

INCH-POUND

AN929 Rev 13
 w/AMENDMENT 1
 20 November 2013
 SUPERSEDING
 AN929 Rev 13
 6 February 2013

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.

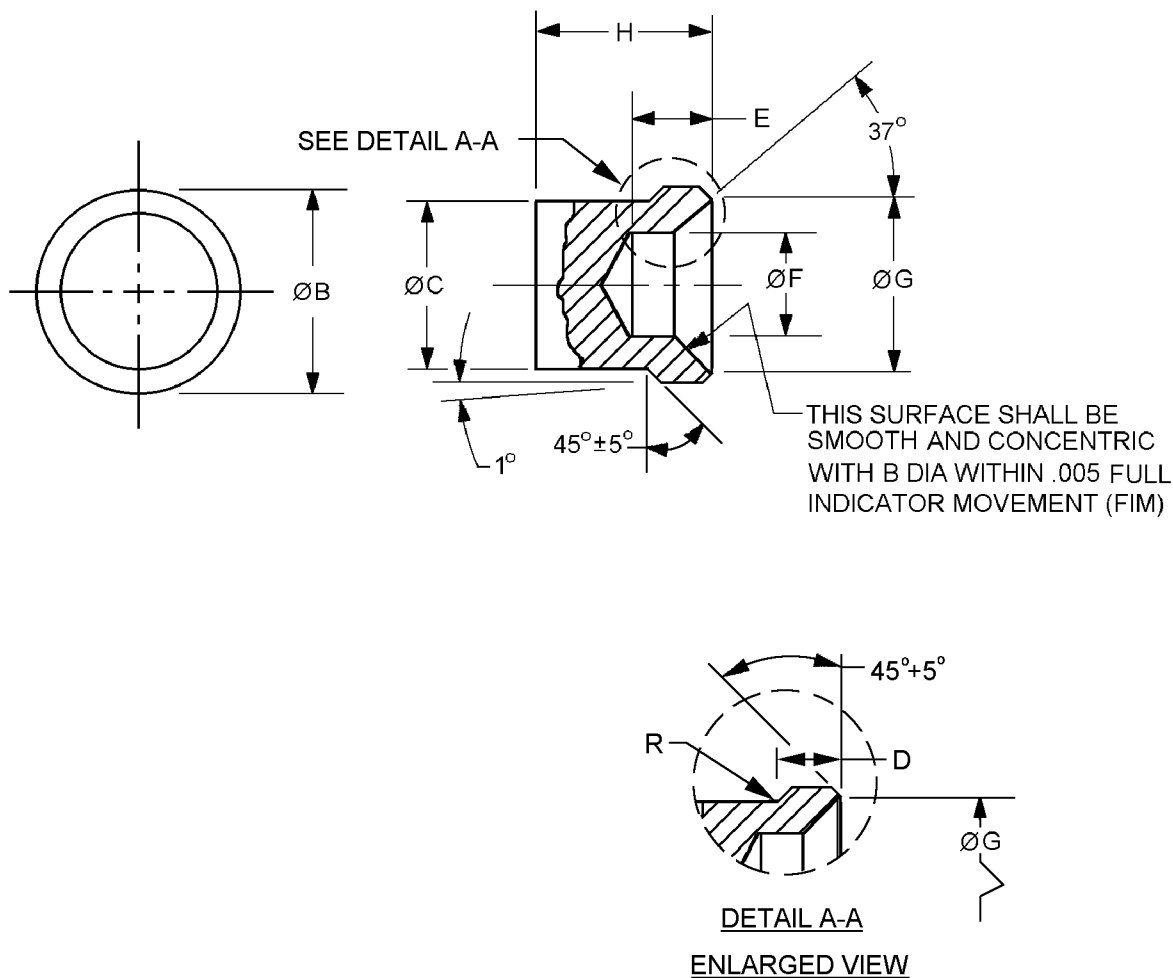
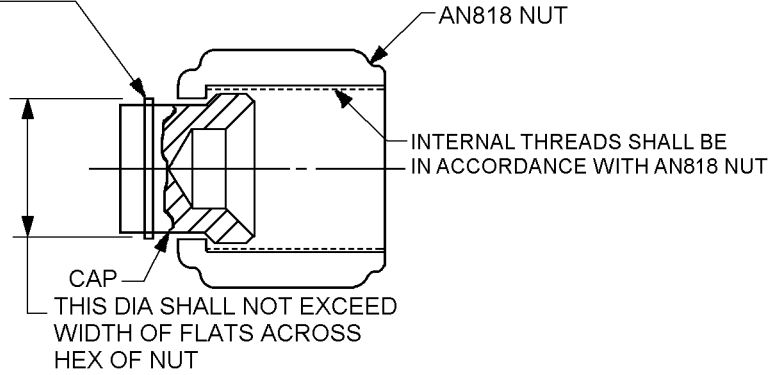
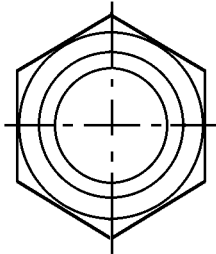


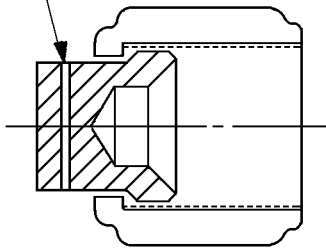
FIGURE 1. Cap assembly, dimensions and configurations.

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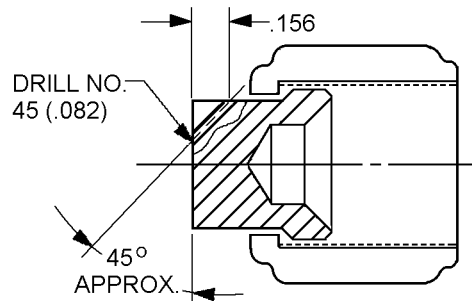
METHOD OF PREVENTING MOVABLE CAP FROM FALLING OUT, OPTIONAL WITH MANUFACTURER UPON APPROVAL BY THE PROCURING ACTIVITY



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 |
|--------|------|
| .005 | 0.13 |
| .082 | 2.08 |
| .156 | 3.96 |

FIGURE 1. Cap assembly, dimensions and configurations – Continued.

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| 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 ± 0.010 inch (0.25 mm).
5. For design features purposes, this standard takes precedence over documents referenced herein.

FIGURE 1. Cap assembly, dimensions and configurations. - Continued.

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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.

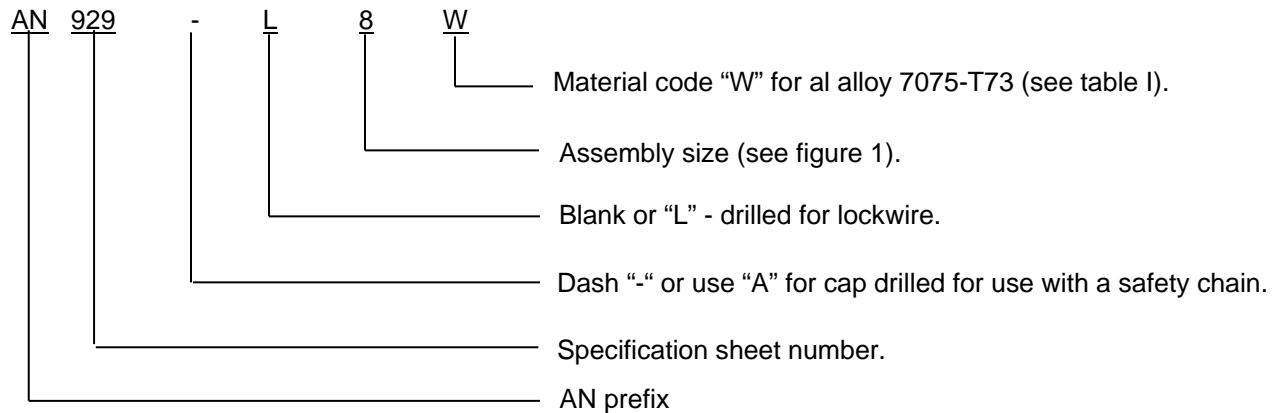
| Cap insert assembly AN929 | | | Nut AN818 <u>2/</u> | | |
|---------------------------|----------|--------------|---------------------|----------|--------------|
| Material designator | Material | Alloy | Material designator | Material | Alloy |
| F | Steel | 4130 or 4140 | Blank | Steel | 4130 or 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, dash or "A" for cap drilled for safety chain, blank or "L" for nut drilled with lock wire, number for assembly size, and a letter for material designator.



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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), cap drilled for attachment of safety chain, CRES 347.

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

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 AN818.

CONCLUDING MATERIAL

Custodians:

Navy - AS
Air Force - 99
DLA - CC

Preparing activity:

DLA - CC

(Project 4730-2013-120)

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>.