

ORDNANCE DEPARTMENT

STANDARD RIFLE TEST

TEST I

- a. The rifle shall be disassembled and an examination made of all working parts.
- b. The number and names of all parts and the types of springs will be recorded.
- c. The weight of the rifle shall be recorded.
- d. The rifle will be photographed in various conditions of assembly and disassembly.

TEST II

The time, also the number and kind of tools required for each of the following operations will be recorded:

- a. To disassemble the rifle
- b. To assemble the rifle
- c. To dismount the breech and magazine mechanism, with the exception of the bolt and block
- d. To assemble the breech and magazine mechanism, with the exception of the bolt or block.

TEST III

Function fire the weapon 100 rounds to insure proper operation.

TEST IV

With the rifle clean and lightly oiled, magazine empty, mechanism closed, and muzzle end of the barrel covered with tape, it will be placed in the standard dust box, and will be exposed to a mixture of very fine sand and dust, agitated by means of a hand blower, for a period of two minutes. It will then be removed and may be cleaned by wiping with the bare hands or by blowing with the mouth. There will then be 20 rounds fired. The test will be repeated with the magazine charged while exposed to the dust.

TEST V

With the muzzle end of the barrel covered with tape, and the magazine charged, the gun will be submerged in a trough filled with mud. This mud should be of a semi-liquid consistency. The gun should then be turned over on the opposite side and the mud stirred over the gun. Fire complete magazine and one magazine charged with clean ammunition.

TEST VI

The gun will be given a standard rain test by directing a spray of water from a hose on to the breech end. The gun is to be fired for 300 rounds increment of 20 rounds with 10 minutes of simulated rain between increments, or until it fails to function. Only normal lubrication of the gun will be permitted prior to start of test.

TEST VII

Should the rifle be of such dimensions and construction as to accommodate a standard grenade launcher, there will be fired 10 anti-tank grenades with the rifle against the shoulder and 10 anti-personnel grenades with butt of rifle on ground of various hardness.

TEST VIII

The rifle will be fired 150 rounds at elevation of 45° and 150 rounds at elevation of -75° . Half of the firing in each case will be done with the rifle held loosely in the hands.

TEST IX

The instrumental velocity will be measured on 20 rounds.

TEST X

The rifle will be fired for accuracy, 3 targets of 10 rounds each at 100 yards and 3 at 300 yards, by an expert rifleman from bench rest. Firing will be for group only.

TEST XI

The rifle will be fired 4500 rounds for endurance at the rate of at least 15 rounds per minute for each 150 rounds. The barrel may be cooled and parts oiled without disassembly after each 150 rounds. The entire mechanism may be disassembled, cleaned, oiled, etc., after each 600 rounds. All malfunctions, breakages, and replacing of components together with the total firing time, the time for replacing or correction of parts, etc., will be recorded. The general working of the rifle will then be examined by the members of the board. The headspace will be measured after each 1200 rounds of the test. Breech bore readings will be taken before and after the endurance test. Trigger pull will be measured before and after the endurance test.

Of the 4500 rounds fired:

- a. 50 rounds will be fired with the gun held loosely in the hands.
- b. 75 rounds will be fired with the gun held right side down.
- c. 75 rounds will be fired with the gun held left side down.

TEST XII

Fire from the shoulder 20 rounds per minute until a serious stoppage occurs or until 150 rounds have been fired.

TEST XIII

The rifle, with barrel heated by firing, will be fired in the dark for observation of flash.

NOTE: Test of submitted rifle is to be discontinued when its performance in any one of the above phases does not equal or prove superior to that of the performance of the present standard rifle.

Copied by LJ
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