

R.M.H. Walker

December 3, 1946

TO: P. B. Rutherford

FROM: M. H. Walker

SUBJECT: THEORETICAL UNSAFE CONDITION OF M/721 SAFETY

Straight calculation of the amount the Safety lifts the Sear off the Trigger gives a max. lift of .0147" and a min. lift of minus .0024". However, fourteen (14) different dimensions are used in the calculation. The actual amount of lift by statistical analysis would be a max. of .009" and a min. of .0032".

Objections have been raised to the above theoretical unsafe condition. According to L. T. Murphy, the necessary dimension changes on the Sear to eliminate this condition can be made without changes to tooling or gaging. With a minimum lap of .026" between Sear and Firing Pin head the change can be made by changing the depth of grind on the Sear notch.

This change will be incorporated in the drawing as soon as tool procurement is completed.

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