

Movement of Model 700 Fire Control Holes resulting from Heat Treating

Objective: To determine if Heat Treating warps Model 700 Long Action receivers and how much, if any, this warping influences the position of the Fire Control Holes. In these tests the right rear fire control hole was used.

Test 1 Results: Measured Five Remington receivers from this Heat Treat batch.

Five receivers manufactured at our plant were measured before and after heat treatment.

- The position of the right rear fire control hole changed an average of 0.0013".
- The most extreme movement was 0.0016".
- The least amount movement was 0.0007".

Note: In this batch the distance from receiver centerline to the hole position (nominal 0.5200") got shorter after heat treat.

Test 2 Results: Measured Five Remington receivers from this Heat Treat batch.

Five receivers manufactured at our plant were measured before and after heat treatment.

- The position of the right rear fire control hole changed an average of 0.0034".
- The most extreme movement was 0.0065".
- The least amount of movement was 0.0011".

Note: In this batch the distance from receiver centerline to the hole position (nominal 0.5200") increased after heat treat.

Test 3 Results: Measured Eight Kerner receivers from same batch as Test 2.

Eight receivers manufactured by Kerner were measured before and after heat treatment.

- The position of the right rear fire control hole changed an average of 0.0019".
- The most extreme movement was 0.0077".
- The least amount of movement was 0.0004".

Note: In this batch the distance from receiver centerline to the hole position (nominal 0.5200") increased in seven of the eight receivers after heat treat.

CONCLUSION: Heat Treating the receivers causes the Fire Control Hole position to change and that the change seems to vary between different heat batches.

Terrence M. Kalka
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