

Test Lab Work Request Form

Rev.3 -20 April, 2000

Date Submitted: 1/4/01	Tracking # : TLW 0395
Project # : 241095	Engineer: Franz for Matt Golemboski
Test Objective: Conduct standard SAAMI Jar-Off, Drop and Rotation tests on 10 new Model 710 rifles with iron sights.	
Test Description: <ul style="list-style-type: none"> • Follow standard SAAMI procedures established for Jar-Off, Drop and Rotation tests. • All guns to be set at process minimums for trigger pull (4 lbs.) and engagement (.020 in.). • After setting fire controls check for proper trigger return and verify that sears move freely. 	
Resource Usage: Manpower Requirements - 2 tech. Facility Requirements - Drop Area	Test Results Required: Formal Report: X Data Only: Requested Completion Date: 1/26/01
Required Materials/Parts/Equipment (include quantities):	
Test Parts Availability Date: now	
Start Date: 01/16/01 Completion Date: 01/19/01 Report Date:	Test Assigned To: Jeff Wade Assignment Date: 01/15/01 <i>Jeff Wade</i>

ET29976

BEFORE	TRIGGER PULL 4 lbs.							ENGAGEMENT .02				1-17-01
SERIAL #	1	2	3	4	5	6	AVG.	1	2	3	AVG.	
71003108	4.5	4.25	4.5	4.25	4.25	4.25	4.33	.0205	.0201	.0205	.0204	
71002467	4.5	4.25	4.25	4.25	4.25	4.0	4.25	.0196	.0201	.0201	.0199	
71003109*	N/A											SEAR SCREW OUT OF TEST
71003121	4.0	4.0	4.0	4.25	3.75	4.0	4.0	.0201	.0200	.0210	.0204	
71002455	4.25	4.5	4.5	4.25	4.25	4.25	4.33	.0210	.0199	.0198	.0202	
71002457	4.25	4.0	3.75	4.0	4.0	4.0	4.0	.0211	.0207	.0212	.0210	BOLT HANDLE BROKEN
71002459	4.5	4.25	4.25	4.0	4.25	4.0	4.21	.0204	.0201	.0205	.0203	
71002465	4.25	4.25	4.5	4.5	4.5	4.25	4.38	.0202	.0201	.0209	.0204	
71002460	4.0	4.25	4.25	4.25	4.25	4.25	4.21	.0195	.0197	.0202	.0198	83
7102458	4.5	4.25	4.5	4.25	4.5	4.5	4.42	.0202	.0204	.0199	.0202	
AFTER												1-18-01
71003108	4.5	4.5	4.5	4.5	4.5	4.5	4.5	.0215	.0214	.0212	.0214	
71002467	4.0	4.25	4.25	4.25	4.5	4.5	4.29	.0195	.0196	.0199	.0197	
71003121	4.0	4.0	4.25	4.25	4.25	4.0	4.15	.0222	.0210	.0228	.0222	
71002455	4.5	4.5	4.25	4.5	4.5	4.25	4.42	.0198	.0200	.0201	.0200	
71002459	4.0	4.25	4.0	4.25	4.25	4.25	4.17	.0192	.0190	.0201	.0194	
71002465	4.25	4.25	4.5	4.5	4.5	4.5	4.46	.0197	.0200	.0204	.0200	
71002460	4.0	4.0	4.25	4.25	4.25	4.25	4.17	.0200	.0196	.0201	.0199	
71002458	4.5	4.5	4.25	4.25	4.25	4.25	4.5	.0190	.0191	.0193	.0191	
71002457	4.0	4.0	3.75	4.0	3.75	4.0	3.92	.0218	.0210	.0215	.0214	

ET29977

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: Sta. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn. Engagement at Start 0204
Model No. 710 Serial No. 71003108 Engagement at End 0214
Trigger Pull at Start of Test (1) 4.50 (2) 4.25 (3) 4.50 (4) 4.25 (5) 4.25 (6) 4.25
Average Trigger Pull at Start of Test: 4.33 Std. Dev. of Trigger Pull at Start of Test: _____ 1-18-01
Trigger Pull at End of Test (1) 4.5 (2) 4.5 (3) 4.5 (4) 4.5 (5) 4.5 (6) 4.5 83
Average Trigger Pull at End of Test: 4.5 Std. Dev. of Trigger Pull at End of Test: _____
Additional Notes and Comments

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 _____

ET29978

TLW 1395
Project No. 241095

Page 2 of :

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

SAAMI Specifications for Standard Drop Test:

1-18-07

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 :	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 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.

1-17-07

"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 + EP

ET29979

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: Std. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn. Engagement at Start 0199
Model No. 710 Serial No. 71002467 Engagement at End 0197
Trigger Pull at Start of Test (1) 4.50 (2) 4.25 (3) 4.25 (4) 4.25 (5) 4.25 (6) 4.0
Average Trigger Pull at Start of Test: 4.25 Std. Dev. of Trigger Pull at Start of Test: _____
Trigger Pull at End of Test (1) 4.0 (2) 4.25 (3) 4.25 (4) 4.25 (5) 4.5 (6) 4.5
Average Trigger Pull at End of Test: 4.29 Std. Dev. of Trigger Pull at End of Test: _____

Additional Notes and Comments

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

ET29980

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

1-18-01

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 :	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 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 :	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 + EP

ET29981

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: Std. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn. Engagement at Start .0204
Model No. 710 Serial No. 71003121 Engagement at End .0222
Trigger Pull at Start of Test (1) 4.0 (2) 4.0 (3) 4.0 (4) 4.25 (5) 3.75 (6) 4.0
Average Trigger Pull at Start of Test: 4.0 Std. Dev. of Trigger Pull at Start of Test: .0222
Trigger Pull at End of Test (1) 4.0 (2) 4.0 (3) 4.25 (4) 4.25 (5) 4.25 (6) 4.0 sp. 18.0
Average Trigger Pull at End of Test: 4.13 Std. Dev. of Trigger Pull at End of Test: _____

Additional Notes and Comments

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 _____	

ET29982

TLW 0395
Project No. 241095

Page 2 of 2

S.A.A.M.I. JAR-OFF, DROP & 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.

		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 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.

		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 + EP

ET29983

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: S&A Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn. Engagement at Start 0204
Model No. 710 Serial No. 71002465 Engagement at End 0200
Trigger Pull at Start of Test (1) 4.25 (2) 4.25 (3) 4.5 (4) 4.5 (5) 4.5 (6) 4.25
Average Trigger Pull at Start of Test: 4.38 Std. Dev. of Trigger Pull at Start of Test: _____
Trigger Pull at End of Test (1) 4.5 (2) 4.25 (3) 4.5 (4) 4.5 (5) 4.5 (6) 4.5
Average Trigger Pull at End of Test: 4.46 Std. Dev. of Trigger Pull at End of Test: _____

Additional Notes and Comments

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 <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"/>	

ET29984

S.A.A.M.I. JAR-OFF, DROP & 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 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: JWS + EP

ET29985

TLW 0395
Project No. 241095

Page 1 of 2

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

JW

Firecontrol No. _____ Firecontrol Type: Std. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn. Engagement at Start 0202
Model No. 710 Serial No. 71002455 Engagement at End 0200
Trigger Pull at Start of Test (1) 4.25 (2) 4.50 (3) 4.50 (4) 4.25 (5) 4.25 (6) 4.25
Average Trigger Pull at Start of Test: 4.33 Std. Dev. of Trigger Pull at Start of Test: _____
Trigger Pull at End of Test (1) 4.5 (2) 4.5 (3) 4.25 (4) 4.5 (5) 4.5 (6) 4.25 83
Average Trigger Pull at End of Test: 4.42 Std. Dev. of Trigger Pull at End of Test: _____

Additional Notes and Comments

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 _____	

ET29986

TLW 0395
Project No. 241095

Page 2 of 2

S.A.A.M.I. JAR-OFF, DROP & 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.

		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 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.

		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 + EP

ET29987

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: Sta. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn. Engagement at Start .0203
Model No. 710 Serial No. 71002459 Engagement at End .0194
Trigger Pull at Start of Test (1) 4.5 (2) 4.25 (3) 4.25 (4) 4.0 (5) 4.25 (6) 4.0
Average Trigger Pull at Start of Test: 4.21 Std. Dev. of Trigger Pull at Start of Test: _____
Trigger Pull at End of Test (1) 4.0 (2) 4.25 (3) 4.0 (4) 4.25 (5) 4.25 (6) 4.25 83
Average Trigger Pull at End of Test: 4.17 Std. Dev. of Trigger Pull at End of Test: _____

Additional Notes and Comments

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 durameter (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 _____	

ET29988

TLW 0395
Project No. 241095

Page 2 of 2

S.A.A.M.I. JAR-OFF, DROP & 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.

		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 (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.

		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 + EP

ET29989

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: Std. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn. Engagement at Start .0198
Model No. 710 Serial No. 71002460 Engagement at End .0199
Trigger Pull at Start of Test (1) 4.0 (2) 4.25 (3) 4.25 (4) 4.25 (5) 4.25 (6) 4.25
Average Trigger Pull at Start of Test: 4.21 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) 4.25 (5) 4.25 (6) 4.25 1.2501
Average Trigger Pull at End of Test: 4.17 Std. Dev. of Trigger Pull at End of Test: _____

Additional Notes and Comments

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

ET29990

S.A.A.M.I. JAR-OFF, DROP & 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"/>	MAGAZINE RELEASED
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 + EP

ET29991

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: Sta. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Sta. Engagement at Start .0210
Model No. 710 Serial No. 7100-2457 Engagement at End .0214
Trigger Pull at Start of Test (1) 4.25 (2) 4.0 (3) 3.75 (4) 4.0 (5) 4.0 (6) 4.0
Average Trigger Pull at Start of Test: 4.0 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) 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

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 _____	FRONT SIGHT FEEL OFF
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 _____	

ET29992

TLW 0395
Project No. 241095

Page 2 of 2

S.A.A.M.I. JAR-OFF, DROP & 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"/>	FRONT SIGHT FELL OFF
Barrel Horizontal, Left side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	BROKE BOLT HANDLE - REPLACED BOLT
Barrel Horizontal, Right side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	BOLT BODY FROM GUN 71003109
Barrel Vertical, Muzzle Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	CONTINUED
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"/>	MAGAZINE RELEASED

Notes: BOLT HANDLE BROKE ON 48" SAAMI Drop Test
LEFT SIDE OF STOCK UP - PULLED FROM TEST

Tester Initials: JW + EP

ET29993

TLW 0395
Project No. 241095

Page 1 of 2
JW

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

Firecontrol No. _____ Firecontrol Type: Sta. Date: 1-17-01
Dry Cycles/Rounds Completed: _____ Stock Type Syn Engagement at Start .0202
Model No. 710 Serial No. 71002458 Engagement at End ~~.0202~~ .0191
Trigger Pull at Start of Test (1) 4.5 (2) 4.25 (3) 4.5 (4) 4.25 (5) 4.5 (6) 4.5
Average Trigger Pull at Start of Test: 4.42 Std. Dev. of Trigger Pull at Start of Test: _____
Trigger Pull at End of Test (1) 4.5 (2) 4.5 (3) 4.25 (4) 4.75 (5) 4.25 (6) 4.75 18.01
Average Trigger Pull at End of Test: 4.5 Std. Dev. of Trigger Pull at End of Test: _____
Additional Notes and Comments

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 <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"/>	REAR SIGHT FELL OFF
Barrel Vertical, Muzzle Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	

ET29994

S.A.A.M.I. JAR-OFF, DROP & 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 :	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"/>	GRIP CAP CAME OFF
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 (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 + ER

ET29995

TLW 0395
Project No. 241095

Page 1 of 2

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

Firecontrol No. _____ Firecontrol Type: Std. Date: _____

Dry Cycles/Rounds Completed: _____ Stock Type S&W Engagement at Start _____

Model No. 710 Serial No. 71003109 Engagement at End _____

Trigger Pull at Start of Test (1) _____ (2) _____ (3) _____ (4) _____ (5) _____ (6) _____

Average Trigger Pull at Start of Test: _____ Std. Dev. of Trigger Pull at Start of Test: _____

Trigger Pull at End of Test (1) _____ (2) _____ (3) _____ (4) _____ (5) _____ (6) _____

Average Trigger Pull at End of Test: _____ Std. Dev. of Trigger Pull at End of Test: _____

Additional Notes and Comments

SEAR ENGAGEMENT SCREW BROKEN, PULLED FROM TEST.

SCREW WAS LOCKTITED, WHEN TRIED TO ADJUST SCREW HEAD BROKE

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

ET29996

TLW 0395
Project No. 241095

Page 2 of 2

S.A.A.M.I. JAR-OFF, DROP & 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	Fail	
Barrel Horizontal, Bottom of Stock Up :	Pass	Fail	
Barrel Horizontal, Left side of Stock Up :	Pass	Fail	
Barrel Horizontal, Right side of Stock Up :	Pass	Fail	
Barrel Vertical, Muzzle Up :	Pass	Fail	
Barrel Vertical, Muzzle Down :	Pass	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 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	Fail	
Firearm Vertical, Drop so Right side of Stock is Up :	Pass	Fail	

Notes: _____

Tester Initials: _____

ET29997