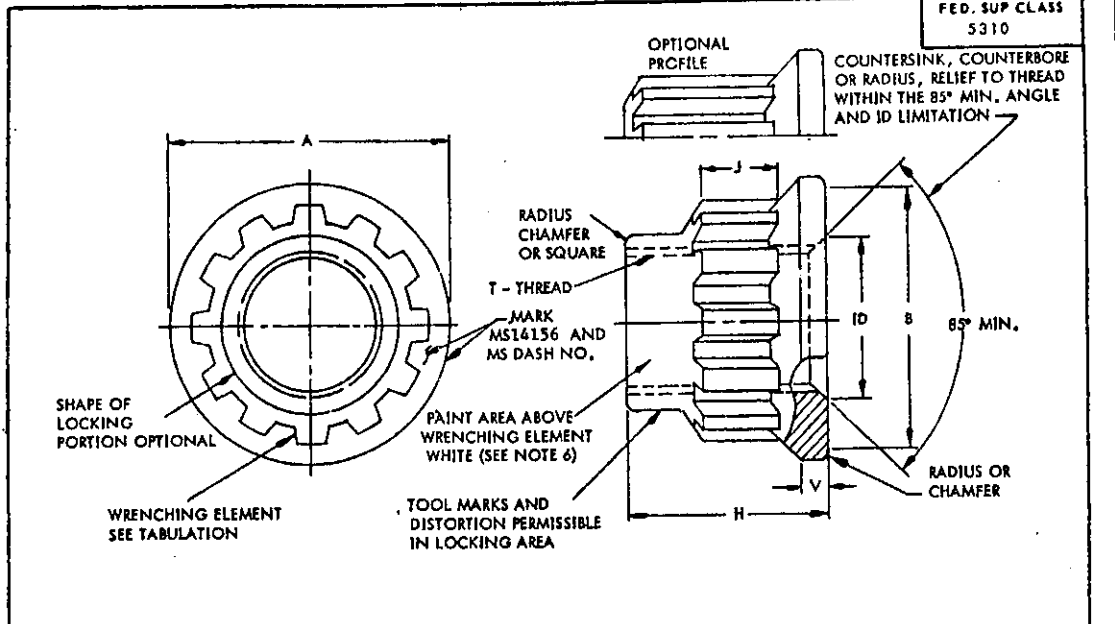


REVIEWER SYMBOLS:
ARMY - AV, EL, AT, ME, WC

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NOTES:

1. MATERIAL: ALLOY STEEL, AMS 6304, AMS 6485, AMS 6487.
2. HARDNESS: ROCKWELL C 48 MAX.
3. SURFACE TEXTURE: BEARING SURFACE 125 IN ACCORDANCE WITH ANSI B46.1.
4. PLATING: CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 2.
5. LUBRICANT: LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN THE PROCUREMENT SPECIFICATION.
6. PAINT: AFTER BAKE, THE AREA ABOVE WRENCHING ELEMENT WITH NO. 17875 WHITE PER TT-E-489.
7. THREADS: MIL-S-8879 BEFORE LUBRICATION.
8. WRENCHING ELEMENT: PER MS33787, DRIVERS PER MIL-W-8982.
9. DIMENSIONS IN INCHES: DIMENSIONS APPLY BEFORE LUBRICATION.
10. DESIGN USAGE INFORMATION: THESE NUTS ARE DESIGNED TO BE USED WITH MS14157 BOLTS AND MS14155 WASHERS.
11. PERPENDICULARITY: BEARING SURFACE SHALL BE NORMAL WITH PITCH DIAMETER OF THREAD WITHIN 'X' (SEE TABLE) WHEN CHECKED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
12. PERFORMANCE: PER MIL-N-8985 EXCEPT FOR:
 - a. THREADS AND BEARING SURFACES SHALL BE LUBRICATED WITH MIL-T-5544 COMPOUND FOR WRENCH TORQUE, TORQUE EFFECTIVITY, LOCKING TORQUE, PERMANENT SET, ACCELERATED VIBRATION, STRESS DURABILITY AND STRESS CORROSION.
 - b. TABULATED SEATING TORQUE FOR TORQUE EFFECTIVITY TEST.
 - c. MINIMUM BREAKAWAY 1st CYCLE TORQUE VALUES ARE NOT APPLICABLE. USE MINIMUM BREAKAWAY TORQUE VALUES.
 - d. FOR WRENCHING TORQUE BOLTS SHALL BE 220,000 P.S.I. MINIMUM.
13. EXCHANGEABILITY RELATIONSHIP: FOR AIRCRAFT WHEELS ONLY MS14156 NUTS CAN UNIVERSALLY REPLACE THE GYN 184 THROUGH GYN 1816 NUTS OF LIKE PLATING AND THREAD SIZE. BUT THE GYN 184 THROUGH GYN 1816 NUTS CANNOT UNIVERSALLY REPLACE THE MS14156 NUTS.

EXAMPLE OF PART NUMBERS:

MS14156 -04 = .2500-28 NUT, CADMIUM PLATED, SOLUBLE LUBRICANT.

FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

P. A. NAVY - AS Other Cust USAF - 11 ARMY - AV	TITLE NUT, WHEEL, SELF-LOCKING, FLANGED, STEEL, 180 KSI F _T , 450°F. SPLINE DRIVE	MILITARY STANDARD
		MS14156
PROCUREMENT SPECIFICATION MIL-N-8985	SUPERSEDES	SHEET 1 OF 5

REVIEWER SYMBOLS: USER SYMBOLS:
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DASH NO.	NOMINAL SIZE	T THREAD	MS 33787 ELEMENT NUMBER	A		B		ID	
				MAX	MIN	MAX	MIN	MAX	MIN
04	1/4	.2500-28UNJF-3B	10	.444	.414	.280	.250		
05	5/16	.3125-24UNJF-3B	12	.517	.517	.342	.312		
06	3/8	.3750-24UNJF-3B	14	.654	.614	.405	.375		
07	7/16	.4375-20UNJF-3B	18	.753	.713	.473	.438		
08	1/2	.5000-20UNJF-3B	20	.863	.823	.535	.500		
09	9/16	.5625-18UNJF-3B	22	.938	.898	.597	.562		
10	5/8	.6250-18UNJF-3B	24	1.050	1.010	.660	.625		
12	3/4	.7500-16UNJF-3B	30	1.230	1.190	.785	.750		
14	7/8	.8750-14UNJF-3B	34	1.438	1.398	.910	.875		
16	1	1.0000-12UNJF-3B	38	1.625	1.575	1.035	1.000		

DASH NO.	H MAX	V MIN	J MIN	X MIN	ULTIMATE AXIAL STRENGTH LB MIN (a)	SEATING TORQUE FOR TORQUE EFFECTIVITY TEST IN-LB	APPROX WEIGHT LB/100
04	.290	.033	.110	.003	7,270	110	.57
05	.363	.038	.138	.004	11,500	210	.96
06	.438	.045	.165	.004	17,100	380	1.63
07	.506	.053	.193	.005	23,200	600	2.42
08	.549	.060	.220	.005	30,900	910	3.28
09	.600	.068	.248	.005	39,200	1300	4.13
10	.650	.075	.275	.006	49,100	1800	6.26
12	.750	.090	.330	.007	71,000	3200	9.35
14	.875	.105	.385	.008	97,100	5000	14.00
16	1.000	.120	.440	.009	126,000	7500	19.52

(a) AXIAL STRENGTH DETERMINED FROM FORMULA $W_a = F_t A$ WHERE A IS THE CROSS SECTIONAL AREA, IN SQUARE INCHES, BASED ON THE MAXIMUM PITCH DIAMETER OF BOLT THREAD, F_t IS 180 KSI AND W_a IS THE AXIAL STRENGTH IN POUNDS.

APPROVED 13 SEP 74 REVISED

P.A. NAVY - AS Other Cust	TITLE NUT, WHEEL, SELF-LOCKING, FLANGED, STEEL, 180 KSI F_t , 450°F. SPLINE DRIVE	MILITARY STANDARD MS14156
PROCUREMENT SPECIFICATION MIL-N-8985	SUPERSEDES	SHEET 2 OF 3

REVIEWER SYMBOLS: USER SYMBOLS:
ARMY - AV, EL, AT, ME, WC

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EXCHANGEABILITY TABLE

SELECT NUTS FROM THE FOLLOWING EXCHANGEABILITY TABLE OF THIS STANDARD AS SUBSTITUTIVE PARTS FOR GYN 184 THROUGH GYN 1816	
INACTIVATED PART NUMBERS FOR WHEEL NUTS ONLY	SUBSTITUTIVE PART NUMBERS
(a) GYN 184	MS14156-04
GYN 185	MS14156-05
GYN 186	MS14156-06
GYN 187	MS14156-07
GYN 188	MS14156-08
GYN 189	MS14156-09
GYN 1810	MS14156-10
GYN 1812	MS14156-12
GYN 1814	MS14156-14
GYN 1816	MS14156-16

(a) GOODYEAR TIRE AND RUBBER CO., DESIGNATION.

APPROVED 13 SEP 74 REVISED

P.A. NAVY - AS Other Cust USAF - 11 ARMY - AV	TITLE	MILITARY STANDARD
	NUT, WHEEL, SELF-LOCKING, FLANGED, STEEL, 180 KSI F _{tu} , 450°F. SPLINE DRIVE	
PROCUREMENT SPECIFICATION MIL - N-8985	SUPERSEDES:	MS14156 SHEET 2 OF 3

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

OMB Approval
No. 22-R255

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DOCUMENT IDENTIFIER AND TITLE MS14156 NUT, WHEEL, SELF-LOCKING, FLANGED, STEEL,
180 KSI Ft_u, 450°F. SPLINE DRIVE

NAME OF ORGANIZATION AND ADDRESS

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

 DIRECT GOVERNMENT CONTRACT SUBCONTRACT

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