

CONFIDENTIAL

Remington Arms Company Inc.  
RESEARCH & DEVELOPMENT TECHNICAL CENTER  
315 WEST RING ROAD

**TLW0683H - Measure Bolt Lift and Bolt Closing Forces :**

The force required opening the bolt and closing the bolt will be measured for each sample. Both of these forces will be taken with the chamber empty and then repeated, this time with a new dummy round in the chamber. There is not a specification for these forces and the readings will be taken for information only.

Method:

- After locating the rifle in the trigger pull fixture and securely locking in place, (it may be necessary to clamp the fixture to the bench if not already securely fixed in place), locate the hook of the force gauge at the point on the bolt handle just behind the ball.
- With the chamber empty, pull the trigger to release the firing pin. Using the Chatillion gauge, pull the gauge straight up and perpendicular to the bore, measure the force required to open the bolt.
- Lock the firearm in a horizontal position, using the trigger pull holding fixture, (i.e. shooting position) before taking the measurements.
- Take three readings for each gun in the sample.
- Record all readings.
- Repeat the procedure only this time rotate the bolt closed by pulling downward on the bolt handle.
- Note that it may be necessary to start the bolt closed by hand. A forward force may have to be applied on the bolt handle before bolt closing can be started so the firing pin head is depressed sufficiently to clear the notch and can then start up the cam surface of the bolt as the firing pin is cocked.
- Repeat the above procedure this time with a new, unused dummy round in the chamber.

Data Required:

- Rifle serial number
- Each of the three readings taken for each of the 4 states for each test sample
- The average of each set of three measurements per state

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TLW 0683

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