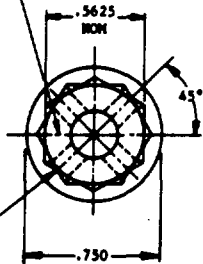


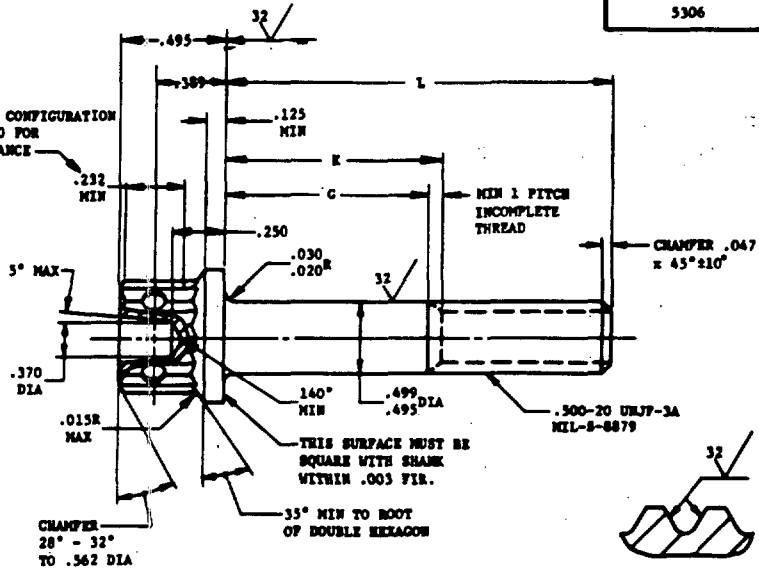
MS9946

MARK PART NUMBER
AND MANUFACTURER'S IDENT
PER AS 478 CLASS A

WRENCHING CONFIGURATION
PER AS 870 FOR
THIS DISTANCE



.070 DIA 4 HOLES
EQUALLY SPACED AS SHOWN
C90° TO .100 DIA



SECTION THRU
THREAD PROFILE

PART NO.	L	G MIN	K MAX	APPROX WEIGHT LB/100
MS9946-15	1.500	.090	.250	11.01
MS9946-16	1.562	.152	.312	11.36
MS9946-17	1.625	.215	.375	11.71
MS9946-18	1.688	.278	.438	12.06
MS9946-19	1.750	.340	.500	12.40
MS9946-20	1.812	.402	.562	12.75
MS9946-21	1.875	.465	.625	13.08
MS9946-22	1.938	.528	.688	13.43
MS9946-23	2.000	.590	.750	13.80
MS9946-24	2.125	.715	.875	14.49
MS9946-25	2.250	.840	1.000	15.19
MS9946-26	2.375	.965	1.125	15.88
MS9946-27	2.500	1.090	1.250	16.58
MS9946-28	2.625	1.215	1.375	17.28
MS9946-29	2.750	1.340	1.500	17.97

PART NO.	L	G MIN	K MAX	APPROX WEIGHT LB/100
MS9946-30	2.875	1.465	1.625	18.67
MS9946-31	3.000	1.590	1.750	19.36
MS9946-32	3.125	1.715	1.875	20.06
MS9946-33	3.250	1.840	2.000	20.75
MS9946-34	3.375	1.965	2.125	21.45
MS9946-35	3.500	2.090	2.250	22.15
MS9946-36	3.625	2.215	2.375	22.84
MS9946-37	3.750	2.340	2.500	23.54
MS9946-38	3.875	2.465	2.625	24.24
MS9946-39	4.000	2.590	2.750	24.93
MS9946-40	4.125	2.715	2.875	25.63
MS9946-41	4.250	2.840	3.000	26.32
MS9946-42	4.375	2.965	3.125	27.02
MS9946-43	4.500	3.090	3.250	27.72
MS9946-44	4.625	3.215	3.375	28.41
MS9946-45	4.750	3.340	3.500	29.11
MS9946-46	4.875	3.465	3.625	29.80
MS9946-47	5.000	3.590	3.750	30.50

PART NO.	L	G MIN	K MAX	APPROX WEIGHT LB/100
MS9946-48	5.125	3.715	3.875	31.20
MS9946-49	5.250	3.840	4.000	31.89
MS9946-50	5.375	3.965	4.125	32.59
MS9946-51	5.500	4.090	4.250	33.28
MS9946-52	5.625	4.215	4.375	33.98
MS9946-53	5.750	4.340	4.500	34.68
MS9946-54	5.875	4.465	4.625	35.37
MS9946-55	6.000	4.590	4.750	36.07

1. SHANK SHALL BE STRAIGHT WITHIN .002 TOTAL PER INCH OF BOLT LENGTH.
2. THE CONCENTRICITY OF THREAD PD IN RELATION TO THE SHANK SHALL BE WITHIN .006 FIR.
3. THE CONCENTRICITY OF THE SHANK IN RELATION TO THE WASHER FACE DIAMETER AND DOUBLE HEXAGON CD SHALL BE WITHIN .012 FIR.
4. MATERIAL: STEEL AMS 6322.
5. HARDNESS: ROCKWELL C26-32.
6. FINISH: CADMIUM PLATE AMS 2400. DIMENSIONS SPECIFIED ARE AFTER PLATING.
7. MANUFACTURING SPECIFICATION: AMS 7452 EXCEPT HEAD SHALL BE UPSET.
8. HEAD TO SHANK FILLET SHALL BE COLD WORKED.
9. MAGNETIC PARTICLE INSPECTION PER AMS 2640 AFTER PLATING.
10. SURFACE TEXTURE: USAS B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
11. BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
12. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.010, ANGULAR DIMENSIONS ±5°.
13. DO NOT USE UNASSIGNED PART NUMBERS.

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THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE MILITARY SERVICES BY THE SAE AEROSPACE PART STANDARDS DIVISION.

P.A. AIR FORCE - 11 Other NAVY - AS	TITLE BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, DRILLED, FULL SHANK, STEEL AMS 6322, CADMIUM PLATED, .500-20 UNF-3A	MILITARY STANDARD MS 9946
PROCUREMENT SPECIFICATION AMS-7452	SUPERSEDES:	SHEET 1 OF 1

DD FORM 672-1 (limited circulation)
ASD use only

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

☆ U. S. GOVERNMENT PRINTING OFFICE: 1971-433-696/5036

User activities: Navy - MG, CG
 Review activities: Air Force - 82
 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.

APPROVED 30 Dec 70 REVISED