## **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±5 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.

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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.

Test Assigned To: Jefs

• Record the round level on the firearm

Resource Usage:Test Results Required:Manpower Requirements -Formal Report:Data Only: XREQUESTED Completion Date:Facility Requirements -Example of the second second

Required Materials/Parts/Equipment (include quantities):

Test Parts Availability Date: Start Date: 9 - 12 - 00

Completion Date: 9-13-00 Report Date: