

SAE Executive Standards Committee 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 revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

REV. A
AS95™

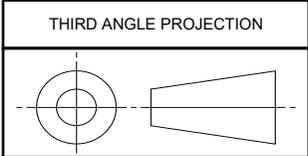
FEDERAL SUPPLY CLASS
4730

RATIONALE

ALL GRAPHICS AND TABLES REDRAWN FOR CLARITY. CADMIUM WARNING NOTE ADDED. "NOT RECOMMENDED" NOTE ADDED TO SHEET 1. PROCUREMENT SPECIFICATION MIL-F-5509 REPLACED BY CURRENT AS4841. "CODE LETTER NONE" IS BEING REPLACED BY "DASH AS CODE LETTER" TO ENSURE A DASH IS INCORPORATED IN THE PART NUMBER FOR 4130 STEEL. SPECIFICATION CALLOUTS UPDATED TO CURRENT NOMENCLATURE. MATERIAL CODE LETTER "R," CRES 321, INTRODUCED AS AN OPTIONAL MATERIAL. FINISH FOR MATERIAL CODE LETTER "R" BEING INTRODUCED. PROCUREMENT SPECIFICATION NOTE UPDATED TO CURRENT QML VERBIAGE. NOTE /10/ UPDATED TO INCLUDE ASSEMBLY INSTRUCTIONS OF NUT ONTO BODY. NOTE /17/, EXAMPLE OF PART NUMBER, UPDATED TO REFLECT OPTIONAL DRY FILM CODE LETTER "N" CALLOUT IN PART NUMBER FOR SWIVEL NUT. REVISION INDICATOR NOTE 18 ADDED. RECOMMENDATION USAGE NOTE /19/ ADDED FOR ALUMINUM AND 347 CRES. INVENTORY DISPOSITION NOTE 20 ADDED.

SAENORM.COM : Click to view the full PDF of as95a

For more information on this standard, visit
<https://www.sae.org/standards/content/AS95A/>



CUSTODIAN: G-3/G-3B PROCUREMENT SPECIFICATION: AS4841 /4/

	AEROSPACE STANDARD (R) FITTING ASSEMBLY, CROSS, REDUCER AND NON-REDUCER, INTERNAL FLARE ON ONE END, TO FLARED TUBE	AS95™ SHEET 1 OF 7	REV. A

ISSUED 1995-03 REAFFIRMED 2013-01 REVISED 2023-05

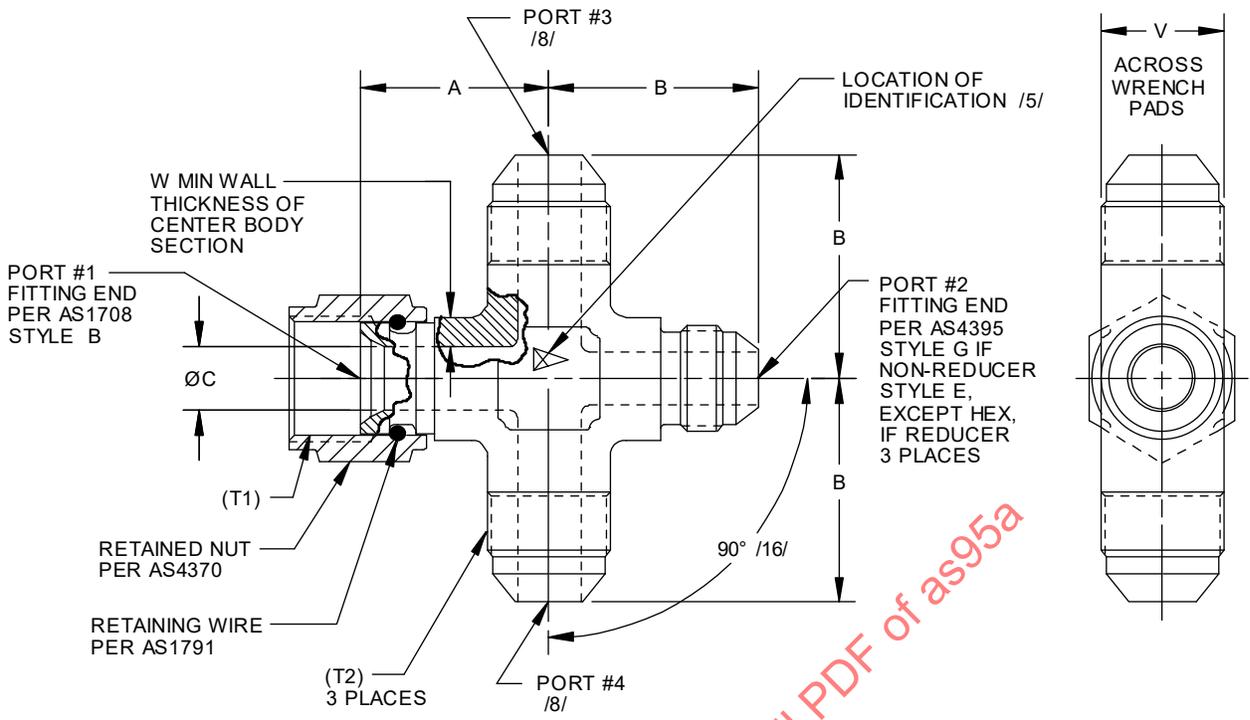


FIGURE 1 - FITTING ASSEMBLY, CROSS

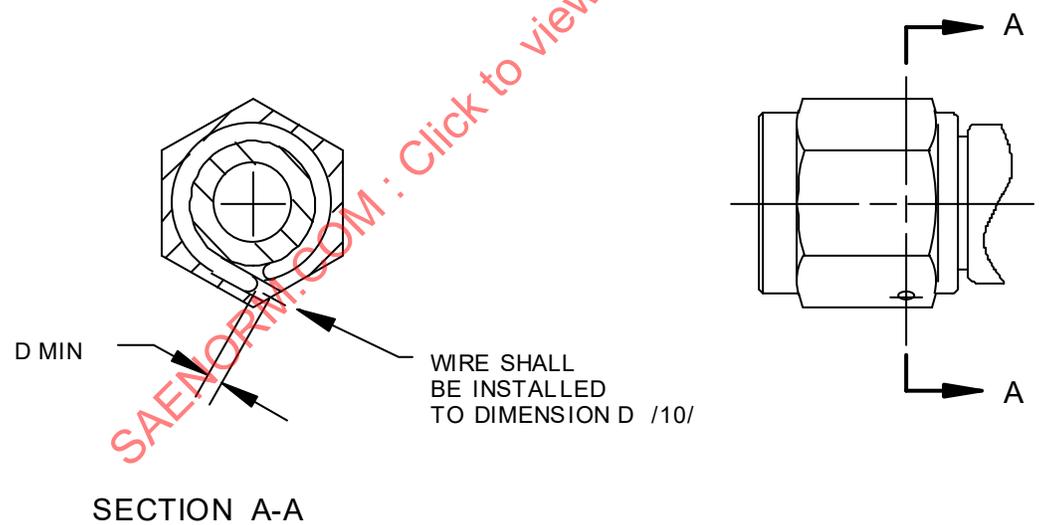


FIGURE 2 - INSTALLATION, RETAINED NUT AND RETAINING WIRE

NOT RECOMMENDED IN PART /19/

	AEROSPACE STANDARD (R) FITTING ASSEMBLY, CROSS, REDUCER AND NON-REDUCER, INTERNAL FLARE ON ONE END, TO FLARED TUBE	AS95™ SHEET 2 OF 7	REV. A

TABLE 1 - DIMENSIONS C-W AND WEIGHTS

BASIC NO. AS95 /17/ SIZE CODE	(NOMINAL TUBE SIZE)	T1, T2 THREAD		C	D	V	W	LB/EA	LB/EA	LB/EA
		PER AS8879	CLASS 3B, 3A					APPROX REF ALUM	APPROX REF CRES	APPROX REF TI
02	.125	.3125-24 UNJF		.058- .065	.045	.313	.090	.022	.062	.036
03	.187	.3750-24 UNJF		.121- .128	.045	.375	.100	.029	.084	.048
04	.250	.4375-20 UNJF		.168- .175	.045	.438	.110	.040	.116	.067
05	.312	.5000-20 UNJF		.230- .237	.045	.500	.120	.052	.150	.086
06	.375	.5625-18 UNJF		.293- .301	.045	.563	.120	.069	.201	.115
08	.500	.7500-16 UNJF		.387- .395	.055	.750	.150	.133	.385	.220
10	.625	.8750-14 UNJF		.480- .488	.063	.875	.170	.203	.590	.338
12	.750	1.0625-12 UNJ		.604- .614	.095	1.063	.185	.335	.970	.556
16	1.000	1.3125-12 UNJ		.839- .851	.125	1.313	.205	.489	1.419	.813
20	1.250	1.6250-12 UNJ	1.073-1.086		.155	1.625	.240	.879	2.550	1.461
24	1.500	1.8750-12 UNJ	1.307-1.320		.180	1.875	.250	1.181	3.369	1.930
32	2.000	2.5000-12 UNJ	1.776-1.791		.180	2.563	.350	2.544	7.385	4.230

TABLE 2 - LEG LENGTH A

SIZE OF PORT #1	FORG. SIZE /9/ 02	FORG. SIZE /9/ 03	FORG. SIZE /9/ 04	FORG. SIZE /9/ 05	FORG. SIZE /9/ 06	FORG. SIZE /9/ 08	FORG. SIZE /9/ 10	FORG. SIZE /9/ 12	FORG. SIZE /9/ 16	FORG. SIZE /9/ 20	FORG. SIZE /9/ 24	FORG. SIZE /9/ 32
02	.658	.686	.743	.767	.884	.924	1.100	1.157	1.268	1.521	1.521	2.031
03	--	.672	.555	.587	.649	.743	.838	.931	1.056	1.213	1.338	2.015
04	--	--	.602	.633	.695	.789	.883	.976	1.101	1.258	1.383	1.890
05	--	--	--	.675	.737	.831	.925	1.018	1.143	1.300	1.425	1.937
06	--	--	--	--	.821	.915	1.009	1.102	1.227	1.384	1.509	1.968
08	--	--	--	--	--	1.023	1.117	1.210	1.334	1.491	1.616	2.130
10	--	--	--	--	--	--	1.167	1.260	1.383	1.540	1.665	2.098
12	--	--	--	--	--	--	--	1.224	1.348	1.505	1.630	2.098
16	--	--	--	--	--	--	--	--	1.387	1.524	1.649	2.150
20	--	--	--	--	--	--	--	--	--	1.571	1.696	2.243
24	--	--	--	--	--	--	--	--	--	--	1.776	2.286
32	--	--	--	--	--	--	--	--	--	--	--	2.442

TABLE 3 - LEG LENGTH B

SIZE OF PORTS #2, #3, #4	FORG. SIZE /9/ 02	FORG. SIZE /9/ 03	FORG. SIZE /9/ 04	FORG. SIZE /9/ 05	FORG. SIZE /9/ 06	FORG. SIZE /9/ 08	FORG. SIZE /9/ 10	FORG. SIZE /9/ 12	FORG. SIZE /9/ 16	FORG. SIZE /9/ 20	FORG. SIZE /9/ 24	FORG. SIZE /9/ 32
02	.757	.789	.789	.843	.946	1.033	1.135	1.232	1.341	1.544	1.685	2.169
03	--	.820	.811	.874	.977	1.064	1.166	1.263	1.372	1.575	1.716	2.200
04	--	--	.882	.945	1.048	1.135	1.237	1.334	1.443	1.646	1.787	2.271
05	--	--	--	.945	1.048	1.135	1.237	1.334	1.443	1.646	1.787	2.271
06	--	--	--	--	1.054	1.141	1.243	1.340	1.449	1.652	1.793	2.277
08	--	--	--	--	--	1.242	1.344	1.441	1.555	1.753	1.894	2.378
10	--	--	--	--	--	--	1.445	1.542	1.651	1.854	1.995	2.479
12	--	--	--	--	--	--	--	1.648	1.757	1.960	2.101	2.585
16	--	--	--	--	--	--	--	--	1.804	2.007	2.148	2.632
20	--	--	--	--	--	--	--	--	--	2.054	2.195	2.679
24	--	--	--	--	--	--	--	--	--	--	2.320	2.804
32	--	--	--	--	--	--	--	--	--	--	--	3.054

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 FORGING OR BAR PER AMS6370 OR AMS-S-6758.
- (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 /19/:

- (1) BODY: 2014-T6 ALUMINUM ALLOY FORGING PER AMS4133 OR AMS-QQ-A-367; OR 2024-T6 ALUMINUM ALLOY BAR PER AMS4112 OR AMS-QQ-A-225/6; OR 2024-T851 ALUMINUM ALLOY BAR PER AMS-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: TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5639 OR AMS-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: TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5648 OR AMS-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 R:

- (1) BODY: TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5645 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER R OF AS4370 (TYPE 321 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

f. CODE LETTER S /19/:

- (1) BODY: TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5646 OR AMS-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).

g. CODE LETTER T:

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

SAENORM.COM: Click to view the full PDF of as95a

	AEROSPACE STANDARD	AS95™ SHEET 4 OF 7	REV. A
	(R) FITTING ASSEMBLY, CROSS, REDUCER AND NON-REDUCER, INTERNAL FLARE ON ONE END, TO FLARED TUBE		

h. CODE LETTER W:

- (1) BODY: TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141 OR AMS-QQ-A-367 OR 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 (TYPE 302 OR 305 CORROSION RESISTANT STEEL).

2. HEAT TREAT 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, DYE BLACK).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

b. MATERIAL CODE LETTER D:

- (1) BODY: ANODIZE PER AMS2472 OR MIL-PRF-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 R:

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

f. 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).

g. MATERIAL CODE LETTER T:

- (1) BODY: ANODIZE PER AMS2488 TYPE 2 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486.
- (2) NUT: MATERIAL CODE LETTER T OF AS4370 (FLUORIDE PHOSPHATE CONVERSION COAT).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

	AEROSPACE STANDARD	AS95™ SHEET 5 OF 7	REV. A
	(R) FITTING ASSEMBLY, CROSS, REDUCER AND NON-REDUCER, INTERNAL FLARE ON ONE END, TO FLARED TUBE		