

CC: C. S. Gifford
N.R. Warden

Elion, New York, September 26, 1947.

TO: E. C. Hadley (20)
FROM: H. A. Brown
SUBJECT: MODEL 721 CLEARANCE - TRIGGER AND GUARD

RECEIVED
SEP 30 1947
W. L. CLAY

The standard currently set up for the clearance between the tip of the trigger and the guard bow is a minimum of .040", as per Products Committee Minute #6, dated 3-17-47.

We find that in actual production practice the build-up of tolerances which can affect this clearance is such that a variation from .010" to .100" is being obtained.

It is our opinion that a minimum clearance of .020" would be satisfactory due to the fact that the actual trigger movement in the fire control of this rifle is substantially less than in previous guns, other than target models such as the M/37. We recommend, therefore, that this minimum allowance be reduced from .040" to .020". The other alternative would possibly be the use of a thin washer between the guard and the trigger guide plate at the rear guard screw. It would be necessary to use this washer in the assembly operation, depending upon the actual clearance obtained from gun to gun. Present practice in the assembly room is to bend the guard bow sufficiently at this point to achieve this clearance. It is costly and alters the shape of the guard bow somewhat.

If the .040" min. clearance is considered essential, we would propose to provide washers for selective assembly to eliminate the need for alteration to the shape of the guard bow, and it would be necessary to review the process on all operations affecting this point, particularly the inletting of the Stock in an attempt to bring them under much closer control.

We are delivering two sample guns to W. L. Clay - one with .040" clearance and the other with .020" as recommended.

H. A. Brown
H. A. Brown
Manager, Arms Division,
Technical Department

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