

Sabatti s.p.a.



USER MANUAL

USE AND MAINTENANCE OF AR-15 RIFLE

SABATTI SPA

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1 - WARRANTY

This Sabatti Spa Company firearm carries a 2 years warranty to the original purchaser and covers all defects in material and workmanship.

Any unauthorized, repair, misuse, abuse, modifications or alterations of this product are not covered by this warranty. This warranty does not include normal and expected wear of components, exterior finishes and appearance through use.

All warranty work will be carried out at Sabatti Spa Company. Any product requiring warranty work will be repaired/replaced free of charge and return shipping covered. Please supply a copy of the sales invoice or the dated sales receipt.

* The use of steel case ammunition will void warranty.

* The use of re-loaded ammunition, proof rounds or ammunition that exceeds C.I.P. specifications will void warranty.

* Any repairs or modifications not done by Sabatti Spa Company will void warranty.

* Any modifications of barrel, including reaming, turning down barrel to lighter profile, threading or rethreading barrel for attachments will void warranty.

NOTICE:

Sabatti Spa Company has no control over the use of your firearm, and shall not be held responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm.

In addition, Sabatti Spa Company shall not be responsible for proper function of the firearm when it is used for purposes or subjected to treatment for which it was not intended.

Sabatti Spa Company will not honor claims which may result from careless or improper handling, unauthorized adjustments or parts replacement, corrosion, neglect, use of the wrong type or caliber of ammunition, or the use of ammunition other than original, high quality commercially manufactured ammunition in good condition or any combination thereof.

2 - SAFETY WARNINGS

- ▶ ALWAYS handle and treat your firearm as if it were loaded.
- ▶ Always keep the rifle pointed in a safe direction.
- ▶ Never point your firearm at anything that you do not intend to shoot.
- ▶ Keep your finger off the trigger and out of the trigger guard until you are aiming at your target and ready to shoot.
- ▶ Always keep the safety in the “SAFE” position, especially when the firearm is loaded and cocked, until you are ready to fire.
- ▶ Always keep and carry your firearm with an empty chamber until you intend to shoot, so that your firearm cannot be fired unintentionally.
- ▶ Firearms should be unloaded when not actually in use.
- ▶ Be sure of your target and backstop before you shoot.
- ▶ Always wear hearing and eye protection when shooting.
- ▶ Discharging firearms in safe areas, cleaning firearms, or handling ammunition may result in exposure to lead, a substance known to be associated with birth defects, reproductive harm, and other serious injury. Have adequate ventilation at all times and wash hands after handling.
- ▶ Be sure that your barrel is clear of obstructions, including excessive oil, grease, cleaning patches, etc before shooting.
- ▶ Use only clean, high quality factory loaded ammunition in good condition. Sabatti Spa Company cannot condone the use of handloaded ammunition. Any such use voids the Sabatti Spa Company warranty.
- ▶ Do not alter or modify your firearm.
- ▶ Do not try to change your firearm’s trigger pull, because alterations of trigger pull can affect sear engagement and might cause accidental firing.
- ▶ Store firearms and ammunition separately, and beyond the reach of children.

3 - GENERAL OPERATIONS

LOAD THE MAGAZINE

1. Use only ammunition for which your firearm is chambered.
2. With front of magazine forward, place a round between the lips of the magazine with the bullet forward. Press the round down until it is retained by the magazine lips. Place the next round on top of the last and repeat until the desired number of rounds are loaded.

LOAD THE RIFLE

1. With the rifle pointing in a SAFE direction, pull charging handle assembly rearward, lock bolt, and release charging handle. Place selector lever on SAFE.
 2. Pull charging handle assembly rearward and check to see that chamber is clear.
 3. Release charging handle assembly.
 4. Push upward on the magazine until magazine catch engages and holds the magazine.
 5. Tap upward to make sure cartridge magazine is seated correctly.
- Chambering and firing a round

RIFLE WITH BOLT ASSEMBLY TO THE REAR.

1. Depress upper portion of bolt catch to release the bolt.
2. Tap forward assist assembly (if equipped) to ensure bolt is fully forward and locked.
3. Move selector lever to FIRE.
4. Squeeze the trigger and fire.

NOTICE:

This is a semi-automatic firearm and is immediately loaded and ready to fire after each shot until magazine is empty.

4 - MAIN OPERATIONS

- ▶ **Feeding**
- ▶ **Chambering**
- ▶ **Locking**
- ▶ **Firing**
- ▶ **Unlocking**
- ▶ **Ejecting**
- ▶ **Cocking**

1. Place selector lever on SAFE.
2. Insert loaded magazine in the magazine well and chamber a round.
3. Place the rifle to your shoulder.
Face the target, move the selector lever from SAFE to FIRE.
4. Align the front and rear sight with the target and squeeze the trigger.
5. Squeezing the trigger releases the firing pin and allows it to impact the primer on the round.
6. The primer ignites the propellant in the round.
7. Gas from the burning propellant pushes the projectile along the barrel of the rifle.
8. The rifling in the barrel causes the projectile to rotate which provides stability during flight to the target.
9. When round reaches approximate end of barrel, expanding gases from burning propellant pass out through gas port and into gas tube. Gas goes into bolt carrier assembly, ejects old cartridge, and chambers a new round.

FOR YOUR SAFETY AND FOR THOSE AROUND YOU:

- ▶ **ALWAYS keep the rifle pointed in a safe direction.**
- ▶ **ALWAYS keep your finger off the trigger until ready to shoot.**
- ▶ **ALWAYS keep the rifle unloaded until ready to use.**
- ▶ **ALWAYS know your target and what is beyond.**

WARNING!

To avoid accidental firing, BE SURE WEAPON IS CLEAR. Failure to do so could result in serious injury or death.

- Be sure the cam pin is installed in the bolt group. If it isn't, your rifle can still fire and will explode causing injury or death.
- DO NOT exchange or switch bolt assemblies from one rifle to another. It could cause damage to both you and the rifle.
- DON'T OVERHEAT YOUR SABATTI RIFLE BARREL. Sustained firing of the Sabatti Rifle will rapidly raise the temperature of the barrel to a critical point. Firing 140 rounds, rapidly and continuously, will raise the temperature of the barrel to the COOKOFF POINT. At this temperature, any live round remaining in the chamber for any reason may cook off (detonate) in as short a period as 10 seconds. If the cookoff point (or temperature) is felt possible, weapon should be immediately cleared and allowed to cool.
- Sustained rate of fire for the Sabatti Rifles is 12-15 rounds per minute. This is the actual rate of fire that a weapon can continue to deliver for an indefinite length of time without serious overheating. Sustained rate of fire should never be exceeded except under circumstances of extreme urgency.
- If your bolt fails to unlock and you try to free it by banging the buttstock on the ground, keep clear of the muzzle.
- If there's water in the barrel, don't fire the rifle. It could explode.

WARNING!

- If you experience a noticeable difference in sound or recoil, STOP FIRING. Either condition could indicate an incomplete propellant burn and a bullet still in the bore. Retract bolt slowly and remove fired cartridge case. Clear weapon and check for unburned powder grains in the receiver or bore and for a bullet in the bore. Remove unburned propellant or bullet from bore before resuming firing or barrel could explode. If bullet is lodged in bore, turn in rifle to your unit armorer or a certified gunsmith.
- If rifle stops firing with a live round in the chamber of a hot barrel, remove the round immediately. However, during training, if you cannot remove it within 10 seconds, wait 15 minutes with the rifle pointing in a safe direction. This way you won't get hurt by a possible ammunition cookoff, which could happen 1 seconds after contact with a hot chamber. Clear rifle.
- Use only high quality commercially manufactured ammunition in good condition.

5 - HANDGUARD DISASSEMBLY

PARTIAL REMOVAL

1. Remove the external screws using the correct key. Completely remove the 4 side screws and unscrew without removing the central screw underneath.



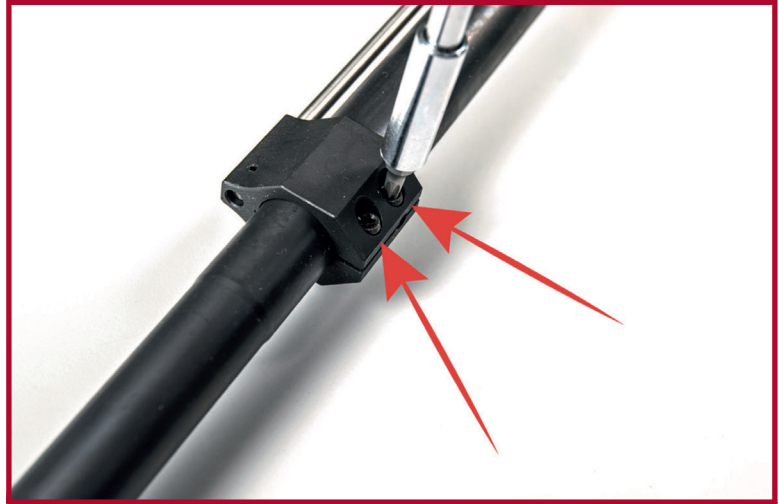
2. Pull the handguard forward.



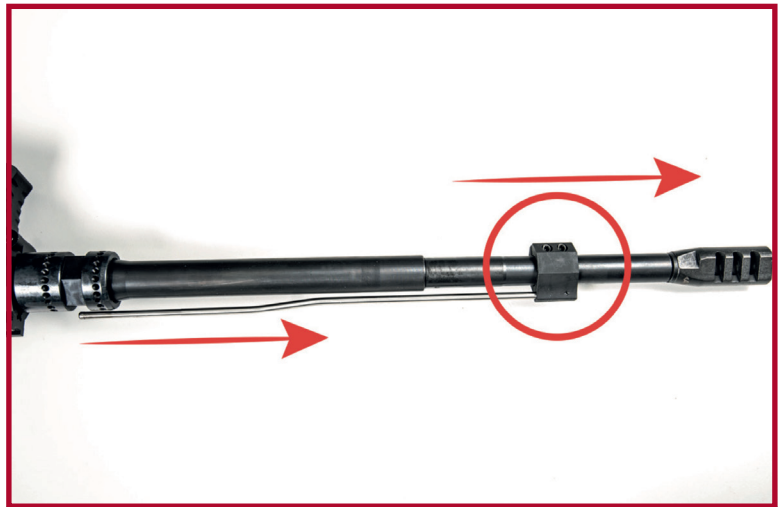
TOTAL REMOVAL

To completely remove the handguard, in order to support or remove the barrel, follow the following steps:

1. Unscrew the “Gas Block” connected to the pipe with the appropriate key.

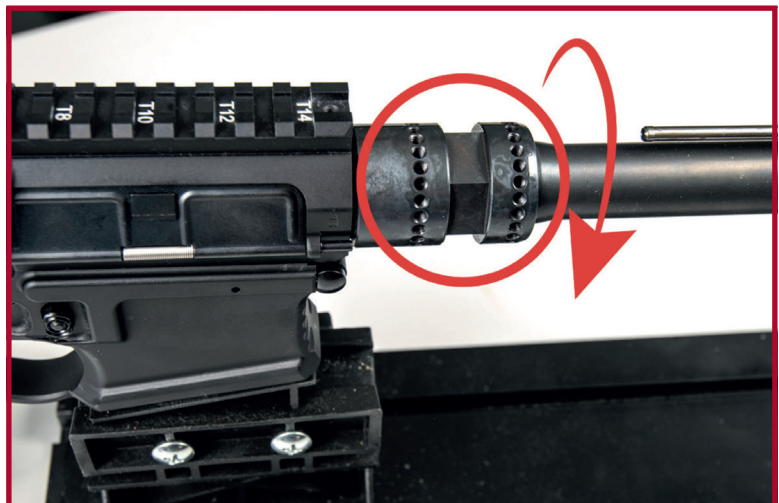


2. Slide the Gas Block outwards.



3. Block the entire “Upper” and unscrew the “Barrel nut” with a specific metric key 29mm. This maneuver requires considerable effort; once unscrewed, it will be possible to install a new handguard or remove the barrel to clean it.

N.B. We recommend this operation only if necessary!



6 - RIFLE CLEANING

BEFORE YOU BEGIN:

- ▶ CHECK THAT THE RIFLE IS UNLOADED
- ▶ REMOVE THE MAGAZINE
- ▶ LOCK THE BOLT TO THE REAR
- ▶ VISUALLY AND PHYSICALLY INSPECT THE CHAMBER
- ▶ POINT THE MUZZLE IN A SAFE DIRECTION, RELEASE THE BOLT AND PLACE THE RIFLE ON “SAFE” MODE



CHAMBER INSPECTION

1. Pull the charging handle and lock the bolt to the rear.



2. Visually inspect the chamber. If there is round in the chamber, clear it.



► **THE CLEANING OF THE RIFLE REQUIRES OBVIOUSLY CONSCIOUS DISASSEMBLY OF THE SAME.**

► **THIS MAINTENANCE PROCEDURE IS ADVISABLE EVERY 2,500 / 3,000 SHOT SPOTS.**

► **IN THE NEXT PAGES, WILL BE ILLUSTRATED STEP BY STEP:**

- **THE DISASSEMBLING THE RIFLE IN ITS PARTS MAIN (SECTION 7)**
- **THE DISASSEMBLY OF THE BOLT&CARRIER GROUP (SECTION 8)**
- **SPECIFIC INSTRUCTIONS FOR CLEANING ALL THE COMPONENTS (SECTION 9)**

7 - RIFLE DISASSEMBLY

Before starting the disassembly of the rifle, make sure that the weapon is unloaded.

1. Push the rear pin from left to right with your finger. If it turns out too hard, use an instrument that does not damage the weapon. Push the pin until it is completely pulled out of the Lower until it stops.



2. Turn the "Lower" down.



3. Retract the cocking lever until it stops.



4. Pull the Bolt&Carrier Group to the rear and out of the back of the Upper receiver. Leave the charging handle. In case of bolt carrier with left or right charging system, remove first the “system” by disassembling the screw.



5. After removing the Bolt&Carrier Group completely, pull out the Charging Handle and tilt it downwards, proceeding with removal.



6. At this point we will have totally extracted the Bolt&Carrier Group and the Charging Handle.



7. Push in the front takedown pin from left to right with your finger, or if tight, use a non-marring tool. Separate the upper and lower receivers.



8. To proceed with the removal of the “Recoil Buffer”, lower the “Hammer” to the correct position. Insert the safe. The removal of the “Recoil Buffer” is not part of the normal activity of “use and maintenance” of the rifle. Perform the operation if necessary.



9. Ensure the hammer is in the cocked position and the safety is on. Depress the Buffer Retainer and allow the buffer and spring to exit the buffer tube. During this operation, take care not to direct the spring towards your face.



10. Extract the spring.



11. The rifle is now disassembled in these parts:

- Upper
- Lower
- Bolt&Carrier Group
- Charging Handle
- Recoil Buffer

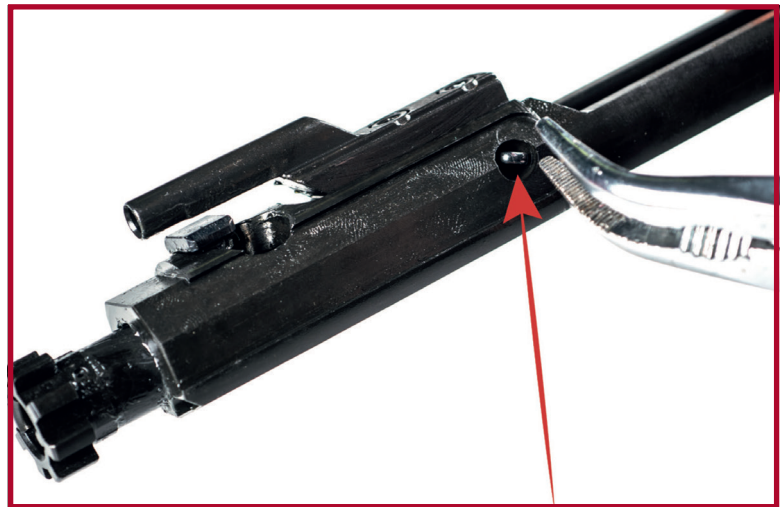




8 - BOLT&CARRIER DISASSEMBLY

1. Remove the Retaining Pin from the Bolt Carrier.

In case of rifle model with: left, right or ambi-charging system, the pin must be removed with hammer and pin punch.



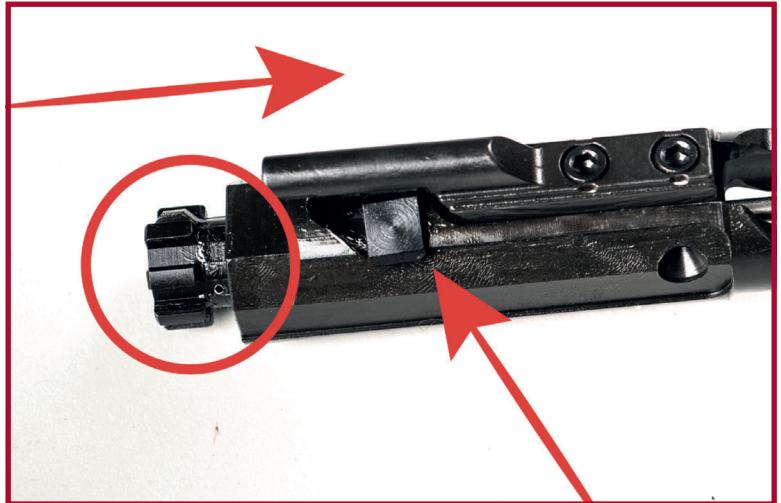
2. Push the Bolt in to the locked position (into the Bolt Carrier fully).



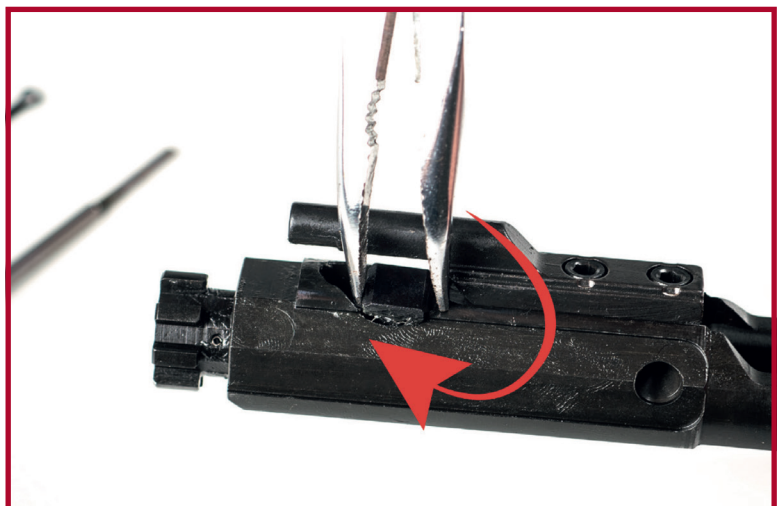
3. Invert the Bolt Carrier and allow the Firing pin to drop into your hand or onto a safe surface.



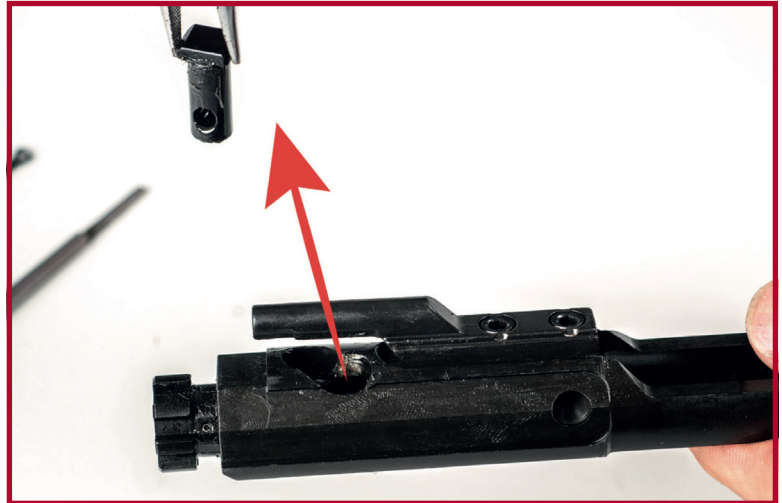
4. Push the Bolt back into the Bolt Carrier.
Note that the rectangular “Cam Pin” moves in an advanced position, adapts for the extraction.



5. Rotate the Bolt Cam Pin of 90 degrees.

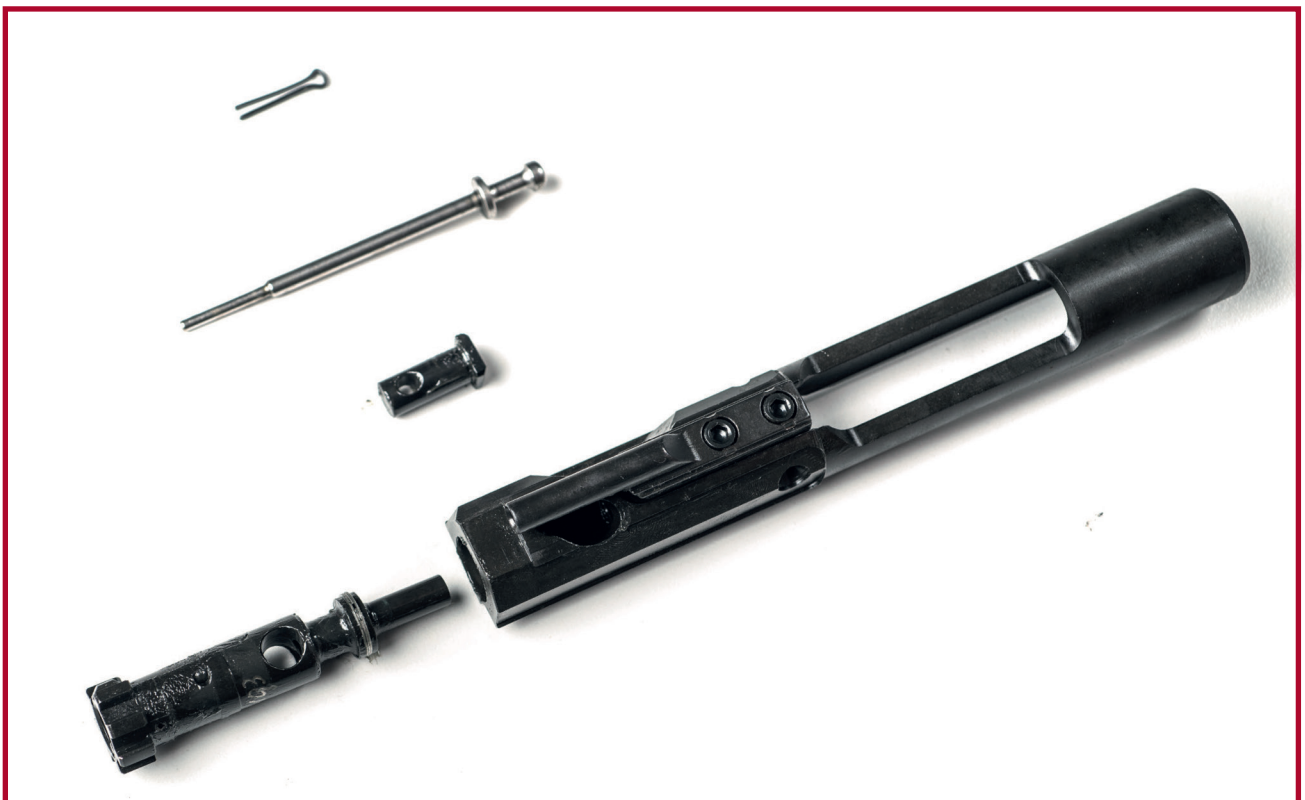
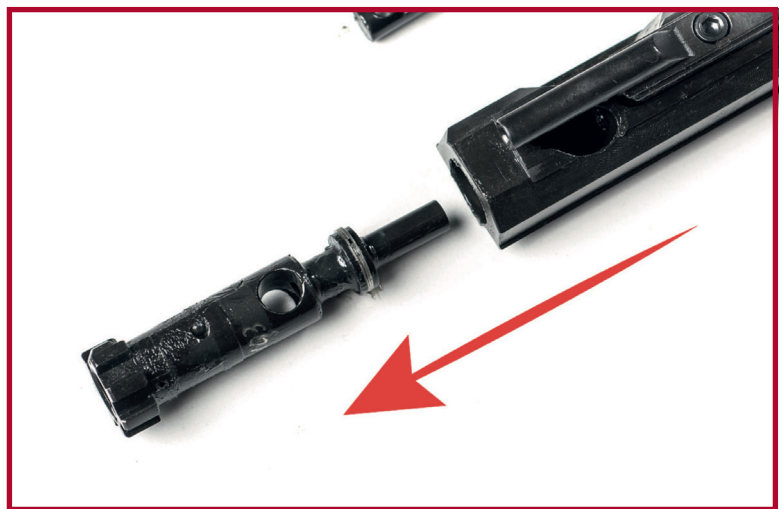


6. Remove the Cam Pin.



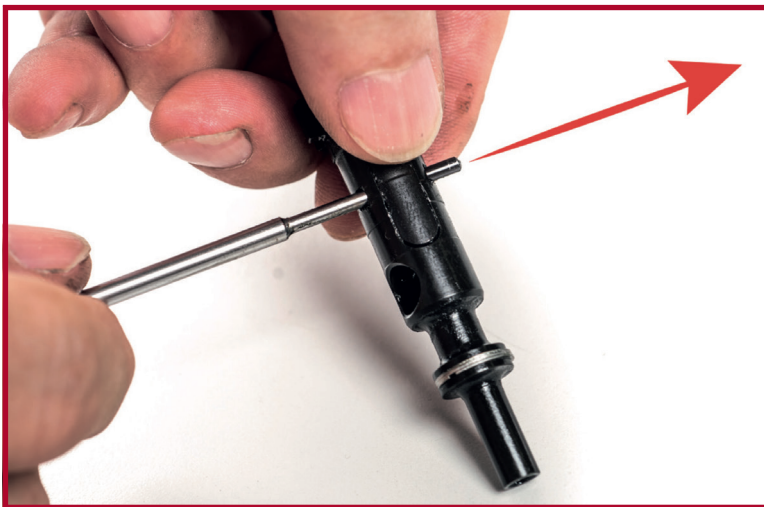
7. Extract the Bolt from the Carrier.
Now the Bolt&Carrier Group is disassembled in these parts:

- Retaining Pin
- Firing Pin
- Cam Pin
- Bolt
- Carrier



BOLT DISASSEMBLY

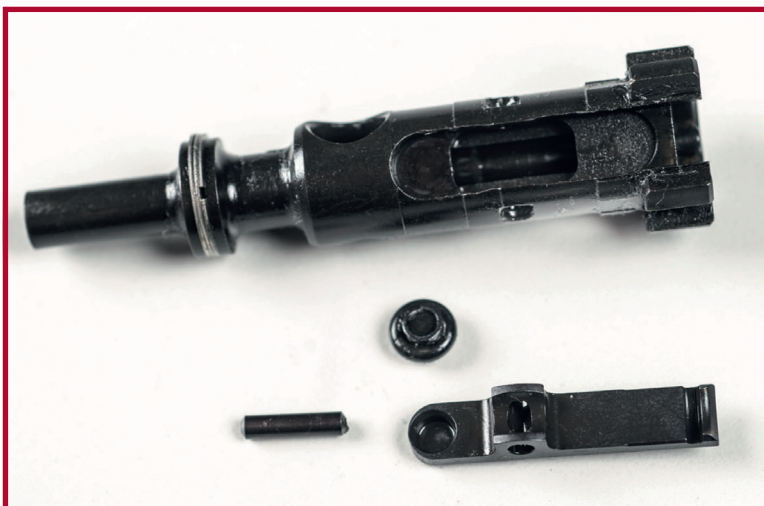
8. While pressing the extractor with your thumb, remove the extractor pin by pushing it outwards. If the firing pin is used for the extraction, pay attention and make sure not to damage the tip of the firing pin.



9. Lift out the extractor and spring. Do not remove the spring from the extractor. The extractor needs to be cleaned only when damaged or extremely dirty.



10. The Bolt is now disassembled.



9 - CLEANING AND LUBRICATION

RECOIL SPRING & BUFFER

- ▶ Use a dry cloth to wipe carbon, oil or dirt off of the spring and buffer.
- ▶ Apply a very light coat of oil to the spring & buffer. If in an arid/dusty environment leave dry.
- ▶ Inspect for damage.

LOWER

- ▶ Use a dry cloth and soft cleaning brush to clean the internal surfaces and components of the lower receiver.
- ▶ Apply a small amount of lubricant to the operating and bearing surfaces of the fire control components; trigger/hammer pins, springs, and trigger/hammer polished contact surfaces..

Do not use oil, it may cause accidental firing!

UPPER

- ▶ Use a dry cloth to clean the internal surfaces of the upper receiver. Avoid using abrasive products in the upper receiver as it may remove the applied Dry Film Lubricant.
- ▶ Keep particular attention as to not damage or bend the gas tube.
- ▶ Use a chamber brush to clean the chamber and barrel extension.
- ▶ Clean the bore with a .22cal/ 5.56m bore brush and swabs with an approved Cleaner, Lubricant, Preservative (CLP). Clean until a barrel patch pulls through clean.
- ▶ Wipe down the internal and external surfaces with a light coat of oil.
- ▶ Wipe down and lubricate the charging handle
- ▶ Inspect all parts for signs of cracking or peening.
- ▶ Inspect the gas tube and gas block and ensure that the gas system is secure and in the upright position. Check the set screws in the gas block for security.

BOLT&CARRIER

- ▶ Wipe down surfaces with CLP.
- ▶ Using a carbon scraper or brass brush, remove carbon buildup.
- ▶ Place two drops of CLP into the gas key.
- ▶ Inspect gas key screws for security.
- ▶ Check for cracks or battered/peened surfaces.

FIRING PIN

- ▶ Inspect for cracks, chips, bent or damaged tip.
- ▶ Apply a thin film of lubricant.

CAM PIN

- ▶ Use a dry cloth to wipe carbon, oil or dirt.
- ▶ Inspect for cracks and damage.
- ▶ Apply a thin coat of grease to the cam pin.

FIRING PIN RETAINER

- ▶ Wipe clean & apply a thin coat of CLP.
- ▶ Inspect for damage and cracks. If damaged replace with an proper firing pin retainer, not a standard cotter pin.

BOLT

- ▶ Using a carbon scraper or brass brush, remove carbon buildup.
- ▶ Inspect the bolt face. Ensure that firing pin hole is round. Inspect the lugs for chips/breaks.
- ▶ Inspect the gas rings.

REPLACE GAS RINGS EVERY 3000 ROUNDS

- ▶ Clean the extractor, lubricate and check the extractor for wear.
- ▶ Apply a light coat of lubricant to all surfaces.
Apply a light coat of grease to the gas rings and cam pin hole.

GAS RING FIT TEST

- ▶ Check bolt assembly for proper fit with bolt cam pin removed.
- ▶ Insert the Bolt into the Carrier.
- ▶ Invert the bolt carrier group and suspend so the bolt assembly is pointed down.
- ▶ The bolt assembly should not drop free.

NOTICE!

The bolt assembly must not drop out of the carrier when doing the gas ring fit test. If the weight of bolt assembly allows it to drop out of the bolt carrier assembly, replace the bolt gas rings.

9 - CLEANING AND LUBRICATION

1. After having cleaned and lubricated the parts according to the instructions, place the spring with “o-ring” in the appropriate housing located in the Bolt.



2. Place the extractor in its housing, making sure that the spring with “o-ring” engages correctly inside the cable clamp on the extractor.



3. Pressing with the thumb the extractor (which mechanically will oppose a strong resistance, so if you could not manually make use of a clamp taking great care not to damage the parts) proceed with the reinsertion of the extractor pin. Eventually help yourself with a small rubber mallet.



BOLT CARRIER GROUP ASSEMBLY

1. Once the Bolt has been reassembled, insert it into the Bolt Carrier.

NOTICE:

Make sure the extractor is on the left (indicatively points at 10 o'clock) compared to the "Bolt Carrier Key" positioned on the Carrier.
(see image below)



2. As you can see the Bolt is correctly inserted.
The Extractor is in the "10 o'clock" position with respect to the Bolt Carrier Key.

This position of the Bolt allows us to insert the Firing Pin and the Cam Pin.

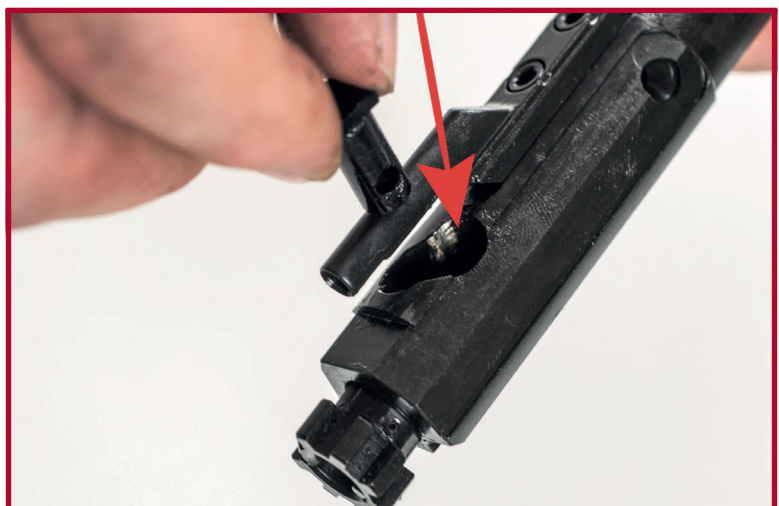


3. Insert the Cam Pin into the hole.

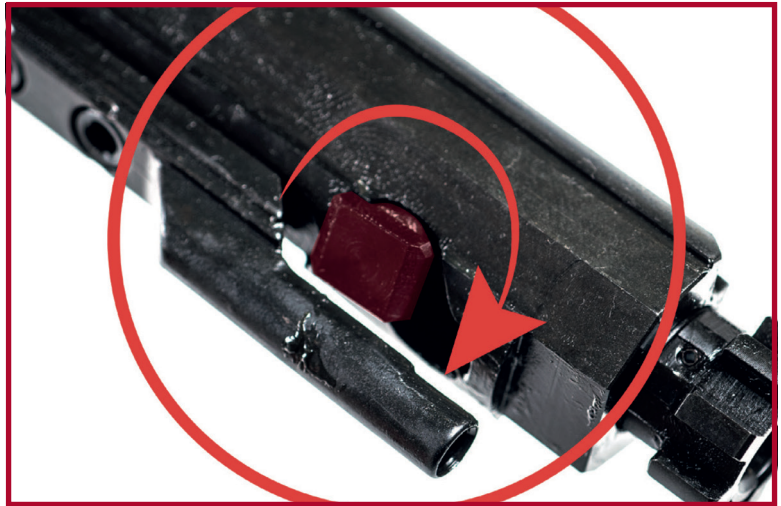
NOTICE:

The Cam Pin has a slightly rectangular head; insert it with the long side parallel to the Bolt Carrier.

At the base of the Cam Pin note the hole for housing the Firing Pin is perpendicular to the head, as shown in the photo.

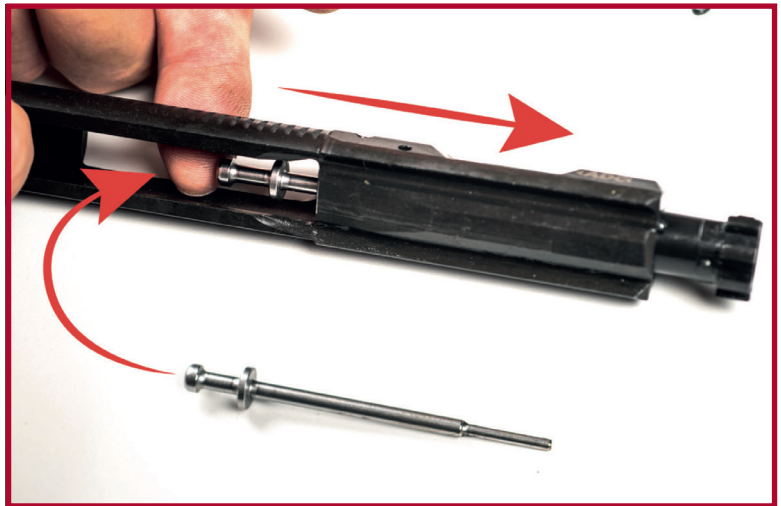


4. Rotate the Cam Pin 90 degrees.



5. Insert the Firing Pin inside the Bolt Carrier.

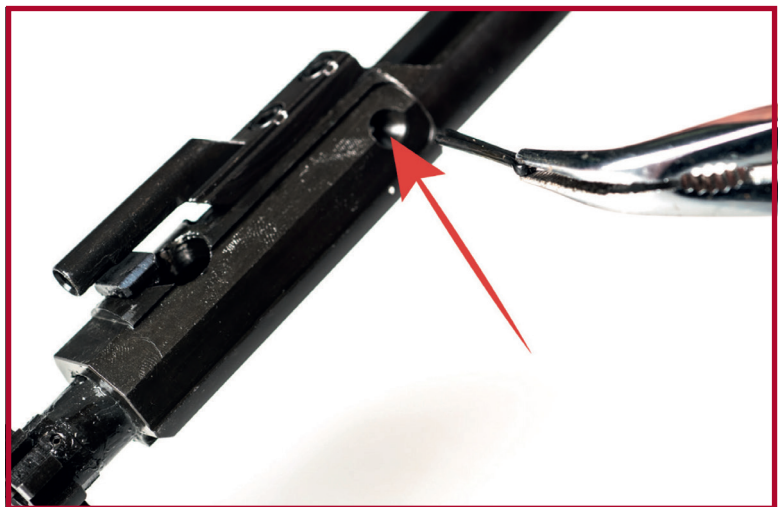
Push the Firing Pin completely inside of the Bolt Carrier.



3. Insert the Retaining Pin.

NOTICE:

The Retaining Pin must simply be inserted to the end of its stroke, without further action.

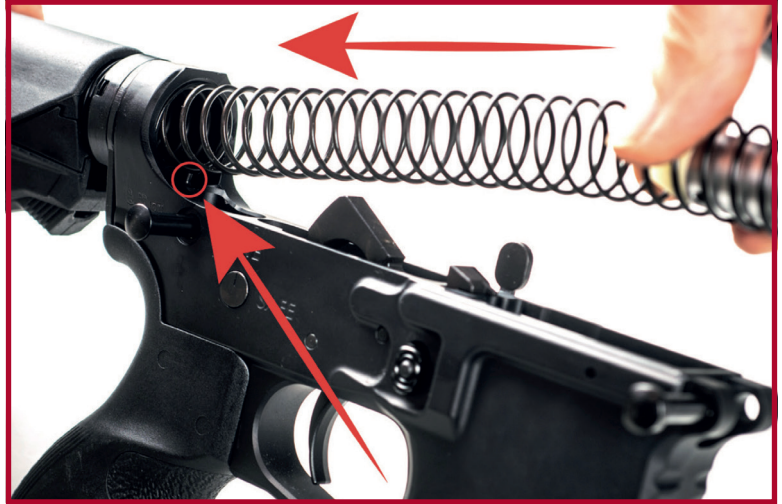


4. The Bolt&Carrier Group is now completely reassembled and can be inserted in the Upper.

UPPER&LOWER ASSEMBLY

If the “Recoil Buffer” has been extracted, before reassembling of the “Upper & Lower”, reinsert it into the appropriate housing tube.

1. Paying attention to the Buffer Retainer Pin (indicated in the circle), insert the spring and the Buffer into the housing tube. Push until the Buffer Retainer Pin locks the mechanism.



2. Join the Upper and the Lower by inserting the FRONT takedown pin again until it locks.



3. Insert the Charging Handle lever inside the Upper proceeding in an inclined direction, as shown in the photograph.

The Charging Handle will find precise housing in the shaped space of the Upper.



4. Insert the Bolt&Carrier Group inside the Upper (Bolt Carrier Key pointing towards the barrel).

Push the Bolt&Carrier Group to the end of its stroke.
The Charging Handle will follow the race until it is completely closed inside the Upper.



5. Complete the reassembly of the rifle by rotating the Lower until precise engagement with the Upper.



6. Keeping the Upper and the Lower together, insert the REAR Takedown Pin of the Lower until it is locked.

If it should resist, carefully use the rubber hammer to push the Takedown Pin.



7. The rifle is now fully assembled. Test the operation by proceeding to the “Function Check”, as described in the next section.

11 - FUNCTION CHECK

► NOTICE: A function check should be performed each and every time the rifle is reassembled or any time there is a doubt as to whether the selector or rifle are functioning properly.

CHECK THAT THE RIFLE IS UNLOADED

1. Pull the charging handle to the rear and release.
2. Place the selector on SAFE. Pull the trigger, and the hammer should not fall.
3. Place the selector on FIRE. Pull the trigger and hold to the rear. The hammer should fall.
4. Continue to hold the trigger to the rear, pull the charging handle to the rear, and release it.
5. Release the trigger with a slow, smooth motion until the trigger is fully forward. The hammer should not fall.
6. Pull the trigger. The hammer should fall.

WARNING!

► When reassembling the Bolt&Carrier Gropu, make sure you have installed the Cam Pin.

The rifle can work even without an installed the Cam Pin, but the consequence will be dangerous with probable weapon breakage and damage to yourself.



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