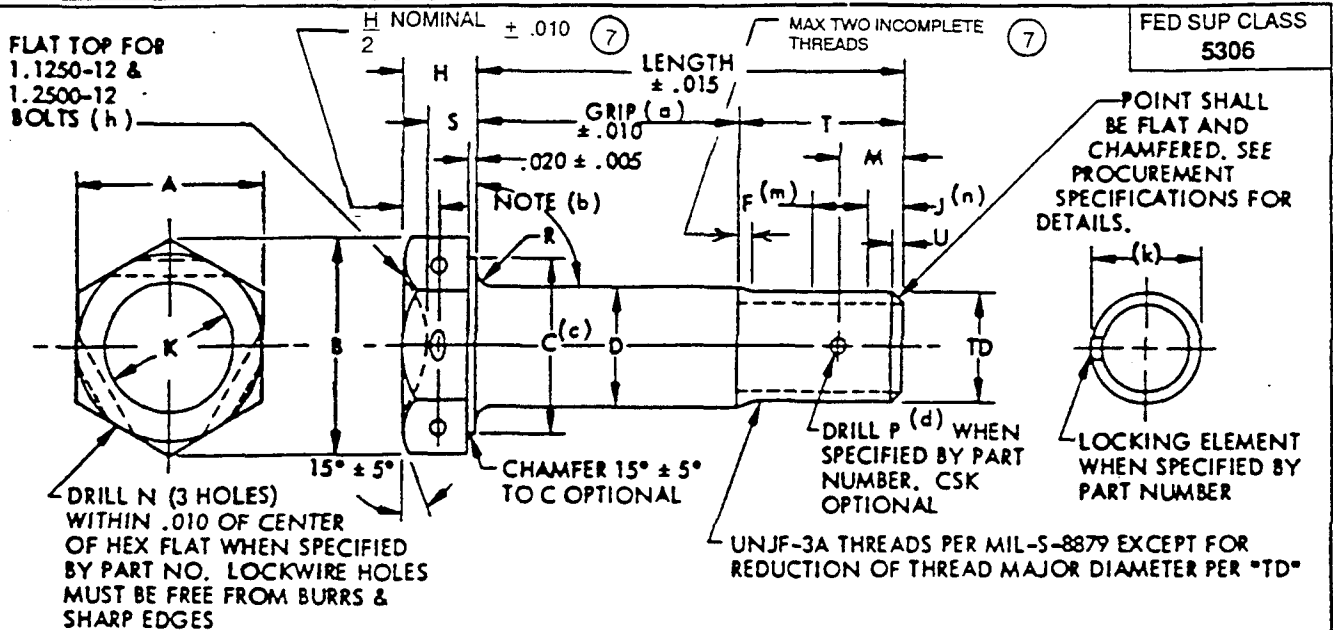




HEAD MARKING: Basic number plus grip dash number plus "D",
"L" or "P", when applicable, plus manufacturer's symbol,
Raised or depressed .010 max. Arrangement optional.
"D" identifies bolt with drilled shank.
"L" identifies bolt with optional locking element.
"P" identifies bolt with patch type locking element only.

TABLE I DIMENSIONS (CONTINUED ON SHEET 2)

BASIC NUMBER	THREAD UNJF-3A	A		B MIN	C DIA MIN (c)	D DIAMETER (d)						F (m)	H +.015 -.000
						BEFORE CHROME PLATE		BEFORE CAD PLATE		AFTER PLATE			
		MAX	MIN			MAX	MIN	MAX	MIN	MAX	MIN		
NAS6603	.1900-32	.376	.367	.410	.335	.1850	.1845	.1885	.1879	.1895	.1885	.156	.110
NAS6604	.2500-28	.439	.429	.480	.398	.2450	.2445	.2485	.2479	.2495	.2485	.178	.125
NAS6605	.3125-24	.502	.492	.552	.460	.3075	.3070	.3110	.3104	.3120	.3110	.208	.156
NAS6606	.3750-24	.564	.554	.623	.523	.3700	.3695	.3735	.3729	.3745	.3735	.208	.188
NAS6607	.4375-20	.690	.678	.764	.648	.4325	.4320	.4360	.4354	.4370	.4360	.250	.219
NAS6608	.5000-20	.752	.741	.836	.710	.4950	.4945	.4985	.4979	.4995	.4985	.250	.250
NAS6609	.5625-18	.877	.865	.978	.835	.5570	.5565	.5605	.5599	.5615	.5605	.278	.281
NAS6610	.6250-18	.940	.928	1.050	.898	.6195	.6190	.6230	.6224	.6240	.6230	.278	.312
NAS6612	.7500-16	1.065	1.052	1.191	1.023	.7445	.7440	.7480	.7474	.7490	.7480	.312	.375
NAS6614	.8750-14	1.252	1.239	1.405	1.210	.8695	.8690	.8730	.8724	.8740	.8730	.357	.438
NAS6616	1.0000-12	1.440	1.427	1.619	1.398	.9945	.9940	.9980	.9974	.9990	.9980	.416	.500
NAS6618	1.1250-12	1.627	1.614	1.832	1.585	1.1195	1.1185	1.1230	1.1219	1.1240	1.1225	.416	.562
NAS6620	1.2500-12	1.814	1.801	2.046	1.772	1.2445	1.2435	1.2480	1.2469	1.2490	1.2475	.416	.625

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

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

LIST OF CURRENT SHEETS

SHT.	REV.
1	7
2	5
3	5
4	3
5	1
6	4

CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE



PROCUREMENT
SPECIFICATION

TITLE

CLASSIFICATION
STANDARD PART

NOTED ON
SHEET 3

BOLT, HEX HEAD, CLOSE TOLERANCE, ALLOY STEEL,
LONG THREAD, SELF-LOCKING AND NONLOCKING

NAS6603 THRU 6620
SHEET 1 OF 6

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY CONFORMANCE OF ITEMS PROCURED UNDER NATIONAL AEROSPACE STANDARDS. AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE SUITABILITY OF ITEMS FOR ANY PARTICULAR APPLICATION, OR (2) THE EXISTENCE OF OR APPLICABILITY THERETO OF PATENT OR TRADEMARK RIGHTS.



TABLE I DIMENSIONS (CONTINUED)

BASIC NUMBER	J (n)	K DIA ±.010	M ±.010	N DIA +.010 -.000	P(d) DIA +.010 -.000	R RAD		S +.015 -.000	T(e) REF	U MAX	TD DIA	
						MAX	MIN				MAX	MIN
NAS6603	.094	.19	.164	.046	.070	.020	.010	.073	.345	.039	.184	.181
NAS6604	.107	.25	.178	.046	.076	.020	.010	.053	.425	.045	.244	.241
NAS6605	.125	.31	.181	.070	.076	.020	.010	.104	.469	.052	.306	.302
NAS6606	.125	.38	.197	.070	.106	.025	.015	.125	.578	.052	.368	.364
NAS6607	.150	.44	.201	.070	.106	.025	.015	.146	.694	.062	.431	.426
NAS6608	.150	.50	.216	.070	.106	.030	.020	.167	.735	.062	.493	.488
NAS6609	.167	.56	.218	.070	.141	.035	.020	.188	.840	.068	.555	.550
NAS6610	.167	.62	.249	.070	.141	.040	.025	.208	.902	.068	.618	.612
NAS6612	.188	.75	.252	.070	.141	.045	.030	.250	1.041	.078	.743	.737
NAS6614	.214	.88	.257	.070	.141	.050	.035	.292	1.184	.089	.868	.861
NAS6616	.250	1.00	.264	.070	.141	.060	.045	.333	1.309	.104	.993	.986
NAS6618	.250	(h)	.357	.070	.141	.070	.055	(h)	1.458	.104	1.118	1.111
NAS6620	.250	(h)	.389	.070	.141	.075	.060	(h)	1.646	.104	1.243	1.236

TABLE I DIMENSIONS (CONTINUED)

NOM SIZE	INSPECTION DATA		
	X(f)	Y(f)	Z(g)
.1900	.003	.0045	.0040
.2500	.006	.0045	.0030
.3125	.008	.0045	.0030
.3750	.009	.0045	.0025
.4375	.010	.006	.0025
.5000	.011	.006	.0020
.5625	.012	.006	.0020
.6250	.015	.006	.0020
.7500	.018	.009	.0020
.8750	.020	.009	.0020
1.0000	.022	.009	.0020
1.1250	.025	.009	.0020
1.2500	.028	.009	.0020

MATERIAL: ALLOY STEEL - 4140 (UNS G41400) per MIL-S-5626, 4340 (UNS G43400) per AMS6415, E4340 (UNS G43406) per MIL-S-5000 or 8740 (UNS G87400) per MIL-S-6049. Locking element - plastic per MIL-F-18240 and QPL18240. (5)

HEAT TREAT: Develop basic material properties as follows, with controls per MIL-H-6875. 160-180 KSI Ft; 95 KSI min ultimate shear per MIL-H-6875. (5)

FINISH: Cadmium plate per QQ-P-416, Type II, Class 2. ~~Parts plated to class 2 may be used until stock depleted.~~ Embrittlement requirements per NAS4002.

CHROMIUM PLATED BOLTS - Chromium plate per QQ-C-320, class 2 on shank only. All other surfaces cadmium plated. No chromium within .020 of line of tangency of head-to-shank fillet. Chromium in thread runout permitted. Chromium plated bolts no available with grip dash number 1 or number 2.

(d), (e), ETC: SEE NOTES ON SHEET 3.

NAS6603 thru 6620
SHEET 2



AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1250 EYE STREET, N.W.
WASHINGTON, D.C. 20008

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.

CODE: Basic part number = nonlocking bolt with undrilled shank and undrilled head, cadmium plated.
Add "C" after basic number for chromium plated bolts.
(5) Add "D" after basic number for drilled shank bolts. Do not use with "L" or "P" code. (r)
(5) Add "H" after basic number for bolt with drilled head. ~~Do not use with "L" or "P" code.~~
Add "L" after basic number for self-locking bolt with optional locking element: See procurement spec below. Do not use "L" with "D", "H" or "P" code.
Add "P" after basic number for self-locking bolt with patch type locking element only; see procurement spec below. Do not use "P" with "D", "H" or "L" code.
When multiple letter codes are used, sequence must be in alphabetical order.
See sheets 4 and 5 for tabulations of grip and length dimensions.

EXAMPLES OF PART NUMBERS: (See sheet 6 for oversize bolts).

NAS6604-10 = Bolt, .2500-28 thread, .625 grip, undrilled, nonlocking, cadmium plated.
NAS6604D10 = Bolt, .2500-28 thread, .625 grip, drilled shank, undrilled head, nonlocking, cadmium plated.
NAS6604H10 = Bolt, .2500-28 thread, .625 grip, drilled head, undrilled shank, nonlocking, cadmium plated.
NAS6604DH10 = Bolt, .2500-28 thread, .625 grip, drilled shank, drilled head, nonlocking, cadmium plated.
NAS6604L10 = Bolt, .2500-28 thread, .625 grip, undrilled, self-locking (optional type; see procurement spec below), cadmium plated.
NAS6604P10 = Bolt, .2500-28 thread, .625 grip, undrilled, self-locking (patch type; see procurement spec below), cadmium plated.
NAS6604C10 = Bolt, .2500-28 thread, .625 grip, undrilled, nonlocking, chromium plated.

- NOTES:** (a) Grip length: From under side of head to end of full cylindrical portion of shank.
(5) (b) Bearing surface squareness: Within .003 FIM with shank.
(c) Washer face dia: Max not to exceed actual width across flats; min as tabulated in table 1.
(d) Cotter pin hole centerline: Within .010 and normal within 2° of bolt centerline.
(e) Reference dimensions are for design purposes only and are not an inspection requirement.
(5) (f) Concentricity: "C" and "D" diameters within "X" values FIM. "D" and thread pitch dia. within "Y" values FIM.
(5) (g) Shank straightness: Within "Z" values FIM per inch of length.
(h) Top of head shall be flat on the 1.1250-12 and 1.2500-12 size bolts.
(k) Protrusion of locking element shall be controlled so that it will pass freely, or with finger pressure, through a ring gage with diameter of .010 (+.001, -.000) greater than maximum major diameter of bolt thread.
(m) "F" min (5 thread pitches) = Region of minimum engagement with female thread required to meet MIL-F-18240 requirements. Locking element within "F" region must develop required torque when tested per MIL-F-18240.
(n) For ease in starting, locking element shall not be effective in "J" area (3 thread pitches).
(5) (p) ~~Plating thickness minimum to be .0003 inch per QQ-P-416, Class 2~~

NOTES CONTINUED ON SHEET 4.

SURFACE TEXTURE: (AA MAX PER ANS/ASME B46.1) "D" DIA. HEAD-TO-SHANK FILLET RADIUS BEARING SURFACE OF HEAD, THREAD FLANKS AND THREAD ROOT 32; OTHER SURFACES 125.

Dimensions to be met after plating, except as noted on sheets 1 and 6.

Dimensions in inches.

PROCUREMENT SPECIFICATION: NAS4002, except as noted. Cold work of head to shank fillet is not required for NAS6603 bolts. Locking element for self-locking bolts: Per MS15981 and MIL-F-18240, any type or configuration including patch type, is optional when "L" code is specified. Patch type locking element (with no metal removed) is required when "P" code is specified. Locking element must be supplied by a qualified source listed in QPL18240 or approved for listing in QPL18240. Shipping notice should identify supplier of bolt and locking element separately.

**NAS6603 thru 6620
SHEET 3**

TABLE II GRIP AND LENGTH DIMENSIONS (CONTINUED ON SHEET 5)

GRIP DASH NO.	GRIP ±.010	LENGTHS ±.015 (SEE NOTES BELOW)						
		BASIC NUMBER AND THREAD SIZE						
		NAS6603 .1900-32	NAS6604 .2500-28	NAS6605 .3125-24	NAS6606 .3750-24	NAS6607 .4375-20	NAS6608 .5000-20	NAS6609 .5625-18
1	.062	.407	.487	.531	.640	.756	.797	.902
2	.125	.470	.550	.594	.703	.819	.860	.965
3	.188	.533	.613	.657	.766	.882	.923	1.028
4	.250	.595	.675	.719	.828	.944	.985	1.090
5	.312	.657	.737	.781	.890	1.006	1.047	1.152
6	.375	.720	.800	.844	.953	1.069	1.110	1.215
7	.438	.783	.863	.907	1.016	1.132	1.173	1.278
8	.500	.845	.925	.969	1.078	1.194	1.235	1.340
9	.562	.907	.987	1.031	1.140	1.256	1.297	1.402
10	.625	.970	1.050	1.094	1.203	1.319	1.360	1.465
11	.688	1.033	1.113	1.157	1.266	1.382	1.423	1.528
12	.750	1.095	1.175	1.219	1.328	1.444	1.485	1.590
13	.812	1.157	1.237	1.281	1.390	1.506	1.547	1.652
14	.875	1.220	1.300	1.344	1.453	1.569	1.610	1.715
15	.938	1.283	1.363	1.407	1.516	1.632	1.673	1.778
16	1.000	1.345	1.425	1.469	1.578	1.694	1.735	1.840
17	1.062	1.407	1.487	1.531	1.640	1.756	1.797	1.902
18	1.125	1.470	1.550	1.594	1.703	1.819	1.860	1.965
19	1.188	1.533	1.613	1.657	1.766	1.882	1.923	2.028
20	1.250	1.595	1.675	1.719	1.828	1.944	1.985	2.090
21	1.312	1.657	1.737	1.781	1.890	2.006	2.047	2.152
22	1.375	1.720	1.800	1.844	1.953	2.069	2.110	2.215
23	1.438	1.783	1.863	1.907	2.016	2.132	2.173	2.278
24	1.500	1.845	1.925	1.969	2.078	2.194	2.235	2.340
25	1.562	1.907	1.987	2.031	2.140	2.256	2.297	2.402
26	1.625	1.970	2.050	2.094	2.203	2.319	2.360	2.465
27	1.688	2.033	2.113	2.157	2.266	2.382	2.423	2.528
28	1.750	2.095	2.175	2.219	2.328	2.444	2.485	2.590
29	1.812	2.157	2.237	2.281	2.390	2.506	2.547	2.652
30	1.875	2.220	2.300	2.344	2.453	2.569	2.610	2.715
31	1.938	2.283	2.363	2.407	2.516	2.632	2.673	2.778
32	2.000	2.345	2.425	2.469	2.578	2.694	2.735	2.840
34	2.125	2.470	2.550	2.594	2.703	2.819	2.860	2.965
36	2.250	2.595	2.675	2.719	2.828	2.944	2.985	3.090
38	2.375	2.720	2.800	2.844	2.953	3.069	3.110	3.215
40	2.500	2.845	2.925	2.969	3.078	3.194	3.235	3.340
42	2.625	2.970	3.050	3.094	3.203	3.319	3.360	3.465
44	2.750	3.095	3.175	3.219	3.328	3.444	3.485	3.590
46	2.875	3.220	3.300	3.344	3.453	3.569	3.610	3.715
48	3.000	3.345	3.425	3.469	3.578	3.694	3.735	3.840
50	3.125	3.470	3.550	3.594	3.703	3.819	3.860	3.965
52	3.250	3.595	3.675	3.719	3.828	3.944	3.985	4.090
54	3.375	3.720	3.800	3.844	3.953	4.069	4.110	4.215
56	3.500	3.845	3.925	3.969	4.078	4.194	4.235	4.340
58	3.625	3.970	4.050	4.094	4.203	4.319	4.360	4.465
60	3.750	4.095	4.175	4.219	4.328	4.444	4.485	4.590
62	3.875	4.220	4.300	4.344	4.453	4.569	4.610	4.715
64	4.000	4.345	4.425	4.469	4.578	4.694	4.735	4.840

INTERMEDIATE AND LONGER LENGTHS MAY BE SPECIFIED BY USE OF WHOLE GRIP DASH NUMBERS ONLY.
NOMINAL GRIP DIMENSION EQUALS GRIP DASH NUMBER TIMES .0625 (ROUNDED TO 3 DECIMAL PLACES).
NOMINAL LENGTH EQUALS NOMINAL GRIP PLUS "T" (SEE SHEET 2).

③ NOTES CONTINUED FROM SHEET 3.

③ (r) If required, tensile testing of bolts requiring cross-drilled threads shall be performed prior to drilling and the application of plating and/or coatings. When bolts have been drilled, strength may be verified by shear testing, in lieu of tensile testing, in accordance with MIL-STD-1312. Users should be aware that fasteners with cross-drilled threads may exhibit a reduction in tensile strength.

NAS 6603 THRU 6620
SHEET 4

TABLE II GRIP AND LENGTH DIMENSIONS (CONTINUED)

GRIP DASH NO.	GRIP = .010	LENGTH = .015 (SEE NOTE BELOW)					
		BASIC NUMBER AND THREAD SIZE					
		NAS6610 .6250-18	NAS6612 .7500-16	NAS6614 .8750-14	NAS6616 1.0000-12	NAS6618 1.1250-12	NAS6620 1.2500-11
1	.062	.964	1.103	1.246	1.371	1.520	1.708
2	.125	1.027	1.166	1.309	1.434	1.583	1.771
3	.188	1.090	1.229	1.372	1.497	1.646	1.834
4	.250	1.152	1.291	1.434	1.559	1.708	1.896
5	.312	1.214	1.353	1.497	1.621	1.770	1.959
6	.375	1.277	1.416	1.559	1.684	1.833	2.021
7	.438	1.340	1.479	1.621	1.747	1.896	2.084
8	.500	1.402	1.541	1.684	1.809	1.958	2.146
9	.562	1.464	1.603	1.747	1.871	2.020	2.208
10	.625	1.527	1.666	1.809	1.934	2.083	2.271
11	.688	1.590	1.729	1.872	1.997	2.146	2.334
12	.750	1.652	1.791	1.934	2.059	2.208	2.396
13	.812	1.714	1.853	1.997	2.121	2.270	2.459
14	.875	1.777	1.916	2.059	2.184	2.333	2.521
15	.938	1.840	1.979	2.121	2.247	2.396	2.584
16	1.000	1.902	2.041	2.184	2.309	2.458	2.646
17	1.062	1.964	2.103	2.247	2.371	2.520	2.708
18	1.125	2.027	2.166	2.309	2.434	2.583	2.771
19	1.188	2.090	2.229	2.372	2.497	2.646	2.834
20	1.250	2.152	2.291	2.434	2.559	2.708	2.896
21	1.312	2.214	2.353	2.497	2.621	2.770	2.959
22	1.375	2.277	2.416	2.559	2.684	2.833	3.021
23	1.438	2.340	2.479	2.621	2.747	2.896	3.084
24	1.500	2.402	2.541	2.684	2.809	2.958	3.146
25	1.562	2.464	2.603	2.747	2.871	3.020	3.208
26	1.625	2.527	2.666	2.809	2.934	3.083	3.271
27	1.688	2.590	2.729	2.872	2.997	3.146	3.334
28	1.750	2.652	2.791	2.934	3.059	3.208	3.396
29	1.812	2.714	2.853	2.997	3.121	3.270	3.459
30	1.875	2.777	2.916	3.059	3.184	3.333	3.521
31	1.938	2.840	2.979	3.121	3.247	3.396	3.584
32	2.000	2.902	3.041	3.184	3.309	3.458	3.646
33	2.062	2.964	3.103	3.247	3.371	3.520	3.708
34	2.125	3.027	3.166	3.309	3.434	3.583	3.771
35	2.188	3.090	3.229	3.372	3.497	3.646	3.834
36	2.250	3.152	3.291	3.434	3.559	3.708	3.896
37	2.312	3.214	3.353	3.497	3.621	3.770	3.959
38	2.375	3.277	3.416	3.559	3.684	3.833	4.021
39	2.438	3.340	3.479	3.621	3.747	3.896	4.084
40	2.500	3.402	3.541	3.684	3.809	3.958	4.146
41	2.562	3.464	3.603	3.747	3.871	4.020	4.208
42	2.625	3.527	3.666	3.809	3.934	4.083	4.271
43	2.688	3.590	3.729	3.872	3.997	4.146	4.334
44	2.750	3.652	3.791	3.934	4.059	4.208	4.396
45	2.812	3.714	3.853	3.997	4.121	4.270	4.459
46	2.875	3.777	3.916	4.059	4.184	4.333	4.521
47	2.938	3.840	3.979	4.121	4.247	4.396	4.584
48	3.000	3.902	4.041	4.184	4.309	4.458	4.646
49	3.062	3.964	4.103	4.247	4.371	4.520	4.708
50	3.125	4.027	4.166	4.309	4.434	4.583	4.771
51	3.188	4.090	4.229	4.372	4.497	4.646	4.834
52	3.250	4.152	4.291	4.434	4.559	4.708	4.896
53	3.312	4.214	4.353	4.497	4.621	4.770	4.959
54	3.375	4.277	4.416	4.559	4.684	4.833	5.021
55	3.438	4.340	4.479	4.621	4.747	4.896	5.084
56	3.500	4.402	4.541	4.684	4.809	4.958	5.146
57	3.562	4.464	4.603	4.747	4.871	5.020	5.208
58	3.625	4.527	4.666	4.809	4.934	5.083	5.271
59	3.688	4.590	4.729	4.872	4.997	5.146	5.334
60	3.750	4.652	4.791	4.934	5.059	5.208	5.396
61	3.812	4.714	4.853	4.997	5.121	5.270	5.459
62	3.875	4.777	4.916	5.059	5.184	5.333	5.521
63	3.938	4.840	4.979	5.121	5.247	5.396	5.584
64	4.000	4.902	5.041	5.184	5.309	5.458	5.646

SEE SHEET 4 REGARDING INTERMEDIATE OR LONGER LENGTHS.

AIA AND ITS COMMITTEES WILL NOT INVESTIGATE THE APPLICABILITY OF PATENTS TO THE SUBJECT MATTER OF THIS STANDARD AND IN NO EVENT WILL IT DO NOT ASSUME ANY LIABILITY TO PATENT OWNERS OR TO PROSPECTIVE USERS

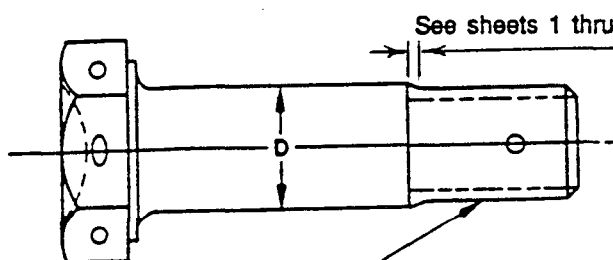
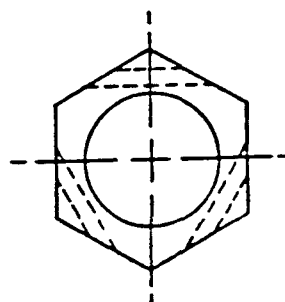
THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST DATE OF APPROVAL SHOWN HEREON

APPROVAL DATE Feb. 1966 REVISION 15 June 1976



RESTRICTED USAGE: FOR REPAIR WORK ONLY
.0156 AND .0312 OVERSIZE SHANK FOR REPLACEMENT OF BOLTS SHOWN ON SHEET 1

Head Marking: Same as shown on sheet 1
plus identification for oversize, as applicable,
to be included in second sector.
Identify .0156 oversize by "X".
Identify .0312 oversize by "Y".



See sheets 1 thru 5 for dimensions not shown.

INCOMPLETE THREADS
FOR .0156 OVERSIZE
(2PITCHES +.017) MAX
FOR .0312 OVERSIZE
(2PITCHES +.033) MAX

MAJOR DIAMETER OF THREADS MAY
CONFORM TO "TD" ON SHEET 2 OR TO
MIL-S-8879 TOLERANCE.

TABLE III OVERSIZE PART NUMBER AND DIMENSIONS

PART NUMBER NONLOCKING, **UNDRILLED HEAD, ***UNDRILLED SHANK	NOMINAL THREAD SIZE	(4) D DIA. .0156 OVERSIZE SHANK (p)			
		BEFORE CAD PLATE		AFTER PLATING	
		MAX	MIN	MAX	MIN
NAS6603-X	.1900-32	.2016	.2010	.2026	.2016
NAS6604-X	.2500-28	.2641	.2635	.2651	.2641
NAS6605-X	.3125-24	.3266	.3260	.3276	.3266
NAS6606-X	.3750-24	.3891	.3885	.3901	.3891
NAS6607-X	.4375-20	.4516	.4510	.4526	.4516
NAS6608-X	.5000-20	.5141	.5135	.5151	.5141
NAS6609-X	.5625-18	.5761	.5755	.5771	.5761
NAS6610-X	.6250-18	.6386	.6380	.6396	.6386
NAS6612-X	.7500-16	.7636	.7630	.7646	.7636
NAS6614-X	.8750-14	.8886	.8880	.8896	.8886
NAS6616-X	1.0000-12	1.0136	1.0130	1.0146	1.0136
NAS6618-X	1.1250-12	1.1386	1.1375	1.1396	1.1381
NAS6620-X	1.2500-12	1.2636	1.2625	1.2646	1.2631
		D DIA. .0312 OVERSIZE SHANK (p)			
NAS6603-Y	.1900-32	.2172	.2166	.2182	.2172
NAS6604-Y	.2500-28	.2797	.2791	.2807	.2797
NAS6605-Y	.3125-24	.3422	.3416	.3432	.3422
NAS6606-Y	.3750-24	.4047	.4041	.4057	.4047
NAS6607-Y	.4375-20	.4672	.4666	.4682	.4672
NAS6608-Y	.5000-20	.5297	.5291	.5307	.5297
NAS6609-Y	.5625-18	.5917	.5911	.5927	.5917
NAS6610-Y	.6250-18	.6542	.6536	.6552	.6542
NAS6612-Y	.7500-16	.7762	.7756	.7762	.7752
NAS6614-Y	.8750-14	.9042	.9036	.9052	.9042
NAS6616-Y	1.0000-12	1.0292	1.0286	1.0302	1.0292
NAS6618-Y	1.1250-12	1.1542	1.1531	1.1552	1.1537
NAS6620-Y	1.2500-12	1.2792	1.2781	1.2802	1.2787

* Grip dash number in .0625 increments. See sheets 4 and 5 for grip and length dimensions. For material, finish and procurement information, see sheet 3.

** For drilled head, add "H" after basic number.
EXAMPLE: NAS6604H-X = drilled head, cad plated .0156 oversize bolt.

*** For drilled shank, add "D" after basic part number.
EXAMPLE: NAS6604D-X = Drilled shank, cad plated .0156 oversize bolt.
NAS6604DH-Y = Drilled shank, drilled head, cad plated .0312 oversize bolt.

NAS6603 thru 6620
SHEET 6