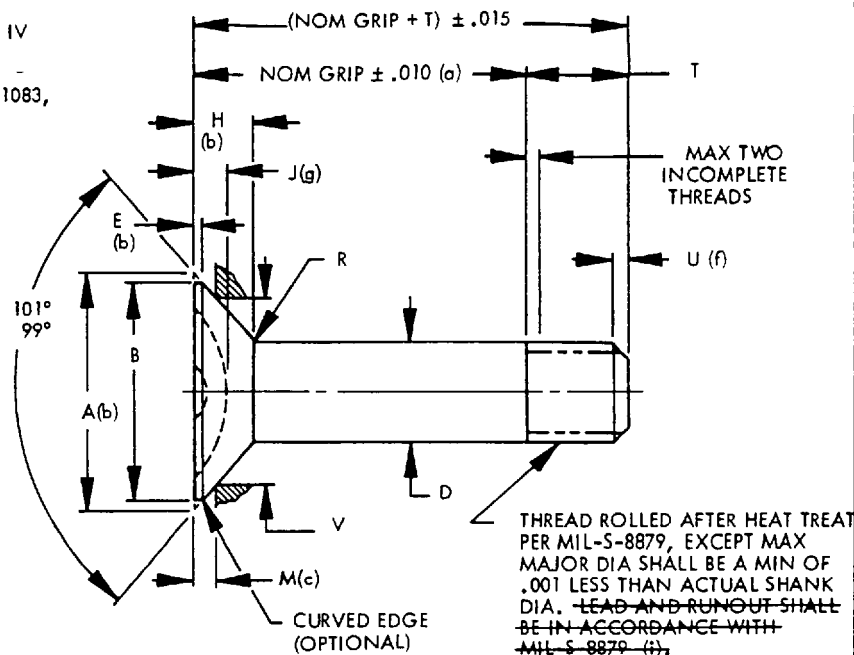
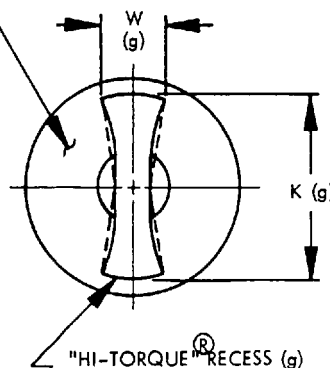


NATIONAL AEROSPACE STANDARD

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

HEAD MARKING PER NAS1347, TYPE IV
EXCEPT THE DASH NUMBER MAY BE
OMITTED FROM NAS1083 SIZE AND
"NAS" MAY BE OMITTED FROM NAS1083,
NAS1084, AND NAS1085 SIZES.



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DO NOT ASSUME ANY LIABILITY TO PATENT OWNERS OR TO PROSPECTIVE USERS.

BASIC PART NO.	THREAD UNJF-3A	A DIA MAX (b)	B DIA MIN		D DIA	E MAX (b)	H REF (b)	M GAGE PROT (c)	R RAD	T	U REF (f)	V GAGE DIA	Y TIR (d)	Z TIR (e)	"HI-TORQUE" ^(B) RECESS (g)				
															RECESS NO.	J	K REF	W REF	Torque In. Lbs. Min
NAS1083	.1900-32	.3813	.339		.1895 .1890	.015	.083	.0285 .0255	.035 .015	.276	.050	.3147 .3145	.005	.0040	3	.045 .042	.305	.110	50
NAS1084	.2500-28	.5066	.464		.2495 .2490	.015	.111	.0338 .0309	.035 .015	.316	.050	.4245 .4243	.006	.0030	4	.054 .051	.422	.134	125
NAS1085	.3125-24	.6335	.578		.3120 .3115	.015	.140	.0409 .0370	.045 .025	.375	.060	.5389 .5387	.007	.0030	5	.064 .061	.490	.160	250
NAS1086	.3750-24	.7604	.717		.3745 .3740	.015	.167	.0459 .0422	.045 .025	.391	.060	.6532 .6530	.008	.0025	6	.088 .084	.639	.198	430
NAS1087	.4375-20	.8884	.826		.4370 .4365	.022	.195	.0470 .0425	.055 .035	.453	.080	.7784 .7782	.009	.0025	7	.100 .096	.715	.224	925
NAS1088	.5000-20	1.0139	.951		.4995 .4990	.022	.222	.0529 .0482	.055 .035	.453	.080	.8902 .8900	.010	.0020	8	.105 .101	.766	.256	1210

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.

LIST OF CURRENT SHEETS

SHEET	REVISION
1	5
2	5
3	1

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FOR DESCRIPTION OF STATUS NOTE, SEE NAS 380

CUSTODIAN: NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT
SPECIFICATION

⑤ NAS4004
NAS624

TITLE
BOLT, 100° FLUSH HEAD
"HI-TORQUE" RECESS
TITANIUM ALLOY
(SHORT THREAD)

CLASSIFICATION
STANDARD PART

NAS1083-1088
SHEET 1 OF 3

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8 Jan. 2001

⑤

March 1977

④ 30

Sept. 1970

③ 30

Aug. 1965

② 15

JULY 1956

REVISION

② 15

JULY 1956

APPROVAL DATE

NATIONAL AEROSPACE STANDARD

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

- (a) GRIP LENGTH IS FROM TOP OF BOLT HEAD TO END OF FULL CYLINDRICAL PORTION OF SHANK.
- (b) A, E, AND H ARE INCLUDED FOR ENGINEERING REFERENCE PURPOSES ONLY AND ARE NOT TO BE USED FOR INSPECTION. VALUES A, E, AND H ARE CALCULATED LIMITS RESULTING FROM TOLERANCE ON B, D, M, V, AND HEAD ANGLE.
- (c) DIMENSIONS FOR M GAGE PROTRUSION SHALL BE INSPECTED PER NAS 527.
- (d) HEAD EDGE OUT OF ROUNDNESS SHALL NOT EXCEED "Y" TIR.
- (e) SHANK SHALL BE STRAIGHT WITHIN "Z" VALUES TIR PER INCH OF LENGTH.
- (f) POINT SHALL BE FLAT AND CHAMFERED. CHAMFER PLUS INCOMPLETE THREAD SHALL NOT EXCEED "U".
- (g) HI-TORQUE[®] RECESS PER MS 33750. BOLT RECESS SHALL BE TORQUE TESTED WITH APPLICABLE MS 33750 DRIVER WITH AXIAL END PRESSURE NOT EXCEEDING 15 POUNDS. BOLTS ARE REJECTABLE IF MINIMUM TORQUE VALUES LISTED ABOVE CAUSE FRACTURE OF BOLT OR DISTORTION WHICH RESULTS IN RAISE OF METAL AT EDGE OF SLOT EXCEEDING .005 ABOVE SURROUNDING AREA. SAMPLING SHALL BE PER MIL-STD-105, 4% AQL LEVEL S-1.
- ~~(h) BOLTS WITHOUT PILOT DEPRESSION IN RECESS MAY BE SUPPLIED UNTIL TWELVE (12) MONTHS AFTER LAST REVISION DATE SHOWN HEREON.~~
- ~~(i) FASTENER SUPPLIERS MAY SUPPLY FASTENERS WITH MIL-S-7742 THREADS UNTIL TWELVE (12) MONTHS AFTER LAST REVISION DATE SHOWN HEREON. FASTENERS WITH MIL-S-7742 THREADS MAY BE USED UNTIL STOCK IS DEPLETED.~~

MATERIAL: 6A1-4V TITANIUM ALLOY PER PROCUREMENT SPEC (SEE "CODE").

HEAT TREAT: 160,000 PSI MINIMUM TENSILE STRENGTH PER PROCUREMENT SPEC.

FINISH: NONE

CODE: DASH NUMBER INDICATES GRIP LENGTH IN .0625 INCH INCREMENTS (CONVERTED TO THREE DECIMAL PLACES PER USAS Y14.5). ~~INTERMEDIATE AND LONGER GRIP LENGTHS THAN THOSE LISTED ON PAGE 3 MAY BE ORDERED BY USE OF SIGNIFICANT DASH NUMBERS.~~

MATERIAL: CODE LETTER "V" FOLLOWING BASIC PART NUMBER INDICATES 6A1-4V MATERIAL.

RECESS: CODE LETTERS "HT" FOLLOWING DASH NUMBER INDICATE "HI-TORQUE" RECESS.

EXAMPLE OF PART NUMBER: NAS 1084V5HT = .2500-28 6A1-4V MATERIAL BOLT: .312 GRIP LENGTH, WITH "HI-TORQUE" RECESS.

- NOTES:
1. CONCENTRICITY: CONICAL SURFACE TO "D" DIA WITHIN .0003 TIR.
"D" DIA TO THREAD PITCH DIA WITHIN .0045 TIR FOR NAS 1083
THRU NAS 1085, AND WITHIN .006 TIR FOR NAS 1086 AND LARGER
 2. SURFACE TEXTURE PER ANSI B46.1, CONICAL SURFACE OF HEAD, HEAD TO SHANK FILLET RADIUS, SHANK AND ALL THREAD ELEMENTS 32 RHR MAX. ALL OTHER SURFACES 125 RHR MAX.
 3. BREAK ALL SHARP EDGES AND REMOVE ALL BURRS.
 4. DIMENSIONS IN INCHES.
 5. PARTS MANUFACTURED TO NAS621 PROCUREMENT SPECIFICATION PRIOR TO JANUARY 1, 2001 MAY BE SUPPLIED TO DEPLETION.

INACTIVE FOR DESIGN AFTER DECEMBER 31, 1976. SEE NAS1790

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SHEET 2 of 3.

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APPROVAL DATE APRIL 1957 REVISION 2 15 Aug. 1965 3 30 Sept. 1970 4 30 March 1977 5 8 Jan. 2001

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