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H. P. WHITE LABORATORY, INC. EST. 1936

TEST REPORT

EXTREME ENVIRONMENT, RELIABILITY TESTING OF MODIFIED MODEL 700, RIFLE, FIRE CONTROL ASSEMBLIES

Prepared For

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PREFACE

This report presents the results of Extreme Environment Testing of modified, Model 700 Rifle Fire control Assemblies comparatively with currently fielded, Model 700 Rifle Fire Control Assemblies. The tests were conducted in accordance with Remington Arms Company, Inc. Purchase Order Number LRR-0792.

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Figure 01. Remington Model 700, Bolt Action Rifle

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Figure 02. Fire Control Group of Test Sampling

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SECTION 1.0 INTRODUCTION

1.1 Background

- 1.1.1 The Remington Arms Company, Inc. has developed an improved Fire Control Assembly for use in Model 700 Rifles which was intended to improve the functional reliability of that rifle.
- 1.1.2 Preliminary testing of the modified assembly produced favorable results in tests conducted under less-than-severe environmental conditions.

1.2 Objective

1.2.1 The objective of this testing was intended to examine the functional reliability of the modified assemblies when subjected to extremes of temperature and contaminating environmental conditions.

1.3 Scope of Testing

- 1.3.1 Three unmodified, new condition, Model 700 Rifles and five, Model 700 with Modified Fire Control Assemblies, but in otherwise new condition, were provided for this testing.
- 1.3.2 Each of the rifles was tested in accordance with the general provisions of TOP 3-2-045, U.S. Army TEST AND EVALUATION COMMAND TEST OPERATIONS PROCEDURE "AUTOMATIC WEAPONS, MACHINE GUNS, HAND AND SHOULDER WEAPON".
 - 1.3.2.1 High Temperature Test, Paragraph 4.5.1.
 - 1.3.2.2 Low Temperature Test, Paragraph 4.5.2.
 - 1.3.2.3 Water Spray Test, Paragraph 4.5.4.
 - 1.3.2.4 Dynamic Dust Test, Paragraph 4.5.5.1.
 - 1.3.2.5 Static Dust Test, Paragraph 4.5.5.2.
 - 1.3.2.6 Mud Test Number 01, Paragraph 4.5.6.2.1.
 - 1.3.2.7 Mud Test Number 02, Paragraph 4.5.6.2.2.
- 1.3.3 The provisions of TOP 3-2-045, which are intended for testing of auto-loading, full and semi-automatic firearms, were modified to accommodate the bolt action operation of the Model 700 Rifle.

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1.4 Description

- 1.4.1 The Model 700 Test Assemblies, control and modified, were chambered for caliber .30-06 Springfield and were of stainless steel construction with stocks of a black, synthetic (high impact plastic) material.
- 1.4.2 Three of the modified assemblies were fitted with blued, steel triggers and safeties. Two of the modified assemblies and all of the control assemblies were fitted with stainless steel triggers and safeties.

1.5 Summary

- 1.5.1 Except for the Blowing Sand and Dust Test, none of the extreme environmental testing produced a discernible effect on the operation of either configuration of Fire Control Groups.
 - 1.5.1.1 The Sand/Dust Test adversely effected the operation of both of the Fire Control Groups.
- 1.5.2 None of the extreme environmental testing produced inadvertent firings with either Fire Control Group configuration.
 - 1.5.2.1 All of the malfunctions induced by conditions of the tests interrupted the firing sequence and are therefore categorized as having no effect on safety.
- 1.5.3 During the final cleaning, subsequent to the last test of the series, two of the rifles "fired" inadvertently with the release of the safety - one each of both configurations of the Fire Control Group.
 - 1.5.3.1 A Safety Manipulation Test was conducted which performed one hundred trials with each of the five Modified Fire Control Groups, the three previously tested, unmodified Fire Control Groups and two additional, unmodified Fire Control Groups not previously tested (10 guns/1000 testing) with no additional inadvertent "firings".

2.1 General

- 2.1.1 The procedures of each of the tests of this test series were based on the procedures specified by TOP 3-2-045, U.S. Army TEST AND EVALUATION COMMAND TEST OPERATIONS PROCEDURE "AUTOMATIC WEAPONS, MACHINE GUNS, HAND AND SHOULDER WEAPON".
- 2.1.2 The procedures of TOP 3-2-045 are intended for testing of autoloading firearms and the specified firing cycles for automatic and semi-automatic firings are not appropriate for testing of bolt action rifles such as the Model 700.
- 2.1.3 Lacking universally acceptable procedures for testing of bolt action rifles, the procedures of TOP 3-2-045 were modified to reflect the bolt action operation of the Model 700 Rifle.
 - 2.1.3.1 All firing sequences were fired as single fire, bolt action tests.
 - 2.1.3.2 The required number of firings of each test was reduced from that associated with the semi- and full-automatic, area-fire mission of military weaponry to numbers of firings consistent with a bolt action, point fire, sporting requirement.
- 2.1.4 Prior to initiation of these tests each of the rifles had purportedly been fired 50-100 times by the Remington Arms Company, Inc.
 - 2.1.4.1 The functional suitability of the rifles was confirmed prior to testing by firing one full magazine (4 rounds) of the test ammunition from each rifle.

2.2 High Temperature Testing

- 2.2.1 Each of the rifles was cleaned and lubricated prior to testing.
- 2.2.2 Each of the rifles was fully loaded (four rounds in the magazine and one in the locked chamber), and with safety "on" and an additional full loading of ammunition (five rounds), the rifle was conditioned at a temperature of +160°F for an uninterrupted period of 6-hours.
- 2.2.3 After 6-hours at +160°F the five loaded cartridges were fired and the gun reloaded and fired with the second full loading of conditioned cartridges.
- 2.2.4 The entire firing sequence (the initial firing, reloading and second firing) was conducted without removing the gun from within the conditioning chamber.

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2.3 Low Temperature Testing

- 2.3.1 Each of the rifles was cleaned and lubricated prior to testing.
- 2.3.2 Each of the rifles was fully loaded (four rounds in the magazine and one in the locked chamber), and with safety "on" and an additional full loading of ammunition (five rounds), the rifle was conditioned at a temperature of -50°F for an uninterrupted period of 4-hours.
- 2.3.3 After 4-hours at -50°F the loaded gun was removed from the conditioning chamber and fired immediately.
- 2.3.4 After firing, the gun was reloaded with the conditioned, second loading and the loaded gun reconditioned for a period of 2-hours at -50°F. The elapsed time between removal of the gun from the conditioning environment and reinsertion in that environment did not exceed 3-minutes.
- 2.3.5 After 2-hours of reconditioning the loaded gun was removed and the second full loading immediately fired.

2.4 Water Spray Test

- 2.4.1 Each of the rifles was cleaned and lubricated prior to testing.
- 2.4.2 The magazine of each of the rifles was fully loaded (four rounds) and, with the bolt open, positioned horizontally in a conditioning chamber and exposed to a water spray at the rate of 0.4 of an inch per minute for a period of 5-minutes.
- 2.4.3 A fifth round was loaded in the chamber, the bolt closed and locked, safety "on", and the rifles conditioned for an additional 5-minutes.
- 2.4.4 After the second conditioning period the gun was removed from the water spray environment, the bolt opened and the chamber drained by positioning the gun muzzle-up and muzzle-down and the full loading of five rounds fired.
- 2.4.5 The entire sequence, 2.4.2 through 2.4.4, was repeated.
- 2.4.6 The entire sequence, 2.4.2 through 2.4.5, was repeated with the rifles positioned muzzle-up in the conditioning chamber.
- 2.4.7 The entire sequence, 2.4.2 through 2.4.5, was repeated with the rifles positioned muzzle-down in the conditioning chamber.

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2.5 Dynamic Dust Test

- 2.5.1 Each of the rifles was cleaned and lubricated prior to testing.
- 2.5.2 Each of the rifles with the muzzle taped closed, was fully loaded (four rounds in the magazine and one in the locked chamber) and with the safety "on", was positioned horizontally and exposed to a blowing sand mixture introduced into the conditioning chamber at the rate of 100.0 grams per minute per square meter for one minute.
- 2.5.3 After 1-minute, and with the gun still within the blowing sand environment, the first full loading (five rounds) was fired.
- 2.5.4. The gun was removed from the conditioning environment, reloaded and the muzzles re-taped. The gun was then reconditioned and refired as in 2.5.2 and 2.5.3.
- 2.5.5 The sand mixture used in this testing was in accordance with that specified by Table 13 of TOP 3-2-045.

2.6 Static Dust Test

- 2.5.1 Each of the rifles was cleaned and lubricated prior to testing.
- 2.6.2 Each of the rifles with the muzzle taped closed, was fully loaded (four rounds in magazine and one in the locked chamber) and with the safety "on", was positioned in a normal, horizontal firing orientation and exposed to a blowing sand mixture introduced into the conditioning chamber at the rate of 5-pounds per minute for 1minute.
- 2.6.3 After 1-minute conditioning the guns were removed from the conditioning environment and cleaned by wiping the rifle with bare hands, jarring and blowing, prior to firing in an ambient environment.
- 2.6.4 The rifles were then reloaded, reconditioned and fired as in 2.6.2 and 2.6.3 except that the rifles were conditioned upside-down in a horizontal orientation during conditioning.

2.7 Mud Test Number 01

- 2.7.1 Each of the rifles was cleaned and lubricated prior to testing.
- 2.7.2 Each of the rifles was fully loaded (five rounds), the muzzle taped closed and with the safety "on" and an additional full loading of ammunition (five rounds), the rifle was immersed for 1-minute in a mud mixture complying with the mixture specified by Paragraph 4.5.6.2.1 of TOP 3-2-045.

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- 2.7.3 The gun and second ammunition loading were then removed from the mud conditioning and cleaned with bare hands, jarring and blowing.
- 2.7.4 The initial loading (five rounds) was then fired and the second loading of five rounds loaded and fired without further conditioning.

2.8 Mud Test Number 02

- 2.8.1 Each of the rifles was cleaned and lubricated prior to testing.
- 2.8.2 The procedures of 2.7.2 through 2.7.4 were repeated except that after the cleaning of 2.7.3 the gun and second loading of ammunition were dried for 4-hours at ambient conditions.

2.9 Safety Manipulation Test

- 2.9.1 After an extreme environment testing had been completed each of the test rifles and two, untested, contingency rifles with unmodified (control) Fire Control Groups were given a Safety Manipulation Test.
- 2.9.2 Each of the ten rifles (five previously tested, modified rifles, three previously tested, Control rifles and two untested Control rifles) was cocked and "dry-fired" fired one hundred times.
 - 2.9.2.1 The unloaded rifles were cocked, the safeties set in the "safe" position, the safeties set in the "fire position and the triggers pulled to dry-fire the rifles.
 - 2.9.2.2 This procedure was repeated for a total of one hundred trials with each rifle except that alternate trails (50 per rifle) included pulling and releasing the trigger while the safety was set in the "safe" position.

2.10 Miscellaneous

- 2.10.1 All firing sequences were conducted in five round increments with a reconditioning of the rifles between each five round firing sequence except for Mud Tests, Numbers 1 and 2 which did not include a reconditioning between firing sequences.
- 2.10.2 After each test, the rifles were disassembled, cleaned and lubricated. Disassembly included the bolt assemblies but did NOT include the Fire Control Groups. The five Control Groups were cleaned by immersion in a solvent which were then blow-dried with compressed air after which a light lubricant was applied.

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2.11 Materials

- 2.11.1 The following materials were used to conduct this testing.
 - 2.11.1.1 Rifle, Caliber .30-06, Remington Model 700, Serial Numbers T6212776, T6212827 and T6212870 and contingency rifles, Serial Numbers T6212823 and T6212840.
 - 2.11.1.2 Rifle, Caliber .30-06, Remington Model 700, MODIFIED, Serial Numbers T6209827, T6212503, T6212692, T6212893 and T6213209.
 - 2.11.1.3 Cartridge, .30-06, Remington, Catalog Number R30061, Lot Number B15KC3225.
 - 2.11.1.4 Oil, Lubricating, LSA, MIL-L-46000B.
 - 2.11.1.5 Miscellaneous range fixturing and materials.

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3.1 General

- 3.1.1 Upon receipt, each of the rifles was inspected for evidence of damage or other irregularities which might effect the results of thistesting.
 - 3.1.1.1 No irregularities were noted and no malfunctions were noted in firing four rounds from each rifle.
- 3.1.2 Our inspection revealed two visual differences in the Control and Modified Fire Control Assemblies (see Figure 02).
 - 3.1.2.1 The side plates of all Control, Fire Control Assemblies had a single inspection hole while the side plate of the Modified Fire Control Assemblies had additional and larger diameter holes.
 - 3.1.2.2 Two of the five Modified Fire Control Assemblies were fitted with blued steel triggers and safeties while three of the Modified Assemblies and all of the Control Assemblies were fitted with stainless steel triggers and safeties.
- 3.1.3 Prior to initiation of testing and after all testing had been completed, the trigger pull of each rifle was determined. Table I presents a summary of that testing.

TABLE I. GUN WEIGHT AND TRIGGER PULL

Gun	Gun Weight (lbs.)	Trigger Pu	ll (1bs.)
Serial Number	(Unloaded)	Initial	Final
Modified			
6209827(a)	7.03	4.62	4.89
6212503	7.00	4.38	5.12
6212692	7.04	2.89	4.12
6212893 (a)	7.03	4.10	5.35
6213209(a)	6.98	4.14	4.85
Unmodified			
6212776	7.02	4.84	4.86
6212827	7.03	3.88	4.38
6212870	7.02	5.11	5.38

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3.2 Summary of Results (Environmental Testing)

3.2.1 Table II presents a summary of the data records of all testing presented in Appendices A and B hereto.

TABLE II. SUMMARY OF EXTREME ENVIRONMENTAL TESTING

Test Sequence Rounds/Gun	Hot Cold 160°F) (-50°) 01 02 10 10	Water Spray	No.01	Mud No.02		ıst	Rounds	Ma	1 f	mat	-i on	
Test Sequence Rounds/Gun	01 02	,	1	No.02	f			Malfunctions				<u> </u>
Rounds/Gun		03	1	- · - · • • •	Static	Dynamic					1	 I
	10 10		04	05	06	07						
	E	30	10	10	10	10		Total	FJ	FX	FFR	FFI
Modified Guns												
6209827(a) 4(t	b) 4(b)	0	0	1(h)	1(d)	0	90	10	4	4	1	1
6212503 0	0	1(f)	0	0	1(d)	0	90	1	0	0	1.	0
6212692 4 (c	c) · 4(c)	0	2(d,h)	2 (b,c)	1(d)*	0	90	13	ı	9	2	1
6212893 (a) 0	1(d)	0	2 (h)	1(h)	2(b,h)	0	90	6	1	0	1	4
6213209(a) 0	5 (c)	0	1(h)	2 (h)	1(d)*	0	90	9	o	5	1	3
TOTAL 8	14	0 ~	5	6	6	0	450	39.	6	18	6	9
Unmodified Guns												
6212776 10	3 (e)	1 (g)	1(h)	2(h)	2(d)*	0	90	8	0	2	3	3
6212827 0	0	0	1(h)	3 (b,d,h)	1(d)*	0	90	5	1	0	2	2
6212870 0	2 (d)	0	0	1(h)	1(h)	O	90	4	0	0	2	2
TOTAL 0	5	0	2	6	4	0	270	17	1	2	7	7

- (a) Gun fitted with blued steel trigger and safety.
- (b) Failures-To-Eject fired case (FJ).
- (c) Failures-To-Extract fired case (FX).
- (d) Failure-To-Fire (FFR).
- (e) Two Failures-To-Extract fired case (FX) and one Failure-To-Fire (FFR).
- (f) Disregard. Failure-To-Fire (FFR) attributed to ammunition.
- (g) Disregard. Grip Cap Failed-To-Remain-Assembled (FA).
- (h) Failure-To-Feed (FFD) up in magazine.
- * ATTRIBUTED TO FIRE CONTROL GROUP.
 - 3.2.2 Of the 58 malfunctions all but two were attributed to the gun assembly and the effects of the test environment on that assembly.
 - 3.2.2.1 One of the two malfunctions not attributable to the gun was ammunition-attributable and the other was the loosening and disassembly of the Grip Cap.
 - 3.2.2.2 All of the malfunctions, excepting the disassembled Grip Cap caused an interruption in the operation of the rifle (stoppage).

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- 3.2.3 The cause of all of the 56 gun-attributable malfunctions/stoppages may be characterized as contamination of the Bolt Assembly (Failures-To-Fire, Extract, Eject), Magazine Assembly (Failures-To-Feed-up) and the Fire Control Group (Failures-To-Fire). In every case the stoppage was cleared by removal of the contaminant ice, mud, sand, dust and brass shavings.
- 3.2.4 All of the malfunctions attributable to the Fire Control Group (Failures-To-Fire), occurred during the Static Dust Test and were characterized as "jamming of the Sear Safety Cam in the downward position thereby disallowing cocking of the Firing Pin in preparation for the next firing.
 - 3.2.4.1 All of the five occurrences were cleared by manipulation of the Fire Control Group.
- 3.2.5 None of the malfunctions resulted in an inadvertent or unintended firing.

TABLE III. MALFUNCTIONS (EXTREME ENVIRONMENTAL TESTS)

		Attrib	<u>ıtable To -</u>	· · · · · · · · · · · · · · · · · · ·		Total	
	Ammunition		Gun				
		Fire Control Group	Magazine Assembly		Other		
Control Rifles		3	7	7	1(a)	17	
Modified Rifles Blue Steel Trigger and		1	8	16			
Safety Stainless Stee: Trigger and Safety	l 1(a)	1	1	12			
Total (Blued an Stainless)	nd 1(a)	2	9	28		39	

- 3.3 Summary of Results (Safety Manipulation)
 - 3.3.1 During post-test cleaning, two of the cleaned guns (one each Modified and Control), Serial Numbers 6212893 and 6212870, malfunctioned in a manner which, had they been loaded, would have resulted in an inadvertent firing.
 - 3.3.1.1 When the safety was moved from the "safe" to the "fire" position, the firing pin fell without manipulation of the trigger.

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- 3.3.2 To more thoroughly examine this phenomena, the eight test rifles and two previously untested rifles with unmodified (Control) Fire Control Groups (ten total) were subjected to the Safety Manipulation Test of Paragraph 2.9.
- 3.3.3 Table IV presents a summary of that testing which was conducted after cleaning and application of a light lubricant.

TABLE IV. SUMMARY OF SAFETY MANIPULATION TESTS

Rifle Serial	Environme	ental Test Malfunctions	Safety Manipula	tion Malfunctions
Number	Total	Fire Control Group	w/Trigger Pull (a)	w/o Trigger Pull (b)
Control (Unmod	dified)			
6212776	8	2	0	0
6212827	5	· 1	0 .	0
6212870	4	0 (e)	0	0 (e)
6212823(c)	NA	AN	0	0
6212840(c)	NA	NA	0	0
Modified		•		,
6209827(d)	10	0	0	0
6212503	1	0	0	0
6212692	13	1 .	0	0
6212893 (d)	6	0 (e)	0	0(e)
6213209(d)	9	1	0	0

- (a) Trigger pulled and released with safety in "safe" position (50 trials).
- (b) Trigger was not pulled with safety in "safe" position (50 trials).
- (c) Previously untested.
- (d) Fitted with blued steel safety and triggers.
- (e) Does not include inadvertent firing during cleaning (see Paragraph 3.3.1)

3.4 Conclusions

- 3.4.1 The conclusions presented herein are based on the limited results of this testing and are not necessarily endorsed by anyone other than H.P. White Laboratory, Inc. and its personnel.
- 3.4.2 Both configurations of the Fire Control Group (Control and Modified) of the Model 700 Rifle were adversely effected by environmental extremes (Sand and Dust Test).
- 3.4.3 None of the ENVIRONMENTALLY-INDUCED malfunctions of the Model 700 Rifle with either Fire Control Group produced an inadvertent firing hazard.

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- 3.4.3.1 While no environmentally-induced, inadvertent firings were encountered, it may be conjectured that, should the dust-induced malfunctions of the Fire Control Groups, which jammed the Sear Safety Cam, be accompanied by a dust-jammed Firing Pin in the FIRED position, the gun may inadvertently fire during the chambering sequence. (While ten instances of debris-jammed Firing Pins were encountered; it should be noted that all were jammed in the COCKED position.)
- 3.4.4 The overall, comparative failure rate of the rifles fitted with Control and Modified Fire Control Groups (63/1000 vs 87/1000) is, given the limited sampling, not statistically significant (see Table V).

TABLE V. MALFUNCTION RATE (a)

	Unmodified Assemblies	Mo	dified Assem	Assemblies		
	·		Stainless Steel			
Hot Test	0	133	200	160		
Cold Test	167	333	200	280		
Spray Test	0	C	0	. 0		
Mud, No. 1 Test	67	100	100	100.		
Mud, No. 2 Test	200	133	100	120		
Dust, Static Test	133	100	133	120		
Dust, Dynamic Test	0	0	0	Ó		
Individual Maximum	89	111	144	144		
Individual Minimum	44	67	11	. 11		
COMBINED	63	.93	78	87		

- 3.4.5 The post-test, Safety Manipulation Tests failed to recreate a single instance of the inadvertent firings encountered during cleaning.
 - 3.4.5.1 That result suggests the inadvertent firings may be an infrequent, random phenomena created by debris which is cleared by subsequent manipulation of the Fire Control Group.

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APPENDIX A

-UNMODIFIED_MODEL_700_RIFLES-

 Serial Number 6212776
 Pages A2 - A8

 Serial Number 6212827
 Pages A9 - A15

 Serial Number 6212870
 Pages A16 - A22

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					-HI	White La	RE TEST-		HPWL1	0793-02 L Job N ctober	umb	er 95		
	Gur	: Rer	nington	700	(Madal)	.30-0 (Calib	5	New	· · · · · · · · · · · · · · · · · · ·	212776				
										riai Nu	mroe	er)		
	Amr.	munition	Remin	ngton		125.0 gr., (Type)	SP , B15k	C3225	-1					
	Cor	ditioni	ng Temp	erature	:	(°F),	Condition	ing Time	a:	,(Hrs	.)		
	Tes	t Descr	ription:	additi approp Conduc	onal c riate) t firi	oricate gun. artridges i for specifi ng tests fr th specified	n loade ed time om withi	i belts at spe n condi cycle.	or ma cified itioning	gazines tempera chambo	tur er	if e. in		
equ	ence	1				Cyclic R.		М	alfuncti	ons	86	W 10	۵	<u> </u>
		Ammo	Mag.	Velocit	y(fps)		Yaw	Type	alfuncti Rd. No.(s)	Cause	Scopp	Clas	Acerib.	EPR
1	05	İ					None		None					
2	05	į					None		None					ļ
					-End	of Test-								
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'IAR	KS:	(a) Gui	n condi	tioned v	vith lo	aded and loc	ked cham	ber and	safety		ΛN	.28	57	_
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-LOW TYMPERATURE TEST. (Paragraph 4.5.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 9 October 1995

	Gun:	F	Remingto	n , 700	.30-06		New	, 6	212776			
			ike)	(Model)			(Conditi			mbe	r)	
	Ammu	mition	ı:_Remin	gton	125.0 gr.,	-SP-, B	15KG3225					
				ake)			Lot Numbe					
	Cond	litioni	ng Tempa	erature: -50	(°F),	Condition	oning Tim	e:6		Hrs	.)	
				appropriate) Remove gun a sequence and environment (to conditioning Repeat two specified fir	and sufficient immediatel +70°±5°P) at any chamber for hour condit	nt amm y fire specif or two h ioning	unition that s ied rate ours and i	to fire equence of fire. Fire seco	one i in an Returned and sequence	iri bic m q meno unt	ng enc pun e.:il	
	Rds.	Ammo	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Туре	Malfumeti Rd. No.(s)	Cause	toppage	Class	ttrib.
01	05					None	FX	5	(ъ)	Y		G
02	04		1		!	None	FFR	6	(c)	Y	N	G
	[]				i i		FFR	9	(4)	Y	N	G
	l i			-	End of Test	 -			i	П	Ť	

Gun conditioned with loaded and locked chamber and safety on. (a) (b) PTMARKS: Failure-To-Extract fire case. Extracted on second attempt.

Failure-To-Fire. Jammed (Frozen) firing pin freed and fired on second attempt. Failure-To-Fire. Jammed (Frozen) firing pin freed but primer which had been lightly struck on first attempt would not fire dispite multiple, additional attempts.

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01-32B Low Temperature

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-WATER SPRAY TEST[Paragraph 4.5.4 of TOP 3-2-045]

6793-02

HPWLI Job Number
10 October 1995

Date

Gun:	Remington	, 700	.30-06	New	6212776
	(Make)	(Model)			(Serial Number)
inamini:	ition: Remingto	on 125.0	O gr., SP	B15KC3225	
	(Make	3)	(Type)	(Lot Number)	
Condi	tioning Tempera	ture: 70	(°f), Co	nditioning Time:_	NA (Hrs.)
Test 1	o: ae	f 0.4 inch p ccordance with	er minute following : tion , Wit	xpose to overhead and conduct fir schedule: th loaded magazin amber - 5 minutes	ring sequence in
			, With	th loaded magazine	, loaded and close
			, Op	en and drain char	
			, Re	peat horizontal ex quence.	xposure and firing
	Muzz	le-Uo Orientat	ion . Re	eat entire Horiz	ontal Orientation
	1.124.4			st.	

Seau No.	ence Rds.	Алто	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Rd. No.(s)	Cause	Stoppæe	Breakge	Attrib.	EPR
1H	05					None		None					li
2Н	05					None		None					
3U	05				,	None]	None	(a)	N	N	G	
4 U	05					None		None					
3D	05					None		None					
6D	05					None		None					
Ì				-	End of Test-				}				

A4

REMARKS: (a) Grip cap fell from stock after round 10, replaced.

01-32C Water Spray

Confidential - Subject to Protective Order Williams v. Remington

-MUD TEST NUMBER 1-Paragraph 4.5.6.2.1 of TOP 3-2-045) 6793-02 HPWLI Job Number 17 October 1995

Date

Gun: Remington,	700	. 30-06	. New	, 62127	76
(Make)	(Model)	(Caliber)	(Condition)	(Serial	Number;
Ammunition: Remingto	n 125.	0_gr., SP.	B15KC3225		
(Make)		(Type)	(Lot Number;	•	
Conditioning Temperat	ure: 61	(°F), Cond	itioning Time:	1/60	(Hrs.)

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

	lence				Cyclic R.			Malfunction	ons	38 e	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ė	\prod
10.	Rds.	Amma	Mag.	Velocity(fps) (Spm)	Yaw	Туре	Rd. No.(s)	Cause	Scop	Bree!	Attrib	EPR
01	05				1	None	FFD	3	(P)	Y	N	Т	
02	05				1	None		None					
					End of Test		<u> </u>						
					i :]						
]		i								
į	1				•			1					
					ļ							T	\prod
							•						
			ļ										

MARKS: (a) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

(b) Failure-to-fire (bolt overridge). Cleared by pushing down on cartridge in magazine and releasing on third attempt.

A.5.

01-32F Mud Test #1

Confidential - Subject to Protective Order Williams v. Remington

-MUD TEST NUMBER 2-(Paragraph 4.5.6.2.2 of TOP 3-2-045)

6793-02 HPWLI Job Number 18 October 1995

Date

700 .30-06 6212776 Gun: Remington New (Caliber) (Make) (Model) (Condition) (Serial Number) Ammunition: Remington 125.0 gr. SP B15KC3225 (Make) (Type) (Lot Number) 69 (°F), Conditioning Time: Conditioning Temperature:

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Place conditioned gum and unprotected ammunition in 70°±5°F environment for four hours. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Section No.	lence Rds.	Anmo	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	toppage	Class	Attrib.	EPR
. 01	05					None	FFD	3	(b)(c)	1	_	Т	
02	05					None	FFD	8	(b)(c)	Y	N	Т	
				- E1	d of Test-	ī							
				į		į]						
											T		
;											1	1	
													\prod
												1	

MARKS: (a) Gun conditioned with loaded and locked chamber and safety on and muzzle taped

A6

closed. Failure-to-feed (bolt override). Ammunition in magazine depressed and feeding

restored on second attempt.

(c) Bolt difficult to operate.

to Protective Order MA2861

01-32G Mud Test #2

Confidential - Subject Williams v. Remington

-STATIC DUST TEST-(Paragraph 4.5.5.2 of TOP 3-2-045) 6793-02 HPWLI Job Number 19 October 1995

Date .30-06 6212776 New Remington 700 Gun: (Caliber) (Make) (Model) (Condition) (Serial Number) 125.0 gr., SP Ammunition: Remington B15KC3225 (Lot Number) (Make) (Type) 64 (°F), Conditioning Time: Conditioning Temperature: (Hrs.)

Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence.

Sea No.	Rds.	Ammo .	Mag.	Velocity(fps	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	toppage	reakage	Class	Acerib.	EPR
01	05					None	FFR	3	(ъ)	Y	N		Т	
	<u> </u>						FFR	4	(b)	Y	И		Т	
02	05					None		None						
					End of Test-					Γ	Ī	ĺ		i
	!					:				Γ				
	!					1								
	l			İ	!	İ							Ī	
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										T	Ī		Ī	\Box
										T				
	,									T	T			

REMARKS: (a) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

A.7

(b) Sear Safety Cam jammed downward preventing cocking of firing pin. Cleared by manipulation.

Confidential - Subject to Protective Order Williams v. Remington 01-32D Static Dust

6793-02 -DYNAMIC DUST TEST-HPWLI Job Number (Paragraph 4.5.5.1 of TOP 2-2-045) 23 OCtober 1995 Date .30-06 6212776 700 New Gun: Remington (Make) (Caliber) (Model) (Condition) (Serial Number) Ammunition: Remington 125.0 gr., SP B15KC3225 (Make) (Type) (Lot Number)

Conditioning Temperature: 61 (°F), Conditioning Time: 2/60 (Hrs.)

Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. From within the conditioning chamber fire one sequence. Remove gun from conditioning chamber, reload, recondition and fire a second sequence.

Sequence No.	Rds.	Алипо	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncți Rd. No.(s)	Cause	coppage	Class	Attrib.	EPR
01	0.5				!	None		None					
2	05					None		None					
	i			_	End of Test-								
	1				1								
						Ì							
					Ì								
-	l				İ								
													\prod
					İ						T		
					İ								
				j	Ì								T

O'MARKS: (a) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

A8

Confidential - Subject to Protective Order Williams v. Remington 01-32E <u>Dynamic Dust</u>

MA2863

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6793-02 -HIGH TEMPERATURE TEST-HPWLI Job Number (Paragraph 4.5.1 of TOP 3-2-045) 6 October 1995 Date Remington 700 6212827 New Gun: (Make) (Model) (Caliber) (Condition) (Serial Number) Remington 125.0 gr., SP B15KC3225 Ammunition: (Make) (Type) (Lot Number) +160 Conditioning Temperature: (°F), Conditioning Time: (Hrs.)

Test Description: Clean and lubricate gum. Condition loaded gum and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature. Conduct firing tests from within conditioning chamber in accordance with specified firing cycle.

Seq	uence_	Ì			Cyclic R.		1	Malfuncti	ons	age .	30 %	ا ا	
lo.	Rds.	Ammo	Mag.	Velocity(fps)	(Spm)	Yaw	Type	Rd. No.(s)	Cause	Stopp	Class	Attrib.	EPR
01	05					None		None					
02	05					None		None			1	1	1
					nd of Test-								Ť
									·		\top	1	\dagger
	<u> </u>				·]	•				\dagger	+	\dagger
	<u>!</u>	<u> </u>									+	+	+
						<u> </u>			-		十	+	\dagger
						<u>†</u> [-	H	+	+	$\frac{\perp}{1}$
	<u> </u>				<u> </u>				-	H	+	+-	+
						 			-	H	+	+-	+
			ļ						-	H	+	+-	+
			<u> </u>						-	+1	+	-	+
			<u> </u>				<u> </u>		<u> </u>			\perp	

and locked chamber and safety on.

O1-32A High Temperature

Confidential - Subject to Protective Order Williams v. Remington

6793-02 -LOW TEMPERATURE TEST-HPWLI Job Number [Paragraph 4.5.2 of TOP 3-2-045] 9 October 1995 Date 700 .30-06 6212827 New Remington Gun: (Caliber) (Condition) (Make) (Model) (Serial Number) Ammunition: Remington 125.0_gr., SP., B15KC3225-(Type) (Make) Conditioning Temperature: -50 (°F), Conditioning Time: 6 Test Description: Clean and lubricate gun. Condition loaded gun and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature. Remove qun and sufficient ammunition to fire one firing sequence and immediately fire that sequence in ambient environment (+70°±5°F) at specified rate of fire. Return gun to conditioning chamber for two hours and fire second sequence. Repeat two hour conditioning and firing sequence until specified firings are completed. toppage freakage Class Attrib. Cyclic R. Malfunctions Sequence : Rds. Yaw OMMA Mag. Velocity(fps) (Spm) Rd. Cause No. (s) 01 | 05 None None 02 05 None None -End of Test-(a) Gun conditioned with loaded and locked chamber and safety on. PEMARKS: A10 01-32B Low Temperature

> Confidential - Subject to Protective Order Williams v. Remington

-WATER SPRAY TEST[Paragraph 4.5.4 of TOP 3-2-045]

6793-02

HPWLI Job Number
10 October 1995
Date

Gun: Kemington ,	700	,30-06	, New	6212827
(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
Ammunition: Remington	125.	O gr., SP	B15KC3225	
(Make)		(Type)	(Lot Number)	•
Conditioning Temperatu	re: 70	(°F), Con	itioning Time:	NA (Hrs.)
		er minute a	nd conduct fir	

<u>Seo</u>	Rds.	OmmA	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Alfuncti Rd. No.(s)	Cause	Stoppæe	Breakge	Class	Actrib.	E P R
111	05		<u> </u>			None		None					Anny April	
2 H	0.5]			None		None						
30	05					None		None						
40	05					None		None						
- 3D	05		Ì			None		None					-	T
. 6D	05					None		None						
				-	End of Test									

REMARKS:

A11.

01-32C Water Spray

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H.P. White Laboratory Inc.

-MUD TEST NUMBER 1-(Paragraph 4.5.6.2.1 of TOP 3-2-045) 6793-02 HPWLI Job Number 17 October 1995

Date

Gun: Remin	gton ,	700	.30-06	, New	6212827
(Mak	:e)	(Model)	(Caliber)	(Condition)	(Serial Number)
Admunition:	Remington	, 125.	0 gr., SP ,	B15KC3225	
	(Make)		(Type)	(Lot Number)	
Conditionin	g Temperatur	e: 62	(°F), Condi	itioning Time:	1/60 (Hrs.)
Test Descri	-		-		a fully loaded

est Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Sea la.	Rds.	Алипо	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	Stoppæe	Breakege Class	Attrib.	EPR
)1	05) -	ĺ			None	FFD	2	(b)(c			T	; !
02	05]				None		None					_i
				-Er	d of Test-							11	
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	İ		1		1		Ì	ŀ					
			Î		!								
	Ì	į			i 								
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									, i				

:MARKS: (a) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

A12

(b) Failure-to-feed (bolt override). Pushing on ammunition in magazine cleared stoppage and feeding restored on second attempt.

(c) Bolt difficult to operate.

Confidential - Subject to Protective Order Williams v. Remington

MA2867

01-32F Mud Test #1

-MOD TEST NUMBER 2-(Paragraph 4.5.5.2.2 of TOP 3-2-045)

6793-02 HPWLI Job Number 18 October 1995 Date

Gun:_ Remington New 6212827 (Make) (Caliber) (Condition) (Serial Number) Ammunition: Remington 125.0 gr. SP B15KC3225 (Make) Type (Lot Number) 4-1/60 (Hrs.) 69 (°F), Conditioning Time: Conditioning Temperature:

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Place conditioned gun and unprotected ammunition in 70°±5°F environment for four hours. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Sequ	ence					Cyclic R.		1	alfuncti	ona	3.Re	1 Re	20	ъ.	
No.	Rds.	Апто	Mag.	Velocit	y(fps)	(Spm)	Yaw	Type	Rd. No.(s)	Cause	copp	3reakage	Class	Attrib	EPR
01	05]				None	FJ	5	(a)(c)	Y	N		т	
02	05						None	FFD	8	(d)	Y	N		T	
		,	[FFR	8	(e)	Y	N		T	
						End of Test	1	Ī							
)										
					·										
														Γ	
											Γ				
												Γ			T
														T	T
MAI	(b)	Gun cor closed. Failure			loaded	and locked	chamber :	and safe	ety on an	d muzz	e	ta	ipe o	đ	

(d) Failure-to-feed (bolt override). Ammunition in magazine depressed and feeding restored on second attempt. 01-32G Mud Test #2

A13

(e) Failure-to-fire. Jammed firing pin freed by manipulation.

(c) Bolt difficult to operate.

Confidential - Subject

to Protective Order Williams v. Remington

-STATIC DUST TEST-{Paragraph 4.5.5.2 of TOP 3-2-045}

6793-02 HPWLI Job Number 19 October 1995

Date

	and the second second second					
Gun:	Remington	700	.30	-06 , New	, 6212	827
	(Make)	(Model) (Cali	ber) (Condition)	(Serial	Number)
Ammuni	tion: Reming	ton	125.0_gr.,	SPB15KC3225		
	(Ma)	ce)	(Type)	(Lot Number)		
Condit	ioning Temper	ature: 6	il (°F),	Conditioning Time:	2/60	(Hrs.)

Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence.

Seq No.	Rds.	Ammo	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	toppage	Class	terib.	EPR
. 01	05	İ				None		None					
02	05	1				None	FFR	7	(b)	Y	1	T	
	1	ì		-En	d of Test-				i !				
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REMARKS:

- Gun conditioned with loaded and locked chamber and safety on and muzzle taped (a) closed.
- Sear Safety Cam jammed in down position, preventing cocking of firing pin. (P)

A14	01-32D Static Dusc
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Confidential - Subject	لجح والمتحصيد عاء دست الأعيدو الاستا
Williams v. D. Order	
v. Hemington	Dagcana

MA2869

A14

				(2		TRUD DIMANYO 1 4.5.5.1 of			HPWLI	October	<u> </u>	99	5			
	Gur	ı: Remi	ington ke)	·	(Model)	.30-0	<u>, (t</u>	New Conditi		Date 212827 rial Nu						
Sequ	Cor	ditioni	ng Temp	erature Clean and clo	e 66 and lubrosed charaction	(Type) ('P'), (ricate gun. umber to blow ing chamber chamber, rel	(Lot Condition Expose fu ing sand fire one .oad, rec	illy loa for one sequence condition	e: 2/60 ided gun, minute. ce. Remo	with 1 From wove gun re a s	iti fi ec	dec nir con	i n i			
ia.	Rds.	Armino	Mag.	Velocit	y(fps)	(Spm)	Yaw None	Type	Rd. No.(s)	Cause	Stoppe	Break	C1888	Attrib.	EPR	
01	05	<u> </u>		 		: 	None		None			-			ļ	i
02	05	<u> </u> 				End of Test-	<u> </u>	1	Hone			1				ļ 1
	!	<u> </u>				End of lest	!			<u> </u>		-				
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: MAI	us:		un cond	litioned	with 1	oaded and lo	ocked cha	mber an	d safety	on and	d m	uz	zle		трес	1
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						A15				01-32	E	Dy	nam	10	Dus	<u>.t.</u>
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H.P. White Laboratory Inc.

-HIGH TEMPERATURE TEST-(Paragraph 4.5.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 6 October 1995

									Date						
	Gur	ı; Re	mington	, 700)	, .30-0									
		(M)	ake)		(Model)	.30-0 (Calib	er) (Conditi	ion) (Se	rial Nu	mbe	r)			
	Amn	munitio	n: Remi	ngton		125.0 gr., (Type)	SP B15	5KC3225							
	,		1)	(ake)		(Type)	(Lo	t Numbe	er)						
	Cor	dition.	ing Temp	erature	:+10	60 (°F),	Condition	ning Tin	ie: 6	(Hrs	.)			
	Tes	st Desc	ription:	: Clean	and lub	oricate gum.	Condit:	ion loa	ded cum a	and rec	nir	eđ			
				additi	onal c	artridges i	n loade	d belt	s or ma	gazines	- 3 (i£			
						for specif: ng tests fr									
						th specified			J						
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g	Rds.	Апто	Mag.	Velocit	v/fna)	Cyclic R. (Spm)	Yaw		Malfuncti Rd.	ons	D名	8 8	ctrib.	Q	
		Amino	l'iag.	761061	-y(Lps/	(Span)	104	11156	No.(a)	Cause	Stop	Cla	AEEr	EDB	
į.	05						None		None				i i		
2	05	İ		,			None		None			1	İ	İ	
					-Er	d of Test-				1			-	İ	
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!		<u> </u>	!	<u> </u>	<u> </u>	<u> </u>	1 .	<u> </u>	<u> </u>	1	Ш			_	
AF	K5: (a) Gun	condit	ioned w	ith loa	ded and lock	ked chamb	er and	safety o	n.					
			•												
						•			-						
						*16			01	-32A <u>Hi</u>	gh,	Tem	era	<u>t1</u>	
						A16									

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					6793-02
	٠	37- 3-2-045)	HPWLI Job Number 9 October 1995		
					Date
Gun:_	Remington	700	.30-06	, New	6212870
. —	(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)

(Type)

125.0 gr., SP , B15KC3225

(Lot Number)

Ammunition: Remington

(Make)

Test Description: Clean and lubricate gum. Condition loaded gum and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature. Remove gun and sufficient ammunition to fire one firing sequence and immediately fire that sequence in ambient environment (+70°±5°F) at specified rate of fire. Return gun to conditioning chamber for two hours and fire second sequence. Repeat two hour conditioning and firing sequence until specified firings are completed.

:	Seq o.	Rds.	АпшпО	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	Stoppæe	Breakee	Class	Attrib.	EPR
_	01	05					None		None						
	02	04]			None	FFR	б	(P)	Y	И		G	
								FFR	7	(c)	Y	N		G	
_					j i -	End of Test									
															
_															
;															

(a) Gun conditioned with loaded and locked chamber and safety on. TMARKS:

(b) Failure-To-Fire. Jammed (Frozen) firing pin freed and fired on second attempt.

(Q) Failure-To-Fire. Jammed (Frozen) firing pin freed but primer which had been lightly struck on first attempt would not fire dispite multiple, additional attempts.

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01-32B Low Temperature

A-17

-WATER SPRAY TEST-(Paragraph 4.5.4 of TOP 3-2-045) 6793-02

HPWLI Job Number 10 October 1995 Date

				<u>, , , , , , , , , , , , , , , , , , , </u>
Gun: Remingto	n , 700	.30-06	New	6212870
(Make)	(Mode.	l) (Caliber) (Condition	(Serial Number)
Ammunition: Remi	ngton ,	125.0 gr., SP	, B15KC3225	
	(Make)	(Type)	(Lot Number)	
Conditioning Tem	perature:	70 (°F), Co	nditioning Time:	NA (Hrs.)
	of 0.4 in	ch per minute with following entation , Wi ch , Wi ch , Op se , Re se	and conduct f. schedule: th loaded magazinamber - 5 minute th loaded magazinamber - 5 minute en and drain ch quence.	e, loaded and closed

Sequ No.	Rds.	Anmo	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Rd. Rd. No.(s)	Cause	Stoppæe	Breakae	B13	Attrib.	EPR
1H	05					None		None						
?H	05					None		None						
30	05					None		None						
4U	05	,				None		None						
'D	05					None		None						
6D	05					None		None						
				-	End of Test-									

REMARKS:

A18

01-32C Water Spray

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-MUD TEST NUMBER 1-(Paragraph 4.5.6.2.1 of TOP 3-2-045) 6793-02

HPWLI Job Number 17 October 1995

Dare

		·	,30-06	, New	, 6212870
(Make		(Model)	(Caliber)	(Condition).	(Serial Number)
mmunition:	Remington	, 125.0	gr., SP	B15KC3225	
	(Make)		(Type)	(Lot Number)	
Conditioning	Temperatur	e: 60	· (°F), Cond	itioning Time:	L/60 (Hrs.)

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Seq	Rds Ammo Mag Velocity(fps) (Spm) Yaw Type Rd							ons	386	8	<u> </u>	٥	Ì	
ło.	Kqa∙	Атто	Mag.	Velocity(fps)	(Spm)	Yaw	Type	Rd. No.(s)	ons Cause	Scop	Break	C1 a	Attr	EPR
1	05	ĺ				None		None				- Constant		and kan
2	05				[None		None						
		1		-	End of Test-									
										Γ				
		!			į						П			
		<u> </u>												Ť
							T			T				Ī
					i I					T	T		 	
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										T	T			
										T	T		T	T
		<u></u>			1					1	\dagger		1	\dagger
emai	uks:	clo	condi	tioned with loa	aded and lock	ed cham	ber and	safety o	n and i	nu 2	ZZJ	i e 1	capo	<u> </u>

A19

01-32F Mud Test #1

Confidential - Subject to Protective Order Williams v. Remington

-MUD TEST NUMBER 2-

6793-02

				(Pa	ragraph	4.5.6.2.2	of TOP 3-	2-045)		ctober	19	95		
										Date				
	Sw				700	,,	<u>6</u> ,	New		212870	_			
	•	(M	ake)		(Model)	(Calibe	er) (Conarti	.on) (Sei	rial Nu	mb	er)		
	· Am	munitio	n: Remi	ington		125.0 gr. SI	P B1	5KC322.	5					adadis hamadashandi 1977
			4)	fake)		(Type)	(Lo	t Numbe	r)					
	Cor	ndition	ing Temp	erature	:	69 (°F), (Condition	ning Tim	e:4-1	/60(Hr	a.)		
	Te:	st Desc	ription:	gun wi second Remove ammuni unprot	th load full from tion will ected ane sequent	ricate gun. ied and clos load of unpromud and cle th bare hand memunition in ence. Without nd sequence.	ed chamb rotected an the ds only. 170°±5°F out furth	er and ammunit closed Place environ	immerse ion for gun and conditionment for	in mud 60 sec unprot med gu four h	w: ond ect n :	ith is. ted and rs.		•
		<u> </u>		1		d14 - P	<u></u>				a	D)	Τ.	1
seq To.	uence Rds.	Ammo	Mag.	Veloci	y(fps)	Cyclic R. (Spm)	Yaw	Туре	<u>Malfuncti</u> ! Rd.	ons Cause	PAE	ka a	terib.	EPR
	!			}		-			No.(s)	Cause	top	Cl	Ate	回
01	05						None	FFD	3	b)(c)	-	orizinalmuta	Т	
)2	05						None		None					
					-	End of Test-								
	!												T	$\overline{\Box}$
	<u>:</u> 	' -					i	'	1			+	+	$\dagger \dagger$
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					<u></u>									
EMA.	rks :		un condi losed.	itioned	with lo	aded and lo	cked char	ber an	d safety	on and	mu	zzl	e ta	ped
		(b) F	allure-				Ammunitio	on in m	agazine d	epresse	ed.	and	fee	ding
			estored olt dif			-								
					-	A20				01-3	2G	Muc	l Te	9t #:
										:				
										•				

01)2

Confidential - Subject to Protective Order Williams v. Remington

6793-02 HPWLI Job Number 19 October 1995 -STATIC DUST TEST-(Paragraph 4.5.5.2 of TOP 3-2-045) Date

Ammunition: Remington 125.0 gr., SP B15KC3225 (Make) (Type) (Lot Number) Conditioning Temperature: 62 (°F), Conditioning Time: 2/60 (Hrs.) Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence. Cyclic R. (Spm) Yaw Type Rd. Cause 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Gun	1: Re:	mington	, 700)	.30-	-06	New		212870				
Conditioning Temperature: 62 (°F), Conditioning Time: 2/60 (Hrs.) Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence. Conditioning Time: 2/60 (Hrs.) Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence. Conditioning Time: 2/60 (Hrs.) Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber and fire one sequence. Remove gun from chamber and fire one sequence. Conditioning Time: 2/60 (Hrs.) Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber and for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Conditioning Time: 2/60 (Hrs.) Clean and closed chamber and for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Conditioning Time: 2/60 (Hrs.) Clean and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence.		(Ma	ıke)	(Modeli	(Calibe	er)	(Conditi	on) (Ser	cial Nu	cím	er)		
Conditioning Temperature: 62 (°F), Conditioning Time: 2/60 (Hrs.) Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence. Conditioning Time: 2/60 (Hrs.) Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence. Conditioning Time: 2/60 (Hrs.) Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber and fire one sequence. Remove gun from chamber and fire one sequence. Conditioning Time: 2/60 (Hrs.) Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber and for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Conditioning Time: 2/60 (Hrs.) Clean and closed chamber and for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Conditioning Time: 2/60 (Hrs.) Clean and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence. Repeat conditioning with gun upside-down and fire one sequence.	Amur	mnition	Remi	ngton		125.0 gr., S	P'	B15KC322	5	· · · · · · · · · · · · · · · · · · ·				
Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence. Compared to the content of the co			(M	lake)		(Type)	(1.	or Numbe	r)					
and closed chamber to blowing sand for one minute. Remove gun from chamber and fire one sequence. Repeat conditioning with gun upside-down and firing sequence. Cyclic R.	Con	ditioni	ng Temp	erature:	62	(°Ē), (Conditio	ning Tim	e: 2/6	0 (Hr	g.)		
None None	Tes	st Descr	ription:	and clo	osed cha hamber	umber to blow and fire one	ving san sequen	d for on ce. Rep	e minute.	Remov	re i	gun	L	
05 None	ica_					Cyclic R.		1	dalfuncti	ons	Be	98 c		T
None FFD 8 (b) Y N T -End of Test-	ds.	Апило	Mag.	Velocit	y(fpa)	(mgZ)	Yaw	Type	1	Cause	toppa	reaks	ttrib	EPR
End of Test-	05				ļ		None		None					
	05	<u> </u>]		1	; ;	None	FFD	8	(P)	Y	N	Т	
]		-	End of Test-	}							
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: (a) Gun conditioned with loaded and locked chamber and safety on and muzzle taped			<u> </u>			1			<u> </u>			Ц	丄	

REMARKS

No.

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02

(b) Failure-to-feed (bolt override). Ammunition in magazine depressed and released, and, after two attempts, feeding was restored.

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MA2876

01-32D Static Dust

A21

-DYNAMIC DUST TEST-(Paragraph 4.5.5.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 2<u>0 October</u> 1995

										Sate			-	
	Gur	ı: Rem	ington		700	.30-06	5 ,	New	, . (5212870				
						.30-06 (Calibé				rial Nu	mbe	<u>r)</u>		
	Amp	munition	: Remi	ngton	,12	5.0 gr., SP (Type)	B1:	5KC3225		·				
			4)	(ake		(Type)	(Lo	t Numbe	er)					
						(°F), (
	162	or peace	. 15. 1011	and cl	osed chandition ioning	amber to blow ing chamber chamber, rel	ing sand fire one	for one	e minute. uce. Rem	From w	ith:	in om		
ecn	lence Rds.	Ammo	Mag.	Veloci	y(fps)	Cyclic R. (Spm)	Yaw	Туре	1	Cause	ppage	9 8 6	rib.	EPR
	05				pi madaman,		None		No.(s)		0 1	CI	11	l I
	05	<u> </u>]	<u> </u>			None		None		-	-		<u> </u> -
		ì		1	<u> </u>	End of Test-		1	<u> </u>			+	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>	!	<u> </u>	I TEBE		1	 		+	\vdash	-	<u> </u>
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1AJ	RKS: (condit	ioned w	ith loa	ded and lock	ed chamb	er and	safety or	n and m	uzzi	ie t	ape	d
			v											
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APPENDIX B

-MODIFIED MODEL 700 RIFLES -

Serial	Number	6209827	Pages	B2 - B8
Serial	Number	6212503	Pages	B9 - B15
Serial	Number	6212692	Pages	B16 - B22
Serial	Number	6212893	Pages	B23'- B29
Carial	Number	6213209	Paned	R30 - R36

B-1

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6793-02

-HIGH TEMPERATURE TEST-(Paragraph 4.5.1 of TOP 3-2-045) HPWLI Job Number 6 October 1995

				Date
Gun: Remington	_, 700x	.30~06	, New (a)(c)	,_6209827
(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
Ammunition: Remin	gton , 12	5.0 gr., SP	, B15KC225	-
(Ma	ke)	(Type)	(Lot Number)	
Conditioning Tempe	rature: +160	(°F), Cond	itioning Time:	6 (Hrs.)
	additional cart	ridges in l r specified tests from	oaded belts or time at specif: within conditio	gun and required magazines (if ied temperature. ning chamber in
	•			

-	Sequ	Rds.	Апто	Mag.	Velocity(fp	Cyclic R. (Spm)	Yaw	Туре	Malfuncti Rd. No.(s)	Cause	Stoppæe	Breakage	СІввя	Attrib.	EPR
•	01	05					None	FJ	3 & 4	(d)(e)				G	
!								FJ	5	(d)(e)	Y	N		G	
	02	05					None	FJ	6	(d)(e)	Y	И		G	
;						-End of Test-									
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i								-			_	_			
										}					

EMARKS:

- Fitted with Modified Fire Control Group. (a)
- (b) Gun conditioned with loaded and locked chamber and safety on.
- (c) Fitted with blued steel trigger and safety.
- (d) Brass shavings jammed ejector rearward.
- (e) Disassembled and cleaned.

B2

01-32A High Temperature

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6793-02 HPWLI Job Number -LOW TEMPERATURE TEST-(Paragraph 4.5.2 of TOP 3-2-045) 9 October 1995 Date 6209827 700x .30-06 New(a)(c)Remington Gun: (Condition) (Serial Number) -125.0 gr., SP B15KC3225 Ammunition: Remington (Type) (Lot Number) (Make) (°F), Conditioning Time: Conditioning Temperature: Test Description: Clean and lubricate gun. Condition loaded gun and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature. Remove gun and sufficient ammunition to fire one firing sequence and immediately fire that sequence in ambient environment (+70°±5°F) at specified rate of fire. Return gun to conditioning chamber for two hours and fire second sequence. Repeat two hour conditioning and firing sequence until specified firings are completed. 9 9

Seq	ience				Cyclic R.		 	<u>Malfunctio</u>	ns	No.	8	20	اما	1
lo.	Rds.	Ammo	Mag.	Velocity(fps)	(Spm)	Yaw	Type	Rd. No.(s)	Cause	Stopp	Break	Class	Attrib.	EPR
71	05					None		None						
02	01					None	FFR	6,7,8&10	(a)	Y	И		G	
	!		1	-В	nd of Test-									
											П			
·										Γ				
										Γ				
										T				
										T				
		1	1	1	1			1	,	┸_	1	1		-

PEMARKS:

- (a) Fitted with Modified Fire Control Group.
- (b) Gun conditioned with loaded and locked chamber and safety on.
- (c) Fitted with blued steel trigger and safety.
- (d) Failure-To-Fire. Jammed (Frozen) firing pin freed but primer which had been lightly struck on first attempt would not fire dispite multiple, additional

lightly struck on first attempt would not fire dispite multiple, additional attempts.

B3 01-32B Low Temperature

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-WATER SPRAY TEST-(Paragraph 4.5.4 of TOP 3-2-045)

6793-02 HPWLI Job Number 11 October 1995

										Date				•	
	Gui	n: Re	mington	, 700	X	.30-06 (Calibe		New (a)	(ъ) ;	620982	27			****	
		(Ma	ike)	(M	(lodel	Calib	er)	(Condit	ion) (Se	rial No	cím	er)			
		munition	. Remin	gton	12	5.0 gr., SP (Type)	В15	5KC3225				a dada terser we ha	*****		
			4)	lake)		(Type)	(L	ot Numb	er)						
	Cor	nditioni	ing Temp	erature:_	71	(약),	Conditio	ning Ti	me: N	Α . (Hr:	s.)			
	Te:	st Descr	<u>Hc</u>	of 0.4 accordance or izontal	inch nce wit Orient	, , , , , , , , , , , , , , , , , , ,	and of schedulith load thamber open and equence equence equence equence equence equence executives.	conduct le: ded maga: - 5 min drain drain crizont:	firing azine, enutes.	sequence apty and ded and fir re and f	e cir:	in pen sed one ing			
Section	ience]			1	Cyclic R.	1	1	Malfunct	ione	98	9	T:	1	
	Rds.	Ammo	Mag.	Velocity 	,	•	Yaw	Type		Cause	Stoppe	Break	Attrib	R 4 E	i
 1н	05	1]		:		None		None						
2H	05				į		None		None						_
3U	05				i		None		None			T		i	
4U	05				;		None		None			1		1	
50	05						None		None		П				
6D	05						None		None						
		1			-	End of Test								T	

(a) Fitted with Modified Fire Control Group. PEMARKS:

No.

1H 2H 3U

4U 5D 6D

(b) Fitted with blued steel trigger and safety.

B4

01-32C Water Spray

Confidential - Subject to Protective Order Williams v. Remington

-MUD TEST NUMBER 1-(Paragraph 4.5.6.2.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 16 October 1995 Date

Gun: Reming	ton ,	700 X	, .30-06	, New(a)(c)	62098	27
(Mak	e)	(Model)	(Caliber)	(Condition)	(Serial	Number)
Ammunition:	Remington	, 125	.0 gr., SP	B15KC3225		
•	(Make)		(Type)	(Lot Number)	•	
Conditioning	r Temperatur	e: 62	(°F), Cond	itioning Time:	1/60	(Hrs.)

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Section.	lence Rds.	Апило	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Malfunction Rd.	Cause	Stoppæe	Breskæe Class	Attrib.	EPR
01	05				, , , , , , , , , , , , , , , , , , ,		None		None	İ			l l	
02	05	!					None		None				T	
-		<u> </u>			-)	ind of Test-								
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(a) (b) MARKS:

Fitted with Modified Fire Control Group.
Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

(c) Fitted with blued steel trigger and safety.

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01-32F Mud Test #1

Confidential - Subject to Protective Order Williams v. Remington

-MUD TEST NUMBER 2-(Paragraph 4.5.6.2.2 of TOP 3-2-045) 6793-02 HPWLI Job Number 17 October 1995

700 X .30-06 Remington New(a)(c) 6209827 Gun: (Make) (Model) (Caliber) (Condition) (Serial Number) Ammunition: Remington 125.0-gr. SP -B15KC3225 (Lot Number) (Make) (Type) _(°F), Conditioning Time: 4-1/60 Conditioning Temperature:

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Place conditioned gun and unprotected ammunition in 70°±5°F environment for four hours. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Seq	uence				Cyclic R.	}		4alfuncti	ons	ge	8e	150		
10.	Rds.	Ammo	Mag.	Velocity(fps)	(Spm)	Yaw	Type	Rd. No.(s)	Cause	Stoppa	reakage	Слав	Attrib.	EPR
01	0.5					None	FFD	3	(d)(e				T	
02	05					None		None			П			
				-	End of Test	-								Γ
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•										Γ				T
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	<u> </u>									T				T

MARKS: (a) Fitted with Modified Fire Control Group.

(b) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

В6

(c) Fitted with blued steel trigger and safety.
 (d) Failure-to-feed (bolt override). Rounds in magazine depressed, clearing stoppage and restoring feed on second attempt.

(e) Bolt difficult to operate.

01-32G Mud Test #2

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-STATIC DUST TEST-(Paragraph 4.5.5.2 of TOP 3-2-045)

6793-02 HPWLI Job Number 18 October 1995

Date

	Gur	. Rei	mington	700	χ	, 30- (Calibe	06	·New(a	ı)(c)	620982	.7		_		
										rial Nu	dm	er)		
	Ama	unition	:_Remi	ngton		125.0 gr., S	P	5KC3225				_	at a material at a Viga	tumotomore	earlann.
			(P	axe)		(Type)	(PC	с иштое	Σ)						
	Cor	ditioni	.ng Temp	erature	: 62	(°F), (Condition	ning Tim	e: 2/6	(0(Hr	s . :)		
	Tes	t Descr	iption:	and cl	osed ch hamber	ricate gun. amber to blow and fire one own and firin	ving sand sequence	l for on e. Rep	e minute.	Remov	re (дш	n		
Sequ No.	Rds.	Ammo	Mag.	Velocit	cy(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Causa	coppage	reakage	Class	Actrib.	EPR
01	05						None		None	(d)				Sapanos	İ
02	05						None	FFR	6	(d)(e)	Y	N		T	
					-Er	d of Test-									
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REMAI		(b) Gu cl (c) Fi (d) Bo	n condi osed. tted wi lt diff:	tioned the blue icult to	with lo d steel o opera	re Control G aded and loc trigger and te. d firing pin	ked cham				mu	<u></u> z z	le	tar	oed

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01-32D Static Dust

Confidential - Subject to Protective Order Williams v. Remington

-DY	namic	מטם'	r test	'-
(Paragraph	4.5.5	.1 0	f TOP	3-2-045)

6793-02 HPWLI Job Number 20 October 1995

		GIII.		ke)		(Model)	, .30-0 (Calibe	er)	(Conditi	on) (Se	62098		r)		
		3 mm	mition	. Remi	ngton	125	5.0 gr., SP	. В	15KC3225	·					
			· · · · · · · · · · · · · · · · · · ·	(1)	(ake)	/	(Type)		ot Numbe	r)					
		Con	ditioni	ng Temp	erature	: 64	(°F), (Conditio	ning Tir	e: 2/60	-	(Hrs	.)		
		Tan	r Means	dotdon.	· Cl ===	n m of 1 115n	ricate gun.	Evnosa i	En 1 1 1 1 0	adad care		•			
		ıça	c Desca	-p	and cl	osed cha	umber to blow	ing sand	i for one	minute.	Prom	with	in		
							ing chamb <mark>er</mark> chamber, rel								
					sequen	_	,	- ,							
									- [- y ₁₀ - y ₁₀	् ।	1 6		Т
	Seq No.	uence Rds.	Ammo	Mag.	Veloci	ty(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti , Rd.	Caus	- B8G	8 8	4.	,
i										No.(s)	Caus	top	Cla	terib	000
	01	05						None		None				Para Maria	T
	2	05						None		None		\top	1	1	†
						-F	nd of Test-					1-1	-	T	1
						1								\dagger	İ
		.			İ			}				$\dagger \dagger$	\top	\top	Ì
				<u></u>]						.		1	†
	- 100				İ .			-				\Box	\dagger		1
						<u> </u>		<u> </u>				$\forall \exists$	+	-	+
				<u>[</u> ,	 			 			 	$\dashv \dashv$	+	+	+
					1			 	_		 	+	+	+	+
		<u> </u>			 		}			<u> </u>	-	\dashv	+	+	+
		<u> </u>				-	1	-			-	\dashv	+	+-	-
					<u> </u>	1		Comment		<u></u>			1		_
	PRMA	RKS :	(b) Go	n cond:	with Mod Itioned	lified F with lo	ire Control aded and loc	Group. cked cha	mber and	i safety	on and	i nu:	zz1e	e ta	pe
				losed. Itted w	ith blue	ed steel	trigger and	i safety							

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-HIGH TEMPERATURE TEST-(Paragraph 4.5.1 of TOP 3-2-045) 6793-02 HPWLI Job Number 5 October 1995 Date

Gun: Remington 700X .30-06 , New (a) ,6212503

(Make) (Model) (Caliber) (Condition) (Serial Number)

Ammunition: Remington 125.0 gr., SP B15KC3225

(Make) (Type) (Lot Number)

Conditioning Temperature: +160 (°F), Conditioning Time: 6 (Hrs.)

Test Description: Clean and lubricate gun. Condition loaded gun and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature. Conduct firing tests from within conditioning chamber in accordance with specified firing cycle.

Secn	Rds.	Ammo	Mag.	Velocit	y(fpa)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	Stoppæe	Class	Attrib.	EPR
01	05						None		None					
02	05						None		None					
					-	End of Test-								
													T	
										<u> </u>		1		
								<u> </u>						\prod
			 	<u>'</u>		<u> </u>							T	П
			<u> </u>									\top	\top	
-													\top	
	<u>!</u>	<u>'</u>	<u></u>		<u> </u>			 					+	
					 -								+	

: MARKS: (a) Fitted with Modified Fire Control Group.

(b) Gun conditioned with loaded and locked chamber and safety on.

в9

01-32A High Temperature

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-LOW TEMPERATURE TEST-(Paragraph 4.5.2 of TOP 3-2-045)

6793	-02	
HPWLI 9 Oct		Number

									Date—					
Gı	ın:	Remingto	n 70	00X	,30-06	N.	ew (a)) • ,	621250	3				
	()	Make;	()	Model)	(Calibe	r) ((Conditi		rial Nu		er)		
Ar	www.itio	on:—Remir	eton		125.0 gr.,	SPB1	5KC322	5	100 d of 2 and 3 and 3		•			_
•			lake)		(Type)	(Lot	Numbe	r)						
C.	nditio	ning Temp	ersture.	-50	(°F), c	'ondition	ina Mila	10.	; ,	127 xx	a 1	١.		
		rand temb			· -/, c		-mg rin	15+	<u> </u>	n.	3.,	,		
Te	est Des	ription:			ricate gun.									
		•			artridges in for specifi									
	,		Remove	gun a	nd sufficie	nt ammun	ition	to fire	one f	ir	ing	3		
					immediately +70° <u>+</u> 5°P) at									
					ng chamber fo	_					-			
			-		our conditi	_	nd fir	ring seq	uence.	un	t‡.	1.		
			specifi	eu me	ings are com	braced.								
		···			0-11-2		T			e e	انه			_
ience 	Ammo	Mag.	Velocit	y(fps)	Cyclic R. (Spm)	Yaw	Туре	Malfuncti . Rd.	.ons .Cause	abdc.	ak æ	Class	rerib.	000
					•		1	No. (s)	Cause	CO	3re	C1.	\r.	Ē
05	i					None		None	Control de la co			-	ar to the	
	<u> </u>	<u>'</u>	-k	econdi	ioned for 2	hours-	 	<u> </u>	 	-				_
. 05	<u> </u>	<u> </u>	<u> </u>		· · = · · · · · · · · · · · · · · · · ·	None	 	None	 	╁	\vdash			 -
,	<u> </u>		<u> </u>				ļ			_				L
			1	-:	End of Test-									
	j	İ	<u> </u>						,	1				Ī
	j	İ							 	-				Ļ
														t

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-WATER SPRAY TEST-(Paragraph 4.5.4 of TOP 3-2-045) 6793-02

HPWLI Job Number 12 October 1995

Date

Gun: Remingt	on , 700X	. 30-06	New (a)	6212503
(Make)		.) (Caliber)		(Serial Number)
Ammunition: Rem	ington	125.0 gr., SP	B15KC3225	
	(Make)		(Lot Number)	•
Conditioning Ter	mperature:	70 (°F), Cond	ditioning Time:	NA (Hrs.)
	of 0.4 inc	th per minute a with following so entation , with cham , with cham , oper sequence , Reperture , Reper	and conduct first chedule: a loaded magazine, a loaded magazine, aber - 5 minutes. a and drain chamb dence. eat horizontal expense.	loaded and closed
·	Muzzle-Down Or	Test <u>ientation</u> , Repe Test	eat entire Horizo	ontal Orientation

Sea	ence	1	1	j	Cyclic R.			Malfuncti	ons	86	8	6	j
10.	Rds.	Ammo	Mag.	Velocity(fps):	(mgS)	Yaw	Туре	Rd. No.(s)	Cause	Scopp	Clas	Actrib	EPR
1H	05	j	į		İ	None		None					- I
2H	05					None		None					T
3U	05					None		None			T	1	Ť
4U	05					None		None			+	Ť	Ť
5D	05					None		None			T	\top	T
6D	04					None	FFR	28	(ъ)	Y	N	A	
			 	-1	End of Test-					\sqcap	\top	\top	T

REMARKS: (a) Fitted with Modified Fire Control Group.
(b) Primer struck three times without firing.

B11

01-32C Water Spray

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-MUD TEST NUMBER 1- (Paragraph 4.5.6.2:1 of TOP 3-2-045)

6793-02

HPWLI Job Number 16 October 1995

Jate

un: Remington	, 70	XOX	, .30-06	, New(a)	_, 6212503
(Make)	4)	(odel)	(Caliber)	(Condition)	(Serial Number)
Ammunition:R	emington	1.25.0)_gr.,_SP	B15KC3225	
	(Make)			·(Lot Number)	
Conditioning Te	mperature:		(°F), Condi	tioning Time:	1/60 (Hrs.
Test Descripti	on: Clean a	nd lubrica	ite qun. Tar	e the muzzle o	a fully loade
				hamber and imme	•

gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 50 seconds.

Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Sequ 'o.	Rds.	Ammo	Mag.	Velocity	y(fps)	Cyclic R. (Spm)	Yaw	Type	Malfunction Rd. No.(s)	Cause	Stoppæe	Breakge	СГавв	Attrib.	EPR
71	05						None		None	(c)	N	N		T	
02	05				į		None		None	(a)	N	N		Т	
					-En	d of Test-									
					i										
		!		Î	j		,								
										}					
;															
	Ì														

: MARKS: (a) Fitted with Modified Fire Control Group.
(b) Gun conditioned with loaded and locked chamber and safety on and muzzle taped

closèd. (c) Blown primer - one case.

(d) Bolt difficult to operate.

B12

01-32F Mud Test #1

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-MUD TEST NUMBER 2-(Paragraph 4.5.6.2.2 of TOP 3-2-045)

6793-02 HPWLI Job Number 17 October 1995

Date

Sun:_	Remington ,	700X	.30-06	, New(a)	6212503
	(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
Ammun	ition: Remington	112	5.0_grSP	B15KC3225	
	(Make)		(Type)	(Lot Number)	•
Condi	cioning Temperatu	re: 68	(°F), Cond	itioning Time:	4-1/60 (Hrs.)

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Place conditioned gun and unprotected ammunition in 70°±5°F environment for four hours. Fire one sequence. Without further mud exposure, reload gun and fire second sequence..

Segr	lence				Cyclic R.			Malfunctio	ons	age	8 8 G	م	
o. 	Rds.	Ammo	Mag.	Velocity(fps)	(Spm)	Yaw	Type	Rd. No.(s)	Cause	COPP	Sreakage Class	Attrib	EPR
01	05					None		None					
02	05					None		None		П			T
			Ì	-	End of Test-]					\top		Ť
		İ	<u> </u>	į		!					\top		Ī
			ĺ	1.						П			Ī
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		j								П			Ť
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												1	1
										П		T	Ť
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B13

Gun conditioned with loaded and locked chamber and safety on and muzzle taped

closed.

Confidential - Subject
to Protective Order
Williams v. Remington
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MA2890

01-32G Mud Test #2

-STATIC DUST TEST-(Paragraph 4.5.5.2 of TOP 3-2-045)

6793-02 HPWLI Job Number 18 October 1995

Date

	Gur	1:Re	mington	700	οx	. 30-	06	New(a) ,	62125	03				
			r)ce}		(Model)	(Calib	•	(Conditi		rial N	ımio	er	7	•	
	Amn	minition	Remi	ngton		125.0 gr., S	P	B15KC3225	5						
			4)	iake)		(Type)	(Lot Numbe	r)						
	Con	ditioni	ing Temp	erature	:61	(05)	Conditi	oning Tim	e: 2/	60	(Hr	5)		
	Tes	st Desci	ciption:	and cl	osed cha hamber	ricate gun. amber to bloo and fire one wn and firir	seque	nd for on nce. Rep	e minute	Remo	ve ·	gu	п		
Segr Io .	Rds.	Ammo	Mag.	Velocit	cy(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	toppage	reakage	Class	cerib.	EPR
01	05						None	FFR	1	(c)(d)	Y	N		T	İ
02	05						None		None	(g)					i
į					-E1	nd of Test-									
															!
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												T		<u> </u>	Ť
REMAR	(b) Gun clo c) Fai		ioned w -fire.	ith loa Jammed	e Control G ded and lock firing pin e.	ced cha		-		nuz	zl	e t	:ap	e d

No.

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B14

Williams v. Remington

MA2891

01-32D Static Dust

-DYNAMIC DUST TEST-

6793-02 HPWLI Job Number

			•	(P	aragrap	h 4.5,5.1 of	TOP 3-2	-045)		Ctober Cate	_	95			
	Gur	n: Rem	ington		700X.	.30-00 (Calibe	6	New (a	<u> </u>	6212503					
										rial Nu	cim	er)			
	Amr	munition	Remi	ngton	12	(Type)	Bls	KC3225						an halo d'in h a south d	
			1)	fake)		(Type)	(La	t Numbe	er)						
	Cor	nditioni	ing Temp	erature	:62	(°₽), (Condition	ning Tin	ne: 2/60	(Hr	3.)			
	Te	st Desci	ription	and cl	osed cha ndition ioning	ricate gun. umber to blow ing chamber chamber, rel	ing sand fire one	for one	minute. Ice. Rem	From w	it!	nin rom			
500	mence_		1	1		Cyclic R.			Malfuncti		9	00	Τ.	1	;
Mo.	Rds.	Ammo	Mag.	Veloci	ty(fps) }	(Spm)	Yaw	Туре		Cause	toppa	oreaka Class	terib	EPR	
01	05						None		None	İ					, !
2	05						None		None						į
					-	End of Test-									
						 								1	
				}						į					: !
	1														!
	j	<u> </u>	<u> </u>					ļ							<u> </u>
								İ							
														T	İ
7 EMP	irks:		itted win condi	ith Modi	lfied Fi	re Control (Group, ked cham	ber and	safety (on and	nuz	zle	tar	oed	
						B15				01-32	E Į)yna	amic	Dus	<u>r</u>

Confidential - Subject to Protective Order Williams v. Remington

-HIGH TEMPERATURE TEST-(Paragraph 4.5.1 of TOP 3-2-045) 6793-02 HPWLI Job Number 5 October 1995 Date

Gun:	Remington ,	700x	, .30-06	, New(a)	, 6212692				
	(Make)	(Model)	(Caliber)	(Condition)	(Serial	Number)			
Ammunit	ion: Remingtor	makanan 1930 makanan 1930 makan 1930 makan 1930 makan 1930 makan 1930 makan 1930 makan 1930 makan 1930 makan 1	125.0 gr., SP	, B15KC3225		error and the state with the second			
	(Make)		(Type)	(Lot Number)	-				
Conditi	oning Temperati	ure: +1	60 (°F). Cond	litioning Time:	6	(Hrg.)			

Test Description: Clean and lubricate gun. Condition loaded gun and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature. Conduct firing tests from within conditioning chamber in accordance with specified firing cycle.

Seq	uence Rds.	Ammo Mag. Velocity(Velocity(fps)						Malfuncti Rd.	Cause	ppæe	nkage	Class	Attrib.	EPR
	h							No.(s)	-	Sto	Bre	S	Act	9	
01	05					None	FX	3	(c)	Y		- 1	G		
J2	05					None	FX	7	(c)	Y	N		G		
							FX	8	(c)	Y	N		G		
							FX	10	(c)	Y	N		G		
				-En	d of Test-										
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														Ī	
														Γ	
														Ī	
														T	

TMARKS: (a) Fitted with Modified Fire Control Group.

(b) Gun conditioned with loaded and locked chamber and safety on.

B16

(c) Failure to Extract, but when bolt was again closed on chambered case, case Extracted.

01-32A High Temperature

Confidential - Subject

to Protective Order Williams v. Remington

-LOW TEMPERATURE TEST-(Paragraph 4.5.2 of TOP 3-2-045) 6793-02 HPWLI Job Number 9 October 1995

Date_ 6212692 Remington 30-06 New (a) (Caliber) (Condition) (Make) (Model) (Serial Number) Ammunition: Remington-125.0-gr., SP , B15KC3225 (Make) (Type) (Lot Number) Conditioning Temperature: -50 (°F), Conditioning Time: Test Description: Clean and lubricate gun. Condition loaded gun and required

clean and lubricate gun. Condition loaded gun and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature. Remove gun and sufficient ammunition to fire one firing sequence and immediately fire that sequence in ambient environment (+70°±5°F) at specified rate of fire. Return gun to conditioning chamber for two hours and fire second sequence. Repeat two hour conditioning and firing sequence until specified firings are completed.

Sequ lo .	Rds.	Ammo	Mag.	Velocit	y(fps)	Cyclic R. (Spm)	Yaw	Type	Ro	ncti l. (s)	Cause	Stoppæe	Breakage	Славв	Attrib.	ЕРК
01	0.5						None	FX	1 4	x 5	(c)	Y	N		G	
02	05				,		None	FX	6 6	S ₂ 7	(c)	Y	И		G	
						-End of Test	_									
:																
							•									
:																

PEMARKS: (a) Fitted with Modified Fire Control Group.

(b) Gun conditioned with loaded and locked chamber and safety on.

B17

c) Failure-To-Extract fire case. Extracted on second attempt.

Confidential - Subject
to Protective Order
Williams v. Remington

01-32B Low Temperature



-WATER SPRAY TEST-(Paragraph 4.5.4 of TOP 3-2-045)

6793-02 HPWLI Job Number 13 October 1995

					····	Date	6
Gun:	Remington	, 700X	,30-	06	New (a)	6212692	The second secon
`	(Make)	(Mode	(C:	aliber)	(Condition	i) (Serial	Number)
Ammun:	ition: Reming	ton	125.0 gr.,	SP.	B15KC3225		Sec. 1991
		ike)	(Tyr	e)	(Lot Number)		
Condi	tioning Tempe	racure:	70 .(°	F), Condi	tioning Time:	NA	(Hrs.)
Test 1	<u>Muz</u>	of 0.4 in accordance rizontal Or	nch per mi with follo ientation ,	nute and wing sche With 1 chambe With 1 chambe Open sequer Repeal sequer Repeal	d conduct f. edule: loaded magazi er - 5 minute caded magazin er - 5 minute and drain ch nce. t horizontal	iring sequine, empty ass. e, loaded ares. amber and amber and arexposure and arexposure and arexposure and arexposure and areas area	ence in and open ad closed fire one d firing entation

Seq	Rds.	Алто	Mag.	Velocit	:y(fps)	Cyclic R. (Spm)	Yaw	Type	Malfunctions Rd. Cause No.(s)		Type Rd.		coppage	Breakge	Attrib.	EPR
l H	05						None		None	- Andrews of the second	03		1			
:H	05						None		None				1	\uparrow		
30	05						None		None					1		
ן יינו	05						None		None					1		
·D	05						None		None				1			
6D	05						None		None		Γ			T		
					-	End of Test-										

REMARKS: (a) Fitted with Modified Fire Control Group.

B18

01-32C Water Spray

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-MUD TEST NUMBER 1-(Paragraph 4.5.6.2.1 of TOP 3-2-045) 6793-02

HPWLI Job Number 13 October 1995

Gun: Remington ,	700X	_,30~06	, New(a)	6212692
(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
Ammunition: Remington	1.25	.0 gr., SP ,	B15KC3225	
(Make)		(Type)	(Lot Number)	•
Conditioning Temperatu	re: 73	(°F), Condi	tioning Time:	1/60 (Hrs.)
Test Description: Clea	an and lubric	cate gun. Tái	pe the muzzle o	f a fully loaded

gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Seq.	Rds.	Ammo	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	Stoppæe	Breakge	Class	Attrib.	EPR
+1	0.5					None	FFR	1		Y			Т	
							FFD	3	(a)	Y	N		Т	
'2	05					None		None						
				-En	d of Test-									
-														
<u></u>														
•														

EMARKS:

Fitted with Modified Fire Control Group.
Gun conditioned with loaded and locked chamber and safety on and muzzle taped

(c) Failure-to-fire. Firing pin failed to fall. Loosened by manipulation. Fired

on second attempt.
Failure:to-feed. Magazine freed by pushing down on cartridge ol-32F Mud Test #1 and releasing. Feeding restored on third attempt.

B19

Confidential - Subject to Protective Order

Williams v. Remington

-MUD TEST NUMBER 2- (Paragraph 4.5.6.2.2 of TOP 3-2-045)

6793-02 HPWLI Job Number 17 October 1995

Date-

Gun:_	Remington ,	700X	.30-06	New (a)	6212692
	(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
- Ammura:	ition: Remington		.0 gr. SP ,	B15KC3225	-
	(Make)		(Type)	(Lot Number)	
Condi	tioning Temperatu	re: 68	(°F), Cond	itioning Time:	4-1/60 (Hrs.)
Test 1	Description: Clea		-	•	f a fully loaded

on: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Place conditioned gun and unprotected ammunition in 70°±5°F environment for four hours. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Sequino.	Rds.	Ammo	Mag.	Velocit	y(fps)	Cyclic R. (Spm)	Yaw	Type	Rd.	Cause	coppage	breakage	Class	Attrib.	EPR
01	05						None	FX	1	(c)	Ϋ́		dagray, and	₹ T	
02	05 .						None	FJ	8	(d)	Y	N		Т	
					-	End of Test-									
			·		-										
:															
:						_									
-											L		_		_
:					}										

(c) Failure-to-extract. Extracted on second attempt.

(a) Fitted with Modified Fire Control Group.

MARKS:

(d) Failure-to-eject. Fired case dropped from bolt after extraction.

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MA2897

01-32G Mud Test #2

B20

(b) Gun conditioned with loaded and locked chamber and safety on and muzzle taped

-STATIC DUST TEST-

6793-02 HPWLI Job Number

				. (P	aragrap	h 4.5.5.2 of	TOP 3-2	-045)		Octobe		995		
				- One		Type a page 1 control to the page 1 control				Date				
	Gur	1:Re	mington	,	X	.30-0 (Calibe)6 	New (a)		12692				
										rial Nu	dmı	er)		
	Am	munition	n:Remi	ngton		125.0 gr., S	Р—, В	15KC322	;		Name and Park	-1/1		
			(M	iake)		(Type)	(Lo	t Numbe	r)					
	coz	nditioni	ing Temp	erature	65	(°F), (Condition	ning Tim	e:2/6	50	Hr	s.}		
						ricate gun.		•						
	,	or nesci	LIPCIOII.	and clo	osed cha	amber to blow	ving sand	for on	e minute.	Remor	re ·	gun		
						and fire one			eat cond	itionir	ıg	with	ì	
				gun up	side-do	wn and firin	ig sequen	ce.		•				
	lence_	T	T	[Cyclic R.		1 ,	alfuncti		26	0) m	Т.	T
).	Rds.	Amno	Mag.	Velocit	y(fps)	(Spm)	Yaw	Type	Rd.	Cause	ppa	aka las	ttrib	EPR
									No.(s)		10	9 0	it.	표
L	05						None	FFR	2	(c)	Y	1	T	
2	05	 	<u> </u>				None	-	None	 		\vdash	+	+
		1	}			! !					-	_	+	┼
					- E	nd of Test-				<u> </u>	L	1		
		 -											Ť	1
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]			<u> </u>								
)										}
						1	1			1				1
		() 7:	1	1 N-3:	52 - 1 72		<u> </u>		L	<u> </u>	1	<u> </u>		ــــــــــــــــــــــــــــــــــــــ
MAJ	RKS:			tioned	with lo	re Control G aded and loc	ked char	ber and	safety	on and	mu	zzl	e ta	.ped
		(c) Fa	losed. ailure-t	o-fire.	Sear	Safety Cam	jammed do	wnward	preventi	ng coc	kin	ıg o	fth	ıe
		£	iring pi	in. Man	ipulati	on of the Se	ear Safe	y Cam	ind Safet	y clea	red	l th	e ja	. III
						_								
						B21				01-3	20	Sta	tic	Dus

Confidential - Subject to Protective Order Williams v. Remington

-DYNAMIC DUST TEST-(Paragraph 4.5.5.1 of TOP 3-2-045) 6793-02 HPWLI Job Number 20 October 1995

 Remington
 700X
 .30-06
 New(a)
 6212692

 (Make)
 (Model)
 (Caliber)
 (Condition)
 (Serial Number)

Amminition: Remington 125.0 gr., SP B15KC3225 (Make) (Type) (Lot Number)

Conditioning Temperature: 64 (°F), Conditioning Time: 2/60 (Hrs.

Test Description: Clean and lubricate gun. Expose fully loaded gun, with loaded and closed chamber to blowing sand for one minute. From within the conditioning chamber fire one sequence. Remove gun from conditioning chamber, reload, recondition and fire a second sequence.

Sem	Rds.	Amma	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Rd. No.(s)	Cause	Stoppage	Class	Attrib.	EPR
10	05					None		None					
, -	05					None		None					
÷				-	End of Test-								
	·												
													П
											1		
:													
:													
;												1	\prod
:											1	T	

TMARKS: (a) Fitted with Modified Fire Control Group.

(b) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

B22

01-32E Dynamic Dust

Confidential - Subject to Protective Order Williams v. Remington

MA2899

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-HIGH TEMPERATURE TEST-(Paragraph 4.5.1 of TOP 3-2-045) 6793-02 HPWLI Job Number 6 October 1995

Date

700 X .30-06 New (a)(c) Remington Gun: (Make) (Caliber) (Condition) (Model) Ammunition: Remington 125.0 gr., SP B15KC3225 (Type) (Make) (Lot Number) +160 Conditioning Temperature: (°F), Conditioning Time:

Test Description: Clean and lubricate gun. Condition loaded gun and required additional cartridges in loaded belts or magazines (if appropriate) for specified time at specified temperature.

Conduct firing tests from within conditioning chamber in accordance with specified firing cycle.

Sequito.	Rds.	Ammo	Mag.	Veloci	y(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	Stoppæe	Breakae	СІввв	Attrib.	EPR
01	05						None		None						
02	05		-				None		None						
					~En	d of Test-								.	
															
															.
	,]												
					i		Ì								
,									Ì						

MARKS: (a) Fitted with Modified Fire Control Group.

(b) Gun conditioned with loaded and locked chamber and safety on.

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(c) Fitted with blued steel trigger and safety.

01-32A High Temperature

Confidential - Subject to Protective Order Williams v. Remington

-LOW TEMPERATURE TEST-

6793-02 HPWLI Job Number

					(Paragra	ph 4.3.2 cf	TOP 3-2-	045)	9 00	tober 1	99	5	_	•
- :	<u> </u>									Date				
	Gun	ı:F	lemingto	on_,	700X	.30-06		New (a)	(c) 6	212893			_	
		(Ma	ike)		(Model)		er)	Condit:	ion) (Se	rial Nu	ımi	er	1	
	Amn	mnition	: Remin	ngton		125.0 gr.,	SP , B15	KC3225						
			(1)	(ake)		(Type)		t Numbe						
	Con	ditioni	ng Temp	erature	::	50 (°F),	Condition	uing Tim	ne:6	,	(Hr	·s.)	
	, 60	o pesci	-p01011	addit: approp Remove sequer enviro to con Repeat	ional coriate) e gun a nce and comment (ditioning t two	pricate gun. artridges i for specifi and sufficie immediatel +70°±5°F) at ag chamber fo hour condit ings are con	n loaded ed time ent ammu y fire specifi or two hou ioning	d belt at sp mition that ed rate urs and	s or made continuation of fire second continuation of fire fire second continuation of the continuation of the second continuatio	tempera one f in am . Retur	itu ir bi mbi	(ii ire ing ent gun	E	
		1	1			Cyclic R.	<u> </u>		Malfunct:		e	l e	_	· i
•	Rds.	Ammo	Mag.	Veloci	ty(fps)	•	Yaw	Type	Rd. No.(s)	Cause	toppa	Sreaka	Class	ittrib
-	05	 					None		None		1			
j	05						None	FFR	6	(d)	Y	N		G
		<u></u>			-End	of Test-				 	\vdash			!
j					i						1			<u> </u>
_					İ		i	 .						Ť
			<u> </u>		<u> </u>	<u>:</u>	i	-i	 	-	\dagger	\dagger		<u> </u>
		<u> </u> 	<u>!</u> !	<u> </u> 	1		!	 	 	1	-	╂┤		
		<u> </u>			 	<u> </u>	<u> </u>	-		-	+	1-1		1
			<u> </u>		<u> </u>									
Ì														
<u>_</u>					1			1			1			
MAF	uks:	(b) (c) F	Sun cond Fitted v	ditione with bl	d with l ued stee	re Control (coaded and 1 cl trigger a ned (Frozen)	ocked chand safet	у.						arte

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-WATER SPRAY TEST- (Paragraph 4.5.4 of TOP 3-2-045)

6793-02 HPWLI Job Number 11 October 1995

		the state of the s				-
un: Remington	ngton , 70	χc	.30-06	New (aXb)	6212893	
Make)		(Caliber)	(Condition)		Number)
Ammunition:	Remington	125.0	gr., SP	B15KC3225		
	(Make)			(Lot Number)		
Conditioning	Temperature	70	(°F), Cond	itioning Time:	NA	_ (Hrs.)
tear neactio	of 0.4 accord	4 inch per ance with f	minute ar ollowing sch on , With chamb , With chamb	loaded magazine per - 5 minutes. loaded magazine, per - 5 minutes. and drain cham	ing seque, empty a	ence in and open d closed

Se No.	guence Rds.	Ammo	Mag.	Velocity(fps:	Cyclic R. ! (Spm)	Yaw	Туре	Malfuncti Rd.	Ons Cause	ррже	18 kge	trib.	EPR
					2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A 2000 A			No.(s)		St	E C	AE	
1H	1 05	İ			· •	None		None					
I	05	}	<u> </u>			None		None					
3 U	05					None		None					
J	05				;	None		None					
- 1	05		·		1	None		None					
6D	05					None		None					
				-Е	nd of Test-								

REMARKS: (a) Fitted with Modified Fire Control Group.
(b) Fitted with blued steel trigger and safety.

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В	2	5

01-32C Water Spray

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-MUD TEST NUMBER 1-(Paragraph 4.5.6.2.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 17 October 1995 Jate-

700X Gun: Remington .30-06 New(a)(c)(Make) (Model) (Caliber) (Condition) 125.0-gr., SP-B15KC3225 Ammunition: Remington (Make) (Type) (Lot Number) 62 Conditioning Temperature: (°F), Conditioning Time: 1/60

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

Sequ Io.	Rds.	Апто	Mag.	Velocit	y(£ps)	Cyclic R. (Spm)	Yaw	Type	Malfuncți Rd. No.(s)	Cause	Stoppæe	Breakge	Class	Attrib.	EPR
31	05						None	FFD	3	(d)(e)	Y	N		T	
02	05						None	FFD	7	(d)(e)	Y	N		T	
					-Er	d of Test-									
		l					,								
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										1					
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										1	T				
											T				
		ļ													

MARKS:

(a) Fitted with Modified Fire Control Group.
(b) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.

Fitted with blued steel trigger and safety. Failure-to-feed (bolt override). Magazine cleared and feeding restored on

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second attempt by pushing down on cartridges.

(e) Bolt difficult to operate.

01-32F Mud Test #1

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-MUD TEST NUMBER 2- (Paragraph 4.5.6.2.2 of TOP 3-2-045)

6793-02 HPWLI Job Number _18 October 1995

4-1/60 (Hrs.)

Date

un: Remington , 700 X , .30-06 New (a)(c) , 6212893
(Make) (Model) (Caliber) (Condition) (Serial Number)

Ammunition: Remington 125.0 gr. SP B15KC3225

(Make) (Type) (Lot Number)

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds.

Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Place conditioned gun and

unprotected ammunition in $70^{\circ}\pm5^{\circ}F$ environment for four hours. Fire one sequence. Without further mud exposure, reload gun and fire second sequence.

69 (°F), Conditioning Time:

coppage reakage Class Sequence Cyclic R. Malfunctions Cause No. Rds. OmmA Mag. Velocity (fps) (mg2) Yaw Rd. No, (s) (d)(e)Y N None FFD 3 01 05 None None 02 05 -End of Test-MARKS:

(a) Fitted with Modified Fire Control Group.
 (b) Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed.
 (c) Fitted with blued steel trigger and safety.

(d) Failure-to-feed (bolt override). Ammunition in magazine depressed and feeding restored on second attempt.

(e) Bolt difficult to operate.

Conditioning Temperature:

01-32G Mud Test #2

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MA2904

B27

-STATIC DUST TEST-(Paragraph 4.5.5.2 of TOP 3-2-045) 6793-02

HPWLI Job Number 19 October 1995

							-
Gun:	Remins	gton , 700	X	, 30-06	New(a)(c)	6212	893
	(Make)		Modelı	(Caliber)	(Condition)	on) (Serial	Number)
Ammuni	ition: Remington		125	5.0 gr., SP	B15KC3225		
		(Make)		(Type)	(Lot Number)	•	
Condit	ioning (<u> Pemperature</u>	62	(°F), Con	ditioning Time:	2/60	(Hrs.)
Tear I	nescrint	ion: Clean	and lubric	ate con. Ext	nose fully loaded	cun wit	h losded

and closed chamber to blowing sand for one minute. Remove gun from champer and fire one sequence. Repeat conditioning with gun upside-down and firing sequence.

Seq.	Rds.	Алипо	Mag.	Velocity(fps)	Cyclic R. (Spm)	Yaw	Type	Rd.	Cause	toppage	reakage	СІвяя	ctrib.	EPR
: 01	05	į		:	1000	None		None	į	6	عَم		Character 1	2022-10
02	05	: !				None	FJ	6		Y	Ŋ		T	. !
							FFD	7	(d)	Y	1		Т	
			j	-Erld	of Test-									
				1										
					1									
	<u> </u>	i								T				
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		<u> </u>												
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		<u> </u>												

Fitted with Modified Fire Control Group.
Gun conditioned with loaded and locked chamber and safety on and muzzle taped closed. REMARKS:

(c) Fitted with blued steel trigger and safety.(d) Failure-to-feed (bolt override). Ammunition in magazine depressed and feeding restored on second attempt.

B28

01-32D Static Dust

Confidential - Subject to Protective Order Williams v. Remington

-DYNAMIC DUST TEST-(Paragraph 4.5.5.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 23 OCtober 1995

									Date				
	Gur	ı: Rem		,			New (a	<u> </u>	212893				
		(Ma	ike)	(Mode	ei) (Calib	er; (Conditi	.on) (Se	rial Nu	mbe	r)		
	Ann	munition	ı: Remi	ngton-	1-25.0-gr., SP	, B15	KC3225				- w		
				iake)	(Type)		t Numbe	r)					
	Cor	nditioni	ing Temp	erature:	60 (°F),	Condition	ing Tim	e: 2/60) (Hrs	. 1		
		:			, ,		J		·················		.,		
	Tes	st Desci	ription:	•	lubricate gun.	-	-						
					chamber to blo ioning chamber	-							
			, ·		ng chamber, re		_		-				
				sequence.									
	· · · · · · · · · · · · · · · · · · ·	, 		·		-,							,
Segn	ence		-		Cyclic R.		!	Malfungti	Cause	988	2	نا	
No.	Rds.	Ammo	Mag.	Velocity(fp	(Spm)	Yaw	Type	Rd. No.(s)	Cause	dde	Class	ttrib.	EPR
	-]						نا تنا	0	ļī,	
01	05		1			None	1	None					
02	05	<u> </u>	<u> </u>	İ		None	1	None	<u></u>		1	1	
- 02	0.5	<u> </u>	1	1		Hone	<u> </u>	110110		\sqcup	-	 	1
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RAMAR	uks:	(a) Fi	tted wi	th Modified	Fire Control of loaded and l	Group.	-ham -n	d cafaty	on and	****	221	a Fs	nad
		С	losed.					d salecy	Oll alto	щи	221	2 (0	ipeu
		(c) F	itted w	ith blued st	teel trigger a	nd safety	•						
					·								
					B29				A1 3 2				

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MA2906

01-32E Dynamic Dust

-HIGH TEMPERATURE TEST-(Paragraph 4.5.1 of TOP 3-2-045)

6793-02 HPWLI Job Number

5 October 1995 Date

Gun:	Remington	700 X	.30-06	, New(a)(c)	6213209
	(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
Ammuni	ition: Remington	· · · · · · · · · · · · · · · · · · ·	125.0 gr., SP ,	B15KC3225	4 41 41 41 41 41 41 41 41 41 41 41 41 41
	(Make)		(Type)	(Lot Number)	•
]ondit	tioning Temperati	re: +160	(°F), Condi	tioning Time:	6 (Hrs.)
Test I	add app	itional ca r op riate)	ertridges in lo	paded belts or cime at sp eci f:	gun and required magazines (if ied temperature.

Conduct firing tests from within conditioning chamber in accordance with specified firing cycle.

Sequ	ience_					Cyclic R.		1	alfunction	ms	8	a G	, p	
!···o.	Rds.	Алипо	Mag.	Velocit	y(fps)	(Spm)	Yaw	Type	Rd. No.(s)	Cause	Stopp	Breake	Attrib	EPR
٧٦.	05					•	None		None					
02	05						None		None					
					-F	nd of Test-								
													\perp	
												_		
								<u> </u>				_		
_								ļ						

(a) Fitted with Modified Fire Control Group. F TMARKS:

(b) Gun conditioned with loaded and locked chamber and safety on.

(c) Fitted with blued steel trigger and safety.

B30

01-32A High Temperature

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-LOW TEMPERATURE TEST[Paragraph 4.5.2 of TOP 3-2-045]

6793-02 HPWLI Job Number 9 October 1995

				- 							Date					
a y aparts	Gun	F	lemingto	on, 7	700 X	, 30-06	, Ne	w (a)	(c)	62	13209					
		(Ma	ke)		(Model)	(Calibe	er) (C		ion)	(Ser	ial N	uni	er	}		
	Anın	unition	. Remin	ngton	·	_125.0_gr.,	SP B15K	C3225	:			art Maria Mariana e de la	A. C. Person			
				(ake)	·	(Type)	(Lot									
	Con	ditioni	na Temo	erature	- 50	(°Ē), (Conditioni	na Tir	ne :	6		(Hr	s.)		
	Tes	t Descr	iption:			oricate gun. artridges i										
				approp	riate)	for specifi	ed time	at sp	ecifi	ed t	emper	atu	шe			
						and sufficie immediatel										
						+70°±5°F) at										
						ng chamber fo										
						hour condit		.a cı	ring	a e dr	ience	ur	121	Ţ		
eq	ience					Cyclic R.			Malfr	mcti	Cause	æe.	86	82	۵	Γ
•	Rds.	Anmo	Mag.	Veloci	ty(fps)	(Spm)	Yaw	Type	1		Cause	ddo	eak	las	terib.	PPR
		*, monte				***************************************			(40.	(3)				U	<u> </u>	_
	05						None	FX	3 &	4	(q)	Y	N		G	
	05						None	FX	6,7	&10	(a)	Y	И		G	Ī
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	<u> </u>	ļ				1		}							}	1
LAM	RKS:	(a) Fi (b)	tted wi	th Modi	fied Fi	re Control G loaded and l	roup. ocked char	ıber a	and sa	ıfetv	on.					
		(c)	Fitted	with bl	ued ste	el trigger a	nd safety.									
		(d) 1	Failure	-To-Ext	ract fi	re case. Ex	tracted of	seco	ond at	temp	t.					

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-WATER SPRAY TEST-(Paragraph 4.5.4 of TOP 3-2-045)

6793-02 HPWLI Job Number 11 October 1995

Date

Gum: Remington,	700X	,30-06	New (a)(b)	6213209
(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
Ammunition: Remingto (Make	n 125.	0 gr., SP	B15KC3225	
(Make)	(Type)	(Lot Number)	
Conditioning Tempera	ture: 70	(°F), Cond	itioning Time:	NA (Hrs.)
ac Horiz	0.4 inch p	er minute ar following sch tion , With chamb , With chamb , Open seque , Reper	nd conduct firing the conduct firing the conduct first loaded magazine, loaded magazine, loaded magazine, and drain chamberce. at horizontal expence. at entire Horizontal	ng sequence in . empty and open loaded and closed er and fire one cosure and firing

Secrition.	rence Rds.	Ammo	Mag.	 Velocity(fps) 	Cyclic R. (Spm)	Yaw	Type	Rd. No.(s)	Cause	Stoppæe	Славя	Attrib.	EPR
1H	05				İ	None		None					
2Н	05					None		None ·					
30	05					None		None			T		
4U	05					None		None			1		\prod
5D	05					None		None		П		T	
6D	05					Nine		None					\prod
					End of Test	· ·					T		

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REMARKS:

(a) Fitted with Modified Fire Control Group.(b) Fitted with blued steel trigger and safety.

01-32C Water Spray

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-MUD TEST NUMBER 1-(Paragraph 4.5.6.2.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 16 October 1995 Date

(Make) (Model) (Caliber) (Condition) (Serial Number) Ammunition: Remington , 125.0 gr., SP , B15KG3225 (Make) (Type) (Lot Number) Conditioning Temperature: 61 (°F), Conditioning Time: 1/60 (Hrs.) Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence. Sequence No. Rds. Ammo Mag. Velocity(fps) (Spm) Yaw Type Rd. Cause 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Gur	ı: Remi		 '	700 X		6	New (a)	(c)	621320	9				
Conditioning Temperature: 61 (°F), Conditioning Time: 1/60 (Hrs.) Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence. Sequence O. Rds. Ammo Mag. Velocity(fps) (Spm) Yaw Type Rd. Cause Caus			(Ma	uce)		(Model)	(Calibe	er) (Condit	lon) (Ser	ial Nu	ınic	er)		
Conditioning Temperature: 61 (°F), Conditioning Time: 1/60 (Hrs.) Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence. Sequence D. Rds. Ammo Mag. Velocity(fps) (Spm) Yaw Type Rd. Cause Caus		Anur	wnition	: Remi	ngton	,_1	.25.0 gr., SF	, B1	5KC322	5						
Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence. Sequence D. Rds. Ammo Mag. Velocity(fps) Cyclic R. (Spm) Yaw Type Rd. Cause Cyclic R. No.(s) Yaw Type Rd. Cause Cyclic R. No.(s) Yaw Type Rd. Cause Cyclic R. No.(s) Yaw Type Rd. Cause Cyclic R. No.(s) Yaw Type Rd. Cause Cyclic R. No.(s) Yaw Type Rd. Cause Cyclic R. No.(s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. No. (s) Yaw Type Rd. Cause Cyclic R. Yaw Type Rd. Ca				1)	lake)		(Type)	(Lo	t Numbe	er)						
gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Fire one sequence. Without further mud exposure, reload gun and fire second sequence. Sequence D. Rds. Ammo Mag. Velocity(fps) Cyclic R. Yaw Type Rd. Cause Company Compan					,											
05		Tes	st Descr	ription	gun wi second Remove ammuni	th load full i from tion wi	ded and clos load of unpromud and cle th bare hand	ed chamb otected an the o s only.	er and ammunit :losed Fire or	immerse tion for gwn and he sequence	in mud 60 sed unprot ca. Wi	i w con cec ith	rit ds te ou	h d		
None			Ammo	Mag.	Velocit	y(fps)		Yaw	1	Rd.	Cause	toppæe	reakge	Class	terib.	EPR
	-	05	!					None		None	Section that we have	l				ᅜ
-End of Test-		05						None	FFD	7	(e)	Y	N		T	
						- E	nd of Test-									
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MARKS: (a) Fitted with Modified Fire Control Group. (b) Gun conditioned with loaded and locked chamber and safety on and muzzle tape closed. (c) Fitted with blued steel trigger and safety. (d) Bolt difficult to operate. (e) Failure-to-feed. Magazine freed by pushing down on cartridge		(clo c) Fit d) Bol	sed. ted wit t diffi	h blued cult to	steel operat	trigger and	safety.				nuz	zzl	e t	ape	d

B33

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-MUD TEST NUMBER 2-(Paragraph 4.5.6.2.2 of TOP 3-2-045)

6793-02 HPWLI Job Number 17 October 1995 Date

Gun:_	Remington	700X	.30-06	New(a)(c)	6213209
	(Make)	(Model)	(Caliber)	(Condition)	(Serial Number)
Ammun	ition: Reming	ton 125	.0 gr. SP ,	B15KC3225	
	(Mak	e)	(Type)	(Lot Number)	
Condi	tioning Tempera	ture: 68	(°F), Condi	tioning Time:	4-1/60 (Hrs.)

Test Description: Clean and lubricate gun. Tape the muzzle of a fully loaded gun with loaded and closed chamber and immerse in mud with second full load of unprotected ammunition for 60 seconds. Remove from mud and clean the closed gun and unprotected ammunition with bare hands only. Place conditioned gun and unprotected ammunition in 70°+5°P environment for four hours. Fire one sequence. Without further mud exposure, reload gum and fire second sequence.

Sequ No.	Rds.	Ammo	Mag.	Velocity	(fps)	Cyclic R. (Spm)	Yaw	Type	Malfuncti Rd. No.(s)	Cause	Scoppage	Class	Attrib.	EPR
01	05						None		None	(a)				
02	05						None	FFD	7	(e)	Y	N	T	T
								FFD	8	(e)	Y	N	T	
					-	End of Test-								T
- 1-1-1-1														T
					·									+
													\top	+
														+
. —			<u> </u>							1			+	+
; MAI		b) Gun	condit	ioned wi	th loa	ire Control ded and lock	ed cham	ber and	safety or	n and n	1112	zle	tap	ed

(c) Fitted with blued steel trigger and safety.(d) Bolt difficult to operate.

(e) Failure-to-feed (bolt override). Rounds in magazine depressed, clearing the stoppage and restoring feed on second attempt. 01-32G Mud Test #2 **B34**

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-STATIC DUST TEST-(Paragraph 4.5.5.2 of TOP 3-2-045)

0/93)-UZ	
HPWL:	Job	Number
19 (Octob	er 1995

										Date				
and the second second second	Gur	ı: Re	mington	7002	K	.30-0	5 ,	New(a)(c)	62132	:09			
		(Ma	ıke)	4)	Model)	(Calibe	rì (Condit:	ion) (Se	rial Nu	mio	er)		
	Am	munition	. Remi	ngton	<u> </u>	(Type)	, в15	XC3225						
			1)	(ake)		(Type)	(Lo	t Numbe	er)					
	Cor	ditioni	ng Temp	erature:		65 (°F), C	ondition	ning Tin	me: 2/	60	Hr:	5.)		
	Tes	at Descr	ription	and clos from ch	sed cha amber	ricate gun. I amber to blow and fire one wn and firin	ing sand sequenc	for on	e minute	. Remor	лe q	gun		
Seque	2000			1.		Cyclic R.		1	Malfunct		9	0 0	П.	T-
No.	Rds.	Апто	Mag.	Velocity	r(fps)	(Spm).	Yaw	Type		Cause	toppa	reaka	terib	EPR
01	05						None	FFR	2	(d)	Y	-	Т	
02	05						None		None					1
j					-1	End of Test-							1	
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REMARK	cs:	(b) Gu c1	n condi osed.	tioned w	ith lo	re Control Graded and loca	ked cham		i safety	on and	mu:	zzl	e ta	iped
		(d) Fa	ilure-t	o-fire.	Sear 8	trigger and Safety Cam anipulation.			i prevent	ing coo	ki	ng	of	
						B35				01-3	2D	St	atic	Du

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-DYNAMIC DUST TRST-(Paragraph 4.5.5.1 of TOP 3-2-045)

6793-02 HPWLI Job Number 20 October 1995

: Remingtor (Make) unition: Rem ditioning Ter t Description Ammo Mag	(Make) sperature n: Clean and cl the cc condit sequen	: 64 and lubrosed cha	(Type)	, B15 (Lot condition: Expose fu ing sand : fire one	KC3225 Mumber ing Time lly loa for one sequence	ded gun, minute.	with 1 From w	Ers oad ith	-) edin		
unition: Ren	(Make) sperature n: Clean and cl the cc condit sequen	: 64 and lubrosed cha	(Type) (°F), Cricate gun. mber to blowing chamber	, B15 (Lot condition: Expose fu ing sand : fire one	KC3225 Mumber ing Time lly loa for one sequence	ded gun, minute.	with 1 From w	Ers oad ith	-) edin		
ditioning Ter	n: Clean and cl the co condit sequen	and lubrosed characteristics	(°F), Cricate gun. unber to blow	Condition: Expose fuing sand: fire one	ing Time 11y loa For one sequence	ded gun, minute.	with 1 From w	Hrs oad ith	ed in		
ditioning Ter	n: Clean and cl the co condit sequen	and lubrosed characteristics	(°F), Cricate gun. unber to blow	Condition: Expose fuing sand: fire one	ing Time 11y loa For one sequence	ded gun, minute.	with 1 From w	Hrs oad ith	ed in		
t Descriptio	n: Clean and cl the co condit sequen	and lubrosed cha ondition cioning	ricate gun. umber to blow ing chamber	Expose fu ing sand : fire one	lly loa for one sequence	ded gun, minute. :e. Remo	with 1 From w	oad ith	ed in		
t Descriptio	n: Clean and cl the co condit sequen	and lubrosed cha ondition cioning	ricate gun. umber to blow ing chamber	Expose fu ing sand : fire one	lly loa for one sequence	ded gun, minute. :e. Remo	with 1 From w	oad ith	ed in		
	and cl the co condit sequen	osed cha indition ioning	umber to blow ing chamber	ing sand : fire one	for one sequent	minute. e. Remo	From w	ith fr	in om		
Ammo Mag	the co	ndition ioning	ing chamber	fire one	sequenc	e. Remo	we gun	fr	om		
Ammo Mag.	condit	cioning	-		-		-				
Ammo Mag	aequer										
Ammo Mag	Veloci										
Ammo Mag.	Veloci										
Ammo Mag.	Veloci	1	Cyclic R.	Yaw	м	ons	986	0	:	1	
	1	ty(fps)	(<i>m</i> q2)		Type	Rd.	Cause	btoppage	48	E	EPR
						No.(s)			: 5	111	
			•	None		None					
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		}									
(a) Fitted	with Mod	ified F	ire Control	Group.				-	<u></u>		
b) Gun cond	itioned	with loa	ided and loci	ked chamb	er and	safety o	n and	muz	z Le	tar	ed
	ith blue	d steel	trigger and	safety.							
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			В36				01-32	R D	Yng	nu <u>i</u> c	Du
I	b) Gun condclosed.	b) Gun conditioned of closed.	(a) Fitted with Modified F b) Gun conditioned with log	 Gun conditioned with loaded and lock closed. 	(a) Fitted with Modified Fire Control Group. b) Gun conditioned with loaded and locked chamb closed. c) Fitted with blued steel trigger and safety.	(a) Fitted with Modified Fire Control Group. b) Gun conditioned with loaded and locked chamber and closed. c) Fitted with blued steel trigger and safety.	(a) Fitted with Modified Fire Control Group. b) Gun conditioned with loaded and locked chamber and safety of closed. c) Fitted with blued steel trigger and safety.	(a) Fitted with Modified Fire Control Group. b) Gun conditioned with loaded and locked chamber and safety on and closed. c) Fitted with blued steel trigger and safety.	(a) Fitted with Modified Fire Control Group. b) Gun conditioned with loaded and locked chamber and safety on and muz closed. c) Fitted with blued steel trigger and safety.	(a) Fitted with Modified Fire Control Group. b) Gun conditioned with loaded and locked chamber and safety on and muzzle closed. c) Fitted with blued steel trigger and safety.	(a) Fitted with Modified Fire Control Group. b) Gun conditioned with loaded and locked chamber and safety on and muzzle tarclosed. c) Fitted with blued steel trigger and safety.

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"ONE TEST IS WORTH A THOUSAND EXPERT OPINIONS." — THE RIEHLE AXIOM



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