



TABLE I

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					
R POINT RADIUS	MAX MIN	.079 .064	.099 .084	.135 .104	.154 .123	.173 .142	.219 .188	.265 .234	.312 .281	.406 .375					
L LENGTH	TOL.	DASH NUMBER													
.125	±.010	1	8	16	26	36	46	58	70	80					
.188		2	9	17		26					36	46	58	70	
.250			10	18		27					37	47	59	71	81
.312				19		28					38	48	60	72	83
.375	±.020			20	29	39	48	60	70	80					
.500					30	40	49	61	71	81					
.625							50	62	72	82					
.750							51	63	73	82					
1.000						52	64	74	83						

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: MS51981-1, plain setscrew or MS51981-1L self-locking setscrew.
- 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.
- SELF-LOCKING ELEMENT:**
 - The self-locking element shall be a patch type or longitudinal strip in accordance with MIL-P-18240.
 - Maximum ring gage diameter that locking region of Setscrew must pass through freely or with finger pressure shall be the nominal size plus 0.010.
 - Locating of effective locking area, design and usage limitation (see MS51981).

INTERCHANGEABILITY

Screws covered by the dash numbers given in MS51049 and MS51051 are cancelled after 11 March 1964 and superseded by the screws covered on MS51981 having the same dash numbers. Cancelled screws may be used until existing stocks are depleted. Use only MS51981 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	MS51981	MS51053	MS51981	MS51053	MS51981	MS51053	MS51981
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
401	**	413	9	420	**	431	**
402	1	414	10	426	16	432	**
403	2	415	**	427	17	433	**
404	**	416	**	428	18	434	**
405	**	417	**	429	19	435	**
411	**	418	**	430	20	436	**
412	8	419	**				

** No Replacement

P.A. AR Other Cust AS 99	TITLE SETScrew - HEXAGON SOCKET, OVAL POINT, ALLOY STEEL, CADMIUM PLATED, UNC-3A	MILITARY STANDARD MS51981
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES: MS51049, MS51051 and in part MS51053, BCTX2, BCTX2.1, BCTX2.10 and BCUX4.1	SHEET 1 OF 1

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 when applicable.

APPROVED 11 MAR 1964 REVISED (A) 10 SEP 1969 (B) 31 MAR 1972 (C) 15 MAR. 1977