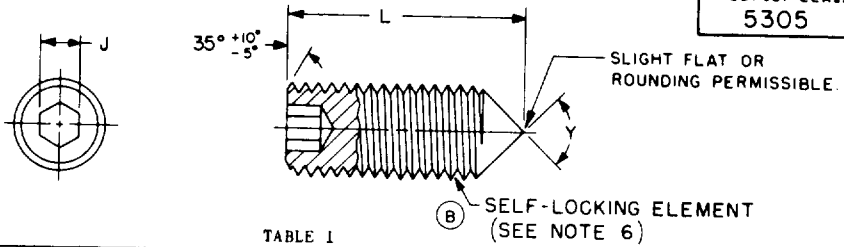


To detach this form, cut along this line.

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.

REVIEWER: AV, EL, IS, MI, MC, US, SH, YD  
 USER: AT, CL, MC, ME, OS

FED. SUP CLASS  
 5305



NOMINAL SIZE	.086	.112	.138	.164	.190	.250	.3125	.375	.500							
	THREADS PER INCH (UNF-3A)	64	48	40	36	32	28	24	24	20						
J SOCKET WIDTH ACROSS FLATS	NOM .035	.050	.062	.078	.094	.125	.156	.188	.250							
Y CONE POINT ANGLE	118° ± 2° FOR LENGTHS UNDER															
	90° ± 2° FOR THESE LENGTHS AND OVER															
L LENGTH	TOL	DASH NUMBER														
		PLAIN	PLAIN	PLAIN	PLAIN	PLAIN	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK
.125	±.010	1*	8*	16*	25*		101*		112*							
.188		2*	9*	17*	26*		102*		113*							
.250			10*	18*	27*	34*	103*	44*	114*	125*						
.312				19*	28*	35*	104*	45*	115*	126*						
.375						36*	105*	46*	116*	127*	65*	137*				
.438	±.020						38*	106*	116*							
.500								107*	117*	57*	128*	66*	138*	74*	148*	
.562								108*	118*	58*	129*	67*	139*	75*	149*	
.625								109*	119*	59*	130*	68*	140*	76*	150*	
.750									110	49*	121	131	141	151		
1.000	±.031									122	132	142	152			
1.250										123	133	143	153			
1.500											124	134	144	154		
1.750												135	145	155		
2.000												136	146	156		
2.500	±.031														157	
3.000															158	

(B) \* Inactive for new design after 29 DEC 1972

(B) For changes see sheets 1 and 2.

P.A. WC Other Cust AS 82	TITLE SETSCREW - HEXAGON SOCKET, CONE POINT, ALLOY STEEL, CADMIUM PLATED, UNF-3A, PLAIN AND SELF-LOCKING	MILITARY STANDARD <b>MS 51974</b>
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES: MS51035, MS51037 and in part MS18067, BCTX2.4, BCTX2.5, BCTX2.12, BCUX2, BCUX3 and BCUX4.3.	SHEET 1 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

APPROVED 29 JAN 1964 REVISED (A) 13 SEP 1966 (B) 29 DEC 1972

NOTES:

1. MATERIAL: Alloy steel in accordance with procurement specification, having a Rockwell Hardness of C45-53.
2. PROTECTIVE COATING: Cadmium plated in accordance with procurement specification.
3. THREADS: The threads shall be in accordance with MIL-S-7742.
4. DIMENSIONS: All dimensions are in inches, unless otherwise specified.
5. PART NUMBER: The MS part number consists of the MS number, plus the dash number.  
Example: MS51974-34.
6. SELF-LOCKING ELEMENT:
  - (a) The self-locking element shall be in accordance with MIL-F-18240.
  - (b) For design and usage limitations, see MS15981.
  - (c) Location of effective locking area shall be in accordance with MS15981.
  - (d) Maximum ring gage diameter that locking region of setscrew must pass thru freely or with finger pressure shall be the nominal size plus 0.010.
  - (e) MIL-F-18240 doesn't establish torque requirements for lengths above the dashed line. Only a positive indication of torque is required.
7. Referenced documents shall be of the issue in effect on date of invitations for bid.
8. For design feature purposes, this standard takes precedence over procurement documents referenced herein.

REVIEWER: AV, EL, IS, MI, MU, CS, SH, YD  
USER: AT, GL, MC, ME, OS, SH, YD

INTERCHANGEABILITY

Screws covered by the dash numbers given in MS51035 and MS51037 are cancelled after 29 January 1964 and superseded by the screws covered on MS51974 having the same dash numbers. Cancelled screws may be used until existing stocks are depleted. Use only MS51974 screws for new design.

Screws covered by the dash numbers given in MS18067 in part are cancelled. Cancelled screws may be used until existing stocks are depleted. Use only the superseding screws for new design. Replacement shall be in accordance with Table 11.

TABLE 11 (B)

CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING
MS18067	MS51974	MS18067	MS51974	MS18067	MS51974	MS18067	MS51974
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
4	101	32	116	64	131	82	145
8	102	37	117	70	132	85	146
13	103	45	118	74	133	92	147
19	104	50	119	78	134	40	148
25	105	57	120	81	135	53	149
31	106	63	121	84	136	60	150
36	107	69	122	91	137	66	151
44	108	73	123	39	138	72	152
49	109	77	124	52	139	76	153
56	110	15	125	59	140	80	154
68	111	21	126	65	141	83	155
9	112	27	127	71	142	86	156
14	113	38	128	75	143	87	157
20	114	51	129	79	144	88	158
26	115	58	130				

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APPROVED 29 JAN 1964 REVISED (A) 13 SEP 1966 (B) FOR CHANGES SEE SHEETS 1 AND 2

P.A. WC Other Cust AS 82	TITLE SETScrew - HEXAGON SOCKET, CONE POINT, ALLOY STEEL, CADMIUM PLATED, UNF-3A, PLAIN AND SELF-LOCKING (B)	MILITARY STANDARD <b>MS51974</b>
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES MS51035, MS51037 and in part MS18067, BCTX2.4, BCTX2.5, BCTX2.12, BCUX2, BCUX3 and BCUX4.3.	SHEET 2 OF 2

**SPECIFICATION ANALYSIS SHEET**

Form Approved  
Budget Bureau No. 22-R255

**INSTRUCTIONS:** This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.

SPECIFICATION

ORGANIZATION

CITY AND STATE

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

DIRECT GOVERNMENT CONTRACT       SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

YES       NO (If "yes", in what way?)

4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)

SUBMITTED BY (Printed or typed name and activity - Optional)

DATE

**DD FORM 1426**  
1 JAN 69

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.

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