

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



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file

Ilion, New York
June 2, 1976

To: W. E. Lee

From: J. P. Linde JPL

HIGH SPOT RUGER MODEL 77 BOLT ACTION ANALYSIS

The Ruger Model 77 Bolt Action Rifle was introduced in 1968. The rifle is based on the Mauser 98 design. Where the Mauser used forgings, the Ruger uses investment steel castings. The rifle is offered in two action lengths with a choice of 15 cartridges. The rifle is also offered with a choice of two receiver styles, one with integral scope bases, and another with a round top similar to the M/700.

The cartridge combinations, action lengths, barrel lengths, and Varmint barrel, options are very similar to what Remington offers. The Ruger 77ST (round top, with open sights), and 77R (integral base with 1" scope rings, no sights) retail for \$215.00, the same price as our Model 700 ADL.

Comparing our 700 ADL with the Ruger Model 77 features, we have the following list:

Ruger 77 Sales Features

1. Choice of round or integral base receiver.
2. Diagonal bedding system (front guard screw on angle to pull action down and back against stock recoil bearing pad).
3. One-Piece Bolt (one-piece casting, compared to our cast bolt handle brazed to the bolt body, our 700 bolt body joint is proven for reliability; no competitive disadvantage here).

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Ruger 77 Sales Features - Cont'd.

4. Military Type Extractor (they advertise its proven performance in military actions, and at the same time degrade our stamped spring extractor as being cheap and question its reliability. The fact is, it is reliable and gives us a recessed bolt head which greatly adds to the strength of the rifle.
5. Sliding Tang Safety (the Safety is in such a position that a live round cannot be loaded with the safe in the "on safe" position. The Safety locks the trigger similar to our shotgun Safeties).
6. Traditional or Classic appearing Stock:- The Stock has a pistol grip with a pleasing pistol grip cap, rubber pad, and hand cut checkered Stock. The Stock does not have the cheekpiece or Monte Carlo feature of the 700.
7. The gun has an externally adjustable Trigger for pounds pull (The pounds pull can be adjusted with an Allen wrench down to an advertised minimum pull of 2 pounds).

The Ruger 77 has the following features which the 700 ADL does not have for the same retail price:

1. Hinged floor plate
2. Cut checkering
3. Half-inch recoil pad
4. Quick release swivel studs
5. Optional iron sights or scope rings

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The Remington 700 ADL has the following features the Ruger 77 does not have:-

1. Strong Action - 3 rings of steel
2. Jeweled anti-bind bolt
3. Low profile positive thumb safety
4. Monte Carlo Stock with cheekpiece
5. Checkered bolt handle

The Ruger 77 has no manufacturing breakthroughs in its processing. The major parts are investment cast steel; these include the receiver, bolt stop, trigger, sear, trigger housing, safety lever, follower, bolt, extractor, and trigger spring stop. The floor plate trigger guard and floor plate swivel are aluminum die cast parts.

Conclusions

The overall workmanship, function, and appearance of the Ruger 77 are no better than the 700 ADL. The Ruger does offer more features for the same price, such as, the cut checkered stock, recoil pad, and hinged floor plate.

The most noticeable difference is in the stock design. The Ruger has a classic style stock with a dull finish whereas the Remington 700 ADL has the cheek piece Monte Carlo stock with the high lustre RK-W finish.

The Ruger has no major process innovations with the majority of its construction being made from investment castings.

J. P. Linde/nl
Ilion Research Division

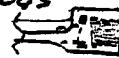
17 V5 22
RUGER 11.77

RECEIVER - MACHINING OPERATIONS

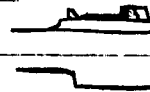
- ① MACHINE FRONT OF RECEIVER
CASTING SQUARE



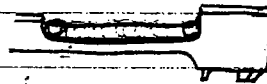
- 2 - DRILL & TAP BARREL NUT & FACE LOCKING LUGS



- 3 - MILL FLAT - BOTTOM FRONT



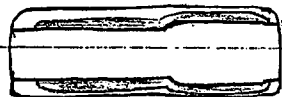
- 4 - MILL BOTTOM OF EJECTION PORT
FULL LENGTH



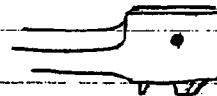
- 5 - DRILL & TAP TAKE DOWN SCREW
HOLE



- 6 - PROFILE BOTTOM SURFACE OF
FEED RAIL



- 7 - DRILL & REAM GAS ESCAPE HOLE -
RIGHT FRONT SIDE



- 8 - MILL REAR LOCKING SURFACE

- 9 - MILL BOLT PLUG CLEARANCE IN TANG



10- MILL STRIATIONS



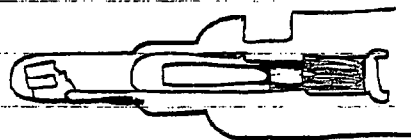
11- END MILL SAFETY ROD CLEARANCE



12- MILL FLAT BEHIND TRIGGER SLOT



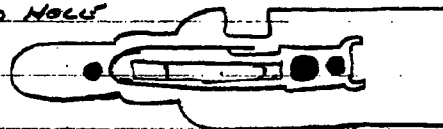
13- MILL FLAT AHEAD OF TRIGGER SLOT



14- DRILL & TAP REAR TAKE DOWN SCREW

HOLE & TRIGGER GUARD SCREW HOLE - FRONT

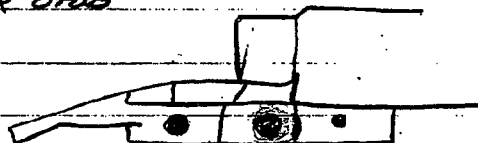
& DRILL & REAM TRIGGER ASSEMBLY STUD HOLE



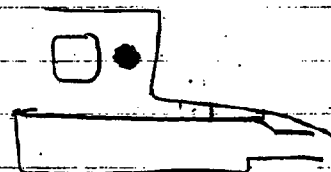
15- DRILL, CROSS & REAM SEAR PIN HOLE, FRONT FACE, DRILL,

& REAM SAFETY HOLE; & DRILL & REAM TRIGGER STUD

CROSS PIN HOLE



16- DRILL & TAP BOLT STOP SCREW HOLE



17- DRILL SEAR SPRING DETENT

