

Snedeker, Jim

From: Franz, Scott
Sent: Wednesday, November 01, 2000 5:26 PM
To: Bristol, II Ronald H.; Russo, Alfred D.; Trull, John C.; Golemboski, Matt R.; Zajk, Joseph J; Diaz, Danny; Keeney, Mike; Danner, Dale; Snedeker, Jim; Franz, Scott
Subject: M/710 T & P Plan

Importance: High

Attached is the final M/710 T & P test plan that we will execute to. Please review and get back if you have any issues or questions prior to test start. T & P activity will start this Friday with a Marketing evaluation of both product and packaging. T & P test and measurement activity will start Saturday.

Scott



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Snedeker, Jim

From: Franz, Scott
Sent: Thursday, November 02, 2000 8:54 AM
To: Golemboski, Matt R.; Zajk, Joseph J; Diaz, Danny; Keeney, Mike; Danner, Dale; Snedeker, Jim
Subject: 10 Gun Test Summary
Importance: High

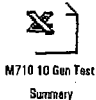
Attached are the summary results for the 10 gun test that was completed yesterday.

Results can be summarized as follows:(see attached file for specifics)

- 2 Bolt Handle Braze Failures
 1. One handle failed at 107 rounds during live fire testing
 2. The second handle failed during the bolt plug abuse test
- Trigger pulls not within Specification
- Followers sticking in magazine boxes
- Bolt stop detent Inconsistent
- Bolt Closing Force High
 1. Improved over DAT (Could not measure accurately)
 2. High closing force related to extractor operation (2 guns)

In addition our "albeit" limited test shows the new bolt plug design superior. Recommend T&P samples all have the new configuration. Call if you have any questions.

Scott



PROJECT# 241095
TLR 0344
ISS ABUSE TEST

GUN

OLD STYLE INSERT

- A-1 BOLT CLOSED EASILY WITH ISS LOCKED. NO VISIBLE DAMAGE.
- A-5 CLOSED BOLT WITH ISS LOCKED. NO DAMAGE VISIBLE.
- A-7 **CLOSED BOLT WITH ISS LOCKED. BROKE BOLT PLUG. DAMAGE VISIBLE.**
- A-8 **CLOSED BOLT WITH ISS LOCKED. BROKE BOLT PLUG. DAMAGE VISIBLE.**

NEW STYLE INSERT

- A-3 CLOSED BOLT WITH ISS LOCKED. NO DAMAGE VISIBLE.
- A-6 COULD NOT CLOSE BOLT ISS LOCKED. NO DAMAGE VISIBLE.
- A-9 CLOSED BOLT WITH ISS LOCKED. NO DAMAGE VISIBLE.
- A-10 COULD NOT CLOSE BOLT WITH ISS LOCKED. NO DAMAGE VISIBLE.

INSPECTED ALL BOLT PLUG WITHOUT VISIBLE DAMAGE USING STEREOSCOPE

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PROJECT# 241095
TLW 0344

GUN	TRIGGER PULL	Trial 1	Trial 2	Trial 3	AVERAGE
A-1		4.75	5	4.5	4.75
A-2		4.75	4.75	4.75	4.75
A-3		5.5	5.25	5	5.25
A-4		5.5	5.5	5.25	5.42
A-5		6	5.75	5.75	5.83
A-6		4.75	4.25	4.75	4.58
A-7		4.75	5	5	4.92
A-8		5.5	5.5	6	5.67
A-9		6	5.25	5.5	5.58
A-10		4.75	4.5	4.75	4.67

Overall Av
Std. Dev. =

CONFIRM PROPER FIT BETWEEN STOCK AND RECEIVER AND STOCK TO BARREL. NO SHIMS

GUN	
A-1	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS
A-2	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS
A-3	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS
A-4	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS
A-5	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS
A-6	OK
A-7	OK
A-8	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS
A-9	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS
A-10	STOCK, BARREL AND RECEIVER GAPS NOT UNIFORM BUT NOT EXCESSIVE NO SHIMS

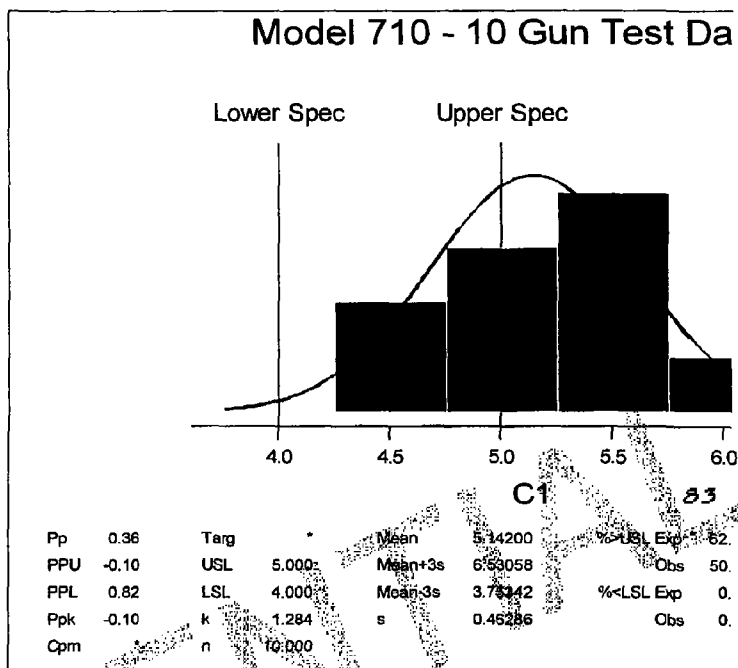
CONFIRM PERMANENT ATTACHMENT OF RECOIL LUG TO STOCK

RECOIL LUGS ON ALL 10 GUNS WERE PERMANENTLY GLUED TO THE STOCK.

GUN	HEAD SPACE	PROOF RDS	HEAD SPACE	@ 10 RDS.	BOLT OPEN w/DUMMY	
					Firing Pin-->	Cocked
A-1	MIN	1	0.001	0.002		4.23
A-2	0.001	1	0.003	0.003		3.43
A-3	0.002	1	0.002	0.003		2.48
A-4	MIN	1	0.002	0.002		3.89
A-5	0.001	1	0.002	0.002		3.38
A-6	0.001	1	0.002	0.002		3.26
A-7	0.001	1	0.002	0.002		2.97
A-8	0.001	1	0.002	0.002		3.28
A-9	0.001	1	0.002	0.002		3.16
A-10	0.001	1	0.002	0.002		3.70
					Avg.	3.38
					Std. Dev.	0.49

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g. =	5.14	lbs.
	0.4632314	lbs.



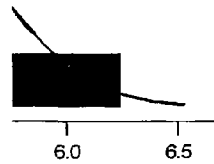
ING FORCE MEASUREMENTS (lbs.)		
w/o DUMMY	w/DUMMY	w/o DUMMY
Cocked	Uncocked	Uncocked
2.67	12.59	11.62
2.84	13.75	13.46
2.67	13.15	12.79
3.34	11.63	10.62
2.55	13.54	12.35
2.53	11.69	11.54
2.59	14.88	15.09
3.09	14.61	14.97
3.39	11.8	11.03
3.54	10.03	9.83
2.92	12.77	12.33
0.39	1.51	1.77

BOLT CLOSING FORCE MEASUREMENTS (lbs.)	
w/o DUMMY	
FORWARD FORCE	
38.70	
32.85	
35.45	
34.37	
34.82	
33.75	
32.94	
39.68	
30.59	
30.17	
34.33	
3.07	

Note: Could not get consistent closing force measu
Overall impression is that they close better than DA

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t Data



p	62.05	PPM>USL Exp	620498
s	50.00	Obs	500000
p	0.68	PPM<LSL Exp	6807
s	0.00	Obs	0

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rements.
T samples.

ET34354

PROJECT# 241095

TLW 0344

200 ROUND JACK FUNCTION TEST

GUN	AMMO	ROUNDS	
A-1	REM R30065 180GR	200	NO MALFUNCTIONS
A-2	REM R30065 180GR	107	BOLT HANDLE BROKE 107 RDS
A-3	REM R30065 180GR	200	NO MALFUNCTIONS
A-4	REM R30065 180GR	200	(6) STEM LOWS. FOLLOWER STICKING. FILED FOLLOWER NO MORE MALFUNCTIONS
A-5	REM R30065 180GR	200	NO MALFUNCTIONS
A-6	REM R30065 180GR	200	NO MALFUNCTIONS
A-7	REM R30065 180GR	200	NO MALFUNCTIONS
A-8	REM R30065 180GR	200	NO MALFUNCTIONS
A-9	REM R30065 180GR	200	(6) STEM LOWS. FOLLOWER STICKING. FILED FOLLOWER NO MORE MALFUNCTIONS
A-10	REM R30065 180GR	200	NO MALFUNCTIONS

* TESTERS REPORTED THAT THE BOLT CLOSING FORCE WAS VERY HIGH WHILE ROTATING THE OPERATING HANDLE DOWNWARD ON GUNS A-1 & A-7, THIS OCCURRED MOST OF THE TIME, BUT NOT ON EVERY CYCLE.

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Confidential - Subject to Protective Order
Williams v. Remington

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TLR 0344
ISS ABUSE TEST

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