

# Test Lab Work Request Form

Rev.3 -20 April, 2000

Date Submitted: 06-07-01	Tracking # :TLW 0546
Project # : 241095	Engineer: M. Keeney
<b>Test Objective: Confirmation of proposed M/710 reduced bolt body diameter samples' performance when subjected to SAAMI Drop Testing.</b> 6 Guns to be tested, 3 sighted & 3 scoped	
<b>Test Description:</b> 1. Measure initial trigger pull. 2. Measure bolt body diameter using micrometers. 3. Inspect and adjust supplied firearms to process minimums for trigger pull (4 lbs.) and sear engagement (.020). 4. Perform standard SAAMI Jar-off Test, Rotation Test and Drop Test and record results per our standard test procedures. 5. Measure sight screw hole depth on the 3 sighted guns, per print- D-305320. See Phillip for print & measurement method.	
<b>Resource Usage:</b> <b>Manpower Requirements -</b>  <b>Facility Requirements -</b>	<b>Test Results Required:</b> <b>Formal Report:            Data Only:X</b>  <b>Requested Completion Date: 06-13-01</b>
<b>Required Materials/Parts/Equipment (include quantities): Firearms supplied by Mayfield.</b>	
<b>Test Parts Availability Date: 06-07-01</b>	
<b>Start Date: 06-12-01</b> <b>Completion Date: 06-12-01</b> <b>Report Date: 06-12-01</b>	<b>Test Assigned To: Bob Lee &amp; Jeff Wade</b> <b>Assignment Date: 06/11/01</b>

ET30270

PROJECT: # 241095  
TLW0546

REMINGTON M/710  
REDUCED BOLT BODY DIAMETER

START DATE : 06-12-01  
FINISH DATE : 06-13-01

M/ 710 RIFLE REDUCED DIAMETER BOLT BODY  
PROJECT #241095  
TLW0546 6/13/01

**INITIAL TRIGGER PULL**

avg. of 6 measurements

A1	5.88
A2	3.96
A3	4.79
A4	4.88
A5	4.66
A6	4.62

**SET PRIOR TO DROP TEST**

avg. of 6 measurements

	TRIGGER PULL	ENGAGEMENT
A1	3.96	0.0200
A2	3.96	0.0200
A3	3.96	0.0207
A4	4.08	0.0204
A5	3.96	0.0203
A6	3.96	0.0204

**AFTER DROP TEST**

avg. of 6 measurements

	TRIGGER PULL	ENGAGEMENT
A1	4.00	0.0200
A2	4.00	0.0200
A3	4.00	0.0207
A4	4.58	0.0204
A5	3.92	0.0203
A6	3.96	0.0204

**BOLT BODY DIAMETER**

A1	.689 +.002
A2	.688 +.003
A3	.698 +.002
A4	.689 +.002
A5	.688 +.003
A6	.689 +.002

**SAAMI JAR-OFF, ROTATION & DROP TESTING**

Drop Test data sheets in file

A1	PASS
A2	PASS
A3	PASS
A4	PASS
A5	PASS
A6	PASS

**SIGHT SCREW HOLE DEPTH**

sighted guns only

REFERENCE POINT D-305320

REAR			FRONT		
	HOLE A	HOLE B		HOLE C	HOLE D
A1	0.140	0.140	A1	0.113	0.110
A2	0.140	0.139	A2	0.111	0.112
A3	0.141	0.140	A3	0.111	0.110

ET30271

# Remington

PO BOX 99 \* 22 RIFLE TRAIL \* HICKORY, KY 42051

TO: **MIKE KEENEY** FROM: **TERRY HELMER**  
COMPANY: DATE: **6/8/01**  
FAX NUMBER: TOTAL NO. OF PAGES INCLUDING COVER: **2**  
PHONE NUMBER: SENDER'S PHONE NUMBER: **270-856-4200 x**  
RE: SENDER'S FAX NUMBER: **270-856-3233**

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

## NOTES/COMMENTS:

MIKE,

PER MY VOICE MAIL TO YOU THIS  
AFTERNOON.

- SIX M/710 30-06 CAL (3 SCORED & 3 SIGHTED)
- WILL SHIP TO YOU TODAY HPS GROUND.
- THE BOLT BODIES ARE AT .690" DIA.
- GUNS ARE FOR DROP TEST
- ADJUSTING SCREWS DIDN'T HAVE DNCO APPLIED.
- I WILL ALSO SEND A BOX WITH SIX BOLT BODY ASSEMBLIES AT .690" DIA. FOR JIM HARBON TO TEST.

THANKS,  
TERRY

IF YOU RECEIVE THIS FAX BY MISTAKE, PLEASE NOTIFY SENDER.

ET30272

M/710 ENGINEERING TEST GUNS				
DATE	6/8/01			
NAME	Helmer			
TEST:	Drop test on guns with bolt body at .690 dia.			
	M/710's (30-06 cal.)			
QTY.	3 ea. Scoped guns and 3 ea. Sighted guns.			
SENT TO:	E-town C/O Mike Keeney			
	REL. INSERT			
	ADJUSTING			
	FIXTURE BENCH			
	Ser. No.	T.P. Fix.	T.P. Ben.	Sear Lift
Scoped	71017722	5.087 lb.	4.667 lb.	0.015
	71016333	4.912 lb.	4.417 lb.	0.016
	71015921	5.045 lb.	5.000 lb.	0.017
Sighted	71015574	4.968 lb.	5.000 lb.	0.015
	71016322	5.060 lb.	5.000 lb.	0.016
	71015057	4.877 lb.	4.583 lb.	0.016
	Avg.	4.992 lb.	4.778 lb.	0.016
NOTE: No Duco cement was put on any of the adjusting screws.				

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ET30273

Project # 241095  
Tracking # TLW 0546

Initial  
Trigger pull

A1	6.0	6.0	6.0	5.75	5.75	5.75	AVG.	6-12-01
A2	4.8	3.75	4.0	4.0	4.0	4.0	3.94	
A3	5.0	5.0	4.25	4.5	4.5	5.0	4.79	
A4	5.25	4.75	5.0	4.75	4.75	4.75	4.88	
A5	4.75	4.75	4.25	4.75	4.5	5.0	4.66	
A6	4.75	4.75	4.75	4.5	4.5	4.5	4.62	

Adjusted Trigger pull

A1	4.0	4.0	4.0	4.0	3.75	4.0	AVG.	3.96
A2	4.0	3.75	4.0	4.0	4.0	4.0	3.96	
A3	4.0	4.0	4.0	4.0	4.0	3.75	3.96	
A4	4.0	4.0	4.5	4.0	4.0	4.0	4.08	
A5	4.0	3.75	4.0	4.0	4.0	4.0	3.96	
A6	4.0	4.0	4.0	3.75	4.0	4.0	3.96	

Engagement

A1	,0201	,0200	,0201	AVG.	,0200
A2	,0200	,0201	,0213	AVG.	,0200
A3	,0208	,0200	,0207	AVG.	,0207
A4	,0201	,0203	,0209	AVG.	,0204
A5	,0207	,0200	,0204	AVG.	,0203
A6	,0203	,0209	,0201	AVG.	,0204

ET30274

	Bolt Body Diameter			AVG.
A1	.6937	.6932	.6935	.6934
A2	.6930	.6935	.6936	.6933
A3	.6930	.6937	.6935	.6934
A4	.6936	.6939	.6930	.6935
A5	.6935	.6938	.6935	.6936
A6	.6932	.6933	.6935	.6933

	End of Test Trigger Pull							AVG.
A-1	4.0	4.0	3.75	4.0	4.5	3.75	4.0	
A-2	3.5	3.5	3.25	3.25	3.0	3.25	3.29	Adjusted
A3	4.0	4.0	4.25	3.75	4.0	4.0	4.0	*
A4	4.5	4.5	5.0	4.5	4.25	4.75	4.58	
A5	3.75	4.25	4.0	3.75	3.75	4.00	3.92	
A6	4.5	3.75	3.75	4.0	4.0	4.0	4.0	

	End of Test Engagement			AVG.
A1	.0206	.0202	.0207	.0205
A2	.0208	.0200	.0212	.0206
A3	.0201	.0199	.0203	.0201
A4	.0205	.0204	.0202	.0204
A5	.0205	.0206	.0205	.0205
A6	.0205	.0205	.0205	.0205

	Adjusted Trigger Pull							AVG.
A1	4.0	4.0	3.75	4.0	4.5	3.75	4.0	
A2	4.0	4.0	3.75	4.0	4.25	4.0	4.0	Adjusted
A3	4.0	4.0	4.25	3.75	4.0	4.0	4.0	
A4	4.5	4.5	5.0	4.5	4.25	4.75	4.58	
A5	3.75	4.25	4.0	3.75	3.75	4.00	3.92	
A6	4.5	3.75	3.75	4.0	4.0	4.0	4.0	

ET30275

## Rear Sight hole diameter

A1 Hole A .1400

A2 " A .1400

A3 " A .1405

~~A4 " A~~~~A5 " A~~~~A6 " A~~

Hole B .1400

" B .1390

" B .1400

~~" B~~~~" B~~~~" B~~

## Front Sight hole diameter

A1 Hole C .1130

A2 " C .1105

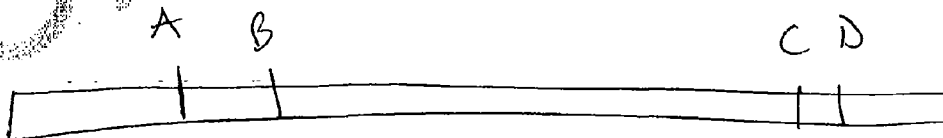
A3 " C .1110

~~A4 " C~~~~A5 " C~~~~A6 " C~~

Hole D .1100

" D .1115

" D .1100

~~" D~~~~" D~~~~" D~~

ET30276

CONFIDENTIAL 83

Original DATA

OL-12-01

Project: 241095

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ET30277





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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST

Rifle  
Firecontrol No. A-1 Firecontrol Type: STANDARD Date: 6-12-01Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type STANDARD Engagement at Start .020Model No. 710 Serial No. 71015574 Engagement at End .0205Trigger Pull at Start of Test (1) 4.0 (2) 4.0 (3) 4.0 (4) 4.0 (5) 3.75 (6) 4.0Average Trigger Pull at Start of Test: 3.96 Std. Dev. of Trigger Pull at Start of Test: \_\_\_\_\_Trigger Pull at End of Test (1) 4.0 (2) 4.0 (3) 3.75 (4) 4.0 (5) 4.5 (6) 3.75 <sup>83</sup>Average Trigger Pull at End of Test: 4.0 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

## Additional Notes and Comments

Bolt Body Diameter .6934 / With out scope

For additional details on the proper procedures to be used for this Test Procedure refer to:

ANSI / SAAMI Z299.5-1990

## SAAMI Specifications for Standard Jar-Off Test:

Jar-Off Test: 12 inch drop - onto 1" thick 85 durometer (Shore A) Rubber Matt  
 Firearm ready to fire, Safe in "Fire" position, Fresh Primed Case in  
 Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

12 inch drop (safety in "Fire" position) - one drop per orientation.

## Comments

Barrel Horizontal, Bottom of Stock Down :	Pass	<u>X</u>	Fail	_____
Barrel Horizontal, Bottom of Stock Up :	Pass	<u>X</u>	Fail	_____
Barrel Horizontal, Left side of Stock Up :	Pass	<u>X</u>	Fail	_____
Barrel Horizontal, Right side of Stock Up :	Pass	<u>X</u>	Fail	_____
Barrel Vertical, Muzzle Up :	Pass	<u>X</u>	Fail	_____
Barrel Vertical, Muzzle Down :	Pass	<u>X</u>	Fail	_____

ET30279

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST (cont'd)

## SAAMI Specifications for Standard Drop Test:

Drop Test: 48 inch drop - onto 1" thick 85 durometer (Shore A) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

48 inch drop (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Barrel Horizontal, Bottom of Stock Down :	Pass <u>X</u>	Fail	
Barrel Horizontal, Bottom of Stock Up :	Pass <u>X</u>	Fail	
Barrel Horizontal, Left side of Stock Up :	Pass <u>X</u>	Fail	
Barrel Horizontal, Right side of Stock Up :	Pass <u>X</u>	Fail	
Barrel Vertical, Muzzle Up :	Pass <u>X</u>	Fail	
Barrel Vertical, Muzzle Down :	Pass <u>X</u>	Fail	

## SAAMI Specifications for Standard Rotation Test:

Rotation Test: Rest Firearm on the Butt end and allow Firearm to Fall  
 Drop - onto 1" thick 85 durometer (Shore A) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

"Rotation" (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Firearm Vertical, Drop so Left side of Stock is Up :	Pass <u>X</u>	Fail	
Firearm Vertical, Drop so Right side of Stock is Up :	Pass <u>X</u>	Fail	

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Tester Initials: JW

ET30280

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST

Rifle  
Firecontrol No. A-2 Firecontrol Type: STANDARD Date: 6-12-01Dry Cycles/Rounds Completed:        Stock Type STANDARD Engagement at Start ,020Model No. 710 Serial No. 71016322 Engagement at End       Trigger Pull at Start of Test (1) 4.0 (2) 3.75 (3) 4.0 (4) 4.0 (5) 4.0 (6) 4.0Average Trigger Pull at Start of Test: 3.96 Std. Dev. of Trigger Pull at Start of Test:       Trigger Pull at End of Test (1) 4.0 (2) 4.0 (3) 3.75 (4) 4.0 (5) 4.25 (6) 4.0 83Average Trigger Pull at End of Test: 4.0 Std. Dev. of Trigger Pull at End of Test:       

## Additional Notes and Comments

Bolt Body Diameter .6933 / With out scope / Trigger pull adjusted*For additional details on the proper procedures to be used for this Test Procedure refer to:*

ANSI / SAAMI Z299.5-1990

## SAAMI Specifications for Standard Jar-Off Test:

Jar-Off Test: 12 inch drop - onto 1" thick 85 durometer (ShoreA) Rubber Matt  
Firearm ready to fire, Safe in "Fire" position, Fresh Primed Case in  
Chamber, Magazine loaded to capacity with Dummy Rounds.  
After each drop Fire Primed Case to verify firearm will still function.

12 inch drop (safety in "Fire" position) - one drop per orientation.

## Comments

Barrel Horizontal, Bottom of Stock Down: Pass X Fail       Barrel Horizontal, Bottom of Stock Up: Pass X Fail       Barrel Horizontal, Left side of Stock Up: Pass X Fail       Barrel Horizontal, Right side of Stock Up: Pass X Fail       Barrel Vertical, Muzzle Up: Pass X Fail       Barrel Vertical, Muzzle Down: Pass X Fail       

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST (cont'd)

## SAAMI Specifications for Standard Drop Test:

Drop Test: 48 inch drop - onto 1" thick 85 durometer (ShoreA) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

48 inch drop (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Barrel Horizontal, Bottom of Stock Down :	Pass <u>X</u>	Fail _____	front sight fell off
Barrel Horizontal, Bottom of Stock Up :	Pass <u>X</u>	Fail _____	
Barrel Horizontal, Left side of Stock Up :	Pass <u>X</u>	Fail _____	
Barrel Horizontal, Right side of Stock Up :	Pass <u>X</u>	Fail _____	
Barrel Vertical, Muzzle Up :	Pass <u>X</u>	Fail _____	
Barrel Vertical, Muzzle Down :	Pass <u>X</u>	Fail _____	

## SAAMI Specifications for Standard Rotation Test:

Rotation Test: Rest Firearm on the Butt end and allow Firearm to Fall  
 Drop- onto 1" thick 85 durometer (ShoreA) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

"Rotation" (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Firearm Vertical, Drop so Left side of Stock is Up :	Pass <u>X</u>	Fail _____	
Firearm Vertical, Drop so Right side of Stock is Up :	Pass <u>X</u>	Fail _____	

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Tester Initials: JW

ET30282

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST

Rifle  
 Firecontrol No. A-3 Firecontrol Type: STANDARD Date: 6-12-01  
 Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type STANDARD Engagement at Start .0207  
 Model No. 710 Serial No. 71015057 Engagement at End \_\_\_\_\_  
 Trigger Pull at Start of Test (1) 4.0 (2) 4.0 (3) 4.0 (4) 4.0 (5) 4.0 (6) 3.75  
 Average Trigger Pull at Start of Test: 3.96 Std. Dev. of Trigger Pull at Start of Test: \_\_\_\_\_  
 Trigger Pull at End of Test (1) 4.0 (2) 4.0 (3) 4.25 (4) 3.75 (5) 4.0 (6) 4.0 83  
 Average Trigger Pull at End of Test: 4.0 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

## Additional Notes and Comments

Bolt Body Diameter .6934 / with out SCOPE

For additional details on the proper procedures to be used for this Test Procedure refer to:

ANSI / SAAMI Z299.5-1990

## SAAMI Specifications for Standard Jar-Off Test:

Jar-Off Test: 12 inch drop - onto 1" thick 85 durometer (Shore A) Rubber Matt  
 Firearm ready to fire, Safe in "Fire" position, Fresh Primed Case in  
 Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

12 inch drop (safety in "Fire" position) - one drop per orientation.

## Comments

Barrel Horizontal, Bottom of Stock Down :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Horizontal, Bottom of Stock Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Horizontal, Left side of Stock Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Horizontal, Right side of Stock Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Vertical, Muzzle Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Vertical, Muzzle Down :	Pass	<input checked="" type="checkbox"/>	Fail	_____

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST (cont'd)

## SAAMI Specifications for Standard Drop Test:

Drop Test: 48 inch drop - onto 1" thick 85 durometer (ShoreA) Rubber Matt  
Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
in Chamber, Magazine loaded to capacity with Dummy Rounds.  
After each drop Fire Primed Case to verify firearm will still function.

48 inch drop (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Barrel Horizontal, Bottom of Stock Down :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Left side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Right side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Vertical, Muzzle Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Vertical, Muzzle Down :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	

## SAAMI Specifications for Standard Rotation Test:

Rotation Test: Rest Firearm on the Butt end and allow Firearm to Fall  
Drop - onto 1" thick 85 durometer (ShoreA) Rubber Matt  
Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
in Chamber, Magazine loaded to capacity with Dummy Rounds.  
After each drop Fire Primed Case to verify firearm will still function.

"Rotation" (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Firearm Vertical, Drop so Left side of Stock is Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Firearm Vertical, Drop so Right side of Stock is Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Tester Initials: JW

ET30284

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST

Rifle  
 Firecontrol No. A-4 Firecontrol Type: STANDARD Date: 6-12-01  
 Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type STANDARD Engagement at Start .0204  
 Model No. 710 Serial No. 710 17722 Engagement at End .0204  
 Trigger Pull at Start of Test (1) 4.0 (2) 4.0 (3) 4.5 (4) 4.0 (5) 4.0 (6) 4.0  
 Average Trigger Pull at Start of Test: 4.08 Std. Dev. of Trigger Pull at Start of Test: \_\_\_\_\_  
 Trigger Pull at End of Test (1) 4.5 (2) 4.5 (3) 5.0 (4) 4.5 (5) 4.25 (6) 4.7583  
 Average Trigger Pull at End of Test: 4.58 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

## Additional Notes and Comments

Bolt Body Diameter .6935 / with scope

For additional details on the proper procedures to be used for this Test Procedure refer to:

ANSI / SAAMI Z299.5-1990

SAAMI Specifications for Standard Jar-Off Test:

Jar-Off Test: 12 inch drop - onto 1" thick 85 durometer (Shore A) Rubber Matt  
 Firearm ready to fire, Safe in "Fire" position, Fresh Primed Case in  
 Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

12 inch drop (safety in "Fire" position) - one drop per orientation.

## Comments

Barrel Horizontal, Bottom of Stock Down :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Horizontal, Bottom of Stock Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Horizontal, Left side of Stock Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Horizontal, Right side of Stock Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Vertical, Muzzle Up :	Pass	<input checked="" type="checkbox"/>	Fail	_____
Barrel Vertical, Muzzle Down :	Pass	<input checked="" type="checkbox"/>	Fail	_____

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST (cont'd)

## SAAMI Specifications for Standard Drop Test:

Drop Test: 48 inch drop - onto 1" thick 85 durameter (Shore A) Rubber Matt  
Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
in Chamber, Magazine loaded to capacity with Dummy Rounds.  
After each drop Fire Primed Case to verify firearm will still function.

48 inch drop (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Barrel Horizontal, Bottom of Stock Down :	Pass <u>X</u>	Fail _____	
Barrel Horizontal, Bottom of Stock Up :	Pass <u>X</u>	Fail _____	Bent scope
Barrel Horizontal, Left side of Stock Up :	Pass <u>X</u>	Fail _____	
Barrel Horizontal, Right side of Stock Up :	Pass <u>X</u>	Fail _____	
Barrel Vertical, Muzzle Up :	Pass <u>X</u>	Fail _____	
Barrel Vertical, Muzzle Down :	Pass <u>X</u>	Fail _____	Loose scope

## SAAMI Specifications for Standard Rotation Test:

Rotation Test: Rest Firearm on the Butt end and allow Firearm to Fall  
Drop - onto 1" thick 85 durameter (Shore A) Rubber Matt  
Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
in Chamber, Magazine loaded to capacity with Dummy Rounds.  
After each drop Fire Primed Case to verify firearm will still function.

"Rotation" (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Firearm Vertical, Drop so Left side of Stock is Up :	Pass <u>X</u>	Fail _____	
Firearm Vertical, Drop so Right side of Stock is Up :	Pass <u>X</u>	Fail _____	

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Tester Initials: TW

ET30286

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST

Rifle  
 Firecontrol No. A-5 Firecontrol Type: STANDARD Date: 6-12-01  
 Dry Cycles/Rounds Completed:        Stock Type STANDARD Engagement at Start ,0203  
 Model No. 710 Serial No. 71015921 Engagement at End ,0205  
 Trigger Pull at Start of Test (1) 4.0 (2) 3.75 (3) 4.0 (4) 4.0 (5) 4.0 (6) 4.0  
 Average Trigger Pull at Start of Test: 3.96 Std. Dev. of Trigger Pull at Start of Test:         
 Trigger Pull at End of Test (1) 3.75 (2) 4.25 (3) 4.0 (4) 3.75 (5) 3.75 (6) 4.0 83  
 Average Trigger Pull at End of Test: 3.92 Std. Dev. of Trigger Pull at End of Test:       

## Additional Notes and Comments

Bolt Body Diameter .6936 / with scope

For additional details on the proper procedures to be used for this Test Procedure refer to:

ANSI / SAAMI Z299.5-1990

SAAMI Specifications for Standard Jar-Off Test:

Jar-Off Test: 12 inch drop - onto 1" thick 85 durometer (Shore A) Rubber Matt  
 Firearm ready to fire, Safe in "Fire" position, Fresh Primed Case in  
 Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

12 inch drop (safety in "Fire" position) - one drop per orientation.

## Comments

Barrel Horizontal, Bottom of Stock Down :	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Horizontal, Bottom of Stock Up :	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Horizontal, Left side of Stock Up :	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Horizontal, Right side of Stock Up :	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Vertical, Muzzle Up :	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Vertical, Muzzle Down :	Pass <u>X</u> Fail <u>      </u>	<u>      </u>

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST (cont'd)

## SAAMI Specifications for Standard Drop Test:

Drop Test: 48 inch drop - onto 1" thick 85 durameter (ShoreA) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

48 inch drop (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Barrel Horizontal, Bottom of Stock Down :	<u>X</u>		
Barrel Horizontal, Bottom of Stock Up :	<u>X</u>		Bent scope
Barrel Horizontal, Left side of Stock Up :	<u>X</u>		
Barrel Horizontal, Right side of Stock Up :	<u>X</u>		
Barrel Vertical, Muzzle Up :	<u>X</u>		
Barrel Vertical, Muzzle Down :	<u>X</u>		

## SAAMI Specifications for Standard Rotation Test:

Rotation Test: Rest Firearm on the Butt end and allow Firearm to Fall  
 Drop - onto 1" thick 85 durameter (ShoreA) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

"Rotation" (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Firearm Vertical, Drop so Left side of Stock is Up :	<u>X</u>		
Firearm Vertical, Drop so Right side of Stock is Up :	<u>X</u>		

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST

Rifle  
 Firecontrol No. A 6 Firecontrol Type: STANDARD Date: 6-12-01  
 Dry Cycles/Rounds Completed:        Stock Type STANDARD Engagement at Start .0204  
 Model No. 710 Serial No. 71016333 Engagement at End .0205  
 Trigger Pull at Start of Test (1) 4.0 (2) 4.0 (3) 4.0 (4) 3.75 (5) 4.0 (6) 4.0  
 Average Trigger Pull at Start of Test: 3.96 Std. Dev. of Trigger Pull at Start of Test:         
 Trigger Pull at End of Test (1) 4.5 (2) 3.75 (3) 3.75 (4) 4.0 (5) 4.0 (6) 4.0 <sup>83</sup>  
 Average Trigger Pull at End of Test: 4.0 Std. Dev. of Trigger Pull at End of Test:       

## Additional Notes and Comments

Bolt Body Diameter .6933 / with scope

For additional details on the proper procedures to be used for this Test Procedure refer to:

ANSI / SAAMI Z299.5-1990

## SAAMI Specifications for Standard Jar-Off Test:

Jar-Off Test: 12 inch drop - onto 1" thick 85 durometer (Shore A) Rubber Matt  
 Firearm ready to fire, Safe in "Fire" position, Fresh Primed Case in  
 Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

12 inch drop (safety in "Fire" position) - one drop per orientation.

## Comments

Barrel Horizontal, Bottom of Stock Down:	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Horizontal, Bottom of Stock Up:	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Horizontal, Left side of Stock Up:	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Horizontal, Right side of Stock Up:	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Vertical, Muzzle Up:	Pass <u>X</u> Fail <u>      </u>	<u>      </u>
Barrel Vertical, Muzzle Down:	Pass <u>X</u> Fail <u>      </u>	<u>      </u>

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## S.A.A.M.I. JAR-OFF, DROP &amp; ROTATION TEST (cont'd)

## SAAMI Specifications for Standard Drop Test:

Drop Test: 48 inch drop - onto 1" thick 85 durameter (Shore A) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

48 inch drop (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Barrel Horizontal, Bottom of Stock Down :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Barrel Scope
Barrel Horizontal, Left side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Right side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Vertical, Muzzle Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Vertical, Muzzle Down :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	

## SAAMI Specifications for Standard Rotation Test:

Rotation Test: Rest Firearm on the Butt end and allow Firearm to Fall  
 Drop - onto 1" thick 85 durameter (Shore A) Rubber Matt  
 Firearm not ready to fire, Safe in "Safe" position, Fresh Primed Case  
 in Chamber, Magazine loaded to capacity with Dummy Rounds.  
 After each drop Fire Primed Case to verify firearm will still function.

"Rotation" (safety in "Safe" position) - one drop per orientation.

	Pass	Fail	Comments
Firearm Vertical, Drop so Left side of Stock is Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Firearm Vertical, Drop so Right side of Stock is Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	

Notes:

Tester Initials: JW

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