

INTRODUCTION TO THE SERVICE RIFLE AND MAINTENANCE



OVERVIEW

- DISASSEMBLY
- MAINTENANCE
- ASSEMBLY

TERMINAL LEARNING OBJECTIVE

Given a service rifle, Common Combat Sling, and cleaning gear maintain a service rifle to ensure the weapon is complete clean and serviceable.

Learning Objectives

Given a service rifle, Common Combat Sling, and cleaning gear maintain a service rifle to ensure the weapon is complete clean and serviceable, **disassemble the weapon.**

Given a service rifle, Common Combat Sling, and cleaning gear maintain a service rifle to ensure the weapon is complete clean and serviceable, **perform maintenance of the weapon.**

Given a service rifle, Common Combat Sling, and cleaning gear maintain a service rifle to ensure the weapon is complete clean and serviceable, **assemble the weapon.**

Method/Media

Evaluation

Safety/Cease Training

Administrative Notes

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graph TD; A[?] --- B[What I will Be Teaching???]; A --- C[How I will Be Teaching???]; A --- D[How You will Be Evaluated???]
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What I will
Be
Teaching???

How I will
Be
Teaching???

How You will
Be
Evaluated???

M16A4 SERVICE RIFLE

NOMENCLATURE



M16A4 SERVICE RIFLE NOMENCLATURE



CLEARING THE SERVICE RIFLE

Clearing the service rifle means to ensure that the rifle is free of ammunition. To clear the service rifle:

- Attempt to move the selector lever to the SAFE position.
- Depress the magazine release button and remove the magazine.
- Pull the charging handle to the rear and lock the bolt.
- Ensure the chamber is empty; Let the bolt go forward and observe the bolt moving forward in an empty chamber. Close the ejection port cover.

DISASSEMBLE THE SERVICE RIFLE

The Disassembly of the Service Rifle into Three Main Groups:

- Upper Receiver
- Bolt Carrier Group
- Lower Receiver



DETAILED DISASSEMBLY

Detailed Disassembly of the Service Rifle:

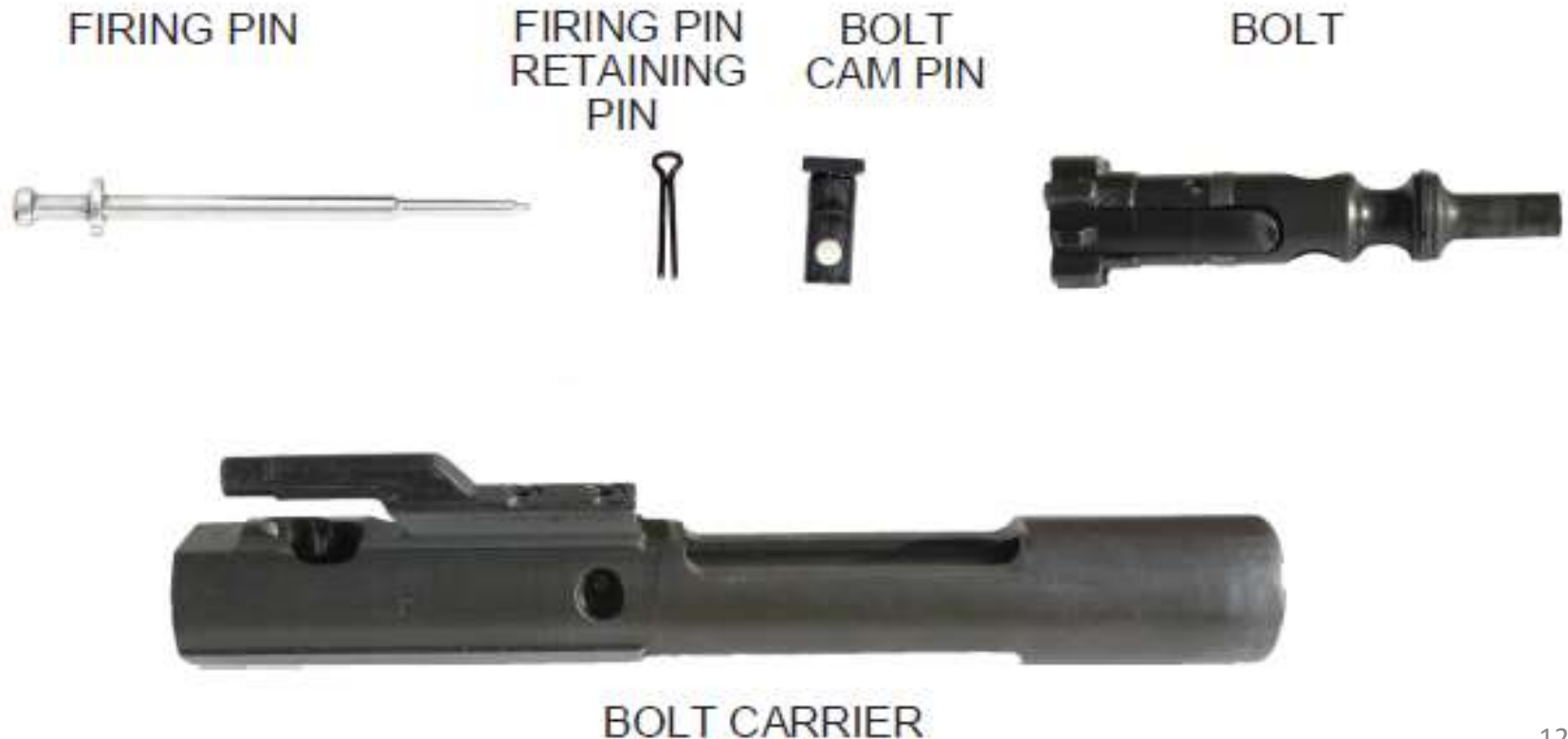
UPPER RECEIVER



DETAILED DISASSEMBLY

Detailed Disassembly of the Service Rifle:

BOLT CARRIER GROUP



DETAILED DISASSEMBLY

Detailed Disassembly of the Service Rifle:

LOWER RECEIVER



CLEANING THE SERVICE RIFLE

- **NORMAL CARE AND CLEANING:** Normal care and cleaning will result in proper functioning of all parts of the rifle.
- Use only authorized cleaning materials because using non authorized cleaning materials can result in stoppages, or even breakage.
- **INSPECTION:** While cleaning the rifle, and during each succeeding step in the preventive maintenance process, inspect each part for cracks and chips and to ensure parts are not bent or badly worn.
- Report any damaged part to the armorer.
- An inspection is normally performed during rifle cleaning (prior to lubrication), however, it can be performed throughout the preventive maintenance process.

CLEANING THE SERVICE RIFLE

UPPER RECEIVER: Basic cleaning should include:

- Point the muzzle down and insert the non-patch end of the rod into the chamber. Attach the handle to the cleaning rod section and pull a CLP-moistened patch through the bore.
- Put a few drops of CLP on the bore brush. Insert the rod into the barrel from the chamber end, and pull the brush through the bore. Inspect the bore for cleanliness.
- Clean the interior portion of the upper receiver with the general purpose brush and CLP.
- Wipe the barrel, gas tube, and rail cover/heat shields clean with a rag.

CLEANING THE SERVICE RIFLE

BOLT CARRIER GROUP: Basic cleaning should include:

- Clean the outer and inner surfaces of the bolt carrier with a general purpose brush; Clean the bolt carrier key with a pipe cleaner.
- Insert a swab into the rear of the bolt and swab out the firing pin recess and gas ports.
- Clean the extractor with the general purpose brush, ensuring all the carbon is removed from underneath the extractor lip.
- Clean the firing pin, firing pin retaining pin, and extractor pin using the general purpose brush and CLP.
- Clean the charging handle assembly with the general purpose brush and patches.

CLEANING THE SERVICE RIFLE

LOWER RECEIVER: Basic cleaning should include:

- Wipe dirt from the firing mechanism with a clean patch and general purpose brush/pipe cleaners.
- Clean the outside of the receiver with the general purpose brush and CLP. Clean the butt plate and rear sling swivel, ensuring the drain hole is clear of dirt.
- Wipe the inside of the buffer tube, buffer, and action spring.
- Wipe the inside of the magazine well with a rag.
- Wipe out the inside of the pistol grip, ensuring it is clean.

CLEANING THE SERVICE RIFLE

RIFLE COMBAT OPTIC (RCO): Basic cleaning should include:

- Remove sand or dirt from the lenses. Take care not to scratch the lens.
- Gently apply felt cleaner to lenses to achieve cleanliness.
- Protect the RCO with the cover when not in use.

MAGAZINE: Basic cleaning should include:

- Clean the inside of the magazine with the general purpose brush and CLP; Wipe dry.
- Keep the spring lightly oiled.

CLEANING THE SERVICE RIFLE

The climatic conditions in various locations require special knowledge about cleaning and maintaining the service rifle. The abnormal weather conditions that will affect the service rifle the most are:

HOT, WET TROPICAL

HOT, DRY DESERT

ARCTIC OR LOW TEMPERATURE

HEAVY RAIN

LUBRICATING THE SERVICE RIFLE

Lubrication is performed as part of the detailed procedure for preventive maintenance:

In all but the coldest arctic conditions, CLP is the lubricant for the service rifle. Remember to remove excess CLP from the bore and chamber before firing.

Lightly lube means that a film of CLP barely visible to the eye should be applied.

Generously lube means that the CLP should be applied heavily enough that it can be spread with the finger.

REASSEMBLE THE SERVICE RIFLE

Re-Assembly of the Service Rifle:

- LOWER RECEIVER
- BOLT CARRIER GROUP
- UPPER RECEIVER
- MAGAZINE

PERFORM A FUNCTION CHECK

- Ensure the service rifle is in Condition 4.
- Pull charging handle to the rear and release. Ensure selector level is on SAFE. Move the trigger to the rear – hammer should not fall.
- Place selector lever on SEMI. Move the trigger to the rear and hold to the rear – hammer should fall. While holding the trigger to the rear, pull charging handle to the rear and release. Release trigger until you hear a “clunk.”
- Place selector lever on BURST. Move the trigger to the rear and hold to the rear – hammer should fall. While holding the trigger to the rear, pull charging handle to the rear three times and release. Release trigger until you hear a “clunk, and move to the rear again – hammer should fall.”
- Pull charging handle to the rear and release. Place selector lever on SAFE; close ejection port cover.

USER'S SERVICABILITY INSPECTION

Check the service rifle to ensure the following:

- The service rifle is in Condition 4.
- The compensator is centered and tight.
- The barrel is tight.
- The hand guards are serviceable.
- Sighting System: RCO is attached correctly/throw levers secures, lenses not cracked, scratched, or broken. The fiber optic cable is serviceable. The RCO is securely mounted to the rail system.
- Stock: Tight on lower receiver, then break weapon down “shotgun style.” The buffer tube is straight and not cracked. The sling keeper can be adjusted and secured.

USER'S SERVICABILITY INSPECTION

- Chamber/Barrel: Clear of obstructions, no major pits or cracks.
- Gas Tube (from chamber end): Not bent or damaged, is securely fixed.
- Bolt Carrier Group: Properly assembled, rotates freely, and gas rings are staggered evenly around the bolt.
- Lubrication: Lubricated for operational conditions and climate.
- The pistol grip is tight.
- The trigger guard release pin is locked into place.
- The ejection port operates correctly.
- Load the rifle with an empty magazine. Pull the charging handle to the rear. Ensure that the bolt locks to the rear.

QUESTIONS?

SUMMARY

- DISASSEMBLY
- MAINTENANCE
- ASSEMBLY