

TEST AND MEASUREMENT LAB

TEST REPORT

REQUESTER: D. Findlay
 WRITTEN BY: D. Thomas
 DATE: 11/10/93
 WORK ORDER:
 REPORT NO.: 932792
 TEST TYPE: Function / Endurance
 MODEL: 522

CAL: 22

REASON FOR TEST:

To compare function and endurance characteristics of the experimental sear 2534 and experimental Firing Pin Spring 2475 to the current design.

EQUIPMENT REQUIRED:

Ten control Model 522's (SERIAL #'s)

3049628	3049627	3049655	3049655	3049786
3049641	3049745	3049785	3049748	3049656

Ten 522's with exp. sear 2534 & exp. firing pin spring 2475 (SERIAL #'s)

3049882	3049878	3049886	3049881	3049890
3049889	3049855	3049872	3049874	3049883

2000 rounds of each of the ammunition types listed.

Winchester	Remington	Federal	CCI
X22LR	6122	710	00052
XT22LR	1522	712	00033
X22LRH	1922		

TEST PROCEDURE:

Twenty guns were shot 100 rounds with each of the ammunition types listed above, for a total of 1000 rounds per gun.
 All malfunctions and breakages were recorded.

TEST RESULTS:

The malfunctions by group were as follows:

Malfunction	Control	Experimental
Fail to Fire (Stopped 2nd Sear)	30	131
Trapped Shell	10	65
Fail to Fire (poor hit)	6	51
Bolt Override	19	36
Don't Close Up	60	31
Stems Chamber	15	18
Don't Blow Back (Stopped 2nd Sear)	0	3
Fail to Fire (good hit)	2	2
Fail to Connect	3	0
Blown Case	1	0
Total	146	337
Total rounds fired	10000	9800
Malfunction rate	1.46%	3.4%

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RESEARCH TEST & MEASUREMENT LAB WORK REQUEST

Purpose for Testing:

<input checked="" type="checkbox"/> Developmental	<input type="checkbox"/> Design Change Eval.	<input type="checkbox"/> Ammunition Evaluation
<input type="checkbox"/> Design Acceptance	<input type="checkbox"/> Plant Assistance	<input type="checkbox"/> Cost Reduction
<input type="checkbox"/> Trial & Pilot	<input type="checkbox"/> Marketing Request	<input type="checkbox"/> Litigation Support
<input type="checkbox"/> Safety Issue	<input type="checkbox"/> Quality Evaluation	<input type="checkbox"/> Other

Types of Testing Requested:

<input type="checkbox"/> Intentional Abuse	<input checked="" type="checkbox"/> Endurance Testing	<input type="checkbox"/> Photography/Video
<input type="checkbox"/> Function Test	<input type="checkbox"/> Dry Cycle Testing	<input type="checkbox"/> High Speed Photography
<input type="checkbox"/> Accuracy Test	<input type="checkbox"/> Ammunition Testing	<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Measurements	<input type="checkbox"/> Environmental Testing	

Type Report Desired:

☐ Formal Written
☒ Informal Written
☐ Results only

Date Requested: 10 / 6 / 93
(dd / mm / yy)Date Needed: 11 / 6 / 93
(dd / mm / yy)Work Order No. to be
Charged for This
Testing: _____Name of Requester: D. Friday
Extension where you can be reached: JKK
Pager Number: 241

Firearm Descriptions:

Model(s): <u>522 exp.</u>	Model(s): <u>522 CONTROL</u>	Model(s): _____
Gage/Cal: _____	Gage/Cal: _____	Gage/Cal: _____
Barrel Type: _____	Barrel Type: _____	Barrel Type: _____
RAMAC #: _____	RAMAC #: _____	RAMAC #: _____
No. of samples: <u>10</u>	No. of samples: <u>10</u>	No. of samples: _____

Explain in DETAIL the reason(s) for conducting this test.

- what are we trying to learn?
- what will be the criteria used to judge the results?
- use back of sheet if more room is needed.

SHOOT 10 VAPERS WITH EXP
 SEAR 2534 + EXP SPRING 2475
 1000 RD ENDURANCE WITH VARIOUS AMM.
 TYPES. SHOOT ALSO THE CONTROLS
 THE SAME 1000 RDS.

TL-FORM # -001

Note: No firearms or parts will be tested
 in the Lab unless accompanied by a Work
 Request that is completely filled out
 along with the guns or parts that are to
 be tested. NO EXCEPTIONS

Date completed: ____/____/____

Completed By: _____

Report Completed: ____/____/____