

Ilion, New York
July 9, 1956

MODEL 40X - TARGET RIFLE

Trigger and Trigger Pull

There have been several characteristics reported in the form of customer complaints. One of the most prevalent has been variations in trigger pull and perhaps of less frequency is the complaint of growth in head space. Two rifles were obtained from regular production assembly and submitted to 50,000 cycles of dry firing. Checks were made on each rifle with respect to head space, intent, trigger pull, and safety or sear engagement. Also the ability of the fire control to maintain its uniform sear engagement.

On Rifle #1 the firing pin intent changed from .025" to .010", which in a target rifle would no doubt be considered unsatisfactory. Sear engagement remained OK and trigger pull remained within satisfactory limits. However, in Rifle #1 the head space developed at an alarming rate, having changed from .042" to .052" within the 50,000 cycles. In order to provide an artificial bolt head force for checking head space wear, a test device was provided with a rod inserted through the bore of the rifle and adjusted to provide a preload of approximately 35 lbs. Although this may not be identical to the bolt face load under actual shooting, it was perhaps more severe than normal and would provide a means for making comparisons. The trigger pull on Rifle #1 started at 3 lbs. 5 oz. and during the course of firing had a maximum pull of 3 lbs. 10 oz. and a minimum pull of 2 lbs. 11 oz. Sear engagement remained uniform.