

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



xc: J. P. Linde
Lab File

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

Ilion, New York
December 15, 1975

TO: W. E. LEEK
FROM: A. A. HUGICK
DATE: DECEMBER 10, 1975
SUBJECT: M/700 SAFETY EVALUATION - REPORT #8

Work Order: E 0262

INTRODUCTION:

Design initiated a review of the bolt action rifle safety function. The final phase of this program involved the M/700 rifle. Consideration of standardizing on safety detent system between the 700 & 600 rifle control systems. Three M/700 rifles were delivered for safety dry cycle evaluation in the measurement and test dry cycle equipment. This allows M/700 trigger housings to be used in the M/600.

TEST OBJECTIVE:

Dry cycle test the sample M/700 rifles with safety detent system compatible with M/600 fire control system.

TEST RESULTS & OBSERVATIONS:

1. M/700 - S.N. 6898412 - Test Gun #1

Test Activity	- 50,000 Safe On - Safe Off cycles.
	- 10,000 Cock and Dry fire Cycles.
	- W. D. 40 lubrication.
	- Design fabricated rifles.
Test Results	- Sear lift data showed variations Min. - .007
	to max. -.009.
	- Sear lift data indicated no trend.
	- Safe on force variation ranged from 7.5 lbs. max.
	to 4.5 min.
	- Safe Off force variation ranged from 5.5 lb. max.
	to 3.0 min.
	- Striker & fire control parts inspection indications
	were good (A.)

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TEST RESULTS & OBSERVATIONS: - Contd.

2. M/700 - S. N. 6898446 - Test Gun #2
- Test Activity - 50000 Safe On - Safe Off cycles
- 10000 cock & dry fire cycles
- WD 40 lubrication
- Design fabricated rifles.
- Test Results - Sear Lift data showed variations min .0048
to max .0073.
- Graphing of data indicated a sear lift decrease trend.
- Safe On force variation ranged from 6.0 lbs max.
to 3.25 min.
- Safe off force variation ranged from 6.5 lb max. to
3.50 min.
- Striker and fire control parts inspection indications
were good.
3. M/700 - S. N. 6897681 - Test Gun #3
- Test Activity - 50000 Safe On - Safe Off cycles
- 10000 cock & dry fire cycles
- W D 40 lubrication
- Design fabricated rifles
- Test Results - Sear lift data showed variations between min .0053
and max .0068 inches.
- Sear lift data indicate a minor trend of decreasing.
- Safe on force variation ranged from 6.0 lbs. max.
to 3.50 min.
- Safe off force variation ranged from 6.0 lbs max. to
3.75 min.
- Striker and fire control parts inspection indications
were good.

AAH:bd
Measurement/Test Lab
Illion Research Division

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BOLT ACTION RIFLE SAFETY EVALUATION PROGRAM
3 x M/700 RIFLES FOR DRY CYCLE EVALUATION

- A. Trigger pull, Safe On force, Safe Off force
Safe On - Lift of sear at trigger.
- B. Check function of safe.
- C. Clean and lubricate fire control (WD 40)
- D. 10,000 Safe on - Safe Off dry cycles.
- E. Repeat "A"
- F. Repeat "B", and "C"
- G. Repeat "D"
- H. Continue test to a total of 50,000
Safe On - Safe Off dry cycles.
- I. Repeat "A", "B", and "C"
- J. 10,000 cock and dry fire cycles.
- K. Repeat "A" and "B"
- L. End of Dry cycle test

9/17/75
A. A. HUGICK

AAH:bd