



Daisy M853 M753 M888 M887 Trigger Modification Instructions



Basic Principles

- This trigger modification is done using a longer setscrew for sear adjustment, as well as polishing the various parts of the trigger mechanism. This method allows the trigger pull to be returned to near-stock condition, with no disassembly or replacement of parts. In addition, it also provides a cleaner, crisper trigger release than the results provided by cutting the springs.

Basic Principles (Cont.)

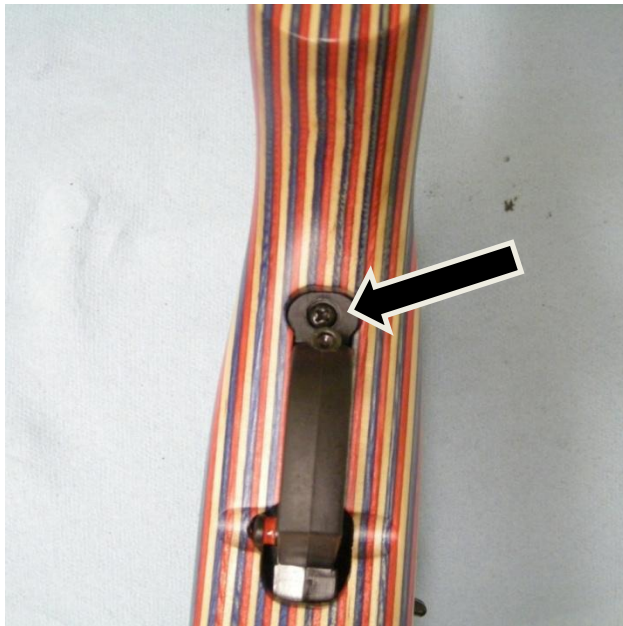
- In addition, the use of a socket-head screw in place of the original phillips-head screw will help prevent shooters from tampering with their trigger settings.
- Rifle used in pictures is an M888

Tools/Parts Needed

- #2 Phillips screwdriver (2 for M853 or M753)
- Flat-bladed screwdriver
- 1/8" drill bit and drill
- 8-32 SAE tap
- Grease
- 8-32x3/4" Socket Cap Screw (1 per rifle done)
- Small whetstone for polishing sear and striker
- A 4" or larger mill file

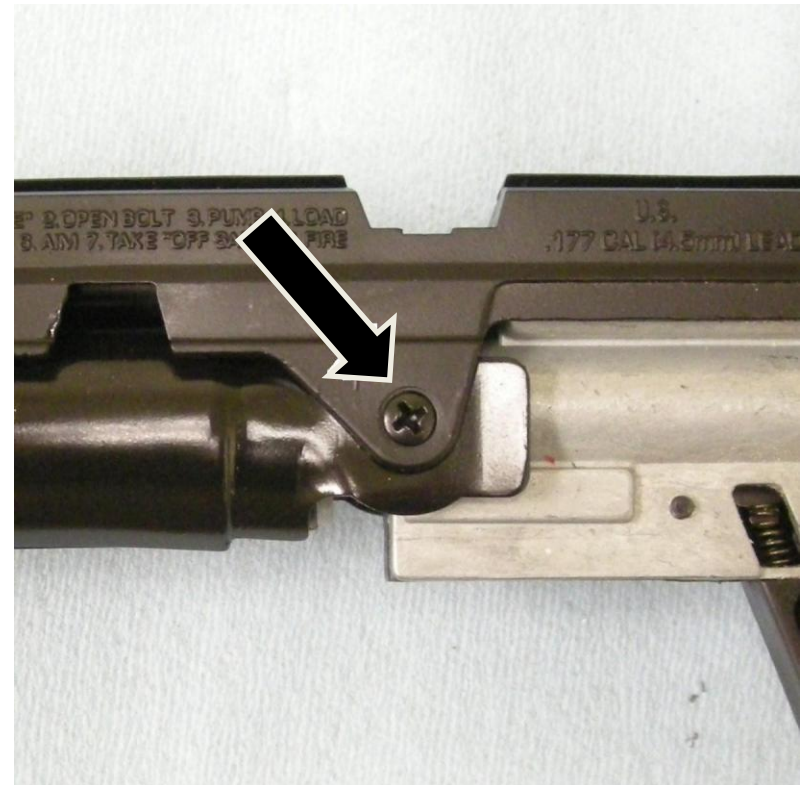
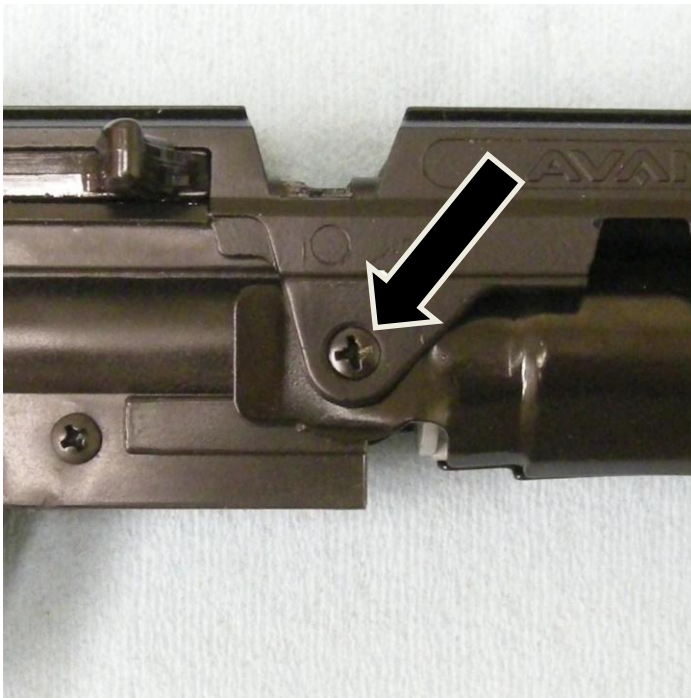
Disassembly of Rifle to Component Parts

- Remove action from stock (3 Phillips-head screws)
- M853/M753 require 2 screwdrivers for front screw



Disassembly (Continued)

- Remove the 2 action top cover screws, one on each side.



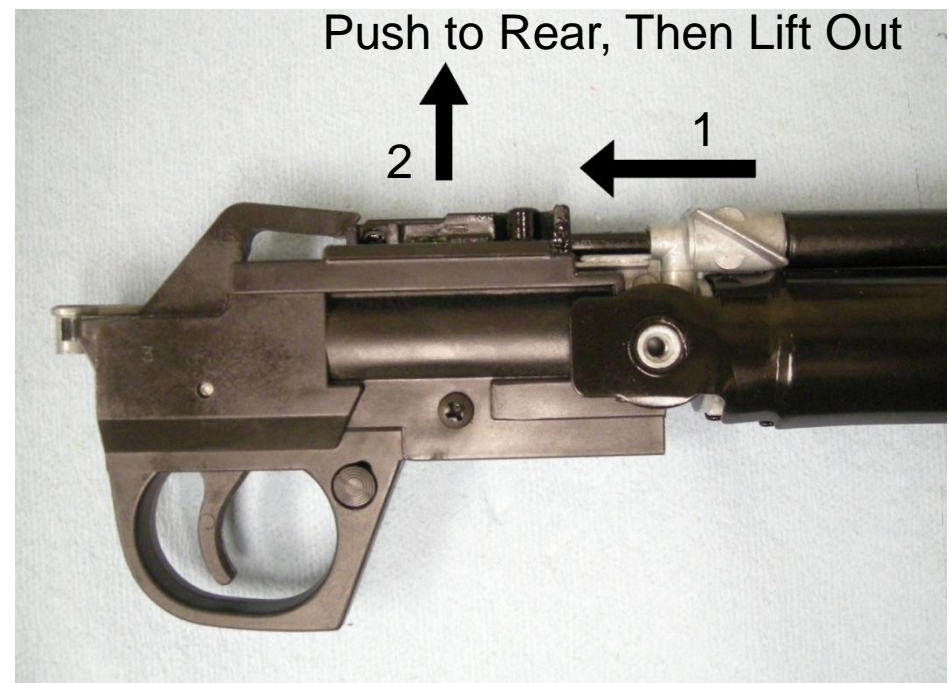
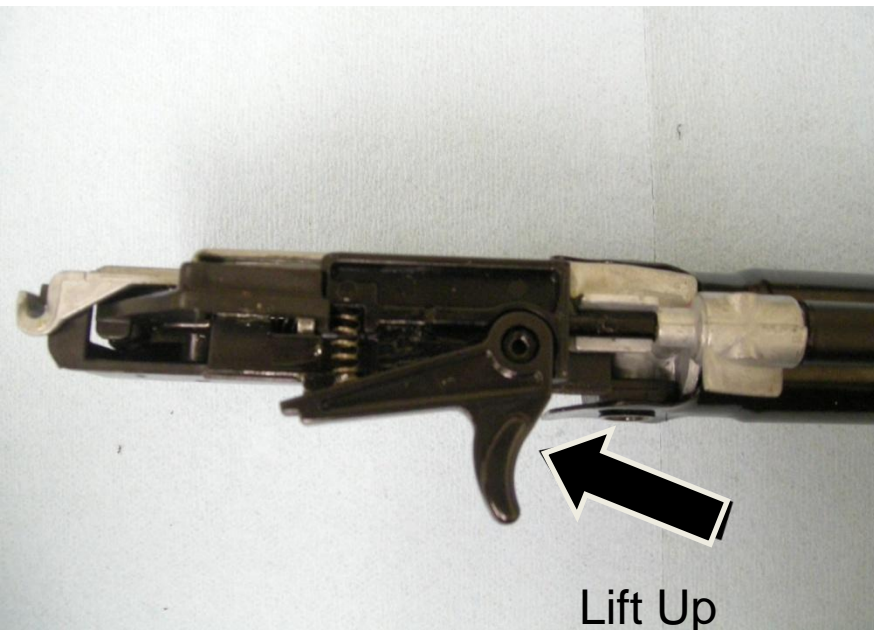
Disassembly (Continued)

- Grasp top cover at rear and pull up and forward, rotating it off the tabs at the front



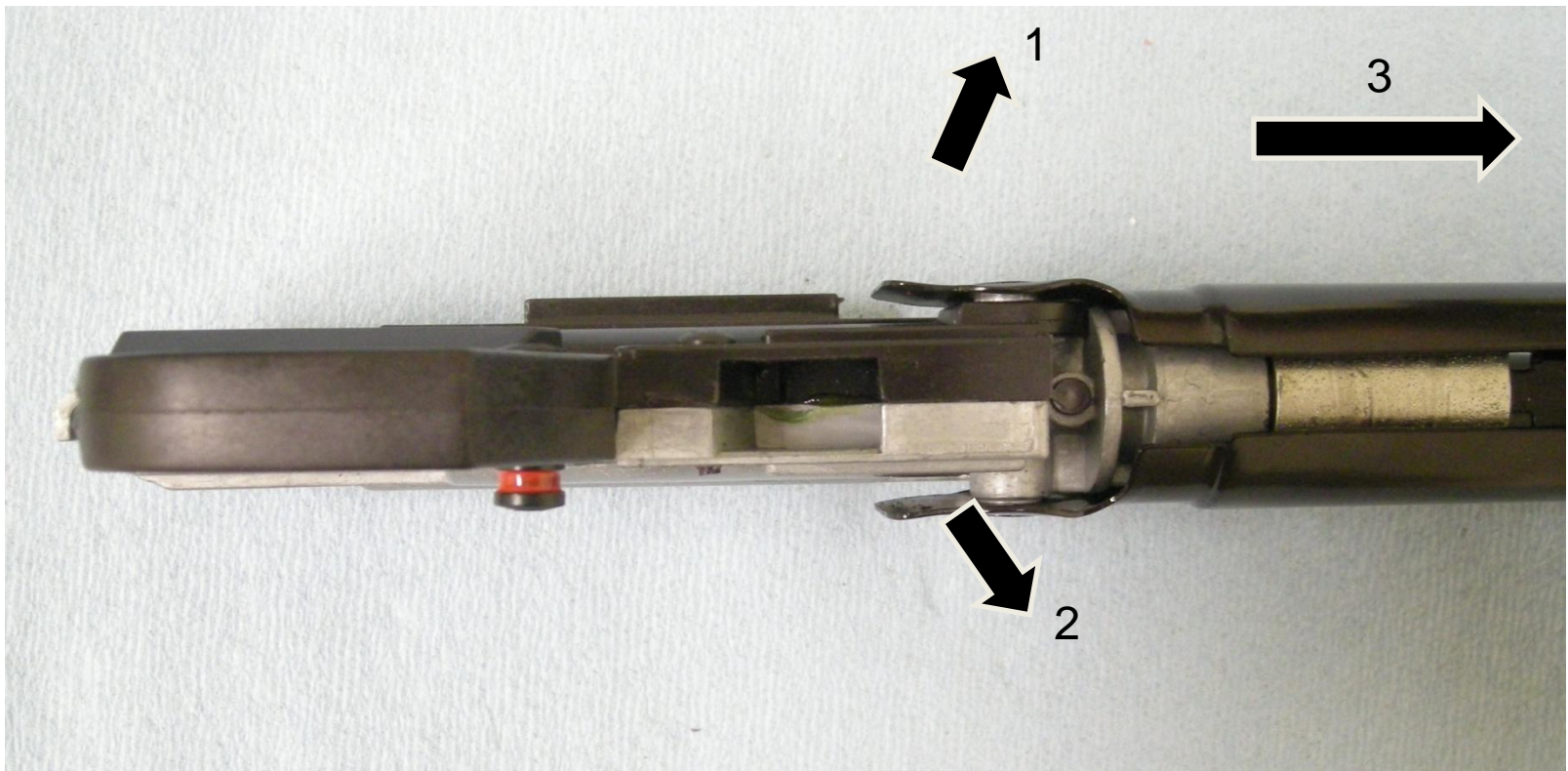
Disassembly (Continued)

- Lift bolt handle and bolt handle spring off of bolt.
- Push bolt to rear, and lift out front end first



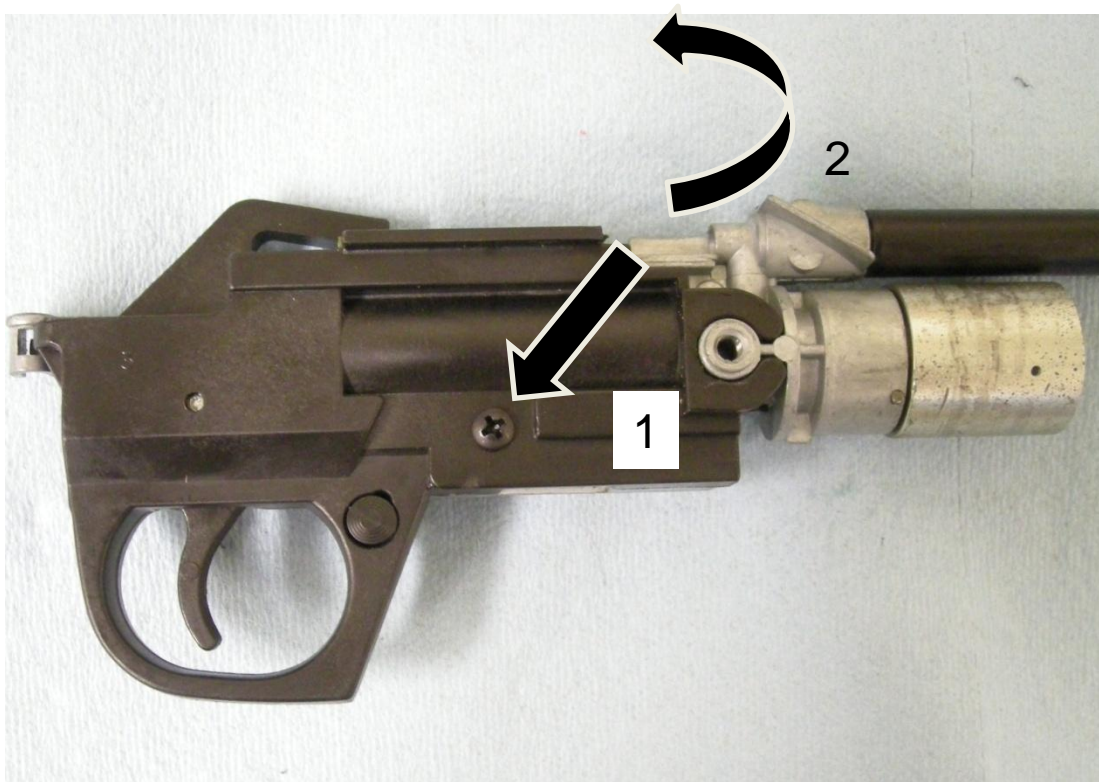
Disassembly (Continued)

- Pry out the tabs on rear of gas cylinder tube, (or piston assembly on M853/M753) then slide the cylinder off the front



Disassembly (Continued)

- Remove trigger guard screw and lift from front



Disassembly (Final)

- All parts then lift out of action



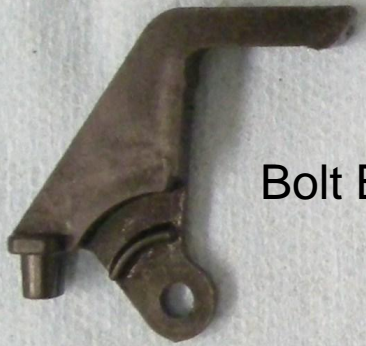
Sear



Sear Spring



Trigger Guard



Bolt Block



Trigger



Trigger Spring



Striker Spring



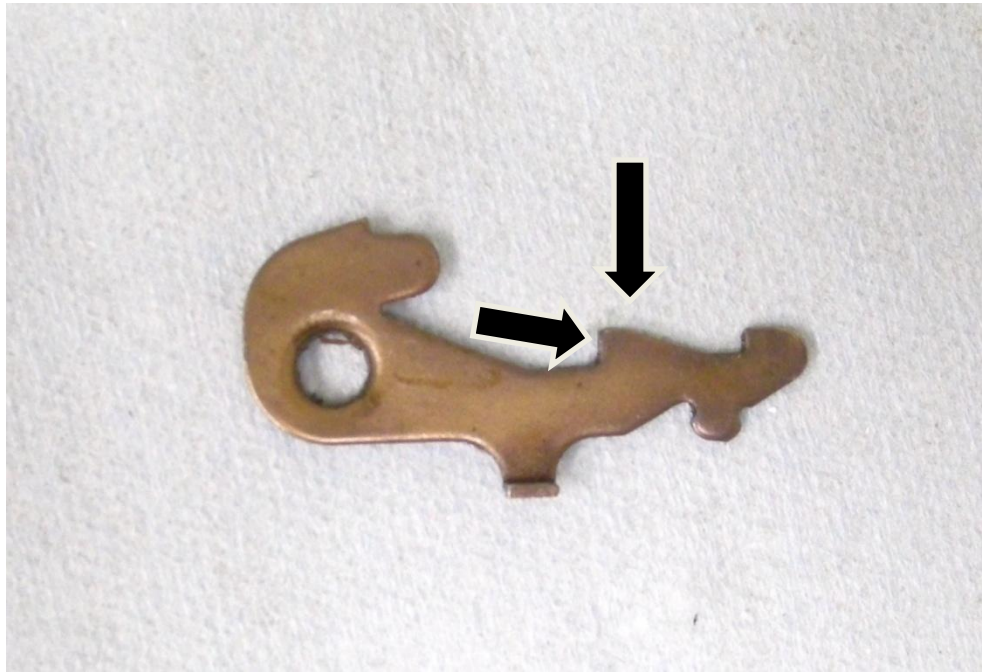
Striker

Step 1: Polishing the Sear

- Using the whetstone, the first step is to polish the sear surfaces.
- Polishing the sear engagement surfaces allows for a smoother, cleaner trigger release.
- This method simply polishes the sear, not reshapes it. The only goal is the removal of the rough surfaces left over from the manufacturing process. This allows for a consistent trigger pull.

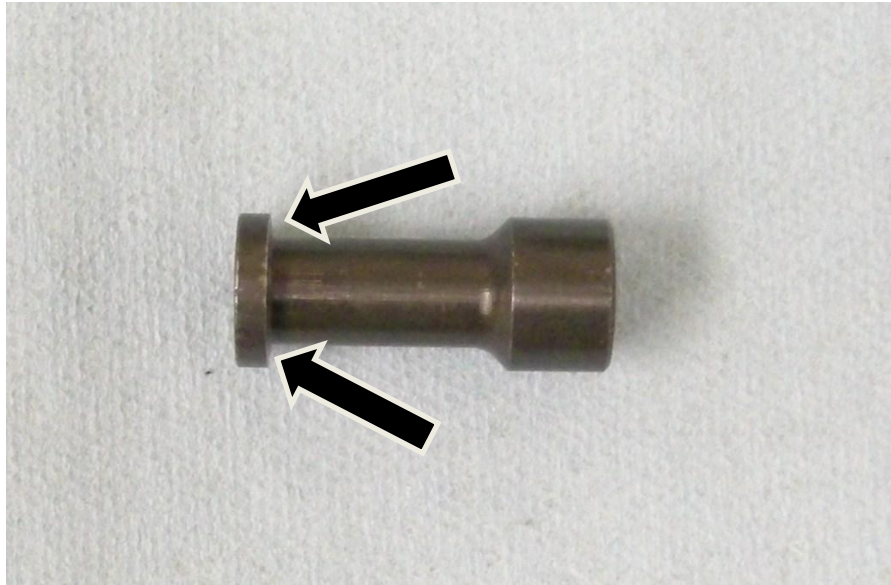
Sear Polishing

- The two surfaces indicated by the arrows are the only two surfaces requiring any work. Again, the surface smooth is the only goal, not any reshaping of the sear.



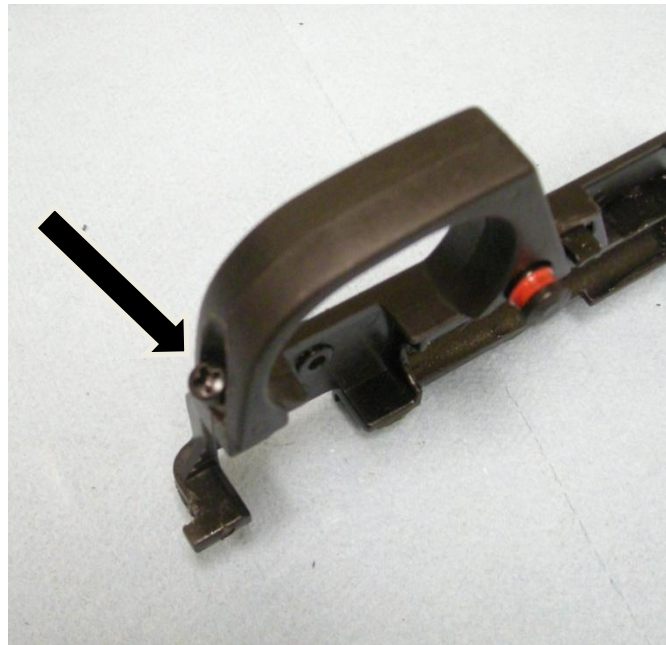
Striker Polishing

- The striker is polished in the same manner as the sear. No reshaping or grinding, just simple removal of roughness on the surface. This surface should be smooth polished all the way around the perimeter of the striker



Trigger Guard Modification

- Remove the screw from the rear of the trigger guard. (M888, M887 only)



Trigger Guard Modification (M853/M753 only)

- Use a rotary cutter and a dremel tool to cut a recess for the screw head in the rear of the trigger guard, similar to what is found on the M887/M888



Trigger Guard Modification (Continued)

- Drill out screw hole with 1/8" drill bit
- Drill new hole on M853/M753



Trigger Guard Modification (Continued)

- Tap screw hole with 8-32 tap and install new screw



Trigger Modification

- The front edge of the trigger has to be relieved to clear the safety. Without this modification, the safety cannot be placed in the “on safe” position
- This modification is done with the mill file.

Area inside yellow circle is the area that is modified



Before



After

Area inside yellow lines is removed. Molding line indicated by the black arrow is the reference mark for depth of cut



Bolt Block Modification

- In similar manner to the trigger, the bolt block also has to be modified. Since the new, longer screw holds the trigger higher in the action, the bolt cannot be opened if the bolt block is not modified.
- This modification is done with the mill file.

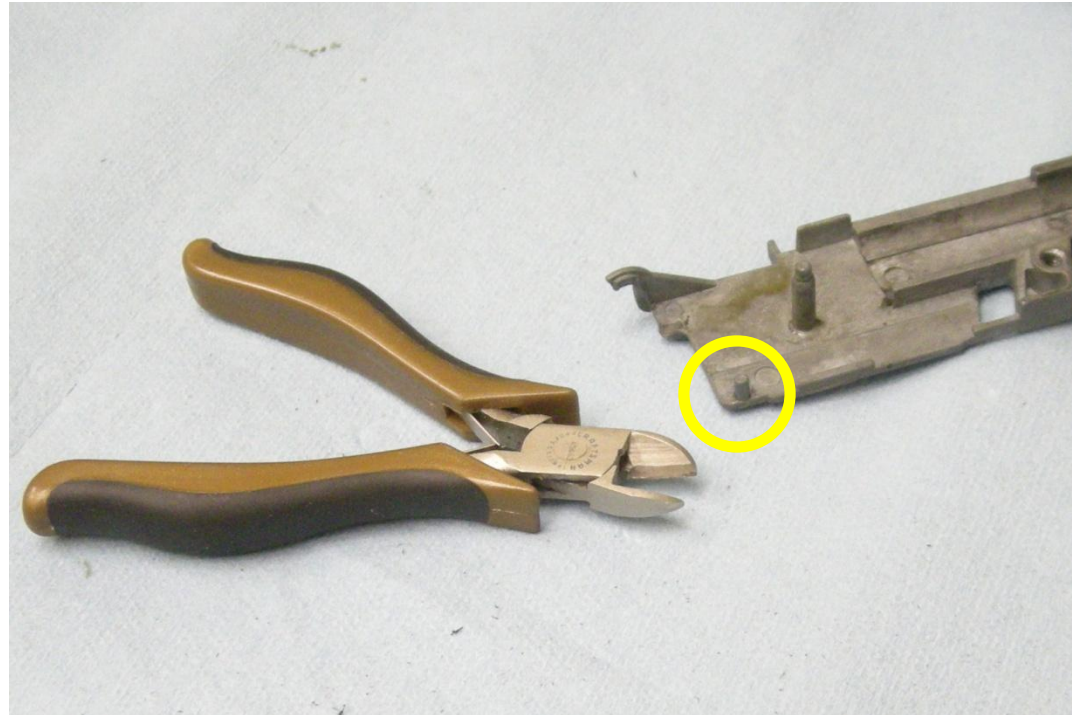
Bolt Block Modification (Continued)

The yellow line indicates what material needs to be removed. Approximately $\frac{1}{2}$ of the stem is removed in this step.



Action Modification (M853/M753 Only)

- The small peg circled in yellow must be removed so that it will clear the new setscrew. This is done with a pair of diagonal cutting pliers



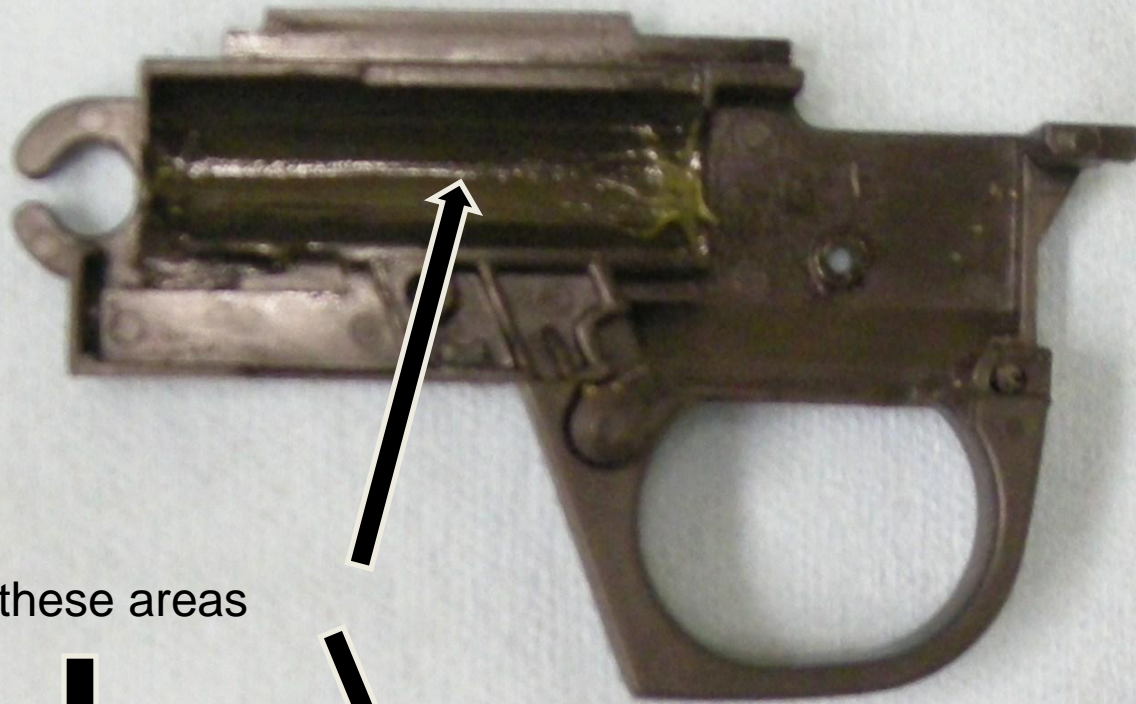
Reassembly

- Rifle is then reassembled in reverse order.
- The setscrew installed in the trigger guard must be turned out so that the point is flush with the plastic for reassembly.
- Also, the trigger must be set after the rifle is fully assembled, because the parts are put under different pressures when the rifle is assembled.

Reassembly

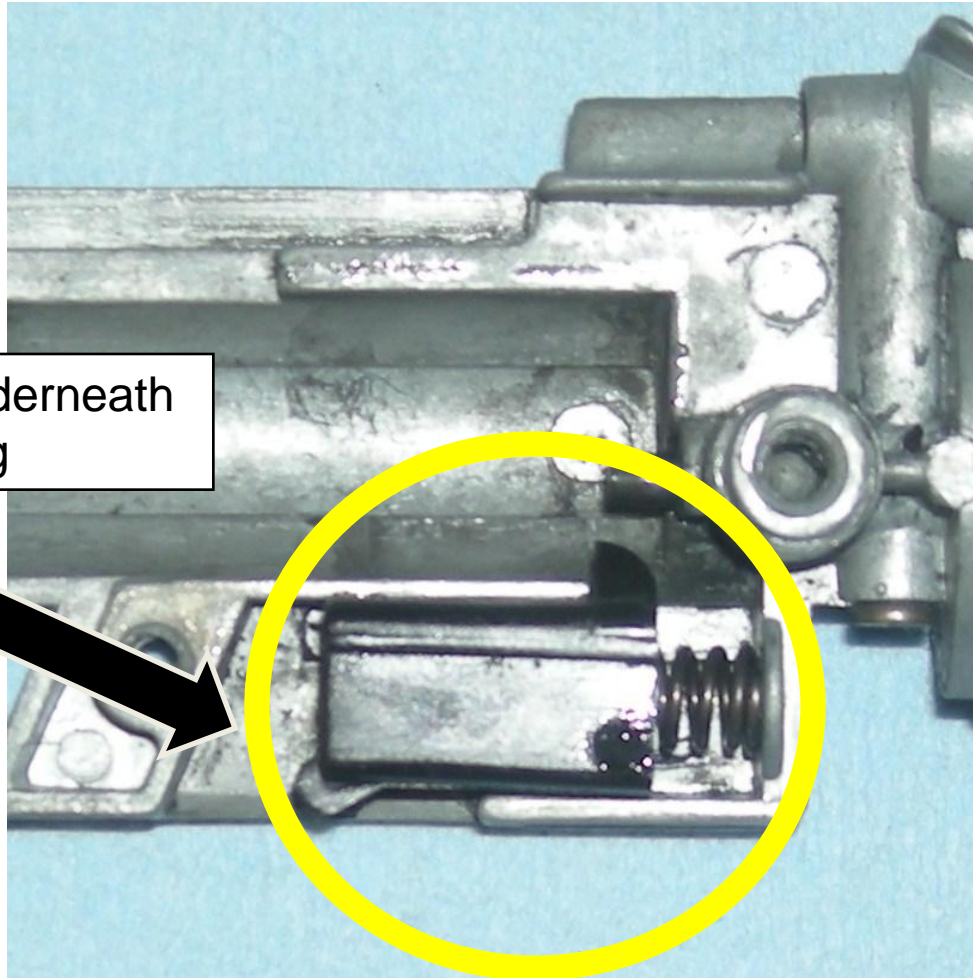
- Replace parts in action. Order of assembly is as follows:
- Grease striker track with light coat of grease
- Bolt block with trigger spring attached
- Sear with spring attached
- Trigger
- Striker and striker spring
- Pump handle latch and spring (M853/M753 only)

Grease these areas



Pump Handle Latch Detail (M853/M753 Only)

Grease slot underneath
before installing



1.



2.



3.

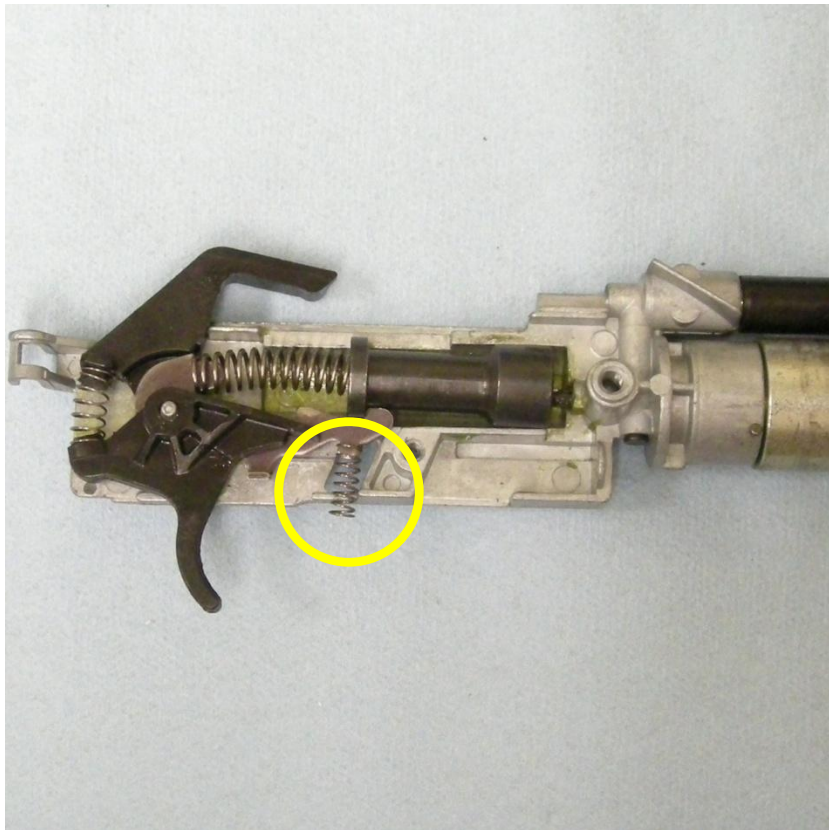


4.



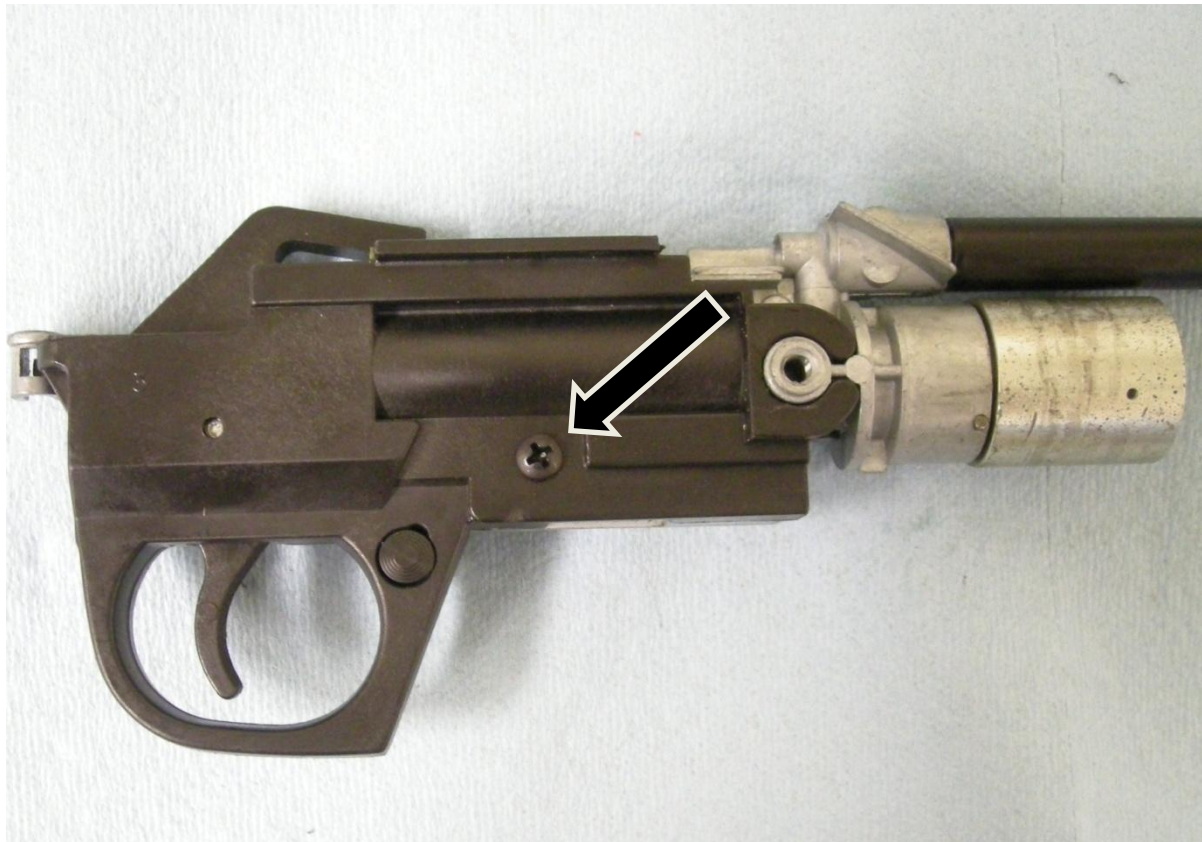
Reassembly (Continued)

The sear spring, circled in yellow, must be depressed with a flat blade screwdriver when the trigger guard is installed. Otherwise, the spring can be damaged. When assembled, the spring should be parallel to the sides of the slot, as seen in red.



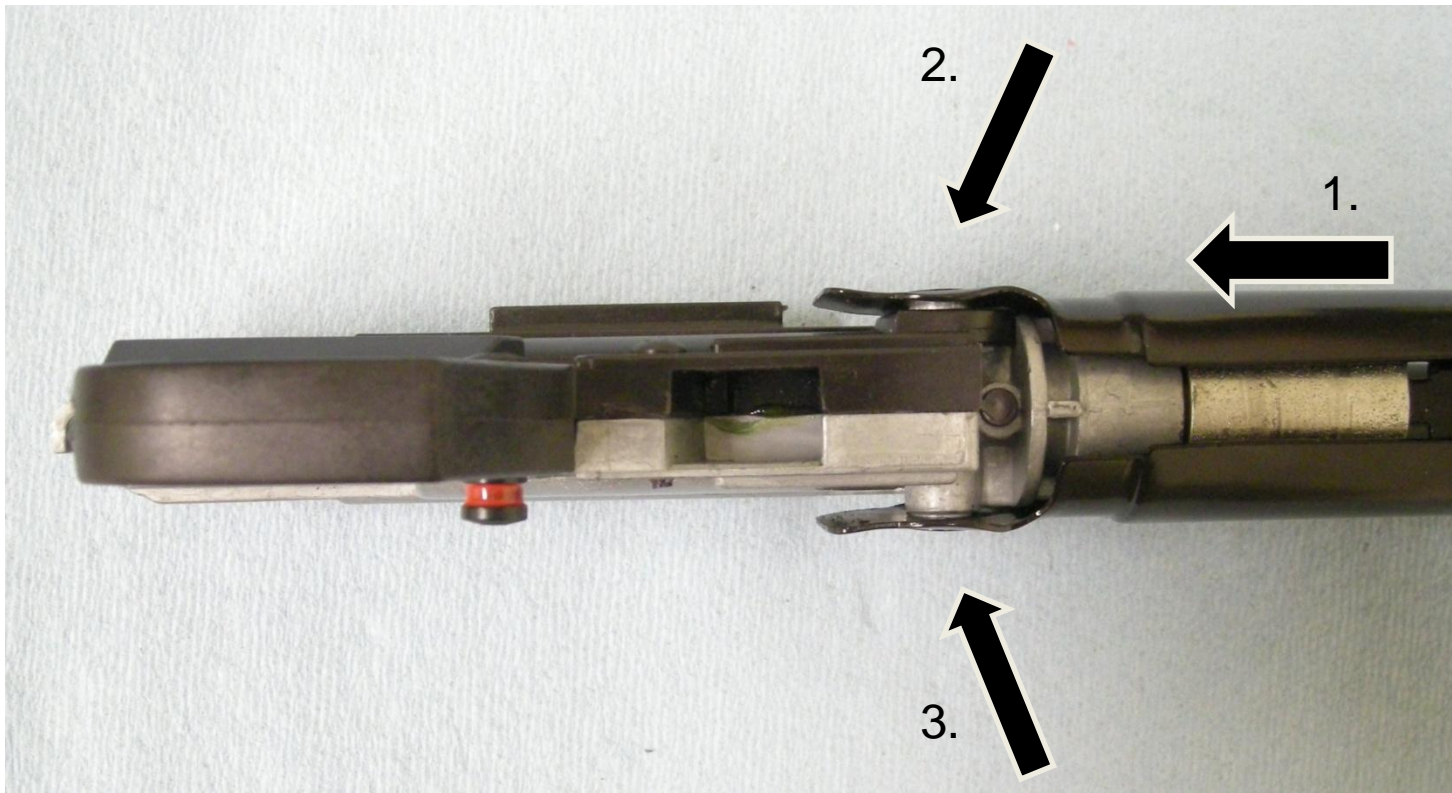
Reassembly (Continued)

- After the cover is pressed into place, reinstall the trigger guard screw.



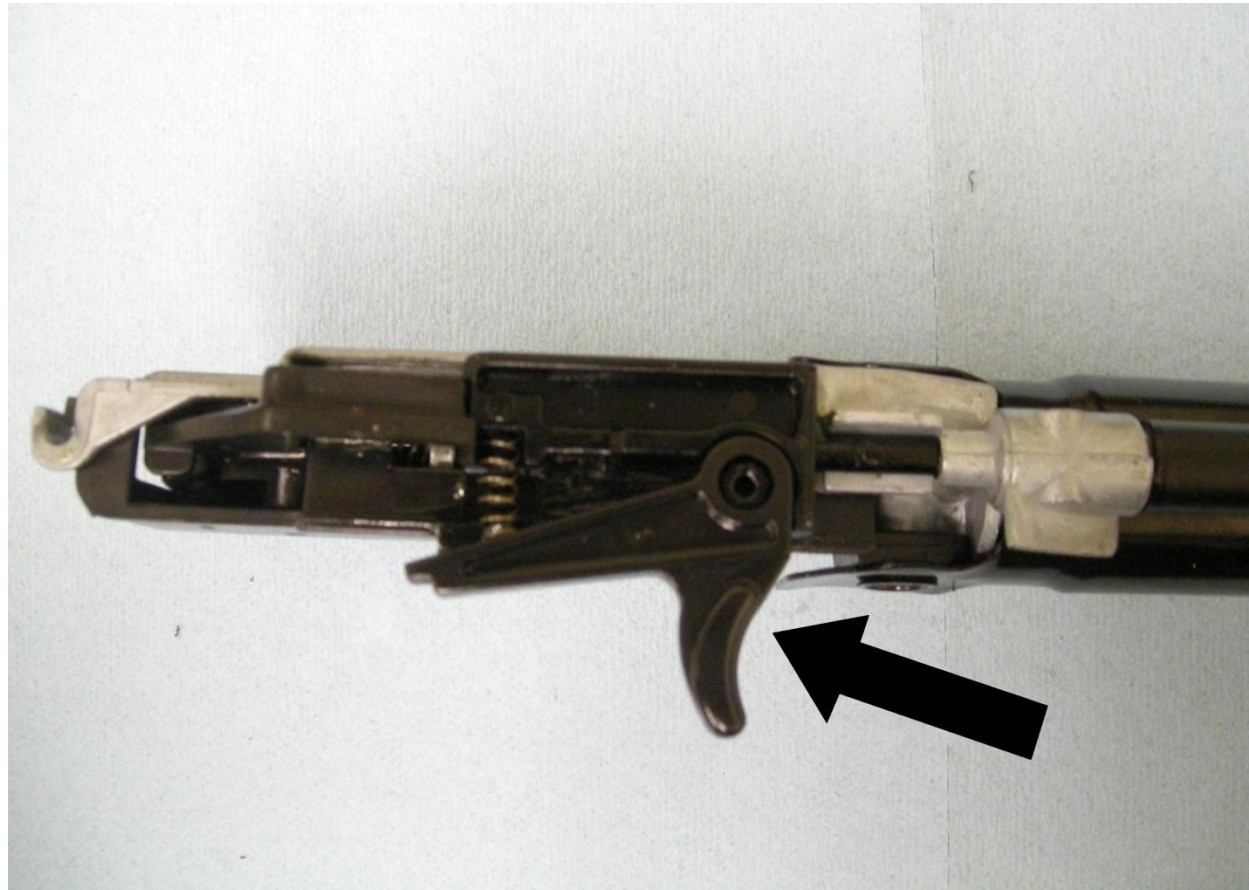
Reassembly (Continued)

- Next, reinstall the gas cylinder tube by sliding it into place and bending the tabs back into place on the action



Reassembly (Continued)

- Reinstall the bolt, bolt handle and bolt handle spring in the top of the action.



Reassembly (Continued)

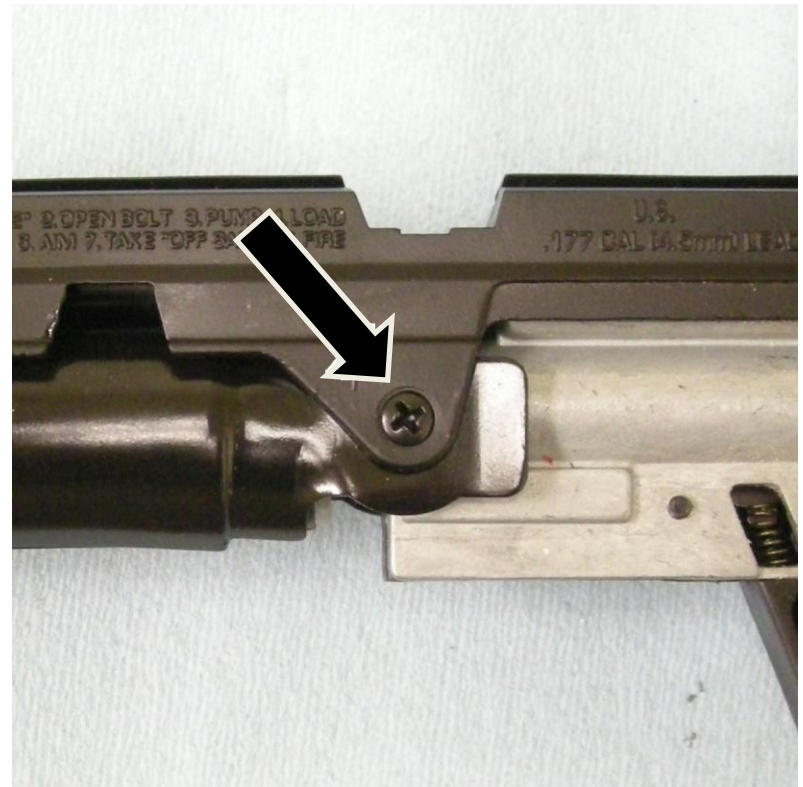
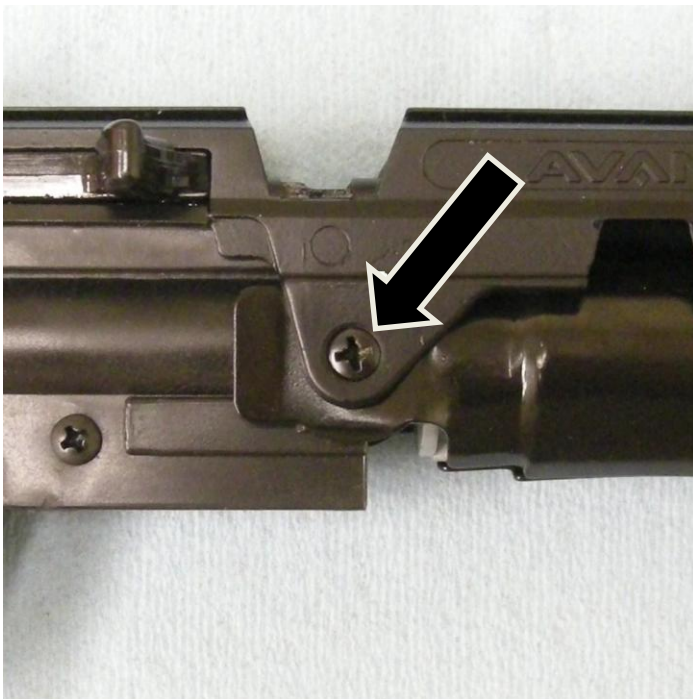
- Install the top cover, first by engaging the tabs in the gas cylinder tube with the front edge of the top cover, then rotating the cover down into place.





Reassembly (Continued)

- Install the 2 action top cover screws, one on each side.



Top Cover Screw Installation (M853/M753, Early Production M888 Only)

- The M853, M753, and the early production M888 came with a two-piece rear bedding screw. This is easiest to assemble if the top half of the screw is removed and installed into the action before the action is installed into the stock.

Top Cover Screw (Continued)

Disassemble Screw



Install screw into top cover



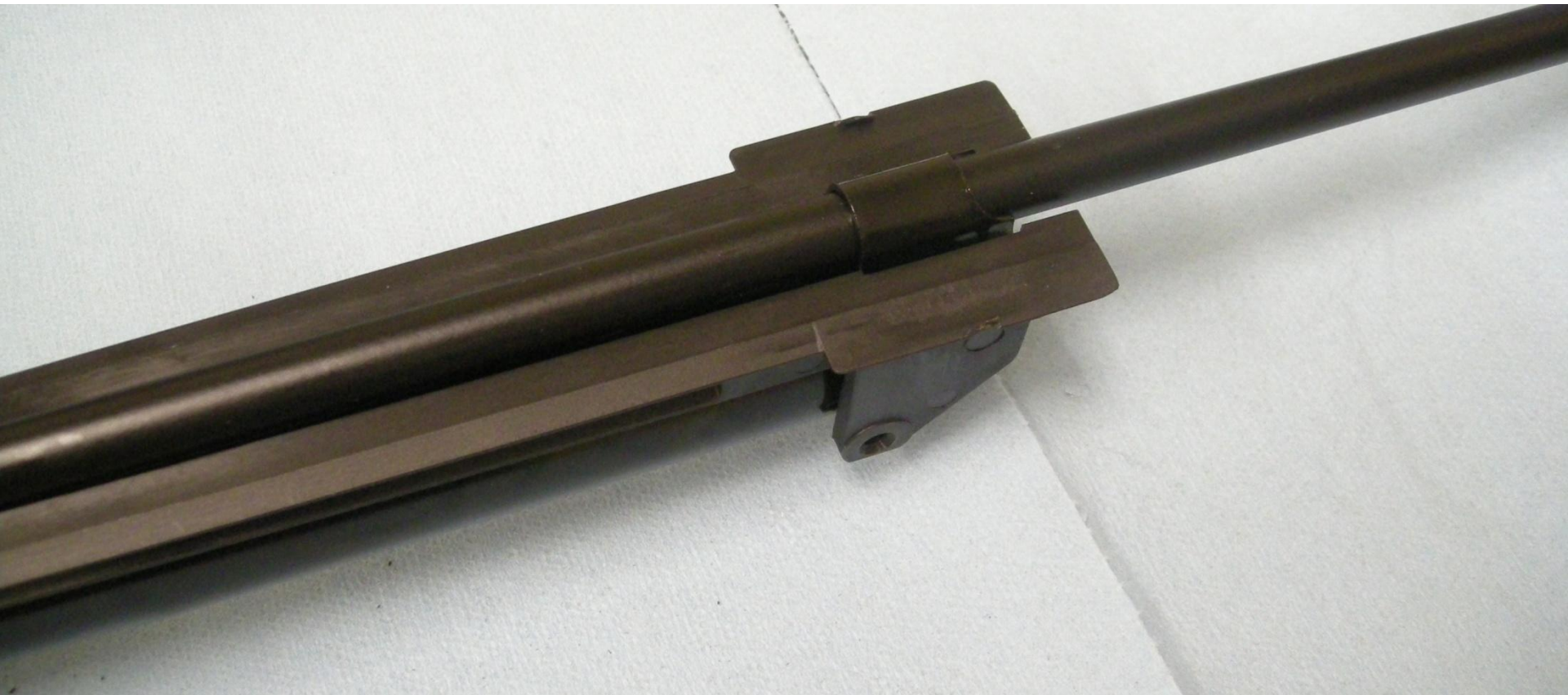
Stock Modification

To greatly simplify reassembly, cut a small notch in the stock to clear the safety, as shown in the picture in yellow. This can be done with a round file or dremel tool.



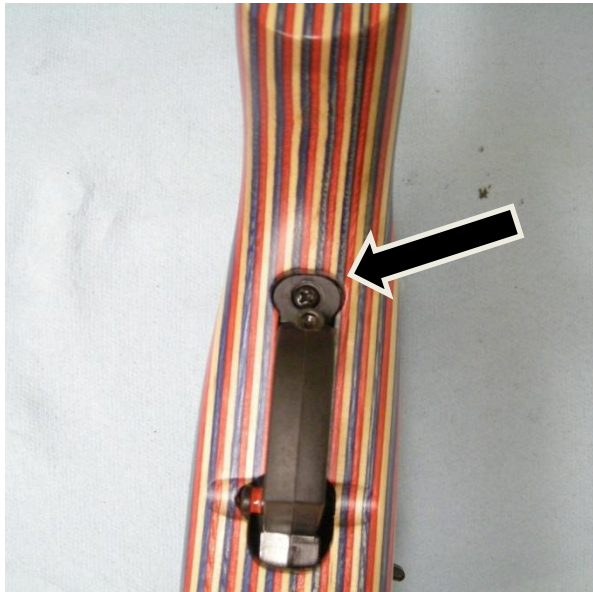
Reassembly (Continued)

- Install the plastic filler pieces, along with the barrel band.



Reassembly (Continued)

Insert the action into the stock. The plastic spacers must be held while the action is dropped into the stock. After the action is seated in the stock, reinstall the three bedding screws and the plastic washer on the rear screw.



Trigger Adjustment

- The sear engagement is adjustable with the new setscrew. To reduce the sear engagement and lighten the pull, tighten the screw. To increase the sear engagement and increase the pull, loosen the screw. A 9/64 hex wrench is necessary to adjust the setscrew. Once the trigger pull is set, bump the side of the stock firmly with a fist, and if the rifle dry-fires, increase the sear engagement.