Form Approved
OMB No. 0704-0188

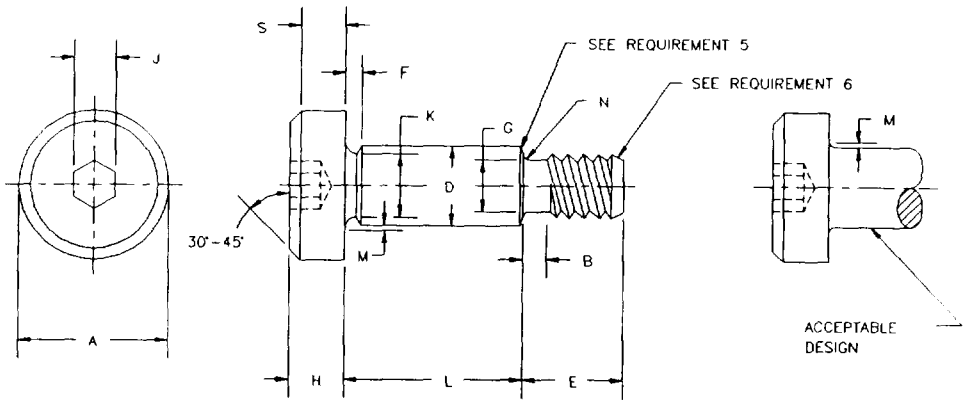


TABLE I.

NOMINAL SIZE		.250	.3125	.375	.500	.625	.750	1.000	1.250
THREADS (UNC-3A)		.1900-24	.2500-20	.3125-18	.3750-16	.5000-13	.6250-11	.7500-10	.8750-9
D SHOULDER DIAMETER	MAX	.2480	.3105	.3730	.4980	.6230	.7480	.9980	1.2480
	MIN	.2460	.3085	.3710	.4960	.6210	.7460	.9960	1.2460
A HEAD DIAMETER	MAX	.375	.438	.562	.750	.875	1.000	1.312	1.750
	MIN	.357	.419	.543	.729	.853	.977	1.267	1.723
H HEAD HEIGHT	MAX	.188	.219	.250	.312	.375	.500	.625	.750
	MIN	.177	.209	.240	.302	.365	.490	.610	.735
S HEAD SIZE HEIGHT	MIN	.157	.183	.209	.262	.315	.421	.527	.633
E THREAD LENGTH	MAX	.375	.438	.500	.625	.750	.875	1.000	1.125
	MIN	.355	.418	.480	.595	.720	.845	.970	1.095
G THREAD NECK DIAMETER	MAX	.142	.193	.249	.304	.414	.521	.638	.750
	MIN	.133	.182	.237	.291	.397	.502	.616	.726
B THREAD NECK WIDTH	MAX	.083	.100	.111	.125	.154	.182	.200	.222
J SOCKET WIDTH ACROSS FLATS	NOM	.125	.156	.188	.250	.312	.375	.500	.625
K SHOULDER NECK DIAMETER	MIN	.227	.289	.352	.477	.602	.727	.977	1.227
F SHOULDER NECK WIDTH	MAX	.093	.093	.093	.093	.093	.093	.125	.125
N THREAD NECK FILLET	MAX	.023	.028	.031	.035	.042	.051	.055	.062
	MIN	.017	.022	.025	.029	.036	.045	.049	.056
M HEAD FILLET	MAX	.014	.017	.020	.026	.032	.039	.050	.060
	MIN	.009	.012	.015	.020	.024	.030	.040	.050
2/ SHEAR STRENGTH SINGLE	MIN	1,170	2,180	3,700	5,580	10,400	16,600	25,000	34,800
DOUBLE	MIN	7,980	12,550	18,150	32,450	50,900	73,400	130,900	204,850
1/ TENSILE STRENGTH LBS-MIN		1,950	3,640	6,170	9,310	17,300	27,700	41,700	58,000

1/ Ultimate tensile strength of 140,000 psi min, based on the minimum thread neck area.

2/ Single shear strength of 84,000 psi min in thread neck area, based on the minimum thread neck area. Double shear strength of 168,000 psi min in shoulder area, based on the minimum shoulder.

(D) ENTIRE STANDARD REVISED

INCH-POUND

PREPARING ACTIVITY: DLA-IS
CUSTODIANS: ARMY - AR NAVY - SH
AIR FORCE - 99
REVIEW: GSA,82
USER:
PROJECT NUMBER: 5305-1954

MILITARY SPECIFICATION SHEET

TITLE
SCREW, SHOULDER - SOCKET HEAD, HEXAGON, ALLOY STEEL, CADMIUM PLATED, UNC-3A

SPECIFICATION SHEET NUMBER
MS51975 25 APR 94 REV D

SUPERSEDING
MS51975C 30 OCT 84 (SEE NOTE 6)

AMSC- N/A FSC 5305

DISTRIBUTION STATEMENT
A. Approved for public release; distribution is unlimited.

DD Form 672, MAY 88 PREVIOUS EDITIONS ARE OBSOLETE

Form Approved
OMB No. 0704-0188

TABLE II

NOMINAL SIZE		.250	.3125	.375	.500	.625	.750	1.000	1.250
THREADS (UNC-3A)		1900-24	2500-20	3125-18	3750-16	5000-13	6250-11	7500-10	8750-9
L SHOULDER LENGTH	TOL	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER
.375		1							
.500		2	8	16		38•			
.625		3	9	17		39•			
.750		4	10	18	28	40•			
.875						41•			
1.000		5	11	19	29	42•	51•		
1.250	± 005	6	12	20	30	43	52•		
1.500		7	13	21	31	44	53	60•	
1.750			14	22	32	45	54	61•	71•
2.000			15	23	33	46	55	62•	72•
2.250				24	34	47	56	63•	73•
2.500				25	35	48	57	64•	74•
2.750				26	36	49	58	65•	75•
3.000				27	37	50	59	66•	76•
3.500							81	68•	77•
3.750						80			
4.000								70•	78•

• Indicates manufacturer's non-stock production item.

PREPARING ACTIVITY: DLA-IS
CUSTODIANS: ARMY- AR NAVY- SH
AIR FORCE- 99
REVIEW: GSA,82
USER:
PROJECT NUMBER: 5305-1954

MILITARY SPECIFICATION SHEET

TITLE
SCREW, SHOULDER - SOCKET HEAD, HEXAGON, ALLOY STEEL, CADMIUM PLATED, UNC-3A

SPECIFICATION SHEET NUMBER
MS51975 25 APR 94 REV D

SUPERSEDING
MS51975C 30 OCT 84 (SEE NOTE 6)

AMSC- N/A FSC 5305

DISTRIBUTION STATEMENT
A. Approved for public release, distribution is unlimited.

DD Form 672, MAY 88 PREVIOUS EDITIONS ARE OBSOLETE

Form Approved
OMB No. 0704-0188

REQUIREMENTS:

1. MATERIAL: ALLOY STEEL, IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

2. PROTECTIVE COATING: CADMIUM PLATED IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 2.

3. THREADS: THREADS SHALL BE CLASS 3A IN ACCORDANCE WITH FED-STD-H28/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 22.

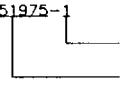
4. HEAD: PLAIN OR KNURLED ARE ACCEPTABLE.

5. EDGE OF SHOULDER: THE EDGE OF SHOULDER MAY BE BROKEN. THE RADIUS OR CHAMFER MAY NOT EXCEED 0.005 INCH FOR SHOULDERS TO 0.375 INCH DIAMETER AND 0.008 INCH FOR LARGER DIAMETERS.

6. SCREW POINT CHAMFER: THE POINT SHALL BE FLAT OR SLIGHTLY CONCAVE, AND CHAMFERED. THE PLANE OF THE POINT SHALL BE APPROXIMATELY NORMAL TO THE AXIS OF THE SCREW. THE CHAMFER SHALL EXTEND SLIGHTLY BELOW THE ROOT OF THE THREAD, AND THE EDGE BETWEEN FLAT AND CHAMFER MAY BE SLIGHTLY ROUNDED. THE INCLUDED ANGLE OF THE POINT SHOULD BE APPROXIMATELY 90 DEGREES.

7. PART NUMBER: THE PART NUMBER SHALL CONSISTS OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER TAKEN FROM TABLE II.

   EXAMPLE: MS51975-1

   MS24667-1 INDICATES - SCREW, SHOULDER, SOCKET HEAD, HEXAGON, ALLOY STEEL, .250 NOMINAL SHOULDER SIZE, .375 SHOULDER LENGTH, 1900-24 UNC-3A THREAD SIZE, CADMIUM PLATED.

8. IDENTIFICATION: SCREWS WITH NOMINAL SIZES .1900 AND LARGER SHALL BE PERMANENTLY MARKED WITH A SYMBOL IDENTIFYING ITS MANUFACTURER OR PRIVATE LABEL DISTRIBUTOR. MARKINGS SHALL BE PLACED ON THE TOP OF HEAD, INDENTED. METHOD AND SIZE OF MARKINGS SHALL CONFORM TO THE REQUIREMENTS FOR PERMANENT MARKINGS SPECIFIED IN SAE AS478.

NOTES:

1. INTERPRET DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ANSI Y14.5M.
2. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
3. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
4. REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.
5. SEE MS21301 FOR UNPLATED ALLOY STEEL AND MS51576 FOR CORROSION RESISTANT STEEL SCREWS.
6. SCREWS COVERED BY DASH NUMBERS 1 THRU 70 GIVEN IN MS16637 AND MS16638 ARE CANCELLED AFTER 15 DECEMBER 1964 AND SUPERSEDED BY THE SCREWS GIVEN IN MS51975 HAVING THE SAME DASH NUMBERS. THE CANCELLED SCREWS CANNOT ALWAYS REPLACE THE SUPERSEDING SCREWS AND SHOULD BE USED UNTIL STOCKS ARE DEPLETED. USE ONLY THE SUPERSEDING SCREWS FOR NEW DESIGN AND REPLACEMENT.

PREPARING ACTIVITY: DLA-IS CUSTODIANS: ARMY- AR NAVY- SH AIR FORCE- 99 REVIEW: GSA,82 USER: PROJECT NUMBER: 5305-1954	MILITARY SPECIFICATION SHEET TITLE SCREW, SHOULDER - SOCKET HEAD, HEXAGON, ALLOY STEEL, CADMIUM PLATED, UNC-3A	SPECIFICATION SHEET NUMBER MS51975 25 APR 94 REV D SUPERSEDING MS51975C 30 OCT 84 (SEE NOTE 6) AMSC- N/A FSC 5305
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.		Page 3 of 3

DD Form 672, MAY 88 PREVIOUS EDITIONS ARE OBSOLETE