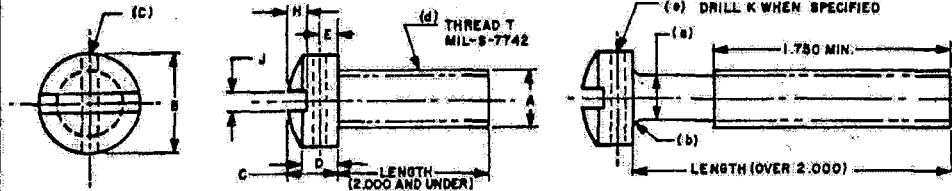


NAVAER 1080A (Rev. 5-51)

FSC 5305



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 hereby 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 as an implication or otherwise in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

THREAD T UNC-2	A MAX DIA	B DIA		C		D		E REF	H		J		K DRILL + .004 - .001
		MAX	MIN	MAX	MIN	MAX	MIN		MAX	MIN	MAX	MIN	
NO. 2-56	.0860	.140	.124	.083	.070	.062	.055	.026	.030	.022	.031	.023	.031
NO. 3-48	.0990	.161	.145	.095	.082	.070	.064	.030	.034	.026	.035	.027	.037
NO. 4-40	.1120	.183	.166	.107	.094	.079	.072	.035	.038	.030	.039	.031	.037
NO. 5-40	.1250	.205	.187	.120	.106	.086	.081	.038	.042	.033	.043	.035	.046
NO. 6-32	.1380	.226	.208	.132	.118	.096	.089	.043	.045	.035	.048	.039	.046
NO. 8-32	.1640	.270	.250	.156	.141	.113	.106	.043	.065	.054	.054	.045	.046
NO. 10-24	.1900	.313	.292	.180	.165	.130	.123	.043	.075	.064	.060	.050	.046
1/4-20	.2500	.414	.389	.237	.219	.170	.161	.062	.102	.087	.075	.064	.062
5/16-18	.3125	.518	.490	.295	.276	.211	.201	.078	.130	.110	.084	.072	.070
3/8-16	.3750	.622	.590	.355	.333	.253	.242	.094	.154	.134	.094	.081	.070

DASH NUMBERS FOR UNDRILLED CARBON STEEL SCREWS

LENGTH	NO. 2-56	NO. 3-48	NO. 4-40	NO. 5-40	NO. 6-32	NO. 8-32	NO. 10-24	1/4-20	5/16-18	3/8-16
3/16	2-3	3-3	4-3	5-3	6-3					
1/4	2-4	3-4	4-4	5-4	6-4		10-4			
5/16	2-5	3-5	4-5	5-5	6-5	8-5	10-5			
3/8	2-6	3-6	4-6	5-6	6-6	8-6	10-6	416-6	516-6	616-6
7/16	2-7	3-7	4-7	5-7	6-7	8-7	10-7	416-7	516-7	616-7
1/2	2-8	3-8	4-8	5-8	6-8	8-8	10-8	416-8	516-8	616-8
5/8	2-10	3-10	4-10	5-10	6-10	8-10	10-10	416-10	516-10	616-10
3/4	2-12	3-12	4-12	5-12	6-12	8-12	10-12	416-12	516-12	616-12
7/8					6-14	8-14	10-14	416-14	516-14	616-14
1					6-16	8-16	10-16	416-16	516-16	616-16
1-1/8					6-18	8-18	10-18	416-18	516-18	616-18
1-1/4					6-20	8-20	10-20	416-20	516-20	616-20
1-3/8					6-22	8-22	10-22	416-22	516-22	616-22
1-1/2					6-24	8-24	10-24	416-24	516-24	616-24
1-3/4					6-28	8-28	10-28	416-28	516-28	616-28
2					6-32	8-32	10-32	416-32	516-32	616-32
2-1/2							10-40	416-40	516-40	616-40
3							10-48	416-48	516-48	616-48

- (a) THE DIAMETER OF THE UNTHREADED PORTION SHALL NOT BE LESS THAN THE MINIMUM PITCH DIAMETER NOR MORE THAN THE MAXIMUM MAJOR DIAMETER OF THE THREAD.
- (b) THE RADIUS OF THE FILLET AT THE BASE OF THE HEAD SHALL NOT EXCEED ONE-HALF THE PITCH OF THE SCREW THREAD.
- (c) DRILLED HOLE TO BE ON CENTER APPROXIMATELY AT RIGHT ANGLES TO THE SLOT BUT MUST NOT BREAK THROUGH THE BASE OR TOP (SPHERICAL PORTION) OF THE HEAD.
- (d) FOR MACHINE SCREWS 7 INCHES LONG AND SHORTER, COMPLETE THREADS SHALL EXTEND TO WITHIN 2 THREADS OF THE BEARING SURFACE OF THE HEAD OR CLOSER IF PRACTICABLE. SCREWS OF LONGER LENGTH SHALL HAVE A MINIMUM COMPLETE THREAD LENGTH OF 1-3/4 INCHES.
- (e) ALL FILLISTER HEAD SCREWS WITH UNDRILLED HEADS INACTIVE FOR DESIGN AFTER 12 MAY 1950.
- (f) FOR DEFINITION AND APPLICATION OF DRAWING STATUS NOTES, SEE DOD-D-1000.
- (g) REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT AN INSPECTION REQUIREMENT.
- (h) NOT PREFERRED FOR AIRFRAME USE.

(i) MATERIAL: (2) CARBON STEEL, QQ-S-637 TYPE FS1010, 60,000 PSI MINIMUM TENSILE STRENGTH OR OTHER STEEL MEETING THE SAME PHYSICAL REQUIREMENTS.
CORROSION RESISTANT STEEL, QQ-C-743, CLASS IV, MIL-C-7720, COMPOSITION TM OR D FOR GOLD SPUTTERING PROCESS, OR NON-MAGNETIC EQUIVALENT.
(1) BRASS, COMMERCIAL, 35,000 PSI MINIMUM ULTIMATE TENSILE STRENGTH.

(j) FINISH: CARBON STEEL, CADMIUM PLATE, QQ-P-416, TYPE 1, CLASS 3.
CORROSION RESISTANT STEEL, PASSIVATE.
BRASS, NONE.

PLAIN DASH NUMBER INDICATES CARBON STEEL.
ADD A BEFORE FIRST DASH NUMBER FOR DRILLED HEAD.
ADD B BEFORE FIRST DASH NUMBER FOR BRASS.
ADD C BEFORE FIRST DASH NUMBER FOR CORROSION RESISTANT STEEL. NOT TO BE USED FOR NEW DESIGN.
ADD D BEFORE FIRST DASH NUMBER FOR CORROSION RESISTANT STEEL.

EXAMPLES OF PART NUMBERS: (a) AN5004-8 - NO. 4-32 UNDRILLED CARBON STEEL SCREW, 1/2 INCH LONG.
AN500A6-8 - NO. 6-32 DRILLED CARBON STEEL SCREW, 1/2 INCH LONG.
AN500AB6-8 - NO. 6-32 DRILLED BRASS SCREW, 1/2 INCH LONG.
(e) AN500C6-8 - NO. 6-32 UNDRILLED BRASS SCREW, 1/2 INCH LONG.
AN500AC6-8 - NO. 6-32 DRILLED CORROSION RESISTANT STEEL SCREW, 1/2 INCH LONG.
AN500AD6-8 - NO. 6-32 DRILLED CORROSION RESISTANT STEEL SCREW, 1/2 INCH LONG.

SCREWS SHALL BE FREE OF ALL LOOSE OR HANGING BURRS OR SLIVERS WHICH MIGHT BECOME DISLOODED UNDER USAGE.
(b) CANCELED AFTER 24 MAY 1967. USE M336273 OR M336275.
(c) ENTIRE STANDARD INACTIVE FOR NEW DESIGN AFTER 24 MAY 1967. USE M555265, M336273, OR M336275.

(1) (2) INTERCHANGEABILITY RELATIONSHIP: AN500D SCREWS CAN UNIVERSALLY REPLACE AN500C SCREWS OF LIKE THREAD SIZE AND LENGTH; BUT THE AN500C SCREWS CANNOT UNIVERSALLY REPLACE THE AN500D SCREWS. FOR M336273 OR M336275 PARTS THAT CAN BE SUBSTITUTED FOR AN500 PARTS, SEE INTERCHANGEABILITY TABLES OF M336273 OR M336275. PARTS MARKED WITH (3) HAVE NO SUBSTITUTE PARTS.
(7) REINSTATED AS OF 12 NOVEMBER 1980.

PROCUREMENT SPECIFICATION	AIR FORCE-NAVY AERONAUTICAL STANDARD	AN500
FF-5-92	SCREW, MACHINE, FILLISTER HEAD, COARSE THREAD	SHEET 1 OF 1

SUPERSEDES USAF DRAWING 500 AND SUPERSEDES NAF DRAWING 1164 FOR BRASS ONLY

12 NOV 80
26 MAY 67
12 APR 46
REVISED
APPROVED