

RATIONALE

COMPLETELY REVISED AND REDRAWN. CHANGES TO ALLOW OPTIONAL SHAPE AT BOTTOM OF LIGHTENING HOLE, ADD EXCEPTION TO EDGE DISTANCE REQUIREMENTS FOR HEADING MARKING, ADD DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982, UPDATE THREAD SPECIFICATION TO AS8879, UPDATE SURFACE FINISH REQUIREMENTS, ADD AS3062 AND DELETE NOTE ON FILLET FOR INCOMPLETE THREAD REQUIREMENTS, ADD REQUIREMENT FOR SURFACE TEXTURE SYMBOLS, ADD MIN. BEARING FACE DIAMETER, ADD DATUM REQUIREMENTS FOR -.04 THRU -.18 LENGTHS (NEW NOTE 1), CORRECT K DIM FOR -.46, DELETE ".015 MAX" RADIUS AT BASE OF WRENCH PAD, UPDATE MAGNETIC PARTICLE INSPECTION REFERENCE, AND UPDATE NOTICE, FORMATS, TABLE AND NOTES.

AS9887A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9887(ASG), AMENDMENT 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.

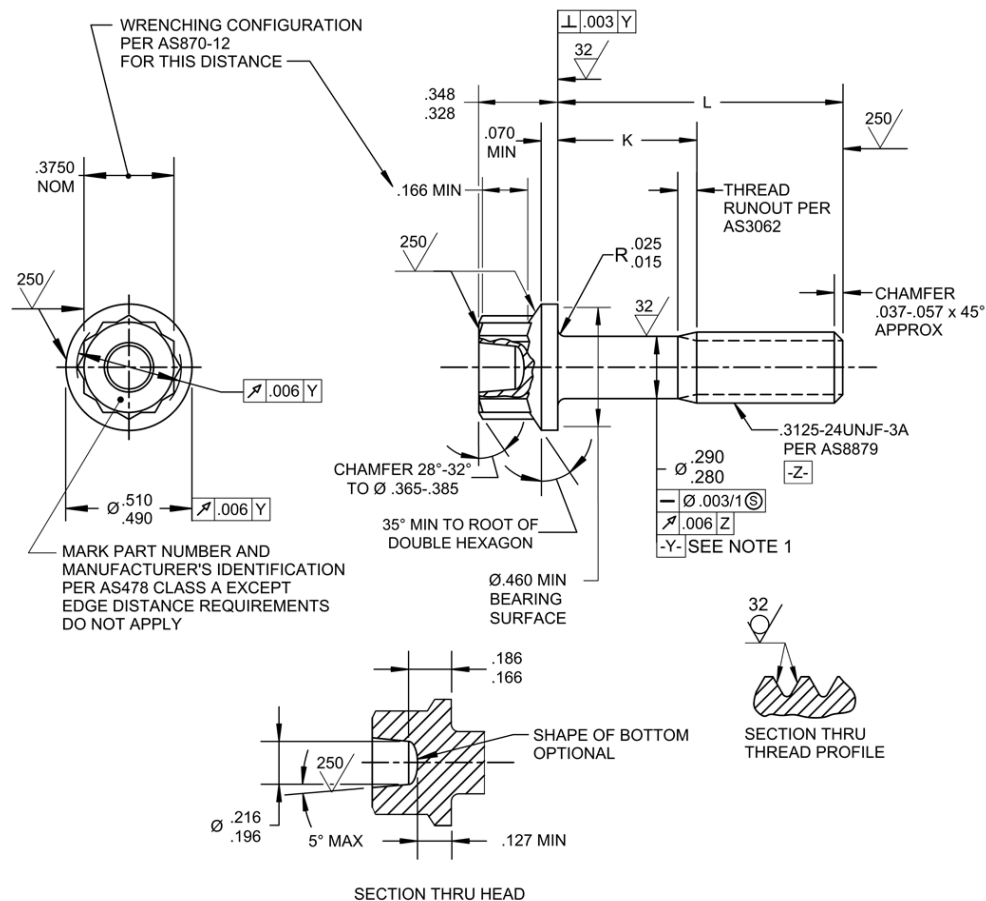
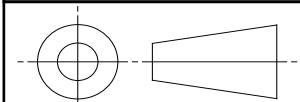


FIGURE 1 - BOLT

For more information on this standard, visit
<https://www.sae.org/standards/content/AS9887A/>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE



AEROSPACE STANDARD

BOLT, MACHINE-DOUBLE HEXAGON
EXTENDED WASHER HEAD, PD SHANK
AMS5616, .3125-24 UNJF-3A

AS9887™
SHEET 1 OF 3

REV.
A

Documents

TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NO.	L	K	APPROX. MASS LB/100	PART NO.	L	K	APPROX. MASS LB/100
MS9887-04	.490-.510	.088-.108	2.20	MS9887-34	2.740-2.760	1.815-1.875	6.32
MS9887-05	.552-.572	.088-.108	2.31	MS9887-35	2.865-2.885	1.940-2.000	6.55
MS9887-06	.615-.635	.088-.108	2.45	MS9887-36	2.990-3.010	2.065-2.125	6.78
MS9887-07	.678-.698	.088-.108	2.54	MS9887-37	3.115-3.135	2.190-2.250	7.01
MS9887-08	.740-.760	.088-.108	2.66	MS9887-38	3.240-3.260	2.315-2.375	7.24
MS9887-09	.802-.822	.088-.108	2.77	MS9887-39	3.365-3.385	2.440-2.500	7.47
MS9887-10	.865-.885	.088-.108	2.89	MS9887-40	3.490-3.510	2.565-2.625	7.70
MS9887-11	.928-.948	.088-.108	3.00	MS9887-41	3.615-3.635	2.690-2.750	7.92
MS9887-12	.990-1.010	.088-.125	3.12	MS9887-42	3.740-3.760	2.815-2.875	8.15
MS9887-13	1.052-1.072	.128-.188	3.23	MS9887-43	3.865-3.885	2.940-3.000	8.38
MS9887-14	1.115-1.135	.190-.250	3.35	MS9887-44	3.990-4.010	3.065-3.125	8.61
MS9887-15	1.178-1.198	.252-.312	3.46	MS9887-45	4.115-4.135	3.190-3.250	8.84
MS9887-16	1.240-1.260	.315-.375	3.57	MS9887-46	4.240-4.260	3.315-3.375	9.07
MS9887-17	1.302-1.322	.378-.438	3.69	MS9887-47	4.365-4.385	3.440-3.500	9.30
MS9887-18	1.365-1.385	.440-.500	3.80	MS9887-48	4.490-4.510	3.565-3.625	9.53
MS9887-19	1.428-1.448	.502-.562	3.92	MS9887-49	4.615-4.635	3.690-3.750	9.76
MS9887-20	1.490-1.510	.565-.625	4.03	MS9887-50	4.740-4.760	3.815-3.875	9.99
MS9887-21	1.552-1.572	.628-.688	4.15	MS9887-51	4.865-4.885	3.940-4.000	10.21
MS9887-22	1.615-1.635	.690-.750	4.26	MS9887-52	4.990-5.010	4.065-4.125	10.44
MS9887-23	1.678-1.698	.752-.812	4.38	MS9887-53	5.115-5.135	4.190-4.250	10.67
MS9887-24	1.740-1.760	.815-.875	4.49	MS9887-54	5.240-5.260	4.315-4.375	10.90
MS9887-25	1.802-1.822	.877-.937	4.60	MS9887-55	5.365-5.385	4.440-4.500	11.13
MS9887-26	1.865-1.885	.940-1.000	4.72	MS9887-56	5.490-5.510	4.565-4.625	11.36
MS9887-27	1.928-1.948	1.002-1.062	4.83	MS9887-57	5.615-5.635	4.690-4.750	11.59
MS9887-28	1.990-2.010	1.065-1.125	4.95	MS9887-58	5.740-5.760	4.815-4.875	11.82
MS9887-29	2.115-2.135	1.190-1.250	5.18	MS9887-59	5.865-5.885	4.940-5.000	12.05
MS9887-30	2.240-2.260	1.315-1.375	5.41	MS9887-60	5.990-6.010	5.065-5.125	12.28
MS9887-31	2.365-2.385	1.440-1.500	5.64				
MS9887-32	2.490-2.510	1.565-1.625	5.86				
MS9887-33	2.615-2.635	1.690-1.750	6.09				

NOTES:

- FOR PART NUMBERS MS9887-04 THRU MS9887-18 THE THREAD PD (DATUM -Z-) SHALL REPLACE DATUM -Y-.
- MATERIAL: CORROSION RESISTANT STEEL AMS5616 (UNS S41800).
- PROCUREMENT SPECIFICATION: AS7470 EXCEPT HEAD SHALL BE UPSET.
- HEAD TO SHANK FILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS.
- HARDNESS: 32-38 HRC.

	AEROSPACE STANDARD		AS9887™ SHEET 2 OF 3	REV. A
	BOLT, MACHINE-DOUBLE HEXAGON EXTENDED WASHER HEAD, PD SHANK AMS5616, .3125-24 UNJF-3A			

