
From: Boyles, Derek
Sent: Tuesday, January 13, 2009 6:04 PM
To: Norton, Vince
Cc: James, Will; Vicars, Gerald; Tipton, Don
Subject: RE: CURRENT 770 FIRE CONTROL
Attachments: Sfty.On_Off.Forces.xls

Vince,

Midstate Spring is the supplier of the detent spring. I made contact with them today. They do have access to music wire in .001" diameter increments down from the current .041" specified. Here is the contact information if you are interested in ordering prototypes:

John Kirby
 (315) 437-2623 x128
jkirby@midstatespring.com

On the same subject, see the attached graph showing the on/off forces of our assembly compared to Ilion, original DAT data, etc. The new F/C assembly has safety "off" forces that approximate the current F/C's safety "on" forces.

Regards,

Derek Boyles
Quality Engineer
 Remington Arms Company, Inc.
 22 Rifle Trail
 Hickory, KY 42051
 Phone: 270-856-4227
 Fax: 270-856-3233
www.remington.com

From: Norton, Vince
Sent: Tuesday, January 13, 2009 2:08 PM
To: Vicars, Gerald
Cc: Boyles, Derek
Subject: RE: CURRENT 770 FIRE CONTROL

I'm sure that then can be. I would say that the easiest thing to do would be to redesign the safety detent spring. Derek and I had talked about going down .001" on the wire diameter and see if we couldn't get some prototypes made. The spring that is in there now is the X-mark pro spring and would be nice if we could add-use it but if not then we can do a unique spring for this model. I think that the safety forces should be brought in line with current product.
 Vince

From: Vicars, Gerald
Sent: Tuesday, January 13, 2009 1:07 PM
To: Norton, Vince; James, Will
Cc: Boyles, Derek
Subject: FW: CURRENT 770 FIRE CONTROL

Vince,
 Can the required operational forces be brought into parity with existing fire controls? Is this acceptable? If not, what are our options?

Gerald Vicars
 Engineering Manager
 REMINGTON ARMS COMPANY, INC.

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From: Boyles, Derek
Sent: Tuesday, January 13, 2009 11:29 AM
To: Tipton, Don; Vicars, Gerald
Subject: FW: CURRENT 770 FIRE CONTROL

FYI...there is a big difference b/w current F/C and the new one. DAT test data from Oct '07 shows the safety on force at 3 – 5.8 lbs.

Regards,

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From: Norton, Vince
Sent: Monday, January 12, 2009 4:18 PM
To: Boyles, Derek
Subject: CURRENT 770 FIRE CONTROL

Here is data for safety on/off forces for 5 current model 770 fire controls. The new one is certainly higher; by more than 2x in some cases.

A								
Zero round level.			50 round level.			100 round level.		
	Off	On		Off	On		Off	On
1	1.82	4.02	1	2.26	3.90	1	2.34	3.94
2	2.06	4.52	2	2.26	3.96	2	2.34	4.08
3	1.86	4.02	3	1.82	3.94	3	2.14	4.22
avg	1.91	4.19	avg	2.11	3.93	avg	2.27	4.08

B								
Zero round level.			50 round level.			100 round level.		
	Off	On		Off	On		Off	On
1	1.80	4.82	1	1.74	4.06	1	2.52	4.28
2	1.70	4.06	2	2.16	4.72	2	2.34	4.14
3	1.76	4.02	3	2.12	4.14	3	2.24	4.16
avg	1.75	4.30	avg	2.01	4.31	avg	2.37	4.19

C								
Zero round level.			50 round level.			100 round level.		
	Off	On		Off	On		Off	On
1	2.48	4.68	1	2.20	4.36	1	2.10	4.80
2	2.10	4.62	2	1.76	4.70	2	1.86	4.66

3	1.88	4.72
avg	2.15	4.67

3	1.74	4.64
avg	1.90	4.57

3	1.86	4.86
avg	1.94	4.77

D**Zero round level.**

	Off	On
1	1.48	4.10
2	1.70	3.92
3	1.48	3.72
avg	1.55	3.91

50 round level.

	Off	On
1	1.70	4.16
2	1.74	3.96
3	1.66	4.30
avg	1.70	4.14

100 round level.

	Off	On
1	1.76	4.36
2	1.74	4.10
3	1.68	4.52
avg	1.73	4.33

E**Zero round level.**

	Off	On
1	1.52	4.10
2	1.70	4.30
3	1.58	4.10
avg	1.60	4.17

50 round level.

	Off	On
1	1.60	3.98
2	1.48	4.16
3	1.52	3.98
avg	1.53	4.04

100 round level.

	Off	On
1	1.72	4.42
2	1.76	4.48
3	1.70	4.50
avg	1.73	4.47

Vincent Norton

Sr. Research Engineer

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