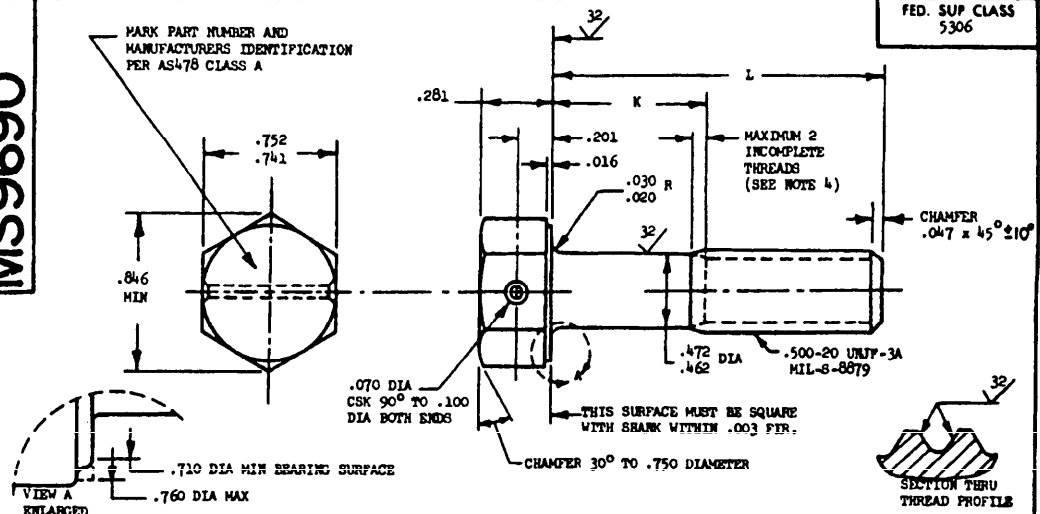


**MS9690**

PART NUMBER	L	K	APPROX WEIGHT LB/100	PART NUMBER	L	K	APPROX WEIGHT LB/100
MS9690-03	.750	.105-.125	7.47	MS9690-31	3.000	1.690-1.750	18.34
MS9690-04	.812	.105-.125	7.77	MS9690-32	3.125	1.815-1.875	18.95
MS9690-05	.875	.105-.125	8.07	MS9690-33	3.250	1.940-2.000	19.55
MS9690-06	.938	.105-.125	8.37	MS9690-34	3.375	2.065-2.125	20.16
MS9690-07	1.000	.105-.125	8.67	MS9690-35	3.500	2.190-2.250	20.76
MS9690-08	1.062	.105-.125	8.98	MS9690-36	3.625	2.315-2.375	21.36
MS9690-09	1.125	.105-.125	9.28	MS9690-37	3.750	2.440-2.500	21.97
MS9690-10	1.188	.105-.125	9.58	MS9690-38	3.875	2.565-2.625	22.57
MS9690-11	1.250	.105-.125	9.88	MS9690-39	4.000	2.690-2.750	23.18
MS9690-12	1.312	.105-.125	10.19	MS9690-40	4.125	2.815-2.875	23.78
MS9690-13	1.375	.105-.125	10.49	MS9690-41	4.250	2.940-3.000	24.38
MS9690-14	1.438	.128-.188	10.79	MS9690-42	4.375	3.065-3.125	24.99
MS9690-15	1.500	.190-.250	11.09	MS9690-43	4.500	3.190-3.250	25.59
MS9690-16	1.562	.252-.312	11.39	MS9690-44	4.625	3.315-3.375	26.20
MS9690-17	1.625	.315-.375	11.70	MS9690-45	4.750	3.440-3.500	26.80
MS9690-18	1.688	.378-.438	12.00	MS9690-46	4.875	3.565-3.625	27.41
MS9690-19	1.750	.440-.500	12.30	MS9690-47	5.000	3.690-3.750	28.01
MS9690-20	1.812	.502-.562	12.60	MS9690-48	5.125	3.815-3.875	28.61
MS9690-21	1.875	.565-.625	12.90	MS9690-49	5.250	3.940-4.000	29.22
MS9690-22	1.938	.628-.688	13.20	MS9690-50	5.375	4.065-4.125	29.82
MS9690-23	2.000	.690-.750	13.51	MS9690-51	5.500	4.190-4.250	30.43
MS9690-24	2.125	.815-.875	14.11	MS9690-52	5.625	4.315-4.375	31.03
MS9690-25	2.250	.940-1.000	14.72	MS9690-53	5.750	4.440-4.500	31.64
MS9690-26	2.375	1.065-1.125	15.32	MS9690-54	5.875	4.565-4.625	32.24
MS9690-27	2.500	1.190-1.250	15.93	MS9690-55	6.000	4.690-4.750	32.84
MS9690-28	2.625	1.315-1.375	16.53				
MS9690-29	2.750	1.440-1.500	17.13				
MS9690-30	2.875	1.565-1.625	17.74				

- SHANK SHALL BE STRAIGHT WITHIN .002 TOTAL PER INCH OF BOLT LENGTH.
- THE CONCENTRICITY OF THREAD PD IN RELATION TO THE SHANK SHALL BE WITHIN .006 FIR.
- THE CONCENTRICITY OF THE SHANK IN RELATION TO THE WASHER FACE DIAMETER AND HEXAGON SHALL BE WITHIN .003 FIR.
- INCOMPLETE THREADS NOT TO ENTER FILLET.
- MATERIAL: STEEL AMS 6304.
- HARDNESS: ROCKWELL C42-46.
- FINISH: DIFFUSED NICKEL CADMIUM PLATE PER AMS 2416. DIMENSIONS SPECIFIED ARE AFTER PLATING. CONTACT POINTS PERMISSIBLE.
- MANUFACTURING SPECIFICATION: AMS 7459.
- MAGNETIC PARTICLE INSPECTION PER AMS 2640 BEFORE PLATING.
- SURFACE TEXTURE: USAS B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
- BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm .010$ , ANGULAR DIMENSIONS  $\pm 5^\circ$ .
- DO NOT USE UNASSIGNED PART NUMBERS.

AS & AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERS, INC. PUBLICATIONS.  
THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE MILITARY SERVICES BY THE SAE AEROSPACE PART STANDARDS DIVISION.

P.A. Air Force-II	INTERNATIONAL INTEREST	TITLE BOLT, MACHINE - HEXAGON HEAD, DRILLED, 1 HOLE, PD SHANK, STEEL AMS 6304, DIFFUSED NICKEL CADMIUM PLATE, .500-20 UNF-3A	MILITARY STANDARD <b>MS9690</b>
Other Cust Navy - AS	ASCC AIR STD 17/2		
PROCUREMENT SPECIFICATION AMST489	SUPERSEDES:		SHEET 1 OF 1

DD FORM 672-1 (Limited coordination)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

This standard has been approved by the Department of Air Force and the Department of the Navy (AS) and is mandatory for use by their activity. All other military activities are required to employ this standard unless otherwise indicated.

REVISED  
6 Jul 71  
APPROVED