

Section B

Listed Malfunctions
Known Functional Deficiencies

A

DAILY PROGRESS REPORT

SUBJECT M/721 Pilot Line Inspection

Date 4/9/47

There is evidence from the functioning of the above mentioned guns that the Connector, Safety Cam and Gear are not within design limits. This situation can be very dangerous from a safety and functional point of view and the existing condition has caused the following listed malfunctions to occur in several guns that were inspected:

1. Firing Pin moves forward during the bolt locking cycle.
2. Possible to fire the gun by pushing the Safety to the "off" position.
3. Occasionally the firing pin moves forward during the bolt locking cycle.

From the inspection standpoint, situation #3 should be considered the most dangerous in that the malfunction might not occur during the relatively few cycles that the gun would be functioned during inspection.

5

W. E. Leek
Test Engineer

PLAINTIFFS
EXHIBIT
3083

AL 0023239

C

T

Free Will DON'T SAY IT—WRITE IT

TO *K. H. Hays*

DATE December 21, 1973

FROM E. H. Carr

R/100 - CUSTOMER COMPLAINTS

Fires on Safe - Follows down

Over three years ago, all guns in the above category began to be referred to F.E. & C. for examination and diagnosis. It began to be readily apparent that these guns were all the result of minimal Connector-Sear engagement.

In June of 1972, an operation was initiated making the adjustment on a comparator which assured a minimum engagement of .015"

It is my opinion that review of these guns, except in the case of Damaged Actions or Personal Injury guns, is no longer justified and should be discontinued.

*Does this present any problem to you
like*

TO BE SAFE FIRST THINK YOU MIGHT NOT BE

*Not at all. We
will stop sending
to F.E. & C. this type
of complaint as of 1/2/74
T. P. Henshott*

PLAINTIFFS
EXHIBIT

3175

AL 0029705

Bridgeport, Connecticut
April 23, 1975

TO: R.L. HALL
FROM: E.F. BARRETT
SUBJECT: PRODUCT SAFETY MEETING - 4/23/75

A. Define study objectives: Analyze product safety of bolt action fire controls.

B. Determine what should be done and who should do it.

1. Research

Review present design; Failure analysis; Identify tolerance build-up problems, if any; Determine critical design specifications.

2. Marketing

Review reports from field; Review present performance requirements; Identify possible or potential problems by improper use.

Review existing customer and gunsmith information for clarity and content.

3. Production

Review process specifications and records, quality control procedures and limits. Review actual Plant performance.

C. Discussion of Model 600 quality audit.

D. Assignment of responsibilities and development of tentative schedule.

EFB/ab

6

NTBOOK013

PLAINTIFF'S
EXHIBIT

DON'T SAY IT—WRITE IT

03582

TO GEORGE MARIN

SAFETY MALFUNCTIONS
GALLERY 4

DATE 5-2-75

FROM GENE BULLIN

MODEL	MALFUNCTIONS															TOTALS MALF. BY MODEL
	FSR			JO			FD			FOS			SWW			
	715	74	73	715	74	73	715	74	73	715	74	73	715	74	73	
40							4									4
XP 100							3									3
540																
541								2	1							3
580													1			1
581							3	2	1							6
582																
600	1						10	74	55							140
700	9						7	19	10	1			1			47
788	4						3	9	3	2	9	4	14	95	53	196
ONLY MALF. TOTALS	14						30	106	70	3	9	4	14	97	53	417

TOTAL SAFETY

MALFUNCTION MEANINGS

FSR - FIRES WHEN SAFE IS RELEASED - SELF EXPL.

JO - JARS OFF (HAMMER FAILS TO STAY ENGAGED WITH SEAR AND FALLS DOWN WHEN GUN IS JARRED.)

FD - FOLLOWS DOWN (COCKING ARM FAILS TO PROPERLY ENGAGE WITH SEAR AND FALLS THE COCKING CAM SURFACE OF THE BOLT TO THE FIRED POSITION)

FOS - FIRES ON SAFE (GUN FIRES WITH SAFE IN "ON" POSITION WHEN TRIGGER IS PULLED).

SWW - SAFETY WON'T WORK - SELF EXPL.

010000150

* - 1975 DATA FROM DEC. 20, 1974 TO APRIL 23, 1975 ONLY.

1 : 51

Remington

COPY

PETERS

CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

Ilion, New York
May 20, 1975

TO: E.F. BARRETT

FROM: G.W. MARTIN

SUBJECT: BOLT ACTION RIFLE SAFETIES

Since your last visit, and per your request, we have had the opportunity to look into three (3) different areas for information. The three (3) areas are as follows:

1. The computer
2. All available Gunsmith Call Reports
3. Arms Service Usage Report

The Computer Report is broken down into three (3) parts.

1. Safety malfunctions found in our gallery on new rifles.
2. The number of complaints coming into Arms Service
3. The number of actual justified complaints from number 2, preceeding. A copy of these reports are attached.

The Gunsmith Call Reports date back as far as 1970. In these reports we find one (1) Model 600, two (2) Model 788, and thirteen (13) Model 700's with some sort or another of justified or unjustified malfunctions. The one that is the most concerning is Fred Woodrick's Call Report of March 5th. on Ewell Cross Gunshop, Ft. Worth, Texas. I personally called Malcom Cross to confirm that he did encounter six (6) Model 700's that were malfunctioning. He did verify that it was the Model 700, but that it was an educated guess on the number. He did say that this is the first that he had encountered this on the Model 700. He stated that it was because there was not enough clearance between the sear and the connector. He did not seem concerned, but promised to send us the very next one he gets into his Shop. Copies of these Gunsmith Call Reports are attached.

We are also enclosing the Arms Service Usage Report. Truthfully, I don't think we can get much meat from this report for our particular purpose. It would be too difficult to get factually why the various components parts were needed.

We are attaching, also, a copy of the Model 700 Safety Function Test Preliminary Survey as of May 19th. In addition to the guns already tested, we received, today, 220 additional rifles from Carter's Country in Houston, Texas.

C. Long

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington

PETERS

xc: W. E. Leek
G. W. Martin
C. F. Prosser

Remington

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

Ilion, New York
March 4, 1976

TO: J. P. LINDE
FROM: F. E. MARTIN
SUBJECT: M/700 25-06 Ser. #6496814
Customer Complaint Accidental Discharge

This rifle was received from G. W. Martin for examination by R&D. This inspection was made March 2, 1976 by J. P. Linde, C. F. Prosser and F. E. Martin.

It was found during examination that this gun could be made to "Follow-Down". It was decided at this time to replace the fire control. This was done by C. F. Prosser and examination of the fire control assembly continued. During this examination the following items were noted. The sear safety cam showed a radius at the sear area. The trigger connector also showed the same radius at the mating point. It is known that this damage is indicative of being caused by a pierced primer. The fire control itself showed less trigger-sear engagement than is presently accepted. It was noted that the fire control had not been tampered with and was one that was set entirely by the assembler. Present practice is to set sear engagement and trigger pull by use of a comparator. There was no damage to the fire control assembly noted.

To determine if pierced primers had been experienced, G. W. Martin contacted the former owner of this rifle. It was determined through this conversation that the former owner was not a handloader and had not used handloads. It was also determined that he did not know what a pierced primer was. Further examination of this rifle is to be done. This will include a chamber cast and shooting.

It is felt by all persons that examined this rifle that through some misuse the fire control of this rifle was made defective.

FEM:bd
Ilion Research Division

REM 0087271

LUN 0018605

Rev.

11/21/76

Make two additional copies and file under
M/600 - Product Defects
M/700
M/742

ISSUE OF SAFETY PROBLEMS

DATE	DEFECT	CHARGE
11/21/76	600	FOREIGN MATTER BINDING SEAR
742	FD	F.P. BINDS, DET PIN CUT MISCT IN F.P.
742	FD	DISC. LOOSE, DROPS OFF ACTIONS BAR
700	FD	COILING CHAIN & NOTCH OFF POS. IN BOT
11/28/76	600	SEAR BINDS, BURE IN REAR HANGING PIN TOWEL
600	PER	CONNECTOR BINDS, BURE @ HOME
600	FSR	CHAIN DUPLICATION - CHECKS OK
12/15/76	742	PRIMER FRAGMENT CAUGHT IN F.P. WARE
12/12/76	600	CONNECTOR BINDS ON CROCIATED REC STOP SCREW
600	FSR	CONNECTOR DOESN'T DETECT - NO WIRE & MIS ADJUSTED
12/19/76	742	F.P. BINDS FORWARD, DET. PIN CUT .015 SHALLOW (.14)
700	FSR	INSUFFICIENT SAFETY LIFT - .0015 (.005 MIN)
700	FSR	SAFETY BINDS ON STOCK - HIGH AT E.S. OF TRAC
1/2/77	742	INSUFFICIENT TENSION ON DISCONNECTOR, DROPS OFF A. BAR
700	FSR	TRIGGER STICKS BACK, BINDS IN GAPS - LEFT SIDE
1/16/77	742	CHAIN DUPLICATION, BUT POUND PRIMER ANHIL IN ACTION
700	FSR	SAFETY BUTTON BINDS ON STOCK - HIGH AT E.S. OF TRAC.
742	FD	DISCONNECTOR OVER TOP OF CONNECTOR
700	FSR	INSUFFICIENT SAFETY LIFT - .0015 (.005 MIN)

A

LUN 0012234

REM 0080902

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington
OUT PORT

PETERS
OUT PORT

REMINGTON ARMS CO.
RECEIVED

MAR 7 1980

cc: C. B. Markman
J. P. Linde
T. W. Rawson, Bpt.
E. G. Larson "

ILION RESEARCH DIVISION

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

E. HOOTON, JR.

Jim Martin
for your use in developing a letter
Bolt Action Gun Control
Clark

Ilion, New York
March 5, 1980

SAFETY-RELATED COMPLAINTS-BOLT ACTION CENTER FIRE RIFLES JULY, 1979 - JANUARY, 1980

In response to Earl Larson's letter to D. J. Sanita dated January 23, 1980, the following data is supplied. Listed are items where Bolt Action firearms were returned for a safety complaint. We have been previously reporting on all customer returned Model 700's that failed the trick test and fires off safe (see attached letter).

Model	Production for the Period	Complaints	Total No. Unable to Duplicate	Total No. Verified
700	82-86	3	89	44
788		0	4	6
600	.33 % failure rate	5	3	2
660		1	-	1
721		1	1	-
722		1	-	1
725		1	-	1
<u>Complaints</u>			<u>Total No.</u>	

I. Model

- 1) Rifle discharged when Safety is released
- 2) Trigger stiff - misfires
- 3) Follows Down
- 4) Bolt closes hard and discharges
- 5) Delayed firing
- 6) Fires on closing Bolt when unloading
- 7) Rifle discharged when Bolt handle raised
- 8) Push Safety to "Off" position - slight touch of Trigger and rifle discharges
- 9) Accidental discharge
- 10) Fires on closing
- 11) Safety does not work
- 12) Defective Safety - works hard
- 13) Faulty Trigger - gun goes off
- 14) Goes off prematurely

54
1
4
2
5
3
2
1
5
8
1
1
1
1
89

REM 0034093

March 5, 1980

Complaints Unable to Duplicate - Contd.Total No.II. Model 78E

- 1) Fires on Safe
- 2) Fires when chambering round
- 3) Fires on closing
- 4) Close Bolt with Safety on - discharges

1
1
1
 $\frac{1}{4}$

III. Model 600

- 1) Follows Down
- 2) Safety doesn't work
- 3) Fails to fire when Trigger pulled,
Fires on closing and
Fires when Safety released

1
1
 $\frac{1}{3}$

IV. Model 721

- 1) Fires on closing

$\frac{1}{1}$

Complaints VerifiedI. Model 700Complaints:

- 1) Rifle discharges when Safety is released

Total No. = 19

Causes:No.

- a) Insufficient Sear lift
- b) Trigger bent
- c) Adjusting screws adjusted
outside of factory
- d) Safety Detent ball missing
- e) Excess oil in housing
- f) Interior of housing dirty
- g) Excess movement of Trigger
- h) Trigger binds on Trigger Guard
- i) Excess clearance - Trigger and
Trigger Pin
- j) Safety not responsive

3
1
8
1
1
1
1
1
1
1

- 2) Follows Down

Total No. = 8

Causes:No.

- a) Sear binds
- b) Adjusting Screws adjusted
outside of factory
- c) Connector broken
- d) Engagement surfaces of Sear
and Connector chipped

4
2
1
1

REM 0034094

March 5, 1980

Complaints Verified Contd.I. Model 700 - Contd.3) Accidental Discharge

Total No. = 2

Causes:No.

- a) Insufficient Sear lift 1
- b) Adjusting Screws adjusted
outside of factory 1

4) Safety Does Not Work

Total No. = 3

Causes:No.

- a) Safety clearance cut in
Stock miscut 1
- b) Safety binds in Receiver 1
- c) Detent ball missing 1

5) Fires on Closing

Total No. = 4

Causes:No.

- a) Interior of housing dirty - oily 1
- b) Sear rubs in housing 1
- c) Adjusting Screws adjusted
outside of factory 1
- d) Connector broken 1

6) Rifle Discharges with Safety On

Total No. = 2

Causes:No.

- a) Trigger binds on Trigger Guard
(could not verify on Safe -
only when Safety released) 1
- b) Safety not responsive
(could not verify full on Safe -
only null location) 1

7) Trigger Will Not Work

Total No. = 1

Cause:No.

- a) Chip lodged in front of Trigger 1

8) Trigger Pull Light

Total No. = 1

Cause:No.

- a) Adjusting Screws adjusted
outside of factory 1

: REM 0034093 :

March 5, 1980

Complaints Verified Contd.I. Model 700 - Contd.9) Safety Malfunction

Total No. = 1

Cause:No.

- a) Follows down - housing very
-
- dirty - Sear sluggish

1

10) Gun Has Gone Off Several Times

Total No. = 1

Cause:No.

- a) Follows down - adjusting Screws
-
- adjusted outside of factory

1

11) Delayed Firing

Total No. = 1

Cause:No.

- a) Safety interferes with top
-
- of Stock

1

12) Trigger Has Hesitation

Total No. = 1

Cause:No.

- a) Adjusting Screws adjusted
-
- outside of factory

1

Total Verified 44

II. Model 788Complaints:1) Rifle Discharged When Safety is Released

Total No. = 2

Cause:No.

- a) Insufficient Sear Lift
-
- b) Steel chip embedded in housing
-
- (Trigger not retracting under
-
- Sear fully)

1

1

2) Safety Defective

Total No. = 3

Cause:No.

- a) Trigger and Sear altered
-
- outside of factory
-
- b) Safety works hard
-
- c) Foreign substances in
-
- Receiver and on Bolt Stop

1

1

1

: REM 0034096 :

March 5, 1960

Complaints Verified Contd.II. Model 788 - Contd.3) Misfires

Total No. = 1

Cause:No.

a) Safety hits top of Stock

1

Total Verified 6

III. Model 600Complaints:1) Trigger Will Not Move

Total No. = 1

Cause:No.

a) Excessive Sear engagement

1

2) Trigger Defective

Total No. = 1

Cause:No.a) Follows down - Housing dirty
Sear binds

1

Total Verified 2

IV. Model 660Complaints:

Total No. = 1

1) Fires on Closing and Opening BoltCause:No.a) Housing not centered in Firing
Pin head slot in Receiver

1

V. Model 725Complaints:

Total No. = 1

1) Accidental DischargeCause:No.

a) No Sear lift - Fire Control worn

1

! REM 0034097 !

March 5, 1980

Complaints Verified Contd.

VI. Model 722

Complaints:

1) Rifle Discharges When Safety is Released

Total No. = 1

Cause:

No.

a) Insufficient lift

1

R. L. Hall
Plant Manager

H. K. Boyle
H. K. Boyle
Asst. Plant Manager

HKB:ah

REM 0034098

02/22/95

14:21

3816 374 3302

BRYAN CAVE EC

0003

REMINGTON ARMS COMPANY, INC.

~~CONFIDENTIAL~~

Remington
REM

PETERS
P

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

January 25, 1988

TO: K.D. GREEN

FROM: J.A. STEKL *JAS*

RE: M/700 RIFLE RETURNS - ALLEGED ACCIDENTAL FIRINGS

The number of Model 700 rifles being returned to the factory because of alleged accidental firing malfunctions is constantly increasing.

170 were returned to Product Service for examination in 1988 with various accidental firing complaints.

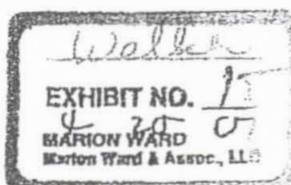
To date this year, 28 have been returned.

JAS:tpv

cc: W.E. Ericson
J.C. Hutton

CONFIDENTIAL - SUBJECT
TO PROTECTIVE ORDER

WILLIAMS V. REMINGTON



IL 126 01561

PR 0604