

**Keeney, Mike**

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To: golemboski,zajk  
Cc: diaz  
Subject: 710.xls

Matt/Joe,  
Attached is a spreadsheet indicating 710 performance data for the two guns that completed testing last week. There are two malfunction types common to both guns, stem low and misfires.

Misfires -- I had previously designed and prototyped higher energy firing pin springs as backup for the primary spring. I have installed a higher energy spring in both of the test guns and will have Jesse reshoot the test. Copper crusher indents averaged .018" with the new springs, versus approx. .016" with the old springs. I measured the old springs when removed from the test guns, the free length varied .04" between the two and were up to .06" shorter than the spec. Not sure if this was due to "setting" of the springs or the protos varied in free length originally. My plans are to enter DAT with the production sample springs that you have already received. If we see misfire problems during DAT, we will order the higher energy springs for part B testing. Firing pin energy and bolt lift forces are the two items that I am trying to balance, thus the desire to stay away from the higher energy spring.

Stem Low -- When we incorporated the .02" radius on the bottom side of the feed lips for the production box, the feed lip width increased from .417 to .434. The test boxes were at .417". I have opened the test box feed lips to .434 for the retest. Hopefully this will allow the rounds to sit high enough to eliminate the stem low malfunction.

Please review and let me know if you have questions.  
Thanks  
Mike