



**SIG SAUER 556xi<sup>®</sup>**  
**CALIBER EXCHANGE KITS**  
**AND CONVERSION KITS**

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**INSTALLATION INSTRUCTIONS**

## **⚠ WARNING**

This SIG SAUER 556xi kit comes complete with all parts, tools, and detailed instructions for installation. These items are designed to assist you in the proper installation of this kit. This kit was designed to function properly in its original condition. Alterations can make it unsafe. Do not alter any part or add or substitute any parts or accessories not manufactured by SIG SAUER Inc.

SIG SAUER strongly recommends this kit be installed by a qualified gunsmith or certified SIG SAUER Armorer.

However, should you attempt this installation yourself, you should thoroughly read and understand the procedures required to properly install the contents of this kit. If you have any doubts about your ability to successfully complete this installation process, you should seek guidance from a qualified gunsmith or certified SIG SAUER Armorer.

Failure to properly follow the supplied instructions may result in the improper function of your rifle, damage to the rifle, and possibly injury to yourself or others.

Read and become familiar with the procedure for field stripping your 556xi as described in your original owner's manual.

### **▲ ADDITIONAL WARNING**

Early 556xi rifles chambered in 5.56x45mm NATO were fitted with a lighter hammer spring. Using that lower receiver assembly with this kit upgrade in 7.62x39mm, may produce light primer strikes and failures to fire. A hammer spring P/N 1511193 is available for factory installation in your lower to resolve this. Please contact SIG SAUER for further information.

## **General Safety Information**

**▲ WARNING:** Safety is the number one concern when working with firearms.

- Keep the muzzle pointed in a safe direction at all times.
- Never allow live ammunition to be brought into the maintenance/cleaning area.
- Verify that all weapons are unloaded and clear prior to performing any maintenance.
- Do not touch the trigger unless the procedure requires you to do so.
- Always wear safety glasses with side shields when performing maintenance.

## **Setting Up a Safe Work Place**

Having a proper work area to install this kit will help to ensure success and reduce the chance of damaging the firearm. A solid workbench with a bench mat, and a properly mounted vise is required for securing the firearm with the supplied vise jaws. Sufficient lighting should be available.

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## Caliber Exchange Kit Components

- Bolt (7.62x39mm or 5.56x45mm)
- Barrel & Gas Block Assembly (7.62x39mm or 5.56x45mm)
- Vise jaws with Pin
- Barrel wrench
- Grease

## Conversion Kit Components

Kit Includes all items from above listed kit, plus the lower receiver and magazine listed below depending on which kit you purchased.

- Complete lower receiver assembly with magazine
  - AR Type lower with AR magazine either in 5.56x45 NATO or 7.62x39 Russian
  - AK Type lower with AK magazine in 7.62x39mm Russian

## Required Tools

- Bench vise
- Vise jaws – Supplied in kit
- Barrel wrench – Supplied in kit
- Torque wrench –Capable of 50 foot pounds
- Wrench handle ½ inch drive

## **1.0 Preparing the 556xi for Installation – Caliber Exchange Kit**

### **Field Strip the 556xi**

1. Unload the 556xi and visually and physically check to make sure that no ammunition is present.

- Rotate the selector to SAFE.
- Remove the magazine if present.
- Retract the charging handle and lock the bolt to the rear.
- Physically and visually inspect the chamber for ammunition.
- Release the charging handle to its forward and locked position.

2. Pull the rear takedown pin from left to right until stopped by the detent.



3. Pull the front pivot pin to full detent.

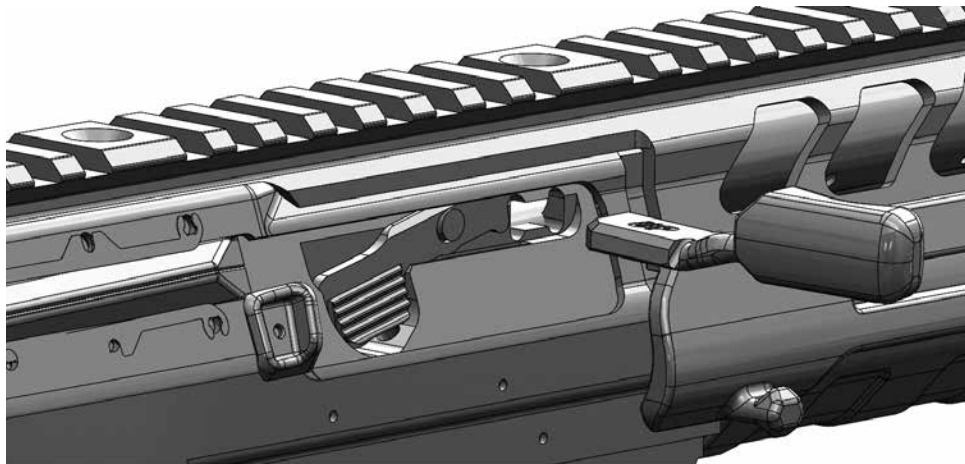




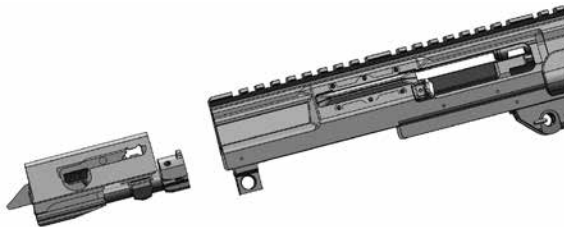
4. Separate the upper for the lower receiver.



5. Depress the charging handle catch and pull the charging handle from the bolt carrier.



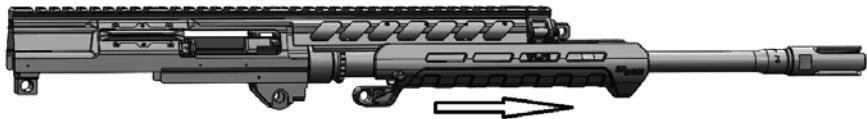
6. Tilt the upper receiver and allow the bolt carrier assembly to drop from the rear of the receiver.



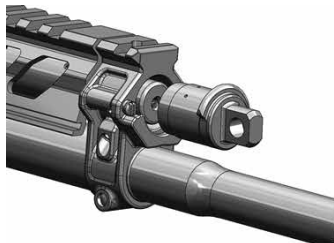
7. Remove the bolt assembly from the bolt carrier. You will be replacing the bolt with the new bolt from your kit.



8. Grasp the lower portion of the handguard and slide it forward and off of the rail assembly.

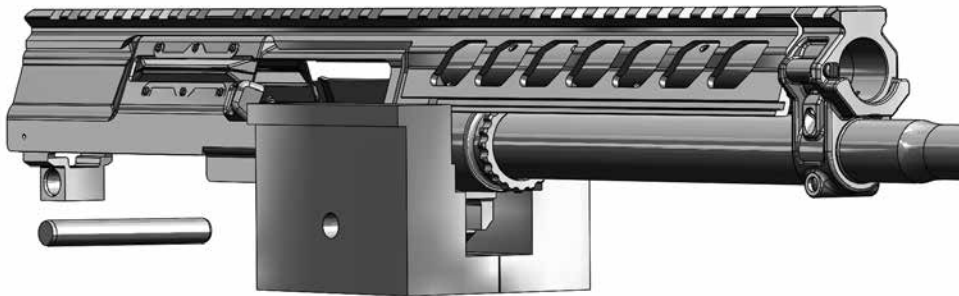


9. Remove the gas valve and piston/op rod. Push in on the stop pin and rotate the gas valve so the flange clears the gas block channel. Pull the valve straight out of the gas block. Pull the piston/op rod from the gas tube.



## 2.0 Barrel Removal

1. Attach the two vise jaws and secure them with the supplied dowel pin. Push the pin through the first jaw, then the pivot pin hole in the upper receiver, and into the second vise jaw.



2. Clamp the upper receiver assembly in the vise with the right side facing you. This will allow you to place downward pressure on the barrel wrench which will make it easier to loosen the barrel nut and keep the assembly from trying to lift out of the vise

3. Attach the barrel wrench to a ½ inch drive wrench handle (not shown).

Note: Due to the configuration of the upper rail assembly, only the lower two thirds of the barrel nut scallops are accessible. Position the barrel nut wrench as shown. Use caution applying pressure to the wrench to guard against damaging the upper receiver rail assembly when the barrel nut breaks loose.

4. Position the barrel wrench onto the barrel nut engaging as many scallops as you can. Attach the ½" drive handle.

5. Loosen the barrel nut counterclockwise. You will only be able to rotate the wrench a small amount of travel at a time.

6. Reposition the wrench and continue to loosen the barrel nut until you can rotate the barrel nut by hand. Remove the barrel from the receiver.

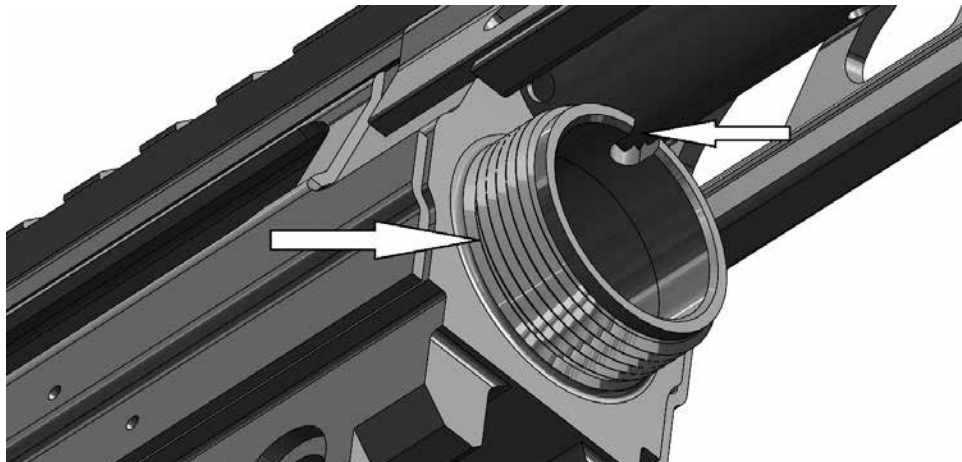


7. With the barrel removed you can now pull the gas tube from the rear of the gas block. Take this opportunity to thoroughly clean the gas tube.



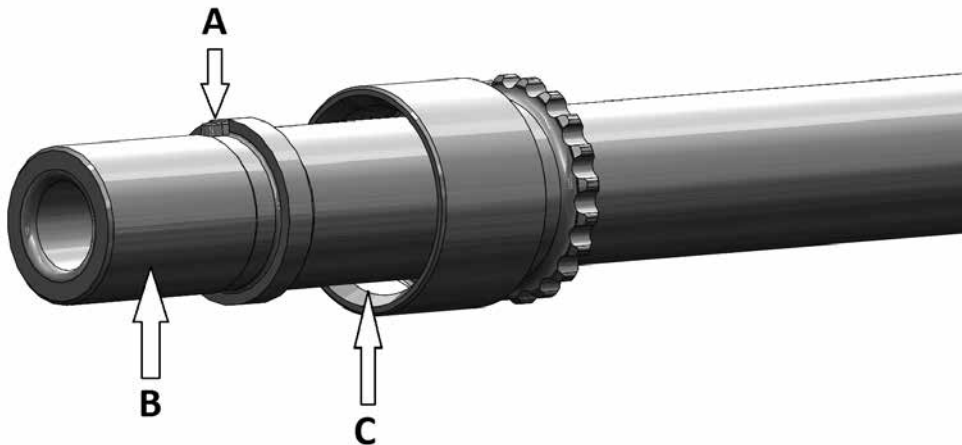
### 3.0 Barrel Installation

1. Thoroughly clean the upper receiver threads and the barrel channel of all residue.





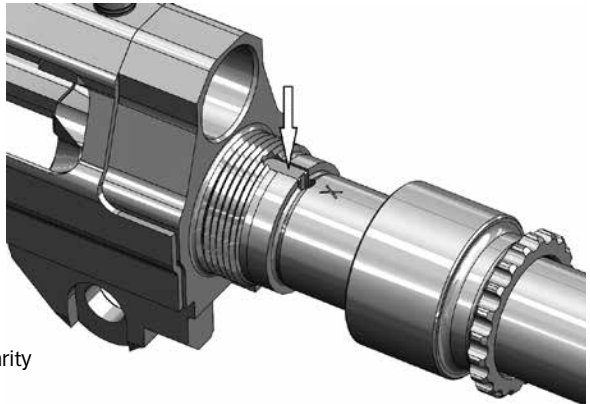
2. Clean the threads on the new barrel nut (C), clean the barrel (B), and the area around the alignment pin (A).



3. Remove the gas valve from the new barrel assembly and set it aside.
4. Lubricate the threads on the upper receiver with the supplied grease.
5. Mount the upper receiver in the vise with the left side facing you.
6. Push the gas tube into the rear of the gas block of the new barrel assembly



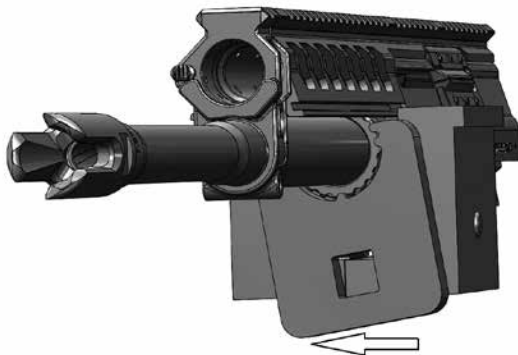
7. Insert the new barrel assembly into the receiver making sure the alignment pin is in the slot of the receiver. Thread the barrel nut on by hand. Loosen it and tighten it several times by hand to circulate the grease around the threads.



\*\*Upper Rail and gas tube omitted for clarity

8. Attach the barrel wrench to the torque wrench and set for 50 foot pounds.

9. Tighten the barrel nut to 50 foot pounds.



10. Loosen the barrel nut with the  $\frac{1}{2}$  inch drive handle attached to the barrel wrench. Do not use the torque wrench to loosen the barrel nut.

11. Repeat the tightening sequence two more times for a total of three (3) tightening sequences.

## 4.0 Reassembly

1. Clean the old lubricant from the bolt carrier and re-lube the channel for the bolt lug.
2. Install the new bolt assembly to your bolt carrier.



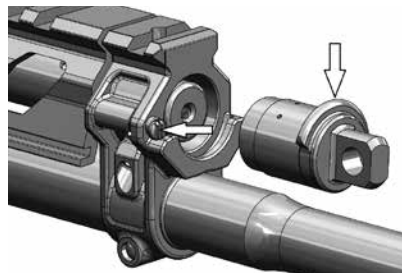
3. Pull the bolt forward to the unlocked position.

4. Install the piston/op rod back into the gas tube with the notched end for the charging handle entering the gas tube first, and facing downward.

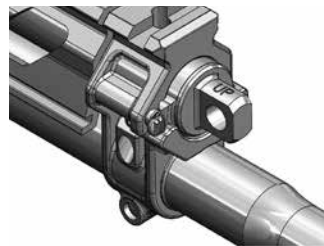


5. Push in on the piston end until the op rod is fully seated. If the op rod is not fully seated into the receiver you may press on the piston head while rotating it slightly to align the retaining pin for the recoil spring. You should see the notch for the charging handle in the ejection port with the notch facing downward.

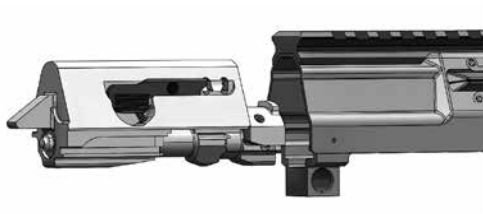
6. Replace the gas valve by inserting it into the gas block and over the piston, with the flange facing upward.



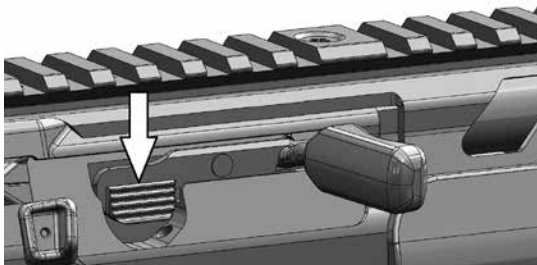
7. Push in on the stop pin and rotate the gas valve until the "UP" on the valve is facing upward. Check that the valve rotates between Pos 1 and Pos 2 stopping on the detent.



8. Insert the bolt/bolt carrier assembly back into the upper receiver sliding it completely forward.

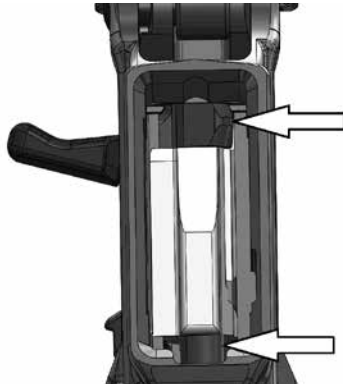


9. Insert the charging handle into the slot of the bolt carrier. Push down on the charging handle latch and insert the charging handle in to the slot of the bolt carrier.

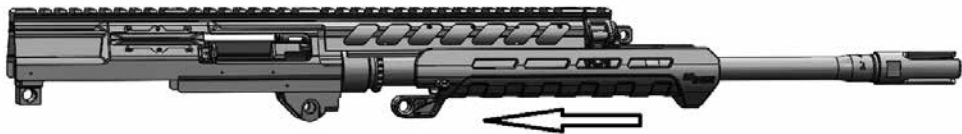




10. Retract the charging handle and check the function of the op rod. The bolt carrier should move smoothly and the bolt should lock into the monoblock. Turn the receiver over so you can observe the bottom of the bolt carrier and the bolt head. As you check the movement of the bolt carrier, watch the rotation of the bolt head and make sure it is rotating to its locked position in the monoblock as it moves forward. The image below depicts the bolt properly rotated and locked.



11. Slide the lower handguard back onto the upper rail assembly and pull it rearward.



12. Attach the upper to the lower and push the front pivot pin from right to left making sure the pin passes through the handguard link as detailed in the close up image below.



13. Close the receivers together and push the takedown pin from right to left.

## **5.0 Conduct a Function Check**

### **5.1 AR type lower receivers only**

Prior to conducting the function check ensure the rifle is clear by doing a visual and physical check of the rifles chamber and the magazine to verify there is no ammunition present.

1. Rotate the fire control selector to SAFE (S).
2. Insert an empty magazine into the mag well making sure it is properly seated.
3. Pull the charging handle completely to the rear and release. The bolt should stay locked to the rear.
4. Press the magazine catch-the mag should drop free.
5. Depress the bolt catch. The bolt should go forward and lock.
6. Attempt to press the trigger to the rear. The hammer should not fall.
7. Rotate the fire control selector to semi (F).
8. Press the trigger and hold it to the rear. The hammer should fall.
9. Keep the trigger pressed rearward and retract the charging handle fully rearward then release it.
10. Release the trigger. You should hear a click and the hammer should not fall.
11. Press the trigger to the rear. The hammer should fall.

## 5.2 AK type lower and AK magazine

Prior to conducting the function check ensure the rifle is clear by doing a visual and physical check of the rifles chamber and the magazine to verify there is no ammunition present.

1. Rotate the fire control selector to SAFE (S).
2. Insert an empty magazine into the mag well making sure it is properly seated.
3. Pull the charging handle completely to the rear and release. The bolt should not stay locked to the rear.
4. Press the magazine catch forward and simultaneously remove the magazine.
5. Retract the charging handle and lock the bolt to the rear by pushing up on the bolt catch.
6. Depress the bolt catch. The bolt should go forward and lock.
7. Attempt to press the trigger to the rear. The hammer should not fall.
8. Rotate the fire control selector to semi (F).
9. Press the trigger and hold it to the rear. The hammer should fall.
10. Keep the trigger pressed rearward and retract the charging handle fully rearward then release it.
11. Release the trigger. You should hear a click and the hammer should not fall.
12. Press the trigger to the rear. The hammer should fall.

## 6.0 Conversion Kit Instructions

If you have purchased a SIG SAUER 556xi Conversion Kit you received a complete lower receiver assembly with its appropriate magazine in addition to the parts that come in the caliber exchange kit. Once you have completed the barrel change, as previously described in Sections 3-5, you will need to attach the new lower receiver assembly.

To attach the new lower:

1. Pull the front pivot pin and rear takedown pin to full detent.
2. Align the upper receiver to the lower receiver and push the front pivot pin back in to full detent.
3. Close the receivers together and push the rear takedown pin in to full detent.

4. Conduct a function check in accordance with Section 5.0.



*Trigger Housing with AR magazine well*



*Trigger Housing with AK magazine well*



**FOR PRODUCT SERVICE ON THIS MODEL, PLEASE CALL 603-610-3000**

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