

HARRINGTON & RICHARDSON M-12

BOLT DISASSEMBLY / RE-ASSEMBLY



Disassembly/reassembly of the H&R M12 bolt is simple with proper tools.

Tools required:

Large external retaining ring pliers

Narrow nosed pliers

A piece of hardwood

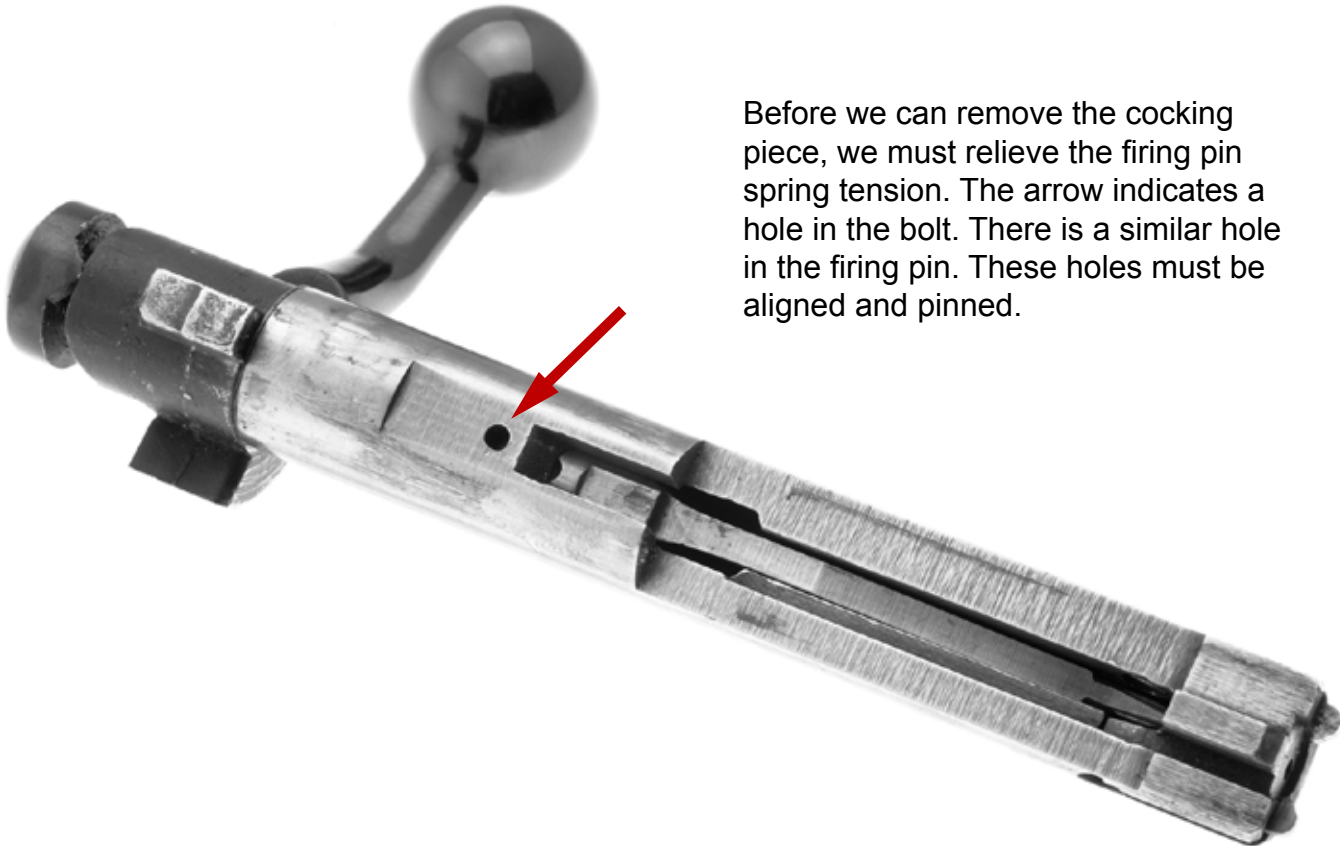
A block of lead

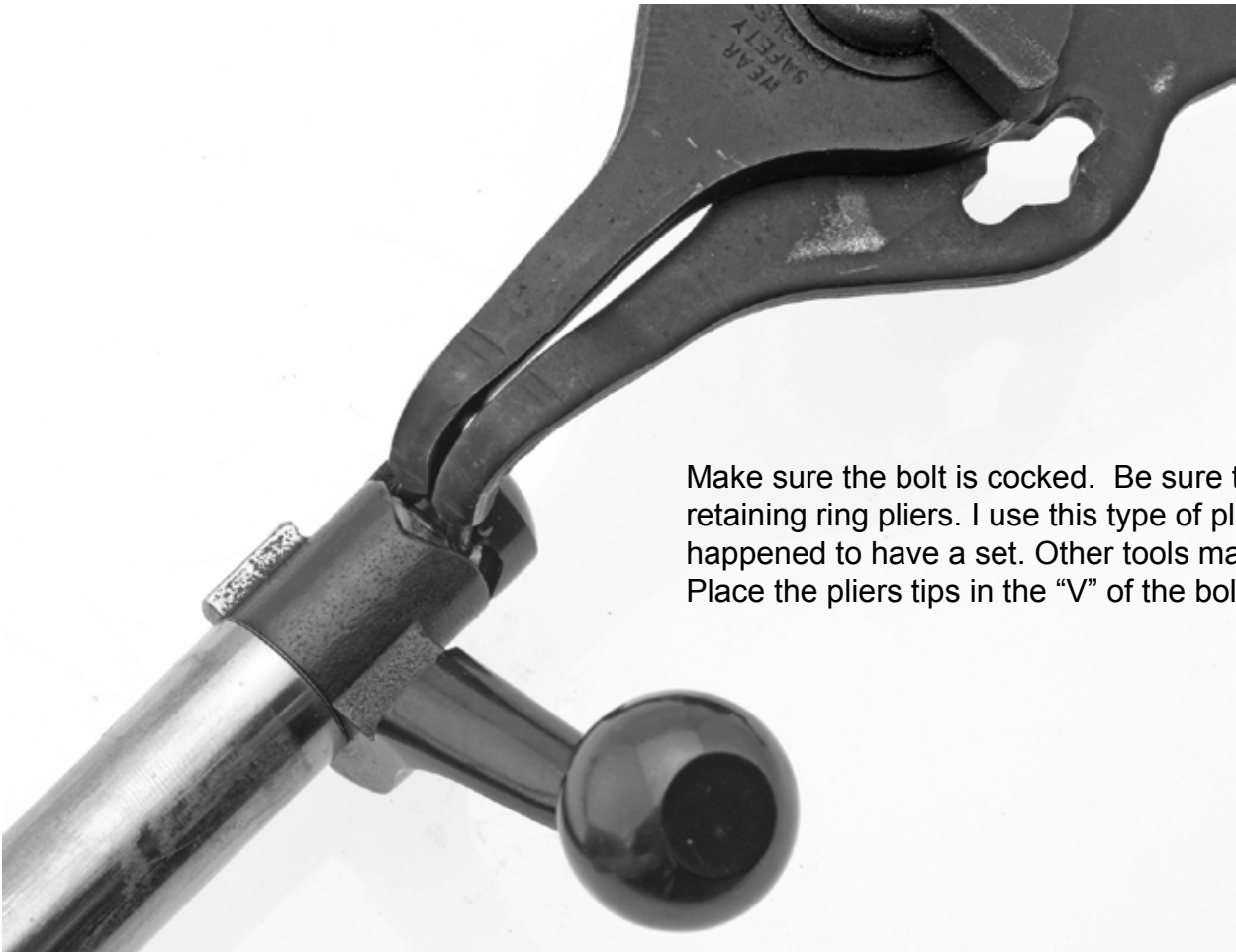
2-3/32" punches (or 1 3/32" punch and 1 3/32" pin)

1 5/32" punch

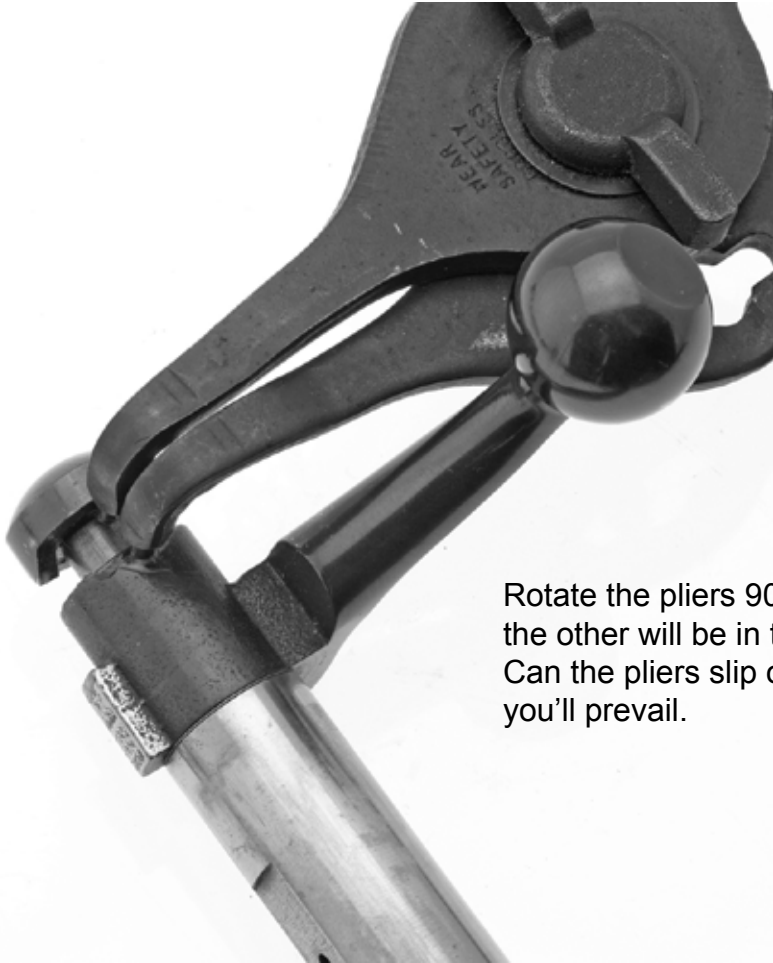
1 hammer

Before we can remove the cocking piece, we must relieve the firing pin spring tension. The arrow indicates a hole in the bolt. There is a similar hole in the firing pin. These holes must be aligned and pinned.

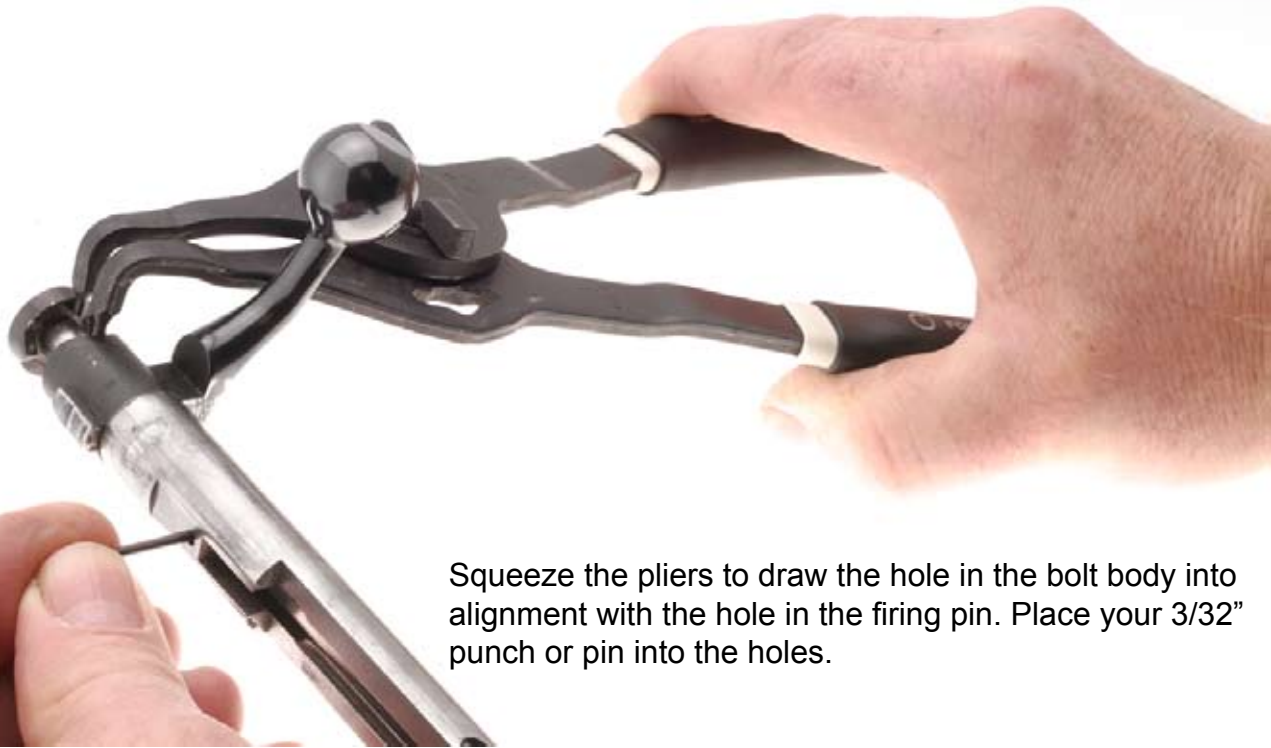




Make sure the bolt is cocked. Be sure to use external retaining ring pliers. I use this type of plier because I happened to have a set. Other tools may work also. Place the pliers tips in the “V” of the bolt handle.

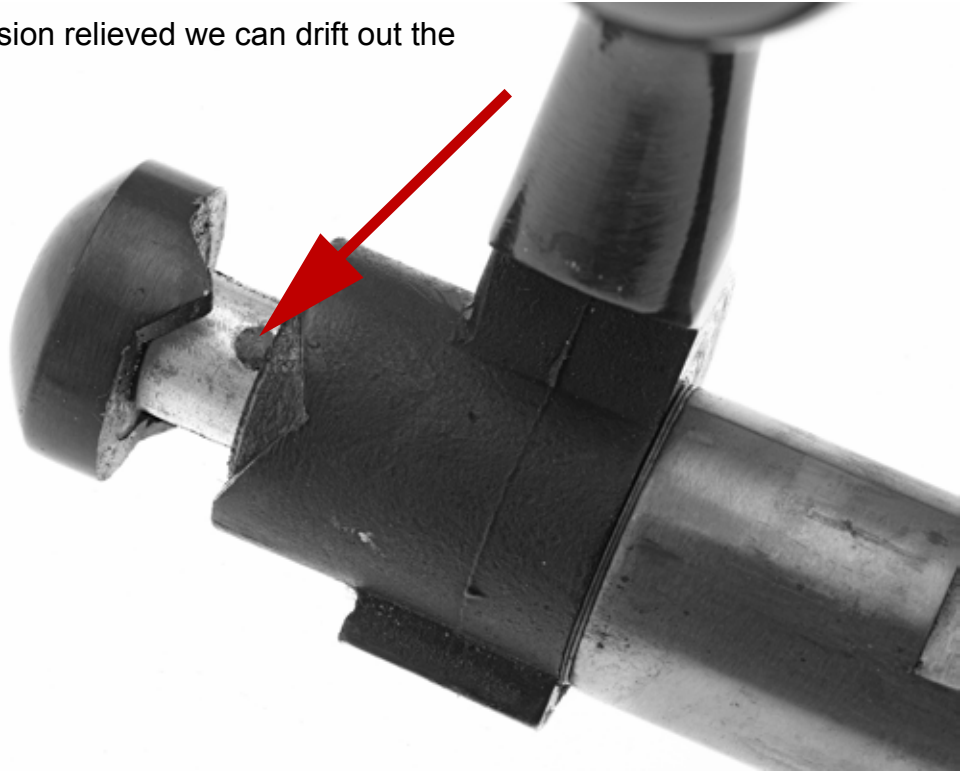


Rotate the pliers 90°. One tip will be against the cocking piece, the other will be in the bottom of the “V” in the bolt handle. Can the pliers slip out of this spot? Sure can! Keep at it and you’ll prevail.



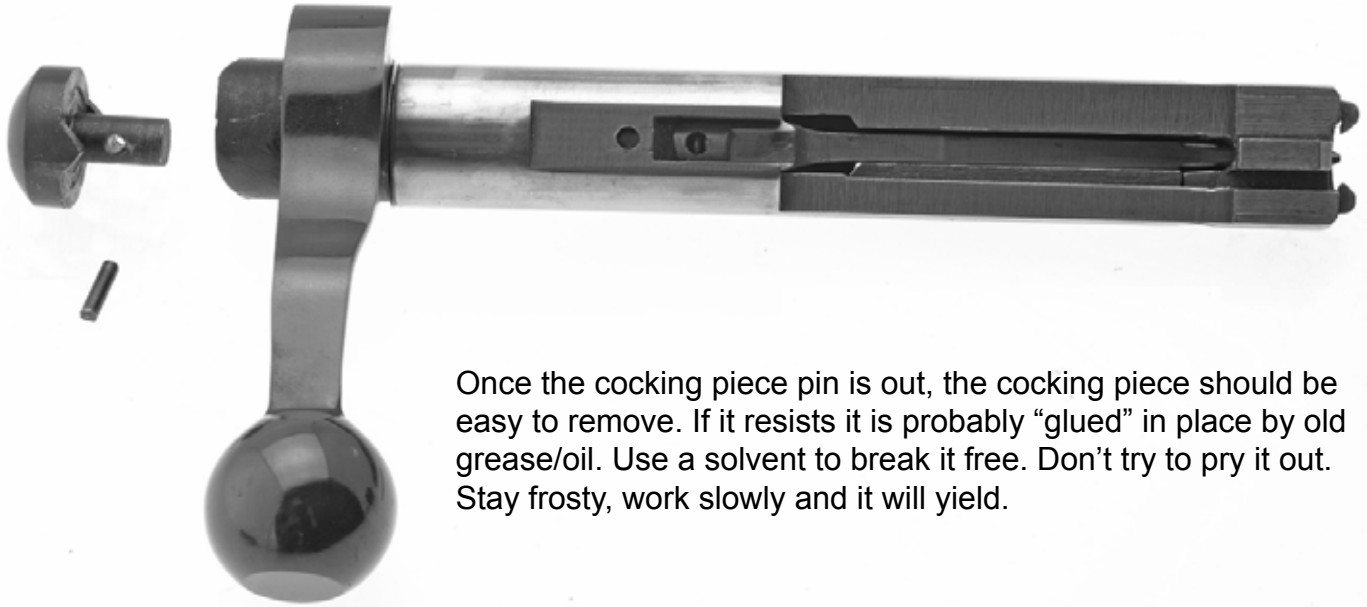
Squeeze the pliers to draw the hole in the bolt body into alignment with the hole in the firing pin. Place your 3/32" punch or pin into the holes.

With the firing pin spring tension relieved we can drift out the cocking piece pin

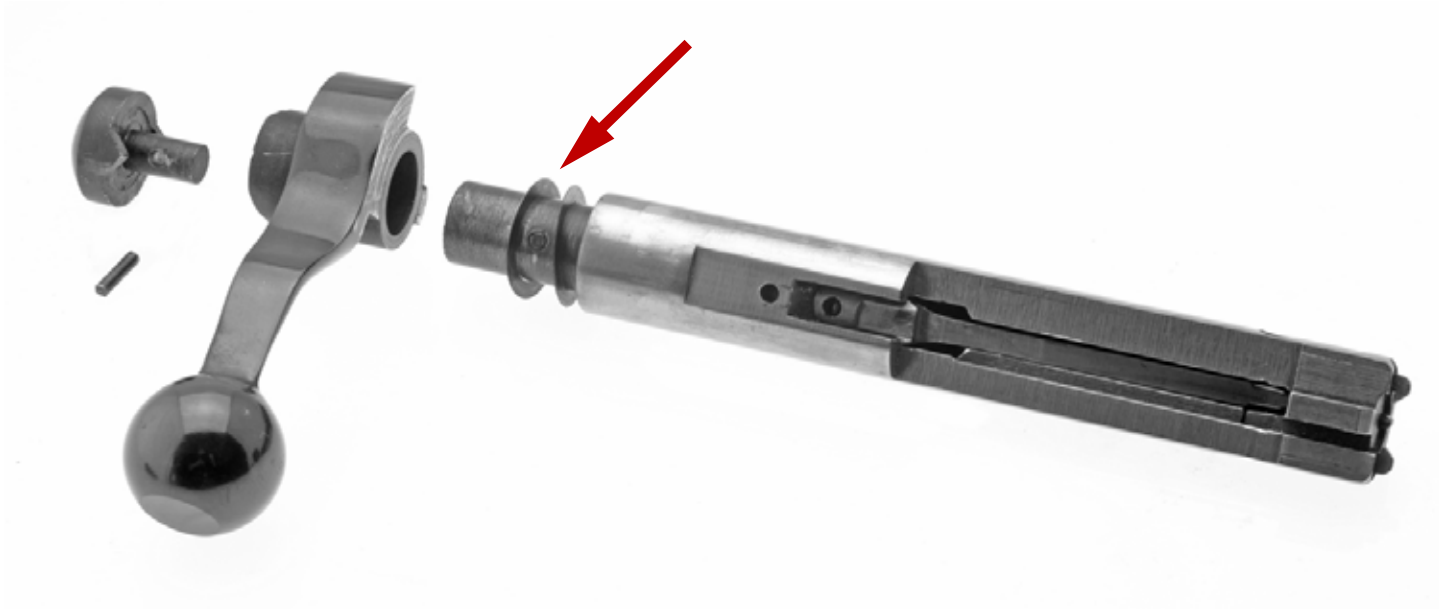




Drift out the cocking piece pin. You will find the bolt handle to be mostly in the way. Positioning it as you see in the photo will help. Remember, you still have your 3/32" punch or pin in place. Be careful not to bump it out of position.



Once the cocking piece pin is out, the cocking piece should be easy to remove. If it resists it is probably “glued” in place by old grease/oil. Use a solvent to break it free. Don’t try to pry it out. Stay frosty, work slowly and it will yield.



With the cocking piece removed we can slide off the bolt handle. The arrow indicates headspace washers. This is how H&R regulated and adjusted the headspacing of the bolt from rifle to rifle. Some rifles will have one, others will have many. You might not have any at all. How many washers your rifle has is how many you will need, so don't misplace them.

The arrow indicates the firing pin spring retaining pin which holds the firing pin and spring in place. Also, here's another look at the headspace washers.





Drift this pin out carefully.

You want the punch to continue to hold the firing pin and spring in place. Remember, if the spring gets away from you it might cause injury. Also wayward springs always land where they will least likely be found.

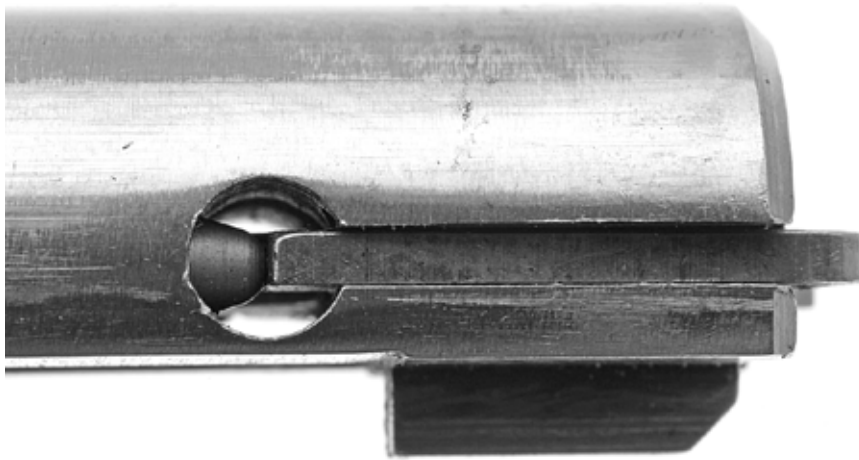




Hold the bolt body firmly against a solid object, here a large block of lead, and slowly draw out the punch.

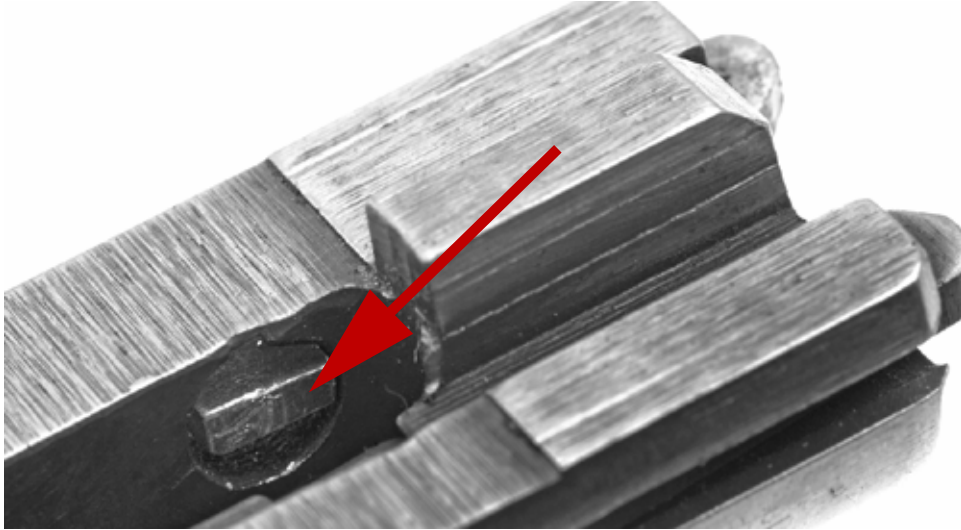


The firing pin spring can now be removed along with the firing pin.



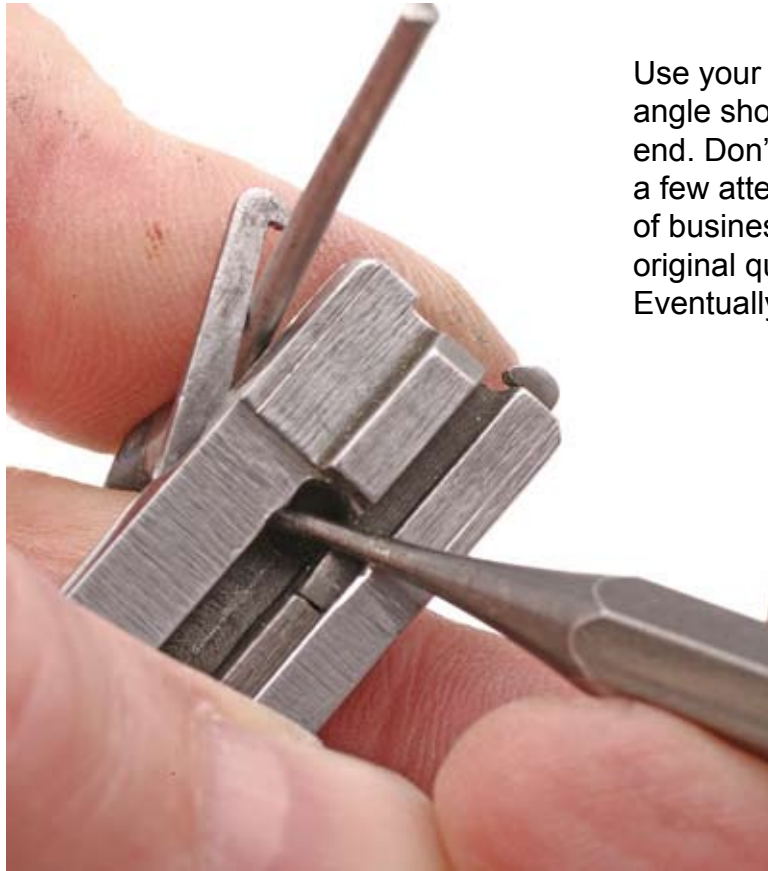
First thing to do to before removing the extractors is to ask yourself “Do I really need to do this?”. If you have a broken extractor or they are so gummed up that they don’t work, well, that answers that. Otherwise clean them with degreaser and add a touch of oil.

If you must remove them here’s how.



The key to this is care and patience.

The extractor is held in place by the tension created by the extractor spring. No tiny pins to loose in the carpet. However the spring tension is considerable. The arrow indicates the tail end of the extractor. You must push there to remove the extractor.



Use your 3/32" punch to hold the extractor at the angle shown. Carefully apply pressure to the tail end. Don't hurry and don't get impatient if it takes a few attempts. Break the extractor and your out of business until you find a replacement.(refer to original question...Do I really need to do this?...) Eventually you'll prevail.



Having removed the extractor you can now remove the extractor spring plunger and the extractor spring. Give all the nooks and crannies a good cleaning and lightly oil.

Congratulations! You have successfully disassembled your H&R M12 bolt.

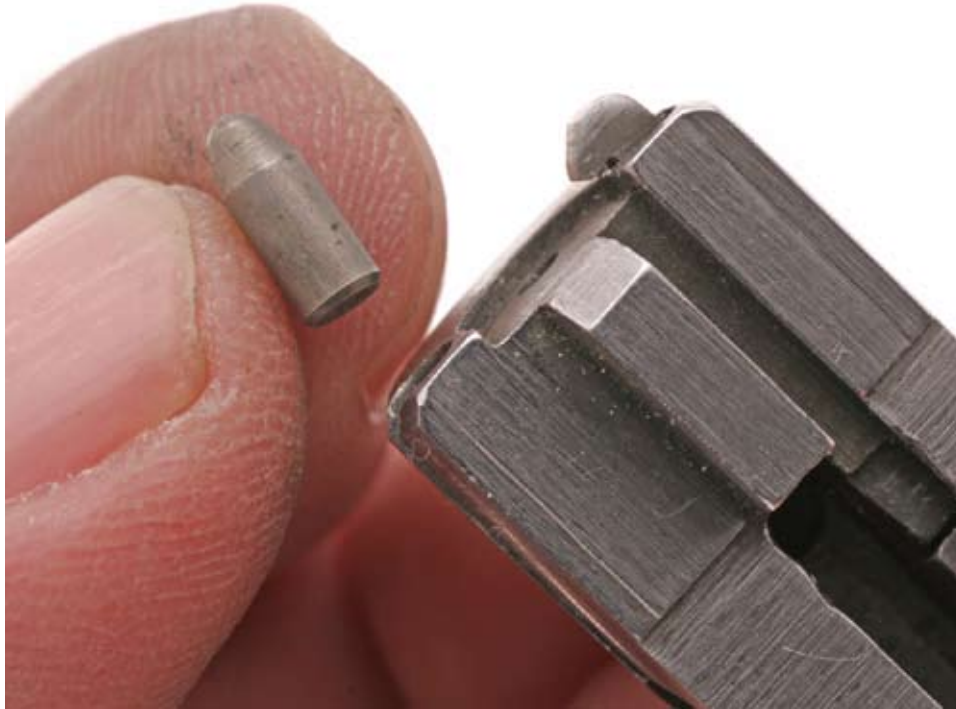
LEFT

RIGHT

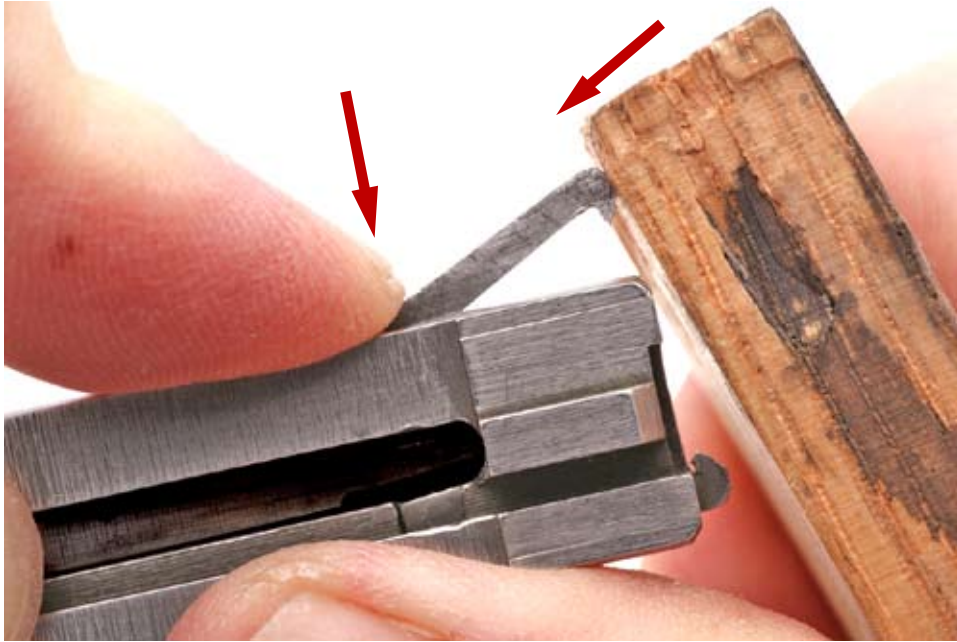


Reassembly is basically the reverse of the above procedures. Well, with a couple of suggestions.

When reassembling the extractors, notice that they are not the same. The right extractor comes to a sharp point. The left does not have the sharp point. Be sure to reinstall extractors as you see here. We are viewing from the top of the bolt. Sharp to the right, blunt to the left.



Drop the extractor spring into the bolt followed by the extractor spring plunger. Notice that the extractor spring plunger is bullet shaped. Be sure the plunger is returned to the bolt as you see it here, ogive pointing up.



Here we go again. Be careful, patient... capture the tip of the extractor spring plunger with the cut out in the tail of the extractor. Position the extractor in it's groove at the angle shown. Push the tip of the extractor towards the back of the bolt while pushing the tail into the bolt. As you can see in the photo a piece of wood saves wear and tear on your finger tip.



With the extractors out of the way and having degreased, degorped, stoned and polished all parts, it's time to reassemble the bolt. Start by aligning the holes in the bolt and firing pin. Insert your 3/32" pin or punch.

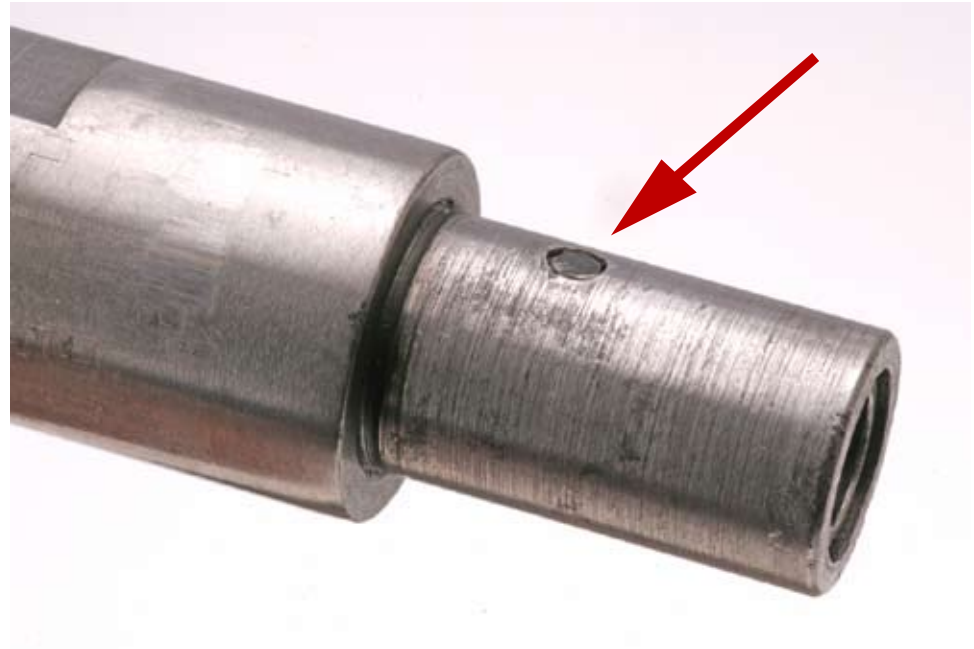


Insert the firing pin spring. Take your 5/32" punch and compress the firing pin spring. Not as easy as you thought? It helps to have a solid object to push against. A large block of lead, as seen earlier, is perfect. We use the 5/32" punch for this as it's smaller than the diameter on the spring and permits us to partially insert the firing pin spring retaining pin, just enough to capture the spring. Please recall the earlier cautions about springs getting away from you.



Tap the firing pin spring retaining pin carefully into place. Use the 5/32" punch to tap it flush to the bolt.

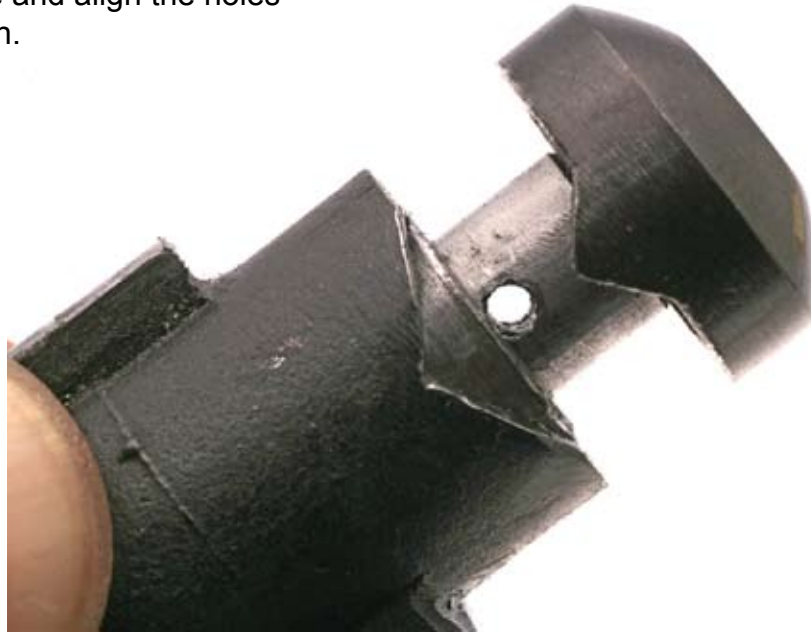
The firing pin spring retaining pin must be flush to the bolt. Otherwise it will prevent the headspace washers from seating correctly.



Replace the headspace washers, if any were present.
Remember improper headspace can result in an unsafe
firearm.



Replace the bolt handle with the “V” notch towards the rear of the bolt.
Insert the cocking piece and align the holes for the cocking piece pin.



A narrow nosed pliers will assist in starting the cocking piece pin. Remember you have a 3/32" pin or punch relieving the firing pin spring tension. Take care not to move it out of place.

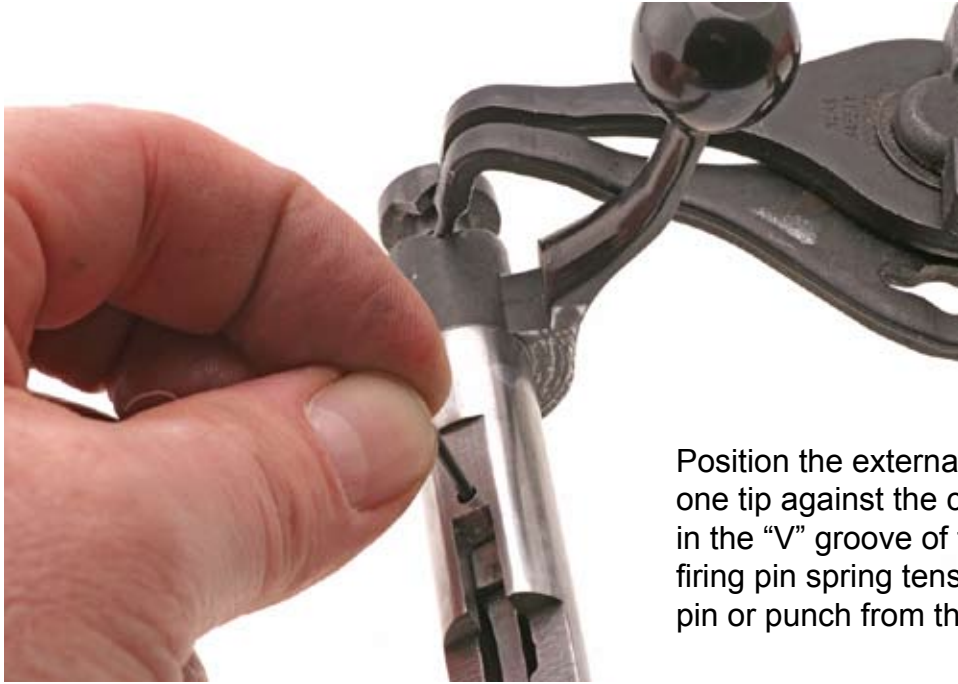


Once the cocking piece pin is started, check that the holes in the firing pin and cocking piece are still aligned.





Take the 5/32" punch and tap the cocking piece pin into place. Be sure that the cocking piece pin is flush with the firing pin or it will impede the firing pin's travel, resulting in a weak primer strike.



Position the external retaining ring pliers with one tip against the cocking piece and the other in the "V" groove of the bolt handle. Relieve the firing pin spring tension and remove the 3/32" pin or punch from the bolt.



Well done!
You have successfully disassembled and reassembled
the bolt from your H&R M12.