



| PART NUMBER | L     | K         | APPROX WEIGHT LB/100 | PART NUMBER | L     | K           | APPROX WEIGHT LB/100 | PART NUMBER | L     | K           | APPROX WEIGHT LB/100 |
|-------------|-------|-----------|----------------------|-------------|-------|-------------|----------------------|-------------|-------|-------------|----------------------|
| MS9683-02   | .500  | .028-.108 | 2.76                 | MS9683-18   | 1.500 | .440-.500   | 5.42                 | MS9683-39   | 3.875 | 2.815-2.875 | 11.80                |
| MS9683-03   | .562  | .028-.108 | 2.92                 | MS9683-19   | 1.562 | .502-.562   | 5.59                 | MS9683-40   | 4.000 | 2.940-3.000 | 12.13                |
| MS9683-04   | .625  | .028-.108 | 3.08                 | MS9683-20   | 1.625 | .565-.625   | 5.76                 | MS9683-41   | 4.125 | 3.065-3.125 | 12.46                |
| MS9683-05   | .688  | .028-.108 | 3.24                 | MS9683-21   | 1.688 | .628-.688   | 5.93                 | MS9683-42   | 4.250 | 3.190-3.250 | 12.79                |
| MS9683-06   | .750  | .028-.108 | 3.40                 | MS9683-22   | 1.750 | .690-.750   | 6.10                 | MS9683-43   | 4.375 | 3.315-3.375 | 13.12                |
| MS9683-07   | .812  | .028-.108 | 3.56                 | MS9683-23   | 1.875 | .815-.875   | 6.43                 | MS9683-44   | 4.500 | 3.440-3.500 | 13.55                |
| MS9683-08   | .875  | .028-.108 | 3.73                 | MS9683-24   | 2.000 | .940-1.000  | 6.77                 | MS9683-45   | 4.625 | 3.565-3.625 | 13.89                |
| MS9683-09   | .938  | .028-.108 | 3.90                 | MS9683-25   | 2.125 | 1.065-1.125 | 7.10                 | MS9683-46   | 4.750 | 3.690-3.750 | 14.22                |
| MS9683-10   | 1.000 | .028-.108 | 4.07                 | MS9683-26   | 2.250 | 1.190-1.250 | 7.44                 | MS9683-47   | 4.875 | 3.815-3.875 | 14.55                |
| MS9683-11   | 1.062 | .028-.108 | 4.24                 | MS9683-27   | 2.375 | 1.315-1.375 | 7.77                 | MS9683-48   | 5.000 | 3.940-4.000 | 14.89                |
| MS9683-12   | 1.125 | .028-.125 | 4.41                 | MS9683-28   | 2.500 | 1.440-1.500 | 8.10                 | MS9683-49   | 5.125 | 4.065-4.125 | 15.23                |
| MS9683-13   | 1.188 | .128-.188 | 4.57                 | MS9683-29   | 2.625 | 1.565-1.625 | 8.44                 | MS9683-50   | 5.250 | 4.190-4.250 | 15.56                |
| MS9683-14   | 1.250 | .190-.250 | 4.74                 | MS9683-30   | 2.750 | 1.690-1.750 | 8.78                 | MS9683-51   | 5.375 | 4.315-4.375 | 15.89                |
| MS9683-15   | 1.312 | .252-.312 | 4.91                 | MS9683-31   | 2.875 | 1.815-1.875 | 9.12                 | MS9683-52   | 5.500 | 4.440-4.500 | 16.22                |
| MS9683-16   | 1.375 | .315-.375 | 5.09                 | MS9683-32   | 3.000 | 1.940-2.000 | 9.46                 | MS9683-53   | 5.625 | 4.565-4.625 | 16.55                |
| MS9683-17   | 1.438 | .378-.438 | 5.26                 | MS9683-33   | 3.125 | 2.065-2.125 | 9.79                 | MS9683-54   | 5.750 | 4.690-4.750 | 16.89                |
|             |       |           |                      | MS9683-34   | 3.250 | 2.190-2.250 | 10.13                | MS9683-55   | 5.875 | 4.815-4.875 | 17.23                |
|             |       |           |                      | MS9683-35   | 3.375 | 2.315-2.375 | 10.46                | MS9683-56   | 6.000 | 4.940-5.000 | 17.57                |
|             |       |           |                      | MS9683-36   | 3.500 | 2.440-2.500 | 10.80                |             |       |             |                      |
|             |       |           |                      | MS9683-37   | 3.625 | 2.565-2.625 | 11.13                |             |       |             |                      |
|             |       |           |                      | MS9683-38   | 3.750 | 2.690-2.750 | 11.46                |             |       |             |                      |

- SHANK SHALL BE STRAIGHT WITHIN .0025 FIR 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 .009 FIR.
- INCOMPLETE THREADS NOT TO ENTER PILLET.
- MATERIAL: STEEL AMS 6322.
- HARDNESS: ROCKWELL C26-32.
- FINISH: CADMIUM PLATE AMS 2400. DIMENSIONS SPECIFIED ARE AFTER PLATING.
- MAGNETIC PARTICLE INSPECTION PER AMS 2640 AFTER PLATING.
- MANUFACTURING SPECIFICATION: AMS 7452 EXCEPT HEAD MUST BE UPSET.
- HEAD TO SHANK PILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS.
- SURFACE ROUGHNESS: AS 291. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES EXCEPT UPSET HEAD.
- BREAK SHARP EDGES .003 TO .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.

REINSTATED AFTER 27 JUN 84

AS & AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERS, INC., PUBLICATIONS.  
THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE ENGINE AND PROPELLER UTILITY PARTS COMMITTEE OF THE SAE.

|                           |             |  |                   |
|---------------------------|-------------|--|-------------------|
| P.A.                      | AS          | TITLE  | MILITARY STANDARD |
| Other Cust                | (B)         | BOLT, MACHINE-STEEL AMS 6322, CADMIUM PLATED, DOUBLE HEXAGON EXTENDED WASHER HEAD, CUPWASHER LOCKED, .375-24 UNJF-3A | MS9683 (ASG)      |
| 99                        |             |  |                   |
| PROCUREMENT SPECIFICATION | SUPERSEDES: | PAGE 1   | OF 1              |

Review activities:  
AIR FORCE - 82  
DLA - IS

This standard has been approved by the Department of the Air Force and the Department of the Navy and is mandatory for use by that activity. All other military activities are required to employ this standard where suitable.