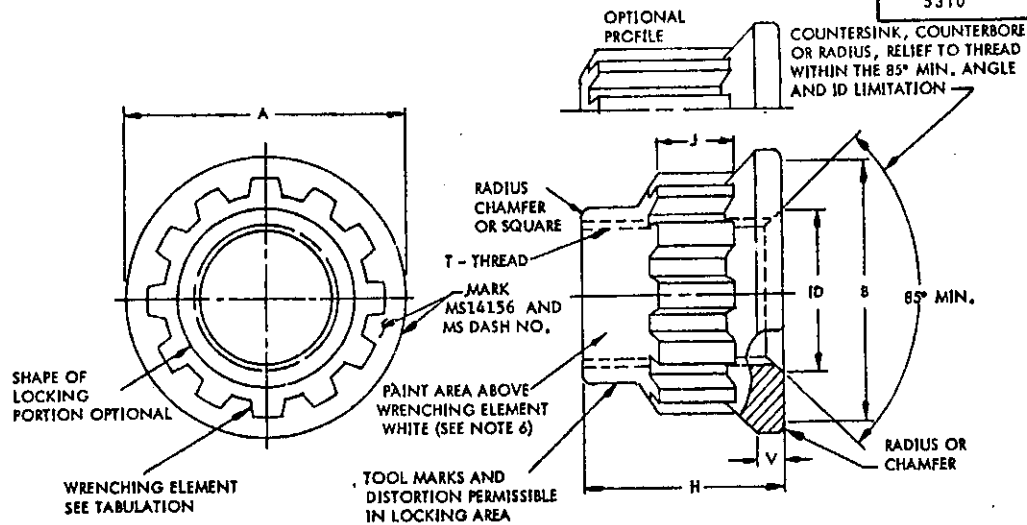


FED. SUP CLASS
5310REVIEWER SYMBOLS:
ARMY - AV, EL, AT, ME, WC

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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 184THROUGH GYN 1816NUTS OF LIKE PLATING AND THREAD SIZE. BUT THE GYN 184THROUGH GYN 1816NUTS CANNOT UNIVERSALLY REPLACE THE MS 14156 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 _{tu} , 450°F. SPLINE DRIVE	MILITARY STANDARD MS14156
PROCUREMENT SPECIFICATION MIL-N-8985	SUPERSEDES	SHEET 1 OF 3

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PLATE NO. 23065

APPROVED 13 SEP 74 REVISED

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

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be made from this document.

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 (d)	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

(d) 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.

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

PROJECT NO. 5310-0870

FED. SUP CLASS
5310REVIEWER 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.

P.A.
NAVY - AS
Other Cust

USAF - 11
ARMY - AV

PROCUREMENT SPECIFICATION
MIL-N-8985

TITLE

NUT, WHEEL, SELF-LOCKING, FLANGED,
STEEL, 180 KSI F_{tu}, 450°F.
SPLINE DRIVE

SUPERSEDES:

MILITARY STANDARD

MS14156

SHEET 2 OF 3

APPROVED 13 SEP 74 REVISED

INSTRUCTIONS: The purpose of this form is to solicit beneficial comments which will help achieve procurement of suitable products at reasonable cost and minimum delay, or will otherwise enhance use of the document. DoD contractors, government activities, or manufacturers/vendors who are prospective suppliers of the product are invited to submit comments to the government. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements. Attach any pertinent data which may be of use in improving this document. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity.

DOCUMENT IDENTIFIER AND TITLE	MS14156 NUT, WHEEL, SELF-LOCKING, FLANGED, STEEL, 180 KSI F _{tu} , 450°F. SPLINE DRIVE
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NAME OF ORGANIZATION AND ADDRESS

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT☐ SUBCONTRACT

1. HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY DOCUMENT REQUIREMENT CONSIDERED TOO RIGID

3. IS THE DOCUMENT RESTRICTIVE?

☐ YES ☐ NO (If "Yes", in what way?)

4. REMARKS

SUBMITTED BY (Printed or typed name and address - Optional)

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DD FORM 1426
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