

# Test Lab Work Request Form

**Date Submitted:** 10 March, 2000

**Tracking #:** TLW 0010S

**Project #:** 241095

**Engineer:** J.R.SNEDEKER

**Test Objective:**

**TLW0010S - Balance Point:**

Balance Point -- Phase II measurement. Establish the balance point for this firearm. (This measurement will also be used later for the SAAMI drop and Jar-Off tests)

**Test Description:**

Method:

- Using a right angle block from the metrology lab, invert the block to provide a "sharp edge".
- Close the action over an empty chamber and with the magazine empty
- Using two hands, carefully place the firearm in a horizontal orientation, over the edge of the angle block with the bottom of the firearm in the down position.
- Again, using two hands, one on each side of the block edge about one foot from the block edge front to rear, carefully place the firearm on the edge and attempt to locate the balance point.
- With the assistance of another individual, place a light pencil mark at the likely balance point. After removing the firearm from the edge, measure the distance to the breech face with the bolt in the closed position. (The position of the breach face was determined when the barrel length was measured. This location, that is, the breach face can be established by measuring the specific distance from the muzzle to outside of the receiver and marked accordingly. The distance from the balance point to this breach face mark is the location of the balance point.)
- Repeat this procedure for the following condition:
  - Using .30-06 dummy shells, place one in the chamber and four in the magazine, close the action and measure the distance to the bolt face.

Data Required:

- Record rifle serial number
- Record balance point with firearm empty
- Record balance point with firearm "loaded"

**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:** 12 Sept 00

**Completion Date:** 13 Sept 2000

**Report Date:**

**Test Assigned To:**

*V. Carson*

ET07052

Balance Point - TLW 00105

Empty.

Loaded.

B1 - 21 <sup>15</sup> / <sub>16</sub> "	22"	1074
B2 - 21 <sup>15</sup> / <sub>16</sub> "	22"	1346
B3 - 21 <sup>15</sup> / <sub>16</sub> "	22"	1070
B4 - 21 <sup>15</sup> / <sub>16</sub> "	22"	1338
B5 - 21 <sup>7</sup> / <sub>8</sub> "	22"	1340
B6 - 21 <sup>7</sup> / <sub>8</sub> "	22"	1328
B7 - 21 <sup>15</sup> / <sub>16</sub> "	22"	1333
B8 - 21 <sup>15</sup> / <sub>16</sub> "	22"	1333
B9 - 21 <sup>7</sup> / <sub>8</sub> "	22"	1063
B10 - 21 <sup>7</sup> / <sub>8</sub> "	22"	1069

22-141 50 SHEETS  
22-142 100 SHEETS  
22-144 200 SHEETS



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