

RUGER® ELITE 451/452™

TRIGGER REPLACEMENT INSTRUCTIONS

1. Disassembly of the Fire Control Group from the Dry Firing Housing.

You will need the following tools in order to disassemble your new trigger system from the dry firing housing:

- hammer or mallet
- 1/8" or 5/32" pin punch
- 3/16" Allen wrench/key

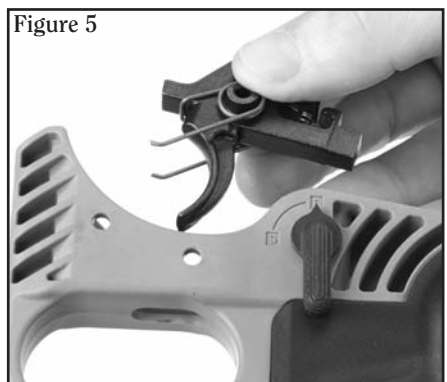
a. Remove the hammer:

Place the safety selector to the "FIRE" position and let the hammer fall forward by pulling the trigger (see Figure 1). Use your pin punch and mallet to knock the hammer pivot pin out from either side of the dry fire housing (see Figure 2). The hammer and the hammer spring can now be removed from the dry fire housing (see Figure 3).



b. Remove the trigger:

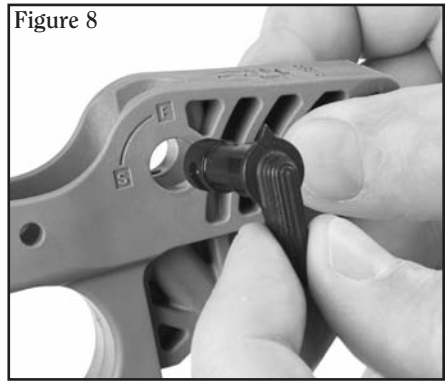
Use your pin punch and mallet to knock the trigger pivot pin out from either side of the dry fire housing (see Figure 4). The trigger, the trigger spring, the disconnector, and the disconnector spring can all now be removed from the dry fire housing (see Figure 5).



c. Remove the grip:

NOTE: This step applies only if you choose to replace the safety selector switch and/or grip.

Using your Allen wrench, unscrew the socket head cap screw, which is accessible through the bottom of the grip (see Figure 6). Slide the grip off of the dry fire housing. Note that the safety selector detent and spring are both held in the dry fire block by the grip (see Figure 7). Set these two items aside. The safety selector can now be removed from the left-hand side of the dry fire housing (see Figure 8).



2. Unload Rifle and Make Safe.

- Keep the muzzle pointed in a safe direction at all times and keep fingers outside the trigger guard. **Rotate the safety to the "SAFE" position.**
- Remove the magazine. **REMEMBER that even though the magazine has been removed, a cartridge remaining in the chamber can still be fired!**
- Pull the charging handle all the way to the rear, extracting and ejecting the cartridge in the chamber.
- When the bolt carrier is fully retracted, push down on the bottom pad of the bolt catch and then allow the bolt carrier to move forward until it comes to rest against the bolt catch.
- Always visually double check the chamber to be certain it is empty.**
- Press the upper thumb pad of the bolt catch to release the bolt carrier assembly into battery position.
- On the left-hand side of the lower receiver, push the rear takedown pin to the right. (If the pin is hard to remove use a punch and gently tap with a hammer. The pin will become easier to remove over time.)
- From the right side of the rifle, pull the pin outward until the detent stops any additional travel. (It is best if you hold the upper and lower receivers together until you are ready to open the rifle.) **CAUTION: The upper receiver will move forward once the pin is disengaged and could pinch your fingers if you are holding the magazine well.**

3. Assembly of the Fire Control Group into your Lower Receiver.

Once your rifle is unloaded and the upper and lower receivers have been separated, follow the same trigger disassembly procedure described in Step 1 to remove any previously installed trigger group, grip, and safety selector.

You will need the following tools in order to assemble your new trigger system into the lower receiver of your rifle:

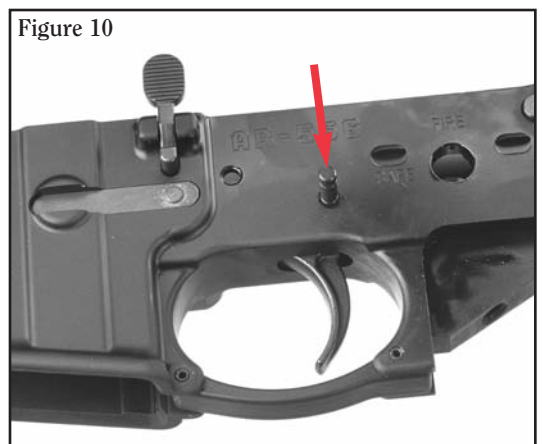
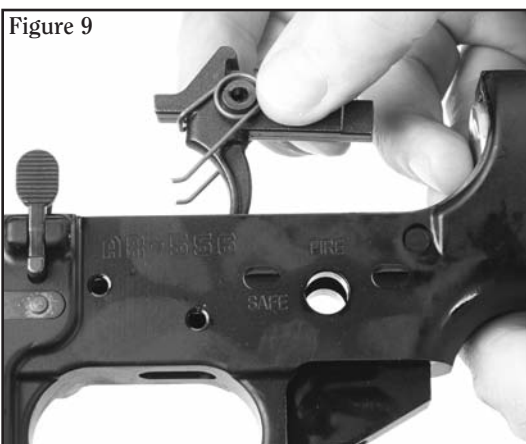
- soft-ended hammer or mallet
- 1/8" or 5/32" pin punch
- 3/16" Allen wrench/key
- quality gun oil

At the very minimum, you will need to install the following supplied components into the lower receiver of your rifle. See Exploded View drawing on page 4 of this instruction sheet.

Key No.	Part No.	Part Name
2	NS02100	Trigger/Hammer Pins – Elite 451 & 452
4	NS04700	Hammer Spring – Elite 451 & 452
5	NS11705	Single-Stage Hammer – Elite 451
	NS01704A	Two-Stage Hammer – Elite 452
6	NS04801	Heavy Trigger Spring – Elite 451
	NS04800	Standard Trigger Spring – Elite 452
7	NS12003	Single-Stage Disconnecter – Elite 451
	NS12002	Two-Stage Disconnecter – Elite 452
8	NS12101	Disconnecter Spring – Elite 451 & 452
9	NS02002	Trigger – Elite 451 & 452

While it is recommended to install the included Safety Selector, NS13800, it is not necessary as long as the safety selector used in your rifle passes Step 5: Safety Selector Function.

- Install trigger spring and disconnecter spring on the trigger, if not already installed.
- Install the disconnecter into the trigger assembly. The flat portion of the disconnecter should be fitted above the disconnecter spring and beneath the flat ridge on the trigger assembly.
- Keeping downward pressure on the disconnecter, place the trigger assembly into the receiver (see Figure 9). Align the trigger and disconnecter such that the trigger pivot pin can be inserted through the receiver. This will require that you keep downward pressure on the trigger assembly. (See Figure 10).



- Install the safety selector by sliding it into the left side of the receiver with the safety selector pointing to "FIRE" (see Figure 11).



- e. Place the selector detent into the hole in the underside of the receiver grip area (see Figure 12).



Figure 12

- f. Place selector detent spring into the grip.
- g. Slide grip onto receiver (see Figure 14).
- h. Insert socket head cap screw and star washer through the bottom of the grip and tighten (see Figure 15).



Figure 14



Figure 15

- i. Install hammer spring onto the hammer if not already installed.
- j. See Figure 16 for correct position of trigger/spring assembly inside receiver. With the safety still on "FIRE," insert the hammer assembly into the receiver such that the hammer spring's legs are sitting on top of the trigger pivot pin pointing towards the rear of the rifle (see Figure 17).
- k. Align the hammer with the pivot pin hole by placing downward pressure on the hammer (see Figure 18) and completely insert the hammer pivot pin. This will require the use of a mallet (see Figure 19).

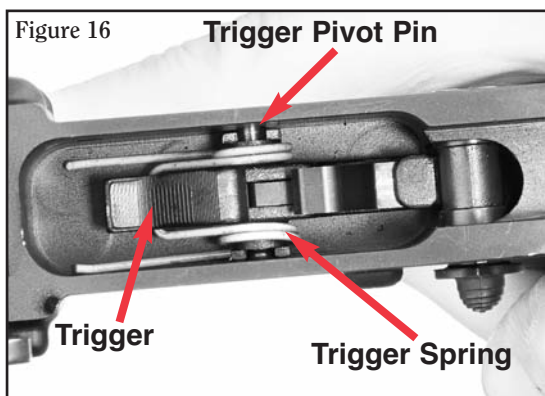


Figure 16

Trigger Pivot Pin

Trigger

Trigger Spring

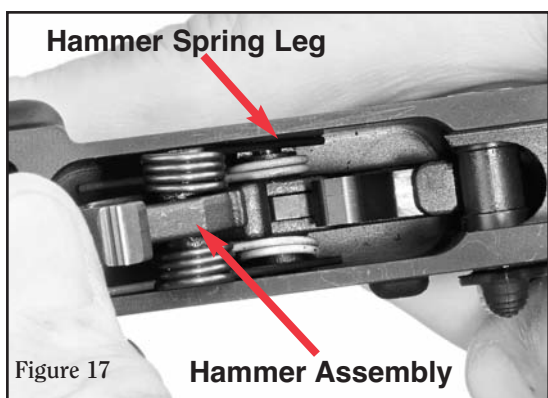


Figure 17

Hammer Spring Leg

Hammer Assembly

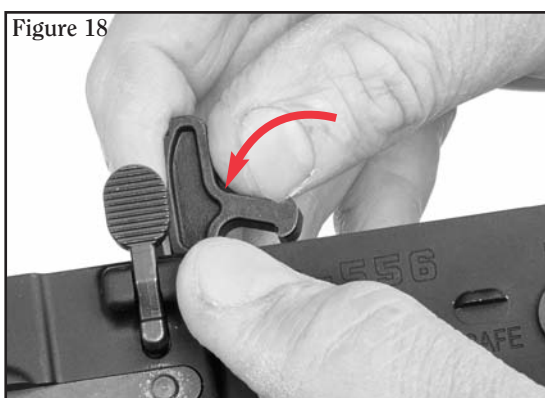


Figure 18

Apply a light coating of quality gun oil to the primary and secondary sear surfaces of the hammer, trigger, and disconnecter.

- l. Perform all safety checks!



Figure 19

4. Primary and Secondary Sear Function.

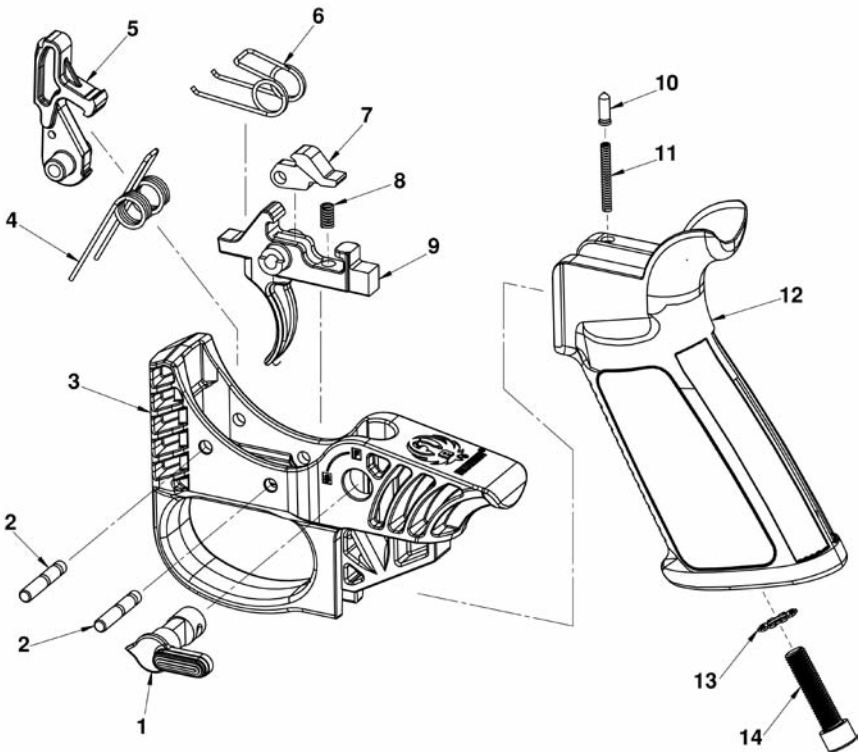
- With the selector on "Fire" and the hammer in the cocked position, the hammer should fall when 4 - 4.5 lbs of force is applied to the trigger. **WARNING! – If you dry fire your rifle without the upper receiver in place, you will damage your lower receiver.**
- With the trigger held back, manually cock the hammer. The hammer should lock rearward on the disconnecter hook (secondary sear).
- With the hammer locked back on the secondary sear, slowly release the trigger until the hammer slips from the secondary sear onto the primary sear. The hammer should not fall off of the primary sear. Be sure not to make any contact with the hammer during this process.
- Repeat steps 4a. through 4c. four more times.

5. Safety Selector Function.

- Safety selector switch should operate smoothly and definitively snap into "Safe" and "Fire" positions. Selector should not be able to rotate past "Fire".
- With the selector on "Safe", the hammer should not fall when the trigger is pulled.
- Trigger should fully return to starting position when released (does not perch).

RUGER® ELITE 451 & 452 AR TRIGGERS PARTS LIST & EXPLODED VIEW

Key No.	Part No.	Part Name	Model
1	NS13800	Safety Selector Switch	451 & 452
2	NS02100	Hammer/Trigger Pin, 2 Req'd	451 & 452
3	NS00900	Fire Control Housing	451 & 452
4	NS04700	Hammer Spring	451 & 452
5	NS11705	Single-Stage Hammer	451
	NS01704A	Two-Stage Hammer	452
6	NS04801	Heavy Trigger Spring	451
	NS04800	Standard Trigger Spring	452
7	NS12003	Single-Stage Disconnecter	451
	NS12002	Two-Stage Disconnecter	452
8	NS12101	Disconnecter Spring	451 & 452
9	NS02002	Trigger	451 & 452
10	NS04200	Safety Selector Detent	451 & 452
11	NS04900	Safety Selector Detent Spring	451 & 452
12	ND00075	Grip	451 & 452
13	MA13500	Grip Washer	451 & 452
14	NS00069	Grip Screw	451 & 452



STURM, RUGER & COMPANY, INC.
271 Cardwell Road
Mayodan, North Carolina 27027 U.S.A.
www.ruger.com

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