

# Disassembly, Assembly, and Cleaning of M16A4/M4



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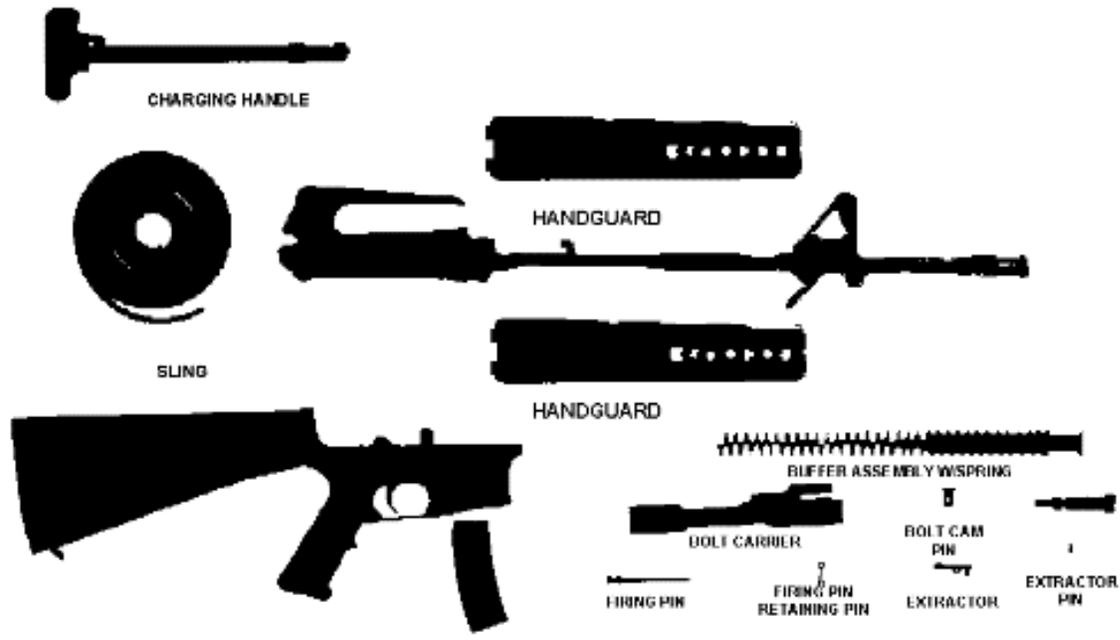
## **Introduction**

Have the desire to take your M16 apart? Well, this manual will explain the process of dismantling your M16. Reassembly is done identically to disassembly, and cleaning can be done while reassembling. You will be provided with a list of supplies needed, step-by-step directions on how to break the weapon down, and a troubleshooting guide in case you run into any problems. This process is a relatively easy one and doesn't take much effort to complete. If you follow this manual to its entirety, you will reach your goal in less than 15 minutes. To get started, please get your M16 and move to an area where it will be easy for you to work.



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# M16A2 RIFLE FIELD STRIPPED





## Disassembly

The procedure to dismantling a M16 is not a lengthy process. Not much effort is needed to take apart this weapon. In this section, we will explain a step by step process for dismantling a M16.

### Clearing the Magazine

First off, you want to make sure the weapon is not equipped with a magazine nor is there a round in the chamber. Place the selector on safe. Drop the magazine from the well by using the release button on the right side of the weapon located on the magazine well. After you drop the magazine from the well, pull back the charging handle to eject the remaining round that is still in the chamber. You want to make sure the magazine is released before you pull the charging handle back. If you do not release the magazine, you'll just be replacing the round you ejected from the chamber with another from the magazine. Once the weapon is vacant of ammo, you can begin to dismantle your M16.

### Retaining Pins

There are two retaining pins that connect the upper and lower receivers. By using a small, hard, and diameter object, you can push these pins out to separate the halves. The first pin is located just above the pistol grip and the other can be found in the corner on the magazine well next to the slip ring. Only removing the pin above the pistol grip is known as shot-gunning. This procedure can be used for partial cleaning. The pins do not separate from the lower receiver so they can't be lost.

### Upper Receiver

Remove the charging handle and the bolt carrier group (BCG) from the receiver. Slide both the handle and the BCG back simultaneously to remove the charging handle. You can now remove the BCG without a problem. The slip ring, which can be found directly before the hand-guard, is used to remove the hand-guard. With your hand, push downward on the slip ring to take off both the upper and lower portion of the hand-guard.

### Bolt Carrier Group (BCG)

Remove the firing pin retaining pin from the bolt carrier. The firing pin can easily slide out after the retaining pin is removed. Now remove the bolt cam pin which is located underneath the carrier key. This will allow you to extract the bolt from the bolt carrier. Once the bolt is apart from the carrier, you can separate the extractor. There is a little pin on the bolt that can be dislodged using the firing pin. Push the extractor pin out to separate the extractor.

### Lower Receiver

Inside the butt stock of the lower receiver, there is a spring. This spring can be released from the butt stock. A pin like object is located directly in front of the butt stock which prevents the spring exiting. Push down on this pin and the spring shall depart easily.



BOM fly page





# Bill of Materials

## Safety

Cleaning station covering - Can be temporary, like several layers of newspaper, or permanent, like a protective coat of paint.



Ventilation - Most rifle solvents are classed as carcinogenic, and should always be used in an area with plenty of ventilation.



Nitrile gloves - These are necessary for the same reason as ventilation, and because the mineral oil



base of most solvents easily penetrates human skin.

## Supplies

**Solvent** - There are many types of solvents on the market. Their primary purpose is to dissolve and remove carbon build-up in the firing chamber and barrel. Most solvents use a mineral oil base, combined with oleic acids, alcohols, and perfumes. Some are aerosolized, which can improve the evenness of the coating. Some recommended solvents are Hoppe's #9 and Break-free CLP. CLP, a military standard, also acts as a lubricant, eliminating the steps of lubricating the rifle.



**Lubricating oil** - Historically, solvents and lubricants have been separate. While the main purpose of the solvent is to remove carbon from the firing chamber and barrel, the lubricants purpose is to protect the metal components from friction and rust. Some lubricants that have been commonly used, and indeed still are by many enthusiasts, include grease and 10W20. There are also many proprietary lubricants, like Remington oil. For the purposes of this manual, we will assume a combined solvent



and lubricant, specifically CLP.

**Patches** - Square pieces of cotton that are used to spread solvent and lubricant on and through the rifle.



## Tools

Rod - A tool long and thin enough to easily pass through the barrel of the rifle. It also can have various types of grips, though a T-type grip is common.



Jag - An attachment that screws into the end of the rod. Jags are only slightly smaller caliber than the rifle bore and have a point to pierce a patch and is usually ridged to increase the contact between the patch and the bore.



Eyelet - An alternative to a jag, an eyelet has a small oblong hole that a patch can be passed through. The patch can then be sent down the rifle's barrel.



Bore Brush - An attachment for the rod, intended to clear exceptional fouling from the bore.



Brushes - Sometimes arranged in a set, a brush is used to remove fouling and grime in the chamber that can't be removed easily with the cleaning solution and patches.



Trouble shooting flypage



# Function check

If the weapon fails any of the following checks, it is unsafe to use, and the appropriate inspection and replacement/repair should be made. Continued use may result in injury or death.

## 1. Clear the weapon:

- a. Remove the magazine.
- b. Pull charging handle assembly to rear.
- c. Check that the firing chamber is clear.
- d. Let the bolt and bolt carrier close. Do not pull the trigger and leave the hammer in the cocked position

If the rifle fails to cock, disassemble and reassemble the upper receiver ensuring that all the parts are present, correctly inserted, and not worn or broken.

If any part of the upper receiver is missing, worn or broken replace the part and restart the weapon function check.

If the weapon still fails the weapons check it should be taken to a gunsmith for repair. Do not attempt to repair the rifle yourself without proper training.

## 2. SAFE check

Place the selector lever on SAFE and squeeze the trigger. The hammer should not move from the cocked position.

If the hammer falls, your weapon cannot be locked and should be taken to a gunsmith for repair.

## 3. SEMI check

Place the selector lever on SEMI and squeeze the trigger. The hammer should fall.

If the hammer fails to fall, disassemble the upper receiver and check the the bolt assembly for rough edges, ridges, or burrs. If present, these can be removed without special training. This procedure is beyond the scope of this manual.

If no burrs are present or not repairable take the damaged bolt assembly to a gunsmith for repair.

If your rifle has an AUTO or BURST option, the following function checks should also be performed

- b. Hold the trigger to the rear, charge the weapon, and slowly ( $\frac{1}{4}$  to  $\frac{1}{2}$  normal speed) and smoothly release the trigger until it is fully forward. An audible click should be heard and the hammer should not fall.

c. Repeat steps b and c four more times. If the weapon fails on any of these cycles, it should be taken to a gunsmith for repair.

6. **AUTO/BURST check**

- a. Place selector lever on AUTO/BURST, charge the weapon, and squeeze the trigger. The hammer should fall.
- b. Squeeze and hold the trigger. The hammer should fall.
- c. Pull and release the charging handle three times. Release the trigger. The hammer should not fall.
- d. Squeeze the trigger. The hammer should fall. Attempt to place the selector on SAFE. If the selector can be put on SAFE, the weapon should be taken to a gunsmith for repair.

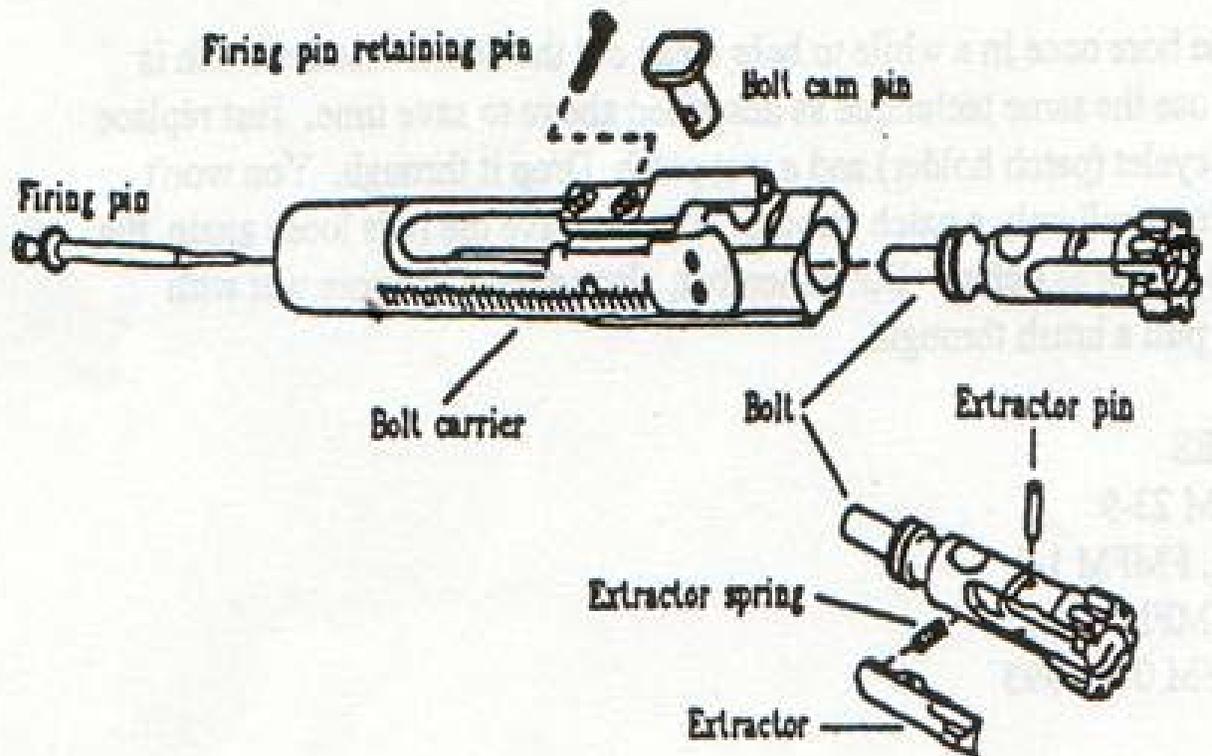
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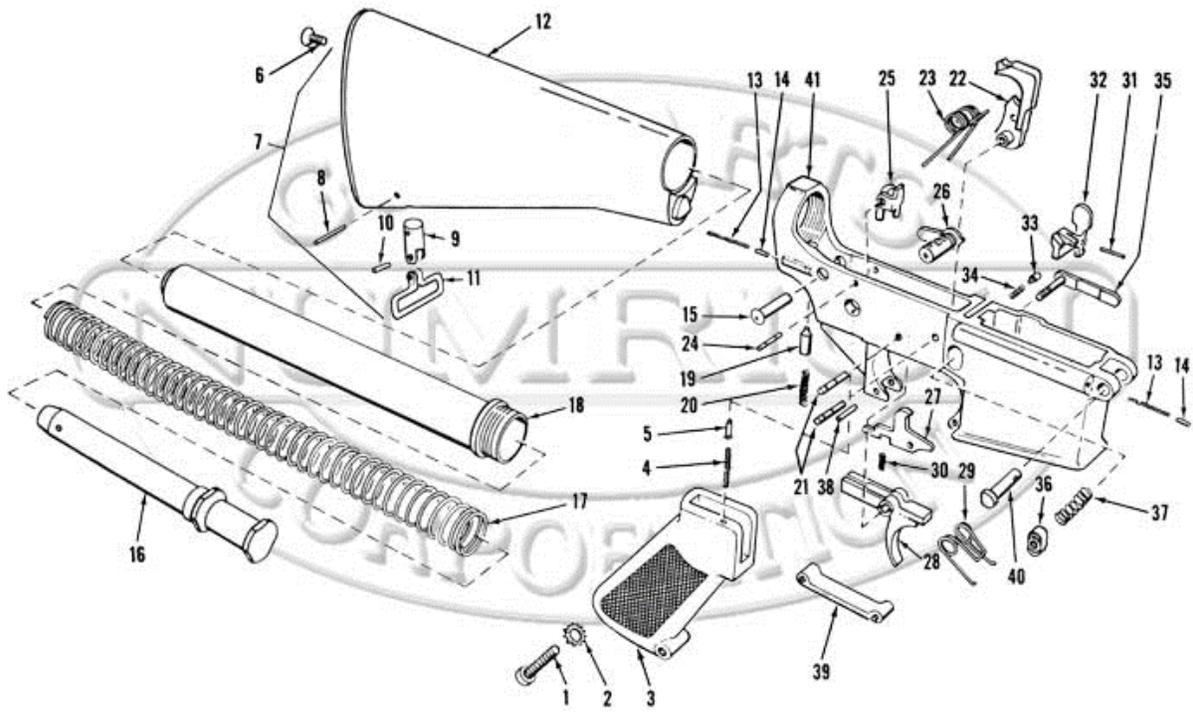




## Bolt Carrier Group



# Lower Receiver



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