

# MESSERSCHMITT



## AR15

Bedienungsanleitung  
Operator's Manual

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## 1 INTRODUCTION

The Messerschmitt AR15 is based on a system which has already been in use for decades by militaries all over the world. Much has changed over the years, especially in the field of material development. For instance, a wide range of alloy components now makes it possible to produce stronger materials than ever before. That's why the upper and lower receiver of the Messerschmitt AR15 are made of drop-forged 7075 T6 aluminum. This manufacturing process gives the material an uninterrupted grain structure, as opposed to receivers which are machined from solid.

The Messerschmitt AR15 is a gas-operated weapon with a lug locking system. The following operator's manual gives the user an overview of the weapon's most important functions, handling, maintenance, cleaning and care.

### 1.1 WARNINGS AND SAFETY NOTIFICATIONS

#### WARNINGS



**Danger to life when handling loaded firearms.**

Only fire this weapon where permitted by law.

Always consider a firearm to be loaded as long as you have not conducted a safety inspection on the firearm yourself.

Never point the firearm at a person, even if the firearm is believed to be unloaded! Always keep the muzzle pointed in a safe direction, such as a bullet trap.

Conduct a safety check before using the firearm.

Only use ammunition which is approved according to CIP specifications, undamaged and free of dirt. Failure to observe this can lead to severe injuries or even death. Only use the firearm when it is in technically flawless condition.

## WARNINGS



### Read the operator's manual thoroughly before using the weapon.

Do not interchange locking mechanism parts from other rifles with one another. This could cause damage to the rifle and result in personal injury or even death.

Do not overheat the barrel of the AR15. Sustained shooting can lead to critical barrel temperatures. If you shoot rapidly and continuously, e.g. approx. 150 rounds in a very short time, temperatures may reach the so-called COOKOFF POINT. This can cause a cartridge in the chamber to ignite on its own (self-ignition). For this reason, you must let your firearm cool down as necessary. If you cannot remove the ammunition from the rifle, then keep the rifle pointed in a safe direction (bullet trap) for approx. 15 minutes and put it on safety. The rifle should then be cooled down so that it is possible to remove the ammunition.

Self-ignition is not possible at a sustained rate of fire of 20 to 25 rounds per minute.

If there are any liquids, dirt or particles in the barrel during shooting, it may cause the weapon to explode, leading to personal injury or even death.

Stop shooting immediately if you hear a changed sound or feel a difference in recoil. Open the bolt and remove the ammunition from the rifle. Then conduct a safety check on the weapon and make sure that there is no bullet or powder or other fouling in the barrel.

Remove any particles and clean the barrel before continue shooting. If there is a bullet in the barrel, consult a qualified gunsmith or firearm dealer who will professionally solve this problem.

## SAFETY NOTIFICATIONS



### The operator's manual is part of the weapon.

Only persons who have completely read and understood the operator's manual should be allowed to use the weapon.

Before handing the weapon over or laying it down, check to make sure it is not loaded and keep the action open until it is loaded for use.

## 2 TECHNICAL DATA

<b>CALIBER</b>	.223 Rem (5.56 x 45)
<b>MAGAZINE</b>	5-round, 10-round, 20-round, 30-round
<b>TWIST</b>	1:8



## 3 HANDLING AND MODE OF OPERATION

### 3.1 SAFETY CHECK

Conduct a safety check before each time you handle the weapon, before and after shooting, as well as when loading the weapon and when handing it to other people. Be sure to keep the muzzle pointed in a safe direction when doing so.


1. Set the weapon on safety (if cocked)
2. Remove magazine from the weapon (if it is inserted). Push the magazine release button on the right side to do so
3. Pull the charging handle back a bit and conduct a visual inspection to determine whether the weapon is loaded
4. Look into the chamber through the ejection port in order to be sure that there is no cartridge in the chamber



5. Release the charging handle, the bolt speeds forward
6. Pull the trigger and the trigger hammer will be released
7. The rifle is now uncocked/decocked



### 3.2 SAFETY

Cock the weapon by pulling the charging handle all the way back and letting it snap forward. Put the safety lever into the  (safe) position by swinging it counter-clockwise. The safety roller will now block the trigger.



### 3.3 OPERATING SEQUENCE OF THE REPEATING CYCLE

The shot is fired when the trigger is pulled. When the bullet has passed the gas port in the barrel, the powder gases will flow through the gas block and into the gas piston. The powder gas flows through the gas tube until it hits the gas diverter on the bolt. This introduces the powder gas into the bolt head carrier, where it hits the rear part of the bolt head. The pressure causes the bolt head carrier and bolt head to move in opposite directions from one another. The control bolt applies a rotating motion to the bolt head, thus releasing the barrel extension, the counter bearing. After approx. 6 millimeters of release travel, the locking bolt is lifted and the locking piece slides rearward from the acceleration put on it. The cartridge case being held by the extractor is pulled out of the chamber and ejected through the ejection port by the ejector. The bolt moving backwards pushes the striker backwards and re-cocks it. The locking spring with buffer housed in the weapon's buttstock ensures that the bolt closes again after the end of the rearward motion. In the process, a new cartridge is moved from the magazine and into the chamber. The weapon is re-cocked and ready to fire.

### 3.4 BOLT CATCH

The Messerschmitt AR15 has an automatic bolt catch. It is triggered by the magazine follower after the last shot is fired. In order to manually secure the bolt in the rearward position, the bolt must be pulled all the way back with the charging handle, and the bolt catch lever at the bottom end must be pushed. Push the charging handle back in the forward position. In order to put the bolt back into the forward position, either push the bolt catch lever latch at the top end of the lever or push the bolt catch on the right side down or pull the charging handle into the rearward position and let it snap forward.



### SAFETY NOTIFICATIONS

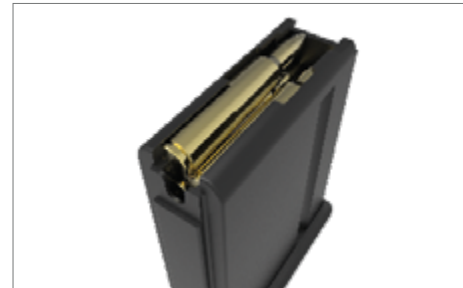


Make sure that the magazine is not dented, dirty or otherwise damaged.

## 4 LOADING THE WEAPON

### 4.1 LOADING THE MAGAZINE

Push the cartridges into the magazine one by one. Make sure that the cartridges are seated correctly by gently pushing the top cartridge in the magazine downward with your thumb after loading. The cartridges should be able to move without catching. If the cartridges have become jammed, you can remedy this by gently knocking the back of the magazine with the palm of your hand.



### 4.2 INSERTING THE MAGAZINE

1. Insert full magazine into magazine well
2. Push magazine into end position until it audibly clicks into place
3. Make sure that the magazine is properly locked in place



## SAFETY NOTIFICATIONS



Only chamber a round immediately before shooting.

### 4.3 CHAMBERING A ROUND

1. Hold the weapon by the grip with one hand  
Keep your index finger outside of the trigger guard



2. Pull the charging handle all the way back
3. Release the charging handle (The weapon is now loaded)
4. Set safety catch lever to position ∞ (safe)
5. Set safety catch lever to position ■ (fire)
6. Pulling the trigger will fire the shot



### 4.4 RELOADING

1. Put weapon on safety
2. Remove magazine
3. After the last round is shot, the bolt stays open
4. Make sure that the chamber is clear (see Point 3.1 Safety check)
5. Insert loaded magazine into weapon
6. Make sure that the magazine is completely locked in place
7. Pull charging handle back a bit and release it, or push the bolt catch lever
8. The weapon has been reloaded and is ready to fire



### 4.5 UNLOADING

1. When the bolt catch is in the backwards position put safety catch lever on safety
2. Push the magazine release button and remove magazine
3. Pull the charging handle all the way back to remove the cartridge in the chamber
4. Conduct a safety check (see Point 3.1 Safety check)
5. Close the bolt, set the safety on fire position and dry fire in a safe direction



## 5 DISASSEMBLY INTO ASSEMBLY GROUPS

### 5.1 DISASSEMBLING THE UPPER AND LOWER RECEIVER

1. Use your thumb or a pin punch to push out the takedown pin up to the stop



2. Use your thumb or a pin punch to push out the pivot pin up to the stop



3. Remove the upper receiver from the lower receiver



### 5.2 REMOVING THE BOLT

1. Pull back the charging handle 2/3 of the way so that the bolt comes out



2. Remove the bolt from the upper receiver



3. Pull back the charging handle up to the recess in the upper receiver and remove it upwards



### 5.3 DISASSEMBLING THE BOLT

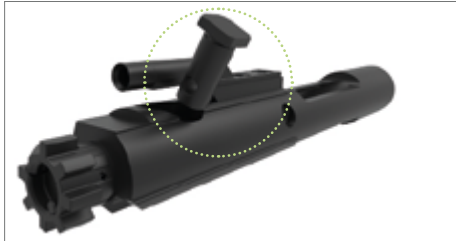
1. Push the bolt head into the bolt carrier
2. Push out the retaining pin for the firing pin with a pin punch



3. Guide the firing pin backwards and remove it downwards



4. Rotate the cam pin by 90° and pull it out



5. Pull the bolt head out of the bolt carrier



### 5.4 DISASSEMBLING THE BOLT HEAD

1. Gently push the extractor against the bolt head and push out the extractor pin with a pin punch



2. Remove extractor (make sure that you do not separate the extractor spring from the extractor)



### 5.5 DISASSEMBLING THE LOWER RECEIVER

1. Push down the buffer retainer (make sure that the hammer is cocked, because buffer and buffer spring cannot be removed otherwise)



2. Remove buffer and buffer spring





## 5.6 REMOVING THE FRONT HANDGUARD

### SAFETY NOTIFICATIONS



Usually there is no need to remove the handguard.

1. Loosen the screws counter-clockwise with an Allen key



2. Remove the handguard forwards over the barrel



### SAFETY NOTICE



A cleaning brush should always be moved from the cartridge chamber to the muzzle.

Never change the direction of pulling when the brush is inside the barrel.

Never use steel brushes to clean the weapon.

## 6 CLEANING AND MAINTENANCE OF THE ASSEMBLY GROUPS

**Basic information:** To ensure a flawless functioning, accuracy and a long service life your firearm should be cleaned after every shooting. This applies to all surfaces coated with smoke residue and assembly groups which are under stress. Only use cleaning products which are approved for firearm cleaning and maintenance. Read the instructions thoroughly. We recommend Schmeisser Weaponcare products for cleaning your weapon, because they were developed for our products and are perfectly coordinated for them. Make sure that the weapon is unloaded during cleaning (see Point 3.1 Safety check).

### 6.1 CLEANING AND MAINTENANCE OF UPPER RECEIVER

1. Remove smoke residue in the upper receiver with the brush
2. Clean charging handle with a soft cloth



3. Oil the barrel from the inside and clean it with the brass brush to remove rough fouling



4. Clean the locking surface of the barrel extension and cartridge chamber with a suitable cleaning brush



5. Remove gunshot residue from the lugs of the barrel extensions with a brush
6. Clean chamber and barrel with a wool pull-through
7. For rust-proofing pull a slightly oiled pull-through through the barrel



## WARNINGS



### Check for wear

Check the barrel (1), gas tube (2) and handguard (3) for damage and deformations such as cracks or bulging, and check all components for rust.

## SAFETY NOTIFICATIONS



Remove oil residue in the barrel and chamber with suitable cleaning material before shooting.

Use cleaning product, lubricant and preservative agent (oil) at the following areas:



- Upper receiver (sliding surface) (lubricant oil)
- Barrel and cartridge chamber (rust-proofing oil, **only** for storage, remove before shooting)
- Charging Handle (lubricant oil)

## 6.2 BOLT CLEANING AND MAINTENANCE

1. Clean gas key with diverter with a cotton swab and oil slightly



2. Remove powder residue from bolt head on the following areas using a brush:
  - a. Locking lugs
  - b. Recess for extractor
  - c. Gas rings (do not remove for cleaning, make sure the slots are NOT aligned)
  - d. Extractor
  - e. breech face



3. Cam pin , bolt carrier (inside and outside) and firing pin retaining pin with a soft cloth
4. Clean firing pin with a brush



## WARNINGS



### Check for wear

Check locking surfaces of bolt head, firing pin, cam pin and firing pin retaining pin for damage and deformation and check all components for rust.

Use cleaning product, lubricant and preservative agent (oil) at the following areas:



- All areas where rust can form from powder residue and fouling (lubricant oil)
- Bolt head, inside and outside (lubricant oil)
- Bolt carrier, inside and outside (lubricant oil)
- Cam pin, firing pin and firing pin retaining pin (lubricant oil)

## WARNINGS



### Check for wear

Check the lower receiver, recoil spring guide rod tube, buffer and buffer retaining pin for damage and deformations and check all operating elements for rust.

## SAFETY NOTIFICATIONS



Further disassembly of the lower receiver is not necessary. Disregarding may lead to damage or malfunction of the firearm.

## 6.3 LOWER RECEIVER CLEANING AND MAINTENANCE

1. Clean the recess for the trigger group in the lower receiver with a pipe cleaner or cotton swab
2. Clean bolt catch lever with a brush
3. Clean magazine well with a soft cloth
4. Clean recoil spring guide rod tube with a 12-gauge wool pull-through (not included)
5. Clean buffer and spring with a soft cloth



## 7 ASSEMBLY OF THE MESSERSCHMITT AR15

### 7.1 ASSEMBLING THE LOWER RECEIVER

1. Cock hammer and and put weapon on safety



2. Insert buffer into spring and slide them together into the buffer tube until it is held by buffer retainer (make sure to align the buffer so that one of the three straight surfaces on the buffer head is facing downwards)

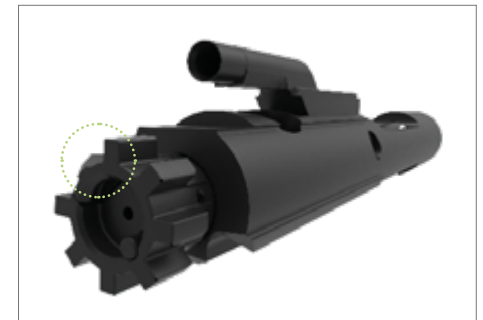


### 7.2 ASSEMBLING THE BOLT GROUP

1. Insert the extractor with the extractor spring into the bolt head (if the extractor spring has fallen out, insert it with the larger end into the recess of the extractor)
2. Insert the extractor into the bolt head and push in the extractor pin



3. Insert the bolt head into the bolt carrier so that the extractor is pointing at 10 o'clock from the front view



4. Push bolt head all the way to the rear, align the hole for the cam pin with the control cam in the bolt carrier and insert the cam pin



5. Rotate the cam pin by 90° (if it cannot be inserted, check the position of the extractor)



6. Pull the bolt head all the way forward
7. Insert the firing pin from the backside of the bolt carrier and push it forward
8. Insert firing pin retaining pin



## SAFETY NOTIFICATIONS



Check to make sure the firing pin retaining pin is seated properly by holding the bolt carrier with the extracted bolt head facing up and shaking it. The firing pin must not fall out, but it must be able to move back and forth slightly.

## SAFETY NOTIFICATIONS



To check the accuracy to size of the gas rings, hold the bolt carrier group vertically as shown in the image below and push the bolt head into the bolt carrier. Now hold the bolt head firmly. The bolt head must not move into the unlocked position from the weight of the bolt carrier itself.



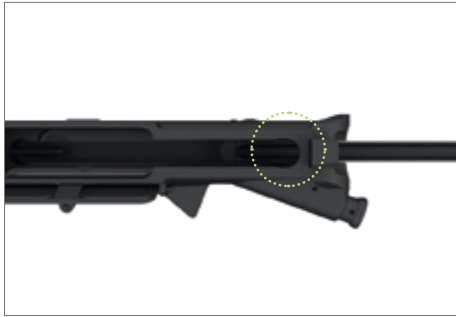
Bolt group locked



Bolt group unlocked

### 7.3 ASSEMBLING THE UPPER RECEIVER

1. Insert charging handle into groove in the upper receiver and push it forwards slightly



2. Insert bolt carrier group into recess in the charging handle with the gas key facing downwards (make sure that the bolt head has been pulled all the way to the front so that the cam pin is in the maximum forward position)



3. Push the charging handle with the bolt carrier group simultaneously forward until it locks into the barrel extension



### 7.4 ATTACHING THE LOWER RECEIVER TO THE UPPER RECEIVER

1. Close dust cover until it audibly clicks into place



2. Pull the pivot pin and the takedown pin in lower receiver to the left as far as it will go



## 7.5 ATTACHING THE FRONT HANDGUARD

### SAFETY NOTIFICATIONS



It is only necessary to remove the handguard in exceptional cases.

1. Push handguard onto the weapon over the barrel and gas block and align it to the Picatinny rail




2. Tighten screws with an Allen key from back to front and vice versa



## 8 FUNCTION CHECK


Conduct a safety check before conducting the function check (see Point 3.1 Safety check).

1. Cock the weapon by pulling the charging handle all the way backwards and release it. Set the safety lever to position  (safe)



2. Pull the trigger – the striker must not fall



3. Set safety lever to position  (fire) and pull trigger – the striker must fall



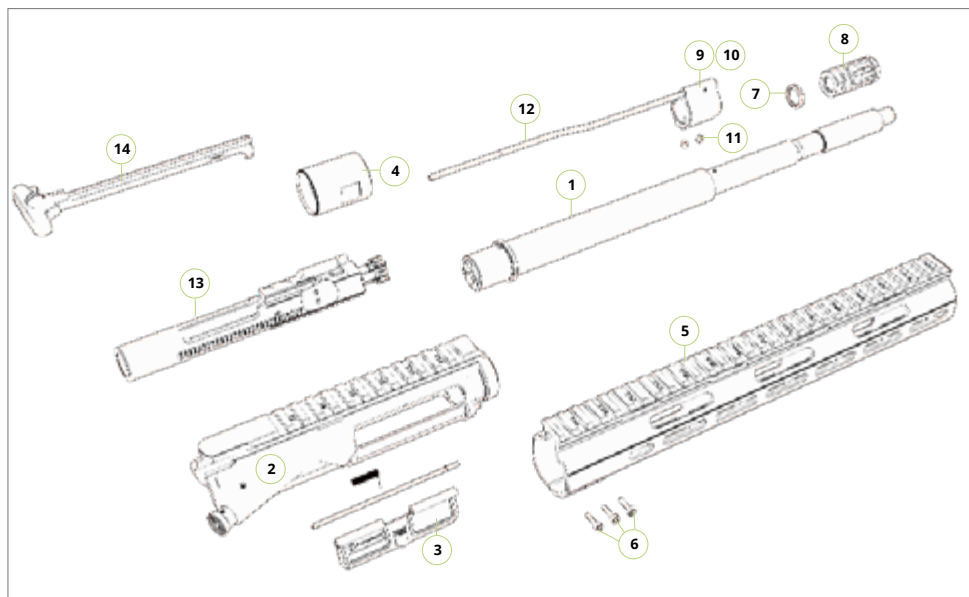
4. Hold the trigger down and cock the weapon using the charging handle at the same time; the disconnecter will hold the striker in the rearward position



5. Slowly guide the trigger forward. The disconnecter will release the striker. This will make a "click" sound. When pulling the trigger once again the striker must fall

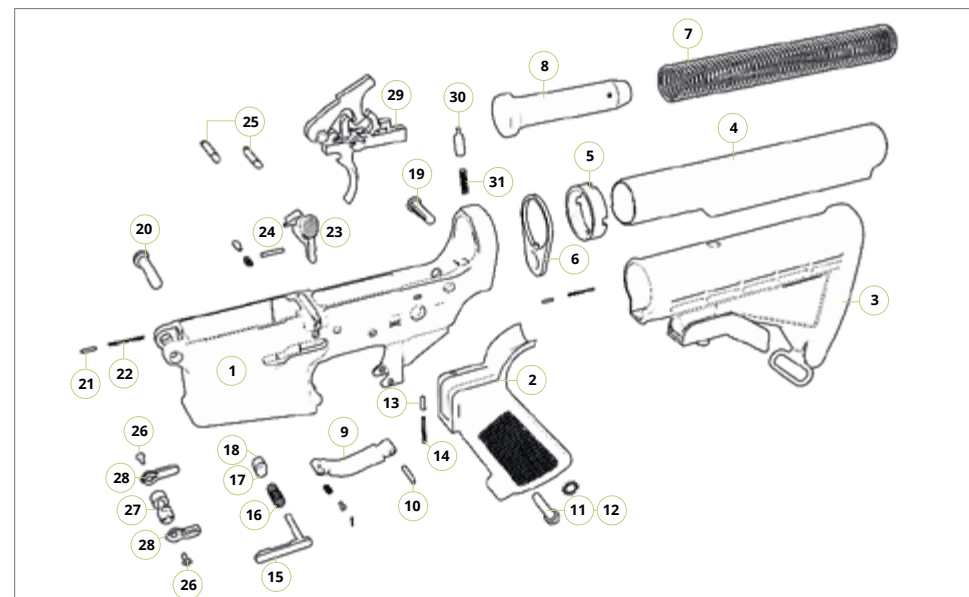


## UPPER RECEIVER



- |                             |                       |
|-----------------------------|-----------------------|
| 1. Barrel                   | 8. Flash hider        |
| 2. Upper receiver           | 9. Gas block          |
| 3. Dust cover               | 10. Gas tube roll pin |
| 4. Barrel nut               | 11. M3 setscrews      |
| 5. Handguard                | 12. Gas tube          |
| 6. M3 cylinder head screw   | 13. Bolt              |
| 7. Flash hider crush washer | 14. Charging handle   |

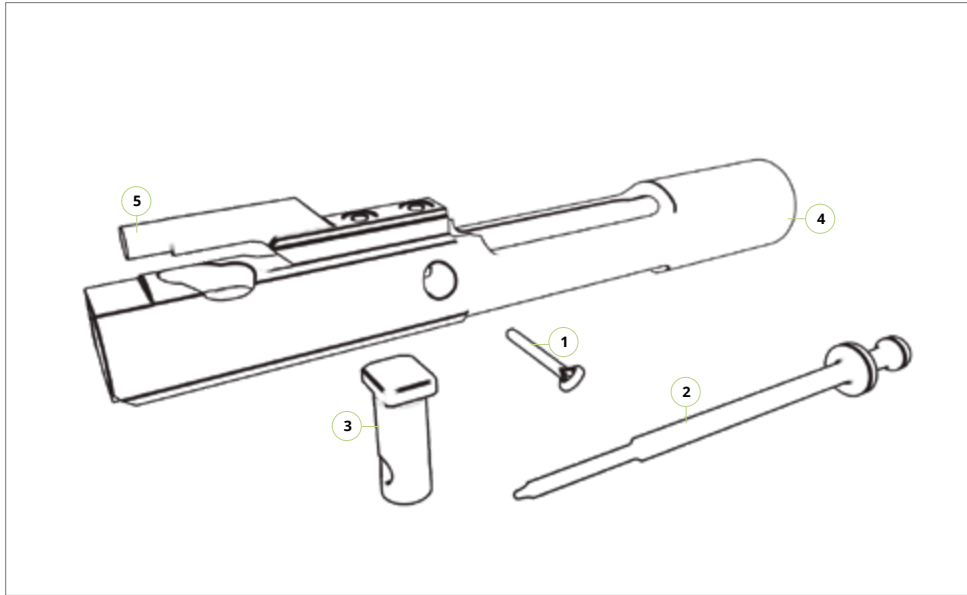
## LOWER RECEIVER



- |                           |                                   |
|---------------------------|-----------------------------------|
| 1. Lower receiver         | 17. Magazine catch nut            |
| 2. Pistol grip            | 18. Magazine catch release button |
| 3. Buttstock              | 19. Takedown pin                  |
| 4. Buffer tube            | 20. Pivot pin                     |
| 5. Castle nut             | 21. Retaining bolt pin            |
| 6. Receiver end plate     | 22. Retaining bolt spring         |
| 7. Buffer spring          | 23. Bolt catch pin                |
| 8. Buffer                 | 24. Bolt catch lever              |
| 9. Trigger guard          | 25. Rear trigger retaining pin    |
| 10. Trigger guard pin     | 26. Front trigger retaining pin   |
| 11. Pistol grip washer    | 27. M2.5 cylinder head screw      |
| 12. Pistol grip screw     | 28. Safety shaft / Safety lever   |
| 13. Locking pin           | 29. Two-stage trigger             |
| 14. Locking pin spring    | 30. Buffer retainer               |
| 15. Magazine catch        | 31. Retainer spring               |
| 16. Magazine catch spring |                                   |

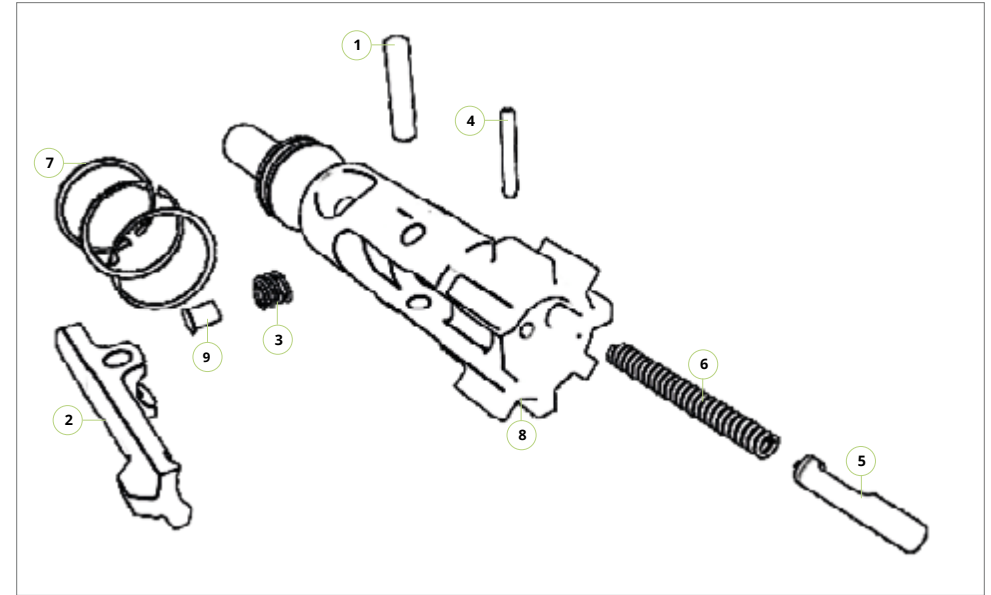


## BOLT HEAD CARRIER



- |                             |                      |
|-----------------------------|----------------------|
| 1. Firing pin retaining pin | 4. Bolt head carrier |
| 2. Firing pin               | 5. Gas diverter      |
| 3. Cam pin                  |                      |

## BOLT HEAD



- |                                 |                            |
|---------------------------------|----------------------------|
| 1. Extractor claw retaining pin | 6. Ejector spring          |
| 2. Extractor claw               | 7. Gas rings               |
| 3. Extractor claw spring        | 8. Bolt head               |
| 4. Ejector retaining pin        | 9. Extractor rubber insert |
| 5. Ejector                      |                            |





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