## CONFIDENTIAL

## Remington Arms Company Inc.

RESEARCH & DEVELOPMENT TECHNICAL CENTER
315 WEST RING ROAD
ELIZABETHTOWN, KY 42701

## M/710 Testing "Holeless" Connector and Tempered Scope Mount Screw Test

## Description:

Mayfield and E-town Firearm Design personnel proposed eliminating the hole in the connector for the M/710 since it serves no function in this model. This simplifies manufacture and results in a less expensive part. Mayfield and E-town Test jointly agreed on a 15 gun test where 8 rifles would be built in .30-06 caliber and 7 in .270 Win. Caliber. About this same time Mayfield had a need to test a heat treat change to the scope mount screws also used on the 710. It was decided to test both of these changes concurrently.

A test outline was agreed to that consisted of the following measurements and tests:

- Measurements as Rec'd (All 15 guns)
  - Trigger Pull (specific 4.0 5.5 lbs.)
  - o Engagement (spec. is .020 .025 in.)
  - Over travel (spec. is .20 + .025 iπ.)
  - Headspace
- Proof and Re-measure Headspace (All 15 guns)
- SAAMI Jar-Off, Drop Rotation (6 guns: 3 of each cal, chosen at random)
  - o Drop with scopes mounted (Use std. Screws)
  - Set fire controls to process minimums

TRIGGER PULL 4.0 lbs.
ENGAGEMENT 0.020 in.

- Extended SAAMI Jar-Off Only (same 6 guns) For Information Only
  - o Drop with scopes mounted (Use std. Screws)
  - Set fire controls to process minimums

TRIGGER PULL: 4.0 lbs. ENGAGEMENT: 0.020 in.

- 100 Rd. Jack Fen. Test (9 guns)
  - Shoot with scopes mounted on 8 guns, 9<sup>th</sup> gun has no scope mounted
    - Use special mount screws provided (tempered screws)
    - Use Loctite 222MS and torque screws to 15 20 in. lb.
  - Fire 100 rds/gun, heavy shooting jacks (any ammo-note what's used)
  - Track malfunctions
  - Pay special attention to fire control function and feel
  - © Cycle Safety from Fire to Safe every feeding cycle
  - Check Scope mount screws for tightness after firing 100 rds
    - Remove and inspect screws for cracks after firing

April: 02 – M.710 Testing – "Holeless" Connector and Tempered Scope Mount Screw Test;
R & D Technical Center Project No. 241230; TLW 0822
file: C:\Program\text{Program}\text{Tiles}\text{TCDECrackerLoaderREM\text{REMEmail}\text{rawblob}\text{20060119142156A00005246.doc}

Page 1
CONFIDENTIAL

S. FRANZ - But the above theman