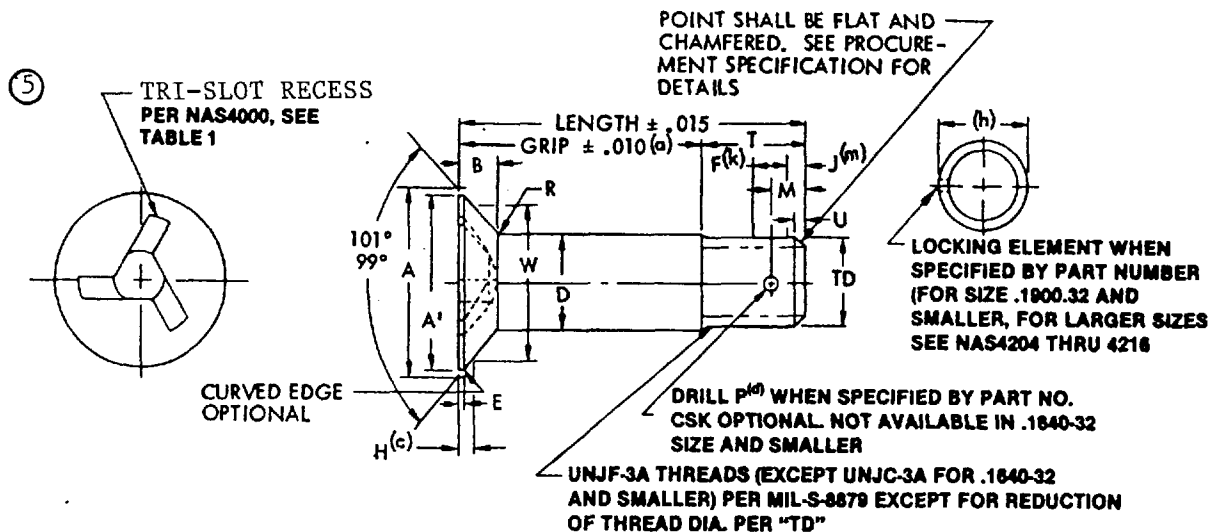


NATIONAL AEROSPACE STANDARD

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1725 DE SALES STREET, N.W., WASHINGTON, D. C. 20036

© COPYRIGHT 1996 AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC. ALL RIGHTS RESERVED

FED. SUP CLASS
5306



Head marking shall be depressed (.010 Max) and arranged as follows:

- | | |
|---------------|--|
| First Sector | <ul style="list-style-type: none"> Mark with basic number ("NAS" optional), except mark .1120-40 size with "4", .1380-32 size with "8", .1640-32 size with "8", and (optional) .1900-32 size with "10". These sizes also to be marked "C" for A286. |
| Second Sector | <ul style="list-style-type: none"> Mark with manufacturer's symbol (symbol location optional in any sector), grip dash number and "D", "L" or "P" when applicable.(1) "D" identifies bolt with drilled shank. "L" identifies bolt with optional locking element. "P" identifies bolt with patch type locking element only. |
| Third Sector | <ul style="list-style-type: none"> Mark with recess dash number, encircled. Recess number should be approximately 25% larger than other numerals in head marking. |

LIST OF CURRENT SHEETS

SHEET NO.	REV. NO.
1	5
2	4
3	5
4	3
5	1
6	4

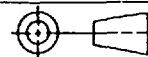
**INACTIVE FOR NEW DESIGN
AFTER JANUARY 1, 1986
NO SUPERSEDING STANDARD**

⑤ FOR DESCRIPTION OF STATUS NOTES SEE NAS380

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST DATE OF APPROVAL SHOWN HEREON.

CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE

THIRD
ANGLE
PROJECTION



PROCUREMENT SPECIFICATION

TITLE

⑤

**BOLT, 100⁰ HEAD, TRI-SLOT RECESS,
CLOSE TOLERANCE, A286 CRES, SHORT THREAD,
SELF-LOCKING AND NONLOCKING**

CLASSIFICATION
STANDARD PART

**NOTED ON
SHEET 3**

NAS 4500 THEU 4516
SH 1 OF 6

SH 1 OF 6

APPROVAL DATE	REVISION	18 March 1970	15 Feb 1972	17 Dec. 1979	15 August 1985	29 March 1996
Dec 1988	1					

NATIONAL AEROSPACE STANDARD

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1725 DE SALES STREET, N.W., WASHINGTON, D. C. 20036

© COPYRIGHT 1996 AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC. ALL RIGHTS RESERVED

TABLE I DIMENSIONS

BASIC NUMBER	NOM THREAD SIZE	A DIA MAX (b)	A' ABSOL- UTE MIN DIA (b)	B MAX (b)	D DIA, UNPLATED		D DIA, Plated or Coated				TRI-SLOT KEYWAY NUMBER (4)	H GAGE PROTRUSION (c)	
					MAX	MIN	BEFORE (4)		AFTER			NOM	±TOL
							MAX	MIN	MAX	MIN			
NAS4500	.1120-40	.226	.193	.044	.1115	.1110	.1187	.1191	.1115	.1105	NAS4000- 2	.0202	.0010
4501	.1380-32	.280	.248	.061	.1375	.1370	.1387	.1381	.1375	.1365	3	.0232	.0011
4502	.1640-32	.331	.296	.072	.1635	.1630	.1627	.1621	.1635	.1625	4	.0186	.0012
4503	.1900-32	.381	.338	.082	.1895	.1890	.1887	.1881	.1895	.1885	5	.0210	.0013
4503J	.1900-32	.381	.338	.082	.1895	.1890	.1887	.1881	.1895	.1885	4J	.0210	.0013
4504	.2500-28	.508	.456	.111	.2495	.2490	.2487	.2481	.2495	.2485	8	.0299	.0015
4505	.3125-24	.635	.575	.138	.3120	.3115	.3112	.3106	.3120	.3110	7	.0354	.0017
4506	.3750-24	.763	.692	.166	.3745	.3740	.3737	.3731	.3745	.3735	8	.0414	.0019
4507	.4375-20	.889	.810	.193	.4370	.4365	.4362	.4356	.4370	.4360	9	.0435	.0021
4508	.5000-20	1.016	.928	.221	.4995	.4990	.4987	.4981	.4995	.4985	10	.0498	.0023
4509	.5625-18	1.144	1.047	.249	.5615	.5610	.5607	.5601	.5615	.5605	11	.0558	.0025
4510	.6250-18	1.276	1.169	.279	.6240	.6235	.6232	.6226	.6240	.6230	12	.0649	.0027
4512	.7500-16	1.531	1.406	.334	.7490	.7482	.7482	.7476	.7490	.7480	13	.0738	.0031
4514	.8750-14	1.786	1.644	.390	.8740	.8735	.8732	.8726	.8740	.8730	14	.0840	.0035
4516	1.0000-12	2.043	1.882	.446	.9990	.9985	.9982	.9976	.9990	.9980	15	.0950	.0039

**The last two digits of the basic number designate the size. See Sheet 3 for "D", "L", "P" and "U" codes. See Sheets 4 and 5 for grip dash numbers.

(a), (b) etc: See Notes on Sheet 3.

TABLE I DIMENSIONS (CONTINUED)

BASIC NUMBER	E MAX	F ^(k)	J ^(m)	M ± .010	P ^(d) + .010 - .000	R		T ^(e) REF	TD DIA		U MAX	W GAGE DIA + .0002 - .0000	Y ⁽ⁿ⁾	Z ^(o)
						RAD			MAX	MIN				
						MAX	MIN							
NAS4500	.010	.125	.075	-	-	.012	.005	.238	.1085	.1085	.031	.1740	.0045	.0040
4501	.010	.158	.094	-	-	.012	.005	.278	.1340	.1315	.039	.2208	.0045	.0040
4502	.012	.158	.094	-	-	.020	.010	.323	.1595	.1570	.039	.2830	.0045	.0040
4503	.015	.158	.094	.164	.070	.020	.010	.323	.184	.181	.039	.3270	.0045	.0040
4503J	.015	.158	.094	.164	.070	.020	.010	.323	.184	.181	.039	.3270	.0045	.0040
4504	.018	-	-	.170	.078	.020	.010	.370	.244	.241	.045	.4318	.0045	.0030
4505	.021	-	-	.182	.078	.025	.010	.438	.306	.302	.052	.5449	.0045	.0030
4506	.025	-	-	.183	.108	.030	.015	.454	.368	.364	.052	.6580	.0045	.0025
4507	.028	-	-	.199	.108	.030	.015	.528	.431	.426	.062	.7782	.006	.0025
4508	.031	-	-	.198	.108	.030	.015	.528	.493	.488	.062	.8900	.006	.0020
4509	.034	-	-	.207	.141	.030	.015	.594	.555	.550	.068	1.0026	.006	.0020
4510	.038	-	-	.207	.141	.030	.015	.626	.618	.612	.068	1.1122	.006	.0020
4512	.044	-	-	.222	.141	.030	.015	.666	.743	.737	.078	1.3438	.006	.0020
4514	.050	-	-	.241	.141	.030	.015	.759	.868	.861	.089	1.5730	.009	.0020
4516	.057	-	-	.264	.141	.030	.015	.895	.993	.986	.104	1.8024	.009	.0020

(c), (d), etc: See Notes on Sheet 3.

INACTIVE FOR NEW DESIGN
AFTER JANUARY 1, 1986
NO SUPERSEDING STANDARD

NAS 4500-4516
SH 2

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR PROVIDE ANY WARRANTY OR REPRESENTATION FOR THE FITNESS OF ITEMS PRODUCED UNDER NATIONAL AEROSPACE STANDARDS. AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE ABILITY OF ITEMS FOR ANY PARTICULAR APPLICATION, OR (2) THE LICENSEE'S ABILITY TO OBTAIN NECESSARY PATENT RIGHTS. Licensee= www.sepana.ir/5991803002, User=sam, albert

Not for Resale, 01/09/2016 01:06:42 MST