

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



(Discuss)

Route to:

Xc: C.B. Workman
J.W. Brooks
A.A. Hugick
J. P. Linde

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

MEMORANDUM

Ilion, New York
June 19, 1979

ACCURACY TESTING OF M/700 - 7mm/06 RIFLES
AFTER THE ROLLMARK CHANGE TO 7mm EXP.REM.

INTRODUCTION

It is desired to change the rollmark of 2100 Model 700 rifles from 7mm/06 to 7mm EXP.REM. A process has been proposed whereby the 7mm/06 rollmark is removed by grinding and the barrel is rerolled with the desired designation. Henceforth, this process will be referred to as the repair operation, or simply the repair.

OBJECTIVE

To determine if the repair operation causes rifles which have previously met the grouping specs to fail to meet the specs subsequent to the repair.

CONCLUSIONS

Five rifles, of the twenty tested, failed to pass the grouping specs after being repaired. Two of the five failed marginally. Refer to the data sheets.

TESTING PROCEDURE

Twenty rifles rollmarked 7mm/06 were shot from the shoulder using 165 gr. factory loaded ammunition. The average of three 5-shot groups was used to determine if each rifle met the 3.5 inch grouping spec. All of these rifles passed.

The method as described above was used to determine the average group size of the rifles after the repair operation had been performed.

B.I. Bennett:T
Current Firearms Design
Ilion Research Division

Accuracy Testing of M/700 - 7mm/06 Rifles
Before the Rollmark Change to 7mm EXP REM.

6-19-79

-2-

Rifles shot from Shoulder: 165 gr. FL Lot #J01ED
*165 gr. FL Lot #G12ED

RIFLE GROUP SIZES BEFORE REPAIR

Gun Number	Group Size			Average		
	#1	#2	#3	Before	After	in p/deg
2*	2.48	3.16	3.58	3.07	2.1	
5*	2.70	1.34	3.26	2.43	2.77	
7*	2.91	3.66	2.98	3.18	2.53	
9*	2.81	3.38	4.01	3.40	4.08	
10*	2.90	3.73	2.90	3.18	4.28	
11*	2.56	3.18	4.74	3.49	2.41	
14*	3.94	2.42	2.72	3.03	2.21	
18*	2.19	2.36	2.57	2.37	2.05	
2-1	2.76	2.08	2.19	2.34	3.17	
2-2	4.01	2.87	2.50	3.13	2.05	
2-3	1.94	1.44	3.18	2.19	2.58	
2-4	2.98	1.63	2.45	2.35	3.62	
2-5	4.36	3.01	2.68	3.35	3.54	
2-8	2.19	1.37	1.90	1.82	2.37	
2-10	3.25	3.26	3.19	3.23	3.07	
2-12	4.22	3.06	2.52	3.27	?	
2-13	1.52	2.44	1.68	1.88	1.76	
2-14	2.32	2.84	1.88	2.35	1.93	
2-15	2.27	1.82	2.67	2.25	2.97	
2-20	2.10	3.60	3.34	3.01	2.59	

Accuracy Testing of M/700 - 7mm/06 Rifles
After the Rollmark Change to 7mm EXP.REM.

6-19-79

-3-

Date 6/14 - 6/15, 1979

Rifles Shot from Shoulder: 165 gr. FL Lot #J01ED

5-shot Groups

RIFLE GROUP SIZES AFTER REPAIR

Gun Number	Group Size				Fail 3.5" Spec.
	#1	#2	#3	Average	
2	2.49	1.59	2.23	2.10	
5	3.14	2.36	2.81	2.77	
7	2.29	1.88	3.41	2.53	
9	4.88	4.53	2.82	4.08	x
10	3.82	3.70	5.33	4.28	x
11	2.98	1.95	2.29	2.41	
14	2.72	1.86	2.06	2.21	
18	1.41	2.59	2.15	2.05	
2-1	2.89	2.73	3.88	3.17	
2-2	1.38	2.18	2.60	2.05	
2-3	2.37	2.06	3.32	2.58	
2-4	2.21	5.43	3.22	3.62	x
2-5	4.93	2.72	2.98	3.54	x
2-8	2.00	2.24	2.86	2.37	
2-10	1.54	3.50	4.16	3.07	
2-12	4.40	2.54	Only four shots found	?	x
2-13	1.00	1.50	2.77	1.76	
2-14	3.10	1.56	1.14	1.93	
2-15	1.46	4.30	3.14	2.97	
2-20	3.38	3.22	1.16	2.59	

Accuracy Testing of M/700 - 7mm/06 Rifles
After the Rollmark Change to 7mm EXP.REM.

6-19-79

-4-

Average of three 5-shot Group Sizes, Shot from the Shoulder.
165 gr. FL Ammunition

Gun Number	Average Group Size		Improved	Worse	+ Amount -	
	Before Repair	After Repair				
2	MARGUAT	3.07	2.10	X		
5		2.43	2.77		X	.34
7		3.18	2.53	X		
9		3.40	4.08		X F	.68
10		3.18	4.28		X F	1.10
11	X	3.49	2.41	X		.02
14		3.03	2.21	X		.82
18		2.37	2.05	X		.32
2-1		2.34	3.17		X	.83
2-2		3.13	2.05	X		1.08
2-3		2.19	2.58		X	.39
2-4		2.35	3.62		X F	1.27
2-5		3.35	3.54		X F	.19
2-8		1.82	2.37		X	.55
2-10		3.23	3.07	X		.16
2-12		3.27	?		F	
2-13		1.88	1.76	X		.12
2-14		2.35	1.93	X		.42
2-15		2.25	2.97		X	.72
2-20		3.01	2.59	X		.42
			10	10	.498	.67
					Ave	Ave

Groups #9 2.81 - 3.38 - 4.01 - 4.88 - 4.53 - 2.82

BIB:T

6-19-79

Illion Research Division

Groups #10 2.90 - 3.73 - 2.90 - 3.82 - 3.70 - 5.33