

# Test Lab Work Request Form

Date Submitted: 19 May, 1999	Tracking #: TLW 9142I
Project #: 241095	Engineer: SNEDEKER, J.R.
<b>Test Objective:</b> COMPLETE STANDARD S.A.A.M.I. DROP, JAR-OFF AND ROTATION TESTING ON EACH OF THE M/710 EET SAMPLE RIFLES SUBMITTED FOR EVALUATION ON 18 MAY '99.	
<b>Test Description:</b> <ol style="list-style-type: none"> <li>1. Perform standard procedure, S.A.A.M.I. Drop, Jar-Off And Rotation Testing on all submitted samples of M/710 EET rifles. Examine each rifle after each drop using standard S.A.A.M.I. procedures. Load chamber and close bolt over a fresh primed case for each drop, jar-off or rotation orientation. "Fire" the primed case after each drop to make sure the round did not fire when dropped.</li> <li>2. Use the standard forms for S.A.A.M.I. Drop, Jar-Off And Rotation Testing procedure for recording the results. In addition to the test results, and as a minimum, each data sheet should list the tester's initials, the date, the beginning and ending round level covered by that data sheet. Also, the "TLW..." number, the serial number of the firearm and the sample number and the ammunition type used when the malfunction occurred should be recorded on each data sheet.</li> <li>3. Due to the construction of the EET samples, the drop procedure may require modification. Before proceeding with this test, discussion should occur between the engineer, technician and testing manager to determine the proper methods to be used. <i>These guns were drop with the aluminum test stock. The 95. gun weight was approx. 12 lbs.</i></li> </ol>	
<b>Resource Usage:</b> Manpower Requirements - 1 technician Facility Requirements -	<b>Test Results Required:</b> Formal Report: Data Only: X REQUESTED Completion Date: 28 May '99
<b>Required Materials/Parts/Equipment (include quantities):</b> Approximately 120 rounds of standard .30-06 ammunition, with bullets and powder removed to make primed cases. 85 durameter rubber mat.	
<b>Test Parts Availability Date: 18 May '99</b>	
Start Date: 6/16/99 Completion Date: 6/16/99 Report Date:	Test Assigned To: Steve Wade 6/16/99

☐ INDEXED
 ☐ ASSIGNED
 ☐ SCHEDULED

ET09426

11.845  
12.090  
11.915  
12.045  
11.985

CONFIDENTIAL<sup>83</sup>

ET09427

TLW

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/99

Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start \_\_\_\_\_

Model No. M710 Serial No. X21052 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

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 _____

ET09428

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/99Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start \_\_\_\_\_Model No. M/710 Serial No. XC-1058 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

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"/>	_____

11.985 lbs

ET09429

TLW

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/99Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start \_\_\_\_\_Model No. M/710 Serial No. XC-1059 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

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 _____	Tigger locked will not function
Barrel Horizontal, Left side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail _____	Cycle bolt (OK)
Barrel Horizontal, Right side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail _____	indent mark on primer
Barrel Vertical, Muzzle Up :	Pass <input checked="" type="checkbox"/>	Fail _____	
Barrel Vertical, Muzzle Down :	Pass <input checked="" type="checkbox"/>	Fail _____	

ET09430

TLW

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/99Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start \_\_\_\_\_Model No. M/710 Serial No. XC 1055 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

*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 <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"/>	_____

12.04516s

ET09431

TLW

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/95Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start \_\_\_\_\_Model No. M/710 Serial No. XC-1062 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

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.

	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"/>	_____

11.915 lbs

ET09432

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/99Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start \_\_\_\_\_Model No. M710 Serial No. XC-1060 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

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 _____	Fail <input checked="" type="checkbox"/>	<u>Fired Primed Case</u>
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 _____	_____

12.090 lbs

ET09433



TLW

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91421

91243

24095

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/99Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start \_\_\_\_\_Model No. M/710 Serial No. KC-1054 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

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"/>	Sear retaining pin came out
Barrel Horizontal, Bottom of Stock Up :	Pass <input type="checkbox"/>	Fail <input checked="" type="checkbox"/>	
Barrel Horizontal, Left side of Stock Up :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed case
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 checked="" type="checkbox"/>	
Barrel Vertical, Muzzle Down :	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	

ET09434

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

Firecontrol No. \_\_\_\_\_ Firecontrol Type: \_\_\_\_\_ Date: 6/16/99Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type S&W Engagement at Start \_\_\_\_\_Model No. M/710 Serial No. XC-1057 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

*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 <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Up:	Pass <input type="checkbox"/>	Fail <input checked="" type="checkbox"/>	<u>Fired Primed Case</u>
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"/>	

11.845 lbs

ET09435