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TECHNICAL MANUAL

OPERATION AND SERVICE INSTRUCTION

WITH ILLUSTRATED PARTS BREAKDOWN FOR

SMITH AND WESSON
COMBAT MASTERPIECE
CALIBER .38 REVOLVER MODEL NO. 15

This publication supersedes TO 11W3-4-2-51 dated 15 January 1962.

INSERT LATEST CHANGED PAGES, DESTROY SUPERSEDED PAGES.

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands. Changes to wiring diagrams are indicated by shaded areas.

Dates of issue for original and changed pages are:

Original...0... 1 May 79

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 42, CONSISTING OF THE FOLLOWING:

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Title A i - ii a b Blank 1-1 - 1-6 2-1 - 2-2 3-1 3-2 Blank 4-1 - 4-5 4-6 Blank 5-1 - 5-12 6-1 - 6-7 6-8 Blank	0 0 0 0 0 0 0 0 0 0		

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PRECAUTIONS

Most vapors of cleaning agents are toxic if inhaled in large quantities for extended periods. Use toxic cleaning agents sparingly and only in well ventilated areas.

Wash hands thoroughly with soap and water after using cleaning agents. A lanolin base cream may be used after washing. Should the cleaning agent accidentally splash into eyes, flush eyes with water immediately.

Only the cleaning agents in this manual are authorized for cleaning the M-15 service revolver.

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SECTION I

INTRODUCTION AND DESCRIPTION

- 1-1. GENERAL. This manual contains instructions for organizational, maintenance personnel maintaining the M-15, .38 caliber service revolver.
- 1-2. Maintaining AFTO Form 105. Completion of this form will be accomplished in accordance with TO 11W-1-10 dated 1 July 1976.
- 1-3. Recommended changes to this manual should be submitted on AFTO Form 22 in accordance with TO 00-5-1. Forms will be forwarded through your Command Headquarters to WR-ALC, Robins Air Force Base, Georgia, 31098, Attn: MMED.
- 1-4. LEADING PARTICULARS. (See table 1-1.)
- 1-5. DESCRIPTION. The Smith and Wesson, K-38, Combat Masterpiece revolver is a six shot breech-loading hand weapon. It has a solid frame with a swing-out type cylinder, having six chambers around a central axis so six shots may be fired before reloading. The weapon may be fired either single or double action, and cocking the hammer by either method causes the cylinder to rotate and align the next chamber with the barrel. The rate of fire is limited only by the dexterity of the operator in reloading the cylinder and his ability to aim and pull the trigger.
- 1-6. Thumbpiece. The thumbpiece (figure 1-1) is located on the left side of the revolver above the stock. It is knurled and shaped to fit the thumb. Pressing the thumbpiece forward moves the bolt plunger, to release the cylinder to swing out.

- piece forward moves the bolt plunger, to release the cylinder to swing out.
- 1-7. <u>Serial Number</u>. The weapon serial number appears on the underside of the frame near the grips. (See figure 1-2.)
- 1-8. Extractor. The extractor rod (figure 1-1) is located in the center of the cylinder and yoke group and is knurled at the forward end. After opening the cylinder and depressing the extractor rod rearward the empty shells or cartridges are extracted. The extractor should return to its flush position, due to spring pressure.
- 1-9. Cylinder, Cylinder Stop and Yoke. The cylinder and yoke (figure 1-1) swing out to the left side of the revolver for loading and ejecting. The cylinder rotates counterclockwise one-sixth revolution during each cocking of the hammer. The spring loaded cylinder stop, projects through a slot in the frame below the cylinder and into a rectangular cut in the cylinders (figure 1-6). This holds the cartridge chamber aligned with the barrel and steady during firing.
- 1-10. <u>Hammer Block</u>. The hammer block is an internal part of the revolver. It is the secondary safety device that serves to prevent the hammer from moving fully forward to strike the primer, except when the trigger is all the way to the rear. An accidental blow on the hammer, when in the uncocked position, cannot cause the revolver to fire.
- 1-11. Wide Target Type Trigger. The trigger is serrated and shaped to fit the index finger (figure 1-4). It is

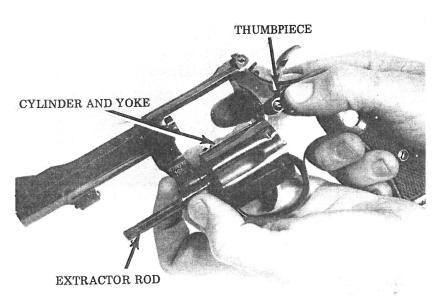


Figure 1-1. Pushing Thumbpiece to Release Cylinder and Yoke Group

operated by squeezing, to the rear, against the hand and tension of the rebound slide spring. For single action firing, apply pressure to the trigger after the hammer has been cocked. For double action firing, apply pressure to the trigger and pull firmly all the way to the rear.

1-12. Wide Spur Target Hammer. The hammer (figure 1-4) is located at the rear of the frame above the stock. It is knurled and shaped to fit the thumb. To cock the revolver for single action firing, depress the hammer fully downward and to the rear. Depressing and holding the hammer at the one quarter full cock position allows the cylinder to be rotated. To lower cocked hammer on a loaded chamber without firing, draw the hammer fully to the rear with the thumb. Press the trigger to disengage it from the hammer. Let hammer down slowly a short distance. Release trigger and carefully lower hammer as far as it will go.



Figure 1-2. Serial Number



Figure 1-3. Wide Trigger and Target Hammer

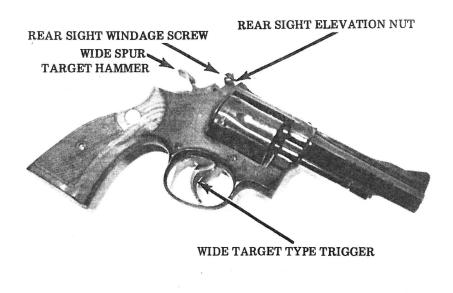


Figure 1-4. Windage and Elevation Adjustment Screw

- 1-13. Rear Sight. The rear sight requires a small common screwdriver to rotate windage (right and left) and elevation (up and down) screws, to calibrate sights with point of impact.
- 1-14. To elevate rear sight, turn rear sight elevation screw (figure 1-4) to the left or counterclockwise, noting the number of clicks of adjustment made. Each click of adjustment moves the point of impact on the target approximately 3/8 inch elevation at 50 yards and half the amount at 25 yards.
- 1-15. To move rear sight to the right, turn rear sight windage screw (figure 1-4) to the right or clockwise. To move rear sight to the left, turn windage screw to the left or counterclockwise, noting the number of clicks of adjustment made. Each click of adjustment moves point of impact on the target approximately 1/4 inch at 50 yards and half the amount at 25 yards.
- 1-16. DESTRUCTION OF MATERIAL FOR PREVEN-TION OF ENEMY USE. Destruction of the revolver and its ammunition when subject to capture or abandonment in the combat zone will be undertaken by the using armys only when, in the judgment of the Unit Commander concerned, such action is necessary in accordance with orders of or policy established by the Air Force Commander.
- 1-17. The information that follows is for guidance only, Some of the procedures outlined require the use of explosives and incendiary grenades which are not authorized items for the revolver. The issue of these and related materials and the condition under which destruction will be effected are command decisions in each case, according to the tactical situation. Of the several means of destructions, these most generally applicable are:

- a. Mechanical requires axe, pick mattock, sledge, crowbar or similar implement.
- b. Burning requires gasoline, oil, incendiary grenades or other flammables.
- c. <u>Gunfire</u> includes artillery, machine guns and launchers using high-explosive projectiles.
- d. $\underline{\mathbf{Demolition}}$ requires suitable explosive or ammunition.
- e. <u>Disposal</u> depends upon the geographical locations, soil conditions, etc., such as loam, clay, sand, swamp, rivers and other large bodies of water. In general, destruction of essential parts, followed by burning will usually be sufficient to render the revolver useless. However, selection of the particular method of destruction requires imagination and resourcefulness in the utilization of the facilities at hand under existing conditions. Time is usually critical.
- 1-18. If destruction to prevent enemy use is resorted to, the revolver and related materiel must be so badly damaged that they cannot be restored to a usable condition in the combat zone either by repair or cannibalization. Adequate destruction requires that all parts essential to the operation of the revolver or related materiel be destroyed or damaged beyond repair. However, when lack of time and personnel prevent destruction of all parts, priority is given to the destruction of those parts most difficult to replace. Equally important, the same essential parts must be destroyed and all like materiel so that enemy cannot construct one complete unit from several damaged ones.
- 1-19. If destruction is directed, due consideration should be given to:



Figure 1-5. Smith and Wesson Combat Masterpiece Caliber .38 Revolver, Model No. 15, Left Rear View

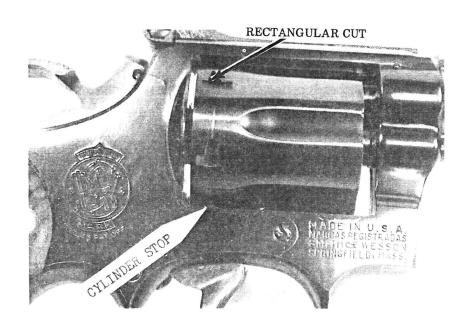


Figure 1-6. Cylinder Stop, Rectangular Cut.

- a. Selection of a point of destruction that will cause teatest hazard to the enemy, also prevent projectiles hich may occur incidental to destruction.
 - b. Observance of appropriate safety precautions.
- -20. TYPES OF DESTRUCTION.
- ·21. Met hod No. 1 Destruction by Mechanical Means. Ising a sledge, pick or rock to smash the frame housing ntil it is completely useless. Break or bend trigger group ad springs. Break front and rear sight assembly, bend arrel or batter until it is kinked or dented.

WARNING

Destruction by mechanical means shall not be used on ammunition.

- ·22. Method No. 2 Destruction by Burning. Destruction of essential parts such as the sight, frame and firing techanism followed by burning in an intense fire will ender the revolver useless. Since the revolver is composed most entirely of metal, sufficient quantities of combustile material should be used to insure a hot fire. However, combustible material is not available, use incendiary tenades as indicated:
 - a. Remove ammunition, if present from revolver.

- b. Place the revolver on the ground.
- c. Lay an incendiary grenade on the frame. Fire the grenade.
- 1-23. <u>Ammunition Destruction by Burning</u>. Lay the ammunition on a pile of combustible material and ignite from a distance by means of a train of flammable material to the pile or toss an incendiary (thermate) grenade onto the pile. Take cover immediately.

WARNING

Do not use WP (White Phosphorus) grenades when following instructions in paragraphs 1-22 and 1-23. WP grenades burst and throw the burning white phosphorus particles as far as 30 meters (100 feet).

- 1-24. Method No. 3 Destruction by Gunfire. Destroy the revolver by gunfire using artillery, machine guns, rifles using rifle grenades or launchers using antitank rockets. Fire on the revolver(s); although one well placed hit may destroy the revolver(s), several hits may be required for complete destruction.
- 1-25. Method No. 4 Destruction by Explosives.
 - a. Prepare a one-pound charge of explosive TNT (Using

TA	ABLE 1-1.	Leading Particulars	
 Caliber			0.357
Number of grooves			5
Barrel Length · · · · ·			4 Inches
Weight (loaded)		3	4 Ounces
Length (overall)		9	-1/8 Inches
Capacity of Cylinder -			6 Rounds
Frame ·····		square butt with grooved tangs.	
Hammer		····· wide spur, target.	
Trigger · · · · · · · · · · · · · · · · · · ·		S&W grooving with adjustable trigger stop.	
Sights Front			
Sights Rear		S&W Micrometer Click Sight, Adjustable for Elevat	tion and Windage

a one-pound block or equivalent, together with necessary detonating cord to make up the charge).

- b. Place the charge on the revolver(s) and tape in place, if possible, or use mud to hold the charge in place.
- c. Provide for dual priming to minimize the possibility of a misfire. For priming, either a non-electric blasting cap crimped to at least 5 feet of safety fuse (safety fuse burns at the rate of one foot in 30 to 45 seconds, test before using) or an electric blasting cap and firing wire may be used. Safety fuse which contains black powder and non-electric blasting caps must be protected from moisture at all times. The safety fuse is ignited by a fuse lighter or a match before taking cover. The electric blasting cap requires a blasting machine or equivalent source of electricity and is fired after taking cover.

CAUTION

Keep the blasting caps, detonating cords and safety fuse separated from the charges until required for use.

d. Detonate the charge. The detonation of the charge will destroy the revolver(s). If priming with time fuse, ignite and take cover. If primed with electric blasting cap, take cover before firing the charge.

- 1-26. Ammunition-Destruction by Explosives. The ammunition can be destroyed in conjunction with the revolvers. It can also be separately destroyed by placing in piles. stacks, or pits and using sufficient amount of demolition explosives. Prime and detonate the charges as outlined in c and d and follow the precaution therein.
- 1-27. Method No. 5 Destruction by Disposal. There are many ways in which the revolver can be destroyed by disposal. The following methods are recommended:
- a. Dig a hole and bury the revolver. Replace and arrange top layer of soil and vegetation to blend with sur roundings, so that burial site will be as inconspicious as possible.
- b. If a river, lake, or other body of water is nearby, c in the path of withdrawal, throw the revolver into the water
- c. After partially destroying by mechanical means (Method No. 1) the broken parts and separate component can be disposed of as following:
 - (1) Bury parts in more than one location.
- (2) Scatter the parts and components over a wide area.
 - (3) Throw the separate parts into a river, lake, etc

SECTION II

SPECIAL TOOLS & CLEANING EQUIPMENT

2-1. GENERAL. Maintenance supplies and materials used for cleaning, lubricating and preserving the service	CODE	EXPLANATION
revolver are listed in table 2-1 with National Stock Numbers. The maintenance level column indicates the lowest	С	Operator/crew
category of maintenance authorized to utilize the particu- lar item. The maintenance level codes used are:	0	Organizational Maintenance

Table 2-1. Maintenance Supplies and Materials for Cleaning, Lubricating and Preserving

DESCRIPTION	MAINT LEVEL
Dry Cleaning solvent: (SD) (1 Gal Can)	С
Brush, cleaning, small arms Cal .38	С
Rod, cleaning, small arms M4	С
Screwdriver 5/32 inch blade	С
Swab, small arms cleaning, cotton $2\text{-}1/2$ in. sq 20 ea domestic pack waterproof env	C
20 ea waterproof env export pack	
200 ea in bndl	
	Dry Cleaning solvent: (SD) (1 Gal Can) Brush, cleaning, small arms Cal .38 Rod, cleaning, small arms M4 Screwdriver 5/32 inch blade Swab, small arms cleaning, cotton 2-1/2 in. sq 20 ea domestic pack waterproof env 20 ea waterproof env export pack

NOTE

No other special tools or equipment are authorized for maintenance by Field Organizations.

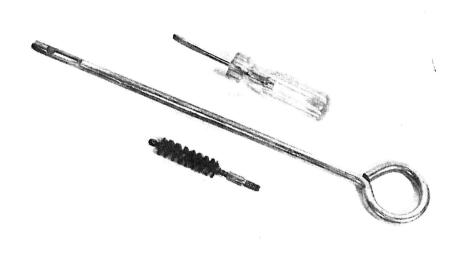


Figure 2-1. Special Tools and Equipment

SECTION III

SERVICE UPON RECEIPT OF MATERIAL AND PREPARATION FOR STORAGE AND SHIPMENT

- 3-1. GENERAL. This section contains instructions for service upon receipt of material preparation for storage and shipment.
- 3-2. SERVICE UPON RECEIPT OF MATERIAL. (See able 2-1.)

WARNING

Before starting an inspection, be sure to clear the weapon. Do not actuate the trigger until the weapon has been cleared by inspecting the cylinder to insure that no ammunition is present.

Table 3-1. Service Upon Receipt of Material

STEP	ACTION
1.	Remove weapon from container.
**2.	Check for missing items.
3.	Check bore for VC1 bore tube and remove.
4.	Field strip and inspect for missing parts.
5.	Clean and lubricate as necessary.
6.	Reassemble.
7.	Function check using dummy cartridges.
**Item	s must agree with basic issue items list.

- ·3. When a new or reconditioned revolver is received it the responsibility of the officer in charge to determine erviceability and assure it is in condition to perform its inction.
- 4. All basic issue items, replacement parts will be checked gainst listings. A record will be made of all missing parts 1d of any malfunctions. Corrective action will be initiated quickly as possible.

3-5. PREPARATION FOR STORAGE AND SHIPMENT. Revolvers to be stored are to be cleaned, dried, preserved, packaged and marked as indicated in paragraphs 3-6 through 3-12.

CAUTION

Refer to precautions listed in table 3-1.

- 3-6. <u>Cleaning</u>. Remove dust, dirt, grit or other foreign matter from surfaces of the weapon, making certain all components are clean.
- 3-7. <u>Drying</u>. Component parts must be thoroughly dried before preserving and packing.
- 3-8. Preservation and Packaging. Revolvers must be preserved with lubricating oil and will be packaged in suitable containers or boxes.
- 3-9. Marking. Marking instructions will be in accordance with applicable marking data.

NOTE

Weapon type, stock number and serial number will be identified on outside of container.

- 3-10. Shipment. Contact local Supply activity for instructions.
- 3-11. <u>Responsibility.</u> When shipping the revolver, the officer in charge of preparing the shipment will be responsible for furnishing the material properly processed for shipment.
- 3-12. <u>Reprocessing.</u> Revolvers removed from storage for shipment need not be reprocessed unless inspection reveals them to be inadequately preserved.

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SECTION IV

OPERATION INSTRUCTIONS

- 4-1. GENERAL. This section contains precautions and instructions for the mechanical steps necessary to operate the revolver.
- 4-2. PRECAUTIONS. Before using the revolver, the following safety precautions shall be observed rigidly until they become second nature.
- a. The revolver shall be checked for live ammunition when picked up, drawn from the holster, handed to or accepted from another individual.
- b. The revolver should always be holstered except when drawn for a definite purpose.
- c. Never point the revolver at anything that you do not intend to shoot.
- d. Do not cock the revolver unless you intend to shoot it. Do not even insert the finger in the trigger guard until you are ready to fire.
- e. Dry shooting, even with dummy cartridges, should be discouraged unless performed on a regular target range or at a known inanimate target object.

CAUTION

Due to damage that can result to the revolver, the hammer will not be pushed-off with the thumb from the cocked position during normal operation. A push-off test will be performed only by qualified gunsmith or ordance specialist.

- 4-3. When the revolver is out of the holster and is held in a ready position, be absolutely certain that it is not pointing at any part of your person or the persons of others who are in your immediate vicinity.
- 4-4. AMMUNITION. The ammunition (figure 4-1) for the .38 caliber revolver is classified as small arms ammunition and is issued in the form of a complete round. A complete round (cartridge) consists of all the components necessary to fire the weapon once, that is projectile (bullet), cartridge case, propellant and primer.
- 4-5. <u>Classification.</u> Based upon type of projectile, ammunition when available for use in this revolver will be classified as follows:
- a. Ball cartridge, for use against light material targets and personnel.
- b. Wadcutter, for use against light material targets training.
 - c. Blank cartridge, for use in training purpose.

4-6. Identification.

- a. The type, caliber, model and ammunition lot number, including the symbol of the manufacturer are necessary for complete identification of small arms ammunition.
- b. Because of its small size, the markings on small arms ammunition consist of the stamping of the manufacturer's initial and year of manufacture on the base of the cartridge case.
- 4-7. <u>Ammunition Lot Number</u>. When ammunition is manufactured, an ammunition lot number which becomes an essential part of the marking, is assigned in accordance with pertinent specifications. This lot number is marked on all packing containers. Since it is impractical to mark the ammunition lot number of each cartridge, every effort should be made to maintain the ammunition lot number of cartridges removed from their original packings.

4-8. Care, Handling and Preservation.

- a. Ammunition is packed to withstand conditions or ordinarily encountered in the field. Care must be observed to keep packings from becoming broken or damaged. All broken packings must be repaired immediately and careful attention given to the transfer of all markings to the new parts. The ammunition may be packed in metal lined wooden boxes or metal boxes. If the damaged box contains a metal liner, it should be air tested and sealed, providing necessary equipment is available.
- b. When necessary to store ammunition in the open, raise it for drainage at least six inches from the ground and protect it with tarpaulin or other cover, leaving enough space for the circulation of air. Where practical, drainage strips should be placed under each layer of boxes. Suitable trenches should be dug to prevent water from running under the pile.
- c. Since ammunition and explosives are adversely affected by moisture and high temperature, due considerations should be given to the following:
- (1) Do not open boxes until ammunition is to be used. Ammunition removed from airtight containers, particularly in damp climate, is apt to corrode, thereby rendering the ammunition unserviceable.
- (2) Protect ammunition from high temperature and direct rays of sun. More uniform firing is obtained if rounds are at the same temperature. The combination of high temperature and a humid atmosphere is particularly detrimental to the reliability of the propellant.
- d. Do not attempt to disassemble the cartridge or any of its components.

- e. The use of oil or grease on cartridge is prohibited.
- f. Ammunition should be protected from sand, mud, moisture, frost, snow, ice, grease and other foreign matter. If it gets wet or dirty, it should be wiped off at once. If corrosion forms on the cartridges, it should be wiped off with a clean dry cloth. However, cartridges should not be polished to make them look better or brighter.
- g. Brass cartridges are easily dented and should be protected from hard knocks or blows. Dented cartridges may cause incomplete obstruction, jamming in the chamber and difficulty in extraction.
- h. Ammunition, when stored should be segregated by caliber, type, and ammunition lot number.
- i. When only a part of a box of a lot of ammunition is used, the ammunition remaining in the box should be protected against unauthorized handling and use by firmly fastening the box cover in place.
- 4-9. Authorized Rounds. Standard nomenclature, which is used in the listing, completely identifies each item except for ammunition lot number. Only authorized cartridges will be used in the weapon. Unauthorized assembly and use of cartridges is extremely dangerous. Ordinarily, issue of this ammunition is in proportion by types to meet tactical requirements, so that substitution of authorized rounds in the field is not required.
- 4-10. Preparation for Firing. After removal from packing materials, cartridges for this weapon are ready for firing. Cartridges prepared for firing, but not fired, will be returned to their original packings or packed in suitable packing boxes. The packing boxes should be appropriately marked to indicate the nomenclature of the cartridges, the quantity of cartridges, and the appropriate ammunition lot number. Such cartridges will be used first in subsequent firing in order that stocks of opened packings may be kept at a minimum.

- 4-11. <u>Precaution in Firing.</u> The following precautions should be closely observed in order to prevent injury to personnel or damage to material.
- a. The cartridges should be free of sand, mud, and moisture, frost, snow, ice, grease, or other foreign matter before loading into the weapon.
- b. Ammunition which is seriously corroded should not be fired.
- c. Cartridges which have been seriously damaged, or those having loose bullets, should not be used.
- d. Before firing, blank cartridges should be visually inspected for evidence of any foreign matter within the cartridge case mouth. Any foreign matter herein would be expelled as a projectile in firing.
- e. Blank cartridges should not be fired at a representative enemy at distances less than 20 feet. The unburned propellant grains may cause injury within this distance.
- f. Ammunition should not be fired unless it has been identified by ammunition lot number and the grade.
- g. Do not fire cartridges which have become overheated due to exposure to the direct rays of the sun or other sources of high temperature. Such cartridges, if fired, may develop hazardous chamber pressure.
- h. If, at the time firing is interrupted, a cartridge is in the chamber of a very hot weapon, the cartridge should be removed promptly to prevent the possibility of a cook-off.
- i. Misfires and hangfires will be handled as indicated in paragraph 5-13.

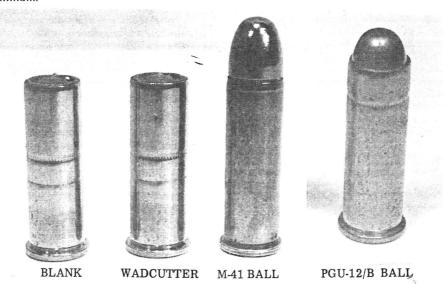


Figure 4-1. Ammunition Comparison

WARNING

When firing the caliber .38 revolver, if a noticeable difference in sound or recoil is experienced, stop firing, clear weapon and check for bullet in bore or any other object in the barrel. Even an abnormal quantity of heavy grease in the bore may result in injuries and in a bulged or burst barrel.

- 4-12. LOADING THE REVOLVER. Depress the thumbpiece and swing the cylinder and yoke out of the frame. (See figure 4-2.)
- 4-13. If the weapon has been fired previously, press in on the extractor rod to extract the cartridge cases. (See figure 4-3).
- 4-14. $\;$ Insert ammunition into the cylinders. (See figure 4-2).
- 4-15. Swing the cylinder and yoke into the frame. It should be locked shut by the locking bolt and the bolt.
- 4-16. FIRING THE REVOLVER. For single action firing proceed as follows:
- a. If all chambers of the cylinder are not loaded, alignment of the proper chamber may be necessary. The first loaded chamber should be on the right of the chamber aligned with the barrel.
 - b. Cock the hammer. (See figure 4-4.)

- c. Cam the front and rear sight to the 6 o'clock position on the target. The correct sight picture is shown in figure 4-5. If sight adjustment of the revolver is necessary, refer to paragraph 1-13.
- d. Squeeze the trigger with trigger finger only, carefully keeping the sights aligned on the target.
- e. For continuous firing, repeat subparagraph b. through d. until six cartridges in cylinder have been fired.
- 4-17. For double action firing, proceed as follows:
- a. If chamber is improperly aligned proceed by making certain the first loaded chamber is on the right of the chamber aligned with the barrel.
- b. Aim front and rear sight to the 6 o'clock position on the target. (See figure 4-5.)
- c. Squeeze the trigger with even pressure until hammer falls.
- d. For continuous firing, repeat subparagraphs b. and c. until all cartridges are expended.
- 4-18. UNLOADING THE REVOLVER. To unload the revolver, proceed as follows:
- a. If hammer has been cocked, keep weapon pointed down range, hold the hammer with the thumb, figure 4-4, pull trigger and slowly let hammer go forward until it is in the forward most position.

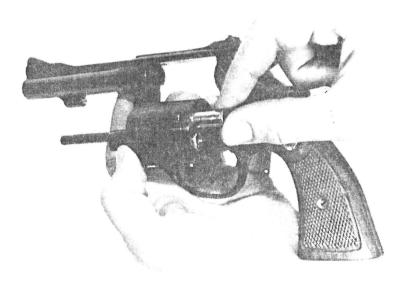


Figure 4-2. Loading Cartridge into Cylinder

- b. Depress the thumb piece and move the cylinder and yoke out of the frame.
- d. For unloading after failure to fire, refer to paragraj 5-15.
- c. Press in on extractor rod and carefully remove the cartridges. (See figure 4-3.)

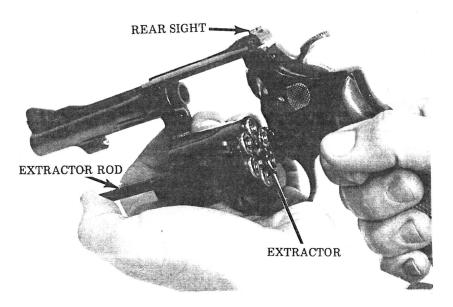


Figure 4-3. Unloading Empty Cartridge Cases from Cylinder by Depressing Extractor Rod

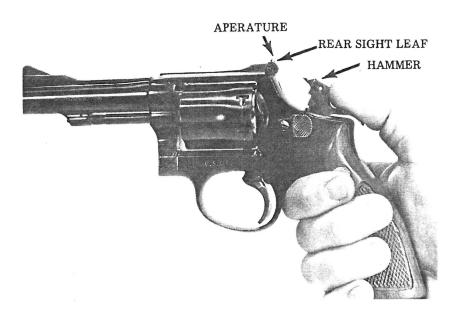


Figure 4-4. Cocking Hammer to Single Action Position

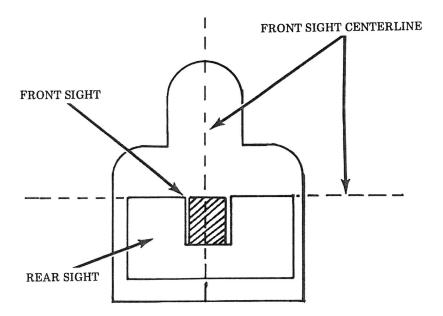


Figure 4-5. Correct Target and Sight Picture

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SECTION V

MAINTENANCE INSTRUCTIONS

- 5-1. GENERAL. This section contains instructions for preventive maintenance checks and services, trouble-shooting, lubrication, disassembly, assembly, cleaning and inspection for revolver, Model No. 15.
- 5-2. PREVENTIVE MAINTENANCE. (See table 5-1.) The importance of a thorough knowledge of how to clean and lubricate cannot be overemphasized. The kind of attention given to the revolver largely determines whether the revolver will shoot accurately and function properly when needed.
- 5-3. Rust, dirt, water and gummed oil cause rapid deterioration of all parts of the revolver. To remove all traces of rust from surfaces use crocus cloth, which is the most coarse abrasive to be used by using personnel for this purpose.
- 5-4. LUBRICATION. Depending on the weather and areas to be lubricated the following type lubricants can be used:
- a. PL Special (General Purpose Lubricating Oil). Use PL Special for general use on all parts of the weapon when temperature is expected to vary down to -30° F temporarily.
- b. LAW (Weapons Lubricating Oil). Use LAW for all parts of the weapon when temperature is expected to remain from 0° to minus 65° F.
- 5-5. <u>Lubrication Under Usual Conditions</u>. Disassemble the weapon into its major groups, clean, wipe, dry and oil with PL Special for above 0° F operation.
- 5-6. <u>Lubrication Under Unusual Conditions.</u> Special care is necessary whenever extremes in weather either exist or are expected. Proper care of weapon not only insures proper functioning, but also guards against wear and deterioration.
- a. Operation in extreme cold. Lubricate weapon with LAW instead of PL Special when temperature is expected to remain below zero.
 - (1) Keep all moving parts free of moisture.
- (2) Do not oil parts excessively. Excess oil solidifies and causes sluggish operation or complete failure.
- (3) Hand operate weapon frequently during periods of low temperature (below $0^{\rm O}$ F) to insure proper function.

CAUTION

Insure weapon is cleared of all ammunition prior to functioning.

- (4) If situation permits, completely disassemble and clean all parts thoroughly prior to firing in below 0° F weather.
- (5) When weapon is brought indoors, moisture is likely to condense on the cold surfaces. First allow weapon to reach room temperature, disassemble, wipe off moisture, lubricate and assemble.
 - b. Lubrication in hot, dry, humid and salty climates.
- (1) High temperatures and humidity tend to dissipate and contaminate lubricants. Therefore, more frequent servicing is necessary than for usual conditions. Inspect daily or more frequently if necessary and clean as necessary.
- (2) Make certain that unexposed parts as well as exposed surfaces are kept free of moisture, clean and oiled.
- (3) After inspection and cleaning, lubricate with PL Special.
- (4) Weapons not in use, or that are to be stored in arms rooms for prolonged periods, will have a light film of PL Special or LAW (Weapons Lubricating Oil) applied. The use of the lubricant will not negate the requirements for cleaning and inspection to insure corrosion has not formed.
 - c. Lubrication in dusty and sandy areas.
 - (1) Inspect daily and clean as necessary.
- (2) Wipe lubricants from exposed and noncritical operating surfaces. This prevents sand from sticking to the lubricant and forming an abrasive which can damage the weapon.
- (3) Immediately after use in sandy terrain, clean weapon and lubricate with PL Special. Then wipe dry as directed in step (2).
- (4) After handling, wipe weapon with a dry rag to remove perspiration to prevent rust.
- (5) Cover weapon as much as possible when operating in dusty or sandy areas.
 - d. Lubrication after exposure to water.
- (1) When splashed or submerged, water will seep into the inner parts of the equipment and can cause rust to form.
- (2) If splashed or submerged, disassemble completely, clean, lubricate and assemble.

Table 5-1. Preventive Maintenance Checks and Services

DETAILED INSTRUCTIONS REFERENCE ITEM TO BE INSPECTED BEFORE FIRING Figure 5-1 and 5-2 Clean bore and cylinder Paragraph 5-6 Clean outer surfaces of revolver Paragraph 5-6 Check revolver for proper lubrication Check operation of the following parts: Paragraph 4-15 Locking bolt Paragraph 1-8 Extractor Cylinder and yoke Paragraph 1-9, 5-10 Paragraph 1-6 Thumbpiece Paragraph 1-12 Hammer AFTER FIRING Figure 4-3 Remove cartridges from cylinder Figure 5-1 and 5-2 Remove carbon deposits from bore and cylinder Figure 5-1 and 5-2 Clean and lubricate barrel and cylinder Paragraph 5-6 Preserve weapon, if further firing is not anticipated.

5-7. TROUBLESHOOTING.

5-8. Trigger Stop. The trigger stop screw (36, table 5-4) in some instances will loosen under continuous firing. This allows the trigger stop (37, table 5-4) to cam over against the rear side of the trigger, locking the trigger in the rear position, the hammer in the cocked position and the cylinder bore aligned with the barrel bore.

CAUTION

Extreme caution must be exercised when handling and removing parts from loaded weapons.

5-9. If this should occur on the pistol range, there is a good possibility that a live round of ammunition will be in the cylinder. The shooter should keep the revolver pointed down range, place his thumb or a solid object securely between the hammer and frame to prevent accidental firing of the weapon and request assistance from range personnel. The range attendant should secure the hammer in the rear position and remove the stocks, strain screw and mainspring. Then with a small screw driver, remove side plate and move trigger stop screw, coat threads with loctite, NSN 8030-00-680-0889, and reinstall

trigger stop being sure the rounded portion of the stop is toward the trigger guard and the longest end of the stop from the screw hole is toward the muzzle end of the wea pon. The trigger stop should be adjusted so the trigger touches the stop immediately after the hammer falls.

NOTE

As an alternative to applying loctite to trigger stop screw, trigger stop and screw may be removed and left out of revolver. Removal of the trigger stop will not affect the function of the revolver.

5-10. Single Action Timing Check. This is accomplished by holding the weapon with the left side facing the inspector and rotating the hammer to the rear only far enough to turn the cylinder 1/6 of a rotation, or unti the cylinder stop drops into the rectangular slot in the cylinder. This check should be accomplished on all six cylinders. If the cylinder stop drops into the cylinder sloprior to the hammer being in a fully cocked position the single action timing meets specification.

CAUTION

If the hammer reaches full cocked position prior to correct cylinder stop engagement, do not fire the revolver until it has been repaired by qualified maintenance personnel.

5-11. <u>Double Action Timing Check</u>. This is accomby pulling the trigger slowly until the cylinder rotates and positive engagement of cylinder stop is accomplished prior to hammer reaching the full cocked position and dropping forward in its double action travel. All six cylinders must pass this inspection. Any failure to engage prior to hammer fall requires maintenance by qualified personnel.

NOTE

Firing a revolver with incorrect timing could result in injury to personnel and/ or damage to equipment. Due to technical complications sometimes encountered in repairing revolvers only qualified weapons maintenance personnel should attempt correcting the problem.

5-12. MALFUNCTIONS. A malfunction is an improper or faulty action of some component part of the weapon that may result in failure to fire, stoppage, or damage to the weapon.

5-13. FAILURE TO FIRE.

- a. Misfire. A misfire is a complete failure to fire, which may be due to a faulty firing mechanism of ammunition. A misfire in itself is not dangerous, but since it cannot be immediately distinguished from a delay in the functioning of the firing mechanism or from a hangfire described in subparagraph b., it should be considered as a possible delayed firing until such possibility has been eliminated. Such delay in the functioning of the firing mechanism, for example, could result from the presence of foreign matter such as grit, sand, frost, ice, improper or excessive oil or grease, which might create initially a partial mechanical restraint which, after some indeterminate delay, is overcome as a result of the continued force applied by the spring, and the firing pin then driven into the primer in the normal manner. In this connection, no cartridge should be left in a hot weapon any longer than the circumstances require, because of the possibility of a cook-off as described in paragraph 5-14.
- b. Hangfire. A hangfire is a delay in the functioning of ammunition at the time of firing. The amount of the delay is unpredictable, but in most cases will fall within the range of a split second to several minutes. Thus, a hangfire cannot be distinguished immediately from a misfire and therein lies the principle danger, - that of assuming that a failure of the weapon to fire immediately upon actuation of the firing mechanism is a misfire. It is for this reason that the time intervals prescribed in paragraph 5-15 should be observed before opening the cylinder

after a failure to fire. These time intervals, based on experience and considerabion of safety, have been established to minimize the danger associated with a hangfire and to prevent the occurence of a cook-off.

CAUTION

During the prescribed time intervals, the revolver will be kept trained on the target or pointed to the ground and all personnel will stand clear of the barrel.

5-14. Cook-off. A cook-off is a functioning of any or all of the explosive components of a cartridge chambered in a very hot revolver, initiated by the heat of the weapon.

NOTE

There is little chance of cook-off in the revolver due to the manner in which it is fired.

- 5-15. Removing a cartridge after a failure to fire due to the possibility of a misfire, hangfire, or cook-off, the following general precautions shall be observed until the cartridge has been removed from the revolver and the cause of the failure determined:
- a. Keep the revolver trained on the target or torwards the ground and all personnel clear of the barrel.
- b. The revolver cannot be recocked to fire the same cartridge.
- c. Wait 10 seconds from the time of failure to fire, before opening the cylinder and actuating the extractor to remove the cartridges.
- 5-16. DISASSEMBLY. Disassemble revolver in accordance with the following procedures:
 - a. Check weapon to insure it is not loaded.
- b. With a 5/32 inch common blade screw driver, remove stock screw, then remove left and right stocks.
- c. Remove screws from side plate, separating the yoke (front) screw.
- d. Depress thumb piece and swing out cylinder and yoke group. Carefully hold cylinder and yoke group and push assembly forward away from frame.
 - e. Remove side plate.

CAUTION

Do not pry side plate off. Using a leather mallot or suitable substitute, lightly tap the frame where the stocks normally are.

f. Remove the hammer block (9 figure 6-2).

- g. Remove strain screw (13). Remove mainspring.
- h. Using a small common screw driver, carefully pry up the rear portion of the rebound slide (12), exercising caution as the internal spring is under considerable pressure, also exercise caution not to bend the stud located directly at the rear of rebound slide.
- i. Rotate hand (23), rearward until it clears the slot in the frame, grasp the trigger and carefully lift it upward from the frame until it clears the stud.
- j. Push thumb piece to the rear completely and follow step k.
- k. Rotate hammer rearward to the 3/4 cocked position, at this angle the hammer nose will clear the frame and can be lifted upward off the hammer stud.
 - l. Remove thumb piece nut (30).
 - m. Using a small common screw driver, apply rearward

pressure to the face of the bolt assembly (33), once the bolt has cleared the frame hole lift upwards and remove.

CAUTION

There is a spring and plunger located at the rear of the bolt. Utilize caution not to lose upon removal.

- n. Utilize a small common screw driver, pivot the cylinder stop (41), downward until it clears the slot in the frame, utilizing a second small screw driver pry upwards and remove cylinder stop from stud. Caution should be exercised as the cylinder stop spring (39) is under pressure and is easily lost.
- o. Remove rear sight leaf screw (2, figure 6-3) and slide complete rear sight assembly to the rear causing elevation stud (10) to slide completely out of groove.
- p. Using a 0.060 inch hardened punch remove locking bolt retaining pin (12) exercising caution as the lock-

Table 5-2. Troubleshooting

TROUBLE	PROBABLE CAUSE	REMEDY
Failure to feed	Dirty chamber	Clean cylinder
	Battered cartridge	Remove and check
		cartridge
Failure of cylinder to	Broken thumbpiece,	Inspection by
open or rotate	cylinder stop, hand	qualified personnel/
	or spring binding,	unit gunsmith
	worn ratchets or	
	extractor rod loose	
Failure to fire	Defective primer weak/	Remove cartridge,
	broken mainspring	unit gunsmith tighten
	loose strain screw	securely
	broken hammer or nose	unit gunsmith
Failure to extract	Dirty chamber	Clean cylinder
	Bent extractor rod	unit gunsmith

ng bolt (14) is under spring pressure.

- q. Barrel. Due to required special fixtures the barrel will be repaired or replaced by Field or Depot level main: enance personnel only.
- 5-17. ASSEMBLY. Assemble revolver in accordance with the following procedures:
- a. Barrel assembly should be checked for alignment with the grooved sight ramp.
- b. Install locking spring and bolt (14 and 15, figure 6-3). Align with fingers and replace locking bolt pin. Insure beveled edge of locking bolt is facing left side or the serial numbered side of weapon.
- c. Install rear sight assembly insuring elevation stud (10) fits into frame groove. Slide assembly forward until screw holes are in alignment and install screw.

NOTE

Loctite, NSN 8030-00-680-0889, may be utilized on rear sight leaf screw if it constantly works loose during firing.

- d. Replace cylinder stop spring into recess of cylinder stop (39 and 41, figure 6-2) and place cylinder stop assembly on appropriate stud using a common screw driver, compress spring until it clears the frame and gradually work cylinder stop down until it falls into proper position (i.e., into frame slot).
- e. Reassemble bolt assembly (33, 34 and 35), bolt assembly must be reinstalled by placing bolt plunger against the rear position of frame, and press completely to the rear sliding bolt assembly downward aligning with forward bolt hole and release, spring pressure will push bolt assembly forward and into place. Reinstall thumb piece and tighten thumb piece nut. Push thumb piece to the rear and install the hammer on the hammer stud at the 3/4 cocked position working the hammer carefully to the fully seated position on the stud. Move hammer forward to the forward most position and release thumb piece.
- f. Holding the trigger (27) in right hand grasp the hand (23) with your left index finger and thumb. Rotate hand slightly counterclock wise and install the trigger assembly on the stud. Slide trigger downward on the stud until the hand (23) clears the frame and is aligned with the slot designed for it.

CAUTION

This must be accomplished carefully as the front trigger engagement area must fit into the slot of the cylinder stop and the rear engagement area will align between the hammer and double action sear (16). Also the trigger lever (26) must be facing directly rearward from the trigger body.

g. Insure the hammer stirrup (19) is in the upward position and reinstall rebound slide and spring (10 and 12). To accomplish this, place rebound spring into the slide itself and place the front pointed edge of rebound slide against trigger lever and let rear portion of slide rest on the stud. With a common screw driver, apply pressure to spring while holding downward pressure on the rebound slide body. Once the spring is compressed enough to clear the stud, press downward and release screw driver, thereby positioning the rebound spring against the stud.

CAUTION

Extreme care should be exercised to prevent damage to components.

- h. Install main spring (14), first connecting it onto the hammer stirrup (19) and installing it into the lower frame slot. Install strain screw and securely tighten.
- i. Ir.stall hammer block (9). Step one of this procedure is to locate slotted area on lower portion block. Install slotted area onto rebound slide pin and push upwards until pin is at the lowest end of the slot. Block should rest flatly against hammer assembly and extended portion should be directly in front of hammer face.

i. Install side plate.

CAUTION

Do not apply excess pressure trying to install plate. Notice there is a groove slot approximately half way up the hammer block and slide side plate upward until protruding lip of side plate contacts inner frame, then lower side plate and by applying light pressure it should fit into lower frame recesses. Install flat headed screw in rear most hole.

- k. Install cylinder and yoke assembly by pulling back slightly on the cylinder sliding it rearward approximately 1/2 inch on the yoke assembly. Insert extended portion of yoke assembly into frame pivot point, allow cylinder to move slightly to allow proper fit. Once the yoke assembly is in place, cylinder will automatically be in the correct position. Close cylinder and install front crowned screw to side plate. Open cylinder; if cylinder binds or is hard to open, remove screw and install remaining crowned screw.
 - 1. Replace left and right stocks and screw.

CAUTION

Do not over tighten as it breaks escutcheon through the wood, thereby making the stock unserviceable.

5-18. CLEANING. Rifle-bore cleaner is used for cleaning the revolver, after it has been fired, or for periodic cleaning. Rifle-bore cleaner contains volatile solvents

that evaporate at temperatures above 150° F, thus reducing the cleaning action. Therefore, after firing, the revolver should not be cleaned until it has cooled. Maximum cleaning efficiency and protection against rusting will be obtained when rifle-bore cleaner is used undiluted.

5-19. Daily inspect bore and chamber for rust and remove accumulated dirt or foreign matter. A light coating of rifle-bore cleaner should be allowed to remain in the bore and chamber between cleanings.

5-20. INSPECTION. Inspection consists of specific instructions for the inspection by maintenance personnel of materiel in the hands of troops in the field, maintenance shops and alerted units scheduled for oversea duty. Troubleshooting information is incorporated wherever applicable as a normal phase of inspection.

5-21. <u>Purpose of Inspection</u>. Inspections are made for the purpose of:

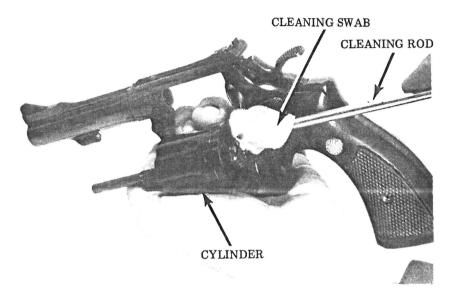


Figure 5-1. Cleaning Cylinder

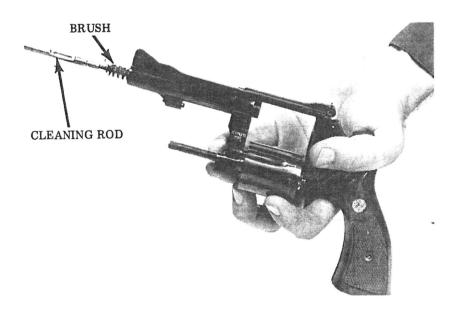


Figure 5-2. Cleaning Barrel

- a. Determining the condition of an item as to serviceability.
 - b. Recognizing conditions that would cause failure.
- c. Assuring proper application of maintenance policies at prescribed levels.
- d. Determining the ability of a unit to accomplish its maintenance and supply missions.
- 5-22. <u>Categories of Inspection</u>. In general, three categories of inspection are performed by direct and general maintenance personnel.
- 5-23. Inspection of materiel in the hands of troops in the field:
- a. Spot-check Inspection. This is an inspection performed on a percentage of materiel in order to ascertain the adequacy and effectiveness of organizational maintenance and supply. Included within this scope is inspection of equipment to detect incipient failures before unserviceability occurs; inspection to ascertain the availability and use of technical and supply manuals and lubrication instructions; inspection to determine the accuracy of records, authorized levels of equipment and supplies, practice of supply economy, preservation, and knowledge of the proper procedures for requisitioning supplies and equipment and follow-up thereon.
- b. Command Maintenance. Command maintenance inspections will be performed at least annually. The purpose of the inspection is to ascertain the serviceability of equipment, to predict maintenance and supply requirements, and to determine adequacy of facilities and effectivemess of procedures. Information obtained during the inspection should indicate future requirements for maintenance and for replacement, as well as disclose immediate needs for maintenance and application of modification work orders. During inspection, correction of deficiencies will be made on the spot, when practical.

5-24. Shop Inspection.

- a. Initial Inspection. This is an inspection of materiel received in maintenance shops for purpose of determining the degree of repair and parts requirement. This includes determination of modification work orders or technical manuals to be applied.
- b. In-Process Inspections. These are inspections performed in the process of repairing the materiel, to insure that all parts conform to the prescribed repair standards, that the workmanship is in accordance with approved methods and procedures, and that deficiencies not disclosed by the initial inspection are found and corrected.
- c. Final Inspection. This is an acceptance inspection performed by a final inspection after repairs have been completed, to insure that the materiel is acceptable for return to user or for return to replacement stock according to the standards established.

5-25. <u>Preembarkation Inspection</u>. This inspection is conducted on materiel in alerted units scheduled for oversea duty to insure that such materiel will not become unserviceable or worn out in a relative short time. It prescribes a higher percentage of remaining usable life in serviceable materiel to meet a specific need beyond minimum serviceability.

WARNING

Before starting an inspection, be sure to clear the revolver. Do not actuate the trigger until the revolver has been cleared. Inspect the cylinders to insure they are empty. Avoid having live ammunition in the vicinity of the work area.

- 5-26. Check to see that the revolver has been cleaned of all grease, oil, dirt or other foreign matter which might interfere with proper functioning or obscure the true condition of **the parts**.
- 5-27. Inspection Prior to Disassembly.
- 5-28. <u>Visual Inspection</u>. Make an overall inspection of the revolver for general appearance, condition and operation.
- 5-29. <u>Initial Inspection</u>. Initial inspection performed upon receipt of materiel turned in for repair determines the extent of repair required and provides the basis for procuring the parts, assemblies or supplies necessary to accomplish the repair.
- 5-30. <u>Functional Inspection</u>. Prior to function firing weapons insure there are no live rounds of ammunition mixed with the dummy cartridges.
- 5.31. MAINTENANCE ALLOCATION. (See tables 5-3 through 5-5.) The maintenance allocation tables prescribes for all levels of maintenance the lowest level authorized to perform each maintenance operation.
- 5-32. MAINTENANCE FUNCTIONS. Maintenance functions shall be limited to and defined as follows:
- a. <u>Adjust</u>. Maintain within prescribed limits by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.
- b. <u>Align</u>. To adjust specified variable elements of an item to bring about optimum desired performance.
- c. <u>Calibrate</u>. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy of the instrument being compared.
- d. <u>Inspect</u>. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through

examination.

- e. <u>Install.</u> The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment/system.
- f. Overhaul. That maintenance effort (service/action) necessary to restore an item to a completely service-able/operational condition as prescribed by maintenance standards by SSM/IM. Overhaul is normally the highest degree of maintenance performed by the Air Force. Overhaul does not normally return an item to like new condition.
- g. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Air Force equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, rounds, etc) considered in classifying Air Force equipment/components.
- h. Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction or failure in a part, subassembly, module/component assembly, and item or system.
- i. <u>Replace</u>. The act of substituting a serviceable liketype part, subassembly module (component or assembly) in a manner to allow the proper functioning of an equipment/system.
- j. <u>Service</u>. Operations required periodically to keep an item in proper operating condition, i.e., to clean, preserve, drain, paint or to replenish fuel/lubricants/hydraulic fluids or compressed air supplies.
- k. <u>Test</u>. To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.
- l. <u>Symbols</u>. The upper case letter placed in the appropriate column indicates the lowest level at which that particular maintenance function is to be performed.
- 5-33. EXPLANATION OF FORMAT. Purpose and use of the format are as follows:
- a. Column 1 Figure and Index. The figure and index numbers are arranged numerically in the group assembly parts lists. The primary use of figure and index numbers is to aid in locating a part in the group assembly parts list after the part has been located in the illustration. Parts not illustrated will be marked NI.

- b. If a part number is known, the figure and index numbers are found in the assembly parts list. The index number will provide the part number and nomenclature in the assembly parts list.
- c. <u>Column 2 Part Number.</u> The manufacturer part number is included for reference information.
- d. <u>Column 3 Description</u>. This column gives the nomenclature used to identify the parts.
- e. <u>Column 5 Maintenance Functions</u>. This colum lists the eleven maintenance functions defined in paragrap 5-33. Each maintenance function required for item shall be specified by the symbol among those listed in subparagraph g. which indicates the level responsible for the required maintenance.
- f. <u>Use of Symbols.</u> The following symbols shall be used to prescribe work function responsibility.

CODE	EXPLANATION
C	Operator/Crew
0	Organization a l
\mathbf{F}	Direct Support
H	General Support
D	Depot

- g. Organizational. Organizational maintenance is that maintenance normally authorized for, performed by and the responsibility of a using organization on equipment in its possession. This maintenance consist of functions and repairs within the capabilities of authorized pesonnel, skills, tools and test equipment as prescribed in appropriate Department of the Air Force technical order Maintenance exceeding the authorized scope of maintenance may be performed when authorized by the next higher maintenance support commanders.
- h. <u>Direct Support</u>. Direct support maintenance is that maintenance normally authorized and performed by designated maintenance activities in direct support of using organizations. This category of using organizations on a return to user basis.
- i. <u>General Support.</u> General support maintenance is that maintenance authorized and performed by designated organizations in support of the supply system. Normally general support maintenance organizations wil repair or overhaul materiel to required maintenance standards in a ready to issue condition based upon applicable supported Air Force Supply requirements.

Table 5-3. Cylinder and Extractor Group

						Mair	ntenar	ice Fu	nction	ıs			
			A	В	C	D	E	F	G	Н	I	J	K
dex No.	Part No.	Description	Inspect	Test	Service	Adjust	Align	Calibrate	Install	Replace	Repair	Overhaul	Rebuild
1- -1	5049	Plate screw, crowned	C	-	C	C	-	-	C	C	F	-	-
-2	5 02 3	Yoke	C	F	F	F	\mathbf{F}	F	F	\mathbf{F}	F	-	-
-3	5455	Rod, extractor	\mathbf{c}	F	F	F	\mathbf{F}	F	F	F	F	-	
-4	5458	Spring, center pin	C	F	F	F	F	F	F	F	F	-	-
-5	5006	Pin, center	C	F	F	F	F	F	\mathbf{F}	F	F	-	-
-6	5629	Collar, extractor rod	C	\mathbf{F}	F	F	F	F	F	F	F	-	-
-7	5022	Spring, extractor	C	F	F	\mathbf{F}	F	F	F	F	F	_	-
-8	5086	Cylinder assembly	C	F	F	F	F	F	\mathbf{F}	F	F	\mathbf{F}	D
-9	5030	Ring, gas	C	F	F	\mathbf{F}	F	F	F	F	F	-	-
-10	5435	Extractor	C	F	F	F	\mathbf{F}	F	F	F	F	F	D
-11	5014	Pin Extractor	C	F	F	F	F	F	F	F	F	\mathbf{F}	D
-12	N/A	Cylinder	C	F	F	F	F	F	F	F	F	F	D
-13	N/A	Frame assembly and barrel group	C	F	F	F	F	F	F	F	F	F	D

Table 5-4. Trigger, Hammer, Frame Assembly and Barrel Group

According to the second													
		ī	A	В	Mai:	ntenar D	ice Fi	inction F	G	Н	I	J	F
Index No.	Part No.	Description	Inspect	Test	Service	Adjust	Align	Cali- brate	Install	Replace	Repair	Over- haul	7
					•								
6-2- -1	7191	Screw, stock	C	-	C	-	C	-	C	C	C	-	-
-2	7197	Stocks, Service	C	\mathbf{F}	C	F	C	-	C	C	C	F	-
-3	7197	Stocks, service	C	\mathbf{F}	C	F	C	-	C	C	C	F	-
-4	5191	Escutcheon	C	F	C	\mathbf{F}	C	-	C	C	C	F	I
-5	5192	Nut, escutcheon	C	F	C	F	C	-	C	C	C	F	1
-6	5091	Plate, screw, flathead	C	\mathbf{F}	C	F	C	F	C	C	C	F	-
-7	5049	Plate, screw crowned	C	F	C	F	C	F	C	C	C	F	•
-8	5129	Plate side	C	\mathbf{F}	F	F	F	F	C	F	F	F	1
-9	5084	Block hammer	C	\mathbf{F}	F	F	F	F	C	F	F	F	1
-10	5074	Spring, rebound slide	C	F	F	F	F	F	C	F	F	F]
-11	5083	Pin, rebound slide	0	F	0	F	F	F	0	F	F	F]
-12	5085	Slide rebound	C	F	0	0	F	F	C	0	F	F	1
-13	5064	Screw, strain	C	0	0	0	-	-	C	C	0	-	
-14	5047	Mainspring	C	0	0	0	0	-	C	0	0	F	1
-15	5053	Pin sear	C	F	0	0	0	0	0	0	0	-	•
-16	5113	Sear	C	F	\mathbf{F}	F	F	F	C/O	F	F	F	:
-17	5054	Spring Sear	C	F	F	F	F	F	C/O	F	F	F	
-18	5053	Pin stirrup	C	F	F	F	F	F	0	F	F	F	
-19	7021	Stirrup	C	F	F	F	F	F	0	F	F	F	
-20	5034	Rivet, hammer nose	C	F	F	F	F	F	F	F	F	F	
-21	5133	Nose hammer	C	F	F	F	F	F	F	F	F	F	
-22	5212	Hammer, wide spur target	C	F	F	F	F	F	F	F	F	F	
-23	5076	Hand	C	F	F	F	F	F	F	F	F	F	
-24	5042	Pin, hand	C	F	\mathbf{F}	F	F	F	F	F	F	-	
-25	5053	Pin, spring	C	F	F	F	F	F	F	F	F	-	
-26	5073	Lever trigger	C	\mathbf{F}	F	F	F	F	F	F	F	F	
-27	5843	Trigger wide, target type	C	F	F	F	F	F	F	F	F	F	
-28	5118	Spring, hand torsion	C	F	F	F	F	F	F	F	F	F	

Table 5-4. Trigger, Hammer, Frame Assembly and Barrel Group - Continued

	Maintenance Functions A B C D E F G H I												17
			A	В	C	D	E	-	G	H	1	J	K
Index No.	Part No.	Description	Inspect	Test	Service	Adjust	Align	Caiibrate	Install	Replace	Repair	Overhaul	Rebuild
6-2- -29	5062	Pin stock	С	0	0	0	0	_	0	0	0	_	_
-30	5071	Nut thumb piece	С	0	0	0	0	-	0	0	0	F	D
-31	5585	Thumb piece	C	F	0	0	0	0	C/O	C/O	0	F	D
-32	5046	Lug frame	C	F	F	F	F	F	F	F	F	F	D
-33	5583	Bolt	C	\mathbf{F}	F	F	F	F	F	F	F	F	D
-34	5004	Plunger bolt	C	F	F	F	F	F	F	F	F	F	D
-35	5005	Spring bolt plunger	C	F	F	F	F	F	F	F	F	F	D
-36	5155	Screw trigger stop	C	F	0	0	0	0	0	0	0	F	D
-37	5114	Stop trigger	C	F	0	0	0	0	0	0	0	F	D
-38	5018	Screw, cylinder stop plunger	С	F	F	F	F	F	F	F	F	F	D
-39	7055	Spring, cylinder stop plunger	C	F	F	F	F	F	F	F	F	F	D
-40	5016	Plunger, cylinder stop	C	F	F	F	F	F	F	F	F	F	D
-41	7198	Stop, cylinder	C	\mathbf{F}	F	F	F	F	F	F	F	F	D
-42	5036	Bushing, hammer nose	C	F	F	F	F	F	F	F	F	F	D
-43	No number	Frame assy and barrel group	F	F	F	F	F	F	F	D	F	F	D

Table 5-5. Rear Sight Assembly, Frame Assembly and Barrel Group

							nce Fu					,	T
		-	A	В	С	D	E	F	G	Н	I	J	H
Index No.	Part No.	Description	Inspect	Test	Service	Adjust	Align	Calibrate	Install	Replace	Repair	Overhaul	
6-3- -1	5100	Rear sight assembly	С	F	0	С	C/O	F	0	0	0	F]
-2	5155	Screw, rear sight leaf	С	F	F	F	F	F	F	F	F	F	,
-3	5102	Nut, elevation, rear sight	C	F	F	F	F	F	F	F	F	F]
-4	7158	Plunger, rear sight	C	F	F	F	F	F	F	F	F	F]
-5	7159	Spring, plunger rear sight	C	F	F	F	F	F	F	F	F	F]
-6	5107	Nut, windage, rear sight	C	F	F	\mathbf{F}	F	F	F	F	F	F]
-7	5108	Screw, windage, rear sight	\mathbf{C}	F	F	F	F	F	F	F	F	F]
-8	5109	Slide, rear sight	C	F	F	F	F	F	F	F	F	F]
-9	5105	Clip, spring, rear sight	C	F	F	F	F	F	F	F	F	F]
-10	5106	Stud, elevation, rear sight	C	F	F	F	F	F	0	0	F	F]
-11	5101	Leaf, rear sight	C	F	F	F	F	F	F	F	F	F]
-12	5044	Pin locking bolt	C	F	F	F	F	F	F	F	F	F]
-13	5043	Locking bolt	C	F	F	F	F	F	F	F	F	F]
-14	5045	Spring, locking bolt	C	F	F	F	F	F	F	F	F	F]
-15	5002	Barrel pin	C	F	F	F	F	F	F	F	F	F	Ι
-16	5757	Barrel, 4 inch	C	F	F	F	F	F	F	F	F	F	Ι
-17	No number	Frame assembly (with studs, bushing and lug)	C	F	F	F	F	F	F	F	F	F	Ι

SECTION VI

ILLUSTRATED PARTS BREAKDOWN

6-1. GENERAL.

6-2. The Illustrated Parts Breakdown Section lists and illustrates the assemblies and detail parts for the Smith and Wesson Combat Masterpiece Caliber .38 Revolver, Model No. 15. The equipment is broken down into main groups as shown in the List of Illustrations. It is used for requisitioning, storing, issuing and identifying parts and for illustrating assembly and disassembly relationships.

6-3. MAINTENANCE PARTS LIST.

- 6-4. The Maintenance Parts List provides a breakdown of assemblies and parts contained in the end item(s) that can be disassembled, repaired, obtained from reclamation, manufactured, reinstalled, replaced and reassembled at all levels of maintenance in agreement with Government assigned SMR coding.
- 6-5. FIGURE AND INDEX NUMBER COLUMN. The figure number identifies the illustration on which a part appears. The index number refers to the number identifying a part on the illustration.
- 6-6. PART NUMBER COLUMN. This column shall contain the applicable part number assigned to each listed part in accordance with MIL-STD-100 requirements.
- 6-7. FEDERAL SUPPLY CODE FOR MANUFACTURERS (FSCM) COLUMN. The appropriate FSCM, published in current issues of H4-1, H4-2, H4-3 Cataloging Handbooks, Federal Supply Code for Manufacturers, shall be listed in this column directly opposite each part, model and type number listed in Part Number column; the FSCM shall identify the Manufacturers or Government Agency whose number appears in the part number column.
- 6-8. DESCRIPTION COLUMN. This column gives the nomenclature used to identify the parts. Subassembly and detail parts of an assembly follow the listing of the assembly and are indented to show their relationship to the assembly. Attaching parts are identified by the abbreviation "(AP)" following description of the part. The notation

"(See figure - for detail breakdown)" following the description of a part number indicates that further breakdown of the part will be shown on the figure noted.

- 6-9. UNITS PER ASSEMBLY COLUMN. This column lists the quantity required as follows:
 - a. Each detail part in an assembly.
 - b. Each assembly in the next higher assembly.
- c. Each attaching part to attach one unit or one assembly.
- d. The abbreviation "AR" for oversize and undersize parts and for those parts when quantities are indefinite, to indicate "as required."
- e. The abbreviation "REF" where items are listed for reference purposes. Such items shall show a quantity where the item is listed assembled or listed in detail, and then show "REF" in other listings.
- f. The quantity opposite the first line of the description when the description required more than one line.
- 6-10. USABLE ON CODE. This column shall contain codes to indicate the configurations (type, model, series, blocks, etc) of the end items to which listed assemblies and parts apply. When a part applies to all configurations, no code is required in this column; likewise when the manual covers only one configuration, no coding system is required. The coding system shall consist of letters of the alphabet and double letters, AA, AB, through AZ, BA, BB etc., when necessary.
- 6-11. SOURCE MAINTENANCE AND RECOVERABILITY (SMR) CODE COLUMN. This column shall contain Joint Military Services Uniform SMR Codes and/or the Air Force Peculiar "In-Being" Source and Repair Codes assigned by the Government and furnished by the procuring activity.

MAINTENANCE PARTS LIST

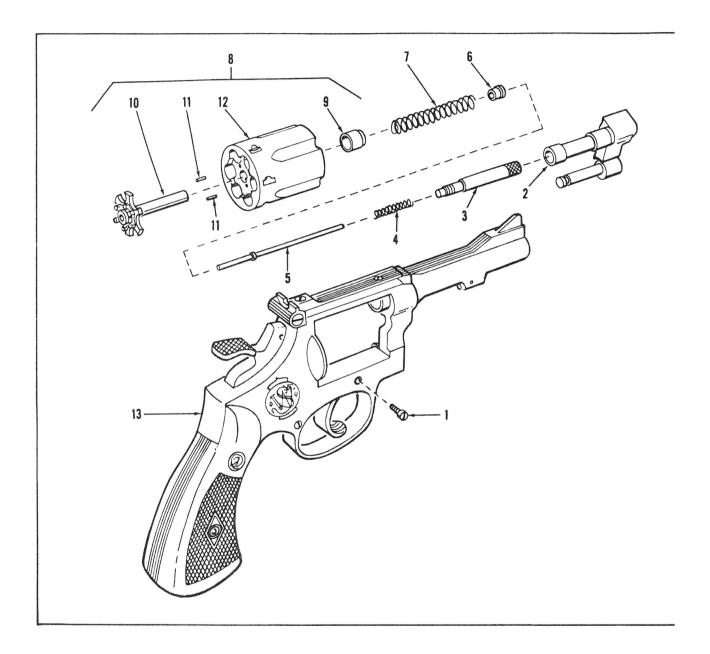


Figure 6-1. Cylinder and Extractor Group

Figure & Index Number	Part Number	FSCM	Description	Units Per Assy	Usable On Code	SMR Code
Number	Number No Number 5049 5023 5020 5008 5006 5629 5022 5086 5030 5009 5014 No Number No Number	FSUM	CYLINDER AND EXTRACTOR GROUP PLATE SCREW, Crowned YOKE ROD, Extractor SPRING, Center pin PIN, Center COLLAR, Extractor rod SPRING, Extractor CYLINDER ASSEMBLY (Consisting of cylinder, extractor, pins, and gas ring) RING, Gas EXTRACTOR PIN, Extractor CYLINDER FRAME ASSEMBLY AND BARREL GROUP	2 1 1 1 1 1 1 1 1 1 1 2	Code	Code

Figure & Index Number	Part Number	FSCM	Description 1 2 3 4 5 6 7	Units Per Assy	Usable On Code	SM Coc
6-21 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25 -26 -27 -28 -29 -30 -31 -32 -33 -34 -35 -36 -37 -38 -39 -40 -41 -42 -43	No Number 5063 5077 5068 5191 5192 5091 5049 5129 5084 5074 5083 5085 5064 5047 5053 5113 5054 5053 5013 5054 5053 5076 5042 5053 5073 5843 5118 5062 5071 5070 5046 5606 5004 5005 5155 5114 5018 5017 5016 5015 5036 No Number		TRIGGER HAMMER, FRAME ASSEMBLY AND BARREL GROUP SCREW, Stock STOCK, Magna, left STOCK, Magna, right ESCUTCHEON NUT, Escutcheon PLATE SCREW, Flat head PLATE SCREW, Crowned PLATE, Side BLOCK, HAMMER SPRING, Rebound slide PIN, Rebound slide SLIDE, Rebound SCREW, Strain MAINSPRING PIN, Sear SEAR SPRING, Sear PIN, Stirrup STIRRUP RIVET, Hammer Nose NOSE, Hammer HAMMER, Wide Spur Target HAND PIN, Hand PIN, Spring LEVER, Trigger TRIGGER, Wide Target Type SPRING, Hand Torsion PIN, Stock NUT, Thumbpiece THUMBPIECE LUG, Frame BOLT PLUNGER, Bolt SPRING, Bolt Plunger SCREW, Trigger SCREW, Trigger Stop STOP, Trigger SCREW, Cylinder Stop Plunger SPRING, Cylinder Stop STOP, Cylinder STOP, SUMMER SEMBLY AND BARREL GROUP	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

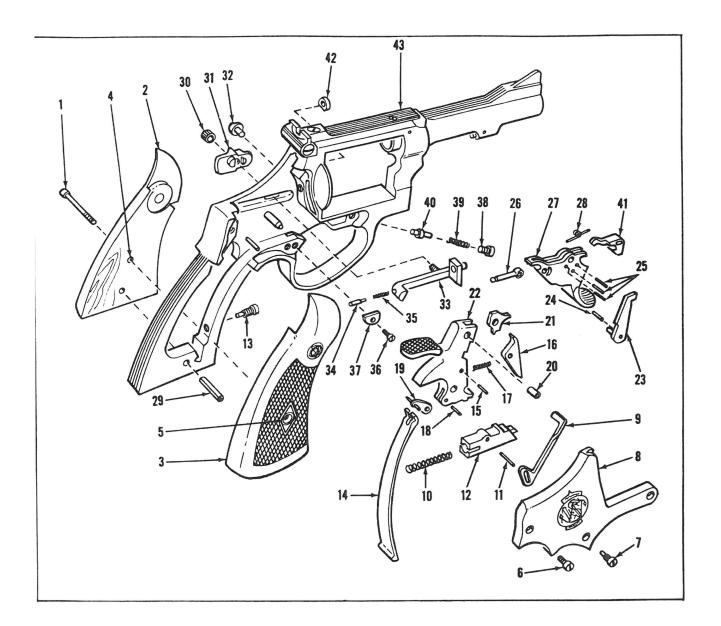


Figure 6-2. Trigger, Hammer, Frame Assembly and Barrel Group

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Figure & Index Number	Part Number	FSCM	Description 1 2 3 4 5 6 7	Units Per Assy	Usable On Code	SM Cor
6-31 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17	No Number 5100 5155 5102 5104 5103 5107 5108 5109 5105 5106 5101 5044 5043 5045 5002 5757 5381		REAR SIGHT ASSEMBLY, FRAME ASSEMBLY AND BARREL GROUP REAR Sight Assembly SCREW, Rear Sight Leaf NUT, Elevation, Rear Sight PLUNGER, Rear Sight SPRING, Plunger, Rear Sight NUT, Windage, Rear Sight SCREW, Windage, Rear Sight SLIDE, Rear Sight CLIP, Spring, Rear Sight STUD, Elevation, Rear Sight LEAF, Rear Sight PIN, Locking Bolt BOLT, Locking Bolt PIN, Barrel BARREL, 4-Inch FRAME ASSEMBLY (with Studs, Bushing and Lug)	1 1 1 2 2 1 1 1 1 1 1 1 1		

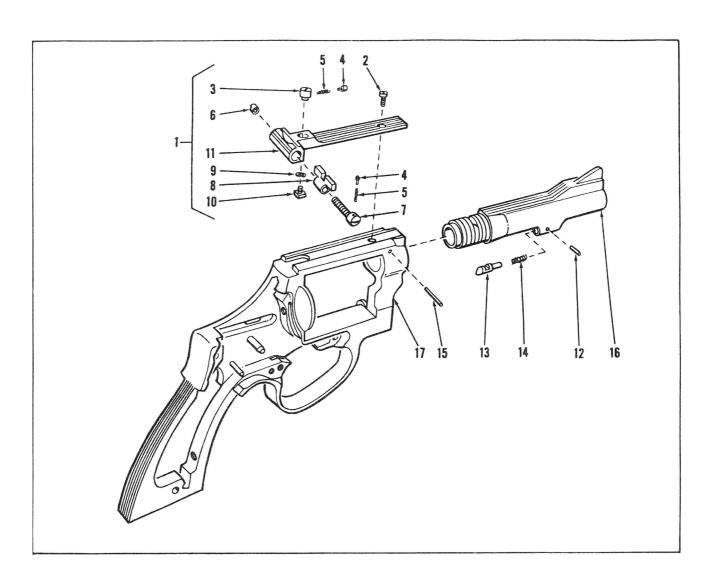


Figure 6-3. Rear Sight Assembly, Frame Assembly and Barrel Group

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