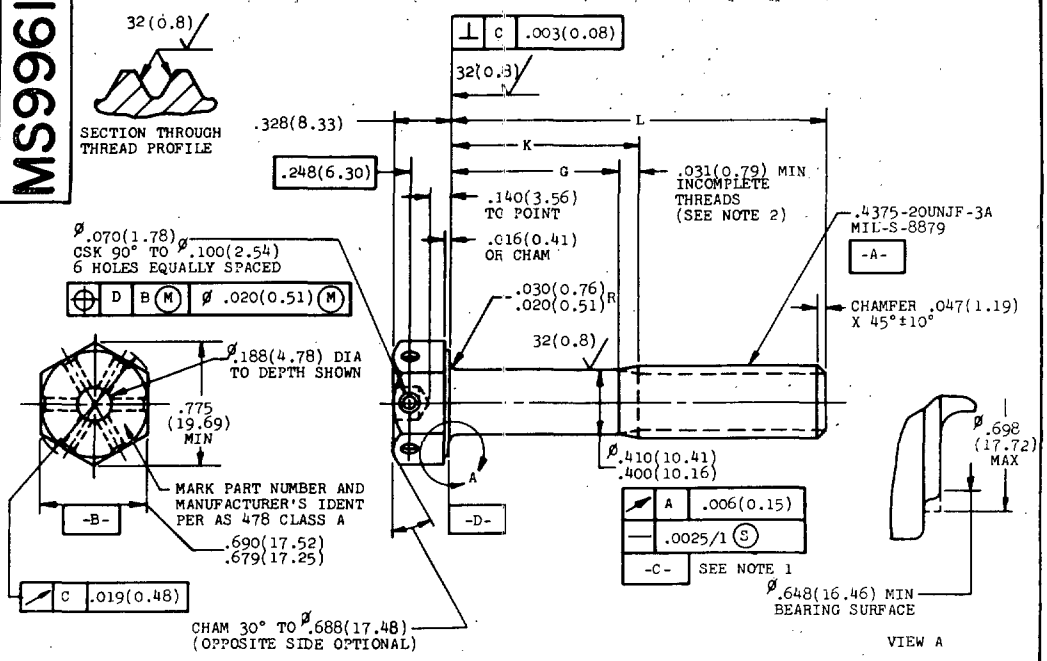
FED. SUP CLASS
5306

MS9961



1. FOR PART NUMBERS MS9961-04 THRU MS9961-24 THE THREAD PD SHALL REPLACE DATUM C.
2. INCOMPLETE THREADS NOT TO ENTER FILLET.
3. MATERIAL: STEEL AMS 6322.
4. HARDNESS: ROCKWELL C26-32.
5. FINISH: CADMIUM PLATE AMS 2400. DIMENSIONS SPECIFIED ARE AFTER PLATING.
6. MANUFACTURING SPECIFICATION: AMS 7452 EXCEPT HEAD SHALL BE UPSET.
7. HEAD TO SHANK FILLET SHALL BE COLD WORKED.
8. MAGNETIC PARTICLE INSPECTION PER AMS 2640 AFTER PLATING.
9. SURFACE TEXTURE: ANSI B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES (3.2 MICROMETERS) EXCEPT UPSET HEAD.
10. BREAK SHARP EDGES .003-.015 (0.08-0.38) UNLESS OTHERWISE SPECIFIED.
11. 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.
12. DIMENSIONING AND TOLERANCING: ANSI Y14.5-1966. Ø = DIAMETER.
13. DO NOT USE UNASSIGNED PART NUMBERS.

AS AND AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERS, INC., PUBLICATIONS.
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APPROVED 27 Jun 74 REVISED

User activities: Army, Navy, Air Force, DSA

Review activities: Army, Navy, Air Force, DSA

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.

P.A. Air Force - 11 Other Cust Army - AV Navy - AS	TITLE BOLT, MACHINE, HEXAGON HEAD, DRILLED, 6 HOLE, PD SHANK, STEEL AMS 6322, CADMIUM PLATED, .4375-20UNJF-3A	MILITARY STANDARD MS 9961
PROCUREMENT SPECIFICATION	SUPERSEDES:	SHEET 1 OF 2

DD FORM 1 SEP 67 672-1
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5306-0496

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Review activities:
Army
Navy
Air Force
DSA

User activities:
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P.A. Air Force - 11
Other Cust
Army - AV
Navy - AS

PROCUREMENT SPECIFICATION

SUPERSEDES:

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

MILITARY STANDARD
MS9961

SHEET 2 OF 2

PART NUMBER	L IN.	L (mm)	G MIN IN.	G MIN (mm)	K MAX IN.	K MAX (mm)	APPROX MASS LB/100	APPROX MASS kg/100
MS9961-04	.688	17.48	.030	0.77	.125	3.17	6.43	2.917
MS9961-05	.750	19.05	.030	0.77	.125	3.17	6.69	3.034
MS9961-06	.812	20.62	.030	0.77	.125	3.17	6.91	3.134
MS9961-07	.875	22.22	.030	0.77	.125	3.17	7.14	3.239
MS9961-08	.938	23.82	.030	0.77	.125	3.17	7.37	3.343
MS9961-09	1.000	25.40	.030	0.77	.125	3.17	7.60	3.447
MS9961-10	1.062	26.97	.030	0.77	.125	3.17	7.82	3.547
MS9961-11	1.125	28.58	.030	0.77	.125	3.17	8.05	3.651
MS9961-12	1.188	30.18	.030	0.77	.125	3.17	8.28	3.756
MS9961-13	1.250	31.75	.030	0.77	.125	3.17	8.50	3.856
MS9961-14	1.312	33.32	.030	0.77	.188	4.77	8.73	3.960
MS9961-15	1.375	34.92	.090	2.29	.250	6.35	8.96	4.064
MS9961-16	1.438	36.52	.152	3.87	.312	7.92	9.19	4.168
MS9961-17	1.500	38.10	.215	5.47	.375	9.52	9.41	4.268
MS9961-18	1.562	39.67	.278	7.07	.438	11.12	9.64	4.373
MS9961-19	1.625	41.28	.340	8.64	.500	12.70	9.87	4.477
MS9961-20	1.688	42.88	.402	10.22	.562	14.27	10.10	4.581
MS9961-21	1.750	44.45	.465	11.82	.625	15.88	10.24	4.645
MS9961-22	1.812	46.02	.528	13.42	.688	17.47	10.47	4.749
MS9961-23	1.875	47.62	.590	14.99	.750	19.05	10.70	4.853
MS9961-24	1.938	49.22	.652	16.57	.812	20.62	10.93	4.958
MS9961-25	2.000	50.80	.715	18.17	.875	22.22	11.23	5.094
MS9961-26	2.125	53.98	.840	21.34	1.000	25.40	11.69	5.302
MS9961-27	2.250	57.15	.965	24.52	1.125	28.57	12.14	5.507
MS9961-28	2.375	60.32	1.090	27.69	1.250	31.75	12.60	5.715
MS9961-29	2.500	63.50	1.215	30.87	1.375	34.92	13.05	5.919
MS9961-30	2.625	66.68	1.340	34.04	1.500	38.10	13.51	6.128

PART NUMBER	L IN.	L (mm)	G MIN IN.	G MIN (mm)	K MAX IN.	K MAX (mm)	APPROX MASS LB/100	APPROX MASS kg/100
MS9961-31	2.750	69.85	1.465	37.22	1.625	41.27	13.96	6.332
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
MS9961-36	3.375	85.72	2.090	53.09	2.250	57.15	16.24	7.366
MS9961-37	3.500	88.90	2.215	56.27	2.375	60.32	16.69	7.570
MS9961-38	3.625	92.08	2.340	59.44	2.500	63.50	17.15	7.779
MS9961-39	3.750	95.25	2.465	62.62	2.625	66.67	17.60	7.983
MS9961-40	3.875	98.42	2.590	65.79	2.750	69.85	18.05	8.187
MS9961-41	4.000	101.60	2.715	68.97	2.875	73.02	18.51	8.396
MS9961-42	4.125	104.78	2.840	72.14	3.000	76.20	18.96	8.600
MS9961-43	4.250	107.95	2.965	75.32	3.125	79.37	19.42	8.809
MS9961-44	4.375	111.12	3.090	78.49	3.250	82.55	19.87	9.013
MS9961-45	4.500	114.30	3.215	81.67	3.375	85.72	20.33	9.221
MS9961-46	4.625	117.48	3.340	84.84	3.500	88.90	20.78	9.426
MS9961-47	4.750	120.65	3.465	88.02	3.625	92.07	21.24	9.634
MS9961-48	4.875	123.82	3.590	91.19	3.750	95.25	21.69	9.838
MS9961-49	5.000	127.00	3.715	94.37	3.875	98.42	22.15	10.042
MS9961-50	5.125	130.18	3.840	97.54	4.000	101.60	22.60	10.251
MS9961-51	5.250	133.35	3.965	100.72	4.125	104.77	23.06	10.460
MS9961-52	5.375	136.52	4.090	103.89	4.250	107.95	23.51	10.664
MS9961-53	5.500	139.70	4.215	107.07	4.375	111.12	23.97	10.872
MS9961-54	5.625	142.88	4.340	110.24	4.500	114.30	24.42	11.077
MS9961-55	5.750	146.05	4.465	113.42	4.625	117.47	24.88	11.285
MS9961-56	5.875	149.22	4.590	116.59	4.750	120.65	25.33	11.489
MS9961-57	6.000	152.40	4.715	119.77	4.875	123.82	25.79	11.698

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