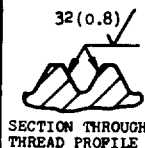
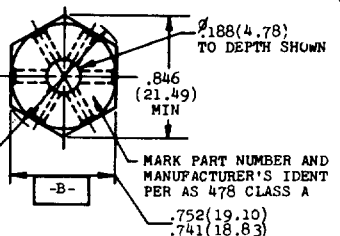


**MS9962**FED. SUP CLASS  
5306

CSK 90° TO  $\phi .100(2.54)$   
6 HOLES EQUALLY SPACED

$\phi .070(1.78)$   
 $\phi .100(2.54)$   
 $\phi .020(0.51)$



$\phi .023(0.58)$

CHAM 30° TO  $\phi .750(19.05)$   
(OPPOSITE SIDE OPTIONAL)

$\phi .003(0.08)$

32(0.8)

.344(8.74)

.264(6.71)

.160(4.06)

.016(0.41)

OR CHAM

.030(0.76)

.020(0.51)

32(0.8)

$\phi .472(11.98)$

$\phi .462(11.74)$

$\phi .710(18.04)$

$\phi .760(19.30)$

$\phi .710(18.04)$

$\phi .760(19.30)$

$\phi .710(18.04)$

$\phi .760(19.30)$

$\phi .710(18.04)$

$\phi .760(19.30)$

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$\phi .760(19.30)$

$\phi .710(18.04)$

$\phi .760(19.30)$

$\phi .710(18.04)$

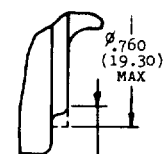
$\phi .760(19.30)$

.031(0.79) MIN  
INCOMPLETE  
THREADS  
(SEE NOTE 2)

.500-20UNJF-3A  
MIL-S-8879

-A-

CHAMFER .047(1.19)  
X 45° ±10°



A .006(0.15)  
B .002(0.05)  
C SEE NOTE 1

User activities:  
Army  
Navy  
Air Force  
D 5 A

Review activities:  
Army  
Navy  
Air Force  
D 5 A

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.

- FOR PART NUMBERS MS9962-03 THRU MS9962-24 THE THREAD PD SHALL REPLACE DATUM C.
- INCOMPLETE THREADS NOT TO ENTER FILLET.
- MATERIAL: STEEL AMS 6322.
- HARDNESS: ROCKWELL C26-32.
- FINISH: CADMIUM PLATE AMS 2400. DIMENSIONS SPECIFIED ARE AFTER PLATING.
- MANUFACTURING SPECIFICATION: AMS 7452 EXCEPT HEAD SHALL BE UPSET.
- HEAD TO SHANK FILLET SHALL BE COLD WORKED.
- MAGNETIC PARTICLE INSPECTION PER AMS 2640 AFTER PLATING.
- SURFACE TEXTURE: ANSI B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES (3.2 MICROMETERS) EXCEPT UPSET HEAD.
- BREAK SHARP EDGES .003-.015 (0.08-0.38) UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS IN INCHES. METRIC CONVERSIONS ARE IN PARENTHESES. UNLESS OTHERWISE SPECIFIED: TOLERANCES; LINEAR DIMENSIONS ±.010 (0.25), ANGULAR DIMENSIONS ±5°.
- INTERNATIONAL SYSTEM UNITS (SI) SHOWN ARE FOR REFERENCE ONLY.
- DIMENSIONING AND TOLERANCING: ANSI Y14.5-1994,  $\phi$  = DIAMETER.
- DO NOT USE UNASSIGNED PART NUMBERS.

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THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE MILITARY SERVICES BY THE SAE AEROSPACE PART  
STANDARDS DIVISION.

P.A. Air Force - II

Other Cast  
Army - AV  
Navy - AS

TITLE

BOLT, MACHINE, HEXAGON HEAD, DRILLED, 6 HOLE,  
PD SHANK, STEEL AMS 6322, CADMIUM PLATED,  
.500-20UNJF-3A

MILITARY STANDARD

**MS9962**

PROCUREMENT SPECIFICATION

SUPERSEDES:

SHEET 1 OF 2

DD FORM 672-1  
ASG use only

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

5306-0497

APPROVED 27 Jun 74 REVISED

**MS9962****FED. SUP CLASS**  
5306User activities:  
Army  
Navy  
US FReview activities:  
Army  
Navy  
US F

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P.A. Air Force - II Other Cast Army - AV Navy - AS	TITLE BOLT, MACHINE, HEXAGON HEAD, DRILLED, 6 HOLE, RD SHANK, STEEL AMS 6322, CADMIUM PLATED, .500-20UNJF-3A	<b>MILITARY STANDARD</b> <b>MS9962</b>
PROCUREMENT SPECIFICATION	SUPERSEDES:	SHEET 2 OF 2

PART NUMBER	L		Q MIN		K MAX		APPROX MASS		PART NUMBER	L		Q MIN		K MAX		APPROX MASS	
	IN.	(mm)	IN.	(mm)	IN.	(mm)	LB/100	kg/100		IN.	(mm)	IN.	(mm)	IN.	(mm)	LB/100	kg/100
MS9962-03	.750	19.05	.030	0.77	.125	3.17	7.99	3.624	MS9962-31	3.000	76.20	1.590	40.39	1.750	44.45	18.88	8.564
MS9962-04	.812	20.62	.030	0.77	.125	3.17	8.28	3.756	MS9962-32	3.125	79.38	1.715	43.57	1.875	47.62	19.49	8.840
MS9962-05	.875	22.22	.030	0.77	.125	3.17	8.59	3.896	MS9962-33	3.250	82.55	1.840	46.74	2.000	50.80	20.09	9.113
MS9962-06	.938	23.82	.030	0.77	.125	3.17	8.90	4.037	MS9962-34	3.375	85.72	1.945	49.92	2.125	53.97	20.70	9.389
MS9962-07	1.000	25.40	.030	0.77	.125	3.17	9.21	4.178	MS9962-35	3.500	88.90	2.090	53.09	2.250	57.15	21.30	9.662
MS9962-08	1.062	26.97	.030	0.77	.125	3.17	9.52	4.318	MS9962-36	3.625	92.08	2.215	56.27	2.375	60.32	21.90	9.934
MS9962-09	1.125	28.58	.030	0.77	.125	3.17	9.82	4.454	MS9962-37	3.750	95.25	2.340	59.44	2.500	63.50	22.51	10.210
MS9962-10	1.188	30.18	.030	0.77	.125	3.17	10.12	4.590	MS9962-38	3.875	98.42	2.465	62.62	2.625	66.67	23.11	10.482
MS9962-11	1.250	31.75	.030	0.77	.125	3.17	10.42	4.726	MS9962-39	4.000	101.60	2.590	65.79	2.750	69.85	23.72	10.759
MS9962-12	1.312	33.32	.030	0.77	.125	3.17	10.73	4.867	MS9962-40	4.125	104.77	2.715	68.97	2.875	73.02	24.32	11.031
MS9962-13	1.375	34.92	.030	0.77	.125	3.17	11.03	5.003	MS9962-41	4.250	107.95	2.840	72.14	3.000	76.20	24.92	11.304
MS9962-14	1.438	36.52	.030	0.77	.125	3.17	11.33	5.139	MS9962-42	4.375	111.12	2.965	75.26	3.125	79.37	25.51	11.580
MS9962-15	1.500	38.10	.030	0.77	.125	3.17	11.63	5.275	MS9962-43	4.500	114.30	3.090	78.38	3.250	82.55	26.11	11.852
MS9962-16	1.562	39.67	.030	0.77	.125	3.17	11.93	5.411	MS9962-44	4.625	117.47	3.215	81.50	3.375	85.72	26.71	12.128
MS9962-17	1.625	41.28	.030	0.77	.125	3.17	12.23	5.547	MS9962-45	4.750	120.65	3.340	84.62	3.500	88.90	27.31	12.404
MS9962-18	1.688	42.88	.030	0.77	.125	3.17	12.53	5.683	MS9962-46	4.875	123.82	3.465	87.74	3.625	92.07	27.91	12.678
MS9962-19	1.750	44.48	.030	0.77	.125	3.17	12.83	5.819	MS9962-47	5.000	127.00	3.590	90.86	3.750	95.25	28.51	12.950
MS9962-20	1.812	46.05	.030	0.77	.125	3.17	13.13	5.955	MS9962-48	5.125	130.18	3.715	93.97	3.875	98.42	29.11	13.222
MS9962-21	1.875	47.62	.030	0.77	.125	3.17	13.43	6.091	MS9962-49	5.250	133.35	3.840	97.07	4.000	101.60	29.71	13.499
MS9962-22	1.938	49.22	.030	0.77	.125	3.17	13.73	6.227	MS9962-50	5.375	136.52	3.965	100.19	4.125	104.77	30.31	13.771
MS9962-23	2.000	50.80	.030	0.77	.125	3.17	14.03	6.363	MS9962-51	5.500	139.70	4.090	103.29	4.250	107.95	30.91	14.048
MS9962-24	2.062	52.38	.030	0.77	.125	3.17	14.33	6.499	MS9962-52	5.625	142.88	4.215	106.40	4.375	111.12	31.51	14.320
MS9962-25	2.125	53.98	.030	0.77	.125	3.17	14.63	6.635	MS9962-53	5.750	146.05	4.340	109.51	4.500	114.30	32.11	14.597
MS9962-26	2.188	55.58	.030	0.77	.125	3.17	14.93	6.771	MS9962-54	5.875	149.22	4.465	112.62	4.625	117.47	32.71	14.869
MS9962-27	2.250	57.15	.030	0.77	.125	3.17	15.23	6.907	MS9962-55	6.000	152.40	4.590	115.73	4.750	120.65	33.31	15.141
MS9962-28	2.312	58.75	.030	0.77	.125	3.17	15.53	7.043									
MS9962-29	2.375	60.32	.030	0.77	.125	3.17	15.83	7.179									
MS9962-30	2.438	61.92	.030	0.77	.125	3.17	16.13	7.315									
MS9962-31	2.500	63.50	.030	0.77	.125	3.17	16.43	7.451									
MS9962-32	2.562	65.08	.030	0.77	.125	3.17	16.73	7.587									
MS9962-33	2.625	66.67	.030	0.77	.125	3.17	17.03	7.723									
MS9962-34	2.688	68.25	.030	0.77	.125	3.17	17.33	7.859									
MS9962-35	2.750	69.85	.030	0.77	.125	3.17	17.63	7.995									
MS9962-36	2.812	71.45	.030	0.77	.125	3.17	17.93	8.131									
MS9962-37	2.875	73.02	.030	0.77	.125	3.17	18.23	8.267									
MS9962-38	2.938	74.62	.030	0.77	.125	3.17	18.53	8.403									
MS9962-39	3.000	76.20	.030	0.77	.125	3.17	18.83	8.539									
MS9962-40	3.062	77.78	.030	0.77	.125	3.17	19.13	8.675									
MS9962-41	3.125	79.37	.030	0.77	.125	3.17	19.43	8.811									
MS9962-42	3.188	80.95	.030	0.77	.125	3.17	19.73	8.947									
MS9962-43	3.250	82.55	.030	0.77	.125	3.17	20.03	9.083									
MS9962-44	3.312	84.13	.030	0.77	.125	3.17	20.33	9.219									
MS9962-45	3.375	85.72	.030	0.77	.125	3.17	20.63	9.355									
MS9962-46	3.438	87.32	.030	0.77	.125	3.17	20.93	9.491									
MS9962-47	3.500	88.90	.030	0.77	.125	3.17	21.23	9.627									
MS9962-48	3.562	90.48	.030	0.77	.125	3.17	21.53	9.763									
MS9962-49	3.625	92.07	.030	0.77	.125	3.17	21.83	9.899									
MS9962-50	3.688	93.65	.030	0.77	.125	3.17	22.13	10.035									
MS9962-51	3.750	95.25	.030	0.77	.125	3.17	22.43	10.171									
MS9962-52	3.812	96.83	.030	0.77	.125	3.17	22.73	10.307									
MS9962-53	3.875	98.42	.030	0.77	.125	3.17	23.03	10.443									
MS9962-54	3.938	100.00	.030	0.77	.125	3.17	23.33	10.579									
MS9962-55	4.000	101.60	.030	0.77	.125	3.17	23.63	10.715									

APPROVED 27 Jun 74 REVISED

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5306-0497

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