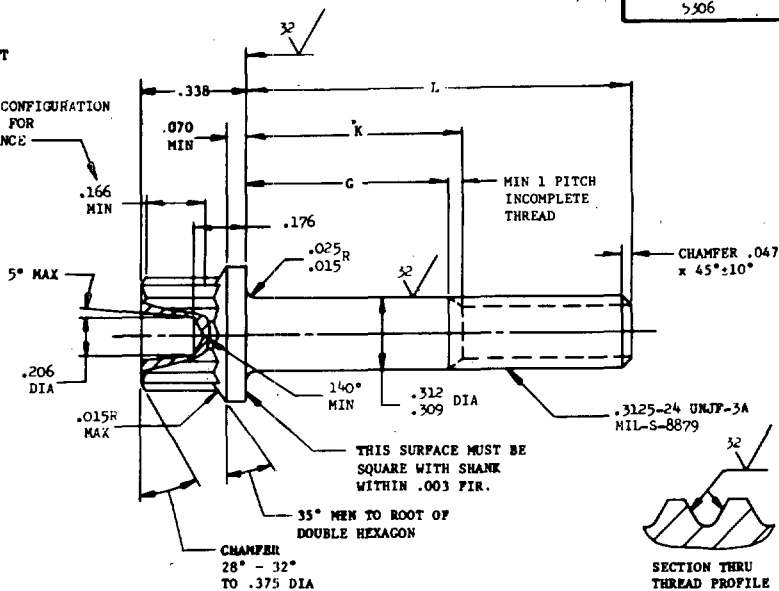
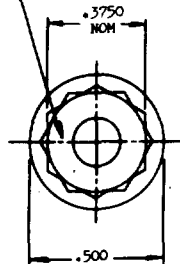


Users activities:  
Navy - MC, CGReview activities:  
Air Force - 82  
Navy - AS

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.

**MS9934**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<br>MIN | K<br>MAX | APPROX<br>WEIGHT<br>LB/100 |
|-----------|-------|----------|----------|----------------------------|
| MS9934-13 | 1.062 | .045     | .188     | 3.14                       |
| MS9934-14 | 1.125 | .107     | .250     | 3.28                       |
| MS9934-15 | 1.188 | .169     | .312     | 3.42                       |
| MS9934-16 | 1.250 | .232     | .375     | 3.55                       |
| MS9934-17 | 1.312 | .295     | .438     | 3.68                       |
| MS9934-18 | 1.375 | .357     | .500     | 3.82                       |
| MS9934-19 | 1.438 | .419     | .562     | 3.95                       |
| MS9934-20 | 1.500 | .482     | .625     | 4.09                       |
| MS9934-21 | 1.562 | .545     | .688     | 4.22                       |
| MS9934-22 | 1.625 | .607     | .750     | 4.35                       |
| MS9934-23 | 1.688 | .669     | .812     | 4.49                       |
| MS9934-24 | 1.750 | .732     | .875     | 4.62                       |
| MS9934-25 | 1.812 | .795     | .938     | 4.76                       |
| MS9934-26 | 1.875 | .857     | 1.000    | 4.89                       |
| MS9934-27 | 1.938 | .919     | 1.062    | 5.03                       |
| MS9934-28 | 2.000 | .982     | 1.125    | 5.16                       |

| PART NO.  | L     | G<br>MIN | K<br>MAX | APPROX<br>WEIGHT<br>LB/100 |
|-----------|-------|----------|----------|----------------------------|
| MS9934-29 | 2.125 | 1.107    | 1.250    | 5.43                       |
| MS9934-30 | 2.250 | 1.232    | 1.375    | 5.70                       |
| MS9934-31 | 2.375 | 1.357    | 1.500    | 5.98                       |
| MS9934-32 | 2.500 | 1.482    | 1.625    | 6.25                       |
| MS9934-33 | 2.625 | 1.607    | 1.750    | 6.52                       |
| MS9934-34 | 2.750 | 1.732    | 1.875    | 6.79                       |
| MS9934-35 | 2.875 | 1.857    | 2.000    | 7.06                       |
| MS9934-36 | 3.000 | 1.982    | 2.125    | 7.33                       |
| MS9934-37 | 3.125 | 2.107    | 2.250    | 7.60                       |
| MS9934-38 | 3.250 | 2.232    | 2.375    | 7.87                       |
| MS9934-39 | 3.375 | 2.357    | 2.500    | 8.14                       |
| MS9934-40 | 3.500 | 2.482    | 2.625    | 8.41                       |
| MS9934-41 | 3.625 | 2.607    | 2.750    | 8.68                       |
| MS9934-42 | 3.750 | 2.732    | 2.875    | 8.95                       |
| MS9934-43 | 3.875 | 2.857    | 3.000    | 9.22                       |
| MS9934-44 | 4.000 | 2.982    | 3.125    | 9.50                       |
| MS9934-45 | 4.125 | 3.107    | 3.250    | 9.77                       |
| MS9934-46 | 4.250 | 3.232    | 3.375    | 10.04                      |

| PART NO.  | L     | G<br>MIN | K<br>MAX | APPROX<br>WEIGHT<br>LB/100 |
|-----------|-------|----------|----------|----------------------------|
| MS9934-47 | 4.375 | 3.357    | 3.500    | 10.31                      |
| MS9934-48 | 4.500 | 3.482    | 3.625    | 10.58                      |
| MS9934-49 | 4.625 | 3.607    | 3.750    | 10.85                      |
| MS9934-50 | 4.750 | 3.732    | 3.875    | 11.12                      |
| MS9934-51 | 4.875 | 3.857    | 4.000    | 11.39                      |
| MS9934-52 | 5.000 | 3.982    | 4.125    | 11.66                      |
| MS9934-53 | 5.125 | 4.107    | 4.250    | 11.93                      |
| MS9934-54 | 5.250 | 4.232    | 4.375    | 12.20                      |
| MS9934-55 | 5.375 | 4.357    | 4.500    | 12.48                      |
| MS9934-56 | 5.500 | 4.482    | 4.625    | 12.75                      |
| MS9934-57 | 5.625 | 4.607    | 4.750    | 13.02                      |
| MS9934-58 | 5.750 | 4.732    | 4.875    | 13.29                      |
| MS9934-59 | 5.875 | 4.857    | 5.000    | 13.56                      |
| MS9934-60 | 6.000 | 4.982    | 5.125    | 13.83                      |

- 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 .008 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  $\pm .010$ , 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.<br>AIR FORCE - 11<br>Other<br>NAVY - AS | TITLE<br>BOLT, MACHINE - DOUBLE HEXAGON EXTENDED<br>WASHER HEAD, FILL SHANK, STEEL AMS 6322,<br>CADMIUM PLATED, .3125-24 UNJF-3A | MILITARY STANDARD<br><b>MS9934</b> |
| PROCUREMENT SPECIFICATION<br>AMS-7452        | SUPERSEDES:  | SHEET 1 OF 1                       |

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

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

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