

CENTER FIRE RIFLES - contd.MODEL 742X - AUTOLOADING CENTER FIRE - contd.

If the Model 1100 is the leader, what improvements are needed?
They are

- . Extended endurance with no breakage of major parts.
- . New appearance.
- . Lighter weight.

Basic improvement requires replacing the present off-center locking system which causes high stresses on firing and reduces part life. This was demonstrated with a large model. A full rotary locking system is required. However, to accommodate this system, the Receiver will be too long and too heavy. This appears to have been proven by Winchester with the long, aluminum Receiver on their Model 1400.

The Model 1100X has a rotary locking system and with the over and under lock the Receiver appears to be short. This was demonstrated with silhouettes of Model 1100, 1100X and Winchester Model 1400. The other features of the Model 1100X (all previously recorded) are a bonus received when solving the basic locking system - appearance problem.

The new spring gas lock system will function the gun mechanism uniformly with constant Bolt velocity. It is believed that this will eliminate the endurance problem of small parts breakage.

In summary:

- . The rotary lock is required to eliminate breakage of Receivers and Barrel Extensions.
- . The break-action is needed to accommodate the rotary lock and at the same time present an acceptable appearance and lighter weight.

83