

REMINGTON ARMS COMPANY, INC.

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October 7, 1955

RECEIVED  
OCT 11 1955  
A. A. RIEHL

TO: A. A. RIEHL

FROM: DAN CARROLL

SUBJECT: VISIT TO ILION - MODEL 40X RIFLE

A meeting on the Model 40X rifle was held at Ilion to discuss complaints and suggestions picked up at Camp Perry this year. Supervision and Engineering members of Product, Process, Quality and Assembly were present.

The following topics were discussed and their disposition was decided as follows:

EXCESS WOOD MARGIN AROUND BUTT PLATE -- This could be due to swelling of wood after sanding to size, and following a humid spell could, until drying out, be excessive for a while.

LOOSE TRIGGER ADJUSTMENT SCREWS -- Failure of sealing material to adhere to screw head and trigger housing. A longer screw to be flush with edges of trigger housing will be used to enable staking of screw to hold permanent setting on assembly.

RECEIVER FILLER PIECE CAUSING ROUGH BOLT OPERATION -- A recent design change in this part has eliminated this fault and has been in assembly for a few days prior to this meeting.

BOLT STOPS STICKING IN DOWN POSITION -- This is due to battering by the bolt and raising a burr on the stop and wedging down in the bolt stop cut in the receiver. A heat treatment of this part will be done to toughen the metal and prevent further troubles in service.

CREEPY TRIGGER PULLS -- This had been found to be due to a radius on the sear engagement corners where they should have been square and sharp. Will be corrected by insuring that these parts are to specification.

INTERFERENCE OF UNERTL REAR TELESCOPE MOUNTS AGAINST REDFIELD REAR SIGHT BASE -- A clearance angle cut on the top inside corner of the Redfield base would prevent this and could be done by the sight maker. Will be investigated and recommendations made to clear up this matter.

REAR TELESCOPE BLOCK NOT CENTERED ON RECEIVER -- This will be corrected by using enlarged screw heads that will fit snugly in the counterbores and prevent lost motion and incorrect assembly.

BOLT HANDLE FLIPS WHEN DRY FIRING -- This trouble does not occur when snapped on a live or dummy round, and is not a fault while shooting, but at Camp Perry our competitors focused attention on this detail as they point out that their Model 52 does not do this, and that they consider it a source of poor accuracy and inspect it out of their rifle. This will be investigated for possible cure.

SAFETY LOCK, HARD OPERATION -- All rifles in the warehouse and all in assembly have been corrected. There should not be any further complaint on this item. At the meeting, the question was asked if there was a real need for a safety on this model of rifle, and it was pointed out by several speakers that the use of a safety is expressly forbidden in matches, and that the only safe rifle is an open and unloaded rifle. There would be a saving of about 50% on each rifle, and an unsightly cut in the stock could be left out if the safety was not fitted. This should be a matter for the Operations Committee to discuss at some other date.

STANDARD BARREL 40X SIGHT BASES -- Recently the writer test fired a Model 40X Standard barrel to check out our advertised feature of one sight plane for both metallic and telescope sights. It was found that the front scope block was so low that the lowest possible scope setting at 50 yards was 13½" too high....also, the metallic sight front base was too low to meet the above requirements. This fault had also been found and corrected at Iion and all guns in the warehouse were refitted with the proper bases. It is estimated that only about 11 guns have been shipped that may not be fitted with the proper blocks.

BARREL CONTOUR ON MODEL 40X STANDARD -- At a place about 4" from the receiver, there is a notch in the barrel profile where the contours do not blend smoothly. This will be investigated and corrected as the fault may be in the contour former of the barrel turning operation.

LOOSENING OF FRONT SWIVEL FITTING WHEN UNDER STRAIN FROM THE SLING -- This was thought to be due to one of two things: (1) That the

swivel loop washer was so hard that the shakeproof washer would not bite into its surface, and that a softer heat treatment would correct. (2) That the wood margin of swivel base and stock was too great and that the wood was crushing under the strain and permitted the fitting to turn. These two causes will be investigated for correction.

FRONT GUARD SCREW TOO SHORT -- The writer has found that in taking down some of these rifles, that the 721 front guard screw had been used instead of the longer 722 that should have been fitted. Will be checked in assembly for correct screw.

THIN BLUEING AND GRAINY APPEARANCE OF BARREL -- It was said at Camp Perry that this compared to the Winchester finish of the past few years and that was not considered to be the equal of ours up until the present. While not a complaint, it was a slanted reflection on the quality of the Model 40X. Several speakers said that this coloring and finish had been approved at Bridgeport and accepted for production. Also, it was said that the former coloring process spoiled the accuracy of too many barrels and the new process was much better from that standpoint. The grainy surface appearance will be investigated to see if the polishing operation is carried out according to specification.

BEDDER ADJUSTMENT SCREWS -- Several complaints from the field indicate that the electric lamp device for setting the bedder does not function. This is due to the browning oxide on the barrel and bedder screws having an insulating quality, and all that is required to clear this trouble is to run the screws up against the barrel several times to cut through the coloring oxide, and no further trouble will be had. This will now be done during assembly of the gun, and will correct this trouble immediately.

SHARP EDGES ON RECEIVER -- The Army complained of this at Camp Perry, and several of the civilian competitors. It was said at the meeting that the same specifications for the 721 and 722 were used on the Model 40X and that they were considered to be satisfactory. However, on a visit to the assembly room, the comparison was made and the Model 40X corners were not removed to the same degree as they were on the 721 and 722. This will be corrected to specification.

BUTT PLATE -- The non-slip butt plate on the Model 40X does not have the Remington name on it as do all our other guns. It was thought that it may be desirable to have the vendor put our name on this plate instead of their own as the quantity is sufficient for this purpose.

TRIGGER, FINGER PIECE -- When the Army tried out the Model 40X at Camp Perry, several of the officers found that their trigger fingers went through the guard too deeply, and that they were pulling the trigger with the fleshy part of their finger below the second joint. Several field complaints have said the same. It was discussed that advancing the finger piece about 1/4" forward would give a much better trigger control and correct this matter. This will be tried experimentally for possible recommendation.

*Dan Carroll*

Shooting Promotion Section

DC:mmm