

REV.
C

SAE AS4690

RATIONALE

CANCELED MILITARY STANDARD NUMBERS HAVE BEEN REPLACED. PRI-QPL NOTE HAS BEEN UPDATED AND CADMIUM WARNING NOTE ADDED. OTHER UPDATES.

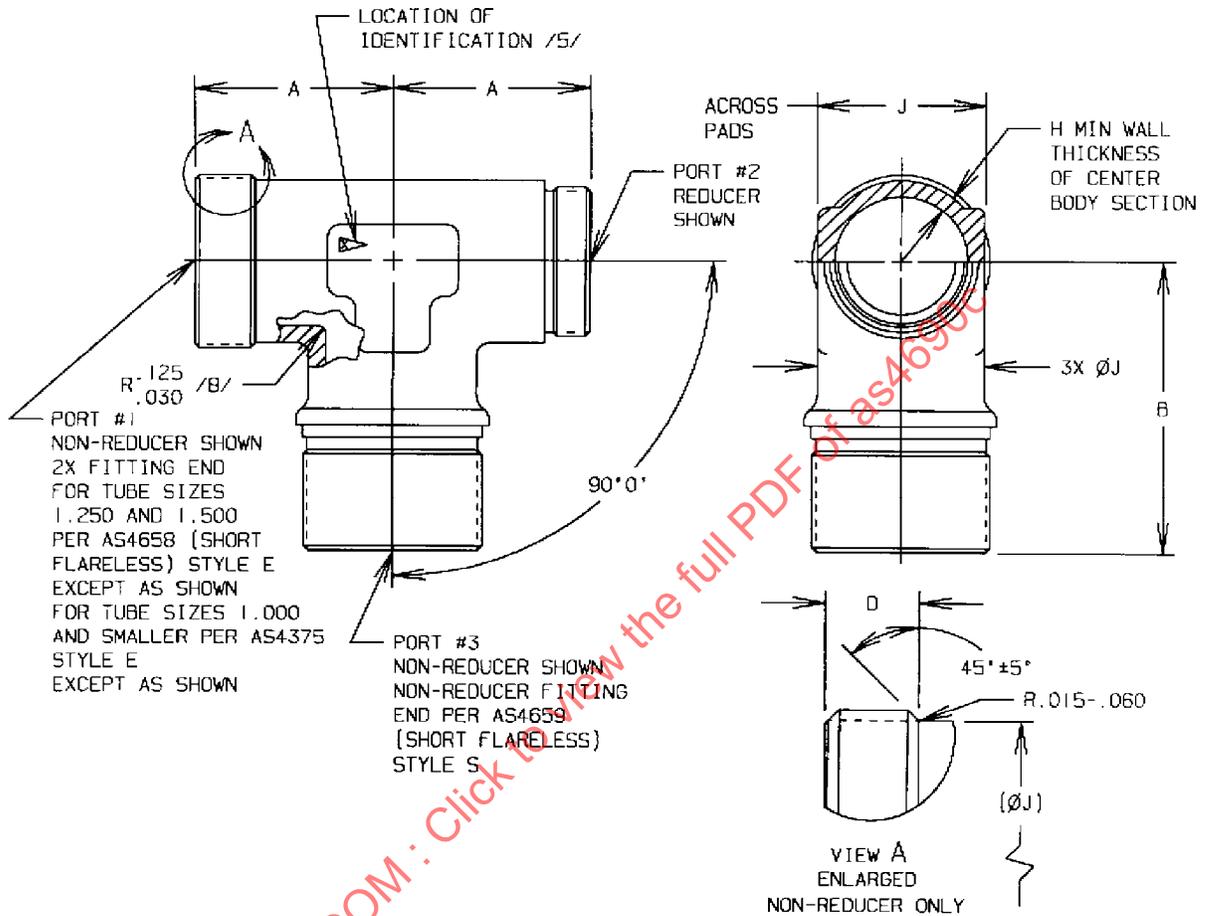
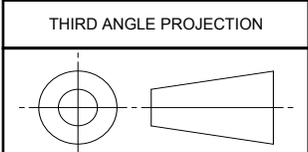


FIGURE 1 - FITTING, TEE, REDUCER

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CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS18280

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) FITTING, TEE, REDUCER,
BULKHEAD ON SIDE,
FLARELESS AND SHORT FLARELESS

SAE AS4690
SHEET 1 OF 7

REV. C

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ISSUED 1992-07 REAFFIRMED 2007-07 REVISED 2012-07

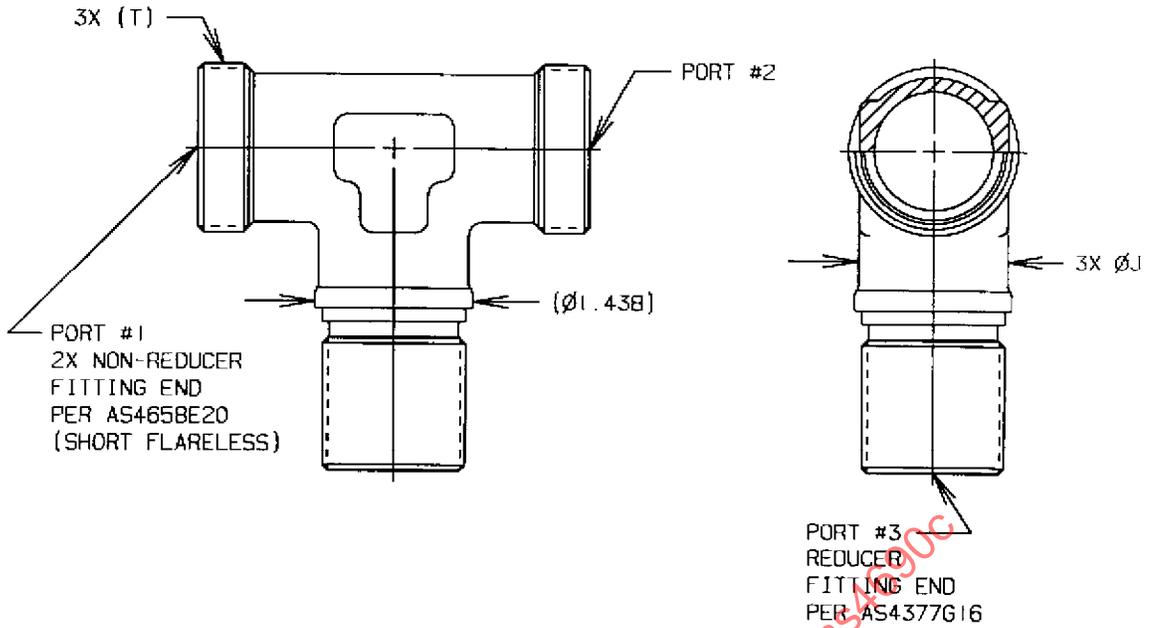


FIGURE 2A - FITTING, TEE, SIZE 20
SHORT ENDS TO SIZE 16 BULKHEAD REDUCER

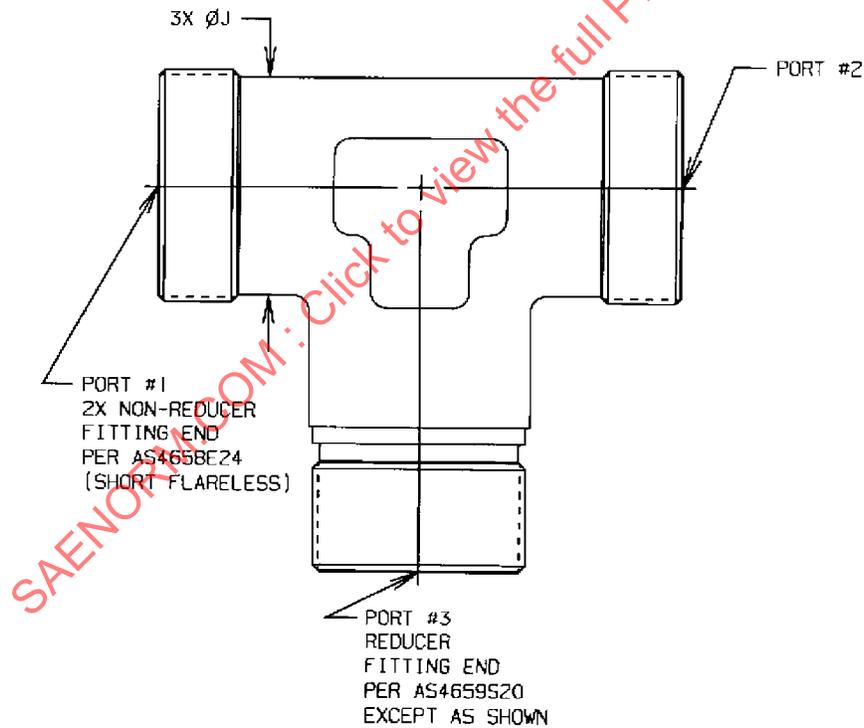


FIGURE 2B - FITTING, TEE, SIZE 24
SHORT ENDS TO SIZE 20 BULKHEAD REDUCER

<p>SAE Aerospace An SAE International Group</p>	AEROSPACE STANDARD	AS4690 SHEET 2 OF 7	REV. C
	(R) FITTING, TEE, REDUCER, BULKHEAD ON SIDE, FLARELESS AND SHORT FLARELESS		

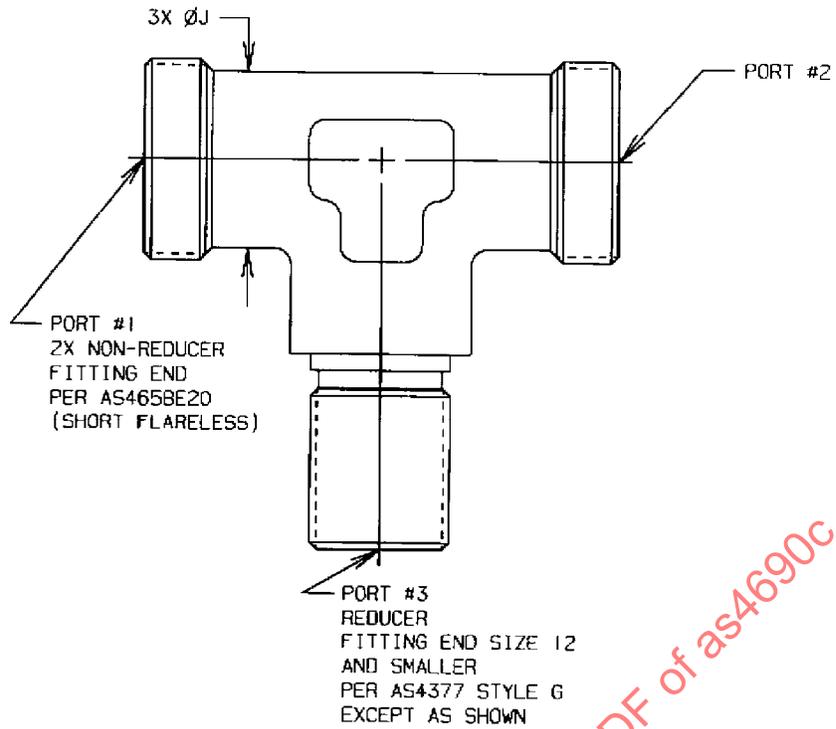


FIGURE 2C - FITTING, TEE, SIZE 20 SHORT ENDS TO SIZE 12 AND SMALLER BULKHEAD REDUCER

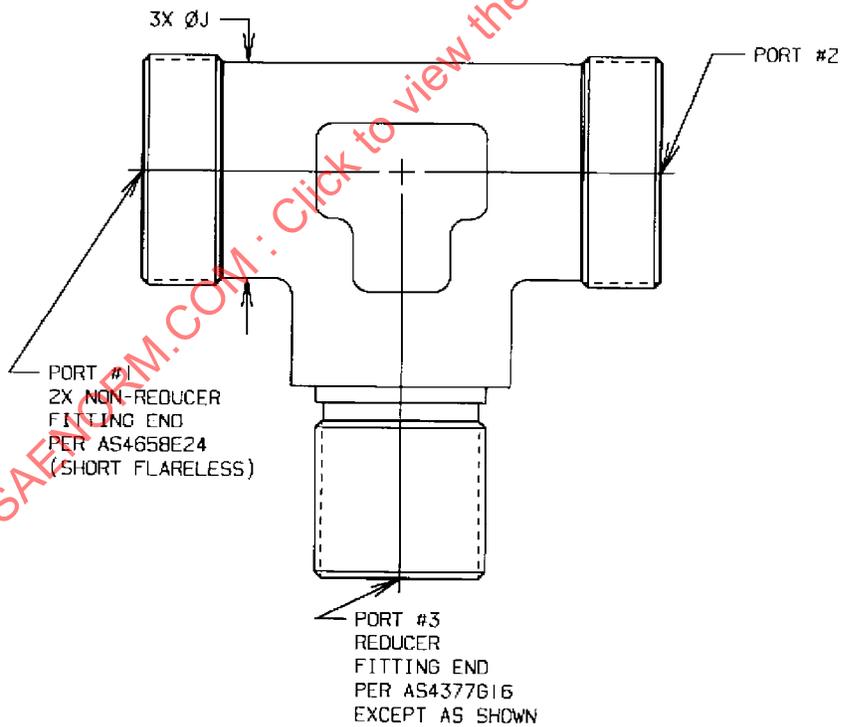


FIGURE 2D - FITTING, TEE, SIZE 24 SHORT ENDS TO SIZE 16 BULKHEAD REDUCER

TABLE 1 - DIMENSIONS AND WEIGHTS /10/

BASIC NO. AS4690 /9/ /19/ SIZE CODE	D	H	J + .005 - .020	LB/EA APPROX REF ALUM	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
20	.517	.124	1.375	.426	1.18	.640
24	.614	.156	1.688	.630	1.74	.998

TABLE 2 - LEG LENGTH A /11/

SIZE OF PORT	FORGING SIZE /9/ 20	FORGING SIZE /9/ 24
02	1.710	1.898
03	1.757	1.945
04	1.788	1.976
05	1.788	1.976
06	1.804	1.992
08	1.897	2.085
10	1.960	2.148
12	2.023	2.211
14	2.023	2.211
16	2.023	2.211
20	1.798	1.986
24	-	1.986

TABLE 3 - LEG LENGTH B /11/

SIZE OF PORT	FORGING SIZE /9/ 20	FORGING SIZE /9/ 24
02	2.320	2.602
03	2.367	2.649
04	2.430	2.712
05	2.430	2.712
06	2.476	2.758
08	2.648	2.930
10	2.789	3.071
12	2.989	3.180
14	2.989	3.180
16	2.989	3.180
20	2.686	2.968
24	-	2.968

TABLE 4 - TUBE SIZE AND CORRESPONDING THREADS

SIZE OF PORT	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A
02	.125	.3125-24UNJF
03	.188	.3750-24UNJF
04	.250	.4375-20UNJF
05	.312	.5000-20UNJF
06	.375	.5625-18UNJF
08	.500	.7500-16UNJF
10	.625	.8750-14UNJF
12	.750	1.0625-12UNJ
14	.875	1.1875-12UNJ
16	1.000	1.3125-12UNJ
20	1.250	1.5625-12UNJ
24	1.500	1.8125-12UNJ

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. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928.
- b. CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5659.
- c. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124 OR 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER T - NONE.
- b. MATERIAL CODE LETTER V - HEAT TREAT TO CONDITION H-1075 PER AMS2759/3.
- c. MATERIAL CODE LETTER W - ELECTRICAL CONDUCTIVITY AND HARDNESS PER PROCUREMENT SPECIFICATION.

/3/ FINISH:

- a. MATERIAL CODE LETTER T - FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 OR ANODIZE PER AMS2488 TYPE 2. BARE AREAS OF FLUORIDE PHOSPHATE COATING OCCURRING ON SEALING, BEARING OR THREADED SURFACES SHALL NOT BE CAUSE FOR REJECTION. BARE AREAS SHALL NOT EXCEED 30% OF THE REMAINING SURFACE AREA.
- b. MATERIAL CODE LETTER V -
 - (1) V CODE PARTS TO BE PASSIVATED ONLY WILL HAVE NO FINISH CODE LETTER AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: PASSIVATE PER AMS2700 TYPE 2 OR 8.
 - (2) V CODE PARTS TO BE CADMIUM PLATED ONLY WILL HAVE THE FINISH CODE LETTER "P" AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.
- c. MATERIAL CODE LETTER W - ANODIZE PER AMS2472 OR PER MIL-A-8625, TYPE II, CLASS 2 DYED BROWN SIMILAR TO COLOR 10080 OF FED-STD-595.

 An SAE International Group	AEROSPACE STANDARD	SAE AS4690 SHEET 5 OF 7	REV. C
	(R) FITTING, TEE, REDUCER, BULKHEAD ON SIDE, FLARELESS AND SHORT FLARELESS		