

Test Lab Work Request Form

Date Submitted: 10 March, 2000	Tracking #: TLW 0010AA
Project #: 241095	Engineer: J.R.SNEDEKER

Test Objective:**TLW0010AA - Basic Jack Function Test (to 200 Rounds):**

To get an early picture of the product's functional capability, a 200 round per rifle jack function test will be conducted. Five bullet types will be used, 40 round of each in each rifle to evaluate the potential for feeding problems. The test will be conducted in the test jacks with the "belly-protectors" in place and fully closed for each shot. All malfunctions and any unusual behavior will be noted on the data forms. The overall average of all sample rifles should be at or below 2-% malfunction rate. Up to two rifles from the sample of 15 are permitted to be removed from the averaging process if they have excessive malfunction rates relative to the remaining group of 13 samples. These rifles will be investigated by engineering to determine the probable source of the problem and engineering will provide written documentation for possible inclusion in the DAT report. No major mechanical failures are allowed in the test sample. Major mechanical failures are defined as those failures that cannot easily be repaired with simple tools and/or readily available replacement parts. At the conclusion of this test the firearms will be carefully examined for signs of excessive wear, especially with respect to the plastic components.

Test Description:**Method:**

- Check each rifle for the presence of the proof stamp(s) – do not shoot unless the stamp(s) are present.
- Check each rifle for headspace
- Draw ammunition from stores – See test manager for ammo types to be used for this test.
- Each tester to have five rifles for test at any given time.
- The muzzle of each rifle will be inserted into the shooting port and the rifle placed securely in the test jack before the rifle is loaded.
- Load the five rounds into the rifle, one in the chamber and four in the magazine, do not shoot single shot by hand-feeding single rounds into the chamber.
- Push the safe to the "fire" position, be sure that the barrel is far enough within the port hole so that the muzzle will stay in the port when the rifle recoils. If there is any question, re-adjust the jack into a better position.
- With the lid on the belly protector closed, fire the first round in the chamber, listen for any off-sounds, and be alert for any other unusual behavior.
- Open the bolt; eject the spent round, note any extraction or ejection problems.

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- Close the bolt to load the first round from the magazine into the chamber, note any feeding or stemming problems.
- Continue to fire the remaining rounds in the magazine until the last round is fired.
- Push the Safety to "On Safe" position, the safety will be pushed to the fire position at the start of every five round trial and will be pushed to the On Safe position at the end of every five round trial. Repetitive action of the safety lever on the trigger assembly side-plate needs to be determined.
- After firing twenty rounds (1 box of ammo) the rifle will be checked carefully for the presence of any live ammunition and if empty will be removed from the test jack and placed in the cooling rack. The safety will be in the "On Safe" position and the bolt will be unlocked and fully open at all times. Compressed air may be used, if necessary to cool the inside of the chamber area if the rifle is excessively hot from firing.
- All malfunctions will be recorded on the data sheets.

Data Required:

- Rifle serial number
- Tester's name
- Date of test firing
- The TLW#
- The ammunition used for the test with the ammo lot code number of the rounds actually used.
- Any malfunctions noted or other unusual items of note.

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:** 3-28-00**Completion Date:** 3-31-00**Report Date:** 7/29**Test Assigned To:** JESSIE ARNOLD

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