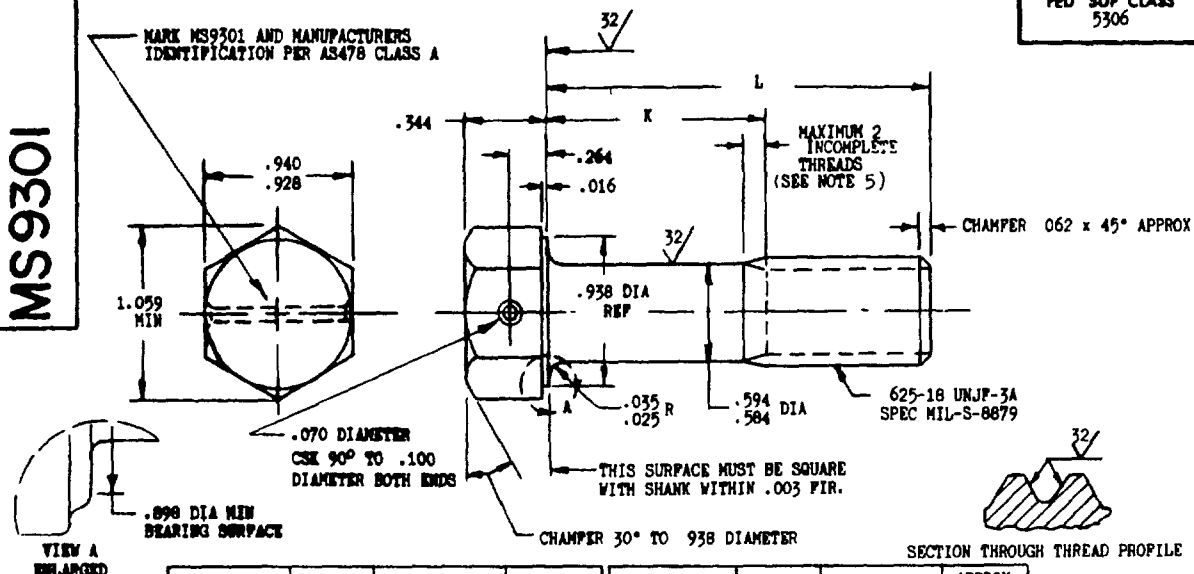


**MS9301**FED SUP CLASS  
5306

PART NUMBER	L	K	APPROX WEIGHT LB/100	PART NUMBER	L	K	APPROX WEIGHT LB/100
MS9301-03	.938	.118-.138	14.43	MS9301-31	3.500	1.940-2.000	34.06
MS9301-04	1.000	.118-.138	14.91	MS9301-32	3.625	2.065-2.125	35.01
MS9301-05	1.062	.118-.138	15.39	MS9301-33	3.750	2.190-2.250	35.97
MS9301-06	1.125	.118-.138	15.87	MS9301-34	3.875	2.315-2.375	36.93
MS9301-07	1.188	.118-.138	16.35	MS9301-35	4.000	2.440-2.500	37.88
MS9301-08	1.250	.118-.138	16.83	MS9301-36	4.125	2.565-2.625	38.84
MS9301-09	1.312	.118-.138	17.31	MS9301-37	4.250	2.690-2.750	39.80
MS9301-10	1.375	.118-.138	17.79	MS9301-38	4.375	2.815-2.875	40.76
MS9301-11	1.438	.118-.138	18.26	MS9301-39	4.500	2.940-3.000	41.71
MS9301-12	1.500	.118-.138	18.74	MS9301-40	4.625	3.065-3.125	42.67
MS9301-13	1.562	.118-.138	19.22	MS9301-41	4.750	3.190-3.250	43.63
MS9301-14	1.625	.118-.138	19.70	MS9301-42	4.875	3.315-3.375	44.58
MS9301-15	1.688	.128-.188	20.18	MS9301-43	5.000	3.440-3.500	45.54
MS9301-16	1.750	.190-.250	20.66	MS9301-44	5.125	3.565-3.625	46.50
MS9301-17	1.812	.252-.312	21.14	MS9301-45	5.250	3.690-3.750	47.45
MS9301-18	1.875	.315-.375	21.61	MS9301-46	5.375	3.815-3.875	48.41
MS9301-19	2.000	.440-.500	22.57	MS9301-47	5.500	3.940-4.000	49.37
MS9301-20	2.125	.565-.625	23.53	MS9301-48	5.625	4.065-4.125	50.33
MS9301-21	2.250	.690-.750	24.49	MS9301-49	5.750	4.190-4.250	51.28
MS9301-22	2.375	.815-.875	25.44	MS9301-50	5.875	4.315-4.375	52.24
MS9301-23	2.500	.940-1.000	26.40	MS9301-51	6.000	4.440-4.500	53.20
MS9301-24	2.625	1.065-1.125	27.36				
MS9301-25	2.750	1.190-1.250	28.31				
MS9301-26	2.875	1.315-1.375	29.27				
MS9301-27	3.000	1.440-1.500	30.23				
MS9301-28	3.125	1.565-1.625	31.18				
MS9301-29	3.250	1.690-1.750	32.14				
MS9301-30	3.375	1.815-1.875	33.10				

- HEAD TO SHANK FILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS.
- SHANK SHALL BE STRAIGHT WITHIN .002 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 .028 FIR.
- INCOMPLETE THREADS NOT TO ENTER FILLET.
- MATERIAL: STEEL AMS 6322.
- HARDNESS: ROCKWELL C26-32.
- FINISH: BLACK OXIDE TREATMENT AMS 2485.
- MANUFACTURING SPECIFICATION: AMS 7452 EXCEPT HEAD MUST BE UPSET.
- MAGNETIC PARTICLE INSPECTION PER AMS 2640.
- SURFACE ROUGHNESS: AS 291, UNLESS OTHERWISE SPECIFIED SURFACES TO BE 125 MICRONS EXCEPT HEXAGON.
- 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.

**(A) INACTIVE FOR DESIGN AFTER 26 OCTOBER 1972.**  
**NO SUPERSEDING STANDARD.**

AS 4 AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERS, INC. PUBLICATIONS.  
 THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE ENGINE AND PROPELLER UTILITY PARTS COMMITTEE OF THE SAE.

P.A. USAF - 11	TITLE	MILITARY STANDARD
Other Cost	BOLT, MACHINE-STEEL AMS 6322, BLACK OXIDE, DRILLED,	
Buy - AS	1 HOLE, HEXAGON HEAD, .625-18 UNJF-3A	<b>MS9301</b>
PROCUREMENT SPECIFICATION	SUPERSEDES	SHEET 1 OF 1

E-23-144

Review activities: USAF - 11  
 Navy - 888

This standard has been approved by the Department of the Air Force (11) and the Department of the Navy and is mandatory for use by their activity. All other military activities are required to comply with this standard when applicable.

APPROVED 24 Sept 65  
 REVISED A 26 Oct 72