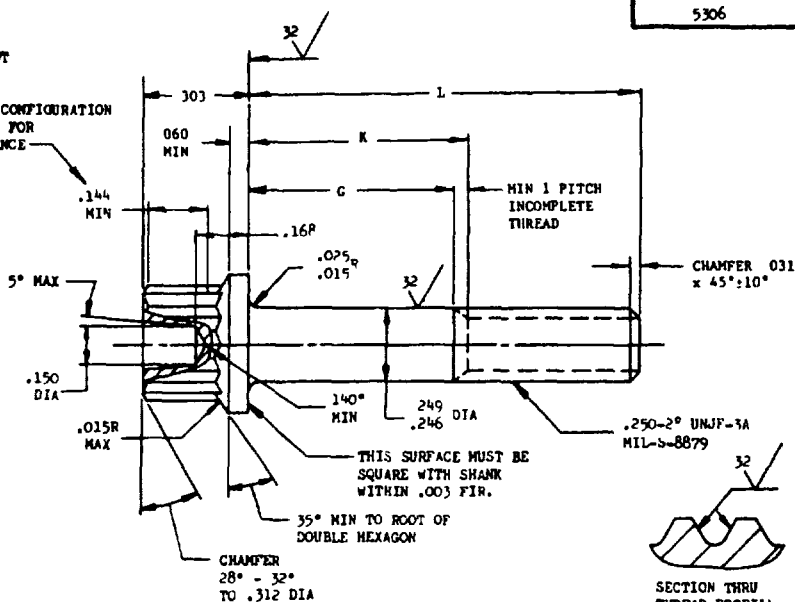
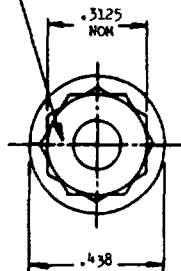


MS9933FED SUP CLASS
5306User activities
Navy - MG, GSReview activities:
Air Force - B2
Navy - AS

This military standard is approved by the Department of the Air Force and the Bureau of Naval Weapons and is mandatory for use by these activities. All other military activities are required to employ this standard where suitable.

MARK PART NUMBER
AND MANUFACTURER'S IDENT
PER AS 478 CLASS AWRENCHING CONFIGURATION
PER AS 870 FOR
THIS DISTANCESECTION THRU
THREAD PROFILE

PART NO	L	G MIN	K MAX	APPROX WEIGHT LB/100
MS9933-13	938	057	188	1 91
MS9933-14	1 000	119	250	1 99
MS9933-15	1 062	.181	312	2 08
MS9933-16	1.125	244	375	2 17
MS9933-17	1 188	.307	438	2 26
MS9933-18	1 250	369	500	2 34
MS9933-19	1 312	431	562	2 43
MS9933-20	1 375	494	625	2 51
MS9933-21	1 438	557	688	2 60
MS9933-22	1 500	619	750	2 69
MS9933-23	1 562	681	812	2 77
MS9933-24	1 625	744	.875	2 86
MS9933-25	1 688	.807	938	2 95
MS9933-26	1 750	869	1 000	3 03
MS9933-27	1 812	931	1 062	3 12

PART NO	L	G MIN	K MAX	APPROX WEIGHT LB/100
MS9933-28	1 875	994	1 125	3 21
MS9933-29	1 938	1 057	1 188	3 29
MS9933-30	2 000	1.119	1 250	3 38
MS9933-31	2 125	1 244	1 375	3 55
MS9933-32	2 250	1 369	1 500	3 73
MS9933-33	2 375	1 494	1 625	3 90
MS9933-34	2 500	1 619	1 750	4 07
MS9933-35	2 625	1 744	1 875	4 25
MS9933-36	2 750	1 869	2 000	4 42
MS9933-37	2 875	1 994	2 125	4 59
MS9933-38	3 000	2 119	2 250	4 77
MS9933-39	3 125	2 244	2 375	4.94
MS9933-40	3 250	2 369	2 500	5 11
MS9933-41	3 375	2 494	2 625	5 29
MS9933-42	3 500	2 619	2 750	5 46
MS9933-43	3 625	2 744	2 875	5.63
MS9933-44	3 750	2 869	3 000	5 81
MS9933-45	3 875	2 994	3 125	5.98

PART NO	L	G MIN	K MAX	APPROX WEIGHT LB/100
MS9933-46	4 000	3 119	3 250	6 15
MS9933-47	4 125	3 244	3 375	6 33
MS9933-48	4 250	3.369	3 500	6 50
MS9933-49	4 375	3 494	3 625	6 67
MS9933-50	4 500	3 619	3 750	6 85
MS9933-51	4 625	3 744	3 875	7 02
MS9933-52	4 750	3 869	4 000	7.19
MS9933-53	4 875	3 994	4 125	7 37
MS9933-54	5 000	4 119	4 250	7 54
MS9933-55	5 125	4 244	4 375	7 72
MS9933-56	5 250	4 369	4 500	7 89
MS9933-57	5 375	4 494	4 625	8.06
MS9933-58	5 500	4 619	4 750	8 24
MS9933-59	5 625	4 744	4 875	8 41
MS9933-60	5 750	4 869	5 000	8 58
MS9933-61	5.875	4 994	5 125	8 76
MS9933-62	6 000	5 119	5 250	8 91

- SHANK SHALL BE STRAIGHT WITHIN .003 TOTAL PER INCH OF BOLT LENGTH
- THE CONCENTRICITY OF THREAD PD IN RELATION TO THE SHANK SHALL BE WITHIN .006 FIR
- THE CONCENTRICITY OF THE SHANK IN RELATION TO THE WASHER FACE DIAMETER AND DOUBLE HEXAGON OD SHALL BE WITHIN .007 FIR
- MATERIAL STEEL AMS 6322
- HARDNESS ROCKWELL C26-32
- FINISH CADMIUM PLATE AMS 2400 DIMENSIONS SPECIFIED ARE AFTER PLATING
- MANUFACTURING SPECIFICATION AMS 7452 EXCEPT HEAD SHALL BE UPSET
- HEAD TO SHANK FILLET SHALL BE COLD WORKED
- MAGNETIC PARTICLE INSPECTION PER AMS 2640 AFTER PLATING
- SURFACE TEXTURE USAS B46 1-1962 UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD
- BREAK SHARP EDGES .003 - .015 UNLESS OTHERWISE SPECIFIED
- DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED, TOLERANCES LINEAR DIMENSIONS ± .010, ANGULAR DIMENSIONS ± 5°
- DO NOT USE UNASSIGNED PART NUMBERS

AS & AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERS, INC. PUBLIC TIONS
THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE MILITARY SERVICE BY THE SAE AEROSPACE PART STANDARDS DIVISION

P.A. Other Code	TITLE	MILITARY STANDARD
NAVY - AS	BOLT, MACHIN. - DOUBLE HEXAGON XT. HEAD WASHER HEAD, FULL SHANK, .250-2° UNJF-3A, CADMIUM PLATED, .250-28 UNJF-3A	MS9933
PROCUREMENT SPECIFICATION AMS-7452	SUPERSEDES	SHEET 1 OF 1

DD FORM 672-1 (Limited coordination)
ASD use only

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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