Contact Retention Summary, AMPMODU* MTE Connector

1. INTRODUCTION

The purpose of this report is to provide a summary of contact retention measurements from tests in the Capital Goods Business Unit Test Engineering Laboratory files. For these tests, contact retention is defined as the force required to move contacts out of the fully inserted position in housings.

2. SUMMARY OF RESULTS

CGL-Test Number	Minimum Retention	Maximum Retention	Average Retention	Standard Deviation	No. Data Points
5464-72	5.13	10.01	7.80	1.22	30
5464-75	3.05	8.41	6.12	1.51	30
5464-76	4.65	11.18	8.53	1.23	26

Figure 1
Contact Retention Data Summary in Pounds

CGL-Test Number	Date Tested	Receptacle Assembly P/N	Wire size	Force Rate (inch/minute)
5464-72	23Jul91	103644-9	24 AWG	1
5464-75	01Apr92	103644-9		0.5
5464-76	17Dec92	1-103644-5 103957-4	See Note	1

NOTE *For Test CGL5464-76, contacts remained locked in the housings with each wire being pulled from the contact. Wire size was not recorded.*

Figure 2
Testing Information

3. PROCEDURE

Contact retention testing was done in accordance with AMP Test Specification 109-30 Revision C, except that force was applied until the contact was moved from the fully inserted position. The connectors were held in a vice on the XY table of the Instron Machine. Each wire was placed in an air jaw fixture attached to the load cell, on the upper movable Instron head, and force was applied in an upward direction until failure.

4. EQUIPMENT LIST

All equipment containing an E4997- number is calibrated and traceable through AMP Metrology Department to the National Institute Of Standards and Technology (NIST).

Equipment	E4997- Manufacturer	Model#
Tensile / Compression	0469, 0293 Instron	1122
Load Cell	0469, 0293 Instron	1000 Lb

Figure 3
Equipment List

5. VALIDATION

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