710 Dry Cycle Report

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OBJECTIVE

The objective of this report is to detail the results of a dry cycle test performed on a Model 710 with a new safety pivot post and clip design.

CONCLUSIONS

The 710 equipped with the new safety pivot post and clip design was dry cycled 2,000 times. No malfunctions of any kind occurred. The safety pivot post was inspected after the dry cycle test and no significant wear was seen.

PROCEDURE

A Remington Model 710 firearm, serial number 71098443, was used for testing. The barreled action was removed from the stock of the firearm. The scope and scope mounting rail were removed from the barreled action. The end of the safety arm was ground flat and drilled through to enable mounting to the safety activator on the dry cycle machine. Photographs were taken of the safety pivot pin prior to testing. No lubrication was applied to the fire control and no cleaning was performed prior to testing. Molybdenum disulphide grease was applied to the locking lugs of the bolt and to the firing pin cam surface of the bolt to ensure smooth operation and minimize bolt wear.

The barreled action was placed in the dry cycle machine. The dry cycle machine performed the following actions in this sequence:

1. Raise bolt
2. Lower bolt
3. Move safety arm to "SAFE" position
4. Move safety arm to "FIRE" position
5. Pull trigger

This sequence was repeated 2,000 times. At the end of the test, the safety was cycled to confirm that it still functioned correctly. The safety was then removed and the safety pivot pin was photographed.

RESULTS

No malfunctions occurred during the 2,000 cycles of the dry cycle test.

Figure 1 contains a photograph of the end of the safety pivot pin prior to the test.

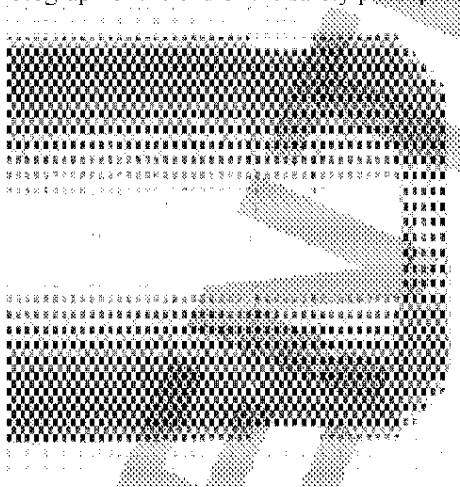

Figure 1. Safety pivot pin prior to test.

Figure 2 contains a photograph of the end of the safety pivot pin after the test. The edges of the groove on the end of the pin are square, and do not show significant wear.

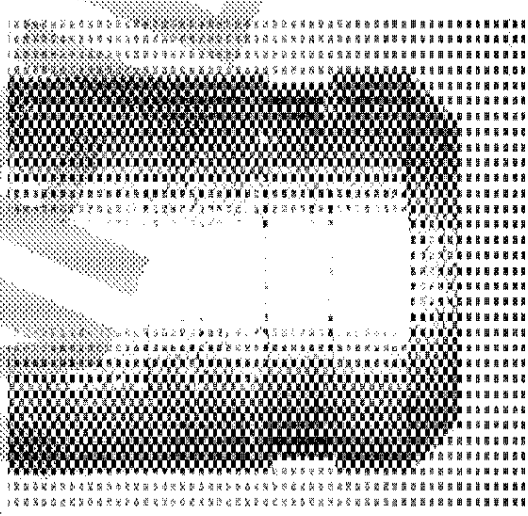

Figure 2. Safety pivot pin after 2,000 cycles.