

File: Conn Spring

E. I. DuPont de Nemours & Company  
Remington Arms Company, Inc.  
Ilion, New York 13357

Xc: J. F. Winske

June 6, 1988

TO: W. H. COLEMAN

FROM: H. C. MUNSON *Acting*

CONNECTICUT SPRING & STAMPING CO.  
RISK ANALYSIS OF MAKING A CLAIM FOR TRIGGER CONNECTOR COMPENSATION

Background

- o Cracked trigger connectors manufactured by Connecticut Spring may have been assembled into some M/700 rifles. This resulted in a trigger assembly replacement program with an estimated cost of \$1,81MM.
- o Connecticut Spring annual sales are about \$30MM.
  - Remington represents 1 1/2-2% of their sales.
  - Total firearms parts make up 8-10% of their sales.
  - DuPont's Electronics Department also represented about 1 1/2% of their sales in 1987, but this is decreasing rapidly due to offshore manufacturing.
- o Connecticut Spring has supplied millions of parts over many years to Remington.

Considerations in Determining What Action to Take

The main risk consideration is the potential loss of firearms sales if Connecticut Spring should decline to make parts beyond current commitments. This may be handled in advance by a white paper contract providing a "window of protection" for at least one year. Without assurance that the supplier is obligated to keep supplying parts against our releases, we would be foolish to risk a loss of supply. Connecticut Spring supplies parts that are used across our entire product line. Nearly all are single-sourced, including an 11-87 part for which no other potential sources have been found.

A "worst case" situation was analyzed, using gross approximations of time and expense required to find new suppliers for all these parts. As an order of magnitude, this effort would consume 7-8 man-months of engineering time, \$250,000 in tool costs, and 6-8 months elapsed time to account for initiation, tool build, development runs, approvals, and production time.

Recommendations

- o Establish a white paper contract with Connecticut Spring, providing assurance of supply for a minimum of one year at all times (for example, a two-year contract renewed annually).
- o Continue increasing our activity with Connecticut Spring through Engineering work on new parts and resolution of problems on existing parts.
- o Consider a gradual build-up of inventory of a few very difficult parts
- o Assess our position monthly to determine the best time to make a claim.
- o Determine the best team to visit Connecticut Spring for the purpose of initiating discussions on T.A.R.P. compensation.

Summary

We need Connecticut Spring as a partnership supplier. By increasing our communication and activity with them over the next 6-12 months, and by establishing a firm contract as we have with other suppliers, we can be in a much stronger position to negotiate sharing costs incurred as a result of defective M/700 trigger connectors.

I will proceed on this basis unless you feel differently.

CONNECTICUT SPRING - IMPACT OF CHANGING SUPPLIERS

Approximately 125 Remington parts are made by Connecticut Spring.

Approximately 3/4 (90) are active parts.

Of the 90, about 1/3 (27) are not coil springs.

Of the 27, 1/3 (9) would be very difficult to move, including the 11-87 gas cylinder spring which no one else will quote.

Assume the following costs and engineering time:

	<u>Coil Springs</u>	<u>Specials</u>
Tool Cost	\$500 - \$1000 (Use \$750)	\$3000 - 40,000 (Use \$8000)
Engineers Initial Time	1-2 Hrs.	1-2
Purchasing Time	1-2 Hrs.	1-2
Follow-Up	2-4 Hrs.	4-8
Scheduling Coord.	1 Hr.	1
Sample Approval (or not)	2-4 Hrs.	2-20
Purchase Order	1 Hr.	1 Hr.
	<u>8-14 Ea. (Use 10 Hrs.)</u>	<u>10-34 (Use 20Hrs.)</u>

Elapsed Time: Weeks

Elapsed Time: Months

Total Cost 63 (\$750) = \$47,250  
 Total Time Invested: 630 Hrs.

27 (\$8000) = \$216,000  
 540 Hrs.

Total	\$250,000 in Tooling
Our Engineering Time	1,200 Hrs. @ \$25/Hr. = \$30,000
Elapsed Time	6-8 Months