

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



XC: File: NBAR

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

August 29, 1985

TO: J.W. Bower
R.S. Murphy

FROM: F.H. Smith

NBAR Firing Pin and Extractor

Firing Pin:

- o As I understand, the NBAR firing pin was designed to give faster lock-time. To achieve this, the hub and shoulder area was reduced from .250 length (M/700) to .125 length (NBAR) thus producing a lighter weight firing pin.
- o The recent testing showed that this design change did not effect performance.
- o A test request is in to measure lock-time and determine if indeed the NBAR design is an improvement.

Extractor:

- o The results from a test dated June 19, 1985, shows one of the reasons for the NBAR design. The M/700 extractor takes a "set" and becomes non-functionable over a number of cycles (10,000 in this test, when it was removed from test), where the NBAR designs functioned 50,000 cycles of .040" deflection without malfunctioning.
- o M/700 magnum extractors are again being riveted in because of breakages and malfunctions in the field. The NBAR has one standard design through all calibers with one assembly method.
- o Also during assembly of a NBAR there is no worry of over-stressing or pre-setting the extractor as there is with the M/700.

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Extractor: (cont'd.)

- o M/700 requires a complex undercut in the shroud, NBAR requires a through hole in the bolt head and a cross pin to retain the extractor.
- o The previous two changes make field replacement easier and more reliable.
- o NBAR extractor has more claw engagement than does the M/700.

The above improvements are why we have proceeded with these designs.

FHS:sps
Attach.