

M710 DAT Phase II –A Test
(10/25/00)

Introduction:

A number of issues were identified in DAT Phase II that resulted in design changes. The purpose of this test is to determine if design changes made satisfactorily solve those deficiencies. Successful completion of this test will give a green light for T & P build and test activity to commence. Some of these issues have already been tested. For instance the magazine box weld strength was increased through weld parameter optimization and then subsequently tested via a tensile test run in the Metallurgical Lab. More specifically this test will focus on the following:

- Locking lug cam surface geometry changes and effect on bolt opening/closing
- Bolt stop location and detent(stock) support changes
- 2 bolt plug designs will be tested
 - ✓ Design #1: DAT design with material changed to nylon
 - ✓ Design #2: New design with material changed to nylon
- Stock mold alterations to bring stock within model drawing (i.e. no shims)
- Permanent recoil lug attachment to the stock (shimmed and glued)

Test Samples:

Ten guns will be delivered. Five will have bolt plug design #1 and the remaining five bolt plug design #2.

Test Plan:

- 10 guns
 1. System operation/bench check
 2. Measure trigger pull
 3. Measure bolt opening and closing force
 4. Measure bolt stop opening and closing force
 5. Confirm proper fit between stock and receiver (no shims)
 6. Confirm permanent attachment of recoil lug to stock
 7. Headspace, Proof, Headspace
 8. 200 round jack function test (all 10 guns)
- 8 guns
 1. ISS abuse test
- 1 gun
 1. 500 round jack function test