NATIONAL AEROSPACE STANDARD

1999

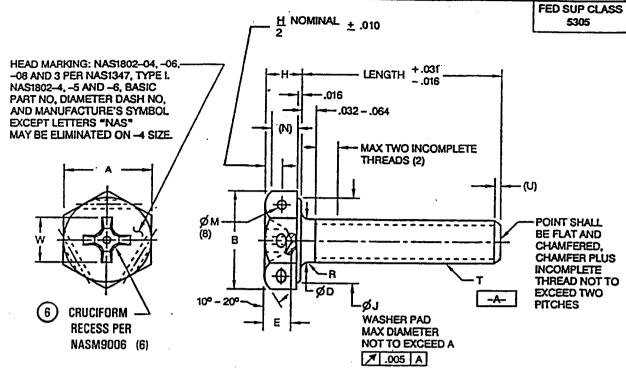
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5 Dec. 1996

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FIRST DASH NO	T NOMINAL THREAD SIZE PER MIL-S-8879	A HEX	B MIN	ØD	H	(1) Ø1	ØM + .010 000	(1/1)	R	ഗ	w	E PENE- TRATION (5)	RECESS SIZE (5)
04	.1120-40 UNIC-3A	.189 .181	.207	.112 .094	.060 .049	.156		.032	.015 .005	.031	.116 .103	.071 .055	1
06	.1380-32 UNIC-3A	.251 .243	.277	.138 .115	.093 .080	.210		.050	.015 .005	.039	.154 .141	.07 <i>5</i> .052	2
08	.1640-32 UNIC-3A	.251 .243	.277	.164 .141	.110 .096	.210		.056	.015 .005	.039	.169 .156	.090 .067	2
3	.1900-32 UNIF-3A	.314 .305	.348	.190 .167	.120 .105	.272	.046	.062	.020 .010	.039	.184 .171	.105 .082	2
4	.2500-28 UNIF-3A	.376 .367	.410	.250 .224	.140 .125	.335	.046	.073	.020 .010	.045	.247 .234	.118 .095	3
5	3125-24 UNIF-3A	.439 .429	.480	.312 .282	.171 .156	.398	.070	.102	.020 .010	.052	.317 .304	.148 .126	4
6	.3750-24 UNIF-3A	.502 .492	.552	.375 .345	.203 .188	.460	.070	.131	.025 .015	.052	.342 .329	.173 .151	4

LIST OF CURRENT SHEETS

	SHT.	REV.
6	1 2	6 6

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CUSTODIAN N	ATIONAL AEROSPACE STANDARDS COMMITTEE	THIRD ANGLE PROJECTION	—	-===
PROCUREMENT SPECIFICATION	TITLE SCREW, HEX HEAD, CRUCIFORM RECESS, FULL	CLASSIFICATION STANDARD PART		
NOTED	THREAD A286 CRES, 160,000 PSI TENSILE	NAS1802		

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S DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE BAME PRODUCT SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST DATE OF ROVAL SHOWN HEREON. AND!



NATIONAL AEROSPACE STANDARD

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MATERIAL:

CRES - A286 (UNS S66286) CONFORMING TO THE CHEMISTRY OF AMS5731, AMS5732,

AMS5737 OR AMS5853.

FINISH:

PASSIVATE PER QQ-P-35, TYPE OPTIONAL

CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2. POST-PLATE HYDROGEN

EMBRITTLEMENT BAKING AND TESTING PER QQ-P-416 ARE NOT REQUIRED FOR A286

MATERIAL.

HEAT TREAT:

DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER MIL-H-6875.

160-190 KSI Flu. PRECIPITATION HARDENING PER AMS5853. (11)

CODE:

FIRST DASH NUMBER INDICATES DIAMETER PER TABLE I.

DASH ("-") FOLLOWING FIRST DASH NUMBER INDICATES UNDRILLED HEAD. LETTER 'D' FOLLOWING FIRST DASH NUMBER INDICATES DRILLED HEAD.

(-3 THRU -6 SIZES ONLY).

SECOND DASH NUMBER INDICATES LENGTH IN .0625 INCREMENTS.

LETTER 'P' FOLLOWING SECOND DASH NUMBER INDICATES CADMIUM PLATE.

EXAMPLE OF PART NUMBER:

NAS 1802-4-16 - .2500-28 UNJF-3A SCREW, 1.000 LONG, PASSIVATED. NAS 1802-04-12 - .1120-40 UNJC-3A SCREW, .750 LONG, PASSIVATED. NAS 1802-4D16 - 2500-28 UNJF-3A SCREW, DRILLED HEAD, 1.000 LONG,

PASSIVATED. - 2500-28 UNJF-3A SCREW, DRILLED HEAD, 1.000 LONG, NAS 1802-4D16P

CADMIUM PLATED.

NOTES:

(6)

TOLERANCES: ± .010, ANGLES ± 1 DEGREE UNLESS OTHERWISE NOTED.

2. COMPLETE THREAD LENGTH FOR SCREWS LONGER THAN 2.000 SHALL BE 1.750 MINIMUM.

- HEAD TO SHANK FILLET, THREAD FLANKS AND SURFACE TEXTURE PER ASME B46.1. THREAD ROOT 32 MICROINCHES Ra; BEARING SURFACE OF HEAD 63 MICROINCHES Ra; OTHER SURFACES 125 MICROINCHES Ra.
 - 4. DIMENSION IN INCHES UNLESS OTHERWISE SPECIFIED.
- GAGING OF THE CRUCIFORM RECESS SHALL BE IN ACCORDANCE WITH NASM9006, GAGE (8) PENETRATION NOTED ABOVE.
 - ORIENTATION OF RECESS SLOTS TO HEX IS OPTIONAL.
 - SCREWS SHALL BE FREE FROM BURRS AND SLIVERS.
 - DRILL "M" DIAMETER, THREE HOLES WITHIN .010 OF CENTER OF HEX FLAT WHEN SPECIFIED BY PART NUMBER, -3 THRU -6 SIZES ONLY.
 - 9. MAGNETIC PERMEABILITY SHALL BE LESS THAN 2.0 (AIR = 1.0) FOR A FIELD STRENGTH H = 200 OERSTEDS USING A MAGNETIC PERMEABILITY INDICATOR PER ASTM A342, METHOD 6.
 - 10. DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1982.
- 11. THE EFFECT OF COLD WORK AND AGING INDUCED DURING THE MANUFACTURING CYCLE MAY INCREASE THE ULTIMATE TENSILE STRENGTH OF THE FINISHED PART, BUT THIS SHALL NOT EXCEED 1.3 TIMES THE TYPE I LOAD AS SPECIFIED IN NAS4003.
- PROCUREMENT SPECIFICATION: **(**6)

NAS4003 EXCEPT AS NOTED. COLD WORKING OF HEAD TO SHANK FILLET RADIUS, THREAD ROLLING AFTER HEAT TREAT. RECESS TORQUE VALUES AND WRENCH TORQUE TESTING NOT REQUIRED. USE NAS4903 LOT PACKAGING -AND FOR TENSILE VALUES FOR SCREWS SMALLER THAN . 1990 32.-

NAS 1802

SHEET 2

1999

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REVISION

MARCH 1977

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