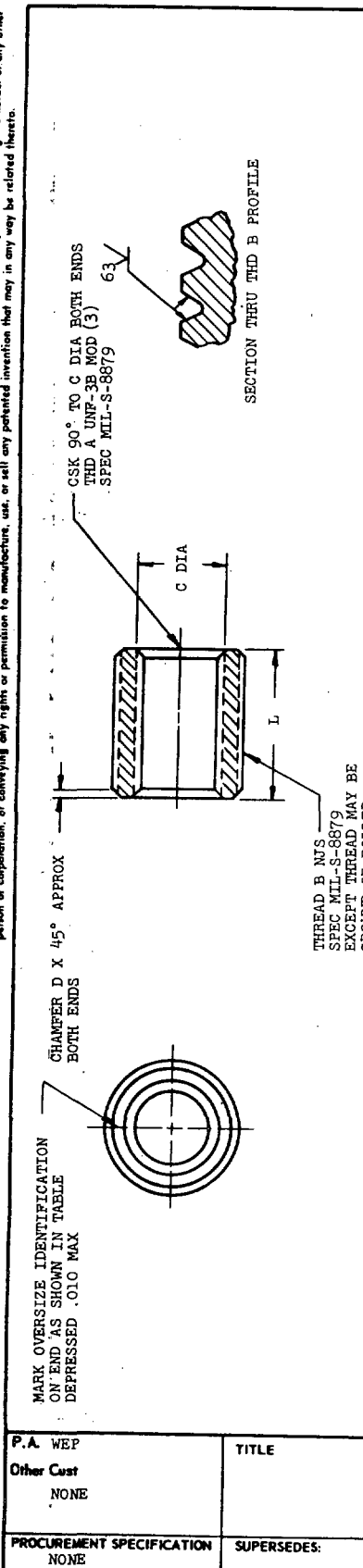


NOTICE—When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any way constituting an endorsement, approval, or person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be claimed therein.

This standard has been approved by the BUREAU OF NAVAL WEAPONS Department of the NAVY and is mandatory for use by that activity. All other military activities are required to employ this standard where suitable.



| THREAD | L | C + .010 -.000 | SIZE | (2) THREAD B | | | ROOT RAD | STANDARD | | | +.003 OVERSIZE | | | +.006 OVERSIZE | | |
|----------|------|----------------------|----------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|----------------|-------------|-------------|
| | | | | MAJOR DIA | MINOR DIA | MAJOR DIA | | NO MARKS | ONE MARK | TWO MARKS | PD THD B | PART NO. | PD THD B | PART NO. | PD THD B | PART NO. |
| .190 -32 | .250 | .200 | .3125-24 | .2640-.2678 | .2640-.2678 | .0063-.0075 | .2876-.2888 | MS17319-010 | .2906-.2918 | MS17319-011 | .2936-.2948 | MS17319-012 | .2936-.2948 | MS17319-021 | .2936-.2948 | MS17319-032 |
| .190 -32 | .312 | .200 | .3125-24 | .3053-.3125 | .2640-.2678 | .0063-.0075 | .2876-.2888 | MS17319-020 | .2906-.2918 | MS17319-021 | .2936-.2948 | MS17319-032 | .2936-.2948 | MS17319-031 | .2936-.2948 | MS17319-032 |
| .190 -32 | .375 | .200 | .3125-24 | .3053-.3125 | .2640-.2678 | .0063-.0075 | .2876-.2888 | MS17319-030 | .2906-.2918 | MS17319-031 | .2936-.2948 | MS17319-032 | .2936-.2948 | MS17319-031 | .2936-.2948 | MS17319-032 |
| .190 -32 | .250 | .200 | .375-24 | .3678-.3750 | .3265-.3303 | .0063-.0075 | .3501-.3513 | MS17319-040 | .3531-.3543 | MS17319-041 | .3561-.3573 | MS17319-042 | .3561-.3573 | MS17319-051 | .3561-.3573 | MS17319-052 |
| .190 -32 | .312 | .200 | .375-24 | .3678-.3750 | .3265-.3303 | .0063-.0075 | .3501-.3513 | MS17319-050 | .3531-.3543 | MS17319-051 | .3561-.3573 | MS17319-062 | .3561-.3573 | MS17319-061 | .3561-.3573 | MS17319-062 |
| .250 -28 | .312 | .260 | .375-24 | .3678-.3750 | .3265-.3303 | .0063-.0075 | .3501-.3513 | MS17319-110 | .3531-.3543 | MS17319-111 | .3561-.3573 | MS17319-112 | .3561-.3573 | MS17319-121 | .3561-.3573 | MS17319-122 |
| .250 -28 | .438 | .260 | .375-24 | .3678-.3750 | .3265-.3303 | .0063-.0075 | .3501-.3513 | MS17319-120 | .3531-.3543 | MS17319-121 | .3561-.3573 | MS17319-132 | .3561-.3573 | MS17319-131 | .3561-.3573 | MS17319-132 |
| .250 -28 | .500 | .260 | .375-24 | .3678-.3750 | .3265-.3303 | .0063-.0075 | .3501-.3513 | MS17319-130 | .3531-.3543 | MS17319-131 | .3561-.3573 | MS17319-142 | .3561-.3573 | MS17319-141 | .3561-.3573 | MS17319-142 |
| .250 -28 | .312 | .260 | .4375-20 | .4294-.4375 | .3790-.3833 | .0075-.0090 | .4073-.4086 | MS17319-150 | .4103-.4116 | MS17319-151 | .4133-.4146 | MS17319-152 | .4133-.4146 | MS17319-161 | .4133-.4146 | MS17319-162 |
| .250 -28 | .375 | .260 | .4375-20 | .4294-.4375 | .3790-.3833 | .0075-.0090 | .4073-.4086 | MS17319-160 | .4103-.4116 | MS17319-161 | .4133-.4146 | MS17319-172 | .4133-.4146 | MS17319-171 | .4133-.4146 | MS17319-172 |
| .250 -28 | .500 | .260 | .4375-20 | .4294-.4375 | .3790-.3833 | .0075-.0090 | .4073-.4086 | MS17319-170 | .4103-.4116 | MS17319-171 | .4133-.4146 | MS17319-182 | .4133-.4146 | MS17319-181 | .4133-.4146 | MS17319-182 |
| .3125-24 | .375 | .320 | .4375-20 | .4294-.4375 | .3790-.3833 | .0075-.0090 | .4073-.4086 | MS17319-210 | .4103-.4116 | MS17319-211 | .4133-.4146 | MS17319-212 | .4133-.4146 | MS17319-221 | .4133-.4146 | MS17319-222 |
| .3125-24 | .500 | .320 | .4375-20 | .4294-.4375 | .3790-.3833 | .0075-.0090 | .4073-.4086 | MS17319-220 | .4103-.4116 | MS17319-221 | .4133-.4146 | MS17319-232 | .4133-.4146 | MS17319-231 | .4133-.4146 | MS17319-232 |
| .3125-24 | .262 | .320 | .4375-20 | .4294-.4375 | .3790-.3833 | .0075-.0090 | .4073-.4086 | MS17319-240 | .4103-.4116 | MS17319-241 | .4133-.4146 | MS17319-242 | .4133-.4146 | MS17319-241 | .4133-.4146 | MS17319-242 |

D = .047 FOR .500-20 OD THD AND SMALLER; .062 FOR .5625-18 OD THD AND LARGER.
 * PREFERRED SIZE.

NOTE: (1) PITCH DIAMETERS OF THREADS SHALL BE CONCENTRIC WITHIN .005 FIR.
 (2) MAJOR DIA AND ROOT RADIUS, IS SAME FOR STD, +.003, AND +.006 OVERSIZE; MINOR DIA INCREASES AS PER INCREMENT OF OVERSIZE.
 (3) MINOR DIA MODIFIED PER MIL-S-8879.

APPROVED 6 Sep 1961 REVISED

MILITARY STANDARD
MS17319 (WEP)
 SHEET 1 OF 2

FED. SUP CLASS
 4730

This standard has been approved by the BUREAU OF NAVAL WEAPONS Department of the NAVY and is mandatory for use by all other military activities are required to employ this standard where suitable.

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| P.A. WEP Other Cust NONE | PROCUREMENT SPECIFICATION NONE | TITLE BUSHING-SCREW, PLAIN (MIL-S-8879 THREAD) | STANDARD | | | | | | | | | | + .003 OVERSIZE | | + .006 OVERSIZE | | | |
|--------------------------------|-----------------------------------|--|----------|-----|------------------|---------|-------------|--------------|-------------|-------------|-------------|-------------|-----------------|-------------|-----------------|----------|-----------|----------|
| | | | THREAD | | | | | (2) THREAD B | | | | | NO MARKS | | ONE MARK | | TWO MARKS | |
| | | | A | L | + .010 - .000 | SIZE | MAJOR DIA | MINOR DIA | ROOT RADIUS | PD THD B | PART NO. | PD THD B | PART NO. | PD THD B | PART NO. | PD THD B | PART NO. | PD THD B |
| | | | 3.125-24 | 375 | 320 | 500 -20 | 4.919-.5000 | 4.415-.4458 | .0075-.0090 | 4.698-.4711 | MS17319-250 | 4.728-.4741 | MS17319-251 | 4.758-.4771 | MS17319-252 | | | |
| | | | 3.125-24 | 438 | 320 | 500 -20 | 4.919-.5000 | 4.415-.4458 | .0075-.0090 | 4.698-.4711 | MS17319-260 | 4.728-.4741 | MS17319-261 | 4.758-.4771 | MS17319-262 | | | |
| | | | 3.125-24 | 562 | 320 | 500 -20 | 4.919-.5000 | 4.415-.4458 | .0075-.0090 | 4.698-.4711 | MS17319-270 | 4.728-.4741 | MS17319-271 | 4.758-.4771 | MS17319-272 | | | |
| | | | 3.125-24 | 562 | 320 | 500 -20 | 4.919-.5000 | 4.415-.4458 | .0075-.0090 | 4.698-.4711 | MS17319-280 | 4.728-.4741 | MS17319-281 | 4.758-.4771 | MS17319-282 | | | |
| | | | 3.75-24 | 438 | 385 | 5625-18 | 5.938-.5625 | 4.975-.5023 | .0083-.0100 | 5.289-.5304 | MS17319-310 | 5.319-.5334 | MS17319-311 | 5.349-.5364 | MS17319-312 | | | |
| | | | 3.75-24 | 562 | 385 | 5625-18 | 5.938-.5625 | 4.975-.5023 | .0083-.0100 | 5.289-.5304 | MS17319-320 | 5.319-.5334 | MS17319-321 | 5.349-.5364 | MS17319-322 | | | |
| | | | 3.75-24 | 562 | 385 | 5625-18 | 5.938-.5625 | 4.975-.5023 | .0083-.0100 | 5.289-.5304 | MS17319-330 | 5.319-.5334 | MS17319-331 | 5.349-.5364 | MS17319-332 | | | |
| | | | 3.75-24 | 625 | 385 | 5625-18 | 5.938-.5625 | 4.975-.5023 | .0083-.0100 | 5.289-.5304 | MS17319-340 | 5.319-.5334 | MS17319-341 | 5.349-.5364 | MS17319-342 | | | |
| | | | 4.375-20 | 500 | 450 | 625-18 | 6.163-.6250 | 5.600-.5648 | .0083-.0100 | 5.914-.5929 | MS17319-410 | 5.944-.5959 | MS17319-411 | 5.974-.5989 | MS17319-412 | | | |
| | | | 4.375-20 | 562 | 450 | 625-18 | 6.163-.6250 | 5.600-.5648 | .0083-.0100 | 5.914-.5929 | MS17319-420 | 5.944-.5959 | MS17319-421 | 5.974-.5989 | MS17319-422 | | | |
| | | | 4.375-20 | 688 | 450 | 625-18 | 6.163-.6250 | 5.600-.5648 | .0083-.0100 | 5.914-.5929 | MS17319-430 | 5.944-.5959 | MS17319-431 | 5.974-.5989 | MS17319-432 | | | |
| | | | 4.375-20 | 688 | 450 | 625-18 | 6.163-.6250 | 5.600-.5648 | .0083-.0100 | 5.914-.5929 | MS17319-440 | 5.944-.5959 | MS17319-441 | 5.974-.5989 | MS17319-442 | | | |
| | | | 5.00-20 | 625 | 510 | 6875-16 | 6.781-.6875 | 6.141-.6195 | .0094-.0113 | 6.495-.6511 | MS17319-510 | 6.525-.6541 | MS17319-511 | 6.555-.6571 | MS17319-512 | | | |
| | | | 5.00-20 | 688 | 510 | 6875-16 | 6.781-.6875 | 6.141-.6195 | .0094-.0113 | 6.495-.6511 | MS17319-520 | 6.525-.6541 | MS17319-521 | 6.555-.6571 | MS17319-522 | | | |
| | | | 5.00-20 | 750 | 510 | 6875-16 | 6.781-.6875 | 6.141-.6195 | .0094-.0113 | 6.495-.6511 | MS17319-530 | 6.525-.6541 | MS17319-531 | 6.555-.6571 | MS17319-532 | | | |
| | | | 5.625-18 | 688 | 570 | 750-16 | 7.406-.7500 | 6.766-.6820 | .0094-.0113 | 7.120-.7136 | MS17319-610 | 7.150-.7166 | MS17319-611 | 7.180-.7196 | MS17319-612 | | | |
| | | | 5.625-18 | 750 | 570 | 750-16 | 7.406-.7500 | 6.766-.6820 | .0094-.0113 | 7.120-.7136 | MS17319-620 | 7.150-.7166 | MS17319-621 | 7.180-.7196 | MS17319-622 | | | |
| | | | 5.625-18 | 812 | 570 | 750-16 | 7.406-.7500 | 6.766-.6820 | .0094-.0113 | 7.120-.7136 | MS17319-630 | 7.150-.7166 | MS17319-631 | 7.180-.7196 | MS17319-632 | | | |
| | | | 6.25-18 | 750 | 635 | 8125-16 | 8.031-.8125 | 7.393-.7449 | .0094-.0113 | 7.747-.7765 | MS17319-710 | 7.777-.7795 | MS17319-711 | 7.807-.7825 | MS17319-712 | | | |
| | | | 6.25-18 | 812 | 635 | 8125-16 | 8.031-.8125 | 7.393-.7449 | .0094-.0113 | 7.747-.7765 | MS17319-720 | 7.777-.7795 | MS17319-721 | 7.807-.7825 | MS17319-722 | | | |
| | | | 6.25-18 | 875 | 635 | 8125-16 | 8.031-.8125 | 7.393-.7449 | .0094-.0113 | 7.747-.7765 | MS17319-730 | 7.777-.7795 | MS17319-731 | 7.807-.7825 | MS17319-732 | | | |

FED. SUP CLASS
4730

MATERIAL: STEEL AMS 6322
 HARDNESS: ROCKWELL C26-32 PARTS MUST BE HARDENED (OIL QUENCHED) AND TEMPERED BEFORE THREADING.
 FINISH: CADMIUM PLATE AMS 2400.
 PARTS SUBJECT TO MAGNETIC INSPECTION PER AMS 2640.
 SURFACE ROUGHNESS: MIL-STD-10. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES.
 BREAK SHARP EDGES .003-.015 UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED: TOLERANCES; LINEAR DIMENSIONS ±.010, ANGULAR DIMENSIONS ±2°.
 DO NOT USE UNASSIGNED PART NUMBERS.

APPROVED 6 Sep 1961 REVISED

MILITARY STANDARD
MS 17319 (WEP)
 SHEET 2 OF 2