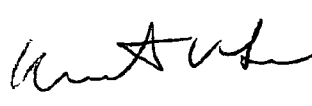


Test Lab Work Request Form

Rev.3 -20 April, 2000

Date Submitted: 06-13-01	Tracking # : TLW 0549
Project # : 241314	Engineer: M. Keeney
Test Objective: Document current production M/710 bolt opening and closing forces.	
Test Description: Sample 6 firearms, measure bolt closing and opening forces 3 times per each rifle. Also as a comparison, re-measure bolt opening & closing forces taken on competitor's rifles (TLW0305). DATA PROVIDED	
Resource Usage: Manpower Requirements - Facility Requirements -	Test Results Required: Formal Report: Data Only: X Requested Completion Date:
Required Materials/Parts/Equipment (include quantities):	
Test Parts Availability Date: 06-13-01	
Start Date: 06-13-01 Completion Date: 06-14-01 Report Date: 06-14-01	Test Assigned To: Bob Lee Assignment Date: 06/13/01 

ET35102

NEW

PROJECT : # 241314
TLW : # 0549

M/710 / COMPETITIVE RIFLES
BOLT OPENING/ CLOSING FORCES

START DATE : 06-13-01
FINISH DATE 06-14-01

PROJECT # 241314						
TLW : 0549						
BOLT OPENING / CLOSING FORCES ON M / 710 710, 700 AND COMPETITIVE CENTER FIRE RIFLES						
OPENING FORCE / FALLEN FIRING PIN						
GUN	SERIAL #	#1	#2	#3		AVG.
(OLD) REM / M/710	71001080	13.46	14.2	14.3		13.98
SAKO 995	888346	5.36	5.48	5.62		5.486
SAVAGE 110	F683474	7.14	6.86	6.72		6.906
WINCHESTER M/70	G2197198	11.52	11.28	11.06		11.28
BROWNING A-BOLT	73170NT8C7	5.46	5.26	5.16		5.293
REM M/ 700 ADL	E6229121	10.46	12.24	11.08		11.26
(NEW) REM M/710	71016322	11.6	10.4	11.34		11.11
(NEW) REM M/710	71015574	10.04	10.84	10.56		10.48
(NEW) REM M/710	71015057	13.9	14.42	13.16		13.82
CLOSING FORCE						
GUN	SERIAL #	#1	#2	#3		AVG.
(OLD) REM M/710	71001080	DELETED	DELETED	DELETED		
SAKO 995	888346	8.18	8.16	8.1		8.146
SAVAGE 110	F683474	11.26	11.02	11.68		11.32
WINCHESTER M/70	G2197198	8.02	9.72	9.1		8.946
BROWNING A-BOLT	73170NT8C7	8.12	8.3	8.16		8.193
REM M/ 700 ADL	E6229121	8.52	8.28	7.64		8.146
(NEW) REM M/710	71016322	10.6	10.32	10.2		10.37
(NEW) REM M/710	71015574	10.48	10.76	10.46		10.56
(NEW) REM M/710	71015057	13.5	13.26	12.74		13.16

83

ET35103

PROJECT# 241095									
TLW 0010H									
BOLT LIFT AND CLOSING FORCES									
DATE - 3-20-00									
		OPEN FORCES				CLOSING FORCE			
GUN	SERIAL#	1	2	3	AVERAGE	1	2	3	AVERAGE
A-1	XC 1116	5.9	6.65	6.6	6.3833	2.3	2.45	2.25	2.333
A-2	XC 1117	6.4	6.4	6.1	6.3000	3.45	3.2	3.25	3.300
A-3	XC 1118	6.7	6	6.2	6.3000	3.15	3.25	3.25	3.217
A-4	XC 1119	6	6.45	5.8	6.0833	2.85	3	2.65	2.833
A-5	XC 1120	6.3	6.2	6.2	6.2333	3.55	3.4	3.6	3.517
A-6	XC 1121	6.2	6.25	5.7	6.0500	2.95	2.95	3	2.967
A-7	XC 1122	6.4	6.05	6.3	6.2500	3.15	2.8	2.95	2.967
A-8	XC 1123	6.25	6.15	6	6.1333	3.35	3.2	3.15	3.233
A-9	XC 1124	6.45	6.4	6.4	6.4167	2.95	2.75	2.85	2.850
A-10	XC 1125	6.6	6.05	6.4	6.3500	3	2.95	2.8	2.917
RD. CHAMBERED		OPEN FORCES				CLOSING FORCE			
GUN	SERIAL#	1	2	3	AVERAGE	1	2	3	AVERAGE
A-1	XC 1116	7.65	8.3	7.7	7.8833	3.35	2.6	3.4	3.117
A-2	XC 1117	6.7	6.25	6.75	6.5667	4.15	4.05	3.7	3.967
A-3	XC 1118	6.05	6.4	6	6.1500	4.1	4.4	4.2	4.233
A-4	XC 1119	6.9	6.35	6.15	6.4667	2.65	3.5	3.45	3.200
A-5	XC 1120	5.8	6.85	6.35	6.3333	3.5	3.8	3.05	3.450
A-6	XC 1121	6.05	6.38	6.35	6.2600	2.85	2.9	3.25	3.000
A-7	XC 1122	6.15	6.5	6.4	6.3500	4	4.7	4.2	4.300
A-8	XC 1123	6.65	6.55	6.25	6.4833	3.8	3	3.05	3.283
A-9	XC 1124	6.65	6.3	6.55	6.5000	2.75	2.55	2.7	2.667
A-10	XC 1125	6.4	6.1	6.4	6.3000	3.85	3.5	3.45	3.600
MEASUREMENTS WERE TAKEN USING A CHATILLON 0 TO 10 LB DIGITAL FORCE GAUGE									
PERFORMED BY BOB LEE									

83

ET35105

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Williams v. Remington