



TABLE I
SELF-LOCKING ELEMENT
(SEE NOTE 6)

REVIEWER: AV, EL, IS, MI, MU, SH, YD
(USER: AT, CL, MC, ME, OS)

NOMINAL SIZE	.086	.112	.138	.164	.190	.250	.3125	.375	.500					
THREADS PER INCH (UNC-3A)	56	40	32	32	24	20	18	16	13					
J SOCKET WIDTH ACROSS FLATS	NOM .035	.050	.062	.078	.094	.125	.156	.188	.250					
CONE POINT ANGLE	118° ± 2° FOR LENGTHS UNDER		.188	.250	.250	.312	.375	.438	.562					
	90° ± 2° FOR THESE LENGTHS AND OVER													
L LENGTH	TOL	DASH NUMBER												
		PLAIN	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	PLAIN	PLAIN	PLAIN	PLAIN	
.125	±.010	1	8	101	17	111	131*							
.188		2	9	102	18	112	132							
.250			10	103	19	113	133	39	50					
.312			11	104	20	114	134	40	51	62				
.375				105	21	115	135	41	52	63	73			
.438	±.020			106*		116*	136*							
.500				107	22	117	137	42	53	64	74	83		
.562				108*		118*	138*							
.625				109		119	139	43	54	65	75	84		
.750	±.020					120	140	44	55	66	76	85		
.875						121	141							
1.000							142		56	67	77	86		

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

NOTES:

- MATERIAL: Alloy steel in accordance with procurement specification, having a Rockwell Hardness of C45-53.
- PROTECTIVE COATING: Cadmium plated in accordance with procurement specification.
- THREADS: The threads shall be in accordance with MIL-S-7742.
- 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: MS51973-1.
- SELF-LOCKING ELEMENT:
 - The self-locking element shall be in accordance with MIL-F-18240.
 - For design and usage limitations, see MS15981.
 - Location of effective locking area shall be in accordance with MS15981.
 - 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.
 - MIL-F-18240 doesn't establish torque requirements for lengths above the dashed line. Only a positive indication of torque is required.
- Referenced documents shall be of the issue in effect on date of invitations for bid.
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.

(B) For changes see sheets 1 and 2.

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 29 JAN 1964 REVISED (A) 10 SEP 1969 (B) 29 DEC 1972

P.A. WC Other Cust AS 82	TITLE SETScrew-HEXAGON SOCKET, CONE POINT, ALLOY STEEL, CADMIUM PLATED, UNC-3A, PLAIN AND SELF-LOCKING (B)	MILITARY STANDARD MS 51973
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES: MS51034, MS51036, BCTX4.1 and in part MS51053, MS18067, BCTX2.4, BCTX2.5, BCTX2.12 and BCUX4.3.	SHEET 1 OF 2

INTERCHANGEABILITY

Screws covered by the dash numbers given in MS51034 and MS51036 are cancelled after 29 January 1964 and superseded by the screws covered on MS51973 having the same dash numbers. Cancelled screws may be used until existing stocks are depleted. Use only MS51973 screws for new design.

Screws covered by the dash numbers given in MS51053 in part are cancelled/inactivated after 10 September 1969. 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 II.

TABLE II

CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING
MS51053	MS51973	MS51053	MS51973	MS51053	MS51973	MS51053	MS51973
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
301	**	313	9	320	**	331	**
302	1	314	10	326	17	332	22
303	2	315	11	327	18	333	**
304	**	316	**	328	19	334	**
305	**	317	**	329	20	335	**
311	**	318	**	330	21	336	**
312	8	319	**				

** No replacement

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 III.

TABLE III (B)

CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING
MS18067	MS51973	MS18067	MS51973	MS18067	MS51973	MS18067	MS51973
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
1	101	46	109	42	118	24	135
5	102	2	111	47	119	30	136
10	103	6	112	54	120	35	137
16	104	11	113	61	121	43	138
22	105	17	114	3	131	48	139
89	106	23	115	7	132	55	140
33	107	90	116	12	133	62	141
41	108	34	117	18	134	67	142

APPROVED 29 JAN 1964 REVISED (A) 10 SEP 1969 (B) FOR CHANGES SEE SHEETS I AND 2

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.

P.A. WC Other Cust AS 82	TITLE SETSCREW-HEXAGON SOCKET, CONE POINT, ALLOY STEEL, CADMIUM PLATED, UNC-3A_t PLAIN AND SELF-LOCKING (B)	MILITARY STANDARD MS51973
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES: MS51034, MS51036, BCTI4.1 and in part MS51053, MS18067, BCTX2.4, BCTX2.5, BCTX2.12 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

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