

PROCEDURE FOR MEASURING FIRING PIN INDENT AND TRIGGER PULL  
ON

RIMFIRE RIFLES (PUMPS, AUTOLOADERS, & BOLT ACTIONS)

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I. METHOD: RIMFIRE FIRING PIN INDENT CRUSHER AND HOLDER

A. Equipment Needed (Fig. #1)

- Rimfire Copper Crusher Cylinders (annealed)
- A pedestal mounted dial indicator, graduated in .005" of an inch.
- Deburring Plate
- Rimfire crusher holder
- A small file
- Trigger Pull Scale
- .22 Caliber cleaning rod and felt patches
- Test Procedure Sheet

Fig. No. I



B. Procedure

- I. Thoroughly clean the chamber of all residue or lubrication. Use a felt patch and a cleaning rod to do this.
2. Place the firearm into the gun saddle and put the safety switch to the "ON" position. ("S" position for the Bolt Actions)

B. (CON'T)

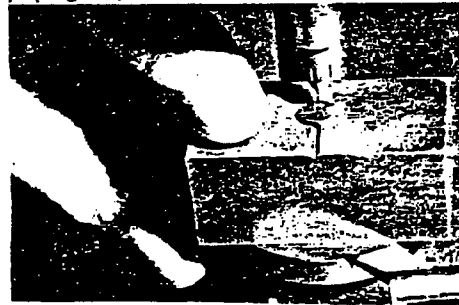
3. Take a copper crusher and rub the rimmed end on the deburring plate until a bright copper color appears. When this occurs, the crusher is deburred. (Fig.#2)

Fig. No. 2



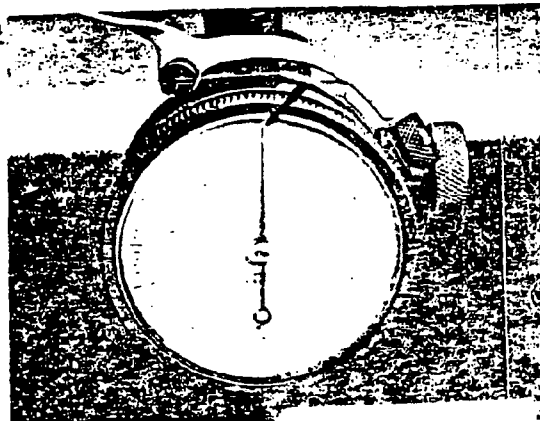
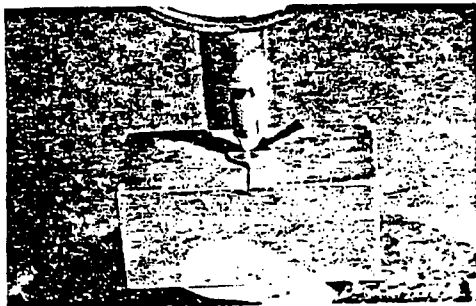
4. Place the crusher into the rimfire crusher holder and put the assembly onto the platform of the dial indicator. (Be sure that you insert the crusher into the holder with the grooved face of the holder facing up.) (Fig.#3)

Fig. No. 3



5. Lower the stylus onto the center of the crusher. Gently move the crusher holder in a circular motion to seat the stylus properly. Now adjust the dial on the indicator face plate until it reads "0". (Fig.#4)

Fig. No. 4



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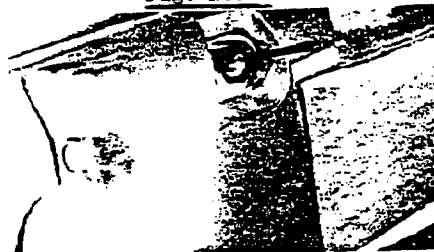
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6. Now that the indicator has been calibrated to the crusher, \* REMOVE the crusher and place it into the chamber of the rifle. Make sure that the rim of the crusher is seated against the chamber face. (Figs. #5, #6)

Fig. No. 5



Fig. No. 6



7. Slowly close the bolt. Be sure that the bolt is fully closed and/or locked up. On:

- Autoloading Rimfires there is no locking system. This means that the bolt doesn't lock into position. In this case you must make sure that the bolt is fully closed to obtain an accurate indent measurement. (Fig. #7)
- Bolt Action Rimfires, the bolt handle must be locked down. (Fig. #8)
- Pump Action Rimfires, the disconnecter must be in its' down position, protruding below the bow of the trigger guard. (Fig. #9)

Fig. No. 7



Fig. No. 8



Fig. No. 9



- \* If the rimfire is an autoloader, be sure to hold a thumb securely on the bolt handle to prevent an injury to the fingers if the bolt prematurely closes.

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7. Put the safety switch into the "OFF" position.  
(Bolt Actions to the "F" position)
8. Slide the red indicator to "0" pounds on the trigger pull scale.
9. Place the hook of the scale onto the trigger. Let the trigger rest in the well of the hook.  
(Fig.#10) Hook the trigger so that the scale runs along side of the left pannel of the stock.  
(Fig.#11)

Fig. No. 10

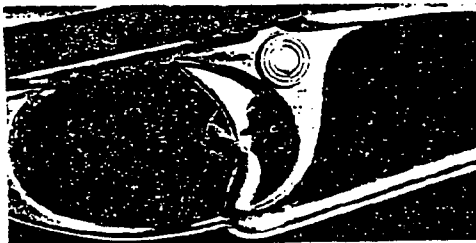
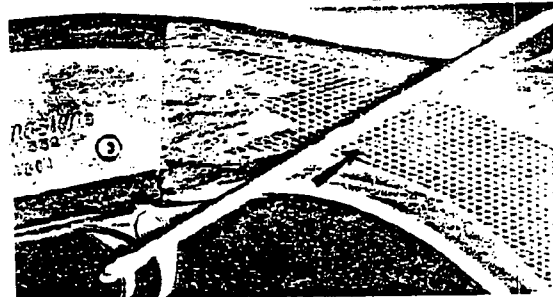
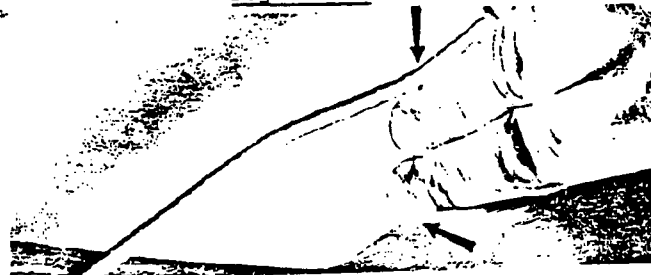


Fig. No. 11



10. Position your index and middle fingers on top of each other and place them on the comb of the stock. Now rest the pull scale over the two fingers.  
(Fig.#12) This is called "The Two Finger Method of Measuring Trigger Pull".

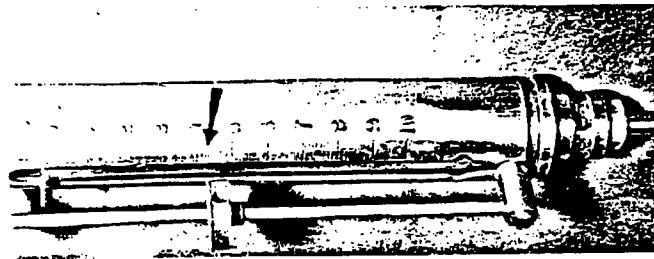
Fig. No. 12



- II. Now grasp the handle of the pull scale and slowly pull it rearward. When you hear the hammer (or striker) fall, "STOP" pulling on the scale. Unhook the scale from the trigger. Be careful not to pull on the scale when you remove it from the trigger, this may cause the indicator to move and give you a false reading. Where the flat of the red indicator stops, is the measured trigger pull in pounds. The pull scale is graduated in grains & pounds. In figure #13, the trigger pull is "4.25lbs.". Record this on the Test Procedure Sheet, under Trigger Pull. This is the first of three trigger pulls to be measured.

B. (CON'T)

Fig. No. I3



- I2. After you have recorded the trigger pull, open the action and remove the crusher. The best way to remove the crusher is by pushing the .22cal. cleaning rod down the bore from the muzzle end. This will push the crusher out into the receiver port area.
- I3. Inspect the indent area of the crusher. You will notice that the indent blow deforms the rim of the crusher directly below the indent. (Fig.#I4) This is a common occurrence when measuring rimfire indents. To compensate for the deformity, the crusher holder has a milled slot in it. This allows the crusher to rest flat on the holder for measurement. Other deformities may have resulted around the bottom of the rim. They MUST be removed with the use of a small file. If they aren't removed, the crusher will not rest flat on the crusher holder and cause you to get an invalid indent measurement. (Fig. #I5)

Fig. No. I4



Fig. No. I5

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18. Remington has set standards for trigger pull and firing pin indent measurements. If the mean figure of either measurement doesn't meet with the standards, note it on the Test Procedure Sheet, and notify Lab Supervision. The standards are:

<u>MODEL</u>	<u>TRIGGER PULL</u>	<u>FIRING PIN INDENT</u>
Mohawk IOC	3.5 - 6.5 lbs.	.014"min. - .016"max.
40XR	2.0 - 4.0 lbs.	.019" min. & max.
Nylon 66	3.5 - 6.5 lbs.	.014"min. - .016"max.
540XR & Junior	1.0 - 5.0 lbs.	-----
54I-S Custom Spt.	3.0 - 5.0 lbs.	.017"min. - .025"max.
552	3.5 - 6.5 lbs.	.014"min. - .018"max.
572	" " "	.016"min. - .018"max.
580-581-582	" " "	.017"min. - .025"max.

This ends the procedure for measuring Firing Pin Indent  
and Trigger Pull on Rimfire Rifles.