

TEST AND MEASUREMENT LAB

TEST REPORT

REQUESTER: D. Findlay
WRITTEN BY: D. Thomas
DATE: 10/06/93
WORK ORDER:
REPORT NO.: 932791
TEST TYPE: Measurement
MODEL: 522

REASON FOR TEST:

To compare trigger pull and firing pin indent when various experimental parts are used.

EQUIPMENT REQUIRED:

Electronic force gage

Rimfire firing pin indent crushers (ANNEALED by Remington)

5 Model 522's with Magnesium Phosphate coated parts (Serial #'s)

3050467	3050980	3050970	3050995	3050554
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5 Model 522's with Zinc Phosphate coated parts (Serial #'s)

3050482	3050522	3050483	3050471	3050485
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10 2475 Firing Pin Springs

TEST PROCEDURE:

The 2475 Firing Pin Springs were assembled into the guns with Magnesium Phosphate and Zinc Phosphate coated parts.

Three Firing Pin indents and three Trigger pulls were taken on each gun.

ROW	C1	C2	C3	C4
1	7.7	7.8	0.0190	0.0180
2	8.2	7.8	0.0197	0.0183
3	7.6	8.0	0.0197	0.0183
4	8.3	8.6	0.0207	0.0193
5	7.5	7.4	0.0187	0.0190

MTB > describe c1-c4

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C1	5	7.860	7.700	7.860	0.365	0.163
C2	5	7.920	7.800	7.920	0.438	0.196
C3	5	0.01956	0.01970	0.01956	0.00077	0.00035
C4	5	0.01858	0.01830	0.01858	0.00054	0.00024

	MIN	MAX	Q1	Q3
C1	7.500	8.300	7.550	8.250
C2	7.400	8.600	7.600	8.300
C3	0.01870	0.02070	0.01885	0.02020
C4	0.01800	0.01930	0.01815	0.01915

MTB > aovoneway c1-c2

ANALYSIS OF VARIANCE

SOURCE	DF	SS	MS	F	P
FACTOR	1	0.009	0.009	0.06	0.820
ERROR	8	1.300	0.163		
TOTAL	9	1.309			

INDIVIDUAL 95 PCT CI'S FOR MEAN BASED ON POOLED STDEV

LEVEL	N	MEAN	STDEV
C1	5	7.8600	0.3647
C2	5	7.9200	0.4382

POOLED STDEV = 0.4031

7.50 7.75 8.00 8.25

ANALYSIS OF VARIANCE

SOURCE	DF	SS	MS	F	P
FACTOR	1	0.0000024	0.0000024	5.37	0.049
ERROR	8	0.0000036	0.0000004		
TOTAL	9	0.0000060			

INDIVIDUAL 95 PCT CI'S FOR MEAN BASED ON POOLED STDEV

LEVEL	N	MEAN	STDEV
C3	5	0.019560	0.000773
C4	5	0.018580	0.000545

POOLED STDEV = 0.000669

0.01820 0.01890 0.01960 0.02030

Test Request No. 932791

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 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 checked="" type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Measurements | <input type="checkbox"/> Environmental Testing | <u>TRIG PUL & INDEAT</u> |

Type Report Desired:

- ☐ Formal Written
☐ Informal Written
☐ Results only

Date Requested: 10/6/93
(dd / mm / yy)

Date Needed: 10/8/93
(dd / mm / yy)

Work Order No. to be
Charged for This
Testing: _____

Name of Requester: D. HEDLEY
Extension where you can reached: _____
Pager Number: _____

Firearm Descriptions:

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

TAKE TRIG. PUL & INDEAT
USING EGP. SPG 2475 WITH
MAG & ZINC COATED SCARS & F.A. PUL

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: ____/____/____