Model 721 — 30'06 P.L.

Date 8/4/47

No. Rounds Fired	Malfunctions: Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
Barrel Cleaned														
Air Gauge - Bore Dimensions														.3096 min
Trigger Pull Test #4														5# 9 oz min
														5 12
														5 14
														5 15 max
														5 13
														5# 14.6 oz avg
Firing Pin Indent Test														.019 min
& Protrusion Test #8														.0195
Protrusion OK														.020 max
														.0198
														.0195
														5 .1978 .0196 avg
														.0196
Bolt Opening Test #10														10
														11 max
														8 min
														9
														10
														5 48 6
														avg - 9.7#

Model _____

Date _____

R.T. No.	Rounds Fired	Malfunctions: Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
															Safety Mechanism Function Test #22 OK
															Safety Sear Mechanism Test #25 OK
															Length of Springs: Sear Spring .485"
															Bolt Release " .314"
															Ejector Spring 1.2"
															Firing Pin Spring 6.24"
1															Take down Inspection Test #11
2															Head Space Test .153" GO
															.154" NO GO
3															Previously proofed
4															Safety Operation Test #31
5															Cut Off Test #21
6															Cleaning & Oiling - Type III
7															Previously proofed
8	—														previously fired
9	—				41										
10															previously performed
11															Reduced Charge
16															See Accuracy data

R2501102

8)

Model _____

Date _____

R.T. No.	Rounds Fired	Malfunctions: Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
															5130 R137 #
13	251-290	OK													
	291-310	OK													
14	311-330	OK													plates.
15	331-370	OK													
	371-390	OK													
	391-490	OK													
16	491-510														
	511-530	OK													
	531-570	OK													
	571-610	OK													
	611-650	OK													
	651-690	OK													
	691-730	OK													
	731-770	OK													
	771-810	OK													
	810-850	OK													
	851-890	OK													
	891-930	OK												17	991-1050 OK
	931-990	OK													

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Model _____

Date _____

1,000

R.T. No.	Rounds Fired	Malfunctions: Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
															.3104" 3½" muzzle
		Accuracy													.3096" - muzzle
															.310" - 4" from muzzle
															.3096' - 8" from muzzle
		Trigger Pull #6													6# - 9 oz 6-12 6-6 6-1 7-3 Av. 7# 12 oz
		Firing Pin Indent & Protrusion Test #8													.0189" - .019" - .019" .020" - .0198" Avg. .0193"
		Protrusion & Bolt Opening Test #10													9½" 8½" 10 11 10 #OK
		Head Space													.153" Go .154" No Go

51

Model 721

Date 8/7/47

T. No.	Rounds Fired	Malfunctions														Remarks
		Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments		
18	1051-1070	OK														
19	1071-1072															
20	1073-1130	OK														
	1131-1170	OK														
	1171-1210	OK														
	1211-1250	OK														
	1251-1290	OK														
	1291-1330	OK														
	1331-1370	OK														
	1371-1410	OK														
	1411-1450	OK														
	1451-1490	OK														
	1491-1530	OK														
	1531-1570	OK														
	1571-1610	OK														
	1611-1650	OK														
	1651-1690	OK														
	1691-1730	OK														
	1731-1770	OK														

6)

Model 721

Date 8/8/47

R.T. No.	Rounds Fired	Malfunctions: Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
	1771-1910	OK													
	1911-1850	OK													
	1851-1890	OK													
	1891-1920	OK													
21	1921-1960	OK													
	1961-2000	OK													
22	2001-2060	OK													

8/11/47

Air gauge - Bore diam. — Inside muzzle .310"

4" .3098"

8" .309"

Max. 3104" 3½" from muzzle

Clean

Head space test #3 — .153 OK .154 No Go (.1537)

Trigger Pull Test #6

1	7#	—
2	7#	6 oz
3	6#	6 oz
4	6#	10 oz
5	6#	4 oz
6	6#	11.6 oz

1)

Model 721
Date 8/11/47 (cont)

R.T. No.	Rounds Fired	Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
	Firing Pin Indentation &														
	Protrusion Test # 8														.0208 – .021
															.019 – .0191 – .0196
	Protrusion OK														.0208 .021 .019 .0196 .0199 .0199 5 / .0994 / .01988
	Bolt Opening Test # 10														11 #
															9 1/2
															10 #
															9 1/2
															9 1/2
															5/49.5 9.9
	~~Safety Mechanism Function Test # 22~~														
	~~Safety Sear Mechanism Test # 25~~														
23	2062 Proof Round														Hardness 8/82 RSN Spec is 84 (?)
24	2063 2100	57													
	2140	2													
	2150		(1)								(1)		(1)		Bolt would not open. Broke cam on firing pin head when wrench was applied. Evidence shows an old break [illegible] firing pin [illegible]
												(1)			

CONFIDENTIAL-SUBJECT TO PROTECTIVE ORDER
KINZER V. REMINGTON

R2501107

Model 721

Date 8/11/47

R.T. No.	Rounds Fired	Malfunctions										Breakages	Replacements	Gun Failures	Adjustments	Remarks
		Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking						
26 27	3 3															See item B appendix
	[illegible]															
	[illegible]															
28																
	2201-2300															
	2340															
	2381-2380															
	[illegible]-2420															
	[illegible]															
	[illegible]-2500															
	[illegible]-2540															
	[illegible]-2580															
	[illegible]-2620															
	[illegible]-2660															
	[illegible]-2700															
	2740															
	[illegible]-2780															
	2781-2820															
	[illegible]-2860															
	2861-2900															
	2901-2940															
	2941-2980															
	2981-3000															
29	3001-3060															

Model ___

Date 2/14/47

T. No.	Rounds Fired	Malfunctions											Replacements	Gun Failures	Adjustments	Remarks
		Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages					
30	3061 - 3062															3000 rounds
31	3063 - 3082							(2)								FEED [illegible]
32	Clean & Lubricate															BOLT OVER [illegible] EDGE
	Gun Jams															.30975" MAX. 3104
																4" .3099" 3½" [illegible]
																Muzzle .3098"
	Trigger Pull Test #6															5 14
																5 12
																5 10
																6 0
																6 4
																5# 14 4 oz
																.017" .017
								Test #8								.0163" .0163
																.0165" .0165
																.0163 .017
																.017" .0178" Avg.
	Bolt Opening Test #10															8
																9
																8½
																10½
																10
																5 46 5 Avg. 9.3#
	Head Space Test #3															Takes .154"
																Does not take .155"

Model 721

Date 8/14/47

T. No.	Rounds Fired	Malfunctions														Remarks
		Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments		
33	3081-3120	OK														
	3121-3160	OK														
	3161-3200	OK														
	3201-3240	OK														
	3241-3280	OK														
	3281-3320															
	3321-3360	OK														
	3361-3400	OK														
	3401-3440	OK														
	3441-3480	OK														
	3481-3520	OK														
	3521-3560	OK														~~180 gr bronze pt~~
	3561-3600	OK														
	3601-3640	OK														
	3641-3680	OK														
	3681-3720	OK														
	3721-3760	OK														
	3761-3800	OK														
	3801-3840	OK														
	3841-3880	OK														
	3881-3920	OK														
	3921-3960	OK														
	3961-3980	OK														
34	3981-4000	OK					Final test									~~150~~

Model 601

Date

T. No.	Rounds Fired	Malfunctions: Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
25	4001-4060	N													
26	4061-4060														
27	Head Space Test # 3														
28	4083-4082	N							Failed					Link	
29	1083-4142											(1)			It was found that the diam. of the bolt was .010" under min.
	Air Gauge											Muzzle -.3098-4" from muzzle :310-5" from muzzle			-.3097 ± MAX .3104 - 3½" from muzzle
	Trigger Pull Test # 6														6 - 0
															6 - 1
															6 - 4
															6 - 0
															avg # 2.23 6 - 6
	Firing Pin Protrusion Test # 8										1				.021
															Protrusion .020
															.020
															.021
	Bolt Opening Test # 10														10 9 8 9
															avg # 45 avg .020
	Head Space														Min. Intake .155 H.S. .154

Model 721

Date 8/20

T. No.	Rounds Fired	Malfunctions										Breakages	Replacements	Gun Failures	Adjustments	Remarks
		Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking						
40	4143-4180	OK														
	4181-4220	OK														
	4221-4260	OK														
	[illegible]-4300	OK														
	4301-4340	OK														
	[illegible]-4380	OK														
	4381-4420	OK														
	4421-4460	OK														
	[illegible]-4500	OK														
	[illegible]-4540	OK														
	4541-4580	OK						(1)								Bolt over-ride
	[illegible]-4620	OK														
	4621-4660	OK														
	4661-4700	OK														
	4701-4740	OK														
	4741-4780	OK														
	4781-4820	OK														
	4821-4860	OK														
	4860-4900	OK														
	4901-4940	OK														
	4941-4980	OK														
	4981-5000	OK														
#1	5601-5060															

Model 141

Date 8/21

T. No.	Rounds Fired	Malfunctions														Remarks
		Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments		5000 Rd
																Head Space .155
																Firing pin Impact — .019
																Protrusion Test #8 .020
																Protrusion # .021
																.020
																avg .020" .020
																Trigger Pull Test #6
																7 — 14
																1st 6 — 7
																6 — 13
																7 — 4
																7 — 9
																Air Gauge —
																.3098 - plug G
																.3085 - Half Wo
																.3098 - full Ldg
																.3104 - MAX
																.3098 - MIN
																Bolt Opening Test #10
																9
																9
																8
																10
																8
																5)44
																Avg 8.8 #

Model _____

Date 8/25

between 2 & 3 o'clock.

T. No.	Rounds Fired	Malfunctions													Remarks
		Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	
42	5061-5065														fired 10 at 8½ o'clock fired 10 at 3" 30 o'clock fired 10 at 3½" 5 o'clock fired 42 at 35"
43	1-														
44	5066-5100	OK													
	5101-5140	OK													
	5141-5180	OK													
	5181-5200	OK													
	5201-5260	OK													
	5261-5300										(1)	(1)	(1)		Stock broke
	5301-5340	OK													
	5341-5380	OK													
	5381-5420	OK													
	5421-5460	OK													
	5461-5500	OK													
	5501-5540	OK													
	5541-5580	OK													
	5581-5620	OK													
	5621-5660	OK													
	5661-5700	OK													
	5701-5740	OK													
	5741-5780	OK													
	5781-5820	OK													
	5821-5860	OK													
	5861-5900	OK													

Model 721

Date 7/27

6000 RNDS.

Zoller

S.T. No.	Rounds Fired	Firing	Unlocking	Primary Extraction	Secondary Extraction	Ejection	Cocking	Feeding	Loading	Locking	Breakages	Replacements	Gun Failures	Adjustments	Remarks
															Firing pin spring - 6"
															EJECTOR " - 1.18
															SEAR " - .48
															BOLT RELEASE SPR. - .311
	Air Gauge														MUZZLE-3012 & 3098 WAY IN-3094
															MIN MAX-3104
	Trigger Pull														7 - 6
															7 - 9
															7 - 10
															6 - 5
															7 - 10
															7 - 48
	Firing Pin Indent & Protrusion														T.W. #6 .020
															.0198" .020
	Protrusion OK														.020
															61090 .0195
															4198 .0195
	Bolt opening.														8
															8
															8
															8
															8
															8
	Head Space														TAKES -.155 will not take -.156"
4F															Sotts (over)

DAILY PROGRESS REPORT Date 9/16/47

SUBJECT: TESTING M/721 REINFORCED STOCKS

One M/721 Stock (previously split in web section) was reinforced by a Fore End Screwed Pin, (Part 74 - M/30 Gun) and subjected to 500 rounds of firing. Results of the test show that the reinforcement prevented further splitting of the stock from the web section.

It should be understood that the results of this test are based on the firing of one gun.

W. E. Leek
Test Engineer

WEL:MC