

## Test Lab Work Request Form

Date Submitted: 10 March, 2000

Tracking #: TLW 0010AT

Project #: 241095

Engineer: J.R.SNEDEKER

### Test Objective:

TLW0010AT- Extended SAAMI Jar-Off Test: (for Information only.)

With the intent to establish design margin this test simulates the abusive impacting (bumping) of the firearm against a hard surface with the firearm in a state of maximum readiness under conditions more severe than the SAAMI recommendations. This test will be performed on a sample of six (Phase II) (or the number available after performing the std. SAAMI tests) firearms.

### Test Description:

#### Method:

- With the firearm cocked and in the safety in the FIRE position the firearm shall be capable of withstanding jar-off shock equivalent to being dropped from a height of 6 inches, 18 inches, 24 inches, and 48 inches onto a 85-85 Durometer, Shore A, rubber mat, one-inch thick backed by concrete. The mat and concrete shall be large enough so that when the gun is dropped it will fall within the perimeter of the mat striking the mat once. The distance of drop will be measured from the test surface to the lowest point on the firearm. The primed case shall be discharged following the drop and a fresh primed cartridge re-chambered prior to the next drop. A "fresh" firearm may be substituted into the test at any point.
- The firearm or firearms shall be dropped in such a way as to cause it to strike the rubber mat surface in each of the following attitudes:
  - Barrel vertical, muzzle down.
  - Barrel vertical, muzzle up.
  - Barrel horizontal, bottom up
  - Barrel horizontal, bottom down.
  - Barrel horizontal, left side up.
  - Barrel horizontal, right side up.
- Tests shall be conducted with the trigger pull force set at the minimum force specified, with engagement set to the minimum specified, and with the firecontrol well lubricated with Rem-Oil.
- The test shall be conducted with the magazine or clip fully loaded with dummy cartridges and inserted in the firearm.
- Conduct this test at 6 inches, 18 inches, 24 inches, and 48 inches.
- Parts breakage or other damage as a result of drop testing does not constitute failure as long as the empty primed case does not fire and the firearm can be unloaded safely after each drop. More stocks are required than the amount of test guns to allow for breakage due to the drop testing. If a stock cracks - replace before continuing test.

PLAINTIFF'S  
EXHIBIT

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EXHIBIT

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ET07223

**Data required:**

- Record engagement and trigger pull
- Record whether or not the firearm fires an empty primed case of its designated cartridge when tested in accordance with this procedure.
- Record the round level on the firearm

**Resource Usage:**

**Manpower Requirements -**

**Facility Requirements -**

**Test Results Required:**

**Formal Report:**                      **Data Only: X**

**REQUESTED Completion Date:**

**Required Materials/Parts/Equipment (include quantities):**

**Test Parts Availability Date:**

**Start Date:** 9-12-00

**Completion Date:** 9-17-00

**Report Date:**

**Test Assigned To:** Jeff Wade

Steve Wade

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CONFIDENTIAL

ET07224

TLW 0010AT

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## EXTENDED JAR-OFF TESTING

Gun  
 Firecontrol No. B-24 Firecontrol Type: Standard Date:   
 Dry Cycles/Rounds Completed: Stock Type Syn Engagement at Start 0201  
 Model No. 710 Serial No. 71001025 Engagement at End 0226  
 Trigger Pull at Start of Test (1) (2) (3) (4) (5) (6)  
 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) (2) (3) (4) (5) (6)  
 Average Trigger Pull at End of Test: 4.83 Std. Dev. of Trigger Pull at End of Test:

Tester Initials: SW/JW

Additional Notes and Comments

Gun with open sights

## Specifications for Extended Jar-Off Test

Jar-Off Test: 6, 18, 24 & 48-inch drop onto 1/2 inch 85 durameter (Shore A Rubber Mat). 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.  
 all drops (safety in "Fire" position) - one drop per orientation.

Note: for Firearms with the ISS system installed - The ISS will be set in the unlocked position for all six orientations of the Jar-Off Test

## 6 INCH EXTENDED JARR- OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Fired primed case

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## EXTENDED JAR-OFF TESTING

12 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	<del>From Defect Log</del> Fired Primed Case

24 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

48 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input type="checkbox"/>	Fail <input checked="" type="checkbox"/>	Gun Fired - Trigger sear released

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## EXTENDED JAR-OFF TESTING

Gun No. B-25 Firecontrol Type: standard Date: \_\_\_\_\_  
 Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start 0195  
 Model No. \_\_\_\_\_ Serial No. 71001049 Engagement at End 0234  
 Trigger Pull at Start of Test (1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_ (5) \_\_\_\_\_ (6) \_\_\_\_\_  
 Average Trigger Pull at Start of Test: 3.88 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: 4.13 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

Tester Initials: SW/JW

Additional Notes and Comments

Gun with open sights

## Specifications for Extended Jar-Off Test:

Jar-Off Test: 6, 18, 24 & 48 inch drop - onto 1" thick 85 durameter (Shore A Rubber Mat) 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.  
 all drops (safety in "Fire" position) - one drop per orientation.

Note for Firearms with the ISS system installed - The ISS will be set in the unlocked position for all six orientations of the Jar-Off Test

'6 INCH EXTENDED JARR-OFF TEST

Orientation	ISS Unlocked	Comments
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/> Fail _____	
Barrel Vertical, Muzzle Down:	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 _____	Magazine came loose
Barrel Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail _____	Magazine came loose
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail _____	Fired primed case

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## EXTENDED JAR-OFF TESTING

19 INCH EXTENDED JARR-OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Fired Primed Case

24 INCH EXTENDED JARR-OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Fired Primed Case

48 INCH EXTENDED JARR-OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	

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## EXTENDED JAR-OFF TESTING

Gun No. B-26 Firecontrol Type: standard Date: \_\_\_\_\_  
 Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type syn Engagement at Start 0193  
 Model No. 710 Serial No. 71001025 Engagement at End 0150  
 Trigger Pull at Start of Test (1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_ (5) \_\_\_\_\_ (6) \_\_\_\_\_  
 Average Trigger Pull at Start of Test: 3.92 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: 4.13 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

Tester Initials: SW/JW

Additional Notes and Comments

Gun with open sights

## Specifications for Extended Jar-Off Test

Jar-Off Test: 6, 12, 24 & 48-inch drop onto 1/2" thick 85 durometer (Shore A Rubber Mat) Firearm ready to fire, Safe in "Fire" position, Fresh Primer Case in Chamber, Magazine loaded to capacity with Dummy Rounds. After each drop, fire Primed Case to verify firearm will still function.

all drops (safety in "Fire" position) - one drop per orientation.

Note: for Firearms with the ISS system installed - The ISS will be set in the unlocked position for all six orientations of the Jar-Off Test

## 6 INCH EXTENDED JARR-OFF TEST

Orientation	ISS Unlocked	Comments
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/> Fail _____	
Barrel Vertical, Muzzle Down:	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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail _____	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail _____	Fired primed case

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## EXTENDED JAR-OFF TESTING

18 INCH EXTENDED JAR-OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Fired Primed Case

24 INCH EXTENDED JAR-OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input type="checkbox"/> Fail <input checked="" type="checkbox"/>	Gun Fired

Trigger Pull 3.83 Engagement 0.212

48 INCH EXTENDED JAR-OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Magazine released - broke spot weld
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	



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**EXTENDED JAR-OFF TESTING**

Gun No. B-27 Firecontrol Type: Standard Date: \_\_\_\_\_  
 Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start 0203  
 Model No. 710 Serial No. 71001308 Engagement at End 0219  
 Trigger Pull at Start of Test (1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_ (5) \_\_\_\_\_ (6) \_\_\_\_\_  
 Average Trigger Pull at Start of Test: 3.83 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: 4.75 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

Tester Initials: SW/JW

Additional Notes and Comments

Gun with scope

Specifications for Extended Jar-Off Test

Jar-Off Test: 6, 18, 24 & 48-inch drop onto 1/2" thick 85 durometer (Shore A Rubber Mat) 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.

all drops (safety in "Fire" position) - one drop per orientation.

Note: for Firearms with the ISS system installed - The ISS will be set in the unlocked position for all six orientations of the Jar-Off Test

6 INCH EXTENDED JARR- OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>	<u>Comments</u>
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/> Fail _____	_____
Barrel Vertical, Muzzle Down:	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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail _____	_____
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail _____	Fired primed case

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## EXTENDED JAR-OFF TESTING

18 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	ISS Unlocked		<u>Comments</u>
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"/>	
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"/>	Plastic Insert Cracked - Replaced
Barrel Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

24 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	ISS Unlocked		<u>Comments</u>
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

48 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	ISS Unlocked		<u>Comments</u>
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

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## EXTENDED JAR-OFF TESTING

Gun No. R-22 Firecontrol Type: standard Date: \_\_\_\_\_

Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type Syn Engagement at Start .0207

Model No. 710 Serial No. 71001311 Engagement at End .0209

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

Average Trigger Pull at Start of Test: 3.79 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: 4.0 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

Tester Initials: SW/JW

Additional Notes and Comments  
Gun with scope

## Specifications for Extended Jar-Off Test

Jar-Off Test: 6, 18, 24 & 48-inch drop ~~against~~ thick 85 durameter (Shore A Rubber Mat). 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.

all drops (safety in "Fire" position) - one drop per orientation.

Note: for Firearms with the ISS system installed - The ISS will be set in the unlocked position for all six orientations of the Jar-Off Test

## 6 INCH EXTENDED JARR-OFF TEST

Orientation	ISS Unlocked	Comments
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/> Fail _____	_____
Barrel Vertical, Muzzle Down:	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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail _____	_____
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail _____	Fired primed case

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## EXTENDED JAR-OFF TESTING

## 18 INCH EXTENDED JARR- OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Front of Scope Bent
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Fired Primed Case

## 24 INCH EXTENDED JARR- OFF TEST

Orientation	ISS Unlocked	Comments
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Fired Primed Case

## 48 INCH EXTENDED JARR- OFF TEST

Orientation	ISS Unlocked	Comments
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>	Tightened Scope Mounts
Barrel Vertical, Muzzle Down:	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"/>	magazine released
Barrel Horizontal, Right side of Stock Up:	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, Bottom of Stock Down:	Pass <input type="checkbox"/> Fail <input checked="" type="checkbox"/>	Gun fired - Trigger sear released

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## EXTENDED JAR-OFF TESTING

Gun No. B-29 Firecontrol Type: Standard Date: \_\_\_\_\_  
 Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock Type: Syn Engagement at Start: 0116  
 Model No. 710 Serial No. 71001313 Engagement at End: 0192  
 Trigger Pull at Start of Test (1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_ (5) \_\_\_\_\_ (6) \_\_\_\_\_  
 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) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_ (5) \_\_\_\_\_ (6) \_\_\_\_\_  
 Average Trigger Pull at End of Test: 4.9 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_

Tester Initials: SW/JW

Additional Notes and Comments

Gun with scope

## Specifications for Extended Jar-Off Test

Jar-Off Test: 6, 18, 24 & 48-inch drop - only 1" thick 85 durameter (Shore A Rubber Mat) 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.  
 all drops (safety in "Fire" position) - one drop per orientation.

Note: for Firearms with the ISS system installed - The ISS will be set in the unlocked position for all six orientations of the Jar-Off Test

## 6 INCH EXTENDED JARR- OFF TEST

Orientation	ISS Unlocked	Comments
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/> Fail _____	
Barrel Vertical, Muzzle Down:	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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail _____	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail _____	Fired primed case.

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## EXTENDED JAR-OFF TESTING

18 INCH EXTENDED JAR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	front of scope bent
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

24 INCH EXTENDED JAR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
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"/>	
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

48 INCH EXTENDED JAR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Tightened Scope Mounts - Screws
Barrel Vertical, Muzzle Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	broken - 2 front screws - replaced
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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

TLW 0010AT

Project No. 241095

## EXTENDED JAR-OFF TESTING

Gun No. B-30 Firecontrol Type: standard Date: \_\_\_\_\_  
 Dry Cycles/Rounds Completed: \_\_\_\_\_ Stock type syn Engagement at Start 0186  
 Model No. 710 Serial No. 71001302 Engagement at End 0239  
 Trigger Pull at Start of Test (1) (2) (3) (4) (5) (6)  
 Average Trigger Pull at Start of Test: 3.42 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: 4.20 Std. Dev. of Trigger Pull at End of Test: \_\_\_\_\_  
 Tester Initials: SW/JW

Additional Notes and Comments

Gun with scope

## Specifications for Extended Jar-Off Test

Jar-Off Test: 6, 18, 24 & 48-inch drop onto 1" thick 85 durameter (Shore A Rubber Mat) 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.

all drops (safety in "Fire" position) - one drop per orientation.

Notes for Firearms with the ISS system installed - The ISS will be set in the unlocked position for all six orientations of the Jar-Off Test

## '6 INCH EXTENDED JARR-OFF TEST

Orientation	ISS Unlocked	Comments
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/> Fail _____	
Barrel Vertical, Muzzle Down:	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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/> Fail _____	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/> Fail _____	Fired primed case

ET07237

B-30

## EXTENDED JAR-OFF TESTING

12 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
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"/>	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 Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Front of Scope bent - Magazine released
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case Magazine released 83

24 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
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"/>	Magazine came loose
Barrel Horizontal, Left side of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Magazine came out of gun
Barrel Horizontal, Right side of Stock Up:	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, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case

48 INCH EXTENDED JARR-OFF TEST

<u>Orientation</u>	<u>ISS Unlocked</u>		<u>Comments</u>
Barrel Vertical, Muzzle Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Magazine released
Barrel Vertical, Muzzle Down:	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"/>	Magazine released
Barrel Horizontal, Right side of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Insect Cracked - Replaced
Barrel Horizontal, Bottom of Stock Up:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	
Barrel Horizontal, Bottom of Stock Down:	Pass <input checked="" type="checkbox"/>	Fail <input type="checkbox"/>	Fired Primed Case