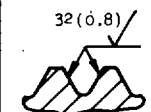


FED. SUP CLASS

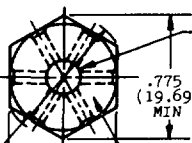
5306

MS9961

SECTION THROUGH  
THREAD PROFILE

$\phi .070(1.78)$   
CSK 90° TO  $\phi .100(2.54)$   
6 HOLES EQUALLY SPACED

$\phi .020(0.51)$  (M)



MARK PART NUMBER AND  
MANUFACTURER'S IDENT  
PER AS 478 CLASS A

$\phi .019(0.48)$

CHAM 30° TO  $\phi .688(17.48)$   
(OPPOSITE SIDE OPTIONAL)

$\phi .328(8.33)$

$\phi .248(6.30)$

$\phi .003(0.08)$

$\phi .32(0.3)$

$\phi .140(3.56)$

$\phi .016(0.41)$

$\phi .030(0.76)$

$\phi .020(0.51)$

$\phi .030(0.76)$

$\phi .020(0.51)$

$\phi .32(0.8)$

$\phi .410(10.41)$

$\phi .400(10.16)$

$\phi .648(16.46)$

$\phi .698(17.72)$

$\phi .648(16.46)$

$\phi .648(16.46)$

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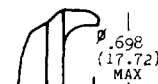
$\phi .648(16.46)$

$\phi .031(0.79)$  MIN  
INCOMPLETE  
THREADS  
(SEE NOTE 2)

.4375-20UNJF-3A  
MIL-S-8879

-A-

CHAMFER .047(1.19)  
X 45° ±10°



VIEW A

- FOR PART NUMBERS MS9961-04 THRU MS9961-24 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°.
- DIMENSIONING AND TOLERANCING: ANSI Y14.5-1966.  $\phi$  = DIAMETER.
- DO NOT USE UNASSIGNED PART NUMBERS.

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STANDARDS DIVISION.

P.A. Air Force - II

Other Cost  
Army - AV  
Navy - AS

PROCUREMENT SPECIFICATION

TITLE

BOLT, MACHINE, HEXAGON HEAD, DRILLED, 6 HOLE,  
PD SHANK, STEEL AMS 6322, CADMIUM PLATED,  
.4375-20UNJF-3A

SUPERSEDES:

MILITARY STANDARD

MS9961

SHEET 1 OF 2

DD FORM 672-1

ASD use only

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

5306-0496

APPROVED 27 Jun 74 REVISED

User activities:  
Army  
Navy  
Air Force  
AS A

See:  
Army  
Navy  
Air Force  
AS 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.

**MS9961****FED. SUP CLASS**  
5306User activities:  
Army  
Navy  
Air Force  
D S AReview activities:  
Army  
Navy  
Air Force  
D S A

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P.A. Air Force - II Other Cost Army - AV Navy - AS	TITLE BOLT, MACHINE, HEXAGON HEAD, DRILLED, 6 HOLE, PD SHANK, STEEL AMS 6322, CADMIUM PLATED, .4375-20UNJF-3A	<b>MILITARY STANDARD</b> <b>MS9961</b>
PROCUREMENT SPECIFICATION	SUPERSEDES:	SHEET 2 OF 2

DD FORM 672-1  
1-73  
ASD use only

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

5306-0496

☆U.S. GOVERNMENT PRINTING OFFICE: 1974-603-109/1179

APPROVED 27 Jun 74 REVISED

PART NUMBER	L		G MIN		K MAX		APPROX MASS		PART NUMBER	L		G 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
MS9961-04	.688	17.48	.030	0.77	.125	3.17	6.43	2.917	MS9961-31	2.750	69.85	1.465	37.22	1.625	41.27	13.96	6.332
MS9961-05	.750	19.05	.030	0.77	.125	3.17	6.69	3.034	MS9961-32	2.875	73.02	1.590	40.39	1.750	44.45	14.42	6.541
									MS9961-33	3.000	76.20	1.715	43.57	1.875	47.62	14.87	6.745
									MS9961-34	3.125	79.38	1.840	46.74	2.000	50.80	15.33	6.954
									MS9961-35	3.250	82.55	1.965	49.92	2.125	53.97	15.78	7.158
MS9961-06	.812	20.62	.030	0.77	.125	3.17	6.91	3.134	MS9961-36	3.375	85.72	2.090	53.09	2.250	57.15	16.24	7.366
MS9961-07	.875	22.22	.030	0.77	.125	3.17	7.31	3.239	MS9961-37	3.500	88.90	2.215	56.27	2.375	60.32	16.69	7.570
MS9961-08	.938	23.82	.030	0.77	.125	3.17	7.71	3.343	MS9961-38	3.625	92.08	2.340	59.44	2.500	63.50	17.15	7.779
MS9961-09	1.000	25.40	.030	0.77	.125	3.17	8.10	3.447	MS9961-39	3.750	95.25	2.465	62.62	2.625	66.67	17.60	7.983
MS9961-10	1.062	26.97	.030	0.77	.125	3.17	8.50	3.547	MS9961-40	3.875	98.42	2.590	65.79	2.750	69.85	18.05	8.187
MS9961-11	1.125	28.58	.030	0.77	.125	3.17	8.95	3.651	MS9961-41	4.000	101.60	2.715	68.97	2.875	73.02	18.51	8.396
MS9961-12	1.188	30.18	.030	0.77	.125	3.17	9.35	3.756	MS9961-42	4.125	104.78	2.840	72.14	3.000	76.20	18.96	8.600
MS9961-13	1.250	31.75	.030	0.77	.125	3.17	9.75	3.856	MS9961-43	4.250	107.95	2.965	75.26	3.125	79.38	19.42	8.809
MS9961-14	1.312	33.32	.030	0.77	.125	3.17	10.15	3.950	MS9961-44	4.375	111.12	3.090	78.38	3.250	82.55	19.87	9.013
MS9961-15	1.375	34.92	.030	0.77	.125	3.17	10.55	4.044	MS9961-45	4.500	114.30	3.215	81.50	3.375	85.72	20.33	9.221
MS9961-16	1.438	36.52	.030	0.77	.125	3.17	10.95	4.168	MS9961-46	4.625	117.48	3.340	84.64	3.500	88.90	20.78	9.426
MS9961-17	1.500	38.10	.030	0.77	.125	3.17	11.35	4.268	MS9961-47	4.750	120.65	3.465	87.76	3.625	92.07	21.24	9.634
MS9961-18	1.562	39.67	.030	0.77	.125	3.17	11.75	4.373	MS9961-48	4.875	123.82	3.590	90.88	3.750	95.25	21.69	9.838
MS9961-19	1.625	41.28	.030	0.77	.125	3.17	12.15	4.477	MS9961-49	5.000	127.00	3.715	93.97	3.875	98.42	22.15	10.042
MS9961-20	1.688	42.86	.030	0.77	.125	3.17	12.55	4.581	MS9961-50	5.125	130.18	3.840	97.14	4.000	101.60	22.60	10.251
MS9961-21	1.750	44.45	.030	0.77	.125	3.17	12.95	4.685	MS9961-51	5.250	133.35	3.965	100.72	4.125	104.77	23.06	10.460
MS9961-22	1.812	46.02	.030	0.77	.125	3.17	13.35	4.789	MS9961-52	5.375	136.52	4.090	103.89	4.250	107.95	23.51	10.664
MS9961-23	1.875	47.62	.030	0.77	.125	3.17	13.75	4.893	MS9961-53	5.500	139.70	4.215	107.07	4.375	111.12	23.97	10.872
MS9961-24	1.938	49.22	.030	0.77	.125	3.17	14.15	4.998	MS9961-54	5.625	142.88	4.340	110.24	4.500	114.30	24.42	11.077
MS9961-25	2.000	50.80	.030	0.77	.125	3.17	14.55	5.094	MS9961-55	5.750	146.05	4.465	113.42	4.625	117.47	24.88	11.285
MS9961-26	2.125	53.98	.030	0.77	.125	3.17	14.95	5.199	MS9961-56	5.875	149.22	4.590	116.59	4.750	120.65	25.33	11.489
MS9961-27	2.250	57.15	.030	0.77	.125	3.17	15.35	5.302	MS9961-57	6.000	152.40	4.715	119.77	4.875	123.82	25.79	11.698
MS9961-28	2.375	60.32	.030	0.77	.125	3.17	15.75	5.406									
MS9961-29	2.500	63.50	.030	0.77	.125	3.17	16.15	5.509									
MS9961-30	2.625	66.68	.030	0.77	.125	3.17	16.55	5.613									