

REMINGTON ARMS COMPANY, INC.

INTERDEPARTMENTAL CORRESPONDENCE

Remington

SMAD

REMINGTON

SMAD

Distribution: C. B. Workman
C. E. Ritchie
J. W. Brooks

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

RESEARCH TEST and MEASUREMENT REPORT - Report No. 832093

M/700 LONG ACTION RIFLE .243 CALIBER WITH LONG ACTION NO-BIND FOLLOWER
FUNCTION TEST

Prepared by: J. Baggetta

Date Prepared: 8-15-83

Prepared and Cleared By:

J.H. Hennings, / R.E. Nightingale,
Foreman-Test Lab / Foreman-Measurement Lab

R.E. Nightingale 8-15-83
Signature Date

C.E. Ritchie,
Sr. Supervisor - Testing,
Mens. & Mech. Analysis Lab

C.E. Ritchie 8/17/83
Signature Date

TEST & MEASUREMENT LAB REPORT

REPORT NUMBER: 832093
REPORT TITLE: M/700 Long Action Rifle .243 Caliber With Long Action
No-Bind - Function Test
MODEL(S): 700
GAUGE OR CALIBER: .243
DATE: 7/28/83
WORK ORDER NO.: C-0103-000
PART NAME: Long Action No-Bind Follower
DESIGNER/ENGINEER: J. W. Brooks

TEST TYPE:

1. PHOTO LAB
2. STRENGTH TEST - NO. OF GUNS TESTED _____
3. FUNCTION TEST - NO. OF GUNS TESTED 10
4. ACCURACY TEST - NO. OF GUNS TESTED _____
5. MEASUREMENTS - TYPE: Headspace
6. ENVIRONMENTAL TEST
7. AMMUNITION TESTING & EVALUATION - TYPE: _____
8. VISUAL EVALUATION - _____ OUT OF _____ GUN SAMPLE
9. ENDURANCE - NO. OF GUNS TESTED: 10
NO. OF ROUNDS PER GUN: 120
TOTAL ROUNDS FIRED IN TEST: 1200
AMMO TYPE: MAGS _____; TARGET: _____
RIM FIRE _____ CENTER FIRE X

August 15, 1983

TO: J. W. BROOKS
FROM: J. BAGGETTA
REPORT TITLE: M/700 LONG ACTION RIFLE .243 CALIBER WITH LONG ACTION
NO-BIND FOLLOWER - FUNCTION TEST

ABSTRACT

A work request was received from J. W. Brooks, Supervisor of Current Products Design to evaluate the M/700 Long Action Rifle .243 caliber with the Long Action No-Bind Follower.

SCOPE OF TEST

To evaluate the performance of the M/700 Long Action Rifle with the Long Action No-Bind Follower, checking for feeding malfunctions.

TEST RESULTS

A. Jack Live Round Unload Function Test

.243 Caliber - Ten rifles were used; four rifles experienced 13 malfunctions occurring in 300 rounds for an overall malfunction rate of 4.3%.

B. Field Function Test

.243 Caliber - Fired 1200 rounds (120 rounds each). Experienced 45 follower related malfunctions for an overall rate of 3.8%.

REPORT TEXT

A. The following rifles experienced malfunctions during the Jack Live Round Unload Test in R & D Shooting Room.

1.) .243 Caliber

- o B6424622 - 1 stem chamber low.
- o B6433879 - 4 shell jumps magazine, 2 bolt override.
- o B6424043 - 4 follower tip down.
- o B6433921 - 2 follower Tip Down.

B. The following rifles experienced follower related malfunctions during the Field Function Test at the Ilion Fish & Game Club rifle range.

1.) .243 Caliber

- o B6433523 - 3 stem chamber low, 1 follower tip down.
- o B6423994 - 6 stem chamber low, 4 shell jumps magazine, 2 follower tip down.
- o B6433879 - 2 stem chamber low, 22 shell jumps magazine.
- o B6474729 - 1 follower tip down.
- o B6433921 - 1 stem chamber low, 1 follower tip down.
- o B6446976 - 1 follower tip down.
- o B6423989 - 1 stem chamber low.

C. The following rifles were used in the Long Action No-Bind Follower test:

.243 Caliber

B424622	B6474729
B6433523	B6433921
B6423994	B6446976
B6433879	B6424046
B6424043	B6423989

TEST PROCEDURE

A. Measurements

- 1.) Headspace taken by Test Lab personnel. Details can be found in Appendix "A", Data Sheet No. 1.

B. Test Conditions

Condition No. 1 - Indoor Jack Shooting

- o The test was run using the Test Lab shooting jacks.
- o The rifles were loaded with 4 rounds in magazine and 1 in chamber.
- o Various speed feeds were used such as: slow, medium and fast.
- o The rifles were live round unload tested. No live fire tests were run in the jacks.

Condition No. 2 - Lion Fish & Game Club Outdoor Range

- o The test was run using the Lion Fish & Game Club 100 yard range.
- o The rifles were loaded with 4 rounds in magazine and 1 in chamber.
- o Various speed feeds were used such as: slow, medium and fast.
- o Five shooters were used incorporating the round robin system.

C. Ammunition

- o See Data Sheet No. 2 in Appendix "A" on ammunition used.

M/700 Long Action Rifle .243 Caliber With Long Action
No-Bind Follower - Function Test

Report No. 832093

APPENDIX " A "

M/700 Long Action Rifle .243 Caliber With Long Action
No-Bind Follower - Function Test

Report No. 832093
Sheet No. 1

M/700 .243 ADL Restyle

Headspace

1.	B6424622	-	Min. +	.001
2.	B6433523	-	Min. +	.003
3.	B6423994	-	Min. +	.004
4.	B6433879	-	Min. +	.004
5.	B6424043	-	Min. +	.005
6.	B6474729	-	Min. +	.002
7.	B6433921	-	Min. +	.004
8.	B6446976	-	Min. +	.002
9.	B6424046	-	Min. +	.002
10.	B6423989	-	Min. +	.002

M/700 Long Action Rifle .243 CALiber With Long Action
No-Bind Follower - Function Test

Report No. 832093
Sheet No. 2

Ammunition Used In Live Round Feed

.243 Caliber

Remington 80 Pointed Soft Point
Remington 100 Pointed Soft Point

Ammunition Used In Live Round Firing

.243 Caliber

Remington 80 Pointed Soft Point
Remington 80 Hollow Point
Remington 100 Pointed Soft Point

Federal 80 Soft Point
Federal 100 Soft Point
Federal 85 Premium

Winchester 80 Pointed Soft Point
Winchester 100 Power Point