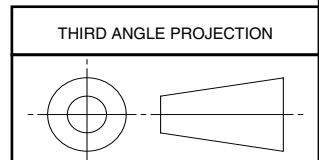


REV. B	RATIONALE THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.		FEDERAL SUPPLY CLASS 5306
AS9451	THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9451A. THIS SAE STANDARD RETAINS THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT. ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LISTS (QPL) MAY CONTINUE TO BE MANDATORY FOR DOD CONTRACTS. REQUIREMENTS RELATING TO QPL'S HAVE NOT BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.		
WARNING THIS DOCUMENT INCLUDES CADMIUM AS A PLATING MATERIAL. THE USE OF CADMIUM HAS BEEN RESTRICTED AND/OR BANNED FOR USE IN MANY COUNTRIES DUE TO ENVIRONMENTAL AND HEALTH CONCERNS. THE USER SHOULD CONSULT WITH LOCAL OFFICIALS ON THE ENVIRONMENTAL AND HEALTH REGULATIONS REGARDING ITS USE.			
CUSTODIAN: SAE E-25			
 SAE Aerospace An SAE International Group	AEROSPACE STANDARD BOLT, MACHINE - STEEL, DIFFUSED NICKEL-CADMIUM PLATED, HEXAGON HEAD, UNS K14675, 195 KSI MIN, .1900-32 UNJF-3A	AS9451 SHEET 1 OF 4	REV. B

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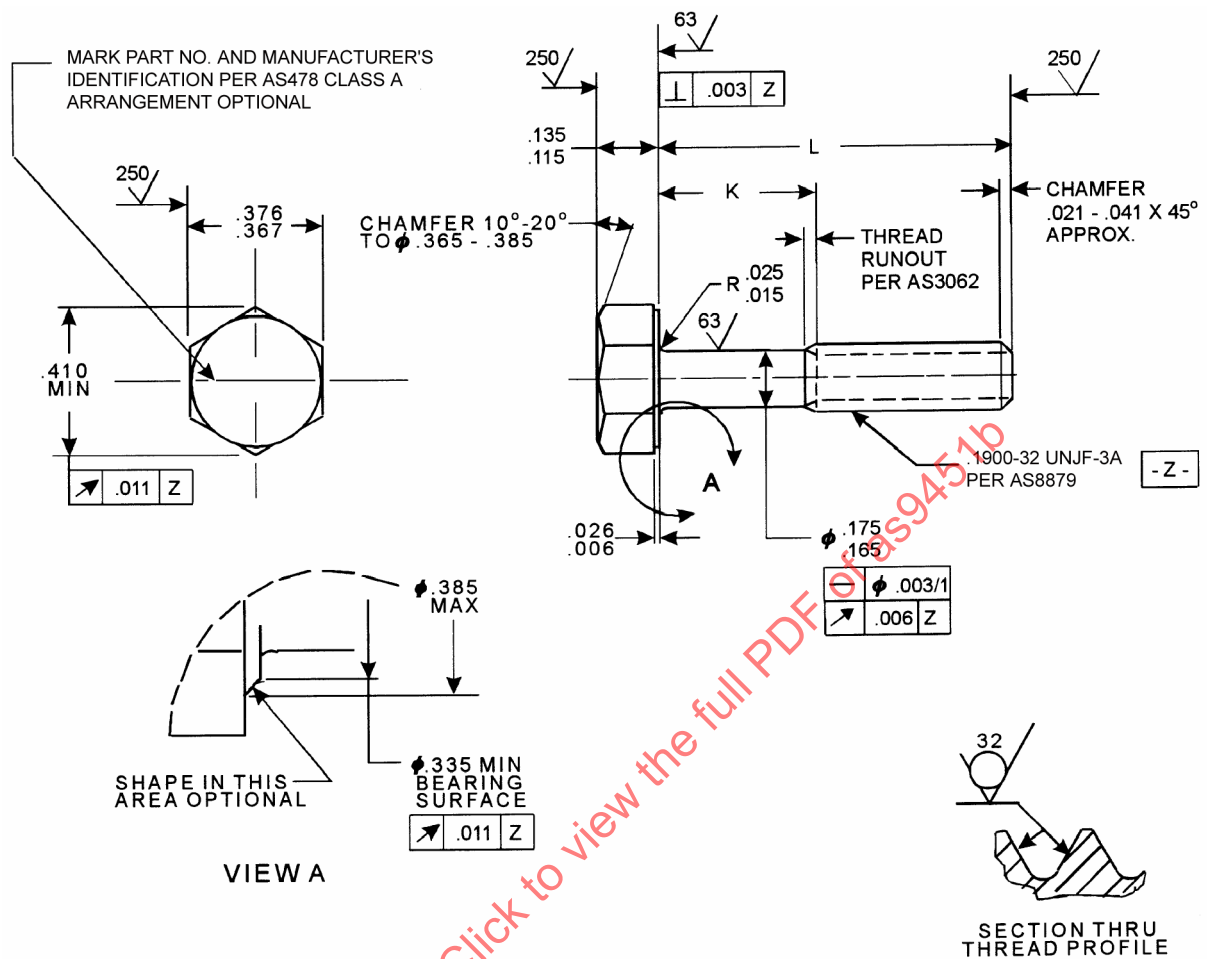


FIGURE 1 - BOLT

TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NO.	L	K	APPROX. MASS LB/100	PART NO.	L	K	APPROX. MASS LB/100
MS9451-04	.365 - .385	.072 - .092	.66	MS9451-25	1.678 - 1.698	.998 - 1.058	1.51
MS9451-05	.428 - .448	.072 - .092	.70	MS9451-26	1.740 - 1.760	1.060 - 1.120	1.55
MS9451-06	.490 - .510	.072 - .092	.74	MS9451-27	1.865 - 1.885	1.185 - 1.245	1.63
MS9451-07	.552 - .572	.072 - .092	.78	MS9451-28	1.990 - 2.010	1.310 - 1.370	1.71
MS9451-08	.615 - .635	.072 - .092	.82	MS9451-29	2.115 - 2.135	1.435 - 1.495	1.79
MS9451-09	.678 - .698	.072 - .092	.86	MS9451-30	2.240 - 2.260	1.560 - 1.620	1.87
MS9451-10	.740 - .760	.072 - .099	.90	MS9451-31	2.365 - 2.385	1.685 - 1.745	1.95
MS9451-11	.802 - .822	.122 - .182	.94	MS9451-32	2.490 - 2.510	1.810 - 1.870	2.03
MS9451-12	.865 - .885	.185 - .245	.98	MS9451-33	2.615 - 2.635	1.935 - 1.995	2.11
MS9451-13	.928 - .948	.248 - .308	1.02	MS9451-34	2.740 - 2.760	2.060 - 2.120	2.20
MS9451-14	.990 - 1.010	.310 - .370	1.07	MS9451-35	2.865 - 2.885	2.185 - 2.245	2.28
MS9451-15	1.052 - 1.072	.372 - .432	1.11	MS9451-36	2.990 - 3.010	2.310 - 2.370	2.36
MS9451-16	1.115 - 1.135	.435 - .495	1.15	MS9451-37	3.115 - 3.135	2.435 - 2.495	2.44
MS9451-17	1.178 - 1.198	.498 - .558	1.19	MS9451-38	3.240 - 3.260	2.560 - 2.620	2.52
MS9451-18	1.240 - 1.260	.560 - .620	1.23	MS9451-39	3.365 - 3.385	2.685 - 2.745	2.60
MS9451-19	1.302 - 1.322	.622 - .682	1.27	MS9451-40	3.490 - 3.510	2.810 - 2.870	2.68
MS9451-20	1.365 - 1.385	.685 - .745	1.31	MS9451-41	3.615 - 3.635	2.935 - 2.995	2.76
MS9451-21	1.428 - 1.448	.748 - .808	1.35	MS9451-42	3.740 - 3.760	3.060 - 3.120	2.84
MS9451-22	1.490 - 1.510	.810 - .870	1.39	MS9451-43	3.865 - 3.885	3.185 - 3.245	2.92
MS9451-23	1.552 - 1.572	.872 - .932	1.43				
MS9451-24	1.615 - 1.635	.935 - .995	1.47				

NOTES:

1. MATERIAL: LOW ALLOY STEEL AMS 6304 (UNS K14675).
2. PROCUREMENT SPECIFICATION: AS7455.
3. HARDNESS: 42-46 HRC.
4. FINISH: DIFFUSED NICKEL-CADMIUM PLATE AMS 2416. DIMENSIONS ARE AFTER PLATING. CONTACT POINTS PERMISSIBLE. PD MAY BE REDUCED .0012 MAXIMUM BEFORE PLATING.
5. MAGNETIC PARTICLE INSPECTION PER ASTM E 1444 BEFORE PLATING.
6. INCOMPLETE THREADS NOT TO ENTER FILLET.
7. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra.
8. BREAK SHARP EDGES .003-.015, UNLESS OTHERWISE SPECIFIED.
9. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982 (ASME PUBLICATION).
10. DIMENSIONS IN INCHES.
11. DO NOT USE UNASSIGNED PART NUMBERS.