

REV.
A

AS4406

RATIONALE

FEDERAL SUPPLY CLASS
4730

CADMIUM NOTICE NOTE ADDED, NADCAP QML NOTE UPDATED, CANCELLED REFERENCE DOCUMENTS REPLACED WITH ACTIVE DOCUMENTS, 2024 ALUMINUM ALLOY MATERIAL MADE INACTIVE FOR NEW DESIGN, AND HEX SIZES DIRECTLY SPECIFIED ON DRAWING.

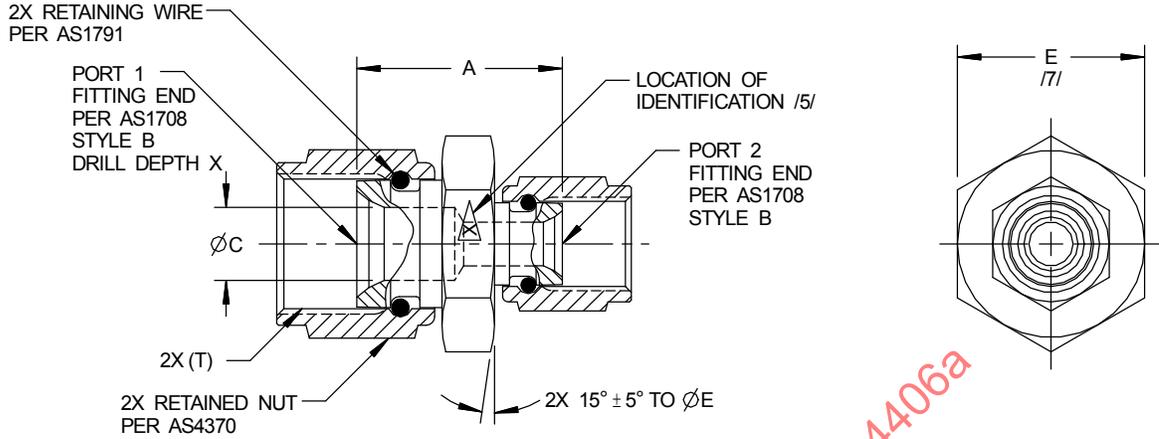


FIGURE 1 - FITTING ASSEMBLY, UNION

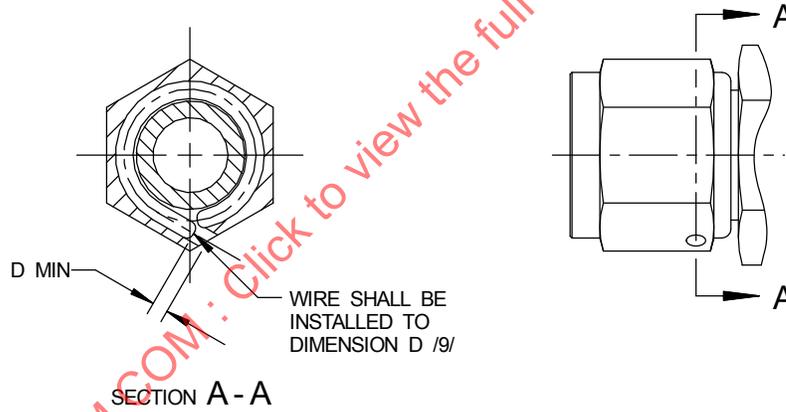
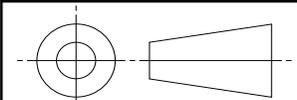


FIGURE 2 - INSTALLATION, RETAINED NUT AND RETAINING WIRE

INACTIVE IN PART /17/

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS4406A>

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS4841

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) FITTING ASSEMBLY, UNION, REDUCER AND NONREDUCER, INTERNAL FLARE

SAE AS4406
SHEET 1 OF 6

REV.
A

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

SAENORM.COM: Click to view the full PDF of as4406a

ISSUED 1995-03 REVISED 2011-02

TABLE 1 - OVERALL LENGTH A

SIZE OF PORT #2	SIZE OF PORT #1 02	SIZE OF PORT #1 03	SIZE OF PORT #1 04	SIZE OF PORT #1 05	SIZE OF PORT #1 06	SIZE OF PORT #1 08	SIZE OF PORT #1 10	SIZE OF PORT #1 12	SIZE OF PORT #1 16	SIZE OF PORT #1 20	SIZE OF PORT #1 24	SIZE OF PORT #1 32
02	.733	.745	.762	.818	.858	.938	1.004	1.022	1.110	1.239	1.318	1.546
03	--	.748	.765	.821	.861	.941	1.007	1.025	1.113	1.242	1.321	1.549
04	--	--	.773	.829	.869	.949	1.015	1.033	1.121	1.250	1.329	1.557
05	--	--	--	.876	.916	.996	1.062	1.080	1.168	1.297	1.376	1.604
06	--	--	--	--	.947	1.027	1.093	1.111	1.199	1.328	1.407	1.635
08	--	--	--	--	--	1.089	1.155	1.173	1.261	1.390	1.469	1.697
10	--	--	--	--	--	--	1.203	1.221	1.309	1.438	1.517	1.745
12	--	--	--	--	--	--	--	1.221	1.309	1.438	1.517	1.745
16	--	--	--	--	--	--	--	--	1.361	1.490	1.569	1.797
20	--	--	--	--	--	--	--	--	--	1.583	1.662	1.890
24	--	--	--	--	--	--	--	--	--	--	1.705	1.933
32	--	--	--	--	--	--	--	--	--	--	--	2.089

TABLE 2 - DIMENSIONS AND WEIGHTS

BASIC NO. AS4406 /16/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879	C	D	E	LB/EA APPROX REF ALUM	LB/EA APPROX REF CRES	LB/EA APPROX REF TI
02	.125	.3125-24 UNJF	.058- .065	.045	.552- .565	.024	.070	.040
03	.188	.3750-24 UNJF	.121- .128	.045	.615- .628	.029	.084	.048
04	.250	.4375-20 UNJF	.168- .175	.045	.678- .691	.030	.087	.050
05	.312	.5000-20 UNJF	.230- .237	.045	.740- .753	.038	.111	.064
06	.375	.5625-18 UNJF	.293- .301	.045	.802- .815	.053	.153	.088
08	.500	.7500-16 UNJF	.387- .395	.055	.990-1.003	.073	.211	.121
10	.625	.8750-14 UNJF	.480- .488	.063	1.113-1.128	.105	.307	.176
12	.750	1.0625-12 UNJ	.604- .614	.095	1.363-1.380	.193	.560	.321
16	1.000	1.3125-12 UNJ	.839- .851	.125	1.613-1.630	.269	.782	.448
20	1.250	1.6250-12 UNJ	1.073-1.086	.155	1.863-1.880	.544	1.580	.905
24	1.500	1.8750-12 UNJ	1.307-1.320	.180	2.109-2.135	.682	1.980	1.134
32	2.000	2.5000-12 UNJ	1.776-1.791	.180	2.734-2.760	1.223	3.550	2.033

TABLE 3 - DRILL DEPTH X

SIZE OF PORT #2	SIZE OF PORT #1 02	SIZE OF PORT #1 03	SIZE OF PORT #1 04	SIZE OF PORT #1 05	SIZE OF PORT #1 06	SIZE OF PORT #1 08	SIZE OF PORT #1 10	SIZE OF PORT #1 12	SIZE OF PORT #1 16	SIZE OF PORT #1 20	SIZE OF PORT #1 24	SIZE OF PORT #1 32
02	THRU	.301	.305	.343	.364	.417	.456	.437	.457	.518	.529	.620
03	--	THRU	.323	.383	.383	.436	.475	.456	.475	.536	.547	.639
04	--	--	THRU	.373	.394	.447	.486	.467	.486	.547	.558	.650
05	--	--	--	THRU	.412	.465	.504	.485	.504	.565	.576	.668
06	--	--	--	--	THRU	.488	.527	.508	.528	.588	.600	.691
08	--	--	--	--	--	THRU	.512	.493	.513	.574	.585	.676
10	--	--	--	--	--	--	THRU	.510	.530	.591	.602	.693
12	--	--	--	--	--	--	--	THRU	.544	.605	.616	.707
16	--	--	--	--	--	--	--	--	THRU	.667	.678	.769
20	--	--	--	--	--	--	--	--	--	THRU	.707	.799
24	--	--	--	--	--	--	--	--	--	--	THRU	.859
32	--	--	--	--	--	--	--	--	--	--	--	THRU

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

A. DASH AS CODE LETTER:

- (1) BODY: TYPE 4130 STEEL BAR PER AMS-S-6758 OR AMS6370.
- (2) NUT: DASH AS CODE LETTER OF AS4370 (TYPE 4130 STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

B. CODE LETTER D /17/:

- (1) BODY: TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6; OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339.
- (2) NUT: CODE LETTER D OF AS4370 (TYPE 2024 ALUMINUM ALLOY).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

C. CODE LETTER J:

- (1) BODY: TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS5639 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER J OF AS4370 (TYPE 304 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

D. CODE LETTER K:

- (1) BODY: TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS5648 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER K OF AS4370 (TYPE 316 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

E. CODE LETTER S:

- (1) BODY: TYPE 347 CORROSION RESISTANT STEEL BAR PER AMS5646 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER S OF AS4370 (TYPE 347 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

F. CODE LETTER T:

- (1) BODY: TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928.
- (2) NUT: CODE LETTER T OF AS4370 (TYPE 6AL-4V TITANIUM ALLOY).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

G. CODE LETTER W:

- (1) BODY: TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124; OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.
- (2) NUT: CODE LETTER W OF AS4370 (TYPE 7075 ALUMINUM ALLOY).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

2. HEAT TREATMENT PER PROCUREMENT SPECIFICATION.

3. FINISH:

A. DASH AS MATERIAL CODE LETTER:

- (1) BODY: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK.
- (2) NUT: DASH AS MATERIAL CODE LETTER OF AS4370 (CADMIUM PLATE, DYED BLACK).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

B. MATERIAL CODE LETTER D:

- (1) BODY: ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL.
- (2) NUT: MATERIAL CODE LETTER D OF AS4370 (ANODIC COATING, DYE BLUE).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

C. MATERIAL CODE LETTER J:

- (1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.
- (2) NUT: MATERIAL CODE LETTER J OF AS4370 (PASSIVATED).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

D. MATERIAL CODE LETTER K:

- (1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.
- (2) NUT: MATERIAL CODE LETTER K OF AS4370 (PASSIVATED).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

E. MATERIAL CODE LETTER S:

- (1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.
- (2) NUT: MATERIAL CODE LETTER S OF AS4370 (PASSIVATED).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

SAEHOM.COM : Click to view the full PDF of as4406a

 An SAE International Group	AEROSPACE STANDARD	AS4406 SHEET 4 OF 6	REV. A
	(R) FITTING ASSEMBLY, UNION, REDUCER AND NONREDUCER, INTERNAL FLARE		