

RATIONALE

THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.

AS4406

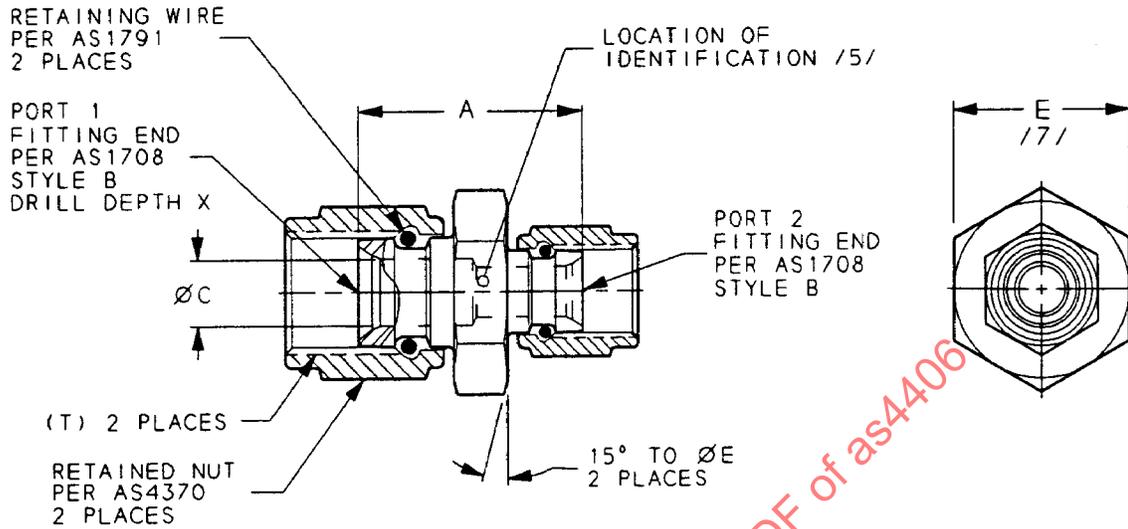


FIGURE 1 - FITTING ASSEMBLY, UNION

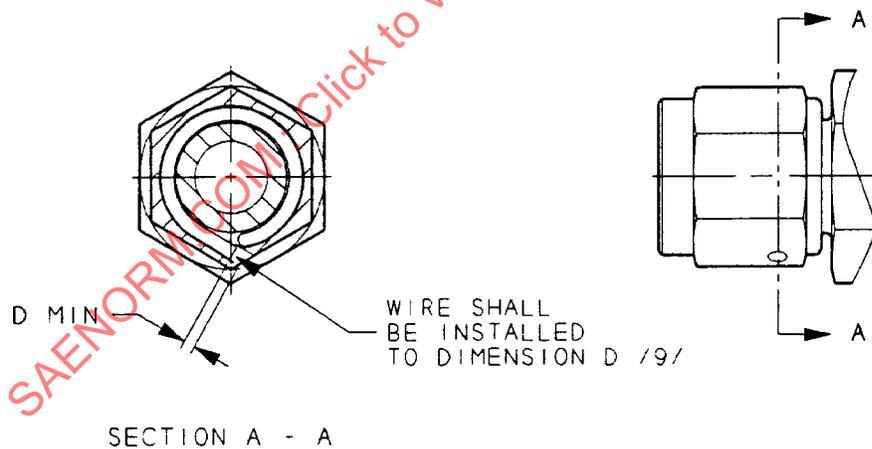
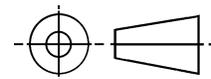


FIGURE 2 - INSTALLATION, RETAINED NUT AND RETAINING WIRE

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ MIL-F-5509

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

FITTING ASSEMBLY, UNION, REDUCER  
AND NONREDUCER, INTERNAL FLARE

**AS4406**  
SHEET 1 OF 4

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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 MIL-S-8879	C	D	E /8/	LB/EA MAX ALUM	LB/EA MAX CRES	LB/EA MAX TI	
02	.125	.3125-24 UNJF	.065	.058	.045	.562	.024	.070	.040
03	.187	.3750-24 UNJF	.128	.121	.045	.625	.029	.084	.048
04	.250	.4375-20 UNJF	.175	.168	.045	.688	.030	.087	.050
05	.312	.5000-20 UNJF	.237	.230	.045	.750	.038	.111	.064
06	.375	.5625-18 UNJF	.301	.293	.045	.812	.053	.153	.088
08	.500	.7500-16 UNJF	.395	.387	.055	1.000	.073	.211	.121
10	.625	.8750-14 UNJF	.488	.480	.063	1.125	.105	.307	.176
12	.750	1.0625-12 UNJ	.614	.604	.095	1.375	.193	.560	.321
16	1.000	1.3125-12 UNJ	.851	.839	.125	1.625	.269	.782	.448
20	1.250	1.6250-12 UNJ	1.086	1.073	.155	1.875	.544	1.580	.905
24	1.500	1.8750-12 UNJ	1.320	1.307	.180	2.125	.682	1.980	1.134
32	2.000	2.5000-12 UNJ	1.791	1.776	.180	2.750	1.223	3.550	2.033

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TABLE 3 - DRILL DEPTH X

SIZE OF PORT #2	SIZE OF PORT #1 #2	SIZE OF PORT #1 #3	SIZE OF PORT #1 #4	SIZE OF PORT #1 #5	SIZE OF PORT #1 #6	SIZE OF PORT #1 #8	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	.361	.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:

## /1/ MATERIAL:

## a. NO CODE LETTER:

- (1) BODY: TYPE 4130 STEEL BAR PER MIL-S-6758
- (2) NUT: CODE LETTER NONE OF AS4370 (TYPE 4130 STEEL)
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL)

## b. CODE LETTER D:

- (1) BODY: 2024T6 ALUMINUM ALLOY BAR PER AMS 4112 OR QQ-A-225/6; OR 2024T851 ALUMINUM ALLOY BAR PER QQ-A-225/6
- (2) NUT: CODE LETTER D OF AS4370 (TYPE 2024 ALUMINUM ALLOY)
- (3) WIRE: PER AS1791 (TYPE 302 OR 305 CORROSION RESISTANT STEEL)

## c. CODE LETTER J:

- (1) BODY: 30304 CORROSION RESISTANT STEEL BAR PER AMS 5639 OR 304 CORROSION RESISTANT STEEL BAR PER QQ-S-763
- (2) NUT: CODE LETTER J OF AS4370 (TYPE 304 CORROSION RESISTANT STEEL)
- (3) WIRE: PER AS1791 (TYPE 302 OR 305 CORROSION RESISTANT STEEL)

## d. CODE LETTER K:

- (1) BODY: 30316 CORROSION RESISTANT STEEL BAR PER AMS 5648 OR 316 CORROSION RESISTANT STEEL BAR PER QQ-S-763
- (2) NUT: CODE LETTER K OF AS4370 (TYPE 316 CORROSION RESISTANT STEEL)
- (3) WIRE: PER AS1791 (TYPE 302 OR 305 CORROSION RESISTANT STEEL)

## e. CODE LETTER S:

- (1) BODY: 30347 CORROSION RESISTANT STEEL BAR PER AMS 5646 OR 347 CORROSION RESISTANT STEEL BAR PER QQ-S-763
- (2) NUT: CODE LETTER S OF AS4370 (TYPE 347 CORROSION RESISTANT STEEL)
- (3) WIRE: PER AS1791 (TYPE 302 OR 305 CORROSION RESISTANT STEEL)

## f. CODE LETTER T:

- (1) BODY: 6AL-4V TITANIUM ALLOY BAR PER AMS 4928
- (2) NUT: CODE LETTER T OF AS4370 (TYPE 6AL4V TITANIUM)
- (3) WIRE: PER AS1791 (TYPE 302 OR 305 CORROSION RESISTANT STEEL)

## g. CODE LETTER W:

- (1) BODY: 7075T7351 ALUMINUM ALLOY BAR PER AMS 4124 OR 7075T73 ALUMINUM ALLOY BAR PER QQ-A-225/9
- (2) NUT: CODE LETTER W OF AS4370 (TYPE 7075 ALUMINUM ALLOY)
- (3) WIRE: PER AS1791 (TYPE 302 OR 305 CORROSION RESISTANT STEEL)

## 2. HEAT TREAT PER PROCUREMENT SPECIFICATION.

## /3/ FINISH:

## a. NO CODE LETTER:

- (1) BODY: CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2, DYE BLACK
- (2) NUT: NO CODE LETTER OF AS4370 (CADMIUM PLATE, DYE BLACK)
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT)