INCH-POUND

AN807 REV 7
20 April 2007
SUPERSEDING
AN807 REV 6
30 August 1982

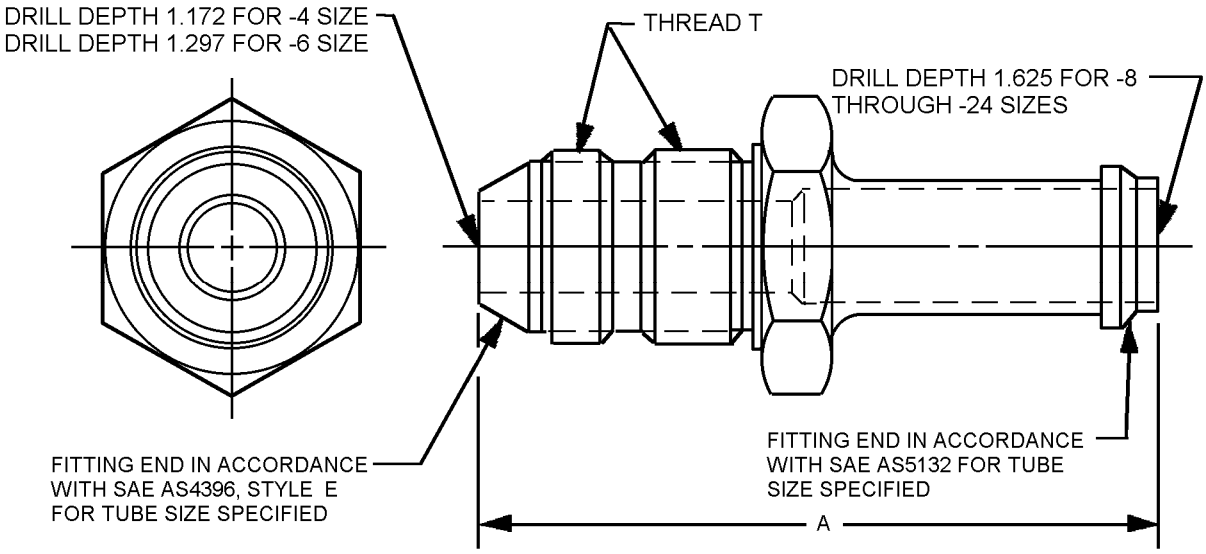
DETAIL SPECIFICATION SHEET

ADAPTER, STRAIGHT, TUBE TO HOSE

Inactive for new design after 20 April 2007. For new design, use SAE AS5180.

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 AS4843/1.



Inches	mm
1.172	29.77
1.297	32.94
1.625	41.28

FIGURE 1. Adapter, straight, tube to hose, dimensions and configuration.

Dash number 1/	Tubing OD and hose ID inch (mm)	Thread T SAE AS8879 Class 3A	A inch (mm)
-4	.250 (6.35)	.4375-20UNJF-3A	2.813 (71.45)
-6	.375 (9.53)	.5625-18UNJF-3A	2.953 (75.01)
-8	.500 (12.70)	.7500-16UNJF-3A	3.109 (78.97)
-10	.625 (15.88)	.8750-14UNJF-3A	3.266 (82.96)
-12	.750 (19.05)	1.0625-12UNJF-3A	3.484 (88.49)
-16	1.000 (25.40)	1.3125-12UNJF-3A	3.484 (88.49)
-20	1.250 (31.75)	1.6250-12UNJF-3A	3.531 (89.69)
-24	1.500 (38.10)	1.8750-12UNJF-3A	3.547 (90.09)

1/ Size designators are SAE convention (16's of an inch).

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Tolerances unless other wise noted are ± .015 inches (0.38 mm).
4. Break all sharp edges and remove all hanging burrs and slivers.

FIGURE 1. Adapter, straight, tube to hose, dimensions and configuration - Continued.

REQUIREMENTS

Dimensions and configurations, see figure 1.

Materials (designator letters in table I).

Aluminum alloy.

Designator letter D: Type 2024 aluminum alloy in accordance with SAE AMS4339, T851 temper.

Designator letter W. Type 7075-T73 aluminum alloy bar in accordance with SAE-AMS-QQ-A-225/9 or type 7075-T7351 aluminum alloy bar in accordance with SAE AMS4124.

Copper alloy.

Designator letter "blank" or C: Type 360 copper alloy bar in accordance with ASTM B16/B16M condition H02 or SAE AMS4610, or manganese bronze in accordance with ASTM B138/B138M.

Corrosion resistant steel.

Designator letter J: Type 304 corrosion resistant steel bar in accordance with SAE AMS-QQ-S-763 or SAE AMS5639.

Designator letter K: Type 316 corrosion resistant steel bar in accordance with SAE AMS-QQ-S-763 or SAE AMS5648.

Designator letter R: Type 321 corrosion resistant steel bar in accordance with SAE AMS-QQ-S-763 or SAE AMS5645.

TABLE I. Material designator.

Material designator	Material/finish
Blank	Copper alloy
C	Copper alloy, cadmium plated
D	Aluminum alloy 2024
J	Corrosion resistant steel alloy 304
K	Corrosion resistant steel alloy 316
R	Corrosion resistant steel alloy 321
W	Aluminum alloy 7075-T73 only

Finish:

Aluminum alloy.

Material designator D: Anodized in accordance with MIL-A-8625, type II, class 2, dye blue.
Material designator W: Anodized in accordance with MIL-A-8625, type II, class 2, dye brown.

Corrosion resistant steel. Passivated in accordance with SAE AMS2700, type II.

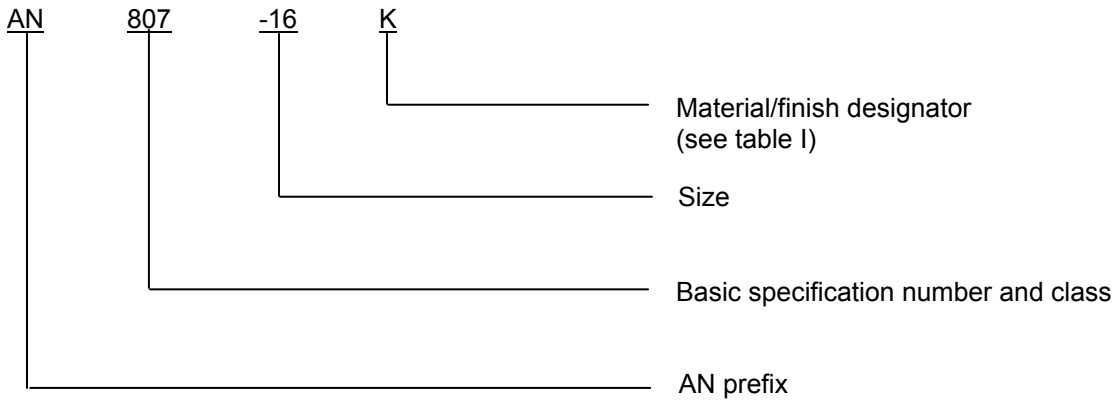
Copper alloy. Designator letter C only. When specified in the Part or Identifying Number (PIN) the copper alloy part shall be cadmium plated in accordance with SAE AMS-QQ-P-416, type II, class 3 (see table I).

Past experience has shown that 3000 psi pressures should be reduced for certain sizes for aluminum and copper alloys. Table II shows the operating pressures for associated material types.

TABLE II. Operating pressures for associated material.

Size designator	Material	psi
2-8	Aluminum alloy	3000
10-16	Aluminum alloy	1500
20	Aluminum alloy	1000
2-8	Copper alloy	3000
10-16	Copper alloy	1500
20	Copper alloy	1000
2-16	Corrosion resistant steel	3000
20	Corrosion resistant steel	1500

PIN example:



Guidance on use of alternative parts with less hazardous or non-hazardous materials. This specification provides for a number of alternative plating materials via the PIN. Users should select the PIN with the least hazardous material that meets the form, fit, and function requirements of their application.

Cross reference data: See table III.

TABLE III. Cross-reference data for inactive for new design. 1/ 2/

Old design AN PIN	Tube size inch (mm)	New design AS PIN		Old design AN PIN	Tube size inch (mm)	New design AS PIN
AN807-4	.250 (6.35)	AS5180B04		AN807-12	.750 (19.05)	AS5180B12
AN807-4D		AS5180D04		AN807-12D		AS5180D12
AN807-4J		AS5180J04		AN807-12J		AS5180J12
AN807-4K		AS5180K04		AN807-12K		AS5180K12
AN807-4S		AS5180R04		AN807-12S		AS5180R12
AN807-4W		AS5180W04		AN807-12W		AS5180W12
AN807-6	.375 (9.53)	AS5180B06		AN807-16	1.000 (25.40)	AS5180B16
AN807-6D		AS5180D06		AN807-16D		AS5180D16
AN807-6K		AS5180J06		AN807-16J		AS5180J16
AN807-6J		AS5180K06		AN807-16K		AS5180K16
AN807-6S		AS5180R06		AN807-16S		AS5180R16
AN807-6W		AS5180W06		AN807-16W		AS5180W16
AN807-8	.500 (12.70)	AS5180B08		AN807-20	1.250 (31.75)	AS5180B20
AN807-8D		AS5180D08		AN807-20D		AS5180D20
AN807-8J		AS5180J08		AN807-20J		AS5180J20
AN807-8K		AS5180K08		AN807-20K		AS5180K20
AN807-8S		AS5180R08		AN807-20S		AS5180R20
AN807-8W		AS5180W08		AN807-20W		AS5180W20
AN807-10	.625 (15.88)	AS5180B10		AN807-24	1.500 (38.10)	AS5180B24
AN807-10D		AS5180D10		AN807-24D		AS5180D24
AN807-10J		AS5180J10		AN807-24J		AS5180J24
AN807-10K		AS5180K10		AN807-24K		AS5180K24
AN807-10S		AS5180R10		AN807-24S		AS5180R24
AN807-10W		AS5180W10		AN807-24W		AS5180W24

1/ Dimensions are in inches.
2/ Metric equivalents are given for information only.

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

Referenced documents. In addition to SAE AS4843/1, this document references the following:

MIL-A-8625	SAE AS4396
ASTM B16/B16M	SAE AS5132
ASTM B138/B138M	SAE AS5180
SAE AMS2700	SAE AS8879
SAE AMS4124	SAE AMS-QQ-A-225/9
SAE AMS4610	SAE AMS-QQ-P-416
SAE AMS5639	SAE AMS-QQ-S-763
SAE AMS5645	SAE AMS4339
SAE AMS5648	

CONCLUDING MATERIAL

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

Preparing activity:
DLA - CC

(Project 4730-2007-033)

Review activity:
Navy - AS

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 http://assist.daps.dla.mil.