

CHAPTER 7

WEAPONS SKILLS

7.1 Introduction. Commanders will only issue firearms to Airmen who have been properly vetted and trained as outlined in AFI 31-117, Chapter 2, Program Management, in order to support missions and contingencies in which deadly force may be authorized. The Air Force Security Forces Center (AFSFC), Combat Arms Branch, is the office of primary responsibility for all Air Force small arms and light weapons requirements, to include weapon accessories. Airmen may not add any accessories, or modify Air Force weapons in any manner, without prior approval through a supporting combat arms organization. Weapon accessories used on Air Force small arms and light weapons must be approved by the AFSFC Combat Arms Branch. Refer to AFI 36-2654, *Combat Arms Program*.

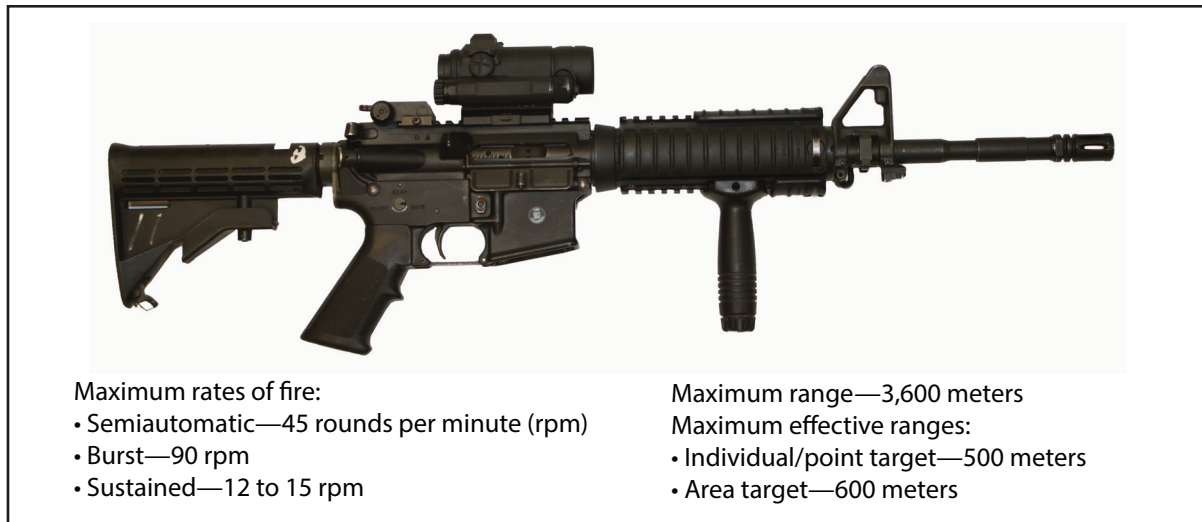
7.2 Weapons Safety. Airmen must practice safe handling practices anytime small arms and light weapons are handled in accordance with Air Force Manual (AFMAN) 31-129, *USAF Small Arms and Light Weapons Handling Procedures*. Following these basic safety concepts will prevent injury or death caused by negligent weapons handling practices. See [Attachment 2](#), QRC 7.1 Weapon Safety.

- Treat all weapons as loaded.
- Never point a weapon at anything without intent to shoot.
- Keep weapon on SAFE until ready to fire, unless directed otherwise.
- Keep finger off the trigger until sights are on target and ready to fire.
- Positively identify target and know what is around and behind it.
- Never engage in horseplay when handling weapons.

7.3 M16A2 Rifle/M4 Carbine. The M16A2/M4 are the primary individual combat weapons for the majority of AF personnel. Operators can use the rifle or carbine in offensive or defensive actions against personnel and light material targets. Refer to Technical Order (TO) 11W3-5-5-41, *Operator's Manual for Rifle/Carbine* and AFSFC, *M4 Carbine Combat Arms Instructor Guide*.

7.3.1 M16A2/M4 Characteristics. The M16A2/M4 are lightweight, gas-operated, air-cooled, magazine-fed, shoulder-fired weapons that fire in semiautomatic or (three-round) burst. See [Figure 7.1](#), M16A2 Rifle Characteristics and [Figure 7.2](#), M4 Carbine Characteristics.

NOTE: The shorter barrel length of the M4 (14.5 inches) results in its classification as a carbine.

Figure 7.1 M16A2 Rifle Characteristics**Figure 7.2 M4 Carbine Characteristics**

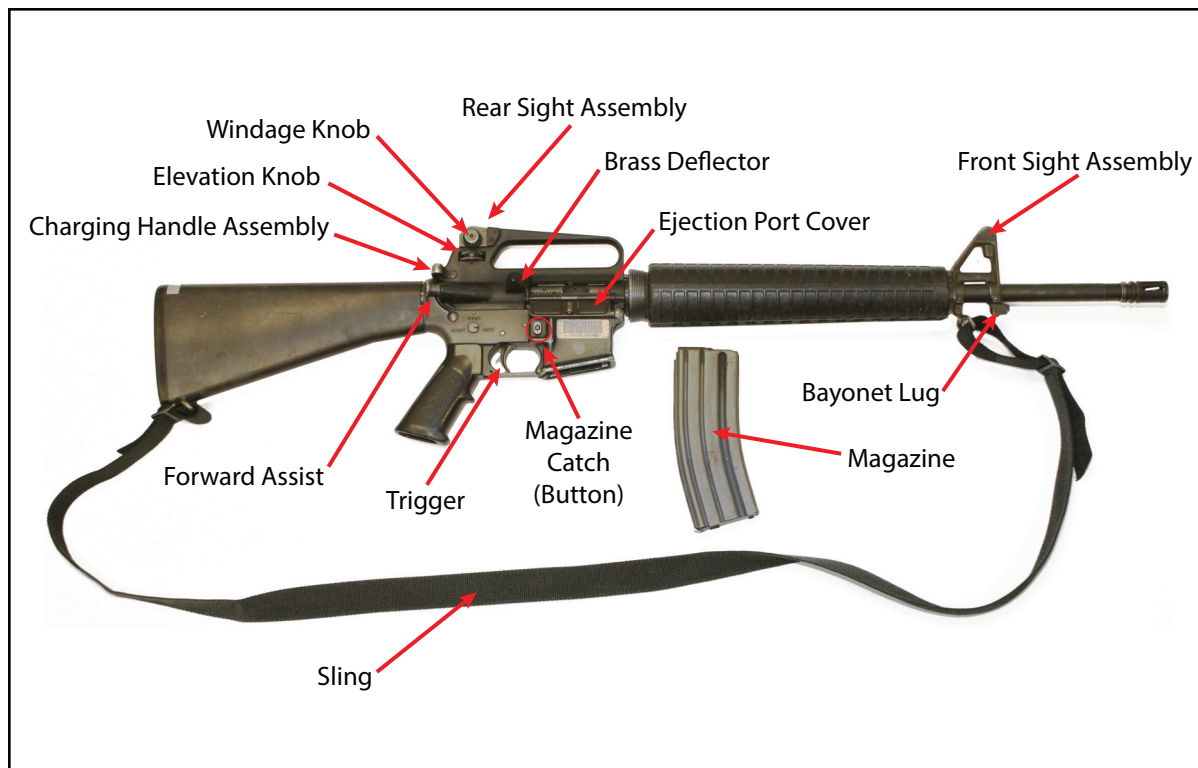
7.3.2 M16A2/M4 Nomenclature. To ensure a common source of reference when referring to operations and malfunctions with small arms and light weapons, it is important to know and use the proper nomenclature for controls and parts. Other than those items indicated in [paragraph 7.3.2.3](#), the nomenclature is the same for the M16A2 and M4.

7.3.2.1 M16A2 Nomenclature (Right Side). See [Figure 7.3](#), M16A2 Nomenclature (Right Side).

- Windage knob—allows adjustment of bullet strike left or right.
- Elevation knob—allows user to adjust rear sight for range (target distance).
- Charging handle assembly—provides initial charging of the weapon.

- Bolt and carrier assembly (inside upper receiver)—provides feeding, chambering, locking, firing, extraction, and ejection of cartridges using the buffer spring and gas pressure from a fired cartridge to initiate movement.
- Rear sight assembly—contains short-range (0 to 200 meters) and long-range (300 meters or more) apertures and adjustment controls.
- Brass deflector—deflects ejected cartridge casings away from operator.
- Ejection port cover—prevents debris from entering the chamber/upper receiver.
- Front sight assembly—houses adjustable front sight post.
- Bayonet lug—allows attachment of bayonet.
- Magazine—provides a source of ammunition (30 rounds) and positions rounds for feeding.
- Magazine catch (button)—locks magazine in place and releases magazine from lower receiver when depressed (also called magazine release).
- Trigger—initiates firing of rifle when pressed.
- Forward assist assembly—allows manual locking of bolt into chamber lugs.
- Sling—provides means to carry weapon.

Figure 7.3 M16A2 Nomenclature (Right Side)

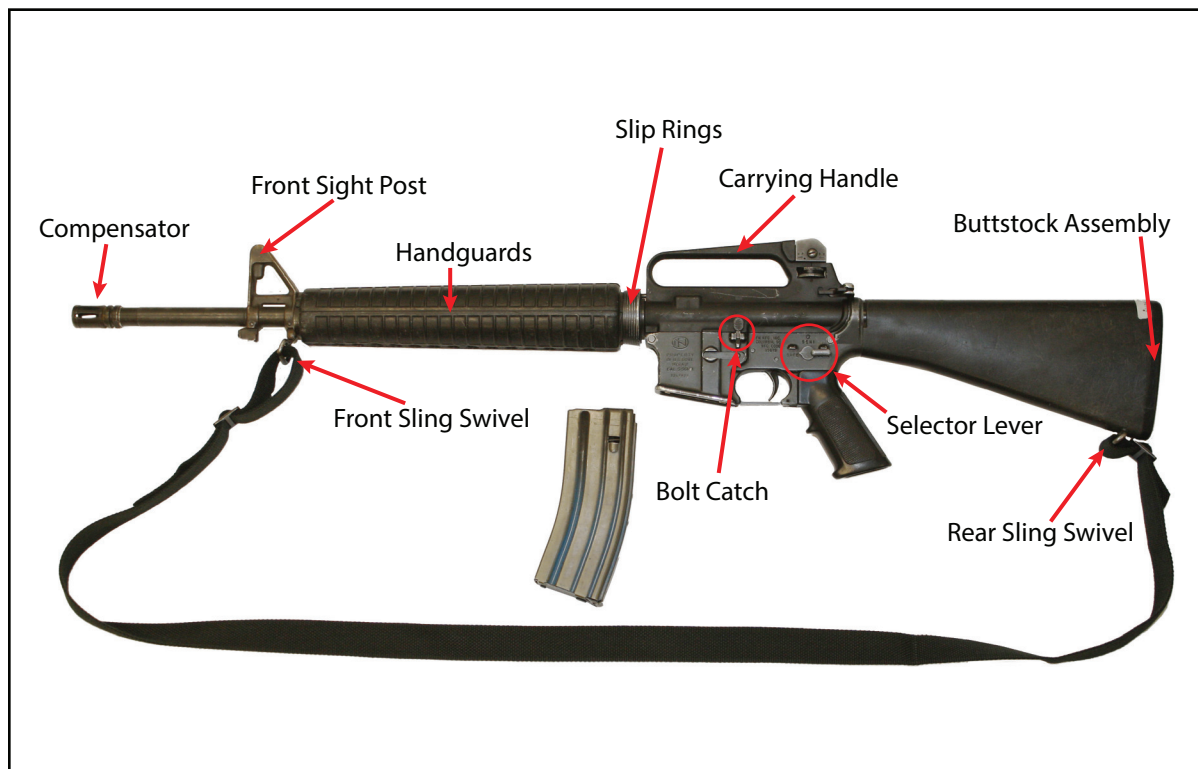


7.3.2.2 M16A2 Nomenclature (Left Side). See [Figure 7.4](#), M16A2 Nomenclature (Left Side).

- Compensator—reduces muzzle rise and detectable flash when firing.

- Front sight post—allows adjustment of bullet strike up or down.
- Slip ring—retains handguards or rail system.
- Carrying handle—houses rear sight assembly and allows for mounting of accessories.
- Selector lever—selects mode of fire (SEMI-automatic/BURST) or SAFE.
- Buttstock assembly—provides the operator a means to shoulder the weapon
- Sling swivel—attachment point for sling.
- Bolt catch—holds bolt to rear after firing last round or being manually depressed (bottom portion); releases bolt forward when depressed (top portion).
- Handguards—allow the operator to hold the front of the rifle and protects the gas tube.

Figure 7.4 M16A2 Nomenclature (Left Side)



7.3.2.3 M4 Nomenclature. All controls and descriptions of the M16A2 apply to the M4 except the carrying handle, rear sight assembly (including windage and elevation knobs), handguards, and the buttstock assembly. See [Figure 7.5](#), M4 Nomenclature. The following items are different from the M16A2:

- Adapter rail—allows the operator to hold the front of the carbine, protects the gas tube, and allows attachment of accessories.
- Adjustable buttstock assembly—mounts to lower receiver extension and provides the operator a means to shoulder the weapon; extends and collapses.

- Lock/release lever—locks buttstock in position and allows operator to release stock to extend or collapse; also allows for removal of stock.
- Back up iron sight—used to aim carbine when close combat optics are not available or fail; it is adjustable for windage and range.
- Barrel and front sight assembly—barrel length is 14.5 inches as compared to the M16A2 barrel length of 20 inches.
- M68 Close Combat Optic (CCO)—is a reflex collimated red dot sight designed for the *two eyes open* method of firing.
- Vertical pistol grip—used to increase stability of weapon when firing (item is optional).

Figure 7.5 M4 Nomenclature



7.3.3 Types of M16A2/M4 Ammunition. The Air Force has approved the following types of ammunition for use in the M16A2 and M4. See [Figure 7.6](#), Types of M16A2/M4 Ammunition.

- M199 Dummy (training only)—identified by flutes in casing and lack of primer.
- M200 Blank (training only)—identified by star crimp on case mouth.
- M855 Ball—identified by green tip.
- M855A1 Ball—new basic use round; replaces M855; identified by bronze tip.
- M856 Tracer—identified by orange tip.

- M856A1 Tracer—new tracer round; replaces M856; identified by orange tip (no visual difference to previous M856 tracer round).
- M955 Armor Piercing—identified by black tip.
- AA40 Frangible (training only)—identified by small ceramic appearing tip.
- M1042 Close Combat Mission Capability Kit (CCMCK) (dye-marking)—identified by aluminum case and plastic tip (training only).

WARNING: Do not fire blanks at personnel within 20 feet. Do not fire dye-marking rounds without required and approved personal protective equipment.

Figure 7.6 Types of M16A2/M4 Ammunition

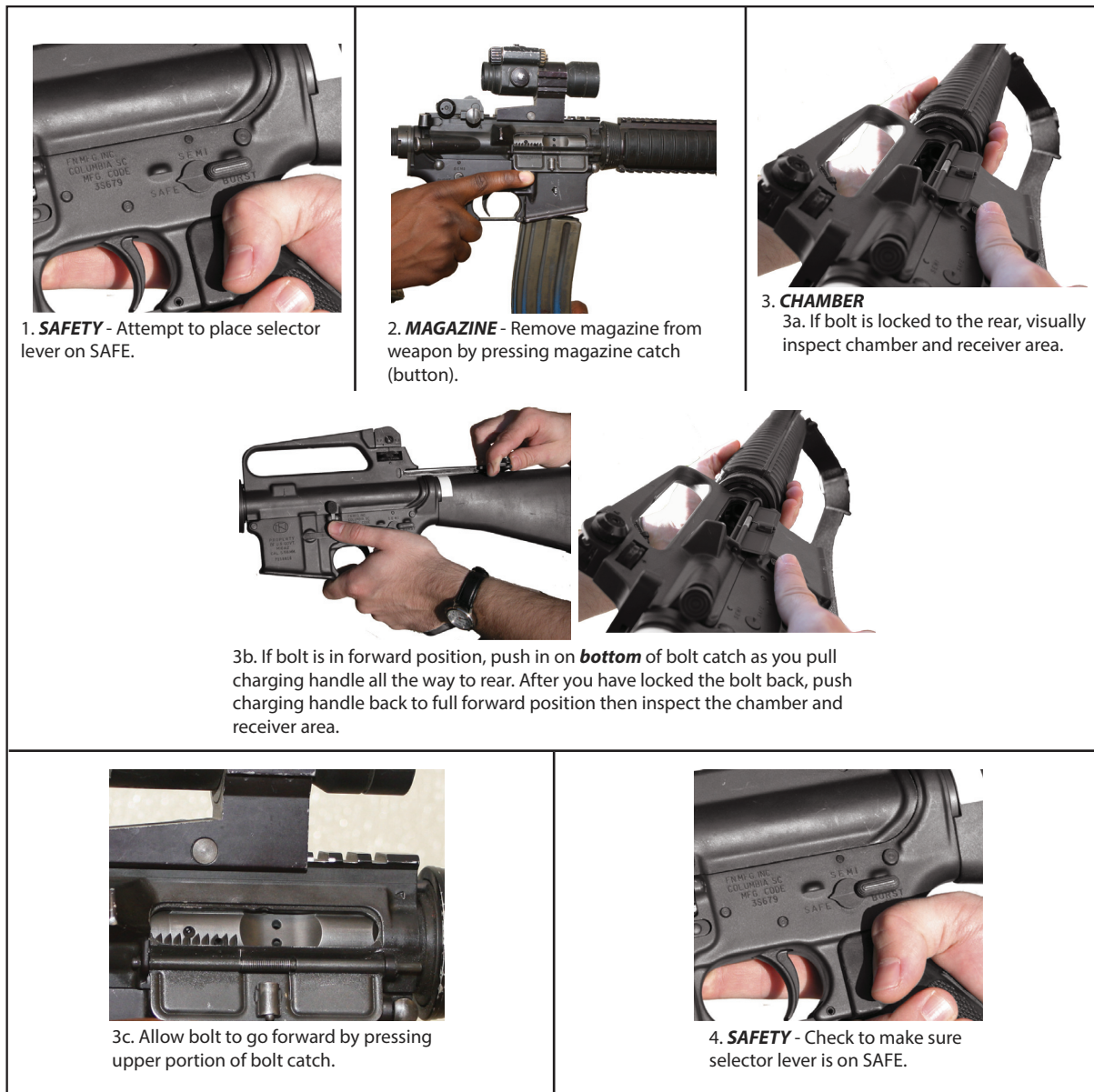


7.3.3.1 Care of Ammunition.

- Store 6 inches off ground (pallet/dunnage).
- Keep closed until ready for use.
- Protect from moisture, high temperatures, and direct sun.
- Do not disassemble.
- Do not lubricate or clean with solvents.
- Clean with dry cloth.

7.3.4 M16A2/M4 Clearing Procedures. See [Figure 7.7](#), M16A2/M4 Clearing and [Attachment 2](#), QRC 7.2 M16A2 Rifle/M4 Carbine Clearing.

Figure 7.7 M16A2/M4 Clearing

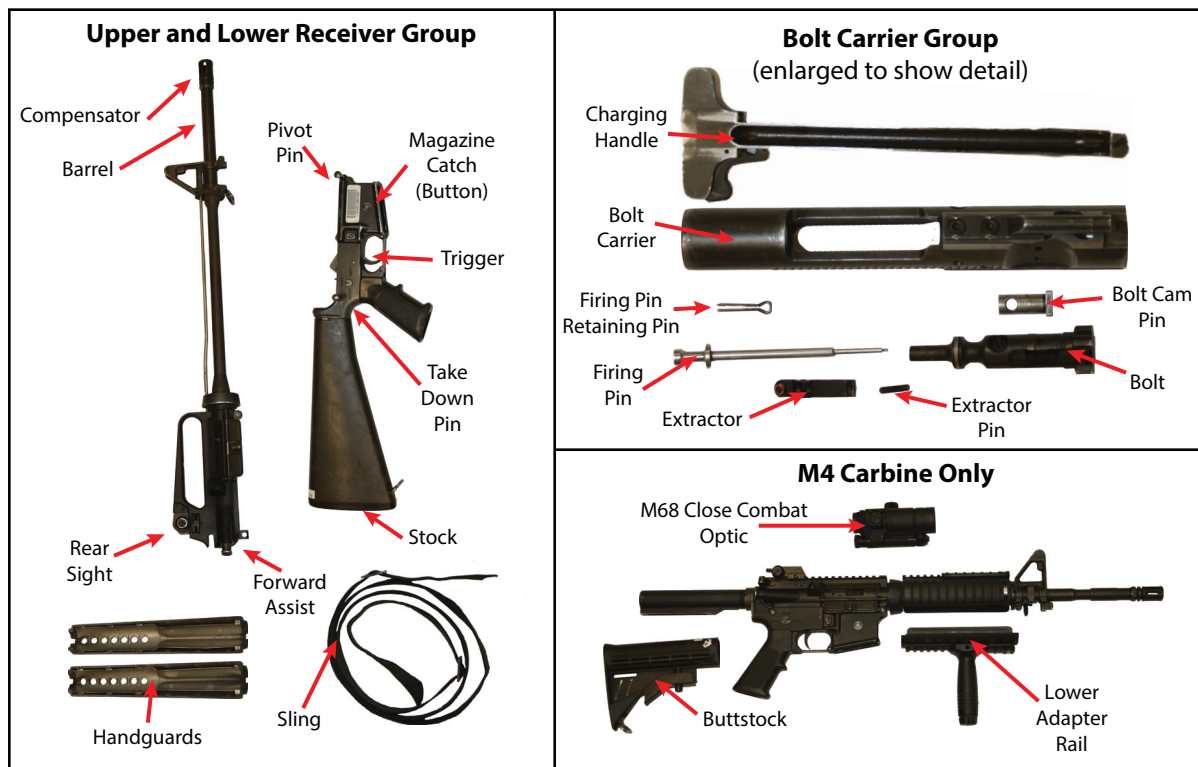


7.3.5 M16A2/M4 Disassembly. To properly clean, lubricate, and inspect a rifle/carbine, Airmen will need to know how to disassemble and reassemble the weapon. See [Figure 7.8](#), M16A2/M4 Disassembly.

- Clear rifle/carbine.
- Remove sling.
- Remove handguards/lower adaptor rail on M4 (may use buddy system); operator only authorized to remove lower adaptor rail on M4.
- Separate upper and lower receivers (press takedown pin, pivot pin to right, and pull until it stops); pins do not separate from lower receiver.
- Remove and disassemble bolt carrier group:

1. Pull charging handle and bolt carrier to the rear and remove (charging handle may be used to hold small parts [e.g., firing pin, retaining pin]).
 2. Remove firing pin retaining pin.
 3. Remove firing pin from rear of bolt carrier (tilt front of bolt carrier up).
 4. Push bolt into bolt carrier, rotate cam pin one-quarter turn, then lift out of bolt carrier.
 5. Remove bolt assembly from bolt carrier.
 6. Press rear of extractor relieving spring pressure and press out extractor pin.
 7. Remove extractor and spring (do not separate spring from extractor).
- Remove buffer and action spring by pressing buffer in and pressing down on retainer.
- 7.3.5.1 Carbine Only. The following steps only apply to the M4 Carbine.
- Remove M68 CCO, when necessary.
 - Remove lower adapter rail (top rail is fixed and cannot be removed by operator).
 - Remove buttstock by pulling down on lock release lever in area of retaining nut.

Figure 7.8 M16A2/M4 Disassembly



7.3.6 M16A2/M4 Magazine Disassembly. See [Figure 7.9](#), M16A2/M4 Magazine Disassembly.

- Release base catch with the end of a cleaning rod and remove base.

- Jiggle spring and follower to remove from magazine tube.

Figure 7.9 M16A2/M4 Magazine Disassembly



7.3.7 M16A2/M4 Care and Cleaning. Clean and lubricate personally assigned rifle/carbine regularly, even if not fired, to ensure it remains operational, avoiding rust and corrosion from forming.

WARNING: Always clear weapon prior to cleaning.

7.3.7.1 M16A2/M4 Cleaning Equipment. The following items are authorized for cleaning the rifle/carbine. Do not use any commercial or unauthorized cleaning equipment. See [Figure 7.10](#), M16A2/M4 Cleaning Equipment.

- Three cleaning rod sections, cleaning rod handle, cleaning rod eyelet, bore brush, chamber brush, and small arms cleaning brush (nylon bristle toothbrush).
- Swabs (patches), pipe cleaners, clean rag.
- Cleaner, lubricant, and preservative (CLP)—one half ounce bottle.
- Other authorized cleaning solvents:
 - Lubricating oil, small arms (LSA), semi-fluid.
 - Lubricating oil, arctic weapons (LAW).
 - Use CLP and LSA at temperatures above -10 degrees Fahrenheit (-23 degrees Celsius).
 - Use LAW at temperatures below -10 degrees Fahrenheit (-23 degrees Celsius).

CAUTION: Do not mix cleaning solvents or lubricants. Always wear eye protection when cleaning a weapon. These are the only authorized cleaners/lubricants; civilian products are not authorized.

- Clean, inspect, and lubricate upper receiver and barrel assembly; use chamber brush and bore brush to clean chamber and bore.
- Clean, inspect, and lubricate charging handle and bolt carrier group.
- Clean, inspect, and lubricate the lower receiver, buttstock, buffer and action spring.
- Clean, inspect, and lubricate the magazine.

NOTE: Wipe inside of magazine tube dry and apply a light coat of lube to exterior of magazine only.


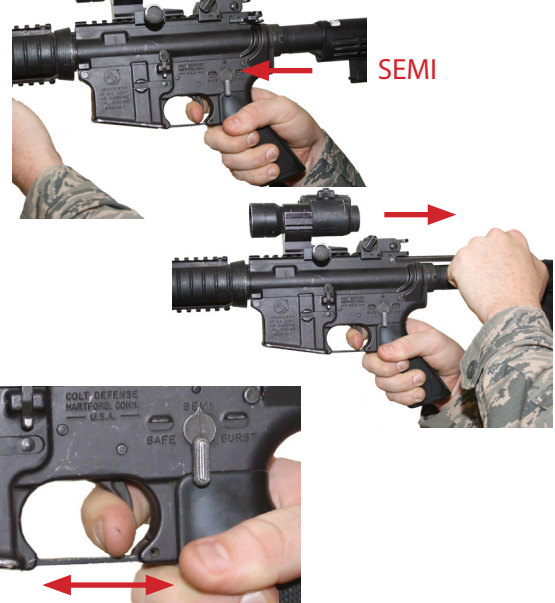

Figure 7.11 M16A2/M4 Cleaning Procedures

7.3.8 M16A2/M4 Assembly. Reassemble weapon in reverse order of disassembly once cleaned and inspected.

7.3.9 M16A2/M4 Function Check. Every time a rifle/carbine is disassembled, the operator should perform a function check on the weapon once reassembled. This will ensure the weapon is assembled properly and functions as designed. See [Figure 7.12](#), M16A2/M4 Function Check.

NOTE: If a rifle/carbine fails any of the function check steps, verify proper assembly. If the problem persists, the weapon must be turned into combat arms for repair.

Figure 7.12 M16A2/M4 Function Check

1. Clear weapon and release bolt to forward position.	
2. Check safety: <ol style="list-style-type: none"> With selector lever on SAFE, press trigger. Weapon should not dry fire (hammer should not fall). 	
3. Check SEMI: <ol style="list-style-type: none"> Place selector lever on SEMI. Press trigger and hold to rear. Weapon should dry fire (hammer should fall). Charge rifle/carbine, while continuing to hold trigger to the rear. Slowly release trigger (an audible click should be heard). Press trigger (hammer should fall). 	
4. Check BURST: <ol style="list-style-type: none"> Place selector lever on BURST and charge weapon. Press trigger and hold to rear. Weapon should dry fire (hammer should fall). Charge rifle/carbine three times, while continuing to hold trigger. Release trigger (an audible click should be heard). Press trigger. Weapon should dry fire (hammer should fall). Attempt to place selector lever on SAFE (should not go to SAFE). 	

7.3.10 M16A2/M4 Loading. When Airmen are authorized to load their rifle/carbine, they will use the following steps to prepare the weapon for use. See [Figure 7.13](#), M16A2/M4 Loading and [Attachment 2](#), QRC 7.4 M16A2 Rifle/M4 Carbine Loading. Proper loading and unloading techniques must be in accordance with AFMAN 31-129.

1. Clear weapon.
2. Release bolt to forward position by pressing top of bolt catch.
3. Insert magazine.
4. Ensure magazine is seated by pulling downward on magazine.

Figure 7.13 M16A2/M4 Loading



7.3.11 M16A2/M4 Firing. When Airmen are required to use deadly force with their rifle/carbine, as authorized by Air Force Use of Force guidance and/or Theater Rules of Engagement, they will perform the following steps. See [Figure 7.14](#), M16A2/M4 Firing and [Attachment 2](#), QRC 7.5 M16A2 Rifle/M4 Carbine Firing.

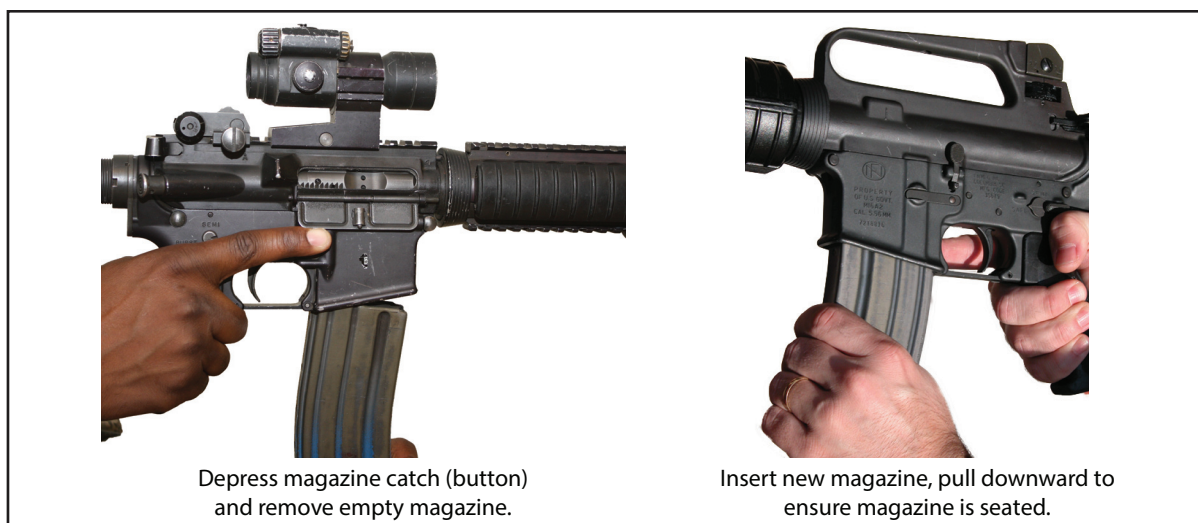
1. Pull charging handle fully to the rear and release (do not ride or push handle forward).
2. Place weapon on SEMI/BURST as appropriate.
3. Apply marksmanship fundamentals and press trigger.

Figure 7.14 M16A2/M4 Firing

7.3.12 M16A2/M4 Reloading. See [Figure 7.15](#), M16A2/M4 Reloading and [Attachment 2](#), QRC 7.6 M16A2 Rifle/M4 Carbine Reloading.

1. Remove magazine from weapon by pressing magazine catch (button).
2. Insert new magazine and pull downward to ensure magazine is seated.
3. Release bolt by pressing top of bolt catch with thumb or heel of hand.

NOTE: Left handed shooters use trigger finger or support hand to press bolt catch.

Figure 7.15 M16A2/M4 Reloading

7.3.13 M16A2/M4 Unloading. Unload the rifle/carbine using the same sequence of procedures used for clearing. If a round had been chambered, expect a live round to be ejected when unloading. See [Figure 7.7](#), M16A2/M4 Clearing and [Attachment 2](#), QRC 7.7 M16A2 Rifle/M4 Carbine Unloading.

7.3.14 M16A2/M4 Immediate and Remedial Action Procedures. Assess position of bolt by quickly glancing in the ejection port. Bolt position determines next action:

- If bolt is fully forward, apply immediate action.
- If bolt is not fully forward, apply remedial action.

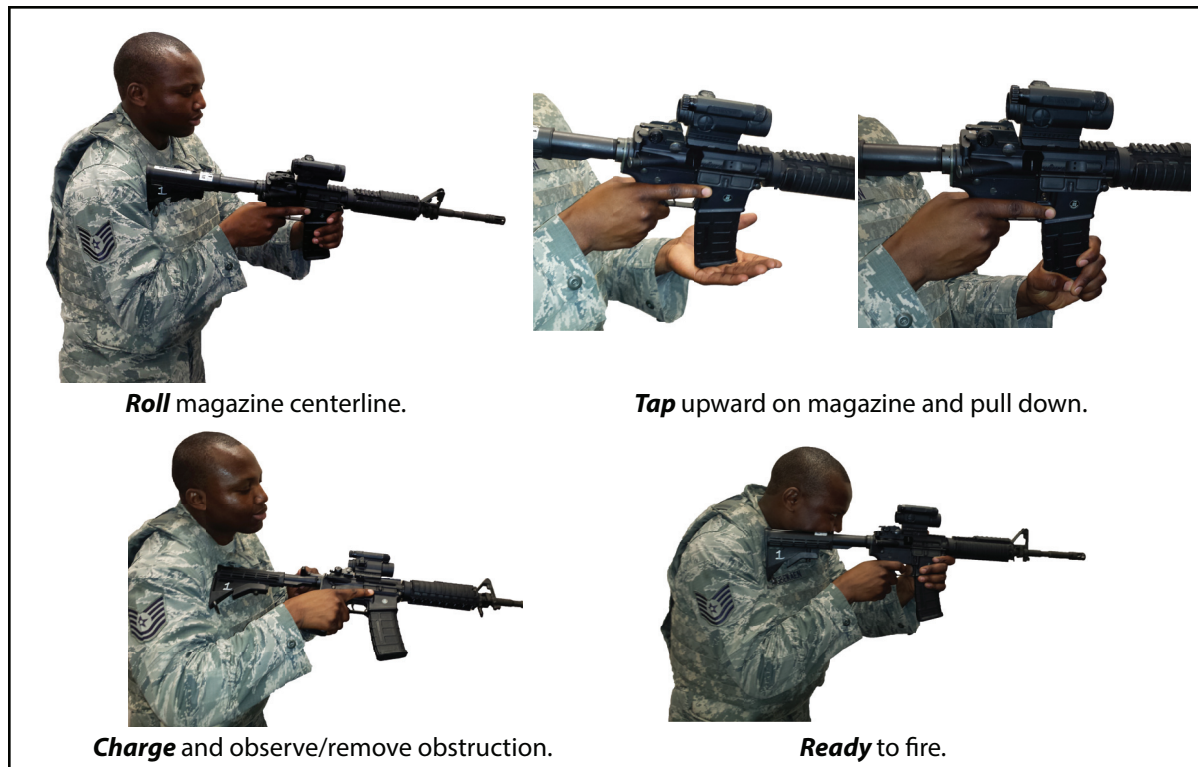
7.3.14.1 Immediate Action. See [Table 7.1](#), M16A2/M4 Immediate Actions Matrix. Defined as the unhesitating action taken by the shooter to clear a stoppage without attempting to determine the cause. See [Figure 7.16](#), M16A2/M4 Immediate Actions and [Attachment 2](#), QRC 7.12 M16A2 Rifle/M4 Carbine Immediate Action.

1. Roll magazine in toward centerline of body.
2. Tap upward on magazine and pull down to ensure it is seated.
3. Charge and observe ejection port for:
 - Ejection of empty casing or live round (continue with immediate action).
 - Obstruction in chamber or upper receiver (if chamber or bolt is obstructed proceed to remedial action).
4. Ready to fire, if necessary.
5. If weapon fails to fire, apply remedial action.

Table 7.1 M16A2/M4 Immediate Actions Matrix

Skill	Expected Outcome	Common Errors
An audible click is heard when firing the M16A2/M4 weapon—perform immediate actions.	Perform immediate actions: <i>Roll, Tap, Charge, Ready.</i>	Failure to assess results in multiple stoppages; attempting to complete actions too fast; failing to observe chamber.

Figure 7.16 M16A2/M4 Immediate Actions



7.3.14.2 Immediate Action Situations.

- Misfire is the failure of round to fire.
- Hangfire is a delayed ignition of the round.

7.3.14.3 Remedial Action. Bolt is partially forward. See [Table 7.2](#), M16A2/M4 Remedial Actions Matrix and [Attachment 2](#), QRC 7.12 M16A2 Rifle/M4 Carbine Immediate Action.

1. Clear weapon—Place weapon on SAFE (if possible).
2. Lock bolt to rear.
3. Remove magazine.
4. Clear stoppage/Malfunction—Remove live rounds, empty cases, or obstructions causing stoppage.
 - Insert fingers into magazine well of the weapon to remove stuck cases.

WARNING: The possibility exists for the bolt to release during clearing. Use caution when inserting fingers inside the weapon.

5. Charge weapon rapidly three times to clear chamber.
6. Reload—Insert a new magazine.
7. Charge weapon to chamber a round.

8. Ready to fire if necessary.

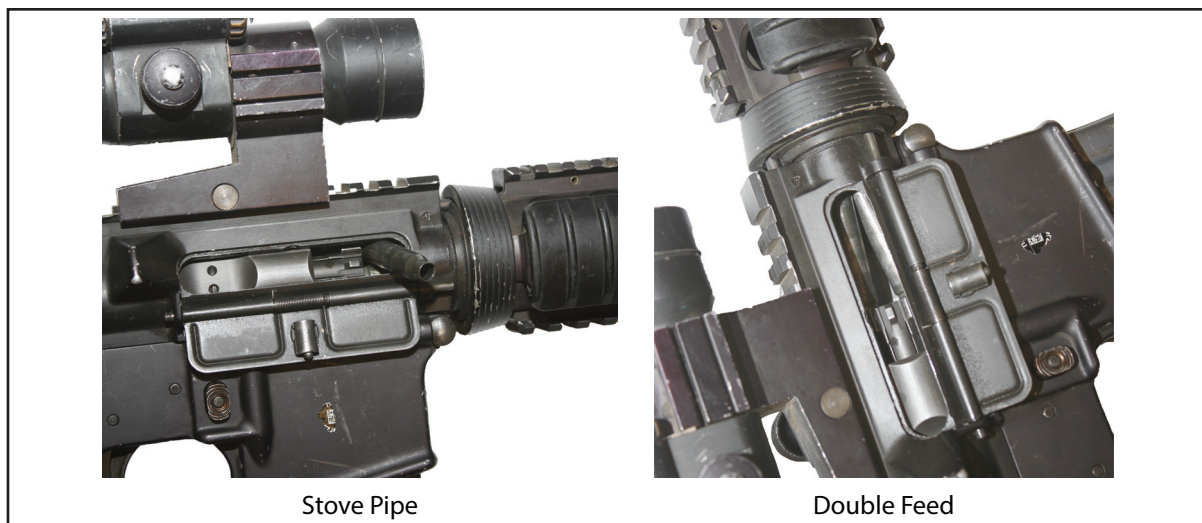
Table 7.2 M16A2/M4 Remedial Actions Matrix

Skill	Expected Outcome	Common Errors
Upon firing the M16A2/M4 weapon an audible click is heard, immediate actions performed and failed—apply remedial actions.	Ensure weapon is in the SAFE position, lock bolt to the rear, remove magazine, remove stoppage, check magazine well, charge weapon rapidly three times, and insert new magazine.	Failing to check if weapon is on SAFE. Failing to check the magazine well, or removing stoppage from chamber.

7.3.14.3.1 Remedial Action Situations. See **Figure 7.17**, Stove Pipe/Double Feed (Rifle/Carbine).

- Stove pipe.
- Failure to feed (bolt over round or double feed stoppage).
- Failure to extract.

Figure 7.17 Stove Pipe/Double Feed (Rifle/Carbine)



7.3.15 Hot Weapon Procedures. If the weapon stops firing with a live round in the chamber of a hot barrel:

- Remove round quickly (within 10 seconds).

WARNING: Keep face away from the ejection port.

- If the round could not be removed, wait 15 minutes with weapon pointed in a safe direction.
- Clear weapon.

7.3.16 Light Recoil Procedures. If an audible “pop” or reduced recoil is experienced during firing—*immediately cease fire! Do not apply immediate action!*

- A projectile may be lodged in barrel.
- **Do not** apply immediate action; the weapon could explode if fired.
- Clear weapon.
- If possible, inspect the bore for obstruction and remove with cleaning rod.

7.3.17 Rifle/M4 Carbine Marksmanship Fundamentals. The objective of applying marksmanship fundamentals is to properly align the sights, place sights on target, and maintain this alignment when pressing the trigger to fire a round. Most shooting errors occur when the shooter does not have the sights properly aligned or moves the sights (weapon) before the round fires (e.g. flinching, jerking the trigger, pushing the weapon, anticipating the shot). Many of these errors can be prevented by applying the fundamentals as an integrated act. In other words, once on target, with sights aligned, do not merely pull the trigger; rather, continue to adjust sight alignment/picture when pressing the trigger. Do not anticipate the shot; the moment the round fires should be somewhat of a surprise. See [Figure 7.18](#), M16A2 Rifle/M4 Marksmanship Fundamentals.

7.3.17.1 Firing Position.

- Establish a steady firing position; stay relaxed.
- Establish a stock weld by placing one's face in firm contact with the stock of the weapon. The shooter should remain consistent with the distance of their eye from the sights.

7.3.17.2 Aiming.

7.3.17.2.1 Iron Sight.

- Sight alignment—focus on the front sight and place the tip of the front sight post in the center of the rear sight aperture.
- Sight picture (align sights on the target)—focus on the front sight post and place the tip of the front sight in the center of the target.
- Process of aiming—locate the target; while focusing on the target, place the tip of the front sight on the target aiming point (typically the center). Then, transfer focus to the front sight and continue to adjust sight alignment while applying the remaining fundamentals.

7.3.17.2.2 Close Combat Optic.

- Sight alignment—make the red dot visible by using the lowest setting possible, and keep both eyes open.
- Sight picture—place the red dot in the center of the target, with both eyes open.
- Process of aiming—locate the target and place the red dot on the aiming point; continue to adjust sight picture while applying the rest of the fundamentals.

7.3.17.3 Breath Control. Shooter must be aware of a weapon's natural movement as a result of breathing.

- Single target engagement—when aiming, or when time is available to fire a shot, Airmen should hold their breath and fire when there is a natural respiratory pause;

when most of the air has been exhaled from the lungs and before inhaling. The shot should be fired before the Airman feels any discomfort.

- Multiple target engagement—when employing rapid fire (engaging short-exposure/multiple targets), Airmen should hold their breath, at any point in the respiratory cycle, when they are about to fire.

7.3.17.4 Trigger Control.

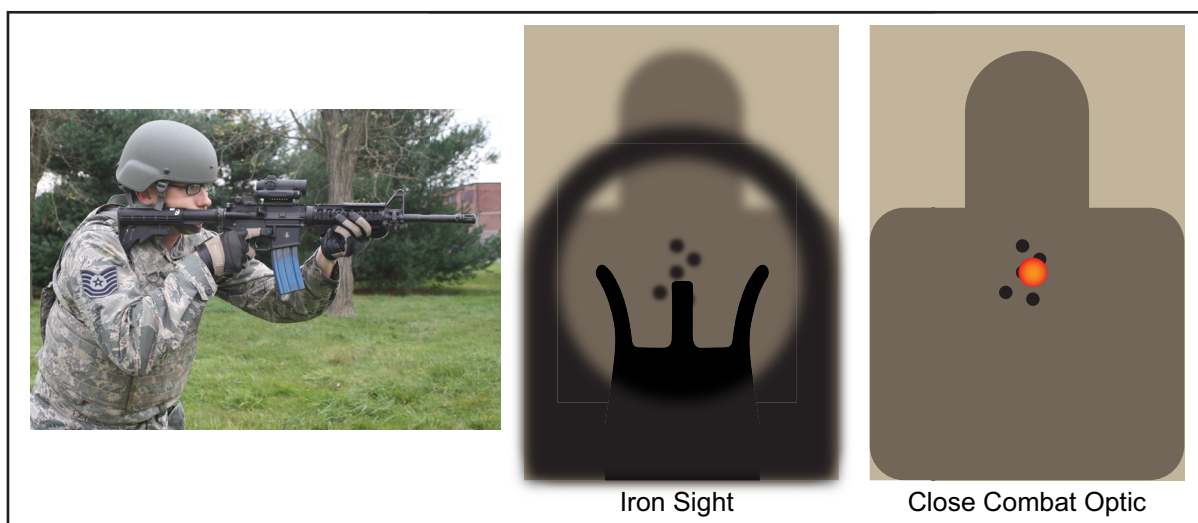
- Place first pad of finger on trigger.
- Press trigger to rear by applying smooth and steady pressure.
- Do not disturb sight alignment/sight picture; constantly adjust aiming, while pressing the trigger.

NOTE: Simply snapping or pulling the trigger, when the sights are aligned, will not provide good results.

7.3.17.5 Follow Through.

- Follow through after weapon fires and recoils.
- Continue aiming and applying all fundamentals.
- Trigger finger and face should remain in contact with weapon.
- Allow the trigger to reset by releasing it until audible click is heard, or trigger reset is felt.
- Continue firing by realigning sights and applying the fundamentals to reengage the target(s).

Figure 7.18 M16A2 Rifle/M4 Carbine Marksmanship Fundamentals



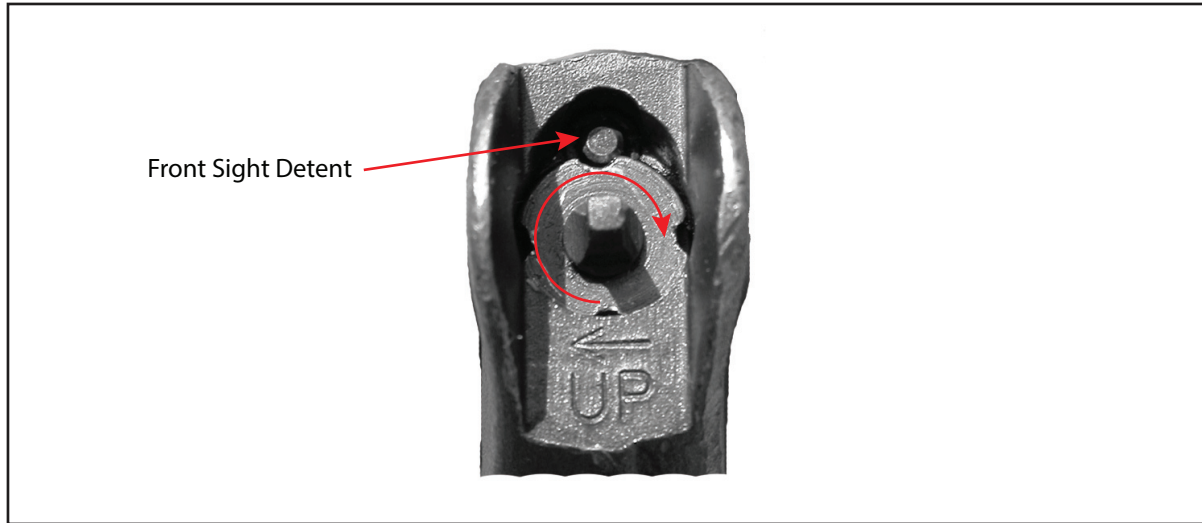
7.3.18 M16A2/M4 Front Sight Adjustments. See [Figure 7.19](#), M16A2/M4 Front Sight Adjustments.

7.3.18.1 Make elevation adjustments to the front sight post during weapons zeroing only.

7.3.18.2 Use the tip of a round to depress front sight detent and rotate sight clockwise to raise strike of bullet or counter-clockwise to lower strike of bullet.

- M16A2: 1 click = 0.9 centimeters at 25 meters and 3.5 centimeters at 100 meters.
- M4: 1 click = 1.2 centimeters at 25 meters and 4.8 centimeters at 100 meters.

Figure 7.19 M16A2/M4 Front Sight Adjustments



7.3.19 Close Combat Optic. The M68 CCO is a reflex red dot sight designed for the *two eyes open* method of firing. It is the primary sight when mounted on the M4. The CCO is not a scope but is intended for short-range engagement and quick target acquisition. See [Figure 7.20](#), Comp M4 and Comp M2.

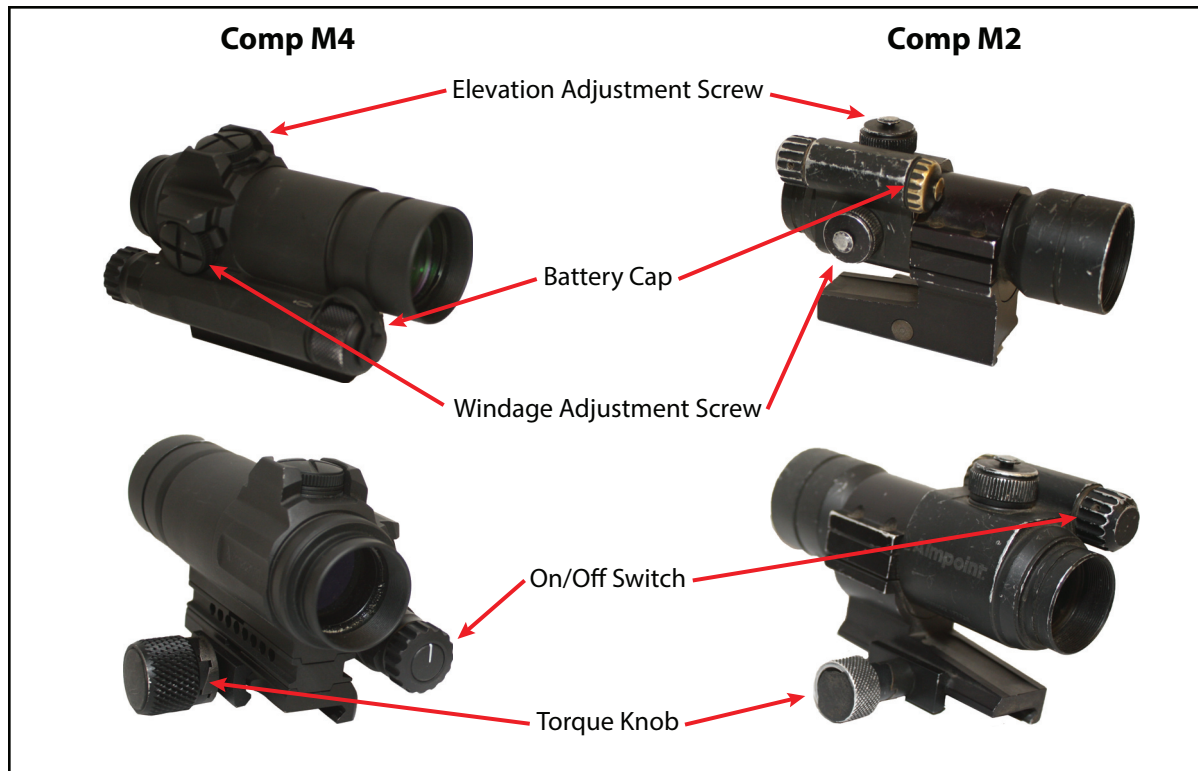
7.3.19.1 Make adjustments in elevation (up/down) using elevation adjustment screw.

- 1 click = 4 millimeters at 25 meters.
- Clockwise = down.

7.3.19.2 Windage adjustment (left/right).

- 1 click = 4 millimeters at 25 meters.
- Clockwise = left.

Figure 7.20 Comp M4 and Comp M2



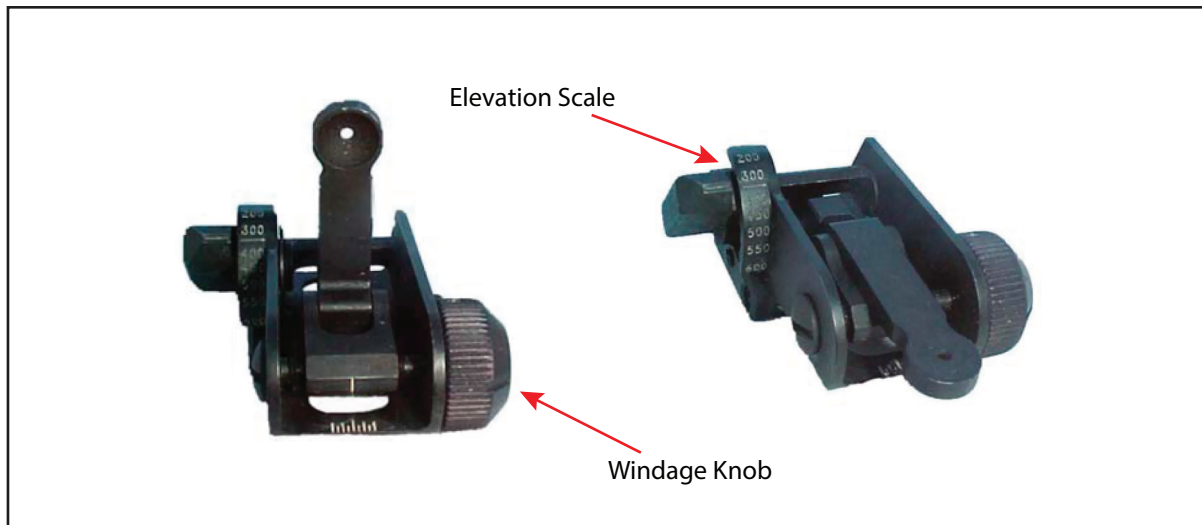
7.3.20 Back Up Iron Sight (BUIS). The BUIS is a backup sighting system used in the event the CCO goes down. The BUIS has a flip up rear sight aperture and is adjustable up to 600 meters. Keep the rear sight aperture in the stowed position when not in use. See [Figure 7.21](#), M4 Back Up Iron Sight (BUIS).

7.3.20.1 Make sight adjustments in windage (left/right) using rear sight windage knob.

- 1 click = 0.5 centimeters at 25 meters and 1.9 centimeters at 100 meters.
- Clockwise = right.

7.3.20.2 Use the rear sight elevation knob and elevation scale to adjust for proper target distance.

- Rear sight elevation should be set on 300 meters when zeroing the carbine.
- Do not use the elevation knob to zero the sights; use the front sight post for this.

Figure 7.21 M4 Back Up Iron Sight (BUIS)

7.3.21 Rear Sight Adjustments. See [Figure 7.22](#), M16A2 Rear Sight Adjustments.

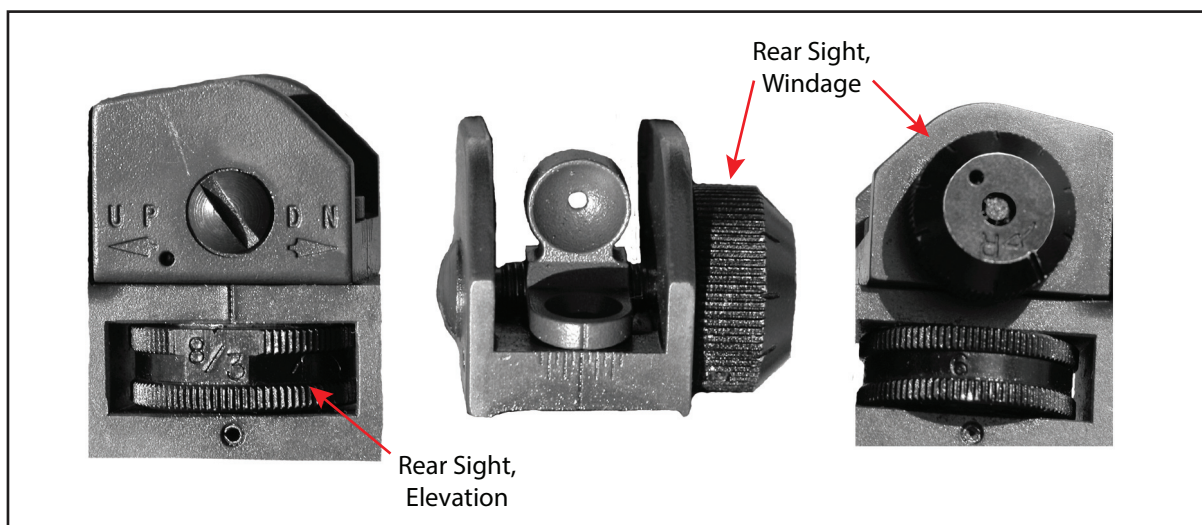
7.3.21.1 Make sight adjustments in windage (left/right) using rear sight windage knob

- 1 click = 0.3 centimeters at 25 meters and 1.25 centimeters at 100 meters.
- Clockwise = right.

7.3.21.2 Larger aperture (0-2) is used for targets 0 to 200 meters, night/limited visibility and moving targets.

7.3.21.3 Smaller aperture is the normal aperture used for most firing situations.

NOTE: Elevation knob should be set to 8/3 when using smaller aperture (turn elevation knob clockwise (down) until it bottoms out against the upper receiver, then raise to 8/3 mark).

Figure 7.22 M16A2 Rear Sight Adjustments

7.3.22 Protective Mask Firing. Marksmanship fundamentals remain valid during firing while wearing the protective mask; however, modifications to standard fundamentals may be required to operate the weapon effectively in increased MOPP levels. See [Figure 7.23](#), Protective Mask Firing.

7.3.22.1 Firing Position.

- Shooter must still establish a good stock weld between the mask and buttstock.
- Face will not be in direct contact with buttstock when wearing protective mask.

7.3.22.2 Aiming.

- Use ideal (normal) sight picture whenever possible.
- Shooter may have to cant (rotate) weapon to see through rear sight or CCO.
- Aim center of mass; rounds fired while weapon is canted impact low and in the direction of the cant, but the effect is minimal out to 75 meters.

7.3.22.3 Breath Control.

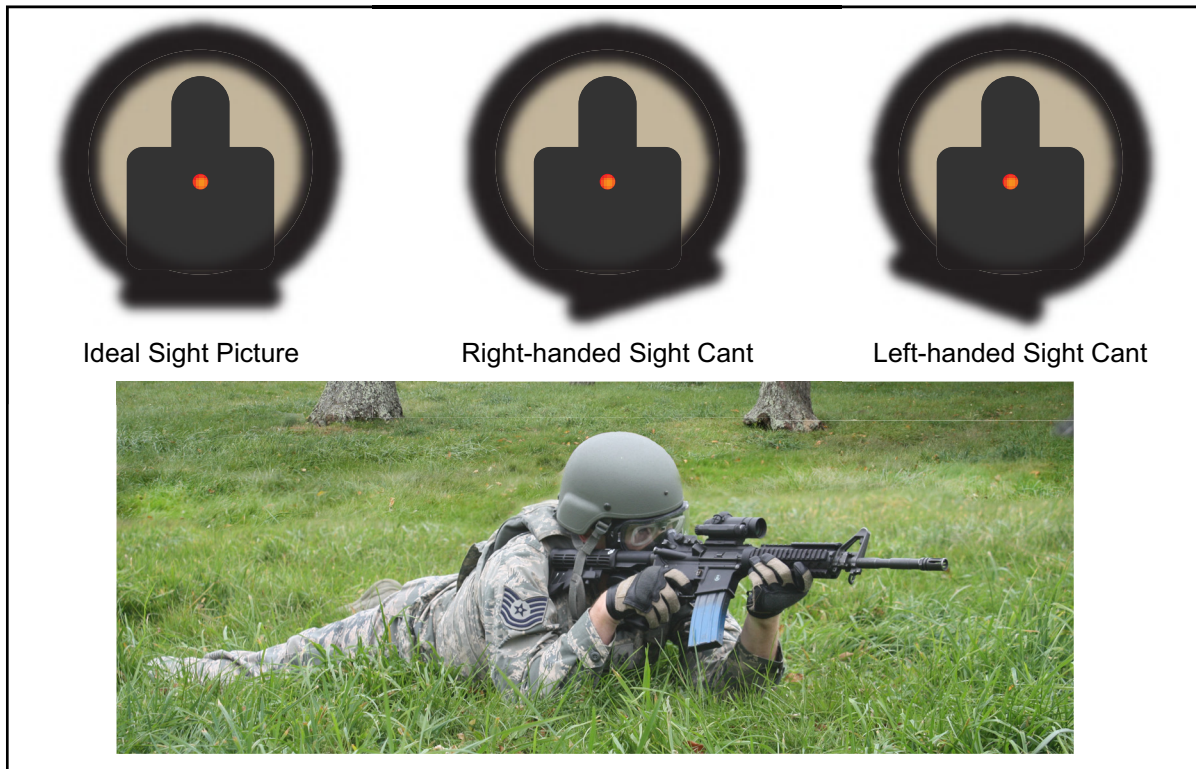
- Breathing may become more restrictive and difficult when wearing the protective mask.
- Use rapid target engagement techniques during the limited amount of time the shooter is able to control their breath.

7.3.22.4 Trigger Control.

- Wearing the protective gloves will affect the ability to grasp the pistol grip and operate the trigger. Dry fire practice will help become familiar and proficient.
- The trigger guard can be lowered if the fit of the glove restricts the trigger finger. This is also an option for extreme cold conditions with mittens/gloves.

7.3.22.5 Follow Through.

- Follow through after weapon fires and recoils.
- Continue aiming and applying all fundamentals.

Figure 7.23 Protective Mask Firing

7.3.23 Short Range Combat (SRC). SRC techniques will enable Airmen to quickly and effectively engage targets at ranges less than 50 meters. Below are some important things to remember during SRC:

7.3.23.1 Selector lever remains on SAFE until ready to fire and when moving.

7.3.23.2 Trigger finger (index) remains outside trigger guard to avoid a sympathetic reflex or unintentional shot.

7.3.23.3 Muzzle Discipline.

- Keep muzzle pointed in safe direction (muzzle awareness).
- Maintain 360 degree situational awareness; communicate with assigned team.

7.3.23.4 Threat Discrimination.

- Positively identify threat/target.
- See first before shot being taken.

7.3.23.5 SRC Weapon Carry Positions.

7.3.23.5.1 Low Ready. See [Figure 7.24](#), Low Ready-SRC Weapon Carry Positions.

- General fighting stance.
- Maximizes visibility and provides for rapid target acquisition.
- Places body armor toward threat to maximize protection.

Figure 7.24 Low Ready-SRC Weapon Carry Positions

7.3.23.5.2 High Ready. See [Figure 7.25](#), High Ready-SRC Weapon Carry Positions.

- Can be used when moving in single file.
- With barrel in line of sight, vision may be slightly obstructed.
- Places body armor toward threat to maximize protection.

Figure 7.25 High Ready-SRC Weapon Carry Positions

7.3.23.5.3 High Port. See [Figure 7.26](#), High Port-SRC Weapon Carry Positions.

- Can be used when operating in close proximity to others.
- Good position to use when maximum speed of movement is needed.
- Can be used when turning with the weapon.

Figure 7.26 High Port-SRC Weapon Carry Positions

7.3.23.5.4 Depressed Ready. See [Figure 7.27](#), Depressed Ready-SRC Weapon Carry Positions.

- Can be used when operating in tight spaces or close proximity to others.
- Allows ability to move or turn with weapon while maintaining muzzle discipline.

Figure 7.27 Depressed Ready-SRC Weapon Carry Positions

7.3.23.6 SRC Firing Stance. The SRC firing stance allows Airmen to move rapidly, while maintaining the ability to identify, discriminate, and engage targets. See [Figure 7.28](#), SRC Firing Stance.

1. Place feet approximately shoulder width apart.
2. Point toes outward.
3. Move strong foot slightly back 2 to 8 inches.

4. Bend knees and place weight on balls of feet.
5. Slightly angle shoulders toward threat.
6. Bend at the waist and place body aggressively forward.
7. Pull the stock into shoulder with firing hand.
 - Elbows should be down.
 - Index trigger finger on receiver.
 - Place thumb on selector lever.
8. Grip the handguards or vertical pistol grip with support hand.
 - Apply rearward pressure with support hand.
 - Do not grip the magazine well with support hand.
9. Cheek should be tight on top of stock forming a snug stock weld.
10. Position stock in full contact with body armor or pectoral muscle.

Figure 7.28 SRC Firing Stance



7.3.23.7 SRC Firing Techniques. The use of SRC firing techniques should be limited to targets appearing at 25 meters or less. Airmen should only use the rapid aimed and aimed quick fire techniques when they cannot engage a target fast enough to use the sights in a normal manner.

7.3.23.7.1 Rapid Aimed Fire.

- Used when speed is needed over accuracy.
- Perfect sight alignment is not used; however, this technique is extremely effective from 0 to 15 meters.

7.3.23.7.2 Aimed Quick Fire (iron sights).

- Extremely fast method of engaging targets from 0 to 12 meters.
- Look over the rear sight when aiming; point the front sight at the target.

- Effect of sight offset; point of impact of the round inside 25 meters will be below the point of aim (at 7 meters the point of impact is approximately 2.5 inches below the point of aim).

7.3.23.7.3 Burst Fire.

- Least desirable technique due to poor accuracy, but is effective out to 50 meters.

7.3.23.7.4 Close Combat Optic Aiming Techniques.

- With both eyes open, place the red dot on the target and fire.
- This technique can be used for all distances and maximizes battlefield awareness/increased field of vision.

7.4 Pistol. The M9 Pistol is a personal defense weapon or sidearm carried by AF personnel in support of various missions. See [Figure 7.29](#), M9 Pistol. Airmen armed with the M9 must keep the weapon holstered at all times until ready for use or turn-in. Airmen must be able to competently handle their assigned weapon prior to carrying in any environment. Refer to TO 11W3-5-5-1, *Operator's Manual Pistol, Semiautomatic, 9mm, M9*; AFSFC *Handgun Instructor Guide*; and AFMAN 31-129. The Air Force is transitioning to the M18/P320 pistol. Refer to local Combat Arms Training and Maintenance (CATM) for more information.

Figure 7.29 M9 Pistol



7.4.1 Pistol Clearing Procedures. See [Figure 7.30](#), M9 Pistol Clearing Procedures and [Attachment 2](#), QRC 7.3 M9 Pistol Clearing.

Figure 7.30 M9 Pistol Clearing Procedures



7.4.2 Pistol Characteristics. The M9 Pistol is a semiautomatic, magazine-fed, recoil-operated, double-action handgun. It will continue to fire each time the trigger is pulled as long as there are rounds in the magazine. When the magazine is empty, the slide assembly will lock in the rear position, ready for a new magazine, if continued firing is needed.

7.4.2.1 Manufacturer: Beretta.

7.4.2.2 Caliber: 9 millimeter (mm) North Atlantic Treaty Organization (NATO) (9mm x 19mm).

7.4.2.3 Magazine: 15 round capacity.

7.4.2.4 Weight.

- Unloaded: 34 ounces with empty magazine.
- Loaded: 41 ounces with 15 round magazine.

7.4.2.5 Types of Fire.

- **Double Action**—starts with the hammer in the forward position. When the trigger is pressed, the hammer is cocked and as the shooter continues to press rearward, the hammer is released to fire the round in the chamber. The first shot will be double action.
- **Single Action**—starts with the hammer in the cocked or rear position. When the trigger is pressed, the hammer is released to fire the round in the chamber. The second

and subsequent shots will be single action, unless the hammer is decocked with the decocking/safety lever.

7.4.2.6 Safety Features.

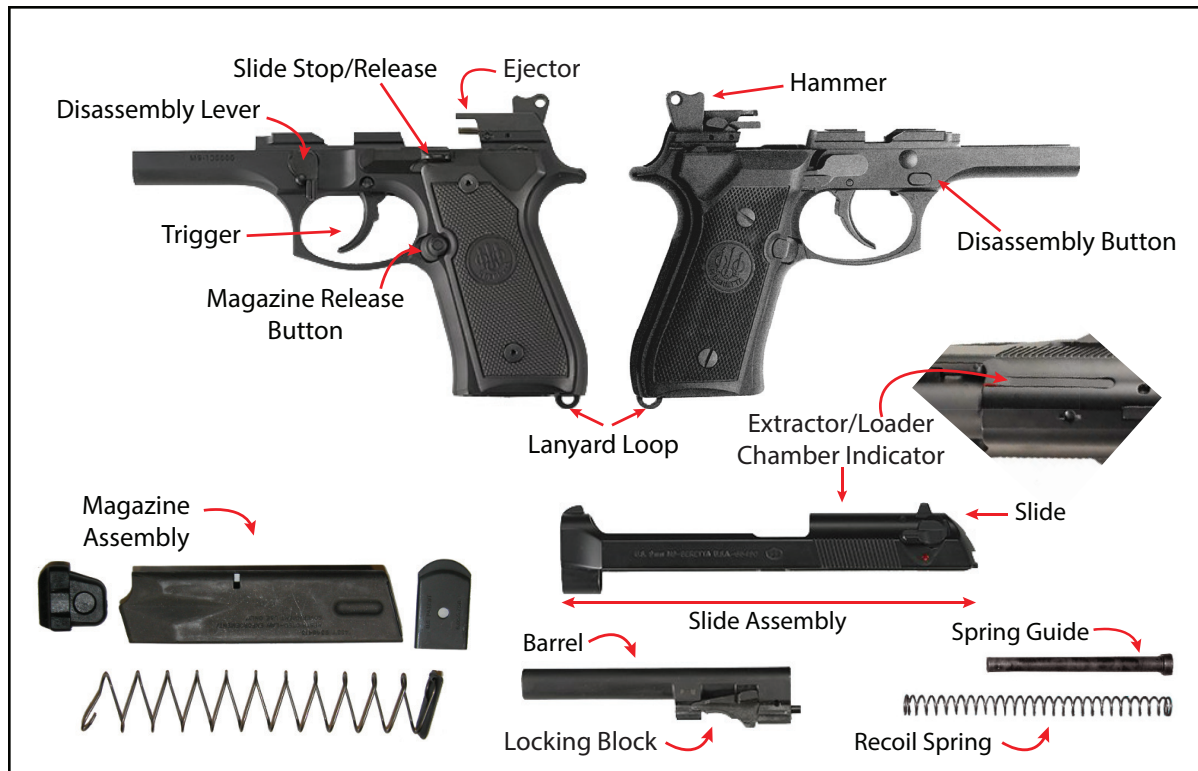
- Decocking/safety lever—allows the hammer to be lowered without discharging the weapon and prevents firing when in the safe position.
- Firing pin block—secures the firing pin and prevents it from moving forward, unless the trigger is pulled, even if the pistol is dropped.
- Half-cock notch—catches the hammer before it can contact the firing pin striker if the hammer moves forward without the trigger being pulled to the rear.

7.4.2.7 Performance Features.

- Maximum range: 1,800 meters.
- Maximum effective range: 50 meters.

7.4.3 Pistol Nomenclature. It is important to know the proper names of the parts and controls on the pistol to ensure a common reference with other operators or when relaying/reporting problems to combat arms for maintenance. See [Figure 7.31](#), M9 Pistol Nomenclature.

- Slide assembly—houses the firing pin; firing pin striker; extractor/loaded chamber indicator; front and rear sights; and decocking/safety lever. The slide assembly cocks the hammer during recoil.
- Receiver assembly—houses the disassembly button and lever; slide stop; trigger; magazine release button; grips; lanyard loop; and hammer. The receiver assembly serves as a support for all major components.
- Barrel and locking block—assembly houses the cartridge for firing, directs projectile for firing, and locks barrel in position during firing.
- Recoil spring and guide—return the slide assembly to the forward position.
- Magazine—assembly consists of the floor plate, magazine spring, follower, and magazine tube.

Figure 7.31 M9 Pistol Nomenclature

7.4.4 Types of M9 Pistol Ammunition. There are several types of 9mm rounds authorized by the Air Force for use in the M9. See [Figure 7.32](#), Types of M9 Pistol Ammunition.

- M882 Ball—basic cartridge for field use.
- MK243 Jacketed Hollow Point—issued to personnel assigned resource protection missions; this ammunition is not normally utilized in combat situations.
- MK254 Mod 0 Frangible (training only)—identified by ceramic appearing tip.
- M917 Dummy (training only)—identified by lack of primer.
- M1041 CCMCK (dye-marker)—identified by a brass case and a blue or red compound encased in plastic tip (training only).

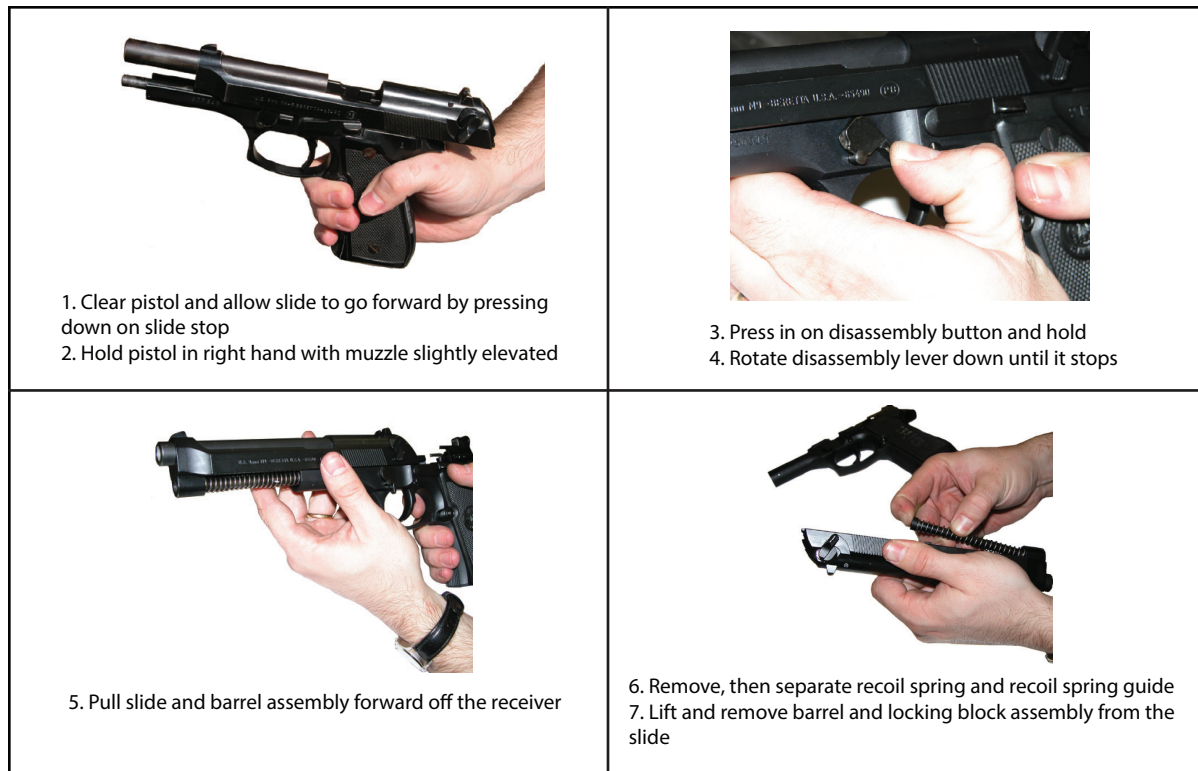
Figure 7.32 Types of M9 Pistol Ammunition

7.4.4.1 Care of Ammunition. Small arms ammunition must be properly stored and handled to ensure it remains serviceable and will work when needed.

- Store 6 inches off ground (use pallet/dunnage).
- Keep closed until ready for use.
- Protect from moisture, high temperatures, and direct sun.
- Do not disassemble.
- Do not lubricate or clean with solvents.
- Clean with dry cloth.

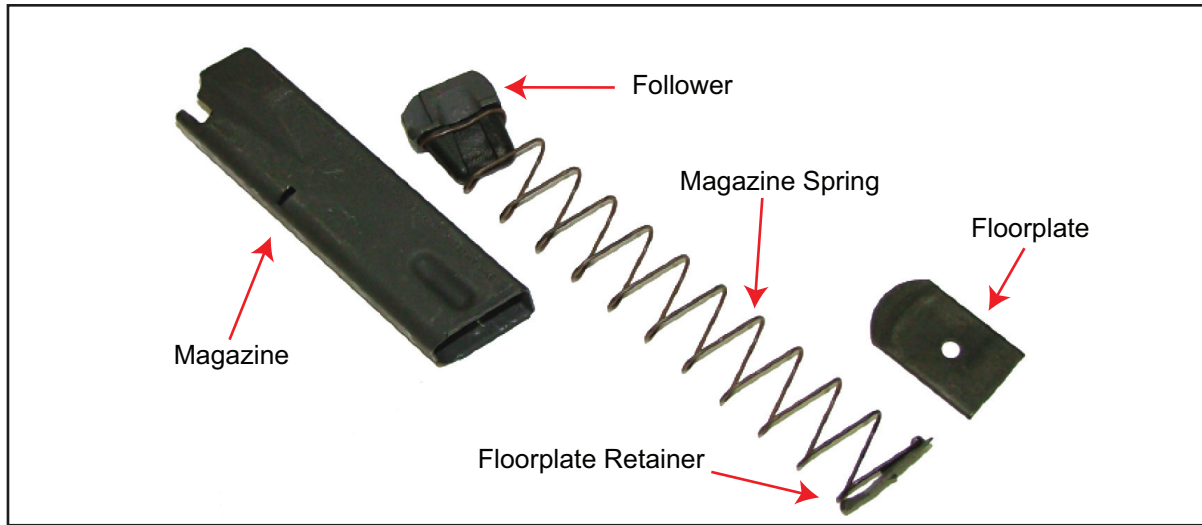
7.4.5 Pistol Disassembly (Field Strip). Airmen will need to know how to disassemble and assemble; clean, lubricate, and inspect their pistol. See [Figure 7.33](#), M9 Pistol Disassembly (Field Strip).

- Clear pistol and allow slide to go forward by pressing down on slide stop.
- Hold pistol in right hand with muzzle slightly elevated.
- Press in on disassembly button and hold.
- Rotate disassembly lever down until it stops.
- Pull slide and barrel assembly forward off the receiver.
- Remove, then separate recoil spring and recoil spring guide
- Lift and remove barrel and locking block assembly from the slide.

Figure 7.33 M9 Pistol Disassembly (Field Strip)

7.4.6 Pistol Magazine Disassembly. The magazine can cause stoppages in the pistol if not properly maintained. Airmen need to disassemble the magazine to clean it, ensuring it will work properly. See [Figure 7.34](#), M9 Pistol Magazine Disassembly.

- Unload magazine.
- Remove floor plate from magazine (use cleaning rod).
- Remove magazine floor plate retainer, magazine spring, and follower.
- Separate floor plate retainer from magazine spring.

Figure 7.34 M9 Pistol Magazine Disassembly

7.4.7 Pistol Cleaning Equipment. See [Figure 7.35](#), M9 Pistol Cleaning Equipment.

1. Cleaning rod, bore brush, and small arms cleaning brush (nylon bristle toothbrush).
2. Swabs (patches), pipe cleaners, rag.
3. CLP-half ounce bottle.
4. Other authorized cleaning solvents:
 - LSA, semi-fluid.
 - LAW.
 - Use CLP and LSA at temperatures above -10 degrees Fahrenheit (-23 degrees Celsius).
 - Use LAW at temperatures below -10 degrees Fahrenheit (-23 degrees Celsius).

CAUTION: Do not mix cleaning solvents or lubricants. Always wear eye protection when cleaning a weapon. The only authorized cleaners/lubricants are those stated above; civilian products are not authorized.

Figure 7.35 M9 Pistol Cleaning Equipment

7.4.8 Pistol Cleaning Procedures. Cleaning the pistol consists of removing all fouling/foreign residue and applying a light coat of lubrication.








- Clean, inspect, and lubricate the slide assembly.
- Clean, inspect, and lubricate barrel.
- Clean, inspect, and lubricate recoil spring and recoil spring guide.
- Clean, inspect, and lubricate receiver.
- Clean, inspect, and lubricate magazine.

NOTE: Wipe inside of magazine tube dry and apply a light coat of lube to exterior of magazine only.

7.4.9 Pistol Assembly. Once the pistol has been cleaned, lubricated, and inspected, it can be assembled in the reverse order of disassembly.

7.4.10 Pistol Function Check. Even though parts of the pistol were inspected during cleaning, the operator must ensure it functions properly. Always perform a function check after assembly. See [Figure 7.36](#), M9 Pistol Function Check.

Figure 7.36 M9 Pistol Function Check

<ol style="list-style-type: none"> 1. Prepare for Function Check: <ol style="list-style-type: none"> a. Clear weapon. b. Release slide and insert empty magazine. 	
<ol style="list-style-type: none"> 2. Check Slide Stop/Release: <ol style="list-style-type: none"> a. Retract slide – Slide should lock to the rear. b. Remove magazine. c. Ensure decocking/safety lever is down/SAFE position. d. Release slide forward. e. Ensure hammer falls fully forward. 	
<ol style="list-style-type: none"> 3. Check Firing Pin Block/Hammer: <ol style="list-style-type: none"> a. Press and release trigger. b. The firing pin block should move up and down. c. Hammer should not move. 	
<ol style="list-style-type: none"> 4. Check Double Action: <ol style="list-style-type: none"> a. Move decocking/safety lever up to the FIRE position. b. Press trigger. c. Weapon should dry fire double action. 	
<ol style="list-style-type: none"> 5. Check Trigger Bar: <ol style="list-style-type: none"> a. Press trigger and hold to rear. b. Retract and release slide. c. Release trigger. d. Reset "click" should be heard and hammer should not fall forward. 	
<ol style="list-style-type: none"> 6. Check Single Action: <ol style="list-style-type: none"> a. Press trigger to check single action. b. Hammer should fall. 	
<ol style="list-style-type: none"> 7. Check Safety: <ol style="list-style-type: none"> a. Rotate decocking/safety lever to down SAFE position. b. Manually cock hammer and release. c. Hammer should fall. 	

7.4.11 Pistol Loading. When Airmen are authorized to load their pistol, they will use the following steps to prepare the weapon for potential use. See [Figure 7.37](#), M9 Pistol Loading and [Attachment 2](#), QRC 7.8 M9 Pistol Loading. Proper loading and unloading techniques must be in accordance with AFMAN 31-129.

1. Clear pistol (pistol on SAFE with slide locked rearward).

WARNING: Make sure the decocking/safety lever is in the down/safe position.

2. Insert a loaded magazine.
3. Press down on slide stop to send slide forward; verify hammer is forward (not cocked).
4. Place decocking/safety lever up in FIRE position (red dot showing).

WARNING: Pistol is now ready to fire; if trigger is pressed, weapon will discharge.

Figure 7.37 M9 Pistol Loading



7.4.12 Pistol Firing. If there is a need and an Airman is authorized to fire, the weapon will be drawn, marksmanship fundamentals applied, and trigger pressed. See [Attachment 2](#), QRC 7.9 M9 Pistol Firing.

7.4.13 Pistol Reloading. If the pistol is fired until the magazine is empty, the shooter may need to reload with another magazine to continue fighting. See [Figure 7.38](#), M9 Pistol Reloading and [Attachment 2](#), QRC 7.10 M9 Pistol Reloading.

Figure 7.38 M9 Pistol Reloading



7.4.14 Pistol Unloading. Unload the pistol using the same sequence of procedures used for clearing. The pistol is loaded, Airmen should anticipate a live round to be ejected from the weapon; be prepared to catch this round when locking slide to the rear. See [Figure 7.30](#), M9 Pistol Clearing Procedures and [Attachment 2](#), QRC 7.11 M9 Pistol Unloading.

7.4.15 Pistol Immediate Action Procedures. Immediate action is the prompt action taken by the operator to correct a stoppage. See [Table 7.3](#), M9 Pistol Immediate Action Matrix, [Figure 7.39](#), Stove Pipe (Pistol) for an example of a stoppage, and [Attachment 2](#), QRC 7.13 M9 Pistol Immediate Action. If the pistol fails to fire, use the following procedures to place it back into action:

7.4.15.1 Slide fully forward:

1. Ensure the decocking lever/safety is in the FIRE (up) position.
2. **Tap**—Firmly tap on bottom of magazine to ensure it is fully seated and locked in place.
3. **Rack**—Pull slide fully to the rear and release.
4. **Fire**—Press the trigger.
5. If weapon still fails to fire:
 - a. Unload and load weapons with new magazine and attempt to fire.
 - b. If the pistol still does not fire, replace the ammunition.
 - c. If the pistol still does not fire, clear/unload the pistol and turn in for inspection/repair.

7.4.15.2 Slide not seated fully forward:

1. Attempt to seat slide.
 - a. Remove finger from the trigger.

- b. Attempt to push forward with the heel of the nonshooting hand.
2. If slide will not seat:
 - a. Place on safe.
 - b. Remove magazine.
 - c. Lock slide to the rear.
 - d. Inspect chamber and bore and remove any obstructions.
 - e. Load using another magazine and attempt to fire.
3. If slide still does not seat:
 - a. Clear/unload the pistol and turn in for inspection/repair.

Table 7.3 M9 Pistol Immediate Action Matrix

Skill	Expected Outcome	Common Errors
Shooter hears an audible click when firing the M9—perform Immediate Actions.	Perform immediate actions: <i>Fire, Tap, Rack, Fire.</i>	Failure to assess resulting in multiple stoppages, attempting to complete actions too fast, failing to observe chamber.

Figure 7.39 Stove Pipe (Pistol)

7.4.16 Four Stage Draw. Before a shooter can apply the pistol marksmanship fundamentals and effectively engage a target, the pistol must be retrieved from the holster. The goal is to safely and quickly draw the pistol from the holster, bring it to eye level, and begin applying the fundamentals. Use the following techniques/procedures to remove a pistol from the holster for firing. The following steps of the four stage draw can be used with any holster system. The shooter should keep their eyes on the target during all stages of the draw. See [Figure 7.40](#), Four Stage Draw.

NOTE: Training and evaluation must be completed, as outlined in AFI 36-2654, on each approved holster used before authorized to carry it on duty.

WARNING: Do not touch the trigger until the pistol is pointed at the target in the final stage of the draw.

7.4.17 Pistol Marksmanship Fundamentals. As with the rifle, apply the following fundamentals: properly align the sights, place them on the target, and maintain this alignment while the trigger is pressed and a round is fired. Remember to apply the fundamentals as an integrated act. Do not simply pull the trigger when the sights are aligned and on the target; in most cases, this will result in a missed shot. Once the sights are aligned and on target, continue to adjust the sight alignment/picture while pressing the trigger, without disturbing aim. The moment the round fires should be somewhat of a surprise. Do not anticipate the shot.

7.4.17.1 Firing Position.

- Assume a stable firing position with arms extended toward target; feet and lower body should be in position before the pistol is drawn.
- Establish a firm two handed grip using the wrap around technique (grip high, but ensure hands remain below tang of weapon); grip just tight enough to support the pistol, see [Figure 7.40](#).
- Raise sights to eye level and align sights (sight alignment), see [Figure 7.40](#).
- Place aligned sights on target (sight picture); focus on front sight.

7.4.17.2 Breath Control.

- Shooter must be aware of natural movement as a result of breathing.
- Single target engagement—when aiming, or when time is available to fire a shot, Airmen should hold their breath and fire when there is a natural respiratory pause; when most of the air has been exhaled from the lungs and before inhaling. The shot should be fired before the Airman feels any discomfort.
- Multiple target engagement—when employing rapid fire (engaging short exposure/multiple targets), Airmen should hold their breath, at any point in the respiratory cycle, when they are about to fire.

7.4.17.3 Trigger Control.

- Press trigger to rear by applying smooth and steady pressure.
- The trigger finger should contact the trigger between the tip of the finger and the second joint.
- Do not disturb sight alignment/sight picture.
- Do not jerk trigger or tighten hands while pressing trigger.

NOTE: Each Airman must experiment with finger placement in order to determine effective placement on the trigger. Once established, effective trigger finger placement allows the trigger to be consistently moved straight to the rear while maintaining sight alignment.

7.4.17.4 Follow Through.

- Follow through after pistol fires and recoils.

- Trigger finger should hold trigger to the rear during the recoil.
- Allow the trigger to reset by releasing until an audible click is heard or trigger reset felt.
- Reestablish sight alignment and sight picture.
- Continue firing, if needed/authorized, by applying fundamentals for each shot.

Figure 7.40 Four Stage Draw

Grab

- Gun hand moves to weapon and holster.
- Use thumb or index finger (depending on holster design) to operate (rotate, move, or press) holster locking system to facilitate removal of the pistol.
- Establish a proper grip with gun hand; ideally, the shooter should not need to adjust grip from this stage all the way through the “look and press” stage.

**Draw**

- Pull pistol straight up or out until the muzzle clears the holster.
- Keep finger off trigger.



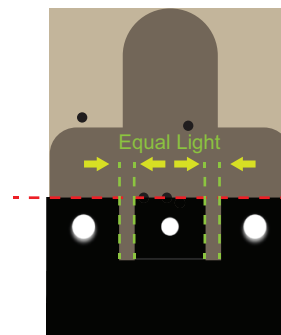
Tang of the Weapon

**Smack**

- Rotate muzzle toward target.
- Move both hands directly toward the target.
- Support hand meets with gun hand in front of body; establish a firm two handed grip.
- Drive pistol towards target by extending arms into firing position.

**Look and Press**

- As pistol comes up to eye level, begin to acquire sights.
- Change focus from target to front sight; place index finger on trigger.
- Attain proper sight alignment/ sight picture and press trigger (simultaneously).



Proper Sight Alignment
Equal Height. Equal Light.
Focused Front Sight.
Blurry Target. Blurry Rear Sight.

Equal Height

Two Handed Grip

