REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington DUPONT PETERS DUPONT

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NBAR EXTRACTOR TESTING

Objective: To dry-cycle the NBAR extractor designs and the M/700 extractor 50,000 cycles and compare performance characteristics.

Goal: To improve upon the M/700's extractor performance, if possible.

Extractors Tested: M/700 rivetless design; NBAR 1st design, NBAR 2nd design

Method: R. Howe, Test and Measurement Lab, built a testing device that would deflect the extractor approximately .040", simulating the movement required when the bolt is closed over a round in the gun. The device then retracts and the springing action of the extractor returns the activating arm, simulating ejection of a round.

Results: NBAR 1st and 2nd designs went 50,000 cycles with no malfunctions or breakages.

M/700 Design

- At 8,000 cycles extractor stuck back and had to be freed.
- At 9,500 and 9,700 cycles approximately, extractor stuck again and had to be freed.

M/700 Design - cont'd.

- Extractor stuck again approximately every 50 rounds up to 10,048 rounds when the extractor was taken out of test.
- Extractor required a 4 lb. force to deflect it at the beginning of the test and 3-1/2 lbs. after testing was stopped.

HS:sps