

# Maintenance Manual

**MK 23 MOD 0**

**Pistol, Semi-automatic, Caliber .45 ACP**

**NSN 1005-01-426-8951**



May 1997  
 HECKLER & KOCH, INC.  
 21480 PACIFIC BOULEVARD  
 STERLING, VIRGINIA 20166-8903  
 (703) 450-1900

Distribution authorized to U.S. Government agencies and their contractors. This publication is required for administration and operational purposes as determined 1 Apr 96. Other requests for this document shall be referred to Commander, Crane Division, Naval Surface Warfare Center, Code 4081, 300 Hwy 361, Crane, IN 47522-5001.

# TABLE OF CONTENTS

	PAGE
<b>CHAPTER 1 - INTRODUCTION</b> .....	6
SECTION I - GENERAL INFORMATION .....	6
1.1 Scope .....	6
SECTION II - PISTOL DESCRIPTION .....	6
1.2 Nomenclature .....	6
1.3 Principle of Operation .....	7
1.4 Major Assembly Groups .....	7
1.5 Technical Specifications .....	8
<b>CHAPTER 2- OPERATING INSTRUCTIONS</b> .....	9
SECTION I - SERVICE UPON RECEIPT OF MATERIAL .....	9
2.1 Initial Inspection .....	9
SECTION II - GENERAL DESCRIPTION .....	9
2.2 Description .....	9
2.3 Operation and Characteristics .....	9
2.4 Cycle of Operation .....	11
2.5 Safety Features .....	14
SECTION III - OPERATION UNDER NORMAL CONDITIONS .....	15
2.6 Clearing Procedures .....	15
2.7 Loading and Unloading the Magazine .....	16
2.8 Loading Procedure .....	16
2.9 Readyng the Pistol for Firing .....	17
2.10 Firing the Pistol .....	18
SECTION IV - OPERATION UNDER UNUSUAL CONDITIONS .....	18
2.11 Extreme Cold .....	18
2.12 Hot, Wet Climates .....	19
2.13 Hot, Dry Climates .....	19
2.14 Heavy Rain and Water Operations - All Climates .....	19
SECTION V - MALFUNCTIONS AND STOPPAGES .....	19
2.15 Immediate Action .....	19
2.16 Remedial Action .....	20
<b>CHAPTER 3 - MAINTENANCE INSTRUCTIONS</b> .....	21
SECTION I - TOOLS & EQUIPMENT .....	21
3.1 Operator Tools and Equipment Required .....	21
3.2 Armorer Tools and Equipment Required .....	21
SECTION II - PMS CHECKS & MAINTENANCE PROCEDURES .....	22
3.3 General .....	22
3.4 Disassembly (Field stripping) .....	23
3.5 Reassembly (From field strip) .....	24
3.6 Armorer Disassembly .....	27
3.7 Armorer Reassembly .....	31
3.8 Operation of the Trigger Mechanism .....	40
3.9 Safety/Function Check .....	43
3.10 Function Firing .....	45
3.11 Cleaning .....	45
3.12 Inspection .....	45
3.13 Lubrication .....	46
SECTION III - TROUBLESHOOTING PROCEDURES .....	48
3.14 Operator Troubleshooting Procedures .....	48
3.15 Armorer Troubleshooting .....	50
3.16 Adjustment of Iron Sights .....	51
3.17 Parts Listing for MK 23 pistol .....	54
<b>CHAPTER 4 - AMMUNITION</b> .....	55
STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL .....	56

---

## LIST OF FIGURES

FIGURE	TITLE	PAGE
1	Pistol - Left View .....	6
2	Pistol - Right View .....	6
3	Major Assembly Groups .....	8
4a	Safe Position .....	10
4b	Fire Position .....	10
5	Firing .....	11
6	Unlocking .....	12
7	Ejection .....	13
8	Feeding .....	14
9	Loading the Magazine .....	16
10a	Armorer Tools & Equipment .....	21
10b	Armorer Tools & Equipment .....	22
11	Removing or Installing the Slide Release .....	23
12	Proper Assembly of Magazine Follower & Spring .....	25
13	Proper Position for the Recoil/Buffer Spring Assembly on the Barrel Locking Block .....	26
14	Correct Position for Holding Slide for Reassembly .....	27
15	Installing Firing Pin .....	33
16	Decocker Assembly .....	35
17	Trigger Bar Assembly .....	36
18	Hammer Assembly .....	36
19	Sear-Ejector Assembly .....	37
20	Sear-Ejector Assembly .....	38
21	Safety Lever Assembly .....	38
22	Operation of the Trigger Mechanism .....	40
23	Operation of the Trigger Mechanism .....	41
24	Operation of the Trigger Mechanism .....	43
25	Rear Sight Elevation Adjustments .....	53
26	Exploded Diagram, Parts .....	54

# CHAPTER 1 - INTRODUCTION

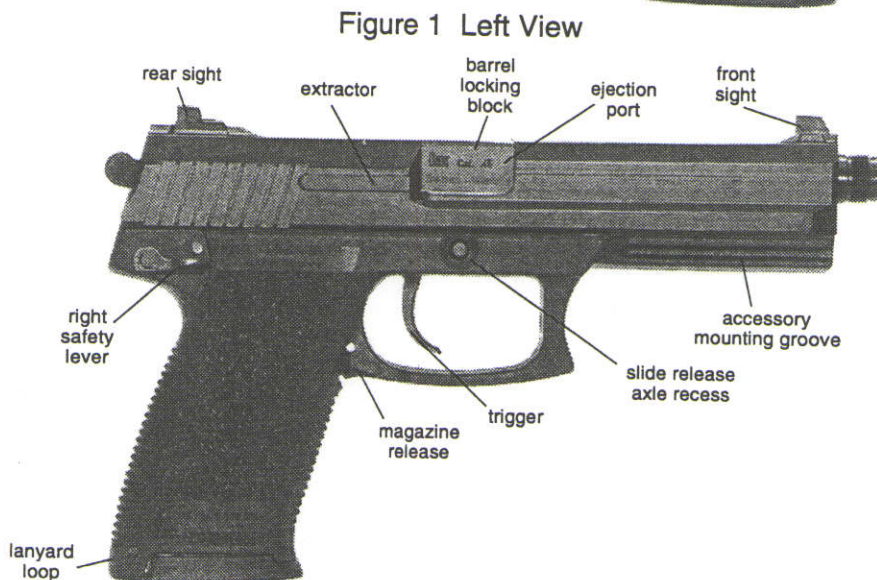
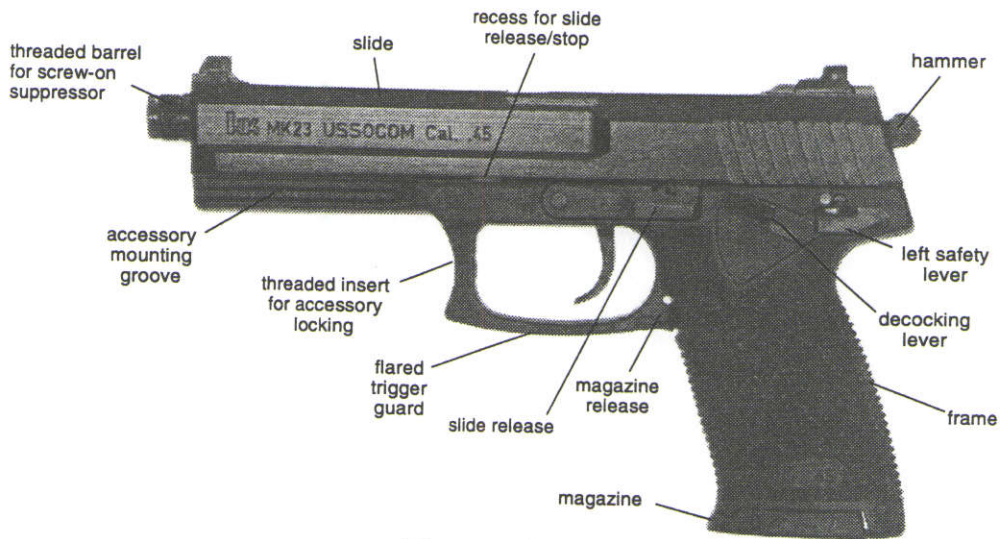
## SECTION I - GENERAL INFORMATION

### 1.1 Scope

- A. **Type of Manual:** Maintenance Manual (Operator Manual also available). This Manual supersedes SW370-BK-MMI-010, May 1996.
- B. **Model Number and Equipment Name:** MK 23 MOD 0, Pistol, Semi-automatic, Caliber .45 ACP (NSN 1005-01-426-8951). The NSN for a magazine, cartridge is 1005-01-426-8953.
- C. **Purpose of Equipment:** Provides the user with enhanced personal protection and offensive capabilities under day and night conditions.

## SECTION II - PISTOL DESCRIPTION

### 1.2 Nomenclature



### 1.3 Principle of Operation

- A. The MK 23 pistol utilizes a modified linkless Browning-style short recoil system to lock and unlock the breech.
- B. Upon firing, the pressure developed by the propellant gas forces the slide and barrel assembly to the rear. After approximately 3 mm, the locking block will stop the rearward movement of the barrel as the barrel is pivoted downward due to the engagement of the angled surfaces of the locking block with those located in the recoil spring guide rod. The locking block will disengage from the slide and the slide will continue rearward. The slide will then extract and eject the fired cartridge case, cock the hammer, and compress the recoil spring. The slide moves forward feeding the next cartridge from the magazine into the chamber and locking to the barrel breech.
- C. The slide locks open after the last round has been fired and ejected.

### 1.4 Major Assembly Groups (See Figure 3)

- A. **Slide** - houses the firing pin, firing pin block and extractor; cocks hammer during recoil.
- B. **Captured Recoil/Buffer Spring Assembly (with guide rod)** - absorbs recoil and returns the slide and barrel to their forward positions; reduces impact of slide on receiver during recoil. The recoil spring is "captured" by a C-clip on the end of the guide rod.
- C. **Threaded Barrel (with locking block)** - contains cartridge and propellant gases during firing. The threaded muzzle allows attachment of a screw-on suppressor. The locking block initiates locking and unlocking of the breech during movement of slide. The O-ring holds the barrel tight in the slide until unlocking.
- D. **Frame** - serves as support to all major components; controls functioning of pistol. The slide release locks the slide with barrel and recoil/buffer spring assembly to the metal locking insert cast into the synthetic frame. A lanyard loop is in the bottom of the grip for attaching a lanyard. The trigger guard is flared on both sides to preclude accidental actuation of the magazine release during holstering.
- E. **Magazine** - holds 12 cartridges in position for feeding and chambering.
- F. **Slide Release** - holds slide to rear when engaged; releases slide when lever depressed.

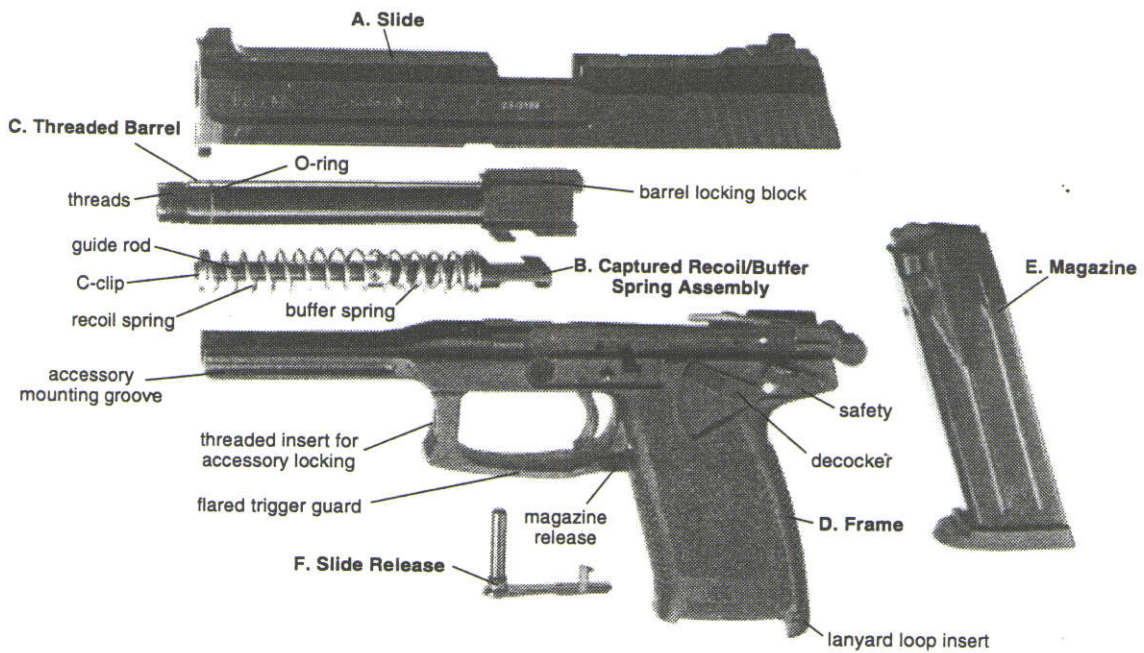


Figure 3 - Major Assembly Groups

### 1.5 Technical Specifications:

• Caliber	.45 ACP (Automatic Colt Pistol)	
• System of Operation	short recoil, semi-automatic	
• Locking System	Browning system (modified), linkless	
• Length		
Barrel	5.87 in.	(149 mm)
Sight radius	7.76 in.	(197 mm)
Pistol	9.65 in.	(245 mm)
• Weight		
Magazine (empty)	.24 lbs.	(.110 kg)
Magazine (w/12 rds M1911 Ball)	.81 lbs.	(.366 kg)
Pistol (w/ empty magazine)	2.66 lbs.	(1.21 kg)
Pistol (w/ 12 rds. M1911 Ball)	3.22 lbs.	(1.46 kg)
• Trigger Pull		
Single-action	4.85 lbs.	(2.20 kg)
Double-action	12.13 lbs.	(5.50 kg)
• Height	5.90 in.	(150 mm)
• Width	1.53 in.	(38.8 mm)
• Muzzle velocity		
M1911 230 grain Ball	886 fps	(270 m/s)
+P 185 grain JHP	1142 fps	(348 m/s)
• Maximum Effective Range	54.7 yds	(50 m)
• Maximum Range (M1911 Ball)	1,467 yds	(1,341 m)
• Rifling	polygonal bore right hand twist	
• Magazine	staggered, 12 round capacity	
• Safety Features	1. safety lever (manual) 2. double-action mode with 12.1 lb. trigger pull, 3. firing pin block, 4. disconnecter	

# CHAPTER 2- OPERATING INSTRUCTIONS

## SECTION I - SERVICE UPON RECEIPT OF MATERIAL

**2.1 Initial Inspection.** Upon initial receipt, the pistol is to be inspected to ensure it was received in proper working order.

<u>Step</u>	<u>Action</u>	<u>Reference</u>
1	Remove pistol and items from container	
2	Remove packing material	
3	Check for missing items	
4	Field strip weapon and inspect for: Missing parts Proper assembly	para. 3.4
5	Clean, dry and lubricate (if necessary)	para. 3.11, 3.13
6	Assemble	para. 3.5
7	Safety/ function check	para. 3.9

## SECTION II - GENERAL DESCRIPTION

**2.2 Description:** The MK 23 MOD 0 is a semiautomatic, magazine fed, recoil operated, double/single-action pistol, chambered for the .45 ACP cartridge up to, and including, the commercial +P cartridges.

### WARNING

The MK 23 MOD 0 incorporates single and double action modes of operation. Anytime the trigger is pulled with the safety lever in the fire (down) position and a round in the chamber, the pistol will fire from either the hammer down or cocked position.

### 2.3 Operation and Characteristics

- A. **Double/Single Action** - For double-action (DA), pulling the trigger will cock the hammer and immediately release it discharging a chambered round. To fire the first chambered round in single-action (SA), the hammer must be manually cocked before pulling the trigger. All shots after the first one will be fired single-action because the slide automatically recocks the hammer after each shot.
- B. **Magazine** - The magazine is produced from sheet steel and has a total capacity of 12 rounds. The rounds are positioned within the magazine in a staggered arrangement. Rounds are visible through the viewing holes located along the back side of the magazine housing. The viewing holes are marked with numerals denoting the number of rounds remaining within. The floor plate can be easily removed for disassembly and cleaning of the magazine components.

C. **Loaded Chamber Indicator** - The MK 23 pistol does not have a loaded chamber indicator. The extractor does not act as a loaded chamber indicator.

D. **Decocking Lever** - The decocking lever allows the operator to quietly lower the cocked hammer without concern of an accidental discharge. When the hammer is cocked, it may be lowered safely by moving the decocking lever fully into the decocking (down) position. The decocking lever cannot be depressed (and therefore does not allow the hammer to be lowered) if the safety lever is engaged. The decocking lever always springs back into its disengaged (up) position due to the spring pressure exerted by the decocking spring.

E. **Safety Lever** - The safety lever is an ambidextrous “thumb” lever located on the rear of the frame. It is actuated by the firing thumb of the operator. The safety lever blocks the release of the cocked hammer when it is in the engaged (up) “safe” position (See Figure 4a). The safety lever is depressed downward into the “fire” position (See Figure 4b). The safety lever is not spring actuated and therefore must be moved manually from one position to the other by the operator.

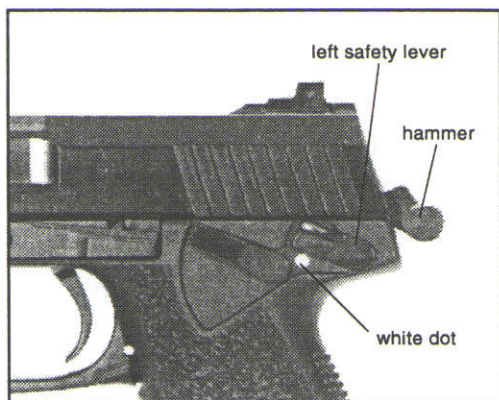


Figure 4a Safe Position

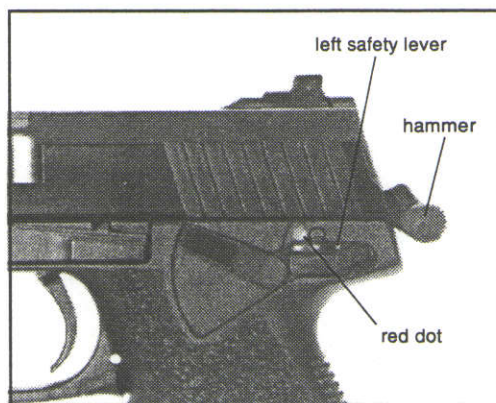


Figure 4b Fire Position

The safety lever cannot be placed in the “safe” (up) position if the hammer is uncocked (down).

#### WARNING

The pistol should always be carried with the safety lever engaged when carried in the single action mode. While there is a spring detent to prevent this, the safety lever can be moved to the “fire” position (down) with a minimum amount of force. This could happen during careless handling or during removal of the pistol from the holster. Always check the position of the safety lever during handling.

F. **Frame** - The front and back straps of the fiberglass reinforced polymer frame are checkered to ensure a firm grip, even with wet hands or under conditions of rapid fire. The trigger guard is extended, recurved and grooved to provide a firm grip when using two hands or gloves. The bottom of the trigger guard is flared on both sides in front of the magazine release lever to shield the lever from accidental actuation.



A threaded insert is molded into the front face of the trigger guard and the frame is grooved forward of the trigger guard for attachment of an accessory such as a laser aiming device or an illuminator. The frame is a one-piece molded component with metal inserts (locking insert and guiding part) cast into the frame during production. The slide rides on these metal inserts during operation.

**G. Slide Release Lever** - This lever is used to lock the slide open and for disassembling the weapon. As a slide stop, it is depressed upward by the magazine follower or the operator's finger as the slide travels rearward during recoil or manual operation. The slide release lever engages the recess visible on the left side of the slide and is spring actuated. The slide release spring holds the slide release lever in a disengaged (down) position until required. As a disassembly lever, the slide release lever is removed from the left side of the frame when the slide is held rearward (see para. 3.4). The slide release lever can be actuated by the firing thumb of the right handed operator or the index finger of the left handed operator.

**H. Magazine Release Lever** - This ambidextrous, spring actuated lever holds the magazine within the grip by engaging in the notch found in the upper third of the magazine housing. Depressing this lever with the firing hand index finger or thumb will allow the magazine to drop from the grip. The magazine release lever is shielded from accidental actuation by the flared trigger guard and the design of the synthetic frame surrounding the lever.

**2.4 Cycle of Operation.** Begins with weapon loaded, hammer cocked, safety lever disengaged.

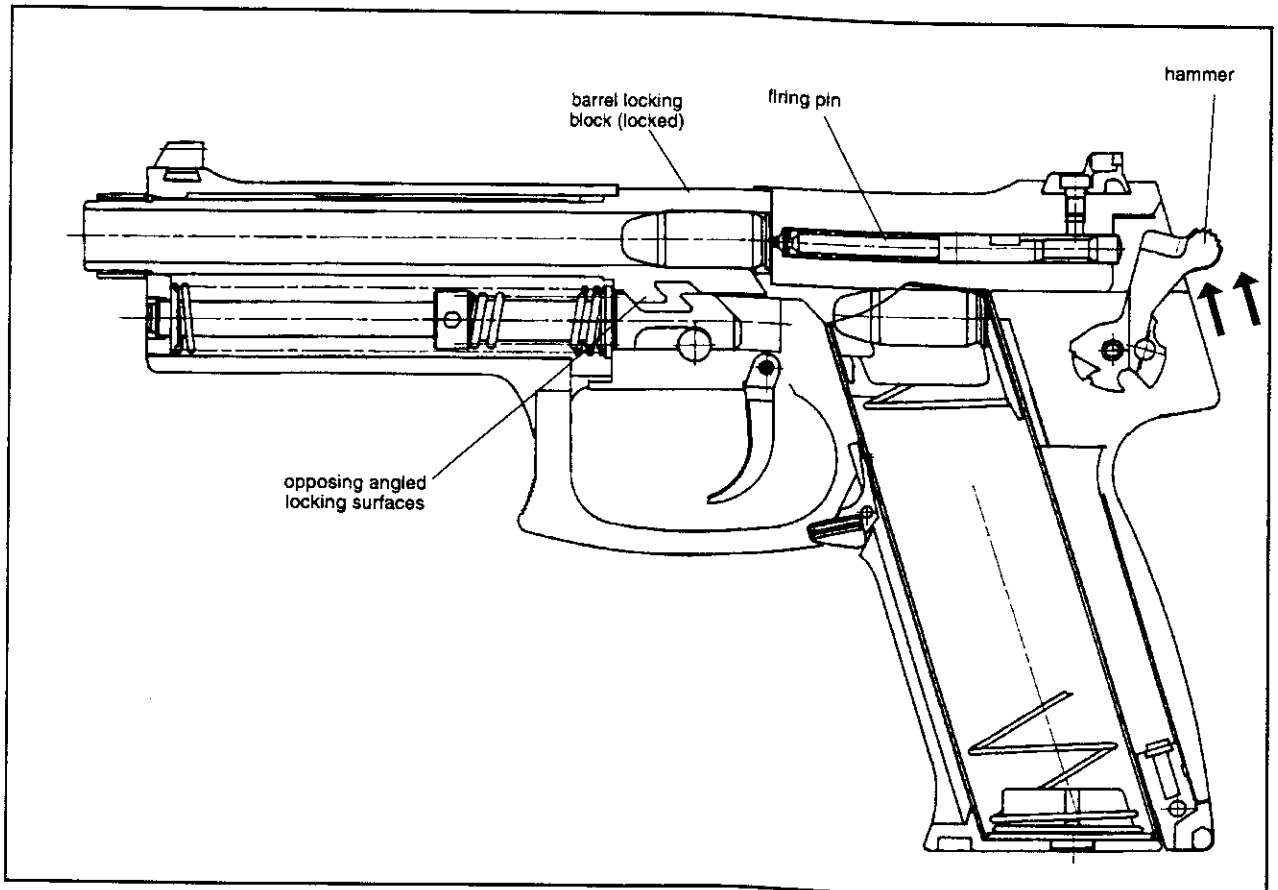


Figure 5 Firing

- A. **Firing** - (See Figure 5) Pulling the trigger rearward pulls the trigger bar forward. The trigger bar pivots the sear actuator upwards which disengages the firing pin block. At the same moment, the sear is pivoted out of engagement from the lower of the two shelves located on the hammer. The compressed hammer spring drives the hammer forward into the rear end of the firing pin. The firing pin strikes the primer of the chambered round. The propellant is ignited by the primer and propellant gases are created inside the cartridge case. The propellant gases drive the projectile down the polygonal bore which spins the projectile in a clockwise direction as a means to stabilize the projectile's flight.
- B. **Unlocking** - (See Figure 6) The gas pressure and energy produced by the propellant gases push rearward on the slide, which is locked to the barrel by the engagement of the barrel locking block within the ejection port milled into the slide. The opposing angled locking surfaces incorporated into the design of the barrel locking block and recoil spring guide rod cause the rear of the barrel to tilt downward as the slide moves rearward. By the time the slide and barrel have recoiled approximately 5 mm, the projectile has left the barrel and the gas pressure within the chamber has dropped to a safe level. The barrel locking block then disengages from the slide. The slide is now free to recoil rearward independently of the barrel.

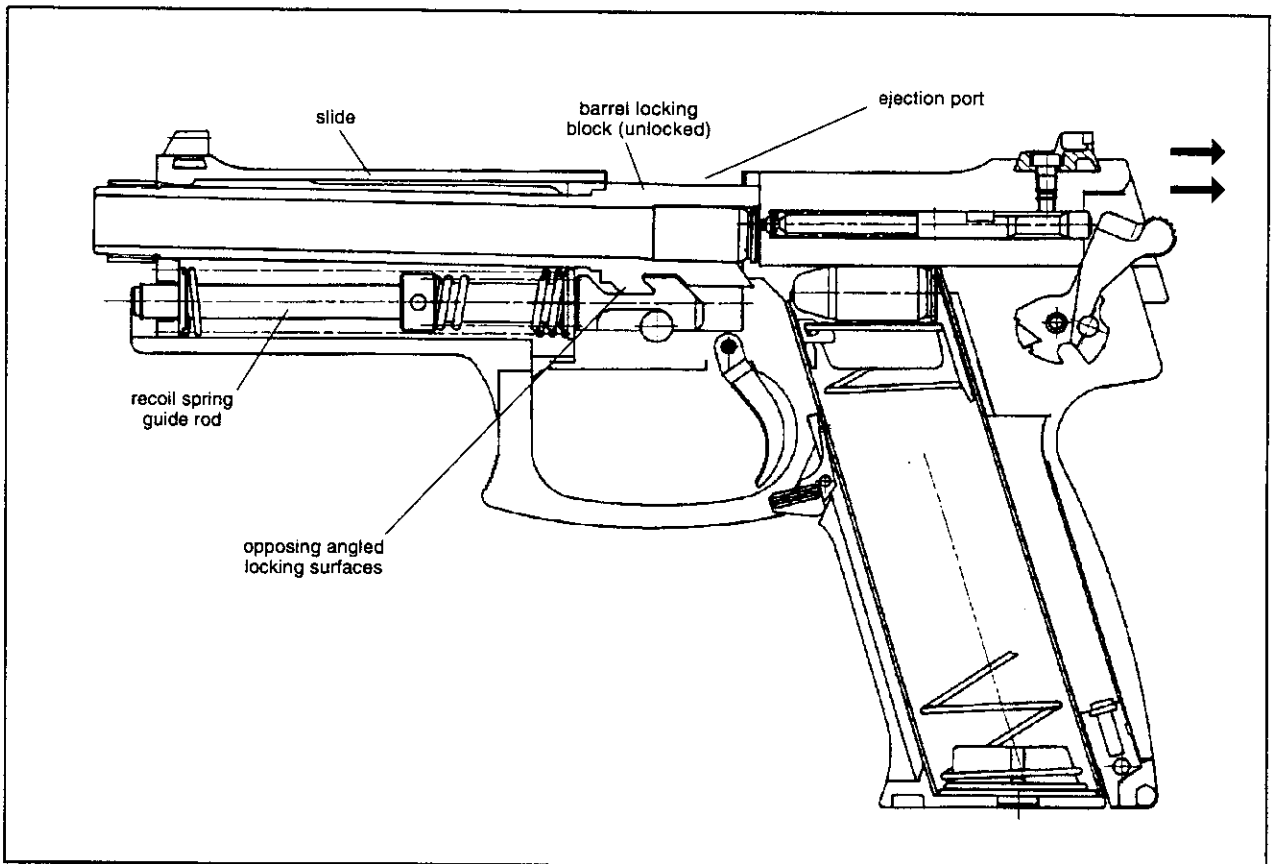


Figure 6 Unlocking

- C. **Extraction** -The empty cartridge case is held firmly against the face of the slide by the claw of the extractor as the slide recoils rearward.
- D. **Ejection** - (See Figure 7) -The rim of the cartridge case strikes the stationary ejector. The empty case is ejected from the open ejection port.

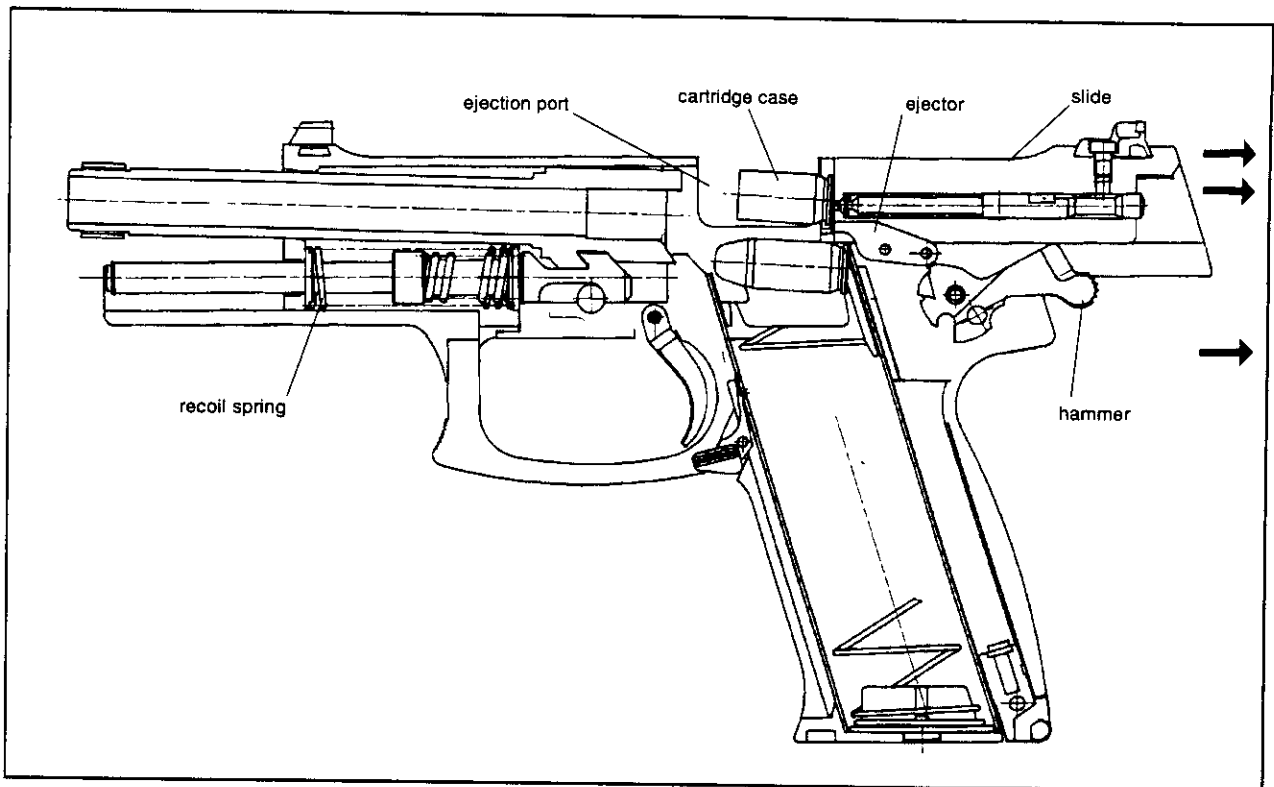


Figure 7 Ejection

- E. **Cocking** - (See Figure 7) - As the slide continues rearward the recoil impulse is dampened by the buffer spring. The recoil spring is compressed and the hammer recocks.
- F. **Feeding** - (See Figure 8) -The compressed recoil spring drives the slide forward. If the magazine is empty, the magazine follower will lift the slide release to a point where it will stop the forward progress of the slide. If the magazine is not empty, the face of the slide will make contact with the top round in the magazine. The round will be driven from the magazine towards the chamber. The tip of the projectile is guided into the chamber by the magazine lips until the round clears the magazine completely. At that moment the claw of the extractor snaps onto the rim of the cartridge case as it becomes parallel with the bore.

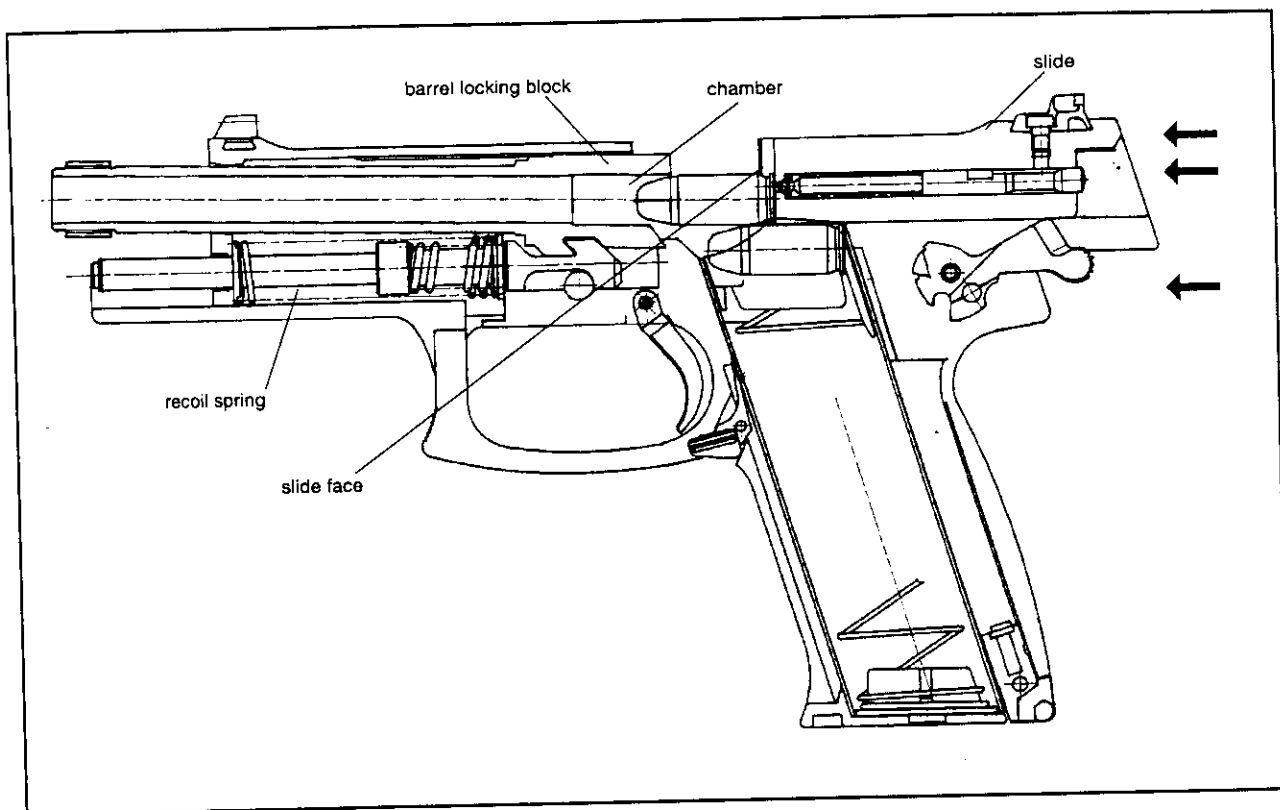


Figure 8 Feeding

**G. Chambering** - The slide pushes the cartridge forward until the projectile enters the mouth of the forcing cone of the bore and the face of the slide contacts the rear of the barrel locking block.

**H. Locking** - (See Figure 5) -The slide presses the barrel forward. As it does, the opposing angled surfaces of the barrel locking block and recoil spring guide rod pivot the rear end of the barrel up into engagement with the ejection port in the slide. The slide is now fully forward and the new round is ready to be fired.

## 2.5 Safety Features

**A. Safety Lever** - This safety blocks the release of the cocked hammer in the SA mode. The safety lever is an external, manually operated, ambidextrous "thumb" lever located on the left and the right side of the frame farthest back from the trigger. The safety lever must be manually actuated by the operator. The shaft of the safety lever moves the sear block into a position where it blocks the movement of the sear actuator. The sear actuator, in turn, does not allow the sear to pivot forward and thus the hammer cannot be released. Engaging the safety lever also interrupts the function of the decocking lever and blocks the hammer mechanically. The safety lever does not restrict the movement of the slide. The safety lever is held in either the fire or safe position by a spring detent. The safety lever cannot be placed in the safe (up) position when the hammer is down (uncocked).

- 
- B. **Double-Action Mode** - This safety keeps the hammer in an uncocked condition until the moment of firing. The double-action mode operates as a passive safety feature in the pistol much as this mode of operation would in any DA revolver or pistol. The hammer is left uncocked until the decision to fire is made. At all times the firing pin is locked by the firing pin block until the trigger is pulled. Approximately 12.1 pounds of pressure on the trigger is required to cock and release the hammer in the DA mode of operation. The mode of operation also permits subsequent hammer strikes on the same chambered round by simply resqueezing the trigger.
  - C. **Firing Pin Block** - This safety prevents the firing pin from striking the primer when the weapon is dropped, the hammer is bumped, or when the slide slams forward. The firing pin block is located in the slide and blocks the forward movement of the firing pin. Only when the trigger is depressed can the sear actuator push the firing pin block upward against the downward pressure exerted by the firing pin block spring. Once the round has been fired and the slide begins to recoil, the firing pin block is pushed back down by the firing pin block spring and engages within the recess provided in the center portion of the firing pin.
  - D. **Disconnecter** - This safety prevents the release of the hammer unless the slide is fully forward and/or the trigger is reset (released) between rounds. This important safety prevents serious malfunctions from occurring, such as "slam-fires" (rounds that fire during loading), automatic fire, or a round being fired out of the battery (with the breech unlocked). The disconnecter disconnects the engagement of the trigger bar and the sear actuator. The disconnecter is engaged (operating) after the slide has moved 2mm to the rear. The slide presses the leading edge of the disconnecter down and into engagement with the trigger bar. When the slide is fully forward, the leading edge of the disengaged disconnecter resides in a recess provided in the bottom of the slide.

## SECTION III - OPERATION UNDER NORMAL CONDITIONS

### 2.6 Clearing Procedures

- A. The MK 23 pistol is not considered "clear" unless:
  - 1. The magazine is removed,
  - 2. The slide is locked to the rear, and
  - 3. The chamber is free of brass or ammunition.

### ***NEVER ASSUME THE PISTOL IS CLEAR!***

#### B. To Clear the Pistol:

- 1. **Make sure fingers are outside of the trigger guard and the pistol is pointed in a safe direction at all times!**
- 2. **Decock Hammer or Engage Safety** - depress decocking lever or engage the safety lever.
- 3. **Remove Magazine** - depress the magazine release lever and remove the magazine from the frame.
- 4. **Open Slide** - lock slide open by pulling slide rearward as you engage the slide release lever (up). Watch for live round or empty case to be ejected.
- 5. **Inspect Chamber** - inspect chamber for the presence of a live round or empty case:
  - a. Visually view chamber through ejection port.
  - b. Physically insert finger into chamber through ejection port and check for presence

- of cartridge case in chamber.
- c. Remove any live rounds or empty cases from the chamber or from within the weapon.

The pistol is now considered "clear".

## 2.7 Loading and Unloading the Magazine - (See Figure 9)

The magazine of the MK 23 pistol holds 12 rounds of .45 caliber ammunition.

### A. Loading the Magazine -

1. Hold the magazine in one hand.
2. Hold a round between the index finger and thumb of the other hand with the projectile pointing towards the palm.
3. Press the rim of the round down against the front edge of the follower or the top round in the magazine and slide the round back under the magazine lips.
4. Repeat steps 1 - 3 until the magazine is full (12 rounds). The viewing holes in the back of the magazine allow the operator to confirm the number of rounds present within the magazine.

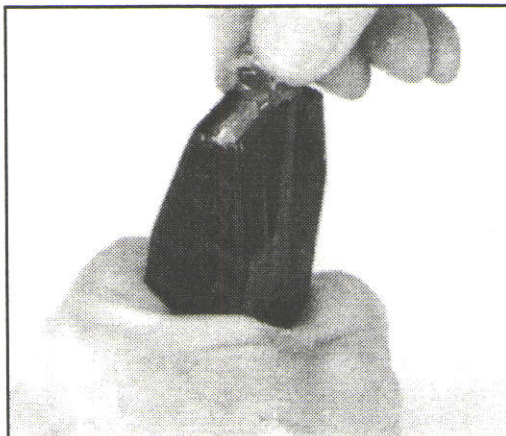


Figure 9 Loading the Magazine

- B. **Unloading the Magazine** - exert pressure with the finger on the base of the cartridge case and push each round forward out of the magazine one round at a time until the magazine is empty.

## 2.8 Loading Procedure

- A. **Administrative Loading** - used to initially load the pistol before it is to be fired.

### Method A (Slide rearward, chamber empty)

1. **Make sure fingers are outside of trigger guard and pistol is pointed in a safe direction at all times!**
2. Insert magazine firmly into the frame. Tug on magazine to insure that it is fully seated and engaged.
3. Depress the slide release lever to release the slide and to chamber the first round.

4. Engage safety lever or depress decocking lever.
5. Remove magazine and top off with one additional round.

#### **Method B (Slide forward, chamber empty)**

1. **Make sure fingers are outside of trigger guard and pistol is pointed in a safe direction at all times!**
2. Insert magazine firmly into the frame. Tug on magazine to insure that it is fully seated and engaged.
3. Retract the slide fully and release. Do not ride slide forward!
4. Engage safety lever or depress decocking lever.
5. Remove magazine and top off with one additional round.

**B. Tactical Reloading** - used to quickly reload pistol once firing has begun.

#### **Method A (Slide rearward, chamber empty)**

1. **Make sure fingers are outside of trigger guard and pistol is pointed in a safe direction at all times!**
2. Keep eyes on target area.
3. Depress the magazine release with finger or thumb of firing hand to drop magazine.
4. At the same time, retrieve a full magazine with the non-firing hand and insert firmly into the frame. Tug on magazine to insure that it is fully seated and engaged.
5. Depress slide release to chamber first round.
6. Continue firing.

#### **Method B (Slide forward, rounds remaining in magazine and chamber)**

1. **Make sure fingers are outside of trigger guard and pistol is pointed in a safe direction at all times!**
2. Keep eyes on target area.
3. Depress the magazine release with finger or thumb of firing hand to drop partially empty magazine.
4. At the same time, retrieve full magazine with non-firing hand and insert firmly into the frame. Tug on the magazine to insure that it is fully seated and engaged.
5. Weapon is now back at full capacity without rendering chamber empty and weapon useless.
6. Continue firing.

### **2.9 Readyng the Pistol for Firing**

Disengage the safety lever (if engaged). Red hazard dot will be visible above safety lever.

#### **WARNING**

1. **BE SURE OF YOUR TARGET AND WHAT'S BEHIND IT! Even a .45 caliber projectile can easily penetrate wood, plasterboard walls, or a car door, and can travel as far as one mile!**
2. **Ensure that all parts of your hand and body are kept away from the muzzle of the pistol at all times!**
3. **Always wear eye and ear protection where possible when firing the pistol.**
4. **Whenever the pistol is dropped on a hard surface landing on the hammer (cocked or down), it should be taken to the unit armorer as soon as practicable to inspect the sear axle. If the sear axle is bent, it should be replaced.**

## 2.10 Firing the Pistol

- A. **Single-action mode** (Hammer back/cocked) Affords operator the best and lightest trigger pull ( $\approx 4.8$  lbs.) for precise and accurate bullet placement. With manual safety disengaged:
1. Aim at the target.
  2. Fire the weapon by pressing the trigger straight to the rear with gradually increasing pressure.
  3. Engage the safety lever to remain in the single-action mode once firing is completed.
- B. **Double-action mode** (Hammer down/uncocked) Provides the operator with a long, heavy ( $\approx 12.1$  lbs.) trigger pull for the first shot only. Subsequent shots will be fired in single-action mode as the slide will automatically cock the hammer after each round is fired. The double-action mode of fire is often the preferred mode of fire when safety during handling and carrying is of greater concern than first round accuracy.
1. Aim at the target.
  2. Fire the weapon by pressing the trigger straight to the rear with gradually increasing pressure.
  3. Depress the decocking lever to lower the hammer to return to the double-action mode once firing is complete, or engage the safety lever to remain in the single action mode.

## SECTION IV - OPERATION UNDER UNUSUAL CONDITIONS

### NOTE

**Unusual conditions are defined as any climatic condition requiring special maintenance of the pistol. Perform the maintenance outlined for the climate that most applies to your operational area. Refer to paragraph 3.13 for lubrication instructions.**

### CAUTION

**If extensive corrosion is found and cleaning does not solve the problem, notify organizational maintenance/next repair level.**

## 2.11 Extreme Cold

- A. When operating pistol in extremely cold climates, clean and lubricate the pistol inside at room temperature if possible.
- B. Apply a light coat of LAW to all functional parts.
- C. To prevent freezing, keep the pistol covered when moving from a warm to a cold area. This will allow gradual cooling.
- D. Always keep the pistol dry.
- E. Do not lay a hot pistol in snow or ice.
- F. Keep ammunition dry; moisture will cause malfunctions. Do not lubricate the ammunition.
- G. Always keep snow out of the bore of the barrel. If snow should get into the bore, clean the bore before firing using a swab and cleaning rod.



## 2.12 Hot, Wet Climates

- A. Perform maintenance more frequently. Inspect hidden surfaces for corrosion. If corrosion is found, clean and lubricate.
- B. To help prevent corrosion, remove hand prints with a cloth. Dry and lubricate the pistol with CLP/LSA.
- C. Check ammunition and magazines frequently for corrosion. Clean the magazine using CLP/LSA and wipe dry with a cloth. If necessary, clean ammunition with a dry cloth.
- D. Always keep mud out of the barrel. If mud should get into the bore, clean it before firing using a swab and cleaning rod.

## 2.13 Hot, Dry Climates

- A. Dust and sand will get into the pistol and cause malfunctions and excessive wear on component contact surfaces during firing. Keep the pistol covered when possible.
- B. Corrosion is less likely to form on metal parts in a dry climate. Therefore, lightly lubricate internal working surfaces only with CLP/LSA. Do not lubricate external parts of the pistol. Wipe any excess lubricant from exposed surfaces. Do not lubricate internal components of magazine.

## 2.14 Heavy Rain and Water Operations - All Climates

- A. Perform maintenance in accordance with the appropriate climatic conditions.
- B. Always attempt to keep pistol dry.
- C. Always try to drain any water from barrel prior to firing. Dry the bore with a swab and cleaning rod.
- D. Lightly lube the bore and chamber. Generously lube internal and external surfaces of the pistol with CLP/LSA.
- E. In extreme or prolonged wet or saltwater conditions, cover serial number and proof mark on barrel and slide with a temporary protective coating. These are etched on through the permanent protective coating on the barrel and slide and therefore may corrode under these conditions.

## SECTION V - MALFUNCTIONS AND STOPPAGES

**2.15 Immediate Action** is the *action* performed *immediately* by the firer any time there is an unscheduled or unanticipated interruption of the pistol's operation *when a backup weapon is unavailable* to transition to. Immediate Action should be practiced to the point that it occurs as a reflex action.

### WARNING

During immediate action, make certain the pistol is pointed in a safe direction at all times.

**RAP** - RAP the magazine on the bottom to ensure magazine is fully seated in weapon.

**TAP** - TAP the rear of the slide to ensure it is fully forward

**BANG** - Attempt to fire the weapon

If weapon fails to fire, pull slide fully rearward and release to load a new round into the chamber. Attempt to fire the weapon.

If the weapon still fails to fire perform **Remedial Action**.

**2.16 Remedial Action** is the action performed to remedy the problem and place the pistol back into operation after Immediate Action has been performed once and proves ineffective.

**WARNING**

**During remedial action, make certain the pistol is pointed in a safe direction at all times.**

**A. Clear the pistol!**

- B. Check the chamber, bore and frame for and remove any type of obstruction caused by such things as an empty or ruptured case, live round or foreign matter, etc.
- C. Insert another loaded magazine into the pistol.
- D. Depress the slide release to chamber a new round.
- E. Attempt to fire the pistol.

If the weapon fails to fire return weapon to armorer.

**WARNING**

**If a round is assembled without powder (a fault of the manufacturing process), the primer alone has enough power to propel the projectile into the bore. A projectile lodged in the bore may cause damage to the barrel and/or the pistol if another round is fired and could cause personal injury. This event is commonly called a "pop and no kick" or "squib load" and is characterized by a much reduced report and little or no movement of the slide. An alert operator should notice the occurrence of this event in time to avoid firing the next round.**

# CHAPTER 3 - MAINTENANCE INSTRUCTIONS

## SECTION I - TOOLS & EQUIPMENT

**3.1 Operator Tools and Equipment Required.** At a minimum, you will require the following materials to maintain the MK 23 pistol and its components:

- Cleaning rod with handle and eyelet
- Long handled nylon brush
- Bronze bristle bore brush (.45 caliber)
- Cotton swabs
- Solvent/bore cleaner/CLP
- Cleaning patches (.45 caliber)
- Rag

**3.2 Armorer Tools and Equipment Required.** The items listed below are required to properly disassemble, reassemble, clean, inspect, and repair the MK 23 pistol.

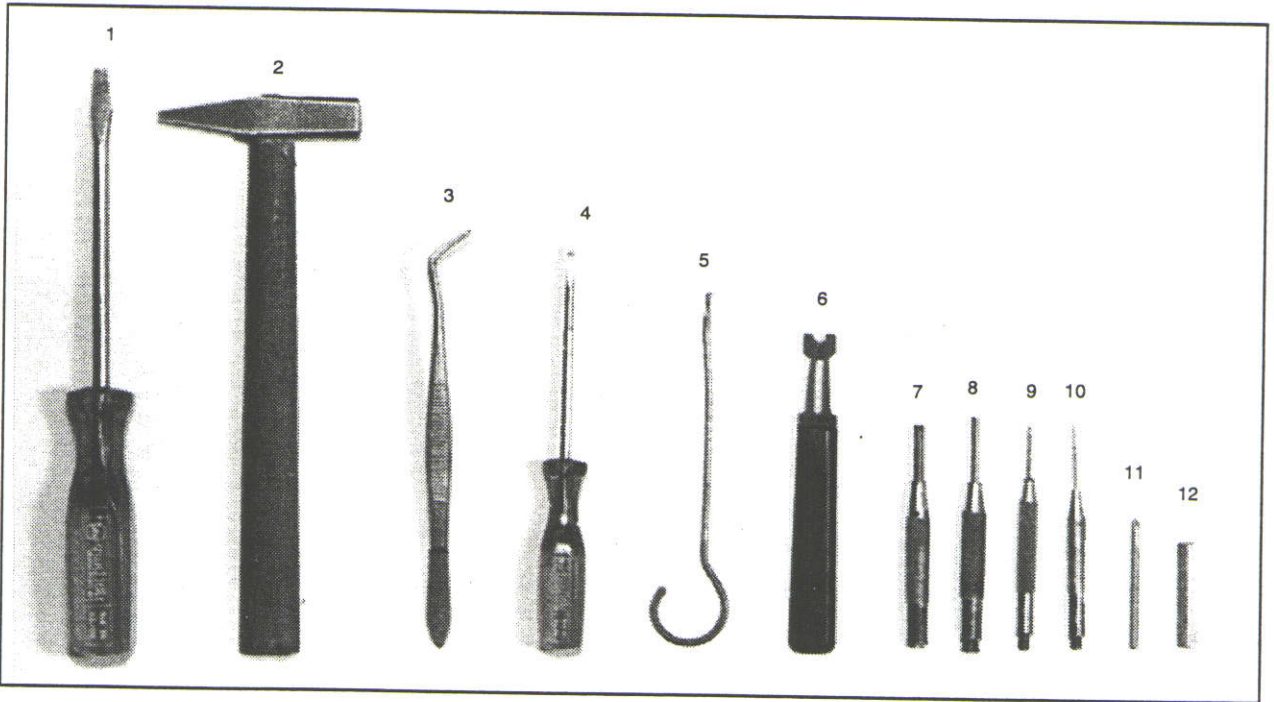


Figure 10a - Armorer Tools & Equipment

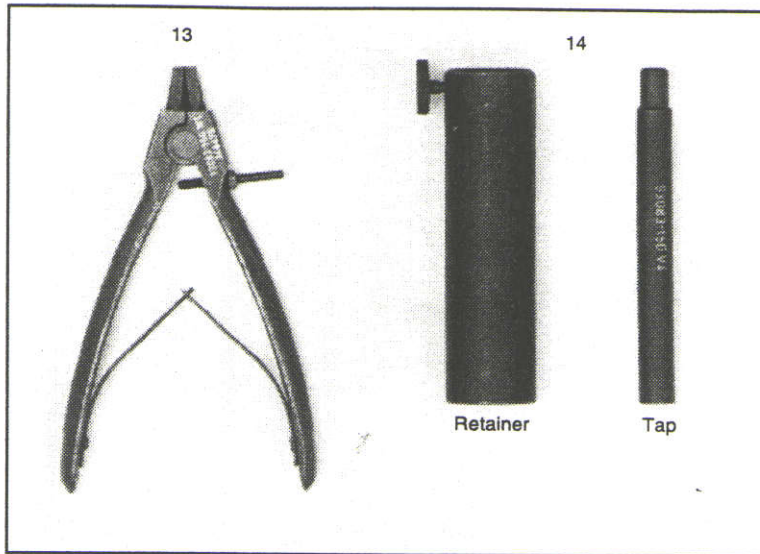


Figure 10b - Armorer Tools & Equipment

**Item Description**

- |                                 |                                 |
|---------------------------------|---------------------------------|
| 1. Flathead screwdriver, 6 mm   | 9. 1.8 mm (1/16 in.) Punch      |
| 2. Hammer                       | 10. 1.4 mm (3/64 in.) Punch     |
| 3. Tweezers                     | 11. 3.0 mm (7/64 in.) Slave Pin |
| 4. Small, flathead screwdriver  | 12. Brass Punch                 |
| 5. Spring Fitting Tool          | 13. C-clip Remover Pliers       |
| 6. C-clip Tool 3.2 mm (1/8 in.) | 14. C-clip Installer Tool       |
| 7. 3.4 mm (1/8 in.) Punch       |                                 |
| 8. 2.8 mm (7/64 in.) Punch      |                                 |

**SECTION II - PMS CHECKS & MAINTENANCE PROCEDURES**

**3.3 General** - This PMS section lists those required checks and services to be performed by personnel who operate the MK 23 pistol. This section includes the services required to prepare the pistol for operation, to check the pistol during operation, and to ensure proper function after maintenance. Before performing any PMS procedures, ensure that the pistol log book has been updated with the correct round count and any PMS procedures documented. If your equipment fails to operate, refer to the Troubleshooting Table in Section III.

**WARNING**

**Before starting an inspection procedure CLEAR THE PISTOL! Inspect the chamber to ensure that it is empty. Do not keep live ammunition near maintenance /work areas.**

**NOTE**

**Before starting any PMS procedure ensure that the pistol log book has been updated with the correct round count and any PMS performed documented.**

### 3.4 Disassembly (Field stripping)

#### A. Pistol

1. **Clear the pistol!**
2. Depress slide release and allow slide to move forward.
3. If applicable, remove suppressor and/or any mounted accessories.

**CAUTION**  
**Suppressor will be hot if pistol fired with suppressor attached.**

4. Using the left hand, retract and hold the slide to the rear approximately 22 mm until the front end of the slide lock is centered on the recess visible on the left side of the slide (See Figure 11).
5. With the right hand push the slide release into the recess on the right side of the frame, lift and completely remove the slide release from the left side of the frame.

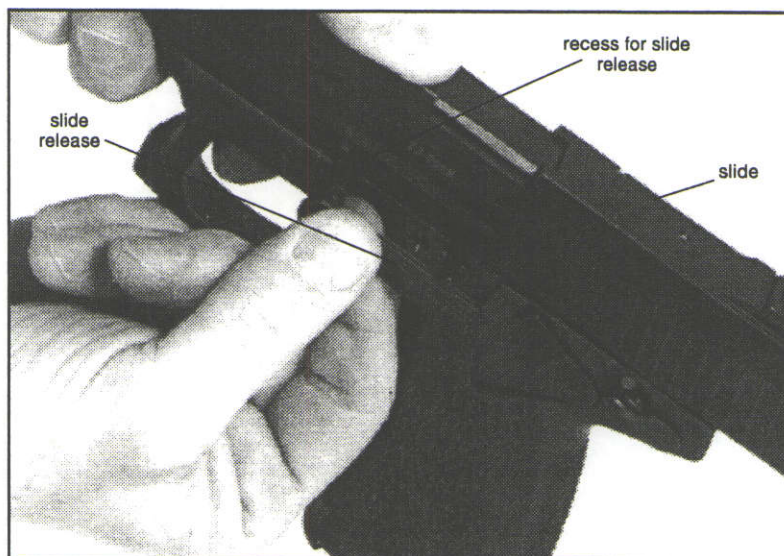


Figure 11  
Removing or Installing the Slide Release

**CAUTION**  
**Hold the recoil/buffer spring assembly in place while removing the slide from the frame.**

6. Remove the slide with barrel and captured recoil/buffer spring assembly off of the frame by sliding it forward.
7. Remove the captured recoil/buffer spring assembly from the barrel and slide by lifting up on the rear of the guide rod. The entire assembly can now be lifted out of the slide.
8. Lift the rear of the barrel by the locking block and withdraw it from the slide.

## B. Magazine

### CAUTION

**Beware of the spring tension exerted by the magazine spring while removing and installing the magazine floor plate. Keep the base of the magazine pointed in a safe direction (away from face and eyes) during disassembly and assembly.**

1. Using a pointed instrument, or a M1911 ball round, depress the locking detent protruding through the bottom of the magazine floor plate and **hold it there**.
2. Place a portion of either hand over the base of the magazine to control the release of the magazine spring and locking plate.
3. **Slowly** slide the floor plate forward off of the magazine housing.
4. Gradually allow the locking plate and magazine spring to expand out of the magazine housing.
5. Remove the locking plate, magazine spring and magazine follower from the magazine housing.

### CAUTION

**Operator disassembly of the MK23 pistol is now complete. Only armorer trained personnel may disassemble the weapon further.**

## 3.5 Reassembly (From field strip)

### A. Magazine

1. Place the magazine follower onto the end of the magazine spring having the loop at the end of the wire on the left side of the follower.
2. Insert the follower and the magazine spring into the magazine housing in the position depicted in Figure 12.
3. Place the locking plate onto the protruding end of the magazine spring so that the locking detent is visible.
4. Push the locking plate down into the magazine housing against the pressure of the magazine spring and **hold it there**.
5. Slide the floor plate over the base of the magazine housing and locking plate from front to rear making sure that:
  - a. The floor plate engages the tabs located on the left and right sides of the magazine housing.
  - b. The floor plate is fully seated on the magazine housing.
  - c. The locking detent fits within the hole provided in the floor plate.
  - d. Check the magazine for proper assembly by insuring that the follower slides up and down freely within the magazine housing and with spring tension. Also check that the magazine follower rises within the housing to be nearly flush against the bottom of the magazine lips.

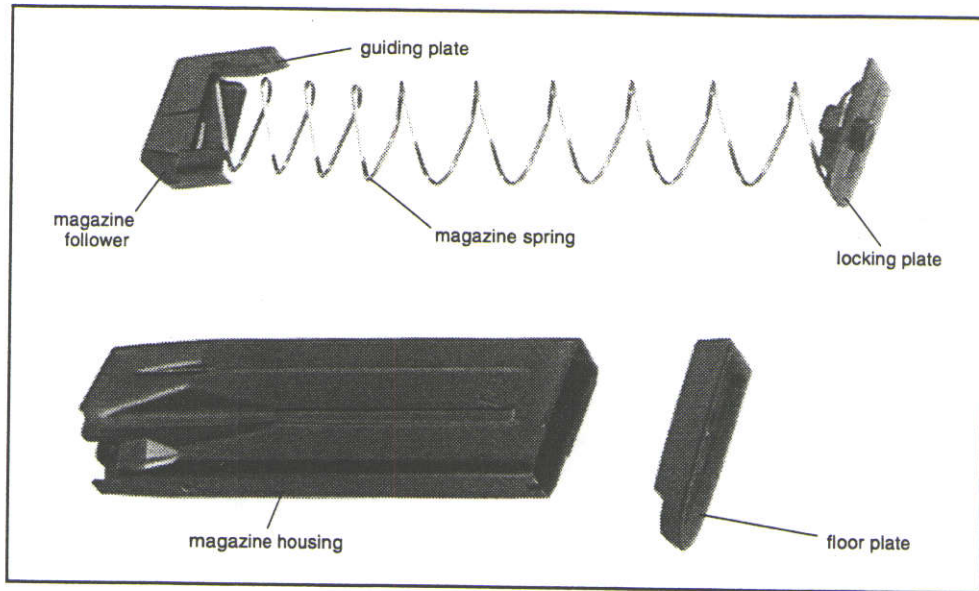


Figure 12  
Proper Assembly of Magazine Follower and Spring

### B. Pistol

1. Insert the muzzle of the barrel through the large hole located in the front of the slide.
2. Drop the barrel down into the slide and push it forward until the O-ring engages the slide, the locking block fits within the ejection port, and the angled locking surface of the locking block are visible along the bottom of the slide. The O-ring will now hold the muzzle tight in the front of the slide.
3. Install the captured recoil/buffer spring assembly into the slide so that the front of the recoil spring guide rod engages in the smaller hole located in the front of the slide.
4. Align the opposing angled locking surfaces of the recoil spring guide rod with those located on the bottom of the barrel locking block.
5. Push the rear of the recoil/buffer spring assembly forward enough so that the recoil spring retainer can be engaged on the shelf provided on the front of the barrel locking block (See Figure 13).
6. Hold the slide in the right hand with the thumb holding the rear end of the recoil/buffer spring assembly in place on the slide (See Figure 14).
7. Hold the frame in the left hand. Position the rear of the slide above the front edge of the frame.
8. Draw the slide back onto the frame so that the rails of the locking insert and guiding part slide within the grooves in the slide.
9. Retract the slide to the point where the recess in the left side of the slide is centered on the hole where the axle of the slide release will go.
10. Hold the slide in this position and insert the slide release from the left to right into the frame until it is flush with the side of the frame and locks in place.

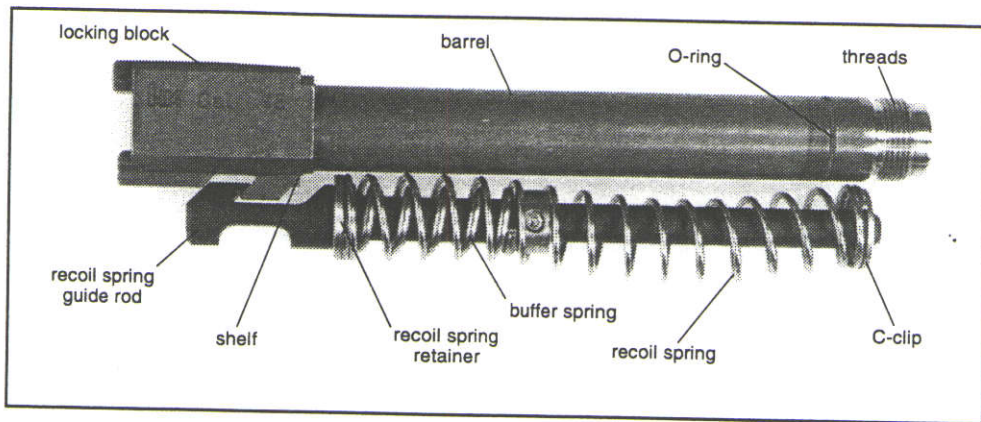


Figure 13  
 Proper Position for the Captured Recoil/Buffer Spring  
 Assembly on the Barrel Locking Block

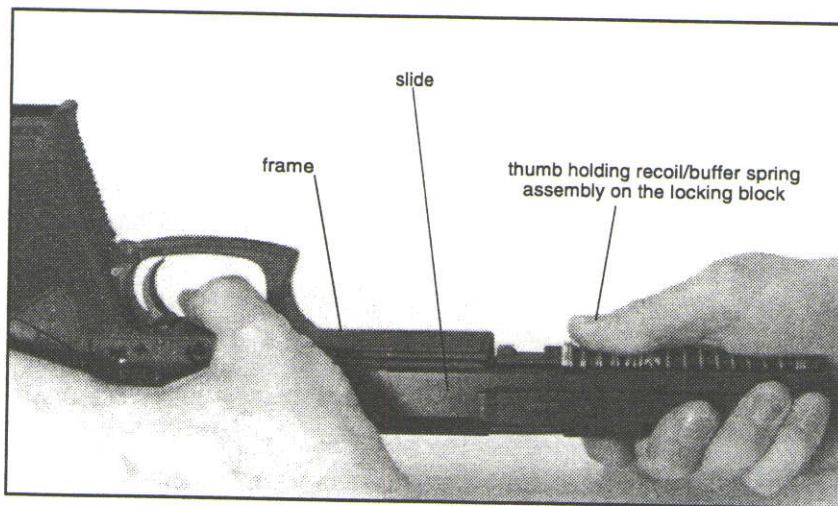


Figure 14  
 Correct Position for Holding Slide for Reassembly

**NOTE**

Operator reassembly of the MK23 pistol is now complete, but not finished without a safety/function check, paragraph 3.9.



### 3.6 Armorer Disassembly (Refer to Figure 26, para 3.17, Parts List, page 54)

ITEM: Slide Assembly

**TOOLS REQUIRED:** Hammer  
2.8 mm punch  
1.8 mm punch  
3.4 mm punch  
6 mm flathead screwdriver  
Brass punch

PART NUMBER	NOMENCLATURE	REMARKS
(11)	Extractor pin	1. Drive extractor pin (11) out of slide (12) using 1.8 mm Punch. 2. Remove extractor (1) from slide (12). 3. Remove extractor spring (2) from slide (12).
(1)	Extractor	
(2)	Extractor spring	
(10)	Firing Pin Retaining Pin	1. Drive out firing pin retaining pin (10) using 2.8 mm Punch. 2. Depress and hold firing pin block (8) up into slide. Firing pin (6) and firing pin spring (7) drop out of rear of slide (12) when slide is tilted up.
(6)	Firing Pin	
(7)	Firing Pin Spring	
(8)	Firing Pin Block	1. Lift firing pin block (8) from bottom of slide (12). 2. Remove firing pin block spring (9) from slide (12).
(9)	Firing Pin Block Spring	
(3)	Rear Sight Retaining Screw	1. Remove rear sight retaining screw (3) using 6 mm flathead screwdriver 2. Make a small index mark from the sights (4 & 5) onto the slide (12) so the sights may be properly realigned (zeroed) during reinstallation. 3. Drift front and rear sight (4 & 5) from slide (12) using hammer and brass punch. Note: Strike the sights (4 & 5) on their bases with the punch, not on the sight blades.
(4)	Rear Sight	
(5)	Front Sight	

**DISASSEMBLY OF THE SLIDE IS NOW COMPLETE.**

---

**Armorer Disassembly (continued)**

**ITEM:** Recoil/Buffer Spring Assembly

**TOOLS REQUIRED:** Hammer  
3.4 mm punch  
C-clip remover pliers  
C-clip retainer

**WARNING**

**Captured recoil spring is under tension. When removing, point in a safe direction.**

<b>PART NUMBER</b>	<b>NOMENCLATURE</b>	<b>REMARKS</b>
(20)	Spring Ring	1. Use the retainer component of the C-clip installer tool to clamp the recoil spring (22) and washer (21) down and remove spring ring C-clip (20) with the C-clip remover pliers. C-clip cannot be reused and must be replaced when reassembling.
(21)	Washer	
(22)	Recoil Spring	
(18)	Dual Roll Pin	
(19)	Buffer Spring Retainer	
(17)	Buffer spring	2. Slowly release pressure on retainer and remove washer (21) and spring (22).
(16)	Recoil Spring Retainer	3. Drive out dual roll pin (18) from recoil spring guide rod (15) using 3.4 mm punch but <b>LEAVE PUNCH IN!</b>
(15)	Recoil Spring Guide Rod	
		4. Point front end of recoil spring guide rod (15) to table. Slowly remove punch. Allow buffer spring (17) to push off buffer spring retainer (19).
		5. Remove buffer spring retainer (19), buffer spring (17) and recoil spring retainer (16) from recoil spring guide rod (15).

**DISASSEMBLY OF THE RECOIL/BUFFER SPRING ASSEMBLY IS NOW COMPLETE.**

ITEM: Frame Assembly

- TOOLS REQUIRED:** Hammer  
 2.8 mm Punch  
 1.8 mm Punch  
 1.4 mm Punch  
 Spring fitting tool  
 Tweezers  
 Vise  
 Small flathead screwdriver

PART NUMBER	NOMENCLATURE	REMARKS
(44)	Grip Insert	1. Turn frame upside down with the hammer decocked. 2. Hold the grip insert (44) with your thumb and using a 1.8 mm punch push the locking bolt (45) out of the frame. 3. Remove the grip insert (44) and hammer strut spring (43).
(45)	Locking Bolt	
(43)	Hammer Strut Spring	
(51)	Magazine Release Pin	1. Using a 1.4 mm punch, drift out the magazine release pin (51) but <b>DO NOT REMOVE THE PUNCH</b> . 2. Locate <b>and cover</b> the magazine release spring (52) where it shows between the magazine release (53) and the frame (46). 3. <b>Slowly</b> lift the magazine release (53) and spring (52) from the bottom of the frame.
(53)	Magazine Release	
(52)	Magazine Release Spring	
(54)	Slide Release Spring	NOTE: This spring should not be moved unless absolutely necessary for replacement. Doing so affects the secure engagement of the spring within the recess in the plastic frame. 1. To remove the slide release spring (54), simply lift up on the hooked end of the spring and pull it from the frame.
(35)	Roll Pin, Right Safety Lever	1. Using a 1.4 mm punch, drift out the roll pin (35) from the right safety lever (36). 2. Remove the right safety lever (41) from the safety axle.
(36)	Right Safety Lever	
(49)	Left Safety Lever	1. Lift left safety lever (49) out of left side of frame. 2. Lift safety detent (47) and safety detent spring (48) from frame.
(47)	Safety Detent	
(48)	Safety Detent Spring	

---

**Armorer Disassembly - Frame (continued)**

---

- |      |                       |  |
|------|-----------------------|--|
| (37) | Sear Block            | 1. Place hammer (40) in forward (down) position.   |
| (38) | Decocking Lockout     | 2. From the rear of the frame remove the sear block (37) from the right side of the hammer and the decocking lockout (38) from the left side of the hammer, using the tweezers. It may be necessary to pull back slightly on the hammer to remove the decocking lockout. |
| (34) | Sear Axle             | 1. Using a 2.8 mm punch, remove the sear axle (34) from the frame from the right to left.  |
| (33) | Disconnecter          | 2. Remove the disconnecter (33).   |
| (32) | Sear Actuator         | 3. Remove sear actuator (32).  |
| (31) | Sear Spring           | 1. Disengage upper arm of sear spring (31) from ejector pin (28).  |
| (30) | Sear                  | 2. Lift sear spring (31) from frame.   |
|      |                       | 3. Lift sear (30) from frame.  |
| (29) | Ejector               | 1. Use a 2.8 mm punch to push the ejector (29) with the roll pin (28) out of the frame from left to right. Note: Do not remove roll pin from ejector.  |
| (28) | Roll Pin, Ejector     |  |
| (39) | Hammer Axle           | 1. Using a 2.8 mm punch, drift the hammer axle (39) out of the frame FROM RIGHT TO LEFT ONLY!  |
| (40) | Hammer                | 2. Remove hammer (40).   |
| (41) | Hammer Rebound Spring | 3. Remove hammer rebound spring (41).  |
| (42) | Hammer Strut          | 4. Lift hammer strut (42) from frame.  |
| (56) | Trigger Pin           | 1. Using a 1.4 mm punch, push the trigger pin (56) out of the frame FROM RIGHT TO LEFT ONLY!   |
| (55) | Trigger               | 2. Lift up on the trigger (55) until the front of the trigger bar (23) clears the frame and remove the front of the trigger bar from the upper right extension of the trigger.   |
| (23) | Trigger Bar           | 3. Remove the trigger bar and spring (24) from the frame.  |
| (24) | Trigger Bar Spring    | 4. Remove the trigger (55) from the trigger guard.   |
| (25) | C-clip                | 1. Using a small screwdriver, remove the c-clip (25) from the end of the axle of the decocking lever (50)  |
| (26) | Decocking Spring      | 2. Using the same small screwdriver, disengage the lower arm of the decocking spring (26) from the decocker (27).  |
| (27) | Decocker              | 3. Remove the decocking lever (50) from the left side of the frame and the decocking spring (26) and decocker (27) will also fall out of the frame.  |
| (50) | Decocking Lever       |  |

**DISASSEMBLY OF THE FRAME IS NOW COMPLETE.**

**DISASSEMBLY OF THE PISTOL IS NOW COMPLETE.**

### 3.7 Armorer Reassembly

#### General

- Unless otherwise directed, reassembly of parts and major groups is to be carried out in reverse order of disassembly.
- These steps are subject to change due to technical modifications to the weapon.
- Read through the entire disassembly and reassembly procedure before attempting it.
- After assembling a part or series of parts, check for the appropriate function of that feature, such as:
  - Free movement or rotation
  - No movement
  - Presence of spring tension
  - Proper positioning or alignment
  - All parts are present
  - All C-clips, roll pins, axles, screws, and other fasteners are properly positioned and secured.
- As you assemble and disassemble the weapon, always look carefully at each component for any signs of damage, such as:
  - Excessive wear
  - Cracks
  - Burrs, dents, bends
  - Absence of protective finish
- Always conduct a safety/function check (as described in paragraph 3.9) and test fire the pistol any time it is reassembled.

ITEM: Recoil/Buffer Spring Assembly

TOOLS REQUIRED: Hammer  
 3.4 mm punch  
 C-clip installer tool

PART NUMBER	NOMENCLATURE	REMARKS
(15)	Recoil Spring Guide Rod	<ol style="list-style-type: none"> <li>1. Place recoil spring retainer (16) on to the guide rod (15).</li> <li>2. Place buffer spring (17) onto guide rod (15).</li> <li>3. Place buffer spring retainer (19) onto guide rod (15).</li> <li>4. Compress buffer spring retainer (16) until hole lines up. Insert 3.4 mm slave punch to hold this position.</li> <li>5. Install dual roll pin (18) to secure buffer spring retainer (16).</li> <li>6. Install recoil spring (22) over recoil spring guide rod (15).</li> <li>7. Hold recoil spring (22) back and place washer (21) over front end of guide rod (15). The smaller diameter step falls toward the spring.</li> <li>8. Use the retainer component of the C-clip installer tool to clamp the washer (21) and recoil spring (22) down, exposing the groove on the guide rod (15).</li> <li>9. Place a new spring ring/C-clip (20) on the end of the guide rod (15) and, using a small hammer and the metal tap component on the installer tool, tap the spring ring (20) into the groove. Release the retainer.</li> </ol>
(16)	Recoil Spring Retainer	
(17)	Buffer Spring	
(19)	Buffer Spring Retainer	
(18)	Dual Roll Pin	
(20)	Spring Ring	
(21)	Washer	
(22)	Recoil Spring	

REASSEMBLY OF THE RECOIL/BUFFER SPRING IS NOW COMPLETE.

ITEM: Slide Assembly

- TOOLS REQUIRED:** Hammer  
 1.8 mm punch  
 2.8 mm punch  
 Tweezers  
 Brass punch  
 6 mm flathead screwdriver

PART NUMBER	NOMENCLATURE	REMARKS
(5)	Front Sight	1. Using brass punch and hammer, drift front (5) and rear sight (4) back into slide dovetails. 2. Secure rear sight (4) by replacing rear sight retaining screw (3) using 6 mm flathead screw driver. 3. Check positioning of front (5) and rear sight (4) in relationship to the index marks made prior to removal.
(4)	Rear Sight	
(3)	Rear Sight Retaining Screw	
(9)	Firing Pin Block Spring	1. With the slide upside down, drop the firing pin block spring (9) into the large circular recess in the bottom of the slide (12). 2. Install the firing pin block (8) into slide on top of spring so that: a. Small shaft on the firing pin block (8) enters the firing pin block spring. b. The 90°, right angle, corner of the two flat sides of the firing pin block (8) points towards the extractor and muzzle.
(8)	Firing Pin Block	
(7)	Firing Pin Spring	1. Place firing pin spring (7) onto front of firing pin (6). 2. Push <b>and hold all the way down</b> on the firing pin block (8). 3. Insert firing pin (6) with spring (7) all the way into the back of the slide so that the forward U-shaped recess is vertical and falls right side of the slide. 4. Release the firing pin block (8). Firing pin (6) should be retained. 5. Install 2.8 mm punch into hole for firing pin retaining pin (10) to retain firing pin (6). 6. Install firing pin retaining pin (10) into slide from top to bottom as you drive out the 2.8 mm punch. 7. Check proper assembly. Push and hold down on firing pin block (8). a. Firing pin (6) should move freely within slide. b. Tip of firing pin (6) should be visible through the face of slide when pushed fully forward.
(6)	Firing Pin	
(10)	Firing Pin Retaining Pin	

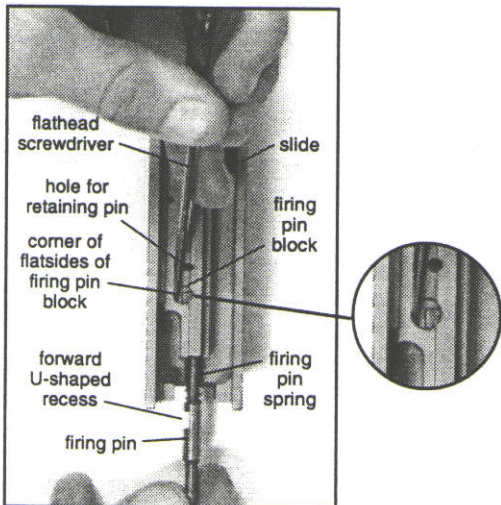


Figure 15 Installing Firing Pin & Block

- (2) Extractor Spring
- (1) Extractor
- (11) Extractor Pin

1. Place extractor spring (2) into slide in the circular recess provided.
2. Place extractor (1) in slide with rear of extractor over spring and claw of extractor facing slide.
3. Using a 2 mm punch as a slave pin from the bottom of the slide, align hole and install extractor pin (11) into slide from top to bottom.
4. Check extractor (1) for free movement and spring tension.

**REASSEMBLY OF THE SLIDE IS NOW COMPLETE.**



ITEM: Frame Assembly

**TOOLS REQUIRED:** 1.4 mm punch  
1.8 mm punch  
2.8 mm punch  
3.0 mm slave pin  
Tweezers

Flathead screwdriver  
C-clip tool (3.2 mm)  
Spring fitting tool  
Hammer

PART NUMBER	NOMENCLATURE	REMARKS
(50)	Decocking Lever	<ol style="list-style-type: none"><li>1. Insert decocking lever (50) into left side of the frame (46).</li><li>2. Using the tweezers, position the decocker (27) onto the axle of the decocking lever (50) so the tab of the decocker is below the axle and curved to the right side of the frame (see Fig. 16).</li><li>3. Again using the tweezers, place the decocking spring (26) on the axle of the decocking lever (50). Insure that the free ends of the spring lay flat against the angled surface of the frame forward of the decocking lever axle.</li><li>4. Use the C-clip holder to attach the 3.2 mm c-clip (25) to the end of the decocking lever axle.</li><li>5. Using the spring fitting tool, engage the lower free end of the decocking spring (26) onto the tab of the decocker located below the axle of the decocking lever (50). Use your free index finger to stabilize the spring (26) by placing pressure on the top of the free end of the decocking spring (26).</li><li>6. Check the decocking lever (50) for:<ol style="list-style-type: none"><li>a. free movement</li><li>b. spring tension</li><li>c. presence of C-clip (25) on axle.</li></ol></li></ol>
(27)	Decocker	
(26)	Decocking Spring	
(25)	C-clip	

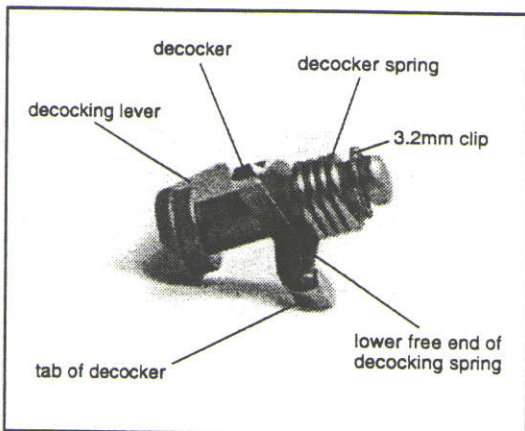


Figure 16

Decocker Assembly -Correct position of parts once they are assembled in frame

- (55) Trigger
- (56) Trigger Pin
- (23) Trigger Bar
- (24) Trigger Bar Spring

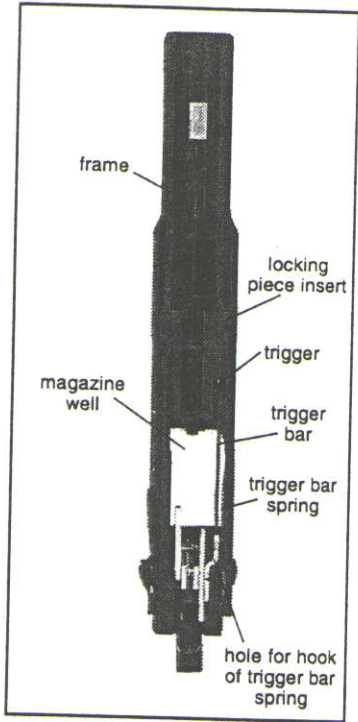


Figure 17  
Trigger Bar Assembly

1. Insert trigger (55) into the frame through the trigger guard. Push up on the trigger and insert the stud on the front of the trigger bar (23) into the hole in the upper right extension on the trigger from right to left.
2. Align the trigger pin hole in the frame and install the trigger pin (56) FROM LEFT TO RIGHT.
3. Drop the rear end of the trigger bar (23) down into the frame.
4. Feed the free (straight) end of the trigger bar spring (24) between the trigger bar (23) and right side of the frame (see Fig. 17).
5. Push down on the rear of the trigger bar and insert the free end of the trigger bar spring (24) into the hole located on the right side of the frame inside the magazine well.
6. Check for spring tension and free movement of the trigger bar (23) by pushing down on the trigger bar and pulling the trigger several times.

- (42) Hammer Strut
- (40) Hammer
- (41) Hammer Rebound Spring
- (39) Hammer Axle

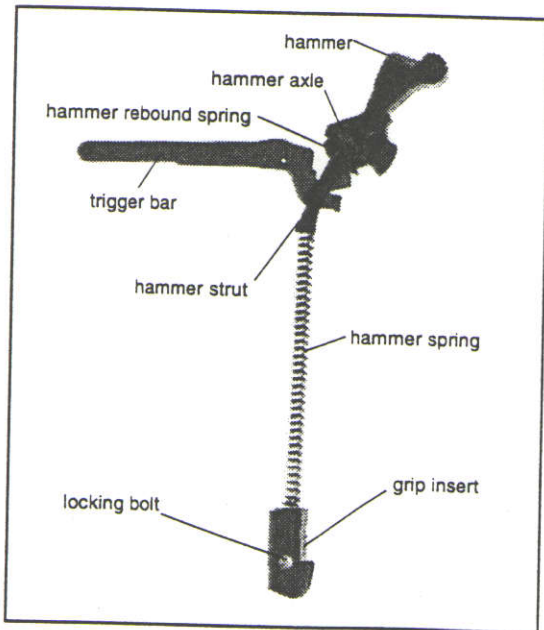


Figure 18 Hammer Assembly

1. Drop the hammer strut (42) into the frame behind the axle of the decocking lever (50) and let it hang there. Check positioning of hammer strut in the frame. It must hang free.
2. Place the hammer rebound spring (41) between the left side of the hammer (40) and the inside surface of the frame. Insure that the front ends of the hammer rebound spring are facing up and forward.
3. Insert the hammer (40) in upright (forward) position straight down into frame.
4. Push the hammer (40) down on the hammer strut (42) and tab on trigger bar (23).
5. Insert 2.8 mm punch as a slave pin into the hole for the hammer axle (39) from **right to left** to hold the hammer (40) in position.
6. Align the parts and insert the hammer axle (39) from **left to right** into the frame to secure the hammer (40) and hammer rebound spring (41). Note: You may need to press down on the trigger bar (23) to provide clearance to fully seat the hammer axle (39).

7. Check the hammer:
  - a. for free movement.
  - b. for rearward spring tension as a result of the proper engagement of the hammer rebound spring (41).
  - c. that the trigger bar (23) pulls the hammer (40) rearward when the trigger (55) is pulled slightly.

Note: Do not pull the trigger fully to the rear at this point or the trigger bar will disengage from the hammer.

- |      |                     |  |
|------|---------------------|--|
| (43) | Hammer Strut Spring | <ol style="list-style-type: none"> <li>1. Place the hammer spring (43) on the bottom of the hammer strut (42) and push up until the top of the hammer strut is positioned in the slot in the bottom of the hammer (40).</li> <li>2. Turn the pistol upside down and position the grip insert (44) in the frame and align the bottom of the hammer spring with the recess in the grip insert.</li> <li>3. Push down and align the hole in the grip insert (44) with the hold in the frame (46) and push the locking bolt (45) into the hole.</li> </ol> |
| (44) | Grip insert         |  |
| (45) | Locking Bolt        |  |

- |      |                   |  |
|------|-------------------|--|
| (29) | Ejector           | <ol style="list-style-type: none"> <li>1. Slide the ejector (29) with roll pin (28) installed into the frame from right to left in the hole provided.</li> <li>2. Check to see that the hole in the rear of the ejector (29) can be aligned with the hole for the sear axle (34) and that the front end of the ejector (29) is parallel with the top edge of the frame.</li> </ol> |
| (28) | Roll Pin, Ejector |  |

- |      |                       |   |
|------|-----------------------|---|
| (41) | Hammer Rebound Spring | <ol style="list-style-type: none"> <li>1. Place the horizontal free end of the hammer rebound spring (41) against the rear edge of the ejector (29) using the small screwdriver.</li> </ol> |
|------|-----------------------|---|

- |      |               |  |
|------|---------------|--|
| (34) | Sear Axle     | <ol style="list-style-type: none"> <li>1. Insert sear axle (34) from left to right through frame and ejector.</li> <li>2. Using the tweezers, place the sear (30) onto the sear axle (34) with the two extensions of the sear (30) facing up and towards the rear of the frame.</li> <li>3. Place coil of sear spring (31) inside the two extensions of the sear (30) with the two free ends of the spring (31) facing forward.</li> <li>4. Push the sear axle (34) through the sear (30) and sear spring (31) only.</li> <li>5. Hook the top free end of the sear spring (31) under the roll pin for the ejector (29).</li> <li>6. Place the sear actuator (32) to the right of the sear (30) so that the shortest arm of the sear actuator (32) fits down inside the frame and the notched arm points rearward.</li> </ol> |
| (30) | Sear          |  |
| (31) | Sear Spring   |  |
| (32) | Sear Actuator |  |
| (33) | Disconnecter  |  |

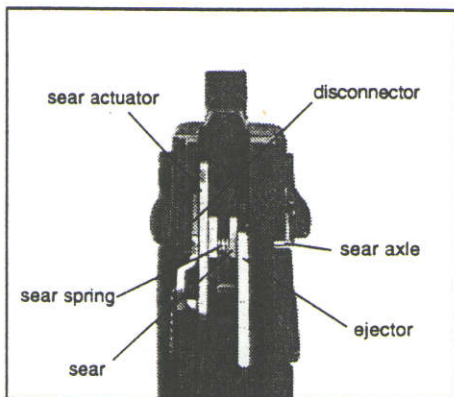


Figure 19  
Sear-Ejector Assembly

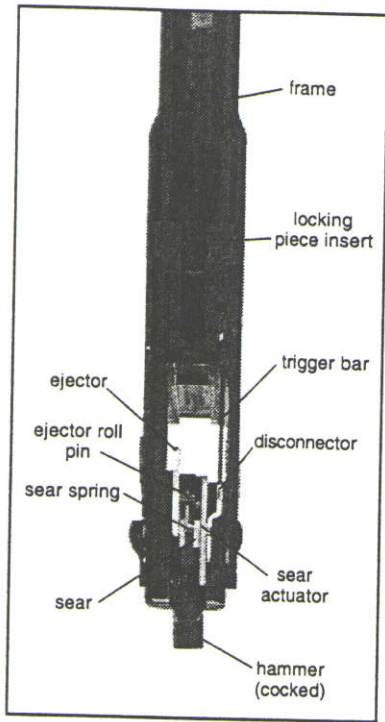


Figure 20  
Sear-Ejector Assembly

7. Push the sear axle (34) through the sear actuator (32) to secure it.
8. Place the disconnecter (33) to the right of the sear actuator (32) with its widest portion resting on top of the trigger bar (23).
9. Push the sear axle (34) fully into place to secure all parts, including the disconnecter.(33).
10. Check for proper assembly by pulling the trigger (55) fully to the rear. The hammer (40) should cock and automatically release in double-action mode. Cock the hammer and pull the trigger to check for automatic release in single action mode.

- (48) Safety Detent Spring
- (47) Safety Detent
- (49) Left Safety Lever
- (38) Decocking Lockout
- (37) Sear Block
- (36) Right Safety Lever
- (35) Roll Pin

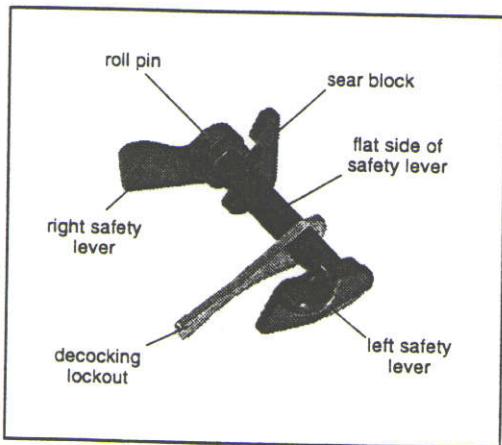


Figure 21  
Safety Lever Assembly

1. Insert the safety detent spring (48) into the hole provided in the left side of the frame.
2. Insert the safety detent (47) on top of the safety detent spring (48).
3. Insert the decocking lockout (38) into the rear of the frame to the left of the hammer (40) with the flat side of its axle hole facing up and slightly forward. To align with axle hole, pull the hammer back slightly.
4. Insert the left safety lever (49) into the frame far enough to where the safety axle passes through the hole in the decocking lockout (48).  
Note: the left safety lever (49) should be in the "fire" (down) position.
5. Install the sear block (37) into the rear of the frame to the right of the hammer (40) with the flat side of its axle hole facing up and slightly forward. The end of the sear block opposite from the axle hole should extend up and under the rear of the sear actuator. Once inside the frame, view from the right side of the pistol and align the axle hole, using a small screwdriver. Once aligned, push the axle through from **left to right**.
6. Push the left safety lever axle (49) all the way into the frame to secure the sear block (37).

7. Place the right safety lever (36) onto the axle.
8. Secure the right safety lever (36) by installing the roll pin (35).
9. Check to insure that:
  - a. The hammer (40) can be released in single-action mode.
  - b. The left safety lever (49) can be engaged and blocks the release of the cocked hammer (40).
  - c. That the cocked hammer (40) can be decocked using the decocking lever (50).
  - d. That the hammer (40) is cocked and automatically released in double-action mode when the trigger (55) is fully depressed.

(54)	Slide Release Spring	<ol style="list-style-type: none"> <li>1. Reinstall the slide release spring (54) into the cross-shaped opening on the left side of the frame so that the hooked end of the spring protrudes from the bottom of the cross-shaped opening.</li> </ol>
(52)	Magazine Release Spring	<ol style="list-style-type: none"> <li>1. Place the magazine release spring (52) into the large circular recess on the magazine release (53).</li> <li>2. Position the magazine release (53) at the opening in the frame for the magazine release so that the serrated surfaces of the magazine release face upward and the magazine release spring (52) faces the heel of the frame.</li> <li>3. Use the flat surface of a screwdriver to compress the magazine release spring (52) as you seat the magazine release (53) in the frame.</li> <li>4. Align the hole and insert the magazine release pin (51) to secure the parts to the frame.</li> <li>5. Check the magazine release for:               <ol style="list-style-type: none"> <li>a. free movement.</li> <li>b. spring tension.</li> <li>c. that a magazine is engaged and released when the magazine release is actuated.</li> </ol> </li> </ol>
(53)	Magazine Release	
(51)	Magazine Release Pin	

**REASSEMBLY OF THE FRAME IS NOW COMPLETE.**

**REASSEMBLY OF THE PISTOL IS NOW COMPLETE.**

**A. Single Action mode -**

**1. Safety lever is engaged (up), pistol is set on "safe" (Figure 22).**

The trigger is held forward by the trigger bar spring. The hammer is engaged with the sear at point A. The sear is held in engagement with the hammer notch by pressure from the sear spring (not shown). The hammer spring is exerting forward pressure on the hammer via the hammer strut (not shown).

The safety lever is in the "safe" (up) position. The axle of the safety lever places the sear block against the rear of the sear actuator at point B. (The sear actuator cannot pivot to allow the sear to disengage from the hammer.)

The axle of the safety axle also places the end of the decocking lockout against the decocker at point C. (The decocker cannot rotate and decock hammer if the decocking lever is actuated. The engagement at point C prevents any movement of the decocking lever.)

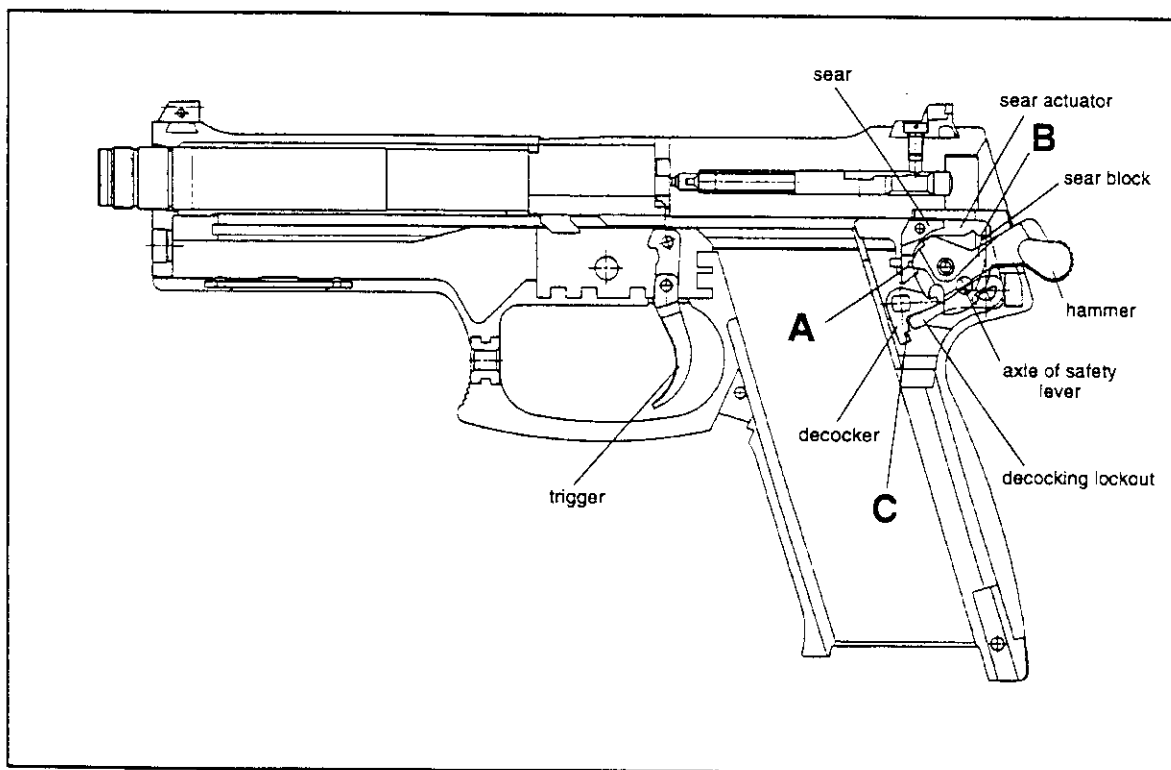


Figure 22  
Operation of the Trigger Mechanism

**2. Safety lever is disengaged (down), pistol is set on "fire" (Figure 23).**

The safety lever is moved into the "fire" (down) position. The axle of the sear lever moves the sear block out of engagement with the rear end of the sear actuator. The sear actuator is now free to pivot.

The axle of the sear lever also moves the decocking lockout out of engagement with the decocker. The decocker is now free to rotate the hammer if the decocking lever is actuated.

The hammer can now be released when the trigger is pulled rearward. The trigger pulls the trigger bar forward. The small horizontal tab of the trigger bar engages the lower extension of the sear actuator at point D. The sear actuator is pivoted forward by the trigger bar. The sear actuator, in turn, pivots the sear out of engagement with the hammer shelf.

The hammer is now free to swing forward from the pressure stored within the compressed hammer spring.

The disconnecter is depressed by the rearward movement of the slide during recoil. The disconnecter depresses the trigger bar. The small horizontal tab on the trigger bar is disengaged from the lower extension of the sear actuator. The sear is now free to reset, under pressure from the sear spring, into its upright position. The sear is again ready to engage the hammer shelf as the slide returns forward into battery after recoil.

The slide is now forward, the hammer spring is compressed, and the hammer is held rearward in a cocked position by the sear.

When the trigger is released, the trigger bar spring lifts the horizontal tab of the trigger bar back into engagement with the lower extension of the sear actuator at point D.

The hammer can now be released again when the trigger is pulled to fire the next round.

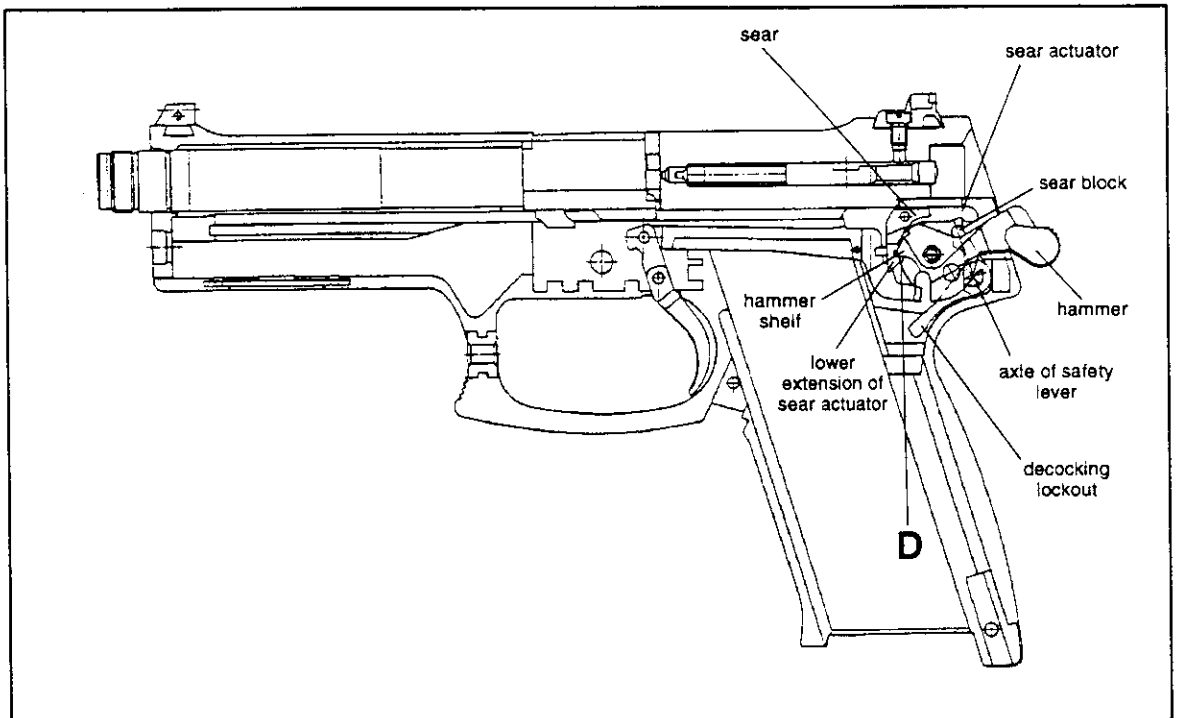


Figure 23  
Operation of the Trigger Mechanism

## **Double-Action mode -**

### **1. Decocking the Hammer Using the Decocking Lever -**

**Safety lever is disengaged (down). Pistol is set on "fire". The hammer is back (cocked) (Figure 24).**

The decocking lever is fully depressed by the operator. The axle of the decocking lever rotates the upper extension of the decocker into engagement with the sear. The decocker pushes the sear forward, disengaging the hammer. The hammer is also caught by the upper extension of the decocker.

The hammer is slowly lowered as the decocking lever is released by the operator. The decocking safety shelf on the hammer is caught by the sear preventing the hammer from striking the firing pin during the decocking process.

### **2. Firing the Pistol in Double-Action mode -**

**Safety lever is disengaged (down). Pistol is set on "fire." The hammer is forward (at rest).**

The trigger is depressed. The trigger pulls the trigger bar forward against the pressure of the trigger bar spring.

The large horizontal tab on the trigger bar engages the hammer in the double-action notch at point E.

As the trigger bar is pulled forward, the large horizontal tab on the trigger bar rotates the hammer rearward into a cocked position. As soon as the hammer spring is fully depressed, the large horizontal tab on the trigger bar disengages from the double-action notch on the hammer.

At the same moment, the small horizontal tab on the trigger bar pivots the sear out of the way of the hammer. The hammer is now free to travel forward under pressure of the compressed hammer spring. The hammer strikes the firing pin and the round is fired.

The slide recoils and cocks the hammer rearward (into single-action mode) as the hammer shelf engages the notch in the sear. The hammer is held rearward, the slide closes and the pistol is ready to be fired in single-action mode.



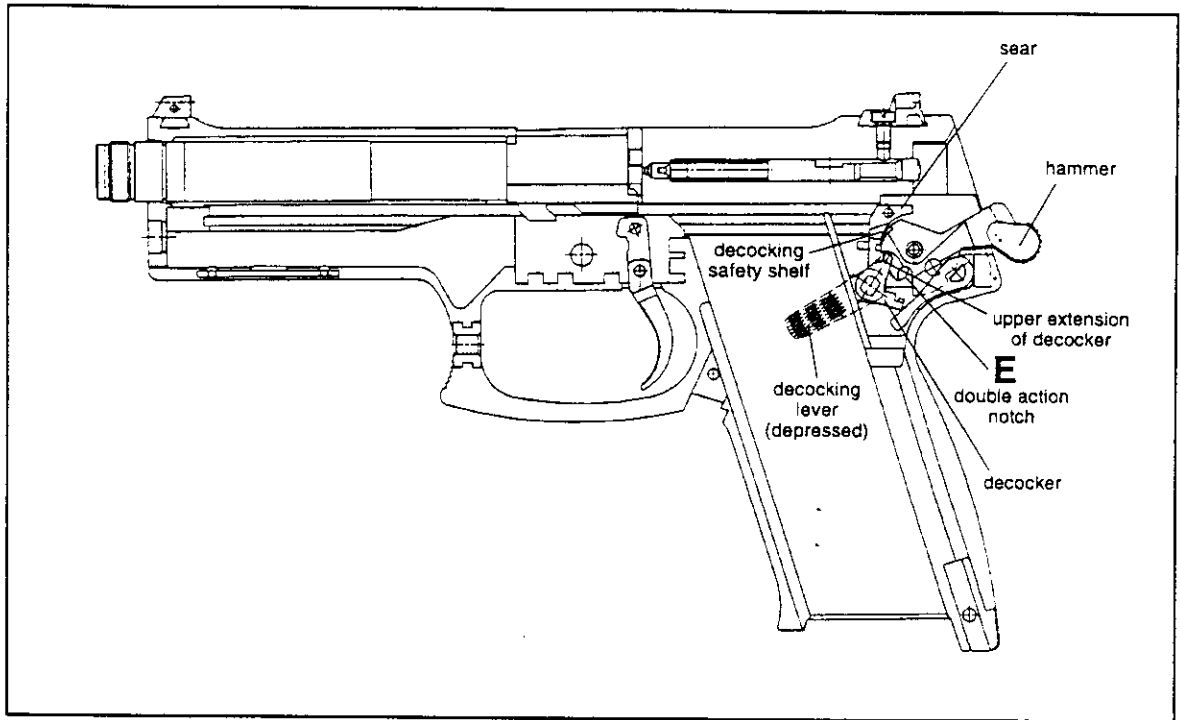


Figure 24  
Operation of the Trigger Mechanism

### 3.9 Safety/Function Check

- A. A safety/function check should be performed anytime the pistol is reassembled. This quick check indicates whether or not the pistol was properly assembled and with all the components. A properly executed safety/function check can also reveal many of the more obvious malfunctions that could occur between the interactive components of the pistol.
- B. **Always** clear the pistol before performing a safety/function check! ***Don't assume the pistol is clear!***
1. **Clear the pistol!**
  2. Actuate the slide and the operating controls to insure that:
    - a. **Magazine and catch** - the magazine is held securely in place by the magazine catch and that it drops free of the frame when the catch is depressed.
    - b. **Slide** - the slide moves freely and without binding on the frame (with and without a magazine installed).
    - c. **Barrel** - the barrel does lock fully into battery within the ejection port of the slide as the slide is closed.
    - d. **Slide Release** -
      - 1) The slide release does hold the slide open when retracted while:
        - a) an empty magazine is in place.
        - b) the slide release is engaged (pressed upwards).
      - 2) The slide release does permit the slide to snap forward when:
        - a) the slide release is depressed.
        - b) the slide is retracted without a magazine installed.
      - 3) The slide release does rebound with spring pressure.

3. Perform the following safety checks:

a. **Safety Lever Test.**

- 1) With the pistol unloaded, and hammer down (uncocked) attempt to press the safety upward into the safe position. The safety should not engage. If the safety engages, return the pistol to the unit armorer.
- 2) With the pistol unloaded, the hammer cocked, move the safety several times from the "safe" to "fire" position. If the safety does not have a pronounced stop when moved from "safe" to "fire" position and back, return the pistol to the unit armorer.
- 3) With the pistol unloaded, cock the hammer and press the safety upward into the safe position. Grasp the pistol in the shooting position and squeeze the trigger tightly three or four times. If the hammer falls, return the pistol to the unit armorer.

b. **Decocking Lever Test.**

- 1) With the pistol unloaded, cock the hammer and depress the decocking lever. If the hammer does not fall or the decocking lever does not rebound (upward into its normal position) with spring pressure, return the pistol to the unit armorer.
- 2) With the pistol unloaded, cock the hammer and press the safety upward into the safe position. Attempt to depress the decocking lever three or four times. If the hammer falls, return the pistol to the unit armorer.

c. **Decocked (hammer down) Test.**

**NOTE**

**On the MK 23 pistol when decocked (hammer down), the sear is engaged with the hammer at a rebounded stop position not touching the rear of the firing pin.**

- 1) With the pistol unloaded, squeeze the trigger allowing the hammer to cycle in the double action mode. After the hammer drops, retain pressure on the trigger. With the non-firing hand apply pressure with your finger tips on the rear of the hammer. The hammer should move forward toward the firing pin. Release pressure on the trigger while still retaining pressure with fingers on hammer. Release pressure on hammer. If the hammer fails to spring back into the stop position, return the pistol to the unit armorer.
- 2) With the pistol unloaded, hammer uncocked, trigger forward, apply pressure to the hammer with your finger tips. If the hammer moves forward, return the pistol to the unit armorer.

d. **Disconnecter and Trigger Test.**

- 1) With the pistol unloaded, cock the hammer, push the slide rearward approximately 3/16 inches (2mm) and hold in that position while squeezing the trigger. If the hammer falls, return the pistol to the unit armorer.
- 2) With the pistol unloaded, pull the slide rearward until the slide stop will engage. Squeeze the trigger and release the slide forward simultaneously. If the hammer falls, return the pistol to the unit armorer.
- 3) With the pistol unloaded, pull the slide rearward until the slide stop will engage. Squeeze the trigger and release the slide forward simultaneously. Release pressure on the trigger. If the trigger does not return to its normal position, return the pistol to the unit armorer. Squeeze the trigger and the hammer should fall. If the hammer does not fall, return the pistol to the unit armorer.

- 4) With the pistol unloaded and the trigger forward, apply thumb pressure to the cocked hammer. If the hammer lowers solely as a result of thumb pressure, return the pistol to the unit armorer.

### 3.10 Function Firing

If any corrective action was accomplished, function fire the pistol with a full magazine prior to cleaning and returning to service use.

### 3.11 Cleaning - performed after each firing, or every twelve (12) months, or after any exposure to extreme environmental conditions such as salt, fog, sand, dust, mud, water, etc.

#### A. Normal Cleaning -

##### 1. Clear the pistol!

##### 2. Disassemble the pistol into the major assembly groups.

##### a. Slide -

- 1) Scrub all internal surfaces of the slide using the nylon brush moistened with solvent.
- 2) Remove all loose fouling from all surfaces of the slide using a rag and cotton swabs.

##### b. Recoil/buffer spring assembly - remove all visible fouling using solvent, a nylon brush, a rag, and cotton swabs.

##### c. Barrel with locking block -

- 1) Moisten the bronze bore brush with solvent and scrub the bore from chamber to muzzle at least six passes, back and forth.
- 2) Remove the loose fouling using cleaning patches.
- 3) Scrub outside surfaces of barrel and locking block with the nylon brush moistened with solvent.
- 4) Scrub the threads of the barrel and O-ring with the nylon brush moistened with solvent.
- 5) Remove all loose fouling using a rag and cotton swabs.

##### d. Frame -

- 1) Scrub all internal surfaces where carbon fouling is visible using the nylon brush moistened with solvent. Concentrate on the area normally covered by the slide.
- 2) Using the rag and cotton swabs, remove all loose fouling from all areas of the frame.

##### e. Magazine -

- 1) The magazine is disassembled for cleaning.
- 2) Scrub the top of the magazine, concentrating on the follower and feed lips, using the nylon brush moistened with solvent.
- 3) Using the rag and cotton swabs, remove all loose fouling from all surfaces of the magazine.

### 3.12 Inspection

During and after cleaning the operator should inspect the pistol and its components for any irregularities that may cause problems during its operation. If any potential deficiencies are noted, they should be corrected immediately and/or brought to the attention of the unit armorer.

## A. Visually Inspect the Pistol and Magazine for:

1. Damaged or missing parts
2. Improper assembly or function
3. Absence of free movement, where applicable
4. Absence of spring tension, where applicable
5. Uncustomed looseness
6. Parts exhibiting signs of cracks, burrs, dents, or obvious signs of damage or stress
7. Presence of stops or tactile clicks in controls, where applicable
8. General overall cleanliness
9. Presence of proper lubrication
10. Presence of corrosion or degradation of surface finish
11. Rubber hammer spur for cracks or chips

### CAUTION

If the rubber hammer spur is badly cracked or chipped, drop safety could be degraded. Pistol should be returned to armorer to replace hammer.

## 3.13 Lubrication

All metal surfaces of the MK 23 pistol have a special surface treatment that resists all types of corrosion including corrosion resulting from exposure to salt water. However, this surface treatment does not reduce friction between parts, therefore, lubricant must be applied to the pistol. Any type of high-quality, medium weight lubricant (oil or grease) specifically designed for use on firearms, such as "Break-Free" (C.L.P.), will work well on the MK 23 pistol.

Do not use lubricants that boast of their ability to penetrate metal as these substances may deaden primers.

### A. Where and how much?

**No Lube** - (surface is dry and not slippery to the touch)

- Plastic components

**Light Lube** - (finger run across surface yields little or no lube)

- Bore, chamber, and exterior of barrel
- All metal parts
- All internal parts in slide and frame
- Magazine housing and spring
- Recoil/buffer spring assembly
- Sights
- O-ring

**Medium Lube** - (finger run across surface yields some lube but lube does not run down surface when held in a vertical position)

- Barrel locking block
- Slide rails
- All operating controls
- Locking insert and guiding part
- Extractor

**Heavy Lube** - (Lube runs down surface when held in a vertical position)

**NOTE**

**No heavy lube is required on the MK 23 pistol.**

Reapply lubrication periodically during firing as it burns off from the heat. Suppressed weapons generate more smoke and noxious gases, especially when over lubricated, so go easy with the lube.

Apply lubricant using a shaving brush, cotton swabs, patches, or rag. A spray bottle also works well using compressed air to circulate the lubricant into all parts and to remove the excess.

## SECTION III - TROUBLESHOOTING PROCEDURES

### 3.14 Operator Troubleshooting Procedures

PROBLEM	SYMPTOM/CAUSE	REMEDY
1. Round does not feed	Fouled magazine or pistol	Clean and lube pistol and magazine
	Improperly assembled	Assemble correctly
	Incorrect loading procedure used	Load pistol in accordance with instructions in operator's manual
	Unserviceable magazine	Replace magazine
2. Round does not chamber	Dirty or damaged magazine	Clean and lube or replace magazine
	Obstruction present in chamber	Remove obstruction, Clean and lube and/or bore chamber/bore
	Bent or damaged recoil spring, buffer spring, or guide rod. Buffer spring retainer roll pin drift.*	Return pistol to armorer for repair
<b>* NOTE</b> <b>Always inspect the buffer spring retainer roll pin for drift. If not firmly seated, return to armorer for replacement.</b>		
3. Slide does not lock fully forward	Fouled barrel locking block or slide	Clean and lube barrel locking block and slide
	Dry component parts or pistol	Lubricate pistol in accordance with instructions in operator's manual
	Damaged or burred slide, barrel locking block, or recoil/buffer spring assembly. Buffer spring retainer roll pin drift.*	Return pistol to armorer for repair
4. Pistol does not fire	Faulty ammunition	Replace ammunition
	Little or no sign of firing pin strike (indent) on primer	Return pistol to armorer for repair
5. Slide does not unlock	Faulty ammunition, determined by short recoil	Check bore for obstruction and replace ammunition
	Check for broken or damaged slide, barrel locking block or recoil/buffer spring assembly. Buffer spring retainer roll pin drift.*	Return pistol to armorer for repair

<b>PROBLEM</b>	<b>SYMPTOM/CAUSE</b>	<b>REMEDY</b>
6. Cartridge does not extract.	Fouled chamber	Clean and lube
	Ruptured cartridge case in chamber	Remove ruptured case, clean and lube chamber
	Fouled or corroded ammunition	Replace ammunition
	Pitted or damaged chamber	Return pistol to armorer for repair
	Broken or damaged extractor or extractor spring	Return pistol to armorer for repair
7. Operating controls do not function as described in operator's manual	Damaged or improperly assembled component parts	Return pistol to armorer for repair
8. Accuracy degradation	Damaged or missing O-ring	Replace O-ring

### 3.15 Armorer Troubleshooting

Before investing valuable time to trouble shoot a problem with the pistol, eliminate any potential non-mechanical reasons with the pistol that may fall within the areas listed below:

- Improper operation by the user
- Excessively dirty
- Lacking sufficient lubrication
- Improper assembly
- Missing or damaged components or parts
- Poor quality ammunition

If after inspecting the general condition of the weapon, the pistol still fails to operate as desired, consult the following list of potential causes and suggested methods to correct them.

#### NOTE

Whenever a pistol is turned in for unit /armorer level maintenance or repair, the armorer should always check the pistol for proper headspace and trigger pull.

**Headspace:** The headspace of the pistol should be between a minimum of .904 in. (2.30 cm) and a maximum of .925 in. (2.35 cm). Headspace should be verified as in a safe condition by using a caliber .45 “go” gauge, in accordance with Drawing 7318289 and a caliber .45 “no go” gauge in accordance with Drawing 7318310. The “no go” gauge shall be placed into the chamber of the pistol and the slide allowed to move forward and attempt to close and locking surfaces to engage. The trigger shall then be pulled and the firing pin should not be released. The “go” gauge shall be placed into the chamber of the pistol and the slide allowed to move forward. The slide shall close and the locking surfaces engage. The trigger shall then be pulled and the firing pin should be released and allowed to go forward.

**Trigger Pull:** Single action trigger pull should be not less than 3.0 lb (1.36 kg) or greater than 5.0 lbs (2.27 kg). Double action trigger pull should not be less than 8.0 lbs (3.6 kg) nor greater than 14.0 lbs (6.4 kg). The unloaded pistol should be mounted with the muzzle directed up in a vertical direction as to restrict the movement of the frame. With the pistol in the cocked position, apply free weights weighing less than 1.36 kg (2 lb, 15 oz). The pistol should not fire. Repeat the above procedure using free weights weighing more than 2.27 kg (5 lbs, 1 oz) to the trigger. The pistol should fire. With the pistol in the uncocked position, apply free weights weighing less than 3.6 kg (7lbs, 15 oz). The pistol should not fire. Repeat the procedure using free weights weighing more than 6.4 kg (14 lbs, 1 oz). The pistol should fire.



PROBLEM	SYMPTOM/CAUSE	REMEDY
1. Slide release engages slide during firing with rounds in the magazine.	Slide release spring is worn.	Replace slide release spring
2. Empty magazine does not drop from frame when magazine release is actuated.	Tab on magazine follower is fouled or deformed	Clean and lube, remove deformation or replace magazine follower.
	Magazine housing is bent or deformed.	Replace magazine housing.
3. Slide closes during loading of magazines into pistol.	Operator slamming magazines into pistol during loading procedure.	Correct operator loading procedure.
	Slide release spring is worn.	Replace slide release spring.
4. Slide does not unlock with sound suppressor attached.	Coupler spring and threaded coupler fouled.	Clean and lubricate sound suppressor components every 250 rounds.
5. Trigger sticks to rear when pistol is assembled	Trigger bar spring pinched by slide.	Reposition or replace trigger bar spring.

### 3.16 Adjustment of Iron Sights -

#### A. Description

The mechanical sights supplied with the MK 23 pistol are comprised of a fixed front sight post combined with a rear sight with u-shaped notch of a conventional configuration. Both front and rear sights are held in place on the slide within a standard dovetail groove. The rear sight is also secured with a retaining screw and is adjustable for windage and elevation.

Both front and rear sights contain white circles (or cylindrical tritium capsules) that appear as dots to the operator. One dot is positioned on either side of the rear sight aperture and in the center of the front sight post. When the sights are properly aligned vertically and horizontally, so are these dots. Thus, the three dots can be used for rapid acquisition of the sights and proper sight alignment.

The sights are situated high enough for use when the optional suppressor is mounted.

#### B. Adjustment

The battle sight zero of the MK 23 pistol is easily adjusted by moving or replacing the rear sight.

**ALL WINDAGE AND ELEVATION ADJUSTMENTS ARE MADE USING ONLY THE REAR SIGHT!**

1. **Windage Adjustments** - to adjust the horizontal (left and right) impact of the projectile follow these steps below:

- a. **Clear the Pistol!**
- b. Note the index mark on the rear sight and its relationship to the index mark on the slide.
- c. Loosen the rear sight retaining screw using a screw driver.
- d. With a small hammer and brass or soft metal drift punch, drift the sight to the:
  - LEFT to move the point of impact to the left.
  - RIGHT to move the point of impact to the right.The amount of movement will depend on the individual shooter and the ammunition used.

**NOTE**

**Always strike the sight on the sight base, not on the sight blades.**

- e. Retighten the rear sight retaining screw.
- f. Confirm your battlesight zero by firing the pistol again.

2. **Elevation Adjustments** -To adjust the vertical (up and down) impact of the projectile follow these steps below:

- a. **Clear the pistol!**
- b. Determine the amount of vertical change, in inches, that is required at 25 meters. Note the index mark on the rear sight and its relationship to the index mark on the slide.
- c. Loosen and remove the rear sight retaining screw using a screw driver.
- d. With a small hammer and brass or soft metal drift punch, drift the sight completely out of either side of the dovetail groove.
- e. Note the marking on the bottom of the rear sight. (The standard sight is unmarked),
- f. Select a higher or lower rear sight from Figure 25 below.
- g. Using the brass or soft metal punch and hammer, install the new sight into the dovetail groove.
- h. Align the index marks of the rear sight and slide as noted in step b above.
- i. Reinstall and tighten the rear sight retaining screw.
- j. Confirm your battle sight zero by firing the pistol again.

3. **Rear Sight Selection** - The rear sight is marked with -6, -4, -2, unmarked, +2, +4, or +6. This marking represents the amount of vertical change, in inches, that occurs when that sight is exchanged with the sight originally installed in the pistol.

- To RAISE the point of impact, install a higher rear sight.
- To LOWER the point of impact, install a lower sight.

**EXAMPLE:** The pistol is shooting 4 inches high at 25 meters. We want the pistol to shoot dead-on (point of aim, point of impact). The rear sight removed from the pistol is unmarked (standard).

Figure 25 shows that the rear sight marked -4 would lower the point of impact by 4 inches, or a total of 4 inches, from the standard unmarked rear sight removed from the pistol.

- The -4 sight would be the correct one to install. Obtain the exchangeable rear sight from the kit delivered with the pistols.

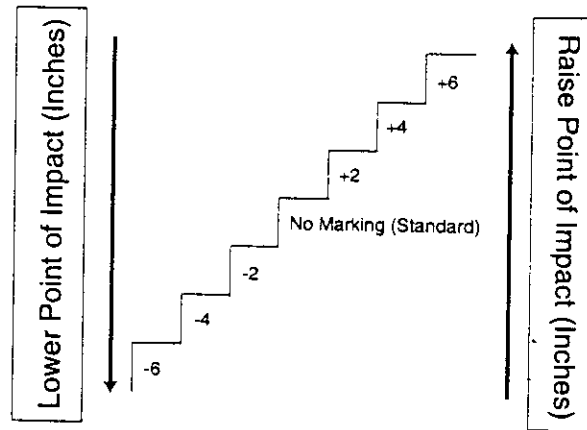


Figure 25

### C. Zeroing

The battlesight zero of the MK 23 pistol is set by the manufacturer using +P 185 grain JHP ammunition. The pistol is fired from a machine rest at a target positioned 25 meters from the pistol. The pistol is zeroed point of aim, point of impact (POA/POI). This means the impact of the projectile on target will coincide with the point of aim of the sights at 25 meters.

Each individual operator of the MK 23 pistol can battlesight zero their personally assigned pistol to their unique shooting style by adjusting the sights in accordance with the procedures in subparagraphs 1 - 3 above. The operator should not remove or replace sights however. Only the armorer is authorized to do this.

### 3.17 Parts List for MK 23 MOD 0 Pistol

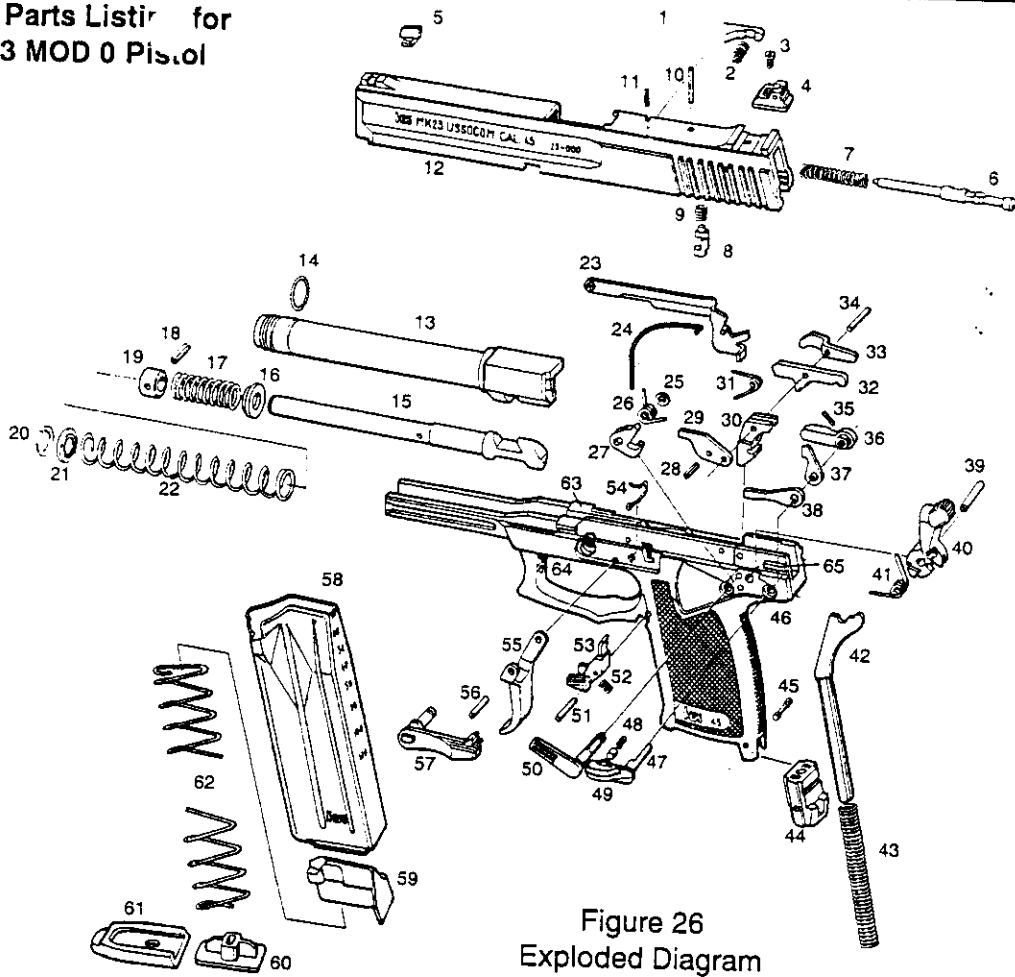


Figure 26  
Exploded Diagram

Position	Item Description	Part Number
1	extractor	215707
2	extractor spring	215708
3	rear sight retaining screw	215711
4	rear sight, 6.3mm standard (unmarked)	215770
4	rear sight, 5.1mm (-6)	215712
4	rear sight, 5.5mm (-4)	215767
4	rear sight, 5.9mm (-2)	215768
4	rear sight, 6.7mm (+2)	215771
4	rear sight, 7.1mm (+4)	215774
4	rear sight, 7.5mm (+6)	215783
5	front sight	215721
6	firing pin	215705
7	firing pin spring	215706
8	firing pin block	215709
9	firing pin block spring	215710
10	firing pin retaining pin	986432
11	extractor pin	986432
12	slide	215704
13	barrel	215702
14	O-ring	986429
15	recoil spring guide rod	215724
16	recoil spring retainer	215725
17	buffer spring	215726
18	dual roll pin (buffer spring retainer)	986433
19	buffer spring retainer	215727
20	spring ring	929191
21	washer	215728
22	recoil spring	215729
23	trigger bar, complete	215760
24	trigger bar spring	215734
25	c-clip (decocker)	927062
26	decocking spring	215743
27	decocker	215742
28	roll pin (ejector)	986431
29	ejector	215752
30	sear	215748
31	sear spring	215749

Position	Item Description	Part Number
32	sear actuator	215750
33	disconnecter	215751
34	sear axle	215753
35	roll pin (right safety lever)	986430
36	right safety lever	215744
37	sear block	215754
38	decocking lockout	215745
39	hammer axle	215738
40	hammer, complete	215772
41	hammer rebound spring	215739
42	hammer strut	215740
43	hammer strut spring	215741
44	grip insert	215731
45	locking bolt	215732
46	frame	215755
47	safety detent	215746
48	safety detent spring	215747
49	left safety lever	215769
50	decocking lever	215766
51	magazine release pin	986432
52	magazine release spring	215737
53	magazine release	215775
54	slide release spring	215733
55	trigger	215735
56	trigger pin	215736
57	slide release lever, complete	215763
58	magazine housing	215778
59	follower	215779
60	locking plate	215781
61	floor plate	215780
62	magazine spring	215782
63	locking insert (molded into frame)	
64	trigger guard insert (molded into frame)	
65	guiding part (molded into frame)	
	recoil spring guide rod assembly	215723
	magazine assembly (NSN 1005-01-426-8953)	215777

## CHAPTER 4- AMMUNITION

### 4.1 Selection

The MK 23 MOD 0 pistol was designed to operate best using two types of .45 ACP caliber ammunition. They are:

- A. M1911 230 grain Ball (DODIC A475)
- B. Commercially Manufactured 185 grain +P Jacketed Hollow Point (JHP)

#### NOTE

**Any military issued .45 caliber ammunition indorsed by your command is acceptable for use.**

#### DO NOT USE -

- Reloaded, remanufactured, or military surplus (foreign or outdated) ammunition
- Ammunition loaded in aluminum cartridge cases
- Dirty or corroded ammunition
- Ammunition assembled with corrosive primer and/or propellant
- Ammunition assembled with projectile damaged or pushed into cartridge case past crimp
- Ammunition exposed to oil, grease, water, or direct sunlight. Remove contaminants if possible before use and cool down ammunition exposed to direct sunlight or heat. (Exposure to sources of heat could raise the chamber pressure of the cartridge above safe limits).

For best performance in terms of sound suppression when utilizing the optional suppressor on the MK 23 pistol, it is recommended that only the M1911 Ball cartridge be used as it's muzzle velocity does not exceed the speed of sound ( $\approx 1,088$  fps). This round is commonly referred to as a "sub-sonic" round. For best performance in terms of flash suppression, M1911 Ball should also be used.

Use of the +P cartridges through the suppressor is safe, but it will still produce a supersonic crack as the 185 grain +P round produces a muzzle velocity in the range of 1,160 fps. This round is commonly referred to as a "supersonic" round. Flash suppression is less effective with 185 grain +P than with the M1911 Ball ammunition.

# **STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL**

The user of this document is encouraged to submit comments and suggestions for improvement using **DD FORM 1426**. In a continuing effort to make standardization documents better, the DOD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions.

In block 5 of the form, be specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgment will be mailed to the user within 30 days to let the suggestor know that the comments were received and are being considered.

**NOTE:** The DD Form 1426 may not be used to request copies of documents, request waivers, deviations, or clarification of specification requirements. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s).

The form should be folded along the lines indicated, taped along the loose edge (**DO NOT STAPLE**), and mailed to:

**COMMANDER  
CRANE DIVISION  
NAVAL SURFACE WARFARE CENTER  
CODE 4081  
300 HIGHWAY 361  
CRANE, INDIANA 47522-5001**