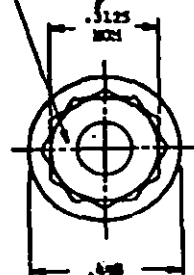


**MS9886 (ASG)**FED. SUP CLASS  
5306MARK PART NUMBER  
AND MANUFACTURER'S IDENT  
PER AS 478 CLASS AWELDING CONFIGURATION  
PER AS 870 FOR  
THIS DISTANCE

3° MAX

.150 DIA

.015R MAX

CHAMFER  
28°-32°  
TO .312 DIA

.32

.303

.144 MIN

.006 MIN

.168

.015

.015R

.32

.140 MIN

.132 DIA

.132 DIA

.250-28 UNJF-3A  
NIL-6-8079THIS SURFACE MUST BE  
SQUARE WITH SHANK  
WITHIN .003 FIR.35° MIN TO ROOT  
OF DOUBLE HEXAGON

32

CHAMFER  
28°-32°  
TO .312 DIA

32

SECTION THREE  
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
MS9886-04	.375	.079-.099	1.29	MS9886-23	1.688	.878-.938	2.80	MS9886-46	6.000	3.190-3.250	5.45
MS9886-05	.438	.079-.099	1.36	MS9886-26	1.736	.940-1.000	2.87	MS9886-47	4.125	3.315-3.375	3.58
MS9886-06	.500	.079-.099	1.44	MS9886-27	1.812	1.002-1.062	2.94	MS9886-48	4.250	3.440-3.500	3.73
MS9886-07	.562	.079-.099	1.51	MS9886-28	1.875	1.065-1.125	3.01	MS9886-49	4.375	3.565-3.625	3.88
MS9886-08	.625	.079-.099	1.59	MS9886-29	1.938	1.128-1.188	3.08	MS9886-50	4.500	3.690-3.750	4.03
MS9886-09	.688	.079-.099	1.66	MS9886-30	2.000	1.190-1.250	3.15	MS9886-51	4.625	3.815-3.875	4.16
MS9886-10	.750	.079-.099	1.73	MS9886-31	2.125	1.315-1.375	3.30	MS9886-52	4.750	3.940-4.000	4.31
MS9886-11	.812	.079-.099	1.80	MS9886-32	2.250	1.440-1.500	3.44	MS9886-53	4.875	4.065-4.125	4.46
MS9886-12	.875	.079-.125	1.87	MS9886-33	2.375	1.565-1.625	3.59	MS9886-54	5.000	4.190-4.250	4.60
MS9886-13	.938	.128-.168	1.94	MS9886-34	2.500	1.690-1.750	3.73	MS9886-55	5.125	4.315-4.375	4.74
MS9886-14	1.000	.190-.250	2.01	MS9886-35	2.625	1.815-1.875	3.88	MS9886-56	5.250	4.440-4.500	4.89
MS9886-15	1.062	.252-.312	2.08	MS9886-36	2.750	1.940-2.000	4.01	MS9886-57	5.375	4.565-4.625	5.03
MS9886-16	1.125	.315-.375	2.15	MS9886-37	2.875	2.065-2.125	4.17	MS9886-58	5.500	4.690-4.750	5.16
MS9886-17	1.188	.378-.438	2.22	MS9886-38	3.000	2.190-2.250	4.31	MS9886-59	5.625	4.815-4.875	5.31
MS9886-18	1.250	.440-.500	2.30	MS9886-39	3.125	2.315-2.375	4.45	MS9886-60	5.750	4.940-5.000	5.46
MS9886-19	1.312	.502-.562	2.36	MS9886-40	3.250	2.440-2.500	4.59	MS9886-61	5.875	5.065-5.125	5.60
MS9886-20	1.375	.565-.625	2.44	MS9886-41	3.375	2.565-2.625	4.74	MS9886-62	6.000	5.190-5.250	5.75
MS9886-21	1.438	.628-.688	2.52	MS9886-42	3.500	2.690-2.750	4.87				
MS9886-22	1.500	.690-.750	2.59	MS9886-43	3.625	2.815-2.875	5.01				
MS9886-23	1.562	.752-.812	2.66	MS9886-44	3.750	2.940-3.000	5.16				
MS9886-24	1.625	.815-.875	2.73	MS9886-45	3.875	3.065-3.125	5.31				

1. SHANK SHALL BE STRAIGHT WITHIN .003 PER INCH OF BOLT LENGTH.
2. THE CONCENTRICITY OF THREAD PG IN RELATION TO THE SHANK SHALL BE WITHIN .004 FIR.
3. THE CONCENTRICITY OF THE SHANK IN RELATION TO THE WASHER FACE DIAMETER AND DOUBLE HEXAGON GO SHALL BE WITHIN .007 FIR.
4. INCOMPLETE THREADS NOT TO ENTER FILLET.
5. MATERIAL: CORROSION RESISTANT STEEL AMS 5616.
6. MANUFACTURING SPECIFICATION: AMS 7470 EXCEPT HEAD SHALL BE UPSET.
7. HEAD TO SHANK FILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS.
8. HARDNESS: ROCKWELL C32-38.
9. SURFACE TEXTURE: USAS B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
10. MAGNETIC PARTICLE INSPECTION PER AMS 2640.
11. BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
12. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm .010$ . ANGULAR DIMENSIONS  $\pm .50^\circ$ .
13. DO NOT USE UNASSIGNED PART NUMBERS.

AS 4 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. USAP - 11	TITLE	MILITARY STANDARD
Other Code	BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, AMS 5616, .250-28 UNJF-3A	<b>MS9886 (ASG)</b>
Navy - AS		SHEET 1 OF 1
PROCUREMENT SPECIFICATION	SUPERSEDED	

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

Project No. 5306-P036  
U.S. GOVERNMENT PRINTING OFFICE: 1964-617-1-2022

Review activities

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

APPROVED 3 MAR 69 REVISED