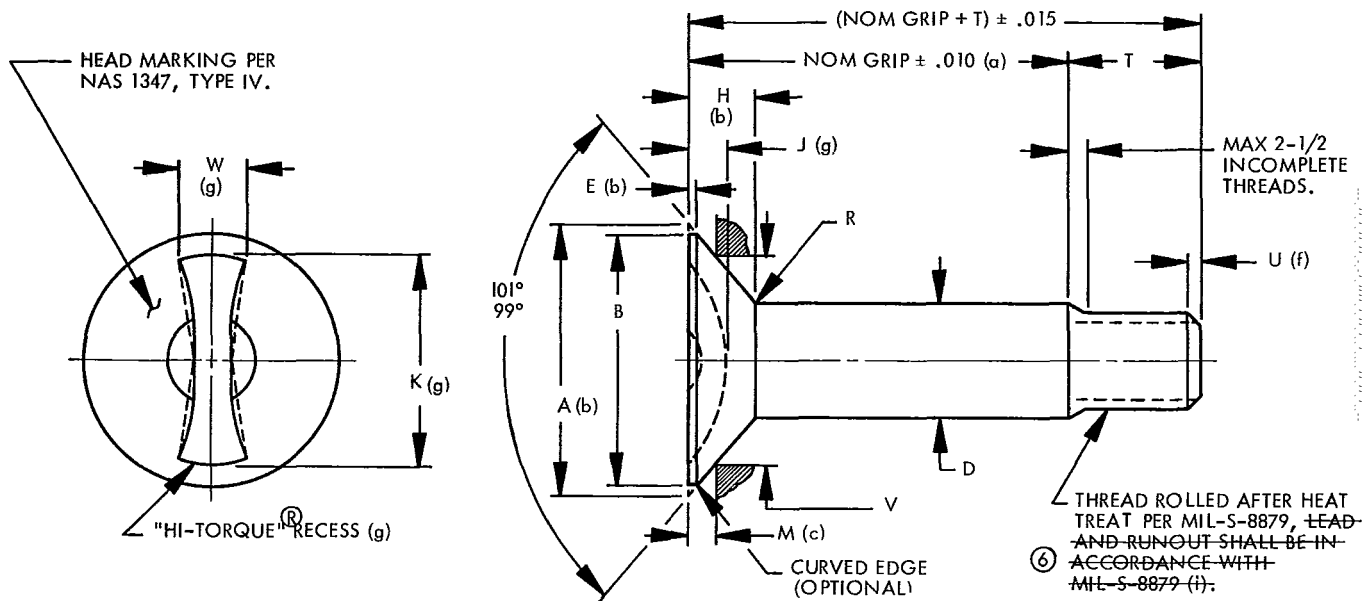


NATIONAL AEROSPACE STANDARD

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

RESTRICTED USAGE: FOR REPAIR WORK ONLY
.0156 OVERSIZE SHANK FOR REPLACEMENT OF NAS1503 - NAS1510

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 RECESS (g)				
				Before Plating	After Plating										RECESS NO.	J	K REF	W REF	Torque In Lbs. Min
NAS1243	.1900-32	.3813	.339	.2018 .2012	.2026 .2016	.015	.074	.0285 .0255	.035 .015	.276	.050	.3147 .3145	.005	.0040	3	.045 .042	.305	.110	50
NAS1244	.2500-28	.5066	.464	.2643 .2637	.2651 .2641	.015	.100	.0338 .0309	.035 .015	.316	.050	.4245 .4243	.006	.0030	4	.054 .051	.422	.134	125
NAS1245	.3125-24	.6335	.578	.3268 .3262	.3276 .3266	.015	.127	.0409 .0370	.045 .025	.375	.060	.5389 .5387	.007	.0030	5	.064 .061	.490	.160	250
NAS1246	.3750-24	.7604	.717	.3893 .3887	.3901 .3891	.015	.154	.0459 .0422	.045 .025	.391	.060	.6532 .6530	.008	.0025	6	.088 .084	.639	.198	430
NAS1247	.4375-20	.8884	.826	.4518 .4512	.4526 .4516	.022	.182	.0470 .0425	.055 .035	.453	.080	.7784 .7782	.009	.0025	7	.100 .096	.715	.224	925
NAS1248	.5000-20	1.0139	.951	.5143 .5137	.5151 .5141	.022	.208	.0529 .0482	.055 .035	.453	.080	.8902 .8900	.010	.0020	8	.105 .101	.766	.256	1210
NAS1249	.5625-18	1.1408	1.071	.5763 .5757	.5771 .5761	.025	.235	.0590 .0541	.055 .035	.511	.090	1.0028 1.0026	.010	.0020	9	.118 .114	.877	.300	1760
NAS1250	.6250-18	1.2723	1.201	.6388 .6382	.6396 .6386	.025	.264	.0683 .0631	.055 .035	.543	.090	1.1124 1.1122	.010	.0020	10	.141 .137	1.020	.344	2460

⑥ INACTIVE FOR DESIGN AFTER DECEMBER 31, 1976. SEE NAS1790 FOR DESCRIPTION OF STATUS NOTE, SEE NAS 380

CUSTODIAN: NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT
SPECIFICATION
NOTED

TITLE

BOLT, 100° FLUSH HEAD

HI-TORQUE RECESS, .0156 OVERSIZE

SHORT THREAD, ALLOY STEEL, 160,000 PSI

CLASSIFICATION
STANDARD PART

LIST OF CURRENT SHEETS

SHEET	1	2	
REV.	6	2	

AVAS Documents

NAS 1243 THRU 1250

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NATIONAL AEROSPACE STANDARD

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

BASIC PART NO.	DOUBLE SHEAR STRENGTH LBS. MIN	TENSILE STRENGTH LBS. MIN
NAS1243	5,380	3,180
NAS1244	9,300	5,790
NAS1245	14,600	9,260
NAS1246	21,000	14,000
NAS1247	28,600	19,000
NAS1248	37,300	25,600
NAS1249	47,200	32,400
NAS1250	58,300	40,900

- (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 30 SEPT. 1971.~~

~~(i) FASTENER SUPPLIERS MAY SUPPLY FASTENERS WITH MIL-S-7742 THREADS UNTIL 30 SEPT. 1971. FASTENERS WITH MIL-S-7742 THREADS MAY BE USED UNTIL STOCK IS DEPLETED.~~

MATERIAL: ALLOY STEEL PER PROCUREMENT SPEC, PLUS 4130 ALLOY STEEL PER MIL-S-6758 FOR NAS 1246 AND SMALLER.

HEAT TREAT: 160,000 - 180,000 PSI TENSILE STRENGTH PER MIL-H-6875.

FINISH CODE: ^② ~~NO LETTER DESIGNATES CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2. LETTER "T" DESIGNATES CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2.~~

CODE: DASH NUMBER INDICATES GRIP LENGTH IN .0625 INCH INCREMENTS ^② ~~(CONVERTED TO THREE DECIMAL PLACES PER ANSI Y14.5). SEE NAS 1503 THRU 1510 FOR TABULATION OF DASH NUMBERS, GRIP DIMENSIONS AND LENGTH DIMENSIONS.~~

EXAMPLE OF PART NUMBER: NAS 1244-5 = .2500-28 STEEL BOLT, .312 GRIP LENGTH, TYPE II, CLASS 2, CADMIUM PLATE; .0156 OVER SIZE SHANK.

^② ~~NAS 1244-5T = .2500-28 STEEL BOLT, .312 GRIP LENGTH, TYPE II, CLASS 2, CADMIUM PLATE; .0156 OVERSIZE SHANK.~~

- NOTES:
1. CONCENTRICITY: CONICAL SURFACE OF HEAD TO "D" DIA WITHIN .003 TIR.
"D" DIA TO THREAD PITCH DIA WITHIN .0045 TIR FOR NAS 1243 THRU NAS 1245, WITHIN .006 TIR FOR NAS 1246 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 PARTS WITH TYPE II, CLASS 3, CADMIUM PLATE MAY BE FURNISHED FROM SUPPLIER'S STOCK UNTIL 1 JULY 1978.
 4. BREAK ALL SHARP EDGES AND REMOVE ALL BURRS.
 5. DIMENSIONS IN INCHES AND TO BE MET AFTER PLATING, ~~EXCEPT AS SHOWN ON SHEET 1.~~

PROCUREMENT SPECIFICATION: PER NAS 498, EXCEPT AS NOTED.

INACTIVE FOR DESIGN AFTER DECEMBER 31, 1976. SEE

^② NAS1790

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