

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
11000 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

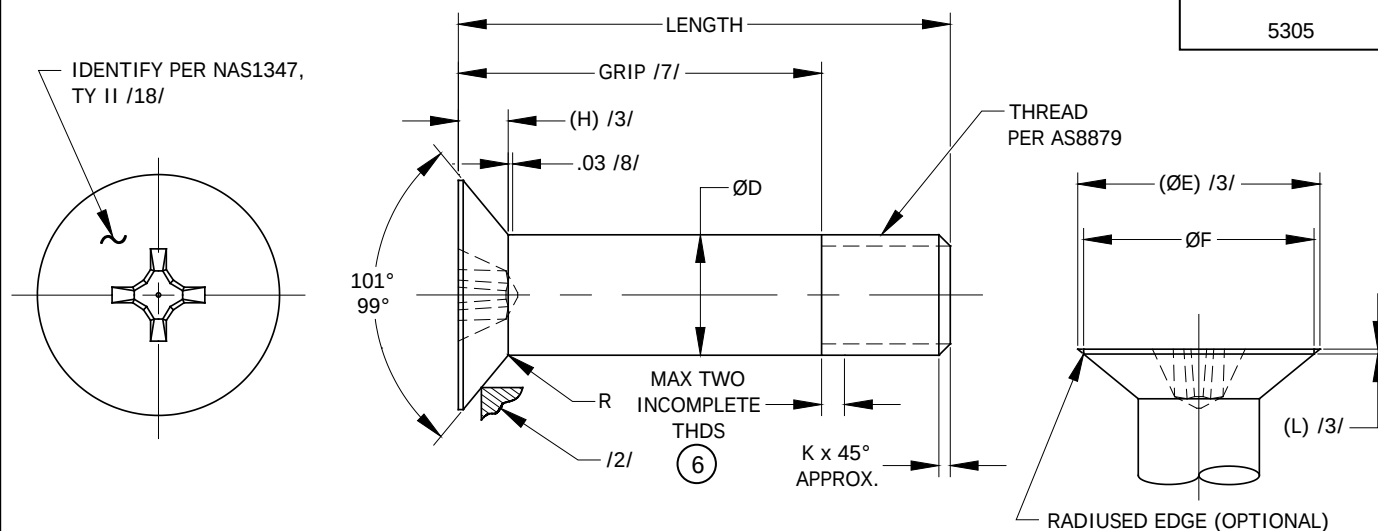


FIGURE 1 – SCREW CONFIGURATION

TABLE I – DIMENSIONS

TABLE 1. DIMENSIONS									
	DIA DASH NO.	THREAD	ØD	(ØE) AT SHARP CORNER /3/	ØF ABSOLUTE MIN	(H) /3/	K CHAMFER MAX	(L) /3/	R RAD
/6/	2	.1640-32 UNJC-3A	.1640 .1610	.334 .323	.287	.068	.031	.015	.020 .010
	3	.1900-32 UNJF-3A	.1890 .1860	.387 .375	.337	.080	.031	.016	.020 .010
	4	.2500-28 UNJF-3A	.2490 .2460	.510 .496	.452	.106	.031	.018	.020 .010
	5	.3125-24 UNJF-3A	.3115 .3085	.638 .622	.572	.133	.047	.021	.025 .010
	6	.3750-24 UNJF-3A	.3740 .3710	.766 .748	.692	.159	.047	.023	.030 .015
	7	.4375-20 UNJF-3A	.4365 .4325	.894 .874	.812	.186	.047	.026	.035 .015
	8	.5000-20 UNJF-3A	.4990 .4950	1.022 1.000	.932	.213	.047	.028	.040 .020

⑥ MATERIAL: ALLOY STEEL: 4130 (UNS G41300) PER AMS-S-6758, 4140 (UNS G41400) PER AMS6382, ~~E4340 (UNS G43400) PER AMS-S-5000 or AMS6484~~, 4340 (UNS G43406) PER AMS6415 OR AMS6484, OR 8740 (UNS G87400) PER AMS6322 OR MIL-S-6049.

HEAT TREAT: DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS-H-6875 OR AMS2759:
160 TO 180 KSI Ft_u.

FINISH: CADMIUM PLATE PER AMS-QQ-P-416 TYPE II, CLASS 2.

THIRD
ANGLE
PROJECTION

CUSTODIAN
NATIONAL AEROSPACE STANDARDS COMMITTEE

REVISION
6

PROCUREMENT SPECIFICATION

TITLE

CLASSIFICATION
PART STANDARD

**SCREW, SHEAR, 100° FLUSH HEAD, ALLOY STEEL,
CROSS RECESS, CLOSE TOLERANCE, 95 KSI Fsu**

⑥

Documents

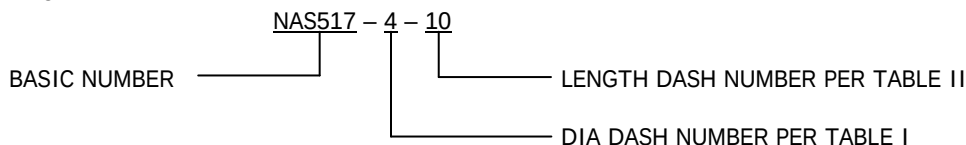
USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY
 Association of America Inc.
 with AIA/NAS "USE OF ITEMS PRODUCED UNDER NATIONAL AEROSPACE STANDARDS". AIA MAKES NO REPRESENTATION OF OR IN RESPECTING (1) THE SUITABILITY
 permitted without the prior written APPLICATION OR (2) THE EXISTENCE OF OR APPLIC Not for Resale, 03/04/2016, 03:56:09 MST. TRADEMARK RIGHTS.

Full document details: AIA NAS517 2014

ISSUE DATE: MARCH 1953 REVISION DATE: FEBRUARY 28, 2014

CODE: DIA DASH NUMBER INDICATES DIAMETER OF BOLT AS SHOWN IN TABLE I.
LENGTH DASH NUMBER INDICATES GRIP AND LENGTH OF BOLT AS SHOWN IN TABLE II.

EXAMPLE OF PART NUMBER:



NAS517-4-10 = SCREW, ALLOY STEEL, CADMIUM PLATED, .2500-28 UNJF-3A THREAD, .625 GRIP, 1.093 LENGTH.

NOTES:

- (1) RECESS SHALL BE IN ACCORDANCE WITH NASM9006.
- /2/ FLUSHNESS GAGE PROTRUSION SHALL BE INSPECTED PER NAS9800.
- /3/ ØE, L, AND H ARE INCLUDED FOR ENGINEERING REFERENCE PURPOSES ONLY AND ARE NOT TO BE USED FOR INSPECTION. ØE, L, AND H VALUES ARE CALCULATED LIMITS RESULTING FROM THE ACCUMULATED TOLERANCE ON THE SHANK DIAMETER, HEAD ANGLE, AND THE APPLICABLE HEAD PROTRUSION AND GAGE DIAMETER AS DEFINED IN NAS9800.
- (4) ECCENTRICITY BETWEEN CONICAL SURFACE OF HEAD AND SHANK .003 MAX FIM MEASURED AT GAGE DIAMETER, AND CHUCKED AS CLOSE TO THE HEAD AS PRACTICAL.
- (5) MAX ECCENTRICITY BETWEEN RECESS AND SHANK:
FOR SIZES -2 THRU -4: .008 WITH .016 FIM.
FOR SIZES ABOVE -4: .012 WITH .024 FIM.
- /6/ .1640-32 SIZE NOT PREFERRED FOR NEW DESIGN.
- /7/ GRIP LENGTH: FROM TOP OF HEAD TO END OF FULL CYLINDRICAL PORTION OF SHANK.
- /8/ FOR THE SPECIFIED LENGTH, AN INCREASE OF .001 OVER ØD MEASURED FROM THE POINT OF TANGENCY OF R RADIUS AND THE SHANK IS PERMISSIBLE.
- (9) DIMENSIONS APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (10) DIMENSIONS IN INCHES.
- (11) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (12) REMOVE ALL BURRS AND SHARP EDGES.
- ⑥ (13) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTABLE FOR USE UNTIL DEPLETION.
- (14) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- (15) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.

REVISION
6
NAS517
SHEET 2



Documents
SHEET 2

Document Sharing Hub