

AS9724

## ADOPTION NOTICE

AS9724, "BOLT, MACHINE-DOUBLE HEXAGON EXTENDED WASHER HEAD, CLOSE TOLERANCE SHANK, CORROSION AND HEAT RESISTANT STEEL, .250-28 UNJF-3A", was adopted on 23 SEPTEMBER 1998 for use by the Department of Defense (DoD). Proposed changes by DoD Activities must be submitted to the DoD Adopting Activity: Defense Industrial Supply Center, ATTN: DISC-AESD, 700 Robbins Avenue, Philadelphia, PA 19111-5096. DoD Activities may obtain copies of this standard from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. The private sector and other Government agencies may purchase copies from the SOCIETY OF AUTOMOTIVE ENGINEERS, INC., 400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096.

## Custodians:

Army - AV  
Navy - AS  
Air Force - 99  
DLA-IS

Adopting activity:  
DLA-IS

(Project 5306-2095)

AMSC N/A

FSC 5306

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Submitted for recognition as an American National Standard

FEDERAL SUPPLY CLASS  
5306

AS9724

NOTICE

THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MS9724A, AMENDMENT 1 AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MS9724A, AMENDMENT 1. ANY PART NUMBERS ESTABLISHED BY THE ORIGINAL SPECIFICATION REMAIN UNCHANGED.

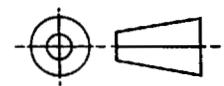
THE ORIGINAL MILITARY SPECIFICATION WAS ADOPTED AS AN SAE STANDARD UNDER THE PROVISIONS OF THE SAE TECHNICAL STANDARDS BOARD (TSB) RULES AND REGULATIONS (TSB 001) PERTAINING TO ACCELERATED ADOPTION OF GOVERNMENT SPECIFICATIONS AND STANDARDS. TSB RULES PROVIDE FOR (A) THE PUBLICATION OF PORTIONS OF UNREVISED GOVERNMENT SPECIFICATIONS AND STANDARDS WITHOUT CONSENSUS VOTING AT THE SAE COMMITTEE LEVEL, AND (B) THE USE OF THE EXISTING GOVERNMENT SPECIFICATION OR STANDARD FORMAT.

UNDER DEPARTMENT OF DEFENSE POLICIES AND PROCEDURES, ANY QUALIFICATION REQUIREMENTS AND ASSOCIATED QUALIFIED PRODUCTS LISTS ARE MANDATORY FOR DOD CONTRACTS. ANY REQUIREMENT RELATING TO QUALIFIED PRODUCTS LISTS (QPL'S) HAS NOT BEEN ADOPTED BY SAE AND IS NOT PART OF THIS TECHNICAL REPORT.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

SAENORM.COM : Click to view the full PDF of as9724

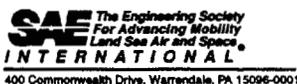
THIRD ANGLE PROJECTION



ISSUED 1998-08

PREPARED BY COMMITTEE E-25

PROCUREMENT SPECIFICATION: AMS 7471



**AEROSPACE STANDARD**

BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, CLOSE TOLERANCE SHANK, CORROSION AND HEAT RESISTANT STEEL, .250-28 UNJF-3A

**AS9724**  
SHEET 1 OF 4

Copyright 1998 Society of Automotive Engineers, Inc. All rights reserved.

Printed in the U.S.A.

QUESTIONS REGARDING THIS DOCUMENT: (724) 772-8510  
TO PLACE A DOCUMENT ORDER: (724) 776-4970

FAX: Distributed under license from the IHS Archive  
FAX: (724) 776-0790

http://www.sae.org

AS9724

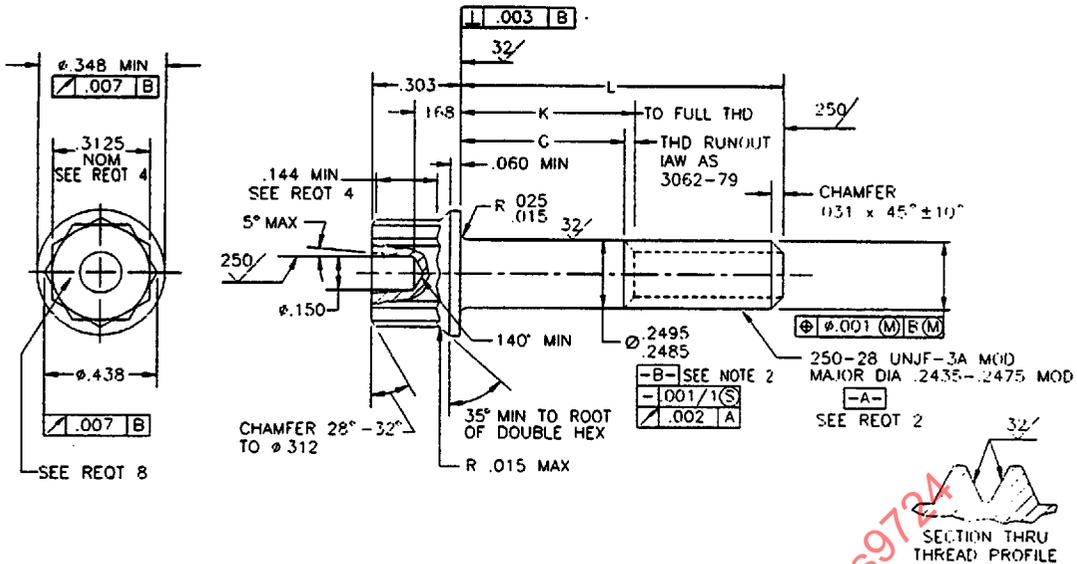


TABLE I. DASH NUMBERS AND DIMENSIONS

DASH NUMBER	L INCH	G MIN INCH	K MAX INCH	APPROX MASS LB/100	DASH NUMBER	L INCH	G MIN INCH	K MAX INCH	APPROX MASS LB/100
-03	.700	.117	.198	1.70	-31	2.450	1.867	1.948	4.22
-04	.762	.179	.260	1.79	-32	2.512	1.929	2.010	4.31
-05	.824	.241	.322	1.88	-33	2.574	1.991	2.072	4.40
-06	.887	.304	.385	1.96	-34	2.637	2.054	2.135	4.49
-07	.950	.367	.448	2.06	-35	2.700	2.117	2.198	4.58
-08	1.012	.429	.510	2.15	-36	2.762	2.179	2.260	4.67
-09	1.074	.491	.572	2.24	-37	2.824	2.241	2.322	4.76
-10	1.137	.554	.635	2.33	-38	2.887	2.304	2.385	4.85
-11	1.200	.617	.698	2.42	-39	2.950	2.367	2.448	4.94
-12	1.262	.679	.760	2.51	-40	3.012	2.429	2.510	5.03
-13	1.324	.741	.822	2.60	-41	3.074	2.491	2.572	5.12
-14	1.387	.804	.885	2.69	-42	3.137	2.554	2.635	5.21
-15	1.450	.867	.948	2.78	-43	3.200	2.617	2.698	5.30
-16	1.512	.929	1.010	2.87	-44	3.262	2.679	2.760	5.39
-17	1.574	.991	1.072	2.96	-45	3.324	2.741	2.822	5.48
-18	1.637	1.045	1.135	3.05	-46	3.387	2.804	2.885	5.57
-19	1.700	1.117	1.198	3.14	-47	3.450	2.867	2.948	5.66
-20	1.762	1.179	1.260	3.23	-48	3.512	2.929	3.010	5.75
-21	1.824	1.241	1.322	3.32	-49	3.574	2.991	3.072	5.84
-22	1.887	1.304	1.385	3.41	-50	3.637	3.054	3.135	5.93
-23	1.950	1.376	1.448	3.50	-51	3.700	3.117	3.198	6.02
-24	2.012	1.429	1.510	3.59	-52	3.762	3.179	3.260	6.11
-25	2.074	1.491	1.572	3.68	-53	3.824	3.241	3.322	6.20
-26	2.137	1.554	1.635	3.77	-54	3.887	3.304	3.385	6.29
-27	2.200	1.617	1.698	3.86	-55	3.950	3.367	3.448	6.38
-28	2.262	1.679	1.760	3.95	-56	4.012	3.429	3.510	6.47
-29	2.324	1.741	1.822	4.04	-57	4.074	3.491	3.572	6.56
-30	2.387	1.804	1.885	4.13	-58	4.137	3.554	3.625	6.65

**AS9724**

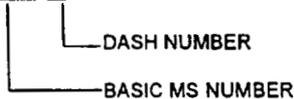
TABLE I. DASH NUMBERS AND DIMENSIONS - CONTINUED

DASH NUMBER	L INCH	G MIN INCH	K MAX INCH	APPROX MASS LB/100	DASH NUMBER	L INCH	G MIN INCH	K MAX INCH	APPROX MASS LB/100
-59	4.200	3.617	3.698	6.74	-73	5.074	4.491	4.572	8.00
-60	4.262	3.679	3.760	6.83	-74	5.137	4.554	4.635	8.09
-61	4.324	3.741	3.822	6.92	-75	5.200	4.617	4.698	8.18
-62	4.387	3.804	3.885	7.01	-76	5.262	4.679	4.760	8.27
-63	4.450	3.867	3.948	7.10	-77	5.324	4.741	4.822	8.36
-64	4.512	3.929	4.010	7.19	-78	5.387	4.804	4.885	8.45
-65	4.574	3.991	4.072	7.28	-79	5.450	4.867	4.948	8.54
-66	4.637	4.054	4.135	7.37	-80	5.512	4.929	5.010	8.63
-67	4.700	4.117	4.198	7.46	-81	5.574	4.991	5.072	8.72
-68	4.762	4.179	4.260	7.55	-82	5.637	5.054	5.135	8.81
-69	4.824	4.241	4.322	7.64	-83	5.700	5.117	5.198	8.90
-70	4.887	4.304	4.385	7.73	-84	5.762	5.179	5.260	9.00
-71	4.950	4.367	4.448	7.82	-85	5.824	5.241	5.322	9.08
-72	5.012	4.429	4.510	7.91	-86	5.887	5.304	5.385	9.17

REQUIREMENTS:

1. **MATERIAL:** CORROSION AND HEAT RESISTANT STEEL IN ACCORDANCE WITH AMS 5708.
2. **THREADS:** THREADS IN ACCORDANCE WITH MIL-S-8879. INCOMPLETE THREADS NOT TO ENTER FILLET.
3. **DIMENSIONING AND TOLERANCING:** DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M.
4. **WRENCHING CONFIGURATION:** WRENCHING CONFIGURATION IN ACCORDANCE WITH AS 870.
5. **SURFACE TEXTURE:** SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL BE 125 MICROINCHES EXCEPT UPSET HEAD IN ACCORDANCE WITH ANSI B46.1.
6. **FLUORESCENT PENETRANT INSPECTION:** FLUORESCENT PENETRANT INSPECTION SHALL BE IN ACCORDANCE WITH ASTM E1417.
7. **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 EXCEPT THAT DISTORTIONS AT A IN FIGURE 2 OF THE PROCUREMENT SPECIFICATION SHALL NOT BE PERMITTED ON THE HEAD BEARING AREA AND SHALL BE PERMITTED ON THE SHANK DIAMETER ONLY IF THE DISTORTION DOES NOT CAUSE THE SHANK DIAMETER TO EXCEED .2500 DIAMETER EXCEPT DASH NUMBER SIZES -06 AND SMALLER.
8. **MARKING:** MARK PART NUMBER AND MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH AS 478-79, CLASS A.
9. **TOLERANCES:** 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. **MANUFACTURING SPECIFICATION:** AMS 7471.
12. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

EXAMPLE: MS9724-03



MS9724-03 INDICATES: BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, CLOSE TOLERANCE SHANK, .250.28 UNJF-3A, LENGTH .700