

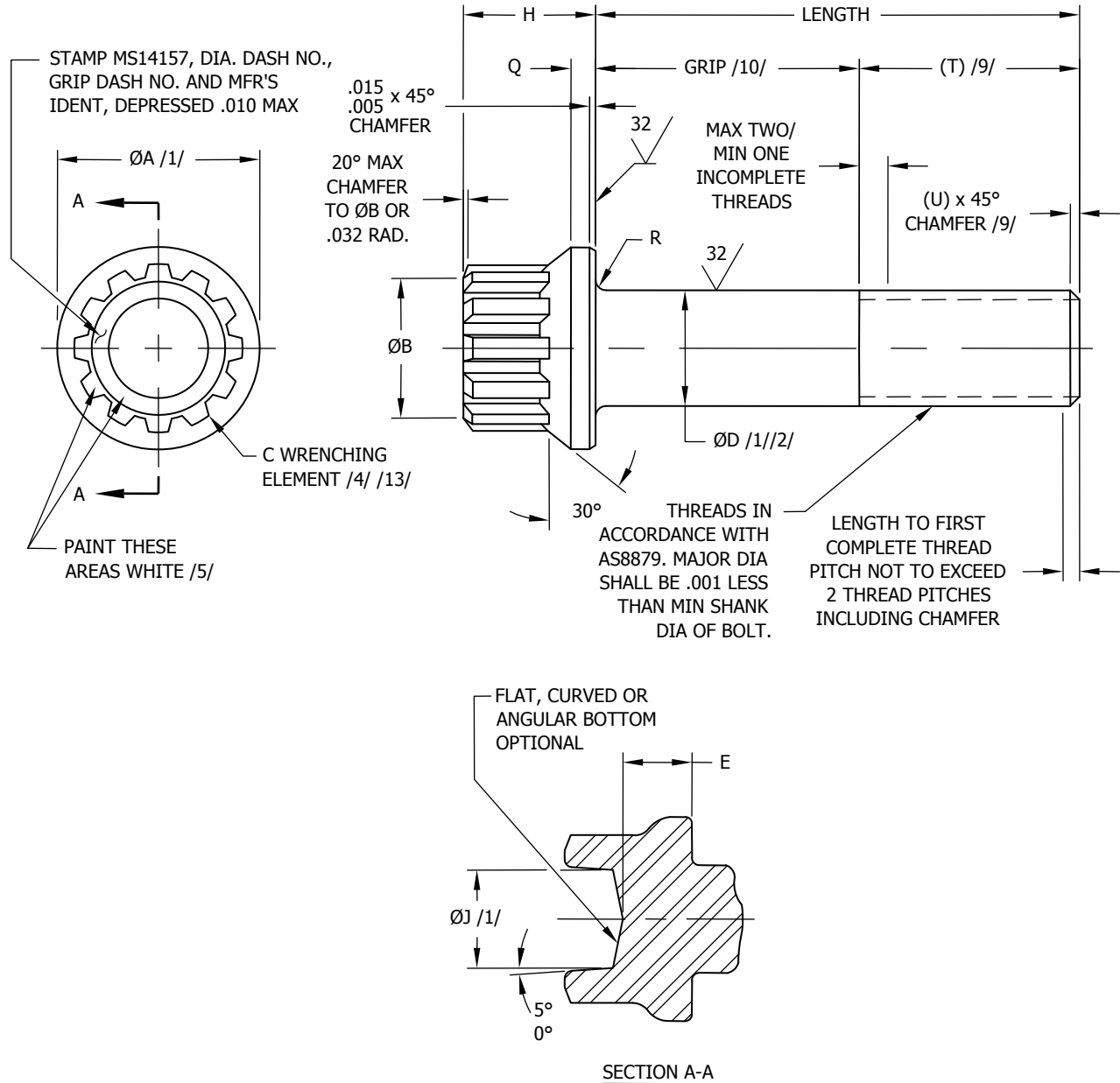
FED. SUPPLY CLASS

5306

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME
PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST
REVISION DATE.

FORM 09-01



THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS14157, REVISION B. PART NUMBERS REMAIN MS14157.

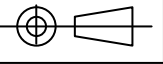
THIRD ANGLE PROJECTION 	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NOTED	TITLE BOLT, WHEEL, TENSION, FLANGED, STEEL, 180 KSI Ft_u, 450 °F, EXTERNAL SPLINE DRIVE	CLASSIFICATION PART STANDARD MSM14157 SHEET 1 OF 5

TABLE I – BOLT DIMENSIONS AND STRENGTH VALUES

(2)

DIA. DASH NO.	NOMINAL SIZE	THREAD UNJF-3A /2/	ØA /1/		ØB		C WRENCHING ELEMENT /4/ /13/	ØD /1/ /2/		E MIN	H	ØJ +.010 -.030 /1/ /13/	ØK ±.005	M ±.010
			MAX	MIN	MAX	MIN		MAX	MIN					
04	1/4	.2500-28	.438	.428	.250	.235	10	.2495	.2485	.135	.250	.180	.037	.062
05	5/16	.3125-24	.531	.521	.375	.360	12	.3120	.3110	.162	.312	.215	.055	.070
06	3/8	.3750-24	.649	.639	.438	.423	14	.3745	.3735	.197	.337	.260		
07	7/16	.4375-20	.750	.740	.500	.485	16	.4370	.4360	.228	.393	.320		
08	1/2	.5000-20	.828	.818	.562	.547	20	.4995	.4985	.254	.450	.380		
09	9/16	.5625-18	.938	.928	.625	.610	22	.5615	.5605	.289	.505	.440	.055	.094
10	5/8	.6250-18	1.050	1.040	.688	.673	24	.6240	.6230	.327	.562	.500		
12	3/4	.7500-16	1.230	1.220	.812	.797	28	.7490	.7480	.380	.600	.570		
14	7/8	.8750-14	1.438	1.428	.938	.923	32	.8740	.8730	.438	.700	.650		

TABLE I – BOLT DIMENSIONS AND STRENGTH VALUES (CONT'D)

DIA. DASH NO.	Q	R RAD		(T) /9/	(U) /9/	FATIGUE LOADING		ULTIMATE TENSILE STRENGTH LB MIN	DOUBLE SHEAR STRENGTH LB MIN	CONCENTRICITY		
						LOW TENSION LOAD	HIGH TENSION LOAD			X	Y	Z
		MAX	MIN			LB±2% /11/	LB±2% /12/			/1/	/4/	/2/
04	.045	.041	.031	.550	.045	4,700	5,600	7,270	10,600	.005	.004	.0045
05	.061			.638	.052	7,500	8,900	11,500	16,600	.006	.005	
06	.069	.057	.047	.708		.063	11,100	13,200	17,100	23,900	.008	
07	.082			.803	15,100		17,900	23,200	32,500	.009	.008	.0060
08	.102			.878	20,100		23,800	30,900	42,400	.010	.008	
09	.112			.970	.069	25,500	28,200	39,200	53,700	.011	.009	
10	.123	1.040	31,900	35,400		49,100	66,300	.012	.010			
12	.155	.073	.063	1.201	.078	46,200	51,100	71,100	95,400	.015	.012	
14	.180			1.367	.089	63,000	69,800	97,000	129,900	.018	.014	

MATERIAL: ALLOY STEEL - 4140 (UNS G41400) PER AMS6382, E4340 (UNS G43406) PER AMS6415 OR AMS6484
MIL-S-5000, 8740 (UNS G87400) PER AMS6322, AMS6325 OR AMS6327 MIL-S-6049.

HARDNESS: HRC 39-43

FINISH: CADMIUM PLATE PER NAS672. SUPPLEMENTARY CHROMATE TREATMENT PER AMS-QQ-P-416.

CODE: DIAMETER DASH NO. DESIGNATES DIAMETER PER TABLE I.
GRIP DASH NO. DESIGNATES GRIP LENGTH IN .0625 INCREMENTS PER TABLE II.
UNASSIGNED DASH NUMBERS SHALL NOT BE USED.

EXAMPLE OF PART NUMBER:

MS14157 - 04 008

GRIP DASH NUMBER FROM TABLE II
DIA DASH NUMBER FROM TABLE I
BASIC NUMBER

MS14157-04008 DESIGNATES BOLT, .2500-28 THREAD, .500 GRIP, 1.075 LENGTH

NOTES:

/1/ DIMENSIONS ØA, ØD AND ØJ SHALL BE CONCENTRIC TO EACH OTHER
WITHIN VALUES SPECIFIED FOR "X" FIM.

REVISION

2

MS14157
SHEET 2



Document Sharing Hub

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY

Copyright Aerospace Industries Association of America Inc. MS PRODUCED UNDER NATIONAL AEROSPACE STANDARD: AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE SUITABILITY OF
Provided by IHS under license with AIA/NAS Licensee= www.sepana.ir/5991803002, User=sam, albert
No reproduction or networking permitted without license from IHS Not for Resale, 01/04/2016 04:00:48 MST TRADEMARKS RIGHTS.

Full document details: AIA NASM14157 2013