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Remington Arms Company In Research & Development Technical Center 315 West Ring Road Euzaberhtown, KY 42701

observed. When the bolt was opened it had a heavy bolt lift, indicating the firing pin was being cocked by the rotation, therefore it was in the fully forward position. On the second Fail-to-Fire no perceivable movement of the trigger was felt when pulled. Again, no movement of the firing pin was detected on this attempt. Bolt lift was again heavy during opening. 18 of the 20 rounds were fired successfully and all steps as outlined in the test procedure were followed. At no time did an inadvertent discharge occur during this test.

- The same gun, B-22, was torn down, cleaned and jubricated. Trigger pull and engagement were reset.
- The Static Sand & Dust Test with the 60 degree some shaped engagement screw was run next. After application of the sand & dust debris the firearm would not fire. Five attempts were made to pull the trigger. At no time did the gun fire. In addition no evidence of the firing pin falling was detected. This time trigger movement was detected on all five attempts. The bolt opened easily each time the bolt was rotated up, further evidence that the firing pin was in the cocked position. As in the first Static Sand & Dust Test further testing was stopped since the gun would not function. At no time did an inadvertent discharge occur during this test.
- The same gun, B-22, was torn down; cleaned and lubricated. Trigger pull and engagement were reset.
- The Dynamic Sand & Dust Test with the 60 degree cone shaped engagement screw was run last. A total of five malfunctions occurred during this test. The first was a Fail-to-Feed up from the magazine on the second round. The magazine box was removed and the rounds were removed and then reloaded into the box. The round fed ok and fired normally. The next malfunction was a Fail-to-Fire when the trigger was pulled. This occurred on the 3<sup>rd</sup> round. No evidence of the firing pin failing was detected. Bolt lift was heavy on opening, evidence that the firing pin was in the fully forward or fired position. The 4<sup>th</sup> and 5<sup>th</sup> rounds fired normally. The three remaining malfunctions were Stem-Lows that occurred on the 7<sup>th</sup>, 12<sup>th</sup>, and 17<sup>th</sup> rounds, or the 2<sup>nd</sup> round out of the box in all three cases. In each case the stem was corrected and the round fed and fired. In all a total of 19 of the 20 rounds were fired. At no time did an inadvertent discharge occur during this test.
- Two guns were modified on 10/10/00 to allow for detailed examination of the connector/sear interface. This was accomplished by drilling a "sight hole" through the stock in a location permitting examination of the engagement adjustment hole in the fire control. In addition, the rear plastic portion of the bolt plug was removed to expose the rear of the firing pin head. This interface was modified slightly to allow a custom tool to be threaded into the firing pin head so it could be manipulated manually/separately from the gun and bolt cam.

an.2001 Design Acceptance Test Remington M/710 Centerfire Rifle;
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