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**REV.
A**

AS9459

FEDERAL SUPPLY CLASS
5306

RATIONALE

THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9459, NOTICE 1. THIS SAE STANDARD RETAINS THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

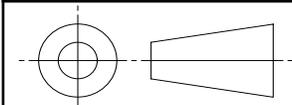
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THIRD ANGLE PROJECTION



CUSTODIAN: SAE E-25

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

BOLT, MACHINE - STEEL, AMS 6304, DIFFUSED
NICKEL-CADMIUM PLATED HEXAGON HEAD,
.750-16 UNJF-3A

AS9459
SHEET 1 OF 4

**REV.
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ISSUED 1999-08 REVISED 2003-11 REAFFIRMED 2007-06

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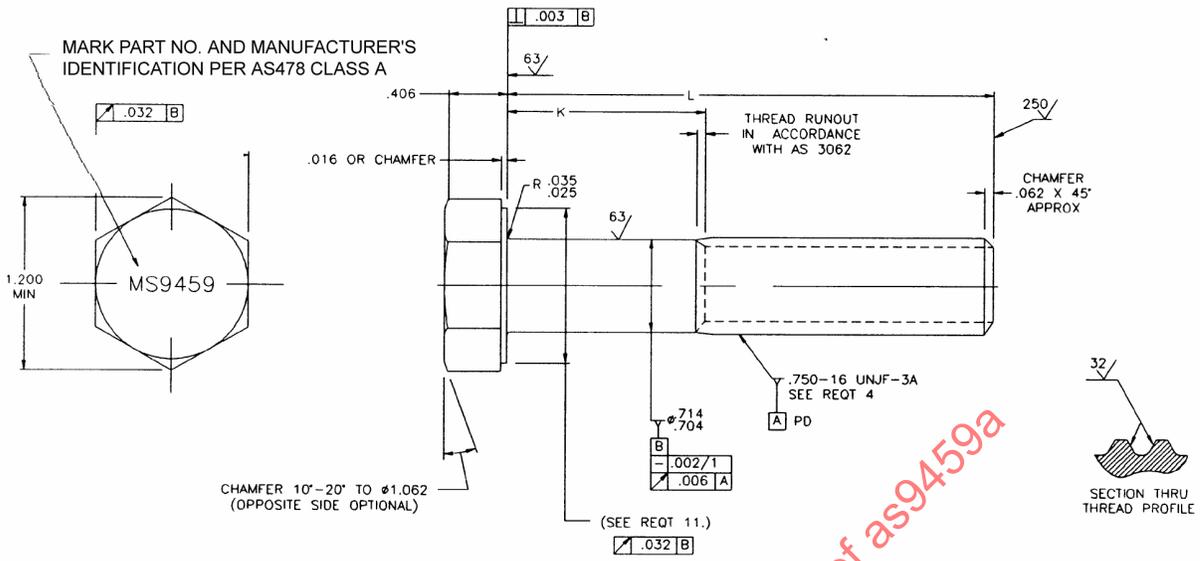


TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NO.	L	K	APPROX WEIGHT LB/100	PART NO.	L	K	APPROX WEIGHT LB/100
MS9459-06	1.250	.129-.149	25.04	MS9459-31	3.625	1.815-1.875	51.47
MS9459-07	1.312	.129-.149	25.74	MS9459-32	3.750	1.940-2.000	52.86
MS9459-08	1.375	.129-.149	26.43	MS9459-33	3.875	2.065-2.125	54.25
MS9459-09	1.438	.129-.149	27.13	MS9459-34	4.000	2.190-2.250	55.64
MS9459-10	1.500	.129-.149	27.82	MS9459-35	4.125	2.315-2.375	57.03
MS9459-11	1.562	.129-.149	28.52	MS9459-36	4.250	2.440-2.500	58.42
MS9459-12	1.625	.129-.149	29.22	MS9459-37	4.375	2.565-2.625	59.81
MS9459-13	1.688	.129-.149	29.91	MS9459-38	4.500	2.690-2.750	61.20
MS9459-14	1.750	.129-.149	30.61	MS9459-39	4.625	2.815-2.875	62.59
MS9459-15	1.812	.129-.149	31.30	MS9459-40	4.750	2.940-3.000	63.98
MS9459-16	1.875	.129-.149	32.00	MS9459-41	4.875	3.065-3.125	65.37
MS9459-17	1.938	.168-.188	32.69	MS9459-42	5.000	3.190-3.250	66.76
MS9459-18	2.000	.190-.250	33.39	MS9459-43	5.125	3.315-3.375	68.15
MS9459-19	2.125	.315-.375	34.78	MS9459-44	5.250	3.440-3.500	69.54
MS9459-20	2.250	.440-.500	36.17	MS9459-45	5.375	3.565-3.625	70.93
MS9459-21	2.375	.565-.625	37.56	MS9459-46	5.500	3.690-3.750	72.33
MS9459-22	2.500	.690-.750	38.95	MS9459-47	5.625	3.815-3.875	73.72
MS9459-23	2.625	.815-.875	40.34	MS9459-48	5.750	3.940-4.000	75.11
MS9459-24	2.750	.940-1.000	41.73	MS9459-49	5.875	4.065-4.125	76.50
MS9459-25	2.875	1.065-1.125	43.12	MS9459-50	6.000	4.190-4.250	77.89
MS9459-26	3.000	1.190-1.250	44.51				
MS9459-27	3.125	1.315-1.375	45.90				
MS9459-28	3.200	1.440-1.500	47.29				
MS9459-29	3.375	1.565-1.625	48.68				
MS9459-30	3.500	1.690-1.750	50.08				

REQUIREMENTS:

1. MATERIAL: STEEL IN ACCORDANCE WITH AMS 6304.
2. THREADS: THREADS IN ACCORDANCE WITH AS8879.
3. DIMENSIONING AND TOLERANCING: DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ASME Y14.5M.
4. HEAD TO SHANK FILLET: HEAD TO SHANK FILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS.
5. MAGNETIC PARTICLE INSPECTION: MAGNETIC PARTICLE INSPECTION SHALL BE IN ACCORDANCE WITH AMS 2640 BEFORE PLATING.
6. HARDNESS: ROCKWELL C42-46.
7. FINISH: FINISH SHALL BE DIFFUSED NICKEL-CADMIUM PLATED IN ACCORDANCE WITH AMS 2416. DIMENSIONS SPECIFIED ARE MET AFTER PLATING. CONTACT POINTS PERMISSIBLE PD MAY BE REDUCED .0012 MAXIMUM BEFORE PLATING.
8. SURFACE ROUGHNESS: ANSI/ASME B46.1 UNLESS OTHERWISE SPECIFIED SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
9. TOLERANCE: UNLESS OTHERWISE SPECIFIED, TOLERANCES SHALL BE FOR LINEAR DIMENSIONS $\pm .010$, ANGULAR DIMENSIONS $\pm 5^\circ$.
10. EDGES: BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
11. BEARING SURFACE: BEARING SURFACE SHALL BE FLAT AND WASHER FACED. DIAMETER OF BEARING SURFACE SHALL BE EQUAL TO THE MAXIMUM WIDTH ACROSS FLATS WITHIN A TOLERANCE OF MINUS 10% IN ACCORDANCE WITH ANSI B18.2.1.
12. PART NUMBER: THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE 1.

EXAMPLE: MS9459 -06

DASH NUMBER

BASIC MS NUMBER

MS9459-06 INDICATES - BOLT, MACHINE-STEEL AMS 6304, DIFFUSED NICKEL-CADMIUM PLATED, HEXAGON HEAD, .750-16 UNJF-3A, LENGTH 1.250.

13. PROCUREMENT SPECIFICATION: AS7452

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. DO NOT USE UNASSIGNED PART NUMBERS.
3. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCED CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.