

INCH-POUND

AN929 Rev 13  
 6 February 2013  
 SUPERSEDING  
 AN929 Rev 12  
 16 February 2010

DETAIL SPECIFICATION SHEET

CAP INSERT, ASSEMBLY, PRESSURE SEAL,  
 FLARED TUBE FITTING

This specification is approved for use by all Departments and Agencies  
 of the Department of Defense .

The requirements for acquiring the product described herein shall consist of this specification sheet and  
 SAE-AS4841.

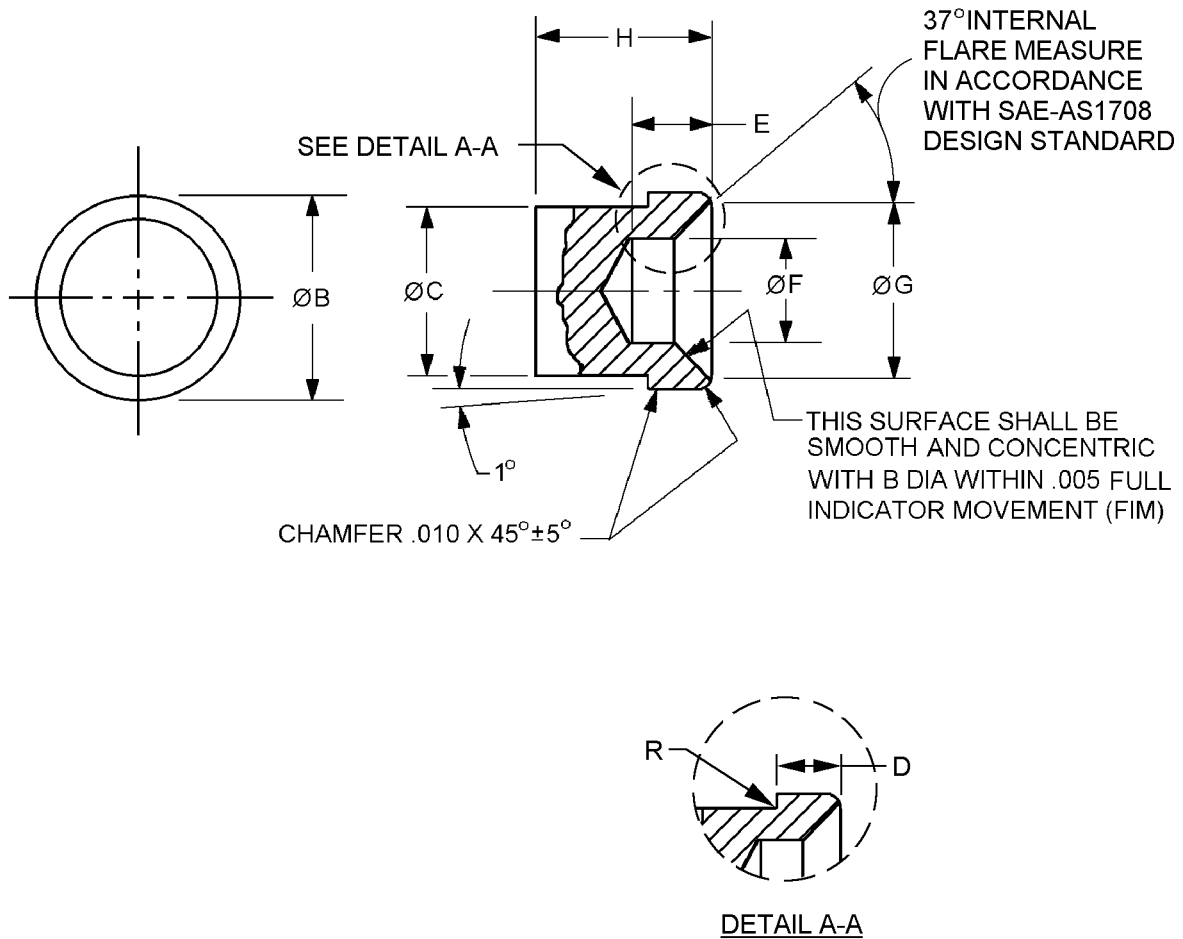
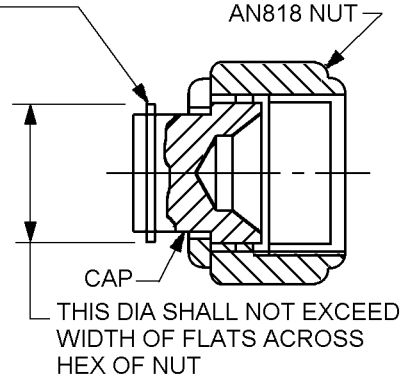
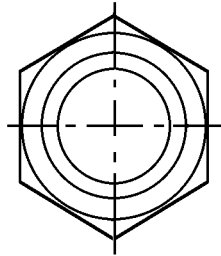


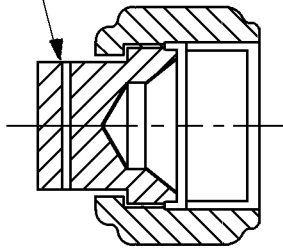
FIGURE 1. Cap.

AN929 Rev 13

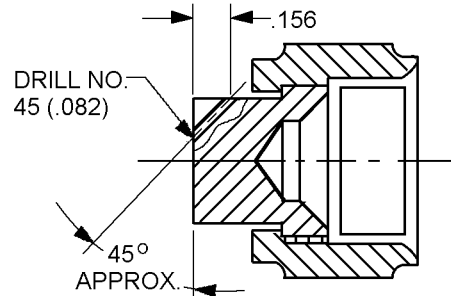
METHOD OF PREVENTING MOVABLE CAP FROM FALLING OUT, OPTIONAL WITH MANUFACTURER UPON APPROVAL BY THE PROCURING ACTIVITY



DRILL NO. 45 (.082) HOLE THROUGH HOLE TO BE APPROX. CENTERED BETWEEN END OF NUT AND END OF CAP



DETAIL FOR DRILLING AN929A2 AND AN929A3



DETAIL FOR DRILLING AN929A4 AND LARGER

CAP DRILLED FOR ATTACHING SAFETY CHAIN

CAP ASSEMBLY

CAP ASSEMBLY

Inches	mm
.082	2.08
.156	3.96

FIGURE 1. Cap – Continued.

## AN929 Rev 13

Dash number	Tube OD inches (mm)	B dia inches (mm) +.000 -.003 (0.08)	C dia. inches (mm)	D inches (mm)	E inches (mm)
-2	.125 (3.18)	.263 (6.68)	.156 (3.96)	.156 (3.96)	.125 (3.18)
-3	.188 (4.78)	.325 (8.26)	.219 (5.56)	.219 (5.56)	
-4	.250 (6.35)	.378 (9.60)	.281 (7.14)	.203 (5.16)	
-5	.313 (7.95)	.441 (11.20)	.344 (8.78)	.219 (5.56)	.141 (3.58)
-6	.375 (9.53)	.503 (12.78)	.422 (10.72)	.266 (6.76)	.156 (3.96)
-8	.500 (12.70)	.683 (17.35)	.547 (13.89)	.313 (7.95)	.172 (4.37)
-10	.625 (15.88)	.799 (20.29)	.672 (17.07)	.281 (7.14)	.250 (6.35)
-12	.750 (19.05)	.974 (24.74)	.813 (20.65)		.313 (7.95)
-16	1.000 (25.40)	1.224 (31.09)	1.063 (27.00)	.297 (7.54)	
-20	1.250 (31.75)	1.536 (39.01)	1.328 (33.73)	.375 (9.53)	
-24	1.500 (38.10)	1.786 (45.36)	1.594 (40.49)	.406 (10.31)	.375 (9.53)
-28	1.750 (44.45)	2.161 (54.89)	1.875 (47.63)	.500 (12.70)	
-32	2.000 (50.80)	2.411 (61.24)	2.141 (54.38)	.578 (14.68)	.500 (12.70)
-40	2.500 (63.50)	2.911 (73.94)	2.641 (67.08)	.625 (15.88)	.688 (17.48)
-48	3.000 (76.20)	3.411 (86.64)	3.156 (80.16)	.688 (17.48)	

Dash number	F dia.	G dia inches (mm) +.000 -.005 (0.13)	H inches (mm)	R radius max inches (mm)
-2	.094 (2.39)	.218 (5.54)	.531 (13.49)	.005 (0.13)
-3	.156 (3.96)	.250 (6.35)		
-4	.172 (4.37)	.300 (7.62)		
-5	.234 (5.94)	.360 (9.14)	.563 (14.30)	.010 (0.25)
-6	.297 (7.54)	.440 (11.18)	.625 (15.88)	
-8	.391 (9.93)	.575 (14.61)	.750 (19.05)	
-10	.438 (11.13)	.685 (17.40)		
-12	.563 (14.30)	.885 (22.48)	.875 (22.23)	
-16	.813 (20.65)	1.103 (28.02)		
-20	1.078 (27.38)	1.413 (35.89)	1.000 (25.40)	.015 (0.38)
-24	1.313 (33.35)	1.661 (42.19)	1.125 (28.58)	
-28	1.547 (39.29)	2.034 (51.66)	1.375 (34.93)	
-32	1.781 (45.24)	2.284 (58.01)	1.438 (36.53)	
-40	2.000 (50.80)	2.784 (70.71)	1.750 (44.45)	
-48	2.500 (63.50)	3.284 (83.41)	1.813 (46.05)	

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Fittings shall be free of all burrs and slivers.
4. Unless otherwise specified tolerances for three point decimals  $\pm 0.010$  inch (0.25 mm).
5. For design features purposes, this standard takes precedence over documents referenced herein.

FIGURE 1. Cap - Continued.

## AN929 Rev 13

## REQUIREMENTS:

Dimensions and configurations: See figure 1.

The part is a 2-piece assembly consisting of an AN818 nut and an insert as specified herein, see figure 1.

Material: See table I herein, procurement specification SAE-AS4841.

TABLE I. Material cap assembly.

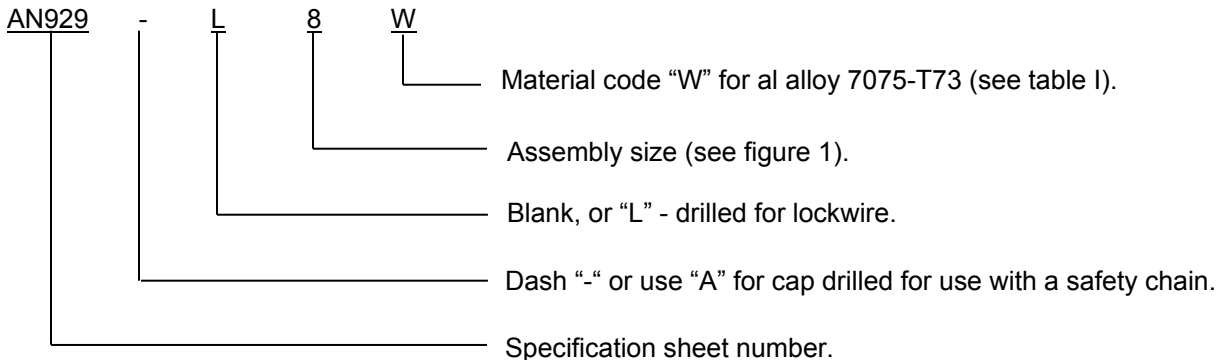
Cap insert assembly AN929			Nut AN818 <u>2/</u>		
Material designator	Material	Alloy	Material designator	Material	Alloy
F	Steel	4130 or 4140	Blank	Steel	4130 or 4140
J	CRES	304	J	CRES	304
K	CRES	316	K	CRES	316
S	CRES	347	J or K	CRES	304 or 316
T <u>1/</u>	Titanium	64Al-4V	T	Titanium	64Al-4V
W	Aluminum	7075-T73	W	Aluminum	7075-T73

1/ Not for use with oxygen systems.

2/ Material designator for manufacturers use only to determine proper AN818 nut to use for the cap insert assembly.

Finish: See SAE-AS4841.

Part or Identifying Number (PIN): The PIN consists of the AN prefix, specification sheet number, a dash or "A", a number for assembly size, a blank or "L" for lock wire and a letter for material designator's, see left hand side of table I.



## PIN Examples:

AN929-8W identifies a cap assembly .500 inch (tube), aluminum.

AN929-L8J identifies a cap assembly .500 inch (tube), nut drilled for lockwire, CRES 304.

AN929A8S identifies a cap assembly .500 inch (tube), insert drilled for attachment of safety chain, CRES 347.

AN929AL8J identifies a cap assembly .500 inch (tube), nut drilled for use with a safety chain, and lock wire, CRES 304.

AN929 Rev 13

Supersession data: Due to stress corrosion cracking aluminum alloys 2014 and 2024 blank designator has been replaced by aluminum alloy 7075 "W" designator example: AN929-8 use AN929-8W.

AN929 assemblies which consist of a cap and an AN818 nut shall be fastened together for shipping or stock purposes in a manner acceptable to the procuring activity.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issues due to the extensiveness of the changes.

Referenced documents. In addition to SAE-AS4841, this document references the following:

AN818  
SAE-AS1708

CONCLUDING MATERIAL

Custodians:  
Navy - AS  
Air Force - 99  
DLA - CC

Preparing activity:  
DLA - CC  
  
(Project 4730-2012-098)

Review activity:  
Air Force - 71

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.