

UNITED STATES MARINE CORPS

WEAPONS TRAINING BATTALION
MARINE CORPS COMBAT DEVELOPMENT COMMAND
QUANTICO, VIRGINIA 22134-5040

DETAILED INSTRUCTOR GUIDE

LESSON TITLE

INTRODUCTION TO THE M9 SERVICE PISTOL/PREVENTIVE MAINTENANCE

COURSE TITLE

DIVISION MATCH COURSE



UNITED STATES MARINE CORPS

Weapons Training Battalion
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DETAILED OUTLINE

INTRODUCTION TO THE M9 SERVICE PISTOL/PREVENTIVE MAINTENANCE

<u>INTRODUCTION</u> (3 MIN)

- 1. GAIN ATTENTION. To engage targets effectively with the M9 service pistol, the Marine must first be familiar with the weapon, its operational capabilities, and features. This knowledge will give the Marine confidence in his weapon and his ability to employ it properly in any situation. If the M9 service pistol is to be effective, it must be maintained in a state of operational readiness at all times. To ensure the continued serviceability of the pistol, the Marine must become familiar with its preventive maintenance procedures. Proper maintenance of the pistol reduces the likelihood of stoppages, maintains mechanical accuracy, and extends the life of the pistol.
- 2. OVERVIEW. This lesson will cover the M9 service pistol to include operational characteristics and capabilities, ammunition, procedures for donning pistol gear, and preventive maintenance.
- 3. <u>INTRODUCE LEARNING OBJECTIVES</u>. The Division Match instruction is structured to prepare the shooter to fire the Division Match Course and is not a component of a formal school program. Therefore, there are no learning objectives.
- 4. METHOD. This lesson will be taught in a classroom setting using lecture and demonstration.
- 5. <u>EVALUATION</u>. The Division Match instruction is structured to prepare the shooter to fire the Division Match Course and is not a component of a formal school program. Therefore, students are not evaluated on this material.

TRANSITION: The M9 service pistol is designed to permit the Marine to engage targets at close range with accurate fire. To employ the pistol effectively, the Marine must become familiar with the weapon's components, features, nomenclature, and the types of ammunition fired from the weapon.



BODY (1 HR 5 MIN)

1. (15 MIN) M9 SERVICE PISTOL OPERATIONAL CHARACTERISTICS AND CAPABILITIES

- a. <u>Description</u>. The M9 service pistol is a semiautomatic, magazine fed, recoil operated, double action pistol, chambered for the 9mm ball, NATO M882 round.
 - 1) The pistol can be fired single action or double action and is designed to fire one round each time the trigger is pulled. When the last round is fired, the slide automatically locks to the rear.
 - 2) The M9 service pistol has a maximum effective range of 50 meters (54.7 yards).
 - 3) The magazine holds 15 rounds.

(ON SLIDE #1)

b. Major Components

- 1) <u>Slide Assembly</u>. The slide assembly houses the firing pin, firing pin block, striker, and extractor, and cocks the hammer during recoil.
- 2) <u>Barrel Assembly</u>. The barrel assembly houses the round for firing, it directs the projectile, and it locks the barrel in position during firing.
- 3) Recoil Spring/Recoil Spring Guide. The recoil spring and recoil spring guide absorbs recoil and returns the slide assembly to its forward position.
- 4) Receiver. The receiver supports the major components, controls the functioning of the pistol, and holds the magazine in place. The front and back straps of the grip are vertically grooved to ensure the hand does not slip when firing.
- c. <u>Safety Features</u>. The safety features of the M9 service pistol include the safety, firing pin block, and half-cock notch.
 - 1) Decocking/Safety Lever. The safety permits safe operation of the pistol by both right- and left-handed shooters. As the safety is moved to the safe (down) position, the firing pin striker moves out of alignment with the firing pin. This movement prevents the pistol from firing as the hammer moves forward.



NOTE

In the fire (up) position, a red dot is visible, indicating the pistol is ready to fire.

- 2) Firing Pin Block. The firing pin block rests in the firing pin notch and prevents movement of the firing pin until the trigger is pulled. As the trigger is pulled, the firing pin block moves up and out of the firing pin notch. This movement allows a round to be fired when the hammer strikes the firing pin.
- 3) <u>Half-Cock Notch</u>. The half-cock notch stops the forward movement of the hammer during a mechanical failure.
- d. <u>Functional Capabilities</u>. When the M9 service pistol is taken off safe, it can be fired in the single action and double action mode.

(ON SLIDE #2)

- 1) Single Action Mode. The single action mode is a functional capability of the pistol that allows the pistol to be fired when the hammer is cocked; single action requires the hammer to be cocked to the rear before the trigger is pulled. The hammer can be manually cocked or it can be mechanically cocked. The hammer is mechanically cocked after the first shot is fired.
- 2) <u>Double Action Mode</u>. The double action mode is a functional capability of the pistol that causes the hammer to move to the rear as the trigger is being pulled.

e. Nomenclature

(ON SLIDE #3)

INSTRUCTOR'S NOTE: Point out each component of the pistol as it is identified.

- 1) Safety (decocking/safety lever).
- 2) Firing pin block.



- 3) Extractor/Loaded Chamber Indicator. The extractor pulls the brass from the chamber after the round is fired. When a round is in the chamber, the upper surface of the loaded chamber indicator protrudes from the right side of the slide. This protrusion can be felt by touch to verify that there is a round in the chamber.
- 4) <u>Disassembly Button</u>. This component permits quick disassembly of the pistol. While depressing the disassembly button, rotate the disassembly lever down.
- 5) Front Sight. The front sight is a nonadjustable (fixed) sight.
- 6) Slide assembly.
- 7) Disassembly lever.
- 8) <u>Slide Stop</u>. The slide stop holds the slide to the rear after the last round is fired. It can also be manually operated to lock the slide to the rear or to release the slide.
- 9) Rear Sight. The rear sight is considered a fixed sight.
- 10) Hammer.
- 11) Receiver.
- 12) Grip.
- 13) Lanyard loop.
- 14) <u>Magazine</u>. The magazine holds fifteen rounds in place for feeding and chambering.
- 15) Magazine Catch Assembly (Magazine Release Button). This component secures the magazine in place when loading and releases the magazine from the pistol when unloading. The magazine catch assembly is designed for both right- and left-handed Marines. For right-handed Marines, the magazine release button should be on the left side of the pistol. (Reversal of the magazine catch assembly for left-handed Marines can be performed by a qualified armorer.)
- 16) Trigger.



- f. Cycle of Operation. Knowing the cycle of operation of the pistol will help the Marine to identify the cause of a stoppage should the pistol stop functioning. There are eight steps in the cycle of operation for the M9 service pistol:
 - 1) <u>Firing</u>. Once the safety is off and the trigger is pulled to the rear, the hammer falls on the firing pin striker, which strikes the primer and ignites the round.
 - 2) <u>Unlocking</u>. As the slide assembly moves to the rear, the locking block rotates out of the notches in the slide.
 - 3) <u>Extracting</u>. As the slide moves rearward, the extractor withdraws the cartridge case out of the chamber.
 - 4) <u>Ejecting</u>. As the face of the slide passes over the ejector, the case strikes the ejector and is knocked upward and outward through the chamber area.
 - 5) <u>Cocking</u>. As the slide moves rearward, the hammer is pushed back allowing the sear to engage the hammer hooks, cocking the hammer to the rear and placing the pistol in the single action mode.
 - 6) <u>Feeding</u>. The slide starts forward, pushed by the recoil spring. The face of the slide makes contact with the cartridge at the top of the magazine, stripping it from the magazine and pushing it toward the chamber.
 - 7) <u>Chambering</u>. As the slide continues forward, it pushes the cartridge into the chamber.
 - 8) <u>Locking</u>. As the slide assembly continues to move forward, the locking block lugs move into the locking block recesses on the right and left sides of the slide.

(ON SLIDE #4)

- g. Ammunition. 9mm ball (NATO, M882) is the only ammunition authorized for the M9 service pistol. For training purposes, dummy ammunition can be used, if available. A dummy round is identified by a hole drilled in its side and the absence of a primer. Ammunition must be cared for just as the pistol is maintained -- in a high state of readiness. To care for ammunition:
 - 1) Keep ammunition dry and clean. If ammunition gets wet or dirty, wipe it off with a clean dry cloth.
 - 2) Wipe off light corrosion as soon as it is discovered. Never use ammunition that is heavily



corroded, dented, or has the projectile pushed in.

- 3) Do not expose ammunition to the direct rays of the sun for long periods of time.
- 4) Do not oil or grease ammunition. Dust or other abrasives that collect on greasy ammunition may cause damage to the operating parts of the pistol. Oiled cartridges produce excessive chamber pressure.

Confirm by questions.

TRANSITION: Once the Marine understands the operational characteristics and capabilities of the M9 service pistol, he must learn how to wear the gear properly. The proper placement of the gear will help ensure safety and aid the Marine in effectively handling and employing the weapon.

2. (3 MIN) WEARING OF M9 PISTOL GEAR

INSTRUCTOR'S NOTE: Demonstrate wearing of gear as it is discussed.

NOTE

The procedures in this section are written for right-handed Marines. Left-handed Marines should reverse instructions as needed.

Pistol equipment should be worn as follows:

(ON SLIDE #5)

- a. <u>M12 Holster</u>. The M12 holster consists of the holster, removable holster flap, and metal retaining clip which can be installed on either side of the holster for right or left-handed shooters.
 - 1) To check for proper placement of the holster, allow the right arm to hang freely. The holster should be slightly in front of the arm to permit easy access to the pistol upon presentation from the holster.



- 2) In most cases, the holster is issued with the holster flap installed for right-handed shooters. To convert the holster from right-handed to left-handed, remove the metal retaining clip and install on the opposite side of the holster.
- b. <u>Magazine Pouch</u>. The magazine pouch should be attached to the cartridge belt on the side opposite the holster in a position that best permits ready access for reloads. A magazine should be stored in the magazine pouch with rounds down and pointed inboard.

Confirm by questions.

TRANSITION: Ensuring the continuous serviceability of the pistol requires each stage of the preventive maintenance process be performed with care and in the proper sequence to avoid damaging the weapon. The first step in this process is disassembly.

3. (10 MIN) DISASSEMBLY OF THE M9 SERVICE PISTOL

- a. Placing the M9 Service Pistol in Condition 4. Before disassembling the pistol, you must place the weapon in Condition 4. The pistol is in Condition 4 when the magazine is removed, the chamber is empty, the slide is forward, and the safety is on. While pointing the pistol in a safe direction:
 - 1) Place the weapon on safe by moving the safety to the safe (down) position.
 - 2) Depress the magazine release button and remove the magazine.
 - 3) Push upward on the slide stop with the right thumb and maintain pressure. Rotate the weapon so the chamber is outboard.
 - 4) Reach over the top of the pistol with the left hand and grasp the slide serrations. Pull the slide fully to the rear and lock it in place.
 - 5) Inspect the chamber to ensure it is empty.
 - 6) Release the slide and allow the slide to return on an empty chamber.
- b. <u>Pistol Disassembly</u>. To disassemble the pistol, perform the following steps in sequence:



1) Hold the pistol in the right hand with the muzzle slightly elevated. Reach over the slide with the left hand and place the left index finger on the disassembly button and the left thumb on the disassembly lever. Press the disassembly button and hold it in place while rotating the disassembly lever downward until it stops.

NOTE

A left-handed Marine will place the right thumb on the disassembly button and the right index finger on the disassembly lever.

- 2) Pull the slide and barrel assembly forward and remove it while wrapping the fingers around the slide to hold the recoil spring and recoil spring guide in place.
- 3) Turn the slide assembly over in the left hand until the recoil spring and recoil spring guide face up. Place the right thumb on the end of the recoil spring guide next to the locking block and compress the recoil spring and spring guide while lifting and removing them from the slide and barrel assembly. Allow the recoil spring to decompress slowly.
- 4) Separate the recoil spring from the recoil spring quide.
- 5) Push in on the locking block plunger with the right index finger while pushing the barrel forward slightly. Lift and remove the locking block and barrel assembly from the slide. This is the furthest the Marine is authorized to disassemble the weapon. Any further disassembly is to be performed by ordnance personnel only.

Confirm by questions.

TRANSITION: Once the pistol has been disassembled, it must be thoroughly inspected to ensure it is in serviceable condition. Inspection of the pistol is also a continuous process during cleaning and reassembly of the pistol.



4. (2 MIN) INSPECTION

- a. <u>Slide Assembly</u>. Check for free movement of the safety. Ensure the rear sight is secure.
- b. <u>Barrel Assembly</u>. Inspect the bore and chamber for pitting or obstructions. Check the locking block plunger for free movement of the locking block. Inspect the locking lugs for cracks and burrs.
- c. Recoil Spring and Recoil Spring Guide. Check the recoil spring for damage. Check that it is not bent. Check the recoil spring guide for straightness and smoothness. Check to be sure it is free of cracks and burrs.
- d. Receiver Assembly. Check for bends, chips, and cracks. Check for free movement of the slide stop and magazine catch assembly. Check the guide rails for excessive wear, burrs, cracks, or chips.

Confirm by questions.

TRANSITION: The M9 service pistol has proven to be a functionally sound and extremely reliable weapon. To maintain this state of reliability, clean and lubricate the pistol to keep it operational.

5. (5 MIN) CLEANING AND LUBRICATION OF THE M9 SERVICE PISTOL

Only authorized cleaning materials should be used to clean and lubricate the pistol. If these items are not issued with the weapon, they may be obtained from the armory.

- a. <u>Slide Assembly</u>. Clean the slide assembly with a cloth. A general purpose brush and cleaning lubricant protectant (CLP) can assist in the removal of excess dirt and carbon buildup. Ensure the safety, bolt face, slide guides, and extractor are free of dirt and residue. Wipe dry with a cloth and apply a light coat of CLP.
- b. <u>Barrel Assembly</u>. Insert a bore brush with CLP into the chamber end of the barrel, making sure it completely clears the muzzle before it is pulled back through the bore.



CAUTION

Insert the bore brush through the chamber to prevent damage to the crown of the barrel.

Repeat several times to loosen carbon deposits. Dry the barrel by pushing a swab through the bore. Repeat until a clean swab can be observed. Clean the locking block with a general purpose brush. Using the barrel brush, apply a light coat of CLP to the bore and chamber area and lubricate the exterior surfaces of the barrel and locking block.

- c. Recoil Spring and Recoil Spring Guide. Clean the recoil spring and recoil spring guide using CLP and a general purpose brush or cloth. After wiping the recoil spring and recoil spring guide clean, apply a light coat of CLP.
- d. Receiver. Wipe the receiver assembly clean with a cloth. Use a general purpose brush for areas that are hard to reach. Pay special attention to the disassembly lever, trigger, slide stop, hammer, and magazine release button. Apply a light coat of CLP.

CAUTION

Do not allow the hammer to fall with full force by pulling the trigger when the slide is removed because this can cause damage to the receiver and hammer.

Confirm by questions.

TRANSITION: Combat situations can place Marines in a variety of extreme weather conditions. To ensure the continued operation of the M9 service pistol, it is important to maintain the pistol in these conditions.

6. (5 MIN) MAINTENANCE OF THE M9 SERVICE PISTOL IN EXTREME WEATHER CONDITIONS

a. Extreme Cold

- 1) When operating the pistol in an extremely cold climate, clean and lubricate the pistol inside at room temperature, if possible.
- 2) Apply a light coat of Lubricant, Arctic Weather



(LAW) to all functional parts.

- 3) Always keep the pistol dry.
- 4) To prevent freezing in arctic weather, keep the pistol covered when moving from a warm area to a cold area. This will permit gradual cooling of the pistol.
- 5) Do not lay a hot pistol in snow or ice.
- 6) Always keep snow out of the bore of the barrel. If snow should enter the bore, clean the bore before firing using a swab and cleaning rod.

b. Hot, Wet Climates

- 1) Perform maintenance more frequently. Inspect hidden surfaces for corrosion. If corrosion is found, clean and lubricate.
- 2) To help prevent corrosion, remove handprints with a clean cloth. Dry the pistol with a cloth and lubricate it with CLP.
- 3) Check ammunition and magazines frequently for corrosion. Disassemble and clean the magazines with CLP and wipe dry with a clean cloth. If necessary, clean ammunition with a dry cloth.

c. Hot, Dry Climates

- 1) Dust and sand can get into the pistol and cause stoppages and excessive wear on component contact surfaces during firing. Keep the pistol covered whenever possible.
- 2) Corrosion is less likely to form on metal parts in a dry climate. Therefore, lightly lubricate internal working surfaces with CLP. Do not lubricate external parts of the pistol. Wipe excess lubricant from exposed surfaces. Do not lubricate internal components of the magazine.

d. Heavy Rain and Fording Operations

- 1) Always attempt to keep the pistol dry.
- 2) Drain any water from the barrel prior to firing. Dry the bore with a swab and cleaning rod.
- 3) Generously lubricate internal and external surfaces of the pistol with CLP.
- e. Amphibious Conditions. If the weapon comes into contact



with salt water, clean the weapon as soon as possible. Wash the weapon with fresh water if time does not permit cleaning in accordance with TM 1005A-10/1.

Confirm by questions.

TRANSITION: After the M9 service pistol has been cleaned and lubricated, it must be reassembled properly to ensure its serviceability.

7. (5 MIN) REASSEMBLY OF THE M9 SERVICE PISTOL

INSTRUCTOR'S NOTE: Demonstrate the procedures as they are explained.

- a. With the left hand, grasp the slide with the bottom facing up and the muzzle pointing toward the body. With the right hand, grasp the barrel assembly with the locking block facing up. With the index finger, push in the locking block plunger while placing the thumb on the base of the locking block.
- b. Insert the muzzle of the barrel assembly into the forward open end of the slide. At the same time, lower the rear of the barrel assembly by slightly moving the barrel downward. The locking block should fall into the notches of the slide assembly.
- c. Slip the recoil spring guide into the recoil spring.
- d. Insert the end of the recoil spring and recoil spring guide into the slide recoil spring housing. At the same time, compress the recoil spring and lower the recoil spring guide until it is fully seated onto the locking block cutaway.
- e. With the left hand, grasp the slide and barrel assembly, sights up, and wrap the fingers around the slide assembly to hold the recoil spring and guide in place. Align the slide assembly guide rails onto the receiver assembly guide rails.
- f. Push the slide rearward while pushing up on the slide stop with the thumb. Lock the slide to the rear while maintaining upward pressure on the slide stop. Rotate the disassembly lever upward. An audible click indicates a positive lock.

Confirm by questions.



TRANSITION: Like the pistol itself, the magazine must be maintained in a state of operational readiness. Each step of the preventive maintenance process must be performed with care and in the proper sequence to avoid damaging the magazine.

8. (5 MIN) PREVENTIVE MAINTENANCE OF THE M9 SERVICE PISTOL MAGAZINE

a. Disassembly of the Magazine

- 1) Grip the magazine firmly in the left hand with the floorplate up and the thumb resting against the flat end of the floorplate.
- 2) Release the floorplate by pushing down on the floorplate retainer stud in the center of the floorplate (this is done with a blunt object like an ink pen). At the same time, slide the floorplate a short distance forward with the thumb.
- 3) While maintaining magazine spring pressure with the thumb, remove the floorplate from the magazine.
- 4) Remove the floorplate retainer and magazine spring and follower from the magazine tube.
- b. <u>Inspection of the Magazine Assembly</u>. Check the spring and follower for damage. Ensure the lips of the magazine are not excessively bent and are free of cracks and burrs. The magazine tube should not be bent or dirty.
- c. <u>Cleaning of the Magazine</u>. Clean the magazine tube and follower with CLP and a general purpose brush. With a cloth, wipe the magazine spring, floorplate retainer, and floorplate clean. Apply a light coat of CLP.

d. Reassembly of the Pistol Magazine

- 1) Grip the magazine firmly in the left hand with the floorplate end up and the counting holes facing you. Insert the follower into the magazine so the flat end of the follower is against the flat end of the magazine.
- 2) Ensure the floorplate retainer is attached to the first curve of the bottom coil.



- 3) Holding the spring upright with the right hand, insert the spring into the magazine tube so the flat end of the floorplate retainer is against the flat end of the magazine.
- 4) Push the magazine spring and floorplate retainer down with the right hand and hold it in place with the thumb of the left hand. With the right hand, slide the floorplate over the side walls of the magazine until fully seated. This will be indicated by an audible click.

Confirm by questions.

TRANSITION: Once the M9 service pistol and magazine are reassembled, a safety/function check must be performed. This check ensures the pistol is operational.

9. (5 MIN) SAFETY/FUNCTION CHECK

INSTRUCTOR'S NOTE: Demonstrate the procedures as they are explained.

- a. Ensure there is no ammunition in the chamber of the pistol.
- b. With the safety in the safe position, depress the slide stop, allowing the slide to return fully forward. At the same time, the hammer should fall to the full forward position.
- c. Pull and release the trigger. The firing pin block should move up and down and the hammer should not move.
- d. Place the safety in the fire position.
- e. Pull the trigger to check the double action. The hammer should cock and fall.
- f. Pull the trigger again and hold it to the rear. With the fingers and thumb of the left hand, grasp the serrated sides of the slide just forward of the safety. Pull the slide to its rearmost position and release it while holding the trigger to the rear. Release the trigger. A click should be heard and the hammer should not fall.
- g. Pull the trigger to check the single action. The hammer should fall. Place the pistol on safe.



h. If the safety/function check does not indicate an operational pistol, take the pistol to organizational maintenance or the next authorized repair level.

Confirm by questions.

TRANSITION: Before the M9 service pistol is fired, a user serviceability inspection must be performed to verify the operability of the pistol.

10. (10 MIN) USER SERVICEABILITY INSPECTION

a. Marines are responsible for performing user serviceability inspections on their weapons prior to live fire. The user serviceability inspection ensures the weapon is in an acceptable operating condition. This inspection is not intended to replace the detailed weapon components inspection following disassembly or the Limited Technical Inspection (LTI) or pre-fire inspection (PFI) conducted by an armorer.

INSTRUCTOR'S NOTE: Demonstrate the procedures as they are explained.

- b. To conduct a user serviceability inspection on the pistol:
 - 1) Ensure the magazine release button is on the left side of the pistol for right-handed Marines, the right side of the pistol for left-handed Marines.
 - 2) Ensure the magazine seats into the magazine well when it is inserted and cannot be pulled out.
 - 3) Ensure the slide stays locked to the rear when the slide is pulled rearward with an empty magazine in the weapon.
 - 4) Ensure magazine falls out freely when the magazine release button is depressed.
 - 5) Repeat steps 2-4 with the second magazine.



- 6) With the slide locked to the rear, lubricate the recoil spring guide, top of the barrel just forward of the front sight, and guide rails of the slide assembly behind the safety. With the muzzle pointed downward, work the slide several times and release.
- 7) Visually inspect the external parts of the pistol to ensure there are no cracks or excessive wear.
- 8) Perform a safety/function check of the pistol.

Confirm by questions.

TRANSITION: Following correct preventive maintenance procedures reduces the likelihood of stoppages, maintains the mechanical reliability and accuracy of the weapon, and extends the service life of the pistol.

OPPORTUNITY FOR QUESTIONS:

(1 MIN)

- 1. Respond to questions from the class.
- 2. Prompt Marines with questions to the class.
 - a. QUESTION: What are the three safety features of the M9 service pistol?

ANSWER: The safety, firing pin block, and half-cock notch.

b. QUESTION: What ammunition is authorized for the M9 service pistol?

ANSWER: 9mm ball, NATO M882. Dummy rounds may be used for training purposes.

c. QUESTION: Which mode of fire requires the hammer of the pistol to be cocked to the rear before the trigger is pulled?

ANSWER: Single action.

INSTRUCTOR'S NOTE: Ask Marines as many questions as necessary to ensure they fully understand the material presented in this lesson.



SUMMARY: (1 MIN)

To employ the M9 service pistol effectively, the Marine must have a basic understanding of the pistol and how it functions. This knowledge will provide the Marine with the foundation he will need to learn and develop pistol marksmanship skills. The Marine must further be sure that his weapon will function properly whenever the need arises. It is the Marine's responsibility to maintain the M9 service pistol in a serviceable condition. Performing regular preventive maintenance will ensure that the weapon will operate reliably in any situation.



SLIDES

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