Snedeker, Jim

From:

Franz, Scott

Sent:

Thursday, June 30, 2005 3:04 PM

To:

Norton, Vince; James, Will

Cc:

Snedeker, Jim; Reesor, Phillip K.

Subject:

FW: Re: Model 710 Short Action Test Plan

Importance: High

Sensitivity: Confidential

fyi

From: Franz, Scott

Sent: Thursday, June 30, 2005 2:25 PM

To: Bristol II, Ronald H

Cc: Millner, Tommy; Campbell, Don H.; Trull, John; Lance, Kevin D.; Diaz, Danny

Subject: RE: Re: Model 710 Short Action Test Plan

Importance: High Sensitivity: Confidential

		554	200	
M/710 SHORT ACTION DAT/T&P TEST PLAN				18 18 18 18 18 18 18 18 18 18 18 18 18 1
				Ammo
	353	FIRE.CONTROL	OPTIONS	Needed
TEST & MEASUREMENTS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Current 710	w/SPL	C710/SPL
Out of Box Inspection (All 3D Guns)	3. 1	X	X	
(Packaging, cosmetics, etc.) ুল্লী 👸 🖏	<u> </u>	Zereiyê y	X	
Preliminary Measurements & Tests (AIF30 Guns) 3		;3°≅ X	X	
Headspace/Proof/Headspace	-403' -403'	X	X	30 Prf/30 Prf
Check Chamber Dimensions, Bore, Broove, Twist R	ate	X	X	
Check Bolt Head and Barrel Hardness		Х	X	
Firing Pindhent Trigger Juli			X	
Trigger Full		X	X	
SPL Specific Measurements			X	
Slam Test - Guns			<u>X</u>	
Jack Function (Alt 30 Guns)		X	X	
200 rds /Gun w/Rem. and Competitive Ammo		X	Х	6,000 <i>i</i> 6,000
Acouracy (5 Guns/Caliber)		X	Х	
Three 5-Shot Groups/gun/arnmo (2 Ammo Types)		Х	Х	600/600
Thermal Testing (One Gun/Caliber)			Х	
Hot, Cold, Heat & Humidity			Х	0/900
Trigger Tests (One Gun/Caliber)			X	
SAMMI Test			Х	
Remington Test			Х	
Dynamic Dust & Debris			Х	
SAAMI Jar-Off, Rotation, Drop Tests (3 Guns/Caliber)		.243 Only	X	
Extended Function & Endurance		Х	X	
500 rd. Level (5 Guns/Caliber)		X	X	4,500/4,500
1 000 rd. Level (2 Guns/Caliber)		2 guns243 only	X	1,000,3,000
2 000 rd. Level (1 Gun/Caliber)			X	000,E\0

The above table shows two tests, one for the 710 SA with the current fire control and one if the SPL is used. With the SPL included there is a greater focus on fire control related testing.

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ET34766

Ammo Required 12,100/18,000

An X means that this test is to be done at the sample size listed to the left. Exceptions are noted. With the current fire control I would

only test the .243 Win. in the SAAMI Jar-Off, Drop and Rotation tests since this will be the heaviest version of the 710 made to date

Let me know if you have any questions.

Scott

From: Bristol II, Ronald H

Sent: Wednesday, June 29, 2005 6:52 PM

To: Franz, Scott; Trull, John

Subject: RE: Re: Model 710 Short Action Test Plan

Sensitivity: Confidential

I want a test plan assuming a spl fire control and a test plan assuming same fire control as now

thanks

From: Franz, Scott

Sent: Wed 6/29/2005 10:24 AM

To: Bristol II, Ronald H; Diaz, Danny; Lance, Kevin D.

Cc: Millner, Tommy; Campbell, Don H.; Trull, John; Norton, Vince; Snedeker, Jim; Reesor, Phillip K.

Subject: Re: Model 710 Short Action Test Plan

Ron,

As requested we have reviewed this program with Diaz's group and Mayfield and have put together a test plan to qualify this product for production. The short action utilizes the same parts as the existing M/710 with the following exceptions:

PART DIFFERENCES

- Magazine Box
- > Magazine Follower
- Magazine Box Bottom
- Receiver Insert
- Support Bracket
- SPL Fire Control
- Magazine Box Spacer

Changes to the stock tool will be required to add additional clearance for the safety arm/button and the fire control housing. The receiver real diameter that accepts the new insert will also be different (larger) than the existing M/710.

With these changes the main focus in testing will be accuracy (for the 3 new calibers), feeding, and then function, endurance and abuse testing due to the integration of a new fire control in the Model 710 action. Based on manufacturing methods to produce parts, the long tooling lead times, and the risk involved a combined DAT/T&P test was requested. I concur with this approach. Since this will also be a T&P class test we should still sample product from a larger pool. With three calibers Mayfield's plan to build 50 guns/caliber should be adequate. We will randomly select 10 guns of each caliber for our test for a total sample size of 30 guns. With that said the following tests are planned:

TEST & MEASUREMENTS

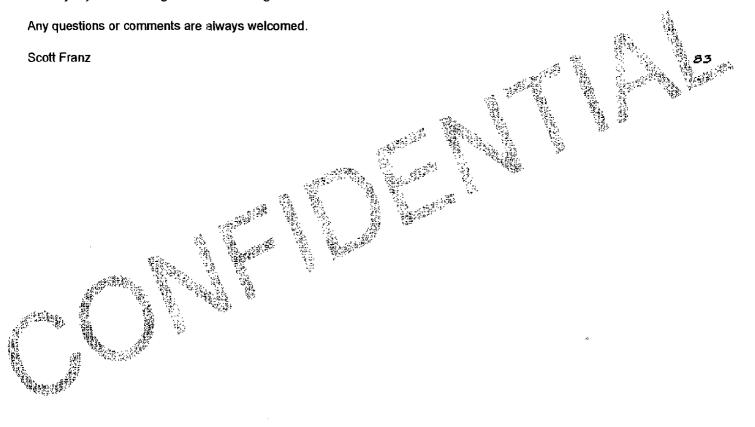
- Out of Box Inspection (All 30 Guns)
 - o (Packaging, cosmetics, etc.)
- Preliminary Measurements & Tests (All 30 Guns)
 - o Headspace/Proof/Headspace
 - o Check Chamber Dimensions, Bore, Groove, Twist Rate
 - Check Bolt Head and Barrel Hardness
 - o Firing Pin Indent
 - o Trigger Pull + other SPL Specific Measurements (Engagement, Over Travel, etc.)
 - o Slam Test 3 Guns
- Jack Function (All 30 Guns)
 - o 200 rds./Gun using Rem. and Competitive Ammo Types

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- Accuracy (5 Guns/Caliber)
 - o Three 5-Shot Groups/gun/ammo (2 Ammo Types)
- Thermal Testing (One Gun/Caliber)
 - o Hot, Cold, Heat & Humidity
- Trigger Tests (One Gun/Caliber)
 - o SAMMI Test
 - o Remington Test
 - o Dynamic Dust & Debris
- SAAMI Jar-Off, Rotation, Drop Tests (3 Guns/Caliber)
- Extended Function & Endurance
 - o 500 rds/Gun (5 Guns/Caliber)
 - o 1,000 rds/Gun (2 Guns/Caliber)
 - o 2,000 rds/Gun (1 Gun/Caliber)

Ammo requirements to support this testing is about 18,000 rounds split evenly amongst the three calibers. The main reason for the majority of this testing is due to the integration of the SPL fire control.



6/30/2005

Snedeker, Jim

From:

Franz, Scott

Sent:

Wednesday, June 29, 2005 10:24 AM

To:

Bristol II, Ronald H; Diaz, Danny; Lance, Kevin D.

Cc:

Millner, Tommy; Campbell, Don H.; Trull, John; Norton, Vince; Snedeker, Jim; Reesor, Phillip K.

Subject:

Re: Model 710 Short Action Test Plan

Importance: High

Sensitivity: Confidential

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PART DIFFERENCES

- Magazine Box
- > Magazine Follower
- Magazine Box Bottom
- > Receiver Insert
- Support Bracket
- SPL Fire Control
- Magazine Box Spacer

Changes to the stock tool will be required to add additional clearance for the safety arm/button and the fire control housing. The receiver rear diameter that accepts the new insert will also be different (larger) than the existing M/710.

With these changes the main focus in testing will be accuracy (for the 3 new calibers), feeding, and then function, endurance and abuse testing due to the integration of a new fire control in the Model 710 action. Based on manufacturing methods to produce parts, the long tooling lead times, and the risk involved a combined DAT/T&P test was requested. I concur with this approach. Since this will also be a T&P class test we should still sample product term a larger pool. With three calibers Mayfield's plan to build 50 guns/caliber should be adequate. We will randomly select 10 guns of each caliber for our test for a total sample size of 30 guns. With that said the following tests are planned:

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 - o (Packaging, cosmetics, etc.)
- Preliminary Measurements & Tests (All 30 Guns)
 - o Fleadspace/Proof/Headspace
 - Check Chamber Dimensions, Bore, Groove, Twist Rate
 - Check Bolt Head and Barrel Hardness
 - o Firing Pin Indent
 - o Trigger Pull + other SPL Specific Measurements (Engagement, Over Travel, etc.)
 - o Slam Test 3 Guns
- Jack Function (All 30 Guns)
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- Accuracy (5 Guns/Caliber)
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6/29/2005

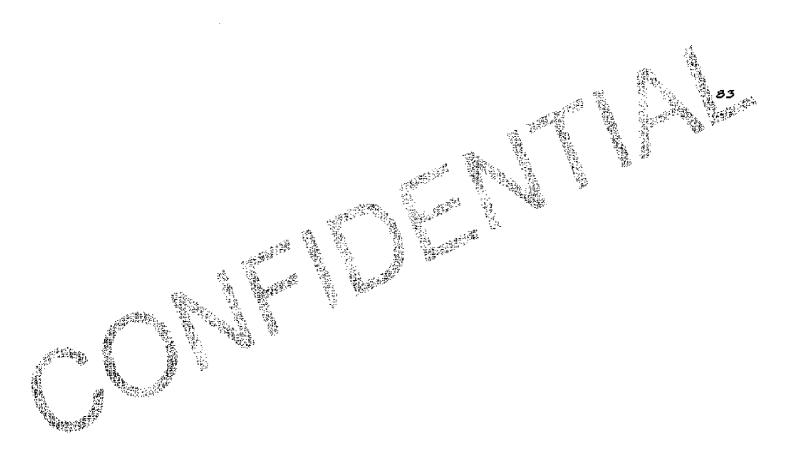
ET34769

- o 1,000 rds/Gun (2 Guns/Caliber)
- o 2,000 rds/Gun (1 Gun/Caliber)

Ammo requirements to support this testing is about 18,000 rounds split evenly amongst the three calibers. The main reason for the majority of this testing is due to the integration of the SPL fire control.

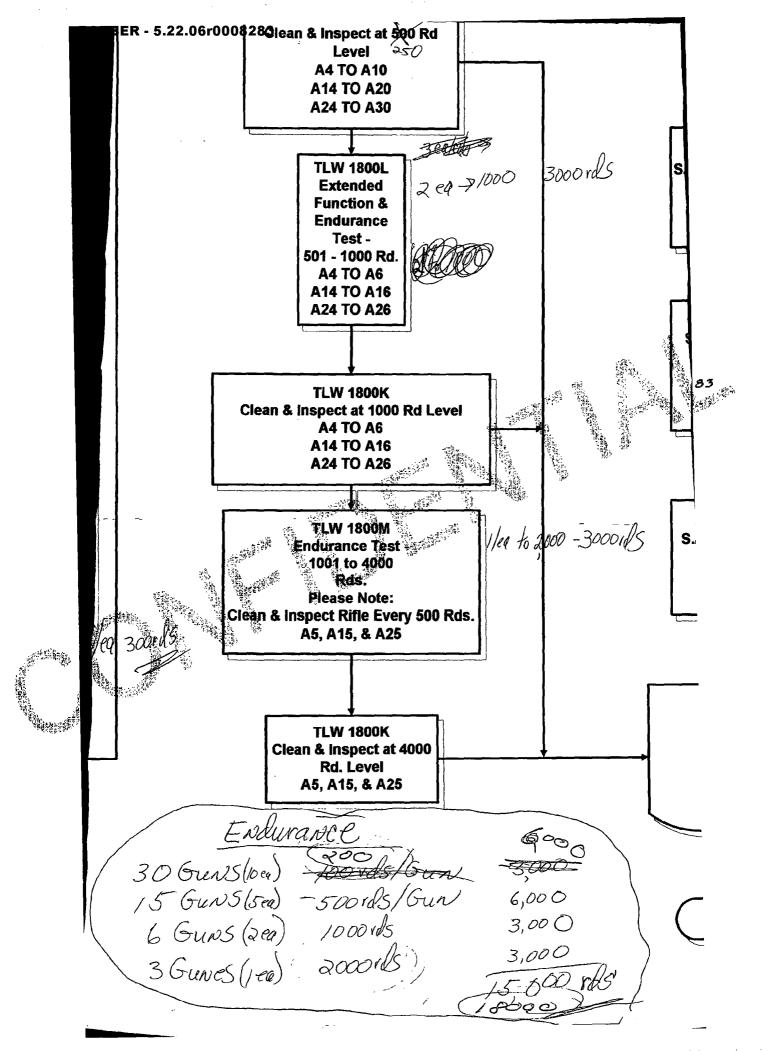
Any questions or comments are always welcomed.

Scott Franz



6/29/2005

ET34770



ET34771

Snedeker, Jim

From:

Franz, Scott

Sent:

Monday, June 27, 2005 8:37 AM

To:

Snedeker, Jim

Subject: Re: M/710 Short Action

Jim,

The following data was included in Mayfield's CAR for this product. Take a look, and then based on what is different in this new version put together what you think is a reasonable combined DAT/T&P test. Looking for a rough outline only then you and I can sit down to discuss. By tomorrow afternoon would be great. Then I'll have time to respond to Ron by Wednesday.

Thanks, Scott

Ammunition:

.308

5,000 rds.

\$1,128.00

.243

5,000 rds.

\$1,128.00 \$1,128.00

7mm-08 5,000 rds.

\$3,384.00

Barrel Process Development:

.308

100 pcs.

\$2,000.00

.243

100 pcs.

\$2,000.00

7mm-08

100 pcs.

\$2,000.00 ______**\$6,000.00**

Finished Guns:

.308

50 units

\$7,000.00

.243

50 units

\$7,000.00

7mm-08

\$7,000.00

\$**21,000.00**

Scott Franz

Manager Research & Technology

Remington Arms Co. Inc.

Research & Development Technology Center

315 West Ring Road

Elizabethtown, KY 42701

phone 270-769-7607

fax 270-737-9576

E-mail: scott.franz@remington.com

6/27/2005