

Part II. Safety Detent Plunger Spring

The second part design studies was the safety detent spring. Part of the safety force is directly related to the spring pressure exerted on the plunger. The safety "off" force was sampled without the plunger spring and then compared to the existing spring with the help of computer analysis. Based on that analysis, a new design spring was developed and samples were made, assembled into fire controls, and tested. These new springs were tested without the revised angle on the detent plunger and safety lever. Results proved satisfactory and samples of the new spring and plunger were evaluated by dry cycle endurance testing. See Appendix 8.