

CONFIDENTIAL

Remington Arms Company Inc.  
 RESEARCH & DEVELOPMENT TECHNICAL CENTER  
 315 WEST RING ROAD  
 ELIZABETHTOWN, KY 42701

3.1.3.10 TLW0300Q – Magazine box Weld Strength Test

**HISTORY:** (details and analysis per M. Jiraneck)

Thirteen M/710 magazine boxes were delivered to the Remington Arms Company Research and Development Technology Center in Elizabethtown, Kentucky for weld evaluation of the T&P product. The current specification of the welded box is that no box shall fail when loaded as described in this report below 2,000 pounds of applied load. Of the thirteen boxes supplied, 10 were tested and 1 inadvertently was destroyed during set-up. There are two boxes remaining.

**SUMMARY:**

**All 10 of the boxes tested passed the current specification criteria.** The average failure load for all 10 tested magazine boxes was 3,037 lbf. The boxes were loaded in the Instron tensile testing machine as depicted in Figure 1. The first two magazine boxes tested did not fail the welds, but rather failed the magazine box material. The test set-up was then altered (for the remaining eight magazine boxes tested) by removing the small block in the bottom of the magazine box. This allowed for the failure of the weld rather than the material in six of the remaining eight magazine boxes tested. The average failure load of the last eight magazine boxes tested was 3,229 lbf.

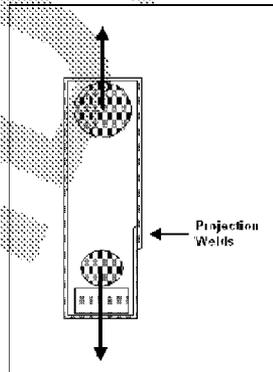


Figure 1. Schematic of the testing set-up for tensile testing the M/710 magazine boxes.

Figure 2 presents an image of one of the magazine boxes which failed the material rather than the welds. Figure 3 presents an image of a magazine box which failed both of the welds during the testing process.

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 R & D Technical Center Project No. 241039; TLW 0300  
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