

EXPERIMENTAL DETAILS

Part I. Investigation of Safety Lever and Detent Plunger Angle

Four angles on the detent plunger and safety lever were investigated to determine what effect the angle has on the functioning of the safety system. Each was tested using the current safety detent plunger spring to measure "safe on" and "safe off" forces. Results were as tabulated in Appendix 6. Based on the testing of several samples, the 100° angled detent system was selected for the final design. All further testing was conducted with this angle. Samples of fire controls were made and tested to see if the revised detent angle increased wear rate. Testing showed no increase wear and consistent forces. See Appendix 7.