

(Ilion Research Division presentation contd.)

MAJOR PRODUCT UPGRADING

Bolt Action Fire Control

Although Remington Bolt Action Rifles have Fire Controls that have been in the line for many years, and have proven themselves to be safe and reliable, it was felt that these designs should be looked at and analyzed in light of new processing technology and materials. With this in mind, the following items were investigated. (Slide A23)

1. Improved Trigger Pull
2. Cost Improvement
3. Standardization of Operation

Improved Trigger Pull

The present Triggers at times have a variation in poundspull that can be distracting to the shooter. It was felt that improvements could be made by improving surface finish of mating parts and by the use of better materials. Grinding of surfaces and plating of parts are being investigated. Some redesign for elimination of parts should also help this problem and will now be covered under cost improvements.

Cost Improvements

The first thing to be looked at under cost improvement was simplification of design so that as many parts as possible could be used by each of the various models.

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MAJOR PRODUCT UPGRADING

Cost Improvements - Contd. (Slide A24)

The design of the Model 700 and Model 600 Sear Safety Cam is being altered so that the same part will be used in both assemblies and models will be in test by the end of July.

(Slide A25)

Consolidation of design, if and where possible, is being looked at to help cut down on the number of parts. The Trigger of the Models 700 and 600 Fire Control can presently be adjusted for engagement with the Sear Safety Cam and for overtravel. It can also be adjusted for pounds pull when the Action is removed from the Stock. Designs have been altered and test models made to incorporate these features.

This slide shows the present Fire Control and a newly developed test model.

1. Fixed Sear and Trigger engagement

On the present Fire Control this is accomplished by adjustment of the Trigger Engagement Screw. On the proposed assembly, this is accomplished by a shoulder on the Sear that stops the Trigger and gives fixed engagement.

2. Fixed overtravel

On the present assembly, this is accomplished by adjustment of the Trigger Stop Screw. On the proposed model, a shoulder near the rear of the Sear Safety Cam will stop the Trigger overtravel.

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Cost Improvements - Contd.

3. Trigger externally adjustable

The adjustment of the present assembly is done with the Trigger Adjusting Screw and Spring after removing the Action from the Stock. The proposed Screw and Spring for adjusting pounds pull will be placed in the Trigger so that adjustment can be made without removing the Action from the Stock.

Another feature being tested in this new model is removal of the present Connector.

The first designs will be ready for testing by the end of July. These designs eliminate one screw, a Connector and two drilled and tapped holes. If materials being investigated for these parts do not prove adequate, more expensive material may be required. This could negate some cost improvements; however, improved function in creep and Trigger pull would help outweigh the cost disadvantage.

Standardization of Operation

Presently, all of our shotguns and some of our rifles can be unloaded with the Safe in the "ON" position. The rest of our rifles must be unloaded with the Safe in the "OFF" position. This is, and has been, a normal practice for years on rifles sold to the trade by all manufacturers. Research feels that Remington should offer the customer the option of being able to unload their Bolt Action firearms with the Safe in the "ON" position, while at the same time if possible, retaining the Bolt Lock condition. Designs have been developed and some models built for testing. They have been given to Marketing for their evaluation in order to decide which type of design the customer would prefer.

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Standardization of Operation - Contd. (Slide A26)

One model is a three-position Safety. The "OFF" Safety position is forward. The middle position is "ON" Safe and the Bolt is locked. The rear position is "ON" Safe but the Bolt can be unlocked.

(Slide A27)

The other model is a Bolt Lock mounted on the Bolt Plug. It is used in conjunction with the present two-position Safety. When the Bolt is closed and cocked, the Bolt Handle is locked in the down position. With the Safe in the "OFF" position, the Trigger can be actuated to fire the rifle and this will automatically unlock the Bolt so that it can be opened. To open the Action with the Safe "ON", the Bolt Lock Lever on the Bolt Plug must be depressed, while at the same time, lifting the Bolt Handle. This can be done easily with a natural motion of the hand and thumb.

Prototypes of these designs are now in test. It is anticipated that final designs will be ready for acceptance by December 1978.

Guns with each of these design features are on display boards and can be examined after the presentations.

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Because the autoloading shotgun market is such an important segment of the total industry, there has been heavy competitive pressure over the past few years. This can readily be seen in the quality and durability of our competitors' latest offerings. While we have not yet lost market share, the effects of the Browning 2000, Winchester SX-1 and Smith and Wesson 1000 will be felt.



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