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Distribution: C. B. Workman
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RESEARCH TEST and MEASUREMENT REPORT - Report No. 831292

MODEL 700 ADL RESTYLE - .222 CAL. - TRIAL & PILOT EVALUATION

Prepared by: C. Stephens

Date Prepared: August 10, 1983

Proofread and Cleared By:

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

R.E. Nightingale
Signature Date

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

C.E. Ritchie 8/15/83
Signature Date

TEST & MEASUREMENT LAB REPORT

REPORT NUMBER: 831292
 REPORT TITLE: Model 700 ADL Restyle - .222 Cal. Trial & Pilot Evaluation
 MODEL(S): M/700 ADL
 GAUGE OR CALIBER: .222
 DATE: Aug. 10, 1983
 WORK ORDER NO.: 81362-904
 PART NAME:
 DESIGNER/ENGINEER: P. Nasypany

TEST TYPE:

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

REMINGTON ARMS CO., INC.
Firearms Research Division

Report No. 831292

August 10, 1983

TO: R. E. NIGHTINGALE
FROM: C. STEPHENS
REPORT TITLE: MODEL 700 ADL RESTYLE .222 CAL. TRIAL & PILOT EVALUATION

ABSTRACT

A request was received from P. Nasypany, Current Products Design, to conduct a Trial & Pilot Test on the Model 700 ADL restyle in .222 caliber.

SCOPE OF WORK

To evaluate the first lot of production rifles in the Model 700 ADL restyle.

TEST RESULTS

The results show a malfunction rate of 1.98 with 20 malfunctions out of 1008 rds. shot.

REPORT TEXT

Eight (8) Model 700 ADL restyle rifles in .222 caliber were delivered to the R & D Test Lab. Each rifle was identified by number (1 - 8).

Seven types of ammunition were shot using slow, medium, and fast feed rates for a total of 18 rds. per ammo type and 126 rds. per rifle. A total of 1008 rounds were shot with 20 malfunctions. Appendix "A" Data sheets 1 - 20 contains the summary and individual information for each rifle.

Impressions of the magazine springs were taken before assembly and after the function test to determine the amount of alterations by the assembler. Data Sheets 21 and 22 show the impressions that were taken.

M/700 ADL Restyle .222 Cal. Trial & Pilot Evaluation
August 10, 1983

Report No. 831292
Page 2

TEST PROCEDURE

A. Measurements

1. Spring impressions were taken by P. Nasypany.

B. Test Conditions

1. Same code of ammunition to be used.

C. Test

The function test was shot at the Ilion Fish & Game Club. Each rifle was shot for slow, medium and fast feed rates, with one round loaded in the chamber and five rounds loaded in the magazine.

The spring impressions were taken by P. Nasypany before assembly and after the function test.

D. Ammunition

- | | | |
|---------------|--------|-----|
| 1. Remington | 50 gr. | PSP |
| 2. Remington | 50 gr. | HP |
| 3. Remington | 55 gr. | MC |
| 4. Winchester | 50 gr. | PSP |
| 5. Winchester | 55 gr. | MC |
| 6. Federal | 50 gr. | PSP |
| 7. Federal | 55 gr. | PBT |

A P P E N D I X " A "

(Data Sheets)

SERIAL NO.

TEST TITLE: SUMMARY SHEETS PER - RIFLE - AMMO TYPE - SHOOTER

1. MALFUNCTION DATE: 1.98

BARBER

SALE 1411
BATE PER
MAY 17

PAGE NO.

SERIAL NO.

TEST TITLE: SUMMARY SHEETS PER - RIFLE - AMMO TYPE - SHOOTER

TTL, MALFUNCTIONS

MALFUNCTION RATE:

"MISFUNCTIONS"

[illegible]

BARBER - PRESALE R 0114119

P2515107
BARBER - PRESALE R 0114119

SERIAL NO.

TEST TITLE: SUMMARY SHEETS PER - RIFLE - AMMO TYPE - SHOOTER

TTL, RDS, FIRED: 1008
TTL, MALFUNCTIONS: 20
MALFUNCTION RATE: 1.98

"MALFUNCTIONS"

[illegible]

BARBER - PRESALE 011 4120

SERIAL NO.

20
MALFUNCTION RATE: 7.98

BARBER - PRESALE ROUTING

[illegible]

REVIOUS
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: 22

SERIAL NO. B6461785

TEST TITLE: T9P ADL Restyle

WEATHER: _____

"MALFUNCTIONS"

#1

TTL. RDS. FIRED: 126

TTL. MALFUNCTIONS: 8

MALFUNCTION RATE: 6%

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STICKS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	SHELLS STUCK IN MAG.	ADJUSTMENTS	RELOADING PROBLEMS	SCOTCH TAP	REMAIN (ON BAR)	YES
								1st	2nd				HIGH	LOW	RIGHT	LEFT												
Rem 50gr PSP s	7												116															
18 F			OK										116															
Rem 50gr 110 s	2		OK																									
18 M													116															
18 F													116															
Rem 55gr M.C s	3		OK																									
18 M													116															
18 F													116															
Win. 55 M.C.	4		OK																									
18													115															
18													116															
TOTAL (PER MAL.)																												

BARBER - PRESALE R 0114122

REVIEWS
ROUNDS

DATE: 11 May 83 MODEL: 700 GAUGE: .222

SERIAL NO. B6461785

TEST TITLE: T & P ADL Restyle

WEATHER: "MALFUNCTIONS" #1

TTL. RDS. FIRED:
TTL. MALFUNCTIONS:
MALFUNCTION RATE:

AMMUNITION Load Size	SECTOR	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STAYS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREAKAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMARKS (ON BACK)
								1st	2nd				HIGH	LOW	RIGHT	LEFT											YES
WIN 50 RSP	S	1	OK																								
18	M		OK																								
	F		OK																								
Fed 50 RSP	S	2	OK																								
18	M		OK																								
	F		OK																								
Fed 55 BT	S	3	OK																								
18	M		OK																								
	F		OK																								
TOTAL (PER MAL.)																											

BARBER - PRESALE R 0114123

REVIEW
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: 222

SERIAL NO. 86463022

TEST TITLE: T & P ADL Restyle

WEATHER: _____

"MALFUNCTIONS"

#2

TTL. RDS. FIRED: 126

TTL. MALFUNCTIONS: 0

MALFUNCTION RATE: 0

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STOPS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREAKAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMARK (ON BACK) YES
								1st	2nd				HIGH	LOW	RIGHT	LEFT											
Rem 50 PSP	s	2	OK																								
	n		OK																								
	r		OK																								
Rem 50 Hal	s	3	OK																								
	n		OK																								
	r		OK																								
Rem 55 MC	s	4	OK																								
	n		OK																								
	r		OK																								
Win 55 MC		1	OK																								
			OK																								
			OK																								
TOTAL (PER ML.)																											

BARBER - PRESALE R 0114124

REVIOUS
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: .222

SERIAL NO. B6462022

TEST TITLE: T+P ADL Restyle

WEATHER:

"MALFUNCTIONS"

#2

TTL. RDS. FIRED:
TTL. MALFUNCTIONS:
MALFUNCTION RATE:

AMMUNITION Load Size	SECTION	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STOPS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREECHES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMAIN (ON YES
								1st LATCH	2nd				HIGH	LOW	RIGHT	LEFT											
WIN 50 PSP	s	2	OK																								
	n		OK																								
	F		OK																								
Fed. 50SP	s	3	OK																								
	n		OK																								
	F		OK																								
Fed. 55 BT	s	4	OK																								
	n		OK																								
	F		OK																								
TOTAL (PER MAL.)																											

BARBER - PRESALE R 0114125

REVIEW
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: .222

SERIAL NO. B6461774

TEST TITLE: T+P ADL Restyle

WEATHER: _____

TTL. RDS. FIRED: 126
TTL. MALFUNCTIONS: 1
MALFUNCTION RATE: .79%

"MALFUNCTIONS"

#3

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STAYS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREAKAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMARKS (ON BACK)
								1st LAUNCH	2nd				HIGH	LOW	RIGHT	LEFT											
Rem 50 PSP	3		OK																								
			OK																								
			OK																								
Rem 50 Hol	4		OK																								
			OK																								
			OK																								
Rem 55 MC	1		OK																								
			OK																								
Win 55 MC	2		OK																								
			OK																								
			OK																								
TOTAL (PER MAL.)																											

BARBER - PRESALE R 0114126

REVIEWS
ROUNDS

DATE: 11 May 88

MODEL: 700

GAUGE: .222

SERIAL NO. B6461774

TEST TITLE: T4P ADL Restyle

WEATHER: _____

"MALFUNCTIONS"

3

TTL. RDS. FIRED: _____
TTL. MALFUNCTIONS: _____
MALFUNCTION RATE: _____

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STICKS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREAKAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMARKS (ON BACK)
								1st LATCH	2nd				HIGH	LOW	RIGHT	LEFT											
WIN 50 PSP	3		OK																								
			OK																								
			OK																								
Fed. 50 SP	4		OK																								
			OK																								
			OK																								
Fed. 55 BT	1		OK																								
			OK																								
			OK																								
TOTAL (PER MAL.)																											

ENTER - PRESALE PER 01147 27

BARBER - PRESALE R 0114127

PREVIOUS
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: .222

SERIAL NO. B6461347

TEST TITLE: T+P ADL Restyle

WEATHER: _____

"MALFUNCTIONS"

#4

TTL. RDS. FIRED: 126

TTL. MALFUNCTIONS: 0

MALFUNCTION RATE: 0

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STOPS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREAKAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMARKS (ON BACK)	
								1st	2nd				HIGH	LOW	RIGHT	LEFT											YES	NO
Rem 50 PSP	4		OK																									
			OK																									
			OK																									
Rem 50 Hel	1		OK																									
			OK																									
			OK																									
Rem 55 MC	2		OK																									
			OK																									
			OK																									
Win 55 MC	3		OK																									
			OK																									
			OK																									
TOTAL (PER MAL.)																												

BARBER - PRESALE R 0114128

REVIEW
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: .022

SERIAL NO. B6461347

TEST TITLE: T+P ADL Restyle

WEATHER: _____

TTL. RDG. FIRED: _____

TTL. MALFUNCTIONS: _____

MALFUNCTION RATE: _____

"MALFUNCTIONS"

AMMUNITION Load Size	SECOES	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STICKS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREA KAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMARKS (ON BARBER YES
								1st	2nd				HIGH	LOW	RIGHT	LEFT											
WIN 50 PSP	4		OK																								
			OK																								
			OK																								
Fed 50 SP	1		OK																								
			OK																								
			OK																								
Fed 55 BT	2		OK																								
			OK																								
			OK																								
TOTAL (PER MAL.)																											

BARBER - PRESALE R 0114129

PREVIOUS
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: .222

SERIAL NO. B6461685

TEST TITLE: T+P HDL Restyle

WEATHER: _____

"MALFUNCTIONS" #5

TTL. RDS. FIRED: 126
TTL. MALFUNCTIONS: 5
MALFUNCTION RATE: 3.9%

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STICKS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREA KAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMARKS (ON BARBER)	YES
								1st LATCH	2nd				HIGH	LOW	RIGHT	LEFT												
Rem 50 PSP	1		OK																									
			OK																									
			OK																									
Rem 50 Hol	2		OK																									
			OK																									
			OK																									
Rem 55 MC	3		OK																									
			OK																									
			OK																									
Win 55 MC	4		OK																									
			OK																									
TOTAL (PER ML.)																												

BARBER - PRESALE R 0114130

SERIAL NO. B6461685

REVIOUS ROUNDS

TEST TITLE: T + P ADL Restyle

WEATHER:

TTL. RDS. FIRED: _____

TTL. MALFUNCTIONS:

MAJORITY MALFUNCTION RATE:

"MALFUNCTIONS"

[illegible]

BARBER - PRESALE#0114131

REMARKS
(ON PAGE 1)

YES

YES

CONFIDENTIAL-SUBJECT TO PROTECTIVE ORDER

P2515119
BARBER - PRESALE R 0114131

[illegible]

R2515121
BARBER - PRESALE R 0114133

[illegible]

PREVIOUS
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: .222

SERIAL NO. B6461578

TEST TITLE: T+P ADL Restyle

WEATHER: _____

"MALFUNCTIONS"

#7

TTL. RDS. FIRED: 126

TTL. MALFUNCTIONS: 0

MALFUNCTION RATE: 0

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STOPS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	BREAKAGES	ADJUSTMENTS	REPLACEMENTS	BOLT VELOCITIES	REMAINING (ON YES
								1st	2nd				HIGH	LOW	RIGHT	LEFT											
Rem 50 PSP	3		OK																								
			OK																								
			OK																								
Rem 50 H&I	4		OK																								
			OK																								
			OK																								
Rem 55 MC	1		OK																								
			OK																								
			OK																								
Win 55 MC	2		OK																								
			OK																								
			OK																								
TOTAL (PER MAL.)																											

BARBER - PRESALE R 0114134

SERIAL NO. B6461578

PREVIOUS ROUNDS

TEST TITLE: T & P ADL Restyle

WEATHER:

TTL. RDS. FIRED:

TTL. MALFUNCTIONS:

MAJORITY RATE:

"MALFUNCTIONS"

BARBER - PRESAL
 0114135

REMARKS
(ON BACK)
YES

[illegible]

CONFIDENTIAL-SUBJECT TO PROTECTIVE ORDER

R2515123
BARBER - PRESALE R 0114135

REVIEW
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: .222

SERIAL NO. B6462025

TEST TITLE: T+P ADL Restyle

WEATHER:

"MALFUNCTIONS"

#8

TTL. RDS. FIRED: 126
TTL. MALFUNCTIONS: 0
MALFUNCTION RATE: 0

AMMUNITION Load Size	SHELLS	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STAYS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	MAGAZINES	ADJUSTMENTS	REPLACEMENTS	SCOTCH TAP	REMARKS (ON PAGE)
								1st	2nd				HIGH	LOW	RIGHT	LEFT											YES
Rem 50 PSP	4		OK																								
			OK																								
			OK																								
Rem 50 Hol	1		OK																								
			OK																								
			OK																								
Rem 55 MC	2		OK																								
			OK																								
			OK																								
Win 55 MC	3		OK																								
			OK																								
			OK																								
TOTAL (PER MAL.)																											

BARBER - PRESALE R 0114136

PREVIOUS
ROUNDS

DATE: 11 May 83

MODEL: 700

GAUGE: 222

SERIAL NO. B6462025

TEST TITLE: T + P ADL Restyle

WEATHER: _____

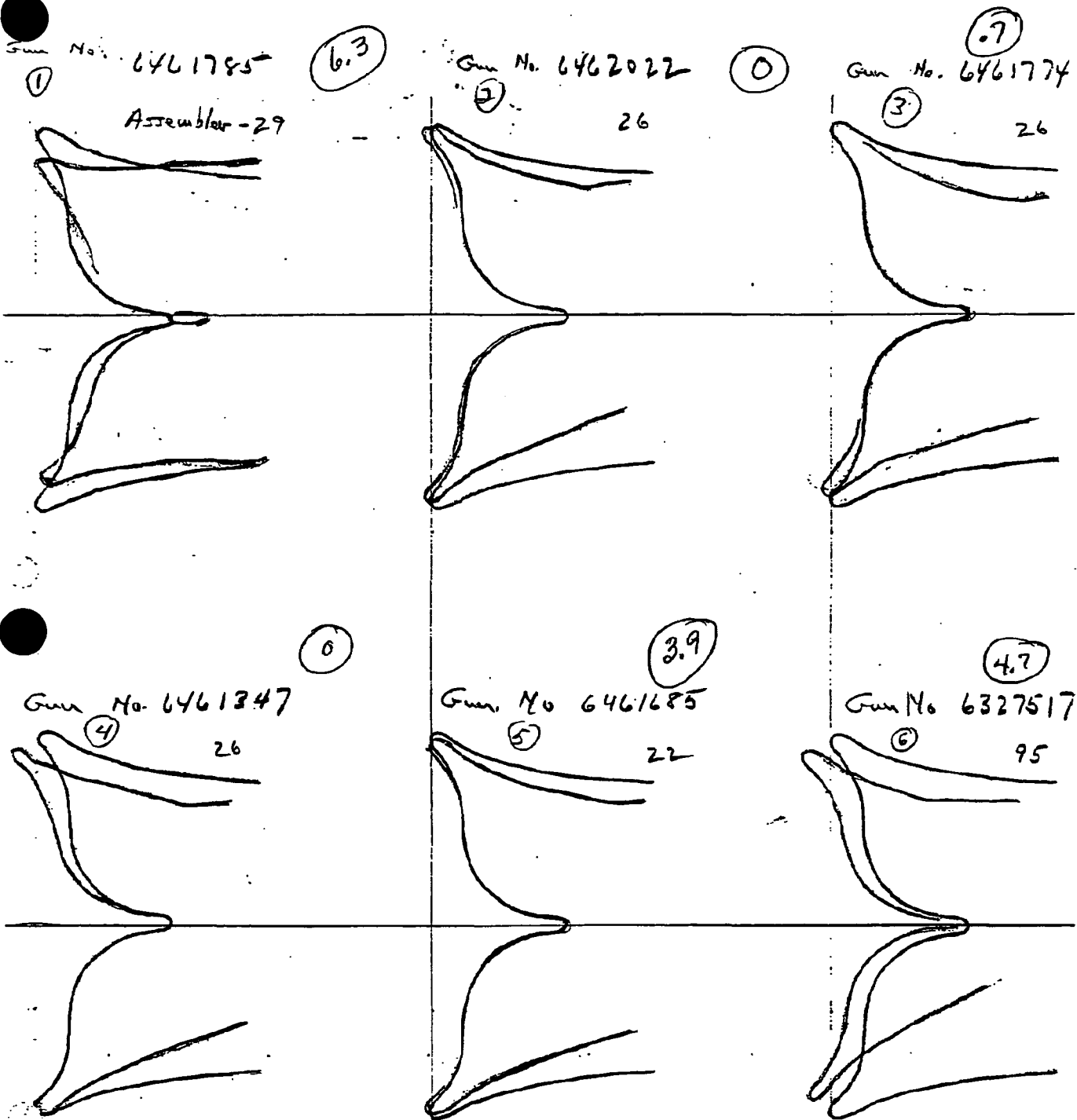
TTL. RDS. FIRED: _____
TTL. MALFUNCTIONS: _____
MALFUNCTION RATE: _____

"MALFUNCTIONS"

AMMUNITION Load Size	SHOOTER	NO. OF ROUNDS FIRED	FIRING	TRAPPED SHELL	DON'T EJECT	DON'T BLOW BACK	DON'T LOCK OPEN	FEED FROM MAG.		SHELL STOPS MAG.	POWER OVERRIDE	DON'T LOCK UP	STEM CHAMBER				SHELL JUMPS MAG.	FOLLOWER BINDS	LOADING	BOLT OVERRIDE	ACTION HANG UP	DON'T EXTRACT	FEED LAGS	ADJUSTMENTS	REPLACEMENTS	SHELLS IN CHAMBER	RE (ON YES)
								1st LATCH	2nd				HIGH	LOW	RIGHT	LEFT											
Win 50 PSP	4		OK																								
			OK																								
			OK																								
Fed 50 SP	1		OK																								
			OK																								
Fed. 55 BT	2		OK																								
			OK																								
			OK																								
TOTAL (FER MAL.)																											

Page 21
5-16-83

M/700 222 Rem Magazine Springs



Black - Impressions before assembly
Red - Impressions after function test.

GUN# 6461578

GUN# 6462025

