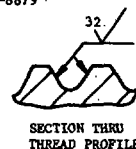
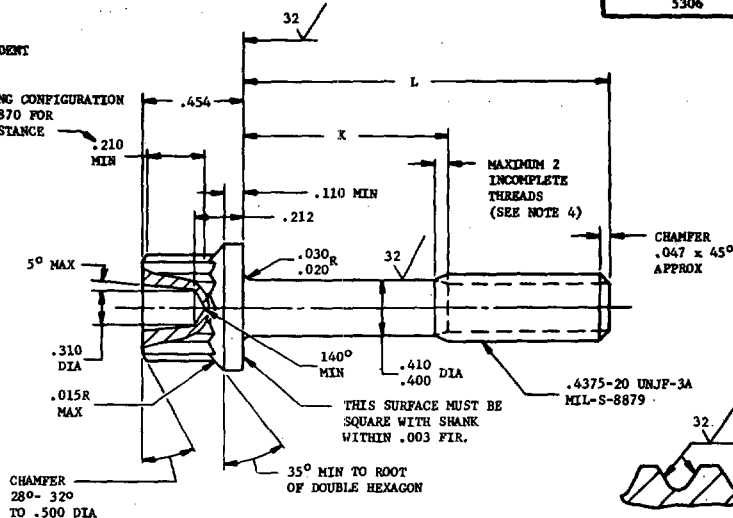
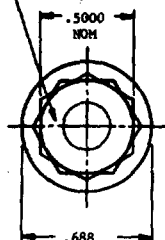


MS9889 (ASG)**FED. SUP CLASS**
5306MARK PART NUMBER
AND MANUFACTURER'S IDENT
PER AS 478 CLASS AWRENCHING CONFIGURATION
PER AS 870 FOR
THIS DISTANCESECTION THRU
THREAD PROFILE

PART NO.	L	K	APPROX. WEIGHT LB/100	PART NO.	L	K	APPROX. WEIGHT LB/100	PART NO.	L	K	APPROX. WEIGHT LB/100
MS9889-04	.688	.105-.125	5.58	MS9889-22	1.812	.627-.687	9.71	MS9889-40	3.875	2.690-2.750	17.30
MS9889-05	.750	.105-.125	5.80	MS9889-23	1.875	.690-.750	9.94	MS9889-41	4.000	2.815-2.875	17.76
MS9889-06	.812	.105-.125	6.03	MS9889-24	1.938	.752-.812	10.17	MS9889-42	4.125	2.940-3.000	18.22
MS9889-07	.875	.105-.125	6.26	MS9889-25	2.000	.815-.875	10.40	MS9889-43	4.250	3.065-3.125	18.68
MS9889-08	.938	.105-.125	6.49	MS9889-26	2.125	.940-1.000	10.86	MS9889-44	4.375	3.190-3.250	19.14
MS9889-09	1.000	.105-.125	6.72	MS9889-27	2.250	1.065-1.125	11.32	MS9889-45	4.500	3.315-3.375	19.60
MS9889-10	1.062	.105-.125	6.95	MS9889-28	2.375	1.190-1.250	11.78	MS9889-46	4.625	3.440-3.500	20.06
MS9889-11	1.125	.105-.125	7.18	MS9889-29	2.500	1.315-1.375	12.24	MS9889-47	4.750	3.565-3.625	20.51
MS9889-12	1.188	.105-.125	7.41	MS9889-30	2.625	1.440-1.500	12.70	MS9889-48	4.875	3.690-3.750	20.98
MS9889-13	1.250	.105-.125	7.64	MS9889-31	2.750	1.565-1.625	13.16	MS9889-49	5.000	3.815-3.875	21.43
MS9889-14	1.312	.128-.188	7.87	MS9889-32	2.875	1.690-1.750	13.62	MS9889-50	5.125	3.940-4.000	21.89
MS9889-15	1.375	.190-.250	8.10	MS9889-33	3.000	1.815-1.875	14.08	MS9889-51	5.250	4.065-4.125	22.34
MS9889-16	1.438	.252-.312	8.33	MS9889-34	3.125	1.940-2.000	14.54	MS9889-52	5.375	4.190-4.250	22.79
MS9889-17	1.500	.315-.375	8.56	MS9889-35	3.250	2.065-2.125	15.00	MS9889-53	5.500	4.315-4.375	23.23
MS9889-18	1.562	.378-.438	8.79	MS9889-36	3.375	2.190-2.250	15.46	MS9889-54	5.625	4.440-4.500	23.67
MS9889-19	1.625	.440-.500	9.02	MS9889-37	3.500	2.315-2.375	15.92	MS9889-55	5.750	4.565-4.625	24.12
MS9889-20	1.688	.502-.562	9.25	MS9889-38	3.625	2.440-2.500	16.38	MS9889-56	5.875	4.690-4.750	24.56
MS9889-21	1.750	.565-.625	9.48	MS9889-39	3.750	2.565-2.625	16.84	MS9889-57	6.000	4.815-4.875	25.01

- SHANK SHALL BE STRAIGHT WITHIN .0025 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 .010 FIR.
- INCOMPLETE THREADS NOT TO ENTER FILLET.
- MATERIAL: CORROSION RESISTANT STEEL AMS 5616.
- MANUFACTURING SPECIFICATION: AMS 7470 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: ROCKWELL C32-38.
- SURFACE TEXTURE: USAS B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
- MAGNETIC PARTICLE INSPECTION PER AMS 2640.
- BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm .010$, ANGULAR DIMENSIONS $\pm 5^\circ$.
- DO NOT USE UNASSIGNED PART NUMBERS.

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

P.A.	USAF -11	TITLE	MILITARY STANDARD
Other Cost	Navy - AS	BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, AMS 5616, .4375-20 UNJF-3A	MS9889 (ASG)
PROCUREMENT SPECIFICATION	SUPERSEDES:		SHEET 1 OF 1

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

Review activities: USAP - 82,85

REVISED
APPROVED 3 Mar 69

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

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

Project No. 5306-P039
U. S. GOVERNMENT PRINTING OFFICE: 1969-341-517/A-5040