



REVIEWER: EL AT AV MI EA  
USER: ME MU PA GL WV YD MC

NOMINAL SIZE	1/4 (.250)		5/16 (.312)		3/8 (.375)		7/16 (.437) <sup>M</sup>		1/2 (.500)	
Threads Per Inch	20 UNC-3B	28 UNF-3B	18 UNC-3B	24 UNF-3B	16 UNC-3B	24 UNF-3B	14 UNC-3B	20 UNF-3B	13 UNC-3B	20 UNF-3B
B Width Across Flats	Nom .437		.500		.562		.687		.750	
	Max .4385		.5020		.5645		.6895		.7520	
	Min .428		.489		.551		.675		.736	
C Width Across Corners	Ref .488		.557		.628		.768		.840	
H Thickness	Max .328		.359		.469		.524		.609	
	Min .212		.258		.320		.365		.427	
Prevailing Torque In. Lb.	Max 40		80		107		133		200	
Prevailing Torque Inch Lb.	1st Removal 6.0		10.5		16		23		30	
	5th Removal 4.5		7.5		11.5		16		20	
Axial Strength Lb.	Min 4,750	5,450	7,850	8,700	11,600	13,200	16,000	17,800	21,300	24,000
MATERIAL AND PROTECTIVE COATING	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.*	DASH NO.*	DASH NO.	DASH NO.
STEEL, PHOSPHATE COATED	1	2	3	4	5	6	7*	8*	9	10
STEEL, CADMIUM PLATED	31	32	33	34	35	36	37*	38*	39	40
STEEL, UNCOATED		70*			71*	72*				

NOMINAL SIZE	9/16 (.562)*		5/8 (.625)		3/4 (.750)		7/8 (.875)*		1 (1.000)	
Threads Per Inch	12 UNC-3B	18 UNF-3B	11 UNC-3B	18 UNF-3B	10 UNC-3B	16 UNF-3B	9 UNC-3B	14 UNF-3B	8 UNC-3B	12 UNF-3B
B Width Across Flats	Nom .875		.937		1.125		1.312		1.500	
	Max .8770		.9395		1.1270		1.3145		1.5020	
	Min .861		.922		1.088		1.269		1.450	
C Width Across Corners	Ref .982		1.051		1.240		1.447		1.653	
H Thickness	Max .656		.765		.890		.999		1.124	
	Min .473		.535		.617		.724		.831	
Prevailing Torque In. Lb.	Max 266		400		533		800		1070	
Prevailing Torque Inch Lb.	1st Removal 40		52		78		117		160	
	5th Removal 28		36		54		82		112	
Axial Strength Lb.	Min 27,300	30,500	33,900	38,400	50,100	56,000	69,300	76,300	91,000	99,500
MATERIAL AND PROTECTIVE COATING	DASH NO.*	DASH NO.*	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.*	DASH NO.*	DASH NO.	DASH NO.
STEEL, PHOSPHATE COATED	11*	12*	13	14	15	16	17*	18*	19	20
STEEL, CADMIUM PLATED	41*	42*	43	44	45	46	47*	48*	49	50

\* INACTIVE FOR NEW DESIGN AFTER 23 JUNE 1976.

© ENTIRE STANDARD REVISED

P.A. WC Other Cust 82 OS	TITLE <b>NUT, SELF-LOCKING, HEXAGON-PREVAILING TORQUE, FOR CRITICAL INSTALLATIONS, 250° F, UNC-3B AND UNF-3B</b>	<b>MILITARY STANDARD MS51943</b>
PROCUREMENT SPECIFICATION MIL-N-45913	SUPERSIDES: BBSX5 and BBSX2, BBSX3, BBSX4 in part, and BBWX7	SHEET 1 OF 2

This Military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

APPROVED 24 JUNE 63 REVISED (A) 24 MAY 66 (B) 17 MAY 68 (C) 23 JUNE 1976

FED. SUP CLASS  
5310

NOMINAL SIZE		1-1/8(1.125)		1-1/4(1.250)		1-3/8(1.375)		1-1/2(1.500)	
Threads Per Inch		7 UNC-3B	12 UNF-3B	7 UNC-3B	12 UNF-3B	6 UNC-3B	6 UNC-3B	12 UNF-3B	
B Width Across Flats	Nom	1.687		1.875		2.062		2.250	
	Max	1.6895		1.8770		2.0645		2.2520	
	Min	1.631		1.812		1.994		2.175	
C Width Across Corners	Ref	1.859		2.066		2.273		2.480	
H Thickness	Max	1.281		1.422		1.609		1.671	
	Min	.939		1.030		1.138		1.245	
Prevailing Torque In. Lb.	Max	1200		1333		1600		1800	
Prevailing Torque Inch Lb.	1st Removal	200		250		293		346	
	5th Removal	140		176		205		242	
Axial Strength Lb.	Min	115,000	128,000	145,000	161,000	173,000	211,000	237,000	
MATERIAL ANT PROTECTIVE COATING		DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.*	DASH NO.	DASH NO.	
STEEL, CADMIUM PLATED		51	52	53	54	<del>55</del>	56	57	

**NOTE:** To be used for critical installations such as tank track, suspension, running gear, and turret attachments and all other installations using heat treated bolts Grade 5 to 8 or equivalent. For general purpose use MS-51922.

**MATERIAL:** Steel, carbon or alloy steel, Grade C, in accordance with procurement specification. Insert, nylon or equivalent.

**PROTECTIVE COATING:** Steel, Carbon, Cadmium Plated QQ-P-416, Type II Class 3, Phosphate Coating MIL-P-16232 Type "Z" Class 2.

**VIBRATION LIFE:** Minimum vibration life requirement in accordance with MIL-N-25027.

**DIMENSIONS:** All dimensions in inches.

**THREADS:** UNC-3B and UNF-3B.

**PART NUMBER:** The MS part number consists of the MS number, plus the dash number. Example: MS51943-1.

- NOTES:** (1) Referenced documents shall be of the issue in effect on date of invitations for bid.  
(2) This standard takes precedence over documents referenced herein.

\* INACTIVE FOR NEW DESIGN AFTER 23 JUNE 1976.

INTERCHANGEABILITY TABLE

The nuts covered by the following dash numbers given in previous issue of this standard are cancelled after 24 May 66. The cancelled nuts should be used for maintenance purposes until existing stock is depleted. Use only the superseding nuts for new design and replacement after stock depletion. Replacement shall be in accordance with the following table:

PART NUMBERS	
CANCELLED	SUPERSEDING
MS51943	MS51943
REVISION A	CURRENT ISSUE
DASH NO.	DASH NO.
21	51
22	52
23	53
24	54
25	55
26	56
27	57

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USER: EL ME MU PA GL WV YD MC

APPROVED 24 JUNE 63 REVISED (A) 24 MAY 66 (B) 17 MAY 68 (C) FOR CHANGES SEE SHEETS 1 AND 2

P.A. WC Other Cust 82 OS	TITLE NUT, SELF-LOCKING, HEXAGON-PREVAILING TORQUE, FOR CRITICAL INSTALLATIONS, 250°F, UNC-3B AND UNF-3B	MILITARY STANDARD <b>MS51943</b>
PROCUREMENT SPECIFICATION MIL-N-45913	SUPERSEDES: BBSX5 and BBSX2, BBSX3, BBSX4 in part, and BBWX7	SHEET 2 OF 2

DD FORM 672-1 1 SEP 57

(coordination)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

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