

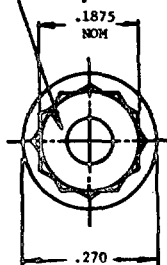
**MS9912 (ASG)**

FED. SUP CLASS

5305

MAKE MS9912  
AND MANUFACTURER'S IDENT  
PER AS 478 CLASS A

WRENCHING CONFIGURATION  
PER AS 870 FOR  
THIS DISTANCE



5° MAX  
.076  
MAX DIA  
HOLE  
OPTIONAL  
.015R  
MAX

CHAMFER  
28°-32°  
TO .188 DIA

.101  
MIN

.205

.030  
MIN

.068  
MIN

.020  
MIN

.010

MAXIMUM 2  
INCOMPLETE  
THREADS  
(SEE NOTE 4)

CHAMFER  
.025 x 45°  
APPROX

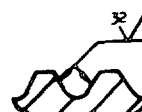
140°  
MIN

THIS SURFACE MUST BE  
SQUARE WITH CHAMFER  
WITHIN .003 FIR.

35° MIN TO ROOT OF  
DOUBLE HEXAGON

.127 DIA  
.117 DIA

.138-40 UNJF-3A  
BIL-S-2879



SECTION THRU  
THREAD PROFILE

| PART NO.  | L     | K         | APPROX<br>WEIGHT<br>LB/100 |
|-----------|-------|-----------|----------------------------|
| MS9912-02 | .250  | .058-.078 | .283                       |
| MS9912-03 | .312  | .058-.078 | .304                       |
| MS9912-04 | .375  | .058-.078 | .325                       |
| MS9912-05 | .438  | .058-.078 | .346                       |
| MS9912-06 | .500  | .058-.078 | .367                       |
| MS9912-07 | .562  | .058-.078 | .387                       |
| MS9912-08 | .625  | .058-.099 | .408                       |
| MS9912-09 | .688  | .102-.162 | .429                       |
| MS9912-10 | .750  | .164-.224 | .449                       |
| MS9912-11 | .812  | .226-.286 | .478                       |
| MS9912-12 | .875  | .289-.349 | .490                       |
| MS9912-13 | .938  | .352-.412 | .511                       |
| MS9912-14 | 1.000 | .414-.474 | .532                       |
| MS9912-15 | 1.062 | .476-.536 | .552                       |

| PART NO.  | L     | K           | APPROX<br>WEIGHT<br>LB/100 |
|-----------|-------|-------------|----------------------------|
| MS9912-16 | 1.125 | .539-.599   | .573                       |
| MS9912-17 | 1.188 | .602-.662   | .601                       |
| MS9912-18 | 1.250 | .664-.724   | .615                       |
| MS9912-19 | 1.312 | .726-.786   | .635                       |
| MS9912-20 | 1.375 | .789-.849   | .656                       |
| MS9912-21 | 1.438 | .852-.912   | .677                       |
| MS9912-22 | 1.500 | .914-.974   | .697                       |
| MS9912-23 | 1.562 | .976-1.036  | .717                       |
| MS9912-24 | 1.625 | 1.039-1.099 | .737                       |
| MS9912-25 | 1.688 | 1.102-1.162 | .758                       |
| MS9912-26 | 1.750 | 1.164-1.224 | .778                       |
| MS9912-27 | 1.812 | 1.226-1.286 | .799                       |
| MS9912-28 | 1.875 | 1.289-1.349 | .820                       |
| MS9912-29 | 1.938 | 1.352-1.412 | .840                       |
| MS9912-30 | 2.000 | 1.414-1.474 | .861                       |

Review activities:  
USAF - 02, 85

This military standard is approved by the Department of the Air Force and the Department of the Navy. It is mandatory for use by these activities. All other military activities are required to employ this standard through outboard.

1. SHANK SHALL BE STRAIGHT WITHIN .003 PER INCH OF SCREW 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 OD SHALL BE WITHIN .004 FIR.
4. INCOMPLETE THREADS NOT TO ENTER FILLET.
5. MATERIAL: STEEL AMS 6322.
6. HARDNESS: ROCKWELL C26-32.
7. FINISH: CADMIUM PLATE AMS 2400. DIMENSIONS SPECIFIED ARE AFTER PLATING.
8. MANUFACTURING SPECIFICATION: AMS 7452 EXCEPT HEAD SHALL BE UPSET.
9. HEAD TO SHANK FILLET SHALL BE COLD WORKED.
10. MAGNETIC PARTICLE INSPECTION PER AMS 2640 AFTER PLATING.
11. SURFACE TEXTURE: USAS B46.1-1962. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
12. BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
13. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm .010$ , ANGULAR DIMENSIONS  $\pm 5^\circ$ .
14. DO NOT USE UNASSIGNED PART NUMBERS.

AS & AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERS, INC. PUBLICATIONS.

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

|                               |  |  |
|-------------------------------|--|--|
| P.A.<br>USAF - 11             | TITLE<br>SCREW, MACHINE - DOUBLE HEXAGON EXTENDED<br>WASHER HEAD, PD SHANK, STEEL AMS 6322, CADMIUM<br>PLATED, .138-40 UNJF-3A | MILITARY STANDARD<br><b>MS9912 (ASG)</b> |
| Other Govt<br>Navy - AS       |  |  |
| APPROVED SPECIFICATION<br>NO. | SUPPLEMENTAL   | DATE<br>1 67 1                           |

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

PROCESSED BY THE AIR FORCE AND NAVY

U.S. GOVERNMENT PRINTING OFFICE: 1969-393-065/S1749

REVISION  
15 Aug 69  
APPROVED