FED SUP CLASS 5305

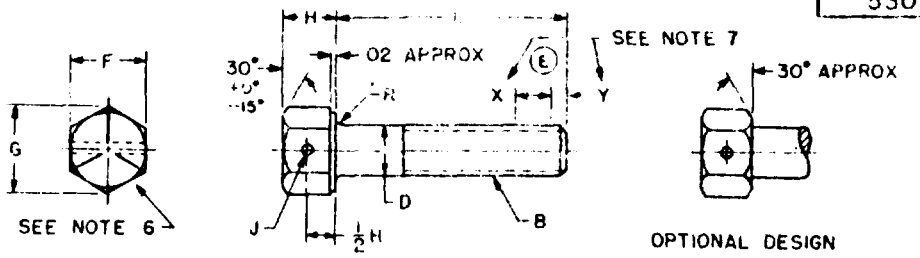

TABLE I

NOMINAL SIZE		1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
B THREAD UNF-2A		28	24	24	20	20	18	16	14	12
D BODY DIAMETER	MAX	.2500	.3125	.3750	.4375	.5000	.6250	.7500	.8750	1.0000
	MIN	.2450	.3065	.3690	.4305	.4930	.6170	.7410	.8660	.9900
F WIDTH ACROSS FLATS	MAX	.4375	.5000	.5625	.6250	.7500	.9375	1.1250	1.3125	1.5000
	MIN	.4260	.4890	.5510	.6120	.7360	.9220	1.1000	1.2850	1.4690
G WIDTH ACROSS CORNERS	MAX	.505	.577	.650	.722	.866	1.083	1.299	1.516	1.732
	MIN	.486	.557	.628	.699	.840	1.051	1.254	1.465	1.675
H HEAD HEIGHT	MAX	.163	.211	.243	.291	.323	.403	.483	.563	.627
	MIN	.150	.195	.226	.272	.302	.378	.455	.531	.591
J/2 H	MAX	.086	.114	.130	.155	.172	.214	.256	.298	.332
	MIN	.075	.098	.113	.136	.151	.189	.228	.266	.296
J HOLE DIAMETER	+.006 -.002	.0625	.0625	.0625	.0625	.094	.094	.094	.125	.125
R RADIUS	MAX	.025	.025	.025	.025	.025	.045	.045	.065	.095
	MIN	.015	.015	.015	.015	.015	.020	.020	.040	.060
MIN TENSILE STRENGTH - LBS		4,350	6,950	10,500	14,200	19,200	30,700	44,800	61,400	79,600

L LENGTH	TOLERANCE SIZE 3/4 AND UNDER	TOLERANCE SIZE 7/8 AND OVER	DASH NO.	DASH NO. (Plain only)	DASH NO.	DASH NO. (Plain only)	DASH NO.	DASH NO.	DASH NO.	DASH NO. (Plain only)	DASH NO.
.375			301	327							
.438			302	328							
.500	+0		303	329	355						
.562	-.031	---	304	330	356						
.625			305	331	357						
.750			306	332	358	384	410	433			
.875			307	333	359	385	411	434			
1.000			308	334	360	386	412	435	457		
1.250	+0	+0	309	335	361	387	413	436	458	482	506
1.500	-.062	-.125	310	336	362	388	414	437	459	483	507
1.750			311	337	363	389	415	438	460	484	508
2.000			312	338	364	390	416	439	461	485	509
2.250			313	339	365	391	417	440	462	486	510
2.500			314	340	366	392	418	441	463	487	511
2.750			315	341	367	393	419	442	464	488	512
3.000			316	342	368	394	420	443	465	489	513
3.250			317	343	369	395	421	444	466	490	514
3.500			318	344	370	396	422	445	467	491	515
3.750	+0	+0	319	345	371	397	423	446	468	492	516
4.000	-.094	-.188	320	346	372	398	424	447	469	493	517
4.250			321	347	373	399	425	448	470	494	518
4.500			322	348	374	400	426	449	471	495	519
4.750			323	349	375	401	427	450	472	496	520
5.000			324	350	376	402	428	451	473	497	521
5.500							429	452	474	498	522
6.000							430	453	475	499	523

NOTE: For notes see sheet 2.

(E) For changes see sheets 1 and 2.

APPROVED 16 JUL 58 REVISED (A) 16 FEB 65 (B) 16 JUL 65 (C) 14 OCT 68 (D) 1 MAY 1969 (E) 15 JUN 1972

REVIEWER: AV, 19; AT, MI, MU, NSA, OS, 11
USER: AS, ME, GL, MC, 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 should be made from this document.

P.A. MC
Other Cust SH 2

TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), HEAD DRILLED FOR LOCKING WIRE, STEEL, GRADE 5, CADMIUM PLATED, UNF-2A, PLAIN AND SELF-LOCKING (E)

MILITARY STANDARD
MS 51096

PROCUREMENT SPECIFICATION FF-S-86

SUPERSEDES MS51094, BCBX1, BCBX1.1, BCBX4, BCBX4.1, BCBX26 and BCBX27

SHEET 1 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

FED SUP CLASS
5305

NOTES:

1. MATERIAL: Medium carbon steel, Grade 5, in accordance with procurement specification. Minimum ultimate tensile strength: 120,000 PSI.

2. PROTECTIVE COATING: Cadmium plated in accordance with procurement specification.

3. THREADS: The threads shall be in accordance with Screw-Thread Standards for Federal Services, Handbook H28.

4. THREAD LENGTH: Minimum thread length shall be twice the diameter plus 1/4 inch. The tolerance shall be plus 3/16 inch or 2-1/2 threads, whichever is greater. On screws that are too short for minimum thread length, the distance from the bearing surface of the head to the first complete thread shall not exceed the length of 2-1/2 threads.

5. DIMENSIONS: All dimensions are in inches, unless otherwise specified.

(E) 6. HEAD MARKING: Heads shall be marked in accordance with MIL-HDBK-131. Screws with self-locking elements shall also have six dots in a circular pattern on the head. Raised markings are preferred, stampings are acceptable.

7. SELF-LOCKING ELEMENT:

(E) (a) The self-locking element shall be a patch type or longitudinal strip in accordance with MIL-F-18240.
(b) For "X" and "Y" dimensions and design and usage limitations, see MS15981.
(c) Maximum ring gage diameter that locking region of screw must pass thru freely or with finger pressure shall be the nominal size plus 0.010.
(d) Sizes 5/16, 7/16 and 7/8 shall not be available with self-locking element.

8. PART NUMBER: The MS part number consists of the MS number, plus the dash number. For screws with self-locking element add the letter "L" after the dash number.
Example: MS51096-301 Plain screw.
MS51096-301L Self-locking screw.

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. INTERCHANGEABILITY:

Screws covered by dash numbers 1 thru 223 of MS51094 and dash numbers 1 thru 223 of MS51096 are cancelled and superseded by dash numbers 301 thru 523, respectively, of MS51096. Cancelled screws may be used until existing stocks are depleted. Use only the superseding screws of MS51096 for new design.

☆ U. S. GOVERNMENT PRINTING OFFICE: 1972 714-167 8014

REVIEWER: AT, AV, IS, MI, MU, NSA, OS, 11
USER: AS, CL, MC, ME, YD

APPROVED 16 JUL 1958 REVISED (A) 16 FEB 1965 (B) 16 JUL 1965 (C) 14 OCT 1968 (D) 1 MAY 1969 (E) FOR CHANGES SEE SHEETS 1 AND 2

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P.A. WC Other Cust SH 82	TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), HEAD DRILLED FOR LOCKING WIRE, STEEL, GRADE 5, CADMIUM PLATED, UNF-2A, PLAIN AND SELF-LOCKING (E)	MILITARY STANDARD MS 51096
PROCUREMENT SPECIFICATION FF-S-85	SUPERSEDES MS51094, BCBX3, BCBX3.1, BCBX4, BCBX4.1, BUBX26 and BUBX27.	SHEET 2 OF 2

DD FORM 672-1 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE