

**Retention Force Test Report Of EP3.96 Header Assembly**

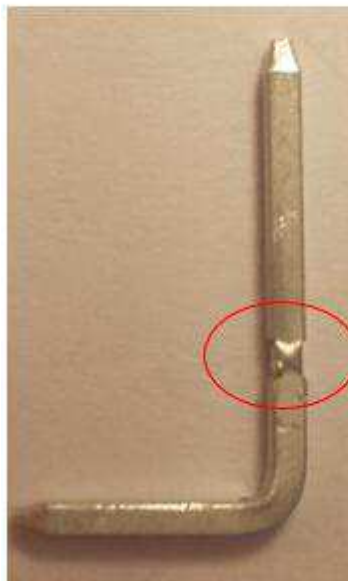
**1. INTRODUCTION**

Test was performed on EP3.96 header assembly to verify the post retention force of current part and new proposal part. (P/N: 1744428-2)

**Before improvement**



**After improvement  
(Add swage structure)**



Test was performed at TE Shanghai Electrical Test Laboratory per Product Specification 108-5619(Rev E).

**2. TEST SPECIMENS**

Description	P/N	Part Revision
EP 3.96 R/A header assembly	1744428-2	E (Current)
EP 3.96 R/A header assembly	1744428-2	After improvement

### 3. TEST CONDITIONS

Unless otherwise specified, all the test shall be performed in any combination of the following test conditions.

Temperature	15 ~ 35°C
Relative Humidity	25 ~ 75%

### 4. TEST RESULT

#### 4.1 Initial post retention force

Samples of before improvement is 27N min, can not meet spec. (29.4N min.)

Samples of after improvement is 68N min, can meet spec.

Sample	Post retention force(N)	
	Before improvement	After improvement
Min.	27.29	68.34
Max.	34.04	83.32
Ave.	31.04	77.85



## 4.2 Retention force after soldering

We tested the retention force (pushed the housing) after soldering (condition: 260degree, 5s, similar with customer condition)

Samples of before improvement is 24N min, samples of after improvement is 96N min, it has an obvious improvement for the retention force.

Sample	Retention force(N)	
	Before improvement	After improvement
Min.	24.10	96.86
Max.	33.80	112.65
Ave.	29.05	104.29





## 5. Summary

From the test, there is a significant improvement for the retention force of the new samples.

If customer agrees with this proposal, we will send the new samples for customer validation at once.