

Test Lab Work Request Form

Date Submitted: 10 March, 2000

Tracking #: TLW 0010AQ

Project #: 241095

Engineer: J.R.SNEDEKER

Test Objective:

TLW0010AQ - SAAMI Drop Test:

This test will simulate abusive dropping of the firearm from a distance of 48 inches onto a 1" thick 85 durometer (Shore A) rubber mat backed by concrete. Trigger Pull weight will be adjusted to minimum specification (3-½ lb.) The Trigger/Sear engagement will be set to the minimum specification (0.00"). Test will be performed according to SAAMI Technical Committee procedures. Magazine capacity will as well be according to SAAMI procedures. After each series of test, the primed case will be discharged to insure validity of test. This test will be performed on a sample of four firearms (for Phase I) and six firearms (Phase II) of .30-06 calibers only.

Test Description:

Method:

- With the firearm safety in the SAFE state, the firearm shall be capable of passing the below test criteria for drop testing from a height of four feet onto an 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 and come to rest without interference within the perimeter of the mat. The four feet shall be measured from the surface of the rubber mat to the center of gravity of the firearm. The center of gravity shall be determined to an accuracy of ± one inch by any recognized method for finding the center of gravity of an irregular shaped object. 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 strike the rubber mat surface once 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 lubricated as in the owner's manual.
- The test shall be conducted with the magazine or clip fully loaded with dummy cartridges and inserted in the firearm.

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- 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.

Data required:

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

Resource Usage:

Manpower Requirements -

Facility Requirements -

Test Results Required:

Formal Report: Data Only: X
REQUESTED Completion Date:

83

Required Materials/Parts/Equipment (include quantities):

Test Parts Availability Date:

Start Date: 9/10/00
Completion Date: 9/10/00
Report Date:

Test Assigned To: Steve Wndr
Jeff Wndr

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