

cc: A.A. Hugick

**REMINGTON ARMS COMPANY, INC.**

INTER-DEPARTMENTAL CORRESPONDENCE

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CONFINE YOUR LETTER TO ONE SUBJECT ONLY

Ilion, New York  
May 14, 1971

*For Johnson  
check - file*  
*This would not be satisfactory for our  
OKP project. W*

TO: W.E. LEE C.B. WORKMAN

FROM: K.W. SOUCY

SUBJECT: XP-100 ALUMINUM RECEIVER

OBJECTIVE:

The objective of this test was to determine headspace advance due to cock and fire dry cycling.

SUMMARY AND CONCLUSIONS :

A summary of the results is shown in Fig. 1. A comparison to the current product cannot be made since information on headspace advance in steel receivers is not available.

EXPERIMENTAL DETAILS:

Conditions for the test were:

- (1) 50,000 cock and fire dry cycles. Bolt not retracted.
- (2) Lubricated dummy cartridge kept in chamber for full test.
- (3) Gun cleaned and lightly lubricated before test.
- (4) Headspace checked every 1000 rounds.

Headspace advanced from min. + .001" to min. + .004" during the 50,000 cycles. At 34,000 cycles, the bolt bound and the cam surface was found to be badly galled. It was filed and stoned, and testing was continued. Points of excessive wear showed up at spots where the bolt handle contacts the receiver.

KWS:sp  
Ilion Research Division

FIG. 1

