

REV.
B

AS9523

RATIONALE

CADMIUM WARNING NOTE UPDATED, THREAD SPECIFICATION REVISED TO AS8879, AND GEOMETRIC CONTROLS FOR SHORT LENGTH BOLTS CLARIFIED TO AGREE WITH AS1132.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9523A, NOTICE 1. 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.

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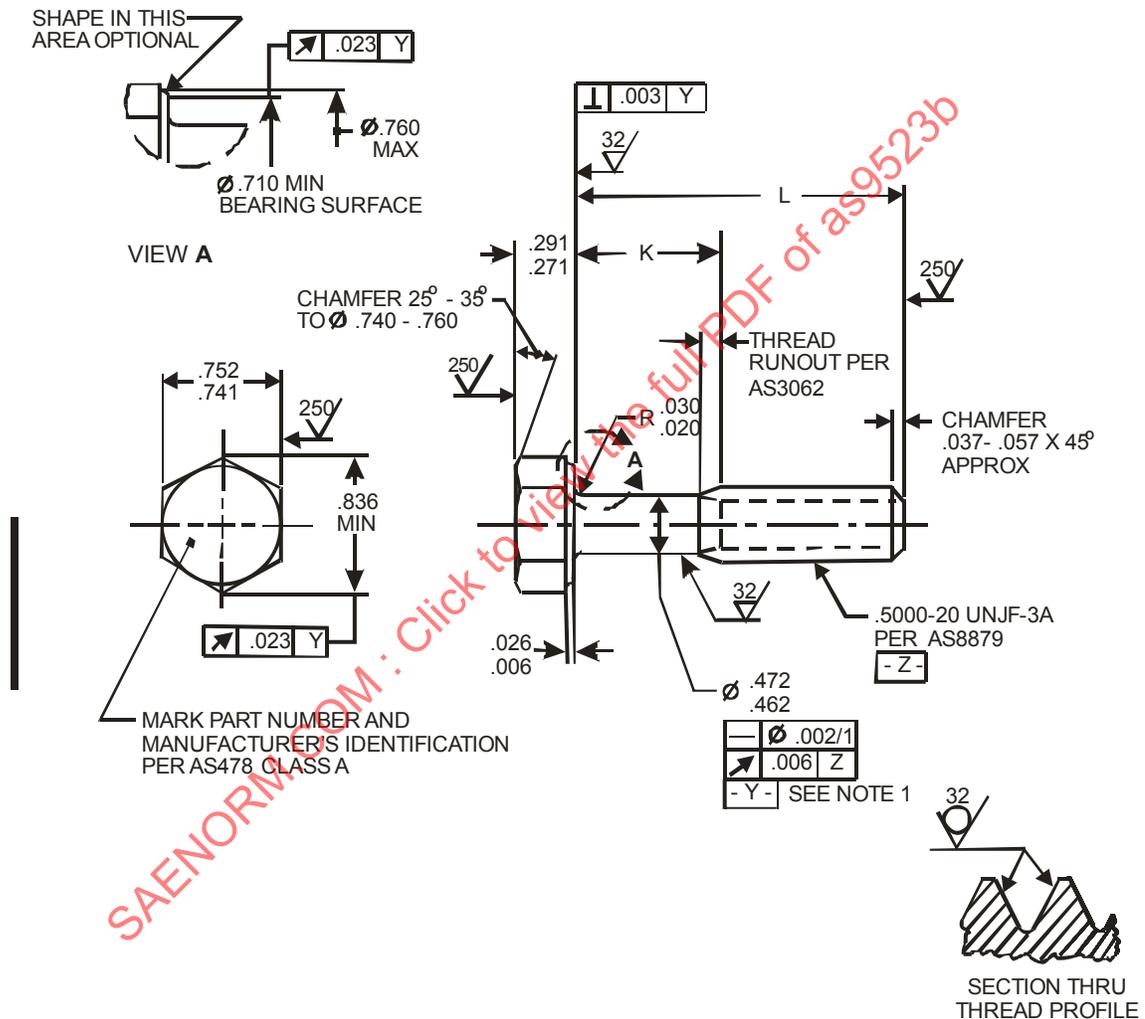
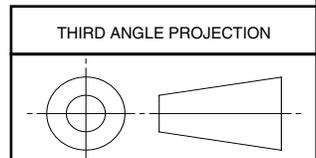


FIGURE 1 - BOLT



CUSTODIAN: SAE E-25



AEROSPACE STANDARD
BOLT, MACHINE - STEEL, CADMIUM PLATED,
HEXAGON HEAD, UNS G87400, 125 KSI MIN,
.5000-20 UNJF-3A

AS9523
SHEET 1 OF 3

REV. B

ISSUED 1999-08 REAFFIRMED 2006-05 REVISED 2007--09

TABLE 1 - PART NUMBERS AND DIMENSIONS

| PART NO. | L | K | APPROX. MASS LB/100 | PART NO. | L | K | APPROX. MASS LB/100 |
|-----------|-------------|-------------|---------------------|-----------|-------------|-------------|---------------------|
| MS9523-04 | .802- .822 | .105- .125 | 7.77 | MS9523-31 | 3.240-3.260 | 1.940-2.000 | 19.55 |
| MS9523-05 | .865- .885 | .105- .125 | 8.07 | MS9523-32 | 3.365-3.385 | 2.065-2.125 | 20.16 |
| MS9523-06 | .928- .948 | .105- .125 | 8.37 | MS9523-33 | 3.490-3.510 | 2.190-2.250 | 20.76 |
| MS9523-07 | .990-1.010 | .105- .125 | 8.67 | MS9523-34 | 3.615-3.635 | 2.315-2.375 | 21.36 |
| MS9523-08 | 1.052-1.072 | .105- .125 | 8.98 | MS9523-35 | 3.740-3.760 | 2.440-2.500 | 21.97 |
| MS9523-09 | 1.115-1.135 | .105- .125 | 9.28 | MS9523-36 | 3.865-3.885 | 2.565-2.625 | 22.57 |
| MS9523-10 | 1.178-1.198 | .105- .125 | 9.58 | MS9523-37 | 3.990-4.010 | 2.690-2.750 | 23.18 |
| MS9523-11 | 1.240-1.260 | .105- .125 | 9.88 | MS9523-38 | 4.115-4.135 | 2.815-2.875 | 23.78 |
| MS9523-12 | 1.302-1.322 | .105- .125 | 10.19 | MS9523-39 | 4.240-4.260 | 2.940-3.000 | 24.38 |
| MS9523-13 | 1.365-1.385 | .105- .125 | 10.49 | MS9523-40 | 4.365-4.385 | 3.065-3.125 | 24.99 |
| MS9523-14 | 1.428-1.448 | .128- .188 | 10.79 | MS9523-41 | 4.490-4.510 | 3.190-3.250 | 25.59 |
| MS9523-15 | 1.490-1.510 | .190- .250 | 11.09 | MS9523-42 | 4.615-4.635 | 3.315-3.375 | 26.20 |
| MS9523-16 | 1.552-1.572 | .252- .312 | 11.39 | MS9523-43 | 4.740-4.760 | 3.440-3.500 | 26.80 |
| MS9523-17 | 1.615-1.635 | .315- .375 | 11.70 | MS9523-44 | 4.865-4.885 | 3.565-3.625 | 27.41 |
| MS9523-18 | 1.678-1.698 | .378- .438 | 12.00 | MS9523-45 | 4.990-5.010 | 3.690-3.750 | 28.01 |
| MS9523-19 | 1.740-1.760 | .440- .500 | 12.30 | MS9523-46 | 5.115-5.135 | 3.815-3.875 | 28.61 |
| MS9523-20 | 1.865-1.885 | .565- .625 | 12.90 | MS9523-47 | 5.240-5.260 | 3.940-4.000 | 29.22 |
| MS9523-21 | 1.990-2.010 | .690- .750 | 13.51 | MS9523-48 | 5.365-5.385 | 4.065-4.125 | 29.82 |
| MS9523-22 | 2.115-2.235 | .815- .875 | 14.11 | MS9523-49 | 5.490-5.510 | 4.190-4.250 | 30.43 |
| MS9523-23 | 2.240-2.260 | .940-1.000 | 14.72 | MS9523-50 | 5.615-5.635 | 4.315-4.375 | 31.03 |
| MS9523-24 | 2.365-2.385 | 1.065-1.125 | 15.32 | MS9523-51 | 5.740-5.760 | 4.440-4.500 | 31.64 |
| MS9523-25 | 2.490-2.510 | 1.190-1.250 | 15.93 | MS9523-52 | 5.865-5.885 | 4.565-4.625 | 32.24 |
| MS9523-26 | 2.615-2.635 | 1.315-1.375 | 16.53 | MS9523-53 | 5.990-6.010 | 4.690-4.750 | 32.84 |
| MS9523-27 | 2.740-2.760 | 1.440-1.500 | 17.13 | | | | |
| MS9523-28 | 2.865-2.885 | 1.565-1.625 | 17.74 | | | | |
| MS9523-29 | 2.990-3.010 | 1.690-1.750 | 18.34 | | | | |
| MS9523-30 | 3.115-3.135 | 1.815-1.875 | 18.95 | | | | |

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

- FOR PART NUMBERS MS9523-04 THRU MS9523-22 THE THREAD PD (DATUM "Z") SHALL REPLACE DATUM "Y".
- MATERIAL: LOW ALLOY STEEL AMS 6322 (UNS G87400).
- PROCUREMENT SPECIFICATION: AS7452.
- HEAD TO SHANK FILLET RADIUS: FOR PART NUMBERS MS9523-16 AND LARGER, THE HEAD TO SHANK FILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS.
- FINISH: CADMIUM PLATE PER AMS 2400. DIMENSIONS ARE AFTER PLATING.

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|  An SAE International Group | AEROSPACE STANDARD | AS9523 SHEET 2 OF 3 | REV. B |
| | BOLT, MACHINE - STEEL, CADMIUM PLATED, HEXAGON HEAD, UNS G87400, 125 KSI MIN, .5000-20 UNJF-3A | | |