SCOPE

This procedure is to be used whenever a Vertical Force test is to be performed on the bars that are on Power Triple Lock (PTL) Cap Housings. As referenced below in Figure 1, there are 2 bars on each housing; Bar 1 (the Latch bar closer to the mating end) and Bar 2 (the Secondary bar closer to the wire exit end).

1. As determined by TE Connectivity, each of the bars is to withstand a Vertical Force of 44.5 N (10 lbf) without cracking or breaking.
2. Testing is to be performed using a force gage where this requirement does not exceed the capacity of the gage and where the 44.5 N (10 lbf) is not within 10% of the minimum or maximum capacity of the gage.

   Gage calibration must be current.

3. The force gage is to be mounted vertically on a base in order to apply a vertical force individually to Bar 1 and Bar 2.

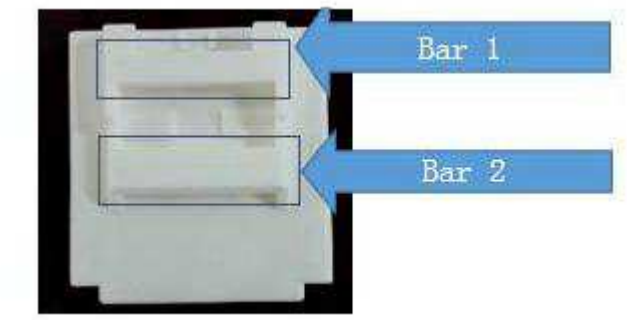

Figure 1

4. The force is to be applied using a manual screw driven base as shown. Note: Alternatively a motorized base can be used to apply the force at a regulated speed of 6.35 mm (0.25 inches) per minute.

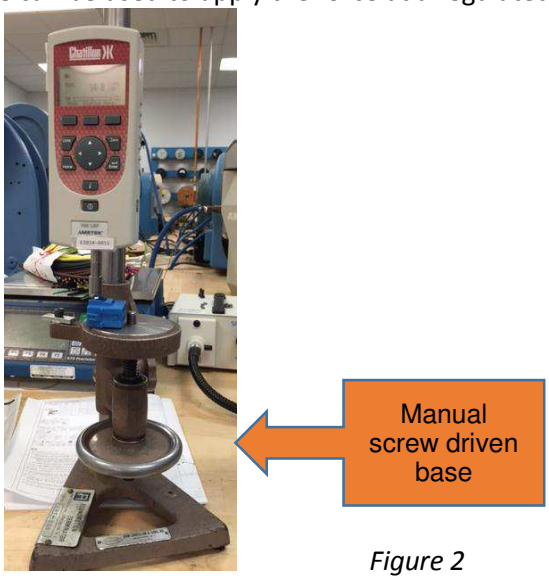

Figure 2

5. A 12.7 mm diameter push rod per TE specifications is to be used to push against each of the bars.
6. The push rod has a large bottom radius and is to touch each bar (individually) in a central position during the testing.
7. The housing is to be aligned so that the top of each bar is perpendicular to the force gage and level.
8. The housing is to be held or clamped in a vise to prevent movement during the duration of the test.

Figure 3

9. The force gage is to be set on “Peak” in order to record the peak force during the test. The test criteria will be as follows: 1) Manually turn the base to apply a force up to 44.5 N (10 lbf) and then inspect each bar of the test sample for cracking or breaking; Record the force applied to each bar and the result (if either bar broke or was OK), or 2) manually turn the base to apply the force until the bar cracks or breaks; If the bar flexes, push only to a distance where the bar just touches the body of the housing and then stop. Record the force applied to each bar and record if it broke or not. If either bar broke, verify that it occurred at a force equal to or larger than 44.5 N (10 lbf).
10. If the test is performed at a TE Connectivity production facility the frequency of the test shall be as specified in the quality inspection plan (QIP) documentation.