

CHAPTER 1  
US ARMY HANDGUNS

1-1. PISTOL, SEMIAUTOMATIC, 9-MM, M9

The M9 pistol is a 9-mm semiautomatic, magazine-fed, recoil-operated, double-action weapon chambered for the 9-mm cartridge. The magazine has a 15-round capacity.

a. Equipment Data.

|                               |         |   |
|-------------------------------|---------|---|
| Caliber                       | -----   | 9-mm NATO   |
| System of Operation           | --- --- | Short recoil, semiautomatic                               |
| Locking System                | -----   | Oscillating block   |
| Length                        | -----   | 217 mm (8.54 inches)                                      |
| Width                         | -----   | 38 mm (1.5 inches)  |
| Height                        | -----   | 140 mm (5.51 inches)                                      |
| Weight with Empty Magazine    |         |   |
|                               | -----   | 960 grams (2.1 pounds)                                    |
| Weight with 15-Round Magazine |         |   |
|                               | -----   | 1,145 grams (2.6 pounds)                                  |
| Barrel Length                 | -----   | 125 mm (4.92 inches)                                      |
| Rifling                       | -----   | R.H., six-groove (pitch<br>250 mm [about 10 inches])      |
| Muzzle Velocity               | -----   | 375 meters per second<br>(1,230.3 feet per second)        |
| Muzzle Energy                 | -----   | 569.5 newton meters (430<br>foot pounds)                  |
| Maximum Range                 | -----   | 1,800 meters (1,962.2 yards)                              |
| Maximum Effective Range       | -----   | 50 meters (54.7 yards)                                    |
| Front Sight                   | -----   | Blade, integral with slide                                |
| Rear Sight                    | -----   | Notched bar, dovetailed to slide                          |
| Sighting Radius               | -----   | 158 mm (6.22 inches)                                      |
| Safety Features               | -----   | Decocking/safety lever,<br>firing pin block.              |
| Hammer (half-cocked notch)    | -----   | Prevents accidental<br>discharge.                         |
| Basic Load                    | -----   | 45 rounds   |
| Trigger Pull                  | -----   | Single-Action: 5.50 pounds<br>Double-Action: 12.33 pounds |

NOTE: For additional information on technical aspects of the M9 pistol see TM 9-1005-317-310.

WARNING

THE HALF-COCKED POSITION CATCHES THE HAMMER AND PREVENTS IT FROM FIRING IF THE HAMMER IS RELEASED WHILE MANUALLY COCKING THE WEAPON. IT IS NOT TO BE USED AS A SAFETY POSITION. THE PISTOL WILL FIRE FROM THE HALF-COCKED POSITION IF THE TRIGGER IS PULLED.

b. Operation.

The M9 pistol has a short recoil system using a falling locking block. The pressure developed by the expanding gases of a fired round recoils the slide and barrel assembly. After a short run, the locking block is disengaged from the slide, the barrel stops against the frame, and the slide continues its rearward movement. The slide then extracts and ejects the fired cartridge case, cocks the hammer, and compresses the recoil spring. The slide moves forward feeding the cartridge from the magazine into the chamber. The slide and barrel assembly remain open after the last cartridge has been fired and ejected.

1-2. PISTOL, AUTOMATIC, .45 CALIBER, M1911 AND M1911A1

The M1911 and M1911A1 pistols are semiautomatic, .45-caliber, recoil-operated, magazine-fed, single-action pistols. The magazine has a seven-round capacity.

a. Equipment Data.

|                                 |  |
|---------------------------------|--|
| Caliber-----                    | 0.45 inches                                |
| System of Operation-----        | Short recoil, semiautomatic                |
| Length-----                     | 8 5/8 inches                               |
| Weight With Empty Magazine----- | 2.4 pounds                                 |
| Weight With Full Magazine-----  | 3 pounds                                   |
| Length of Barrel-----           | 5.03 inches                                |
| Rifling-----                    | L.H., six groove<br>(Pitch 1 in 16 inches) |
| Muzzle Velocity-----            | 830 feet per second                        |
| Muzzle Energy-----              | 17,000 pounds per square inch              |
| Maximum Range-----              | 1,500 meters                               |
| Maximum Effective Range-----    | 50 meters                                  |
| Front Sight-----                | Blade, integral with slide                 |

|                      |   |
|----------------------|---|
| Rear Sight -----     | Notched bar, dovetailed to slide                        |
| Sight Radius-----    | 6.481 inches  |
| Safety Features----- | Manual safety lever,<br>grip safety, half-cock position |
| Basic Load-----      | 21 rounds   |
| Trigger Pull-----    | 5 to 6 1/2 pounds                                       |

b. Operation.

- (1) Each time a cartridge is fired, the parts inside the weapon function in a given order. This is known as the functioning cycle or cycle of operation.
- (2) The cycle of operation of the weapon is divided into eight steps: feeding, cambering, locking, firing, unlocking, extracting, ejecting, and cocking. The steps are listed in the order in which functioning occurs; however, more than one step may occur at the same time.
- (3) A magazine containing ammunition is placed in the receiver. The slide is pulled fully to the rear and released. As the slide moves forward, it strips the top round from the magazine and pushes it into the chamber. The hammer remains in the cocked position, and the weapon is ready to fire.
- (4) The weapon fires one round each time the trigger is pulled. Each time a cartridge is fired, the slide and barrel recoil or move a short distance locked together. This permits the bullet and expanding powder gases to escape from the muzzle before the unlocking is completed.
- (5) The barrel then unlocks from the slide and continues to the rear, extracting the cartridge case from the chamber and ejecting it from the weapon. During this rearward movement the magazine feeds another cartridge, the recoil spring is compressed, and the hammer is cocked.
- (6) At the end of the rearward movement, the recoil spring expands, forcing the slide forward, locking the barrel and slide together. The weapon is ready to fire again. The same cycle of operation continues until the ammunition is expended.

- (7) As the last round is fired, the magazine spring exerts upward pressure on the magazine follower. The stop on the follower strikes the slide stop, forcing it into the recess on the bottom of the slide and locking the slide to the rear. This action indicates that the magazine is empty and aids in faster reloading.

NOTE: For additional information on the technical aspects of the caliber .45 pistol see TM 9-1005-211-12.

### 1-3. REVOLVER, CALIBER .38

There are six basic caliber .38 service revolvers in use by the Army. One is a 2-inch barreled, .38-caliber revolver made by Smith and Wesson; five are 4-inch barreled, .38-caliber revolvers--three made by Ruger, and two by Smith and Wesson. The 2-inch barreled revolver is used mainly by Army CID and counterintelligence personnel. The 4-inch barreled revolvers are used by aviators and military police.

#### a. Equipment Data.

##### Smith and Wesson

|                              |                                |                        |
|------------------------------|--------------------------------|------------------------|
| Caliber                      | -----0.38                      | inches                 |
| System of Operation          | -----Rotated                   | chamber                |
| Length: 2-Inch Barrel        | -----7 1/4                     | inches                 |
| 4-Inch Barrel                | -----9 1/4                     | inches                 |
| Weight: 2-Inch Barrel        | -----26.5                      | ounces                 |
| 4-inch Barrel                | -----30.5                      | ounces                 |
| Length of Barrel             | -----2 inches/4                | inches                 |
| Muzzle Velocity              | -----950                       | feet per second        |
| Muzzle Energy                | -----16,000                    | per square inch        |
| Maximum Range: 2-Inch Barrel | -----868                       | meters                 |
| 4-Inch Barrel                | -----992                       | meters                 |
| Maximum Effective Range      | -----45 meters (2-inch barrel) |                        |
|                              | 60 meters (4-inch barrel)      |                        |
| Front Sight                  | -----Fixed                     | 1/8-inch serrated ramp |
| Rear Sight                   | -----Square                    | notch                  |
| Safety Features              | -----No manually               | operated safety        |
| Basic Load                   | -----18                        | rounds                 |

##### Ruger

|                     |              |         |
|---------------------|--------------|---------|
| Caliber             | -----0.38    | inches  |
| System of Operation | -----Rotated | chamber |
| Length              | -----9 1/4   | inches  |
| Weight              | -----33      | ounces  |

Length of Barrel-----4 inches  
 Muzzle Velocity-----950 feet per second  
 Muzzle Energy-----16,000 per square inch  
 Maximum Range-----992 meters  
 Maximum Effective Range-----60 meters  
 Front Sight-----Fixed blade  
 Rear Sight-----Fixed groove  
 Safety Features -----No manually operated safety  
 Basic Load-----18 rounds

b. Operation.

- (1) When firing single-action, the hammer is pulled back, and the sear engaged the full-cock notch in the hammer.
  - (a) Smith and Wesson: Pulling the trigger lowers the hammer block, allowing the hammer to fall.
  - (b) Ruger: Pulling the trigger raises the transfer bar into the firing position between the hammer and firing pin, allowing the hammer to strike the firing pin.
- (2) When firing double-action, the trigger is squeezed. This engages the sear, raising the hammer to nearly full-cock position. Continued pressure on the trigger allows the sear to escape from the trigger and the hammer to fall.
  - (a) Smith and Wesson: When the trigger is squeezed, the rebound slide pivots the hammer block downward, striking the cartridge primer.
  - (b) Ruger: When the trigger is squeezed and held to the rear, the transfer bar passes force from the transfer bar to the firing pin, striking the cartridge primer. If the trigger is not held to the rear, the hammer rests directly on the frame and the transfer bar remains below the firing pin.
- (3) The cylinder stop (Smith and Wesson) or latch (Ruger) prevents the cylinder from making more than one-sixth of a revolution each time the weapon is cocked. The cylinder stop/latch withdraws from the cylinder as the trigger moves. The trigger hand (Smith and Wesson) or pawl (Ruger) pivots and engages the ratchet on the extractor/ejector portion of the cylinder. The

trigger slips off of the cylinder stop/latch as it continues rearward. The cylinder stop/latch then engages the next notch.

- NOTES: 1. In firing the Ruger, the trigger must remain all the way back till the hammer falls. If the trigger is released before the hammer falls, the weapon will not fire. In firing the Smith and Wesson, the weapon fires only when the trigger is pulled all the way back.
2. For additional information on the technical aspects of the caliber .38 see TM 9-1005-226-14 and TM 9-1005-205-14&P-1.