cc: J. W. Brooks
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File

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington (DUPONT) PETERS (DUPONT)

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

Ilion, New York
August 17, 1978

TO: C. B. WORKMAN

FROM: A. A. HUGICK

DATE: AUGUST 11, 1978

SUBJECT: LONG ACTION M/700 BDL STOCK – REINFORCEMENT STRENGTH

WORK ORDER: C 1803

INTRODUCTION:

Long action M/700 BDL stocks are reinforced with a threaded brass cross–pin in the wooden bridge forward of the trigger housing. Alternates to the brass pin are being considered for improving visual appearance and cracking strength. Production variations of brass cross–pin depth in current production stocks appear to affect stock cracking strength. This priliminary non-shooting evaluation was conducted by cracking the stock at the bridge with a static – slowly applied load application.

TEST OBJECTIVE:

Determine stock cracking strength performance of the reinforcement design stock samples.

TEST RESULTS & OBSERVATIONS:

1. The wooden dowel cross–pin with dark brown adhesive (resorcinol) design test sample produced the highest stock cracking strength load data, and is 1.2 times the brass pin load data.

2. The wooden dowel is a 3/16 inch – 4 fluted maple press fit assembly.

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TEST RESULTS & OBSERVATIONS: (Cont'd)

3. Two wooden dowels cross–pins failed in tension (separated) in the resorcinol adhesive design test sample. 1Z and 2Z.

4. The wooden dowel cross–pin with clear colored adhesive (elmer's glue) design test sample produced stock cracking strength load data lower than the dark brown adhesive sample and lower than the brass pin load data.

5. The fiberglass reinforcement samples indicated fiberglass material glue – joint separation on end grain location. This application on an inside radii pulls the fiberglass material away from the wood end-grain.

TEST RECOMMENDATIONS:

1. Prepare finish stock samples for visual and shooting evaluation test.

AAHugick:bd
Measurement/Test Lab
Ilion Research Division

Attached