

- REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION FF-S-86

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE

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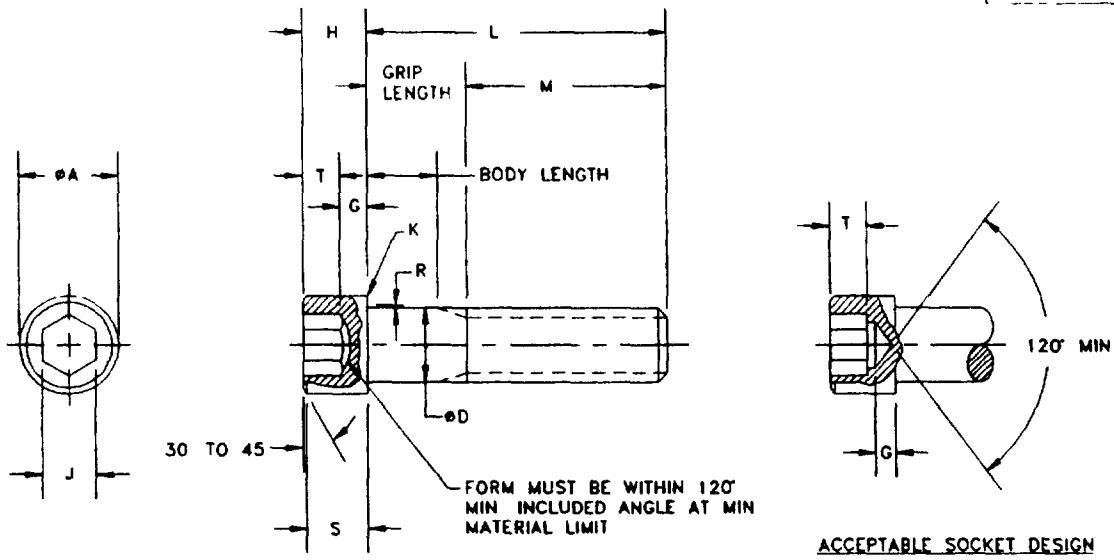


TABLE 1 DASH NUMBERS AND DIMENSIONS

NOMINAL SIZE		#2 (0860)	#4 (1120)	#6 (1380)						
THREADS PER INCH		56 UNC-3A	40 UNC-3A	32 UNC-3A						
ØD BODY	MAX	0860	1120	1380						
	MIN	0822	1075	1328						
ØA HEAD	MAX	1400	1830	2260						
	MIN	1340	1760	2180						
H HEAD HEIGHT	MAX	0860	1120	1380						
	MIN	0830	1080	1340						
S HEAD SIDE HEIGHT	MIN	0770	1010	1240						
J SOCKET WIDTH ACROSS FLATS	MAX	0791	0952	1111						
	MIN	0761	0937	1094						
T KEY ENGAGEMENT	MIN	0380	0510	0640						
G WALL THICKNESS	MIN	0260	0360	0440						
K CHAMFER OR RADIUS	MAX	0030	0050	0050						
R FILLET RADIUS	MAX	0080	0090	0100						
	MIN	0040	0050	0060						
M BASIC THREAD LENGTH 1/	REF	6250	7500	7500						
MIN TENSILE STRENGTH LOAD LBS 2/		300	480	730						
L LENGTH	TOLERANCE	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN
188	+ 000 - 030	1			9			16		
250		2			10			17		
375		3			11			18		
500		4						19		
625								20		
750										

1/ SEE NOTE 2  
2/ BASED ON 80,000 PSI MINIMUM TENSILE STRENGTH LOAD POUNDS ARE CALCULATED BY THE STRESS AREAS INDICATED IN FED-STD-H28/2

INCH-POUND

PREPARING ACTMITY DLA-IS  
CUSTODIANS ARMY- NAVY-OS  
AIR FORCE-82 DLA-  
REVIEW ARMY-MI NAVY-MC SH AIR FORCE-11  
MSA-NS  
PROJECT NUMBER 5305-20B1

MILITARY SPECIFICATION SHEET  
TITLE  
SCREW, CAP SOCKET HEAD-HEXAGON,  
CORROSION RESISTANT STEEL, UNC-3A

SPECIFICATION SHEET NUMBER  
MS16995 27 JUNE 95  
REV C  
SUPERSEDING  
MS16995F 22 FEB 91  
AMSC-N/A FSC-5310

DISTRIBUTION STATEMENT A. Approved for public release distribution is unlimited

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TABLE I DASH NUMBERS AND DIMENSIONS - CONTINUED

NOMINAL SIZE		#8 (1640)	#10 (1900)	#1/4 (250)						
THREADS PER INCH		32 UNC-3A	24 UNC-3A	20 UNC-3A						
ØD BODY	MAX	1640	1900	2500						
	MIN	1585	1840	2435						
ØA HEAD	MAX	2700	3130	3750						
	MIN	2620	3030	3650						
H HEAD HEIGHT	MAX	1640	1900	2500						
	MIN	1590	1850	2440						
S HEAD SIDE HEIGHT	MIN	1480	1710	2250						
J SOCKET WIDTH ACROSS FLATS	MAX	1426	1587	1900						
	MIN	1406	1562	1875						
T KEY ENGAGEMENT	MIN	0770	0900	1200						
G WALL THICKNESS	MIN	0520	0610	0800						
K CHAMFER OR RADIUS	MAX	0050	0050	0080						
R FILLET RADIUS	MAX	0120	0140	0140						
	MIN	0070	0090	0090						
M BASIC THREAD LENGTH 1/	REF	8750	8750	1 0000						
MIN TENSILE STRENGTH LOAD LBS 2/		1 120	1,400	2 540						
L LENGTH	TOLERANCE	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN
375	+ 000 - 030	25			35			47		
500		26			36			48		
625		27			37			49		
750		28			38			50		
875		29			39			51		
1,000		30			40			52		
1 250	+ 000 - 040				41	375	167	53		
1 500					42	375	167	54	500	250
1 750								55	500	250
2 000								56	1 000	750

1/ SEE NOTE 2  
2/ BASED ON 80 000 PSI MINIMUM TENSILE STRENGTH LOAD POUNDS ARE CALCULATED BY THE STRESS AREAS INDICATED IN FED-STD-H28/2

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DCDISS SPECIFIC N THE SOLICITATION FF-5-86

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PREPARING ACTIVITY DLA-IS CUSTODIANS ARMY- NAVY-OS AIR FORCE 82 DLA REVIEW ARMY-M NAVY-MC SH AIR FORCE-11 NSA-NS PROJECT NUMBER 5305-2081	MILITARY SPECIFICATION SHEET TITLE SCREW, CAP SOCKET HEAD-HEXAGON, CORROSION RESISTANT STEEL, UNC-3A	SPLCIFICATION SHEET NUMBER MS16995 27 JUNE 95 REV G SUPERSEDING MS16995F 22 FEB 91 AMSC N/A FSC -5310
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TABLE 1 DASH NUMBERS AND DIMENSIONS - CONTINUED

NOMINAL SIZE			5/16 ( 3125)			3/8 ( 375)			1/2 ( 500)			
THREADS PER INCH			18 UNC-3A			16 UNC-3A			13 UNC 3A			
ØD	BODY	MAX	3125			3750			5000			
		MIN	3053			3678			4919			
ØA	HEAD	MAX	4690			5630			7500			
		MIN	4570			5500			7350			
H	HEAD HEIGHT	MAX	3130			3750			5000			
		MIN	3060			3680			4920			
S	HEAD SIDE HEIGHT	MIN	2810			3370			4500			
J	SOCKET WIDTH ACROSS FLATS	MAX	2530			3160			3790			
		MIN	2500			3125			3750			
T	KEY ENGAGEMENT	MIN	1510			1820			2450			
G	WALL THICKNESS	MIN	1000			1200			1600			
K	CHAMFER OR RADIUS	MAX	0080			0080			0100			
R	FILLET RADIUS	MAX	0170			0020			0260			
		MIN	0120			0150			0200			
M	BASIC THREAD LENGTH 1/	REF	1 1250			1 2500			1 5000			
MIN TENSILE STRENGTH LOAD LBS 2/			4 190			6 200			11 300			
L LENGTH	TOLERANCE		DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	
	SIZE 5/16 ( 3125) AND 3/8 ( 375)	SIZE 1/2 ( 500)										
375	+ 000 - .030	+ 000 - .030	61									
500			62			77						
625			63			78						
750			64			79				92		
875			65			80				93		
1 000	+ 000 - .040	+ 000 - .060	66									
1 250			67			81					94	
1 500			68			82					95	
1 750			69		625	347	84	500	187			96
2 000			70				85	500	187			97
2 250	+ 000 - .060	+ 000 - .080	71	1 125	847	86	1 000	687	99	750	365	
2 500			72	1 125	847	87	1 000	687	100	750	365	
2 750										101	750	365
3 000										102	1 500	1 115

1/ SEE NOTE 2  
2/ BASED ON 80,000 PSI MINIMUM TENSILE STRENGTH LOAD POUNDS ARE CALCULATED BY THE STRESS AREAS INDICATED IN FED-STO-H28/2

PREPARING ACTIVITY DLA-15 CUSTODIANS ARMY- NAVY- 05 AIR FORCE- 82 DLA- REVIEW ARMY-MI NAVY-MC SH AIR FORCE- 11 MSA-NS PROJECT NUMBER 5305-2081	<b>MILITARY SPECIFICATION SHEET</b> TITLE <b>SCREW, CAP SOCKET HEAD-HEXAGON          CORROSION RESISTANT STEEL UNC-3A</b>	SPECIFICATION SHEET NUMBER <b>MS16995</b> 27 JUNE 95 REV G SUPERSEDING <b>MS16995F</b> 22 FEB 91 AMSC- N/A FSC -5310
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TABLE 1 DASH NUMBERS AND DIMENSIONS - CONTINUED

NOMINAL SIZE		5/8 ( 625)		
THREADS PER INCH		11 UNC-3A		
ØD BODY	MAX	6250		
	MIN	6163		
ØA HEAD	MAX	9360		
	MIN	9210		
H HEAD HEIGHT	MAX	6250		
	MIN	6160		
S HEAD SIDE HEIGHT	MIN	5620		
J SOCKET WIDTH ACROSS FLATS	MAX	5050		
	MIN	5000		
T KEY ENGAGEMENT	MIN	3070		
G WALL THICKNESS	MIN	2000		
K CHAMFER OR RADIUS	MAX	0100		
R FILLET RADIUS	MAX	0320		
	MIN	0240		
M BASIC THREAD LENGTH 1/	REF	1 7500		
MIN TENSILE STRENGTH LOAD LBS 2/		18 100		
L LENGTH	TOLERANCE	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN
1 000	+ 000 - 030	107		
1 250		108		
1 500	+ 000 - 060	109		
1 750		110		
2 000		111		
2 250		112		
2 500	+ 000, - 080	113	750	295
2 750		114	750	295
3 000		115	750	295

- 1/ SEE NOTE 2
- 2/ BASED ON 80 000 PSI MINIMUM TENSILE STRENGTH LOAD POUNDS ARE CALCULATED BY THE STRESS AREAS INDICATED IN FED-STD-H28/2

REQUIREMENTS

- 1 MATERIAL CORROSION RESISTANT STEEL IN ACCORDANCE WITH PROCUREMENT SPECIFICATION OR TYPE 303 (UNS S30300) EQUAL TO OR INTERCHANGEABLE WITH 16 18 CHROMIUM NICKEL ALLOY STEEL DEVELOPED FOR COLD HEADING
- 2 CLEANED, DESCALED AND PASSIVATED, SCREWS SHALL BE CLEANED, DESCALED AND PASSIVATED IN ACCORDANCE WITH QQ-P-35
- 3 PROTECTIVE COATING AND SURFACE TREATMENT, SCREWS SHALL BE BLACK OXIDE COATED IN ACCORDANCE WITH MIL-C-13924, CLASS 4 (WHEN BLACK OXIDE COATING IS REQUIRED, THE DASH NUMBER SHALL BE FOLLOWED BY A CODE LETTER "B")
- 4 MAGNETIC PERMEABILITY, SCREWS SHALL HAVE A MAGNETIC PERMEABILITY OF 210 MAXIMUM (AIR = 1.0) FOR A FIELD STRENGTH OF H = 200 OERSTEDS USING A MAGNETIC INDICATOR IN ACCORDANCE WITH MIL-I-17214
- ⑤ THREADS, ACCEPTABILITY OF SCREW THREADS FOR SIZES #2 (0860) THRU #10 (190) NOMINAL DIAMETERS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 21 ACCEPTABILITY OF SCREW THREADS 250 AND LARGER SHALL BE IN ACCORDANCE WITH FED-STD-H28/20 SYSTEM 22 SCREWS ABOVE THE HEAVY LINE SHALL HAVE COMPLETE (FULL FORM) THREADS EXTENDED TO WITHIN TWO (2) THREADS OF THE HEAD AS MEASURED WITH A THREAD RING GAGE
- 6 SOURCE IDENTIFICATION MARK, SOURCE IDENTIFICATION MARK SHALL BE IN ACCORDANCE WITH PROCUREMENT SPECIFICATION
- 7 HEAD STYLE, HEAD OF SCREW MAY BE KNURLED OR NOT KNURLED AT THE OPTION OF THE MANUFACTURER TYPE OF KNURLING OPTIONAL

PREPARING ACTMITY DLA-IS CUSTODIANS ARMY- NAVY-OS AIR FORCE- B2 DLA REVIEW ARMY-MI NAVY-MC,SH AIR FORCE-11 NSA-NS	MILITARY SPECIFICATION SHEET TITLE SCREW CAP SOCKET HEAD-HEXAGON CORROSION RESISTANT STEEL, UNC-3A	SPECIFICATION SHEET NUMBER MS16995 27 JUNE 95 REV G SUPERSEDING MS16995F 22 FEB 91 AMSC-N/A FSC -5310
PROJECT NUMBER 5305-2081		
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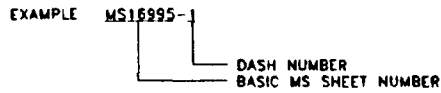
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8 PART NUMBER. THE PART NUMBER SHALL CONSIST OF THE BASIC MS SHEET NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I AND A CODE LETTER "B" FOR BLACK OXIDE IF APPLICABLE



- MS16995-1 INDICATES - SCREW CAP SOCKET HEAD, HEXAGON CORROSION RESISTANT STEEL, 0860 56 UNC-3A NOMINAL THREAD SIZE 188 LENGTH PASSIVATED
- MS16995-1B INDICATES - SCREW, CAP SOCKET HEAD HEXAGON CORROSION RESISTANT STEEL 0860-56 UNC-3A, NOMINAL THREAD SIZE 188 LENGTH BLACK OXIDE COATING

NOTES

- 1 ALL DIMENSIONS ARE IN INCHES
- 2 THE BASIC THREAD LENGTH "M" (TABLE I) IS A REFERENCED VALUE CONTROLLED BY THE GRIP LENGTH AND "L" LENGTH AS SPECIFIED
- 3 MS16995 SUPERSEDES MS35461 IN PART
- 4 IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS DOCUMENT AND THE REFERENCES CITED HEREIN THE TEXT OF THIS DOCUMENT SHALL TAKE PRECEDENCE
- 5 UNLESS OTHERWISE SPECIFIED ISSUES OF REFERENCED DOCUMENTS ARE IN EFFECT AT THE TIME OF SOLICITATION

PREPARING ACTIVITY DLA-IS CUSTODIANS ARMY- NAVY-05 AIR FORCE-82 DLA REVIEW ARMY-MI NAVY-MC SH AIR FORCE-11 NSA-NS PROJECT NUMBER 5305-2081	<b>MILITARY SPECIFICATION SHEET</b>  TITLE <b>SCREW CAP SOCKET HEAD-HEXAGON,          CORROSION RESISTANT STEEL UNC-3A</b>	SPECIFICATION SHEET NUMBER <b>MS16995</b> 27 JUNE 95 REV G  SUPERSEDING MS16995F 22 FEB 91  AMSC- N/A FSC-5310
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THE SCREWS COVERED BY DASH NUMBERS GIVEN IN MS35461 THAT ARE REPLACED BY APPLICABLE DASH NUMBERS IN THIS DOCUMENT ARE CANCELLED AFTER 5 APRIL 62. USE THE DASH NUMBERS GIVEN IN THE PRECEDING SHEETS. THE CANCELLED SCREWS CANNOT ALWAYS REPLACE THE NEW SCREWS AND SHOULD BE USED UNTIL EXISTING STOCKS ARE DEPLETED. USE ONLY THE NEW SCREWS FOR DESIGN AND REPLACEMENT. REPLACEMENT SHALL BE IN ACCORDANCE WITH THIS TABLE. INTERCHANGEABILITY INFORMATION REGARDING PART NUMBERS ON SUPERSEDED DRAWINGS ARE ALSO CONTAINED IN THIS TABLE.

INTERCHANGEABILITY TABLE

PART NUMBERS		PART NUMBERS		PART NUMBERS	
CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING
MS35461	MS16995	MS35461	MS16995	MS35461	MS16995
DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER
1	25	23	49	54	83
2	26	24	50	55	84
3	27	25	51	56	85
4	28	26	52	57	86
5	29	27	53	58	87
6	30	28	54	62	92
11	35	29	55	63	93
12	36	30	56	64	94
13	37	48	77	65	95
14	38	49	78	66	96
15	39	50	79	67	97
16	40	51	80	68	98
21	47	52	81	69	99
22	48	53	82	70	100

SCREWS COVERED BY THE FOLLOWING PART NUMBERS ARE INACTIVE FOR NEW DESIGN AND ENGINEERING. THEY SHALL BE USED FOR MAINTENANCE OF EXISTING EQUIPMENT TO REPLACE THE 5/16 INCH SIZE SCREWS USED IN COUNTERBORED HOLES OR OTHER CLOSE APPLICATIONS.

PART NUMBERS
INACTIVE
MS35461
DASH NUMBER
33
34
35
36
37
38
39
40
41
42
43
44

PREPARING ACTIVITY DLA-IS CUSTODIANS ARMY- NAVY-OS AIR FORCE-82 DLA- REVIEW ARMY-MI NAVY-MC SH AIR FORCE-11 NSA-NS PROJECT NUMBER 5305-2081	<b>MILITARY SPECIFICATION SHEET</b>		SPECIFICATION SHEET NUMBER <b>MS16995</b> 27 JUNE 95 REV G	
	TITLE <b>SCREW, CAP SOCKET HEAD-HEXAGON,          CORROSION RESISTANT STEEL UNC-3A</b>		SUPERSEDING <b>MS16995F</b> 22 FEB 91	
			AMSC- N/A FSC-5310	
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